IR-77-4(71)108

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | IR-77-4(71)108 | |

1 / 455

AKRON INNERBELT
SUM - 77 - 13.71

# STATE OF OHIO
## DEPARTMENT OF TRANSPORTATION

# AKRON INNERBELT
# SUM - 77 - 13.71
# CITY OF AKRON
# SUMMIT COUNTY

Project designation SUM-77-0.00 appearing throughout this plan shall be considered to read SUM-77-13.71 and federal project number M-1T62(2) shall be considered to read IR-77-4(71)108.

Sheets 267 & 268 revised 6-11-84 EBL
Sheets 273, 274, 277, 278, 281, 291, 297 and 299 revised 2-4-85 EBL
Sheet 304S supersedes sheet 304 2-4-85 EBL
Sheet 311S supersedes sheet 311 2-4-85 EBL

### DESIGN DESIGNATION

| | |
|---|---|
| Current A.D.T. (1980) | = 88,650 |
| Design Year A.D.T. (2000) | = 100,200 |
| D.H.V. | = 10,020 |
| D | = 50% |
| T | = 5.0% |
| V | = 60 m.p.h. |

MICROFILMED OCT 26 (??)

### CONVENTIONAL SIGNS

Township Line
Section Line
Corporation Line
Fence Line (existing) — x — x — x — (proposed) — x — x — x —
Center Line 234 + 235 +
Trees ◯, Stumps ⊗, (to be removed) ⊗ ⊗
Utility Poles: Telephone ∅, Power ℙ, Light ∅

Limited Access (only) ——— LA ———
Right of Way (only) ——— RW ———
Limited Access & Right of Way ——— LA & RW ———
Existing Right of Way ——— RW ———
Property Line ——— ℙ ——— (in existing fence) — x — ℙ — x —
Railroad ▬▬▬ or +++++++
Guardrail (existing) - o - o - o - (proposed) - • - • - • -

### INDEX OF SHEETS


| | SHEET No. | | SHEET No. |
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| GRADING PLAN & CROSS SECTION LAYOUT | 8-11B | LAKESHORE BLVD. CROSS SECTIONS | 140-141 |
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| RAMP EN CROSS SECTIONS | 111-122B | STRUCTURES OVER 20' SPAN | 282A 258-442 260A, 272A-272E |
| DART AVE. CROSS SECTIONS | 123-132 | RIGHT OF WAY PLANS | 443-455 |
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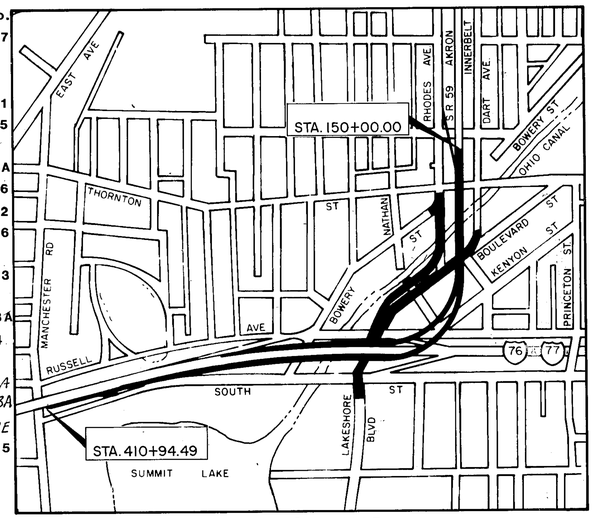


### LOCATION MAP

SCALE IN FEET
0 600 1200

### LINE DATA

| | | | |
|---|---|---|---|
| Begin Work I-77 | Sta. 242+00 | Dart Avenue Sta.221+69.51 to Sta.237+93.80 | 1624.29 L.F. |
| Equation I-77 Sta.268+35.07 BK. = I-77 Sta.410+94.49 AH. | | | |
| Equation I-77 Sta.427+05.27 = Ramp EN Sta.111+07.95 | | | |
| End Work Ramp H | Sta. 162+82.01 | | |
| Length of Work | 9,426.91 L.F. | Russell Avenue Sta.54+12.69 to Sta.58+12.50 | 399.81 L.F. |
| Add For Approaches | | | |
| I-77 Sta.427+05.27 to Sta.483+75.00 | 5669.73 L.F. | Relocated Rhodes Avenue Sta.26+46.19 to Sta.40+20.42 | 1374.23 L.F. |
| Lakeshore Boulevard Sta.10+07.30 to Sta.14+00.00 | 392.70 L.F. | Total Length of Work | 18,887.67 L.F. or 3.577 Mile |
| | | Length of Project | 0.000 L.F. or 0.000 Mile |

### SCALES

Plan 0 20'
Profile: Horizontal 0 50', Vertical 0 5'
Cross Section: Horizontal 0 5', Vertical 0 5'

| SUPPLEMENTAL SPECIFICATIONS | | | |
|---|---|---|---|
| 814 | 1-1-69 | 836 | 3-12-75 |
| 803 | 5-27-83 | 845 | 1-13-84 |
| 921 | 12-4-72 | 853 | 6-26-78 |
| 948 | 2-19-74 | 953 | 8-21-80 |
| 839 | 11-25-70 | 956 | 6-26-78 |
| 861 | 9-9-83 | 849 | 10-19-81 |
| 961 | 9-9-83 | Br. Spec. Prov. | 1-4-84 |
| 824 | 10-8-82 | | |
| 903 | 1-1-69 | | |

### LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director in accordance with the provisions of Section 5511.02 of the Revised Code of Ohio.

### 1983 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved _____
Date _____ City of Akron Director of Public Service

Approved _____
Date _____ City Engineer

Approved _____
Date _____ City of Akron Design Division Manager

Approved _____
Date _____ District Deputy Director of Transportation

Approved _____
Date _____ Engineer, Bureau of Bridges and Structural Design

Approved _____
Date 3-21-84 Chief Engineer, Planning and Design

Approved _____
Date 3-21-84 Director, Department of Transportation

PLANS PREPARED BY

**DALTON · DALTON · NEWPORT**

ARCHITECTS ENGINEERS PLANNERS
AKRON OHIO CLEVELAND

F. J. Richardson
F. J. RICHARDSON REG. ENGINEER No. 19531

STATE OF OHIO — FREDERICK J. RICHARDSON — 19531 — REGISTERED PROFESSIONAL ENGINEER

Project : SUM - 77 - 13.71
Date of Letting _____ 19___, Contract No. _____

| SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| BP-1 | 6-1-65 | I-3A&B | 4-1-80 | TC-21.10 | 5-24-79 | TC-42.20 | 3-26-79 | HL-3 | 7-27-73 | BP-9 | 12-6-76 |
| BP-3 | 12-6-76 | MC-3 | 6-1-73 | TC-21.20 | 5-31-79 | TC-51.11 | 4-3-79 | HL-4 | 1-21-76 | TC-9.30 | 4-24-80 |
| BP-4 | 7-16-81 | MC-4 | 7-26-76 | TC-41.40 | 6-18-79 | TC-61.10 | 4-5-82 | HL-5 | 9-6-73 | MC-11 | 8-1-78 |
| BP-5 | 7-16-81 | MC-5 | 6-12-75 | TC-22.10 | 3-1-79 | TC-71.10 | 4-9-79 | HL-6 | 3-22-77 | BP-10 | 1-3-75 |
| BP-7 | 12-6-76 | MC-6 | 6-1-65 | TC-22.20 | 3-1-79 | TC-72.20 | 2-26-82 | HL-7 | 1-21-76 | LA-1 | 6-1-79 |
| BP-11 | 1-3-75 | MH-1 | 6-12-75 | TC-41.41 | 8-2-73 | TC-81.20 | 4-8-80 | HL-8 | 1-21-76 | TC-51.10 | 3-30-79 |
| BP-12 | 7-7-81 | MH-2 | 6-12-75 | TC-31.21 | 3-6-79 | TC-83.10 | 4-13-79 | HL-9 | 3-22-77 | TC-52.10 | 4-3-79 |
| CB-5 | 5-1-78 | MH-3 | 6-12-75 | TC-32.10 | 3-8-79 | TC-83.20 | 4-17-79 | HL-10 | 6-1-78 | TC-52.20 | 4-3-79 |
| CB-6 | 5-1-78 | MH-5 | 6-12-75 | TC-32.11 | 3-21-79 | TC-85.10 | 4-18-79 | HL-11 | 6-1-79 | AS-1-81 | 11-27-81 |
| GR-1 | 2-5-82 | TC-7.65 | 3-1-79 | TC-41.10 | 12-23-81 | TC-85.20 | 4-18-79 | HL-12 | 4-6-73 | BR-1 | 5-29-79 |
| GR-2B | 2-5-82 | TC-12.30 | 6-10-81 | TC-41.20 | 3-26-79 | MC-9 | 11-1-77 | HL-15 | 1-21-76 | BR-2-82 | 11-1-82 |
| GR-3 | 2-5-82 | TC-16.20 | 3-1-79 | TC-41.50 | 3-26-79 | HL-1 | 5-6-73 | HL-16 | 4-6-73 | RB-1-55 | 2-2-59 |
| GR-4 | 2-5-82 | TC-18.24 | 4-25-79 | TC-42.10 | 8-19-77 | HL-2 | 7-27-73 | HL-22 | 11-9-77 | SD-1-69 | 6-12-69 |

| | | | |
|---|---|---|---|
| BP-2 | 12-6-76 | | |
| F-1 | 5-1-76 | | |
| F-3 | 5-1-76 | | |
| F-5 | 5-1-76 | | |
| F-6 | 5-1-76 | | |
| GR-4A | 2-5-82 | | |
| GR-5 | 2-5-82 | | |
| GR-6 | 2-5-82 | | |
| HW-1 | 6-1-65 | | |
| I-2A | 5-1-79 | | |
| MC-10 | 5-1-76 | | |
| MC-9A | 5-1-81 | | |

Plan Revised 2/28/86

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

_____
DIVISION ADMINISTRATOR

MICROFILMED
OCT 13 1990

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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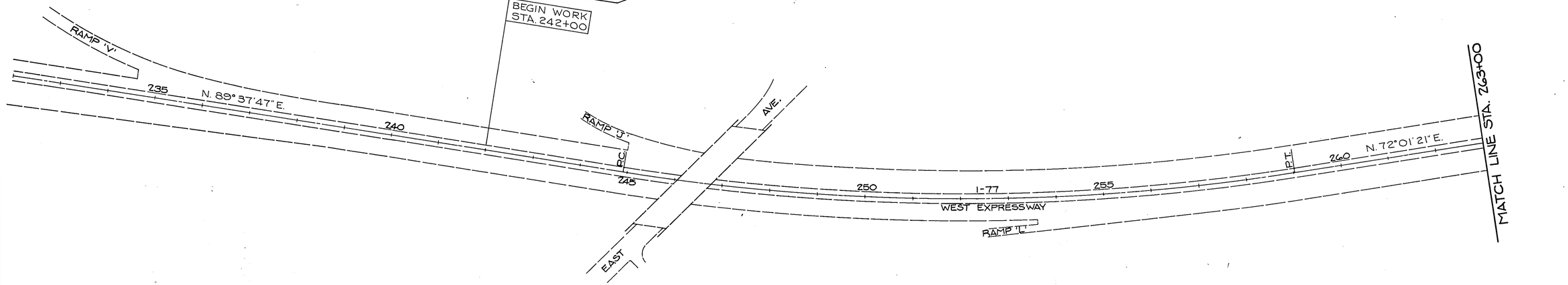
455

AKRON INNERBELT
SUM-59-0.00




℄ WEST EXPRESSWAY CURVE DATA

Δ = 17° 36' 26"
D = 1° 15' 00"
R = 4583.66'
T = 709.88'
L = 1408.58'
E = 54.65'
P.C. STA. 244+93.76
P.T. STA. 259+02.34

GRAPHIC SCALE
0 100 200 300

SCHEMATIC PLAN

FORM D D A-5

MICROFILMED
OCT 16 1990

| PROPOSED STRUCTURE NO. SUM-59-0002 | |
|---|---|
| TYPE | CONTINUOUS WELDED ℄ GIRDERS AND ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE. |
| SPANS | C/C BEARINGS ALONG ℄ 49'-2", 76'-7 3/16", 76'-6", 117'-9 1/8", 142'-6", 92'-9" |
| ROADWAY | 40'-0" F. TO F. CONCRETE BARRIERS ~ 41'-10" O. TO O. |
| DESIGN LOAD | HS-20-44 AND ALTERNATE MILITARY LOADING (CASE II) |
| SKEW | VARIES |
| WEARING SURFACE | 1¼" LATEX MODIFIED CONCRETE |
| APPROACH SLABS | 25'-0" (AS-1-81) |
| ALIGNMENT | CURVE LEFT |
| SUPERELEVATION | VARIES |

| PROPOSED STRUCTURE NO. SUM-59-0016 | |
|---|---|
| TYPE | CONTINUOUS WELDED ℄ GIRDERS AND ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE. |
| SPANS | C/C BEARING ALONG ℄ G7'-1 1/8", 82'-11", G7'-3 1/2", 120'-9", 170'-1", 120'-0", 107'-7 5/8", G6'-0", 50'-0" |
| ROADWAY | 40'-0" F TO F CONCRETE BARRIERS ~ 41'-10" O. TO O. |
| DESIGN LOAD | HS-20-44 AND ALTERNATE MILITARY LOADING (CASE II) |
| SKEW | VARIES |
| WEARING SURFACE | 1¼" LATEX MOD. CONCRETE W/EPOXY REBARS |
| APPROACH SLABS | 25'-0" (AS-1-81) |
| ALIGNMENT | CURVE LEFT, TANGENT |
| SUPERELEVATION | VARIES |

| PROPOSED STRUCTURE NO. SUM-59-0017 | |
|---|---|
| TYPE | CONTINUOUS WELDED ℄ GIRDERS AND ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE. |
| SPANS | C/C BEARINGS ALONG ℄ G5'-G 3/4", 76'-0 1/2", G3'-8 7/8", 118'-8 7/8", 170'-0", 118'-8 7/8", G0'-2 7/8", G7'-0", 50'-0" |
| ROADWAY | 40'-0" F TO F CONCRETE BARRIERS ~ 41'-10" O. TO O. |
| DESIGN LOAD | HS-20-44 AND ALTERNATE MILITARY LOADING (CASE II) |
| SKEW | VARIES |
| WEARING SURFACE | 1¼" LATEX MODIFIED CONCRETE |
| APPROACH SLABS | 25'-0" (AS-1-81) |
| ALIGNMENT | CURVE LEFT, TANGENT |
| SUPERELEVATION | VARIES |

| PROPOSED STRUCTURE RHODES AVE. OVER OHIO CANAL | |
|---|---|
| TYPE | ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE |
| SPAN | 53'-8" |
| ROADWAY | 28'-0" F TO F CURBS WITH A 5'-0" SIDEWALK ON LEFT. 35'-6" O TO O |
| DESIGN LOAD | HS-20-44 AND MILITARY LOADING (CASE II) |
| SKEW | 32°-52'-53" R.F |
| WEARING SURFACE | 1¼" LATEX MODIFIED CONCRETE |
| APPROACH SLABS | 25'-0" (AS-1-81) |
| ALIGNMENT | TANGENT |
| SUPERELEVATION | TRANSITION |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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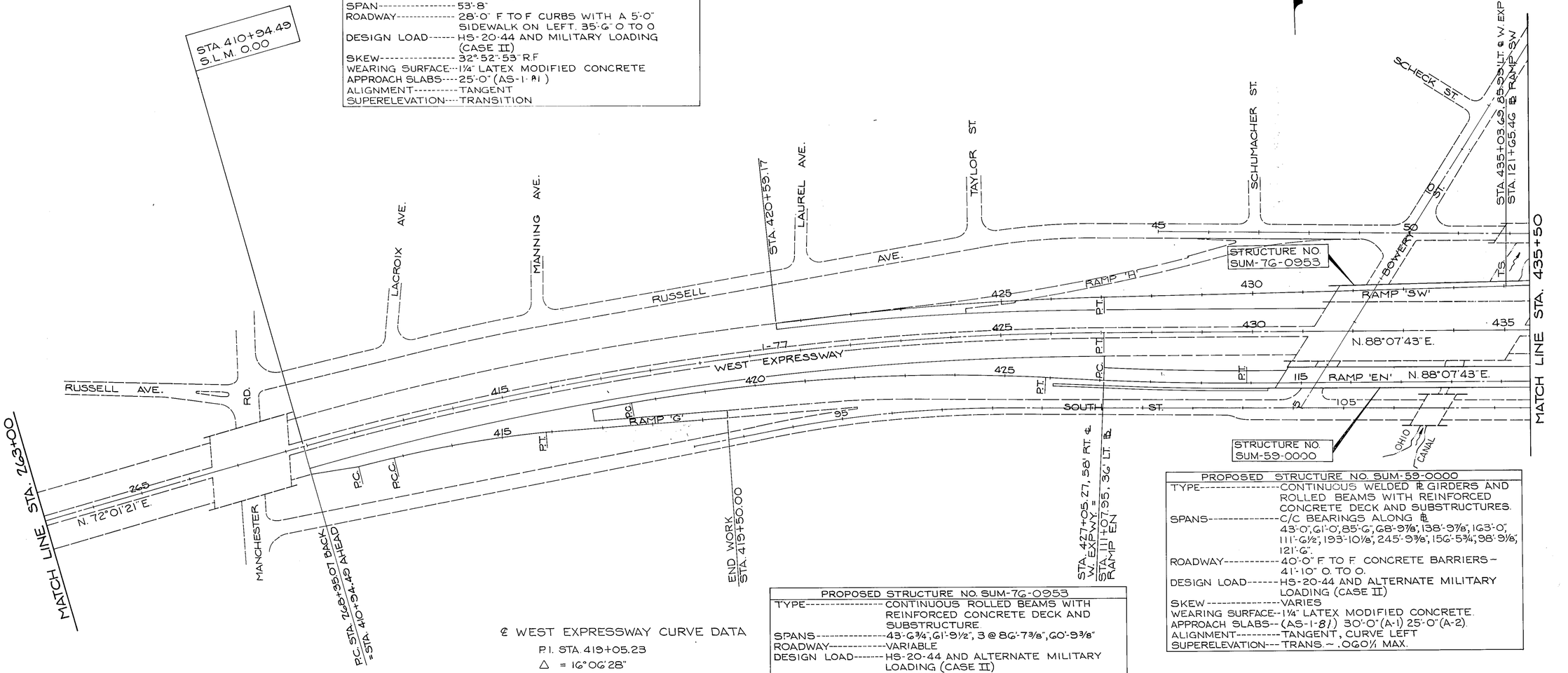
455

AKRON INNERBELT
SUM-59-0.00




| PROPOSED STRUCTURE NO. SUM-76-0953 | |
|---|---|
| TYPE | CONTINUOUS ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE. |
| SPANS | 43'-G 3/4", G1'-9 1/2", 3 @ 8G'-7 3/8", G0'-9 3/8" |
| ROADWAY | VARIABLE |
| DESIGN LOAD | HS-20-44 AND ALTERNATE MILITARY LOADING (CASE II) |
| SKEW | 33°-25'-1G" |
| WEARING SURFACE | 1" MONOLITHIC CONCRETE |
| APPROACH SLABS | 25'-0" (AS-1-81) |
| ALIGNMENT | TANGENT, SPIRAL |
| SUPERELEVATION | TRANSITION |

| PROPOSED STRUCTURE NO. SUM-59-0000 | |
|---|---|
| TYPE | CONTINUOUS WELDED ℄ GIRDERS AND ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES. |
| SPANS | C/C BEARINGS ALONG ℄ 43'-0", G1'-0", 85'-G", G8'-9 7/8", 138'-9 7/8", 1G3'-0", 111'-G 1/2", 193'-10 1/8", 245'-9 3/8", 15G'-5 3/4", 98'-9 1/8", 121'-G". |
| ROADWAY | 40'-0" F TO F CONCRETE BARRIERS ~ 41'-10" O. TO O. |
| DESIGN LOAD | HS-20-44 AND ALTERNATE MILITARY LOADING (CASE II) |
| SKEW | VARIES |
| WEARING SURFACE | 1¼" LATEX MODIFIED CONCRETE. |
| APPROACH SLABS | (AS-1-81) 30'-0" (A-1) 25'-0" (A-2). |
| ALIGNMENT | TANGENT, CURVE LEFT |
| SUPERELEVATION | TRANS. ~ .0G0% MAX. |

℄ WEST EXPRESSWAY CURVE DATA

P.I. STA. 419+05.23
Δ = 1G°06'28"
D = 1°00'00"
R = 5729.58'
T = 810.74'
L = 1G10.78'
E = 57.08'
C = 1G05.48'
P.C. STA. 410+94.49
P.T. STA. 427+05.27

GRAPHIC SCALE
0 100 200 300

SCHEMATIC PLAN

FORM D.D.A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

4
455

# AKRON INNERBELT
SUM-59-0.00

MATCH LINE STA. 435+50

BEGIN WORK STA. 110+35.00

BEGIN WORK STA. 10+07.30

S01°55'47"E LAKESHORE 11 BLVD:

BEGIN WORK STA. 221+69.51

END WORK STA. 112+30.00

MATCH LINE STA. 12+50

END WORK STA. 14+00.00

MATCH LINE STA. 12+50

S. 88°35'45"W.

END WORK STA. 111+73.69

END WORK STA. 58+12.50

BEGIN WORK STA. 261+46.19

BEGIN WORK STA. 54+12.69

RAYMOND ST.

BOWERY ST.

OHIO CANAL

STRUCTURE RHODES AVE. OVER OHIO CANAL

NATHAN ST.

N. 54°08'27"E.

BEGIN WORK STA. 38+25.00

N. 52°35'57"E. RHODES - DART AVE.

N. 52°35'57"E.

STRUCTURE NO. SUM-59-0002

RAMP 'SW'

STRUCTURE NO. SUM-59-0000

RAMP 'EN'

STRUCTURE NO. SUM-59-0016

END WORK STA. 40+20.42

N. 02°54'51"W.

N. 00°12'54"E.

RHODES - AVE.

HOWE AVE.

STA. 150+00.00
S.L.M. 0.00

MATCH LINE STA. 150+00

CAMPBELL ST

TEMP. CONNECTION

S. R. 59

N. 00°13'25"E.

AKRON INNERBELT

STRUCTURE NO. SUM-59-0017

TEMP. CONNECTION

DART AVE.
N. 00°13'25"E.

PENN AVE.

SOUTH ST.

RAMP 'WIT'

I-77 WEST EXPRESSWAY

S. 88°07'43"W.

RAMP 'WO'

RUSSELL AVE.

S. 88°33'51"W.

OWEN AVE.

VICTORY ST.

MARION ST.

RHODES AVE.

KENYON ST.

OBERLIN CT.

OBERLIN ST.

THORNTON ST.

END WORK STA. 237+58.86

BOULEVARD N. 52°35'57"E.

END WORK STA. 237+99.80

MATCH LINE STA. 453+00

## CURVE DATA RAMP 'SW'

Ⓐ
P.I. STA. 125+00.95
Ls = 500.00'
Lт = 335.49'
Sт = 168.62'
Lc = 497.30'
Os = 20°00'00"
T.S. STA. 121+65.46
S.C. STA. 126+65.46

Ⓑ
P.I. STA. 129+75.08
Δ = 46°45'28"
D = 8°00'00"
R = 716.20'
T = 309.61'
L = 584.47'
E = 64.06'
C = 568.39'
S.C. STA. 126+65.46
C.S. STA. 132+49.94

Ⓒ
P.I. STA. 134+18.56
Ls = 500.00'
Lт = 335.49'
Sт = 168.62'
Lc = 497.30'
Os = 20°00'00"
C.S. STA. 132+49.94
S.T. STA. 137+49.94

## CURVE DATA RAMP 'EN'

Ⓐ
P.I. STA. 122+85.96
Ls = 450.00'
Lт = 301.57'
Sт = 151.42'
Lc = 448.03'
Os = 18°00'00"
T.S. STA. 119+84.39
S.C. STA. 124+34.39

Ⓑ
P.I. STA. 127+82.97
Δ = 51°54'18"
D = 8°00'00"
R = 716.20'
T = 348.58'
L = 648.81'
E = 80.32'
C = 626.85'
S.C. STA. 124+34.39
C.S. STA. 130+83.20

Ⓒ
P.I. STA. 132+34.63
Ls = 450.00'
Lт = 301.57'
Sт = 151.42'
Lc = 448.03'
Os = 18°00'00"
C.S. STA. 130+83.20
S.T. STA. 135+33.20

NOTE: FOR STRUCTURE INFORMATION, SEE SHEET NO. 3.

GRAPHIC SCALE
0 100 200 300

# SCHEMATIC PLAN

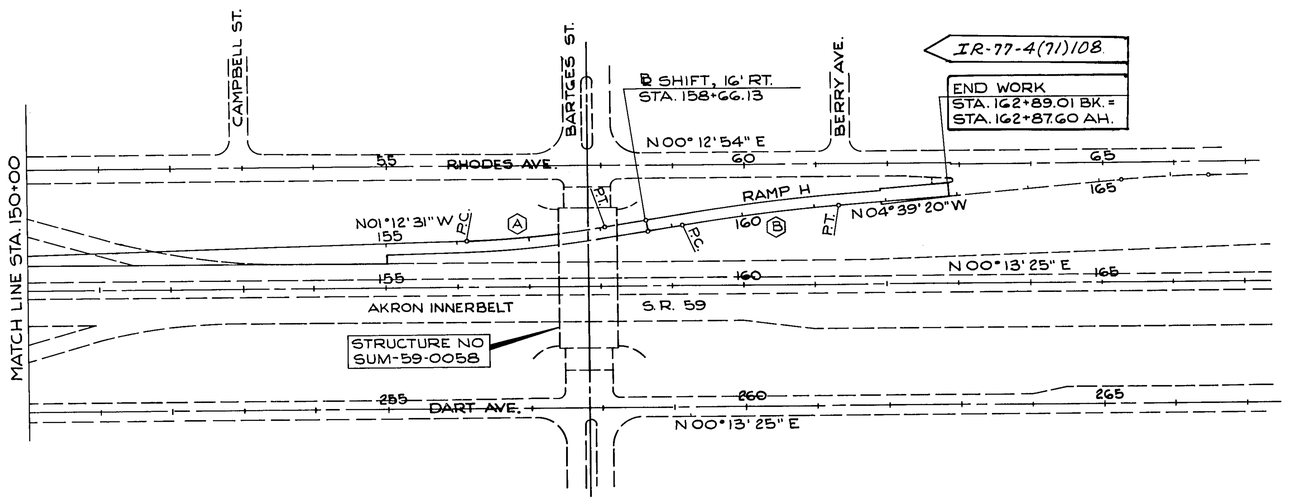
FORM D D A-9

AA D/Fe 719427E

RECEIVED
OCT 19 1983

| | | | |
|---|---|---|---|
| CALC. BY. ____ DATE ____ | M-IT62(2) | OHIO | 4A 455 |
| CHKD. BY. ____ DATE ____ | | F.H.W.A. REGION 5 | |

AKRON INNERBELT
SUM-59-0.00




## CURVE DATA RAMP H

| Ⓐ | Ⓑ |
|---|---|
| P.I. STA. 157+10.00 | P.I. STA. 160+24.12 |
| Δ = 7°49'31" | Δ = 4°22'41" |
| D = 4°00'00" | D = 2°00'00" |
| R = 1432.39' | R = 2864.79' |
| T = 97.97' | T = 109.51' |
| L = 195.63' | L = 218.91' |
| E = 3.35' | E = 2.09' |
| C = 195.48' | C = 218.85' |
| P.C. STA. 156+12.03 | P.C. STA. 159+14.61 |
| P.T. STA. 158+07.66 | P.T. STA. 161+33.52 |

0 100 200 300 Feet

Made By: TAK 5-2-83
Checked By: DSB 5-4-83

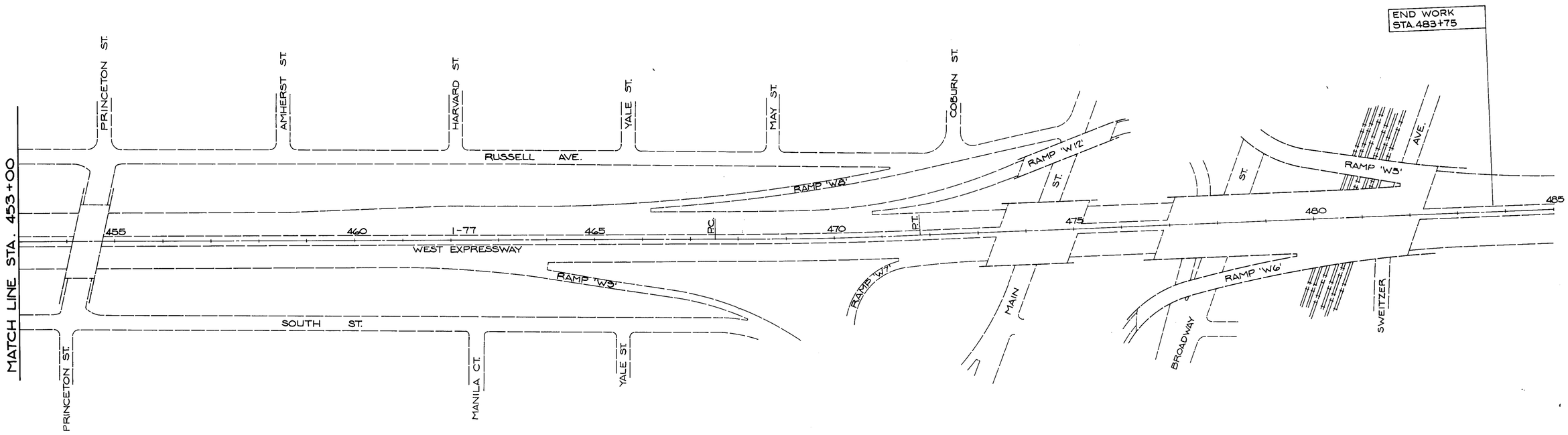
SCHEMATIC PLAN

RECEIVED
OCT 18 1963

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

5
455

AKRON INNERBELT
SUM-59-0.00




℄ WEST EXPRESSWAY CURVE DATA

P.I. STA. 469+65.99
Δ = 1° 59' 28.2"
D = 0° 28' 00"
R = 12,277.67'
T = 213.36'
L = 426.68'
E = 1.79'
P.C. STA. 467+52.63
P.T. STA. 471+79.31

GRAPHIC SCALE
0 100 200 300

SCHEMATIC PLAN

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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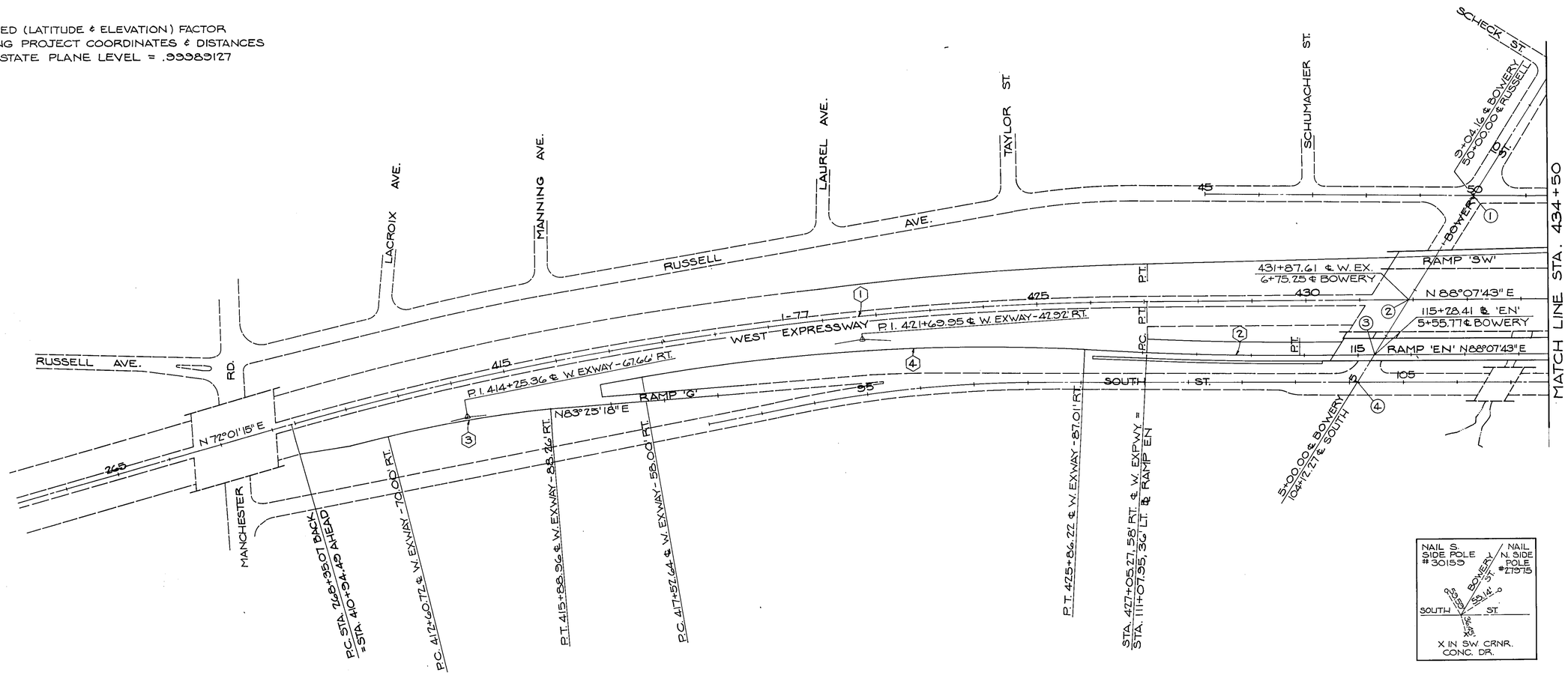
455

AKRON INNERBELT
SUM-59-0.00

| CUR. NO. | Δ | Dc | R | T | L | E | CH | CURVE COORDINATES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | P.I. STA. | NORTH | EAST | P.C. STA. | NORTH | EAST | P.T. STA. | NORTH | EAST |
| 1 | 16°06'28" | 1°00'00" | 5729.58' | 810.74' | 1610.78' | 57.08' | 1605.48' | 419+05.23 | 509721.792 | 2262673.131 | 410+94.49 | 509471.562 | 2261901.978 | 427+05.27 | 509748.246 | 2263483.434 |
| 2 | 2°50'23" | 1°00'00" | 5729.58' | 142.10' | 284.14' | 1.76' | 284.16' | 112+50.05 | 509651.876 | 2263626.800 | 111+07.95 | 509654.782 | 2263484.719 | 113+92.10 | 509656.517 | 2263768.875 |
| 3 | 3°44'14" | 3°00'00" | 1909.86' | 167.68' | 334.57' | 6.92' | 334.18' | 414+25.36 | 509499.084 | 2262236.598 | 417+60.72 | 509453.385 | 2262080.473 | 415+88.96 | 509517.721 | 2262398.203 |
| 4 | 17°21'58" | 1°30'00" | 3819.72 | 413.81' | 824.41' | 22.35' | 822.81' | 421+69.95 | 509663.245 | 2262955.388 | 417+52.64 | 509581.478 | 2262545.737 | 425+86.22 | 509656.239 | 2263363.143 |

| NO. | INTERSECTION COORDINATES | |
|---|---|---|
| | NORTH | EAST |
| 1 | 509561.476 | 2264081.358 |
| 2 | 509763.997 | 2263965.515 |
| 3 | 509660.968 | 2263805.062 |
| 4 | 509617.847 | 2263876.824 |

THE COMBINED (LATITUDE & ELEVATION) FACTOR
FOR REDUCING PROJECT COORDINATES & DISTANCES
SHOWN TO STATE PLANE LEVEL = .99989127







GRAPHIC SCALE
0 100 200 300

GEOMETRIC LAYOUT

DRAWN BY B.H.B 5/14/79
CHECKED BY R.J.T. 5/22/79

FORM DD A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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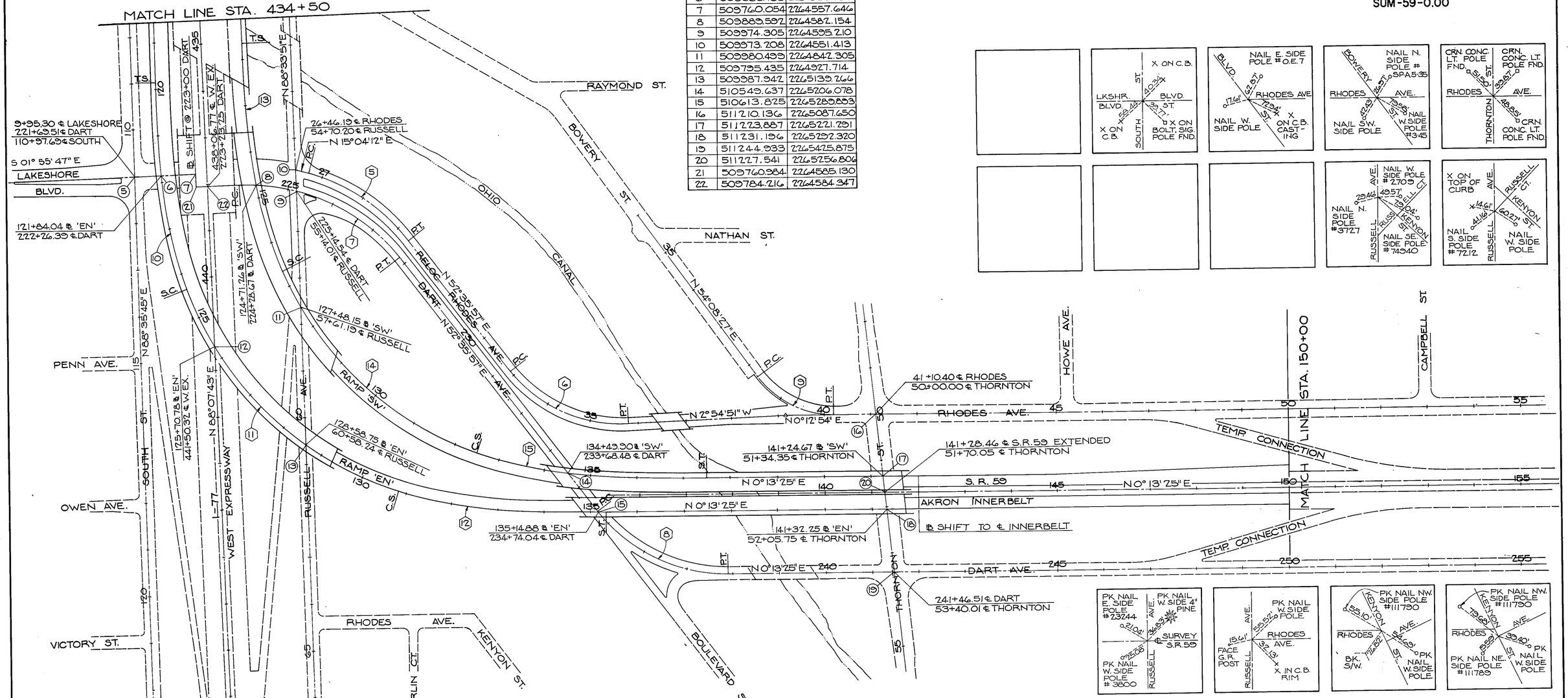
AKRON INNERBELT
SUM-59-0.00

| NO. | INTERSECTION COORDINATES NORTH | EAST |
|---|---|---|
| 5 | 509679.638 | 2764567.040 |
| 6 | 509686.488 | 2764560.137 |
| 7 | 509760.054 | 2764557.646 |
| 8 | 509889.592 | 2764587.154 |
| 9 | 509974.305 | 2764595.210 |
| 10 | 509973.208 | 2764551.413 |
| 11 | 509980.499 | 2764847.305 |
| 12 | 509795.435 | 2764927.714 |
| 13 | 509987.942 | 2765139.766 |
| 14 | 510549.637 | 2765206.078 |
| 15 | 510613.825 | 2765289.853 |
| 16 | 511210.136 | 2765087.650 |
| 17 | 511273.887 | 2765221.291 |
| 18 | 511231.196 | 2765252.320 |
| 19 | 511244.933 | 2765425.875 |
| 20 | 511227.541 | 2765256.806 |
| 21 | 509760.384 | 2764585.130 |
| 22 | 509784.216 | 2764584.347 |




| CUR. NO. | Δ | Dc | R | T | L | E | CH | CURVE COORDINATES P.I. STA. | NORTH | EAST | P.C. STA. | NORTH | EAST | P.T. STA. | NORTH | EAST |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 37°31'45" | 14°00'00" | 409.26' | 139.04' | 268.07' | 22.37' | 263.30' | 28+07.53 | 510179.003 | 2764593.362 | 26+68.49 | 509994.745 | 2764557.212 | 29+36.56 | 510213.454 | 2764703.816 |
| 6 | 55°30'45" | 19°00'00" | 301.56' | 158.70' | 292.18' | 39.21' | 280.88' | 34+50.41 | 510525.560 | 2765112.021 | 32+91.71 | 510479.166 | 2764985.948 | 35+83.89 | 510684.057 | 2765103.953 |
| 7 | 54° 31'44" | 14°00'00" | 409.26' | 210.91' | 389.45' | 51.15' | 374.96' | 226+06.18 | 5100666.992 | 2764574.820 | 223+95.27 | 509856.200 | 2764581.922 | 227+84.76 | 510195.086 | 2764742.365 |
| 8 | 57°22'32" | 16°00'00" | 358.10' | 176.11' | 327.35' | 40.96' | 316.07' | 236+42.57 | 510716.114 | 2765423.811 | 234+66.45 | 510609.146 | 2765283.907 | 237+93.80 | 510892.224 | 2765424.498 |
| 9 | 53°55'33" | 28°38'52" | 200.00' | 101.74' | 188.24' | 24.39' | 181.37' | 39+33.92 | 511018.418 | 2765086.931 | 38+32.18 | 510958.818 | 2765004.473 | 40+20.42 | 511120.160 | 2765067.313 |
| 11 | 51°54'18" | 8°00'00" | 716.20' | 348.58' | 648.81' | 80.32' | 626.85' | 127+82.57 | 509855.662 | 2765132.442 | SEE SPIRAL DATA | | | | | |
| 14 | 46°45'28" | 8°00'00" | 716.20' | 309.61' | 584.47' | 64.06' | 568.39' | 129+75.08 | 5100649.919 | 2765053.200 | | | | | | |

| CUR. NO. | SPIRAL DATA Ls | Θs | LT | ST | COORDINATES P.I. STA. | NORTH | EAST | T.S STA. | NORTH | EAST | S.C. STA. | NORTH | EAST |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 450.00' | 18°00'00" | 301.57' | 151.42' | 122+85.96 | 509685.707 | 2764662.210 | 119+84.39 | 509675.859 | 2764360.805 | 124+34.39 | 509737.177 | 2764804.619 |
| 13 | 500.00' | 20°00'00" | 335.45' | 168.62' | 125+00.95 | 509877.914 | 2764613.039 | 121+65.46 | 509860.748 | 2764278.018 | 126+65.46 | 509943.851 | 2764768.238 |

| CUR. NO. | SPIRAL DATA Ls | Θs | LT | ST | COORDINATES P.I. STA. | NORTH | EAST | C.S. STA. | NORTH | EAST | S.T. STA. | NORTH | EAST |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 450.00' | 18°00'00" | 301.57' | 151.42' | 132+34.63 | 510330.586 | 2765788.805 | 130+83.20 | 510186.757 | 2765241.451 | 135+33.20 | 510632.150 | 2765289.982 |
| 15 | 500.00' | 20°00'00" | 335.45' | 168.62' | 134+18.56 | 510513.675 | 2765818.520 | 132+49.94 | 510355.445 | 2765160.228 | 137+49.94 | 510849.158 | 2765219.829 |

GRAPHIC SCALE
0 100 200 300

GEOMETRIC LAYOUT

DRAWN BY B.H.B 5/14/79
CHECKED BY R.J.T. 5/22/79

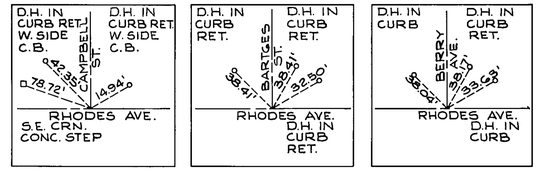
FORM D D A-5

AA B/P# 71948R

| CALC. BY. DATE | M-IT62(2) | OHIO | 7A |
|---|---|---|---|
| CHKD. BY. DATE | | F.H.W.A. REGION 5 | 455 |

AKRON INNERBELT
SUM-59-0.00

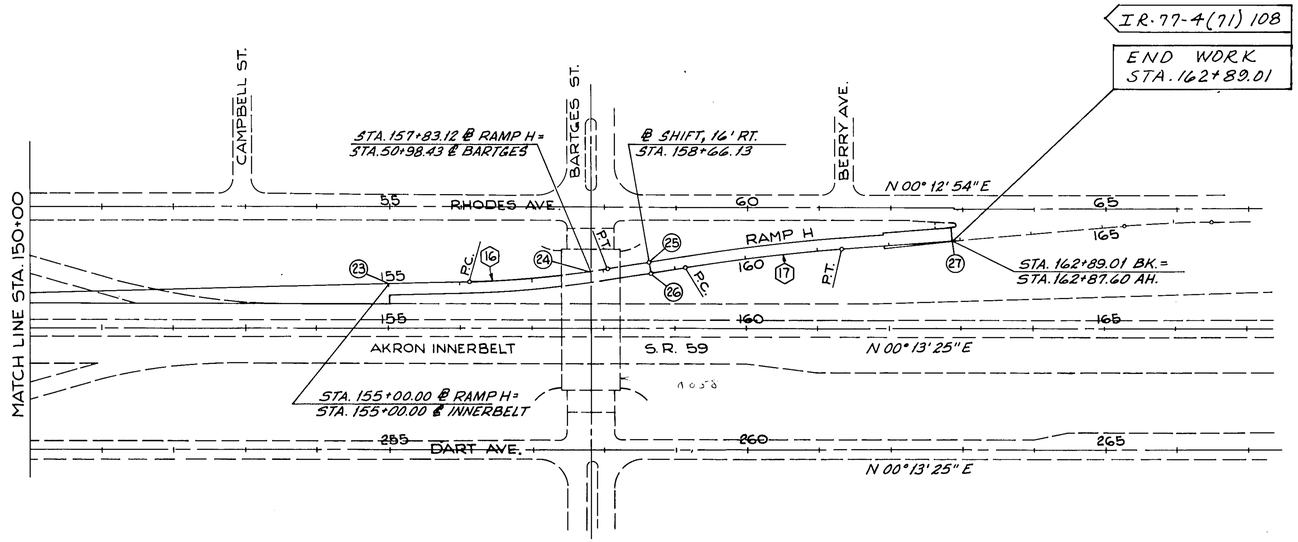
| NO. | INTERSECTION COORDINATES | |
|---|---|---|
| | NORTH | EAST |
| 23 | 512599.071 | 2265262.159 |
| 24 | 512882.175 | 2265192.693 |
| 25 | 512963.750 | 2265172.668 |
| 26 | 512966.262 | 2265188.470 |
| 27 | 513386.418 | 2265412.154 |










| CUR. NO. | Δ | Dc | R | T | L | E | CH | CURVE COORDINATES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | P.I. STA. | NORTH | EAST | P.C. STA. | NORTH | EAST | P.T. STA. | NORTH | EAST |
| 16 | 7°49'31" | 4°00'00" | 1432.39' | 97.97' | 195.63' | 3.35' | 195.48' | 157+10.00 | 512809.260 | 2265197.230 | 156+12.03 | 512711.314 | 2265199.296 | 158+07.66 | 512906.013 | 2265181.847 |
| 17 | 4°22'41" | 2°00'00" | 2864.79' | 109.51' | 218.91' | 2.09' | 218.85' | 160+24.12 | 513122.292 | 2265163.663 | 159+14.61 | 513014.143 | 2265180.857 | 161+33.52 | 513231.438 | 2265154.775 |

0 100 200 300
Feet

Made By: TAK 5.3.83
Checked By: DSB 5.6.83

GEOMETRIC LAYOUT

DRAWN BY BHB 8/28/79
CHECKED BY RJT 12/20/79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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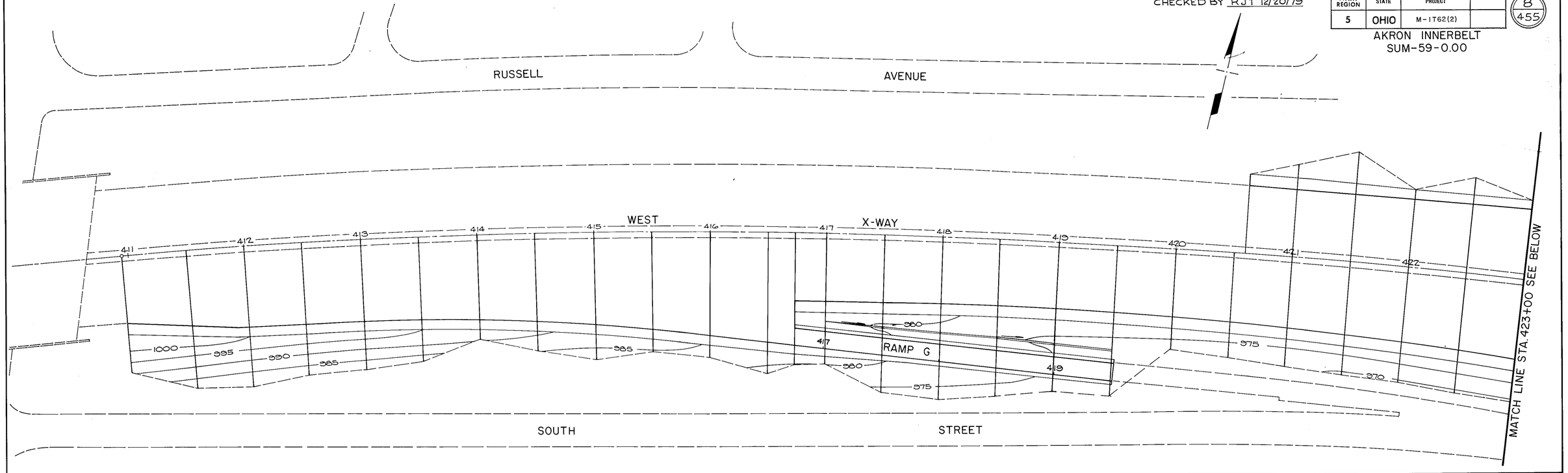
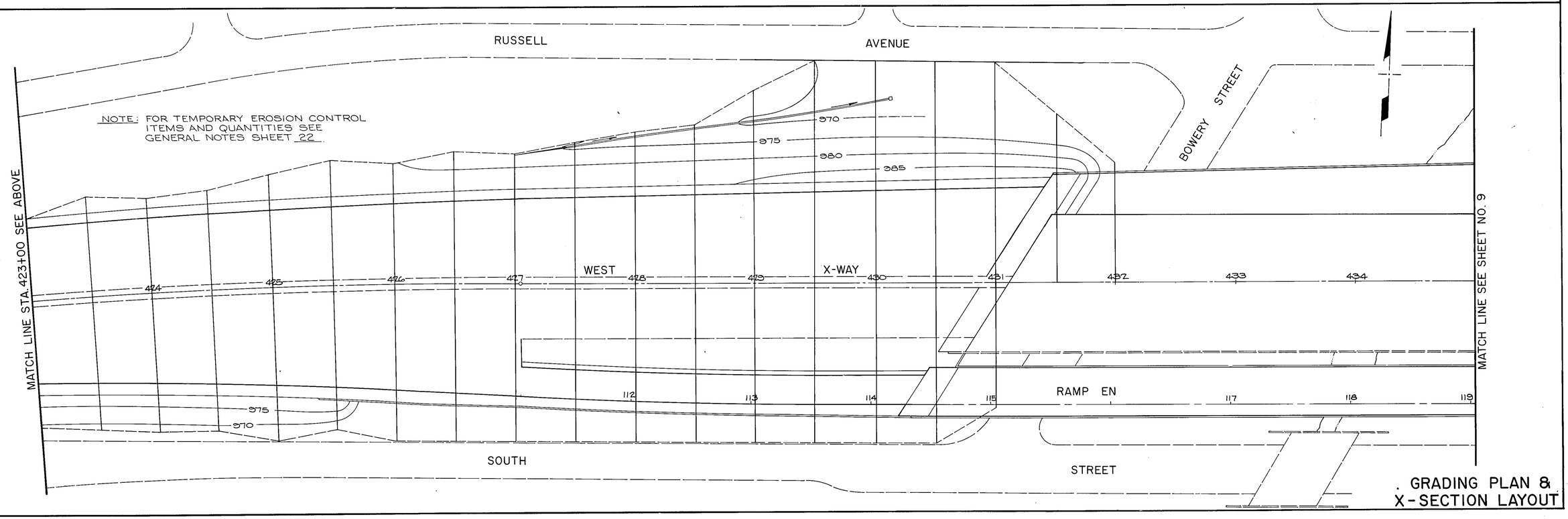
455

AKRON INNERBELT
SUM-59-0.00




GRADING PLAN &
X-SECTION LAYOUT

DRAWN BY BHB 8/28/79
CHECKED BY RJT 12/20/79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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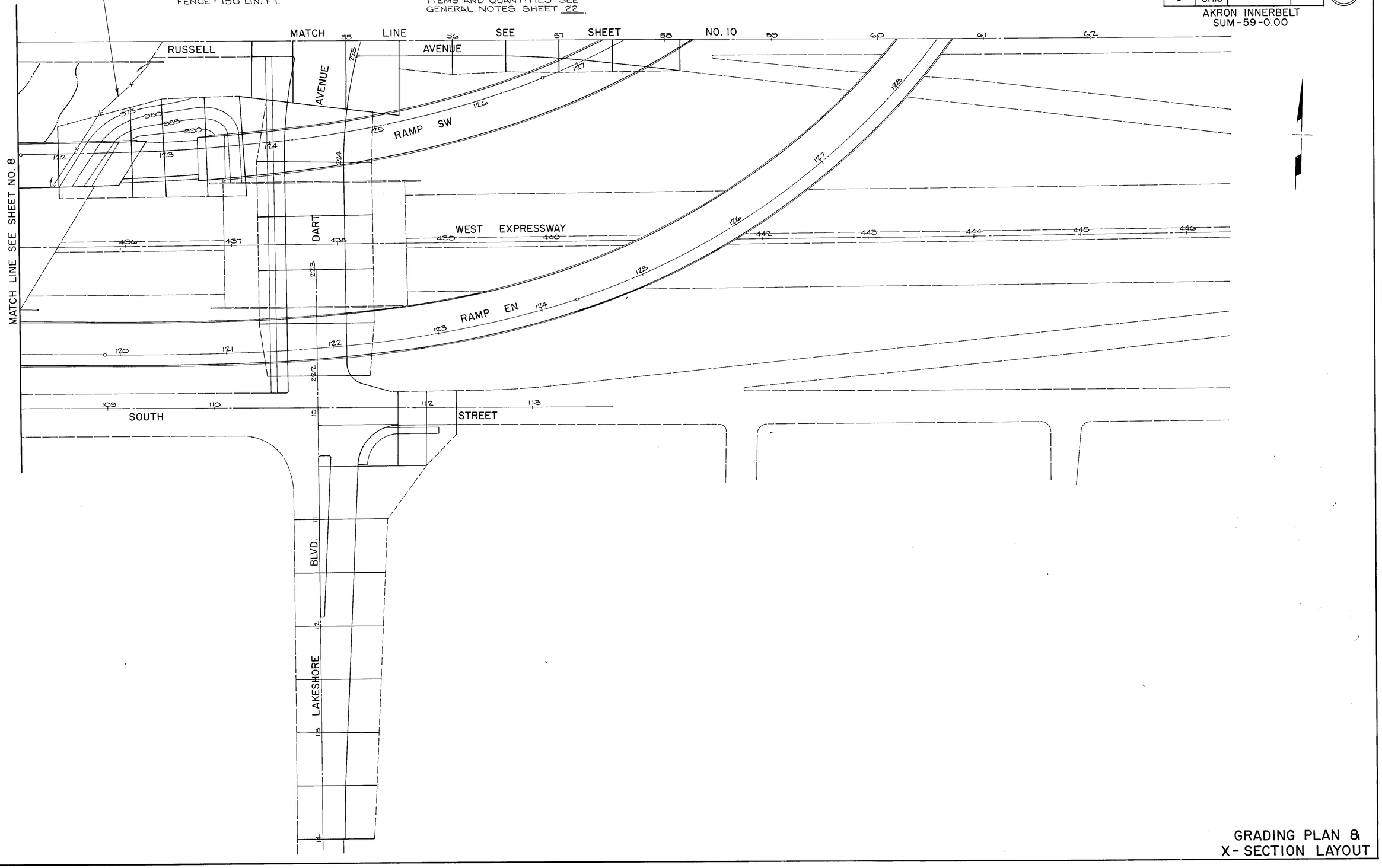
455

AKRON INNERBELT
SUM-59-0.00

ITEM 207 - FILTER FABRIC SEDIMENT FENCE = 150 LIN. FT.

NOTE: FOR TEMPORARY EROSION CONTROL ITEMS AND QUANTITIES SEE GENERAL NOTES SHEET 22.




GRADING PLAN &
X-SECTION LAYOUT

NOTE: FOR TEMPORARY EROSION CONTROL ITEMS AND QUANTITIES SEE GENERAL NOTES SHEET 22.

SEDIMENT BASINS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING MC-11 AND DIMENSIONS SHOWN ON THIS DRAWING. THE DEPTH SHALL BE 2'-6". PAYMENT FOR THE SEDIMENT BASINS SHALL BE PAID FOR UNDER ITEM 207- CUBIC YARD, TEMPORARY BENCHES, DIKES, DAMS AND SEDIMENT BASINS. ROCK REQUIRED SHALL BE PAID FOR UNDER ITEM 601- CUBIC YARD, ROCK CHANNEL PROTECTION TYPE C WITHOUT FILTER.

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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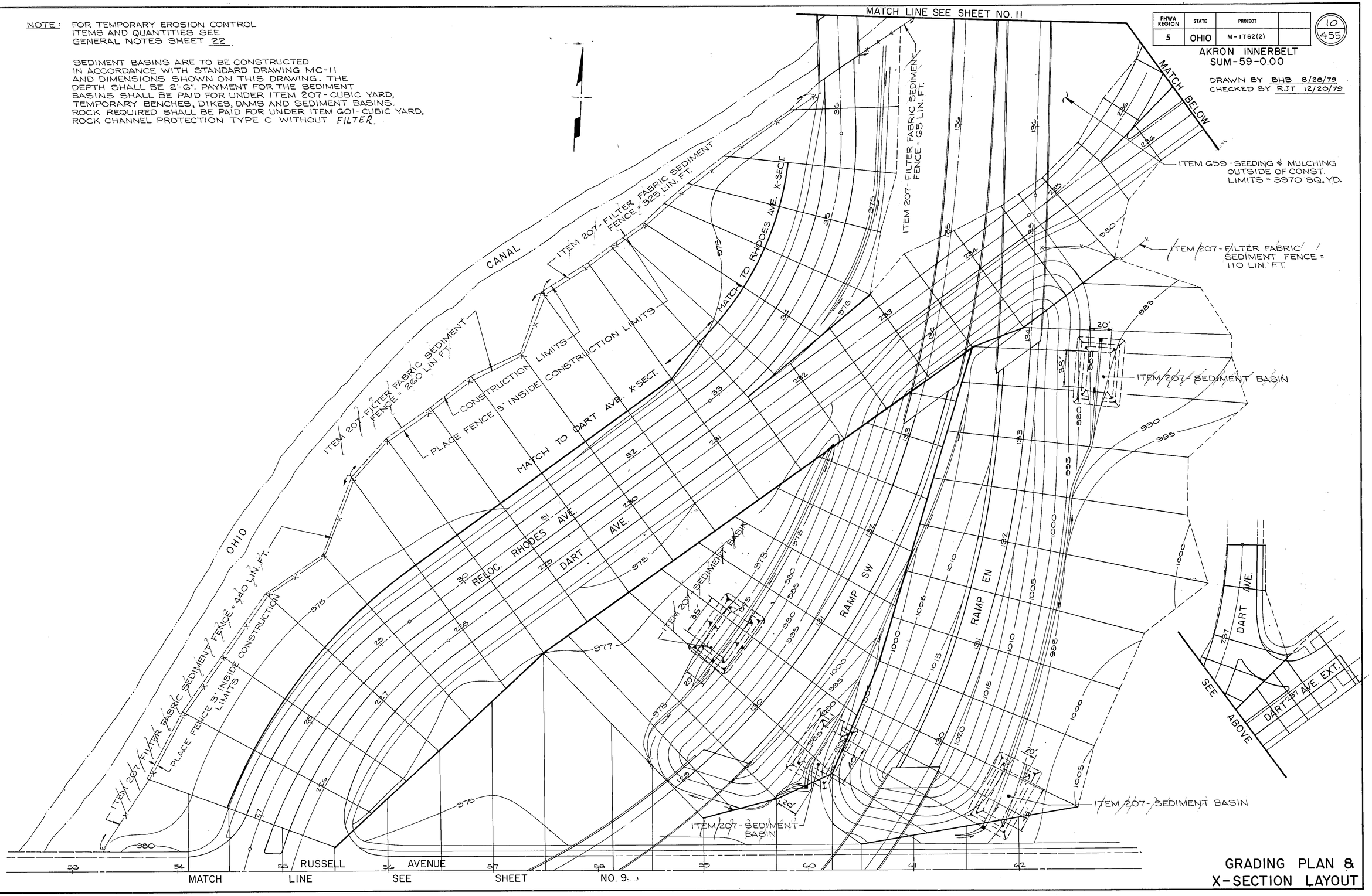
455

AKRON INNERBELT
SUM-59-0.00

DRAWN BY BHB 8/28/79
CHECKED BY RJT 12/20/79




GRADING PLAN & X-SECTION LAYOUT

DRAWN BY BHB 8/28/79
CHECKED BY RJT 12/20/79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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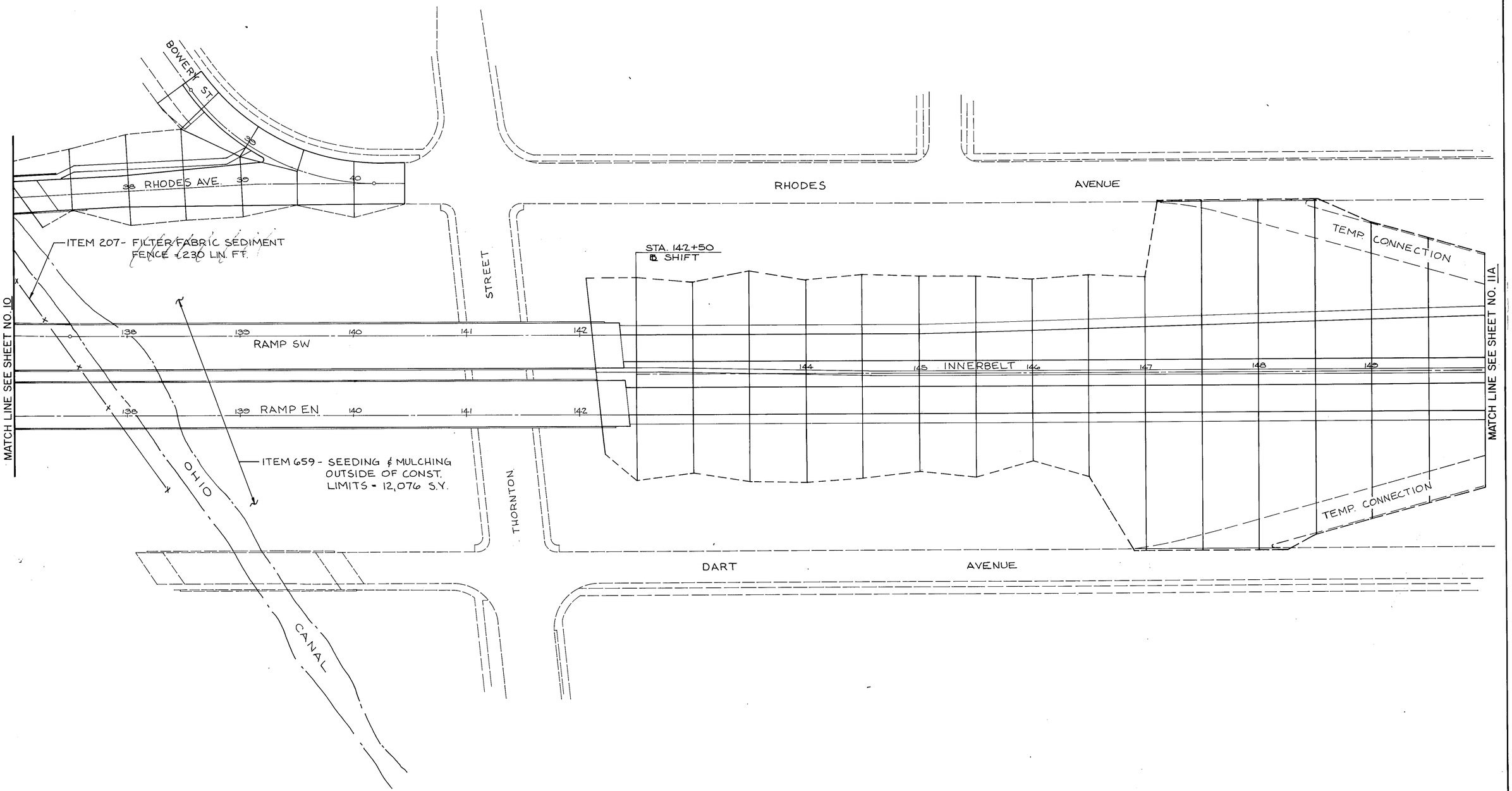
455

AKRON INNERBELT
SUM-59-0.00

NOTE: FOR TEMPORARY EROSION CONTROL ITEMS AND QUANTITIES SEE GENERAL NOTES SHEET 22.




GRADING PLAN &
X-SECTION LAYOUT

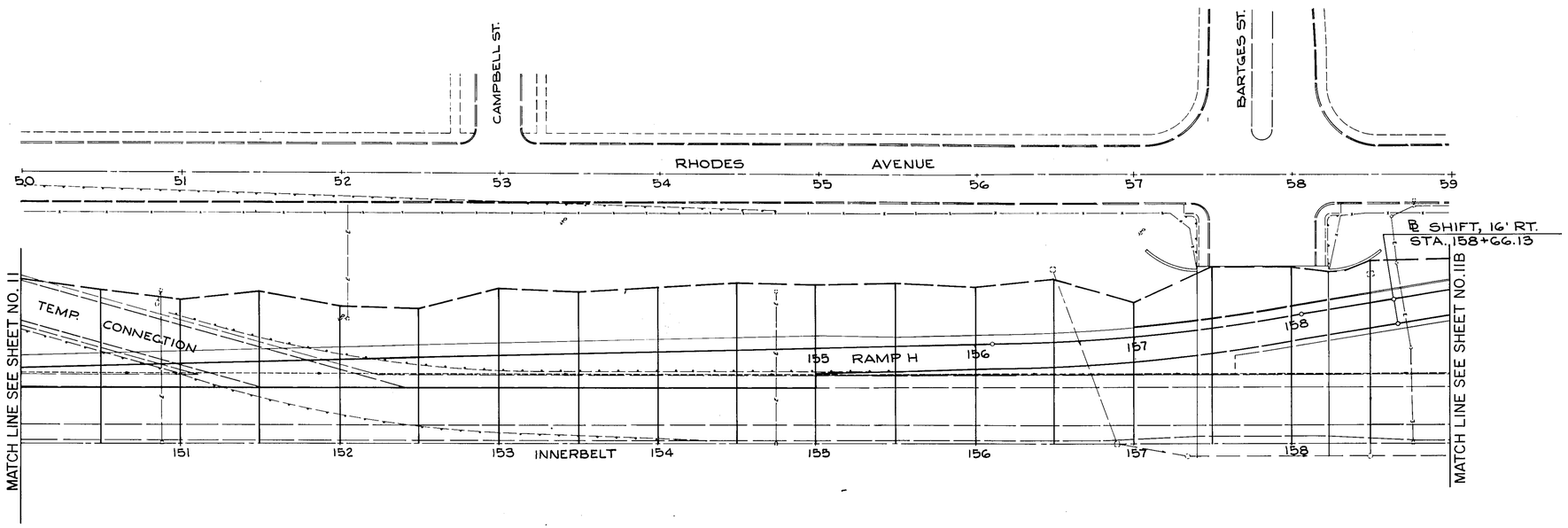
AA B/P# 71842R

| CALC. BY. DATE | M-IT62(2) | OHIO |
|---|---|---|
| CHK'D. BY. DATE | | F.H.W.A. REGION 5 |

IIA
455

AKRON INNERBELT
SUM-59-0.00

NOTE: FOR TEMPORY EROSION CONTROL ITEMS AND QUANTITIES SEE GENERAL NOTES SHEET 22.




Made By: TAK 5-4-83
Checked By: DSB 5-6-83

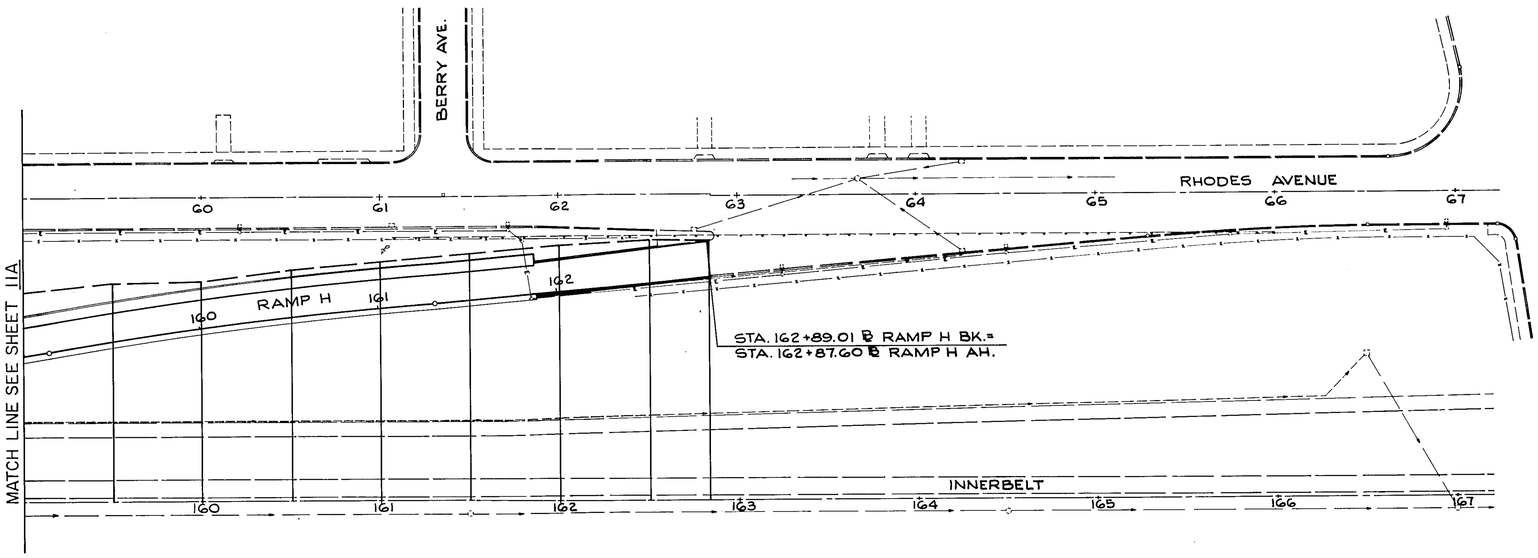
GRADING PLAN &
X-SECTION LAYOUT

NOTE: FOR TEMPORARY EROSION CONTROL ITEMS AND QUANTITIES SEE GENERAL NOTES SHEET 22.

| CALC. BY. DATE | M-IT62(2) | OHIO |
|---|---|---|
| CHKD. BY. DATE | | F.H.W.A. REGION 5 |

IIB 455

AKRON INNERBELT
SUM-59-0.00




Made By: TAK 5-5-83
Checked By: DSB 5-6-83

GRADING PLAN & X-SECTION LAYOUT

DRAWN BY NRE 5/30/79
CHECKED BY RJT 12/4/79

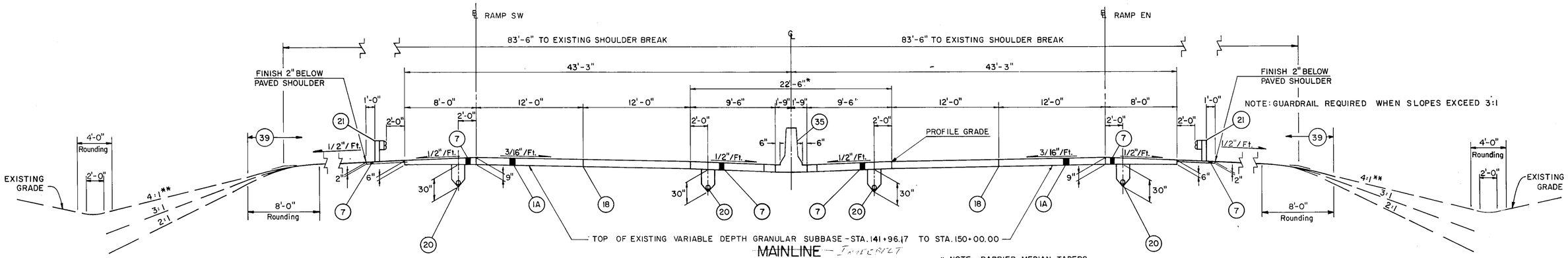
| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

12/455

AKRON INNERBELT
SUM-59-0.00

# TYPICAL SECTIONS

## TYPE 451



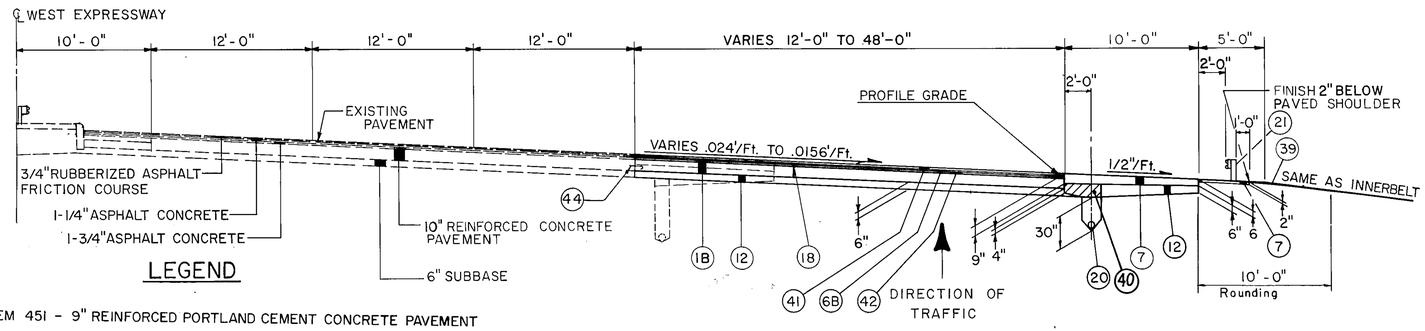

MAINLINE — INNERBELT

### NORMAL SECTION

STA. 142+09.18 TO STA. 142+50 RAMP SW
STA. 142+16.76 TO STA. 142+50 RAMP EN
(℄ SHIFT @ STA. STA. 142+50, 35'-6" LEFT & RIGHT TO ℄)
STA. 142+50 TO STA. 145+00 S.B. MAINLINE
STA. 142+50 TO STA. 150+00 N.B. MAINLINE

* NOTE: BARRIER MEDIAN TAPERS
STA. 142+75.00 TO STA. 144+65.00
FOR DETAILS SEE SHEET 55

** EXISTING AND PROPOSED SIDE SLOPES AND DITCHES ARE TYPICAL UNLESS SHOWN ON CROSS SECTIONS

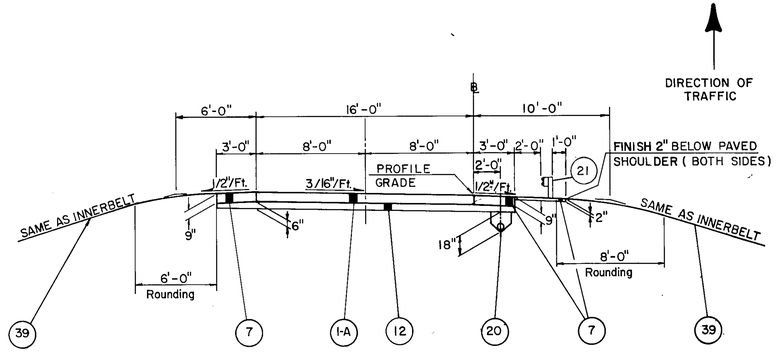



### LEGEND

(1A) ITEM 451 - 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
(1B) ITEM 305 - 9" PORTLAND CEMENT CONCRETE BASE
(4A) ITEM 402 - 1-1/2" ASPHALT CONCRETE, AC-20
(6B) ITEM 404 - 1-1/4" ASPHALT CONCRETE, AC-20
(7) ITEM 301 - BITUMINOUS AGGREGATE BASE: AC-20, RT-11 OR RT-12 *(Thickness as shown)*
(12) ITEM 310 - SUBBASE (VARIABLE DEPTH) - TYPE I, GRADING A
(18) - STANDARD LONGITUDINAL JOINT
(20) ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
(21) ITEM 606 - GUARDRAIL, TYPE - 5
(26) ITEM 608 - 6" CONCRETE WALK
(28) ITEM 609 - CONCRETE CURB, STANDARD TYPE 2-A
(29) ITEM 612 - 6" CONCRETE MEDIAN
(35) ITEM 622 - CONCRETE BARRIER, STANDARD TYPE B-50
(39) ITEM 659 - SEEDING AND MULCHING, AS PER PLAN
(40) *SPECIAL - DRAINAGE CONNECTION, USING NO. 8 AGGREGATE*
(41) SPECIAL - 3/4" OPEN GRADED RUBBERIZED ASPHALT FRICTION COURSE
(42) ITEM 402 - 1-3/4" ASPHALT CONCRETE, AC-20
(43) ITEM 609 - CONCRETE CURB, STANDARD TYPE 6
(44) -HOOK BOLTS 30" O/C AS PER BP-3

### WEST EXPRESSWAY
EASTBOUND WIDENING

LIMITING STATIONS
STA. 416+73.96 TO STA. 427+05.27
STA. 410+94.49 TO STA. 416+73.96




### RAMP "G"
### NORMAL SECTION
STA. 416+73.96 TO STA. 419+50.00

## TYPICAL SECTIONS

FORM D D A-8

DRAWN BY NRE 5/30/79
CHECKED BY RJT 12/4/79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

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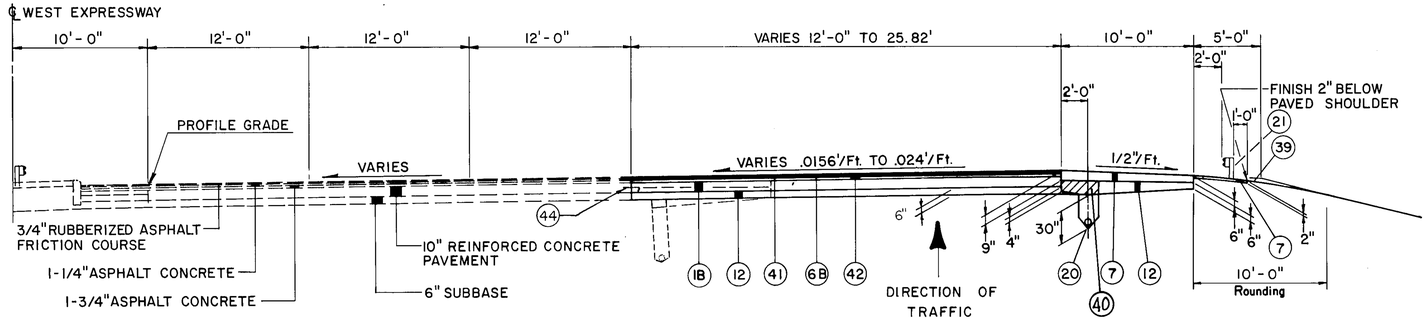
455

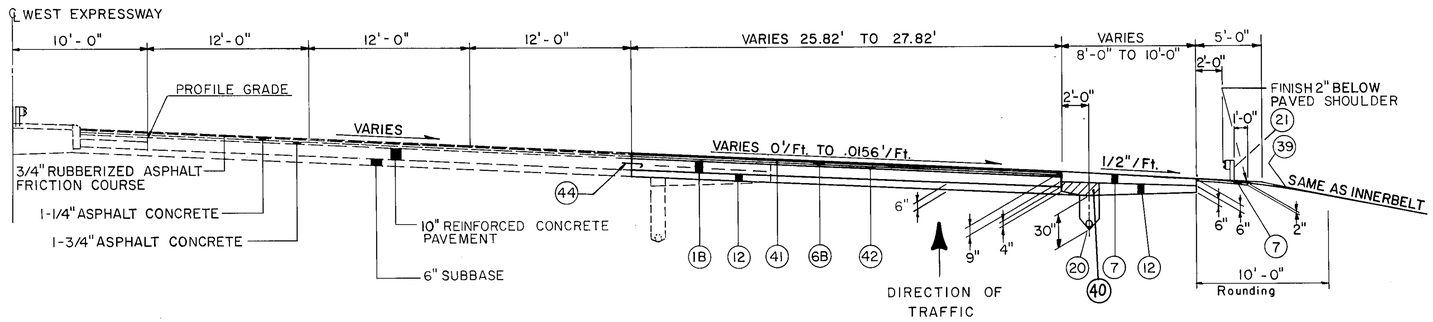
AKRON INNERBELT
SUM-59-0.00

# TYPICAL SECTIONS

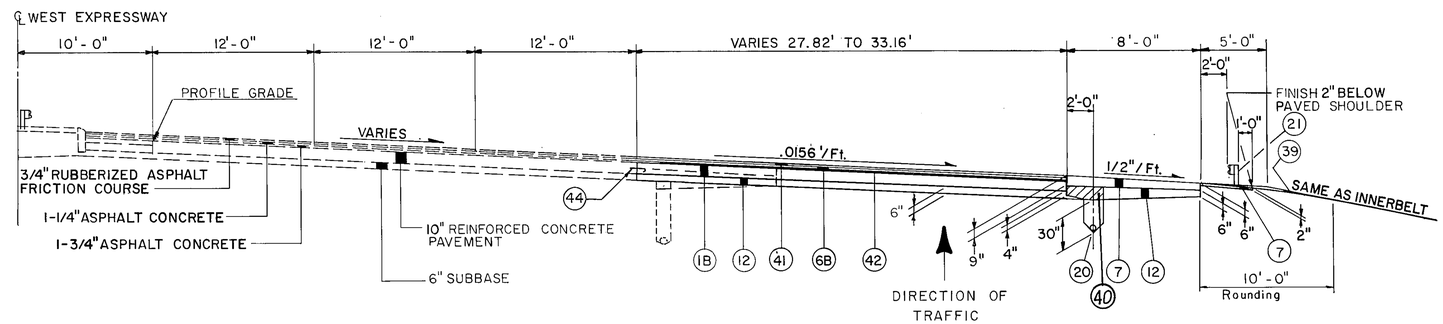
## TYPE 305 & 404




INNERBELT – WEST EXPRESSWAY
CONVERGENCE
LIMITING STATIONS
STA. 420+59.17 TO STA. 427+50.00




INNERBELT – WEST EXPRESSWAY
CONVERGENCE
LIMITING STATIONS
STA. 427+50.00 TO STA. 428+50.00




INNERBELT – WEST EXPRESSWAY
CONVERGENCE
LIMITING STATIONS
STA. 428+50.00 TO STA. 431+61.34

# TYPICAL SECTIONS

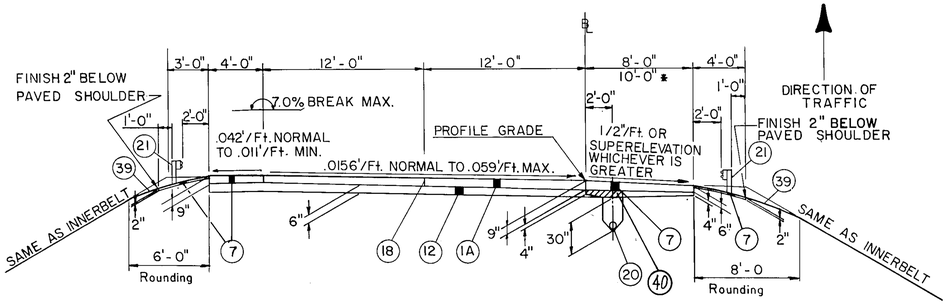
TYPE 451

DRAWN BY NRE 5/30/79
CHECKED BY RJT 12/4/79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

AKRON INNERBELT
SUM-59-0.00

14
455



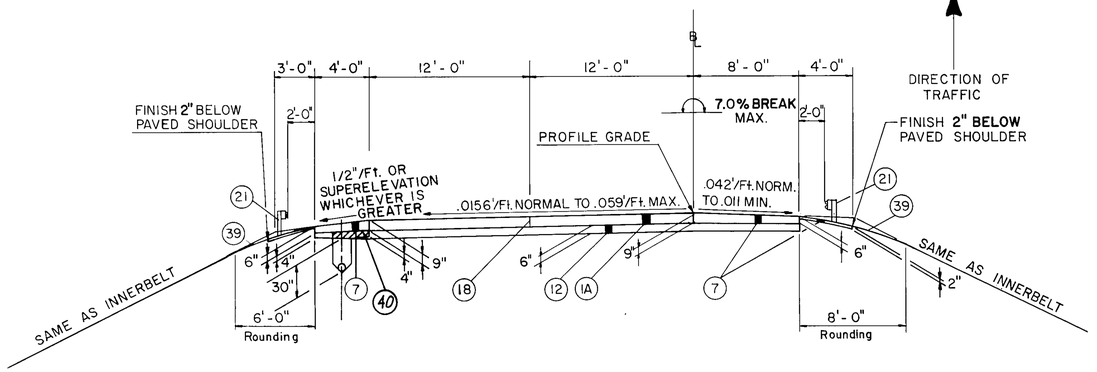

TWO LANE DIRECTIONAL RAMP— TANGENT AND CURVE RIGHT
NORMAL .0156'/Ft. TO .059'/Ft. SUPERELEVATION

LIMITING STATIONS

* RAMP EN STA. 111+07.95 TO STA. 115+34.39 NORMAL
RAMP SW STA. 121+65.46 TO STA. 123+15.46 - NORMAL
RAMP SW STA. 123+15.46 TO STA. 126+65.46 - NORMAL TO .059'/Ft.
RAMP SW STA. 126+65.46 TO STA. 132+49.94 - .059'/Ft.
RAMP SW STA. 132+49.94 TO STA. 137+49.94 - .059'/Ft. TO NORMAL

BRIDGE LIMITS

RAMP EN STA. 114+52.14 TO STA. 115+34.39
RAMP SW STA. 121+65.46 TO STA. 122+55.00
RAMP SW STA. 123+55.46 TO STA. 129+15.60
RAMP SW STA. 133+45.64 TO STA. 142+09.18



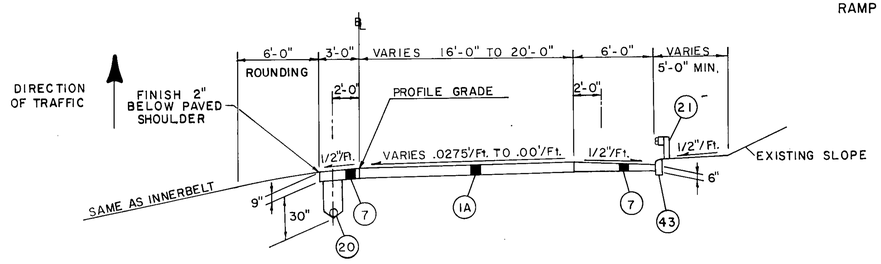

TWO LANE DIRECTIONAL RAMP— TANGENT AND CURVE LEFT
NORMAL .0156'/Ft. TO .059'/Ft. SUPERELEVATION

LIMITING STATIONS

RAMP EN STA. 119+84.39 TO STA. 124+34.39 - NORMAL TO .059'/Ft.
RAMP EN STA. 124+34.39 TO STA. 130+83.20 - .059'/Ft.
RAMP EN STA. 130+83.20 TO STA. 135+33.20 - .059'/Ft. TO NORMAL
RAMP EN STA. 135+30.20 TO STA. 142+50 - NORMAL

BRIDGE LIMITS

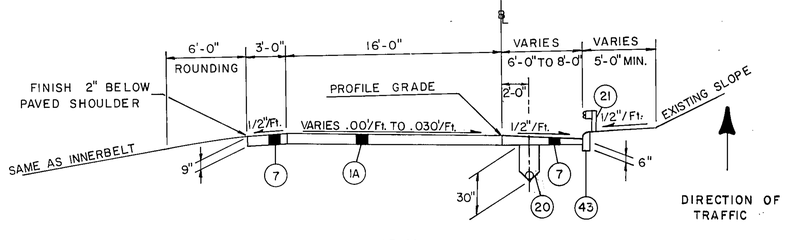
RAMP EN STA. 115+34.39 TO STA. 129+52.60
RAMP EN STA. 134+16.51 TO STA. 142+16.76




RAMP H

LIMITING STATIONS

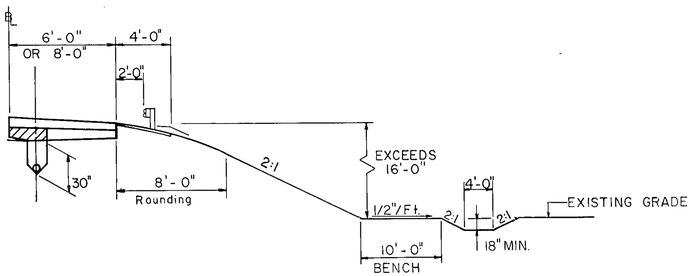
RAMP H STA. 158+66.13 TO STA. 162+89.01



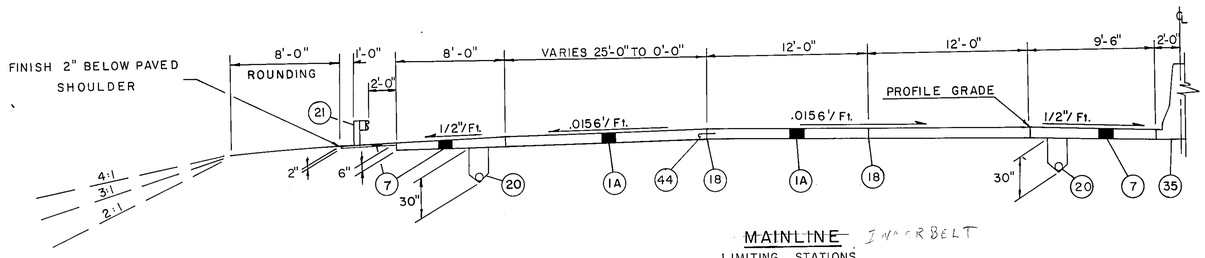

RAMP H

LIMITING STATIONS

RAMP H STA. 155+00 TO STA. 158+66.13




DEEP FILL SECTIONS
DIRECTIONAL RAMPS




MAINLINE — INNERBELT

LIMITING STATIONS

STA. 145+00 TO STA. 155+00 S.B. MAINLINE

TYPICAL SECTIONS

FORM D D A-8

# TYPICAL SECTIONS

TYPE 451

DRAWN BY NRE 5/30/79
CHECKED BY RJT 12/4/79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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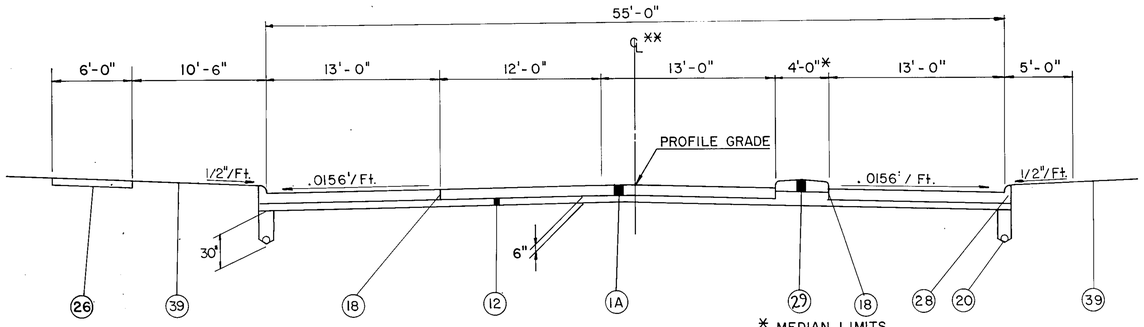
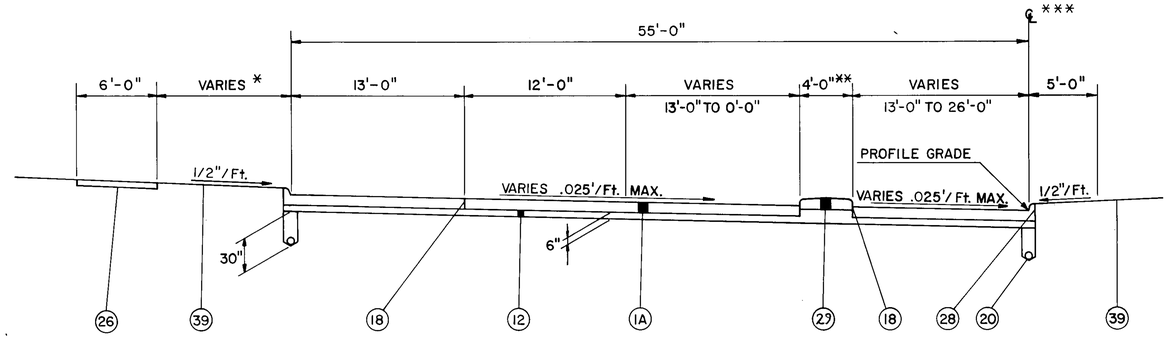
455

AKRON INNERBELT
SUM-59-0.00



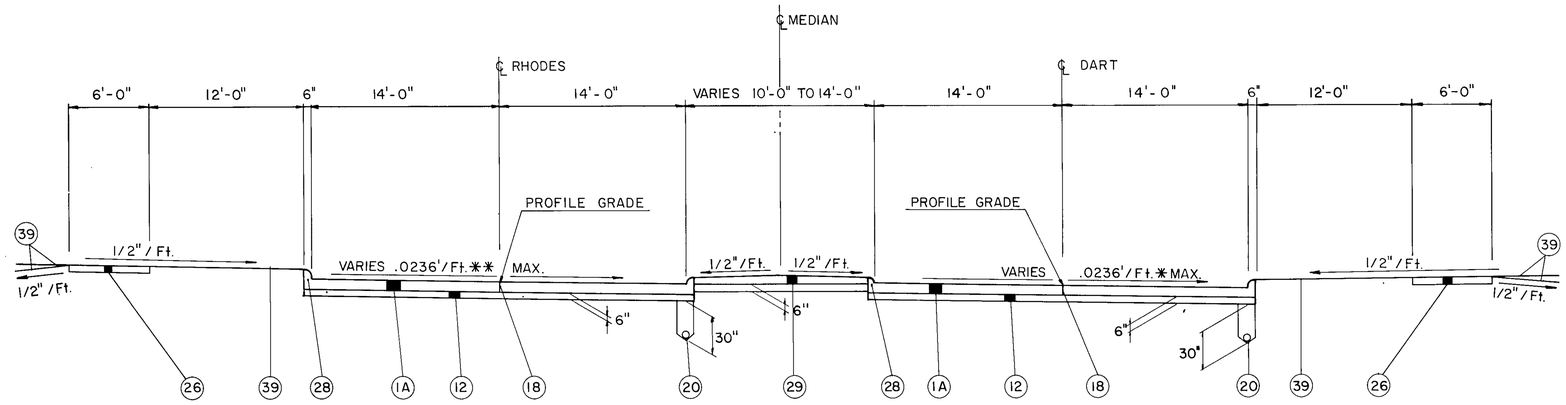

* MEDIAN LIMITS
STA. 222+35.00 TO STA. 223+30.00
** ℄ SHIFTS AT STA. 223+00

DART AVE.
STA. 222+11.91 TO STA. 223+30.00




DART AVE.
STA. 222+30.00 TO STA. 224+85.00

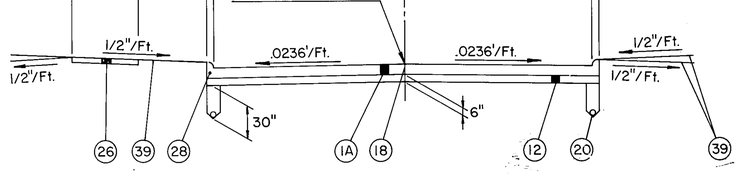
* 10'-6" STA. 222+30.00 TO STA. 223+95.27
** MEDIAN LIMITS STA. 223+30.00 TO STA. 224+45.00
*** ℄ SHIFTS AT STA. 223+00



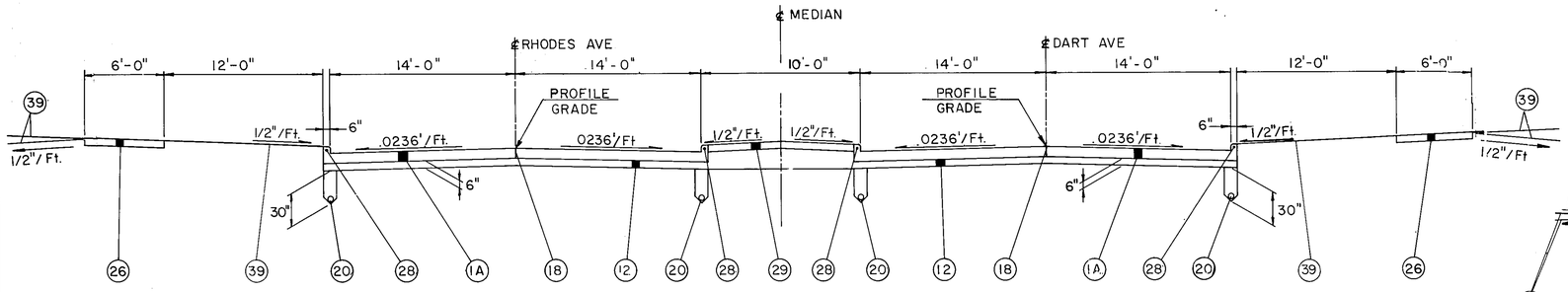

** - STA. 26+99.62 TO STA. 28+78.74
RELOCATED RHODES AVE.

RELOCATED RHODES AVE. — DART AVE.
STA. 26+99.62 TO STA. 29+94.38 RHODES AVE.
STA. 227+05.22 TO STA. 228+50.84 DART AVE.

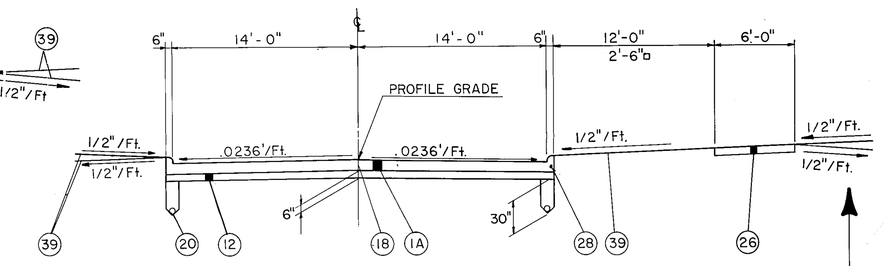
* - STA. 227+05.22 TO STA. 227+18.63
DART AVE.




RUSSELL AVE.
STA. 56+18.00 TO STA. 58+12.50




RELOCATED RHODES AVE. — DART AVE.
STA. 29+94.38 TO STA. 32+33.89 RHODES AVE.
STA. 228+50.84 TO STA. 231+20.43 DART AVE.




DART AVENUE
STA. 231+20.43 TO STA. 237+93.80

□ - STA. 233+00 TO STA. 234+75 ONLY

DIRECTION OF TRAFFIC

## TYPICAL SECTIONS

FORM D D A-8

# TYPICAL SECTIONS

DRAWN BY NRE 5/30/79
CHECKED BY RJT 1/3/80

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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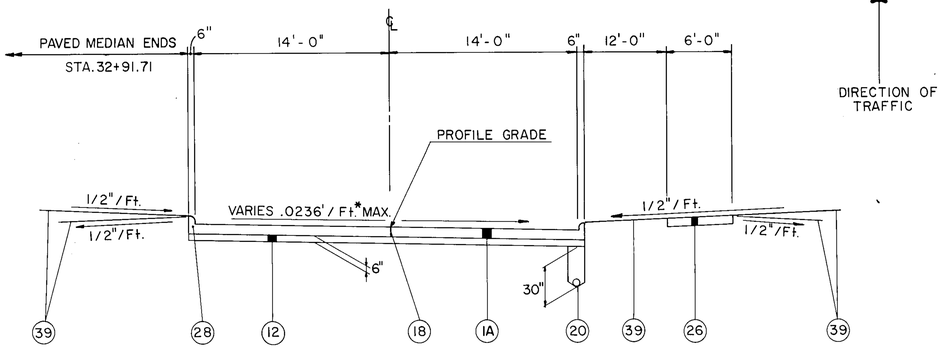
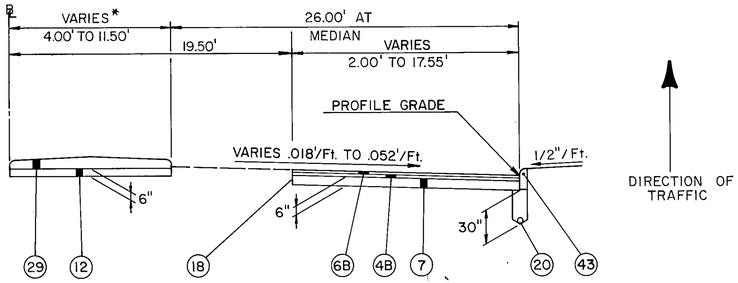
AKRON INNERBELT
SUM-59-0.00




*STA.33+49.53 to STA.35+26.07

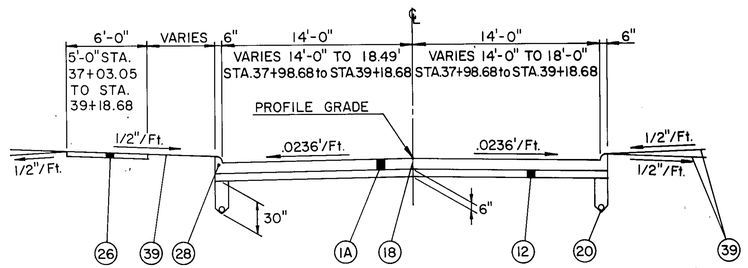
DIRECTION OF TRAFFIC

RHODES AVE.
STA.32+33.89 TO STA.36+42.71




DIRECTION OF TRAFFIC

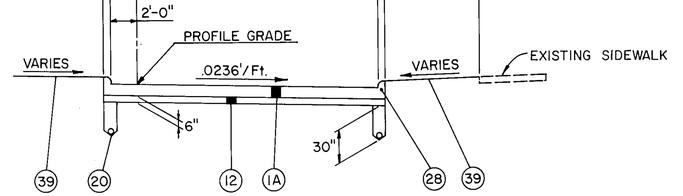
LAKESHORE BOULEVARD
STA. 10+49.01 TO STA. 14+00.00
*MEDIAN LIMITS STA. 10+40.00 TO STA.11+90.00




DIRECTION OF TRAFFIC

RHODES AVE.
STA. 36+42.71 TO STA.39+18.68

BRIDGE LIMITS
STA. 36+44.02 TO STA.37+03.05




DIRECTION OF TRAFFIC

BOWERY ST.
STA. 38+25.00 TO STA. 39+21.41

DRAWN BY NRE 5/30/79
CHECKED BY RJT 12/4/79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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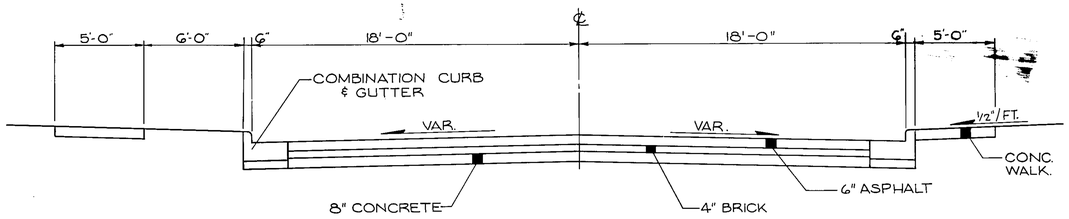
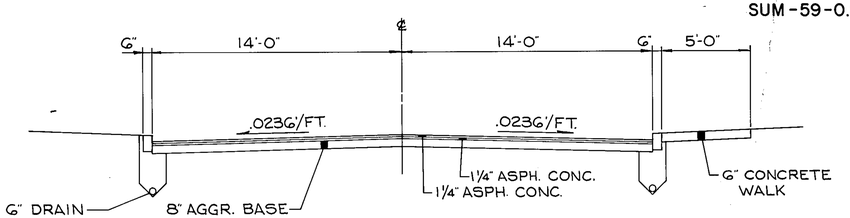
455

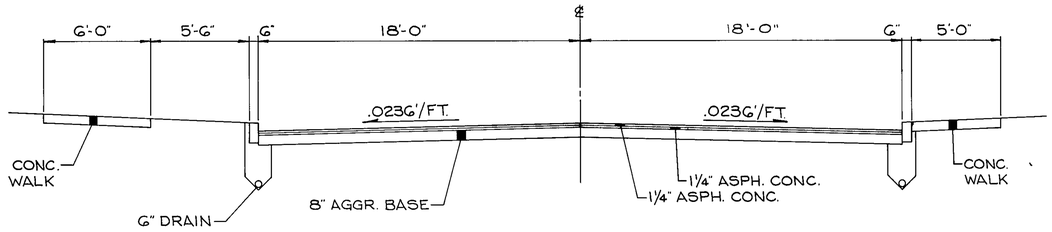
**AKRON INNERBELT**
**SUM-59-0.00**



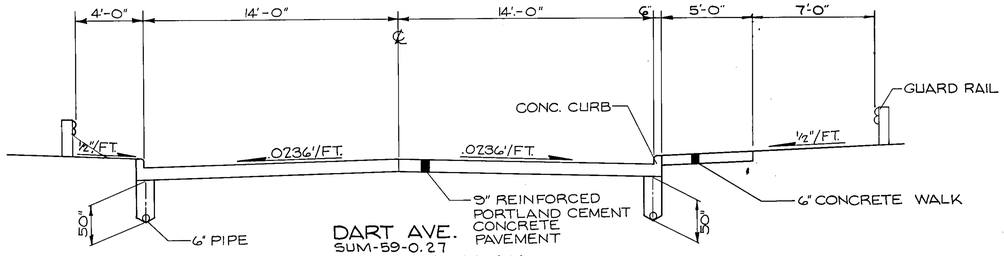

RHODES AVE.
SUM-59-0.27



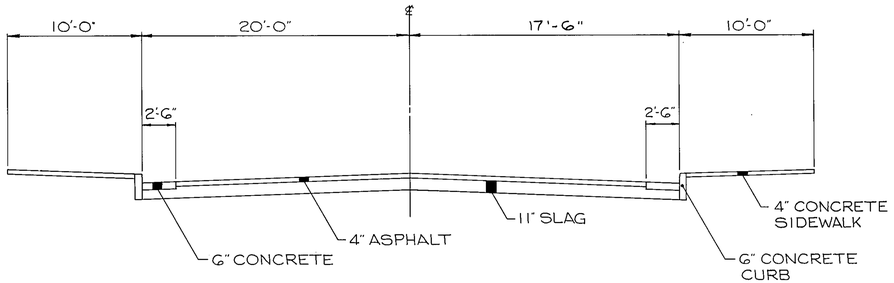

DART AVE.
SUM-59-0.27
STA. 23G+18.77 TO STA. 237+93.80



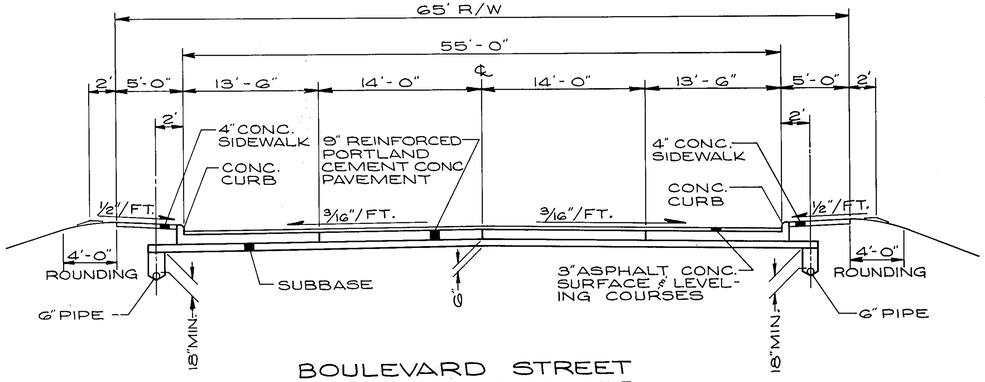

RHODES AVE.
STA. 38+25 TO STA. 40+19.95



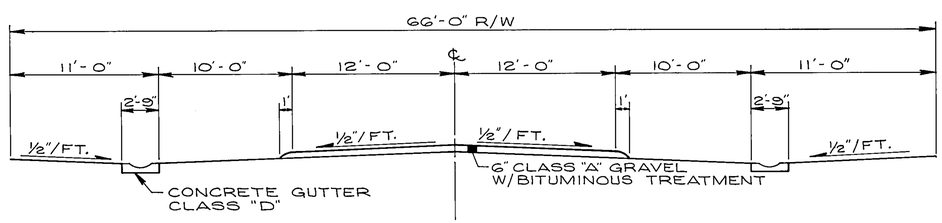

DART AVE.
SUM-59-0.27
STA. 237+93.80 TO STA. 246+14.00



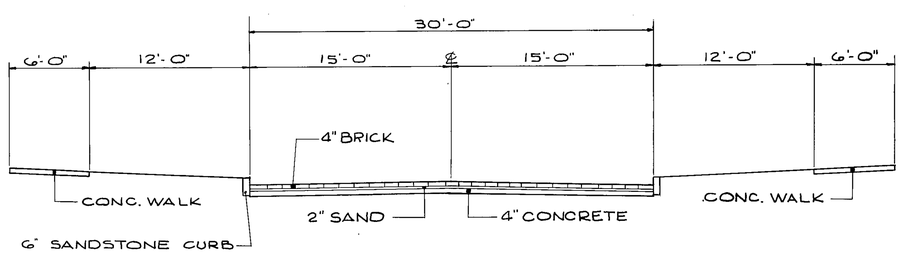

RHODES AVE.
BOWERY ST. TO BOULEVARD ST.




BOULEVARD STREET
SOUTH ST. TO RUSSELL AVE.




LAKESHORE BLVD.
SOUTH STREET- SOUTHERLY




BOULEVARD ST.
RUSSELL AVE. TO THORNTON ST.

**EXISTING TYPICAL SECTIONS**

DRAWN BY NRE 5/30/79
CHECKED BY RJT 12/4/79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

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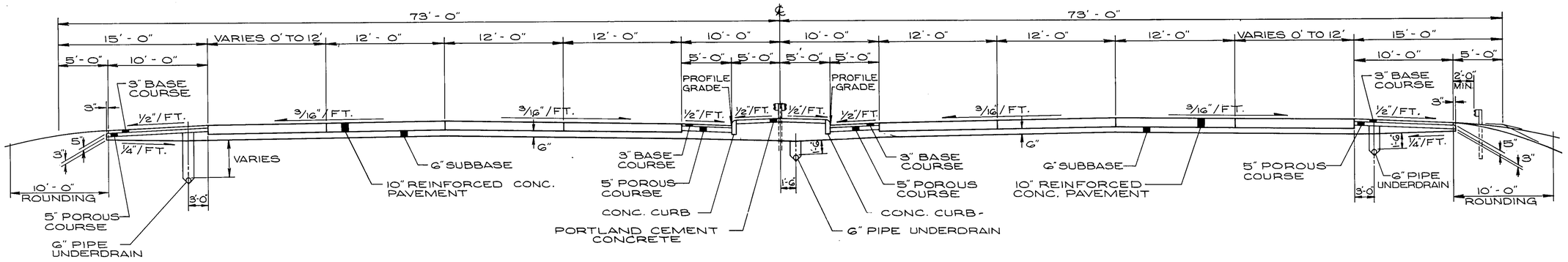
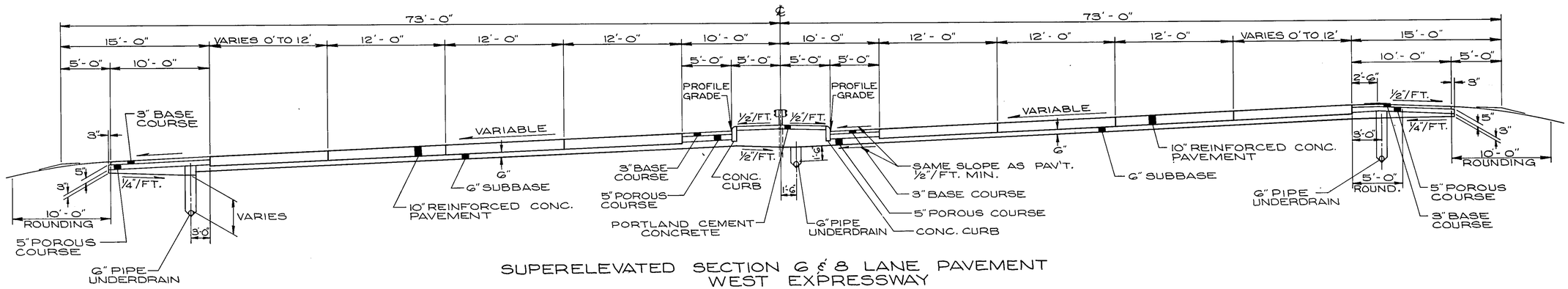
AKRON INNERBELT
SUM-59-0.00



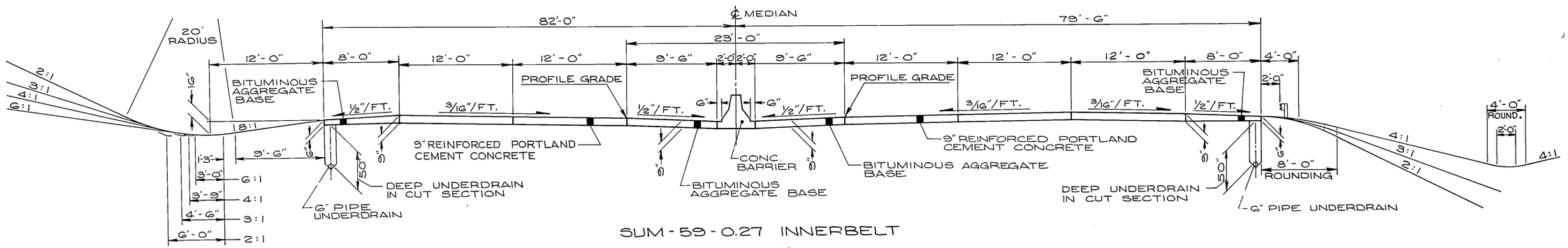

## NORMAL SECTION 6 & 8 LANE PAVEMENT
## WEST EXPRESSWAY

STA. 430+36.99 TO STA. 445+00.00




## SUPERELEVATED SECTION 6 & 8 LANE PAVEMENT
## WEST EXPRESSWAY

STA. 410+88.24 TO STA. 430+36.99




## SUM-59-0.27 INNERBELT
AT STA. 150+00.00

**EXISTING TYPICAL SECTIONS**

DRAWN BY NRE 5/30/79
CHECKED BY RJT 12/4/79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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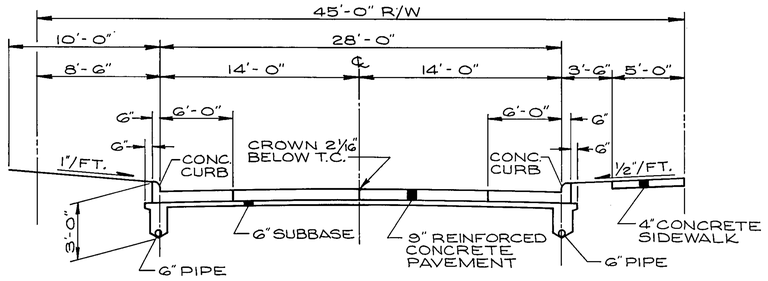
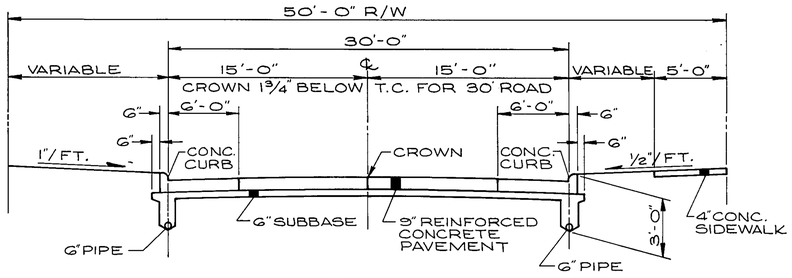
455

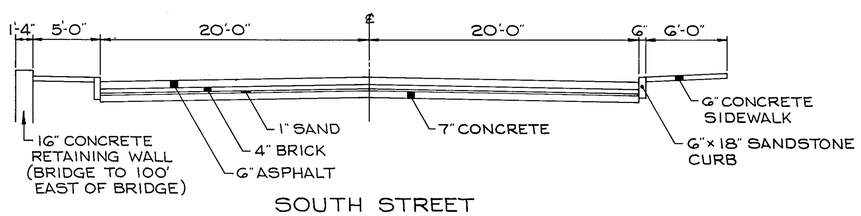
AKRON INNERBELT
SUM-59-0.00



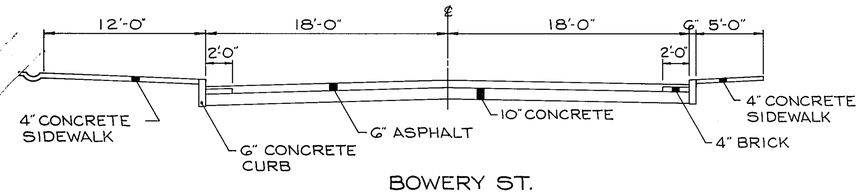

RUSSELL AVENUE
OHIO CANAL TO KENYON STREET



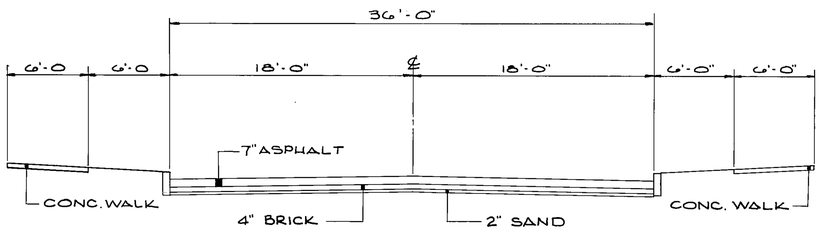

SOUTH STREET
MANCHESTER ROAD TO BOWERY STREET



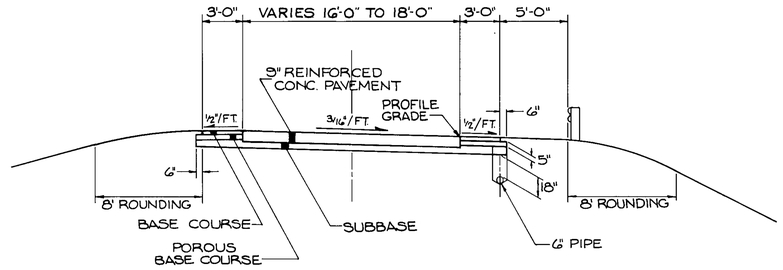

SOUTH STREET
BOWERY ST. TO BOULEVARD ST.



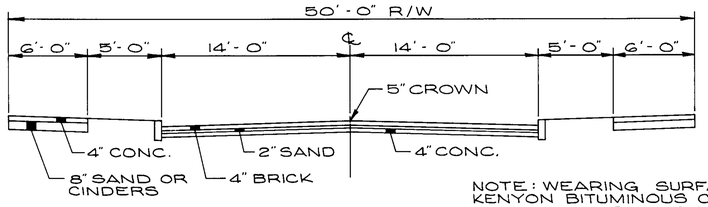

BOWERY ST.
SOUTH ST. TO RUSSELL AVE.




BOWERY ST.
BETWEEN RHODES AVE. & THORNTON ST.
SUM-59-0.27 SOUTHERLY

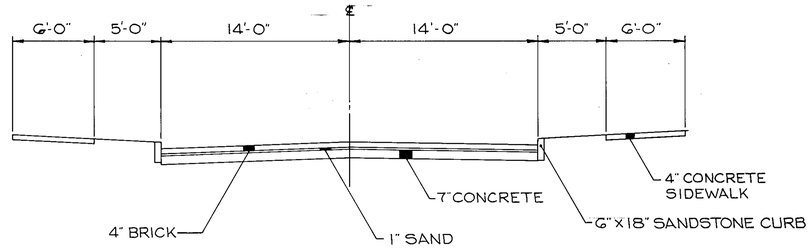



RAMPS "G" & "H"
WEST EXPRESSWAY

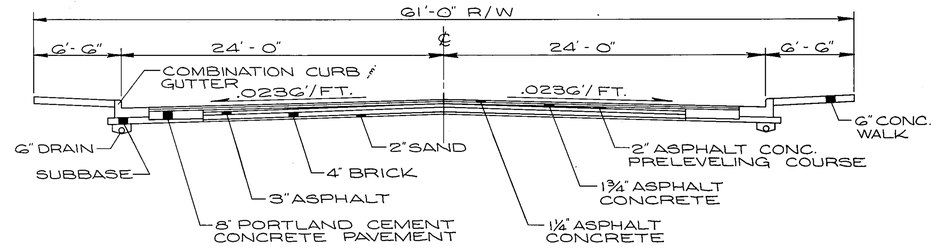



NOTE: WEARING SURFACE KENYON BITUMINOUS CONC. OVER BRICK SURFACE

KENYON STREET
RUSSELL AVE TO EXIST. RHODES AVE.




RUSSELL COURT
BOWERY ST. TO SOUTH ST.




THORNTON STREET
STA. 48+25 TO STA. 54+01.06
SUM-59-0.27

# EXISTING TYPICAL SECTIONS

CALCULATED BY WRS DATE 11/10/79
CHECKED BY RJT DATE 1/9/80

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

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AKRON INNERBELT
SUM-59-0.00

# GENERAL NOTES

## FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 800 SQ. FT. OF FLOOR SPACE.

PAYMENT SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 619, FIELD OFFICE.

## ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS, APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

## MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN ON SHEET No. 63. FOR LOCATIONS, SEE SHEET NO. 443.

## SURVEY MONUMENTS AND BENCH MARKS

THE CONTRACTOR SHALL NOTIFY THE CITY OF AKRON, BUREAU OF ENGINEERING, SURVEY DIVISION, 375-2160, BEFORE DISTURBING OR REMOVING ANY SURVEY MONUMENT OR BENCH MARK IN THE CONSTRUCTION AREA. FAILURE TO DO SO WILL RESULT IN THE REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

## CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN ITEMS SET UP TO BE USED "AS DIRECTED BY ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

## UTILITY OWNERSHIP

The following utilities and owners are located within the work limits of this project:

THE EAST OHIO GAS COMPANY, (216) 762-5100, 1 CASCADE PLAZA, AKRON, OHIO 44308

THE OHIO EDISON COMPANY, (216) 762-9061, 111 CASCADE PLAZA, AKRON, OHIO 44308

THE OHIO BELL TELEPHONE COMPANY, (216) 384-2596, 2525 STATE ROAD, CUYAHOGA FALLS, OHIO 44223

WARNER CABLE T.V. OF AKRON, (216) 633-9200, 1210 BROWNSTONE AVENUE, AKRON, OHIO 44310

CITY OF AKRON PUBLIC UTILITIES BUREAU, (216) 375-2690, 65 SOUTH HIGH STREET, AKRON, OHIO 44308

CITY OF AKRON SEWER MAINTENANCE, (216) 375-2666, 1055 HOME AVENUE, AKRON, OHIO 44308

B.F. GOODRICH CO., (216) 379-2000, 500 SOUTH MAIN STREET, AKRON, OHIO 44311

## UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED from the owners of the utility as required be Section 153.64 ORC.

## ELEVATION DATUM

ALL ELEVATIONS SHOWN ON THESE PLANS ARE IN FEET ABOVE THE STATE GEODETIC CONTROL DATUM PLANE.

## COORDINATES

ALL COORDINATES SHOWN IN THESE PLANS ARE BASED ON THE STATE OF OHIO GEODETIC CONTROL NETWORK.

## SOIL TEST HOLE DATA

ANY DATA FURNISHED ON TEST HOLES IS NOT GUARANTEED FOR ACCURACY BY CITY OF AKRON, AND IS ONLY GIVEN AS A MATTER OF INFORMATION. SOIL BORING INFORMATION IS AVAILABLE FROM THE CITY OF AKRON BUREAU OF ENGINEERING 701 MUNICIPAL BLDG.,166 S. HIGH ST., AKRON, OHIO 44308.

## REMOVAL OF EXISTING PIPE

THE REMOVAL OF ALL EXISTING PIPE DRAINS WHICH WOULD NORMALLY BE REMOVED IN VARIOUS EXCAVATION ITEMS SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICES BID FOR THE RESPECTIVE EXCAVATION ITEMS, UNLESS OTHERWISE ITEMIZED IN THE PLANS.

THE EXISTING 60" SEGMENTAL BLOCK SEWER IN SOUTH STREET DESIGNATED FOR REMOVAL SHALL BE CRUSHED AND BACKFILLED IN ACCORDANCE TO THE PROVISIONS OF 203.

## SALVAGE PAVING BRICKS AND COBBLESTONE

WHERE PAVING BRICKS OR COBBLESTONE ARE ENCOUNTERED DURING EXCAVATION OR PAVEMENT REMOVAL OPERATIONS, THE CONTRACTOR SHALL CAREFULLY REMOVE THE BRICK OR COBBLESTONES AND PROVIDE A SAFE STORAGE SITE. CLEANING, SEPARATION AND STACKING WILL NOT BE REQUIRED. THE CONTRACTOR WILL NOTIFY THE CITY OF AKRON, DIVISION OF HIGHWAY MAINTENANCE (216) 375-2831 AND THE ITEMS WILL BE LOADED AND HAULED FROM THE SITE AT NO COST TO THE CONTRACTOR. THE BRICKS AND COBBLESTONE WILL BECOME THE PROPERTY OF THE CITY OF AKRON. THE COST OF REMOVAL AND STORAGE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 202.

## STREET NAME SIGNS

ALL STREET NAME SIGNS THAT WILL BE DISTURBED BY THE CONSTRUCTION SHALL BE CAREFULLY REMOVED AND STORED BY THE CONTRACTOR FOR SALVAGE BY THE CITY OF AKRON. PAYMENT FOR THIS OPERATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION.

## REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE lump sum price BID FOR ITEM 201 CLEARING & GRUBBING EXCEPT THAT THOSE TREES FOR WHICH PROTECTION AND PRESERVATION WORK IS INDICATED ELSEWHERE IN THESE PLANS SHALL NOT BE REMOVED.

THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

| SIZES | NO. TREES | NO. STUMPS | TOTAL |
|---|---|---|---|
| 18" | 61 | 1 | 62 |
| 30" | 8 | | 8 |
| 48" | 2 | | 2 |
| 60" | | | |

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE OF THE LIMITS OF CONSTRUCTION BUT WITHIN THE RIGHT OF WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

THE FOLLOWING ITEM HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR PROTECTION OF TREES. THIS ITEM IS TO BE USED ONLY AS DIRECTED BY THE ENGINEER.

ITEM 657 9 SQ. YDS. RIPRAP FOR TREE PROTECTION

ITEM 603 100 L.F. 4" CONDUIT TYPE E 711.29

## TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE PERFORMED ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS, OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

CALCULATED BY WRS DATE 11/10/79
CHECKED BY RJT DATE 1/9/80

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
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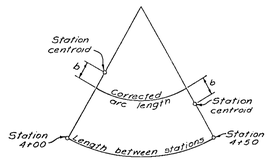
# GENERAL NOTES

## EARTHWORK COMPUTATIONS - CURVED ALIGNMENTS

WHEN THE ROADWAY IS ON A CURVED ALIGNMENT, THE CENTER OF GRAVITY OR THE CENTROID FOR THE END AREA, MAY NOT BE ON OR NEAR THE BASE LINE OR CENTER LINE. THEREFORE, A CORRECTION FOR THE TRUE ARC LENGTH BETWEEN STATIONS HAS BEEN MADE TO OBTAIN A TRUE MEASUREMENT OF EARTHWORK.

THE DIAGRAM SHOWN INDICATES THE METHOD USED TO DETERMINE THE CORRECTED ARC LENGTH FOR COMPUTING THE TRUE MEASUREMENT OF EARTHWORK.

THE CORRECTED ARC LENGTHS AND EARTHWORK TABULATIONS APPEAR ON THE AFFECTED CROSS SECTION SHEETS.
THE C. A. L. HAS BEEN APPLIED TO "ITEM 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION" AND "ITEM 203 EMBANKMENT."




## LOCATIONS OF GUARDRAIL

THE LOCATIONS OF GUARDRAIL RUNS AS SHOWN IN THESE PLANS ARE SUBJECT TO ADJUSTMENT TO ASSURE THAT THE PLANNED INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

## GUARDRAIL BEHIND CURBS

WHERE A CURB IS PROVIDED AT THE OUTER EDGE OF THE PAVED SHOULDER, ANY NECESSARY GUARDRAIL SHALL BE POSITIONED SO THAT THE FACE OF THE GUARDRAIL IS LOCATED 0 INCHES BACK OF THE FACE OF THE CURB AND THE TOP OF THE RAIL SHALL BE 27 INCHES ABOVE THE GUTTER LINE.

## GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE, GRADE AND REINSTALL GUARD RAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARD RAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARD RAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON THE SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF SAID COMPLIANCE.

## CURB RAMPS

CURB RAMPS WILL BE CONSTRUCTED AT THE DIRECTION OF THE ENGINEER. THE CURB RAMP DIMENSIONS, LOCATIONS, AND TYPE MAY BE MODIFIED TO FIT THE LOCATION PER STANDARD DRAWING BP-12. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 608 CURB RAMP:

| LOCATION | TYPE 1 EACH/S.F.* | TYPE 2 EACH/S.F.* |
|---|---|---|
| 10+34, 42' LT. & 36' RT. LAKESHORE BLVD. | 2 | |
| 110+57, 14' LT. SOUTH ST. | | 35 S.F.* |
| 34+27, 17' LT. & 14' RT. RUSSELL AVE. | 1 | 1 |
| 55+40, 23' LT. RUSSELL AVE. | | 1 |
| 55+67, 36' LT. RUSSELL AVE. | 1 | |
| 26+62, 30' LT. RHODES AVE. | 1 | |
| 26+76, 14' RT. RHODES AVE. | | 1 |
| 225+34, 14' LT. DART AVE. | | 1 |
| 225+40, 2' RT. DART AVE. | | 1 |
| 237+43, 17' LT. & 14' RT. DART EXT. | | 2 |
| 39+03, 20' LT. & 3' RT. BOWERY ST. | 65 S.F.* | 1 |
| TOTAL | 5/65 S.F. | 8/35 S.F. |

*CURB RAMPS IN EXISTING SIDEWALKS ARE MEASURED BY THE SQUARE FOOT.

## COATED DOWEL BARS

DOWEL BARS REQUIRED ON STANDARD DRAWING BP-4 SHALL BE COATED IN ACCORDANCE WITH SUP. SPEC. 948.

## DUST CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER FOR DUST CONTROL ON THIS PROJECT:

ITEM 616 CALCIUM CHLORIDE 10 TONS
ITEM 616 WATER 100 M. GALS.

## SEEDING AS PER PLAN

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN THE WORK LIMITS. OTHER ADJACENT AREAS WHERE BUILDINGS, PAVEMENT ETC. HAVE BEEN REMOVED HAVE ALSO BEEN INCLUDED.

THE FOLLOWING SEED MIXTURE SHALL, IN LIEU OF THE MIXTURES LISTED IN 659.09, BE USED THROUGHOUT THE LIMITS OF THIS PROJECT:

35% KENTUCKY BLUEGRASS
55% CREEPING RED FESCUE
5% RED TOP
5% BIRDSFOOT TREFOIL "EMPIRE"

## WATERING AND MOWING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09.

659 WATER 215 M GAL.
659 MOWING 150 M SQ. FT.

## EXISTING CONSTRUCTION

WITHIN THE LIMITS OF THIS CONTRACT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WORK NECESSARY TO PROPERLY JOIN THE NEW AND EXISTING PAVEMENTS AND WALKS AT THE TERMINI OF THE NEW PAVEMENT AND WALKS. THE PAYMENT FOR THIS ITEM SHALL BE INCLUDED UNDER THE APPLICABLE ITEM.

## RESTORATION OF AREAS OUTSIDE NORMAL CONSTRUCTION LIMITS

THE CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING PAVEMENT, CURB, AND GUTTER AND ANY OTHER ITEM OUTSIDE NORMAL CONSTRUCTION LIMITS THAT BECAME DAMAGED OR DESTROYED BY HIS OPERATION. THE CONTRACTOR SHALL PROMPTLY REPLACE THESE ITEMS AT HIS OWN EXPENSE.

## GRAVEL AGGREGATE

GRAVEL AGGREGATE WILL NOT BE PERMITTED IN ANY PORTLAND CEMENT CONCRETE EXPOSED TO VIEW. GRAVEL AGGREGATE MAY BE USED ONLY IN CONCRETE THAT WILL BE PLACED 1 FOOT OR MORE BELOW THE FINISHED GROUND LINE.

## CONTRACTION AND EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN EXPANSION AND CONTRACTION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL, IN ALL CASES, BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS AND THE SPECIFICATIONS.

## PAVEMENT INTERSECTIONS

THE ELEVATIONS APPEARING ON THE INTERSECTION DETAILS HAVE BEEN DETERMINED FROM FIELD SURVEY AND REFLECT THE CALCULATED ELEVATIONS REQUIRED TO PROVIDE A SMOOTH TRANSITION OF INTERSECTING GRADES.

THE CONTRACTOR, AT THE DIRECTION OF THE ENGINEER, SHALL MAKE MINOR ELEVATION ADJUSTMENTS TO MEET EXISTING FIELD CONDITIONS.

## ITEM 203 PROOF ROLLING

An estimated quantity for this item has been provided in the general summary for use as directed by the Engineer.

CALCULATED BY WRS DATE 11/10/79
CHECKED BY RJT DATE 1/9/80

| FHWA REGION | STATE | PROJECT | |
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# GENERAL NOTES

LEGEND

- (U-1) UNDERDRAINS
- (A-1) MANHOLES OR CATCH BASINS ADJUSTED TO GRADE
- (RE-1) MANHOLES OR CATCH BASINS RECONSTRUCTED TO GRADE
- (P) PROPOSED PIPES AND APPURTENANCES
- (E) EROSION CONTROL
- (R) CATCH BASINS, INLETS, MANHOLES OR PIPES TO BE REMOVED
- (AB) CATCH BASINS, INLETS, MANHOLES OR PIPES TO BE ABANDONED
- (G) PROPOSED CONCRETE GUTTER
- (CR) CONCRETE RIPRAP
- (W) PROPOSED WATER MAIN APPURTENANCES
- (GR) PROPOSED GUARD RAIL
- (C) PROPOSED CURB
- (F) PROPOSED FENCE
- (J) PRESSURE RELIEF JOINT
- (X) PAVEMENT, WALK, OR CURB TO BE REMOVED
- (GX) GUARDRAIL TO BE REMOVED

## TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES: SEE LOCATION AND DETAILS – SEE SHEET 10.

| | | |
|---|---|---|
| 207 | FILTER FABRIC FENCE | 1430 LIN. FT. |
| 207 | TEMPORARY SEEDING AND MULCHING | 16,475 SQ. YD. |
| 207 | STRAW OR HAY BALES | 48 EACH |
| 207 | TEMPORARY SLOPE DRAINS | 20,000 LIN. FT. |
| 207 | TEMPORARY BENCHES, DIKES DAMS AND SEDIMENT BASINS | 402 CU. YD. |
| 601 | ROCK CHANNEL PROTECTION, TYPE C W/O FILTER | 45 CU. YD. |
| 659 | MOWING | 37 M SQ. FT. |
| 659 | COMMERCIAL FERTILIZER | 0.7 TON |
| 659 | REPAIR SEEDING AND MULCHING | 418 SQ. YD. |
| 659 | WATER | 36 M GAL. |

SEDIMENT BASINS SHALL BE CONSTRUCTED AT THE ENDS OF ALL DITCHES ENTERING NO. 5 CATCH BASINS AND SHALL STORE A VOLUME OF 67 CUBIC YARDS PER ACRE OF CONTRIBUTING AREA. SEE SHEET 10 FOR LOCATION AND SIZE OF SEDIMENT BASIN.

## EROSION CONTROL

ITEMS 601, 660, 667 AND 668 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS*. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

*and turf of a stable nature will not be removed in order to place 660, 667 and 668.

### EROSION CONTROL PADS AND ANIMAL GUARDS

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL PIPE UNDERDRAINS AND FARM DRAINS, AS PER STANDARD CONSTRUCTION DRAWING MC-4, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE.

PAYMENT FOR THE EROSION CONTROL PADS AND THE ANIMAL GUARDS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 603, 6" CONDUIT, TYPE F.

## REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR ALONG WITH LOCAL REPRESENTATIVES SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS OR UTILIZATION OF T.V. INSPECTION. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE PERTINENT 603 CONDUIT ITEMS OF THE CONTRACT.

### MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

THE CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY CITY OF AKRON FORCES.

ALL CASTINGS ARE TO BE RETURNED TO THE CITY OF AKRON SEWER MAINTENANCE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 202 ITEM.

### CONDUIT END TREATMENT

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE RIPRAP, ROCK CHANNEL PROTECTION, SODDING, ETC.

### STORM AND SANITARY CONSTRUCTION PROTECTION

WHERE PROPOSED STORM AND SANITARY SEWERS ARE TO BE CONSTRUCTED ADJACENT TO EXISTING PRIVATE OR PUBLIC UNDERGROUND LINES, THE CONTRACTOR SHALL PROVIDE SUITABLE PROTECTIVE DEVICES SO AS TO PREVENT ANY DAMAGE OR CREATE A SITUATION THAT WOULD CAUSE SUSPENSION OF SERVICES.

### INSPECTION

THE CITY OF AKRON BUREAU OF ENGINEERING SHALL BE NOTIFIED TWENTY-FOUR HOURS PRIOR TO THE MAKING OF ANY CONNECTION TO EXISTING SANITARY SEWER LINES IN ORDER TO HAVE AN OPPORTUNITY TO INSPECT THESE CONNECTIONS.

## ITEM 207 FILTER FABRIC FENCE

### MATERIALS

NEW OR USED WOVEN WIRE FENCE FABRIC, STEEL LINE POSTS, AND TIES OF THE TYPE CALLED FOR IN ITEM 607 SHALL BE USED FOR THE SUPPORT FENCE. THESE MATERIALS SHALL BE STRUCTURALLY SOUND TO PROVIDE ADEQUATE SUPPORT FOR THE FILTER FABRIC AND TRAPPED SEDIMENT.

THE FILTER FABRIC SHALL BE COMPOSED OF STRONG ROT PROOF POLYMERIC FIBERS FORMED INTO A WOVEN OR NON-WOVEN FABRIC. THE FABRIC SHALL BE FREE OF ANY TREATMENT WHICH MIGHT SIGNIFICANTLY ALTER ITS PHYSICAL PROPERTIES.

THE MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

TYPE C SEDIMENT FENCE

PERMEABILITY: (20 CM - 10 CM FALLING HEAD) $1 \times 10^{-2}$
ULTRAVIOLET RESISTANCE: (ASTM-D-1682 PERCENT STRENGTH RETENTION AFTER 500 WEATHEROMETER HOURS)

IN LIEU OF THESE REQUIREMENTS, A MINIMUM FILTERING EFFICIENCY OF 75 PERCENT USING VADOT TEST VTM-51-79 MAY BE SUBSTITUTED.

IN LIEU OF THIS REQUIREMENT, A MINIMUM SLURRY FLOW RATE OF 0.3 GAL./FT.$^2$ USING VADOT TEST VTM-51-79 MAY BE SUBSTITUTED.

THE VENDOR SHALL SUBMIT WITH SHIPMENT CERTIFIED TEST RESULTS THAT SHOW THAT THE FABRIC MEETS THE ABOVE REQUIREMENTS.

DURING ALL PERIODS OF SHIPMENT AND STORAGE, THE CLOTH SHALL BE WRAPPED IN A HEAVY DUTY PROTECTIVE COVERING TO PROTECT IT FROM DIRECT SUNLIGHT, MUD, DIRT, DUST, AND OTHER DEBRIS.

### CONSTRUCTION:

THE SEDIMENT FENCE SHALL BE CONSTRUCTED AS PER THE FOLLOWING SEQUENCE OF DRAWINGS SHOWN ON DETAIL SHEET 174. THE FENCE FABRIC SHALL BE SECURED TO THE FENCE POST WITH A MINIMUM OF 4 TIES PER POST. THE FILTER FABRIC SHALL BE SECURED TO THE FENCE AT MAXIMUM INTERVALS OF 2 1/2 FT. ALONG THE OVERLAP ON THE BACK OF THE FENCE.

### MAINTENANCE

THE FILTER FABRIC SEDIMENT FENCE SHALL, AT THE DIRECTION OF THE ENGINEER, BE SATISFACTORILY MAINTAINED SO AS TO BE KEPT FUNCTIONAL. THIS SHALL INCLUDE REMOVAL OF TRAPPED SEDIMENT AND REQUIRED CLEANING, REPAIR, AND/OR REPLACEMENT OF THE FILTER FABRIC.

### PAYMENT

THE COST OF ALL MATERIALS, CONSTRUCTION, MAINTENANCE, AND REMOVAL REQUIRED SHALL BE PAID FOR UNDER ITEM 207 LIN. FT. FILTER FABRIC FENCE.

IN LIEU OF THE ABOVE CONSTRUCTION METHOD, PREFABRICATED SEDIMENT FENCE USING FABRIC MEETING THE ABOVE MATERIAL REQUIREMENTS MAY BE USED PROVIDED THAT ADEQUATE SUPPORT OF THE FABRIC CAN BE MAINTAINED IN THE JUDGMENT OF THE ENGINEER.

# GENERAL NOTES

CALCULATED BY WRS DATE 11/10/79
CHECKED BY RJT DATE 1/9/80

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604 CITY STANDARD INLETS TYPE 3 MODIFIED, & 5

THESE ITEMS CALLED FOR ON THESE PLANS ARE CITY OF AKRON STANDARD INLETS AS PER DETAILS ON SHEET NO. 173 & 174

UTILITIES NOTIFICATION

At least two working days prior to commencing construction operations in an area which may involve underground utility facilities, the Contractor shall notify the Project Engineer, the registered utility protection service and the owners of each underground utility facility shown in the plans.

The owner of the underground utility facility shall, within forty-eight hours, excluding Saturdays, Sundays and Legal Holidays, after notice is received, stake, mark or otherwise designate the location of the underground utility facilities in the construction area in such a manner as to indicate their course together with the approximate depth at which they were installed. The marking or locating shall be coordinated to stay approximately two days ahead of the planned construction.

CONNECTIONS TO EXISTING PIPE

WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING SEWER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE HE STARTS TO LAY THE PROPOSED CONDUIT.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEMS.

HOUSE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS OR YARD DRAINS DISTURBED BY THE PROPOSED WORK SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING TO A STORM SEWER, MANHOLE, THROUGH THE BACKSLOPE OF ROADWAY DITCHES, OR THROUGH THE CURB.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENTS WILL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603 4" CONDUIT TYPE E, 711.29 200 LIN. FT.
ITEM 603 6" CONDUIT TYPE E, 706.01, 706.02 OR 706.08 200 LIN. FT.
ITEM 603 6" CONDUIT TYPE F 60 LIN. FT.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

UNRECORDED SANITARY CONNECTIONS

ANY UNRECORDED ACTIVE CONNECTION TO A SANITARY SEWER ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED TO THE EXISTING SEWER AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603 - 8" CONDUIT, TYPE C, 706.01, 706.02, 706.08
WITH JOINTS AS PER 706.11 OR 706.12 100 LIN. FT.

ITEM 603 - 8" CONDUIT, TYPE B, 706.02, 706.08,
WITH JOINTS AS PER 706.11 OR 706.12 100 LIN. FT.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

SPECIAL ITEM - RUBBERIZED OPEN GRADED ASPHALT FRICTION COURSE
(SEE PROPOSAL NOTE)

PIPES TO BE ABANDONED.

EXISTING INLET AND OUTLET PIPES SHOWN TO BE ABANDONED IN THE PLANS SHALL BE SEALED WITH PRECAST VITRIFIED OR CONCRETE STOPPERS OR WITH MASONRY OF A TYPE AND THICKNESS ACCEPTABLE TO THE ENGINEER.

PAYMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202 - MANHOLE, CATCH BASIN, AND INLET ABANDONED.

EMBANKMENT AREAS REQUIRING SPECIAL TREATMENT

A. ROADWAY EMBANKMENTS

NO ORGANIC DEPOSITS WERE ENCOUNTERED IN ANY OF THE ROADWAY BORINGS; HOWEVER, PEAT DEPOSITS AND ORGANIC CLAYEY SILTS WERE ENCOUNTERED IN TWO STRUCTURE BORINGS ALONG THE SOUTH SIDE OF THE WEST EXPRESSWAY AT APPROXIMATELY STATIONS 426 AND 427. ANY PEAT OR ORGANIC SOILS WHICH ARE EXPOSED DURING STRIPPING OR EXCAVATION SHALL BE UNDERCUT PRIOR TO CONSTRUCTING EMBANKMENTS.

THEORETICAL ANALYSES INCIDATE SOME SETTLEMENT WILL RESULT DUE TO CONSOLIDATION OF THE EXISTING SOILS.

EMBANKMENT SHALL BE TREATED AS FOLLOWS: ANY EMBANKMENT FILL ON THE SITE SHALL BE PLACED AS SOON AS POSSIBLE IN SUCH A WAY AS TO ALLOW AS LONG OF A TIME PERIOD AS POSSIBLE BETWEEN REACHING FINAL GRADE AND PAVEMENT CONSTRUCTION. ALL EMBANKMENT SHALL BE PLACED IN ACCORDANCE WITH ITEM 203.

B. REINFORCED EARTH WALL AND EMBANKMENT ALONG SOUTH STREET

SOME OF THE BORINGS FOR THE REINFORCED EARTH WALL ALONG RAMP "EN" (APPROXIMATELY STATION 109+39 TO 114+20) HAVE REVEALED THE PRESENCE OF ORGANIC DEPOSITS.

THEORETICAL ANALYSES INDICATE A PRIMARY SETTLEMENT OF 3 TO 9.5 INCHES DUE TO THE CONSOLIDATION OF THESE ORGANIC MATERIALS. THESE PRIMARY SETTLEMENTS SHOULD OCCUR WITHIN SIX MONTHS UPON COMPLETION OF THE REINFORCED EARTH WALL (UP TO AND INCLUDING THE SECOND PANEL FROM THE TOP) AND EMBANKMENT FILL.

THE REINFORCED EARTH WALL CONSTRUCTION AND BACKFILLING, EXCLUSIVE OF THE TOP REINFORCED EARTH PANEL, CONCRETE COPING AND TRAFFIC BARRIER, SHALL BE DONE AS SOON AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ALLOW AS LONG OF A TIME PERIOD AS POSSIBLE FOR CONSOLIDATION TO TAKE PLACE. SEE SHEET 272 FOR REINFORCED EARTH WALL DETAILS.

AA B/P# 71042R

# MAINTENANCE OF TRAFFIC

| CALC. BY. | | M-1T62(2) | OHIO | 24 |
|---|---|---|---|---|
| CHKD. BY. R.E.R. DATE 11/82 | | | F.H.W.A. REGION 5 | 455 |

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1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE ERECTED AND MAINTAINED IN COMPLIANCE WITH THE STATE OF OHIO "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" ACCORDING TO SIZE, SHAPE, COLOR, AND REFLECTORIZATION.

2. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR PROVIDING AND MAINTAINING LIGHTS, SIGNS, AND BARRICADES FOR THE MAINTENANCE OF TRAFFIC AND SAFETY OF HIS WORK AT THE LOCATIONS SHOWN ON THESE PLANS OR AS DIRECTED BY THE ENGINEER.

3. THE CONTRACTOR SHALL GIVE THE CITY OF AKRON, TRAFFIC ENGINEERING DIVISION, A MINIMUM OF 7 DAYS NOTICE PRIOR TO STARTING WORK.

4. CONTRACTOR SHALL PURSUE THE PROJECT IN SUCH A MANNER AS TO MINIMIZE BOTH THE EXTENT AND DURATION OF THE DISRUPTION OF TRAFFIC.

5. TEMPORARY PAVEMENT MARKINGS WILL BE INSTALLED BY THE CONTRACTOR PRIOR TO PHASE 2 AND 3. PAVEMENT MARKINGS WILL CONSIST OF 4" WIDE YELLOW AND 8" WIDE WHITE TYPE R TAPE. (SEE SHEET 24A)

6. TERMINAL SECTIONS OF GUARDRAIL/CONCRETE BARRIERS THAT ARE NOT TIED TOGETHER SHALL BE FITTED WITH IMPACT ATTENUATION DEVICES.

7. DELINEATORS (WHITE) OR STEADY BURN WARNING LIGHTS SHALL BE INSTALLED ON TOP OF CONCRETE BARRIER - 35' SPACING.

8. TYPE C STEADY BURNING BARRICADE WARNING LIGHTS SHALL BE ERECTED ON DRUMS FOR NIGHT LANE CLOSURES. MAXIMUM SPACING SHALL BE 50' CENTER TO CENTER IN ADVANCE OF THE WORK AREA.

9. EXCAVATIONS MADE FOR NEW CONDUIT ARE TO BE BACKFILLED OR PLATED FOR FULL USE OF TRAFFIC DURING NON-WORKING HOURS.

10. TEMPORARY LANE CLOSURES MAY BE REQUIRED ALONG SOME EXISTING STREETS DUE TO PLACEMENT OF STEEL, ETC. THE MAINTENANCE OF TRAFFIC AND PROTECTIVE DEVICES NEEDED WILL BE AS DIRECTED BY THE ENGINEER.

11. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SO THAT THE MINIMUM NUMBER OF TRAFFIC LANES AS INDICATED ON THE MAINTENANCE OF TRAFFIC DRAWINGS IS MAINTAINED AT ALL TIMES. NO WORK WILL BE PERMITTED WHICH WILL NOT ALLOW THE NUMBER OF LANES, STATED ABOVE, TO BE MAINTAINED IN EACH DIRECTION, EXCEPT AS NOTED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

12. DURING THE BRIDGE WIDENING AND RECONSTRUCTION PHASES, A PORTION OF THE EXISTING MAINLINE SHOULDERS WILL BE USED FOR TRAFFIC LANES. IN AN ATTEMPT TO KEEP TRUCKS FROM USING THE SHOULDER AS A TRAVEL LANE, THE CITY OF AKRON TRAFFIC ENGINEERING DIVISION WILL INSTALL SUPPLEMENTAL SIGNING IN ADVANCE OF THE WORK AREA THAT WILL DIRECT TRUCKS TO THE NORMAL PAVEMENT LANES. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONTINUOUS MAINTENANCE OF THE SHOULDERS WHILE THEY ARE UTILIZED FOR TRAFFIC AND MAKE ALL NECESSARY REPAIRS AS REQUESTED AND DIRECTED BY THE ENGINEER. AFTER THE SHOULDERS ARE NO LONGER REQUIRED FOR TRAFFIC LANES, THEY SHALL BE INSPECTED BY THE ENGINEER FOR DAMAGE. ANY REPAIR WORK WILL BE MEASURED AND PAID FOR AS 404 ASPHALT CONCRETE IN CUBIC YARDS AT THE CONTRACT UNIT PRICE.

13. A SAFETY NET OR PLATFORM SHALL BE REQUIRED TO PROTECT THE WORKMAN AND TRAVELING PUBLIC DURING THE BRIDGE WIDENING AND RECONSTRUCTION OVER EXISTING STREETS. THE CONTRACTOR SHALL PROVIDE A SAFETY NET OR PLATFORM OF SUITABLE STRENGTH AT THE UNDERSIDE OF THE DECK. THE DESIGN OF THE NET OR PLATFORM SHALL CONFORM WITH OSHA REQUIREMENTS AND THE APPROVAL OF THE ENGINEER AND SHALL REMAIN IN PLACE UNTIL THE WORK HAS BEEN COMPLETED AND ACCEPTED, OR AS DIRECTED BY THE ENGINEER. THE FURNISHING, INSTALLING, MAINTAINING AND REMOVING OF THE SAFETY NET OR PLATFORM SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR MAINTENANCE OF TRAFFIC, ITEM 614.

14. WITHIN THE LIMITS OF THIS CONTRACT THE FOLLOWING GENERAL WORK WILL BE CONDUCTED FOR THE AKRON INNERBELT INTERCHANGE:

PHASE 1

- MAINTAIN TRAFFIC IN TWO STAGES ALONG RUSSELL AVENUE WHILE REVISING THE VERTICAL GRADE.
- MAINTAIN TRAFFIC IN TWO STAGES ALONG THE EXISTING BOWERY STREET/RHODES AVENUE CONNECTOR WHILE RECONSTRUCTING THE PAVEMENT.
- MAINTAIN TRAFFIC IN THREE STAGES AT THE INTERSECTION OF LAKESHORE BOULEVARD AND SOUTH STREET WHILE WIDENING THE EAST SIDE AND ADDING A MEDIAN TO LAKESHORE BOULEVARD. PAVEMENT RECONSTRUCTION TO THE NORTH SIDE OF THE INTERSECTION FOR RELOCATED RHODES AVENUE AND DART AVENUE WILL ALSO BE REQUIRED.
- CONSTRUCT RELOCATED RHODES AVENUE AND DART AVENUE FOR COMPLETE LIMITS.
- INSTALL ALL REQUIRED SIGNS FOR CONSTRUCTION PURPOSES INCLUDING DETOUR SIGNING.
- PLACE EMBANKMENT FOR RAMPS 'SW' AND 'EN'.
- THE 60" SEWER CROSSING THE EXPRESSWAY AT STATION 430+00.
- THE RETAINING WALL PARALLELING RAMP 'EN'.
- CONTRACTOR'S OPTIONAL CONSTRUCTION:

  A. BRIDGES SUM-59-0002, SUM-59-0016 AND SUM 59-0017, THE ABUTMENTS, PIERS AND SUPERSTRUCTURE.

  B. BRIDGE SUM-59-0000, THE ABUTMENTS AND SOME OF THE PIER LOCATIONS.

  C. BRIDGE SUM-76-0953 WIDENING, THE ABUTMENTS AND PIERS.

PHASE 2

REDUCE THE NUMBER OF MAINLINE THROUGH LANES TO TWO PER DIRECTION. RECONSTRUCT THE EXISTING BRIDGE DECK AND ABUTMENTS OF THE MAINLINE STRUCTURE SUM-76-0953.

- CONSTRUCT RAMP 'EN' PIER LOCATED ALONG THE MAINLINE CENTERLINE IN THE AREA OF 441+00.
- COMPLETE THE CONSTRUCTION OF STRUCTURES SUM-59-0002, SUM-59-0016 AND SUM-59-0017.
- CONTRACTOR'S OPTIONAL CONSTRUCTION:

  A. PORTIONS OF BRIDGE SUM-59-0000 SUPERSTRUCTURE.

PHASE 3

- REDUCE THE NUMBER OF MAINLINE THROUGH LANES TO TWO PER DIRECTION ADJACENT TO THE MEDIAN. CONSTRUCT THE REMAINING SUBSTRUCTURE ELEMENTS AND BRIDGE DECK OF THE MAINLINE STRUCTURE SUM-76-0953.
- COMPLETE REMAINING CONSTRUCTION FOR RAMP 'SW'.
- CONSTRUCT RAMP 'EN' PIER AT STATION 123+00.
- CONSTRUCT RAMP 'EN' ROADWAY APPROACH WORK.

PHASE 4

- COMPLETE THE SUPERSTRUCTURE CONSTRUCTION FOR BRIDGE SUM-59-0000. DURING THE PLACEMENT OF THE STEEL GIRDERS REQUIRES THE CLOSING OF THE EXPRESSWAY LANES WILL ONLY BE PERMITTED DURING THE HOURS BETWEEN 11:00 P.M. TO 4:00 A.M. A SPECIAL DETOUR PLAN IS NECESSARY AND SHALL BE ACCOMPLISHED AS FOLLOWS:

  A. WESTBOUND EXPRESSWAY TRAFFIC WILL BE ROUTED ALONG RAMP W-10, RUSSELL AVENUE AND RAMP 'H'.

  B. EASTBOUND EXPRESSWAY TRAFFIC WILL BE ROUTED ALONG RAMP 'G', SOUTH AVENUE AND RAMP W-11.

  C. TRAFFIC SIGNALS ALONG RUSSELL AVENUE AND SOUTH STREET WILL BE ADJUSTED BY CITY OF AKRON TRAFFIC ENGINEERING DEPARTMENT. CONTRACTOR MUST NOTIFY THE CITY OF AKRON TRAFFIC ENGINEERING DEPARTMENT 48 HOURS IN ADVANCE OF THIS PHASE OF CONSTRUCTION.

  D. ADVANCE WARNING SIGNS AND DETOUR SIGNS NEEDED FOR THIS PHASE ARE TO BE COVERED WHEN NOT IN USE.

  E. THE CONTRACTOR SHALL PROVIDE THE SERVICES OF TWO (2) SPECIAL DUTY PATROLMAN, EACH WITH A PATROL CAR FOR THE EXCLUSIVE USE OF MAINTAINING TRAFFIC FROM THE EXPRESSWAY ONTO DETOURS. INFORMATION REGARDING ARRANGEMENTS AND PAYMENTS BY THE CONTRACTOR FOR THE SPECIAL DUTY PATROLMAN AND VEHICLE FOR SERVICES MAY BE OBTAINED BY CONTACTING:

  **CITY-COUNTY SAFETY BUILDING, POLICE DIVISION**
  217 SOUTH HIGH STREET
  AKRON, OHIO 44308
  PHONE 375-2503

  PAYMENT SHALL BE INCLUDED IN Item Special, Law Enforcement Officer With Patrol Car 30 Hours.

PHASE 5

- REDUCE THE NUMBER OF MAINLINE LANES TO TWO PER DIRECTION.
- RECONSTRUCT RAMP 'G', TRAFFIC IS TO BE MAINTANED BY CONSTRUCTING A TEMPORARY ACCESS RAMP.
- REMOVE RAMP 'H' ACCESS TO EXPRESSWAY.
- REMOVE THE EXISTING INNERBELT TEMPORARY CONNECTIONS.

15. IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE MANUAL AND SUCH FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER SHALL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

    FAILURE TO COMPLY WITH THE ABOVE REQUIREMENTS SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER OBTAINS COMPLIANCE WITH THESE REQUIREMENTS.

16. PAYMENT FOR THE ABOVE, UNLESS SPECIFIED SEPARATELY, SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 614, "MAINTAINING TRAFFIC" WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS TO COMPLETE THE ABOVE WORK.

| CALC. BY | | M-1T62(2) | OHIO | 24A |
|---|---|---|---|---|
| DATE | | | FHWA REGION 5 | 455 |
| CHKD. BY | | | | |
| DATE | | | | |

AKRON INNERBELT
SUM-59-0.00

# 614 TEMPORARY PAVEMENT MARKINGS
## NOTE B

GENERAL

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND WHEN NECESSARY, REMOVE TEMPORARY RETROREFLECTIVE PAVEMENT MARKINGS ON EXISTING, RECONSTRUCTED, RESURFACED OR TEMPORARY ROADS WITHIN THE WORK LIMITS, IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE MARKINGS SHALL BE MAINTAINED IN GOOD CONDITION DURING THE REQUIRED SERVICE PERIOD TO PROVIDE DAY AND NIGHT VISIBILITY. THE MARKINGS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER TO MAINTAIN REQUIRED VISIBILITY AND/OR REFLECTIVITY AT NO ADDITIONAL COST TO THE STATE.

MATERIALS

UNLESS OTHERWISE INDICATED ON THE PLANS, TEMPORARY PAVEMENT MARKINGS MAY BE OF PAINT, PAVEMENT MARKING TAPE OR REMOVABLE PAVEMENT MARKING TAPE (TYPE R TAPE).

A. PAINT

PAINT SHALL COMPLY WITH 708.14 AND SHALL BE APPLIED IN ACCORDANCE WITH 621 EXCEPT AS MODIFIED HEREIN.

B. PAVEMENT MARKING TAPE

FLEXIBLE RETROREFLECTIVE PREFORMED PRESSURE SENSITIVE TAPE SHALL HAVE STRAIGHT EDGES AND BE FREE OF CRACKS. THE TAPE SHALL CONSIST OF PIGMENT AND FILLERS WITH SUFFICIENT BINDER AND PLASTICIZER TO RETAIN GLASS BEADS HAVING A REFRACTIVE INDEX MEETING THE MINIMUM REFLECTIVE INTENSITY STANDARD STATED IN THE MANUFACTURERS INFORMATION. THE TAPE SHALL BE FLEXOLITE "WET REFLECTIVE". 3M "SCOTCHLANE", OR AN APPROVED EQUAL.

THE GLASS BEADS SHALL BE DISTRIBUTED UNIFORMLY THROUGHOUT THE TAPE WITH SUFFICIENT SURFACE BEADS TO PROVIDE OPTIMUM REFLECTORIZATION AT ALL TIMES.

PAVEMENT MARKING TAPE SHALL COMPLY WITH THE COLOR REQUIREMENTS OF 708.14.

THE TAPE SHALL HAVE A PRECOATED ADHESIVE LAYER FOR PAVEMENT APPLICATION WITHOUT THE USE OF HEAT, SOLVENTS OR ADDITIONAL ADHESIVES. THE ADHESIVE SHALL BE SUFFICIENT TO RETAIN COMPLETE MARKINGS ON THE PAVEMENT SURFACE THROUGHOUT THE USEFUL LIFE OF THE MARKINGS.

IN ADDITION TO THE FOREGOING, ALL TEMPERATURE APPLICATION REQUIREMENTS AND OTHER APPLICABLE MANUFACTURER'S MATERIAL AND APPLICATION INSTRUCTIONS SHALL BE FOLLOWED.

WHEN APPROVED BY THE ENGINEER THE CONTRACTOR MAY USE REMOVABLE PAVEMENT MARKING TAPE (TYPE R TAPE), IN LIEU OF THAT DESCRIBED ABOVE, TO FACILITATE REMOVAL OF MARKINGS.

C. REMOVABLE PAVEMENT MARKING TAPE (TYPE R TAPE)

THE MARKING MATERIAL SHALL BE A MIXTURE OF POLYMERIC MATERIALS, PIGMENTS, REINFORCING MEDIUM TO FACILITATE REMOVAL, GLASS BEADS THROUGHOUT THE PIGMENTED PORTION, AND A RETROREFLECTIVE LAYER OF GLASS BEADS BONDED TO THE TOP SURFACE.

THE TAPE SHALL BE PRECOATED WITH A PRESSURE SENSITIVE ADHESIVE CAPABLE OF TEMPORARILY BONDING TO ASPHALT CONCRETE OR PORTLAND CEMENT CONCRETE PAVEMENT AT AN AMBIENT TEMPERATURE OF NOT LESS THAN 50° F AND RISING, AT A PAVEMENT TEMPERATURE OF NOT LESS THAN 50° F NOR MORE THAN 150° F, WITHOUT THE USE OF HEAT, SOLVENTS, AND ADDITIONAL ADHESIVES OR ACTIVATORS.

MATERIALS SHALL CONFORM TO THE COLOR REQUIREMENTS OF 708.14.

THE TAPE SHALL BE REMOVABLE FROM ASPHALT AND PORTLAND CEMENT CONCRETE INTACT OR IN LARGE PIECES AT TEMPERATURES ABOVE 40° F WITHOUT USE OF HEAT, SOLVENTS, GRINDING, OR SANDBLASTING. REMOVAL SHALL NOT RESULT IN DAMAGE TO, OR OBJECTIONABLE STAINING OF, THE PAVEMENT.

GLASS BEADS SHALL BE PROVIDED IN A PROPER SIZE, QUANTITY AND DISTRIBUTION TO ASSURE OPTIMUM RETROREFLECTIVITY AS THE FILM WEARS. THE FOLLOWING INITIAL AVERAGE REFLECTANCE VALUES AT 86.0° ENTRANCE ANGLE AS MEASURED IN ACCORDANCE WITH THE TESTING PROCEDURES OF FEDERAL TEST METHOD 370 SHALL BE CERTIFIED

| | WHITE | | YELLOW | |
|---|---|---|---|---|
| OBSERVATION ANGLE | 0.2 | 0.5 | 0.2 | 0.5 |
| SPECIFIC LUMINANCE | 1770 | 1270 | 1310 | 810 |

$(HCD/FT^2)/FC$

THE TAPE SHALL BE 3-M COMPANY'S "STAMARK, DETOUR GRADE (SERIES 5710, 5711, 6270, 6211)" OR AN APPROVED EQUAL.

THE CONTRACTOR SHALL FURNISH TO THE ENGINEER CERTIFICATION THAT THE MATERIAL SUPPLIED MEETS THE PROPERTIES SPECIFIED HEREIN.

LAYOUT

THE TEMPORARY MARKINGS SHALL BE ACCURATELY LAID OUT IN CONFORMANCE WITH 621.051 AND SHALL BE LOCATED IN A TRUE LINE ON THE CENTER LINE, LANE LINE, EDGE LINE, OR CHANNELIZING LINE WHERE PERMANENT MARKINGS WOULD LIE UNLESS OTHERWISE SPECIFIED IN THE PLANS.

PLACEMENT

TEMPORARY MARKINGS SHALL BE PLACED IN ACCORDANCE WITH LAYOUTS ON SHEETS _____ AND THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE PLANS.

TEMPORARY MARKINGS SHALL BE COMPLETE AND IN PLACE ON ALL PAVEMENT PRIOR TO EXPOSING IT TO TRAFFIC. WHEN TEMPORARY MARKINGS ARE NO LONGER NEEDED, THEY SHALL BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH 621.134 AND NECESSARY PAVEMENT MARKINGS INSTALLED BEFORE THE FLOW OF TRAFFIC IS CHANGED TO THE NEXT PHASE OR RETURNED TO ITS NORHAL CHANNEL.

WHERE PERMANENT PAVEMENT MARKINGS ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL FURNISH AND PLACE THE PERMANENT MARKINGS WITHIN 30 CALENDAR DAYS FOLLOWING COMPLETION OF ALL SURFACE COURSES IN A SINGLE ROADWAY OR PRIOR TO THE END OF THE CONSTRUCTION SEASON, WHICHEVER COMES FIRST. PERMANENT MARKINGS SHALL NOT BE PLACED OVER ANY TAPE MARKINGS.

A. CLASS I MARKINGS

CLASS I MARKINGS SHALL BE AS DEFINED IN 621, EXCEPT AS FOLLOWS:

1) LANE LINES SHALL BE 4-INCHES IN WIDTH.
2) TRANSVERSE LINES SHALL BE 8-INCHES IN WIDTH.
3) STOP LINES SHALL BE 12-INCHES IN WIDTH.
4) CROSS WALK LINES SHALL BE 8-INCHES IN WIDTH.

GORE MARKINGS SHALL CONSIST OF TWO CHANNELIZING LINES PLACED AT THE THEORETICAL OR TEMPORARY GORE OF RAMPS AND DIVERGING OR CONVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR SOLID 4-INCH LINES, 24 GALLONS PER MILE FOR SOLID 6-INCH LINES, 48 GALLONS PER MILE FOR SOLID 12-INCH LINES, AND 4 GALLONS PER MILE FOR 4-INCH DASHED LINES.

B. CLASS II MARKINGS

CENTER LINES SHALL CONSIST OF SINGLE, YELLOW 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

LANE LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

CHANNELIZING LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 20-FOOT INTERVALS.

GORE MARKINGS SHALL BE TWO CONTINUOUS, WHITE 50-FOOT BY 4-INCH LINES PLACED AT THE THEORETICAL GORE OF AN EXIT RAMP OR DIVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR GORE MARKINGS, 0.8 GALLONS PER MILE FOR CHANNELIZING LINE, AND 0.4 GALLONS PER MILE FOR LANE LINE AND CENTER LINE.

CONFLICTING MARKINGS

THE CONTRACTOR SHALL, PRIOR TO PLACING TEMPORARY MARKINGS, REMOVE ALL EXISTING CONFLICTING MARKINGS VISIBLE TO THE TRAVELING PUBLIC DURING DAYLIGHT OR NIGHTTIME HOURS IN ACCORDANCE WITH 621.134. THE COST FOR REMOVAL OF CONFLICTING MARKINGS SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS.

METHOD OF MEASUREMENT

TEMPORARY PAVEMENT MARKINGS WILL BE MEASURED COMPLETE IN PLACE, BY CLASS AND MATERIAL, IN THE UNITS DESIGNATED. DASHED LINE QUANTITIES WILL BE THE LENGTH OF THE COMPLETED STRIPE, INCLUDING GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT NORMALLY MARKED, IN ACCORDANCE WITH 621.15.

TEMPORARY PAVEMENT MARKINGS WILL INCLUDE THE LAYOUT, APPLICATION AND REMOVAL OF THE MARKINGS, WHEN REQUIRED.

BASIS OF PAYMENT

PAYMENT FOR ACCEPTED QUANTITIES COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR PLACEMENT, MAINTENANCE AND NECESSARY REMOVAL OF THE MARKINGS.

| ITEM | UNIT | DESCRIPTION | |
|---|---|---|---|
| ~~614~~ | ~~MILES~~ | ~~TEMPORARY LANE LINES, CLASS ____, (PAINT, TAPE OR TYPE R TAPE)~~ | |
| ~~614~~ | ~~MILES~~ | ~~TEMPORARY CENTER LINES, CLASS ____, (PAINT, TAPE OR TYPE R TAPE)~~ | |
| 614 | ~~MILES~~/LIN. FT. | TEMPORARY CHANNELIZING LINES, CLASS I, ~~(PAINT, TAPE OR~~ TYPE R TAPE) | 12,495 LIN.F |
| 614 | MILES | TEMPORARY EDGE LINES, CLASS I, ~~(PAINT, TAPE OR~~ TYPE R TAPE) | 0.33 MILES |
| ~~614~~ | ~~LIN. FT.~~ | ~~TEMPORARY GORE MARKING, CLASS II, (PAINT, TAPE OR TYPE R TAPE)~~ | |
| ~~614~~ | ~~LIN. FT.~~ | ~~TEMPORARY STOP LINES, CLASS I, (PAINT, TAPE OR TYPE R TAPE)~~ | |
| ~~614~~ | ~~LIN. FT.~~ | ~~TEMPORARY CROSSWALK LINES, CLASS I, (PAINT, TAPE OR TYPE R TAPE)~~ | |
| ~~614~~ | ~~EACH~~ | ~~TEMPORARY LANE ARROWS, CLASS I, (PAINT, TAPE OR TYPE R TAPE)~~ | |
| ~~614~~ | ~~EACH~~ | ~~TEMPORARY WORD "ONLY" ON PAVEMENT, 72-INCH, CLASS I, (PAINT OR TAPE)~~ | |
| ~~614~~ | ~~LIN. FT.~~ | ~~TEMPORARY TRANSVERSE LINES, CLASS I, (PAINT, TAPE OR TYPE R TAPE)~~ | |

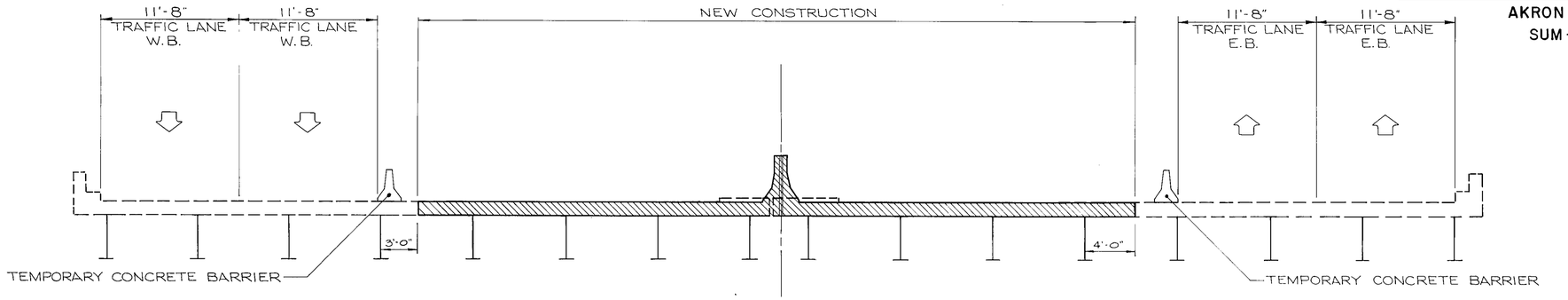
TEMPORARY PAVEMENT MARKINGS, TYPE R TAPE

| PHASE | LOCATION | EDGE LINE, CLASS I, YELLOW LIN. FT. | CHANNELIZING LINE, CLASS I LIN. FT. |
|---|---|---|---|
| 1 | BOWERY ST. | 1,740 | 75 |
| 2 | WEST EXPRESSWAY | — | 6,410 |
| 3 | WEST EXPRESSWAY | — | 6,010 |
| TOTAL | | 1,740 | 12,495 |
| | | 0.33 MILES | |

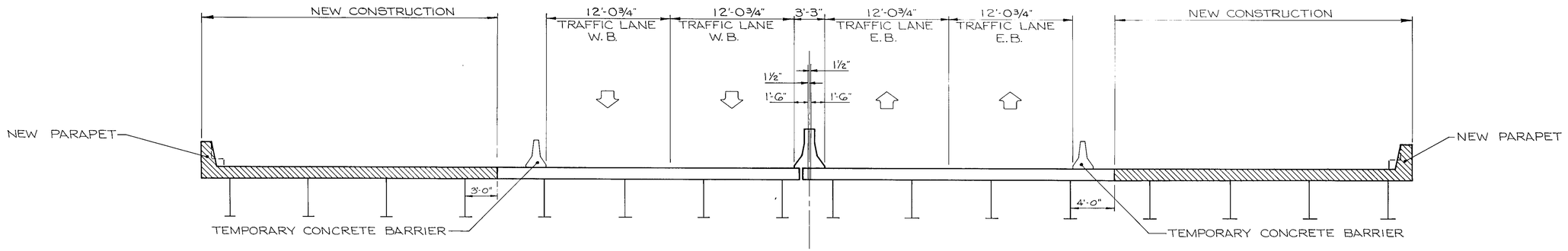
AA D/P# 71942R

| CALC. BY. DATE | | OHIO | 25/455 |
|---|---|---|---|
| CHKD. BY. DATE | M-IT62(2) | F.H.W.A. REGION 5 | |

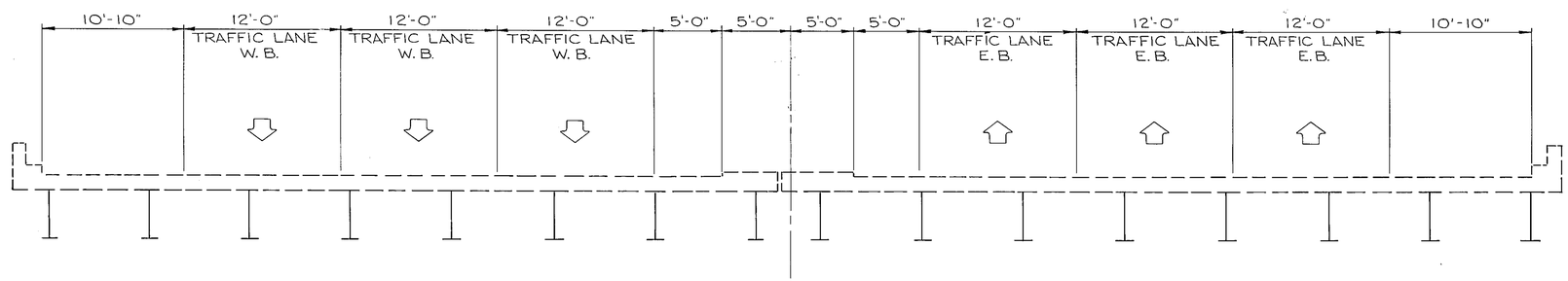
AKRON INNERBELT
SUM-59-0.00




PHASE 2




PHASE 3




EXISTING

STRUCTURES
SUM-18-1014 & SUM-59-0000
TYPICAL SECTIONS
MAINTENANCE OF TRAFFIC

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1702(2) | |

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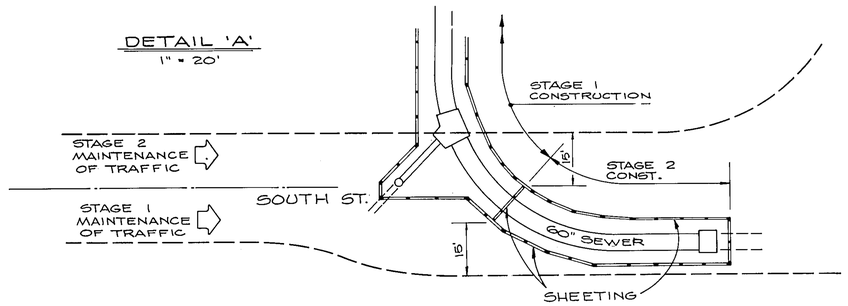
455

AKRON INNERBELT
SUM-59-0.00

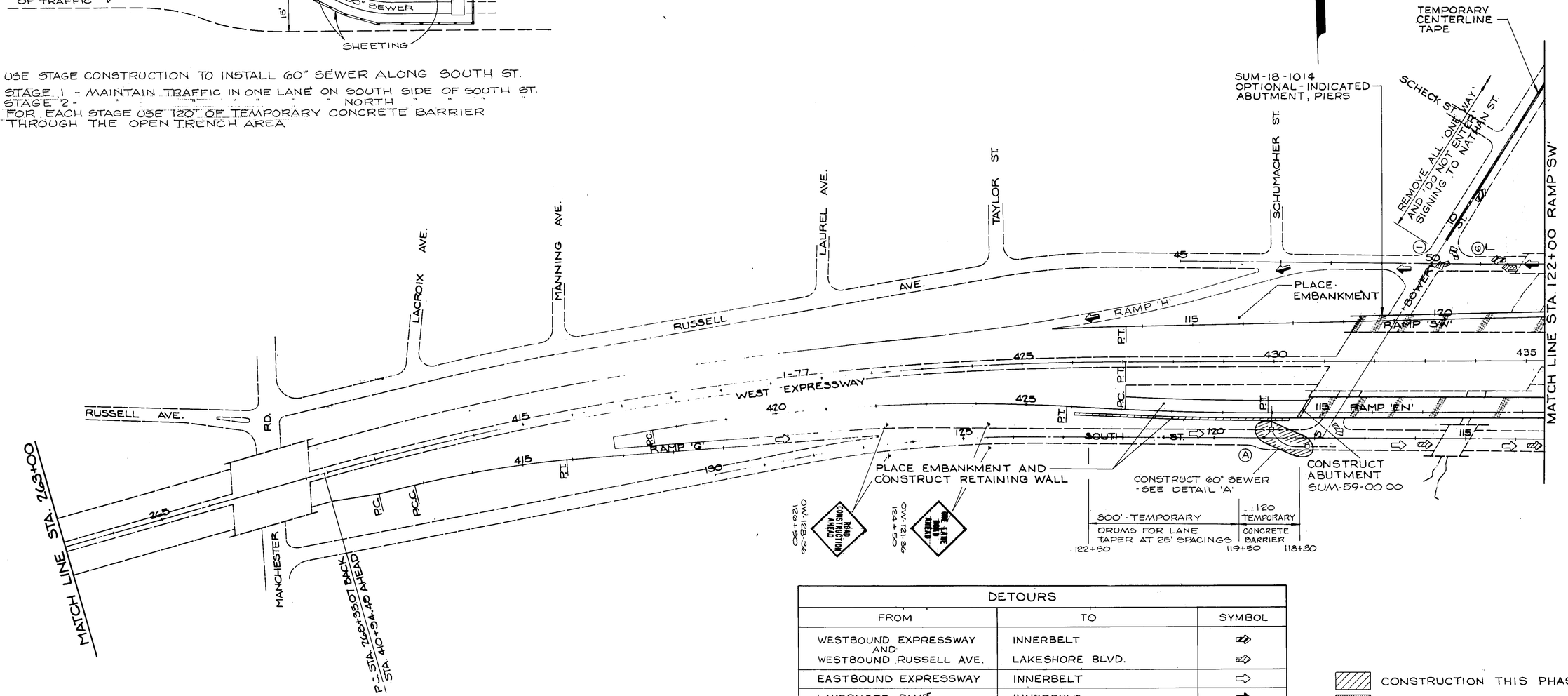
## DETAIL 'A'
1" = 20'




USE STAGE CONSTRUCTION TO INSTALL 60" SEWER ALONG SOUTH ST.
STAGE 1 - MAINTAIN TRAFFIC IN ONE LANE ON SOUTH SIDE OF SOUTH ST.
STAGE 2 - " " " " " " NORTH " " " "
FOR EACH STAGE USE 120' OF TEMPORARY CONCRETE BARRIER THROUGH THE OPEN TRENCH AREA

NOTE: THE FOLLOWING WORK WILL BE CONSTRUCTED AS PART OF PHASE I:
1. PLACE EMBANKMENTS FOR RAMP 'SW' AND RAMP 'EN'
2. THE 60" SEWER CROSSING THE WEST EXPRESSWAY AT STA. 430+00 AND THE RETAINING WALL PARALLELING RAMP 'EN' TO BOWERY ST. SHALL BE CONSTRUCTED CONCURRENTLY.

NOTE: THE FOLLOWING WORK CAN BE CONSTRUCTED AS PART OF PHASE I, AT THE DISGRESSION OF THE CONTRACTOR:
3. BRIDGES SUM-59-00 16 AND SUM-59-00 17
4. THE SUBSTRUCTURES FOR BRIDGE SUM-59-00 00
5. THE PIERS FOR BRIDGES SUM-18-10 14 AND SUM-59-00 02




| DETOURS | | |
|---|---|---|
| FROM | TO | SYMBOL |
| WESTBOUND EXPRESSWAY AND WESTBOUND RUSSELL AVE. | INNERBELT<br>LAKESHORE BLVD. | |
| EASTBOUND EXPRESSWAY | INNERBELT | |
| LAKESHORE BLVD. | INNERBELT<br>WESTBOUND EXPRESSWAY | |

CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

PHASE I 1 OF 2
MAINTENANCE OF TRAFFIC

FORM D D A-8

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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455

# AKRON INNERBELT
## SUM-59-0.00

MATCH LINE STA. 122+00 RAMP 'SW'

TEMPORARY CENTERLINE TAPE

RAYMOND ST.

BOWERY ST.

OHIO CANAL

NATHAN ST.

EXISTING 'DO NOT ENTER' AND 'ONE WAY' SIGNS TO REMAIN.

W-600-36

SEE NOTE 'C'

HOWE AVE.

RHODES AVE.

TEMP. CONNECTION

S. R. 59

AKRON INNERBELT

SUM-59-00.19 MID

SUM-59-08.17

OPTIONAL - INDICATED ABUTMENT, PIERS, SUPERSTRUCTURE AND DECK

DART AVE.

TEMP. CONNECTION

THORNTON ST.

RELOC. RHODES AVE.

DART AVE.

RAMP 'SW'

RAMP 'EN'

PLACE EMBANKMENT

SUM-59-0.00 OPTIONAL - INDICATED ABUTMENTS, PIERS, SUPERSTRUCTURE

SUM-59-0.00 OPTIONAL ABUTMENTS, PIERS

SEE NOTE 'A'

SEE NOTE 'B'

LAKESHORE BLVD.

CROSSIER ST.

200'

50'

OW-128.36

OW-127.36

ROAD CONSTRUCTION AHEAD

DETOUR AHEAD

PENN AVE.

OWEN AVE.

VICTORY ST.

MARION ST.

OBERLIN ST.

PRINCETON ST.

SOUTH ST.

I-77 WEST EXPRESSWAY

RAMP W-10

RAMP W-11

RUSSELL

BOULEVARD ST.

INSTALL TYPE III BARRICADE

EXISTING ONE WAY STREET TO BE REMOVED AND THORNTON AVE. INTERSECTION TO BE MADE TWO WAY. ONE WAY SIGNS FROM BOULEVARD ST.

TEMPORARY DRUMS

8" TEMPORARY CHANNELIZING LINE - TAPE

INSTALL 'NO PARKING ANYTIME' SIGNS FOR NORTHBOUND TRAFFIC

## DETOURS

| FROM | TO | SYMBOL |
|---|---|---|
| WESTBOUND EXPRESSWAY AND WESTBOUND RUSSELL AVE. | INNERBELT | |
| | LAKESHORE BLVD. | |
| EASTBOUND EXPRESSWAY | INNERBELT | |
| LAKESHORE BLVD. | INNERBELT | |
| | WESTBOUND EXPRESSWAY | |

## EXISTING SIGNS

| LOCATION | MESSAGE | ACTION |
|---|---|---|
| (A) SOUTH ST. (SHEET 2) | BOULEVARD ST. | REMOVE |
| (B) SOUTH ST. | 77 SOUTH | REMOVE |
| | 76 EAST | REMOVE |
| | ONE WAY ARROW | REMOVE |
| (C) SOUTH ST. | BOULEVARD ST. | REMOVE |
| | LAKESHORE BLVD. | RELOCATE IF AFFECTED BY CONSTRUCTION |
| (D) RUSSELL AVE. | DO NOT ENTER | REMOVE |
| | ONE WAY ARROWS | REMOVE |
| (E) RUSSELL AVE. | SOUTH 77 NORTH | REMOVE |
| | EAST 76 WEST | REMOVE |
| (F) RUSSELL AVE. | LAKESHORE BLVD | REMOVE |
| | BOULEVARD ST. | REMOVE |
| (G) RUSSELL AVE. | 77 NORTH | REMOVE |
| | 76 WEST | REMOVE |

## DETOUR SIGNING

(1) DETOUR — OC-29R-30

(2) DETOUR — OC-29L-30

(3) DETOUR — OC-29-30

(4) DETOUR — OM-23-24, M-19-21

(5) DETOUR — OM-23-24, M-21-21

(6) HOSPITAL — N-29-24; NP-29-24

ARROW PANEL — WITH — M-19-21; M-21-21; M-26-21; M-24-21; M-24-21

(7) TO NORTH 77 WEST 76

IM-8-24; IM-37-24; IM-40-24; M-5-24-2; M-5-24-2; IM-24-21

FIRST PRIORITY CONSTRUCTION

NOTE 'A'
USE STAGE CONSTRUCTION FOR LAKESHORE BLVD. & DART AVE. INTER.
STAGE 1 - CONSTRUCT LAKESHORE BLVD WIDENING AND CURB RETURN.
STAGE 2 - CONSTRUCT MEDIAN.
STAGE 3 - CONSTRUCT DART AVE. PAVEMENT TRANSITIONS TO SOUTH AVE.
MAINTAIN TRAFFIC WITHIN THE INTERSECTION FOR ALL STAGES.
ESTIMATED QUANTITIES - 20 TEMPORARY DRUMS.

NOTE 'B'
USE STAGE CONSTRUCTION FOR RUSSELL AVE.
STAGE 1 - CONSTRUCT PAVEMENT ON SOUTH SIDE OF CENTERLINE WHILE MAINTAINING TRAFFIC ON NORTH SIDE OF CENTERLINE.
STAGE 2 - CONSTRUCT PAVEMENT ON NORTH SIDE OF CENTERLINE WHILE MAINTAINING TRAFFIC ON SOUTH SIDE OF CENTERLINE.
ESTIMATED QUANTITIES - 10 TEMPORARY DRUMS.

NOTE 'C'
USE STAGE CONSTRUCTION FOR BOWERY/RHODES CONNECTOR
STAGE 1 - MAINTAIN TRAFFIC ON EXISTING PAVEMENT SOUTH OF CENTERLINE WHILE CONSTRUCTING NORTH SIDE.
STAGE 2 - MOVE TRAFFIC TO NORTH SIDE OF CENTERLINE.
ESTIMATED QUANTITIES - 10 TEMPORARY DRUMS.

CONSTRUCTION THIS PHASE

OPTIONAL CONSTRUCTION

CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

# PHASE I 2 OF 2
# MAINTENANCE OF TRAFFIC

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

28
455

AKRON INNERBELT
SUM-59-0.00

215

OW-128-48

ROAD CONSTRUCTION AHEAD

ATTACH TO BRIDGE ILLUMINATE WITH 2-C91 WATT LAMPS AND USE 12 AMBER FLASHER WITH 150 WATT LAMP

RAMP 'V'

RAMP 'W'

220

I-77

WEST EXPRESSWAY

RAMP 'W'

RAMP 'V'

225

RAMP 'U'

15

230

ROAD CONSTRUCTION AHEAD

OW-128-48
STA. 12+00

MATCH LINE STA. 233+00

MATCH LINE STA. 233+00

RAMP 'V'

235

240

RAMP 'J'

P.C.L.

245

AVE.

250

I-77

255

WEST EXPRESSWAY

RAMP 'T'

260

MATCH LINE STA. 263+00

EAST

1/2 MILE
STA. 245+30

OW-145A-30

LEFT LANE CLOSED AHEAD

OW-123-48

40 MPH
STA. 261+30

OW-143-24

OW-60D-48

GRAPHIC SCALE
0 100 200 300

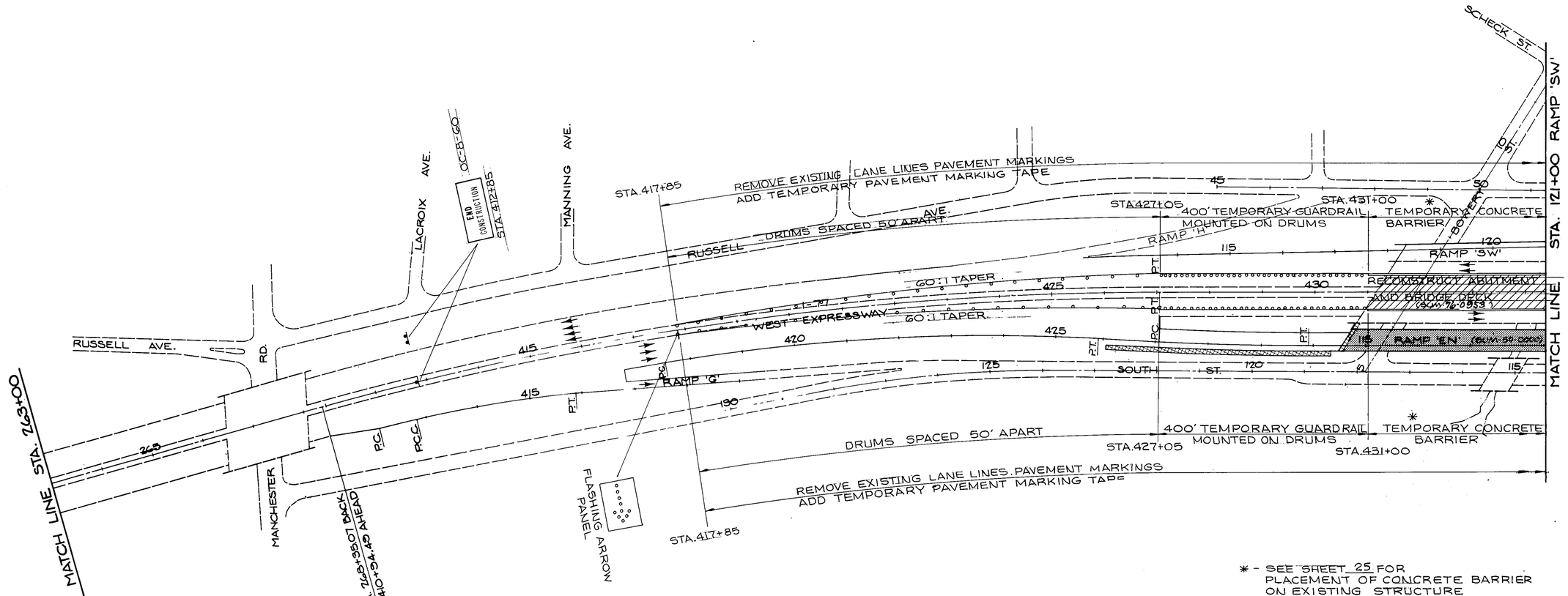
PHASE 2 1 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |



AKRON INNERBELT
SUM-59-0.00




NOTE: DURING THE ERECTION OF STEEL, THE CONTRACTOR WILL BE PERMITTED TO TEMPORARILY CLOSE THE SURFACE STREET FOR THE PLACING OF ONE BEAM IN THE INITIAL POSITION ON THE PIERS. THE STREET SHALL BE REOPENED TO CLEAR THE TRAFFIC BEFORE PLACING THE SECOND BEAM. THE MAXIMUM DURATION FOR TEMPORARY CLOSING SHALL BE HELD TO FIFTEEN MINUTES AT ANY ONE TIME. THE CLOSING IS NOT PERMITTED BETWEEN THE HOURS OF 7:30 TO 8:30 AM AND 4:30 TO 5:30 PM.
RAMP W-10 IS NOT PERMITTED TO BE CLOSED AT ANY TIME.
THE EXPRESSWAY CAN BE CLOSED ONLY DURING PHASE 4.

* - SEE SHEET 25 FOR PLACEMENT OF CONCRETE BARRIER ON EXISTING STRUCTURE

CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

PHASE 2 2 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

30
455

AKRON INNERBELT
SUM-59-0.00

MATCH LINE STA. 121+00 RAMP 'SW'

SUM-59-0000
OPTIONAL-INDICATED
SUPERSTRUCTURE

STA.436+75
400' TEMPORARY GUARDRAIL
MOUNTED ON DRUMS
TEMPORARY CONCRETE BARRIER *

PLACE EMBANKMENT

TEMPORARY CONCRETE BARRIER *

STA.436+75

LAKESHORE BLVD.

STA.440+75
400' TEMPORARY GUARDRAIL
MOUNTED ON DRUMS

60:1 TAPER

60:1 TAPER

STA.440+75

EXISTING LANE LINES PAVEMENT MARKINGS
TEMPORARY PAVEMENT MARKINGS TAPE

REMOVE EXISTING LANE LINES PAVEMENT MARKINGS
ADD TEMPORARY PAVEMENT MARKING TAPE

REMOVE EXISTING LANE LINES PAVEMENT MARKINGS
ADD TEMPORARY PAVEMENT MARKING TAPE

CONSTRUCT PIER

DRUMS SPACED 50' APART

SOUTH ST.

RAMP W-11

23'-4"

WEST EXPRESSWAY

23'-4"

RAMP W-10

RUSSELL AVE.

DRUMS SPACED 50' APART

RAMP 'SW'

RAMP 'ENT'

RAYMOND ST.

BOWERY ST.

OHIO CANAL

NATHAN ST.

SUM-59-0002
SUM-59-0016
SUM-59-0017
COMPLETE STRUCTURES
BEFORE PHASE 5

RAILROAD PHASE 5

RHODES AVE.

HOWE AVE.

CAMPBELL ST

TEMP. CONNECTION

S.R. 59

AKRON INNERBELT

TEMP. CONNECTION

DART AVE.

THORNTON ST.

BOULEVARD ST.

RHODES AVE.

KENYON ST.

OBERLIN CT.

STA.449+90

OBERLIN ST.

FLASHING ARROW PANEL

MATCH LINE STA. 453+00

* - SEE SHEET 25 FOR PLACEMENT OF CONCRETE BARRIER ON EXISTING STRUCTURE

NOTE: DURING THE ERECTION OF STEEL, THE CONTRACTOR WILL BE PERMITTED TO TEMPORARILY CLOSE THE SURFACE STREET FOR THE PLACING OF ONE BEAM IN THE INITIAL POSITION ON THE PIERS. THE STREET SHALL BE REOPENED TO CLEAR THE TRAFFIC BEFORE PLACING THE SECOND BEAM. THE MAXIMUM DURATION FOR TEMPORARY CLOSING SHALL BE HELD TO FIFTEEN MINUTES AT ANY ONE TIME. THE CLOSING IS NOT PERMITTED BETWEEN THE HOURS OF 7:30 TO 8:30 AM AND 4:30 TO 5:30 PM.
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THE EXPRESSWAY CAN BE CLOSED DURING PHASE 4.

CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

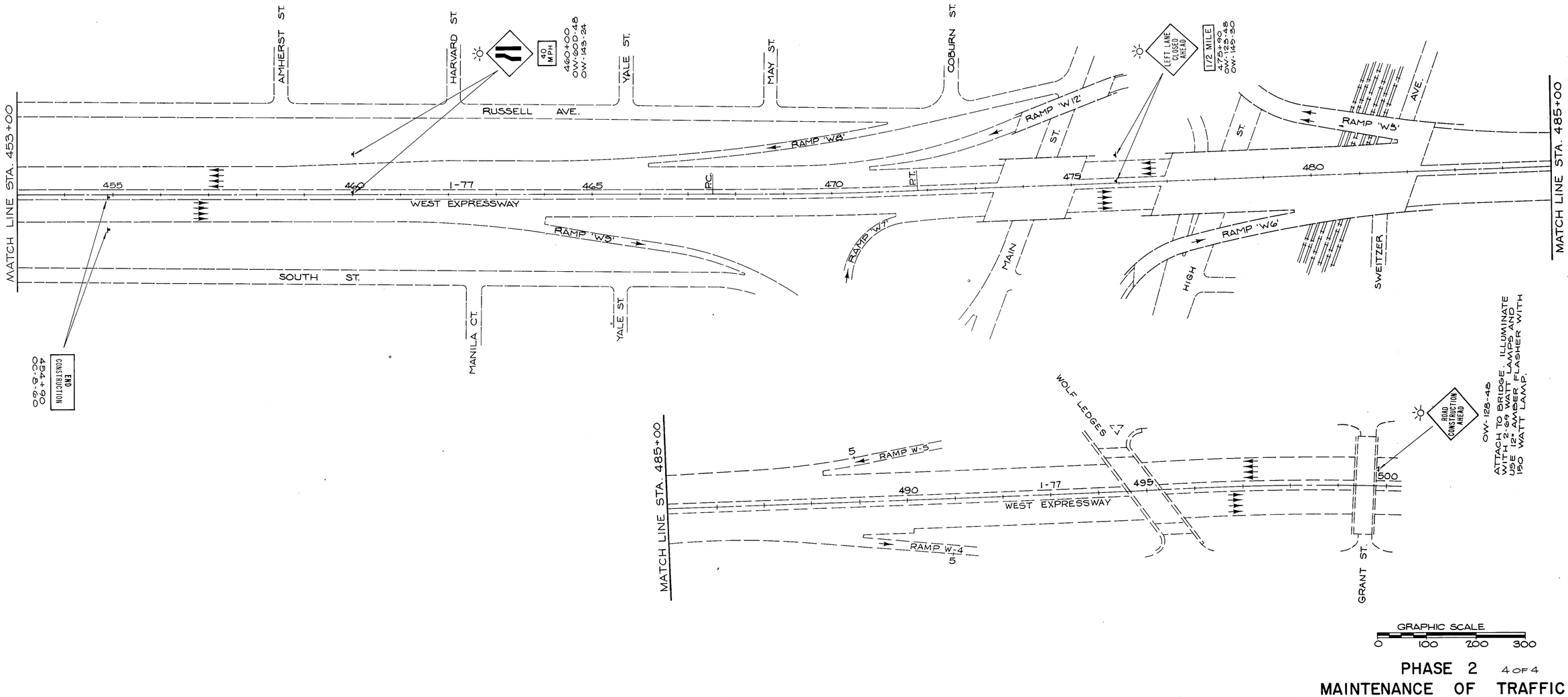
PHASE 2 3 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31
455

AKRON INNERBELT
SUM-59-0.00




PHASE 2 4 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31A
455

AKRON INNERBELT
SUM-59-0.00

215
RAMP 'V'
RAMP 'W'
220
I-77
WEST EXPRESSWAY
RAMP 'W'
225
RAMP 'V'
RAMP 'U'
230
MATCH LINE STA. 233+00
OW-123-48
ROAD CONSTRUCTION AHEAD
ATTACH TO BRIDGE ILLUMINATE FLASHER WITH USE 12-29 WATT LAMP
150 WATT FLOODBEAM LAMPS AND WITH 2-29 WATT LAMPS
MATCH LINE STA. 233+00
RAMP 'V'
235
240
RAMP 'J'
RCL
AVE.
245
250
I-77
255
WEST EXPRESSWAY
RAMP 'C'
260
MATCH LINE STA. 263+00
EAST
½ MILE
STA. 245+30
OW-145A-30
RIGHT LANE CLOSED AHEAD
OW-123-48
40 MPH
STA. 261+30
OW-143-24
OW-60C-48

GRAPHIC SCALE
0 100 200 300

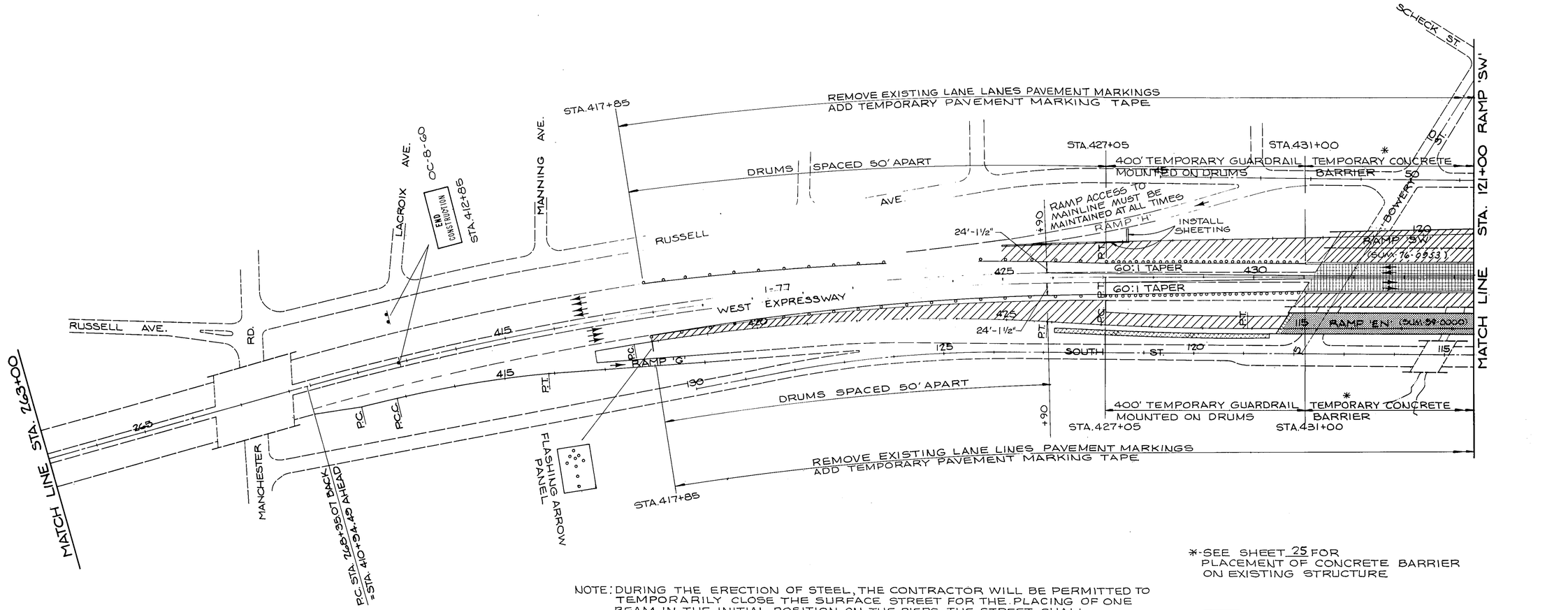
PHASE 3 1 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31B
455

AKRON INNERBELT
SUM-59-0.00

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THE EXPRESSW CAN BE CLOSED ONLY DURING PHASE 4.

*-SEE SHEET 25 FOR PLACEMENT OF CONCRETE BARRIER ON EXISTING STRUCTURE

CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

PHASE 3 2 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31C
455

AKRON INNERBELT
SUM-59-0.00

MATCH LINE STA. 121+00 RAMP 'SW'

RECONSTRUCT AND WIDEN BRIDGE DECK
RECONSTRUCT ABUTMENT

435+76 TEMPORARY CONCRETE BARRIER *
435+75 TEMPORARY CONCRETE BARRIER *
435+75 300' TEMPORARY GUARDRAIL MOUNTED ON DRUMS
300' TEMPORARY GUARDRAIL MOUNTED ON DRUMS
SUM-59-0007
SUM-59-1014
60:1 TAPER
60:1 TAPER
24'-1½"
440+85 BOTH SIDES
CONSTRUCT PIER
110
440
REMOVE EXISTING PAVEMENT MARKINGS
INSTALL TEMPORARY PAVEMENT MARKINGS, TAPE
DRUMS SPACED AT 50' APART
REMOVE EXISTING PAVEMENT MARKINGS
INSTALL TEMPORARY PAVEMENT MARKINGS, PAINT
DRUMS SPACED AT 50' APART
447+90
100
450
SOUTH ST.
RAMP W-11
I-77
WEST EXPRESSWAY
RAMP W-10
AVE.
RUSSELL
ST.
35
P.T.
40
S.T.
50
55
RAYMOND ST.
BOWERY ST.
NATHAN ST.
OHIO CANAL
HOWE AVE.
CAMPBELL ST
RHODES AVE.
45
50
55
TEMP. CONNECTION
S.R. 59
140
145
150
155
AKRON INNERBELT
TEMP. CONNECTION
240
DART AVE.
245
250
255
THORNTON
BOULEVARD ST.
477+90 FLASHING ARROW PANEL
452+90 END CONSTRUCTION
OCT. 8, '80
MATCH LINE STA. 453+00

* SEE SHEET 25 FOR PLACEMENT OF CONCRETE BARRIER ON EXISTING STRUCTURE

CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

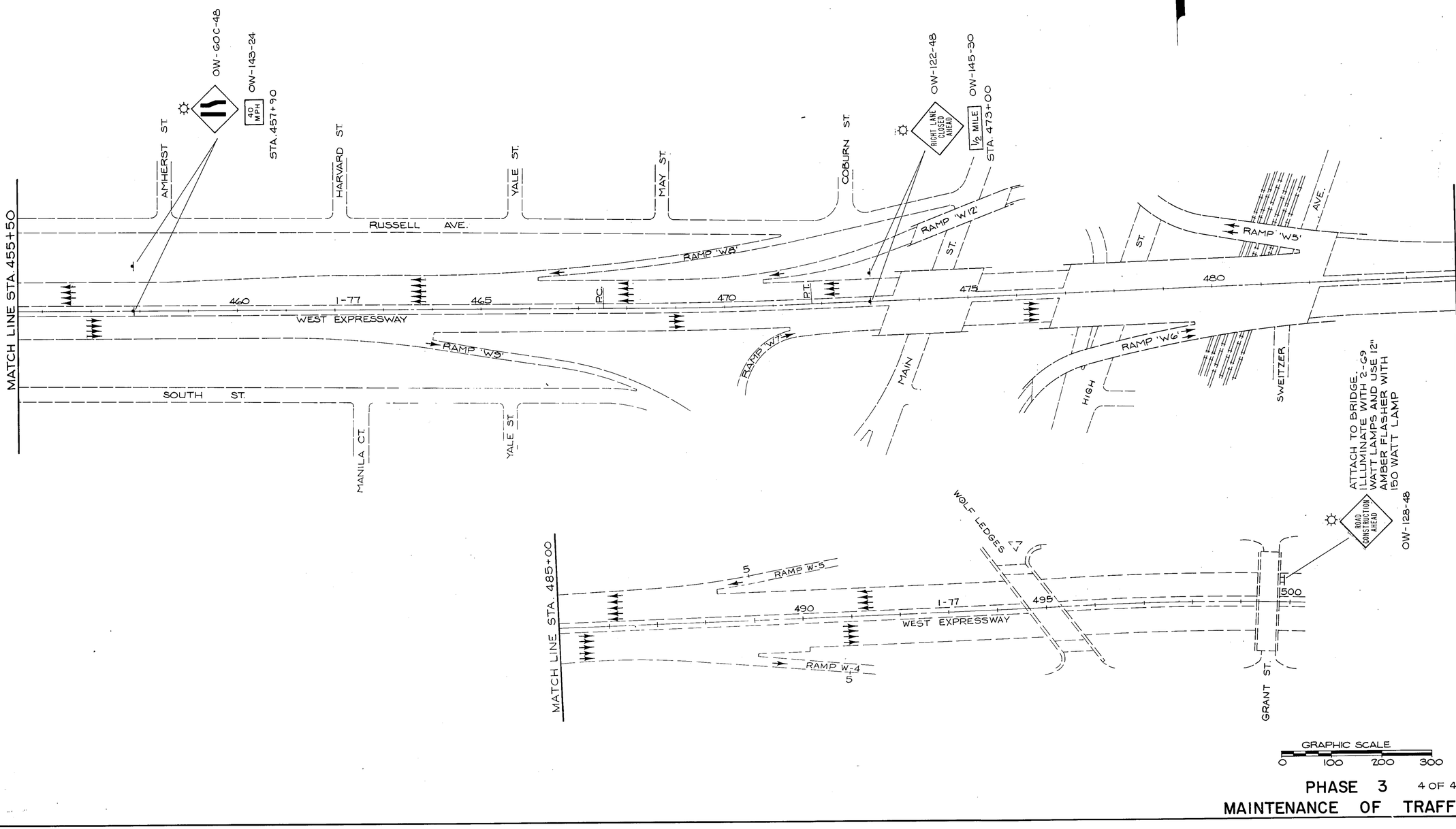
PHASE 3 3 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31D
455

AKRON INNERBELT
SUM-59-0.00



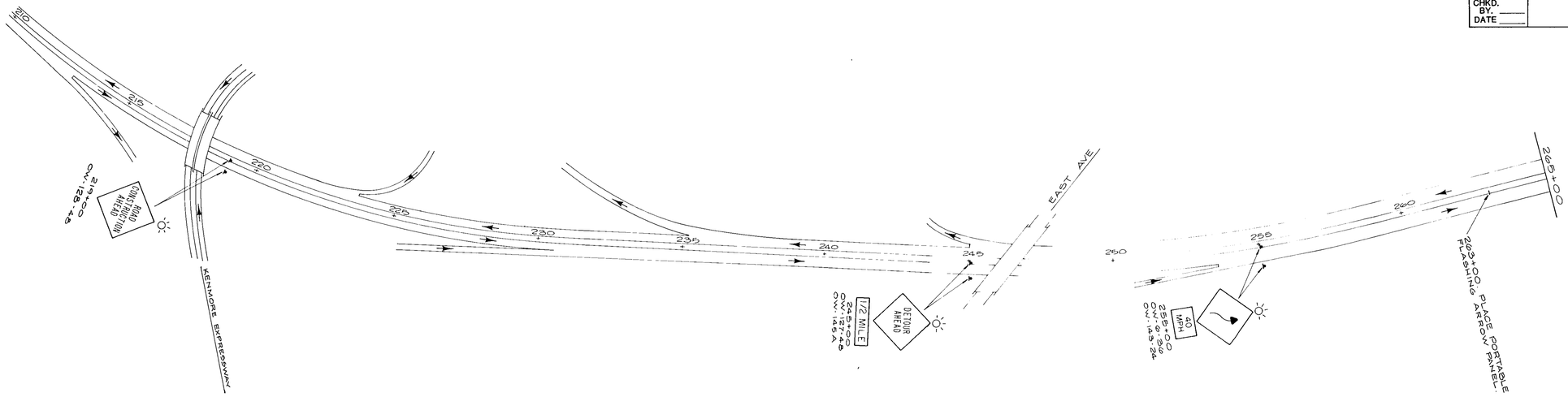

PHASE 3 4 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A 5

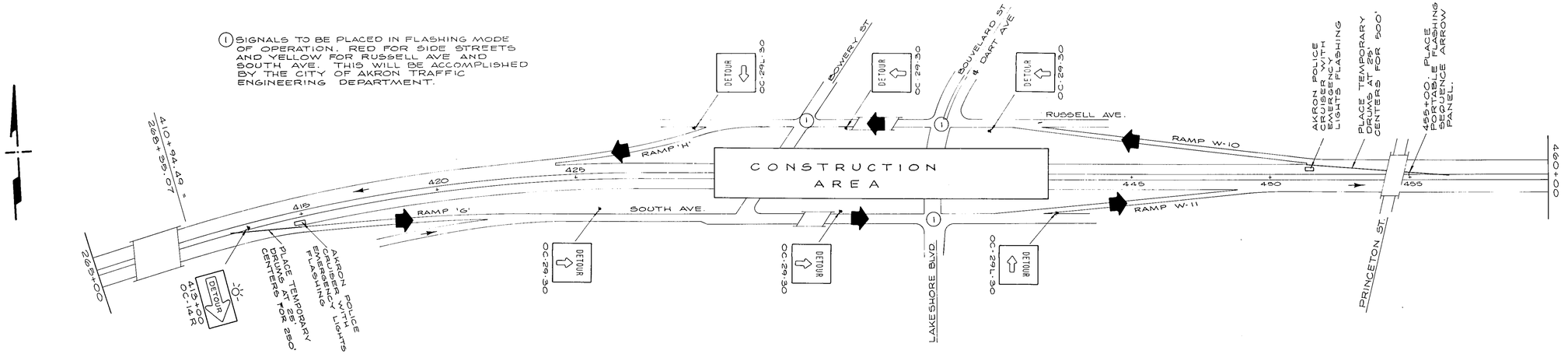
AA B/P# 7194279

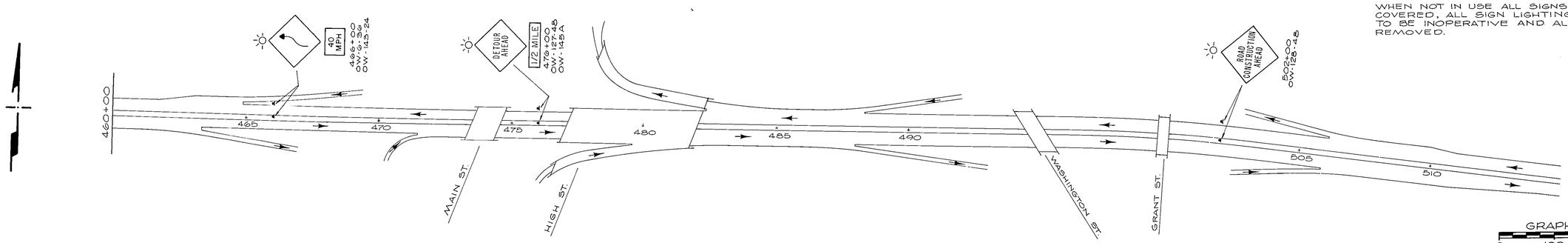
| | | | |
|---|---|---|---|
| CALC. BY. DATE | M-1T62(2) | OHIO | 31E 455 |
| CHKD. BY. DATE | | F.H.W.A. REGION 5 | |

AKRON INNERBELT
SUM-59-0.00




(1) SIGNALS TO BE PLACED IN FLASHING MODE OF OPERATION. RED FOR SIDE STREETS AND YELLOW FOR RUSSELL AVE AND SOUTH AVE. THIS WILL BE ACCOMPLISHED BY THE CITY OF AKRON TRAFFIC ENGINEERING DEPARTMENT.




NOTES:

REMOVAL OF TRAFFIC FROM THE MAINLINE OF EXPRESSWAY IS PERMITTED ONLY DURING THE HOURS BETWEEN 11:00 PM TO 4:00 AM.

WHEN NOT IN USE ALL SIGNS ARE TO BE COVERED, ALL SIGN LIGHTING DEVICES ARE TO BE INOPERATIVE AND ALL BARRICADES REMOVED.

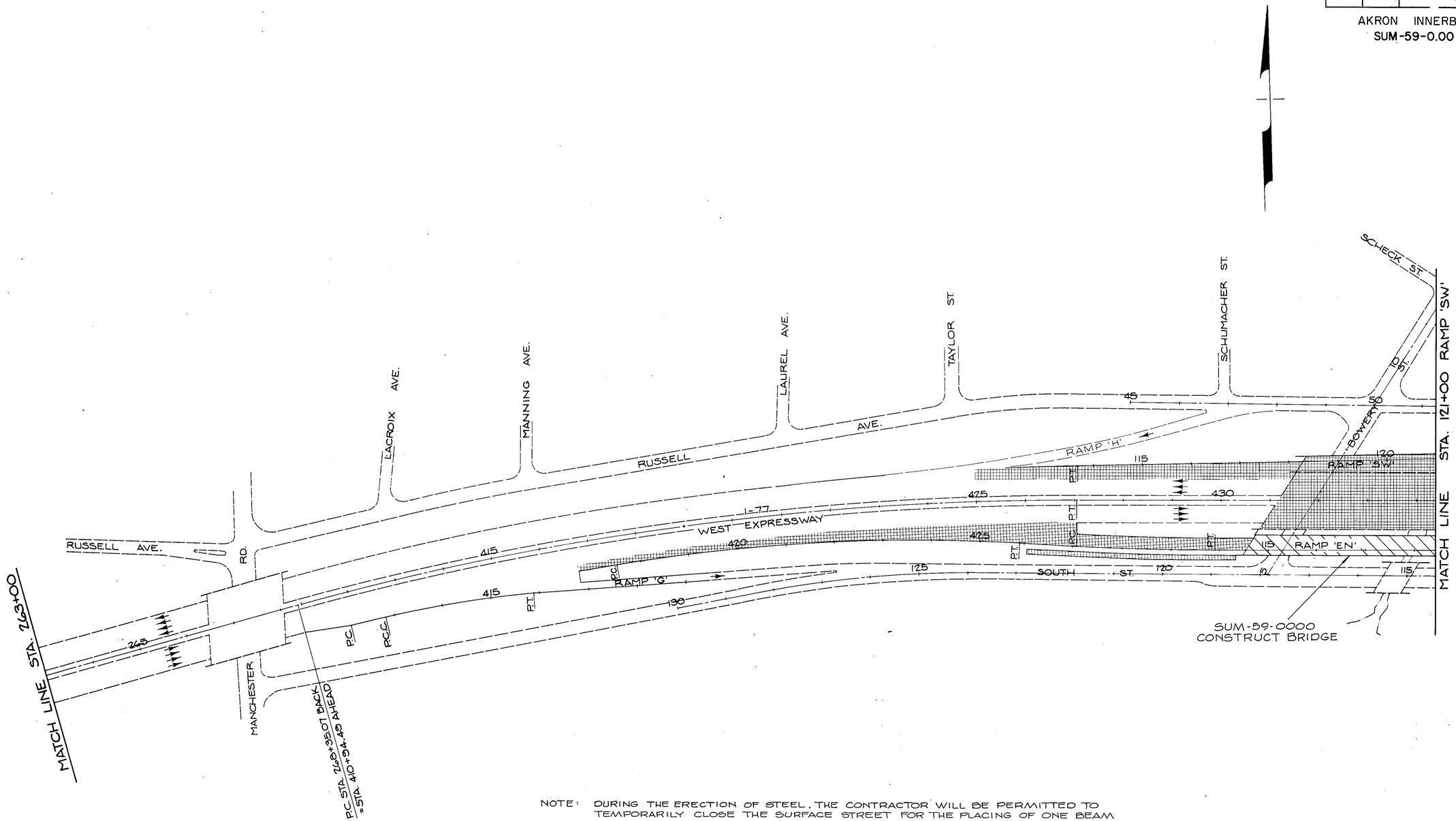
GRAPHIC SCALE
0 100 200 300

PHASE 4 1 OF 3
MAINTENANCE OF TRAFFIC

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31F
455

AKRON INNERBELT
SUM-59-0.00

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CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

PHASE 4 2 OF 3
MAINTENANCE OF TRAFFIC

FORM D D A-2

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

316
455

AKRON INNERBELT
SUM-59-0.00

MATCH LINE STA. 121+00 RAMP 'SW'

RAYMOND ST.
BOWERY ST.
NATHAN ST.
OHIO CANAL
LAKESHORE BLVD.
SUM-59-0000 CONSTRUCT BRIDGE
PENN AVE.
SOUTH 17TH ST.
RAMP W-11
I-77 WEST EXPRESSWAY
RAMP W-10
RAMP E-N
RUSSELL
OWEN AVE.
VICTORY ST.
MARION ST.
OBERLIN CT.
RHODES AVE.
KENYON ST.
OBERLIN ST.
BOULEVARD ST.
HOWE AVE.
CAMPBELL ST
RHODES AVE.
TEMP CONNECTION
S R 59
AKRON INNERBELT
TEMP CONNECTION
DART AVE.
THORNTON ST.

MATCH LINE STA. 453+00

NOTES:
DURING THE ERECTION OF STEEL, THE CONTRACTOR WILL BE PERMITTED TO TEMPORARILY CLOSE THE SURFACE STREET FOR THE PLACING OF ONE BEAM IN THE INITIAL POSITION ON THE PIERS. THE STREET SHALL BE REOPENED TO CLEAR THE TRAFFIC BEFORE PLACING THE SECOND BEAM. THE MAXIMUM DURATION FOR TEMPORARY CLOSING SHALL BE HELD TO FIFTEEN MINUTES AT ANY ONE TIME. THE CLOSING IS NOT PERMITTED BETWEEN THE HOURS OF 7:30 AM TO 8:30AM AND 4:30 PM TO 5:30 PM.
RAMP W-10 IS NOT PERMITTED TO BE CLOSED AT ANY TIME.
THE EXPRESSWAY CAN BE CLOSED ONLY DURING THIS PHASE.

CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

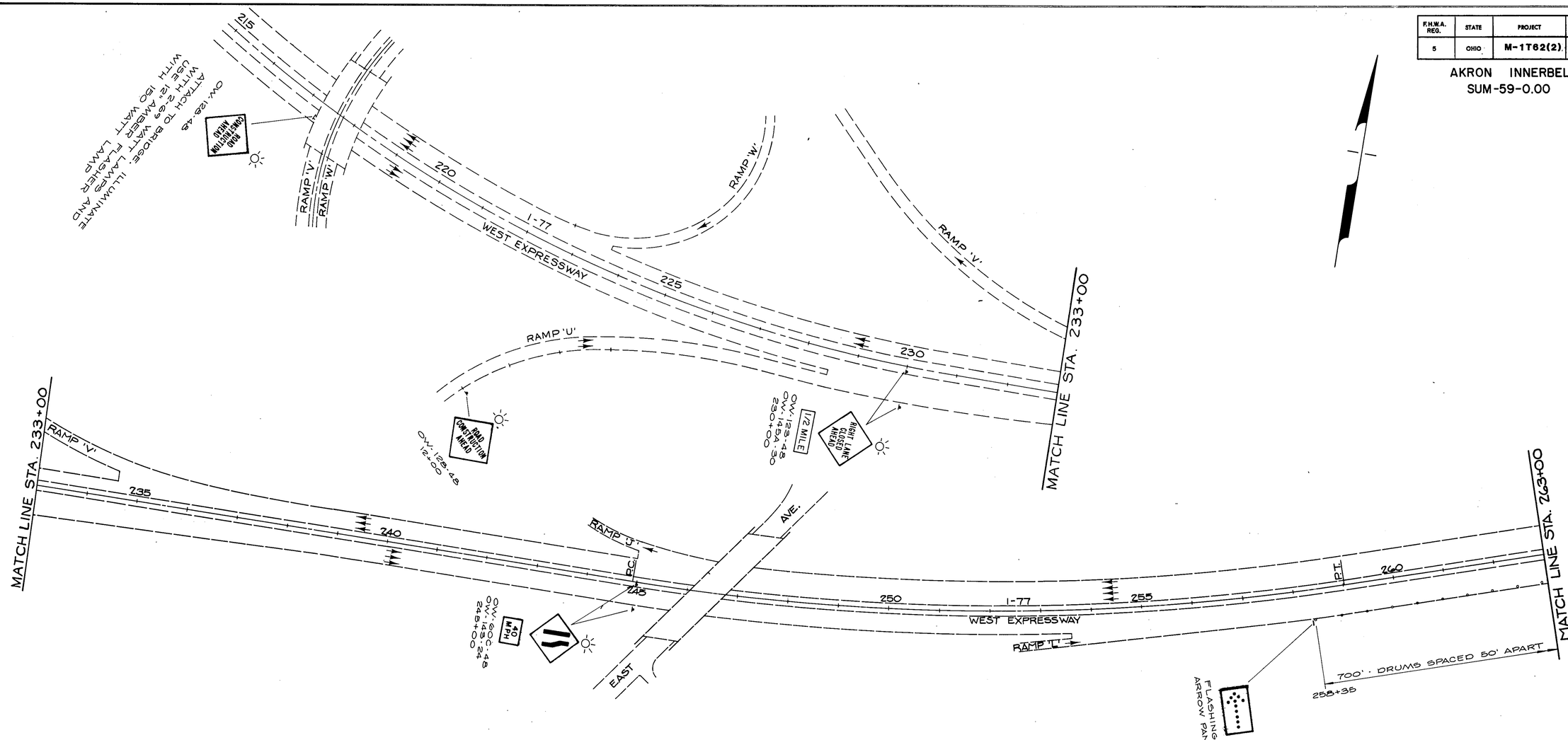
PHASE 4 3 OF 3
MAINTENANCE OF TRAFFIC

FORM D D A-8

| F.H.W.A. REQ. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31 H
455

AKRON INNERBELT
SUM-59-0.00




GRAPHIC SCALE
0 100 200 300

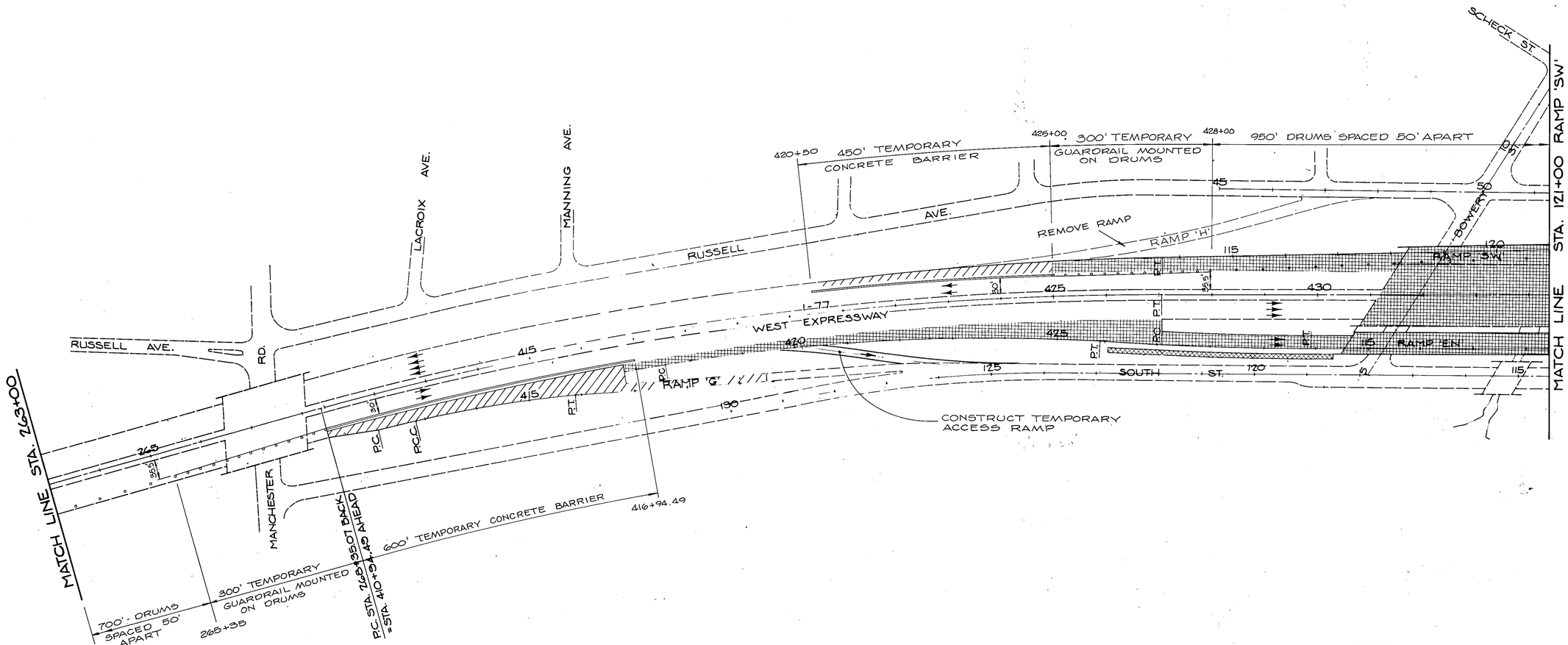
PHASE 5 1 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

311
455

AKRON INNERBELT
SUM-59-0.00




CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

PHASE 5 2 OF 4
MAINTENANCE OF TRAFFIC

FORM 99 A-9

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31J
455

**AKRON INNERBELT**
SUM-59-0.00

MATCH LINE STA. 121+00 RAMP 'SW'

LAKESHORE BLVD.

PENN AVE.

SOUTH ST.

OWEN AVE.

VICTORY ST.

MARION ST.

I-77 WEST EXPRESSWAY

FLASHING ARROW PANEL

RUSSELL AVE.

RAYMOND ST.

BOWERY ST.

NATHAN ST.

OHIO CANAL

950' DRUMS AT 50' SPACES

700' DRUMS AT 50' SPACES

124+00

442+00

OW-60C-36 129+00

OW-122-36 134+00

OW-128-36 142+00

RIGHT LANE CLOSED AHEAD

ROAD CONSTRUCTION AHEAD

RAMP 'SW'

RAMP 'SE'

RHODES AVE.

OBERLIN CT.

KENYON ST.

OBERLIN ST.

BOULEVARD ST.

HOWE AVE.

CAMPBELL ST.

THORNTON ST.

S.R. 59

AKRON INNERBELT

TEMP. CONNECTION

TO BE REMOVED

DART AVE.

MATCH LINE STA. 453+00

CONSTRUCTION THIS PHASE
OPTIONAL CONSTRUCTION
CONSTRUCTION COMPLETED

GRAPHIC SCALE
0 100 200 300

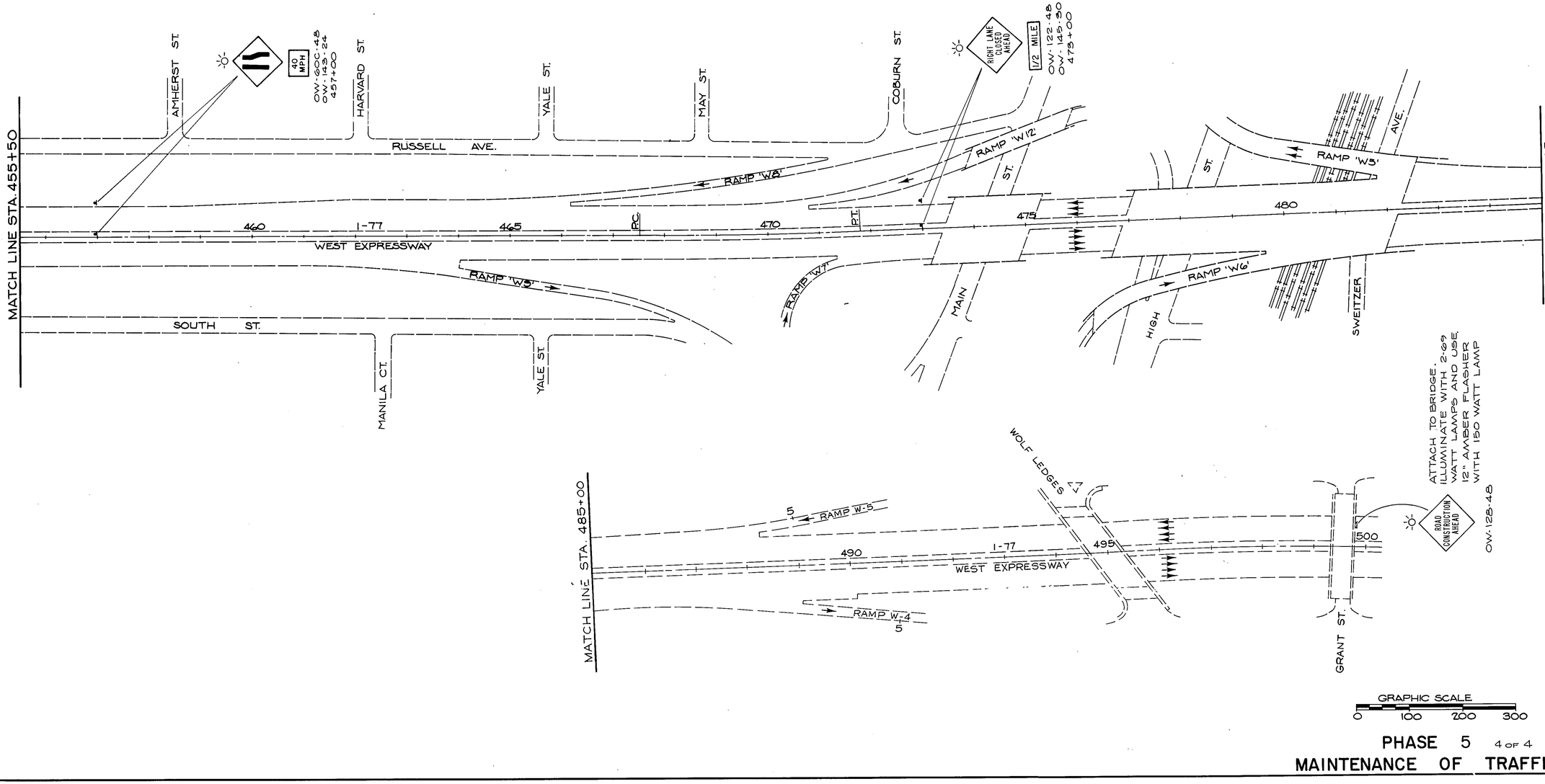
PHASE 5 3 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

31K
455

AKRON INNERBELT
SUM-59-0.00




GRAPHIC SCALE
0 100 200 300

PHASE 5 4 OF 4
MAINTENANCE OF TRAFFIC

FORM D D A-5

CALCULATED BY T.A.K DATE 10/82
CHECKED BY D.S.B DATE 11/82

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

32/455

AKRON INNERBELT
SUM-59-0.00

| LOCATION | ITEM 203 EXCAVATION | ITEM 203 EMBANKMENT | ITEM 203 SEEDING & MULCHING | ITEM 659 COMMERCIAL FERTILIZER | ITEM 659 AGRICULTURAL LIMING |
|---|---|---|---|---|---|
| | | | | .00009T/SY | .00045T/SY |
| | CY | CY | SY | TONS | TONS |
| WEST EXPRESSWAY | | | | | |
| SHEET NO. 45: | | | | | |
| STA 410+94.49/RT TO STA 415+00/RT | 75 | 996 | 1,645 | .15 | 0.74 |
| SHEET NO. 46: | | | | | |
| STA 415+00/RT TO STA 420+00/RT | 165 | 404 | 1,358 | .12 | 0.61 |
| SHEET NO. 47: | | | | | |
| STA 420+00/RT TO STA 425+00/RT | 161 | 1,826 | 1,588 | .14 | 0.72 |
| STA 420+59.17/LT TO STA 425+00/LT | 18 | 38 | 646 | .06 | 0.29 |
| SHEET NO. 48: | | | | | |
| STA 425+00/RT TO STA 429+50/RT | 125 | 1,699 | 1,586 | .14 | 0.71 |
| STA 425+00/LT TO STA 429+50/LT | 88 | 1,824 | 2,827 | .25 | 1.27 |
| SHEET NO. 49: | | | | | |
| STA 429+50/RT TO STA 431+00/RT | 7 | 1,309 | 307 | .03 | 0.14 |
| STA 429+50/LT TO STA 432+00/LT | 79 | 3,837 | 1,313 | .12 | 0.59 |
| RAMPS "EN" & "SW" | | | | | |
| SHEET NO. 50: | | | | | |
| "SW" STA 122+00 TO STA 123+75 | 41 | 2,221 | 769 | .07 | 0.35 |
| SHEET NO. 52: | | | | | |
| "SW" STA 128+85 TO STA 132+00 | 835 | 16,596 | 6,757 | .61 | 3.04 |
| "EN" STA 128+75 TO STA 131+50 | 427 | 26,099 | 4,686 | .42 | 2.11 |
| RUSSELL AVENUE | | | | | |
| SHEET NO. 52: | | | | | |
| STA 57+00 TO STA 62+00 | 462 | 724 | 1,541 | .14 | 0.69 |
| RAMPS "EN" & "SW" | | | | | |
| SHEET NO. 53: | | | | | |
| "SW" STA 132+00 TO STA 133+42 | 154 | 8,177 | 570 | .05 | 0.26 |
| "EN" STA 131+50 TO STA 134+53 | 185 | 29,410 | 6,913 | .62 | 3.11 |
| SHEET NO. 55: | | | | | |
| "SW" STA 142+09.18 TO STA 142+50 | 43 | 5 | 186 | .02 | 0.08 |
| "EN" STA 142+16.76 TO STA 142+50 | 44 | 4 | 144 | .01 | 0.06 |
| INNERBELT | | | | | |
| SHEET NO. 55: | | | | | |
| STA 142+50/RT TO STA 145+00/RT | 424 | 21 | 1,596 | .14 | 0.72 |
| STA 142+50/LT TO STA 145+00/LT | 381 | 21 | 1,374 | .12 | 0.62 |
| SHEET NO. 56: | | | | | |
| STA 145+00/RT TO STA 150+00/RT | 405 | 413 | 1,808 | .16 | 0.81 |
| STA 145+00/LT TO STA 150+00/LT | 549 | 67 | 2,112 | .19 | 0.95 |
| LAKESHORE BLVD. | | | | | |
| SHEET NO. 57: | | | | | |
| STA 10+00 TO STA 14+00 | 240 | 0 | 198 | .02 | 0.09 |
| DART AVENUE | | | | | |
| SHEET NO. 57: | | | | | |
| STA 222+00 TO STA 226+00 | 1,792 | 613 | 1,621 | .15 | 0.73 |
| DART AVENUE X-SECTIONS EXTENDED | | | | | |
| SHEET NO. 57: | | | | | |
| STA 225+50/LT TO STA 226+00/LT | 0 | 467 | 1,078 | .10 | 0.49 |
| RUSSELL AVENUE | | | | | |
| SHEET NO. 57: | | | | | |
| STA 54+12.69 TO STA 57+00 | 469 | 782 | 1,928 | .17 | 0.87 |
| SOUTH STREET | | | | | |
| SHEET NO. 57: | | | | | |
| STA 111+73.69 TO STA 112+30 | 7 | 5 | 38 | .01 | 0.02 |
| DART AVENUE | | | | | |
| SHEET NO. 58: | | | | | |
| STA 226+00 TO STA 229+00 | 183 | 3,042 | 2,120 | .19 | 0.95 |

| LOCATION | ITEM 203 (CONT'D) EXCAVATION | EMBANKMENT | SEEDING & MULCHING | ITEM 659 (CONT'D) COMMERCIAL FERTILIZER | AGRICULTURAL LIMING |
|---|---|---|---|---|---|
| | | | | .00009T/SY | .00045T/SY |
| DART AVENUE X-SECTIONS EXTENDED | | | | | |
| SHEET NO. 58: | | | | | |
| STA 226+00 TO STA 229+00 | 0 | 1,935 | 2,855 | .26 | 1.28 |
| DART AVENUE | | | | | |
| SHEET NO. 59: | | | | | |
| STA 229+00 TO STA 234+00 | 1,809 | 2,308 | 3,318 | .30 | 1.49 |
| DART AVENUE X-SECTIONS EXTENDED | | | | | |
| SHEET NO. 59: | | | | | |
| STA 229+00 TO STA 231+50 | 575 | 198 | 2,743 | .25 | 1.23 |
| RHODES AVENUE | | | | | |
| SHEET NO. 59: | | | | | |
| STA 33+21 TO STA 36+00 | 1,065 | 511 | 3,030 | .27 | 1.36 |
| RHODES AVENUE X-SECTIONS EXTENDED | | | | | |
| SHEET NO. 59: | | | | | |
| STA 34+00 TO STA 35+50 | 4 | 507 | 1,191 | .11 | 0.54 |
| RHODES AVENUE | | | | | |
| SHEET NO. 60: | | | | | |
| STA 36+00 TO STA 40+20.42 | 629 | 300 | 914 | .08 | 0.41 |
| BOWERY STREET | | | | | |
| SHEET NO. 60: | | | | | |
| STA 38+25 TO STA 39+50 | 0 | 74 | 225 | .02 | 0.10 |
| DART AVENUE | | | | | |
| SHEET NO. 61: | | | | | |
| STA 234+00 TO STA 237+93.80 | 617 | 1,492 | 792 | .07 | 0.36 |
| DART AVENUE EXTENSION | | | | | |
| SHEET NO. 61: | | | | | |
| STA 235+50 TO STA 238+00 | 221 | 57 | 324 | .03 | 0.15 |
| TOTAL | 12,279 | 107,992 | 62,101 | 5.59 | 27.94 |

ITEM 203 SUBGRADE COMPACTION

| | | | |
|---|---|---|---|
| WEST EXPRESSWAY | | | |
| SHEET NO. 45: | | | |
| STA 410+94.49/RT To STA 411+94.49/RT | 100' x 27.0' AVG x 1/9 | = | 300.0 SY |
| STA 411+94.49/RT TO STA 415+00/RT | 305.51' x 36.5' AVG x 1/9 | = | 1,239.0 SY |
| WEST EXPRESSWAY | | | |
| SHEET NO. 46: | | | |
| STA 415+00/RT TO STA 416+73.96/RT | 173.96' x 50.5' AVG x 1/9 | = | 976.1 SY |
| STA 416+73.96/RT TO STA 420+00/RT | 326.04' x 23.5' x 1/9 | = | 851.3 SY |
| RAMP "G" | | | |
| SHEET NO. 46: | | | |
| STA 416+73.96 TO STA 417+73.96 | 100' x 24.5' AVG x 1/9 | = | 272.2 SY |
| STA 417+73.96 TO STA 419+50 | 176.04' x 22.0' x 1/9 | = | 430.3 SY |
| WEST EXPRESSWAY | | | |
| SHEET NO. 47: | | | |
| STA 420+59.17/LT TO STA 425+00/LT | 440.83' x 25.0' AVG x 1/9 | = | 1,224.5 SY |
| STA 420+00/RT TO STA 425+00/RT | 500' x 35.5' AVG x 1/9 | = | 1,972.2 SY |
| WEST EXPRESSWAY | | | |
| SHEET NO. 48: | | | |
| STA 425+00/LT TO STA 429+50/LT | 450' x 32.5' AVG x 1/9 | = | 1,625.0 SY |
| STA 425+00/RT TO STA 427+05.27/RT | 205.27' x 52.0' AVG x 1/9 | = | 1,186.0 SY |

ITEM 203 SUBGRADE COMPACTION (CONT'D)

| | | | |
|---|---|---|---|
| RAMP "EN" | | | |
| SHEET NO. 48: | | | |
| STA 111+07.95 TO STA 113+53 | 245.05' x 40.5' AVG x 1/9 | = | 1,102.7 SY |
| WEST EXPRESSWAY | | | |
| SHEET NO. 49: | | | |
| STA 429+50/LT TO STA 431+61.27/LT | 211.27' x 39.0' AVG x 1/9 | = | 915.5 SY |
| RAMP "EN" | | | |
| SHEET NO. 49: | | | |
| STA 113+53 TO STA 114+52.10 | 99.10' x 40.5' AVG x 1/9 | = | 446.0 SY |
| RAMP "SW" | | | |
| SHEET NO. 50: | | | |
| STA 122+55.26 TO STA 123+53.71 | 98.45' x 53.0' AVG x 1/9 | = | 579.8 SY |
| RAMP "SW" | | | |
| SHEET NO. 52: | | | |
| STA 129+17.59 TO STA 132+00 | 282.41' x 36.0' x 1/9 | = | 1,129.6 SY |
| RAMP "EN" | | | |
| SHEET NO. 52: | | | |
| STA 129+52.60 TO STA 131+50 | 197.4' x 36.0' AVG x 1/9 | = | 789.6 SY |
| RAMP "SW" | | | |
| SHEET NO. 53: | | | |
| STA 132+00 TO STA 133+45.65 | 145.65' x 36.0' x 1/9 | = | 582.6 SY |
| RAMP "EN" | | | |
| SHEET NO. 53: | | | |
| STA 131+50 TO STA 134+16.52 | 266.52' x 36.0' AVG x 1/9 | = | 1,066.0 SY |
| RAMP "EN" | | | |
| SHEET NO. 55: | | | |
| STA 142+16.76 TO 142+50 | 33.24' x 44.0' AVG x 1/9 | = | 162.5 SY |
| RAMP "SW" | | | |
| SHEET NO. 55: | | | |
| STA 142+09.18 TO 142+50 | 40.82' x 44.0' AVG x 1/9 | = | 199.6 SY |
| INNERBELT | | | |
| SHEET NO. 55: | | | |
| STA 142+50/LT TO STA 145+00/LT | 250' x 44.0' AVG x 1/9 | = | 1,222.2 SY |
| STA 142+50/RT TO STA 145+00/RT | 250' x 44.0' AVG x 1/9 | = | 1,222.2 SY |
| INNERBELT | | | |
| SHEET NO. 56: | | | |
| STA 145+00 TO STA 150+00 | 500' x 87.5' x 1/9 | = | 4,861.1 SY |
| LAKESHORE BLVD. | | | |
| SHEET NO. 57: | | | |
| STA. 10+07.3/LT TO STA 13+60/LT | PLAN=355.4 SY | = | 355.4 SY |
| S.E. CURB RETURN | PLAN=140.0 SY | = | 140.0 SY |
| DART AVENUE | | | |
| SHEET NO. 57: | | | |
| UNDER ITEM 451 | 1,885.55 | = | 1,885.55 SY |
| UNDER ITEM 609 | 686.67' x 0.5' x 1/9 | = | 38.15 SY |
| STA 225+14.54 TO STA 226+25 | 110.46' x 14.5' x 1/9 | = | 177.96 SY |
| N.E. CURB RETURN AT RUSSELL | PLAN=2,588 x 1/9 | = | 287.56 SY |
| STA 225+90.95 TO STA 226.25 | PLAN=601.62 x 1/9 | = | 66.85 SY |
| RHODES AVENUE | | | |
| SHEET NO. 57: | | | |
| STA 26+46.19 TO STA 27+50 | 103.81' x 29' x 1/9 | = | 334.50 SY |

## ITEM 203 SUBGRADE COMPACTION (CONT'D)

RUSSELL AVENUE
SHEET NO. 57:

| | | | |
|---|---|---|---|
| UNDER ITEM 451 | 482.1 SY | = | 482.10 SY |
| STA 55+93.6 TO STA 57+00/LT | 106.4' x 14.5' x 1/9 | = | 171.42 SY |
| STA 56+38.48 TO STA 57+00/RT | 61.52' x 29.5' x 1/9 | = | 201.65 SY |

DART AVENUE
SHEET NO. 58:

| | | | |
|---|---|---|---|
| STA 226+25 TO STA 227+05.22 | 80.22' x 12.5' x 1/9 | = | 111.42 SY |
| STA 226+25 TO STA 227+05.22 | PLAN=1,417.38 x 1/9 | = | 157.49 SY |
| STA 227+05.22 TO STA 229+25 | 219.78' x 29' x 1/9 | = | 708.18 SY |

RHODES AVENUE
SHEET NO. 58:

| | | | |
|---|---|---|---|
| STA 27+50 TO STA 31+00 | 350' x 29' x 1/9 | = | 1,127.78 SY |

DART AVENUE
SHEET NO. 59:

| | | | |
|---|---|---|---|
| STA 229+25 TO STA 234+00 | 475' x 29' x 1/9 | = | 1,530.56 SY |

RHODES AVENUE
SHEET NO. 59:

| | | | |
|---|---|---|---|
| STA 31+00 TO STA 36+00 | 500' x 29' x 1/9 | = | 1,611.11 SY |

RHODES AVENUE
SHEET NO. 60:

| | | | |
|---|---|---|---|
| STA 36+00 TO 36+43.72 | 43.72' x 29' x 1/9 | = | 104.88 SY |
| UNDER ITEM 451 | 1,159.31 SY | = | 1,159.31 SY |

BOWERY STREET
SHEET NO. 60:

| | | | |
|---|---|---|---|
| UNDER ITEM 451 | 224.96 SY | = | 224.96 SY |

DART AVENUE
SHEET NO. 61:

| | | | |
|---|---|---|---|
| STA 234+00 TO STA 234+66.45 | 66.45' x 29' x 1/9 | = | 214.12 SY |
| UNDER ITEM 451 | 1,679.23 SY | = | 1,679.23 SY |

DART AVENUE EXTENSION
SHEET NO. 61:

| | | | |
|---|---|---|---|
| UNDER ITEM 451 | 304.91 SY | = | 304.91 SY |
| | | TOTAL | 37,431.09 SY |

## ITEM 203 PROOF ROLLING

| | | | |
|---|---|---|---|
| ON SUBGRADE COMPACTION (FROM TOTAL) | 37,431.09 SY x 1/3,000 HR/SY | = | 12.48 HR |
| | | TOTAL | 12.48 HR |

## ITEM 301 BITUMINOUS AGGREGATE BASE AC-20
## RT-11 OR RT-12

WEST EXPRESSWAY E.B. WIDENING

| | | | | | |
|---|---|---|---|---|---|
| STA 410 + 94.49 TO 411+94.49 | = | 100' x 9' AVG x 1/9 | = 100 SY x .625/3 | = | 20.83 CY |
| STA 410+94.49 TO 411+94.49 | = | 100' x 4.52' x 1/9 | = 50.22 SY x .167/3 | = | 2.80 CY |
| STA 411+94.49 TO 416+73.96 | = | 479.47' x 8' x 1/9 | = 426.20 SY x .625/3 | = | 88.79 CY |
| STA 411+94.49 TO 416+73.96 | = | 479.47' x 4.52' x 1/9 | = 240.80 SY x .167/3 | = | 13.41 CY |
| STA 416+73.96 TO 427+05.27 | = | 1,031.31' x 10' x 1/9 | = 1,145.90 SY x .625/3 | = | 238.73 CY |
| STA 418+85 TO 425+31 | = | 646' x 4.52' x 1/9 | = 324.44 SY x .167/3 | = | 18.06 CY |
| | | | SUBTOTAL | | 382.62 CY |

WEST EXPRESSWAY W.B. WIDENING

| | | | | | |
|---|---|---|---|---|---|
| STA 420+59.17 TO 421+03.59 | = | 44.42' x 10' x 1/9 | = 49.36 SY x .625/3 | = | 10.28 CY |
| STA 420+59.17 TO 421+03.59 | = | 44.42' x 4.52' x 1/9 | = 22.31 SY x .167/3 | = | 1.24 CY |
| STA 421+03.59 TO 422+03+59 | = | 100' x 9' AVG x 1/9 | = 100 SY x .625/3 | = | 20.83 CY |
| STA 421+03.59 TO 422+25 | = | 121.41' x 4.52. 1/9 | = 60.98 SY x .167/3 | = | 3.39 CY |
| STA 422+03.59 TO 431+39 | = | 935.41' x 8' x 1/9 | = 831.48 SY x .625/3 | = | 173.22 CY |
| STA 425+80 TO 431+58 | = | 578' x 4.52' x 1/9 | = 290.28 SY x .167/3 | = | 16.16 CY |
| | | | SUBTOTAL | | 225.12 CY |

## ITEM 301 BITUMINOUS AGGREGATE BASE AC-20 (CONT'D)

RAMP "EN" RT.

| | | | | | |
|---|---|---|---|---|---|
| STA 111+07.95 TO 114+22.10 | = | 314.15' x 10' x 1/9 | = 349.06 SY x .625/3 | = | 72.72 CY |
| STA 129+77.60 TO 133+91.51 | = | 413.91' x 8' x 1/9 | = 367.92 SY x .625/3 | = | 76.65 CY |
| STA 129+77.60 TO 133+91.51 | = | 413.91' x 4.52' x 1/9 | = 207.87 SY x .167/3 | = | 11.57 CY |
| STA 142+41.76 TO 142+50 | = | 8.24' x 8' x 1/9 | = 7.32 SY x .625/3 | = | 1.53 CY |
| | | | SUBTOTAL | | 162.47 CY |

RAMP "EN" LT.

| | | | | | |
|---|---|---|---|---|---|
| STA 111+07.95 TO 114+38.53 | = | 330.58' x 4' x 1/9 | = 146.93 SY x .75/3 | = | 36.73 CY |
| STA 112+25.00 TO 114+38.53 | = | 213.53' x 4.52' x 1/9 | = 107.24 SY x .167/3 | = | 5.97 CY |
| STA 129+65.48 TO 133+68.09 | = | 402.61' x 4' x 1/9 | = 178.94 SY x .75/3 | = | 44.74 CY |
| STA 129+65.48 TO 133+68.09 | = | 402.61' x 4.52' x 1/9 | = 202.20 SY x .167/3 | = | 11.26 CY |
| STA 142+38.98 TO 142+50 | = | 11.02' x 13.5' x 1/9 | = 16.53 SY x .75/3 | = | 4.13 CY |
| | | | SUBTOTAL | | 102.83 CY |

RAMP "SW" RT.

| | | | | | |
|---|---|---|---|---|---|
| STA 122+65 TO 123+28 | = | 1,597.5 SF x 1/9 | = 177.50 SY x .75/3 | = | 44.38 CY |
| STA 129+56.20 TO 133+54.19 | = | 397.99' x 4' x 1/9 | = 176.88 SY x .75/3 | = | 44.22 CY |
| STA 129+56.20 TO 133+54.19 | = | 397.99' x 4.52' x 1/9 | = 199.88 SY x .167/3 | = | 11.13 CY |
| STA 142+36.96 TO 142+50 | = | 13.04' x 4' x 1/9 | = 5.80 SY x .75/3 | = | 1.45 CY |
| | | | SUBTOTAL | | 101.18 CY |

RAMP "SW" LT.

| | | | | | |
|---|---|---|---|---|---|
| STA 122+80 TO 123+28.71 | = | 48.71' x 8' x 1/9 | = 43.30 SY x .625/3 | = | 9.02 CY |
| STA 122+80 TO 123+28.71 | = | 48.71' x 4.52' x 1/9 | = 24.46 SY x .167/3 | = | 1.36 CY |
| STA 129+42.59 TO 133+20.65 | = | 378.06' x 8' x 1.9 | = 336.05 SY x .625/3 | = | 70.01 CY |
| STA 129+42.59 TO 133+20.65 | = | 378.06' x 4.52' x 1/9 | = 189.87 SY x .167/3 | = | 10.57 CY |
| STA 142+34.18 TO 142+50 | = | 15.82' x 8' x 1/9 | = 14.06 SY x .625/3 | = | 2.93 CY |
| STA 142+34.18 TO 142+50 | = | 15.82' x 4.52' x 1/9 | = 7.94 SY x .167/3 | = | 0.44 CY |
| | | | SUBTOTAL | | 94.33 CY |

RAMP "G"

| | | | | | |
|---|---|---|---|---|---|
| STA 416+73.96 TO 417+73.96/RT | = | 100' x (5.5' AVG)/9 x .75/3 | | = | 15.28 CY |
| STA 416+73.96 TO 417+03/RT | = | 29.04' x 4.52' x 1/9 x .167/3 | | = | 0.81 CY |
| STA 417+73.96 TO 419.50/RT | = | 176.04' x 3' x 1/9 x .75/3 | | = | 14.67 CY |
| STA 416+73.96 TO 419+50/LT | = | 276.04' x 3' x 1/9 x .75/3 | | = | 23.00 CY |
| | | | SUBTOTAL | | 53.76 CY |

LAKESHORE BLVD.

| | | | | | |
|---|---|---|---|---|---|
| STA 10+49.01 TO 13+60 | = | 310.99' x 9.5' AVG x 1/9 | = 328.27 SY x .5/3 | = | 54.71 CY |
| STA 111+75.20 TO 112+30.00 | = | 54.8' x 3' x 1/9 | = 18.27 SY x .5/3 | = | 3.04 CY |
| RETURN AT SOUTH STREET | = | PLAN=1,260 x 1/9 | = 140 SY x .5/3 | = | 23.33 CY |
| STA 13+60 TO 14+00 | = | 40' x 2' x 1/9 | = 8.89 SY x .5/3 | = | 1.48 CY |
| | | | SUBTOTAL | | 82.56 CY |

INNERBELT NORTHBOUND

| | | | | | |
|---|---|---|---|---|---|
| STA 142+50 TO 150+00/RT | = | 750' x 8' x 1/9 | = 666.67 SY x .625/3 | = | 138.89 CY |
| STA 142+50 TO 142+75/LT | = | 25' x 13.5' x 1/9 | = 37.5 SY x .75/3 | = | 9.38 CY |
| STA 142+75 TO 144+35/LT | = | 160' x 11.5' x 1/9 | = 204.44 SY x .75/3 | = | 51.11 CY |
| STA 144+35 TO 150+00/LT | = | 565' x 9.5' x 1/9 | = 596.39 SY x .75/3 | = | 149.10 CY |
| | | | SUBTOTAL | | 348.48 CY |

INNERBELT SOUTHBOUND

| | | | | | |
|---|---|---|---|---|---|
| STA 142+50 TO 142+75/RT | = | 25' x 4' x 1/9 | = 11.11 SY x .75/3 | = | 2.78 CY |
| STA 142+75 TO 144+65/RT | = | 190' x (4' + 9.5')/2 x 1/9 | = 142.50 SY x .75/3 | = | 35.63 CY |
| STA 144+65 TO 150+00/RT | = | 535' x 9.5' x 1/9 | = 564.72 SY x .75/3 | = | 141.18 CY |
| STA 142+50 TO 150+00/LT | = | 750' x 8' x 1/9 | = 666.67 SY x .625/3 | = | 138.89 CY |
| STA 142+50 TO 143+60/LT | = | 110' x 4.52' x 1/9 | = 55.24 SY x .167/3 | = | 3.08 CY |
| | | | SUBTOTAL | | 321.56 CY |
| | | | TOTAL | | 1,874.91 CY |

## ITEM 305 9" PORTLAND CEMENT CONCRETE BASE

WEST EXPRESSWAY - EASTBOUND WIDENING

| | | | |
|---|---|---|---|
| STA 410+94.49 TO 411+94.49 | 100' x 18' AVG x 1/9 | = | 200.00 SY |
| STA 411+94.49 TO 413+00 | 105.51' x 24' x 1.9 | = | 281.36 SY |
| STA 413+00 TO 414+00 | 100' x 25.5' AVG x 1/9 | = | 283.33 SY |
| STA 414+00 TO 415+00 | 100' x 28.5' AVG x 1/9 | = | 316.67 SY |
| STA 415+00 TO 416+00 | 100' x 38.5' AVG x 1/9 | = | 427.78 SY |
| STA 416+00 TO 416+73.96 | 73.96' X 48' AVG x 1/9 | = | 394.45 SY |
| STA 416+73.96 TO 417+52.64 | 78.68' x 12' x 1/9 | = | 104.91 SY |
| STA 417+52.64 TO 418+00 | 47.36' x 12' x 1/9 | = | 63.15 SY |
| STA 418+00 TO 420+00 | 200' x 13' AVG x 1/9 | = | 288.88 SY |
| STA 420+00 TO 421+00 | 100' x 15.5' AVG x 1/9 | = | 172.22 SY |
| STA 421+00 TO 422+00 | 100' x 18.5' AVG x 1/9 | = | 205.55 SY |
| STA 422+00 TO 423+00 | 100' x 21.5' AVG x 1/9 | = | 238.89 SY |
| STA 423+00 TO 424+00 | 100' x 26.5' AVG x 1/9 | = | 294.44 SY |
| STA 424+00 TO 425+00 | 100' x 32 AVG x 1/9 | = | 355.56 SY |
| STA 425+00 TO 426+00 | 100' x 38.5' AVG x 1/9 | = | 427.78 SY |
| STA 426+00 TO 427+05.27 | 105.27' x 45' AVG x 1/9 | = | 526.35 SY |
| | SUBTOTAL | | 4,581.32 SY |

WEST EXPRESSWAY - WESTBOUND WIDENING

| | | | |
|---|---|---|---|
| STA 420+59.17 TO 421+03.59 | 44.42' x 12' x 1/9 | = | 59.23 SY |
| STA 421+03.59 TO 422+03.59 | 100' x 13' x 1/9 | = | 144.44 SY |
| STA 422+03.59 TO 425+00 | 296.41' x 16.5' AVG x 1/9 | = | 543.42 SY |
| STA 425+00 TO 427+05.27 | 205.27' x 22' AVG x 1/9 | = | 501.77 SY |
| STA 427+05.27 TO 431+27 | 421.73' x 28' AVG x 1/9 | = | 1,312.05 SY |
| | SUBTOTAL | | 2,560.91 SY |
| | TOTAL | | 7,142.23 SY |

## ITEM 310 SUBBASE

WEST EXPRESSWAY - EASTBOUND WIDENING

| | | | |
|---|---|---|---|
| AREA UNDER 9" P.C.C. BASE | 4,581.32 SY x .5' x 1/3 | = | 763.55 CY |
| AREA UNDER SHOULDER: | | | |
| STA 410+94.49 TO 411+94.49 | 100' x 4.23 SF AVG x 1/27 | = | 15.67 CY |
| STA 411+94.49 TO 416+73.96 | 479.47' x 3.58 SF x 1/27 | = | 63.57 CY |
| STA 416+73.96 TO 427+05.27 | 1,031.31' x 4.87 SF x 1/27 | = | 186.02 CY |
| | SUBTOTAL | | 1,028.81 CY |

WEST EXPRESSWAY - WESTBOUND WIDENING

| | | | |
|---|---|---|---|
| AREA UNDER 9" P.C.C. BASE | 2,560.91 SY x .5 x 1/3 | = | 426.82 CY |
| AREA UNDER SHOULDER: | | | |
| STA 420+59.17 TO 421+03.59 | 44.42 x 4.87 SF x 1/27 | = | 8.01 CY |
| STA 421+03.59 TO 422+03.59 | 100' x 4.23 SF AVG x 1/27 | = | 15.67 CY |
| STA 422+03.59 TO 431+39 | 935.41 x 3.58 SF x 1/27 | = | 124.03 CY |
| AREA UNDER ITEM 611 | 827.21 SY x .5' x 1/3 | = | 137.87 CY |
| | SUBTOTAL | | 712.40 CY |

RAMP "EN"

| | | | |
|---|---|---|---|
| AREA UNDER 9" R.P.C.C. PAVEMENT | 1,974.04 SY x .5' x 1/3 | = | 329.00 CY |
| AREA UNDER SHOULDER RT: | | | |
| STA 111+07.95 TO 114+22.10 | 314.15' x 3.09 SF x 1/27 | = | 35.95 CY |
| STA 129+77.60 TO 133+91.51 | 413.91' x 8' x .5' x 1/27 | = | 61.32 CY |
| AREA UNDER SHOULDER LT: | | | |
| STA 111+07.95 TO 114+38.53 | 330.58' x 4' x .5' x 1/27 | = | 24.49 CY |
| STA 129+65.48 TO 133+68.09 | 402.61' x .67 SF x 1/27 | = | 9.99 CY |
| AREA UNDER ITEM 611 | 455.79 SY x .5' x 1/3 | = | 75.97 CY |
| | SUBTOTAL | | 536.72 CY |

RAMP "SW"

| | | | |
|---|---|---|---|
| AREA UNDER 9" R.P.C.C. PAVEMENT | 1,197.76 SY x .5' x 1/3 | = | 199.63 CY |
| AREA UNDER SHOULDER RT: | | | |
| STA 122+65 TO 123+28 | 1,597.5 SF x .5' x 1/27 | = | 29.58 CY |
| STA 129+36.20 TO 133+54.19 | 397.99' x 4' x .5' x 1/27 | = | 29.48 CY |
| AREA UNDER SHOULDER LT: | | | |
| STA 122+80 TO 123+28.71 | 48.71' x 2.28 SF x 1/27 | = | 4.11 CY |
| STA 129+42.59 TO 133+20.65 | 378.06' x 2.28 SF x 1/27 | = | 31.93 CY |
| AREA UNDER ITEM 611 | 437.10 SY x .5' x 1/3 | = | 72.85 CY |
| | SUBTOTAL | | 367.58 CY |

## ITEM 310 SUBBASE (CONT'D)

| | | | |
|---|---|---|---|
| RAMP "G" | | | |
| AREA UNDER 9" R.P.C.C. PAVEMENT | 490.74 SY x .5' x 1/3 | = | 81.79 CY |
| AREA UNDER SHOULDER RT | 119.79 SY x .5' x 1/3 | = | 19.97 CY |
| AREA UNDER SHOULDER LT | 92.01 SY x .5' x 1/3 | = | 15.34 CY |
| | | SUBTOTAL | 117.10 CY |
| DART AVENUE | | | |
| AREA UNDER 9" R.P.C.C. PAVEMENT | 6,720.91 SY x .5' x 1/3 | = | 1,120.15 CY |
| AREA UNDER CURB | 4,188.40' x .5/9 x .5' x 1/3 | = | 38.78 CY |
| AREA UNDER MEDIAN | 72.67 SY x 1.25' x 1/3 | = | 30.28 CY |
| | | SUBTOTAL | 1,189.21 CY |
| DART AVENUE EXTENSION | | | |
| AREA UNDER 451 R.P.C.C. PAVEMENT | 304.91 SY x .5' x 1/3 | = | 50.82 CY |
| AREA UNDER MEDIAN | 240.22 SY x 1.25' x 1/3 | = | 100.09 CY |
| | | SUBTOTAL | 150.91 CY |
| RHODES AVENUE | | | |
| AREA UNDER 451 R.P.C.C. PAVEMENT | 11,270.10 SY x .5' x 1/3 | = | 1,878.35 CY |
| AREA UNDER CURB | 2,413.73' x .5/9 x .5/3 | = | 22.35 CY |
| AREA UNDER ITEM 611 | 140 SY x .5' x 1/3 | = | 23.33 CY |
| | | SUBTOTAL | 1,924.03 CY |
| BOWERY STREET | | | |
| AREA UNDER PAVEMENT | 224.96 SY x .5' x 1/3 | = | 37.49 CY |
| AREA UNDER CURB | 291.83' x .5/9 x .5/3 | = | 2.70 CY |
| | | SUBTOTAL | 40.19 CY |
| RUSSELL AVENUE | | | |
| AREA UNDER PAVEMENT | 1,405.17 SY x 5' x 1/3 | = | 234.20 CY |
| AREA UNDER CURB | 553.81' x .5/9 x .5/3 | = | 5.13 CY |
| | | SUBTOTAL | 239.33 CY |
| DART-RHODES | | | |
| AREA UNDER MEDIAN | 514.23 SY x 1.25' x 1/3 | = | 214.26 CY |
| UNDER MEDIAN AT N.E. CORNER | | SUBTOTAL | 214.26 CY |
| DART AND RUSSELL | PLAN = 64.89 SY x 1.25' x 1/3 | | 27.04 CY |
| | | SUBTOTAL | 27.04 CY |
| LAKESHORE BLVD. | | | |
| AREA UNDER MEDIAN | 115 SY x .5' x 1/3 | = | 19.17 CY |
| | | SUBTOTAL | 19.17 CY |
| | | TOTAL | 6,566.75 CY |

## ITEM 402 ASPHALT CONCRETE - AC - 20

| | | | |
|---|---|---|---|
| 1-1/2" OVERLAY: | | | |
| LAKESHORE BLVD. | | | |
| AREA OVER ITEM 301 | 495.43 SY x .1250/3 | = | 20.64 CY |
| | | SUBTOTAL | 20.64 CY |
| 1-3/4" OVERLAY: | | | |
| WEST EXPRESSWAY - EASTBOUND WIDENING | | | |
| AREA OVER 9" P.C.C. BASE | 4,581.32 SY x .146/3 | = | 222.70 CY |
| WEST EXPRESSWAY - WESTBOUND WIDENING | | | |
| AREA OVER 9" P.C.C. BASE | 2,560.91 SY x .146/3 | = | 124.63 CY |
| RAMP "G" | 43.75' x 16' x .146' x 1/27 | = | 3.79 CY |
| | | SUBTOTAL | 351.12 CY |
| | | TOTAL | 371.76 CY |

## ITEM 404 - 1-1/4" ASPHALT CONCRETE - AC - 20

| | | | |
|---|---|---|---|
| LAKESHORE BLVD. | | | |
| AREA OVER ITEM 301 | 495.43 SY x .1042/3 | = | 17.21 CY |
| | | SUBTOTAL | 17.21 CY |
| WEST EXPRESSWAY - EASTBOUND WIDENING | | | |
| AREA OVER 1-3/4" ASPHALT CONCRETE | 4,581.32 SY x .104/3 | = | 159.07 CY |
| WEST EXPRESSWAY - WESTBOUND WIDENING | | | |
| AREA OVER 1-3/4" ASPHALT CONCRETE | 2,560.91 SY x .104/3 | = | 88.78 CY |
| RAMP "G" | 75.00' x 16' x .104' x 1/27 | = | 4.63 CY |
| | | SUBTOTAL | 252.48 CY |
| | | TOTAL | 269.69 CY |

## SPECIAL - 3/4" OPEN GRADED RUBBERIZED ASPHALT FRICTION COURSE

| | | | |
|---|---|---|---|
| WEST EXPRESSWAY - EASTBOUND WIDENING | | | |
| AREA OVER 1-1/4" ASPHALT CONCRETE | 4,581.32 SY x 0.063/3 | = | 95.44 CY |
| WEST EXPRESSWAY - WESTBOUND WIDENING | | | |
| AREA OVER 1-1/4" ASPHALT CONCRETE | 2,560.91 SY x 0.063/3 | = | 53.78 CY |
| RAMP "G" | (93.75' x 16' x 0.063' x 1/27) + (18.75' x 16' x 0.063' x 1/27) | = | 4.20 CY |
| | | TOTAL | 153.42 CY |

## ITEM 451 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

| | | | |
|---|---|---|---|
| RAMP "EN" | | | |
| STA 111+07.95 TO 114+29.68 | 321.73' x 24' x 1/9 | = | 857.95 SY |
| STA 129+71.28 TO 133+81.65 | 410.37' x 24' x 1/9 | = | 1,094.32 SY |
| STA 142+41.76 TO 142+50 | 8.24' x 24' x 1/9 | = | 21.77 SY |
| | | SUBTOTAL | 1,974.04 SY |
| RAMP "SW" | | | |
| STA 122+73 TO 123+29 | 56' x 24' x 1/9 | = | 149.33 SY |
| STA 129+48.87 TO 133+26.61 | 377.34' x 24' x 1/9 | = | 1,006.24 SY |
| STA 142+34.18 TO 142+50 | 15.82' x 24' x 1/9 | = | 42.19 SY |
| | | SUBTOTAL | 1,197.76 SY |
| INNERBELT | | | |
| STA 142+50 TO 150+00 LT AND RT | 750'x 48' x 1/9 | = | 4,000.00 SY |
| | | SUBTOTAL | 4,000.00 SY |
| RAMP "G" | | | |
| STA 416+73.96 TO 419+50.00 | 276.04' x 16' x 1/9 | = | 490.74 SY |
| | | SUBTOTAL | 490.74 SY |
| DART AVENUE | | | |
| STA 221+75 TO 225+00 | 325' x 56' x 1/9 | = | 2,022.22 SY |
| MINUS CONCRETE MEDIAN | | | -136.67 SY |
| | | | 1,885.55 SY |
| NW RETURN AT SOUTH STREET | 35' x 9.5' x 1/9 | = | 36.94 SY |
| NE RETURN AT SOUTH STREET | PLAN=728 x 1/9 | = | 80.89 SY |
| STA 225+14.54 TO 227+05.22 | 190.68' x 14.5' x 1/9 | = | 307.21 SY |
| NE RETURN AT RUSSELL | PLAN=2,588 x 1/9 | = | 287.56 SY |
| STA 225+90.95 TO 227+05.22 | PLAN=2,019 x 1/9 | = | 224.33 SY |
| STA 227+05.22 TO 234+66.45 | 761.23' x 29' x 1/9 | = | 2,452.85 SY |
| STA 234+66.45 TO 235+98 | PLAN=4,697 x 1/9 | = | 521.89 SY |
| STA 235+98 TO 237+93.80 | PLAN=5,678 x 1/9 | = | 630.91 SY |
| RETURN AT DART EXTENSION | PLAN=2,635 x 1/9 | = | 292.78 SY |
| | | SUBTOTAL | 6,720.91 SY |
| DART AVENUE EXTENSION | | | |
| STA 236+01 TO 236+94 | 93' X 18' AVG x 1/9 | = | 186.00 SY |
| STA 236+94 TO 237+58.86 | 64.86' x 16.5' x 1/9 | = | 118.91 SY |
| | | SUBTOTAL | 304.91 SY |

## ITEM 451 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT (CONT'D)

| | | | |
|---|---|---|---|
| RHODES AVENUE | | | |
| STA 26+46.19 TO 36+20 | 3,137.83' x 29' x 1/9 | = | 10,110.79 SY |
| STA 37+28 TO 37+98.68 | 70.68' x 29' x 1/9 | = | 227.75 SY |
| STA 37+98.68 TO 39+18.68 | 120' x 33' AVG x 1/9 | = | 440.00 SY |
| STA 39+18.68 TO 40+20.42 | PLAN=4,424 1/9 | = | 491.56 SY |
| | | SUBTOTAL | 11,270.10 SY |
| BOWERY STREET | | | |
| STA 38+25.00 TO 39+21.41 | 96.41' x 21' x 1/9 | = | 224.96 SY |
| | | SUBTOTAL | 224.96 SY |
| RUSSELL AVENUE | | | |
| STA 54+12.69 TO 56+38.48 RT | 225.79' x 14.5' x 1/9 | = | 363.77 SY |
| RET AT RHODES | PLAN=1,065' x 1/9 | = | 118.33 SY |
| STA 55+93.60 TO 58+12.50 LT | 218.90' x 14.5' x 1/9 | = | 352.67 SY |
| STA 56+38.48 TO 58.12.50 RT | 174.02' x 29.5' AVG x 1/9 | = | 570.40 SY |
| | | SUBTOTAL | 1,405.17 SY |
| | | TOTAL | 27,588.59 SY |

## 608 CONCRETE WALK

| | | | |
|---|---|---|---|
| LAKESHORE BLVD. - SOUTH STREET | | | |
| RET 61.20 LF x 9.5 | | = | 581.4 SF |
| STA 111+71 TO 112+12 | | = | 246.0 SF |
| | | SUBTOTAL | 827.4 SY |
| DART AVENUE | | | |
| STA 221+85 TO 225+00/LT | 315' x 6' | = | 1,890.0 SF |
| STA 225+90.95 TO 226+25/RT | 34.05' x 6' | = | 204.3 SF |
| STA 226+25 TO 229+25/RT | 300' x 6' | = | 1,800.0 SF |
| STA 229+25 TO 234+00/RT | 475' x 6' | = | 2,850.0 SF |
| STA 234+00 TO 236+00/RT | 200' x 6' | = | 1,200.0 SF |
| STA 236+75 TO 237+45/RT | 96' + 96' + 66' | = | 258.0 SF |
| RETURN AT DART - DART EXTENSION | PLAN=1,131.0 | = | 1,131.0 SF |
| | | SUBTOTAL | 9,333.3 SF |
| RHODES AVENUE | | | |
| RETURN AT RUSSELL AVENUE | PLAN=506.00 | = | 506.00 SF |
| STA 26+99.62 TO 27+50/LT | 50.38' x 6' | = | 302.28 SF |
| STA 27+50 TO 31+00/LT | 350' x 6' | = | 2,100.00 SF |
| STA 31+00 TO 36+00/LT | 500' x 6' | = | 3,000.00 SF |
| STA 36+00 TO 36+33/LT | 33' x 5' | = | 165.00 SF |
| STA 36+92 TO 37+41/LT | 49' x 5' | = | 245.00 SF |
| STA 37+41 TO 39+00 BOWERY/LT | 175' x 6' | = | 1,050.00 SF |
| | | SUBTOTAL | 7,368.28 SF |
| RETURN AT KENYON | 125' x 5' | = | 625 SF |
| | | SUBTOTAL | 625 SF |
| RUSSELL AVENUE | | | |
| RETURN AT DART | PLAN=358 | = | 368 SF |
| STA 56+18.00 TO 61+46 | 528' x 5' | = | 2,640 SF |
| | | SUBTOTAL | 3,008 SF |
| | | TOTAL | 21,161.98 SF |

## ITEM 609 CONCRETE CURB AND GUTTER, STANDARD TYPE 2

| | | | |
|---|---|---|---|
| WEST EXPRESSWAY | | | |
| STA 427+05.27 TO 430+50.90/RT | | = | 345.63 LF |
| | | SUBTOTAL | 345.63 LF |
| RAMP "EN" | | | |
| STA 111+07.95 TO 114+39.79/LT | | = | 331.84 LF |
| | | SUBTOTAL | 331.84 LF |
| | | TOTAL | 667.47 LF |

CALCULATED BY TAK DATE 11/82

CHECKED BY DSB DATE 11/82

| FED. RD. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

AKRON INNERBELT
SUM-59-0.00



## ITEM 609 CONCRETE CURB, STANDARD TYPE 2A

| | | | |
|---|---|---|---|
| DART AVENUE | | | |
| STA 222+11.91 TO 225+00/RT | = | 228.09 LF | |
| RETURN AT SOUTH STREET/RT | = | 60.08 LF | |
| STA 221+84.5 TO 224+88/LT | = | 303.50 LF | |
| RETURN AT SOUTH STREET/LT | = | 35.00 LF | |
| CONCRETE MEDIAN: | | | |
| STA 222+35 TO 224+45 | = | 435.00 LF | |
| RETURNS: | = | 12.50 LF | |
| 225+14.5 TO 237+93.80/LT | = | 1,279.30 LF | |
| 227+05.22 TO 237+58.86 (EXT)/RT | = | 1,053.64 LF | |
| RETURN AT DART EXTENSION/RT | = | 162.71 LF | |
| ISLAND AT DART EXTENSION | = | 242.00 LF | |
| RETURN AT RUSSELL/RT | = | 192.58 LF | |
| ISLAND AT RUSSELL | = | 124.00 LF | |
| | SUBTOTAL | 4,128.40 LF | |
| RHODES AVENUE | | | |
| RETURN AT RUSSELL/LT | = | 78.43 LF | |
| 26+99.62 TO 36+12/LT | = | 912.38 LF | |
| 37+22 TO 39+23.5/LT | = | 201.50 LF | |
| 26+55 TO 36+27/RT | = | 972.00 LF | |
| 37+66 TO 40+20.42/RT | = | 254.42 LF | |
| | SUBTOTAL | 2,418.73 LF | |
| BOWERY STREET | | | |
| STA 38+25.00 TO 40+20/LT | = | 195.42 LF | |
| STA 38+25.00 TO 39.21/RT | = | 96.41 LF | |
| | SUBTOTAL | 291.83 LF | |
| LAKESHORE BLVD. | | | |
| STA 10+40 TO 11+90 MEDIAN | = | 318 LF | |
| | SUBTOTAL | 318 LF | |
| RUSSELL AVENUE | | | |
| STA 54+12.69 TO 54+53/RT | = | 40.31 LF | |
| STA 55+11 TO 58+12.50/RT | = | 303.00 LF | |
| STA 56+18 TO 58+12.50/LT | = | 194.50 LF | |
| STA 54+84 TO 55+00/LT | = | 16.00 LF | |
| | SUBTOTAL | 553.81 LF | |
| | TOTAL | 7,710.77 LF | |

## ITEM 609 CONCRETE CURB, STANDARD TYPE 6

| | | | |
|---|---|---|---|
| RUSSELL AVENUE | | | |
| C-1 STA 46+54 TO 48+74/RT | = | 220 LF | |
| C-12 59+53 TO 61+46/LT | = | 193 LF | |
| | SUBTOTAL | 413 LF | |
| RHODES AVENUE | | | |
| STA 2+77 TO 6+36 (EXISTING)/LT | = | 359 LF | |
| C-17 STA 46+04 TO 48+34/RT | = | 230 LF | |
| | SUBTOTAL | 589 LF | |
| LAKESHORE BLVD. | | | |
| STA 10+49.01 TO 14+00/RT | = | 351 LF | |
| AT RETURN ON SOUTH STREET | = | 116 LF | |
| | SUBTOTAL | 467 LF | |
| WEST EXPRESSWAY | | | |
| C-11 STA 435+27 TO 435+39/RT | = | 12 LF | |
| C-16 STA 424+82 TO 425+08/RT | = | 26 LF | |
| | SUBTOTAL | 38 LF | |
| DART AVENUE | | | |
| C-18 STA 246+14 TO 248+32/LT | = | 218 LF | |
| | SUBTOTAL | 218 LF | |

## ITEM 609 CONCRETE CURB, STANDARD, TYPE 6 (CONT'D)

| | | |
|---|---|---|
| RAMP "SW" | | |
| C-2 STA 117+91 TO 118+05/LT | = | 14 LF |
| C-3 STA 122+88 TO 123+04/LT | = | 16 LF |
| C-4 STA 123+17 TO 123+29/LT | = | 12 LF |
| C-5 STA 129+37 TO 129+51/LT | = | 14 LF |
| C-6 STA 129+58 TO 129+78/RT | = | 20 LF |
| C-9 STA 132+90 TO 133+10/LT | = | 20 LF |
| C-12 STA 133+36 TO 133+55/RT | = | 19 LF |
| C-14 STA 142+33 TO 142+47/LT | = | 14 LF |
| | SUBTOTAL | 129 LF |
| RAMP "EN" | | |
| C-7 STA 129+61 TO 129+80/LT | = | 19 LF |
| C-8 STA 129+82 TO 130+00/RT | = | 18 LF |
| C-10 STA 133+84 TO 134+00/RT | = | 16 LF |
| C-13 STA 133+49 TO 133+68/LT | = | 19 LF |
| C-15 STA 142+41 TO 142+56/RT | = | 15 LF |
| | SUBTOTAL | 87 LF |
| | TOTAL | 1,941 LF |

## ITEM 611 APPROACH SLABS

| | | | |
|---|---|---|---|
| WEST EXPRESSWAY | | | |
| WESTBOUND WIDENING | | | |
| STA 430+86.34 TO 431+11.34 | (25' x 143.35') + (1.17' x 9.35') + (1.17' x 12.65') x 1/9 | = | 401.05 SY |
| STA 435+37.16 TO 435+62.16 | (25' x 151.41') + (2.17' x 9.75') + (2.17' x 13.76') x 1/9 | = | 426.16 SY |
| | | SUBTOTAL | 827.21 SY |
| RAMP "EN" | | | |
| STA 114+22.10 TO 114+52.10 | (30' x 38.67') + (19.03' x 1.17') x 1/9 | = | 131.37 SY * |
| STA 129+52.60 TO 129+77.60 | (25' x 36.67') + (2.17' x 8.58') + (2.17' x 7.09') x 1/9 | = | 105.64 SY |
| STA 133+19.52 TO 134+16.52 | (25' x 38.67') + (1.17' x 7.17') + (1.17' x 10.54') x 1/9 | = | 109.72 SY |
| STA 142+16.76 TO 142+41.76 | (25' x 38.75') + (1.17' x 10.97') x 1/9 | = | 109.06 SY |
| | | SUBTOTAL | 455.79 SY |
| RAMP "SW" | | | |
| STA 123+28.71 TO 123+53.71 | (25' x 38.67') + (1.17' x 14.06') x 1/9 | = | 109.24 SY |
| STA 129+17.59 TO 129+42.59 | (25' x 38.67') + (1.17' x 6.13') + (1.17' x 11.65') x 1/9 | = | 109.73 SY |
| STA 133+20.65 TO 133+45.65 | (25' x 38.67') + (1.17' x 5.83') + (1.17' x 7.17') x 1/9 | = | 109.11 SY |
| STA 142+09.18 TO 142+34.18 | (25' x 38.67') + (1.17' x 12.35') x 1/9 | = | 109.02 SY |
| | | SUBTOTAL | 437.10 SY |
| RHODES AVENUE | | | |
| AS PER PLAN (BOTH APPROACHES) | | = | 140 SY |
| | | SUBTOTAL | 140 SY |
| | | TOTAL | 1,728.73 SY |
| | | TOTAL | 131.37 SY * |

* T = 17" all others T = 15"

## ITEM 612 CONCRETE MEDIAN, AS PER PLAN

| | | | |
|---|---|---|---|
| DART AVENUE | | | |
| STA 222+35 TO 224+45 | 218' x 3' x 1/9 | = | 72.67 SY |
| | | SUBTOTAL | 72.67 SY |
| DART - RHODES | | | |
| STA 225+14 TO 227+84.76 | PLAN=1,607 x 1/9 | = | 178.56 SY |
| STA 227+84.76 TO 231+20.43 | 335.67' x 9' x 1/9 | = | 335.67 SY |
| | | SUBTOTAL | 514.23 SY |
| DART AVENUE - DART AVENUE EXTENSION | PLAN=2,162 x 1/9 | = | 240.22 SY |
| | | SUBTOTAL | 240.22 SY |
| DART - RUSSELL | | | |
| NE TRAFFIC ISLAND | PLAN=584 x 1/9 | = | 64.89 SY |
| | | SUBTOTAL | 64.89 SY |
| LAKESHORE BLVD. | | | |
| STA 10+40 TO 11+90 | PLAN=1,035 x 1/9 | = | 115 SY |
| | | SUBTOTAL | 115 SY |
| | | TOTAL | 1,007.01 SY |

**ITEM SPECIAL - DRAINAGE CONNECTION, NO. 8**

| | | | |
|---|---|---|---|
| WEST EXPRESSWAY | | | |
| U-41 STA 410+95 TO 415+62 | 467' X 1.69 SF X 1/27 | = | 29.23 CY |
| U-42 STA 416+85 TO 421+49 | 464' X 1.69 SF X 1/27 | = | 29.04 CY |
| U-43 STA 421+49 TO 425+00 | 351' X 1.69 SF X 1/27 | = | 21.97 CY |
| U-44 STA 427+50 TO 431+25 | 375' X 1.67 SF X 1/27 | = | 23.19 CY |
| U-48 STA 425+03 TO 111+96 EN | 276' X 1.69 SF X 1/27 | = | 17.28 CY |
| | | SUBTOTAL | 120.71 CY |
| RAMP EN | | | |
| U-49 STA 112+00 TO 114+17 | 204' X 1.14 SF X 1/27 | = | 8.61 CY |
| U-51 STA 129+71 TO 133+40 | 358' X 1.05 SF X 1.27 | = | 13.92 CY |
| | | SUBTOTAL | 22.53 CY |
| RAMP SW | | | |
| U-50 STA 122+89 TO 123+25 | 36' X 1.14 SF X 1/27 | = | 1.52 CY |
| U-52 STA 129+45 TO 133+07 | 359' X 1.13 SF X 1/27 | = | 15.02 CY |
| | | SUBTOTAL | 16.54 CY |
| | | TOTAL | 159.78 CY |



FORM DOT A-8

| CALC. BY. TAK DATE 5.9.83 | M-1T82(2) | OHIO | 348 |
|---|---|---|---|
| CHKD. BY. DSB DATE 5-11-83 | | F.H.W.A. REGION 5 | 455 |

# AKRON INNERBELT
## SUM - 59 - 0.00

### ITEM 203 / ITEM 659

| LOCATION | ITEM 203 EXCAVATION C.Y. | ITEM 203 EMBANKMENT C.Y. | ITEM 203 SEEDING & MULCHING S.Y. | ITEM 659 COMMERCIAL FERTILIZER .00009T./S.Y. TONS | ITEM 659 AGRICULTURAL LIMING .00045T./S.Y. TONS |
|---|---|---|---|---|---|
| INNERBELT | | | | | |
| SHEET 56A: | | | | | |
| STA 150+00 TO STA 155+00/LT | 288 | 78 | 1,795 | .16 | .81 |
| RAMP H | | | | | |
| SHEET 56A: | | | | | |
| STA 155+00 TO STA 156+00 | 35 | 29 | 366 | .03 | .16 |
| SHEET 56B: | | | | | |
| STA 156+00 TO STA 162+00 | 83 | 510 | 1,916 | .17 | .86 |
| SHEET 56C: | | | | | |
| STA 156+00 TO STA 162+89.01/BK | 48 | 13 | 129 | .01 | .06 |
| TOTAL | 454 | 630 | 4,206 | .37 | 1.89 |

### ITEM 203 SUBGRADE COMPACTION

| | | | |
|---|---|---|---|
| INNERBELT | | | |
| SHEET 56: | | | |
| STA 145+00 TO 150+00 | 500' X 6.25' AVG X 1/9 | = | 347 SY |
| SHEET 56A: | | | |
| STA 150+00 TO STA 155+00 | 500' X 18.75' AVG X 1/9 | = | 1,042 SY |
| RAMP H | | | |
| SHEET 56A: | | | |
| STA 155+00 TO STA 156+00 | 100' X 25.5' AVG X 1/9 | = | 283 SY |
| SHEET 56B: | | | |
| STA 156+00 TO STA 157+64 | 164' X 31.5' AVG X 1/9 | = | 574 SY |
| STA 157+64 TO STA 161+89.01 | 425.01' X 25' x 1/9 | = | 1,181 SY |
| STA 161+89.01 TO STA 162+00 | 10.99' X 19' x 1/9 | = | 23 SY |
| SHEET 56C: | | | |
| STA 162+00 TO STA 162+89.01/BK | 89.01' X 20' AVG X 1/9 | = | 198 SY |
| | | TOTAL | 3,648 SY |

### ITEM 203 PROOF ROLLING

| | | | |
|---|---|---|---|
| ON SUBGRADE COMPACTION (FROM TOTAL) | 3,648 SY X 1/3000 HR/SY | = | 1.22 HR |
| | | TOTAL | 1.22 HR |

### ITEM 301 BITUMINOUS AGGREGATE BASE AC-20

#### RT-11 OR RT-12

| | | | |
|---|---|---|---|
| INNERBELT | | | |
| STA 150+00 TO STA 155+00 | 8' X 500' x 7.5/12 X 1/27 | = | 92.59 CY |
| | | SUBTOTAL | 92.59 CY |
| RAMP H | | | |
| STA 155+00 TO STA 155+50/LT | 50' X 7' AVG x 7.5/12 X 1/27 | = | 8.10 CY |
| STA 155+00 TO STA 161+89.01/LT | 639.01' X 6' x 7.5/12 X 1/27 | = | 88.75 CY |
| STA 155+00 TO STA 157+64/RT | 264' X 8' AVG X 9/12 X 1/27 | = | 58.67 CY |
| STA 157+64 TO STA 161+89.01/RT | 425.01' X 3' X 9/12 X 1/27 | = | 35.42 CY |
| | | SUBTOTAL | 190.94 CY |
| | | TOTAL | 283.53 CY |

### ITEM 310 SUBBASE

| | | | |
|---|---|---|---|
| INNERBELT | | | |
| SHEET 56: | | | |
| LEFT SIDE AS PER SHEET 97 | | = | 73 CY |
| RIGHT SIDE AS PER SHEETS 100 AND 101 | | = | 110 CY |
| STA 151+35 TO STA 152+50/LT | AREA UNDER SB TEMP CONNECTION | = | 13 CY |
| | | SUBTOTAL | 196 CY |
| RAMP H | | | |
| SHEET 56B | | | |
| AS PER SHEETS 97D, 97E, ND 97F | | = | 270 CY |
| | | SUBTOTAL | 270 CY |
| | | TOTAL | 466 CY |

### ITEM 451 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

| | | | |
|---|---|---|---|
| INNERBELT | | | |
| STA 145+00 TO STA 155+00 | 1,000' X 12.5' AVG X 1/9 | = | 1,388.89 SY |
| | | SUBTOTAL | 1,388.89 SY |
| RAMP H | | | |
| STA 155+00 TO STA 161+89.01 | 689.01' X 16' X 1/9 | = | 1,224.91 SY |
| STA 161+89.01 TO STA 162+89.01/BK | 100' X 19' AVG X 1/9 | = | 211.11 SY |
| | | SUBTOTAL | 1,436.02 SY |
| | | TOTAL | 2,824.91 SY |

### ITEM 609 CONCRETE CURB, STANDARD TYPE 6

| | | | |
|---|---|---|---|
| RAMP H | | | |
| C-16 STA 157+00 TO STA 162+59/LT | | = | 564 LF |
| C-17 STA 161+89.01 TO STA 162+89.01/BK/RT | | = | 100 LF |
| | | TOTAL | 664 LF |

# GENERAL SUMMARY

CALCULATED BY TAK DATE 11/82
CHECKED BY DSB DATE 11/82

| FED.RD. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

36
455

AKRON INNERBELT
SUM-59-0.00

SHEET Nº

| ITEM | 20 | 24 | 33 | 34 | 34A | 34B | 38 |
|---|---|---|---|---|---|---|---|
| 301 | | | 1875 | | | 284 | |
| 305 | | | 7142 | | | | |
| 310 | | | | 6567 | | 466 | |
| 402 | | | | 372 | | | |
| 404 | | | | 270 | | | |
| 451 | | | | 27589 | | 2825 | |
| 609 | | | | 603 | | | |
| 609 | | | | | 771 | | |
| 609 | | | | | 1941 | 664 | |
| 611 | | | | | 1729 | | |
| 612 | | | | | 131 | | |
| | | | | | 1007 | | |
| 622 | | | | | | | 30 |
| 622 | | | | | | | 761 |
| 622 | | | | | | | 25 |
| SPECIAL | | | | 153 | | | |
| SPECIAL | | | | | | | 168 |
| SPECIAL | | | | | | | 103 |
| Special | | 30 | | | | | |
| 624 | lump | | | | | | |
| 619 | lump | | | | | | |
| 623 | | | | | | | |
| 614 | | lump | | | | | |

| BID ITEM | QUANTITY | UNIT | DESCRIPTION | AMOUNT COMPLETE |
|---|---|---|---|---|
| | | | **PAVEMENT** | |
| 301 | ~~2,159~~ 2057 | CU. YD. | BITUMINOUS AGGREGATE BASE; AC-20, RT-11 OR RT-12 | 10 |
| 305 | 7142 | SQ. YD. | 9" PORTLAND CEMENT CONCRETE BASE | 0 |
| 310 | ~~7,033~~ 6567 | CU. YD | SUBBASE, TYPE 1, GRADING A | 3378 |
| 402 | ~~372~~ 372 | CU. YD. | ASPHALT CONCRETE, AC-20 | 40 |
| 404 | ~~270~~ 246 | CU. YD. | ASPHALT CONCRETE, AC-20 | 24 |
| 451 | ~~30,474~~ 27589 | SQ YD | 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT | 20,921 |
| 609 | 603 | LIN. FT | COMBINATION CURB AND GUTTER, STANDARD TYPE 2 | 0 |
| 609 | ~~1771~~ 771 | LIN. FT | CURB, STANDARD TYPE 2A | 15 |
| 609 | ~~2605~~ 1033 | LIN. FT | CURB, STANDARD TYPE 6 | 1572 |
| 611 | ~~1729~~ 1729 | SQ. YD. | Reinforced concrete approach slabs (T=15") | 161 |
| 611 | 131 | SQ. YD | Reinforced concrete approach slabs (T=19") | 0 |
| 612 | ~~1007~~ 1007 | SQ YD | CONCRETE MEDIAN, 6" | 1007 |
| SPECIAL | 160 | CU. YD. | DRAINAGE CONNECTION, USING NO. 8 AGGREGATE | 0 |
| 622 | ~~130~~ 30 | LIN. FT. | CONCRETE BARRIER, STANDARD TYPE D | 15 |
| 622 | ~~767~~ 761 | LIN. FT | CONCRETE BARRIER, STANDARD TYPE B-50 | 644 |
| 622 | 25 | LIN. FT | CONCRETE BARRIER, Standard Type B-50, modified as per plan | 0 |
| SPECIAL | 153 | CU. YD | RUBBERIZED OPEN GRADED ASPHALT FRICTION COURSE | 0 |
| SPECIAL | ~~168~~ 144 | LIN. FT. | PRESSURE RELIEF JOINT, STANDARD TYPE A | 24 |
| SPECIAL | 103 | LIN. FT. | PRESSURE RELIEF JOINT, STANDARD TYPE B | 0 |
| Special | 30 | Hours | Law Enforcement Officer With Patrol Car | |
| 624 | lump | | Mobilization | F |
| 619 | lump | | Field Office | 37 [illegible] |
| 623 | lump | | Construction Layout Stakes | 14 [illegible] |
| 614 | lump | | Maintaining Traffic | 51,6[illegible] |

ESTIMATED QUANTITIES

| | |
|---|---|
| WATER WORK | SEE SHT. NO. 177 |
| TRAFFIC CONTROL | SEE SHT. NO'S. 209 & 210 |
| LIGHTING | SEE SHT. NO'S. 237 & 238 |
| RETAINING WALL | SEE SHT. No. 272A |
| STRUCTURES OVER 20' SPAN | |
| SUM-59-0000 | SEE SHT. No. 277 |
| SUM-59-0002 | SEE SHT. No. 320 |
| SUM-59-0016 | SEE SHT. No. 346 |
| SUM-59-0017 | SEE SHT. No. 378 |
| SUM-76-0053 | SEE SHT. No. 406 |
| RELOC. RHODES AVE. over OHIO CANAL | SEE SHT. No. 433 |

FOR DRAINAGE QUANTITIES SEE SHEET Nº 37

# GENERAL SUMMARY
# DRAINAGE

CALCULATED BY W.R.S. DATE 11/79
CHECKED BY R.E.R DATE 12/79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

37/455

AKRON INNERBELT
SUM-59-0.00

| ITEM | 20 | 23 | 147 | 148 | 38A | 38 | BID ITEM | BID QUANTITY | BID UNIT | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | CUMULATED |
| | | | ~~14~~ | | | | 602 | 14 | CU.YDS. | CONCRETE MASONRY |
| | | 60 | | 643 | 98 | | 603 | ~~801~~ 771 | LIN.FT. | 6" CONDUIT, TYPE F 510 |
| | | | | 11,047 | 1020 | | 605 | ~~12,067~~ 11,093 | LIN.FT. | 6" SHALLOW PIPE UNDERDRAINS 9025 |
| | | | | | | 394 | 605 | 394 | LIN.FT. | 6" Shallow pipe underdrains, 707.01 Type III or 707.21 Type III 0 |
| | | | 1272 | | | | 603 | ~~1272~~ 1154 | LIN.FT. | 12" CONDUIT, TYPE B, 706.01, 706.02 OR 706.08 W/706.11 OR 706.12 JTS. 1117 |
| | | | 379 | | | | 603 | ~~379~~ 305 | LIN.FT. | 15" CONDUIT, TYPE B, 706.01, 706.02 OR 706.08 W/706.11 OR 706.12 JTS. 277 |
| | | | ~~64~~ | | | | 603 | 64 | LIN.FT. | 18" CONDUIT, TYPE B, 706.01 OR 706.02 WITH 706.11 JOINTS |
| | | | ~~48~~ | | | | 603 | 48 | LIN.FT. | 21" CONDUIT, TYPE B 706.02 WITH 706.11 JOINTS |
| | | | ~~57~~ | | | | 603 | 57 | LIN.FT. | 30" CONDUIT, TYPE B 706.02 WITH 706.11 JOINTS |
| | | | ~~108~~ | | | | 603 | 108 | LIN.FT. | 36" CONDUIT, TYPE B 706.02 WITH 706.11 JOINTS |
| | | | 576 | | | | 603 | ~~576~~ 482 | LIN.FT. | 12" CONDUIT, TYPE C, 706.01, 706.02 OR 706.08 W/706.11 OR 706.12 JTS. 404 |
| | | | 70 | | | | 603 | 70 | LIN.FT. | 15" CONDUIT, TYPE C, 706.01, 706.02 OR 706.08 W/706.11 OR 706.12 JTS. |
| | | | 73 | | | | 603 | 73 | LIN.FT. | 18" CONDUIT, TYPE C, 706.01 OR 706.02 WITH 706.11 JOINTS |
| | | | 179 | | | | 603 | 179 | LIN.FT. | 21" CONDUIT, TYPE C, 706.01 OR 706.02 WITH 706.11 JOINTS |
| | | | 180 | | | | 603 | 180 | LIN.FT. | 30" CONDUIT, TYPE C 706.02 WITH 706.11 JOINTS |
| | | | 310 | | | | 603 | 310 | LIN.FT. | 36" CONDUIT, TYPE C 706.02 WITH 706.11 JOINTS |
| | | | 1 | | | | 604 | + | ~~EACH~~ | ~~12" FLAP GATE~~ |
| | | | 1 | | | | 604 | + | ~~EACH~~ | ~~15" FLAP GATE~~ |
| | | | 13 | | | | 604 | 13 | EACH | CITY OF AKRON NO. 3 INLET |
| | | | 2 | | | | 604 | 2 | EACH | CITY OF AKRON NO. 3 INLET MOD. |
| | | | 8 | | | | 604 | 8 | EACH | CITY OF AKRON NO. 5 INLET |
| | | | 1 | | | | 604 | 1 | EACH | CITY OF AKRON NO. 5 INLET MOD. |
| | | | 4 | | | | 604 | 4 | EACH | CATCH BASIN, STANDARD NO. 5 |
| | | | 6 | | | | 604 | 6 | EACH | CATCH BASIN, STANDARD NO. 6 0 |
| | | | | | 1 | | 604 | 1 | EACH | PAVED SHOULDER INLET, STANDARD NO. 2-A-6 |
| | | | 1 | | | | 604 | 1 | EACH | MEDIAN INLET, STANDARD NO. I-3B50 |
| | | | 11 | | | | 604 | 11 | EACH | MANHOLE, STANDARD NO. 1 |
| | | | 5 | | | | 604 | 5 | EACH | MANHOLE, STANDARD NO. 3 |
| | | | 5 | | | | 604 | 5 | EACH | MANHOLE ADJUSTED TO GRADE |
| | | | 1 | | | | 604 | 1 | EACH | MANHOLE RECONSTRUCTED TO GRADE |
| | | | 4 | | | | 604 | 4 | EACH | CITY OF AKRON NO. 3 INLET ADJUSTED TO GRADE. |
| | | | 1 | | | | 604 | 1 | EACH | CITY OF AKRON NO. 3 INLET RECONSTRUCTED TO GRADE |
| | 100 | 200 | | | | | 603 | 300 | LIN.FT. | 4" CONDUIT, TYPE E, 711.29 |
| | | 200 | | | | | 603 | 200 | LIN.FT. | 6" CONDUIT, TYPE E, 706.01, 706.02 OR 706.08 |

## SANITARY — TYPE CODE Y060

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 100 | ~~[illegible]~~ | | | 603 | 844 | LIN. FT. | 8" CONDUIT, TYPE B, 706.02 OR 706.08 W/706.11 OR 706.12 JOINTS |
| | | | 236 | | | 603 | 236 | LIN. FT. | 12" CONDUIT, TYPE B, 706.02 OR 706.08 W/706.11 OR 706.12 JOINTS |
| | | | 36 | | | 603 | 36 | LIN. FT. | 12" CONDUIT, TYPE C, 706.02 OR 706.08 W/706.11 OR 706.12 JOINTS |
| | | | 22 | | | 603 | 22 | LIN. FT. | 33" CONDUIT, TYPE B, 706.03 W/706.11 JOINTS 1500 D-LOAD |
| | | | 25 | | | 603 | 25 | LIN. FT. | 60" CONDUIT, TYPE B, 706.03 W/706.11 JOINTS 1500 D-LOAD |
| | | | 52 | | | 603 | 52 | LIN. FT. | 60" CONDUIT, TYPE B, 706.03 W/706.11 JOINTS 3000 D-LOAD |
| | | | 17 | | | 603 | 17 | LIN. FT. | 60" CONDUIT, TYPE B, RADIUS 706.03 W/706.11 JOINTS 3000 D-LOAD |
| | | | 60 | | | 603 | 60 | LIN. FT. | 60" CONDUIT, TYPE B, RADIUS 706.03 W/706.11 JOINTS 1500 D-LOAD |
| | | 100 | | | | 603 | 100 | LIN. FT. | 8" CONDUIT, TYPE C, 706.01, 706.02 OR 706.08 W/ 706.11 OR 706.12 JOINTS |
| | | | 6 | | | SPECIAL | 6 | EACH | 8" PIPE CONNECTION SEAL |
| | | | 3 | | | SPECIAL | 3 | EACH | 12" PIPE CONNECTION SEAL |
| | | | 1 | | | SPECIAL | 1 | EACH | 33" PIPE CONNECTION SEAL |
| | | | ~~8~~ * | | | ~~604~~ | ~~8~~ | EACH | MANHOLE, STANDARD NO. 3 |
| | | | 1 | | | 604 | 1 | EACH | MANHOLE, STANDARD NO. 2 W/DROP, PIPE |
| | | | 2 | | | 604 | 2 | EACH | MANHOLE, STANDARD NO. 5, MODIFIED AS PER PLAN |
| | | | 6 | | | 604 | 16 | EACH | MANHOLE ADJUSTED TO GRADE 2 |
| | | | 1 | | | 604 | 1 | EACH | MANHOLE RECONSTRUCTED TO GRADE |
| | | | 1 | | | 604 | 1 | EACH | JUNCTION CHAMBER, AS PER PLAN |

* 100% CITY PARTICIPATION

# QUANTITY SUB-SUMMARY

CALCULATED BY TAK DATE 11/82
CHECKED BY DSB DATE 11/82

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

38/455

AKRON INNERBELT
SUM-59-0.00

| SHEET No. | ITEM No. | STATION TO STATION | SIDE | REF NO. 9 PAVEMENT REMOVED SQ YD | 10 WALK REMOVED SQ FT | 11 CURB REMOVED LIN FT | 14 202 GUARDRAIL REMOVED LIN FT | 12 CURB & GUTTER REMOVED LIN FT | 13 GUTTER REMOVED LIN FT | 15 FENCE REMOVED LIN FT | 22 606 GUARDRAIL TYPE S LIN FT | ANCHOR ASSEMBLY STD TYPE A EACH | 24 BRIDGE TERMINAL ASSEMBLY STD TYPE B EACH | 26 607 FENCE TYPE CL LIN FT | 27 14' GATE TYPE CL EACH | 107 SPECIAL 108 PRESSURE RELIEF JOINT STD TYPE A LIN FT | PRESSURE RELIEF JOINT STD TYPE B LIN FT | 58 605 6" Shallow Pipe Underdrains 707.01 Type III or 707.21 Type IV LIN FT | 104 622 CONCRETE BARRIER STD TYPE B-50 LIN FT | CONCRETE BARRIER TYPE B-50 MODIFIED LIN FT | 105 CONCRETE BARRIER STD TYPE-D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | GX-1 | 410+61 TO 415+80 W. EXPWAY | RT | | | | 519 | | | | | | | | | | | | | | |
| " | GR-1 | 410+61 TO 417+11 W. EXPWAY | RT | | | | | | | | 612.5 | 1 | 1 | | | | | | | | |
| " | X-1 | 410+94.49 TO 413+37 W. EXPWAY | RT | 335 | | | | | | | | | | | | | | | | | |
| " | X-2 | 412+60.72 TO 415+00 W. EXPWAY | RT | 266 | | | | | | | | | | | | | | | | | |
| 46 | X-3 | 415+00 TO 419+50 W. EXPWAY | RT | 700 | | | | | | | | | | | - | | | | | | |
| " | GX-5 | 416+28 TO 417+28 W. EXPWAY | RT | | | | 200 | | | | | | | | | | | | | | |
| 47 | GR-2 | 418+75 TO 425+30 W. EXPWAY | RT | | | | | | | | 618.75 | 1 | 1 | | | | | | | | |
| " | GR-3 | 420+59.17 TO 438+09.17 | LT | | | | | | | | 1725 | 1 | | | | | | | | | |
| " | X-4 | 420+59.17 TO 424+37 W. EXPWAY - RAMP H | LT | 709 | | | | | | | | | | | | | | | | | |
| " | X-5 | 424+37 TO 425+00 W. EXPWAY | LT | 112 | | | | | | | | | | | | | | | | | |
| 48 | GX-2 | 420+59.17 TO 427+31 W. EXPWAY | LT | | | | 686 | | | | | | | | | | | | | | |
| " | GX-3 | 424+57 TO 430+62 W. EXPWAY | RT | | | | 605 | | | | | | | | | | | | | | |
| " | X-6 | 425+00 TO 429+50 W. EXPWAY | LT | 874 | | | | | | | | | | | | | | | | | |
| " | GR-4 | 425+58 TO 431+58 W. EXPWAY | LT | | | | | | | | 562.5 | 1 | 1 | | | | | | | | |
| " | GR-5 | 427+87.5 TO 430+62.5 W. EXPWAY | RT | | | | | | | | 237.5 | 1 | 1 | | | | | | | | |
| " | GR-6 | 111+90.18 TO 114+57 RAMP EN | LT | | | | | | | | 237.5 | 1 | 1 | | | | | | | | |
| 49 | X-7 | 429+50 TO 431+11 W. EXPWAY | LT | 227 | | | | | | | | | | | | | | | | | |
| " | J-1 | 429+74 W. EXPWAY | RT | | | | | | | | | | | | | | 37 | | | | |
| " | J-2 | 430+12 W. EXPWAY | LT | | | | | | | | | | | | | | 66 | | | | |
| " | J-3 | 114+00 RAMP EN | LT | | | | | | | | | | | | | 24 | | 50 | | | |
| 50 | GX-4 | 435+75 TO 439+93 | LT | | | | 118 | | | | | | | | | | | | | | |
| " | GR-7 | 122+77 TO 123+35 RAMP SW | LT | | | | | | | | 37.5 | | 2 | | | | | | | | |
| 51 | X-8 | 54+12.69 TO 62+90 RUSSELL AVE | L&R | ~~1345~~ | ~~2334~~ | 235 | | | | | | | | | | | | | | | |
| 52 | X-9 | 0+55 TO 0+82 RUSSELL CT. | L&R | ~~1004~~ | 270 | 98 | | | | | | | | | | | | | | | |
| " | X-10 | 2+23 TO 3+84 RUSSELL CT. | L&R | ~~4692~~ | 1780 | 334 | | | | | | | | | | | | | | | |
| " | X-11 | 0+26 TO 1+08 KENYON ST. | L&R | 391 | 534 | 168 | | | | | | | | | | | | | | | |
| " | X-12 | 2+57 TO 5+63 KENYON ST. | L&R | ~~933~~ | 3732 | 749 | | | | | | | | | | | | | | | |
| " | GR-8 | 129+27 TO 133+12 RAMP SW | LT | | | | | | | | 362.5 | | 2 | | | | | | | | |
| " | GR-9 | 129+58 TO 132+60.5 RAMP SW | RT | | | | | | | | 381.25 | | 2 | | | | | | | | |
| " | GR-10 | 129+58 TO 133+69 RAMP EN | LT | | | | | | | | 387.5 | | 2 | | | | | | | | |
| " | GR-11 | 129+78 TO 134+03 RAMP EN | RT | | | | | | | | 400 | | 2 | | | | | | | | |
| " | J-4 | 129+83 RAMP SW | RT | | | | | | | | | | | | | ~~84~~ | | 46 | | | |
| " | J-5 | 130+06 RAMP EN | LT | | | | | | | | | | | | | 24 | | 46 | | | |
| 53 | J-6 | 133+08 RAMP SW | RT | | | | | | | | | | | | | 24 | | 46 | | | |
| " | J-7 | 133+46 RAMP EN | LT | | | | | | | | | | | | | 24 | | 46 | | | |
| 55 | GR-12 | 142+22 TO 145+00 INNERBELT | LT | | | | | | | | 243.75 | 1 | 1 | | | | | | | | |
| " | GR-13 | 142+33 TO 142+83 INNERBELT | RT | | | | | | | | 12.5 | 1 | 1 | | | | | | | | |
| " | J-8 | 142+80 INNERBELT | LT | | | | | | | | | | | | | 24 | | 71 | | | |
| " | J-9 | 142+87 INNERBELT | RT | | | | | | | | | | | | | 24 | | 86 | | | |
| " | E-7 | 42+78 TO 48+64 RHODES AVE. | RT | | | | | | | | | | | 690 | | | | | | | |
| " | E-8 | 242+89 TO 248+32 DART AVE. | LT | | | | | | | | | | | 650 | | | | | | | |
| " | | 142+14 TO 145+00 | L&R | | | | | | | | | | | | | | | | ~~2667~~ | 25 | |
| 56 | X-22 | NB. TEMPORARY CONNECTION | RT | 1600 | | | | | | | | | | | | | | | | | |
| " | X-23 | SB TEMPORARY CONNECTION | LT | 1758 | | | | | | | | | | | | | | | | | |
| " | GX-9 | 149+53 TO 154+25 INNERBELT | LT | | | | 475 | | | | | | | | | | | | | | |
| 56A | GX-10 | 150+78 TO 155+55 INNERBELT | LT | | | | 518 | | | | | | | | | | | | | | |
| 56 | GX-11 | 47+74 TO 51+86 RHODES AVE | RT | | | | 412 | | | | | | | | | | | | | | |
| " | GX-7 | 47+74 TO 48+84 RHODES AVE | RT | | | | 115 | | | | | | | | | | | | | | |
| " | GX-8 | 150+19 TO 152+14 INNERBELT | RT | | | | 175 | | | | | | | | | | | | | | |
| " | FX-1 | 147+75 INNERBELT | ℄ | | | | | | | 265 | | | | | | | | | | | |
| " | | 145+00 TO 150+00 INNERBELT | ℄ | | | | | | | | | | | | | | | | ~~500~~ | | |
| 57 | X-13 | 10+07 TO 13+60 LAKESHORE BLVD | LT | ~~230~~ | 420 | | | | ~~131~~ | | | | | | | | | | | | |
| | | BOULEVARD STREET | | | | | | | | | | | | | | | | | | | |
| 58 | X-14 | RUSSELL AVE. TO RUSSELL CT. | L&R | ~~1860~~ | ~~5915~~ | ~~883~~ | | | | | | | | | | | | | | | |
| 59 | X-15 | RUSSELL CT TO RHODES AVE. | L&R | 1038 | ~~4927~~ | ~~507~~ | | | | | | | | | | | | | | | |
| 61 | X-16 | RHODES AVE TO DART AVE | L&R | ~~1506~~ | ~~5164~~ | 784 | | | | | | | | | | | | | | | |
| 61 | X-17 | 236+30 TO 237+93.80 DART AVE. | L&R | 543 | ~~600~~ | 346 | | | | | | | | | | | | | | | |
| | | RHODES AVENUE | | | | | | | | | | | | | | | | | | | |
| 62 | X-18 | 3+55 RHODES AVE TO BOULEVARD ST. | L&R | ~~3288~~ | ~~990~~ | 685 | | | | | | | | | | | | | | | |
| 59 | X-19 | BOULEVARD ST. TO OHIO CANAL | L&R | 4340 | 1202 | | | 541 | | | | | | | | | | | | | |
| 60 | X-20 | 37+28 TO 40+20.42 RHODES AVE | L&R | ~~1159~~ | | | | 350 | | | | | | | | | | | | | |
| 60 | X-21 | 38+25 TO 39+21.41 BOWERY ST. | L&R | 225 | | ~~782~~ | | | | | | | | | | | | | | | |
| " | | 37+36 TO 37+66 RHODES AVE | RT | | | | | | | | | | | | | | | | | 30 | |
| 218 | GR-18 | 258+15 TO 259+90 W. EXPWAY | RT | | | | | | | | 125 | 2 | | | | | | | | | |
| 450 | E-1 | 131+32 RAMP EN TO 60+11 RUSSELL AVE. | | | | | | | | | | | | 507 | 1 | | | | | | |
| 451 | E-2 | 60+11 RUSSELL TO 225+69 DART AVE. | | | | | | | | | | | | 429 | 1 | | | | | | |
| " | E-3 | 225+69 TO 229+89 DART AVE | | | | | | | | | | | | 410 | 1 | | | | | | |
| 452 | E-4 | 131+94 RAMP SW TO 135+42 RAMP EN | | | | | | | | | | | | 570 | 1 | | | | | | |
| " | E-5 | 133+67 TO 135+42 RAMP EN | | | | | | | | | | | | 225 | 1 | | | | | | |
| " | E-6 | 131+32 TO 133+62 RAMP EN | | | | | | | | | | | | 274 | | | | | | | |
| 49 | X-24 | 430+86.34 TO 431+11.34 W. EXPWAY | | 378 | | | | | | | | | | | | | | | | | |
| 50 | X-25 | 435+27.16 TO 435+62.16 W. EXPWAY | | 381 | | | | | | | | | | | | | | | | | |
| TOTAL | | | | ~~29,944~~ | ~~28,368~~ | ~~4931~~ | 3823 | ~~891~~ | 131 | ~~265~~ | 5,944 | 10 | 17 | 3,755 | 5 | ~~1269~~ 1168 | 103 | 394 | ~~767~~ 761 | 25 | ~~30~~ |

# QUANTITY SUB-SUMMARY

CALCULATED BY TAK DATE 5-2-83
CHECKED BY DSB DATE 5-4-83

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

38A
455

AKRON INNERBELT

SUM-59-0.00

| SHEET No. | ITEM No. | STATION TO STATION<br>RAMP H | SIDE | 202<br>GUARDRAIL REMOVED<br>LIN. FT. | 202<br>PIPE REMOVED UNDER 24"<br>LIN. FT. | 202<br>CATCH BASIN OR INLET REMOVED<br>EACH | 603<br>6" CONDUIT TYPE F<br>LIN. FT. | 604<br>INLET TYPE 2-A-6<br>EACH | 605<br>6" SHALLOW PIPE UNDERDRAIN<br>LIN. FT. | 606<br>GUARDRAIL TYPE S<br>LIN. FT. | 606<br>ANCHOR ASSEMBLY TYPE A<br>EACH | 606<br>ANCHOR ASSEMBLY TYPE T<br>EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56C | GX-12 | STA. 61+06 TO STA. 66+00 RHODES AVE. | RT | 494 | | | | | | | | |
| 56B | R-37 | STA. 158+53 RAMP H | LT | | (10) | 1 | | | | | | |
| 56A | U-45 | STA. 149+04 TO STA. 156+50 INNERBELT | LT | | | | 64 | | 399 | | | |
| ~~56B~~ | U-46 | STA. 156+05 TO STA. 158+44 RAMP H | LT | | | | +0 | | 239 | | | |
| ~~56B~~ | U-47 | STA. 158+53 TO STA. 162+35 RAMP H | RT | | | | 24 | | 382 | | | |
| ~~56B~~ | R-65 | STA. 158+53 RAMP H | LT | | | | | 1 | | | | |
| 56B | G-19 | STA. 157+12 TO STA. 159+49.5 RAMP H | LT | | | | | | | 200 | 1 | 1 |
| TOTALS | | | | 494 | 10<br>10 | 1 | ~~98~~<br>64 | 1 | ~~1020~~<br>399 | 200 | 1 | 1 |

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

39
455

AKRON INNERBELT
SUM-59-0.00

| | | |

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

40
455

AKRON INNERBELT
SUM-59-0.00

| | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROFILE GRADE | 1025.00 | 1025.00 | 1024.92 | 1024.79 | 1024.61 | 1024.38 | 1024.11 | 1023.79 | 1023.43 | 1023.01 | 1022.55 | 1022.05 | 1021.49 | 1020.89 | 1020.24 | 1019.55 | 1018.80 | 1018.02 | 1017.20 | 1016.34 | 1015.45 | 1014.55 | 1013.65 | 1012.75 | 1011.85 | 1010.94 | 1010.04 | 1009.17 | 1008.34 | 1007.57 | 1006.85 | 1006.18 | 1005.56 | 1005.00 | 1004.48 | 1004.07 | 1003.70 | 1003.39 | 1003.05 | 1002.87 | 1002.58 | 1002.35 | 1002.16 | 1001.98 | 1001.85 | 1001.72 | 1001.55 | 1001.35 | 1001.10 | 1000.82 | 1000.49 | 1000.12 | 999.74 | 999.27 | 998.78 | 998.25 | 997.68 | 997.07 | 996.42 | 995.74 | 995.01 | 994.24 | 993.51 | 992.76 | 992.01 | 991.24 |
| 12' LT. | 1025.71 | 1025.63 | 1025.50 | 1025.32 | 1025.09 | 1024.82 | 1024.50 | 1024.13 | 1023.72 | 1023.26 | 1022.75 | 1022.20 | 1021.60 | 1021.00 | 1020.35 | 1019.65 | 1018.90 | 1018.12 | 1017.29 | 1016.42 | 1015.51 | 1014.57 | 1013.59 | 1012.58 | 1011.53 | 1010.45 | 1009.34 | 1008.20 | 1007.03 | 1005.83 | 1004.61 | 1003.36 | 1002.09 | 1000.79 | 999.47 | 998.13 | 996.77 | 995.39 | 993.99 | 992.58 | 991.15 | 989.71 | 988.25 | 986.78 | 985.30 | 983.81 | 982.31 | 980.80 | 979.29 | 977.77 | 976.25 | 974.73 | 973.21 | 971.68 | 970.16 | 968.63 | 967.11 | 965.59 | 964.07 | 962.54 | 961.02 | 959.50 | 957.98 | 956.46 | 954.94 | 953.42 | 951.90 | 950.38 | 948.86 | 947.34 | 945.82 | 944.30 | 942.78 | 941.26 | 939.74 | 938.22 | 936.70 | 935.18 | 933.66 | 932.14 | 930.62 | 929.10 | 927.58 | 926.06 | 924.54 | 923.02 | 921.50 | 919.98 | 918.46 | 916.94 | 915.42 | 913.90 | 912.38 | 910.86 | 909.34 | 907.82 | 906.30 | 904.78 | 903.26 | 901.74 | 900.22 | 898.70 | 897.18 | 895.66 | 894.14 | 892.62 | 891.10 | 889.58 | 888.06 | 886.54 | 885.02 | 883.50 | 881.98 | 880.46 | 878.94 | 877.42 | 875.90 | 874.38 | 872.86 | 871.34 | 869.82 | 868.30 | 866.78 | 865.26 | 863.74 | 862.22 | 860.70 | 859.18 | 857.66 | 856.14 | 854.62 | 853.10 | 851.58 | 850.06 | 848.54 | 847.02 | 845.50 | 843.98 | 842.46 | 840.94 | 839.42 | 837.90 | 836.38 | 834.86 | 833.34 | 831.82 | 830.30 | 828.78 | 827.26 | 825.74 | 824.22 | 822.70 | 821.18 | 819.66 | 818.14 | 816.62 | 815.10 | 813.58 | 812.06 | 810.54 | 809.02 | 807.50 | 805.98 | 804.46 | 802.94 | 801.42 | 799.90 | 798.38 | 796.86 | 795.34 | 793.82 | 792.30 | 790.78 | 789.26 | 787.74 | 786.22 | 784.70 | 783.18 | 781.66 | 780.14 | 778.62 | 777.10 | 775.58 | 774.06 | 772.54 | 771.02 | 769.50 | 767.98 | 766.46 | 764.94 | 763.42 | 761.90 | 760.38 | 758.86 | 757.34 | 755.82 | 754.30 |
| 24' LT. | 1024.30 | 1024.21 | 1024.08 | 1023.90 | 1023.68 | 1023.40 | 1023.08 | 1022.72 | 1022.30 | 1021.84 | 1021.34 | 1020.78 | 1020.18 | 1019.53 | 1018.84 | 1018.10 | 1017.31 | 1016.51 | 1015.69 | 1014.82 | 1013.95 | 1013.07 | 1012.20 | 1011.33 | 1010.46 | 1009.59 | 1008.74 | 1007.94 | 1007.20 | 1006.51 | 1005.87 | 1005.28 | 1004.74 | 1004.26 | 1003.82 | 1003.40 | 1003.02 | 1002.68 | 1002.39 | 1002.16 | 1001.98 | 1001.85 | 1001.72 | 1001.55 | 1001.35 | 1001.10 | 1000.82 | 1000.49 | 1000.12 | 999.74 | 999.27 | 998.78 | 998.25 | 997.68 | 997.07 | 996.42 | 995.74 | 995.01 | 994.24 | 993.51 | 992.76 | 992.01 | 991.24 |

1040 1035 1030 1025 1020 1015 1010 1005 1000 995 990 985 980 975 970 965 960

1075' V.C.

400' V.C.

-3.72 %

-0.42%

-3.0%

400' V.C.

P.V.I. STA. 135+00
ELEV. 1003.06

P.V.I. STA. 139+00
ELEV. 1001.38

RAMP "W/O"

RUSSELL AVE.

KENYON ST.

DART AVE.

OHIO CANAL

BOWERY ST.

THORNTON ST.

DRAWN BY B.H.B. 5/7/79
CHECKED BY R.J.T. 5/14/79

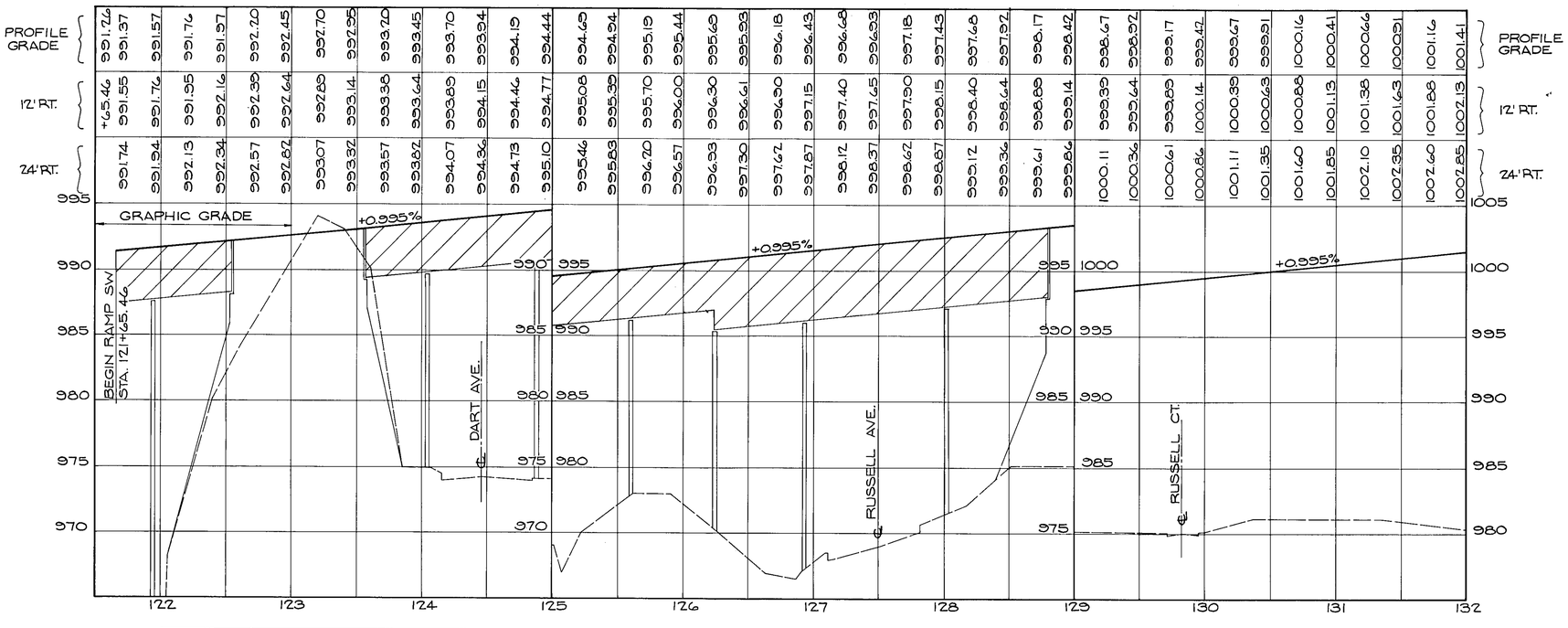
RAMP EN PROFILE

OCT 16 1980

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

41
455

AKRON INNERBELT
SUM-59-0.00







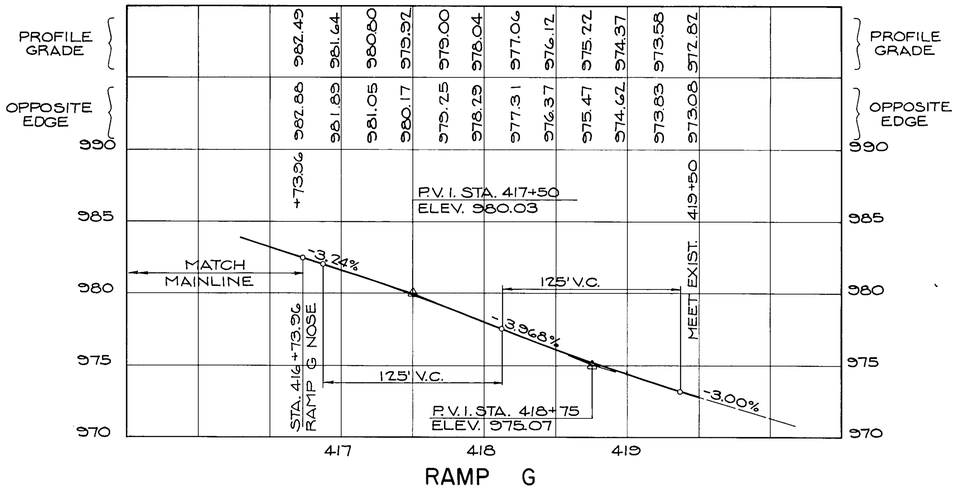
DRAWN BY B.H.B. 5/7/79
CHECKED BY R.J.T. 5/14/79

RAMP SW PROFILE

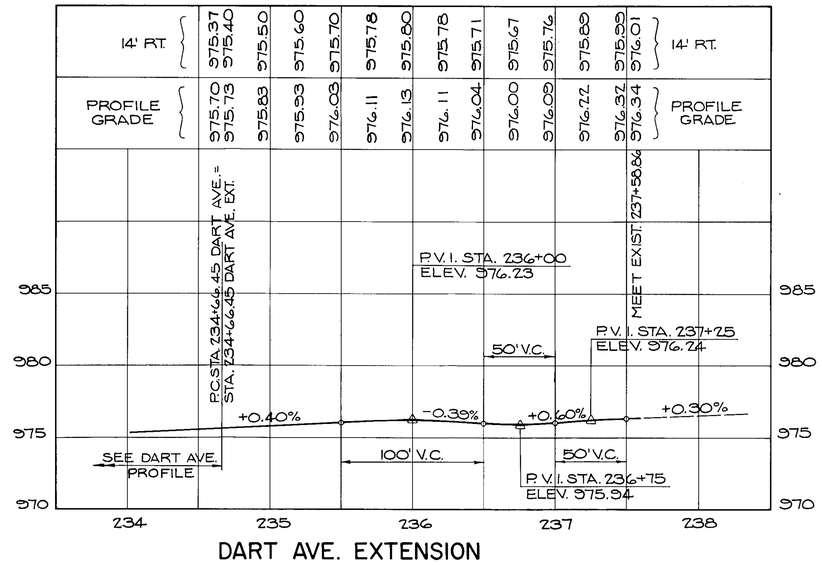
| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

42
455

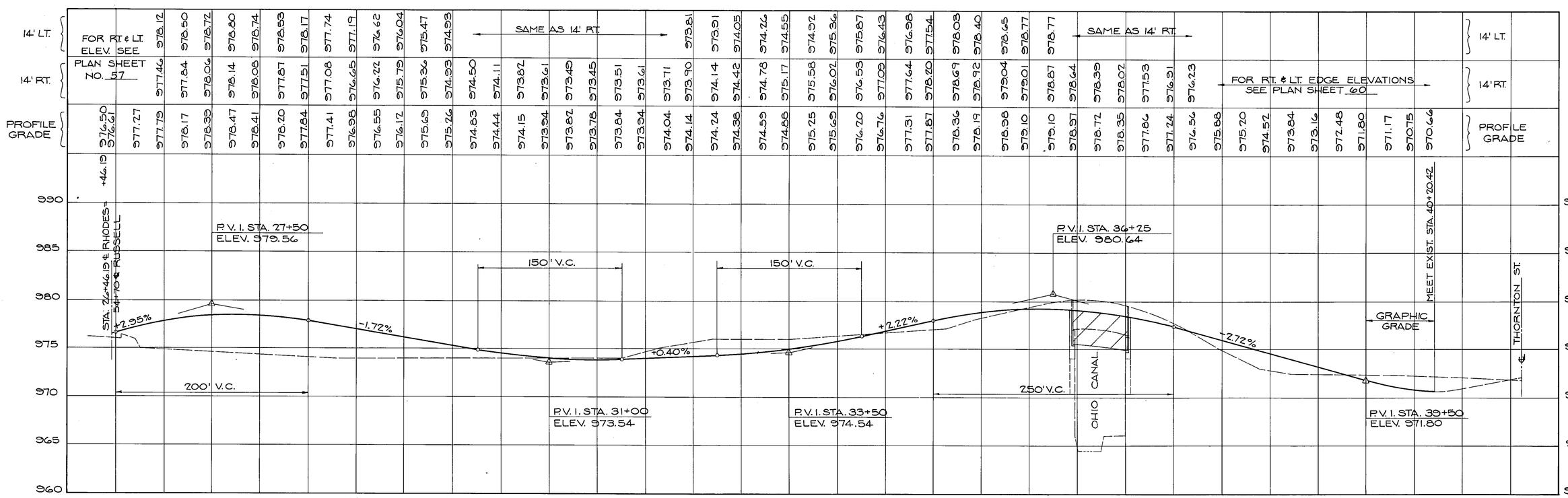
AKRON INNERBELT
SUM-59-0.00




RAMP G




DART AVE. EXTENSION




RHODES AVENUE

DRAWN BY B.H.B. 5/7/79
CHECKED BY R.J.T. 5/14/79

RAMP G, DART AVE. EXT. & RHODES AVE. PROFILES

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |



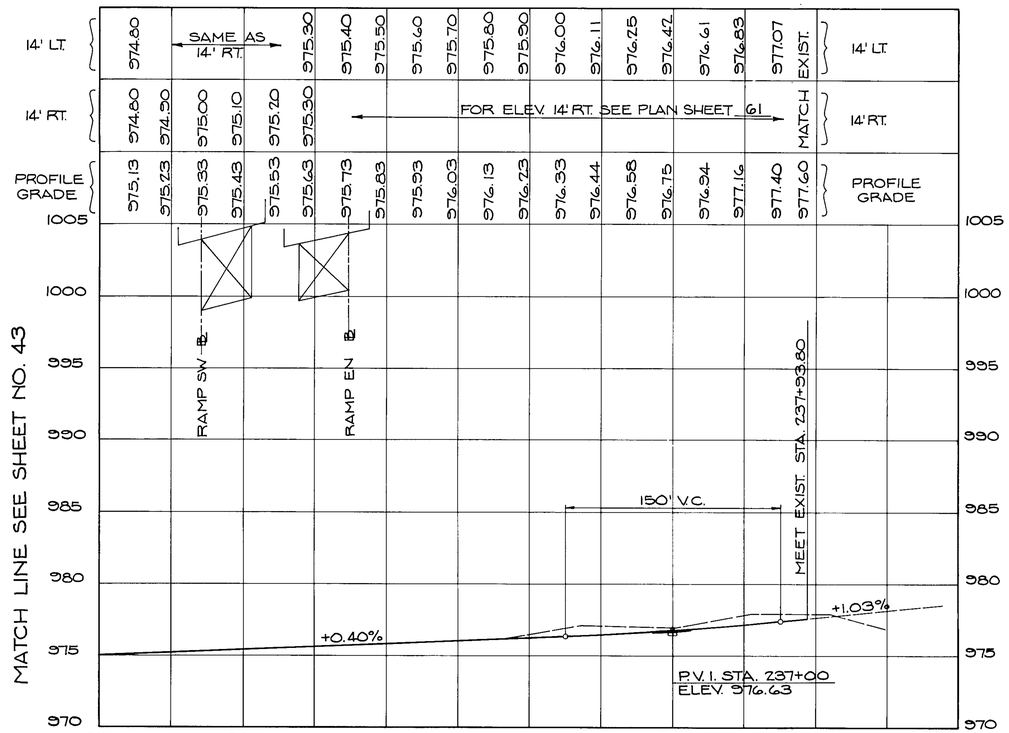
AKRON INNERBELT
SUM-59-0.00

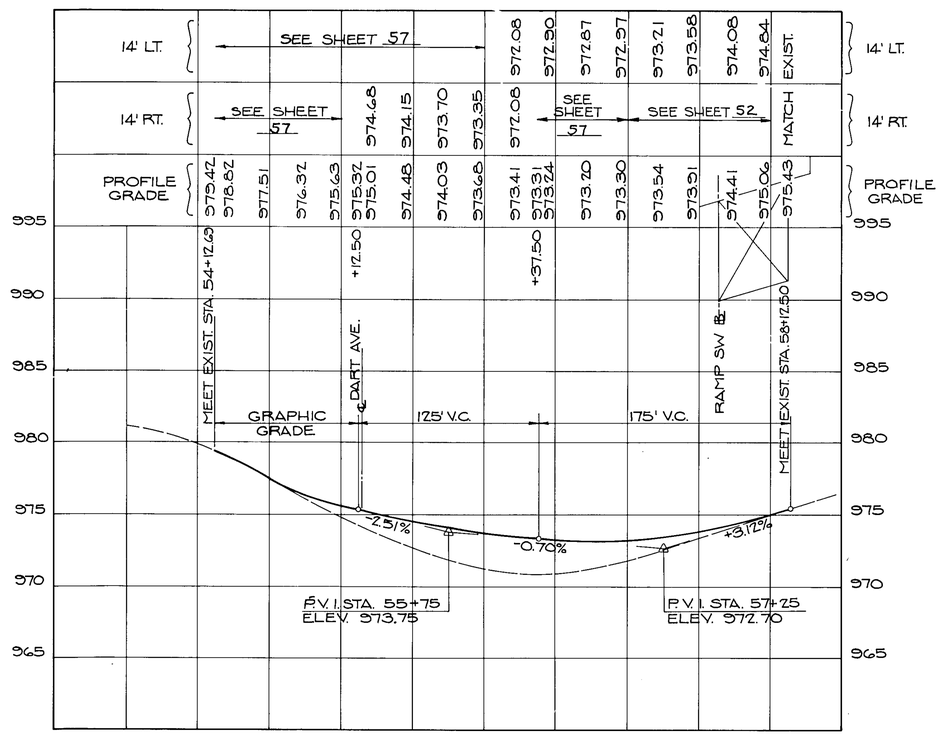
| | | |

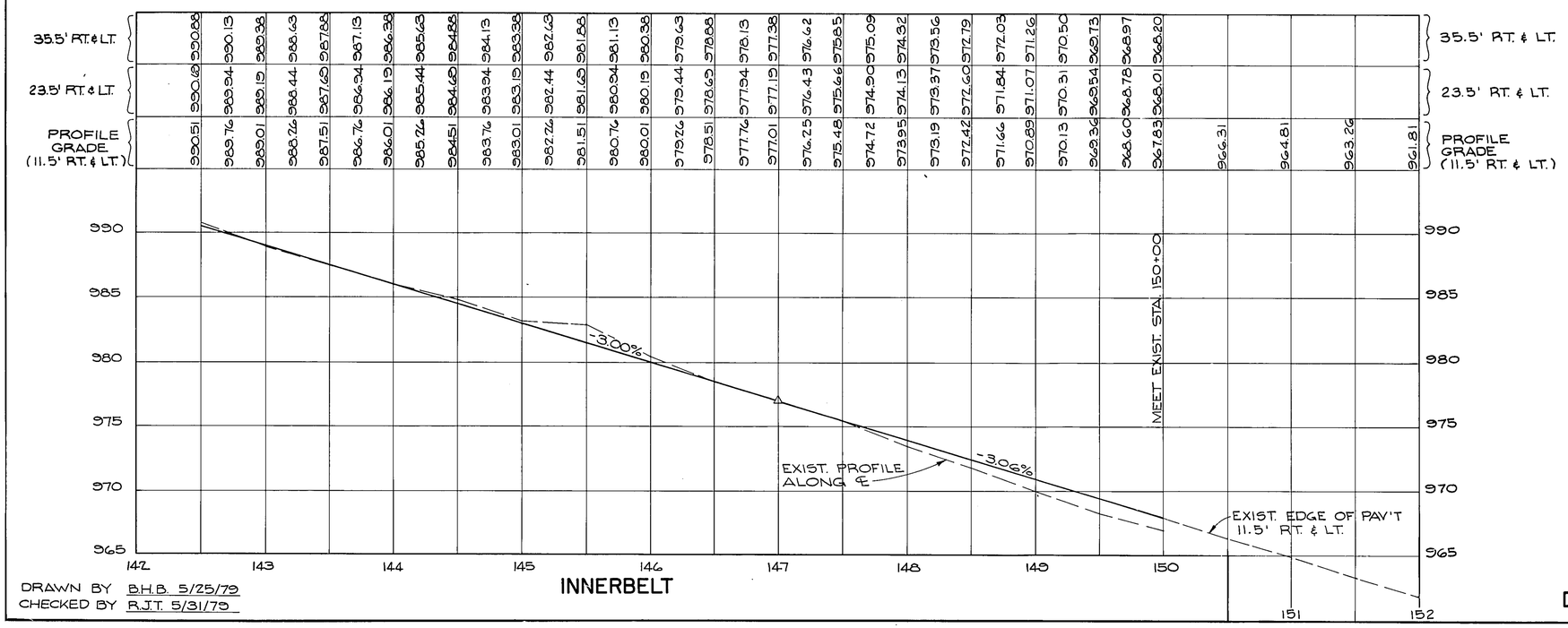
| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T 62(2) | |



AKRON INNERBELT
SUM-59-0.00



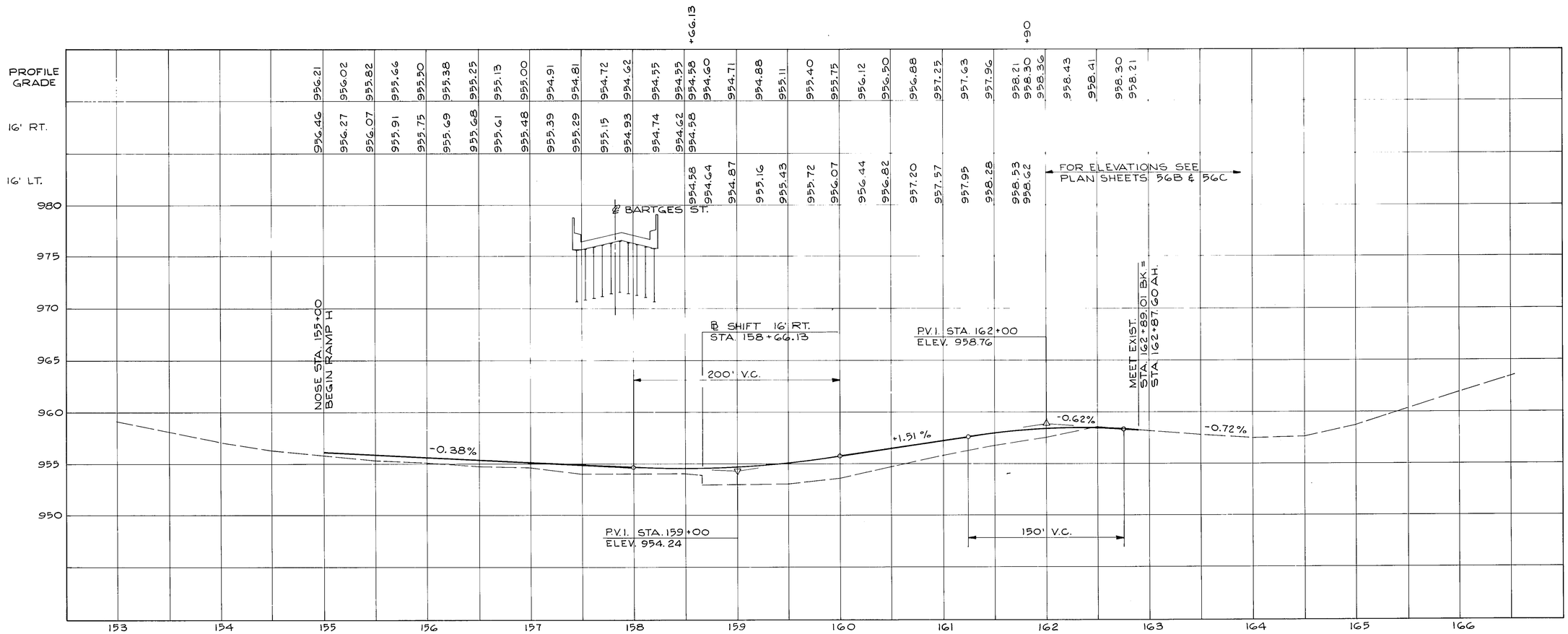

DRAWN BY B.H.B. 5/25/79
CHECKED BY R.J.T. 5/31/79

DART AVE., RUSSELL AVE. & INNERBELT PROFILES

AA 13/P+ 71942ft

| CALC. BY. DATE | | OHIO | 44A |
|---|---|---|---|
| CHKD. BY. DATE | M-IT62(2) | F.H.W.A. REGION 5 | 455 |

AKRON INNERBELT
SUM-59-0.00




Made By: TAK 4·28·83
Checked By: DSB 5·2·83

RAMP H PROFILE

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

45
455

AKRON INNERBELT
SUM-59-0.00

MANCHESTER RD.

RUSSELL AVE.

SOUTH STREET

H2-2 1001.02 | H2-3 990.30 | H3-1 970.78 | H3-2 971.31

## ℄ W. EXPRESSWAY CURVE DATA

P.I. Sta 419+05.23
Δ = 16°-06'-28"
D = 1°-00'-00"
R = 5729.58'
T = 810.74'
L = 1610.78'
E = 57.08'
C = 1605.48'

P.C. Sta 410+94.49

℄ WEST EXPRESSWAY

N 72°-01'-15" E

410 411 412 413 414

SEE SHEET 46

MATCH LINE STA. 415+00

1004.62 1003.62 1002.63 1001.64 1000.65 999.67 998.78 997.89 997.00 996.11 995.22 994.34 993.46 992.57 991.67 990.75 990.63 989.71

1004.61 1003.53 1002.47 1001.40 1000.36 999.44 998.52 997.60 996.68 995.76 994.84 993.92 993.00 992.08 991.16 990.14 989.26

Existing 10' Paved Shoulder

Match Existing Pavement Sta 410+94.49

100' Paved Shoulder Transition

8' Paved Shoulder

EX. 6" UNDERDRAIN

P.C. Sta 412+60.72
70.00' Rt. ℄ W. Exp'way

Type 5 Guardrail

Const. Limits

### JOINT LEGEND

(A) Longitudinal Joint.
(B) Contraction Joint
(C) Expansion Joint
(D) Longitudinal Joint with Hook Bolts

## EASTBOUND PAVEMENT EDGE CURVE DATA

P.I. Sta 414+25.36 ℄ W. Exp'way - 67.66' Rt.
Δ = 9°-41'-14"
D = 3°-00'-00"
R = 1909.86'
= 162.68'
L = 324.57'
E = 6.92'
C = 324.18'

Made By C.C. 8/16/79
Checked By R.J.T. 11/12/79

FORM D D A-5

WEST EXPRESSWAY 410+00 TO 415+00
ROADWAY PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

46
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

H4-2 974.81 — H4-3 983.78 — H4-4 963.80

24" V.P. — C.S.

## ℄ W. EXPRESSWAY CURVE DATA

P.I. Sta 419+05.23
Δ = 16°-06'-28"
D = 1°-00'-00"
R = 5729.58'
T = 810.74'
L = 1610.78'
E = 57.08'
C = 1605.48'

SEE SHEET 45

MATCH LINE STA. 415+00

416 ℄ WEST EXPRESSWAY 417 418 419

SEE SHEET 47

MATCH LINE STA. 420+00

46' — 12' — 16'

GX-5 — X-3 — GX-1 — GR-1 — GR-2

EX. 6" UNDERDRAIN

989.84 988.93 988.01 987.09 986.18 985.27 984.45 983.74 983.14 982.61 981.98 981.40 980.89 980.30 979.81 979.36 978.97 978.65 978.40 978.20

989.32 988.40 987.41 986.43 985.44 984.45 983.61 982.80 983.19 984.00 984.84 985.83 986.82 987.80 988.79

Existing Edge of Pavement

PC Sta. 417+52.64
58.00' Rt. ℄ W. Expway.

10' Paved Shoulder

Nose Sta 416+73.96 - 78' Rt. ℄ W. Expway.
Sta 416+73.96 - 19' Lt. ℄ Ramp G

Type 5 Guardrail

978.01

3' Paved Shoulder

End Asphalt Conc. Overlay
Sta. 417+67.71

417 N 83°25'18"E

418 ℄ RAMP G

419

3' Paved Shoulder

8' Paved Shoulder

PT Sta. 415+88.96
88.26' Rt. ℄ W. Expway.

Type 5 Guardrail
Feather Asph. Conc. Overlay
100' Paved Shoulder Transition

EX. 6" UNDERDRAIN

420

Const. Limits

Match Existing Pavement
Sta 419+50.00

SOUTH STREET

12" — CS — 18" — 20' — W

## EASTBOUND PAVEMENT EDGE CURVE DATA

P.I. Sta 414+25.36 ℄ W. Expway - 67.66' Rt.
Δ = 9°-44'-14" L = 324.57'
D = 3°-00'-00" E = 6.92'
R = 1909.86' C = 324.18'
T = 162.68'

## EASTBOUND LANE ADDITION CURVE DATA

P.I. Sta 421+69.95 — 42.92' Rt ℄ W. Expway.
Δ = 12°-21'-58" L = 824.41'
D = 1°-30'-00" E = 22.35'
R = 3819.72' C = 822.81'
T = 413.81'

## JOINT LEGEND

(A) Longitudinal Joint
(B) Contraction Joint
(C) Expansion Joint
(D) Longitudinal Joint with Hook Bolts

Made By C.C. 8/16/79
Checked By R.J.T. 11/12/79

FORM D D A-5

WEST EXPRESSWAY 415+00 TO 420+00
ROADWAY PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

47
455

AKRON INNERBELT
SUM-59-0.00

## ℄ W. EXPRESSWAY CURVE DATA

P.I. Sta 419+05.23
Δ = 16°-06'-28"
D = 1°-00'-00"
R = 5729.58'
T = 810.74'
L = 1610.78'
E = 57.08'
C = 1605.48'

RUSSELL AVE.

## JOINT LEGEND

(A) Longitudinal Joint
(B) Contraction Joint
(D) Longitudinal Joint with Hook Bolts

Match Existing Pavement Sta 420+59.17

100' Paved Shoulder Transition

End Taper Sta 422+03.59

Existing 10' Paved Shoulder

10' Paved Shoulder

Type 5 Guardrail

8' Paved Shoulder

Existing Edge of Pavement

SEE SHEET 46

SEE SHEET 48

421 ℄ WEST EXPRESSWAY 422 423 424

MATCH LINE STA. 420+00

MATCH LINE STA. 425+00

EX. 6" UNDERDRAIN

RAMP G

SOUTH STREET

## EASTBOUND LANE ADDITION CURVE DATA

P.I. STA 421+69.95 - 42.92' Rt ℄ W. Expwy
Δ = 12°-21'-58"
D = 1°-30'-00"
R = 3819.72'
T = 413.81'
L = 824.41'
E = 22.35'
C = 822.81'

Made By C.C. 8/16/79
Checked By R.J.T 11/12/79

FORM D D A-5

# WEST EXPRESSWAY 420+00 TO 425+00
ROADWAY PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

48
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

## ℄ W. EXPRESSWAY CURVE DATA

P.I. Sta 419+05.23
Δ = 16°-06'-28"
D = 1°-00'-00"
R = 5729.58'
T = 810.74'
L = 1610.78'
E = 57.08'
C = 1605.48'

## JOINT LEGEND

(A) Longitudinal Joint
(B) Contraction Joint
(C) Expansion Joint
(D) Longitudinal Joint with Hook Bolts

RAMP H

8' Paved Shoulder

Type 5 Guardrail

Existing Edge of Pavement

P.T. Sta 427+05.27

N88°07'43"E

℄ WEST EXPRESSWAY

MATCH LINE STA. 425+00
SEE SHEET 47

MATCH LINE STA. 429+50
SEE SHEET 49

Nose Sta 427+05.27 - 58' Rt. ℄ W. Exp'way. =
Sta 111+07.95 - 36' Lt. ℄ Ramp EN

Type G12 Median, for Details See Sht. 64

Existing 10' Paved Shoulder

Type 2 Curb & Gutter

4' Paved Shoulder

Type 5 Guardrail

℄ RAMP EN

10' Paved Shoulder

Retaining Wall

Type 6 Curb

P.T. Sta. 425+86.22
87.01' Rt. ℄ W. Exp'way

P.C. Sta 111+07.95
10' Paved Shoulder

SOUTH STREET

## EASTBOUND LANE ADDITION CURVE DATA

P.I. Sta 421+69.95 - 42.92' Rt ℄ W. Exp'way.
Δ = 12°-21'-58"
D = 1°-30'-00"
R = 3819.72'
T = 413.81'
L = 824.41'
E = 22.35'
C = 822.81'

## RAMP EN CURVE DATA

P.I. Sta. 112+50.05
Δ = 2°-50'-29"
D = 1°-00'-00"
R = 5729.58'
T = 142.10'
L = 284.14'
E = 1.76'
C = 284.16'

Made By C.C. 8/17/79
Checked By R.J.T. 11/12/79

WEST EXPRESSWAY 425+00 TO 429+50
ROADWAY PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

AKRON INNERBELT
SUM-59-0.00

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455

9+04.16 ℄ Bowery
50+00.00 ℄ Russell

RUSSELL AVE.

Begin Curb
Sta. 46+54

Type 6 Curb

End Curb
Sta 48+74

S88°33'51"W

℄ RUSSELL AVE.

RAMP H

℄ BOWERY ST.

## JOINT LEGEND

Ⓐ LONGITUDINAL JOINT
Ⓓ LONGITUDINAL JOINT WITH HOOK BOLTS

End Approach Slab
Sta. 118+23.66

8' Paved Shoulder

Type 5 Guardrail

Proposed Sidewalk

Type B Pressure Relief Joint

Existing Edge of Pavement
80'± 10'

431+87.74 ℄ W. Expway =
6+75.25 ℄ Bowery

N88°07'43"E

℄ WEST EXPRESSWAY

End Approach Slab
Sta. 431+11.34

Type B Pressure Relief Joint

Existing 10' Paved Shoulder
80'± 10'

MATCH LINE STA 429+50
SEE SHEET 48

MATCH LINE STA 434+50
SEE SHEET 50

Type 2 Curb & Gutter

4' Paved Shoulder

Type A Pressure Relief Joint

End Approach Slab
Sta. 114+52.10

## RAMP EN CURVE DATA

P.I. STA 112+50.05

Δ = 2°50'-29" L = 284.14'
D = 1°00'-00" E = 1.76'
R = 5729.58' C = 284.16'
T = 142.10'

℄ RAMP EN

115+28.41 ℄ EN
5+55.77 ℄ Bowery

N88°07'43"E

Retaining Wall
Proposed Sidewalk

10' Paved Shoulder

P.T. Sta. 113+92.10

Made By C.C. 8/17/79
Checked By R.J.T. 11/12/79

5+00.00 ℄ Bowery
104+12.27 ℄ South

℄ SOUTH STREET

WEST EXPRESSWAY 429+50 TO 434+50
ROADWAY PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

50
455

AKRON INNERBELT
SUM-59-0.00

NG-4 975.60

NG-5 981.52

NG-6 972.30

53 54 55 56

℄ RUSSELL AVE.

225

Begin Taper T.S. Sta. 121+65.46 ℄ Ramp SW = Sta. 435+03.69, 85.99' Lt. ℄ W. Exp'way

Nose Sta. 121+65.46, 30' Rt ℄ Ramp SW = Sta. 435+03.69, 56' Lt. ℄ W. Exp'way

X-8

Begin Approach Slab Sta. 122+55.26

Type 5 Guardrail

8' Paved Shoulder

C-3 GR-7 C-4

123 124 125

122

℄ RAMP SW

A

12' 12'

D15Cl. GX-4 D15Cl.

EX. 6" UNDERDRAIN

End Approach Slab Sta. 123+53.71

X-25

124+71.26 ℄ Ramp SW
224+28.67 ℄ Dart

MATCH LINE STA. 126+00 SEE SHEET 5

RAMP SW CURVE DATA
P.I. Sta. 125+00.95
$L_s$ = 500.00'
$L_T$ = 335.49'
$S_T$ = 168.62'
$L_c$ = 497.30'
$\theta_s$ = 20°00'-00"

438+06.77 ℄ W. Exp'way =
223+23.25 ℄ Dart

MATCH LINE STA. 434+50 SEE SHEET 49

N88°07'43"E

435 436 437 438 439

℄ WEST EXPRESSWAY

Begin Approach Slab Sta. 435+37.16

36" R.C.P. OF DUCTS

EX. 6" U.D.

C-11

EX. 6" UNDERDRAIN

EXIST PAVED GUTTER

EX PIER FOOTINGS

℄ DART AVE. 223

JOINT LEGEND
(A) LONGITUDINAL JOINT

MATCH LINE STA. 123+50 SEE SHEET 51

RAMP EN CURVE DATA
P.I. Sta. 122+85.96
$L_s$ = 450.00'
$L_T$ = 301.57'
$S_T$ = 151.42'
$L_c$ = 448.03
$\theta_s$ = 18°00'-00"

T.S. 119+84.39

N88°07'43"E 119 ℄ RAMP EN

120 121 122 123

121+84.04 ℄ EN
222+26.39 ℄ Dart

222

108 109 110 111 112 113

Ex 12"x10" Reducer

SOUTH STREET

Made By C.C. 8/20/79
Checked By R.J.T 11/13/79

WEST EXPRESSWAY 434+50 TO
RAMP SW 126+00
RAMP EN 123+50

ROADWAY PLANS

FORM D 22 A

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

51
455

AKRON INNERBELT
SUM-59-0.00

HB-3 — 56 — 57 — ℄ RUSSELL AVE. — 58 — S88°33'51"W — HB-1 — 59 — 979.19 — BEG. N. CURB STA. 59+53 — HB-2 — 60 — 332.79 — 61 — TYPE 6 CURB

972.39

MATCH LINE STA. 126+00 SEE SHEET 50

S.C. Sta. 126+65.46 — ℄ RAMP SW

MATCH LINE STA. 127+00 SEE SHEET 51

RAMP W-10

MATCH LINE STA. 127+50 SEE SHEET 52

## RAMP SW CURVE DATA

| | | | |
|---|---|---|---|
| P.I. Sta. | 125+00.95 | P.I. Sta. | 129+75.08 |
| $L_S$ | = 500.00' | Δ | = 46°-45'-28" |
| $L_T$ | = 335.49' | D | = 8°-00'-00" |
| $S_T$ | = 168.62' | R | = 716.20' |
| $L_C$ | = 497.30' | T | = 309.61' |
| $\Theta_S$ | = 20°-00'-00" | L | = 584.47' |
| | | E | = 64.06' |
| | | C | = 568.39' |

## RAMP EN CURVE DATA

| | | | |
|---|---|---|---|
| P.I. Sta. | 122+85.96 | P.I. Sta | 127+82.97 |
| $L_S$ | = 450.00' | Δ | = 51°-54'-18" |
| $L_T$ | = 301.57' | D | = 8°-00'-00" |
| $S_T$ | = 151.42' | R | = 716.20' |
| $L_C$ | = 448.08' | T | = 348.58' |
| $\Theta_S$ | = 18°-00'-00" | L | = 648.81' |
| | | E | = 80.32' |
| | | C | = 626.85' |

N88°07'43"E — 440 — 441 — 442 — ℄ WEST EXPRESSWAY — 443 — 444

125+70.78 ℄ Ramp EN
441+50.32 ℄ W. Expressway

MATCH LINE STA. 123+50 SEE SHEET 50

S.C. Sta. 124+34.39 — ℄ RAMP EN

RAMP W-11

112 — 113 — 114 — 115 — 116 — ℄ SOUTH STREET

Made By C.C. 8/20/79
Checked By R.J.T. 11/13/79

RAMP SW 126+00 TO 127+00
RAMP EN 123+50 TO 127+50

ROADWAY PLANS

FORM D D A-3

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

52
455

AKRON INNERBELT
SUM-59-0.00

## RAMP SW CURVE DATA

P.I. Sta. 129+75.08
Δ = 46°45'-48"
D = 8°00'-00"
R = 716.20'
T = 309.61'
L = 584.47'
E = 64.06'
C = 568.39'

## RUSSELL AVE. EASTBOUND PAVEMENT EDGE CURVE DATA

P.I. Sta. 56+96.44
Δ = 6°56'-46"
D = 6°00'-00"
R = 954.93'
T = 57.96'
L = 115.77'
E = 1.76'
C = 115.70'

## RAMP EN CURVE DATA

P.I. Sta. 127+82.97
Δ = 51°54'-18"
D = 8°00'-00"
R = 716.20'
T = 348.58'
L = 648.81'
E = 80.32'
C = 626.85'

P.I. Sta 132+34.63
Ls = 450.00'
Lt = 301.57'
St = 151.42'
Lc = 448.03'
θs = 18°00'-00"

S 52°36'10"W

MATCH LINE STA. 57+00 SEE SHEET 52

MATCH LINE STA. 127+00 SEE SHEET 51

MATCH LINE STA. 132+00 SEE SHEET 53

MATCH LINE STA. 127+50 SEE SHEET 51

MATCH LINE STA. 131+50 SEE SHEET 53

Proposed Sidewalk

TREE TO REMAIN

TREE TO REMAIN

127+48.15 ℄ SW
57+61.19 ℄ Russell
57+62.50
Begin S/W Taper (50')

Match Existing Pavement
Sta 58+12.50 ℄ Russell Ave.

Begin Approach Slab
Sta. 129+17.59

RUSSELL COURT

3 N 37°23'06" W

Type 5 Guardrail

8' Paved Shoulder

℄ RAMP SW

Type A Pressure Relief Joint

4' Paved Shoulder

Type 5 Guardrail

RUSSELL AVE.

Begin Curb & Gutter
59+53

Type 5 Guardrail

4' Paved Shoulder

Type 5 Guardrail

Type A Pressure Relief Joint C.S. Sta 130+87.20

℄ RAMP EN

8' Paved Shoulder

Type 5 Guardrail

KENYON ST.

0+00.00 ℄ Kenyon St. =
59+75.57 ℄ Russell Ave.

0+41.63 ℄ Russell Ct. =
0+57.34 Kenyon St.

0+00 ℄ Russell Ct.
60+46.45 ℄ Russell Ave.

128+58.75 ℄ EN
60+58.24 ℄ Russell

RAMP W-10

Begin Approach Slab
Sta. 129+52.60

61+46
End Curb & Walk

℄ WEST EXPRESSWAY

P.T. Sta 57+53.97
21.01' Rt ℄ Russell

S 88°33'51" W 98

R73.18'

R73.43'

R73.86'

R74.14'

8" SAN

### JOINT LEGEND

(A) Longitudinal Joint
(C) Expansion Joint

Made By C.C. 8/20/79
Checked By R.J.T. 11/13/79

RAMP SW 127+00 TO 132+00
RAMP EN 127+50 TO 131+50

ROADWAY PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

53
455

AKRON INNERBELT
SUM-59-0.00

## RAMP SW CURVE DATA

P.I. Sta. 129+75.08
Δ = 46°45'28"
D = 8°00'00"
R = 716.20'
T = 309.61'
L = 584.47'
E = 64.06'
C = 568.39'

P.I. Sta. 134+18.56
Ls = 500.00'
Lt = 335.49'
St = 168.62'
Lc = 497.30'
θs = 20°06'00"

MATCH LINE STA. 132+00 SEE SHEET 52

MATCH LINE STA. 131+50 SEE SHEET 52

MATCH LINE STA. 135+50 SEE SHEET 54

Type 5 Guardrail
8' Paved Shoulder
C.S. Sta. 132+49.94
(GR-8)
(C-9)
(J-4)
Type A Pressure Relief Joint
℄ RAMP SW
(GR-9)
Type 5 Guardrail
4' Paved Shoulder
(C-12)
End Approach Slab
Sta. 133+45.65
(J-7)*
(C-13)
Type 5 Guardrail
(GR-10)
4' Paved Shoulder
Type A Pressure Relief Joint
℄ RAMP EN
Type 5 Guardrail
(GR-11)
8' Paved Shoulder
(C-10)
End Approach Slab
Sta. 134+16.52

℄ DART AVE.
℄ RHODES AVE.
EXIST. RHODES AVE.
134+49.90 ℄ SW
233+68.48 ℄ Dart
ST. Sta. 135+33.20
135+14.88 ℄ EN
234+74.04 ℄ Dart
EXIST. BOULEVARD
KENYON ST.
EXIST. RHODES AVE.
℄ DART AVE.

Completed
*J-6 & J-7 Complete except for asphalt

## RAMP EN CURVE DATA

P.I. Sta. 132+34.63
Ls = 450.00'
Lt = 301.57'
St = 151.42'
Lc = 448.03'
θs = 18°00'00"

## JOINT LEGEND

Ⓐ LONGITUDINAL JOINT

Made By C.C. 8/20/79
Checked By R.J.T. 11/13/79

RAMP SW 132+00 TO 135+50
RAMP EN 131+50 TO 135+50

ROADWAY PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

54
455

AKRON INNERBELT
SUM-59-0.00

℄ BOWERY ST.

℄ RHODES AVE.

RAMP SW CURVE DATA
P.I. Sta. 134+18.56
$L_S$ = 500.00'
$L_T$ = 335.49'
$S_T$ = 168.62'
$L_C$ = 497.30'
$\Delta_C$ = 20°00'00"

S.T. Sta 137+49.94

℄ RAMP SW

℄ RAMP EN

N 0°13'25"E

MATCH LINE STA. 135+50
SEE SHEET 53

MATCH LINE STA. 140+50
SEE SHEET 55

THORNTON ST.

OHIO CANAL

36"H
O.E. DUCTS

℄ DART EXTENSION

℄ DART AVE.

Made By C.C. 8/21/79
Checked By R.J.T 11/13/79

RAMP SW 135+50 TO 140+50
RAMP EN 135+00 TO 140+50

ROADWAY PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

55
455

AKRON INNERBELT
SUM-59-0.00

41+10.40 ℄ Rhodes
50+00.00 ℄ Thornton

141+24.67 ℄ SW
51+34.35 ℄ Thornton

141+32.25 ℄ EN
52+05.75 ℄ Thornton

241+46.51 ℄ Dart
53+40.01 ℄ Thornton

℄ RHODES AVE.

℄ THORNTON ST.

℄ RAMP SW

℄ RAMP EN

℄ DART AVE.

℄ INNERBELT N 0°13'25"E

MATCH LINE STA. 140+50
SEE SHEET 54

MATCH LINE STA. 145+00
SEE SHEET 56

Sta. 142+50 ℄ Ramp SW = Sta. 142+50 ℄ INNERBELT

Sta. 142+50 ℄ Ramp EN = Sta. 142+50 ℄ INNERBELT

Begin Median Taper
Sta. 142+75.00

End Median Taper
Sta. 144+25.00

Corner Post Assembly
Sta. 42+78, 25' Rt.

End Post Assembly
Sta. 142+22, 13' Lt.

Begin Approach Slab
Sta. 142+09.18

Begin Approach Slab
Sta. 142+16.76

End Post Assembly
Sta. 142+31, 13 Rt.

Corner Post Assembly
Sta. 242+89, 21' Lt.

Type CL Fence

Type 5 Guardrail

Type B-50 Mod.

Type B50 Concrete Barrier

8' Paved Shoulder

9'-6" Paved Shoulder

Type A Pressure Relief Joint

40:1 Taper

O.E. DUCTS

6-3" ELEC. CONDUITS

3'-5" ELECT. CONDUITS

Completed
* J-8 & J-9 Complete except for asphalt

JOINT LEGEND
Ⓐ Longitudinal Joint

NOTE
1. For Median and Concrete Barrier Treatment see Detail Sheet 64

Made By C.C. 8/21/79
Checked By R.J.T. 11/14/79

RAMP SW 140+50 TO 142+00
RAMP EN 140+50 TO 142+00
INNERBELT 142+00 TO 145+00

ROADWAY PLANS

FORM D D A-5

| RWBA. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

56
455

AKRON INNERBELT
SUM-59-0.00

6"SHPG — 42"BCS — 8"SHPG — 42"BCS

24" W — 20'C.S.(Abnd.) — ℄ RHODES AVE. — 20'C.S.(Abnd.)

36" — 36"

46 — 47 — 48 — 49 — 50

Meet Exist. Curb Sta. 48+34

Meet Exist. Fence Sta. 48+64, 25' Rt.

C-17

GX-7

GX-11

Type 6 Concrete Curb

Type CL Fence

F-7

Meet Exist. Curb Sta. 46+04

15"

S. B. TEMPORARY CONNECTION

X-23

GX-9

GX-10

8' Paved Shoulder

6" UNDERDRAIN

149+04, 48' LT ℄

6" PLUG

E-967.64

U 45

A

12' 12'

Type B50 Concrete Barrier

146 — 147 — 148 — 149 — 150 — 151

℄ INNERBELT

N 0° 13' 25" E

9'-6" Paved Shoulder

9'-6" Paved Shoulder

MATCH LINE STA. 145+00 SEE SHEET 55

Match Existing Pavement

GX-8

2265300-E

8' Paved Shoulder

Completed

X-22

FX-1

FOR DRAINAGE PLAN SEE SHEET 160.

JOINT LEGEND
Ⓐ Longitudinal Joint

N.B. TEMPORARY CONNECTION

15"

Meet Exist. Fence Sta. 248+55, 21' Lt.

2265400-E

Meet Exist. Curb Sta. 246+14

F-8

Type CL Fence

Type 6 Concrete Curb

36"P.S. — 36"P.S. — 36"P.S.

246 — 247 — 248 — 249 — 250

C-18

℄ DART AVE.

Meet Exist. Curb Sta. 248+32

8"P.S.

3'-5" ELECT. CONDUITS

12"

Made By C.C. 8/22/79
Checked By R.J.T. 11/14/79

FORM D D A-5

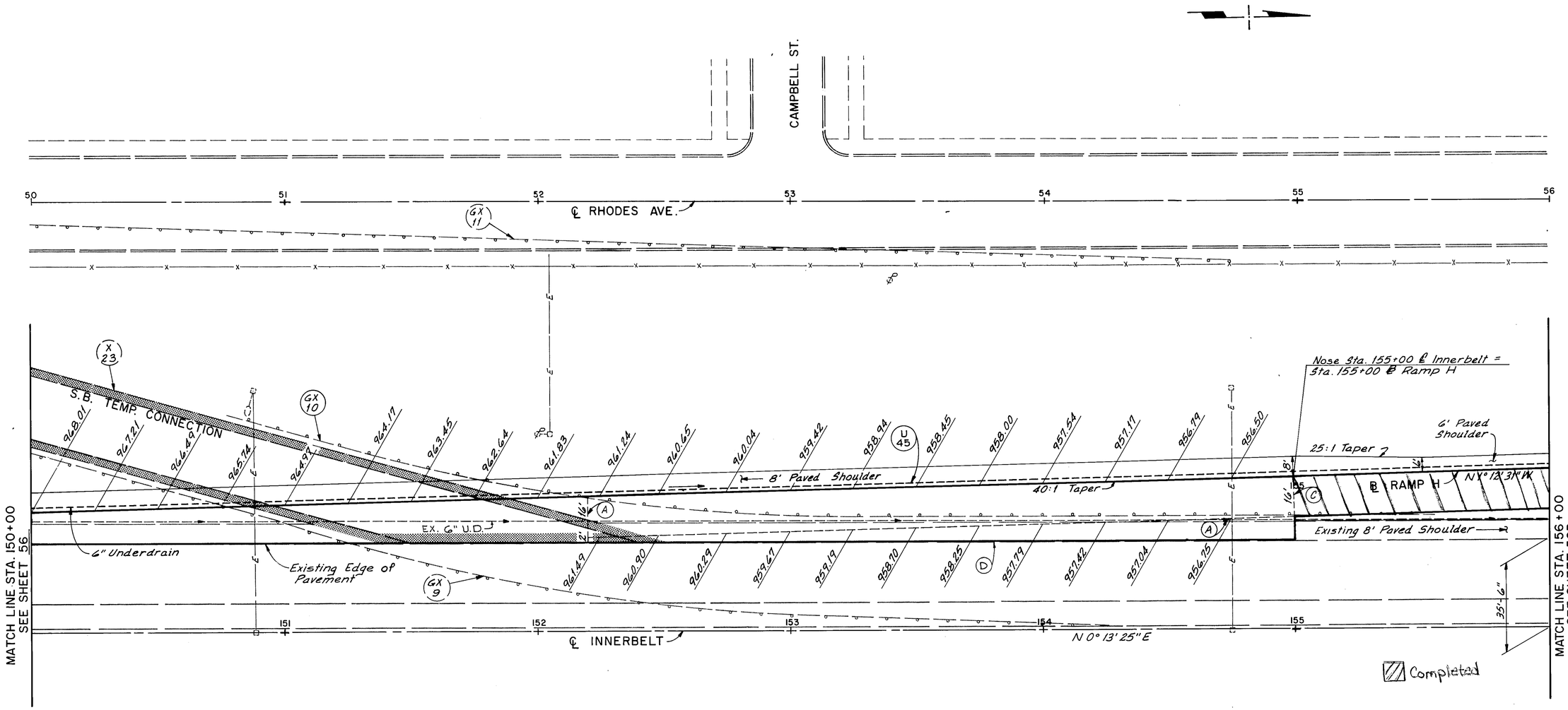
INNERBELT 145+00 TO 150+00
ROADWAY PLANS

AA B/P# 71942R

| CALC. BY. DATE | M-IT82(2) | OHIO |
|---|---|---|
| CHKD. BY. DATE | | F.H.W.A. REGION 5 |

36A 455

AKRON INNERBELT
SUM-59-0.00




JOINT LEGEND

- (A) Longitudinal Joint
- (C) Expansion Joint
- (D) Longitudinal Joint with Hook Bolts

Made By: TAK 4-28-83
Checked By: DSB 4-29-83

INNERBELT 150+00 TO 156+00 LT.
ROADWAY PLANS

AA B/P# 71943R

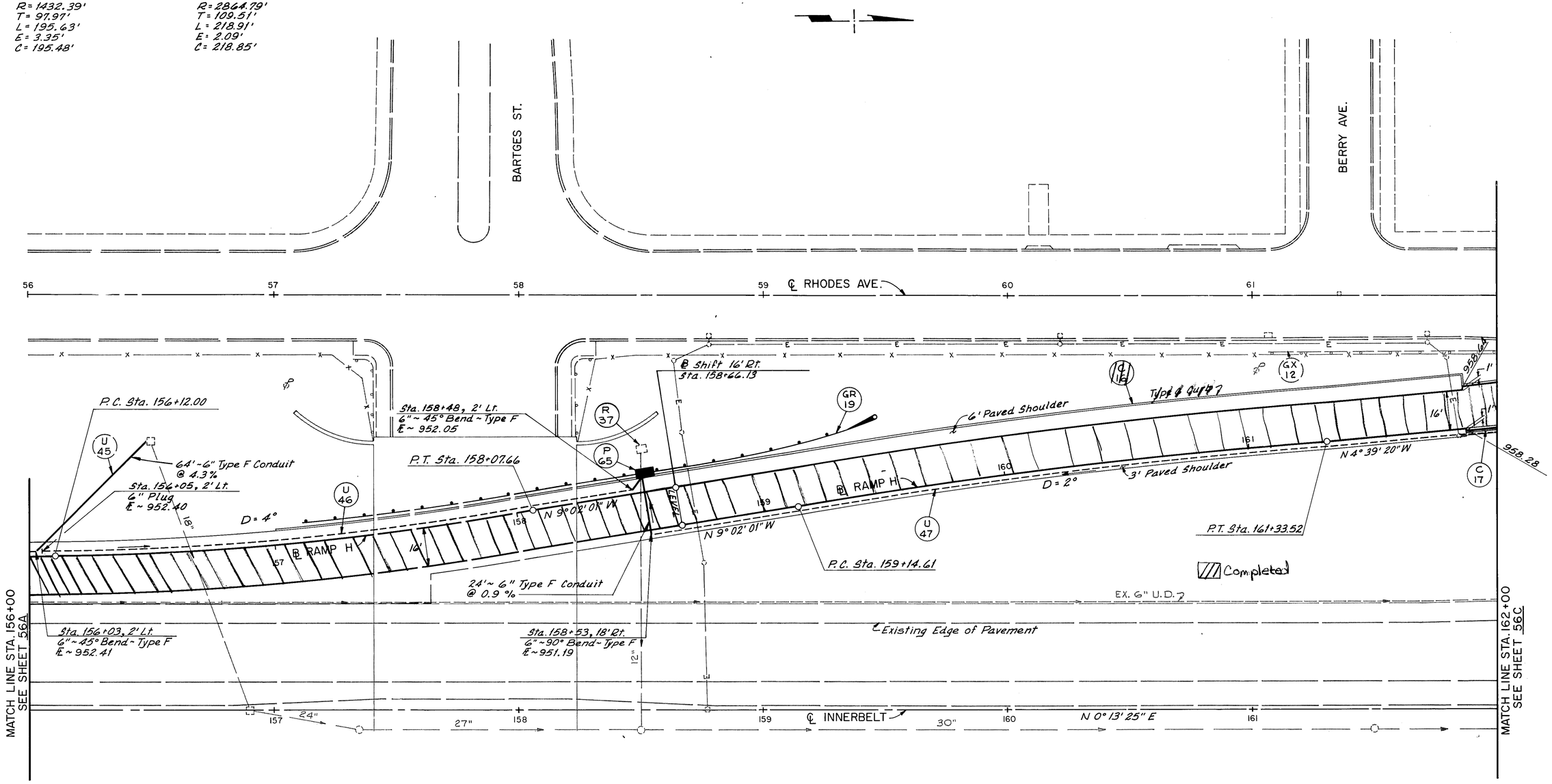
| | | | |
|---|---|---|---|
| CALC. BY. DATE | M-IT62(2) | OHIO | 56B 455 |
| CHKD. BY. DATE | | F.H.W.A. REGION 5 | |

AKRON INNERBELT
SUM-59-0.00

## ℄ RAMP H CURVE DATA

P.I. Sta. 157+10.00
Δ = 7°49'31"
D = 4°00'00"
R = 1432.39'
T = 97.97'
L = 195.63'
E = 3.35'
C = 195.48'

P.I. Sta. 160+24.12
Δ = 4°22'41"
D = 2°00'00"
R = 2864.79'
T = 109.51'
L = 218.91'
E = 2.09'
C = 218.85'




FOR PROFILE P-65 SEE SHEET 97E

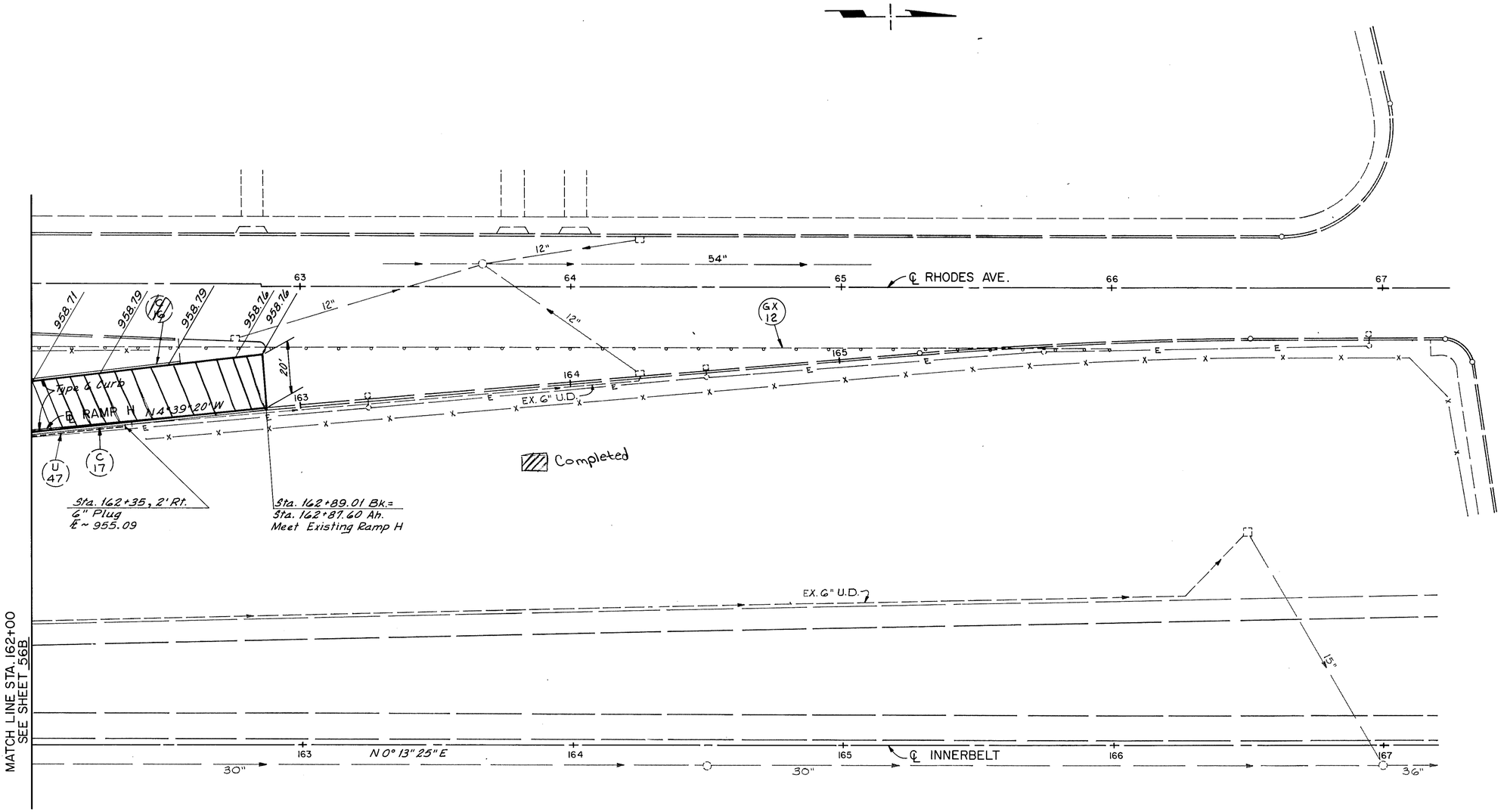
Made By: TAK 4-28-83
Checked By: DSB 5-3-83

INNERBELT 156+00 TO 162+00 LT.
ROADWAY PLANS

AA. D/P# 21942R

| CALC. BY. DATE | M-IT62(2) | OHIO | 56C 455 |
|---|---|---|---|
| CHKD. BY. DATE | | F.H.W.A. REGION 5 | |

AKRON INNERBELT
SUM-59-0.00




Made By: TAK 5-2-83
Checked By: DJB 5-4-83

INNERBELT 162+00 TO 167+00 LT.
ROADWAY PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

57/455

# AKRON INNERBELT
## SUM-59-0.00

9+95.30 ℄ Lakeshore = 221+69.51 ℄ Dart = 110+97.69 ℄ South

End Median ℄ Lakeshore Sta 10+40 ℄ Lakeshore

Taper to 0" Ht.

Type 2A Concrete Curb

S 01°55'47" E

℄ LAKESHORE BLVD.

MATCH LINE STA. 11+80

6" Conc. Median

Type ℄ Conc. Curb

End Taper P.C. Sta 10+49.01-37.05 Lt ℄ Lakeshore Blvd.

MATCH LINE STA. 11+80

Begin Median Sta. 11+90.00

℄ LAKESHORE BLVD.

Match Existing Pavement Sta 224+75 ℄ Dart Ave.

Match Existing Pavement Sta. 110+35 ℄ South St.

Proposed Sidewalk

℄ DART AVE.

Type 2A Concrete Curb

612 Concrete Median

N 01°-55'-47" W

P.T. Sta. 222+11.91 27.50 Rt. ℄ Dart Ave.

P.C. Sta. 111+39.95 23.43' Lt. ℄ South St.

Begin Median Sta 222+35-12.5 ft. ℄ Dart Ave.

Match Existing Pavement Sta 111+73.69 15' Lt ℄ South St.

Sta 223+45

Median Shift

P.C. Sta. 223+95.27

Type 2A Curb 2'R

225+14.54 ℄ Dart

55+14.01 ℄ Russell

S 88°33'51" W

Match Exist. Pavement P.C. Sta. 54+12.69

14.00' Lt. ℄ Russell Ave.

Curb Ramp

35'R. P.C. Sta. 26+20.49

Proposed Sidewalk

26+46.19 ℄ Rhodes-54+70.20 ℄ Russell

P.T. Sta. 26+99.62 14.00' Lt. ℄ Rhodes Ave.

Type 2A Curb

℄ RHODES AVE.

MATCH LINE STA. 27+50 SEE SHEET 52

Type 2A Curb

Taper to 0" Ht.

612 Concrete Median

℄ DART AVE.

MATCH LINE STA. 226+25 SEE SHEET 52

Type 2A Curb

Type 612 Concrete Median

Nose

220'R.

35'R.

18'R.

P.C.C. Sta. 26.15 Rt. ℄ Dart Ave.

P.C.C. Sta. 225+90.95

P.C.C. Sta. 55+93.60 16' Lt ℄ Russell Ave.

150'R.

P.C. Sta. 56+18.00 14' Lt. ℄ Russell Ave.

Proposed Sidewalk

MATCH LINE STA. 57+00 SEE SHEET 52

## N.W. RHODES AVE. CURBLINE CURVE DATA

Δ = 69°08'11"
R = 65.00'
T = 44.79'
L = 78.43'
E = 13.94'

## N.E. CURBLINE CURVE DATA

Δ = 75°27'05"
R = 20.00'
T = 15.47'
L = 26.34'
E = 5.29'

## S.E. CURB LINE CURVE DATA

P.I. Sta. 111+36.80
Δ = 87°39'47"
R = 40.00'
T = 38.40'
L = 61.20'
E = 15.45'

P.T. Sta. 111+75.20 15' Rt. ℄ South St.

Proposed Sidewalk

Match Existing Pavement Sta. 112+30.00

112+12

℄ LAKESHORE BLVD.

Sta. 13+60

Begin Taper Sta. 14+00 - 19.50' Lt. ℄ Lakeshore Blvd. See Detail Sheet G4

Match

℄ SOUTH ST.

S 88°35'45" W

℄ RAMP EN

℄ WEST EXPRESSWAY

End Median Sta 224+45-28 Lt. ℄ Dart Ave.

℄ RAMP SW

## ℄ RHODES AVE. CURVE DATA

P.I. Sta. 28+07.53
Δ = 37°31'45" L = 268.07'
D = 14°00'-00" E = 22.97'
R = 409.26' C = 263.30'
T = 139.04'

## RUSSELL AVE. E.P. PAVEMENT EDGE CURVE DATA

P.I. Sta. 56+96.44
Δ = 6°56'-46" L = 115.77'
D = 6°00'-00" E = 1.76'
R = 954.43' C = 115.70'
T = 57.96'

## ℄ DART AVE. CURVE DATA

P.I. Sta. 226+06.18
Δ = 54°31'-44" L = 389.49'
D = 14°00'-00" E = 51.15'
R = 409.26' C = 374.96'
T = 210.91'

PC. Sta. 56+38.48 14.00' Rt. ℄ Russell Ave.

℄ RUSSELL AVE.

## N.E. DART AVE. CURB LINE CURVE DATA

| 150'R. Curve | 35'R. Curve | 220'R. Curve |
|---|---|---|
| Δ = 9°22'-00" | Δ = 94°51'-08" | Δ = 28°40'-30" |
| R = 150.00' | R = 35.00' | R = 220.00' |
| T = 12.29' | T = 38.10' | T = 56.24' |
| L = 24.52' | L = 57.94' | L = 110.12' |
| E = 0.50' | E = 16.73' | E = 7.08' |

## TRAFFIC ISLAND

2'R. Curve Centers
"A" Sta. 225+19.75-4' Rt. ℄ Dart Ave.
"B" Sta. 225+60.28-4' Rt ℄ Dart Ave.
"C" Sta. 55+49.29-6' Lt ℄ Russell Ave.

## JOINT LEGEND

(A) Longitudinal Joint.
(B) Contraction Joint.
(C) Expansion Joint.

Made By C.C. 8/23/79
Checked By R.J.T. 11/14/79

LAKESHORE BLVD. 9+95.30 TO 14+00
DART AVE. 221+69.51 TO 226+25
RHODES AVE. 26+46.19 TO 27+50

FORM D D A-5

ROADWAY PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

58
455

AKRON INNERBELT
SUM-59-0.00

OHIO CANAL

## ℄ RHODES AVE. CURVE DATA

P.I. Sta. 28+07.53
Δ = 37°31'45" L = 268.07'
D = 14°00'00" E = 22.97'
R = 409.26' C = 263.30'
T = 139.04'

## ℄ DART AVE. CURVE DATA

P.I. Sta 226+06.18
Δ = 54°31'44" L = 389.49'
D = 14°00'00" E = 51.15'
R = 409.26' C = 374.96'
T = 210.91'

Const. Limits

TREE TO REMAIN

TREE TO REMAIN

TREE TO REMAIN

TREE TO REMAIN

TREE TO REMAIN

Type 2-A concrete curb

12'-6"

P.T. Sta. 29+36.56

Proposed Sidewalk

℄ RHODES AVE.

MATCH LINE STA. 27+50 SEE SHEET 57

MATCH LINE STA. 226+25 SEE SHEET 57

Type 2-A Concrete Curb

6'-2" Concrete Median-Width Varies

9' Wide 6'-2" Concrete Median

N 52° 35' 57" E

BOULEVARD ST.

℄ DART AVE.

N 52° 35' 57" E

MATCH LINE STA. 31+00 SEE SHEET 59

MATCH LINE STA. 229+25 SEE SHEET 59

PCC Sta 227+05.22
14.00' Rt. ℄ Dart Ave.

P.T. Sta. 227+84.76

X-14

Type 2-A Concrete Curb

Proposed Sidewalk

RUSSELL

COURT

AVENUE

RAMP SW

JOINT LEGEND
(A) Standard Longitudinal Joint.
(C) Expansion Joint

Made By C.C. 8/24/79
Checked By R.J.T. 11/14/79

DART AVE. 226+25 TO 229+25
RHODES AVE. 27+50 TO 31+00

ROADWAY PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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455

AKRON INNERBELT
SUM-59-0.00

OHIO CANAL

℄ RHODES AVE. CURVE DATA
P.I. Sta. 34+50.41
Δ = 55°30'49"  L = 292.18'
D = 19°00'00"  E = 39.21'
R = 301.56'  C = 280.88'
T = 158.70'

Const. Limits

PT Sta. 35+83.88

MATCH LINE SEE SHEET 60 STA. 36+00

N02°54'51"W

35.35

12'

6 E. DUCTS

TREE TO REMAIN

COURT

PC Sta. 32+91.71

MATCH LINE SEE SHEET 58 STA. 31+00

Proposed Sidewalk

Type 2-A Concrete Curb

12'

6'

14'

32

N 52°35'57" E

33

℄ RHODES AVE.

34

EXISTING RHODES AVE.

X-19

Type 2-A Concrete Curb

9' Wide 6/2 Concrete Median

MATCH LINE SEE SHEET 58 STA. 229+25

BOULEVARD ST.

8" SAN SEWER

230

231

℄ DART AVE.

232

N 52°35'57" E

233

MATCH LINE SEE SHEET 61 STA. 234+00

135'

TREE TO REMAIN

Type 2-A Concrete Curb

229+64.58 ℄ Dart = 3+98.71 ℄ Russell Ct.

RUSSELL N 37°23'06" W

End Median Sta. 231+20.43 ℄ Dart

Proposed Sidewalk

X-18

232.50

233.00

RAMP SW

RAMP EN

133

134

JOINT LEGEND
Complete
A Longitudinal Joint

Made By C.C. 8/24/79
Checked By R.J.T. 11/15/79

DART AVE. 229+25 TO 234+00
RHODES AVE. 31+00 TO 36+00

ROADWAY PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

60
455

AKRON INNERBELT
SUM-59-0.00

## ℄ BOWERY ST. CURVE DATA

P.I. Sta. 39+33.92
Δ = 53°55'33" L = 188.24'
D = 28°38'52" E = 24.39'
R = 200.00' C = 181.37'
T = 101.74'

OHIO CANAL

℄ BOWERY ST.
N59°08'27"E

Match Existing Bowery St.
Sta. 38+25.00
P.C. Sta. 38+32.18

Match Existing Rhodes Ave
P.I. Sta. 40+20.42 ℄ Rhodes Ave

THORNTON ST.

Curb Ramp Type 1.

Type 2-A Concrete Curb

2' R.C.C. Sta. 39+21.41 - 4' Lt. ℄ Bowery St.
Sta. 39+23.50 - 20.49' Lt. ℄ Rhodes Ave.

Begin Approach Slab
Sta. 37+03.35

Const. Limits

Aluminum Railing (Typ.)

Proposed Sidewalk

℄ RHODES AVE

N02°54'51"E

Type 2-A Conc. Curb

Sta. 39+18.68

Type D Conc. Barrier w/ End Terminal

Sta. 37+98.68

Edge of Pavement Taper

MATCH LINE STA. 36+00
SEE SHEET 59

EX. RHODES AVE.

End Approach Slab
Sta. 36+43.72

O.E. DUCTS

℄ RAMP SW

℄ RAMP EN

JOINT LEGEND
(A) Longitudinal Joint
(B) Contraction Joint
(C) Expansion Joint

Made By C.C. 8/27/79
Checked By R.J.T. 11/15/79

RHODES AVE. 36+00 TO 40+20.42
BOWERY ST. 38+25 TO 40+20.42

ROADWAY PLANS

FORM D D A-8

| P.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

61
455

AKRON INNERBELT
SUM-59-0.00

## ℄ DART AVE. CURVE DATA

P.I. Sta. 236+42.57
Δ = 52°22'33" L = 327.35'
D = 16°00'00" E = 40.96'
R = 358.10' C = 316.07'
T = 176.11

## TRAFFIC ISLAND

2' R. Curve Centers
"A" Sta 235+95.07 - 18' Rt ℄ Dart Ave.
"B" Sta 236+80.82 - 16' Rt ℄ Dart Ave.
"C" Sta 236+96.40 - 4' Lt ℄ Dart Ext.

## N.E. CURBLINE CURB DATA

| 100' R. Curves | 30' R. Curve |
|---|---|
| Δ = 16°15'37" | Δ = 95°06'14" |
| R = 100.00' | R. = 30.00' |
| T = 14.29' | T = 32.80' |
| L = 28.38' | L = 49.80' |
| E = 1.02' | E = 14.45' |

EXISTING RHODES AVE.

℄ RAMP SW

℄ RAMP EN

Match Ext. Dart Ave. Rt. Sta. 237+93.80

N00°13'25"E

Type 2-A Concrete Curb

235+15.64 ℄ Dart Ext. = 6+98.81 ℄ Exist. Rhodes Ave.

℄ DART AVE.

Pt. Sta 237+37.65 18.62' Rt. ℄ Dart Ave.
P.C.C. Sta. 237+12.55 21.89 Rt. ℄ Dart Ave.
P.C.C. Sta. 237+30.86 20.00 Lt. ℄ Dart Ext.

End 6' Conc. Walk Sta. 237+85

Match Existing Boulevard St.
P.C. Sta. 237+58.86 - 14' Lt. ℄ Dart Extension

Proposed Sidewalk

6'12 Concrete Median

℄ DART EXTENSION

BOULEVARD ST.

MATCH LINE STA. 234+00 SEE SHEET 59

N52°38'57"E

Proposed Sidewalk

P.C. Sta. 234+66.45 = Sta. 234+66.45 Dart Ext. Ahead

234+75 ±

Match Existing Sidewalk at Curb

N37°11'32"W

235± 25

EXISTING RHODES AVE.

Match existing Sidewalk

Const. Limits

For Driveway Profiles See Sheet No. 149.
Drive Approach Quantities Are Included in Item 608 6" Concrete Walk.
For Drive Approach Details See Sheet No. 63.

Completed

## JOINT LEGEND

(A) Longitudinal Joint
(B) Contraction Joint
(C) Expansion Joint

Made By C.C. 8/27/79
Checked By R.J.T. 11/15/79

DART AVE. 234+00 TO 237+93.80
DART EXT. 234+66.45 TO 237+58.86
ROADWAY PLANS

FORM D D A-5

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

62
455

AKRON INNERBELT
SUM-59-0.00

TREE TO REMAIN

RUSSELL AVE.

8" SAN. SEWER

KENYON ST.

64+37.86 Russell Ave.
0+00.00 ℄ Exist Rhodes Ave.

EXIST RHODES AVE.

Begin Curb 2+77

Type C Curb

20ft

Proposed Sidewalk

16" STM. SEWER

8" SAN

6+81.68 ℄ Kenyon St. =
3+41.69 ℄ Exist Rhodes Ave.

6+07.00 ℄ Kenyon St. =
3+41.69 ℄ Exist Rhodes Ave.

End Curb 6+36

G+32.5

EXIST. RHODES AVE.

16" STM. SEWER

8" SAN SEWER

X-18

Completed

Made By C.C. 8/27/79
Checked By R.J.T. 11/16/79

# EXISTING RHODES AVE.
## ROADWAY PLANS

DRAWN BY NRE 9/19/79
CHECKED BY RJT 1/8/80

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

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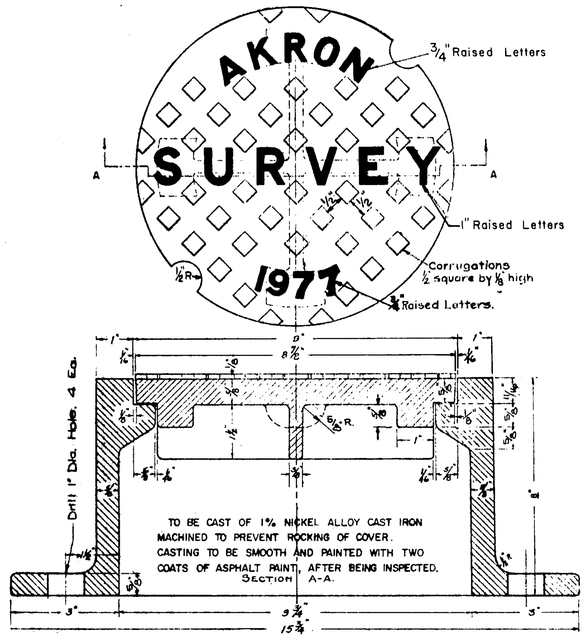
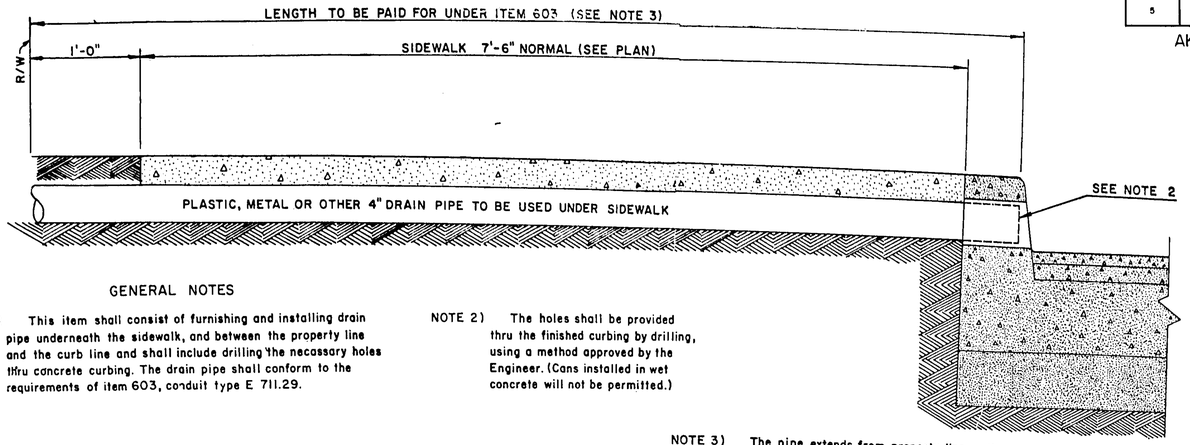
455

AKRON INNERBELT
SUM-59-0.00




CAST IRON FRAME & COVER FOR STREET MONUMENTS

NOTE: PAYMENT FOR SETTING STREET MONUMENTS AT LOCATIONS SHOWN ON THE PLAN WILL BE PAID FOR UNDER ITEM 604 - CITY OF AKRON REFERENCE MONUMENTS



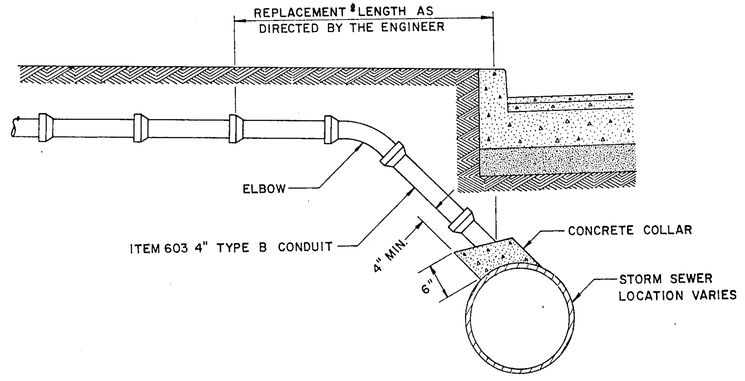

GENERAL NOTES

NOTE 1) This item shall consist of furnishing and installing drain pipe underneath the sidewalk, and between the property line and the curb line and shall include drilling the necessary holes thru concrete curbing. The drain pipe shall conform to the requirements of item 603, conduit type E 711.29.

NOTE 2) The holes shall be provided thru the finished curbing by drilling, using a method approved by the Engineer. (Cans installed in wet concrete will not be permitted.)

NOTE 3) The pipe extends from property line o the curbing. It shall be laid on the subbase on a straight grade from property line to the hole thru he curbing.

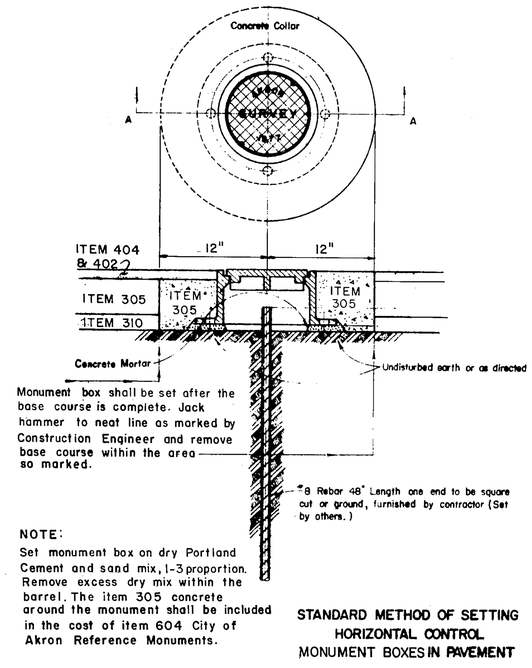
## ROOF DRAINS UNDER SIDEWALKS




## ROOF DRAIN OUTLET DETAIL

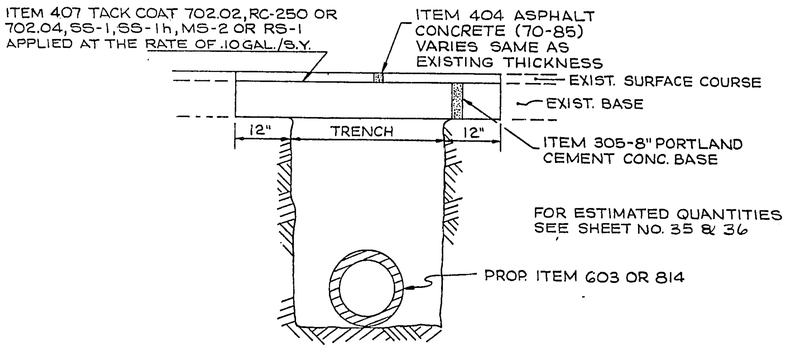



SECTION A-A

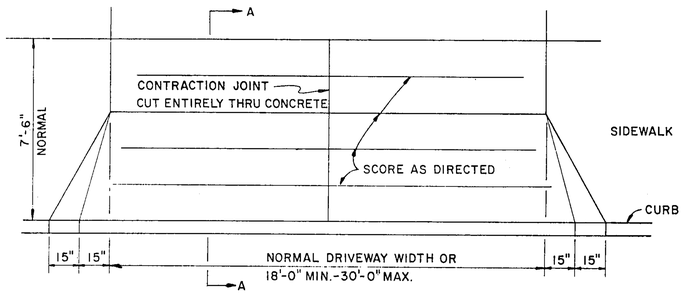



NOTE:
Set monument box on dry Portland Cement and sand mix, 1-3 proportion. Remove excess dry mix within the barrel. The item 305 concrete around the monument shall be included in the cost of item 604 City of Akron Reference Monuments.

STANDARD METHOD OF SETTING HORIZONTAL CONTROL MONUMENT BOXES IN PAVEMENT




DETAIL
PAVEMENT REPLACEMENT
FOR ITEMS 603 & 814




The cost of all work, materials and equipment necessary to construct the driveway approaches and curbs as shown on this plan will be included in the bid price for item 608 6" Concrete Walk.

## DRIVE APPROACH DETAILS

ROADWAY DETAILS

DRAWN BY BHB 10/16/79
CHECKED BY RJT 10/16/79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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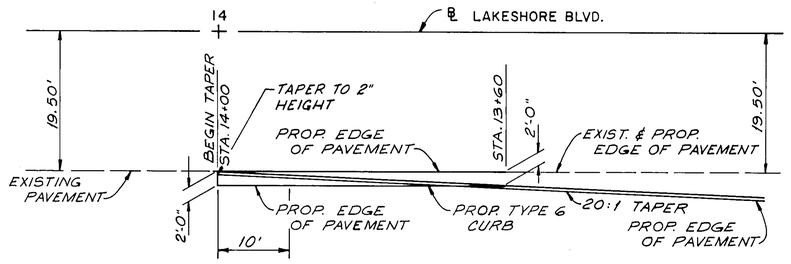
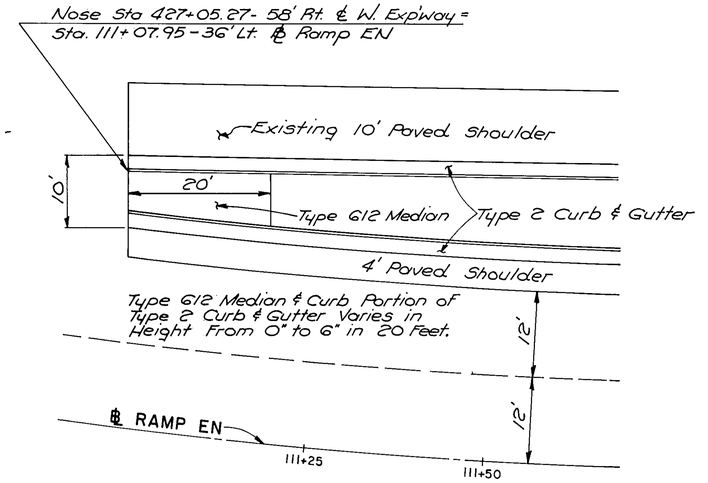
455

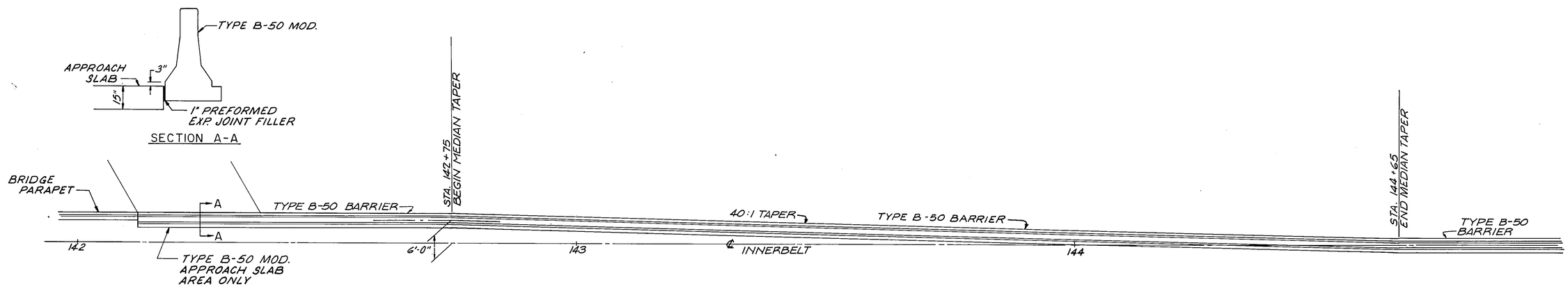
AKRON INNERBELT
SUM-59-0.00




LAKESHORE BLVD.
BEGIN TAPER DETAIL




NOSE DETAIL
RAMP EN STA. 111+07.95




CONCRETE BARRIER DETAIL
INNERBELT STA. 142+75

ROADWAY DETAILS

CALC. BY T.A.K DATE 11-26-79
CHECKED BY R.J.T DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

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455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | 2 | 29 |
| | | | |
| | | | |
| | | |

CALC. BY T.A.K DATE 11-26-79
CHECKED BY R.T.J DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-176Z(2) | |

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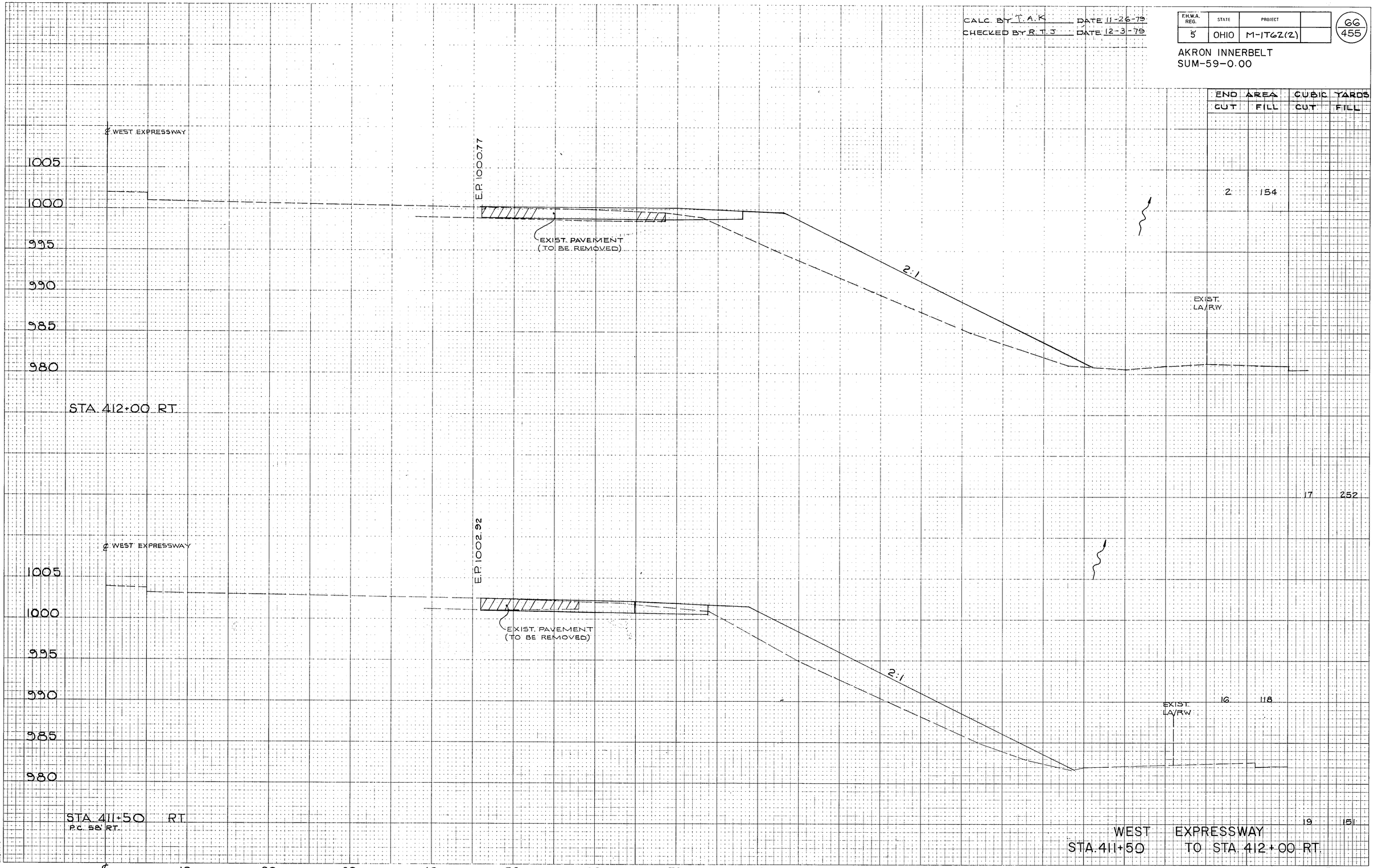
455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 2 | 154 | | |
| 17 | 252 | | |
| 19 | 151 | | |
| 16 | 118 | | |

WEST EXPRESSWAY
STA. 411+50 TO STA. 412+00 RT.

BRUNING 44-142 26372

CALC. BY T.AK DATE 11-26-79
CHECKED BY R.J.T. DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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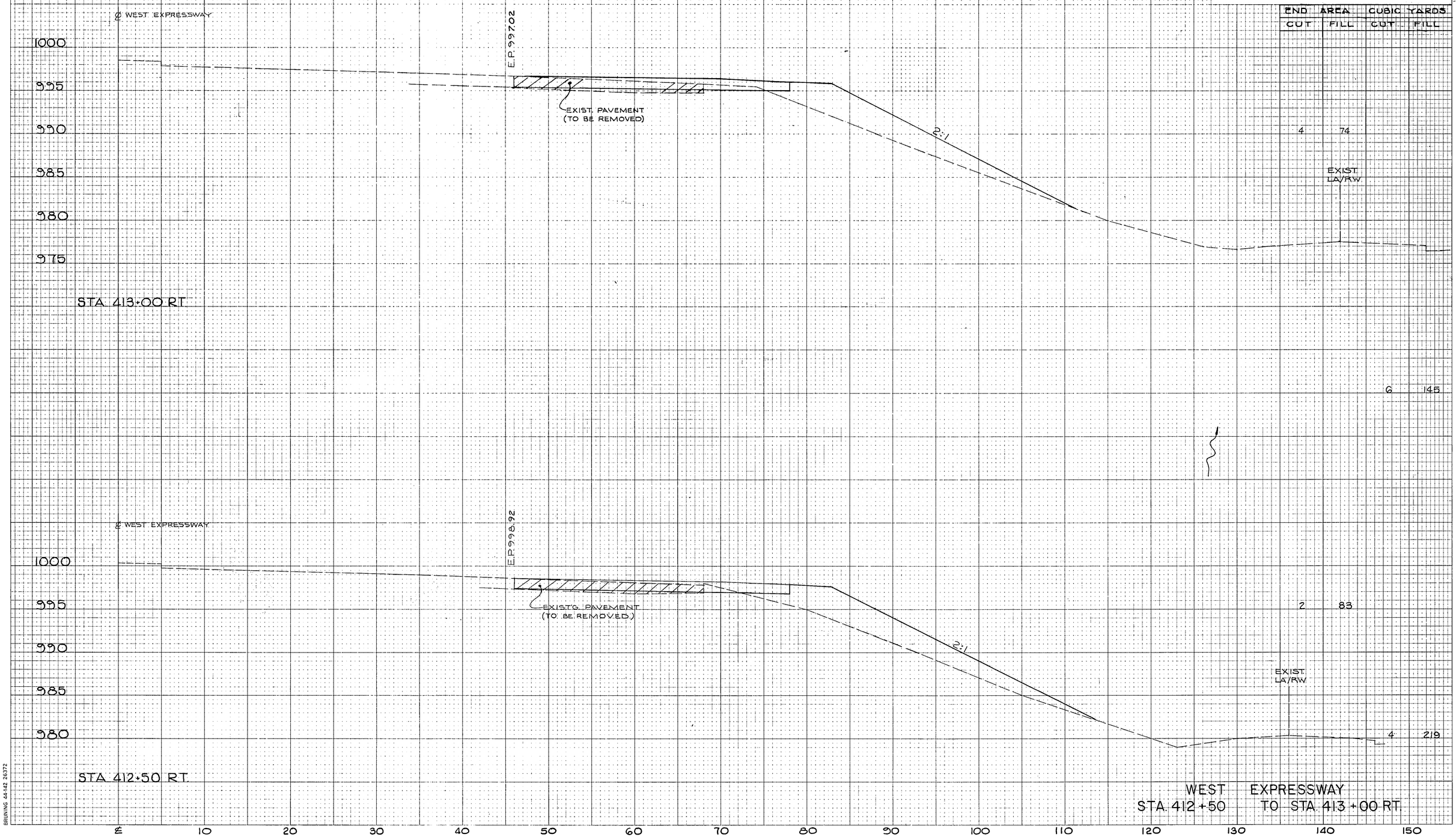
455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | | |
| | | | |
| | | | |
| 4 | 74 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 6 | 145 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 2 | 83 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 4 | 219 | | |

WEST EXPRESSWAY
STA. 412+50 TO STA. 413+00 RT

BRUNING 44-142 26372

CALC. BY T.A.K. DATE 11-26-79
CHECKED BY R.J.T. DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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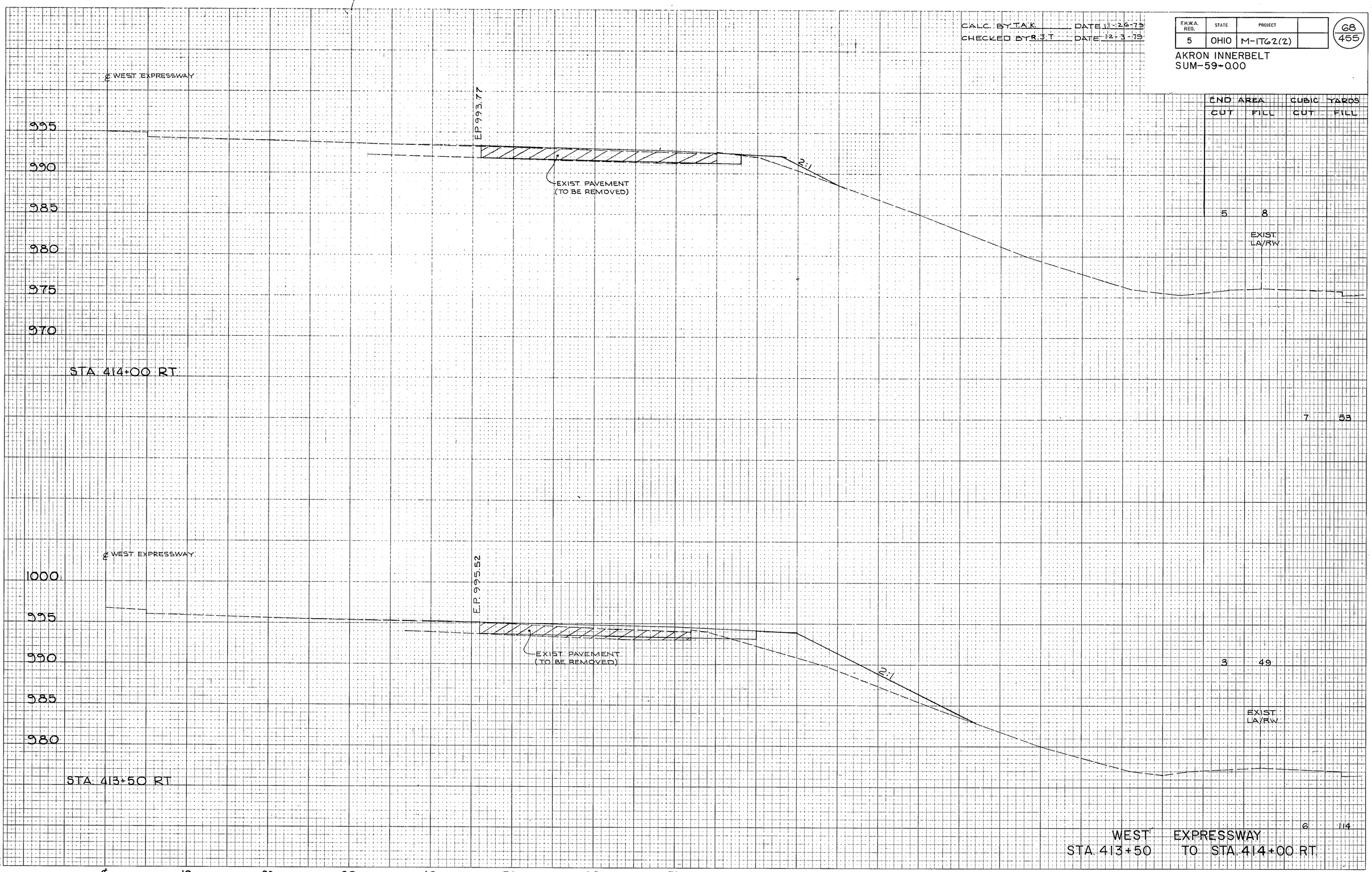
455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| 5 | 8 | | |
| EXIST. LA/RW | | | |
| | | 7 | 53 |
| | | 3 | 49 |
| EXIST. LA/RW | | | |
| | | 6 | 114 |

WEST EXPRESSWAY
STA. 413+50 TO STA. 414+00 RT.

BRUNING 44-142 26372

CALC. BY T.A.K. DATE 11-26-79
CHECKED BY R.J.T. DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1162(2) | |

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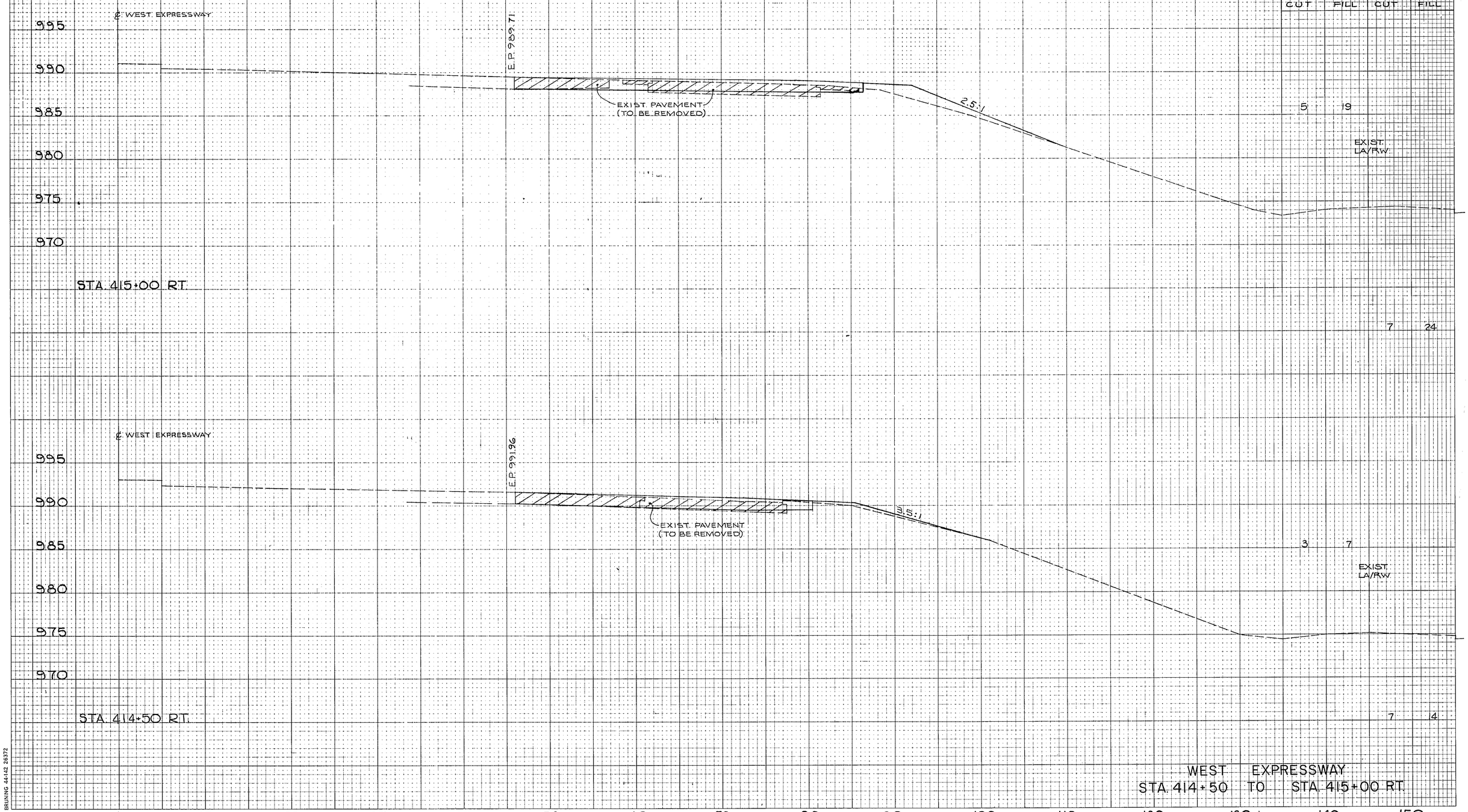
AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |




WEST EXPRESSWAY
STA. 414+50 TO STA. 415+00 RT.

BRUNING 44-142 26372

CALC. BY T.A.K. DATE 11-26-79
CHECKED BY R.J.T. DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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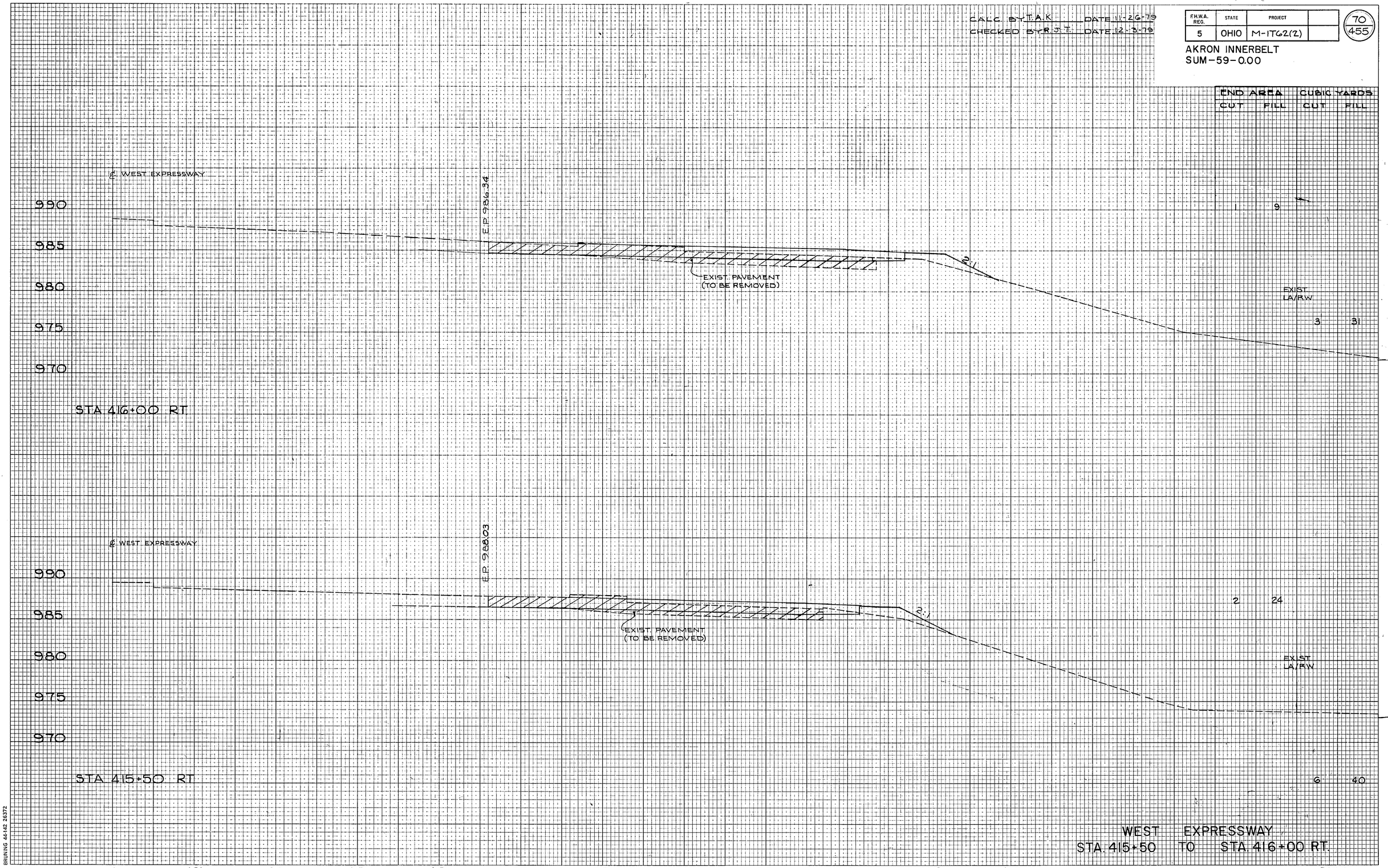
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




WEST EXPRESSWAY
STA 415+50 TO STA 416+00 RT

BRUNING 44-142 26372

CALC. BY T.A.K. DATE 11-26-79
CHECKED BY R.J.T. DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

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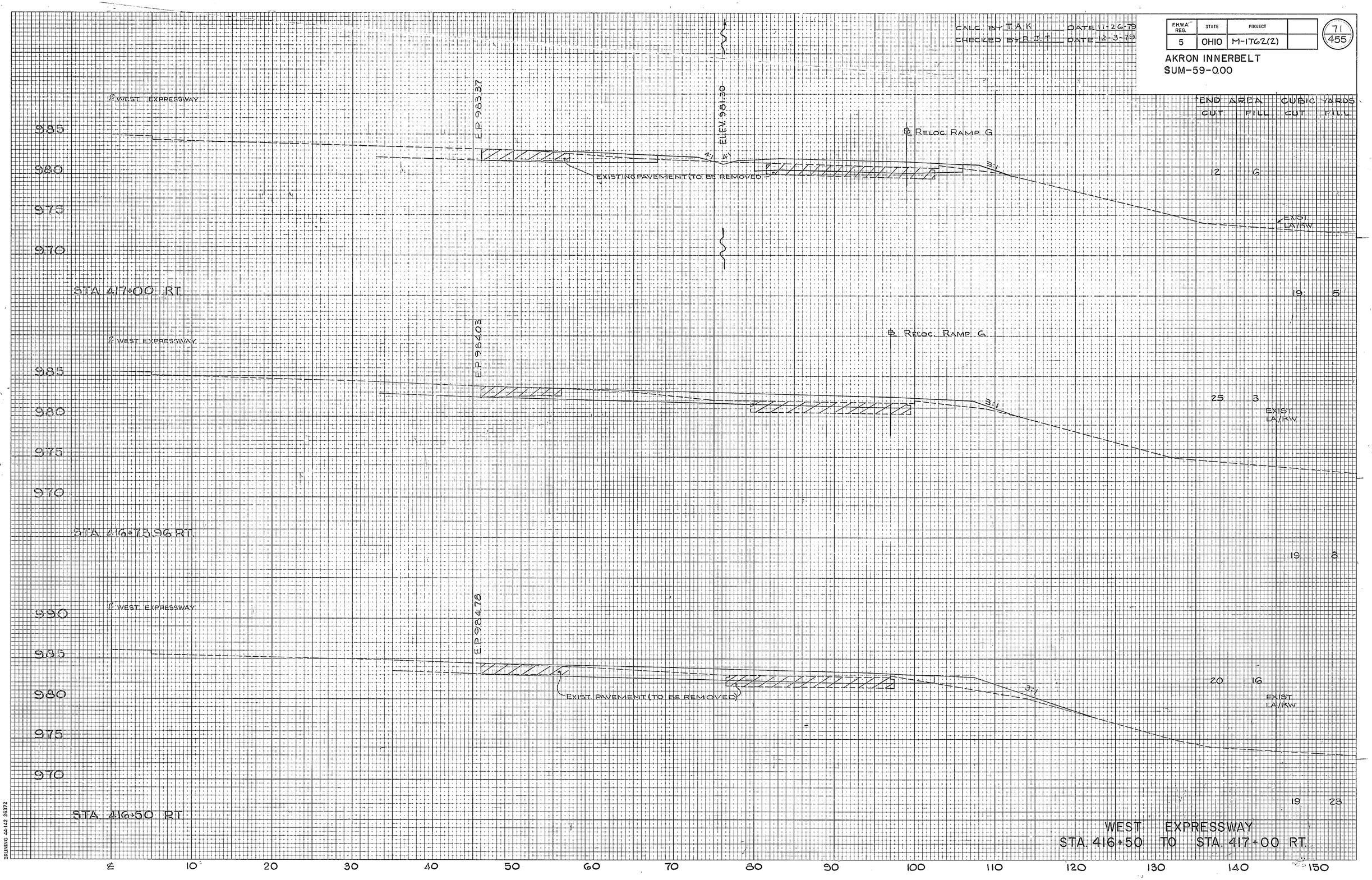
455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | 2 | | 6 |
| | 19 | | 5 |
| | 25 | | 3 |
| | 19 | | 8 |
| | 20 | | 16 |
| | 19 | | 23 |

WEST EXPRESSWAY
STA. 416+50 TO STA. 417+00 RT.

BRUNING 44-142 26372

CALC. BY: T.A.K. DATE 11-26-79
CHECKED BY: R.S.T. DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

72/455

AKRON INNERBELT
SUM-59-0.00

END AREA CUBIC YARDS
CUT FILL CUT FILL

WEST EXPRESSWAY
STA. 417+50 TO STA. 418+50 RT

BRUNING 44-142 26372

CALC. BY T.A.K DATE 11-26-79
CHECKED BY R.J.T DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(7) | |

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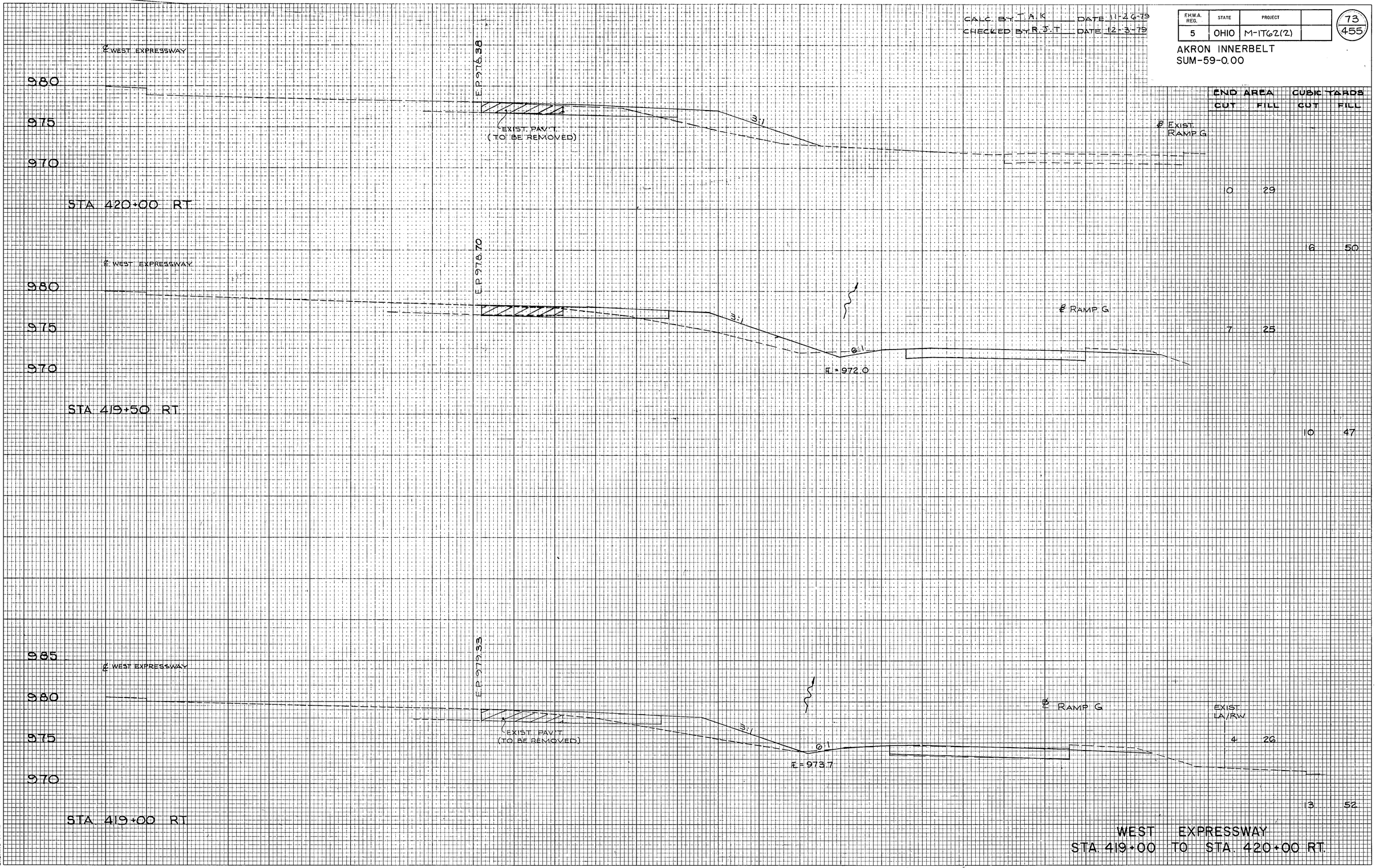
455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| 0 | 29 | | |
| | | 6 | 50 |
| 7 | 25 | | |
| | | 10 | 47 |
| 13 | 52 | | |

WEST EXPRESSWAY
STA. 419+00 TO STA. 420+00 RT.

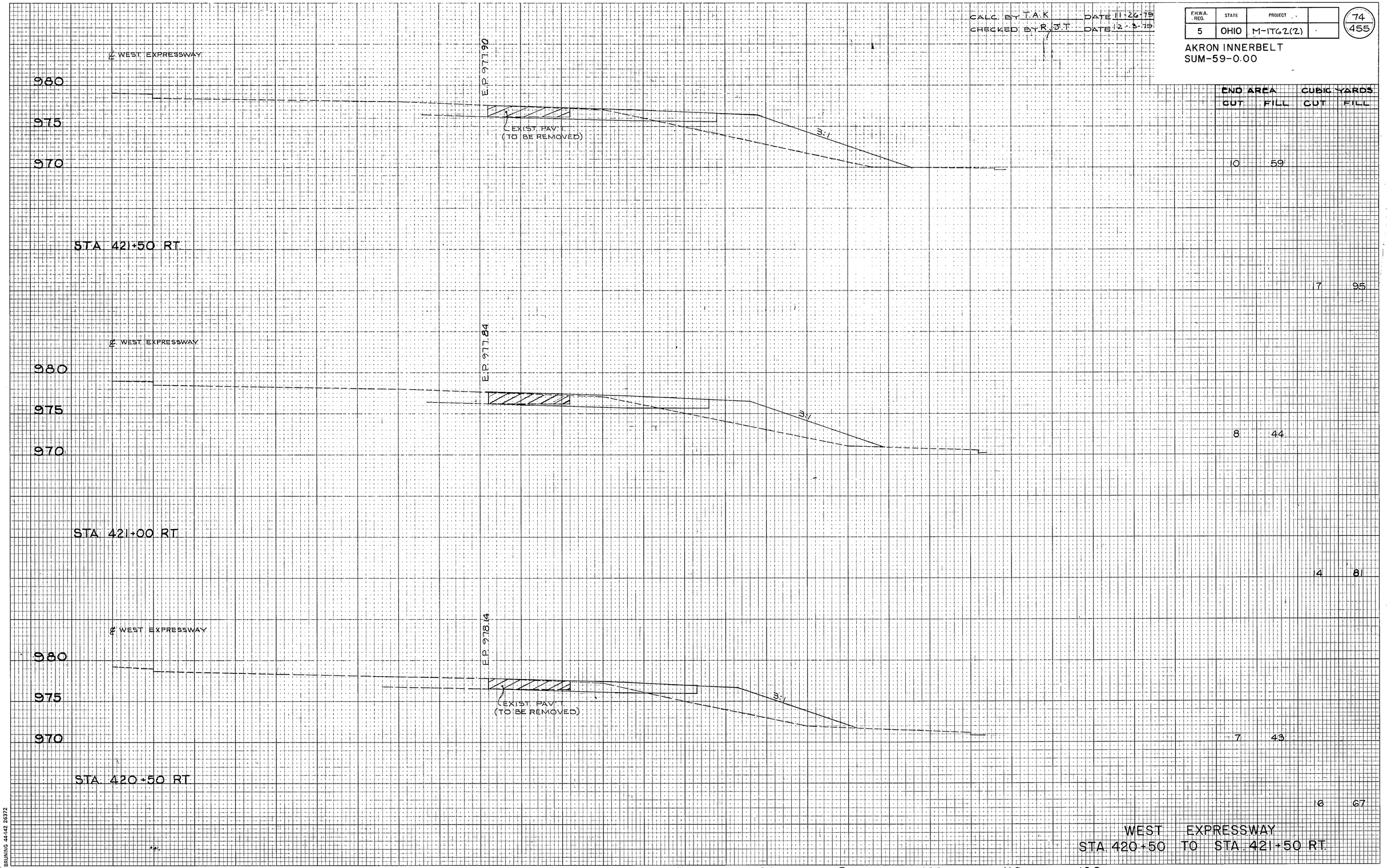
BRUNING 44-142 26372

CALC. BY T.A.K DATE 11-26-79
CHECKED BY R.J.T DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

74
455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | 10 | | 59 |
| | | 7 | 95 |
| | 8 | | 44 |
| | 4 | | 81 |
| | 7 | | 43 |
| | 6 | | 67 |

WEST EXPRESSWAY
STA. 420+50 TO STA. 421+50 RT.

BRUNING 44-142 26372

CALC. BY T.A.K. DATE 11-27-79
CHECKED BY R.J.T. DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

75/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |

℄ WEST EXPRESSWAY

980
975
970
965

E.P. 978.58

EXIST. PAV'T. (TO BE REMOVED)

3:1

STA. 423+00 RT

11 102

9 181

℄ WEST EXPRESSWAY

980
975
970
965

E.P. 978.23

3:1

9 94

STA 422+50 RT

℄ WEST EXPRESSWAY

980
975
970
965

E.P. 977.80

EXIST. PAV'T. (TO BE REMOVED)

3:1

17 153

9 71

STA 422+00 RT

18 120

℄ 10 20 30 40 50 60 70

WEST EXPRESSWAY
STA. 422+00 TO STA. 423+00 RT.

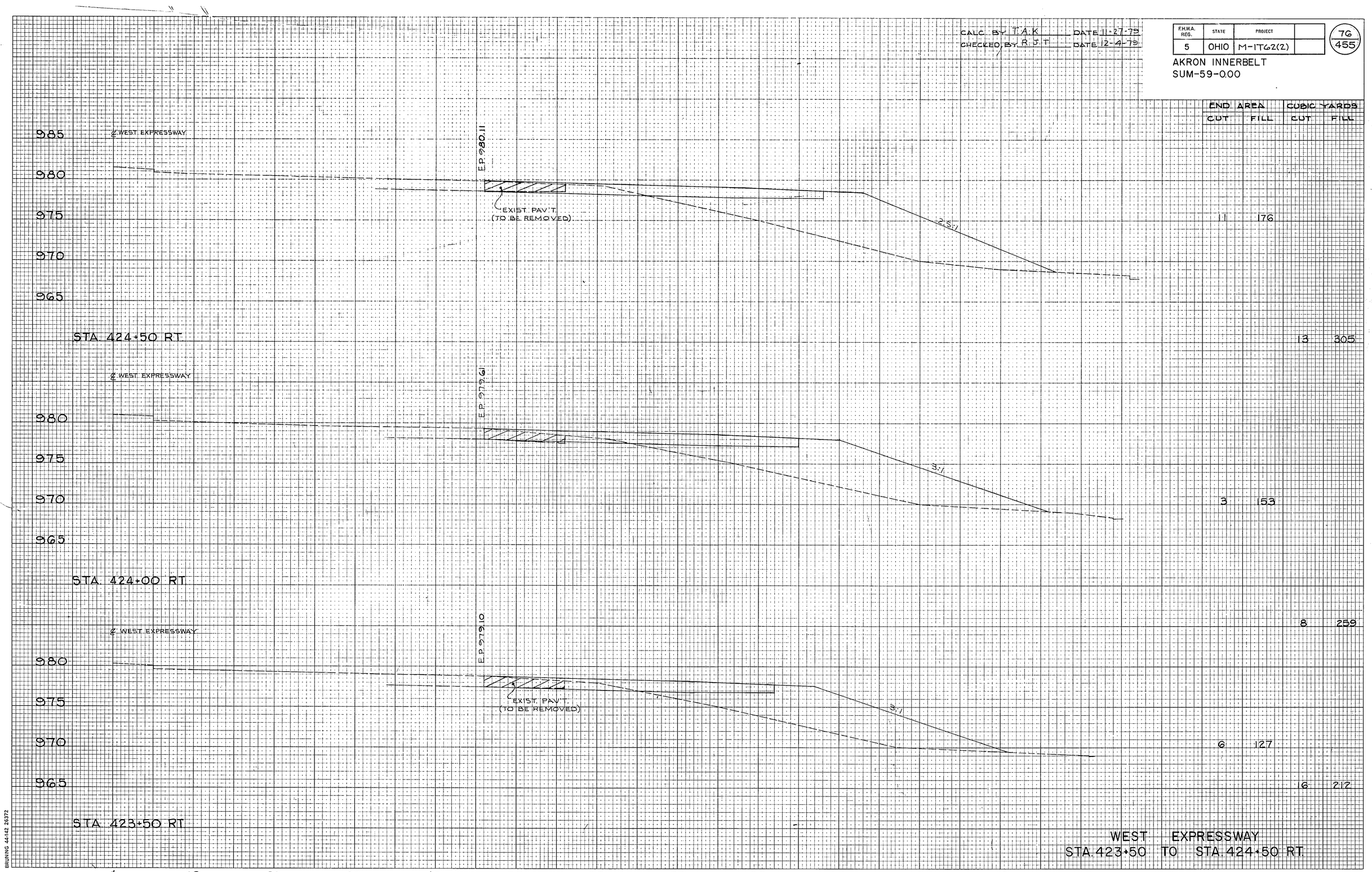
BRUNING 44-142 26372

CALC. BY T.A.K DATE 11-27-79
CHECKED BY R.J.T DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

76/455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 11 | 176 |
| | | 13 | 305 |
| | | 3 | 153 |
| | | 8 | 259 |
| | | 6 | 127 |
| | | 16 | 212 |

WEST EXPRESSWAY
STA. 423+50 TO STA. 424+50 RT

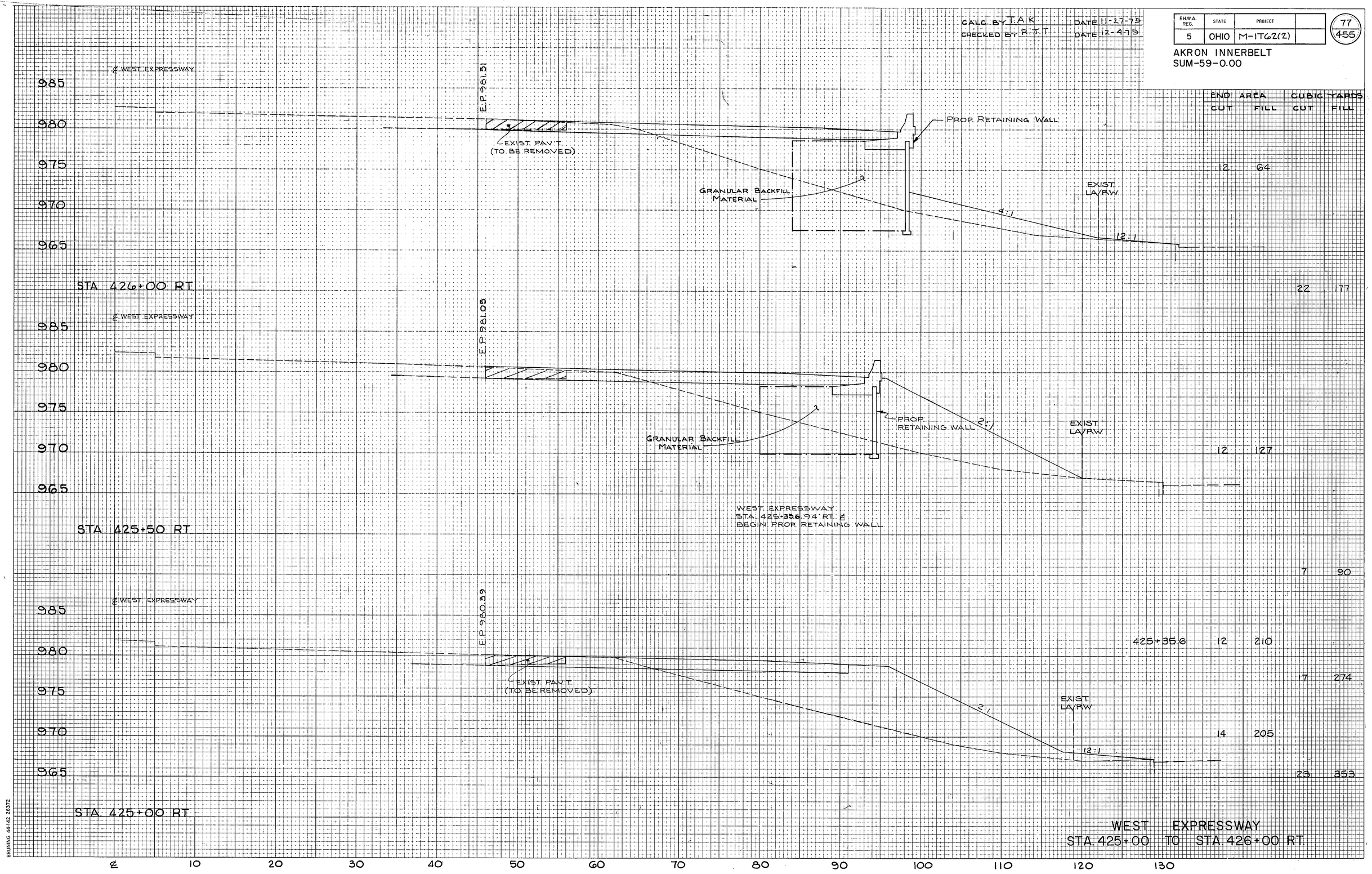
BRUNING 44-142 26372

CALC. BY T.A.K DATE 11-27-75
CHECKED BY R.J.T DATE 12-4-75

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

77 / 455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 12 | 64 |
| | | 22 | 77 |
| | | 12 | 127 |
| | | 7 | 90 |
| 425+35.6 | | 12 | 210 |
| | | 17 | 274 |
| | | 14 | 205 |
| | | 23 | 353 |

WEST EXPRESSWAY
STA. 425+00 TO STA. 426+00 RT.

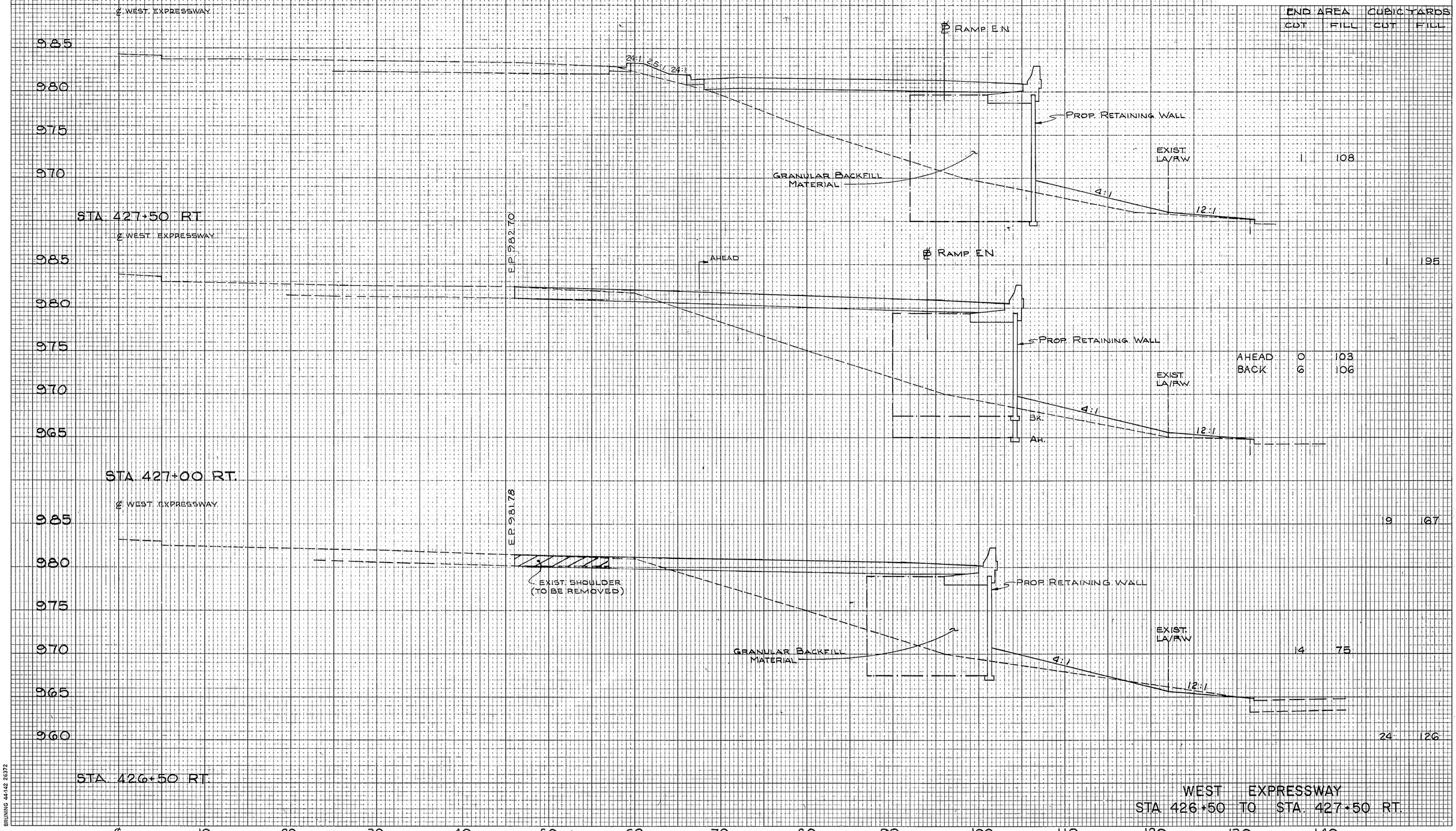
BRUNING 44-142 26372

CALC. BY T.A.K DATE 11-28-79
CHECKED BY R.J.T DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T67.(2) | |

78/455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 1 | 108 |
| | | 1 | 195 |
| AHEAD | 0 | | 103 |
| BACK | 6 | | 106 |
| | | 9 | 67 |
| | | 14 | 75 |
| | | 24 | 126 |

WEST EXPRESSWAY
STA. 426+50 TO STA. 427+50 RT.

BRUNING 44-142 26372

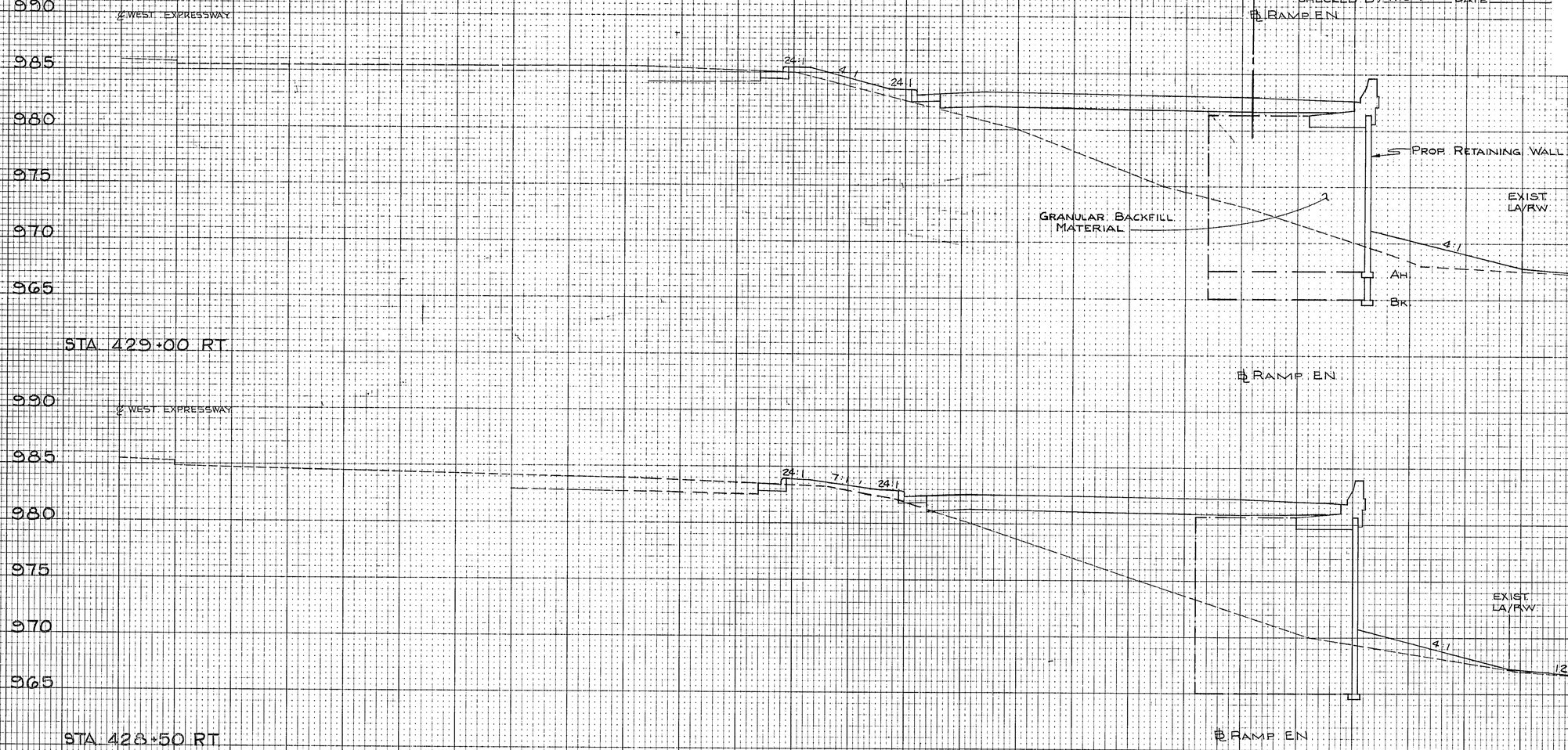
CALC. BY T.A.K DATE 11-28-79
CHECKED BY R.J.T DATE 12-5-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

79/455

AKRON INNERBELT
SUM-59-0.00

STA 429+00 RT




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | | |
| | | |

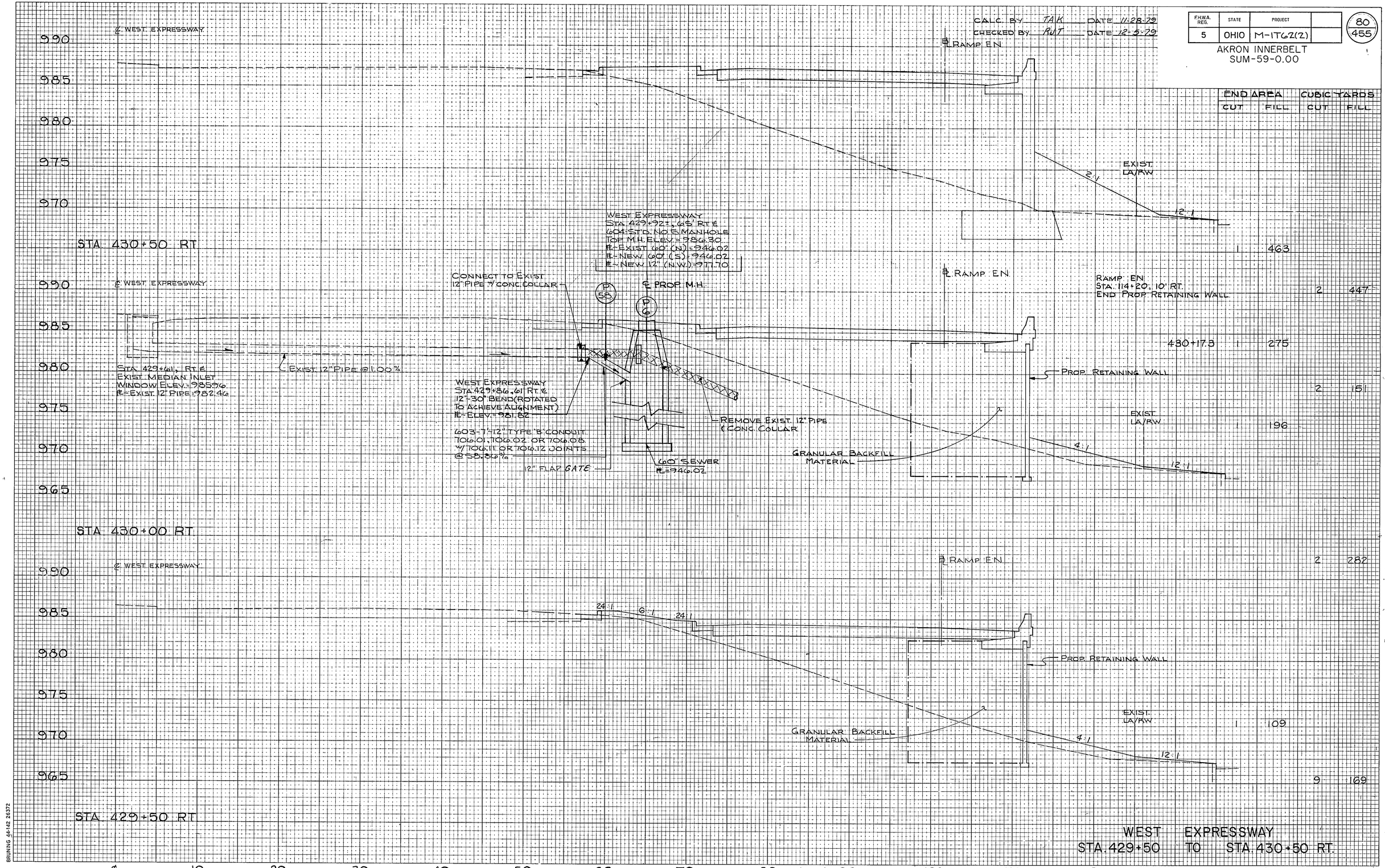
CALC. BY TAK DATE 11-28-79
CHECKED BY RJT DATE 12-5-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

80 / 455

AKRON INNERBELT
SUM-59-0.00

| | END AREA | | CUBIC YARDS | |
|---|---|---|---|---|
| | CUT | FILL | CUT | FILL |
| 463 | | | | |
| 447 | | | | |
| 275 | | | | |
| 151 | | | | |
| 196 | | | | |
| 282 | | | | |
| 109 | | | | |
| 169 | | | | |




WEST EXPRESSWAY
STA. 429+50 TO STA. 430+50 RT.

BRUNING 44-142 26372

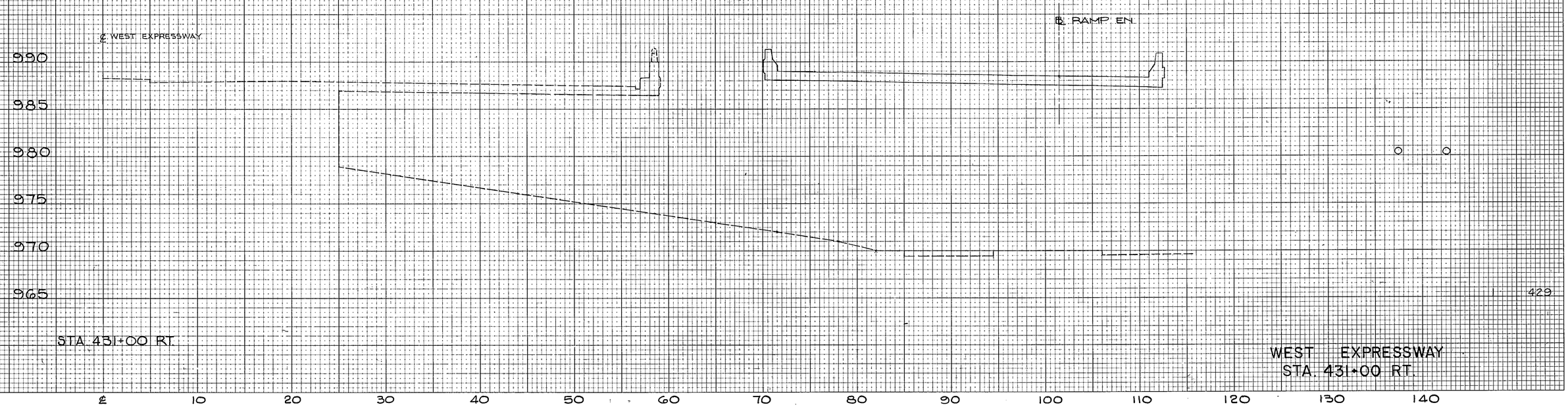
CALC. BY TAK DATE 11-28-79
CHECKED BY RJT DATE 12-5-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITGZ(2) | |

81
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




BRUNING 44-142 26372

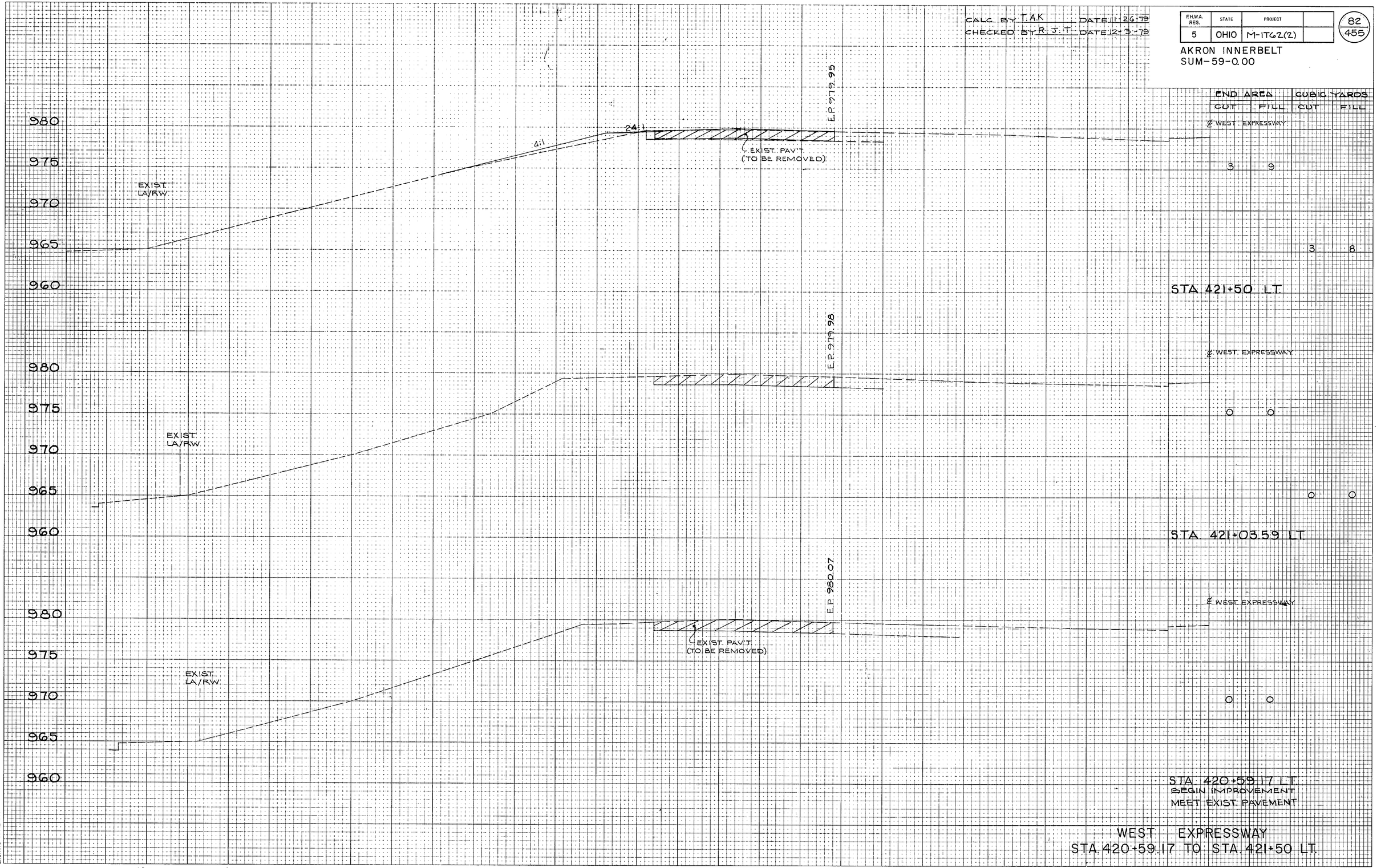
CALC. BY T.A.K. DATE 11-26-79
CHECKED BY R.J.T. DATE 12-3-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

82
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | 3 | 9 |
| | | 3 | 8 |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 0 | 0 |




WEST EXPRESSWAY
STA 420+59.17 TO STA 421+50 LT.

BRUNING 44-142 26372

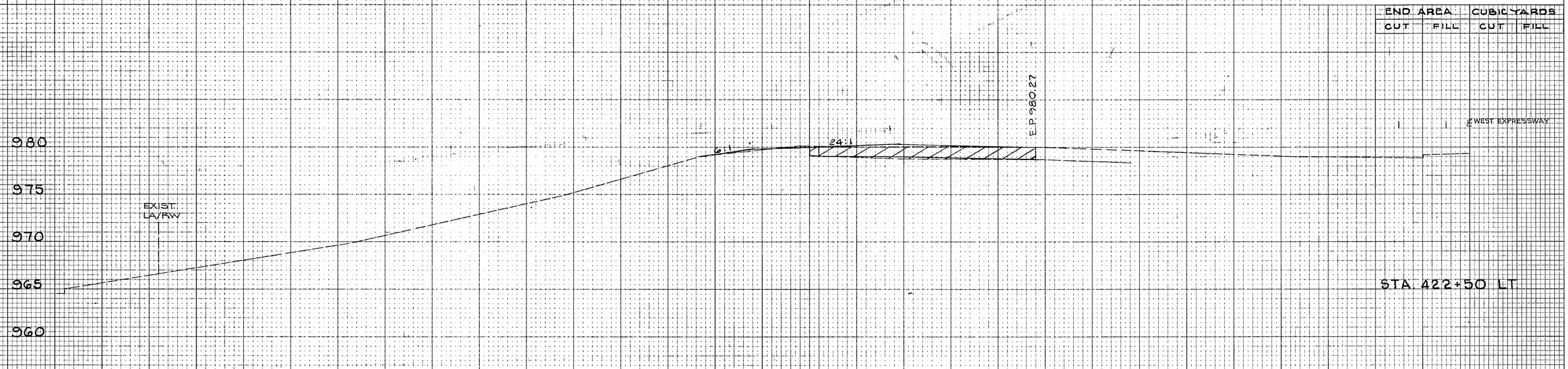
CALC. BY T.A.K DATE 11-27-79
CHECKED BY R.J.T DATE 12-4-79

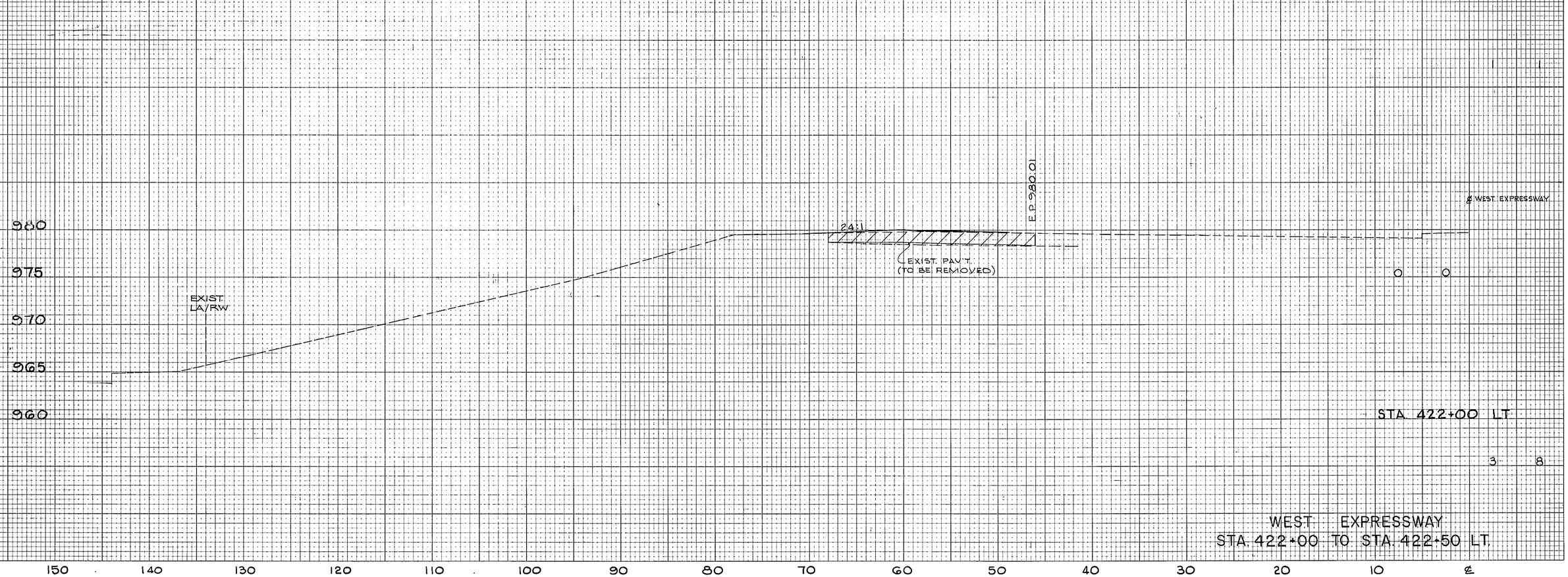
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

83
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




3 8

WEST EXPRESSWAY
STA. 422+00 TO STA. 422+50 LT

BRUNING 44-142 26372

CALC. BY T.A.K. DATE 11-27-79
CHECKED BY R.J.T. DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

84/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

EXIST. LA/RW

970
965

160 150 145

A
A

980
975
970
965

A
A

24:1

E.P. 981.23

℄ WEST EXPRESS'Y

STA 423+50 LT

980
975
970
965

EXIST. LA/RW

24:1

E.P. 980.66

EXIST. PAV'T. (TO BE REMOVED)

℄ WEST EXPRESS'Y

STA 423+00 LT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

WEST EXPRESSWAY
STA. 423+00 TO STA. 423+50 LT.

BRUNING 44-142 26372

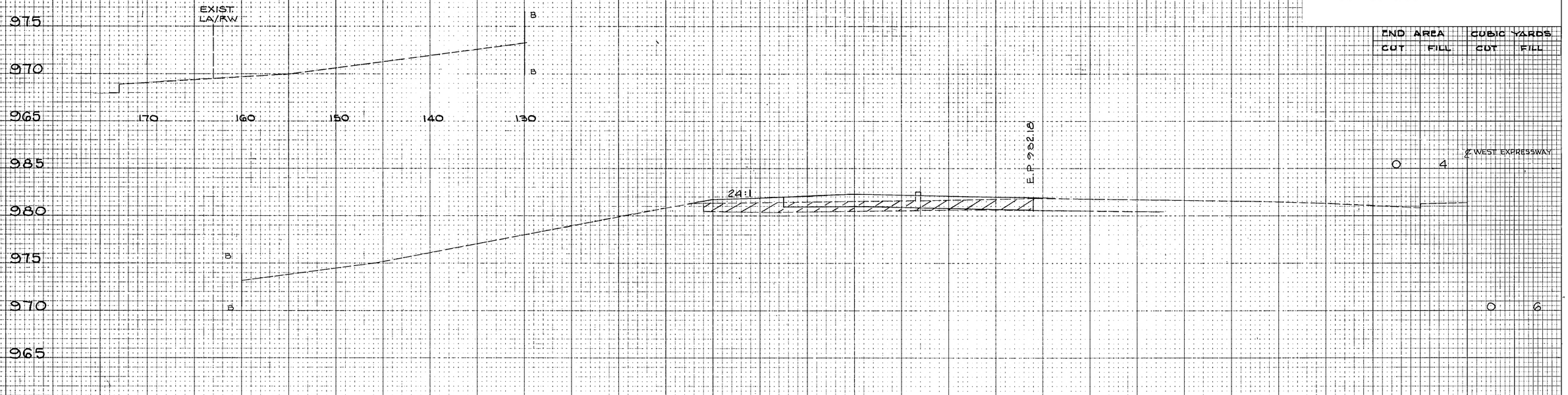
CALC. BY T.A.K. DATE 11-27-79
CHECKED BY R.J.T. DATE 12-4-79

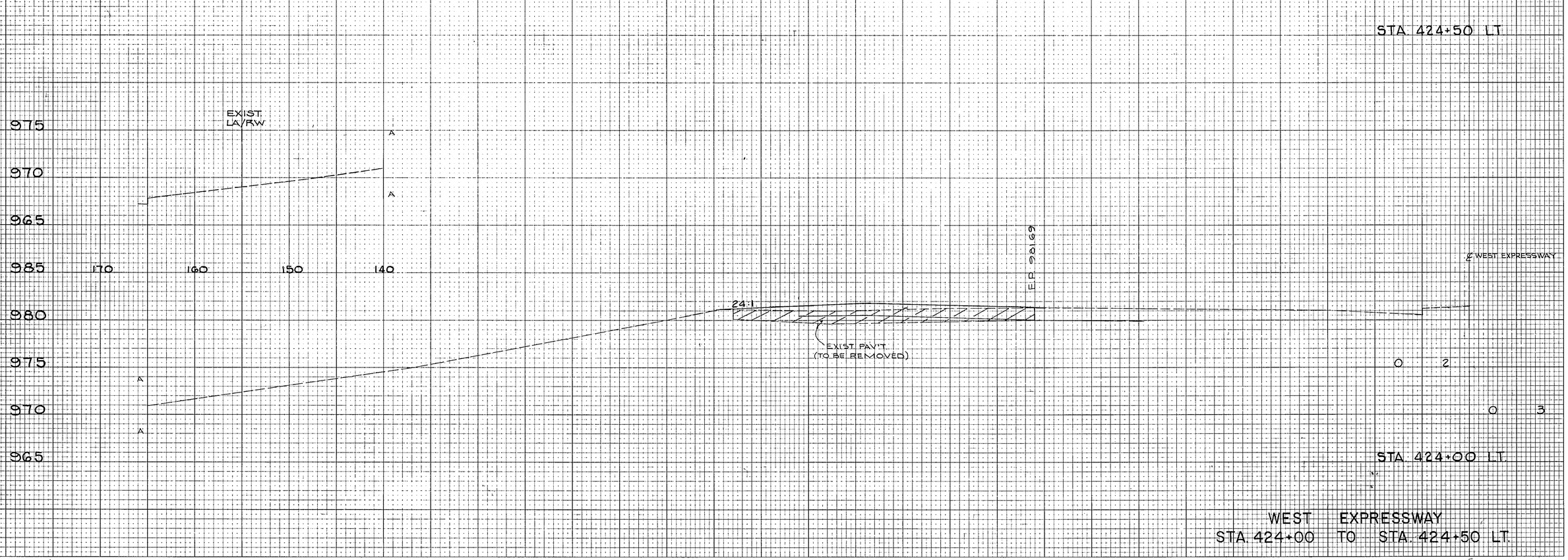
| FHWA REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

85/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




WEST EXPRESSWAY
STA. 424+00 TO STA. 424+50 LT.

BRUNING 44-142 26372

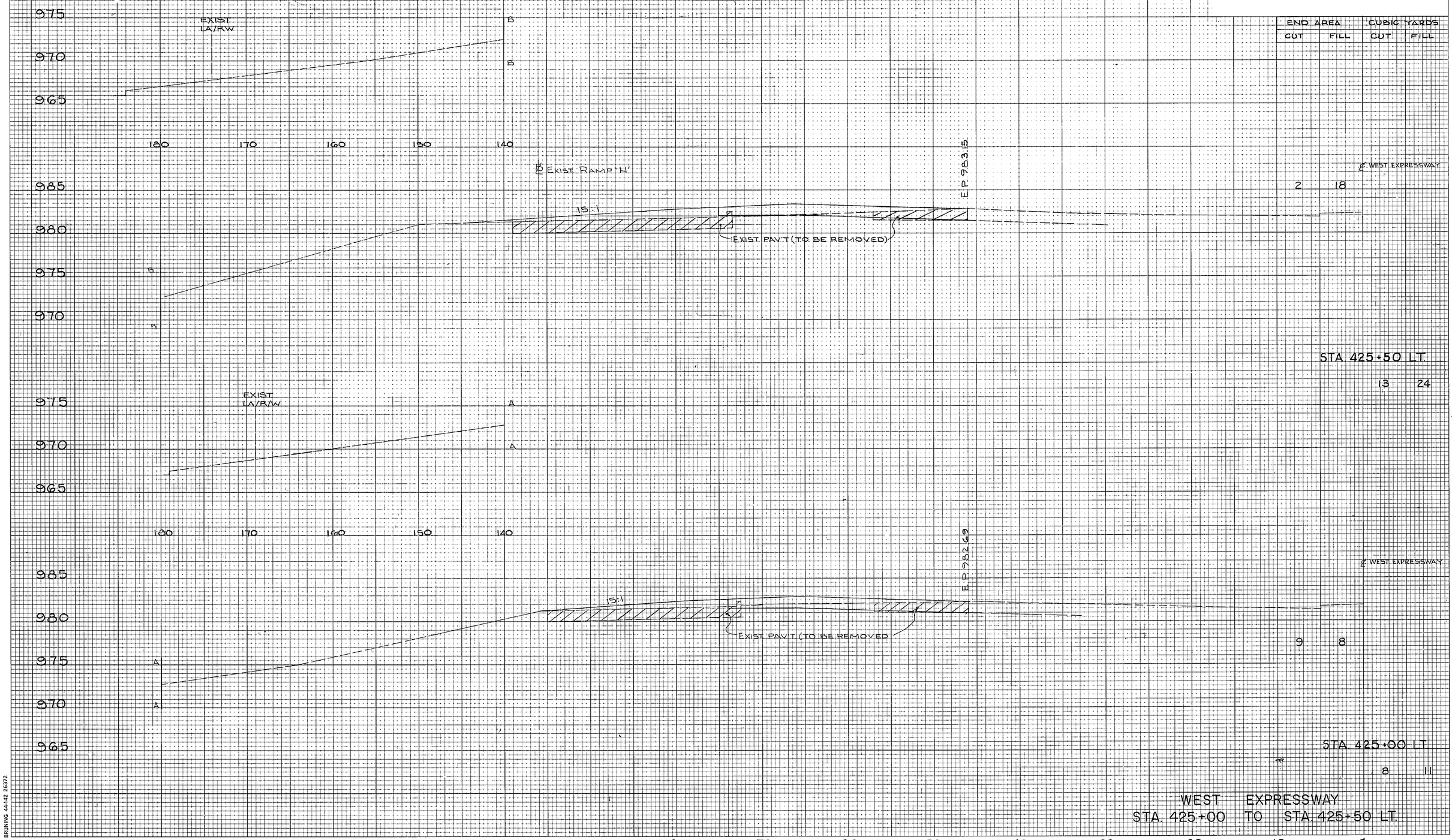
CALC. BY T.A.K. DATE 11-27-79
CHECKED BY R.J.T. DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1767(2) | |

86
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |




WEST EXPRESSWAY
STA. 425+00 TO STA. 425+50 LT.

BRUNING 44-142 26372

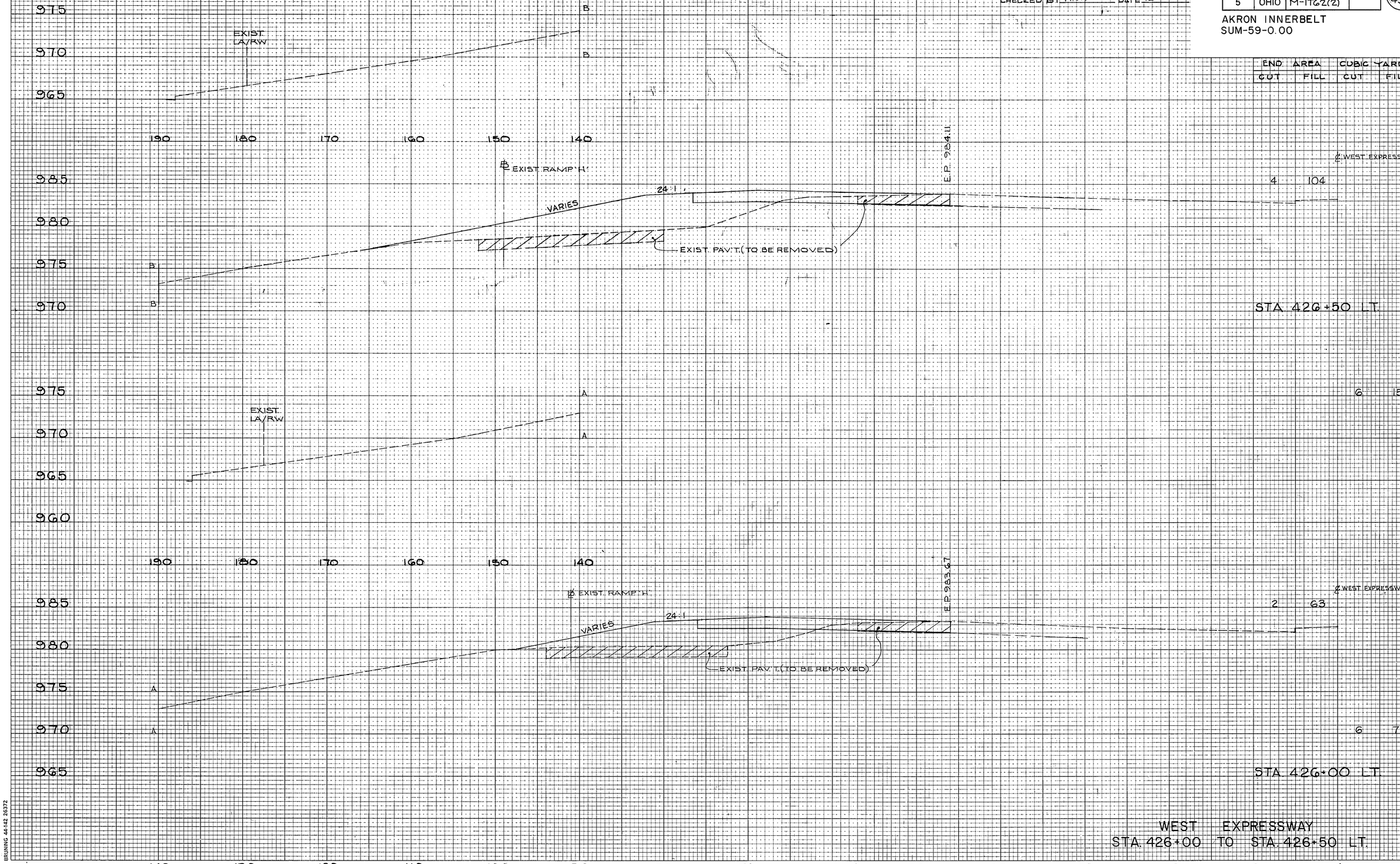
CALC. BY T.A.K. DATE 11-28-79
CHECKED BY R.J.T. DATE 12-5-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

87/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




WEST EXPRESSWAY
STA. 426+00 TO STA. 426+50 LT.

BRUNING 44-142 26372

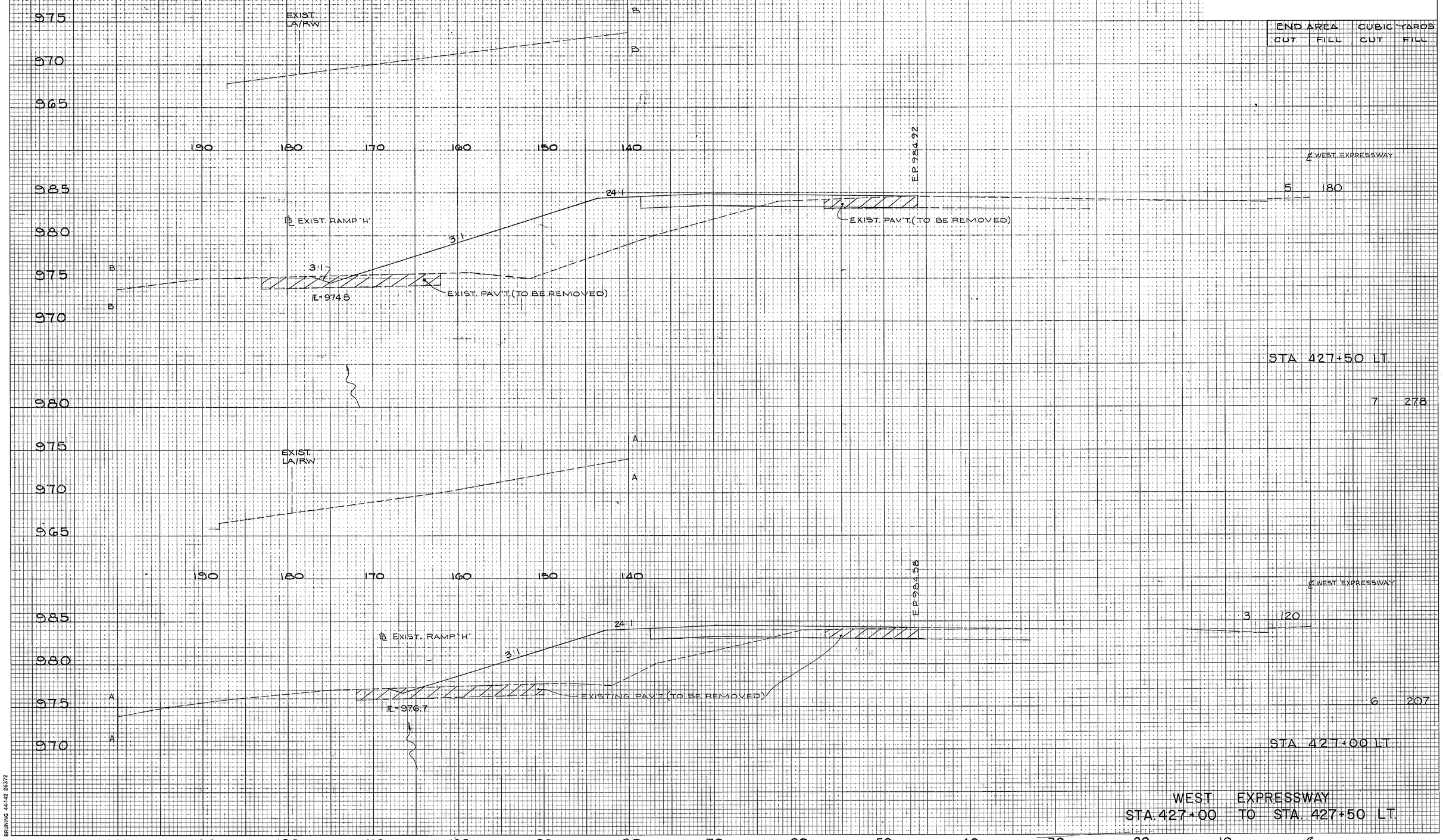
CALC. BY T.A.K DATE 11-29-79
CHECKED BY R.J.T DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

88/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |




WEST EXPRESSWAY
STA. 427+00 TO STA. 427+50 LT.

BRUNING 44-142 26372

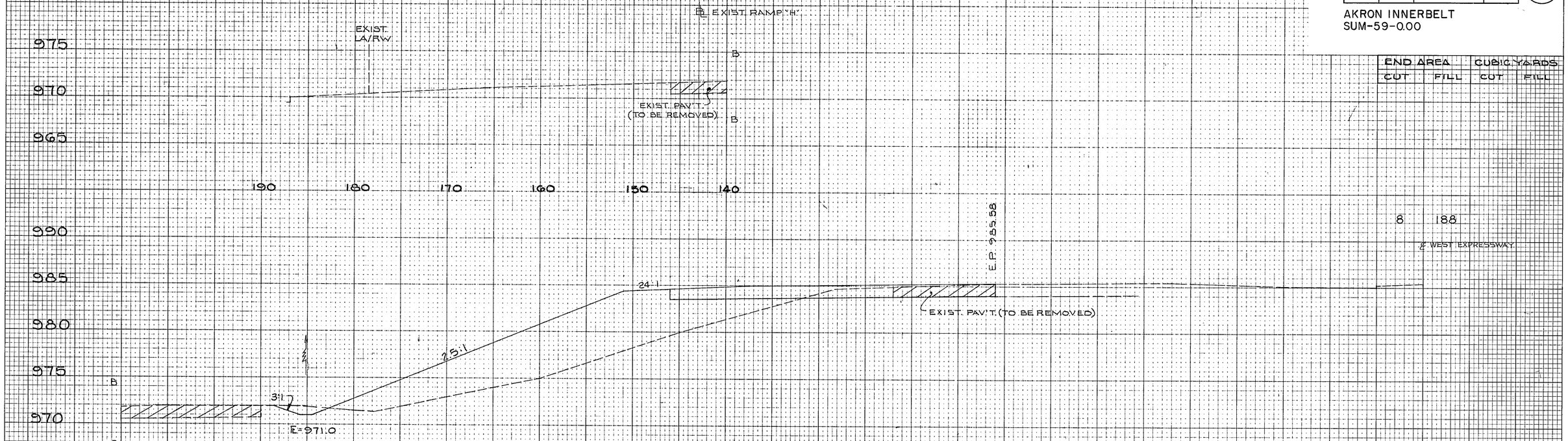
CALC. BY T.A.K DATE 11-28-79
CHECKED BY R.J.T DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1162(2) | |

89/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




WEST EXPRESSWAY
STA. 428+00 TO STA. 428+50 LT.

BRUNING 44-142 26372

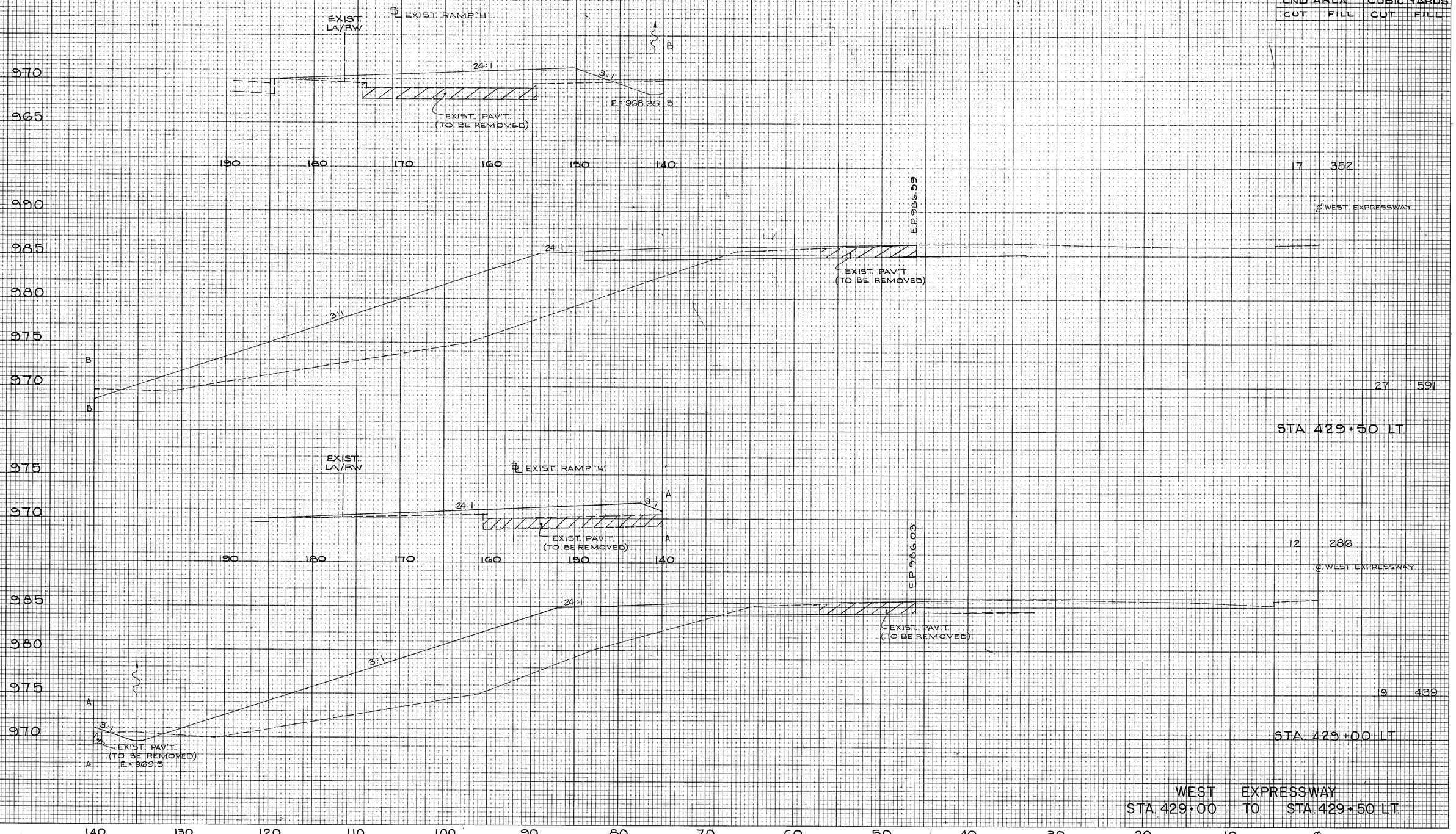
CALC. BY T.A.K. DATE 11-28-79
CHECKED BY R.J.T. DATE 12-5-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

90/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |




BRUNING 44-142 26372

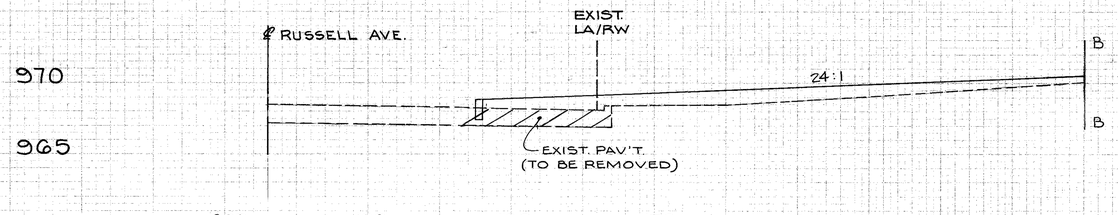
CALC. BY T.A.K DATE 11-28-79
CHECKED BY R.J.T DATE 12-5-79

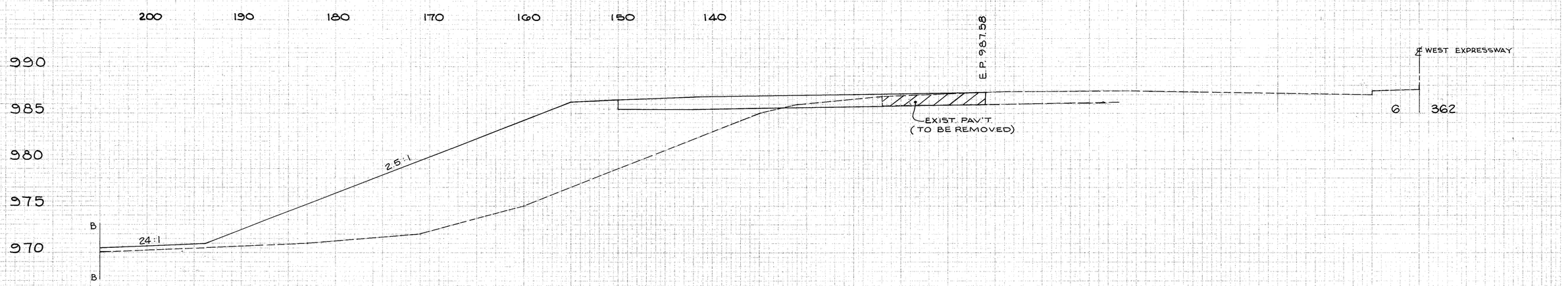
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

91
455

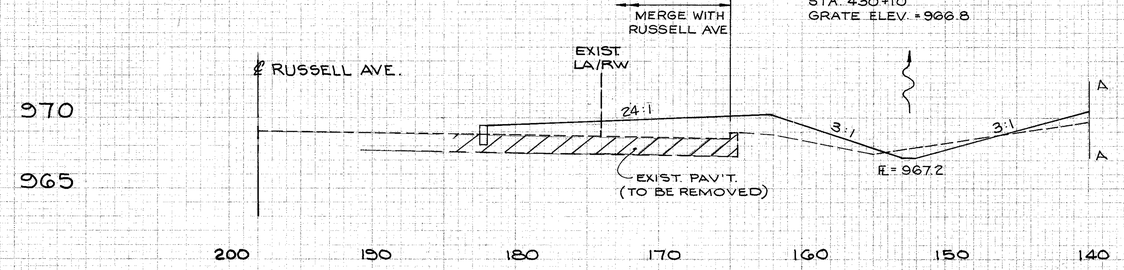
AKRON INNERBELT
SUM-59-0.00

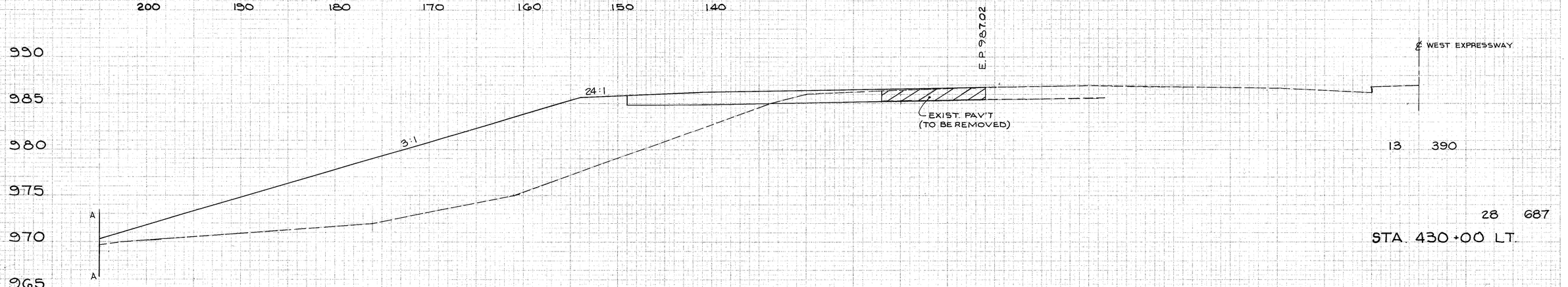
| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




STA. 430+50 LT.




18 696

13 390

28 687

STA. 430+00 LT.

WEST EXPRESSWAY
STA. 430+00 TO STA. 430+50 LT.

BRUNING 44480 25372

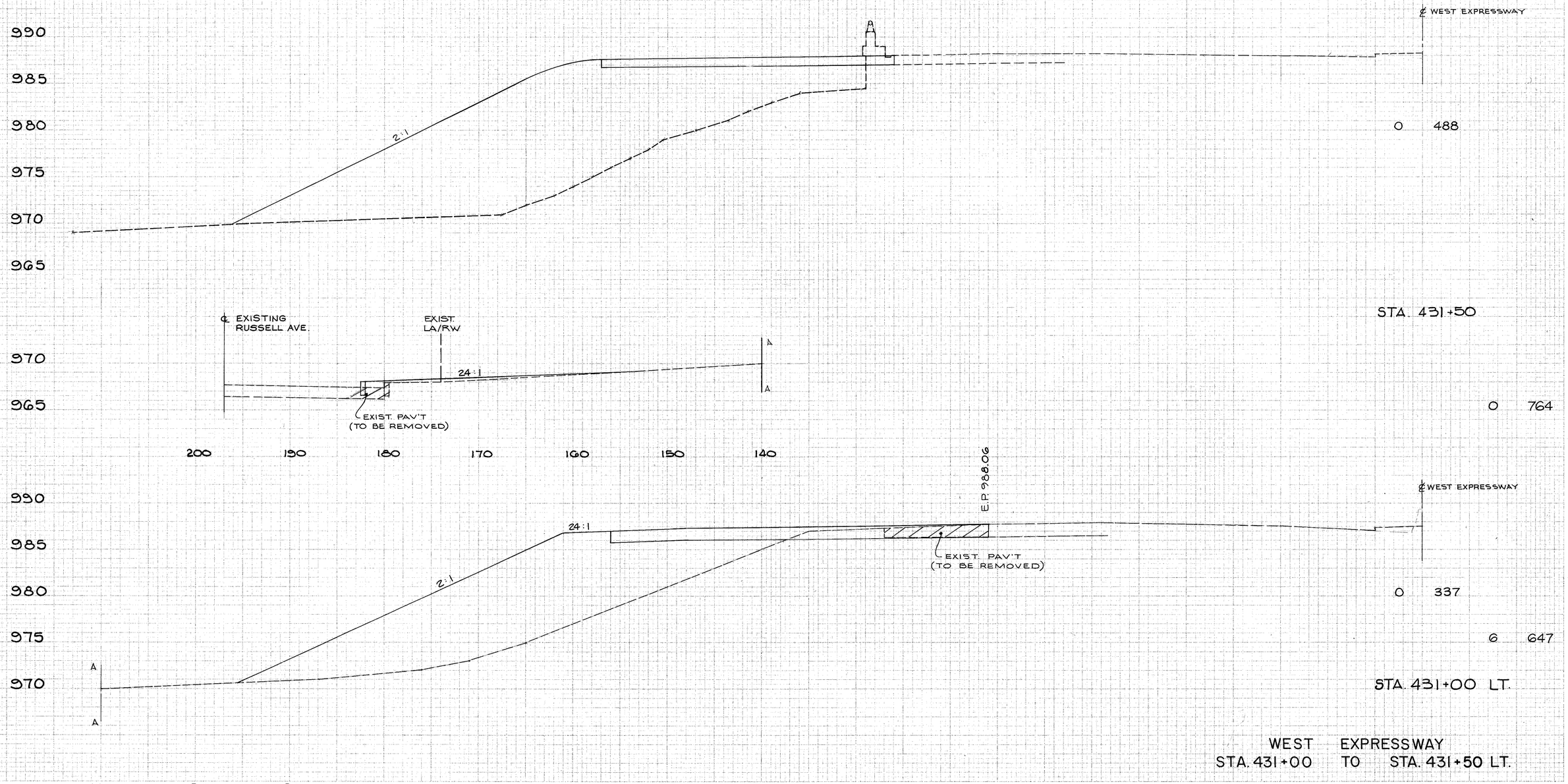
CALC. BY TAK DATE 11-28-79
CHECKED BY RJT DATE 12-5-79

| F.H.W.A. REG. | STATE | PROJECT |
|---|---|---|
| 5 | OHIO | M-ITG2(2) |

92
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




WEST EXPRESSWAY
STA. 431+00 TO STA. 431+50 LT.

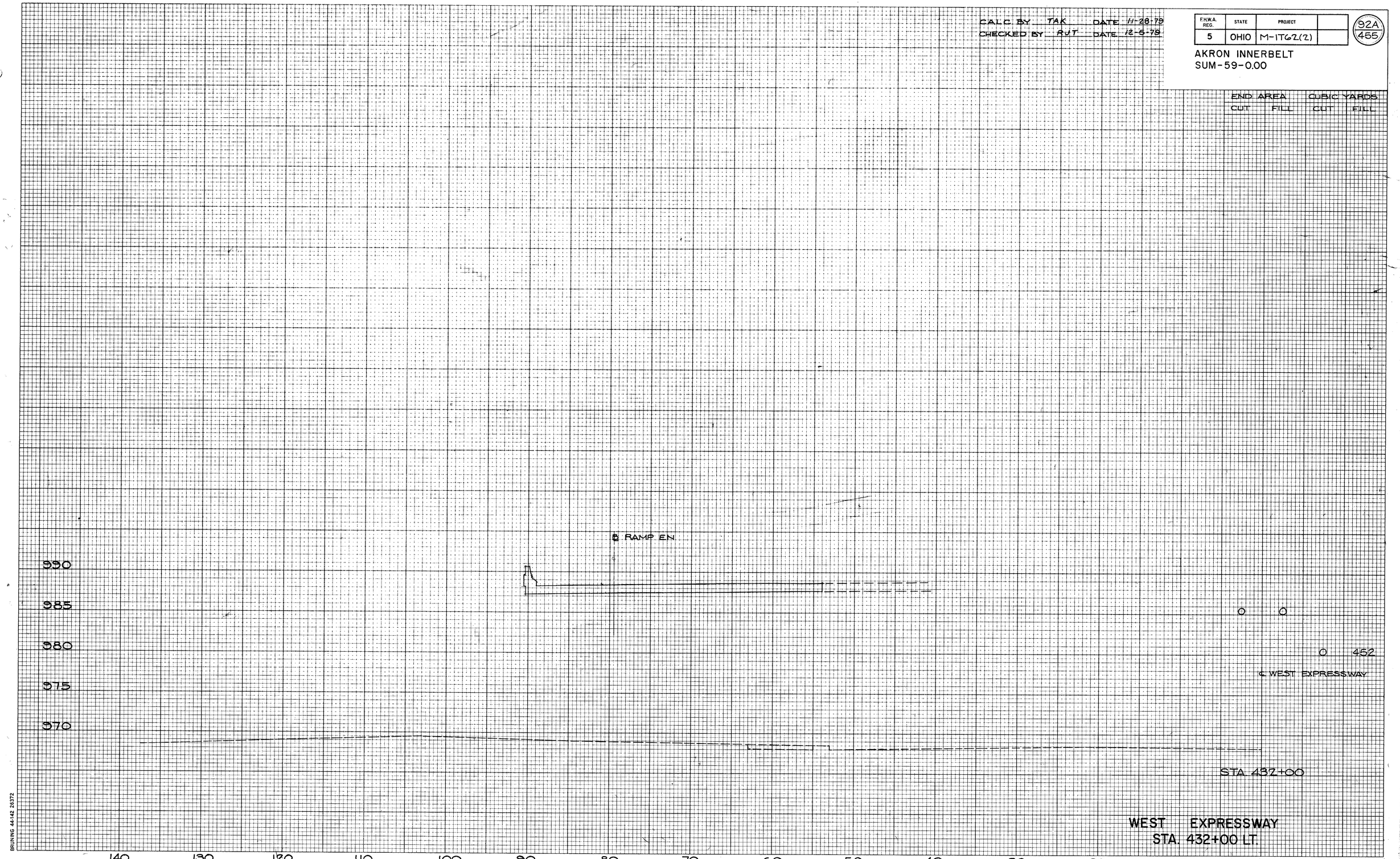
CALC. BY TAK DATE 11-28-79
CHECKED BY RJT DATE 12-5-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1162(2) | |

92A
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




WEST EXPRESSWAY
STA. 432+00 LT.

BRUNING 44-142 26372

CALC. BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-6-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

93/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |

955
950
985
980
975
970
965

E.O.P. RHODES AVE

EXIST. LA/RW

24:1

℄ INNERBELT

26 3

MATCH LINE FOR RIGHT SIDE SEE SHT NO 96

9885

STA. 143+00 LT.
P.G. 989.01

57 4

955
950
985
980
975
970

E.O.P. RHODES AVE

EXIST. LA/RW

24:1

℄ INNERBELT

36

MATCH LINE FOR RIGHT SIDE SEE SHT NO 98

990.7

STA. 142+50 LT.
P.G. 990.51

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

INNERBELT
STA. 142+50 TO STA. 143+00 LT.

BRUNING 44-142 26372

CALC. BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-6-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

94/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |

985
980
975
970
E.O.P. RHODES AVE
EXIST. LA/RW

24:1

℄ INNERBELT
53 0
MATCH LINE - FOR RIGHT SIDE SEE SHT. NO. 99
984.5
STA. 144+50 LT.
P.G. 984.51

990
985
980
975
970
E.O.P. RHODES AVE
EXIST. LA/RW

24:1

76 4
℄ INNERBELT
29 4
75 7
986.0
STA. 144+00 LT.
P.G. 986.01

990
985
980
975
970
E.O.P. RHODES AVE
EXIST. LA/RW

24:1

℄ INNERBELT
52 4
MATCH LINE - FOR RIGHT SIDE SEE SHEET NO. 98
987.4
STA. 143+50 LT.
P.G. 987.51
70 6

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

**INNERBELT**
STA. 143+50 TO STA. 144+50 LT.

BRUNING 44142 26372

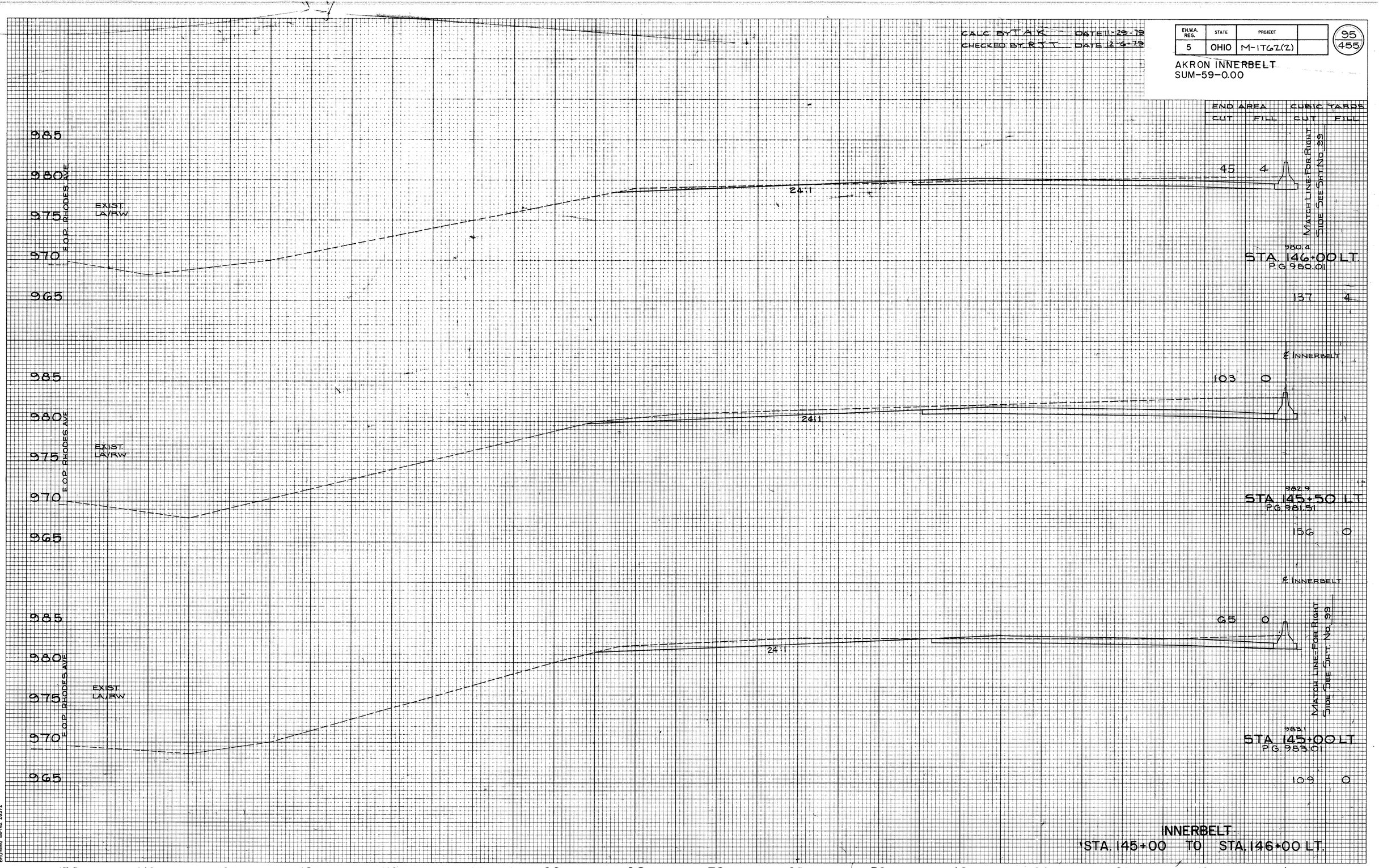
CALC. BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-6-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

95/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |




INNERBELT
STA. 145+00 TO STA. 146+00 LT.

BRUNING 44-142 26372

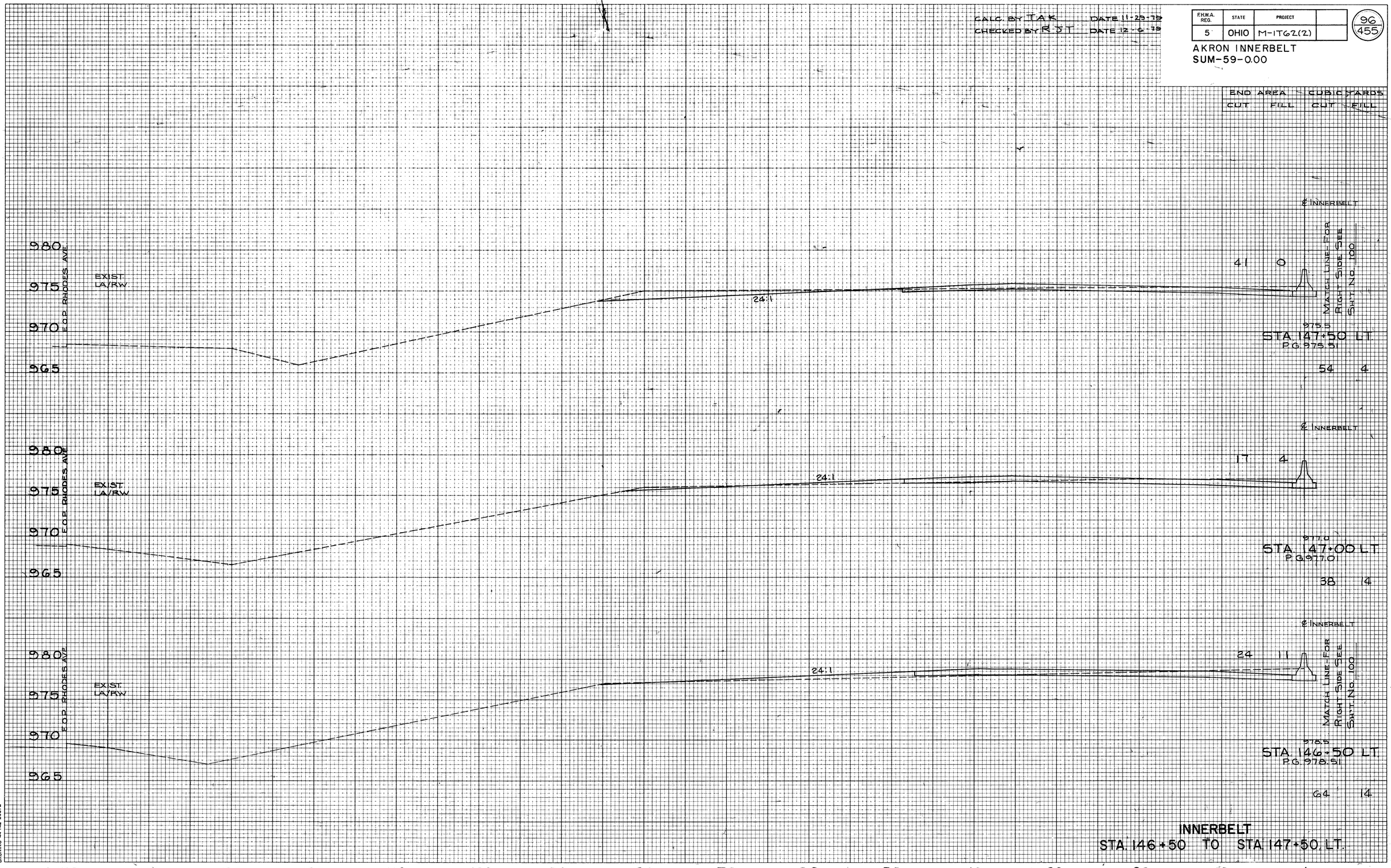
CALC. BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-6-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1162(2) | |

96/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | CUBIC YARDS | |
|---|---|---|
| CUT | FILL | CUT FILL |




INNERBELT
STA. 146+50 TO STA. 147+50, LT.

BRUNING 44-142 26372

CALC. BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-6-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

97
455

AKRON INNERBELT
SUM-59-0.00

| END AREA CUT | END AREA FILL | CUBIC YARDS CUT | CUBIC YARDS FILL |
|---|---|---|---|
| 11 | 3 | | |
| 13 | 0 | | |
| 10 | 0 | | |
| 9 | 6 | | |
| 4 | 8 | | |
| 5 | 9 | | |
| 43 | 8 | | |

970
965
E.O.P. RHODES AVE
EXIST. LA/RW
℄ S.B. TEMP. CONN.
VAR.
EXIST. PAVEMENT (TO BE REMOVED)
MATCH LINE FOR RIGHT SIDE SEE SHT. NO 101
968.3
22
3
STA 150+00 LT
P.G. 968.01
℄ INNERBELT

970
965
EXIST. LA/RW
℄ S.B. TEMP. CONN.
24:1
EXIST. PAVEMENT (TO BE REMOVED)
310 SUBBASE
968.2
STA 149+50 LT
P.G. 969.51
℄ INNERBELT

975
970
965
E.O.P. RHODES AVE
EXIST. LA/RW
℄ S.B. TEMP. CONN.
24:1
EXIST. PAVEMENT (TO BE REMOVED)
310 SUBBASE
970.0
STA 149+00 LT
P.G. 971.01
℄ INNERBELT

975
970
965
EXIST. LA/RW
℄ S.B. TEMP. CONN.
24:1
EXIST. PAVEMENT (TO BE REMOVED)
MATCH LINE FOR RIGHT SIDE SEE SHT. NO 101
971.8
STA 148+50 LT
P.G. 972.51
℄ INNERBELT

975
970
965
EXIST. LA/RW
℄ S.B. TEMP. CONN.
24:1
EXIST. PAVEMENT (TO BE REMOVED)
310 SUBBASE
MATCH LINE FOR RIGHT SIDE SEE SHT. NO 100
973.5
STA 148+00 LT
P.G. 974.01

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

# INNERBELT
STA. 148+00 TO STA. 150+00 LT.

BRUNING 44-142 26372

CALC. BY FF DATE 4-25-83
CHECKED BY DSB DATE 5-3-83

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

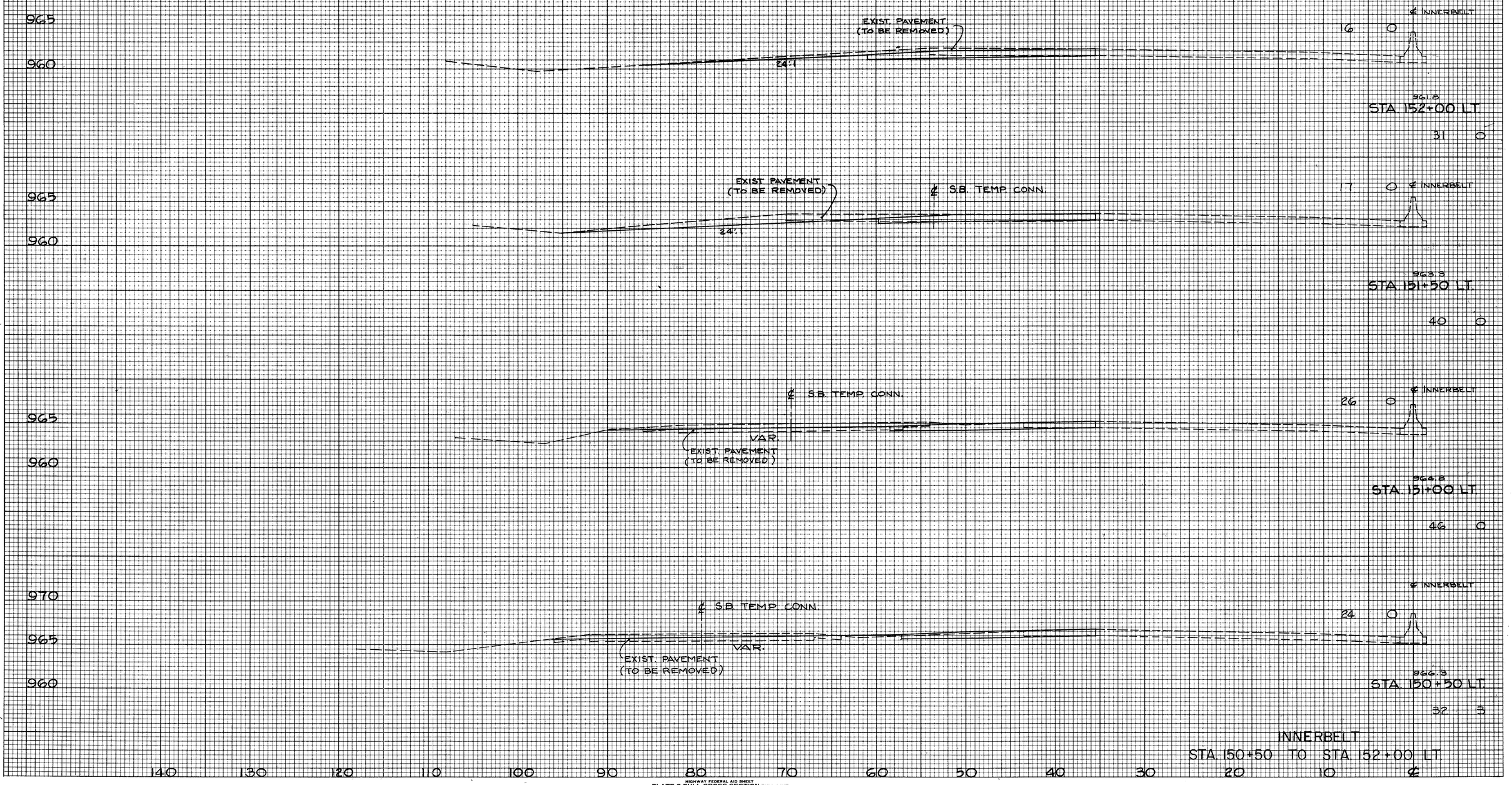
97A
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE




HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

CALC BY FF DATE 4 25 83
CHECKED BY DSB DATE 5 3 83

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

978
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

FINAL SURVEY
SURVEYED
PLOTTED
TRIANG'TD
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
TRIANG'TD
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE

960
955
960
955
960
955

VAR.

4 11 ℄ INNERBELT

957.6
STA. 154+00 LT.

27 18

5 8 ℄ INNERBELT

958.5
STA. 153+50 LT.

23 16

10 9 ℄ INNERBELT

959.5
STA. 153+00 LT.

17 8

8 0 ℄ INNERBELT

VAR.

960.7
STA. 152+50 LT.

22 0

INNERBELT
STA. 152+50 TO STA. 154+00 LT.

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

CALC BY FF DATE 4-26-83
CHECKED BY DSS DATE 5-3-83

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

97C 455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

FINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, AREAS, AREAS CHECKED, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, AREAS, AREAS CHECKED, NO., BY, DATE

960
955
950

℄ RAMP H

VAR.

℄ INNERBELT

11 8

356.8
STA. 156+00 LT.
19 16

℄ RAMP H

℄ INNERBELT

9 9

356.0
STA. 155+50 LT.
16 13

℄ RAMP H

℄ INNERBELT

8 5

356.4
STA. 155+00 LT.
22 14

VAR.

16 10 ℄ INNERBELT

356.9
STA. 154+50 LT.
28 19

INNERBELT
STA. 154+50 TO STA. 156+00 LT.

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

CA-C BY FR DATE 4.26.83
CHECK BY DSB DATE 5.3.83

| | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

970
455

AKRON INNERBELT
SUM-59-0.00

END AREA CUBIC YARDS
CUT FILL CUT FILL

960
955
950

℄ RAMP H
1/2"/FT.
4 35 ℄ INNERBELT
STA. 158+00 LT.
8 83

960
955
950

℄ RAMP H
1/2"/FT.
5 55 ℄ INNERBELT
STA. 157+50 LT.
17 53

960
955
950

℄ RAMP H
VAR.
13 2 ℄ INNERBELT
STA. 157+00 LT.
21 12

960
955
950

℄ RAMP H
VAR.
0 11 ℄ INNERBELT
STA. 156+50 LT.
19 18

INNERBELT
STA. 156+50 TO STA. 158+00 LT.

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0

BRUNING 44-142 26372-2

CALC BY FF DATE 4-26-83
CHECKED BY DSB DATE 5-3-83

| | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG 2(2) | |

97E 455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 0 | 4 |
| | | 0 | 23 |
| | | 0 | 54 |
| | | 0 | 35 |
| | | 0 | 59 |
| | | 0 | 29 |
| | | 7 | 48 |
| | | 8 | 23 |
| | | 11 | 54 |

960
955
950

℄ RAMP H
VAR.
310 SUBBASE
℄ INNERBELT
STA. 160+00 LT.

℄ RAMP H
310 SUBBASE
℄ INNERBELT
STA. 159+50 LT.

℄ RAMP H
310 SUBBASE
℄ INNERBELT
STA. 159+00 LT.

CONSTRUCT STD. 2-A-G INLET
OVER EXISTING 12" PIPE
STA. 158+53, 7.5' LT ℄ RAMP H
TOP GRATE ELEV. = 954.81
E 12" = 949.70

P
GB

℄ RAMP H
VAR.
310 SUBBASE
℄ INNERBELT
STA. 158+50 LT.

EXIST. 12" @ 0.88%

R
3'

REMOVE EXIST. INLET
& 10" ~ 12" PIPE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0

INNERBELT
STA. 158+50 TO STA. 160+00 LT.

BRUNING 44-142 26372-2

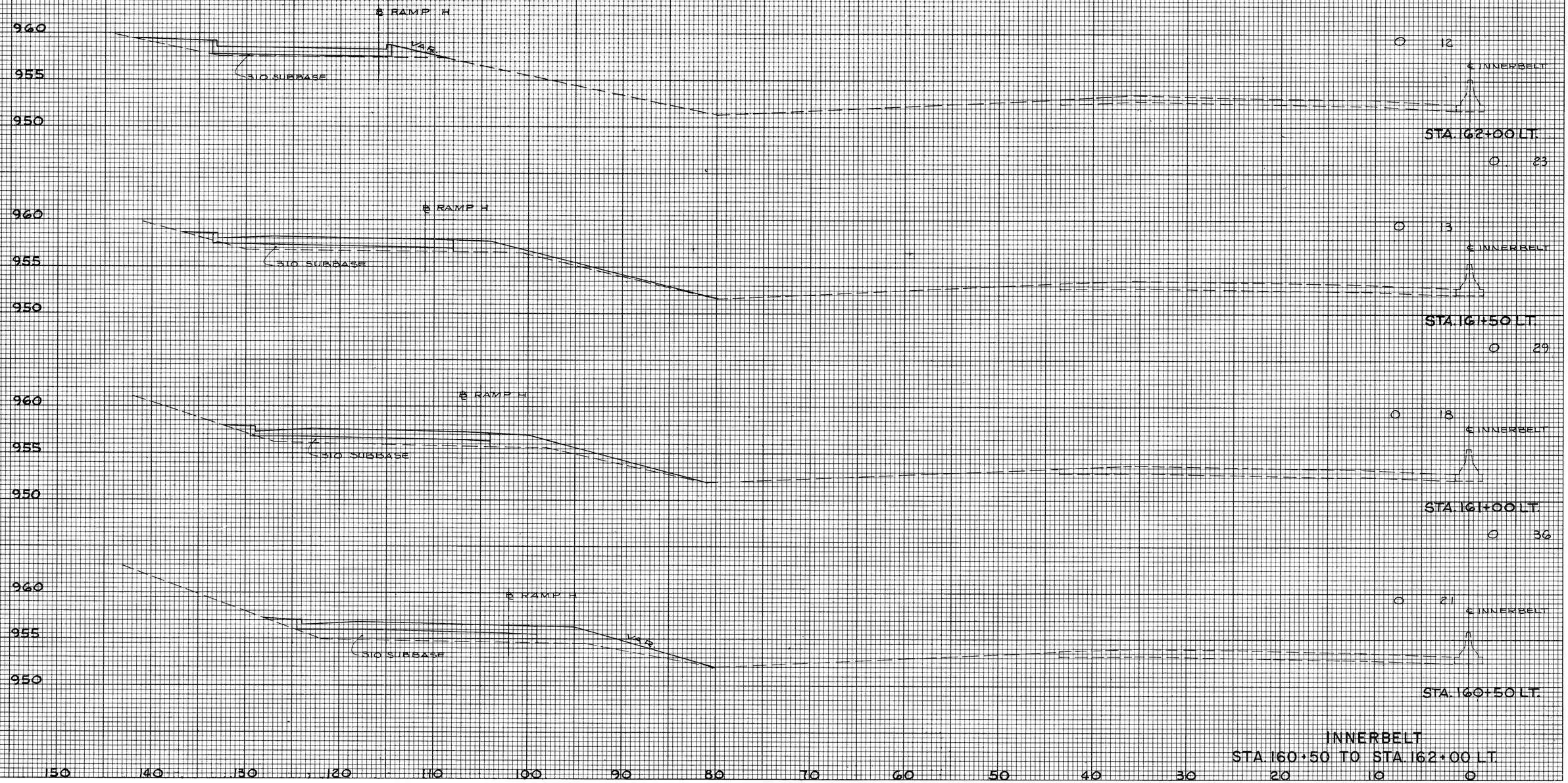
CALC BY FF DATE 4-27-83
CHECK BY DSB DATE 5-3-83

| | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

97F
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 19 | 12 |




INNERBELT
STA. 160+50 TO STA. 162+00 LT.

BRUNING 44-142 26372-2

CALC BY FF DATE 4-27-83
CHECK BY DSB DATE 5-3-83

| | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

976
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

℄ RAMP H

960
955
950

20 0 ℄ INNERBELT

STA. 162+87.60 AHD.
STA. 162+89.01 BK.
MEET EXISTING

29 1

℄ RAMP H

960
955
950

20 1 ℄ INNERBELT

STA. 162+50 LT.

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0

INNERBELT
STA. 162+50 TO STA. 162+89.01 BK.

BRUNING 44-142 26372-2

CALC BY TAK DATE 11-25-79
CHECKED BY RJT DATE 12-6-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

98
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 28 | 4 | | |
| 57 | 7 | | |
| 34 | 4 | | |
| 66 | 6 | | |
| 37 | 2 | | |
| 92 | 2 | | |
| 62 | 0 | | |

EXIST. LA/RW

℄ INNERBELT

MATCH LINE FOR LEFT SIDE SEE SHT. NO 94

STA. 144+00 RT.
P.G. 986.01

STA. 145+50 RT.
P.G. 987.51

STA. 143+00 RT.
P.G. 989.01

STA. 142+50 RT.
P.G. 990.51

24:1

986.0
987.6
988.9
990.7

980 975 970 985 990 985 980 975 970 990 985 980 995 990 985

℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

**INNERBELT**
STA. 142+50 TO STA. 144+00 RT

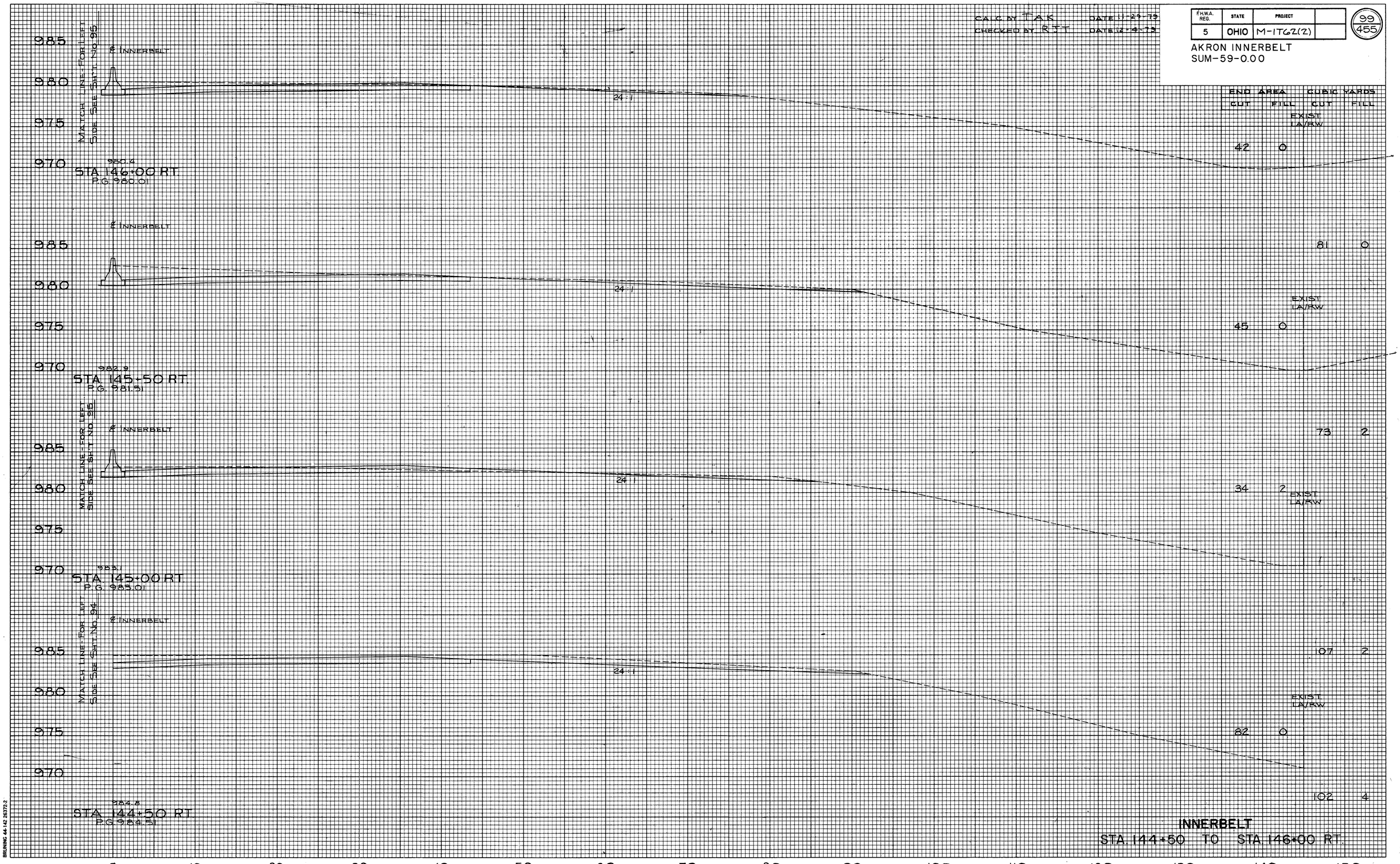
BRUNING 44-142 26372-2

CALC BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(7) | |

99
455

AKRON INNERBELT
SUM-59-0.00




| | END AREA | | CUBIC YARDS | |
|---|---|---|---|---|
| | CUT | FILL | CUT | FILL |
| EXIST. I/A/R/W | | | | |
| | 42 | 0 | | |
| | 81 | 0 | | |
| EXIST. I/A/R/W | | | | |
| | 45 | 0 | | |
| | 73 | 2 | | |
| EXIST. I/A/R/W | | | | |
| | 34 | 2 | | |
| | 07 | 2 | | |
| EXIST. I/A/R/W | | | | |
| | 82 | 0 | | |
| | 102 | 4 | | |

**INNERBELT**
STA. 144+50 TO STA. 146+00 RT.

BRUNING 44-142 26372-2

CALC BY TAK DATE 11-29-78
CHECKED BY RJT DATE 12-8-78

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

100/455

AKRON INNERBELT
SUM-59-0.00

980
975
970
965

℄ INNERBELT

MATCH LINE FOR LEFT SIDE SEE SHT NO 67

24:1

310 SUBBASE

EXIST PAVEMENT (TO BE REMOVED)

STA 148+00 RT
P.G. 974.01

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 6 | 18 |
| | | 39 | 18 |

℄ INNERBELT

24:1

EXIST. LA/RW

STA 147+50 RT
P.G. 975.51

| | | | |
|---|---|---|---|
| | | 36 | 1 |
| | | 57 | 5 |

℄ INNERBELT

24:1

EXIST. LA/RW

STA 147+00 RT
P.G. 977.01

| | | | |
|---|---|---|---|
| | | 26 | 4 |
| | | 64 | 4 |

℄ INNERBELT

MATCH LINE FOR LEFT SIDE SEE SHT NO 66

24:1

EXIST. LA/RW

STA 146+50 RT
P.G. 978.51

| | | | |
|---|---|---|---|
| | | 43 | 0 |
| | | 79 | 0 |

INNERBELT
STA 146+50 TO STA 148+00 RT

℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

BRUNING 44-142 253722

CALC BY TAK DATE 11-29-78
CHECKED BY RJT DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

101
455

AKRON INNERBELT
SUM-59-0.00

END AREA CUBIC YARDS
CUT FILL CUT FILL

975
970
965

MATCH LINE FOR LEFT SIDE SEE SHT. NO. 97

℄ INNERBELT

℄ N.B. TEMP. CONN.

EXIST. PAVEMENT (TO BE REMOVED)

EXIST. LA/RW

0 0

966.9
STA. 150+00 RT
MEET EXISTING PAVEMENT
P.G. 968.01

975
970
965

℄ INNERBELT

℄ N.B. TEMP. CONN.

24"

310 SUBBASE

EXIST. PAVEMENT (TO BE REMOVED)

0 34

968.2
STA. 149+50 RT.
P.G. 969.51

3 51

975
970
965

℄ INNERBELT

℄ N.B. TEMP. CONN.

24"

310 SUBBASE

EXIST. PAVEMENT (TO BE REMOVED)

3 21

970.0
STA. 149+00 RT
P.G. 971.01

3 152

MATCH LINE FOR LEFT SIDE SEE SHT. NO. 97

975
970
965

℄ INNERBELT

℄ N.B. TEMP. CONN.

℄ EXIST. C.B.

24"

310 SUBBASE

EXIST. LA/RW

EXIST. PAVEMENT (TO BE REMOVED)

EXIST. 15" PIPE @ 5.44%

0 143

6 149

971.8
STA. 148+50 RT
P.G. 972.51

STA. 148+50 ℄ INNERBELT
GC4 - STD. NO. 1-3 MEDIAN INLET
GUTTER ELEV. = 972.03
WINDOW ELEV. = 971.76
℄-15" PIPE (E) = 968.15

GC5-105'-15" CONDUIT TYPE 5 706.01 706.02 OR 706.08 W/706.11 OR 706.12 JOINTS @ 3.41%

STA. 148+50.103 RT. ℄
EXIST. STD. NO. 5 C.B.
GRATE ELEV. = 967.34
℄-EX. 15" PIPE = 965.24

INNERBELT
STA. 148+50 TO STA. 150+00 RT

℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

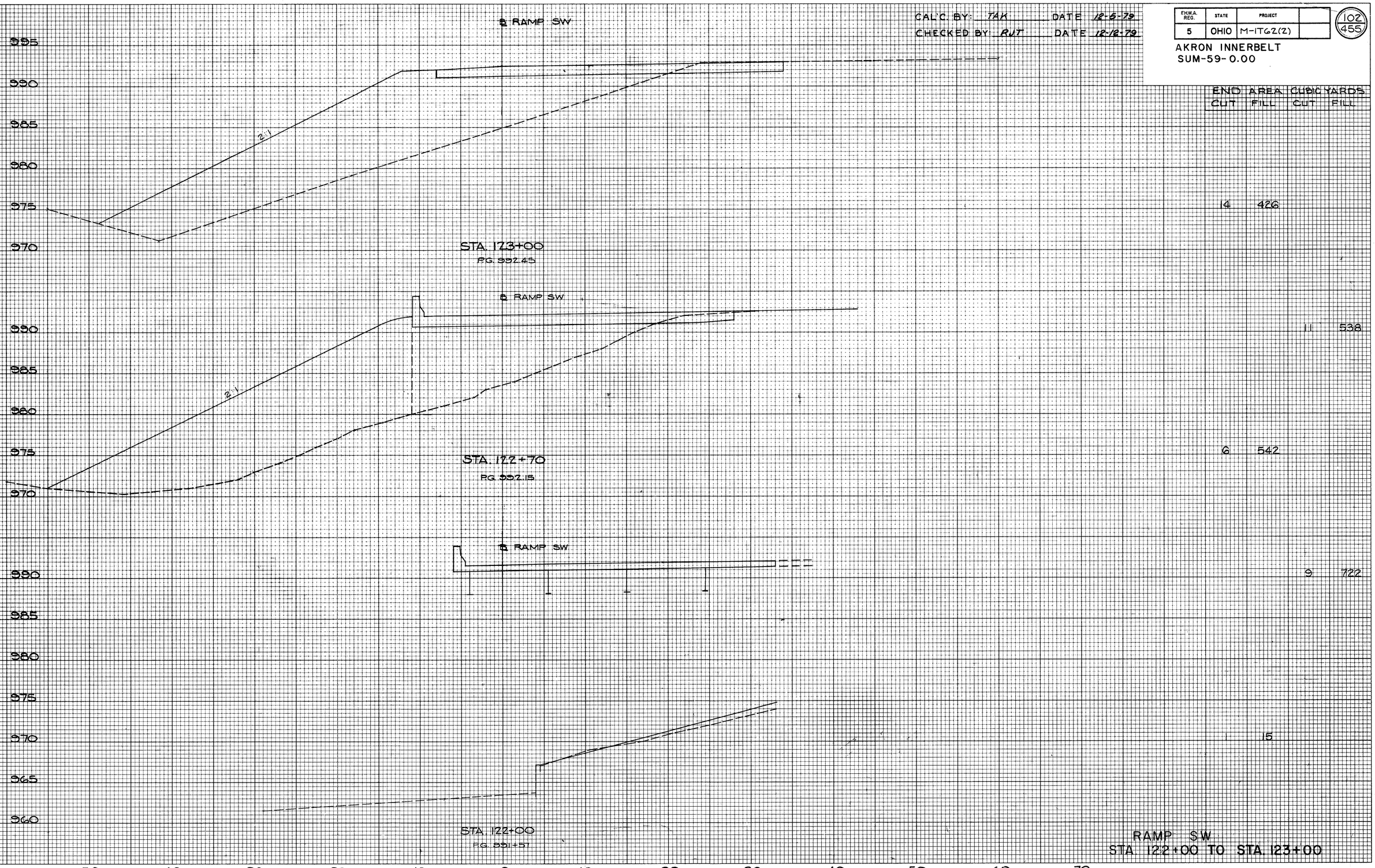
BRUNING 44-142 26372-2

CAL'C. BY: TAK DATE 12-5-79
CHECKED BY: RJT DATE 12-12-79

| FHWA REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

102/455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 14 | 426 |
| | | 11 | 538 |
| | | 6 | 542 |
| | | 9 | 722 |
| | | | 15 |

RAMP SW
STA 122+00 TO STA 123+00

BRUNING 44-142 26372-2

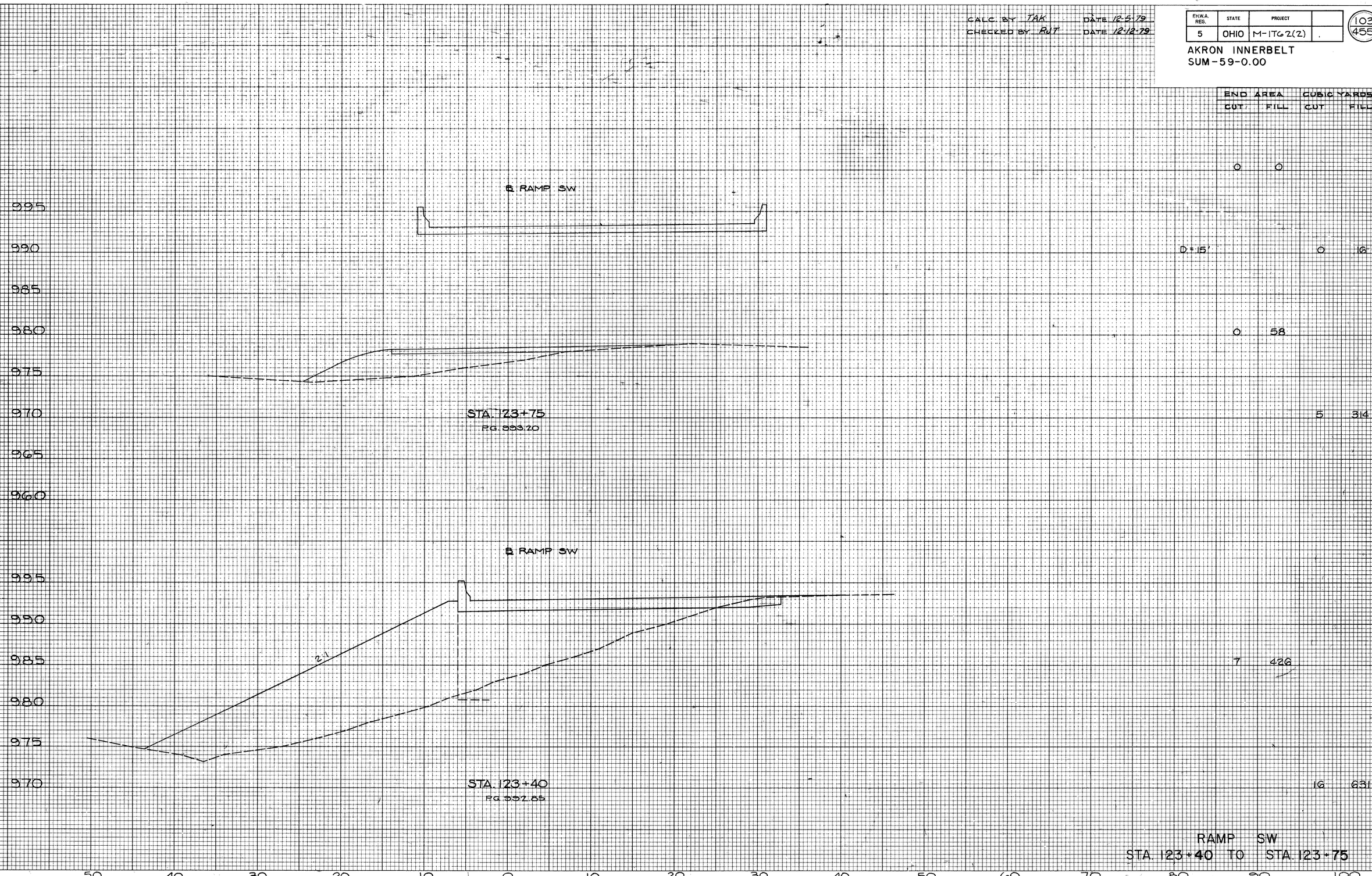
CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | . |

103
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 0 | 0 |
| | | D=15' 0 | 16 |
| | | 0 | 58 |
| | | 5 | 314 |
| | | 7 | 426 |
| | | 16 | 631 |




RAMP SW
STA. 123+40 TO STA. 123+75

BRUNING 44-142 26372

CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

104
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 44 | 646 | | |
| 52 | 413 | | |
| 50 | 98 | | |

MATCH LINE
SEE DART AVE
SHEET 125

℄ RAMP SW

MATCH LINE
RUSSELL AVE
SHEET NO 144

MATCH LINE
SEE DART AVE
SHEET 126

℄ RAMP SW

MATCH LINE
RUSSELL AVE
SHEET NO 144

980.0
STA 129+15
PG 998.56

975.0
STA. 128+85

RAMP SW
STA. 128+85 TO STA. 129+15

BRUNING 44-142 28372-2

CALC BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

105/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

STA 130+10-64 LT.
TYPE 2-2-A
GRATE ELEV. = 973.62
E 12" = 971.45

MATCH LINE SEE DART AVE. SHEET 125

24:1

160 150 140 130 120 110 100 90 80

B 980 975 B

4:1

℄ RAMP SW

1000 995 990 985 980 975

B

2:1 2:1

E = 973.95

E = 980.0

88 1663

MATCH LINE SEE RAMP E-N SHEET 111

980.4
STA 130+00
P.G. 999.42

D_F = 48.95

111 2928

STA. 129+77-83' RT. ℄ RAMP SW
STD. NO. B CB
GRATE ELEV. = 979.15
E 12" S = 977.13

A 980 975 A

24:1

160 150 140 130 120 110 100 90 80 70

℄ RAMP SW

1000 995 990 985 980 975

A

2:1

E = 976.0

E = 981.0

MATCH LINE SEE RUSSELL AVE. SHEET 144

38 1567

53 1434

980.0
STA 129+50
P.G. 998.92

RAMP SW
STA. 129+50 TO STA. 130+00

50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

BRUNING 44-142 26372-2

CALC BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

106
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | | |
| | | |

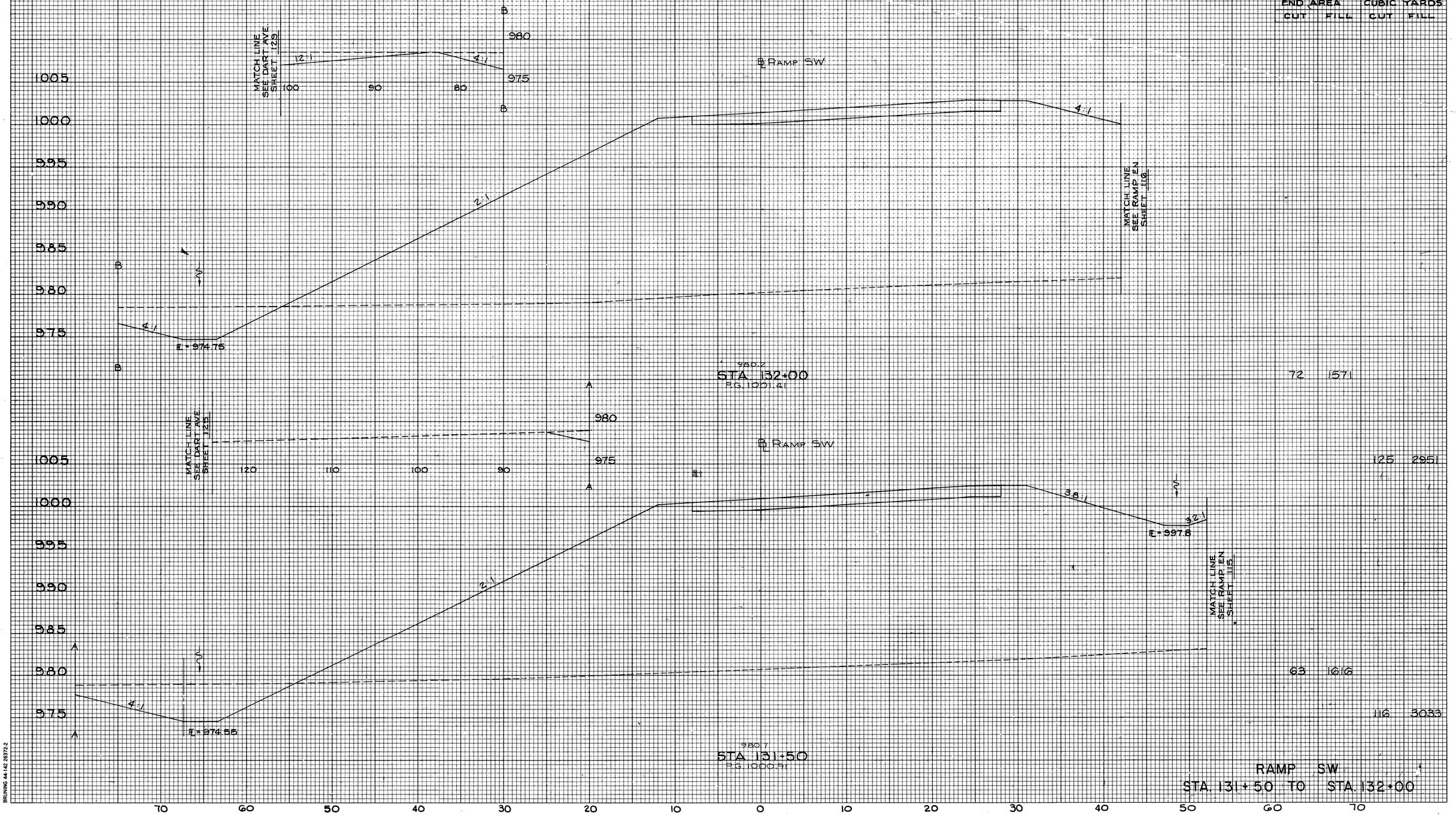
CALC BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

107/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




RAMP SW
STA. 131+50 TO STA. 132+00

BRUNING 44-142 26372-2

CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

108
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

℄ RAMP SW

1005
1000
995
990
985
980
975

2:1

MATCH LINE
SEE DART AVE
SHEET 129

MATCH LINE
SEE RAMP EN
SHEET 1119

979.2
STA 133+00
P.G. 1002.40

0 1489

44 2797

℄ RAMP SW

1005
1000
995
990
985
980
975

8:1
2:1
4:1
VAR.

MATCH LINE
SEE DART AVE
SHEET 129

MATCH LINE
SEE RAMP EN
SHEET 1118

R = 974.95

47 1532

110 2873

979.4
STA 132+50
P.G. 1001.90

RAMP SW
STA. 132+50 TO STA. 133+00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

BRUNING 44-142 26372-2

CALC BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

109
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

1005
1000
995
990
985
980
975

RAMP SW

MATCH LINE SEE DART AVE SHEET 130

MATCH LINE SEE RAMP E-N SHEET 120

979.8
STA 133+42
P.G. 1002.82

D=27 ○ 528

○ 1055

D=42 ○ 1979

RAMP SW
STA. 133+42

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

BRUNING 44-142 26372-2

CALC. BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-6-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1162(2) | |

110
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE

995
990
985
980
975

℄ RAMP SW

24:1

MATCH LINE
SEE RAMP LEN
SHEET 1228

42

990.5
STA 142+50
P.G. 990.88

43 5

℄ RAMP SW

995
990
985
980
975

24:1

MATCH LINE
SEE RAMP LEN
SHEET 1228

15 6

991.2
STA 142+09.18
P.G. 992.10

RAMP SW
STA. 142+09.18 TO STA. 142+50

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

CALC BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

111
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | 0 | 1474 |
| | | D=45 | 0 1266 |
| | | | 0 45 |

1070
1015
1010
1005
1000
995
990
985

℄ RAMP EN

MATCH LINE
SEE RAMP SW
SHEET 105

MATCH LINE
SEE RUSSELL AVE.
SHEET 145

986.3
STA. 129+20
P.G. 1022.85

℄ RAMP EN

MATCH LINE
SEE RUSSELL AVE.
SHEET 144

MATCH LINE
SEE RUSSELL AVE.
SHEET 145

986.7
STA. 128+75
P.G. 1023.72

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50

RAMP EN
STA. 128+75 TO STA. 129+20

BRUNING 44-142 26372

CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

112/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

℄ RAMP EN

1020
1015
1010
1005
1000
995
990
985

MATCH LINE SEE RAMP SW SHEET 106

986.7
STA. 129+73
P.G. 1021.61

100 3348

A
1000
995
A

MATCH LINE SEE RUSSELL AVE. SHEET 145

70 80 50 60

℄ RAMP EN

1020
1015
1010
1005
1000
995
990
985

MATCH LINE SEE RAMP SW SHEET 105

987.0
STA. 129+47
P.G. 1022.23

D=25.46' 52 2691

9 2359

D=26.39' 5 1873

MATCH LINE SEE RUSSELL AVE. SHEET 145

RAMP EN
STA. 129+47 TO STA. 129+73

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

BRUNING 44-142 26372

CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

113
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

MATCH LINE
SEE RAMP SW
SHEET 106

2:1

6:1

1010
1005
1000
995
990
985

80 70 60 65 90 100 110 120 130 140

211 3290

1030
1025
1020
1015
1010
1005
1000
995
990
985

℄ RAMP EN

2:1

D=26.52'

156 3260

℄ KENYON ST.

℄ 993.7

6:1

60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

9-6-79
STA. 130+00
P.G. 1020.95

RAMP EN
STA. 130+00

BRUNING 44-142 26372

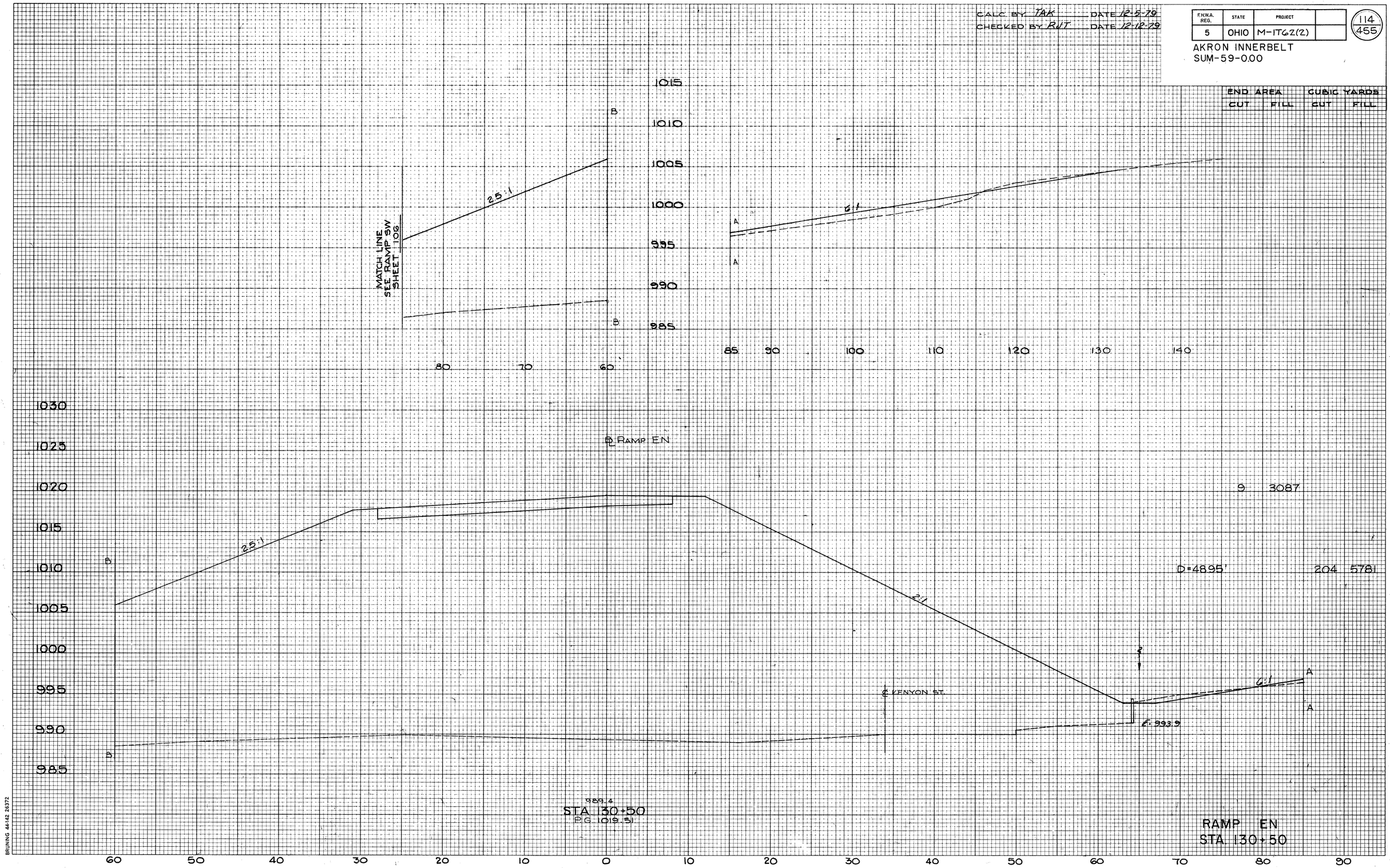
CALC BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

AKRON INNERBELT
SUM-59-0.00

114
455

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




BRUNING 44-142 26372

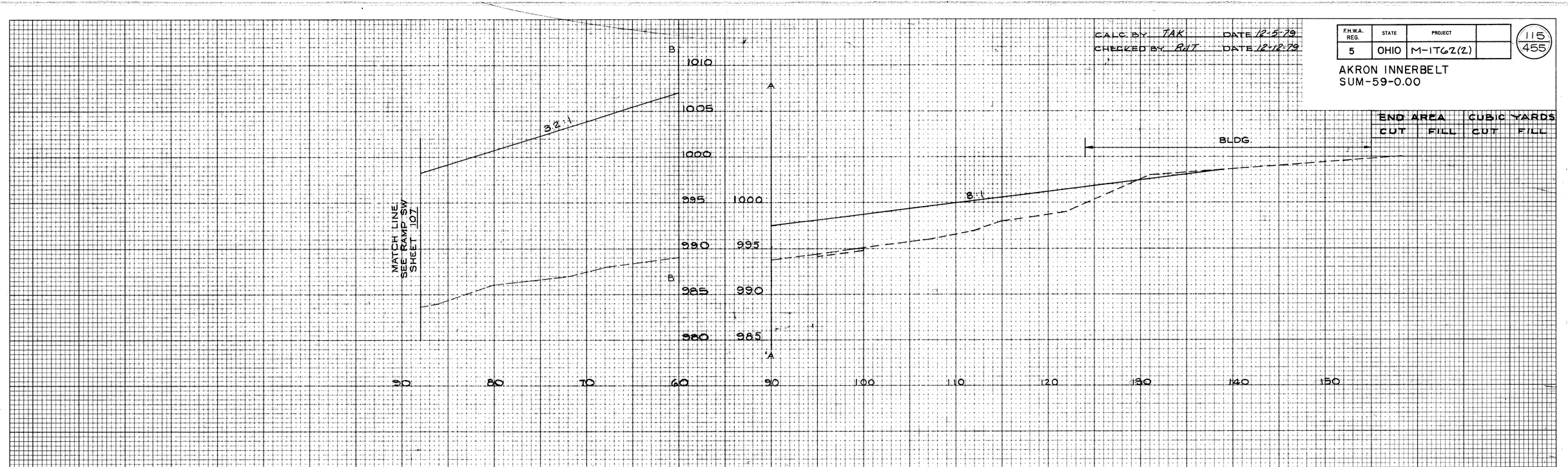
CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

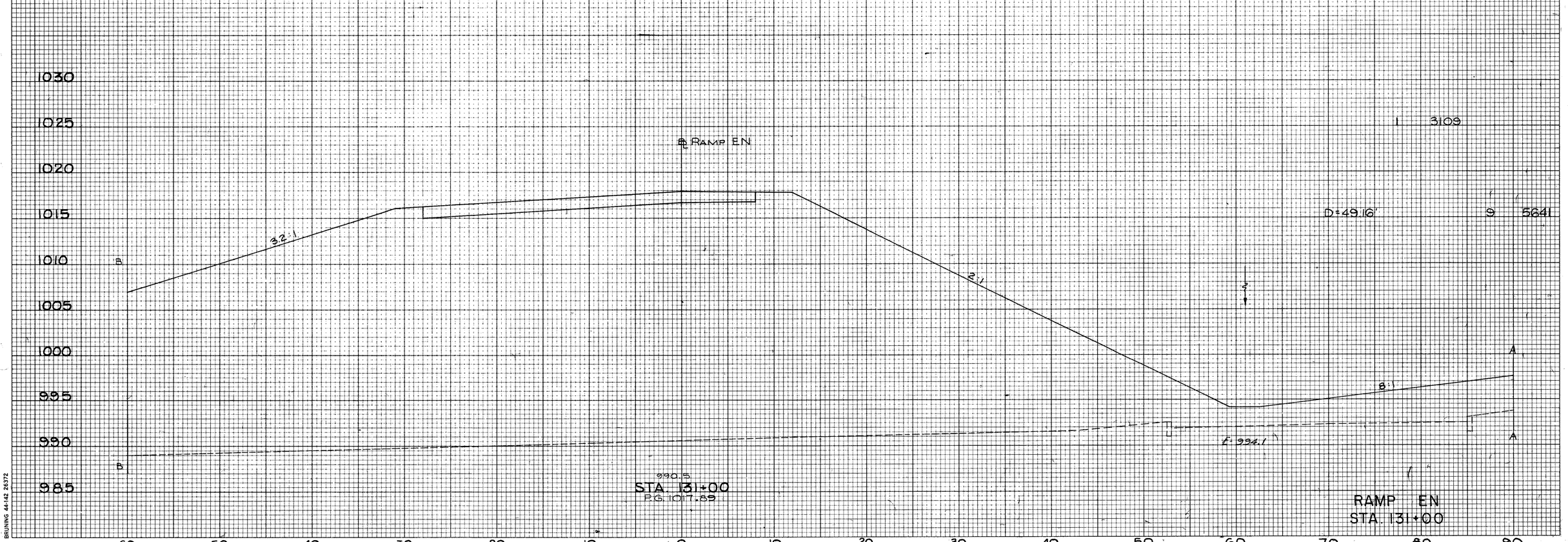
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

115/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




1 3109

D=49°16'

9 5641

990.5
STA. 131+00
P.G. 1017.89

RAMP EN
STA. 131+00

BRUNING 44-142 26372

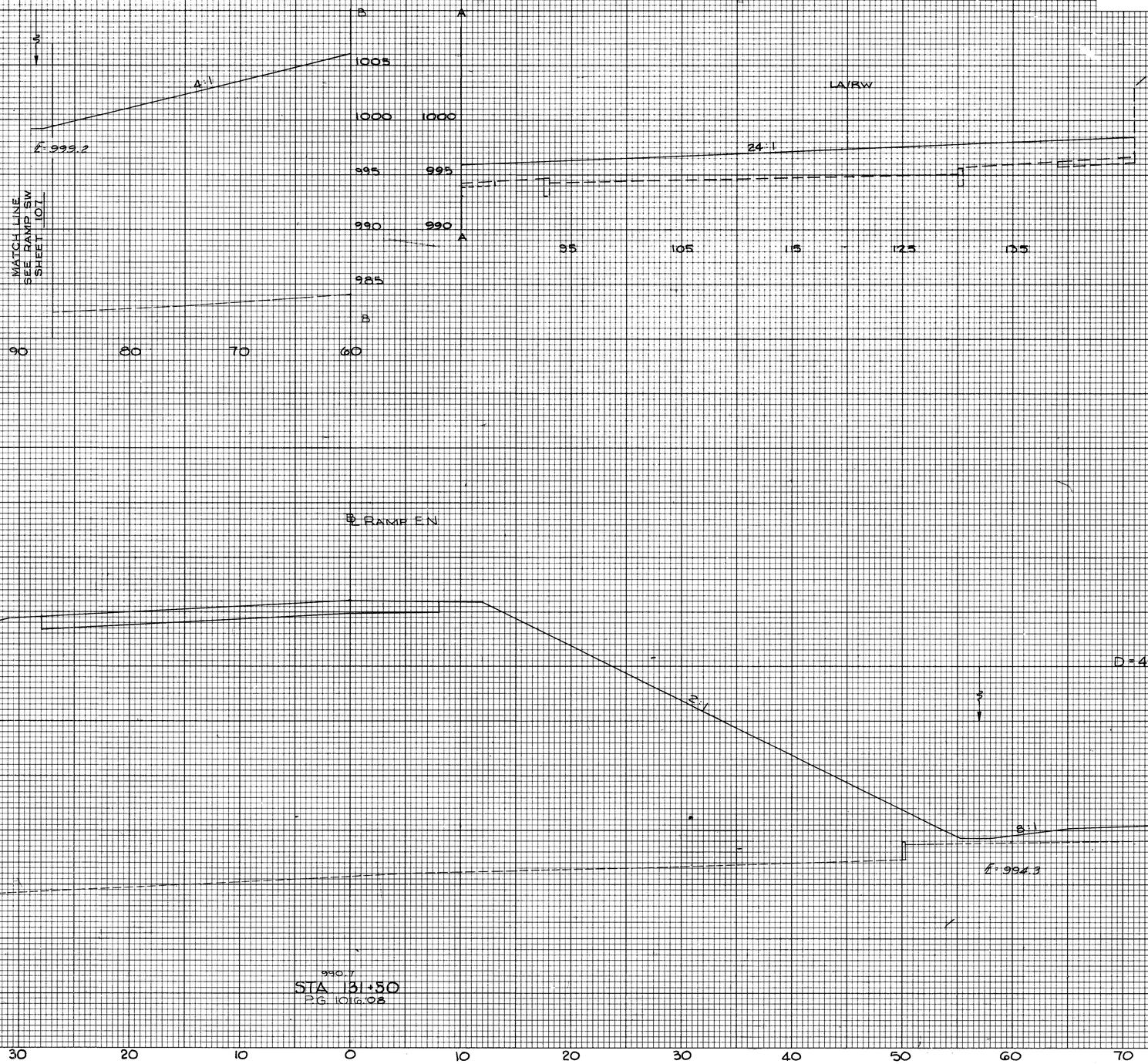
CALC BY TAK DATE 12-5-79
CHECKED BY RWT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

116
455

AKRON INNERBELT
SUM-59-0.00

END AREA CUBIC YARDS
CUT FILL CUT FILL




O 3012

D = 49.29'

I 5587

RAMP EN
STA. 131+50

BRUNING 44-142 263722

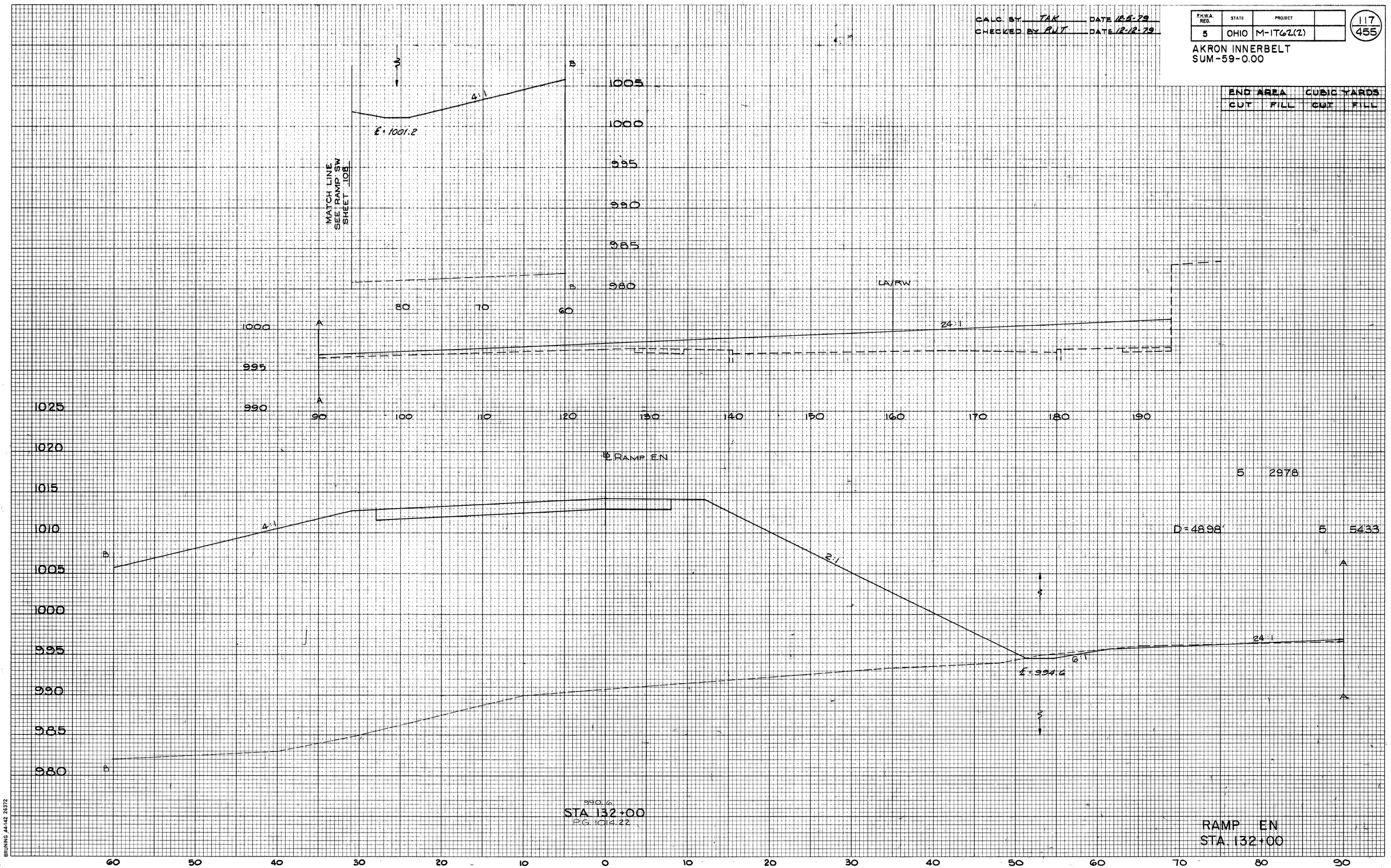
CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(7) | |

117/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




BRUNING 44-142 26372

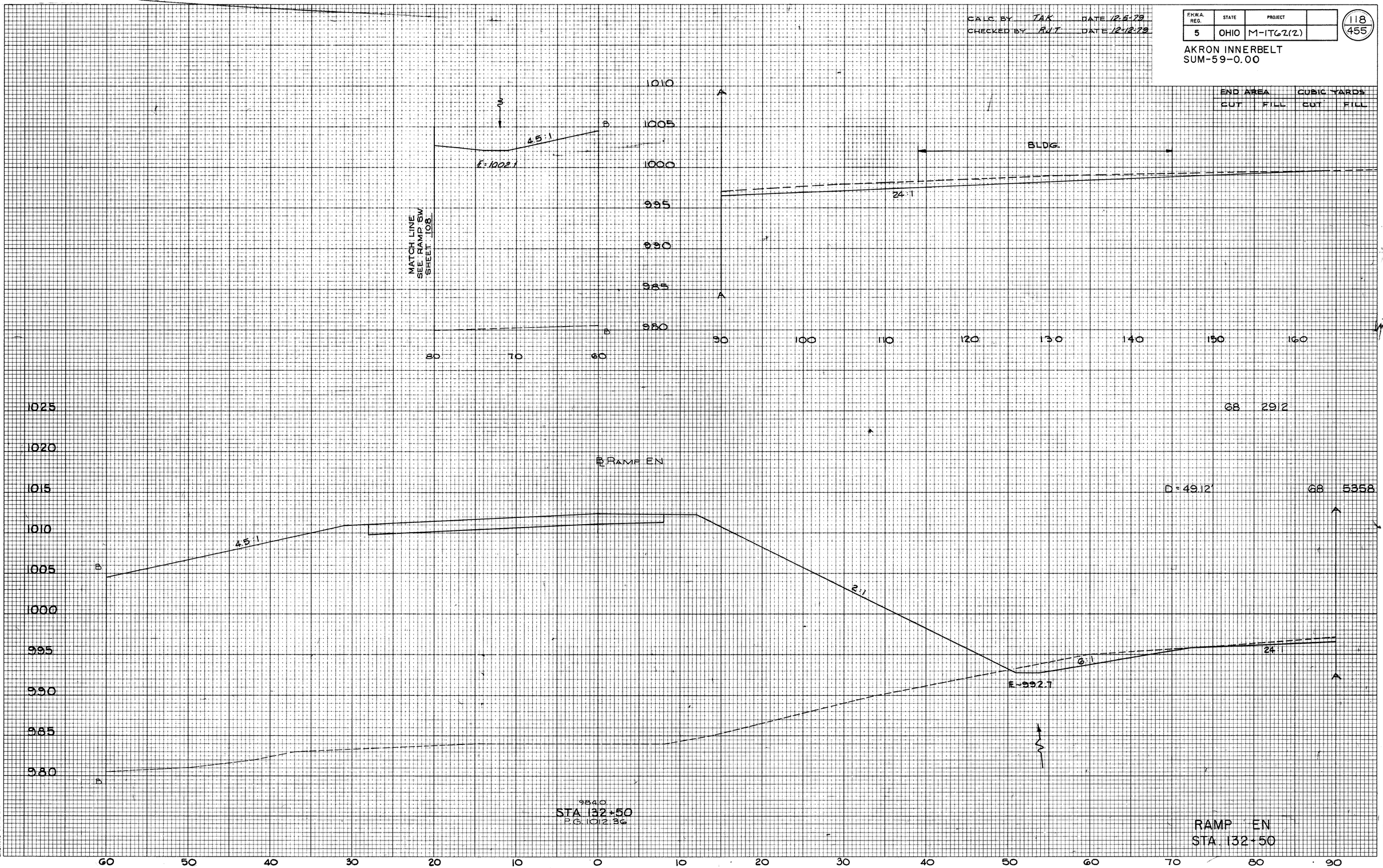
CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(Z) | |

118/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




BRUNING 44-142 26372

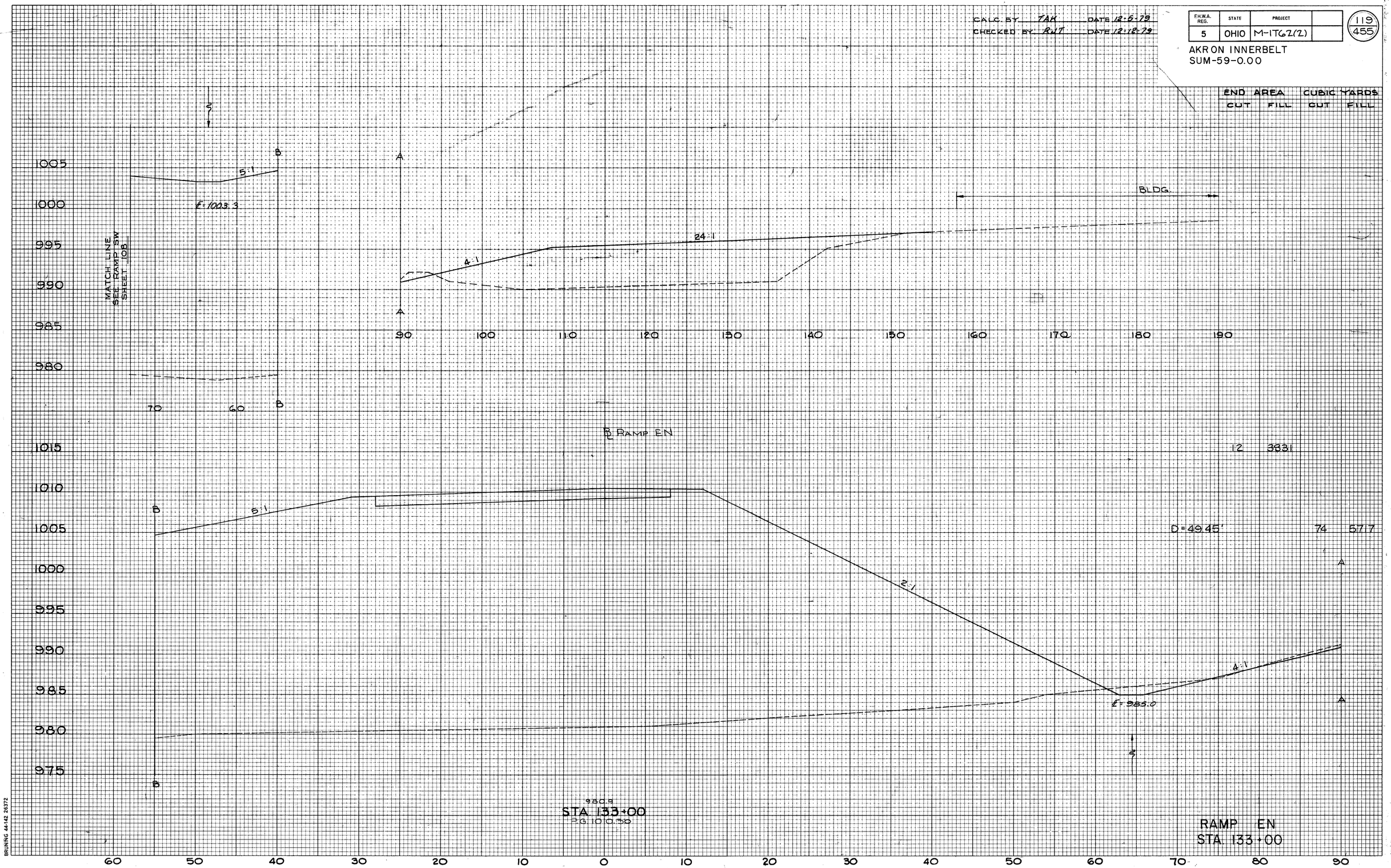
CALC. BY TAK DATE 12-6-79
CHECKED BY R.T DATE 12-18-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

119
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |




BRUNING 44-142 26372

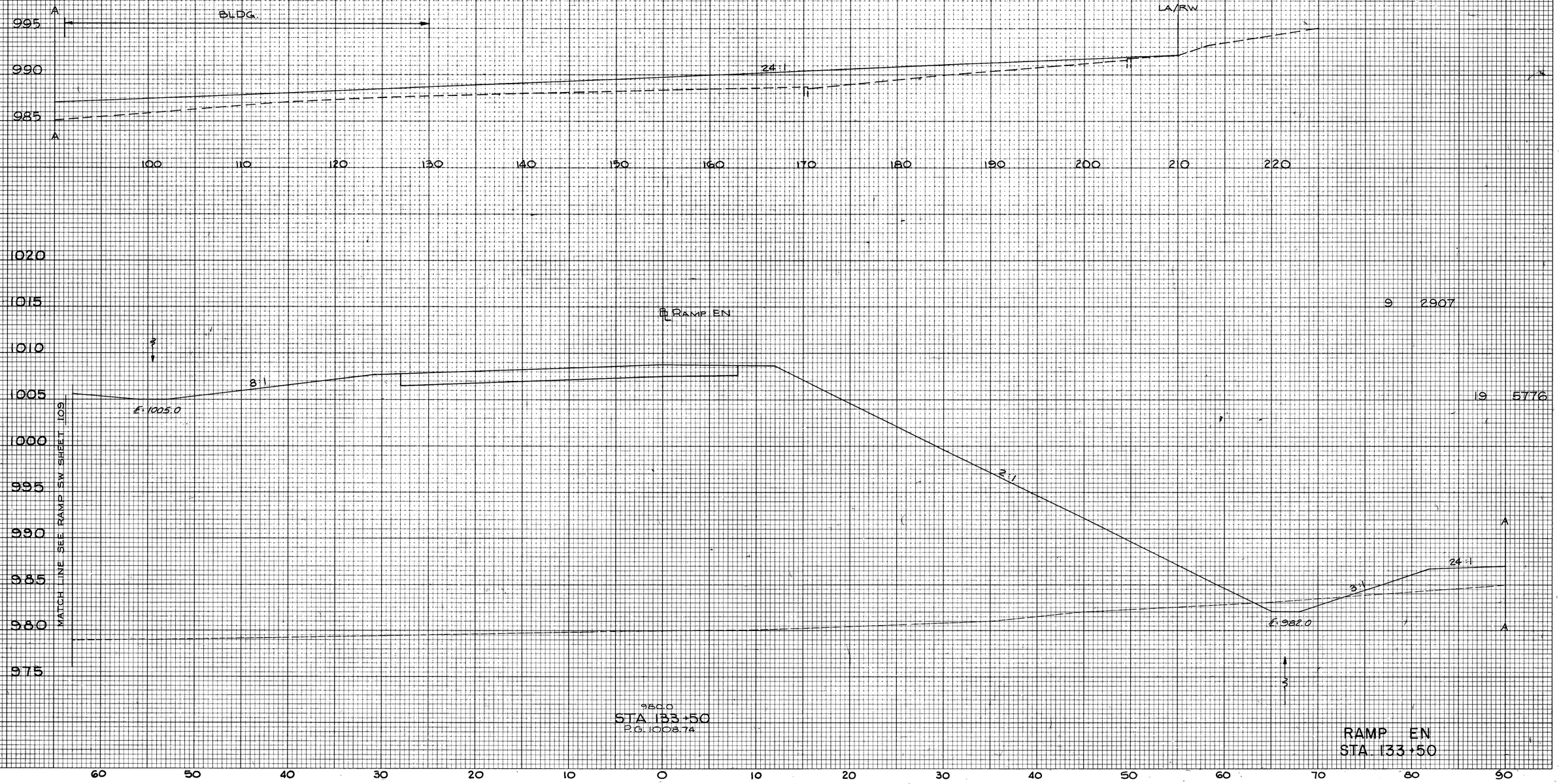
CALC. BY TAA DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

120
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




960.0
STA 133+50
P.G. 1008.74

RAMP EN
STA. 133+50

BRUNING 44-142 26372

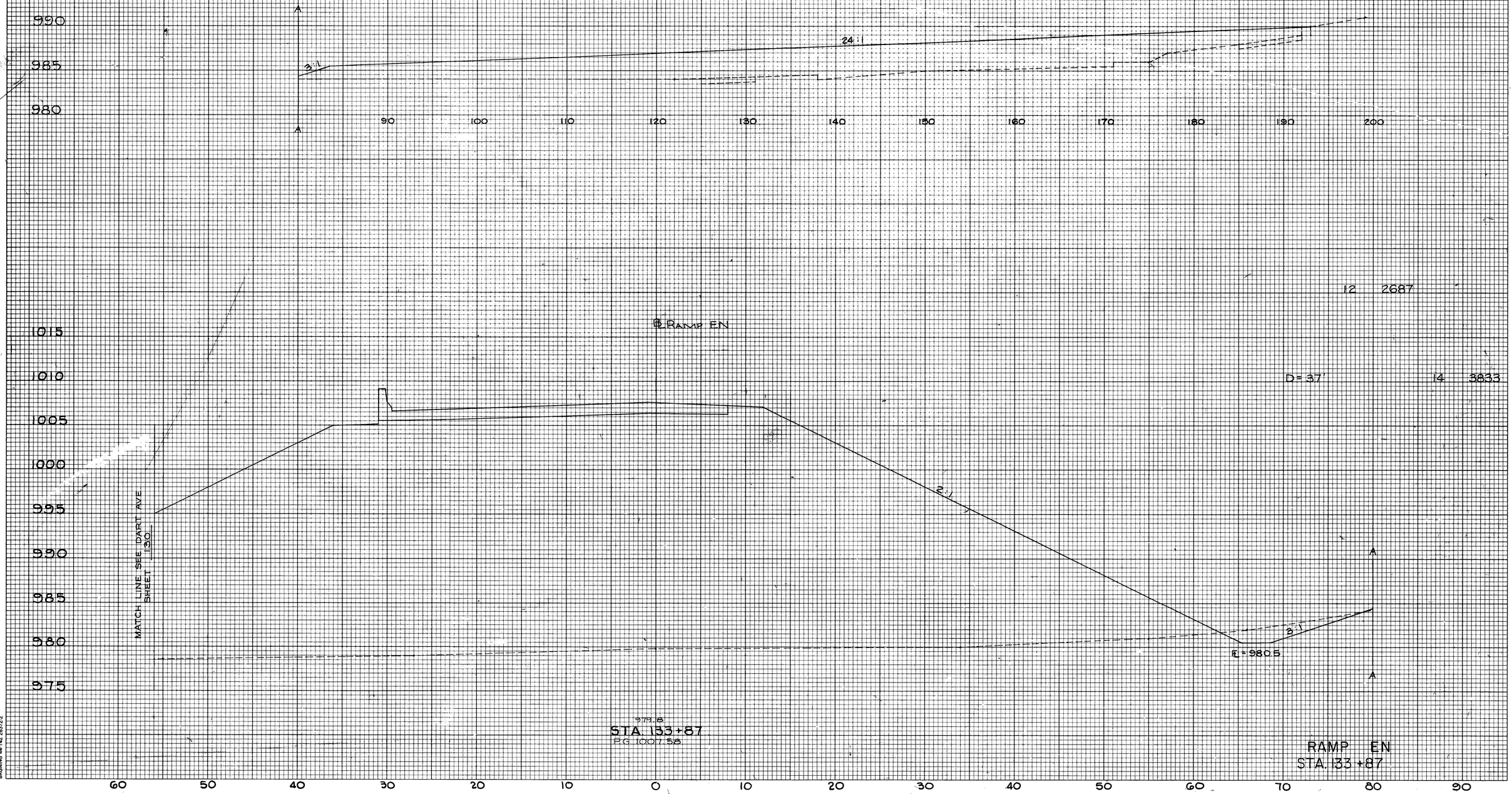
CALC BY TAK DATE 12-5-29
CHECKED BY RJT DATE 12-12-29

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

121
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




BRUNING 44 142 28372-2

CALC. BY TAK DATE 12-5-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

122/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | 0 | 1579 |
| | | D=2.1' | 5 1659 |

RAMP EN
STA. 134+08

BRUNING 44-142 26372

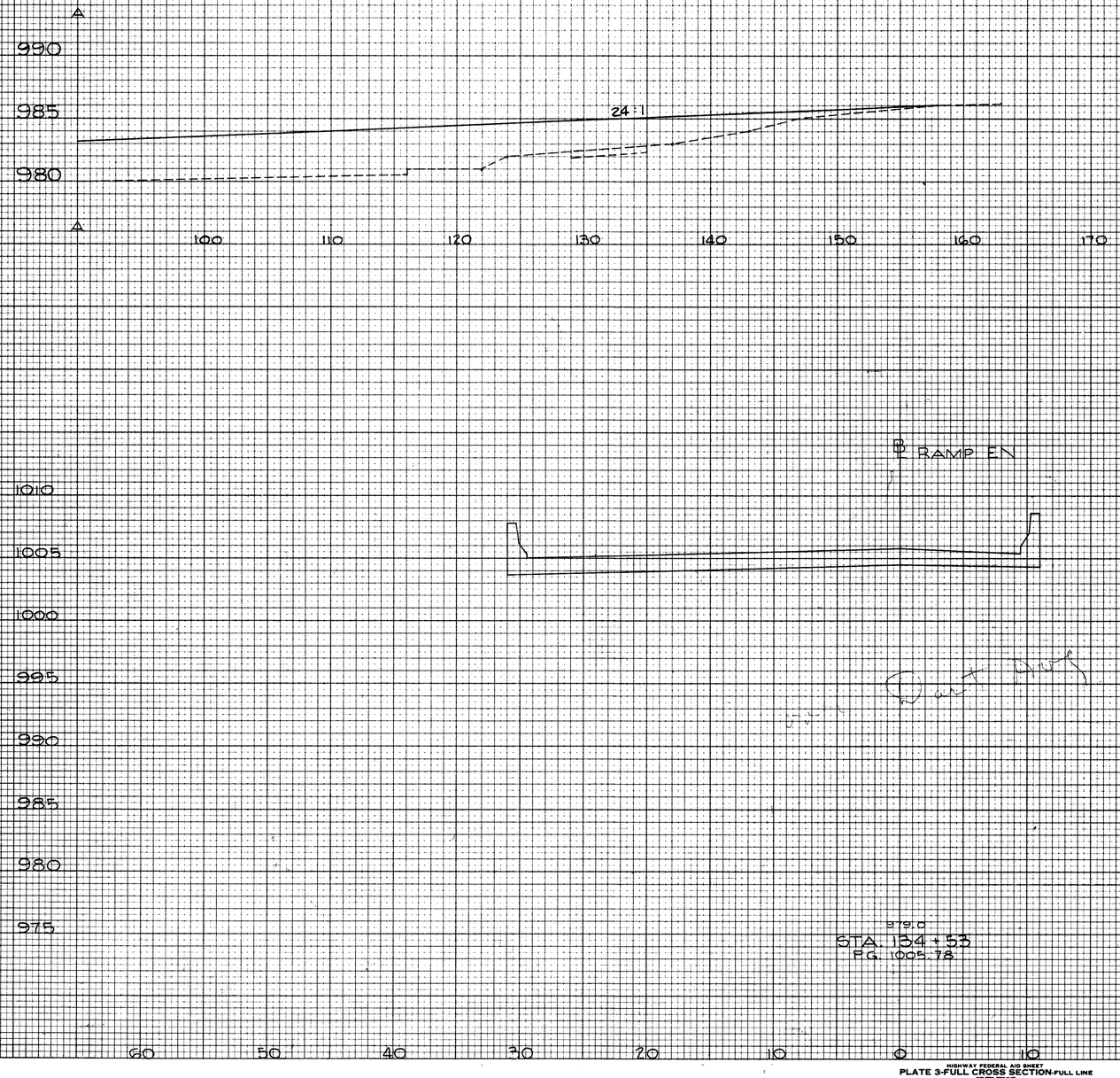
CALC. BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

122A
455

AKRON INNERBELT
SUM-59-0.00

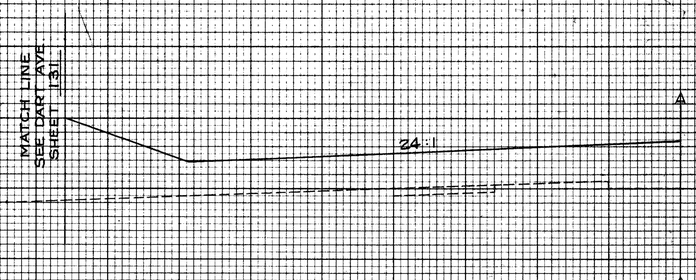
| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| 0 | 0 | | |
| | | | |
| D=12.5' | | 0 | 69 |
| | | | |
| 0 | 300 | | |
| | | | |
| D=45' | | 0 | 1565 |
| | | | |




RAMP EN

STA. 134+53
P.G. 1005.78

3179.0




RAMP EN
STA. 134+53

FINAL SURVEY
DATE
BY
SURVEYED
PLOTTED
TEMPLATE
AREAS
NOTE BOOK
NO.
AREAS CHECKED

ORIGINAL SURVEY
DATE
BY
SURVEYED
PLOTTED
TEMPLATE
AREAS
NOTE BOOK
NO.
AREAS CHECKED

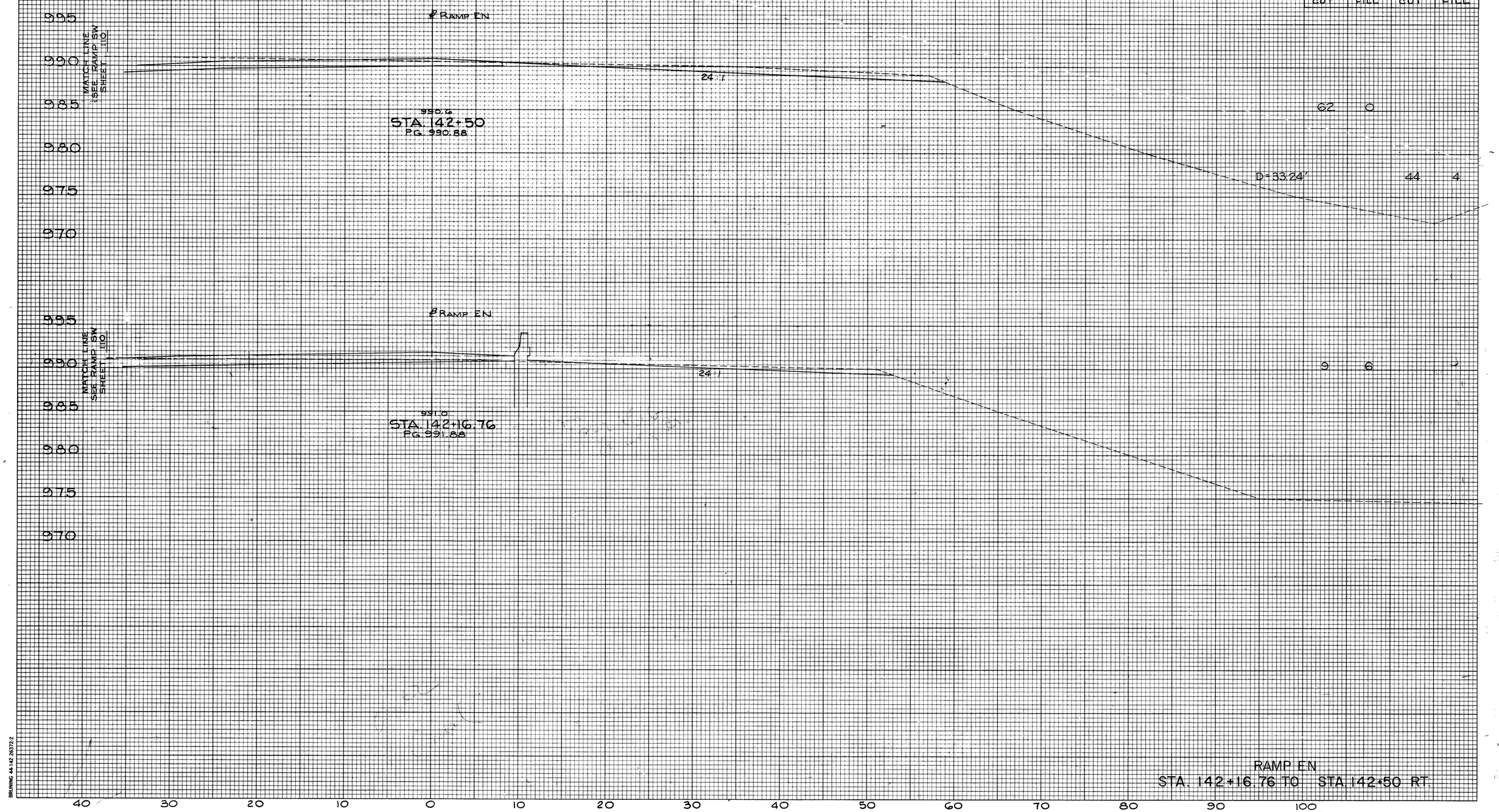
CALC. BY TAK DATE 11-29-79
CHECKED BY RJT DATE 12-4-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

1228
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 62 | 0 | | |
| 44 | 4 | | |
| 9 | 6 | | |




RAMP EN
STA. 142+16.76 TO STA. 142+50 RT.

BRUNING 44-142 26372.2

NOTE: FOR CONTINUATION OF EARTHWORK AHEAD SEE RUSSELL AVENUE X-SECTIONS. SHT. NO. 139

CALC. BY TAM DATE 12-7-79
CHECKED BY RJT DATE 12-14-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-176Z(2) | |

123
455

AKRON INNERBELT
SUM-59-0.00

℄ DART AVE

DART AVE
STA. 224+69.485 RT. ℄
EXIST. CATCH BASIN
GRATE ELEV. = 969.35
INV. 24" PIPE (W) = 964.8

| | END AREA CUT | END AREA FILL | CUBIC YARDS CUT | CUBIC YARDS FILL |
|---|---|---|---|---|
| | | | | |
| 975.1 STA 224+50 P.G. 973.80 | | | 75 | 33 |
| | | | 247 | 31 |
| STA. 223+75, 56' LT. ℄ DART AVE. CITY OF AKRON TYPE 5 INLET GRATE ELEV. = 973.34 ℄ 12" PIPE = 969.88 | | | 192 | 0 |
| 974.5 STA 224+00 P.G. 973.18 | | | | |
| STA. 223+75, ℄ DART AVE. CITY OF AKRON TYPE 5 INLET GRATE ELEV. = 973.52 ℄ 12" PIPE = 969.27 | | | 423 | 0 |
| | | | 265 | 0 |
| 975.0 STA 223+50 P.G. 973.14 | | | 470 | 0 |
| | | | 243 | 0 |
| 975.2 STA 223+00 8' SHIFT 21.5' RT. P.G. 974.04 | | | 390 | 0 |
| | | | 178 | 0 |
| 975.3 STA 222+50 P.G. 974.52 | | | 262 | 3 |
| | | | 105 | 3 |
| 974.6 STA 222+00 P.G. 974.46 | | | | |

INTERSECTION DART AVE & SOUTH ST.
STA. 221+49.51 = 9+99.30

DART AVENUE
STA. 222+00 TO STA. 224+50

40 30 20 10 ℄ 10 20 30 40

BRUNING 44-142 26372.2

CALC. BY TAK DATE 12-7-79
CHECKED BY RJT DATE 12-14-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(7.) | |

124
455

AKRON INNERBELT
SUM-59-0.00

| END AREA CUT | END AREA FILL | CUBIC YARDS CUT | CUBIC YARDS FILL |
|---|---|---|---|
| | | | |
| 0 | 315 | | |
| | | 0 | 694 |
| 0 | 435 | | |
| | | 0 | 848 |
| 0 | 481 | | |
| | | 0 | 833 |
| 0 | 419 | | |
| | | 0 | 579 |
| 0 | 206 | | |

℄ RHODES AVE.
℄ DART AVE
C.G.
VARIES
24:1
48:1
EXIST. PAV'T (TO BE REMOVED)
MATCH LINE SEE RUSSELL AVE SHEET 143
MATCH LINE SEE RUSSELL AVE SHEET 142
MATCH LINE SEE SHT. 126

975.0
STA 227+50
P.G. 976.28

975.0
STA 227+00
P.G. 976.88

975.8
STA 226+50
P.G. 977.08

975.6
STA 226+00
P.G. 976.81

973.3
STA 225+50
P.G. 976.07

975
970

DART AVENUE
STA 225+50 TO STA 227+50

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

BRUNING 44-142 26372-2

CALC. BY TAM DATE 12-7-79
CHECKED BY RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

AKRON INNERBELT
SUM-59-0.00

125
455

980
975
970

℄ RHODES AVE.
℄ DART AVE.
VARIES
24:1
EXIST. PAV'T. (TO BE REMOVED)
LA/RW
MATCH LINE SEE RAMP SW SHEET 106

974.5
STA. 230+50
P.G. 974.03

974.0
STA 230+00
P.G. 973.87

973.6
STA 229+50
P.G. 973.95

974.0
STA 229+00
P.G. 974.35

974.0
STA 228+50
P.G. 974.95

973.8
STA 228+00
P.G. 975.61

MATCH LINE SEE SHT 127
MATCH LINE SEE SHT 128
MATCH LINE SEE SHT 128

24:1
24:1
48:1
C.G.
EXIST. PAVEMENT (TO BE REMOVED)
MATCH LINE SEE RAMP SW SHEET 106
MATCH LINE SEE RAMP SW SHEET 105
MATCH LINE SEE RUSSELL AVE SHEET 143
MATCH LINE SEE RUSSELL AVE SHEET 143

END AREA CUBIC YARDS

| CUT | FILL | CUT | FILL |
|---|---|---|---|
| 180 | 0 | | |
| | | 328 | 0 |
| 174 | 0 | | |
| | | 224 | 66 |
| 68 | 71 | | |
| | | 156 | 78 |
| 100 | 14 | | |
| | | 136 | 73 |
| 7 | 65 | | |
| | | 45 | 181 |
| 2 | 131 | | |
| | | 2 | 413 |

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

DART AVENUE
STA. 228+00 TO STA. 230+50

BRUNING 44-142 26372.2

CALC. BY: TAK DATE 12-7-79
CHECKED BY: RJT DATE 12-12-79

| FED.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

126
455

AKRON INNERBELT
SUM-59-0.00

| END AREA CUT | END AREA FILL | CUBIC YDS. CUT | CUBIC YDS. FILL |
|---|---|---|---|
| | | | |
| 0 | 27 | | |
| | | | |
| D=6.61' | 0 | 572 | |
| | | | |
| 0 | 230 | | |
| | | | |
| D=6.61' | 0 | 509 | |
| | | | |
| 0 | 216 | | |
| | | | |
| D=6.61' | 0 | 467 | |
| | | | |
| 0 | 193 | | |
| AHEAD ONLY | | | |

980
975
970

R/W

7:1

MATCH LINE SEE SHEET 124

STA. 227+00

24:1

STA. 226+50

8:1

STA. 226+00

STA. 225+50

170 160 150 140 130 120 110 100 90 80 70

MATCH TO DART AVENUE
STA. 225+50 TO STA. 227+00

BRUNING 44-142 26372-2

CALC. BY: TAK DATE 12-7-79
CHECKED BY: RJT DATE 12-14-79

| FH.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

127/455

AKRON INNERBELT
SUM-59-0.00

| | END AREA CUT | END AREA FILL | CUBIC YDS. CUT | CUBIC YDS. FILL |
|---|---|---|---|---|
| STA. 229+00 | 0 | 0 | | |
| | | | 0 | 26 |
| STA. 228+50 | 0 | 28 | | |
| | | | 0 | 109 |
| STA. 228+00 D=61.91' | 0 | 90 | | |
| | | | 0 | 258 |
| STA. 227+50 D=61.30' | 0 | 135 | | |
| | | | 0 | 461 |

975
970
965
R/W
24:1
8:1
MATCH LINE SEE SHEET 125
MATCH LINE SEE SHEET 124

200 190 180 170 160 150 140 130 120 110 100 90 80 70

MATCH TO
DART AVENUE
STA. 227+50 TO STA. 229+00

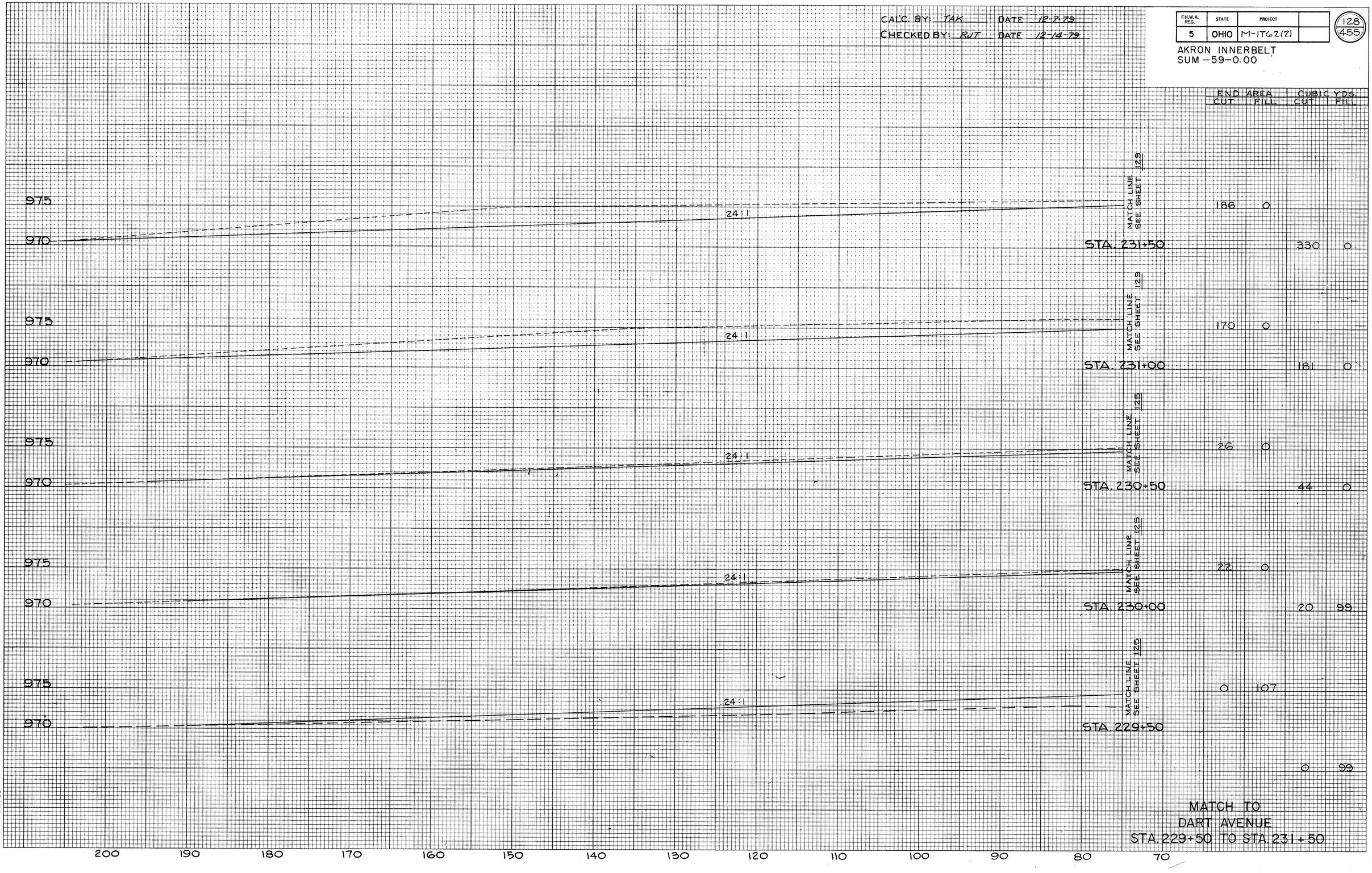
BRUNING 44-142-26372-2

CALC. BY: TAK DATE 12-7-79
CHECKED BY: RJT DATE 12-14-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

128
455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YDS. | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | 186 | 0 | |
| | | | 330 0 |
| | | | |
| | 170 | 0 | |
| | | | 181 0 |
| | | | |
| | 26 | 0 | |
| | | | 44 0 |
| | | | |
| | 22 | 0 | |
| | | | 20 99 |
| | | | |
| 0 | 107 | | |
| | | | 0 99 |

MATCH TO
DART AVENUE
STA. 229+50 TO STA. 231+50

BRUNING 44-142 26372-2

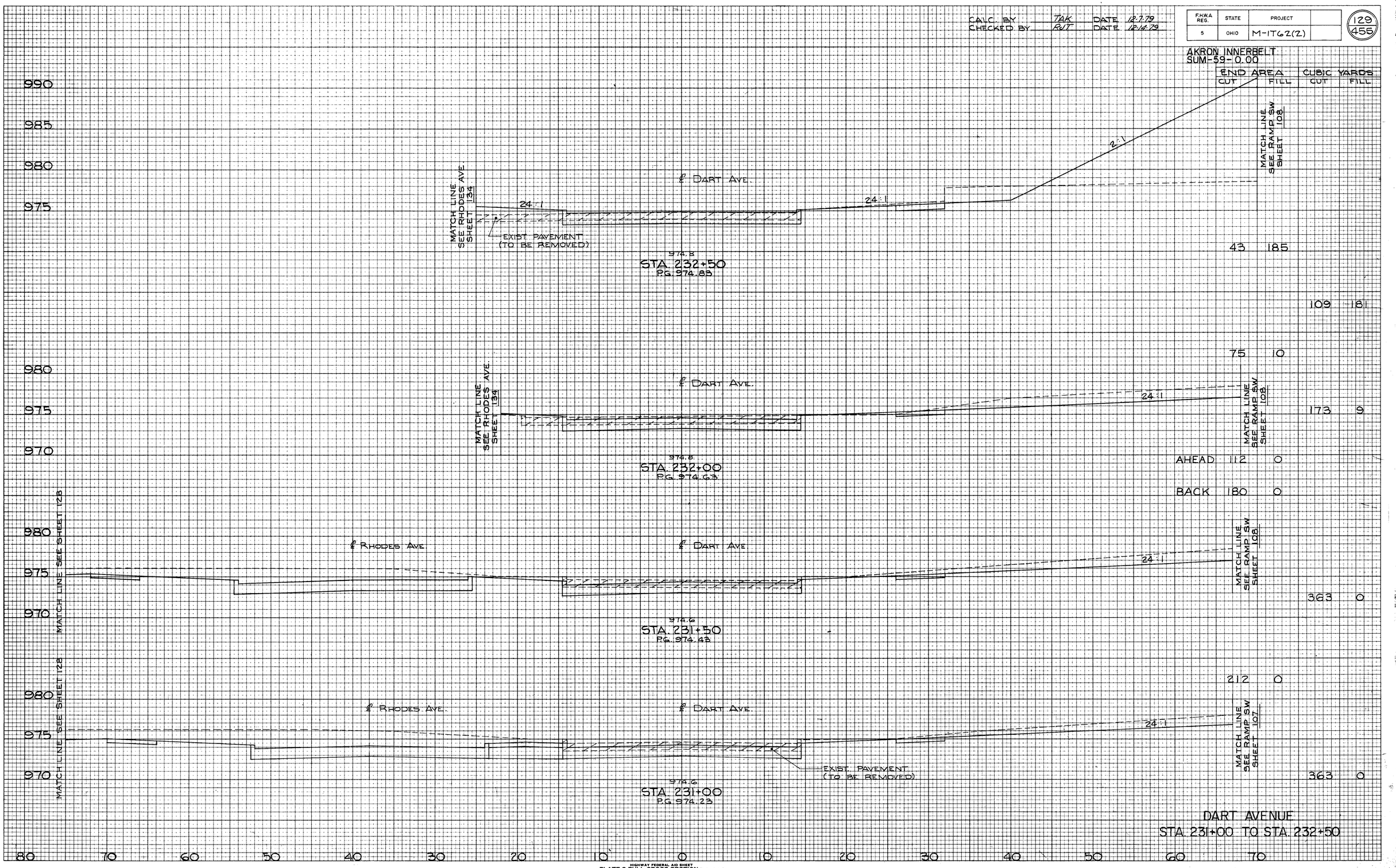
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

129
456

CALC. BY TAK DATE 12.7.79
CHECKED BY RJT DATE 12.14.79

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | 43 | 185 |
| | | 109 | 181 |
| | | 75 | 10 |
| | | 173 | 9 |
| AHEAD | 112 | 0 | |
| BACK | 180 | 0 | |
| | | 363 | 0 |
| | | 212 | 0 |
| | | 363 | 0 |




DART AVENUE
STA. 231+00 TO STA. 232+50

FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
NOTE BOOK
NO.
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
NOTE BOOK
NO.
AREAS CHECKED
BY
DATE

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TRUELOVE
PRINTED IN U.S.A.

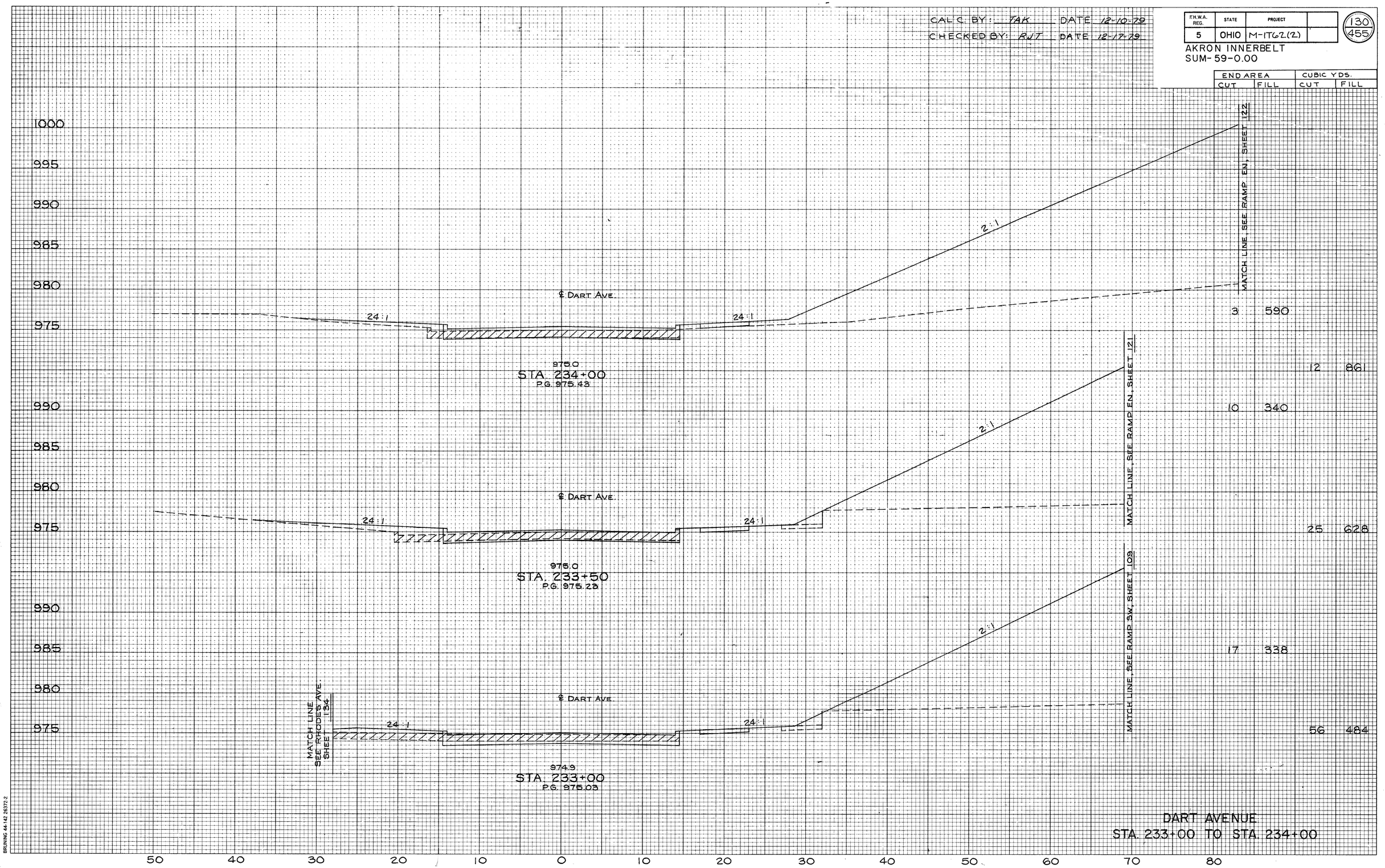
CALC. BY: TAK DATE 12-10-79
CHECKED BY: RJT DATE 12-17-79

| E.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1162(2) | |

130
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YDS. | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 3 | 590 |
| | | 12 | 861 |
| | | 10 | 340 |
| | | 25 | 628 |
| | | 17 | 338 |
| | | 56 | 484 |




DART AVENUE
STA. 233+00 TO STA. 234+00

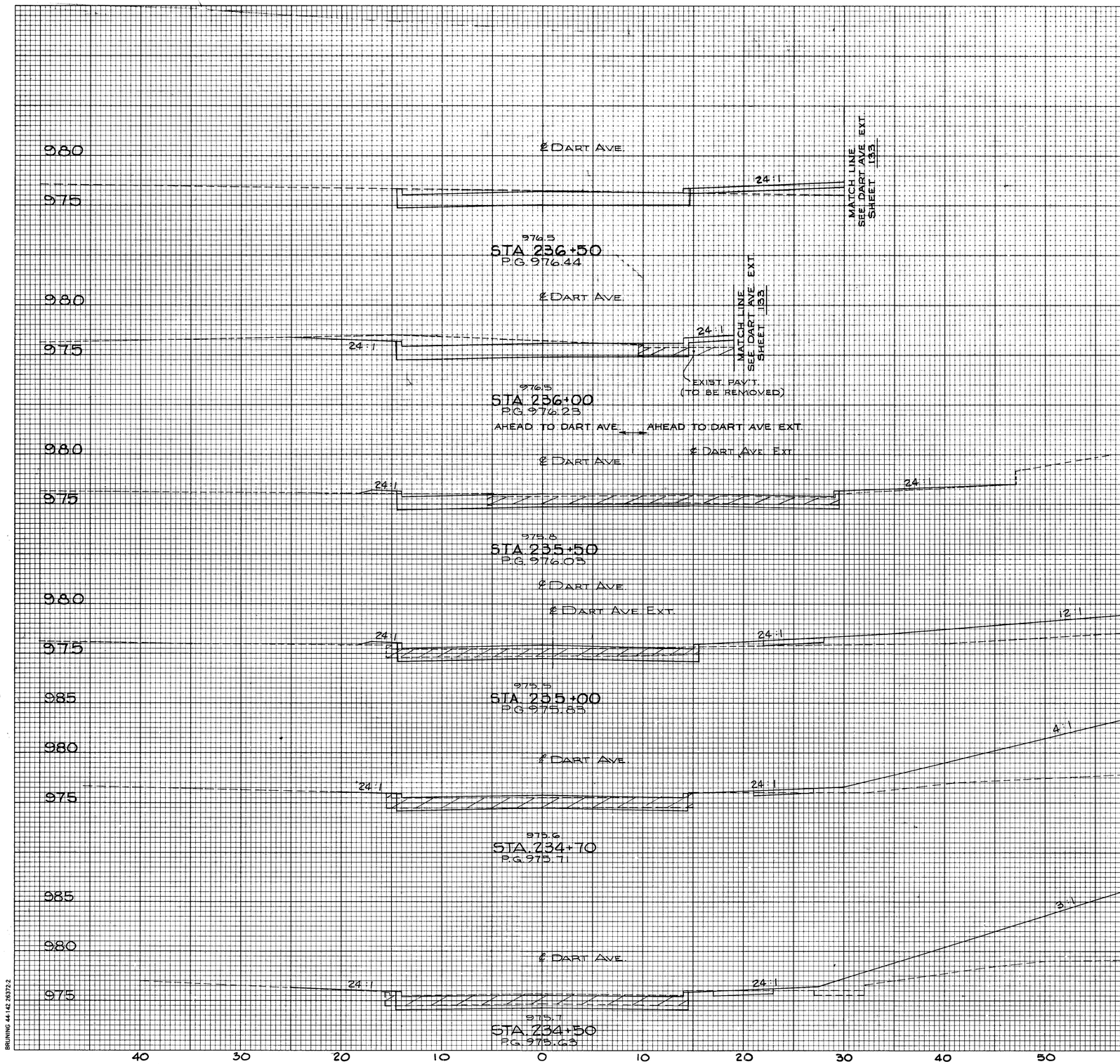
BRUNING 44-142 26372-2

CALC. BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

AKRON INNERBELT
SUM-59-0.00

131/455




| | END AREA CUT | END AREA FILL | CUBIC YARDS CUT | CUBIC YARDS FILL |
|---|---|---|---|---|
| | 49 | 7 | | |
| | | | 93 | 14 |
| | 5 | 8 | | |
| | | | 64 | 8 |
| AHEAD TO DART AVE EXT. SEE SHEET 130 AHEAD TO DART AVE | 18 | 1 | | |
| BACK | 56 | 3 | | |
| | | | 64 | 109 |
| | 13 | 115 | | |
| | | | 11 | 197 |
| | 7 | 239 | | |
| | | | 8 | 232 |
| | 15 | 387 | | |
| | | | 17 | 905 |

DART AVENUE
STA. 234+50 TO STA. 236+50

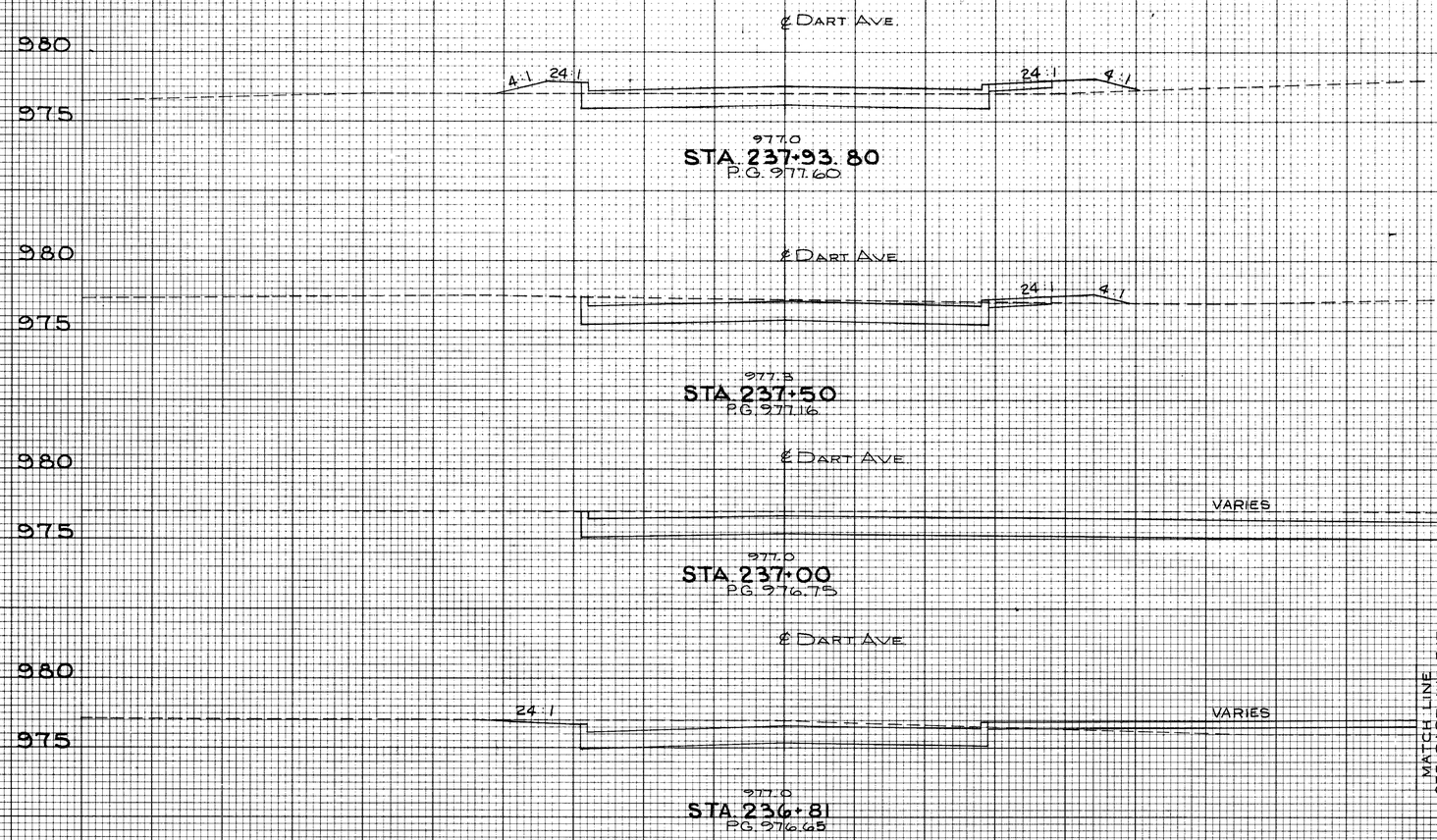
BRUNING 44-142 26372.2

CALC BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

132
455

AKRON INNERBELT
SUM-59-0.00




END AREA CUBIC YARDS

| CUT | FILL | CUT | FILL |
|---|---|---|---|
| | | 30 | 9 |
| D=43.80' | | 67 | 10 |
| | | 52 | 3 |
| | | 169 | 3 |
| | | 131 | 0 |
| D=19' | | 65 | 4 |
| | | 11 | |
| D=31' | | 59 | 10 |

DART AVENUE
STA. 236+81 TO STA. 237+93.80

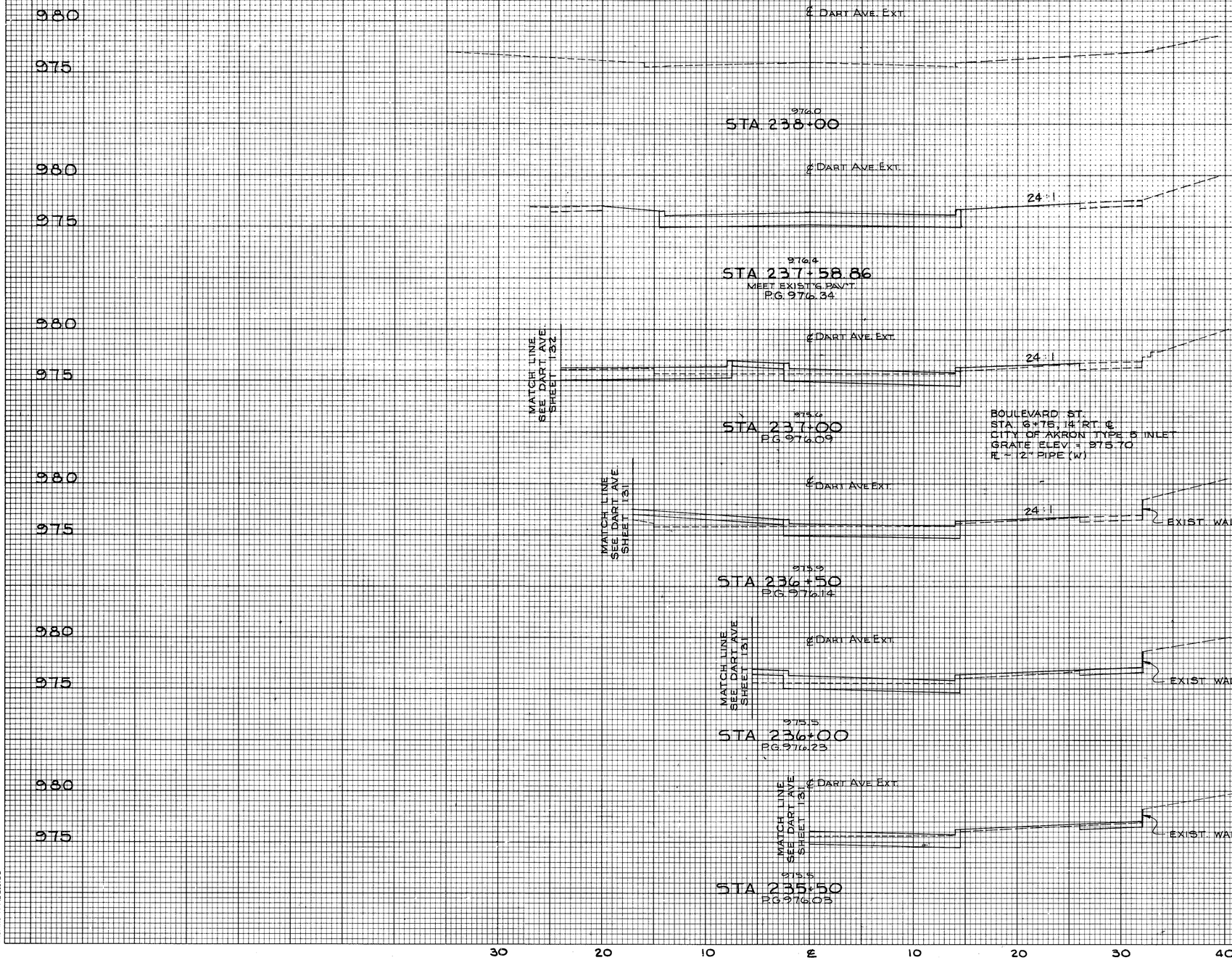
BRUNING 44-142 26372-2

CALC. BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

133/455

AKRON INNERBELT
SUM-59-0.00




| | END AREA | | CUBIC YARDS | |
|---|---|---|---|---|
| | CUT | FILL | CUT | FILL |
| | 0 | 0 | | |
| | | | 25 | 0 |
| | 33 | 0 | | |
| | | | 78 | 13 |
| | 39 | 12 | | |
| | | | 55 | 22 |
| | 20 | 12 | | |
| | | | 32 | 16 |
| | 15 | 5 | | |
| | | | 31 | 6 |
| | 18 | 2 | | |

DART AVENUE EXTENSION
STA. 235+50 TO STA. 238+00

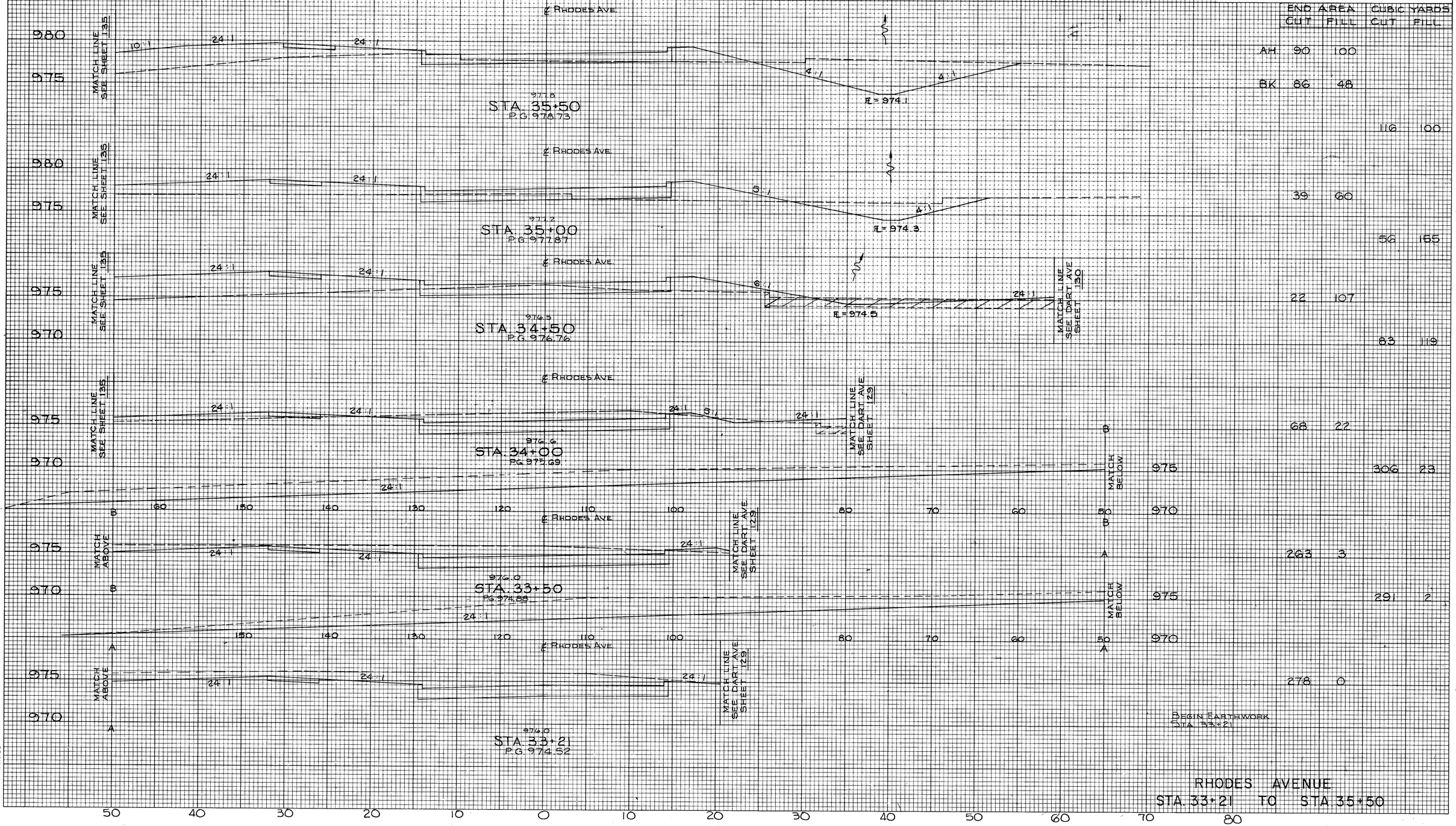
BRUNING 44-142 26372-2

CALC BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1162(2) | |

134
455

AKRON INNERBELT
SUM-59-0.00




| | END AREA CUT | END AREA FILL | CUBIC YARDS CUT | CUBIC YARDS FILL |
|---|---|---|---|---|
| AH | 90 | 100 | | |
| BK | 86 | 48 | | |
| | | | 116 | 100 |
| | | | 39 | 60 |
| | | | 56 | 155 |
| | | | 22 | 107 |
| | | | 83 | 119 |
| | | | 68 | 22 |
| | | | 306 | 23 |
| | | | 263 | 3 |
| | | | 291 | 2 |
| | | | 278 | 0 |

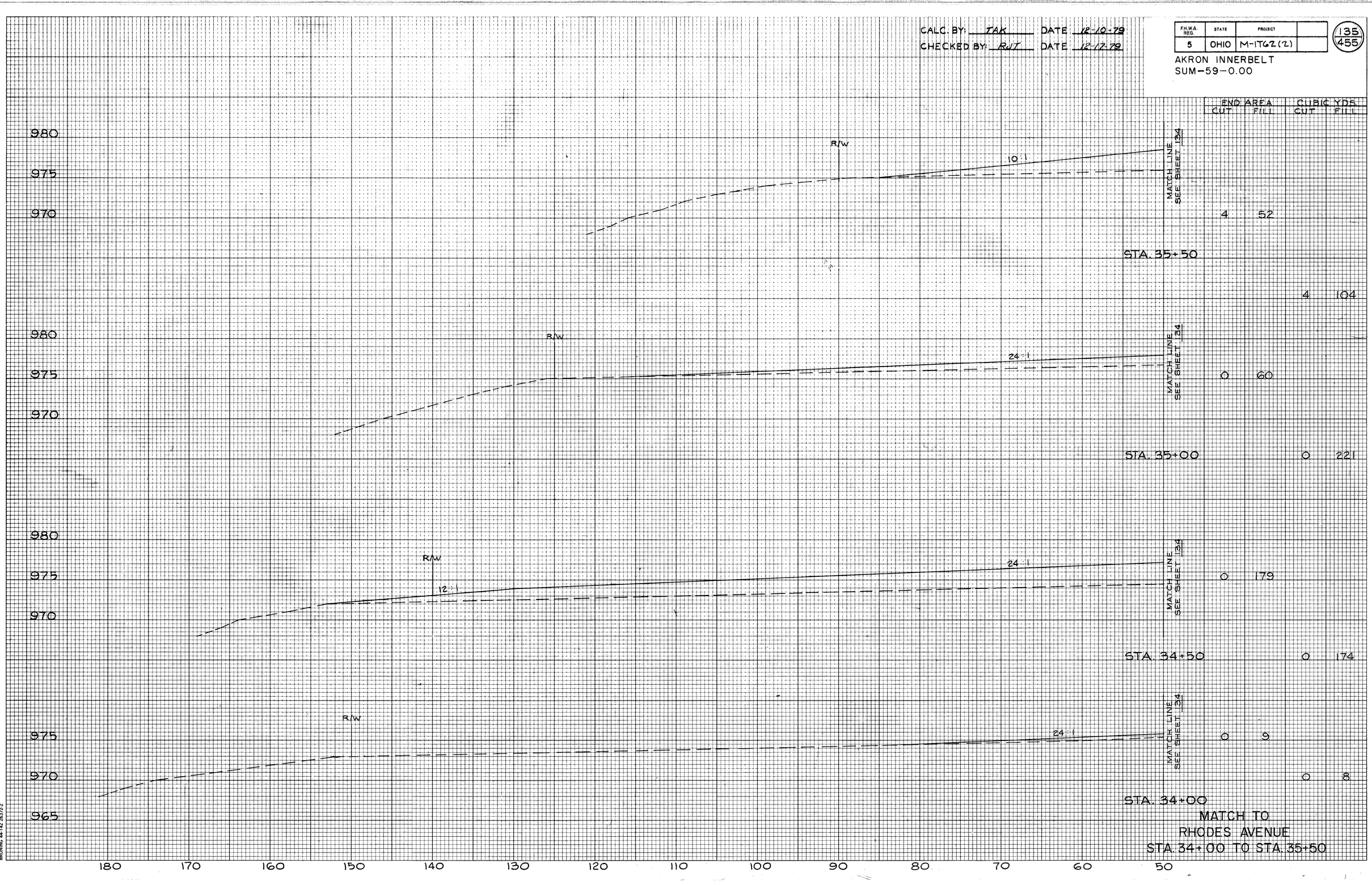
BRUNING 44-142 26372-2

CALC. BY: TAK DATE 12-10-79
CHECKED BY: RJT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1TG2(7) | |

135/455

AKRON INNERBELT
SUM-59-0.00




| | END AREA CUT | END AREA FILL | CUBIC YDS. CUT | CUBIC YDS. FILL |
|---|---|---|---|---|
| STA. 35+50 | 4 | 52 | | |
| | | | 4 | 104 |
| STA. 35+00 | 0 | 60 | | |
| | | | 0 | 221 |
| STA. 34+50 | 0 | 179 | | |
| | | | 0 | 174 |
| STA. 34+00 | 0 | 9 | | |
| | | | 0 | 8 |

MATCH TO
RHODES AVENUE
STA. 34+00 TO STA. 35+50

BRUNING 44-142 26372-2

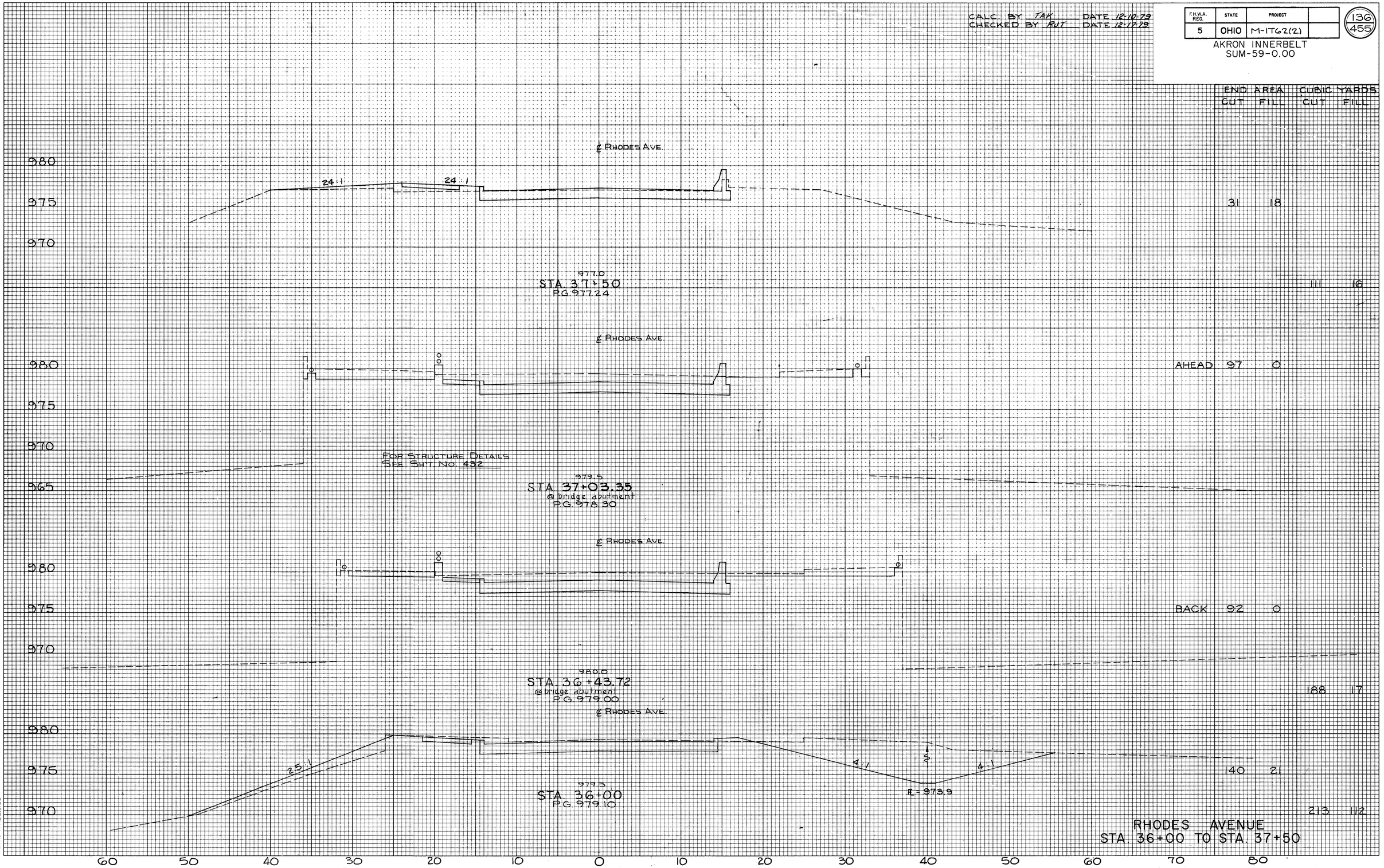
CALC. BY TAK DATE 12-10-79
CHECKED BY RVT DATE 12-12-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

136/455

AKRON INNERBELT
SUM-59-0.00

| END AREA CUT | END AREA FILL | CUBIC YARDS CUT | CUBIC YARDS FILL |
|---|---|---|---|
| | | | |
| | | 31 | 18 |
| | | | |
| | | 111 | 16 |
| | | | |
| AHEAD | | 97 | 0 |
| | | | |
| BACK | | 92 | 0 |
| | | | |
| | | 188 | 17 |
| | | | |
| | | 140 | 21 |
| | | | |
| | | 213 | 112 |




RHODES AVENUE
STA. 36+00 TO STA. 37+50

BRUNING 44-142 26372-2

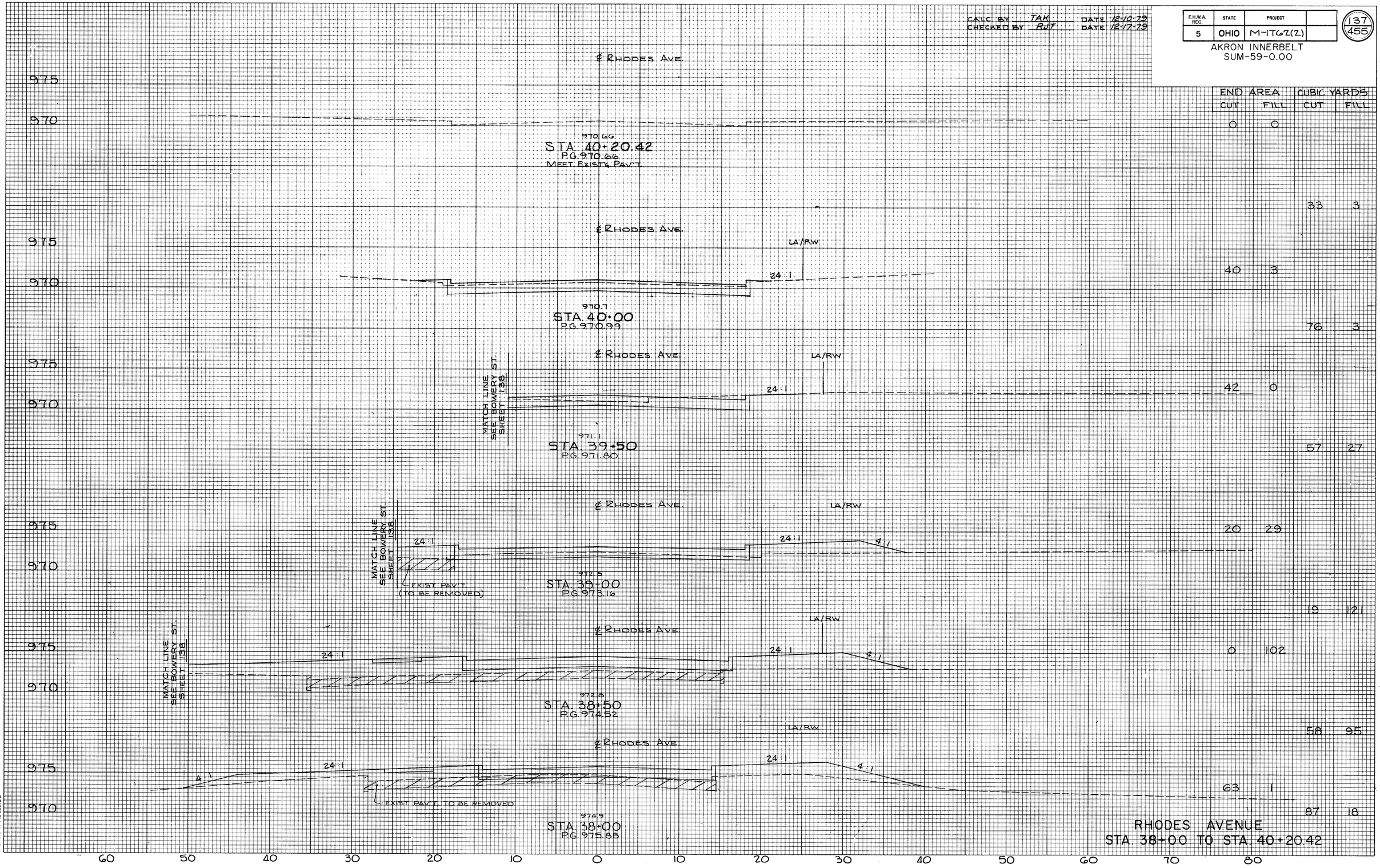
CALC BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

137
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 0 | 0 | | |
| | | 33 | 3 |
| 40 | 3 | | |
| | | 76 | 3 |
| 42 | 0 | | |
| | | 57 | 27 |
| 20 | 29 | | |
| | | 19 | 121 |
| 0 | 102 | | |
| | | 58 | 95 |
| 63 | 1 | | |
| | | 87 | 18 |




RHODES AVENUE
STA. 38+00 TO STA. 40+20.42

BRUNING 44-142 263722

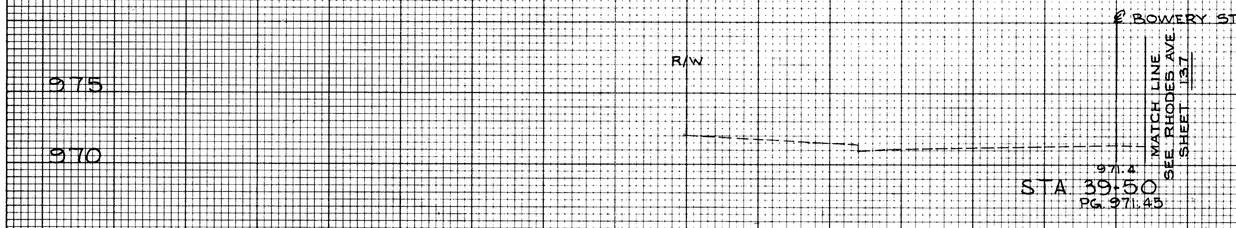
CALC. BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

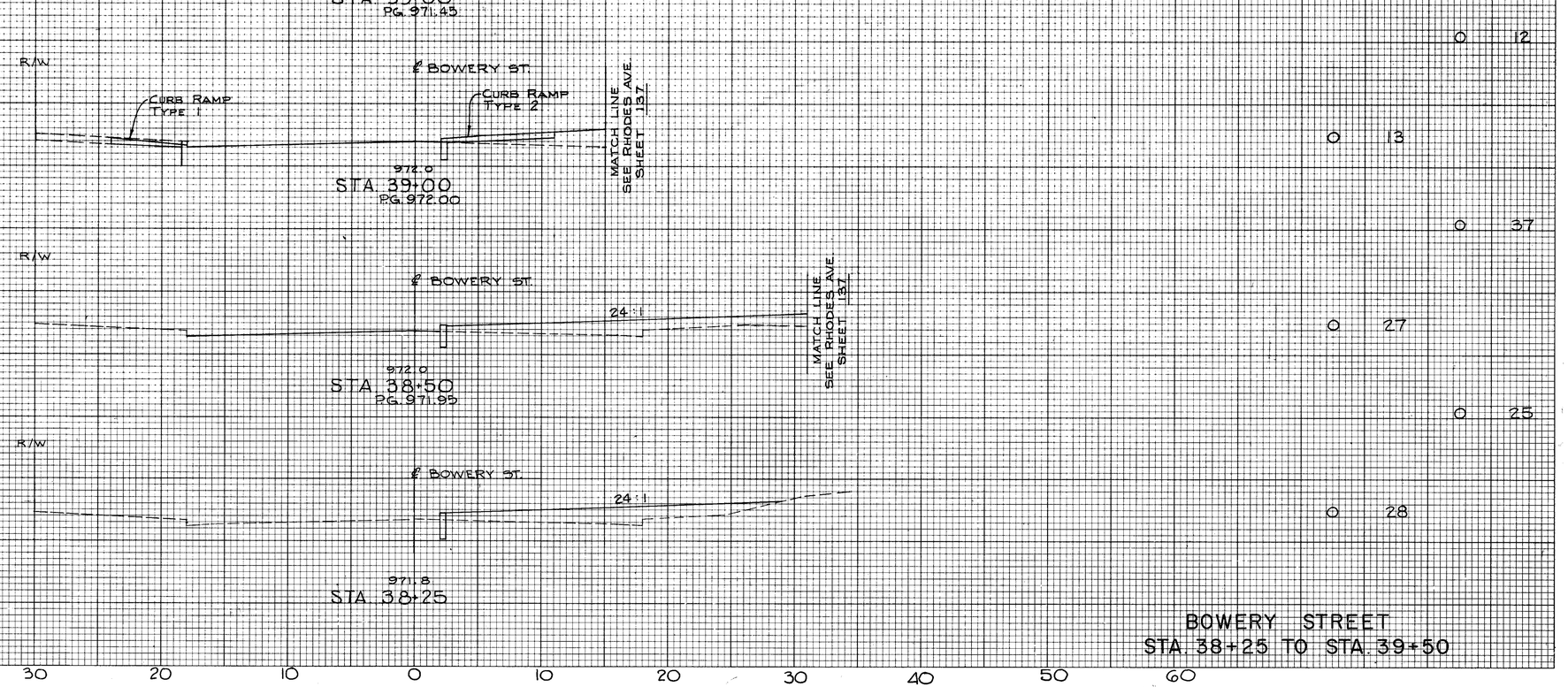
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

138
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |




| | |
|---|---|
| 0 | 12 |
| 0 | 13 |
| 0 | 37 |
| 0 | 27 |
| 0 | 25 |
| 0 | 28 |

BOWERY STREET
STA. 38+25 TO STA. 39+50

BRUNING 44-142 26372.2

CALC BY TAK DATE 12-14-79
CHECKED BY RJT DATE 12-18-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

139
455

AKRON INNERBELT
SUM-59-0.00

| END AREAS | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |

FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
NO.
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

980
975

℄ SOUTH ST.
R/W
976.1
STA. 112+30.00
2 0

980
975

℄ SOUTH ST.
R/W
24:1
975.8
STA. 112+00
2 2
2 4

980
975

℄ SOUTH ST.
R/W
24:1
24:1
975.4
STA. 111+73.69
5 3
8 2

20 10 0 10 20 30

SOUTH ST.
STA. 111+73.69 TO STA. 112+30.00

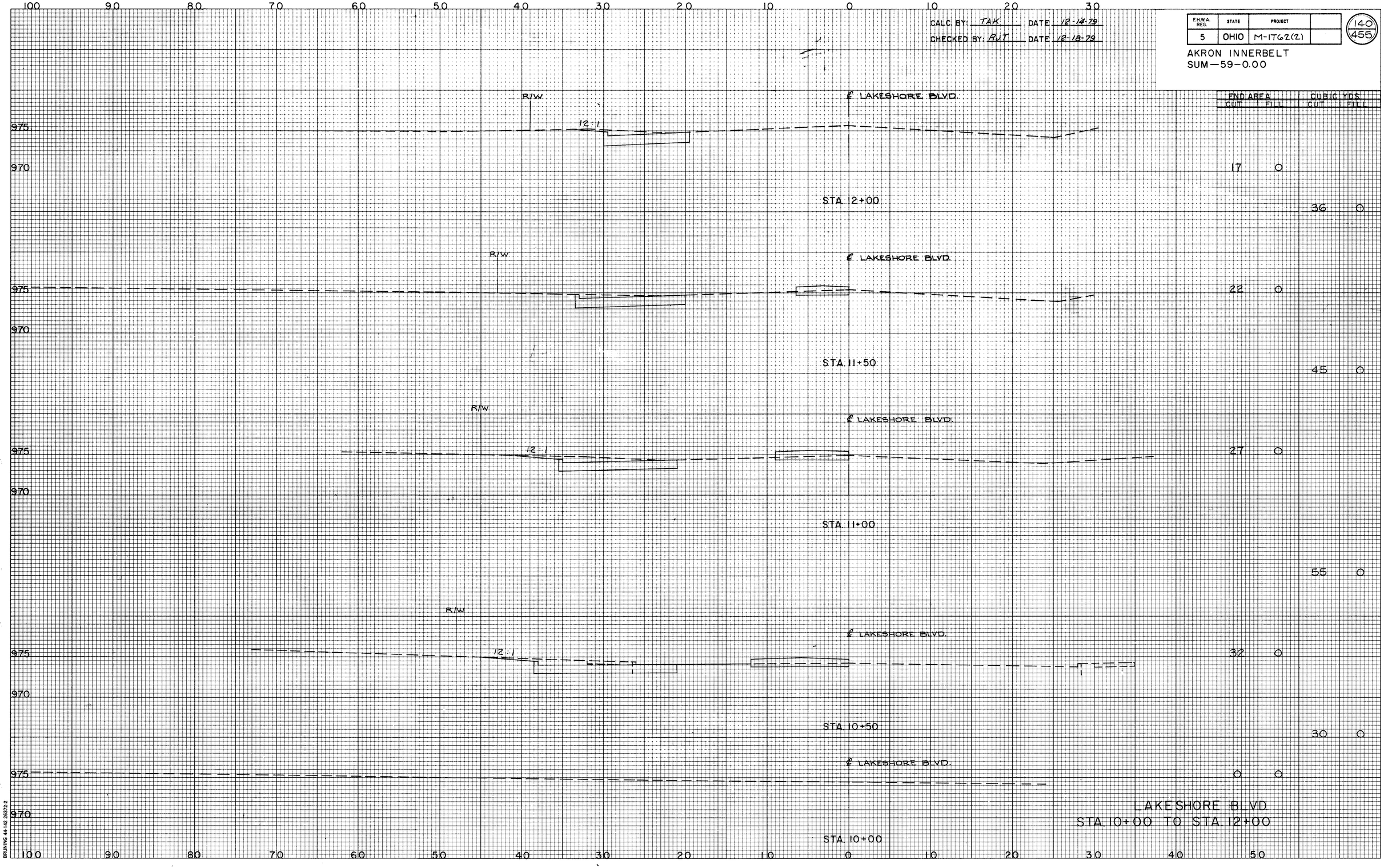
HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

CALC BY: TAK DATE 12-14-79
CHECKED BY: RJT DATE 12-18-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

140
455

AKRON INNERBELT
SUM—59—0.00




| END AREA CUT | END AREA FILL | CUBIC YDS. CUT | CUBIC YDS. FILL |
|---|---|---|---|
| 17 | 0 | | |
| | | 36 | 0 |
| 22 | 0 | | |
| | | 45 | 0 |
| 27 | 0 | | |
| | | 55 | 0 |
| 32 | 0 | | |
| | | 30 | 0 |
| 0 | 0 | | |

LAKESHORE BLVD.
STA. 10+00 TO STA. 12+00

BRUNING 44-142 26372-2

CALC BY: TAK DATE 12-14-79

CHECKED BY: RJT DATE 12-18-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(7) | |

141/455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| | | 4 | 0 |
| | | 14 | 0 |
| 12.1 | | 11 | 0 |
| | | 25 | 0 |
| | | 16 | 0 |
| 12.1 | | 3 | 0 |

STA 14+00

STA 13+50

STA 13+00

STA 12+50

LAKESHORE BLVD.
STA 12+50 TO STA 14+00

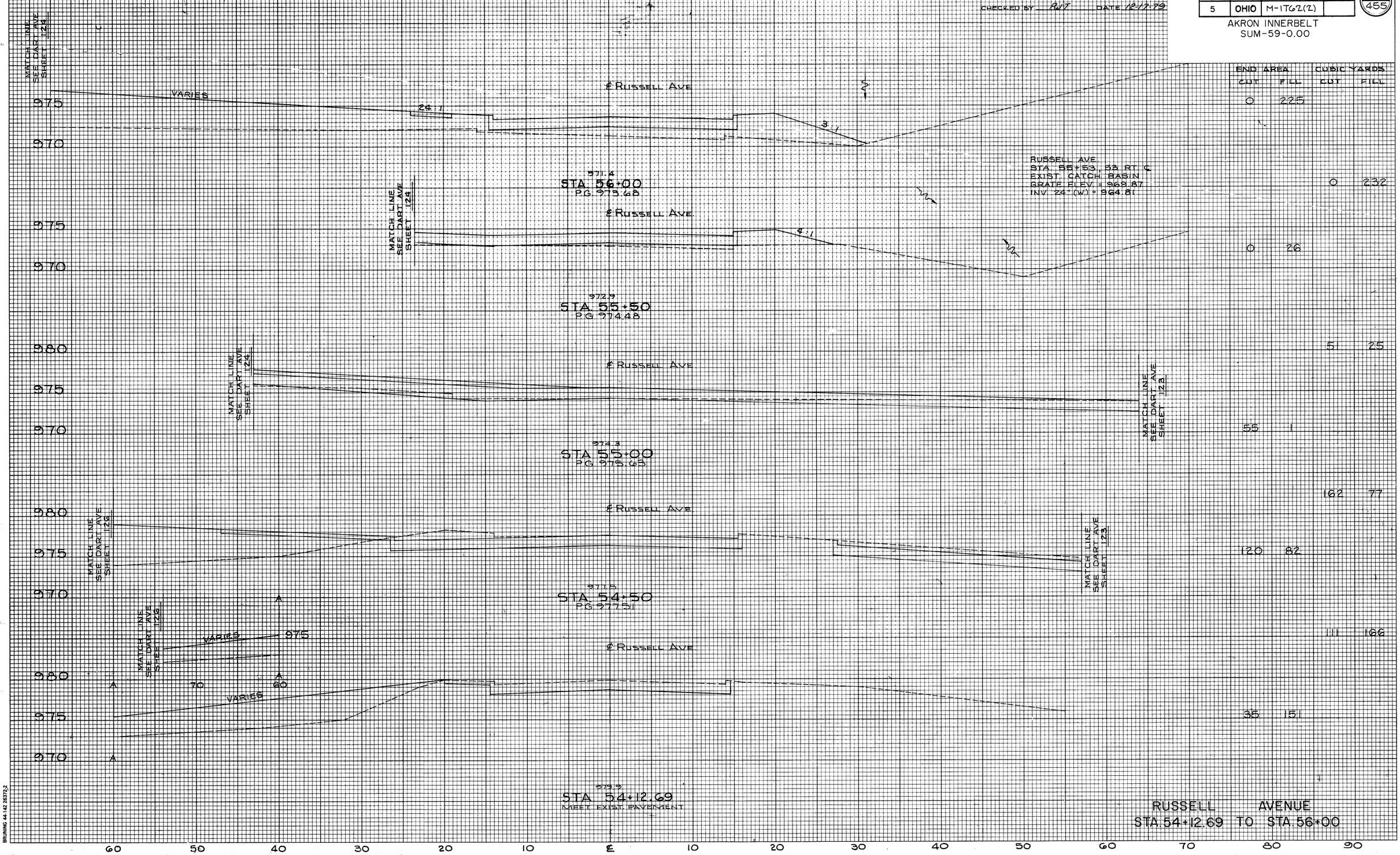
BRUNING 44-142 26372-2

CALC BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

142/455

AKRON INNERBELT
SUM-59-0.00




| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 0 | 225 | | |
| | | 0 | 232 |
| 0 | 26 | | |
| | | 5 | 25 |
| 55 | 1 | | |
| | | 162 | 77 |
| 120 | 82 | | |
| | | 111 | 166 |
| 35 | 151 | | |

RUSSELL AVENUE
STA. 54+12.69 TO STA. 56+00

BRUNING 44-142 263732

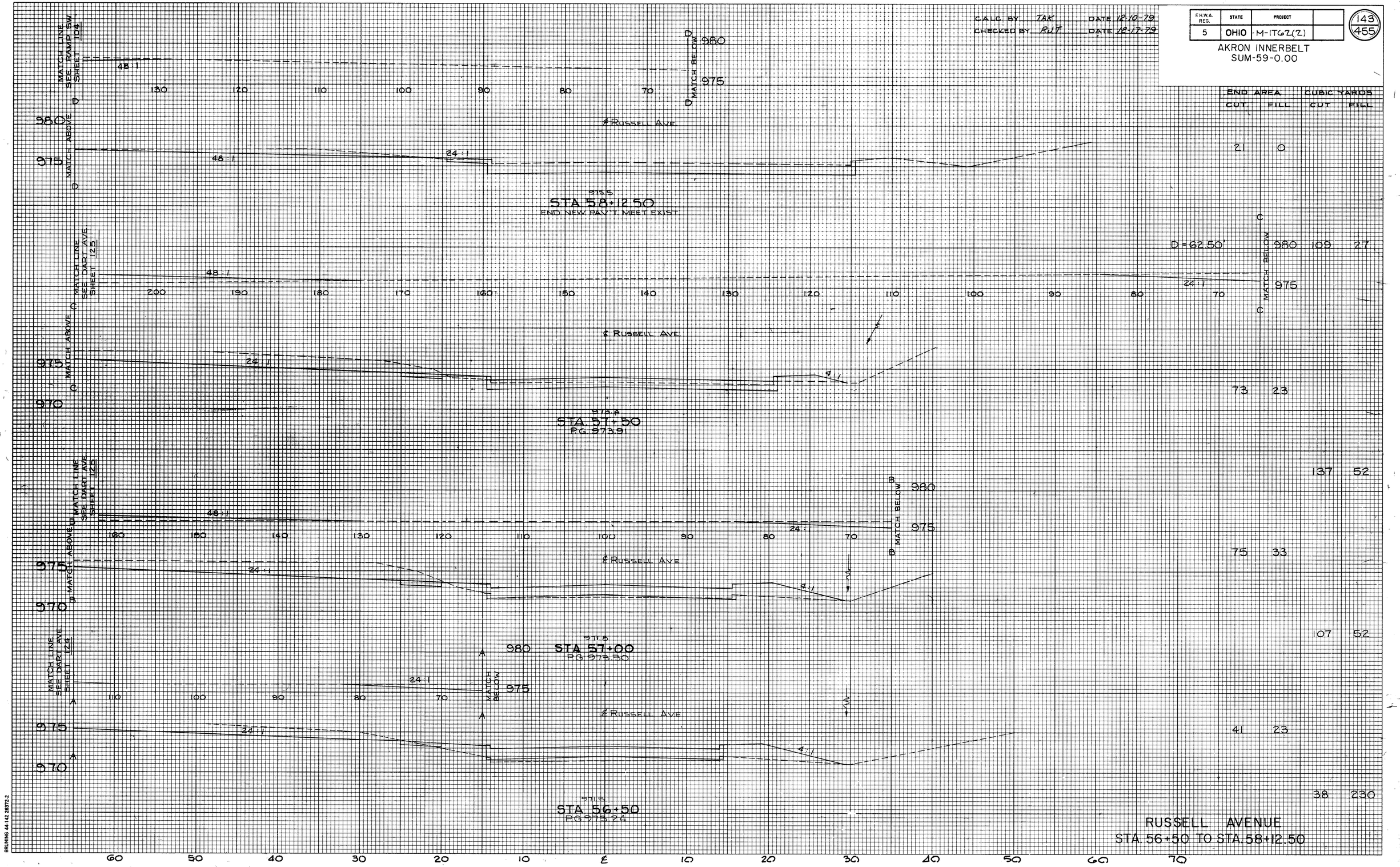
CALC. BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

143
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 21 | 0 |
| | | 73 | 23 |
| | | 137 | 52 |
| | | 75 | 33 |
| | | 107 | 52 |
| | | 41 | 23 |
| | | 38 | 230 |




RUSSELL AVENUE
STA. 56+50 TO STA. 58+12.50

BRUNING 44-142 26372-2

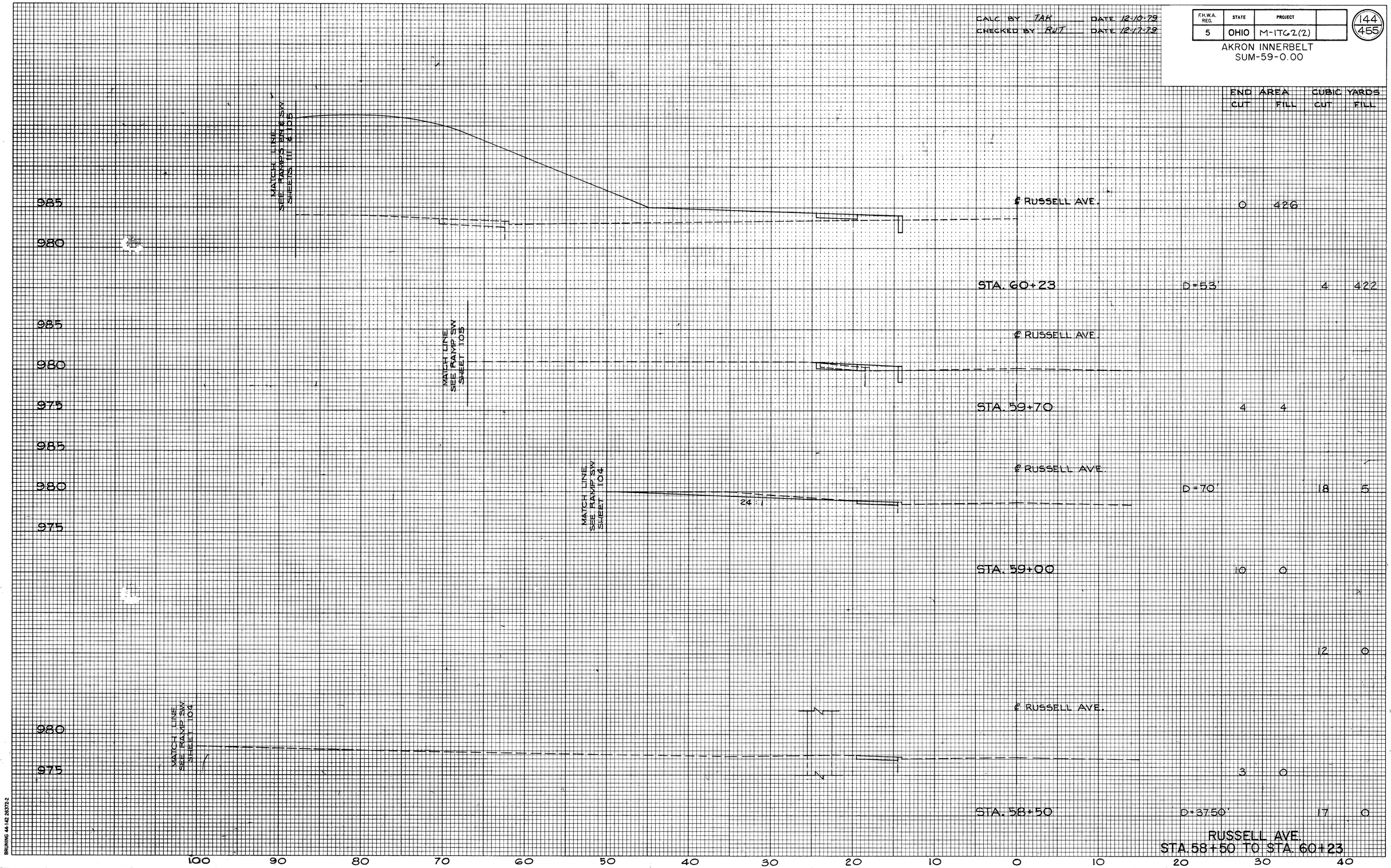
CALC. BY TAK DATE 12-10-79
CHECKED BY R.J.T DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

144
455

AKRON INNERBELT
SUM-59-0.00

| END AREA | | CUBIC YARDS | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 0 | 426 | | |
| 4 | 422 | | |
| 4 | 4 | | |
| 18 | 5 | | |
| 10 | 0 | | |
| 12 | 0 | | |
| 3 | 0 | | |
| 17 | 0 | | |




RUSSELL AVE.
STA. 58+50 TO STA. 60+23

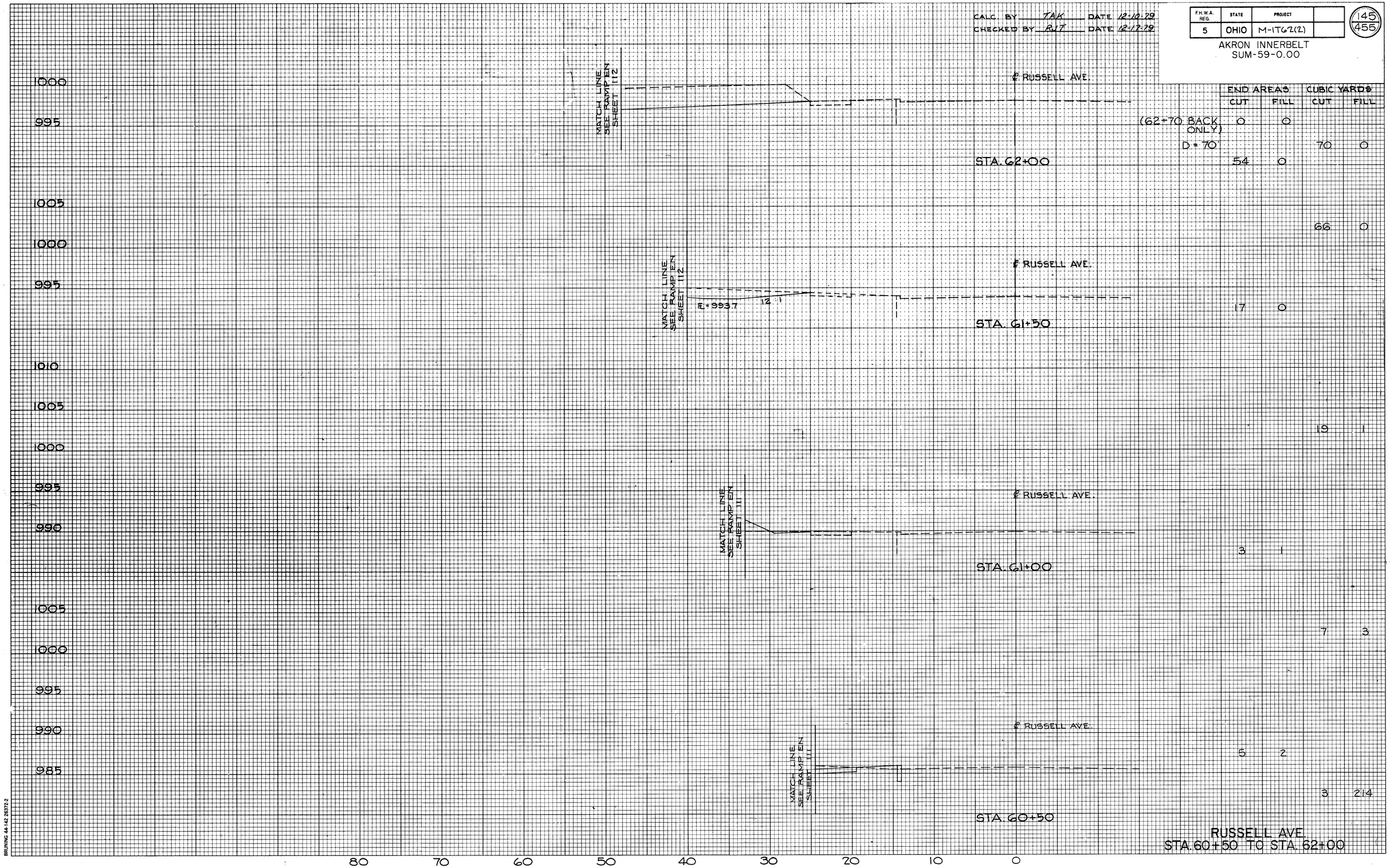
BRUNING 44-142 26372-2

CALC. BY TAK DATE 12-10-79
CHECKED BY RJT DATE 12-17-79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

145/455

AKRON INNERBELT
SUM-59-0.00




| | END AREAS | | CUBIC YARDS | |
|---|---|---|---|---|
| | CUT | FILL | CUT | FILL |
| (62+70 BACK ONLY) | 0 | 0 | | |
| D = 70' | | | 70 | 0 |
| | 54 | 0 | | |
| | | | 66 | 0 |
| | 17 | 0 | | |
| | | | 19 | 1 |
| | 3 | 1 | | |
| | | | 7 | 3 |
| | 5 | 2 | | |
| | | | 3 | 214 |

RUSSELL AVE.
STA. 60+50 TO STA. 62+00

BRUNING 44-142 26372-2

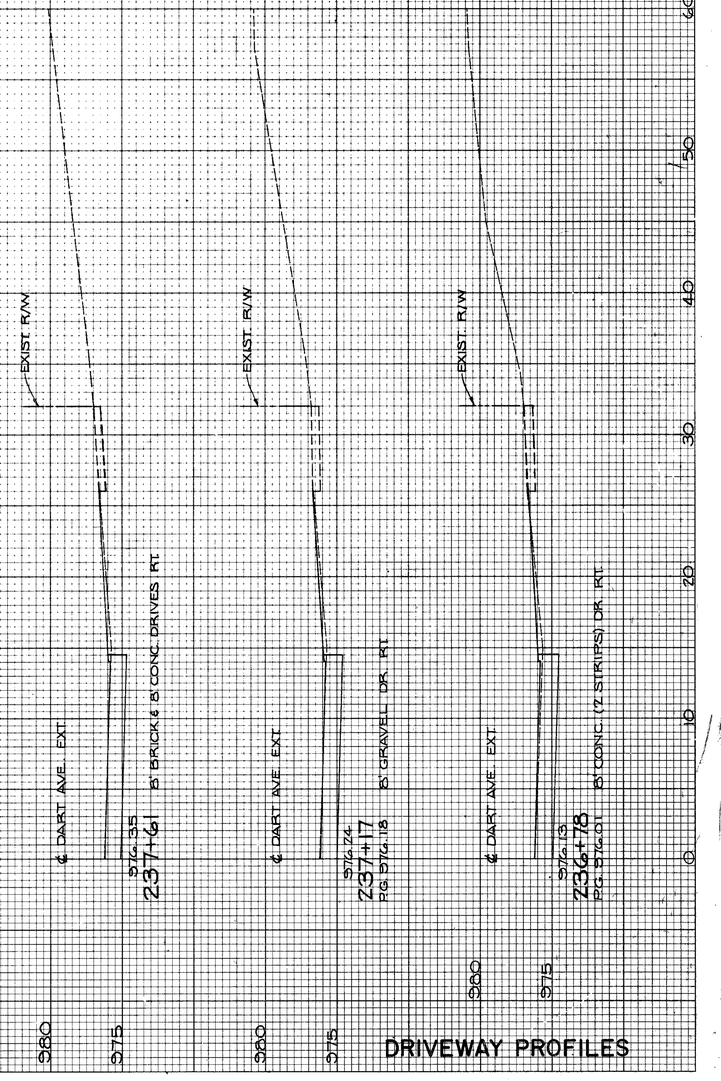
CALC. BY BHB DATE 11/7/79
CHECKED BY RJT DATE 12/4/79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1762(2) | |

146
455

AKRON INNERBELT
SUM-59-0.00

FOR DRIVEWAY DETAILS SEE SHEET NO. 61




DRIVEWAY PROFILES

BRUNING 44-142 26372-2

CALCULATED BY W.R.S. DATE 12/79
CHECKED BY R.E.R. DATE 11/82

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

147/455

AKRON INNERBELT
SUM-59-0.00

* NOT COMPLETE

# ESTIMATED QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | 603 - STORM: TYPE B CONDUIT 706.01, 706.02 W/ 706.11 JOINTS OR 706.08 W/ 706.12 JOINTS 12" LIN. FT. | 603 - STORM: TYPE B CONDUIT 706.01, 706.02 W/ 706.11 JOINTS OR 706.08 W/ 706.12 JOINTS 15" LIN. FT. | 603 - STORM: TYPE B CONDUIT 706.01 OR 706.02 WITH 706.11 JOINTS 18" LIN. FT. | 603 - STORM: TYPE B CONDUIT 706.01 OR 706.02 WITH 706.11 JOINTS 21" LIN. FT. | 603 - STORM: TYPE B CONDUIT 706.02 WITH 706.11 JOINTS 30" L.F. | 603 - STORM: TYPE B CONDUIT 706.02 WITH 706.11 JOINTS 36" L.F. | 603 - STORM: TYPE C CONDUIT 706.01, 706.02 W/ 706.11 JOINTS OR 706.08 W/ 706.12 JOINTS 12" LIN. FT. | 603 - STORM: TYPE C CONDUIT 706.01, 706.02 W/ 706.11 JOINTS OR 706.08 W/ 706.12 JOINTS 15" LIN. FT. | 603 - STORM: TYPE C CONDUIT 706.01 OR 706.02 WITH 706.11 JOINTS 18" LIN. FT. | 603 - STORM: TYPE C CONDUIT 706.01 OR 706.02 WITH 706.11 JOINTS 21" LIN. FT. | 603 - STORM: TYPE C CONDUIT 706.02 WITH 706.11 JOINTS 30" L.F. | 603 - STORM: TYPE C CONDUIT 706.02 WITH 706.11 JOINTS 36" L.F. | 601 PAVED GUTTER STANDARD TYPE I-2 LIN. FT. | 601 RIPRAP USING 6" REINF. CONCRETE SLAB SQ. YD. | FLAP Gate 12" EA. | FLAP Gate 15" EA. | 604 - STORM: CITY OF AKRON INLET N° 3 EACH | CITY OF AKRON INLET N° 3 MODIFIED EACH | CITY OF AKRON INLET N° 5 EACH | CITY OF AKRON INLET N° 5 MODIFIED EACH | MANHOLE STANDARD N° 1 EA. | MANHOLE STANDARD N° 3 EA. | CATCH BASIN STANDARD N° 5 EA. | CATCH BASIN STANDARD N° 6 EA. | CITY OF AKRON N° 3 INLET ADJUST TO GRADE EACH | CITY OF AKRON N° 3 INLET RECONST. TO GRADE EACH | MANHOLE ADJUST TO GRADE EACH | MEDIAN INLET STANDARD N° 13B50 EACH | MANHOLE RECONST. TO GRADE EACH | 602 CONCRETE MASONRY CU. YDS. | SHEET Nº. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P-1 | ML - 424+60, 124' RT. ML - 425+03.29, 90.98' RT. ℄ | RT. | | | | | | | (57) | | | | | | | | | | | | | | | | | | | | | | | | | | | 167 |
| P-2 | RAMP 'EN' 112+00, 8' RT ℄ - 112+00, 32' LT ℄ | LT. | (39) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 167 |
| P-3 | ML - 427+13, 55' RT ℄ - RAMP 'EN' 111+14, 30' LT ℄ | LT. | (8) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 167 |
| P-4 | RAMP 'EN' 114+14, 30' LT ℄ - RAMP EN 112+00, 32' LT ℄ | LT. | (86) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 167 |
| P-5 | RAMP 'EN' 112+00, 32' LT ℄ - ML 429+92, 62' RT ℄ | - | | (195) | | | | | | | | | | | | | | 1 | | | 1 | | | | | | | | | | | | | | | 167 |
| P-7 | SOUTH ST. 107+38, 54' LT ℄ - 107+60, 33' LT ℄ | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 167 |
| P-8 | SOUTH ST. 107+60, 33' LT ℄ - 108+92.5, 33' LT ℄ | LT. | | | | | | | | | | | | | | | 30 | | | | | (1) | | | | | | | | | | | 6.5 | | 168 |
| P-9 | SOUTH ST. 108+92.5, 33' LT ℄ - 110+39, 33' LT ℄ | LT. | | | | | | | | | | | | | | | 136 | | | | | 1 | | | | | | | | | | | | | 168 |
| P-10 | SOUTH ST. 110+39, 33' LT ℄ - DART AVE. 222+16, 46' RT. | - | | | | | | 108 | | | | | | | | | 144 | | | | | 1 | | | | | | | | | | | | | 168 |
| P-11 | SOUTH ST. 108+92.5, 33' LT ℄ - 108+92.5, 42' LT ℄ | LT. | | | | | | | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-12 | LAKESHORE BLVD. 10+50, 17' LT - 87' LT ℄ | LT. | 16 | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 168 |
| P-13 | SOUTH ST. 111+35, 7' LT ℄ - 111+79, 15' RT ℄ | - | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 168 |
| P-14 | SOUTH ST. 111+52, 15' LT ℄ - 111+59, 17' LT ℄ | LT. | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 168 |
| P-15 | DART AVE. 224+42.58' LT ℄ - 224+00, 28' LT ℄ | LT. | 54 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 168 |
| P-16 | DART AVE. 224+00, 28' LT ℄ - 223+75, 56' LT ℄ | - | 36 | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 168 |
| P-17 | DART AVE. 234+08, 28' LT ℄ - 223+75, 56' LT ℄ | - | 38 | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | 168 |
| P-18 | DART AVE. 225+36, 7' LT ℄ - RHODES AVE. 29+00, 14' RT | - | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-21 | RUSSELL AVE. 56+41, 14' LT - 56+85, 14' LT ℄ | LT. | 43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-22 | RHODES AVE. 30+00, 14' RT ℄ - DART AVE. 228+50, 19' LT | - | 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-23 | DART AVE. 228+50, 19' LT ℄ - 228+50, 14' RT ℄ | - | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-24 | DART AVE. 228+50, 19' LT ℄ - 229+80, 19' LT ℄ | LT. | | | | | | | 130 | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 169 |
| P-25 | RHODES AVE. 33+75, 14' LT ℄ - DART AVE. 231+00, 19' LT | - | 109 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-26 | DART AVE. 231+00, 19' LT ℄ - 232+00, 14' LT ℄ | LT. | | | | | | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-27 | DART AVE. 231+00, 19' LT ℄ - 231+00, 14' RT ℄ | - | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-28 | DART AVE. 229+80, 19' LT ℄ - 231+00, 19' LT ℄ | LT. | | | | | | | 123 | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 169 |
| P-29 | RAMP 'SW' 130+10, 64' LT ℄ - DART AVE. 229+80, 19' LT | - | | | | | | | 146 | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-30 | DART AVE. 229+90, 14' RT - 229+80, 11' RT ℄ | - | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| P-29A | DART AVE. 229+80, N' RT. ℄ - 229+80, 19' LT. ℄ | | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| P-31 | DART AVE. 229+80, 11' RT. - 229+90, 14' LT ℄ | LT. | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| P-32 | RHODES AVE. 31+47, 14' LT - 229+80, 13' LT. ℄ | LT. | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| P-33 | RHODES AVE. 31+47, 14' RT - DART AVE. 229+80, 14 LT ℄ | - | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| P-34 | DART AVE. 229+80, 19' LT - RHODES AVE. 31+50, 21.5' LT ℄ | - | | | 48 | | | | | | | 178 | | | | | | | | | | | | | | | | | | | | | | 2.8 | | 170 |
| P-35 | DART AVE. 234+00, 14' LT - DART AVE. 234+12, 12' LT ℄ | LT. | 12 | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 170 |
| P-36 | DART AVE. 234+00, 14' RT ℄ - 234+12, 12' LT ℄ | - | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| P-37 | DART AVE. 234+12, 12' LT ℄ - 235+61, 2' LT ℄ | - | 143 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| P-38 | DART AVE. EXT. 237+59, 15' LT ℄ - 236+84, 14' LT ℄ | LT. | 72 | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 170 |
| P-39 | DART AVE. EXT. 236+74, 13' LT ℄ - 237+07, 14' RT ℄ | - | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| P-40 | DART AVE EXT. 236+74, 13' LT ℄ - 236+66, 14' RT ℄ | - | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| A-3 | SOUTH ST. 111+34, 6' LT. | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 161 |
| P-41 | DART AVE EXT. 235+21, 115' RT ℄ - RAMP 'EW' 134+00, 63' RT | - | | | | | | | | 70 | | | | | | | | | | | | | | | | | | | | | | | | | | 171 |
| P-42 | DART AVE EXT. 235+21, 115' RT ℄ - 236+61, 64' RT ℄ | - | | | | | | | | | 75 | | | | | | | | | | | 1 | | | | | | | | | | | | | | 171 |
| P-43 | DART AVE EXT. 235+61, 64' RT ℄ - 235+61, 2' LT ℄ | - | | 64 | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 171 |
| P-44 | DART AVE. 235+61, 2' LT ℄ - RAMP 'EN' 136+25, 20' RT ℄ | - | | | | | 57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 171 |
| P-45 | RAMP 'EN' 136+25, 20' RT ℄ - 138+04, 20' RT ℄ | RT. | | | | | | | | | | | | | | | 180 | | | | | | | | | | | | | | | | | 4.7 | | 171 |
| P-46 | RHODES AVE. 39+49, 9' RT ℄ - 39+18, 18' LT ℄ | - | 42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 171 |
| P-47 | RAMP 'SW' 129+77, 83' RT ℄ - RUSSELL AVE. 60+02 108 | - | 90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 171 |
| P-48 | RAMP 'SW' 129+50, 78' RT ℄ - RUSSELL AVE 61+33, 12' RT | - | 62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 171 |
| P-49 | RUSSELL AVE. SW 33+12 RT. - 60+02, 12' RT ℄ | - | | 81 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 171 |
| A-4 | SOUTH ST. 110+55, 6' LT. | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 161 |
| P-50 | ML 429+86, 61' RT ℄ - 429+92, 65' RT ℄ | RT. | (7) | | | | | | | | | | | | | | | (1) | | | | | | | | | | | | | | | | | | 80 |
| P-51 | RUSSELL AVE. 56+41, 14' RT - 56+35, 18' RT ℄ | RT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| P-52 | ML 448+50 ℄ - 448+50, 103' RT | - | | 103 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 103 |
| A-2 | RUSSELL AVE. 60+93, 14' LT ℄ | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 156 |
| A-5 | RUSSELL AVE. 54+40, 15' RT ℄ | RT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 161 |
| A-10 | RHODES AVE. 40+20, 18' LT ℄ | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 164 |
| P-54 | EXIST. RHODES AVE. 3+10, 15' LT. - 3+38, 7' RT. | - | (20) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 168 |
| A-11 | RHODES AVE. 40+20, 19' RT ℄ | RT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 164 |
| A-13 | DART AVE. 235+58, 13' LT ℄ | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 165 |
| A-14 | DART AVE. 236+74, 13' LT ℄ | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 165 |
| A-15 | DART AVE. 224+42.58' LT. ℄ | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 161 |
| RE-2 | RUSSELL AVE. 56+85, 14' LT ℄ | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| RE-3 | RUSSELL AVE. 56+35, 18' RT ℄ | RT. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| CR-1 | SOUTH ST. 107+38, 54' LT. ℄ | LT. | | | | | | | | | | | | | | | | 18 | | | | | | | | | | | | | | | | | | 153 |
| CR-2 | RHODES AVE. 31+50, 208' LT ℄ | LT. | | | | | | | | | | | | | | | | 10 | | | | | | | | | | | | | | | | | | 163 |
| G-1 | BOWERY ST. - 7+18, 33' LT. - 7+69, 37' LT ℄ | LT. | | | | | | | | | | | | | | | 52 | | | | | | | | | | | | | | | | | | | 153 |
| G-2 | DART AVE. - 223+83, 81' LT. - 224+25, 88' LT. ℄ | LT. | | | | | | | | | | | | | | | 50 | | | | | | | | | | | | | | | | | | | 154 |
| CR-3 | RAMP 'EN' 138+04, 20' RT. ℄ | RT. | | | | | | | | | | | | | | | | 16 | | | | | | | | | | | | | | | | | | | 158 |
| | TOTAL | | 1272 | 379 | 64 | 48 | 57 | 108 | 576 | 70 | 73 | 178 | 180 | 310 | 102 | 44 | 1 | 1 | 18 | 2 | 8 | 1 | 11 | 5 | 4 | 6 | 4 | 1 | 5 | 1 | 1 | 14 | | |
| | | | | 195 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 0 | 0 | 0 | | | 1 | 1 | 0 | 0 | 0 | | | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | | | | |

DRAINAGE QUANTITIES
SUB - SUMMARY

* INDICATES TYPE C CONDUIT
706.02 W/706.11 JTS. OR 706.08
WITH 706.12 JOINTS

* * INDICATES PARTICIPATION 100% CITY OF AKRON

CALCULATED BY W.R.S. DATE 12/79
CHECKED BY R.E.R. DATE 1/80

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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455

AKRON INNERBELT
SUM-59-0.00

# ESTIMATED QUANTITIES

| REF NO. | STATION TO STATION | SIDE | 603 - SANITARY: TYPE B CONDUIT 706.02 W/706.11 JTS OR 706.08 WITH 706.12 JOINTS, 8" LIN.FT. | 603 - SANITARY: TYPE B CONDUIT 706.02 W/706.11 JTS OR 706.08 WITH 706.12 JOINTS, 12" LIN.FT. | 603 - SANITARY: TYPE B CONDUIT 706.08 W/ 706.11 JOINTS, 33" 1500 D-LOAD LIN.FT. | 603 - SANITARY: TYPE B CONDUIT 706.08 W/ 706.11 JOINTS, 60" 1500 D-LOAD LIN.FT. | 603 - SANITARY: TYPE B CONDUIT 706.08 W/ 706.11 JOINTS, 60" RAD 1500 D-LOAD L.F. | 603 - SANITARY: TYPE B CONDUIT 706.08 W/ 706.11 JOINTS, 60" RAD 3000 D-LOAD L.F. | 603 - SANITARY: TYPE B CONDUIT 706.08 W/ 706.11 JOINTS, 60" 3000 D-LOAD LIN.FT. | 604 - SANITARY: STANDARD MANHOLE NO. 3 EACH | 604 - SANITARY: STANDARD MANHOLE NO. 2 WITH DROP EACH | 604 - SANITARY: STANDARD MANHOLE NO. 5 MODIFIED AS PER PLAN EACH | 604 - SANITARY: MANHOLE RECON. TO GRADE EA. | 604 - SANITARY: MANHOLE ADJUST TO GRADE EA. | 604 - SANITARY: JUNCTION CHAMBER EACH | SPECIAL: PIPE CONNECTION SEAL 8" EA. | SPECIAL: PIPE CONNECTION SEAL 12" EA. | SPECIAL: PIPE CONNECTION SEAL 33" EA. | SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A-1 | W. EXPRESSWAY 429+83, 182' LT. ℄ | LT. | | | | | | | | | | | | | 1 | | | | | | | 153 |
| A-6 | DART AVE. 229+55, 2' RT. ℄ | RT. | | | | | | | | | | | | | 1 | | | | | | | 163 |
| A-7 | DART AVE. 231+89, 1' RT. ℄ | RT. | | | | | | | | | | | | | 1 | | | | | | | 163 |
| A-8 | RHODES AVE. 38+83, 23' LT. ℄ | LT. | | | | | | | | | | | | | 1 | | | | | | | 164 |
| A-9 | RHODES AVE. 39+50, 9' RT. ℄ | RT. | | | | | | | | | | | | | 1 | | | | | | | 164 |
| A-12 | DART AVE. 235+09, 2' LT/℄ | LT. | | | | | | | | | | | | | 1 | | | | | | | 165 |
| P-6 | M 429+92.65' RT.℄ - SOUTH ST. 103+65.17 RT.℄ | RT. | | | ~~25~~ | ~~60~~ | ~~165~~ | ~~82~~ | | | | ~~2~~ | | | | X | | | | | | 167 |
| P-20 | DART AVE. 237+50, 385' RT. ℄ | RT. | | | | | | | | | | | | | | | X | | | | | 169 |
| P-50 | RUSSELL AVE. 62+83, 25' LT.℄ - KENYON 4+25.40' LT. | LT. | ~~27~~ | | | | | | | + | | | | | | | | + | | | | 172 |
| P-51 | KENYON AVE. 4+25.40' LT.℄ - RHODES 5+06.4' LT. ℄ | — | ~~230~~ | | | | | | | + | | | | | | | | + | | | | 172 |
| P-52 | RHODES AVE. 5+06.4' LT.℄ - G+21, 33' RT.℄ | — | ~~28~~ | | | | | | | + | | | | | | | | + | | | | 172 |
| P-53 | RHODES G+21, 33' RT.℄ - DART AVE. EXT 235+47.2' LT.℄ | — | ~~50~~ | | | | | | | + | | | | | | | | + | | | | 172 |
| PX54 | DART AVE. EXT. 235+47.2' LT.℄ X 234+85.76' LT.℄ | — | | ~~93~~ | | | | | | | X | | | | | | | | | | | 172 |
| PX55 | DART AVE. 234+36.76' LT.℄ - RHODES 38+05.99' RT. | — | | ~~104~~ | | | | | | | | | | | | | | | ~~2~~ | | | 172 |
| P-56 | RHODES AVE. 36+05.99' RT.℄ - 36+95.99' RT.℄ | RT. | | ~~38~~ * | | | | | | | | 2 | | | | | | | | | | 172 |
| PX57 | DART AVE. EXT. 235+09.8' LT.℄ - 235+47.2' LT.℄ | LT. | | ~~85~~ | | | | | | | | | | | | | | | | | | 172 |
| P-60 | SOUTH ST. 102+85.15' RT.℄ - 103+17.21' LT. ℄ | — | | | ~~22~~ | | | | | | | | | | | | | | | | X | 171 |
| RE-1 | M 429+97.110' LT. ℄ | LT. | | | | | | | | | | | | | | X | | | | | | 167 |
| P-62 | DART AVE. 237+78.15' RT.℄ - 238+50.38.5' RT.℄ | RT | ~~**30~~ | | | | | | | | | | | | | | | | | | | 168 |
| P-63 | DART AVE. 226+50.36.5' RT.℄ - 228+42. | | ~~**35~~ | | | | | | | | | | | | | | | | e | | | 168 |
| TOTALS | | | ~~60~~ 60** | ~~230~~ 36** | 22 | 25 | ~~60~~ | ~~17~~ | 52 | | ~~154~~ 5 | X | 2 | X | ~~16~~ | X | | | ~~6~~ | ~~3~~ | X | |

# ESTIMATED QUANTITIES

| REF NO. | STATION TO STATION | SIDE | 202 PIPE REMOVED 24" AND UNDER LIN.FT. | 202 PIPE REMOVED OVER 24" LIN.FT. | 202 CATCH BASIN OR INLET REMOVED EACH | 202 MANHOLE REMOVED EACH | 202 CATCH BASIN OR INLET ABANDONED EACH | 202 MANHOLE ABANDONED EACH | SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|
| A-B/1 | RUSSELL AVE. 60+65.83' LT. ℄ | LT | | | | | X | X | 156 |
| A-B/2 | RUSSELL AVE. 60+67.54' LT. ℄ | LT | | | | | | | 156 |
| A-B/3 | RUSSELL AVE. 60+85.60' LT.℄ | LT | | | | | X | | 156 |
| A-B/4 | DART AVE. 226+46.53' RT.℄ | RT | | | | | X | | 162 |
| A-B/5 | RHODES AVE. 34+72.56' RT. ℄ | RT | | | | | | X | 163 |
| A-B/6 | RHODES AVE. 34+82.55' RT.℄ | RT | | | X | | | | 163 |
| A-B/7 | RHODES AVE. 34+65.17' RT.℄ | RT | | | X | | | | 163 |
| A-B/8 | DART AVE. 33+47.22' LT.℄ | LT | | | X | | | | 163 |
| A-B/9 | RHODES AVE. 38+41.50' LT.℄ | LT | | | | | X | | 164 |
| A-B/10 | DART AVE. 235+00.37' LT.℄ | LT | | | | | X | | 165 |
| A-B/11 | DART AVE. 235+30.36' RT.℄ | RT | | | | | X | | 165 |
| A-B/12 | RUSSELL AVE. 61+35.108' LT.℄ | LT | | | | X | | | 156 |
| R-1 | W.EXP 423+29.105' RT.℄ | RT. | | | (1) | | | | 151 |
| R-2 | W.EXP 427+13.54' RT.℄ - 113' RT.℄ | RT | (60) | | | | | | 152 |
| R-3 | W.EXP 429+93.65' RT.℄ - 430+05.99' RT.℄ | RT | | 44 | | X | | | 153 |
| R-4 | W.EXP 430+05.99' RT.℄ - SOUTH ST. 102+86 | — | | 55 | | | | | 153 |
| R-5 | W.EXP 430+05.99' RT.℄ - SOUTH ST. 103+83 | — | | 38 | | | | | 153 |
| R-6 | W.EXP 429+86 - 430+05 | RT | (46) | | | | | | 153 |
| R-7 | SOUTH ST. 107+49 - 107+76 | LT | | 46 | X | | | | 154 |
| R-8 | SOUTH ST. 107+76 - 108+85 | LT | | 120 | | | | | 154 |
| R-9 | SOUTH ST. 108+95.42' LT.℄ | LT | | | | X | | | 154 |
| R-10 | SOUTH ST. 108+85 - 111+48 | LT | | 253 | | | | | 154 |
| R-11 | RUSSELL AVE. 60+41.1' LT. ℄ | LT | | | | X | | | 156 |
| R-12 | SOUTH ST. 111+54.25' RT.℄ | RT | | | X | | | | 161 |
| R-13 | SOUTH ST. 111+55.17' LT. ℄ | LT | | | X | | | | 161 |
| R-14 | DART AVE. 222+02.28' RT.℄ | RT | | | X | | | | 161 |
| R-15 | DART AVE. 222+01.30' LT.℄ | LT | | | X | | | | 161 |
| R-16 | DART AVE. 224+08.56' LT.℄ | LT | 25 | | X | | | | 161 |
| R-17 | RUSSELL AVE. 55+15.14' RT.℄ | RT | | | | X | | | 161 |
| R-18 | RUSSELL AVE. 55+47.23' LT.℄ | LT | | | | X | | | 161 |
| R-19 | RUSSELL AVE. 55+52.23' RT.℄ | RT | | | X | | | | 161 |
| R-20 | RUSSELL AVE. 56+10.15' RT.℄ | RT | | | X | | | | 161 |
| R-21 | RUSSELL AVE. 56+43.18' LT.℄ | LT | | | X | | | | 161 |
| R-22 | DART AVE. 225+94.5' RT.℄ | RT | | | X | | | | 161 |
| R-23 | DART AVE. 225+81.10' RT.℄ | RT | | | | X | | | 161 |
| R-24 | DART AVE. 229+35.14' RT.℄ | RT | | | X | | | | 163 |
| R-25 | DART AVE. 229+82.12' RT.℄ | RT | | | | X | | | 163 |
| R-26 | DART AVE. 229+94.14' RT.℄ | RT | | | X | | | | 163 |
| R-27 | DART AVE. 229+82.12' RT - 12' LT.℄ | — | 84 | | | | | | 163 |
| R-28 | DART AVE. 235+09 - 235+50.2' LT.℄ | LT. | 41 | | | | | | 165 |
| R-29 | DART AVE. 235+35.15' RT.℄ | RT | | | X | | | | 165 |
| R-30 | DART AVE. 235+48.17' LT.℄ | LT | | | X | | | | 165 |
| R-31 | DART AVE. 235+21.26' LT - 5' RT.℄ | — | | 31 | | | | | 165 |
| R-32 | DART AVE 236+86.16' LT.℄ | LT | | | X | | | | 165 |
| R-33 | RHODES AVE. 38+92.18' RT.℄ | RT | | | X | | | | 164 |
| R-34 | LAKESHORE BLVD. 10+50.24' LT.℄ | LT | | | X | | | | 161 |
| R-35 | EX. RHODES AVE. 2+75.15' LT.℄ | LT | | | X | | | | 166 |
| R-36 | DART AVE. 229+92.15' LT.℄ | LT | | | X | | | | 163 |
| TOTALS | | — | 256 | 641 | 23 | 8 | 6 | 2 | |
| | | | 106 | 0 | 1 | 0 | 0 | 2 | |

# ESTIMATED QUANTITIES

| REF NO. | STATION TO STATION | SIDE | 603 6" CONDUIT TYPE "F" LIN.FT. | 605 6" UNDERDRAIN SHALLOW LIN.FT. | SHEET NO. |
|---|---|---|---|---|---|
| U-1 | LAKESHORE BLVD. 14+00 - 10+50 | LT. | 10 | 340 | 161 |
| U-2 | LAKESHORE BLVD. 10+50 - SOUTH ST. 111+70 | RT. | 10 | 45 | 161 |
| U-3 | SOUTH ST. 111+78 - 112+30 | RT. | 10 | 41 | 161 |
| U-4 | DART AVE. 221+88 - 223+75 | LT. | 10 | 176 | 161 |
| U-5 | SOUTH ST. 111+55 - DART AVE. 223+75 | RT. | 10 | 191 | 161 |
| U-6 | DART AVE. 223+75 - 224+84 | LT. | 10 | 85 | 161 |
| U-7 | DART AVE. 223+75 - 224+96 | RT. | 10 | 111 | 161 |
| U-8 | RUSSELL AVE. 55+18 - 56+41 | RT. | 10 | 113 | 161 |
| U-9 | RUSSELL AVE. 56+41 - 58+13 | RT. | 10 | 162 | 156 & 161 |
| U-10 | RUSSELL AVE. 56+41 - 58+13 | LT. | 10 | 162 | 156 & 161 |
| U-11 | DART AVE. 226+48 - RUSSELL AVE. 56+41 | — | 10 | 144 | 161 & 162 |
| U-12 | RUSSELL AVE. 54+12 - RHODES AVE. 27+00 | — | 28 | 75 | 161 |
| U-13 | RHODES AVE. 26+55 - 27+00 | RT. | 10 | 32 | 161 |
| U-15 | RHODES AVE. 27+05 - 30+00 | RT. | 10 | 285 | 161 & 162 |
| U-16 | DART AVE. 226+52 - 228+50 | RT. | 10 | 188 | 162 |
| U-17 | RHODES AVE. 29+25 - 31+48 | LT. | 10 | 213 | 162 & 163 |
| U-18 | DART AVE. 227+75 - 229+80 | LT. | 10 | 195 | 162 & 163 |
| U-19 | RHODES AVE. 30+05 - 31+47 | RT. | 10 | 132 | 162 & 163 |
| U-20 | DART AVE. 228+55 - 229+80 | RT. | 10 | 115 | 162 & 163 |
| U-21 | RHODES AVE. 31+47 - 33+65 | LT. | 10 | 208 | 163 |
| U-22 | RHODES AVE. 31+47 - 34+00 | RT. | 10 | 243 | 163 |
| U-23 | DART AVE. 229+90 - 231+95 | LT. | 10 | 195 | 163 |
| U-24 | DART AVE. 229+90 - 230+95 | RT. | 10 | 95 | 163 |
| U-25 | DART AVE. 231+00 - 233+95 | RT. | 10 | 285 | 163 |
| U-26 | DART AVE. 232+00 - 233+95 | LT. | 10 | 185 | 163 |
| U-27 | RHODES AVE. 33+75 - 36+12 | LT. | 10 | 227 | 163 & 164 |
| U-28 | RHODES AVE. 37+20 - 39+18 | LT. | 10 | 188 | 164 |
| U-29 | RHODES AVE. 37+37 - 40+20 | RT. | 10 | 273 | 164 |
| U-30 | DART AVE 234+00 - 236+00 | RT. | 10 | 190 | 165 |
| U-31 | DART AVE. 234+00 - 237+94 | LT. | 10 | 384 | 165 |
| U-32 | DART AVE. 237+94 - DART EXT. 237+59 | — | 10 | 155 | 165 |
| U-33 | DART EXT. 236+00 - 236+66 | RT. | 10 | 56 | 165 |
| U-34 | DART EXT. 236+66 - 237+50 | RT. | 10 | 74 | 165 |
| U-35 | W. EXPRESSWAY 427+28 - 427+13 | RT. | 16 | — | 152 |
| U-36 | RUSSELL AVE. 59+52 - 60+83 | LT. | — | (131) | 156 |
| U-37 | INNERBELT 142+36 - 149+00 | LT. | (44) | (664) | 159 & 160 |
| U-38 | INNERBELT 142+30 - 148+50 | LT. | 17 | 595 | 159 & 160 |
| U-39 | INNERBELT 142+42 - 148+50 | RT. | 17 | 653 | 159 & 160 |
| U-40 | INNERBELT 142+45 - 148+42 | RT. | (45) | 697 | 159 & 160 |
| U-41 | W. EXPRESSWAY 410+95 - 415+62 | RT. | 20 | 467 | 149 & 150 |
| U-42 | W. EXPRESSWAY 416+85 - 421+49 | RT. | (29) | (464) | 150 & 151 |
| U-43 | W. EXPRESSWAY 421+49 - 425+00 | RT. | | (351) | 151 |
| U-44 | W. EXPRESSWAY 427+50 - 431+25 | LT. | (28) | (375) | 152 & 153 |
| | U-45 To U-47 SEE SHEET 38A | | | | |
| U-48 | W. EXP. 425+03 - RAMP EN 111+96 | RT | (10) | (276) | 152 |
| U-49 | RAMP EN 112+00 - 114+17 | RT | (10) | (204) | 152 & 153 |
| U-50 | RAMP SW 122+89 - 123+25 | LT | (20) | (36) | 154 |
| U-51 | RAMP SW 129+71 - 133+40 | LT | (22) | (358) | 156 & 157 |
| U-52 | RAMP SW 129+45 - 133+07 | LT | (17) | (359) | 156 & 157 |
| TOTALS | | | 643 | 11,041 | |
| | | | 228 | 4,182 | |

DRAINAGE QUANTITIES
SUB-SUMMARY

CALCULATED BY W.R.S. DATE 11/79
CHECKED BY R.E.R. DATE 1/80

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

148A
455

AKRON INNERBELT
SUM-59-0.00

## ESTIMATED QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | 660 REINF-ORCED SODDING SQ. YD. | 667 SEEDING AND JUTE MATTING SQ. YD. | 668 SEEDING AND EXCEL-SIOR MATTING SQ. YD. | SHEET NO. |
|---|---|---|---|---|---|---|
| E-1 | RAMP 'SW' 129+00-130+00 | LT. | | 89 | | 123 |
| E-2 | RAMP 'SW' 130+20-131+80 | LT. | | 151 | | 123 |
| E-3 | RAMP 'SW' 129+80-131+25 | RT. | | 133 | | 123 |
| E-4 | RAMP 'EN' 129+55-130+90 | RT. | | 133 | | 123 |
| E-5 | RAMP 'EN' 133+55-132+45 | RT. | | 133 | | 124 |
| E-6 | MAINLINE 428+55-430+05 | LT. | | 133 | | 119&120 |
| E-7 | RAMP 'SW' 117+91-6' LT. ℄ TO 48' LT. ℄ | LT. | 39 | | | 120 |
| E-8 | RAMP 'SW' 118+25 | LT. | | | 150 | 120 |
| E-9 | RAMP 'SW' 122+70 | LT. | | | 125 | 121 |
| E-10 | RAMP 'SW' 123+06-6' LT. ℄ TO 54' LT. ℄ | LT. | 42 | | | 121 |
| E-11 | RAMP 'SW' 123+40 | LT. | | | 148 | 121 |
| E-12 | RAMP 'SW' 123+20 | LT. | | | 157 | 123 |
| E-13 | RAMP 'SW' 123+55-6' LT. ℄ TO 56' LT. ℄ | LT. | 48 | | | 123 |
| E-14 | RAMP 'SW' 123+50 | RT. | | | 108 | 123 |
| E-15 | RAMP 'SW' 129+88-27' RT. ℄ TO 74' RT. ℄ | RT. | 44 | | | 123 |
| E-16 | RAMP 'EN' 129+60 | LT. | | | 484 | 123 |
| E-17 | RAMP 'EN' 129+88-27' LT. ℄ TO 96' LT. ℄ | LT. | 67 | | | 123 |
| E-18 | RAMP 'EN' 129+75 | RT. | | | 290 | 123 |
| E-19 | RAMP 'EN' 130+03.6' RT. ℄ TO 72' RT. ℄ | RT. | 62 | | | 123 |
| E-20 | RAMP 'SW' 132+83.6' LT. ℄ TO 65' LT. ℄ | LT. | 56 | | | 124 |
| E-21 | RAMP 'SW' 133+20 | LT. | | | 170 | 124 |
| E-22 | RAMP 'EN' 133+75, 6' RT. ℄ TO 66' RT. ℄ | RT. | 58 | | | 124 |
| E-23 | RAMP 'EN' 134+03 | RT. | | | 316 | 124 |
| E-24 | RAMP 'SW' 142+00 | LT. | | | 54 | 126 |
| E-25 | RAMP 'EN' 142+00 | RT. | | | 54 | 126 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| TOTALS | | | 416 | 772 | 2056 | |

DRAINAGE QUANTITIES
SUB - SUMMARY

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

149
455

AKRON INNERBELT
SUM-59-0.00

MANCHESTER RD.

RUSSELL AVE.

H2-2
1001.02

H2-3
990.30

H4-1
978.75

H4-2
974.81

4"HP

42"RCP SQ BLK

24" V.P.

CS

SS

G

S

W

8"

6"

12"

15"RCP

42"RCP

411 412 ℄ WEST EXPRESSWAY 413 414

SEE SHEET 150

MATCH LINE STA. 415+00

EX. 6" UNDERDRAIN

6" UNDERDRAIN

U 41

SOUTH STREET

W 20'

W 12'

FOR LEGEND SEE SHEET NO. 22

FOR DRAINAGE QUANTITIES
SEE SHEET NO. 147 & 148

WEST EXPRESSWAY 410+00 TO 415+00
DRAINAGE PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

150
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

H4-2
974.91

H4-3
968.78

H4-4
963.80

CS 24" V.P.

SEE SHEET 149

MATCH LINE STA. 415+00

416 ℄ WEST EXPRESSWAY 417 418 419

6" PLUG 416+85.60' RT. ℄
E~ 979.4

SEE SHEET 151

MATCH LINE STA. 420+00

EX. 6" UNDERDRAIN

6" UNDERDRAIN

U 41

U 42

415+62.87' RT ℄
6"~90° BEND
TYPE F
E~ 984.0

20 L.F. 6" TYPE F
@7.5 %

415+62.107' RT. ℄
OUTLET 6" U.D.
E~ 982.5 w/EROSION
CONTROL PAD & ANIMAL
GUARD PER MC-4

418 ℄ RAMP G

FOR DRAINAGE QUANTITIES
SEE SHEET NO 147 & 148

FOR LEGEND SEE SHEET NO. 22

SOUTH STREET

12" CS 18" CS 18" CS 18" CS

W 20'

FORM D D A-8

WEST EXPRESSWAY 415+00 TO 420+00
DRAINAGE PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

151
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

H4-4
983.80

H4-5
983.44

24" V.P. C.S.
C.S. 24" V.P.
C.S. C.S. 30" V.P.
30" V.P. C.S.

8" W. G.
8" W. G.
8" W. G.
8" W. G.

24" V.P.
8" G.

12"
12"

SEE SHEET 150

MATCH LINE STA. 420+00

421 ℄ WEST EXPRESSWAY 422 423 424

421+49, 66' RT. ℄
6"-90° BEND - TYPE F
℄ ~ 973.24

EX. 6" UNDERDRAIN
6" UNDERDRAIN

U 42

29'-6" TYPE F
@ 7.7%

EX. 6" U.D.

421+49, 95' RT. ℄
OUTLET 6" U.D.
℄ ~ 971.00 w/
EROSION CONTROL PAD
& ANIMAL GUARD
PER MC-4

FOR DRAINAGE QUANTITIES
SEE SHEET NO. 147 & 148

FOR LEGEND SEE SHEET NO. 22

EX. 6" UNDERDRAIN

6" UNDERDRAIN

U 43

R 1

RAMP G

SOUTH STREET

18" CS
CS 30"
CS
W 20'
W 20'
33" CS
W 20'

ABAN.

6" PLUG 425+00, 83' RT. &
℄ ~ 975.6

SEE SHEET 152

MATCH LINE STA. 425+00

SOUTH STREET

WEST EXPRESSWAY 420+00 TO 425+00
DRAINAGE PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

152
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

H4-6 966.40 | H6-1 969.50 | H6-2 970.0

FOR LEGEND SEE SHEET NO. 22

| FOR SEWER PROFILES | |
|---|---|
| PIPE CODE | SHEET NO. |
| P-1 | 167 |
| P-2 | 167 |
| P-3 | 167 |
| P-4 | 167 |
| P-5 | 167 |

FOR DRAINAGE QUANTITIES
SEE SHEET NO. 147 & 148

427+50, 100' LT. ℄
OUTLET 6" U.D.
E~979.2 w/
EROSION CONTROL PAD
& ANIMAL GUARD
PER MC-4

RAMP H

427+50, 72' LT. ℄
6" 90° BEND-TYPE F
E~981.0

28'-6" TYPE F
@ 6.4%

6" UNDERDRAIN

EX. 6" U.D.

EX. 8" U.D.

MATCH LINE STA. 425+00
SEE SHEET 151

MATCH LINE STA. 429+50
SEE SHEET 153

℄ WEST EXPRESSWAY

426 427 428 429

OUTLET
16'-6" TYPE F CONDUIT
E~6"=979.40

6"-30° BEND

EX. 6" U.D.

EX. 6" UNDERDRAIN

6"-45° Bend Sta 425+14~85' Rt ℄

6" Underdrain

10'-6" Outlet Type F Conduit
F.L. 973.00

6"-45° Bend Sta 112+10, 2' Rt.

RAMP EN

6" Underdrain

6" Plug Sta. 111+96~2' Rt ℄ EN
FL~978.3

10'-6" Outlet Type F Conduit
FL. 978.00

SOUTH STREET

(ABAN.) 36" (B.F.G.)

EX. 8" U.D.

ABAN.

EX. 12"

WEST EXPRESSWAY 425+00 TO 429+50
DRAINAGE PLANS

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

153
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

HS-2
970.0

HS-3
986.31

℄ RUSSELL AVE.

RAMP H

18" PS (Aban.)

30"

12"

FOR DRAINAGE QUANTITIES SEE SHEET NO. 147 & 148.

| FOR SEWER PROFILES | | | |
|---|---|---|---|
| PIPE CODE | SHEET NO. | PIPE CODE | SHEET NO. |
| P-5 | 167 | | |
| P-58 | 80 | | |
| P-6 | 167 | | |
| P-60 | 171 | | |
| P-7 | 168 | | |
| P-8 | 168 | | |

FOR EROSION CONTROL QUANTITIES SEE SHEET NO. 148A.

6" PLUG ~ 431+25, 80' LT.
E ~ 983.6

52' STD. PAVED GUTTER TYPE I-2 CUTOFF WALL

℄ BOWERY ST.

8"-20 PS (Aban.)

12" V.P.

6" UNDERDRAIN

EX. 6" UNDERDRAIN

CUTOFF WALL

FOR LEGEND SEE SHEET NO. 22

MATCH LINE STA. 429+50
SEE SHEET 152

MATCH LINE STA. 434+50
SEE SHEET 154

℄ WEST EXPRESSWAY

| REPLACEMENT ITEMS FOR PIPE RELOCATIONS | | | | | |
|---|---|---|---|---|---|
| | | 305 | 404 | 407 | 609 |
| LOCATION | SIDE | PORTLAND CEMENT CONCRETE BASE | 1-¼" ASPHALT CONCRETE | TACK COAT APPLIED @ RATE OF 1/10 GAL./SQ.YD. | STD. TYPE G CURB |
| | | SQ. YD. | CU. YD. | | LIN. FT. |
| SOUTH ST. | L & R | 213 | 7.3 | 191 | 55 |

ITEMS ABOVE SHALL BE INCLUDED FOR PAYMENT IN ITEM 603 OR 814 FOR WHICH THEY ARE A PART.

3' CONC. COLLAR-SEE DETAIL SHEET

℄ RAMP EN

6" Plug Sta. 114+17 ~ 2' Rt. ℄
E.L. 979.4

6" Underdrain

P.C. STA. 103+11.73
30.93' LT. & SOUTH ST.

P.T. STA. 103+61.56
17' Rt. & SOUTH ST.

CURVE DATA 60" SEWER
Δ = 87°37'35
R = 50.00'
L = 76.47'
T = 47.97'
E = 15.29'
CH = 69.23'

TYPE G CURB

PAV'T. REMOVAL & REPLACEMENT LIMITS

3' CONC. COLLAR-SEE DETAIL SHEET NO. 175

60" BRICK C.S.

℄ SOUTH STREET

CONCRETE RIPRAP

O.F. DUCTS

WEST EXPRESSWAY 429+50 TO 434+50
DRAINAGE PLANS

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

154
455

AKRON INNERBELT
SUM-59-0.00

Outlet Sta. 122+89 ~ 22' Lt
F.L. 987.5
With erosion control pad
and animal guard per MC-4

50'-STD. PAVED GUTTER
TYPE I-2

20'-6" Conduit Type F
at G.oo %

6" Underdrain

6" Plug Sta 123+25 ~ 2' Lt
F.L. 989.1

6" - 90° Bend Sta. 122+89 ~ 2' Lt.
F.L. 988.7

℄ RUSSELL AVE.

℄ WEST EXPRESSWAY

℄ DART AVE.

℄ RAMP SW

℄ RAMP EN

SOUTH STREET

EX. 6" UNDERDRAIN

EX. 6" U.D.

EXIST. PAVED GUTTER

EX. PIER FOOTINGS

36" M.P. A.E. DUCTS

ABAN.

MATCH LINE STA 434+50
SEE SHEET 15

MATCH LINE STA 126+00
SEE SHEET 15

MATCH LINE STA 123+50
SEE SHEET 15

FOR LEGEND SEE SHEET NO. 22

FOR DRAINAGE QUANTITIES
SEE SHEET NO. 147 & 148

FOR SEWER PROFILES

| PIPE CODE | SHEET NO. | PIPE CODE | SHEET NO. |
|---|---|---|---|
| P-8 | 168 | | |
| P-9 | 168 | | |
| P-10 | 168 | | |
| P-11 | 168 | | |

FOR EROSION CONTROL QUANTITIES
SEE SHEET NO. 148A

WEST EXPRESSWAY 434+50 TO
RAMP SW 126+00
RAMP EN 123+50

DRAINAGE PLANS

FORM 8-D A

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

155
455

AKRON INNERBELT
SUM-59-0.00

HG-6 — 56 — 57 — ℄ RUSSELL AVE. — 58 — HG-1 — 59 — 60 — HG-2 — 61

972.38 — 978.19 — 982.78

MATCH LINE STA. 126+00 SEE SHEET 154

MATCH LINE STA. 127+00 SEE SHEET 156

℄ RAMP SW

RAMP W-10

MATCH LINE STA. 127+50 SEE SHEET 156

440 — 441 — 442 — ℄ WEST EXPRESSWAY — 443 — 444

℄ RAMP EN

MATCH LINE STA. 123+50 SEE SHEET 154

RAMP W-11

112 — 113 — 114 — 115 — 116 — ℄ SOUTH STREET

FOR LEGEND SEE SHEET NO. 22

FOR DRAINAGE QUANTITIES SEE SHEET 147 & 148

RAMP SW 126+00 TO 127+00
RAMP EN 123+50 TO 127+50

DRAINAGE PLANS

FORM D-D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

156
455

AKRON INNERBELT
SUM-59-0.00

FOR LEGEND SEE SHEET NO. 22

FOR EROSION CONTROL QUANTITIES SEE SHEET 148A
FOR DRAINAGE QUANTITIES SEE SHEET 147 & 148

REPLACEMENT ITEMS FOR PIPE RELOCATIONS

| LOCATION | SIDE | 305 PORTLAND CEMENT CONCRETE BASE | 404 1-1/4" ASPHALT CONCRETE AC-20 | 407 TACK COAT APPLIED @ RATE OF 1/10 GAL./SQ. YD. | 609 STD. TYPE G | 608 CONCRETE WALK 6" |
|---|---|---|---|---|---|---|
| | | SQ. YD. | CU. YDS. | | LIN. FT. | SQ. FT. |
| RUSSELL AVE. L.&R. | | 96 | 3.3 | 9.6 | 15 | 80 |

ITEMS ABOVE SHALL BE INCLUDED FOR PAYMENT IN ITEM 608 OR 814 FOR WHICH IT IS A PART.

| FOR SEWER PROFILES | |
|---|---|
| PIPE CODE | SHEET NO. |
| P-29 | 170 |
| P-47 | 171 |
| P-48 | 171 |
| P-49 | 171 |

MATCH LINE SEE SHEET NO. 163

MATCH LINE STA. 127+00 SEE SHEET 161

MATCH LINE STA. 127+00 SEE SHEET 153

58+13, LT. ℄ CONNECT 6" CONDUIT TO EXIST. UNDERDRAIN

58+13, RT. ℄ CONNECT 6" CONDUIT TO EXIST. UNDERDRAIN

Ø Inlet Sta. 129+45-13' Lt. FL. 994.8 w/ 24"x38" Concrete Collar Rd

6"-30° Bend Sta. 129+45~2' Lt. F.L. 995.3

17'-6" Conduit Type F at 2.94%

℄ RAMP SW

6" Underdrain

COURT ABAN.

RUSSELL AVE.

CONNECT NEW 6" UNDERDRAIN TO EXIST

8" SAN (ABANDONED)

DIKE

12"

ABAN. 6" W.

PAVT. REMOVAL LIMITS

REPLACEMENT

(ABANDONED)

℄ WEST EXPRESSWAY

RAMP W-10

MATCH LINE STA. 127+50 SEE SHEET 155

6" Plug Sta. 129+71~26' Lt. F.L. 1016.6

6" Underdrain

℄ RAMP EN

6" W. (ABAN.)

KENYON ST.

8" SAN

MATCH LINE SEE SHEET 157 STA. 131+50

MATCH LINE SEE SHEET 157 STA. 132+00

RAMP SW 127+00 TO 132+00
RAMP EN 127+50 TO 131+50

DRAINAGE PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

157
455

AKRON INNERBELT
SUM-59-0.00

℄ RHODES AVE.

EXIST. RHODES AVE.

℄ DART AVE.

℄ RAMP SW

℄ RAMP EN

MATCH LINE STA. 132+00 SEE SHEET 156

MATCH LINE STA. 131+50 SEE SHEET 156

MATCH LINE STA. 135+50 SEE SHEET 158

6" Underdrain

6" Pipe Sta. 133+07 ~ 21' Lt F.L. 998.9

Outlet Sta. 133+40 ~ 48' Lt w/erosion Control Pad

22'~6" Conduit Type F at 0.91%

6"-90° Bend Sta. 133+40 ~ 26' Lt F.L. 1005.2

U-51

E-20 E-21 E-22 E-23 E-5

P-50

8" SAN.

KENYON ST.

DIKE

ABAN. 8" SAN.

EXIST. BOULEVARD

STM. AVE.

EXIST. RHODES

| FOR SEWER PROFILES | | | |
|---|---|---|---|
| PIPE CODE | SHEET NO. | | |
| P-41 | 171 | | |
| P-42 | 171 | | |
| P-51 | 172 | | |

FOR DRAINAGE QUANTITIES SEE SHEET 147 & 148
FOR EROSION CONTROL QUANTITIES SEE SHEET 148A
FOR LEGEND SEE SHEET NO. 22

RAMP SW 132+00 TO 135+50
RAMP EN 131+50 TO 135+50

DRAINAGE PLANS

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

158
455

AKRON INNERBELT
SUM-59-0.00

℄ BOWERY ST.

℄ RHODES AVE.

℄ RAMP SW

℄ RAMP EN

℄ DART AVE.

℄ DART EXTENSION

OHIO CANAL

THORNTON ST.

MATCH LINE STA. 135+50
SEE SHEET 157

MATCH LINE STA. 140+50
SEE SHEET 159

P S4

P S6

12" SAN.

SAN.

ABAN.

12" ABAN.

30" STORM SEWER

30" STM.

CONCRETE RIPRAP

36" W
O.E. DUCTS

EDGE OF EXIST. CANAL LINING

CR 3

8" W (ABAN.)

36" W (B.F.G.)

20" P.S. (Aban.)

36" B.S.

8" P.S. (Aban.)

SHPS

| FOR SEWER PROFILES | | | |
|---|---|---|---|
| PIPE CODE | SHEET NO. | PIPE CODE | SHEET NO. |
| P-41 | 171 | P-52 | 172 |
| P-42 | 171 | P-53 | 172 |
| P-43 | 171 | P-54 | 172 |
| P-44 | 171 | P-55 | 172 |
| P-45 | 171 | P-56 | 172 |
| | | P-57 | 172 |
| P-37 | 170 | | |

FOR DRAINAGE QUANTITIES
SEE SHEET NO. 147 & 148.

FOR LEGEND SEE SHEET NO. 22

FOR DRAINAGE PLAN THIS AREA SEE SHEET NO. 165

RAMP SW 135+50 TO 140+50
RAMP EN 135+50 TO 140+50

DRAINAGE PLANS

FORM D D A-5

| FHWA REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

159
455

AKRON INNERBELT
SUM-59-0.00

8"UP.G. 8"UP.G. 8"UP.G.
20"P.S.(Aban.) 26"S.S. 42"P.S. 20"P.S.(Aban.) 20"P.S.(Aban.) 42"
41 42 43 44
℄ RHODES AVE.
12" 12"
H-12-3 H-12-2
969.00 968.20
O.E. DUCTS
℄ THORNTON ST.
51
E 24
6"PLUG ~ 142+36, 2'LT. ℄ E~988.50
U 37
6" UNDERDRAIN
℄ RAMP SW
141
6"PLUG ~ 142+40, 26'RT. ℄ E~985.70
6" UNDERDRAIN
℄ INNERBELT
143 144
6" UNDERDRAIN
6"PLUG ~ 142+42, 26' LT. ℄ E~985.50
℄ RAMP EN
52
141
6" UNDERDRAIN
U 20
6"PLUG ~ 142+45, 2'RT. ℄ E~988.20
E 25
MATCH LINE STA. 140+50 SEE SHEET 158
MATCH LINE STA. 145+00 SEE SHEET 160
36"(Bot. of Grate) N
53
12"
12"P.S. 12"P.S. 12" 36"P.S.
241 242 243 244
℄ DART AVE.
12" 12"
5'-5" ELEC. CONDUITS 5'-5" ELECT. CONDUITS
12" 12"
W W

FOR DRAINAGE QUANTITIES SEE SHEET NO. 147 & 148 .

FOR LEGEND SEE SHEET NO. 22

FOR EROSION CONTROL QUANTITIES SEE SHEET 148A .

RAMP SW 140+50 TO 142+00
RAMP EN 140+50 TO 142+00
INNERBELT 142+00 TO 145+00

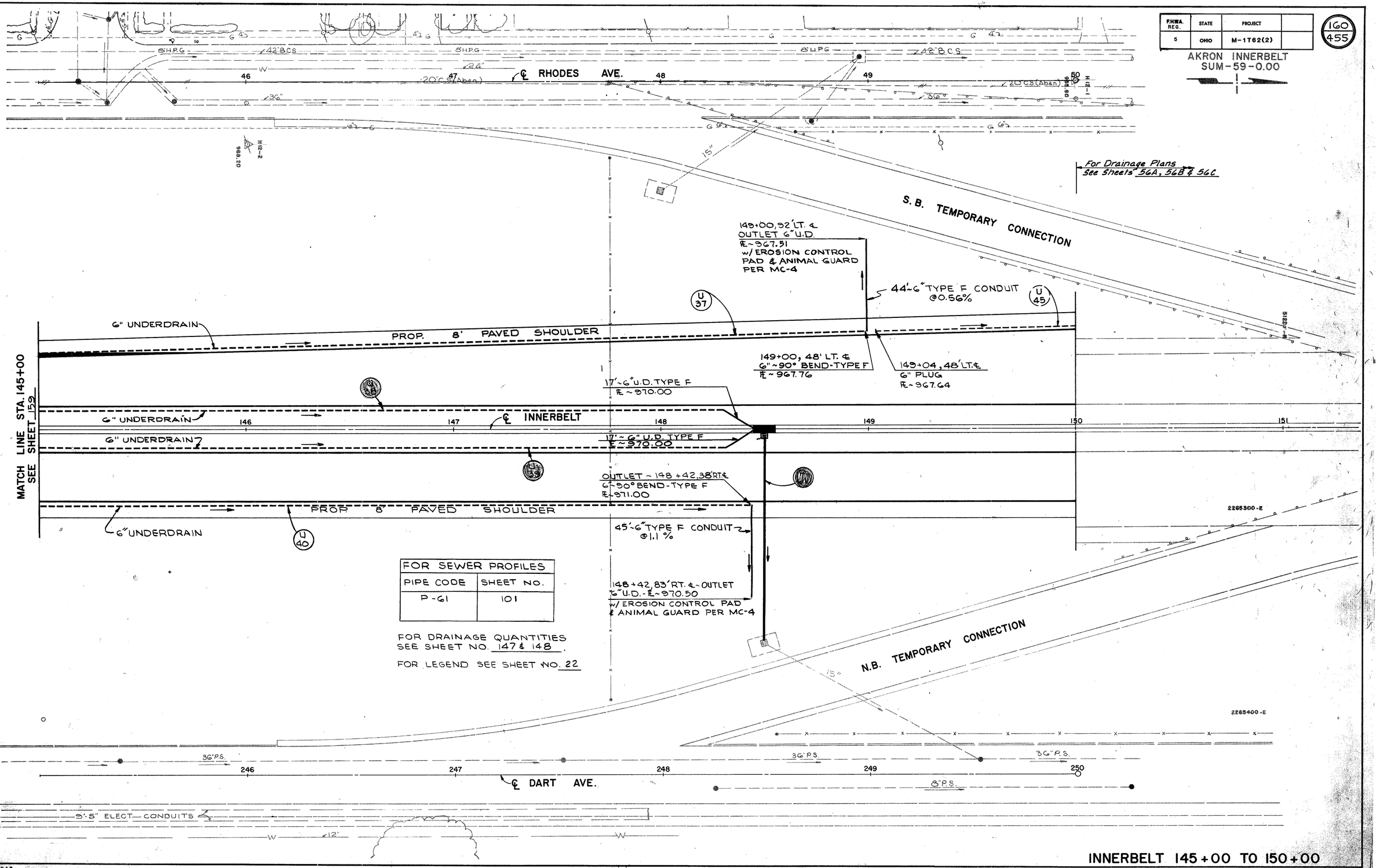
DRAINAGE PLANS

FORM D D A-2

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

160
455

AKRON INNERBELT
SUM-59-0.00




| FOR SEWER PROFILES | |
|---|---|
| PIPE CODE | SHEET NO. |
| P-61 | 101 |

FOR DRAINAGE QUANTITIES SEE SHEET NO. 147 & 148.

FOR LEGEND SEE SHEET NO. 22

INNERBELT 145+00 TO 150+00
DRAINAGE PLANS

FORM D.D.A-9

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

161
455

AKRON INNERBELT
SUM-59-0.00

MATCH LINE STA. 11+80

℄ LAKESHORE BLVD.

MATCH LINE STA. 11+80

OUTLET BOTH SIDES OF INLET-10'(EA)-6" TYPE F CONDUIT ℄-6"= 971.60

6"PLUG-111+70, RT. ℄ ℄-6"= 973.30

OUTLET 10'-6" TYPE F CONDUIT ℄-6"= 973.30

112+30, RT. ℄ CONNECT 6" CONDUIT TO EXIST. UNDERDRAIN

6"PLUG-14+00, LT. ℄ ℄-6"= 974.30

EXIST. CONC. WALK

℄ SOUTH ST.

PROP .5' CONCRETE SIDEWALK

ABAN.

6"PLUG-221+89, LT. ℄ ℄-6"= 972.60

℄ DART AVE.

RELOC. 8" W.M

OUTLET-BOTH SIDES INLET-10'(EA)-6" TYPE F CONDUIT ℄-6"= 971.30

OUTLET-BOTH SIDES INLET-10'(EA)-6" TYPE F CONDUIT ℄-6"= 971.10

6"PLUG-111+53, LT. ℄ ℄-6"= 972.90

OUTLET-10'-6" TYPE F CONDUIT ℄-6"= 973.00

111+28, LT. ℄ CONNECT 6" CONDUIT TO EXIST. UNDERDRAIN

℄ RAMP EN

℄ WEST EXPRESSWAY

℄ RAMP SW

6"PLUG-224+84, LT. ℄ ℄-6"= 973.10

6"PLUG-224+96, ℄ ℄-6"= 972.20

6"PLUG-55+18 RT. ℄ ℄-6"= 972.20

6"PLUG-54+12, LT. ℄ ℄-6"= 976.50

PROP 6" CONC. SIDEWALK

6"PLUG-26+55 RT. ℄-6"=

6"90° BEND ℄-6"= 976.10

OUTLET 18-6 TYPE F CONDUIT

OUTLET 10'-6" TYPE F ℄-6"=

℄ RHODES AVE.

6"PLUG-27+10.8 RT. ℄ ℄-6"= 975.50

MATCH LINE STA. 27+50 SEE SHEET 162

MATCH LINE STA. 226+25 SEE SHEET 162

ABAN.

℄ DART AVE.

℄ RUSSELL AVE.

CONC. SIDEWALK

PROP 5'

OUTLET 10'-6" TYPE F CONDUIT ℄-6"= 970.90

OUTLET 10'-6" TYPE F CONDUIT ℄-6"= 970.80

OUTLET-BOTH SIDES INLET-10'(EA)-6" TYPE F CONDUIT-℄-6"=970.90

MATCH LINE STA. 57+00 SEE SHEET 156

FOR LEGEND SEE SHEET NO. 22

FOR DRAINAGE QUANTITIES SEE SHEET NO. 147 & 148

| FOR SEWER PROFILES | | | |
|---|---|---|---|
| PIPE CODE | SHEET NO. | PIPE CODE | SHEET NO. |
| P-12 | 168 | P-19 | 169 |
| P-13 | 168 | | |
| P-14 | 168 | P-21 | 169 |
| P-15 | 168 | P-59 | 169 |
| P-16 | 168 | | |
| P-17 | 168 | | |
| P-18 | 169 | | |

LAKESHORE BLVD. 9+95.30 TO 14+00
DART AVE. 221+69.51 TO 226+25
RHODES AVE. 26+46.19 TO 27+50

DRAINAGE PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

162
455

AKRON INNERBELT
SUM-59-0.00

| FOR SEWER PROFILES | |
|---|---|
| PIPE CODE | SHEET NO. |
| P-22 | 169 |
| P-23 | 169 |
| P-24 | 169 |
| P-G2 & P-G3 | 168 |

FOR DRAINAGE QUANTITIES
SEE SHEET NO. 147 & 148

FOR LEGEND SEE SHEET NO. 22

OHIO CANAL

RUSSELL

PROP 6" CONCRETE

6"PLUG-229+25 LT. ℄ E-G"=972.50

MATCH LINE STA.27+50 SEE SHEET 162

MATCH LINE STA.226+25 SEE SHEET 162

℄ RHODES AVE.

SIDEWALK

10'-6" OUTLET TYPE F CONDUIT E-G"=972.50

6"PLUG-230+05 RT. ℄ E-G"=972.80

MATCH LINE STA.31+00 SEE SHEET 163

COURT

BOULEVARD ST.

PROP 6" CONCRETE

℄ DART AVE.

8" SAN. SEWER

6"PLUG-226+52 RT. ℄ E-G"=975.10

6"PLUG-226+48 RT. ℄ E-G"=975.00

6"PLUG-227+75 LT. ℄ E-G"=974.00

6"PLUG-228+55 RT. ℄ E-G"=972.50

10'-6" OUTLET TYPE F CONDUIT E-G"=972.60

MATCH LINE STA.229+25 SEE SHEET 163

AVENUE

RAMP SW

DART AVE. 226+25 TO 229+25
RHODES AVE. 27+50 TO 31+00

DRAINAGE PLANS

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

163
455

AKRON INNERBELT
SUM-59-0.00

OHIO CANAL

EDGE OF EXIST. CANAL LINING

10'

9'

CR 2

CONCRETE RIPRAP

| FOR SEWER PROFILES | | | |
|---|---|---|---|
| PIPE CODE | SHEET NO. | PIPE CODE | SHEET NO. |
| P-24 | 169 | P-29 | 170 |
| P-25 | 169 | P-30 | 170 |
| P-26 | 169 | P-31 | 170 |
| P-27 | 169 | P-32 | 170 |
| P-28 | 169 | P-33 | 170 |
| P-55 | 169 | P-34 | 170 |
| | | P-35 | 170 |
| | | P-36 | 170 |

FOR DRAINAGE QUANTITIES SEE SHEET NO. ~~147 &~~ 148

FOR LEGEND SEE SHEET NO. 22

36" W.M.

O.E. DUCTS

MATCH LINE SEE SHEET 164 STA 36+00

ABAN.

OUTLET-BOTH SIDES OF INLET
10'(EA.)-6" TYPE F CONDUIT
E-G= 971.50

21"

COURT

24"

PROP 6' CONCRETE SIDEWALK

MATCH LINE SEE SHEET 162 STA. 31+00

6" PLUG-33+05, LT. ℄
E-G= 974.90

OUTLET-10'-6" TYPE F CONDUIT
E-G= 975.00

RHODES AVE.

℄ RHODES AVE.

12"

34

32

33

6" PLUG-34+00, RT. ℄
E-G= 974.00

EXISTING

OUTLET
10'-6" TYPE F CONDUIT
E-G= 972.30

6" PLUG- +55, LT. ℄
E-G= 973.10

8"

BOULEVARD ST.

8" SAN. SEWER

MATCH LINE SEE SHEET 162 STA. 229+25

OUTLET-10'-6" TYPE F CONDUIT
E-G= 971.50

230

231

℄ DART AVE.

232

233

12" SAN. SEWER

6" PLUG-231+55, LT. ℄
E-G= 972.50

6" PLUG-230+55, RT. ℄
E-G= 971.90

PROP 6' CONCRETE SIDEWALK

OUTLET
10'-6" TYPE F CONDUIT
E-G= 971.50

OUTLET-@ INLET
10'-6" TYPE F CONDUIT
E-G= 971.50

6" PLUG-233+55, RT. ℄
E-G= 973.10

MATCH LINE SEE SHEET 165 STA. 234+00

OUTLET
10'-6" TYPE F CONDUIT
E-G= 971.50

RUSSELL

ABAN.

12"

MATCH LINE - SEE SHEET N° 156

RAMP SW

RAMP EN

133

134

DART AVE. 229+25 TO 234+00
RHODES AVE. 31+00 TO 36+00

DRAINAGE PLANS

FORM D.O.A.-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

164
455

AKRON INNERBELT
SUM-59-0.00

| FOR SEWER PROFILES | |
|---|---|
| PIPE CODE | SHEET NO. |
| P-46 | 171 |
| P-55 | 172 |
| P-56 | 172 |

FOR DRAINAGE QUANTITIES
SEE SHEET NO. 147 & 148.

FOR LEGEND SEE SHEET NO. 22.

OHIO CANAL

℄ BOWERY ST.

20" P.S. (ABAN.)

36" (B.F.G.)

EXIST. 6' CONC. WALK

OUTLET
10'-6" TYPE F CONDUIT
R-6"=970.30

OUTLET
10'-6" TYPE F CONDUIT
R-6"=968.30

THORNTON ST.

EXIST. 24" W.M.

16" (ABAN.)

20" P.S. (ABAN.)

36" B.S.

12" STM.

OUTLET
10'-6" TYPE F CONDUIT
R-6"=968.30

6" PLUG - 36+12, LT. ℄
R-6"=976.70

6" PLUG - 37+20, LT. ℄
R-6"=975.50

6' CONC. WALK

℄ RHODES AVE.

ABAN.

12" SAN.

MATCH LINE STA. 36+00
SEE SHEET 163

6" PLUG - 37+37, RT.
R-6"=975.30

EX. RHODES AVE.

O.E. DUCTS

12" SAN. (ABANDONED)

℄ RAMP SW

℄ RAMP EN

36" (B.F.G.)

℄ (Aban.) W

36" B.S. (Aban.)

RHODES AVE. 36+00 TO 40+20.42
BOWERY ST. 38+25 TO 40+20.42

DRAINAGE PLANS

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

165
455

AKRON INNERBELT
SUM-59-0.00

EXISTING RHODES AVE.

OUTLET
10'-6" TYPE F CONDUIT
E-G"=973.10

℄ RAMP SW

℄ RAMP EN

12" SAN.

ABANDONED

ABANDONED

237+34, LT. ℄
CONNECT 6" CONDUIT TO
EXIST. UNDERDRAIN
E-G"=975.30

237+34, RT. ℄
CONNECT 6" CONDUIT TO
EXIST. UNDERDRAIN.
E-G"=975.30

PROP. 5' CONC. WALK

OUTLET
10'-6" TYPE F CONDUIT
E-G"=974.00

℄ DART AVE.

EX. 12" STUB

EX. 30" STUB

EX. 18" STUB

EX. 12" STUBS

℄ DART EXTENSION

EXIST. CONC. WALK

BOULEVARD ST.

MATCH LINE STA. 234+00
SEE SHEET 169

OUTLET
10'-6" TYPE F CONDUIT
E-G"=973.10

BREAK IN GRADE
E-973.50

PROP. 10' 6" CONC. WALK

EXIST. CONC. WALK

OUTLET-BOTH SIDES OF INLET
10' (EA.)-6" TYPE F CONDUIT
E-G"=973.60

237+50, RT. ℄
6" PLUG-E=979.00

TOE OF SLOPE

ABANDONED

8" SAN.

EXISTING RHODES AVE.

8" SAN.

| FOR SEWER PROFILES | | | |
|---|---|---|---|
| PIPE CODE | SHEET NO. | PIPE CODE | SHEET NO. |
| P-35 | 170 | P-43 | 171 |
| P-36 | 170 | P-44 | 171 |
| P-37 | 170 | P-45 | 171 |
| P-38 | 170 | P-51 | 172 |
| P-39 | 170 | P-52 | 172 |
| P-40 | 170 | P-53 | 172 |
| P-41 | 171 | P-54 | 172 |
| P-42 | 171 | P-55 | 172 |
| | | P-56 | 172 |

FOR DRAINAGE QUANTITIES
SEE SHEET NO. 147 & 148.

FOR LEGEND SEE SHEET NO. 22

DART AVE. 234+00 TO 237+93.80
DART EXT. 234+66.45 TO 237+58.86

DRAINAGE PLANS

FORM D D A-5

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

168
455

AKRON INNERBELT
SUM-59-0.00

## REPLACEMENT ITEMS FOR PIPE RELOCATIONS

| LOCATION | SIDE | 305 PORTLAND CEMENT CONCRETE BASE SQ. YD. | 404 1-1/4" ASPHALT CONCRETE AC-20 CU. YDS. | 407 TACK COAT APPLIED @ RATE OF 1/10 GAL./SQ.YD. |
|---|---|---|---|---|
| RHODES @ KENYON | L & R | 17.1 | 0.6 | 1.71 |

ITEM'S ABOVE SHALL BE INCLUDED FOR PAYMENT IN ITEM 603 FOR WHICH IT IS A PART.

| FOR SEWER PROFILES | |
|---|---|
| PIPE CODE | SHEET NO. |
| P-41 | 171 |
| P-42 | 171 |
| P-50 | 172 |
| P-51 | 172 |
| P-52 | 172 |
| P-64 | 168 |

FOR DRAINAGE QUANTITIES SEE SHEET NO. 147 & 148.

FOR LEGEND SEE SHEET NO. 22

RUSSELL AVENUE

RHODES AVE.

KENYON STREET

PROP. 6' CONC. WALK

8" SANITARY SEWER

8" SAN. (ABAN.)

8" SAN. SEWER

18" STM. SEWER

PAV'T. REPLACE LIMITS

LA

LA/RW

ABAN.

8" SAN.

18" STM.

EXISTING RHODES AVE.
DRAINAGE PLANS

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | M-ITG2(2) | |

167
455

AKRON INNERBELT
SUM - 59 - 0.00

WEST EXPRESSWAY
STA. 425+083.91 ℄ RT. ℄ CONSTRUCT 2 STD. NO. 6 CATCH BASIN'S
TOP GRATE ELEV. = 979.31
℄ - 12" PIPE (W) = 972.00

980
975
970
965
960

PROP. GRADE
P1
SOUTH ST.
STA. 97+83, 15' LT.
EXIST. C.B.
℄ 12" = 960.40
10'-12" @ 5.00%
603-37'-12" TYPE 'C' CONDUIT 706.01, 706.02 OR 706.08 @ 30.28%
CONC. COLLAR
EXIST. 12" PIPE @ 4.58%
10'-12" @ 5.0%

0 1
WEST EXPRESSWAY

RAMP 'EN'
STA. 112+00, 5.8' RT. ℄
STD. NO. 6 CATCH BASIN
TOP GRATE ELEV. 981.64
℄ - 12" PIPE (N) = 977.50
℄ - 12" PIPE (W) = 978.38
℄ - 15" PIPE (E) = 975.08

NOTE: ROTATE C.B. 90° TO FIT BETWEEN WALL STRAPS

RAMP 'EN'
STA. 112+00, 32' LT. ℄
STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 982.7
℄ - 12" PIPE (W) = 978.38
℄ - 12" PIPE (S) = 977.50
℄ - 15" PIPE (E) = 975.08

985
980
975

3'-8"
℄ RAMP 'EN'
P2
EXIST. GROUND
603-39'-12" TYPE 'B' CONDUIT 706.01, 706.08, 706.02 @ 6.2%
NOTE: NO JOINTS FOR FIRST 24" OF PIPE

CONSTRUCT 2-STD. NO. 6 C.B.'S ONE ON EXIST. 12" PIPE
WEST EXPRESSWAY
STA. 427+13, 55' RT. ℄
TOP GRATE ELEV. = 982.32
℄ - 12" PIPE (S) = 979.36
℄ - 12" PIPE (N) = 979.36

RAMP 'EN'
STA. 111+14, 30' LT. ℄
STD. NO. 6 CATCH BASIN
TOP GRATE ELEV. = 981.42
℄ - 12" PIPE (N+E) = 979.24

EX. MEDIAN INLET
℄ 12" = 979.91
℄ I-76
P3
℄ RAMP 'EN'
985
980
975
970
965
PROP. GRADE
EXIST 12" PIPE @ 1.0%
603-8'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @ 1.50%
REMOVE 57' 12" PIPE
EXIST. GROUND

0
WEST EXPRESSWAY

RAMP 'EN'
STA. 111+14, 30' LT. ℄
STD. NO. 6 CATCH BASIN
TOP GRATE ELEV. = 981.60
℄ - 12" (E) = 979.24

RAMP 'EN'
STA. 112+00, 32' LT. ℄
STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 982.60
℄ - 12" (W) = 978.38
℄ - 15" (S&E) = 975.08

WEST EXPRESSWAY
STA. 429+92±, 65' RT. ℄
604-STD. NO. 5 M.H., MOD.
TOP M.H. ELEV. = 986.50
℄ - EXIST. 60" (N) = 946.02
℄ - NEW 60" (S) = 946.02
℄ - NEW 15" (W) = 973.13
℄ - NEW 12" (NW) = 977.70

℄ RAMP 'EN'
PROP. RETAINING WALL

WEST EXPRESSWAY
STA. 429+97, 110' LT. ℄
RECONSTRUCT EXIST. MANHOLE TO GRADE
EX. TOP EL. = 971.40
PROP. TOP EL. = 976.70
℄ - 60" B.S. (N+S) = 945.83

985
980
975
970
965
960
955
950
945

EXIST. GRADE
PROP. GRADE
P4
P5
603-86'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @ 1.00%
603-195'-15" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @ 1.00%
EX. 12" PIPE (TO BE REMOVED)
604-15" FLAP Gate
SOUTH ST.
STA. 103+14.87, 15.43' LT. ℄
604 JUNCTION CHAMBER
TOP M.H. ELEV. = 968.20
INV. 60" = 946.29
INV. 36" = 947.29
℄ SOUTH ST.
EXIST. GRADE
EX. 8" GAS (REMOVED BY OTHERS)
EXIST. 36" WATER MAIN
603-65'-60" RADIUS CONDUIT TYPE 'B' 706.03, 3000 LOAD @ 0.4%
603-60'-60" RADIUS CONDUIT TYPE 'B' 706.03, 1500 D-LOAD 0.4%
P6
3' CONCRETE COLLAR SEE DETAIL SHT. 175
3' CONCRETE COLLAR SEE DETAIL SHEET 175
SPRINGLINE 33" SEWER & 60" SEWER ELEV. = 948.79
EXIST CONC. PIPE @ 0.10%
EXIST. 60" BRICK (2 RING) SEWER @ 0.5%
603-52'-60" TYPE 'B' CONDUIT 706.03, 3000 D-LOAD @ 0.40%
SOUTH ST. PT. 103+14.87, 15.43' LT. ℄
603-25'-60" CONDUIT TYPE 'B' 706.03, 1500 D-LOAD @ 0.40%
SOUTH ST. PT. 103+61.68, 11' RT. ℄

SOUTH STREET
STA. 103+86.68, 17' RT. ℄
604-STD. NO. 5 MANHOLE MOD.
TOP M.H. ELEV. = 968.7
℄ - EXIST. 60" B.S. (NE) = 946.63
℄ - NEW 60" (S.W.) = 946.63
RE
PROP. GRADE
EX. GRADE

NOTE:
ALL 706.02 PIPE TO HAVE 706.11 JOINTS
ALL 706.08 PIPE TO HAVE 706.12 JOINTS

RAMP 'EN'

0 2 3 4 5
DRAINAGE PROFILES

BRUNING 44-142 26372-2

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AKRON INNERBELT
SUM-59-0.00

SOUTH STREET
STA. 107+38.54' LT. ℄
STD. HW-1 HEADWALL
℄-36"=963.85

SOUTH STREET
STA. 107+60.33' LT. ℄
STD. NO. 3 MANHOLE
TOP M.H. ELEV.=976.00
℄-36"(N.W ℄ E)=964.00

SOUTH STREET
STA. 108+92.50, 33' LT. ℄
STD. NO. 3 MANHOLE W/ SLAB TOP
TOP M.H. ELEV.=971.80
℄-36"(E ℄ W)=966.71
℄-12"(N)=969.16

SOUTH STREET
STA. 110+39.35' LT. ℄
STD. NO. 3 MANHOLE
TOP M.H. ELEV.=974.5
℄-36"(E ℄ W)=967.75

DART AVENUE
STA. 222+16.46' RT. ℄
EXIST. MOD. 2-3 INLET
GRATE ELEV.=975.01
℄-36"(E ℄ W)=968.49

EXIST. RHODES AVE
STA. 3+38.7' RT. ℄
EXIST. MANHOLE
TOP M.H. ELEV.=1001.91
INV. 18"=991.06
INV. 12"=995.77

980
975
970
965
960

P 7 · P 8 · P 9 · P 10 · ℄ DART AVE.

EX. 36" W.M.
EXIST. CITY DUCTS
℄-36" OUTLET
ELEV.=963.85
CR 1
CONCRETE RIPRAP-SEE SHT 120
603-30'-36" TYPE 'C' CONDUIT 706.02 @0.5 %
603-136'-36" TYPE 'C' CONDUIT 706.02 @1.99 %
603-144'-36" TYPE 'C' CONDUIT 706.02 @0.7 %
603-108'-36" TYPE 'B' CONDUIT 706.02 @0.7 %
EXIST 36" R.C.P @2.3 %
REMOVE EXIST. 36" R.C.P (SEE PLAN SH'T NO. 154)
0 2 3 4
SOUTH STREET

P 64 · ℄ RHODES ℄ KENYON ST.
EX. 4" GAS
KENYON STREET
STA. 5+75.14' LT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB=1001.02
GRATE ELEV.=1000.52
℄-12" PIPE=995.64
EX. 6" W.M. (ABAN.)
603-26'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @0.5%
1005
1000
995
990

SOUTH STREET
STA. 108+92.50, 33' LT. ℄
STD. NO. 1 MANHOLE W/ SLAB TOP
TOP M.H. ELEV.=972.50
℄-36"(E, W)=966.71
℄-12"(N)=969.16

LAKESHORE BLVD.
STA. 10+50, 13' RT. ℄
EXIST. MANHOLE
TOP M.H. ELEV.=973.94
℄-EX. 12"(E)=969.04
℄-EX. 15"(N.W.)=968.79

South Street
STA. 111+35, 7' LT. ℄
EXIST. MANHOLE-ADJUST TO GRADE
EXIST TOP M.H. ELEV. 974.95
℄-EXIST. 24"(E)=968.12
℄-EXIST 30"(W)=967.58
℄-NEW 12"(S.E.)=970.30
℄-EXIST 12"(N.E.)=970.33

SOUTH STREET
STA. 111+35, 7' LT. ℄
EXIST. MANHOLE-ADJUST TO GRADE
EXIST. TOP M.H. ELEV.=974.95
℄-EXIST. 24"(E)=968.12
℄-EXIST 30"(W)=967.58
℄-NEW. 12"(S.E.)=970.71
℄-EXIST. 12"(N.E.)=970.71

980
975
970
965
960

P 11 · P 12 · P 13 · P 14

SOUTH STREET
STA. 108+92.50, 42' LT. ℄
EXIST. MANHOLE (TO BE REMOVED)
TOP M.H. ELEV.=975.69
℄-36"(E ℄ W)=966.95
℄-12"(N ℄ S)=969.50
EXIST. GRADE
BULKHEAD EXIST. 36" PIPE (E ℄ W) @ MANHOLE
EXIST. 12" PIPE @ 3.78 %
CONNECT TO EXISTING 12" PIPE W/ CONC. COLLAR
603-13'-12" TYPE 'C' CONDUIT 706.01, 706.02 OR 706.08 @3.78%
0
SOUTH STREET

℄ LAKESHORE BLVD.
REMOVE EX. INLET
LAKESHORE BLVD.
STA. 10+50, 37' LT. ℄
604-CITY OF AKRON
TYPE 5 INLET, MOD. SHALLOW
TOP GRATE ELEV.=973.56
℄-12"(W)=970.15
EX. GRADE
PROP. GRADE
603-16'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @3.45%
EXIST 15" PIPE @0.9%
CONNECT TO EXIST. 12" PIPE W/ CONC. COLLAR INV. 970.2" 17' RT. STA. 10+50 LAKESHORE BLVD.
EXIST. 12" PIPE @3.45%
0 40 80
LAKESHORE BLVD.

℄ SOUTH ST.
SOUTH STREET
STA. 111+79.15' RT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP CURB EL.=975.80
TOP GRATE EL.=975.30
℄-12"(N.W)=970.55
EXIST. GRADE
PROP. GRADE
603-50'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @0.50 %
EX. 10" W.M.
EXIST. 30" PIPE @0.8%
0 20 40 60
SOUTH STREET

PROP. GRADE
REMOVE EX. INLET
SOUTH ST.
SOUTH STREET
STA. 111+59.17' LT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB=975.50
TOP OF GRATE=975.00
℄-12"(S.E.)=970.55
603-9'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @0.8%
CONNECT TO EX. 12" PIPE W/ CONC. COLLAR INV.=970.48
STA. 111+52.15' LT.
EXIST. PIPE @0.8%
0 20 40 60
SOUTH STREET

DART AVENUE
STA. 224+42.58' LT. ℄
EX MANHOLE-ADJUST TO GRADE
EX TOP M.H. ELEV.=974.50
EX 12"(S.E) REMOVE=968.70
EX 12"(NE)=969.08
NEW 12"(S.E)=968.41
EX 24"(E)=964.39
EX 30"(W)=963.89

DART AVENUE
STA. 224+00, 28' LT. ℄
STD. NO. 1 MANHOLE
TOP M.H. ELEV.=974.30
℄-12"(N.W. ℄ S.E.)=968.90
℄-12"(S.W.)=969.69

MEDIAN
P 15 · P 16
DART AVENUE
STA. 223+75, ℄
604-CITY OF AKRON
TYPE 5 INLET
GRATE ELEV.=973.52
℄-12"(N.W.)=969.27
REMOVE EX. 12" PIPE
EX. 8" W.M. (ABAN'D.)
603-38'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @0.97%
603-54'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @0.9%
EX. 24" @0.4%
EX. 30" @10.25%
0
DART AVENUE

DART AVENUE
STA. 224+00, 28' LT. ℄
STD. NO. 1 MANHOLE W/ SLAB TOP
TOP M.H. ELEV.=974.30
℄-12"(N.W. ℄ S.E.)=968.90
℄-12"(S.W.)=969.69
P 17
DART AVENUE
STA. 223+75, 36' LT. ℄
604-CITY OF AKRON
TYPE 5 INLET MOD.
GRATE ELEV.=973.34
℄-12"(N.W.)=969.88
12" PIPE @0.8%
EX. 8" W.M.
603-38'-12" TYPE 'B' CONDUIT 706.02 OR 706.08 @0.5%
0 40
DART AVENUE

DART AVENUE
STA. 227+78.16.5' ± RT. ℄
CONNECT W/ CONC. COLLAR
℄-961.65
P 62 · P 63
DART AVENUE
STA. 228+01, 6.5' ± RT. ℄
604-STD. NO. 3 M.H.
TOP M.H. ELEV.=977.85
℄-8" PIPE (N.E. ℄ S.W.)=961.16
603-35'-8" TYPE 'C' CONDUIT 706.02 OR 706.08 @0.50 %
STA. 228+42.5.5' ± RT. ℄
CONNECT W/ CONC. COLLAR
℄-961.01
603-30'-8" TYPE 'C' CONDUIT 706.02 OR 706.08 @1.76%
40 0 40
SOUTH STREET

NOTE:
ALL 706.02 PIPE TO HAVE 706.11 JOINTS
ALL 706.08 PIPE TO HAVE 706.12 JOINTS

DRAINAGE PROFILES

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AKRON INNERBELT
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DART AVENUE
STA. 224+38.73' LT. ℄
EXIST. M.H. ADJUST TO GRADE
EXIST. TOP M.H. ELEV. 974.50
EXIST. 12"(S.E.) = 968.70 - REMOVE
EXIST. 12"(N.E.) = 969.08
NEW 12"(S.E.) = 968.70
EXIST. 15"(N.E.) = 966.06
EXIST. 24"(E.) = 964.39
EXIST 30"(W.) = 963.89

DART AVENUE
STA 225+36.7' LT. ℄
STD NO. 1 MANHOLE
TOP M.H. ELEV. = 975.94
℄ - EXIST. 15"(S.W.) = 964.69
℄ - NEW. 12"( N.W.) = 971.00

P 9
PROP. GRADE
EXIST. 125'-15" PIPE @ 0.5 % (TO REMAIN)
EXIST. 15" PIPE (TO BE ABANDONED)

980 / 975 / 970 / 965 / 960 — 0 — 2

## DART AVENUE

DART AVE
DART AVENUE
STA. 225+36, 7' LT. ℄
STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 975.94
℄ - EXIST. 15"(S.W.) = 966.69
℄ - NEW 12"( N.E. & N.W.) = 971.00

RHODES AVENUE
STA. 27+00, 14' RT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB EL. = 977.96
WINDOW ELEV. = 977.22
℄ - 12"(S.E.) = 974.21

P 19
℄ RHODES AVE.
603-28'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @ 11.46%
EXIST. 15" PIPE @ 0.50%

980 / 975 / 970 / 965 — 0 — 40

## DART AVE & RHODES AVE

DART AVENUE
STA. 225+50, 36' RT. ℄
STD. NO. 3 MANHOLE
TOP M.H. ELEV. = 976.4
℄ - EX. 8"(N.E. & S.W.) = 962.15

P 20
EXIST. 8" SAN. SEWER (TO BE ABAND'D)
EX. 8" SAN. SEWER @ 0.42%

975 / 970 / 965 — 0

## DART AVE

RUSSELL AVENUE
STA. 56+35, 18' RT. ℄
RECONSTRUCT EXIST. MANHOLE
PROP. TOP M.H. ELEV. = 973.5
EXIST. TOP M.H. ELEV. = 971.70
℄ - EXIST. 12"(N.) = 966.28
℄ - EXIST. 15"(E.) = 964.01
℄ - EXIST. 24"(W.) = 965.13

RUSSELL AVENUE
STA. 56+41, 14' LT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB ELEV. = 973.40
WINDOW ELEV. = 972.65
℄ - 12"(S.W. & N.E.) = 966.64

RUSSELL AVENUE
STA. 56+85, 14' LT. ℄
RECONSTRUCT EXIST. CITY OF AKRON NO. 3 INLET
EXIST. TOP OF CURB ELEV. = 971.67
PROP. TOP OF CURB ELEV. = 973.35
℄ - EXIST. 12" = 967.03 (TO BE REMOVED)
℄ - PROP. 12" = 961.03

RE 3
PROP. GRADE
℄ RUSSELL AVE.
P 21
RE 2
EX. GRADE
603-43'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @ 0.9%
EXIST. 12" PIPE @ 0.9%
EXIST. INLET & 12" PIPE (TO BE REMOVED)

980 / 975 / 970 / 965 / 960 — 0 — 40 — 80

## RUSSELL AVENUE

RHODES AVENUE
STA. 228+00, 14' RT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB EL. 975.13
WINDOW ELEV. = 974.38
℄ - 12"(N.E.) = 971.38

DART AVENUE
STA. 228+50, 19' LT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 975.12
℄ - 12"(S.W. (S.E.) = 970.00
℄ - 12"(N.E.) = 969.12

P 22
P 23
℄ RHODES AVE.
℄ DART AVE.
603-21'-12" TYPE 'B' CONDUIT 706.01, 706.02, 706.08 @ 6.57%
EXIST. 8" W.M. (ABAND.)
603-34'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @ 4.03%

980 / 975 / 970 / 965 — 20 — 0 — 20 — 40

## DART AVE.

DART AVENUE
STA. 228+50, 14' RT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB ELEV. = 975.12
WINDOW ELEV. = 974.38
℄ - 12"(N.W.) = 971.37

DART AVENUE
STA. 228+50, 19' LT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 975.12
℄ - 12"(S.W. ℄ S.E.) = 971.00
℄ - 12"(N.E.) = 969.12

DART AVENUE
STA. 229+80, 19' LT. ℄
604-STD. NO. 1 M.H.
TOP M.H. ELEV. = 974.17
℄ - 12"(N.E.) = 967.82
℄ - 12"(N.W. & S.E.) = 970.00
℄ - 21"(N.W.) = 967.07
℄ - 12"(S.E.) = 969.69

PROP. GRADE
P 24
603-130'-12" TYPE 'C' CONDUIT 706.01, 706.02 OR 706.08 @ 1.00%

980 / 975 / 970 / 965 — 0

## DART AVE

RHODES AVENUE
STA. 33+75, 14' LT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB ELEV. = 975.42
WINDOW ELEV. = 974.68
℄ - 12"(S.W.) = 971.67

DART AVENUE
STA. 231+00, 19' LT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 974.48
℄ - 12"(N, NE & SE) = 970.00
℄ - 12"(S.W.) = 968.44

DART AVENUE
STA. 232+00, 14' LT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB ELEV. = 974.80
WINDOW ELEV. = 974.06
℄ - 12"(S.W.) = 971.05

DART AVENUE
STA. 231+00, 19' LT. ℄
604-STD. NO. 1 M.H.
TOP M.H. ELEV. = 974.48
℄ - 12"(N, NE & S.E.) = 970.00
℄ - 12"(S.W.) = 968.44

P 25
P 26
PROP. GRADE
603-110'-12" TYPE 'B' CONDUIT 706.02 OR 706.08 @ 1.52%
603-100'-12" TYPE 'C' CONDUIT 706.01, 706.02 OR 706.08 @ 1.05%

980 / 975 / 970 / 965 — 120 — 80 — 40 — 0 — 40 — 80

## RHODES AVE & DART AVE

REFER TO RE 3 THIS SHEET.
P 59
PROP. GRADE
RUSSELL AVENUE
STA. 56+41, 14' RT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB EL. = 973.40
WINDOW EL. 972.65
℄ - 12"(S.W.) = 969.65
℄ RUSSELL AVE.
603-7'-12" TYPE 'C' CONDUIT 706.01, 706.02 OR 706.08 @ 1.00%

975 / 970 / 965 — 0 — 20

## RUSSELL AVE.

DART AVENUE
STA. 231+00, 14' RT. ℄
604-CITY OF AKRON
NO. 3 INLET
TOP OF CURB ELEV. = 974.48
WINDOW ELEV. = 973.73
℄ - 12"(N.W.) = 970.73

P 27
PROP. GRADE
℄ DART AVE.
603-34'-12" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @ 2.14%
EXIST. 8" W.M. (ABAND.)

975 / 970 / 965 — 0 — 40

## DART AVE.

DART AVENUE
STA. 229+80, 19' LT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 974.17
℄ - 12"(N.E.) = 967.82
℄ - 12"(N.W. & S.E.) = 970.00
℄ - 21"(N.W.) = 967.07
℄ - 12"(S.E.) = 969.69

DART AVENUE
STA. 231+00, 19' LT. ℄
604-STD. NO. 1 M.H.
TOP M.H. ELEV. = 974.48
℄ - 12"(N, NE & SE = 970.0
℄ - 12"(S.W.) = 968.44

P 28
PROP. GRADE
603-123'-12" TYPE 'C' CONDUIT 706.01, 706.02 OR 706.08 @ 0.5%

975 / 970 / 965 — 0 — 40 — 80 — 120

## DART AVE.

NOTE:
ALL 706.02 PIPE TO HAVE 706.11 JOINTS
ALL 706.08 PIPE TO HAVE 706.12 JOINTS

# DRAINAGE PROFILES

BRUNING 44-142-26372-2

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AKRON INNERBELT
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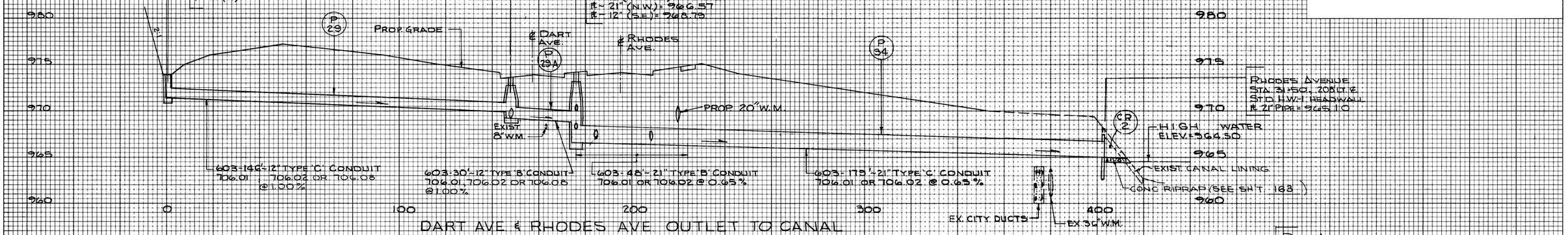
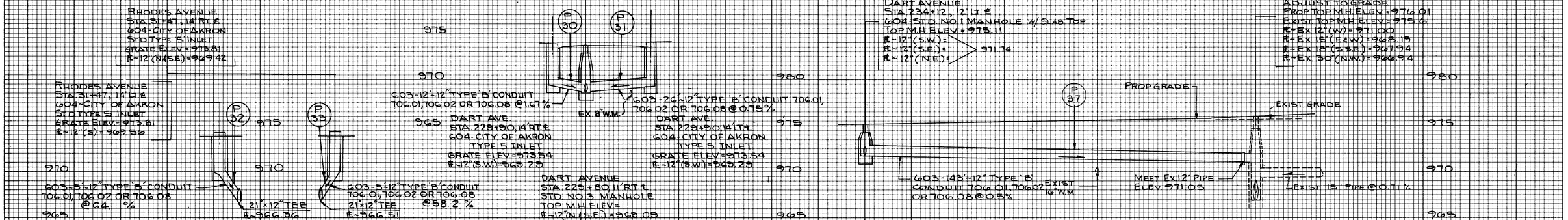
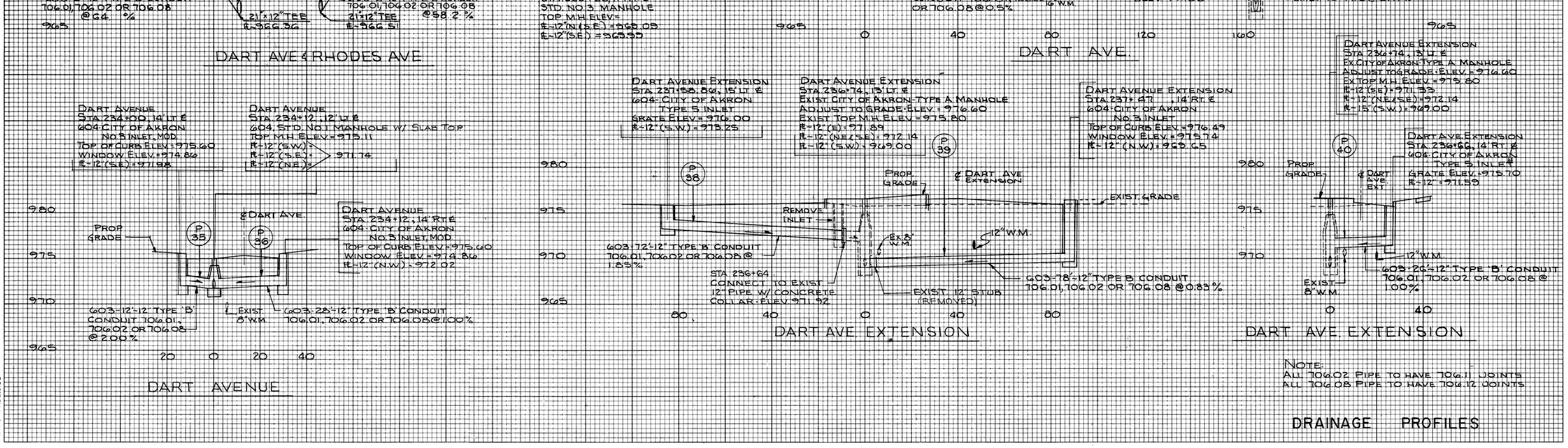
# DART AVE & RHODES AVE OUTLET TO CANAL




DART AVE & RHODES AVE

DART AVENUE

DART AVE.

DART AVE EXTENSION

DART AVE. EXTENSION

NOTE:
ALL 706.02 PIPE TO HAVE 706.11 JOINTS
ALL 706.08 PIPE TO HAVE 706.12 JOINTS

# DRAINAGE PROFILES

BRUNING 44-142 26372-2

| FED. RD. DIVISION | STATE | PROJECT | |
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AKRON INNERBELT
SUM-59-0.00

DART AVENUE EXT.
STA 235+21, 115' RT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 981.2
℄-18"(S&NE) = 972.63
℄-15"(SW.) = 976.65

EARTH DIKE

RAMP 'EN'
STA 134+00, 63.3' RT. ℄
604-STD. NO. 5 CATCH BASIN
GRATE ELEV. = 980.00
℄-15"(N.E.) = 971.00

PROP. GRADE

P 41

603-70'-15" TYPE 'C' CONDUIT
706.01, 706.02 OR 706.08
@ 0.50%

EXIST. 16" W.M.

980
975
970
0
40
80

EXIST. RHODES AVE @ RAMP "EN"

SOUTH STREET
STA 103+14.87, 15.43' LT. ℄
PROP. JUNCTION CHAMBER
TOP M.H. ELEV. = 968.2 ±
℄-60"(N.E.S.E.) = 946.29
℄-33"(S.W.) = 94 29

EXIST. GRADE

970
965
960
955

EXIST. 8" GAS (TO BE REMOVED BY OTHERS)

EXIST. 10" W.M. (ABAN.)

EXIST. 36" W.M. (B.F.G.)

P 60

EXIST. 33" PIPE (TO BE REMOVED)

SOUTH ST.
STA 103+21.7' LT. ℄
SPRINGLINE
60" SEWER
ELEV. = 948.79

℄ SOUTH STREET

SOUTH STREET
STA 102+98.27, 1.5' LT. ℄
EXIST. MANHOLE
TOP M.H. ELEV. = 967.70 ±
℄-EXIST. 33"(W.) = 947.56
℄-NEW 33"(N.E.) = 947.56

965
960
955
950
945

EXIST. 33" COMB. SEWER @ 1.7%

℄-33" = 947.41

*603-22'-33" TYPE B CONDUIT
706.03, 1500 D-LOAD @ 0.68%

0
40

SOUTH STREET

*COMBINATION SEWER

DART AVENUE EXTENSION
STA 235+21, 115' RT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. 981.2
℄-18"(S&NE) = 972.63
℄-15"(S.E.) = 976.65

DART AVENUE EXT.
STA 235+61, 64' RT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 980.6
℄-18"(S&N) = 970.15

DART AVE. STA. 235+61, 2' LT. ℄
EXIST. CITY OF AKRON TYPE 'A' MANHOLE
ADJUST TO GRADE - ELEV. 976.01
℄-EX. 12"(W.) = 971.00
℄-EX. 15"(E&W) = 968.19
℄-EX. 18"(S.S.E.) = 967.74
℄-EX. 30"(N.W.) = 966.94

RAMP 'EN'
STA 130+25, 20' RT. ℄
604-STD. NO. 3 MANHOLE
TOP M.H. ELEV. = 976.10
℄-30"(N&S) = 966.47

℄ DART AVE EXT.
℄ DART AVE

P 42
P 43
P 44
P 45

EXIST. GRADE

EXIST. 18" PIPE @ 4.8%

MEET EXIST. STOP

℄ EX. 8" W.M.

603-73'-8" TYPE 'C' CONDUIT
706.01 OR 706.02 @ 3.42%

603-64'-18" TYPE 'B' CONDUIT
706.01 OR 706.02 @ 3.42%

603-57'-30" TYPE 'B' CONDUIT
706.02 @ 0.75%

603-180'-30" TYPE 'C' CONDUIT
706.02 @ 1.51%

EX. 36" W.M.

EX. CITY DUCTS

RAMP 'EN'
STA 138+04.20' RT. ℄
602-STD. HW-1 HEADWALL
OUTLET-30" = 963.75

CONC. RIP-RAP
SEE PLAN 158

CR 3

RUSSELL AVENUE
STA 60+52, 12' RT. ℄
EXISTING MANHOLE
TOP M.H. ELEV. = 985.20
℄-EXIST. 15"(S.W.) = 977.89
℄-NEW 15"(N.E.) = 977.80
RECHANNEL EXIST. M.H.

RUSSELL AVENUE
STA 61+33, 12' RT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 992.2
℄-12"(N) = 985.26
℄-15"(S.W.) = 983.50

9605
9600
0
100
200
300
380

DART AVE. & RHODES AVE. OUTLET @ CANAL

RHODES AVENUE
STA 39+49, 7' RT. ℄
EX. M.H. ADJUST TO GRADE
EX. TOP ELEV. = 972.54
PROP. TOP ELEV. = 971.62
℄-NEW 12"(S.W.) = 968.39
℄-EX. 30" B.S.(N&S) = 950.66

RHODES AVENUE
STA 39+18, 18' LT. ℄
604 CITY OF AKRON NO. 3 INLET
TOP OF CURB = 972.56
WINDOW ELEV. = 971.82
℄-12"(N&E) = 968.81

RAMP 'SW'
STA 129+77.83' RT. ℄
604 STD. NO. 5 C.B.
GRATE ELEV. = 979.50
℄-12"(S) = 977.13

RUSSELL AVENUE
STA 60+02, 10.5' RT. ℄
604-STD. NO. 1 MANHOLE
TOP M.H. ELEV. = 982.3 ±
℄-NEW 12"(N) = 976.54
℄-EX. 15"(E & W) = 976.29

RAMP 'EN'
STA 129+50.73' RT. ℄
604-STD. NO. 5 C.B.
GRATE ELEV. = 983.50
℄-12"(S) = 980.50

P 46
P 47
P 48
P 49

EXIST'G GRADE

609-12" FLAP VALVE

EXIST. 16" W.M.

603-42'-12" TYPE 'D' CONDUIT
706.01, 706.02 OR 706.08 @ 1.00%

PROP GRADE
EX. GRADE

RUSSELL AVE ℄

EX. 6" W.M. (ABAN'D.)

EX. 6" W.M. (ABAN'D.)

603-90'-12" TYPE 'B' CONDUIT
706.01, 706.02 OR 706.08 @ 0.65%

EX. 6" W.M. (ABAN'D.)

603-62'-12" TYPE 'D' CONDUIT 706.01, 706.02 OR 706.08 @ 2.00%

603-81'-15" TYPE 'B' CONDUIT 706.01, 706.02 OR 706.08 @ 6.55 %

EXIST. 15" PIPE @ 3.46%

EX. 50" B.S.

970
965
960
955
950
985
980
975
990
985
980
975
970
0
40
80
120
160

RHODES AVE. @ BOWERY

RUSSELL AVE. & RAMP "SW"

RUSSELL AVE. & RAMP "EN"

NOTE:
ALL 706.02 PIPE TO HAVE 706.11 JOINTS
ALL 706.08 PIPE TO HAVE 706.12 JOINTS

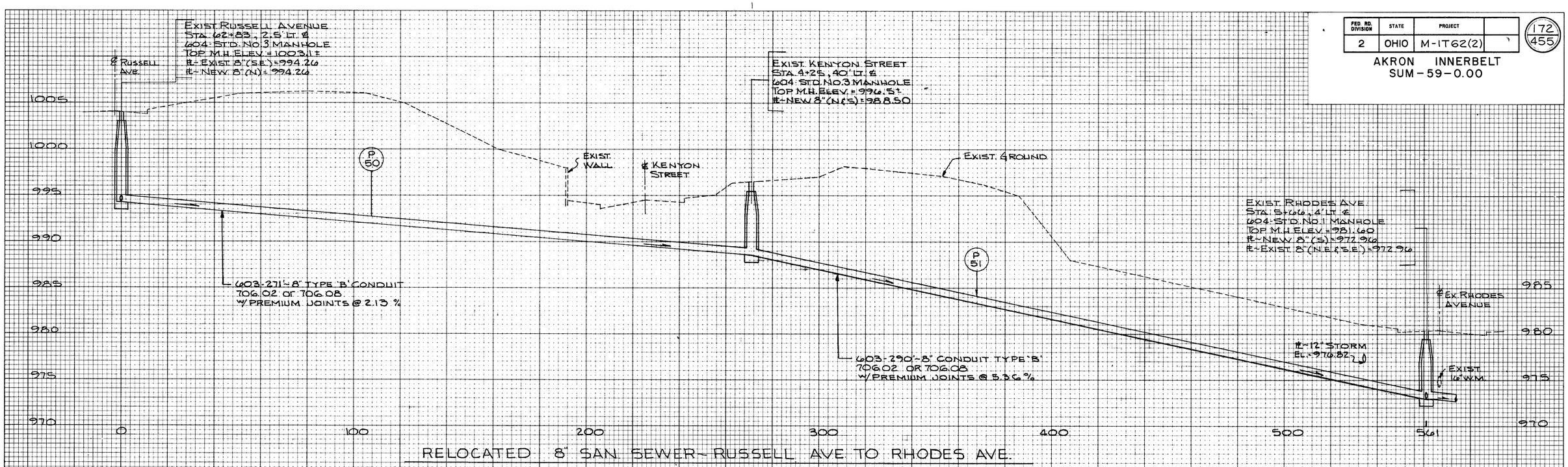
DRAINAGE PROFILES

BRUNING 44 142 26372-2

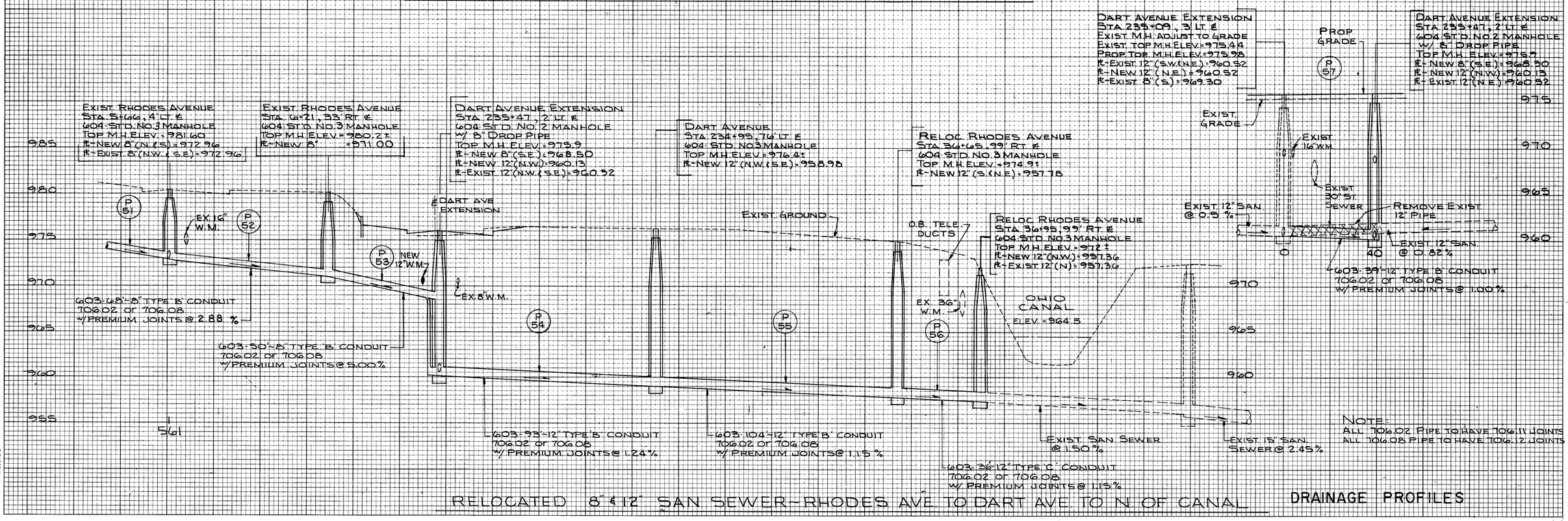
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | M-IT62(2) | |

172
455

AKRON INNERBELT
SUM-59-0.00




RELOCATED 8" SAN. SEWER - RUSSELL AVE. TO RHODES AVE.




RELOCATED 8" & 12" SAN. SEWER - RHODES AVE. TO DART AVE. TO N. OF CANAL

NOTE:
ALL 706.02 PIPE TO HAVE 706.11 JOINTS
ALL 706.08 PIPE TO HAVE 706.12 JOINTS

DRAINAGE PROFILES

BRUNING 44-142 26372-2

| FED. RD. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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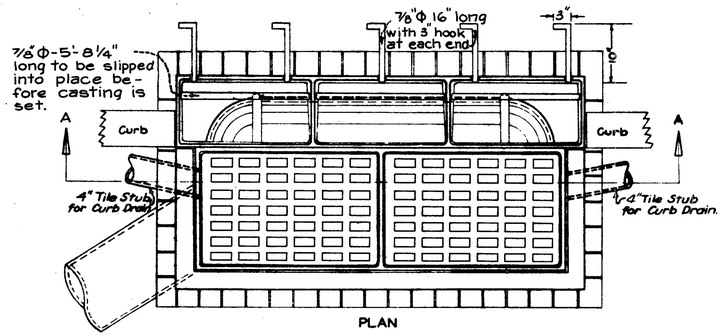
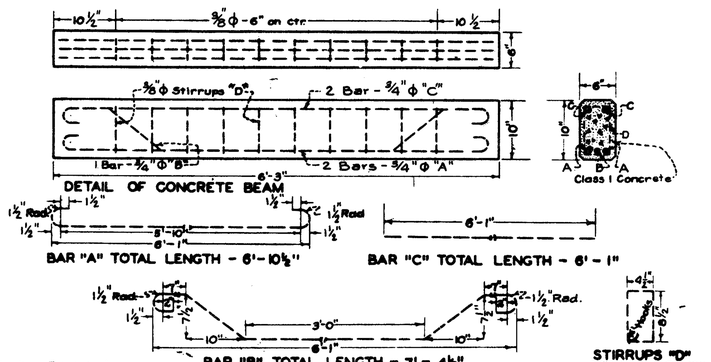
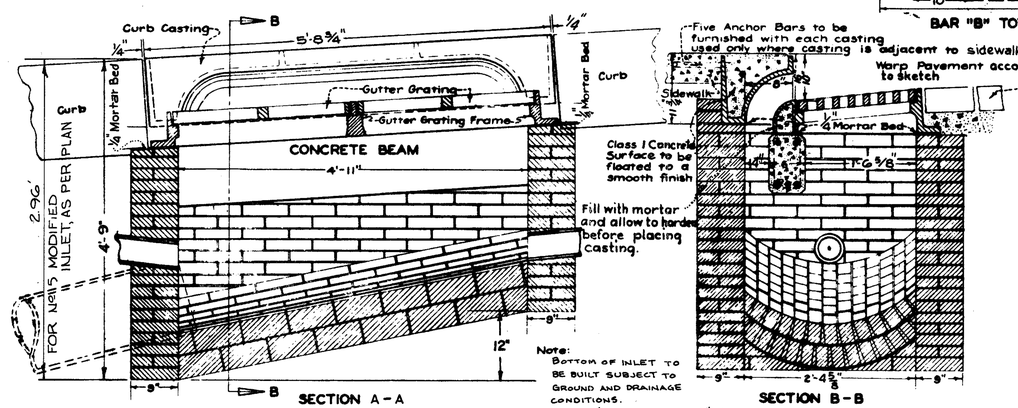
455

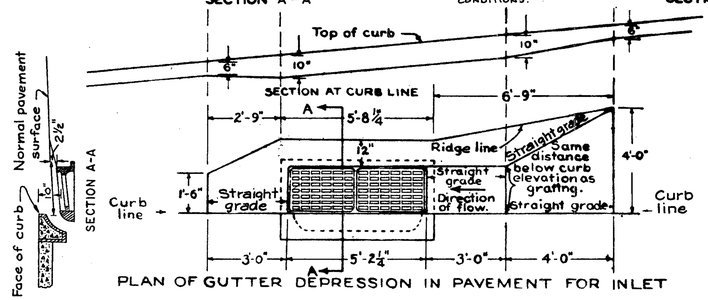
AKRON INNERBELT
SUM-59-00.00




PLAN



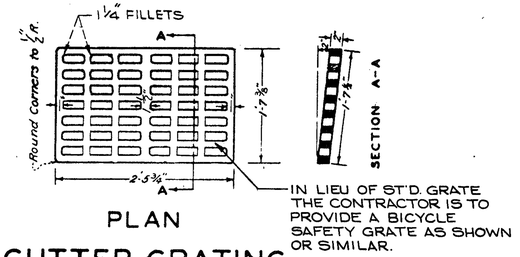

Notes~

*"G" stubs to be placed in inlets as indicated on the plan and sealed when directed by the Engineer. The stubs shall be paid for as item 604 City of Akron. Nº 5 Inlet.*

*Blockouts shall be paid for as part of the pavement with no deduction in pavement, or curb quantities because of castings.*

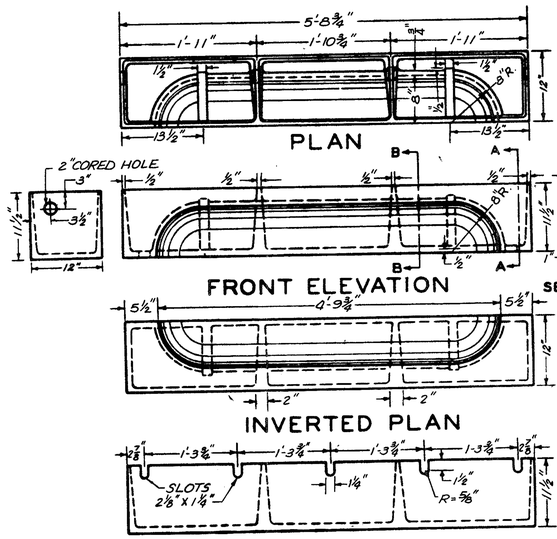
*Where inlet is constructed in existing pavement all reshaping of pavement, within the limits shown on the plan, shall be paid for as inlet, complete.*

*Detail Plans of Curb Casting, Gutter Grating, and Gutter Grating Frame shown on Right side of this sheet.*




PLAN

# GUTTER GRATING
# CITY OF AKRON
# Nº5 INLET




## Note

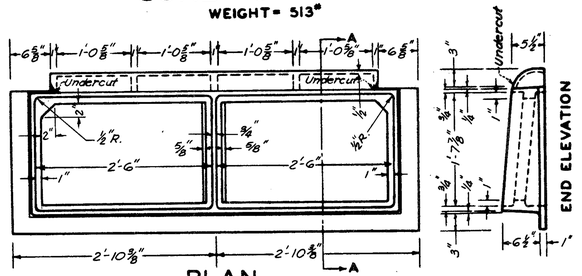
*Undercut Gutter Grating Frame where noted so as to permit a minimum opening of Three (3) inches between Curb Casting and Gutter Grating Frame.*

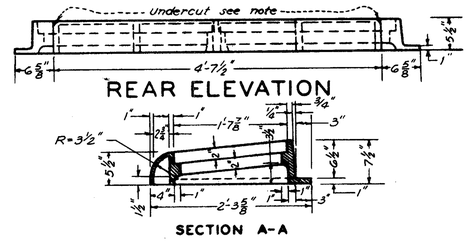
*Bearing parts of Gutter Grating and Gutter Grating Frame shall be machined to provide a firm and even seat.*

*Finished Castings shall not vary more than one sixteenth (1/16) inch per foot in any dimension, or more than five per cent (5%) in weight from that called for on the drawing.*

*Material shall be cast iron of good quality. Castings shall be free from blowholes and other defects. They shall be cleaned of all scale and grease, and receive two coats of bituminous paint.*

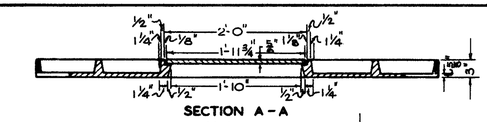
# CURB CASTING
WEIGHT= 513#

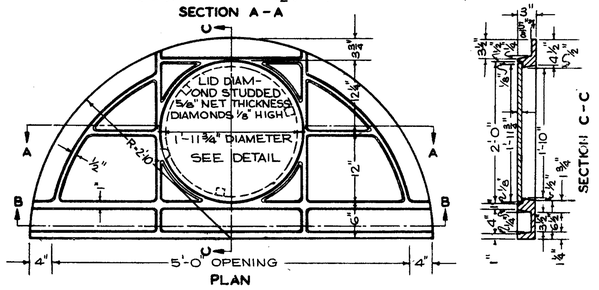



# GUTTER GRATING FRAME
WEIGHT= 543#

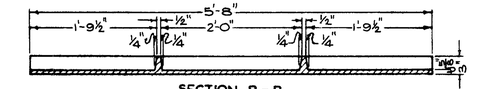
DRAINAGE DETAILS



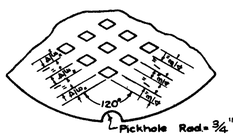




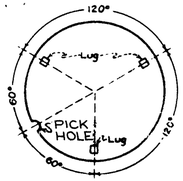



Approximate Wt.= 515 lbs.

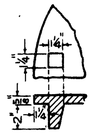
## TOP CASTING FOR STRAIGHT CURB



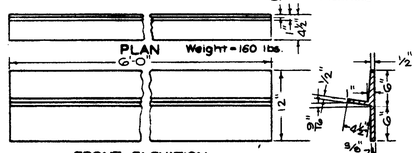

DETAIL OF LID




UNDERSIDE OF LID
Showing Location of Lugs and Picknole

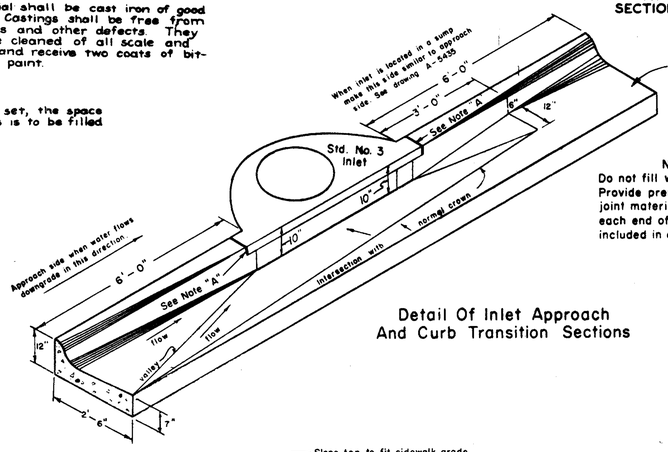


UNDERSIDE OF LID
Showing Lugs




Note- Material shall be cast iron of good quality. Castings shall be free from blowholes and other defects. They shall be cleaned of all scale and grease and receive two coats of bituminous paint.

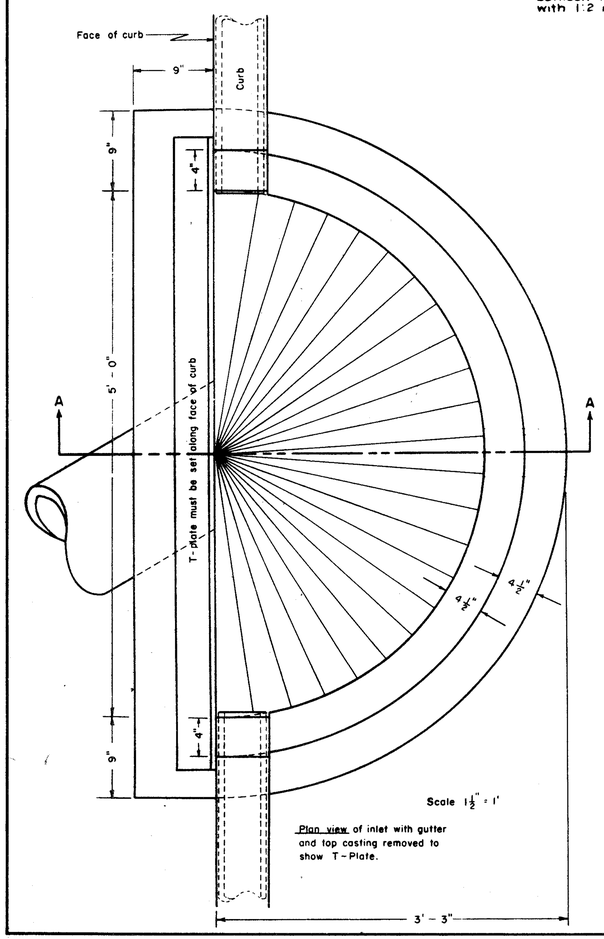
When casting is set, the space between the webs is to be filled with 1:2 mortar.




INLET APPROACH WILL BE INCLUDED IN THE COST OF THE INLETS

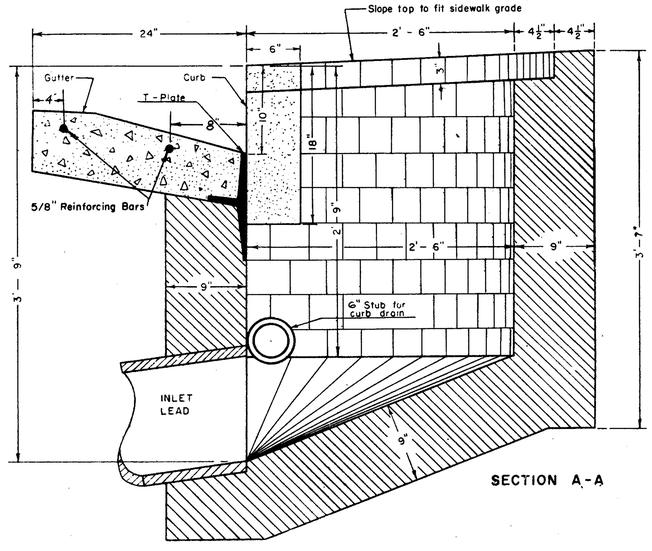
NOTE "A"
Do not fill with mortar. Provide premolded bituminous joint material 1/4" thick at each end of casting. Cost to be included in cost of inlet.

Detail Of Inlet Approach And Curb Transition Sections




Scale 1 1/2" = 1'

Plan view of inlet with gutter and top casting removed to show T-Plate.




1/2" Coat 1:2 1/4" mortar over entire outside.

SECTION A-A

## CITY OF AKRON
No. 3 INLET

CONSTRUCTION:

THE SEDIMENT FENCE SHALL BE CONSTRUCTED AS PER THE FOLLOWING SEQUENCE OF DRAWINGS. THE FENCE FABRIC SHALL BE SECURED TO THE FENCE POST WITH A MINIMUM OF 4 TIES PER POST. THE FILTER FABRIC SHALL BE SECURED TO THE FENCE AT MAXIMUM INTERVALS OF 2-1/2 FT. ALONG THE OVERLAP ON THE BACK OF THE FENCE, OR OTHER APPROVED INSTALLATION METHOD.

PAYMENT: THE COST OF ALL MATERIALS, CONSTRUCTION, MAINTENANCE AND REMOVAL REQUIRED SHALL BE PAID FOR UNDER ITEM 207 - LIN. FT. FILTER FABRIC FENCE.

| FED. RD. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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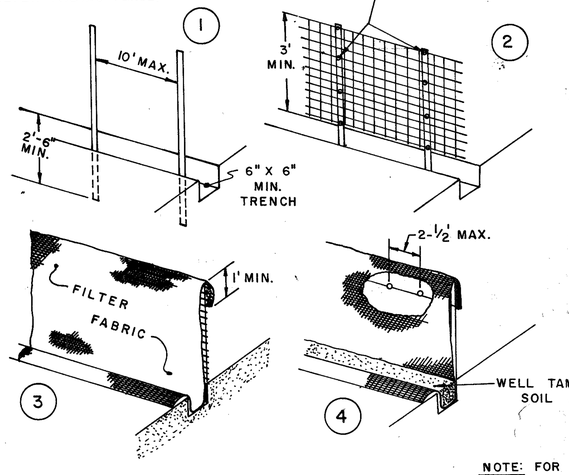
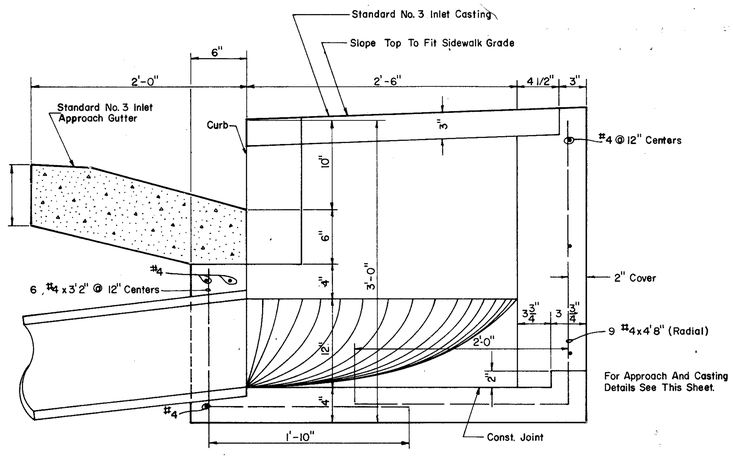
AKRON INNERBELT
SUM- 59-00.00




NOTE: FOR MATERIAL SPECIFICATIONS SEE GENERAL NOTES SHEET NO. 22 .

FILTER FABRIC FENCE
NO SCALE




For Approach And Casting Details See This Sheet.

## CITY OF AKRON
No. 3 Inlet Modified

DRAINAGE DETAILS

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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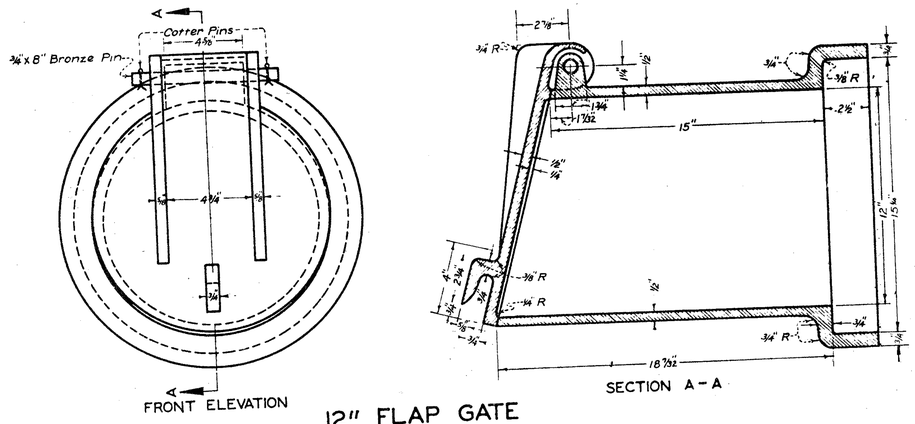
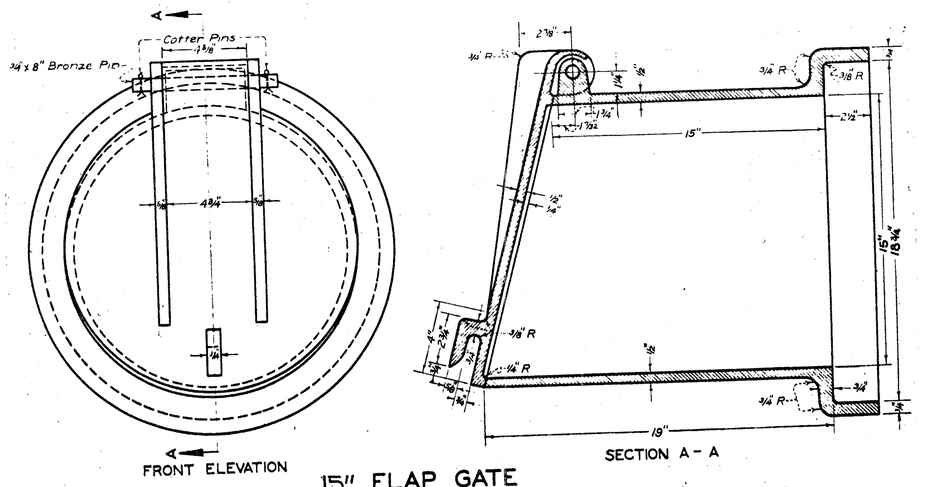
455

AKRON INNERBELT
SUM-59-0.00



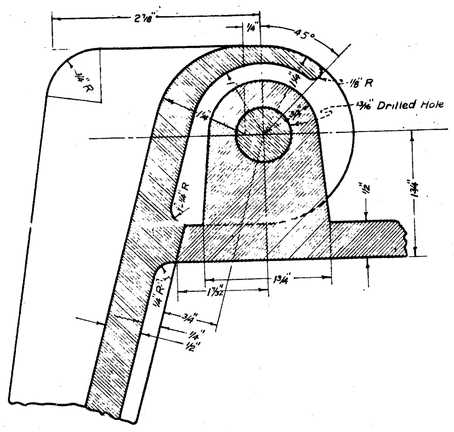

12" FLAP GATE
WEIGHT = 156#




15" FLAP GATE
WEIGHT = 201#

Note~
Bearing parts of flap gate and flap gate frame shall be machined to provide a firm and even seat.
Finished castings shall not vary more than 1/16" per foot in any dimension.
Material shall be cast iron of good quality. Castings shall be free from blowholes and other defects. They shall be cleaned of all scale and grease, and receive two coats of bituminous paint.

## 12" & 15" FLAP GATES

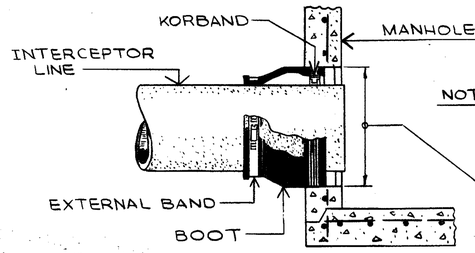



SECTION THRU HINGE 12" & 15"

| BOOT SPECIFICATIONS ASTM Spec. C-443 |
|---|
| Tensile, 1200 psi minimum |
| Elongation, 350% minimum |
| Shore A Duro, 35 min., 65 max. |
| Compression Set, 25% maximum |
| Accelerated Aging 96 hrs./158°F<br>Tensile, -15% max. loss<br>Elongation, -20% max. loss |
| Water Absorption 48 hrs./158°F<br>Max. by weight |

| INTERNAL BAND SPECIFICATIONS |
|---|
| Conforms To Aluminum Material Specification 6061-T6, -T651 |
| 304 Stainless Steel conforming To ASTM Spec A167 |

| EXTERNAL BAND SPECIFICATIONS |
|---|
| 304 Stainless Steel conforming to ASTM Spec A167 |

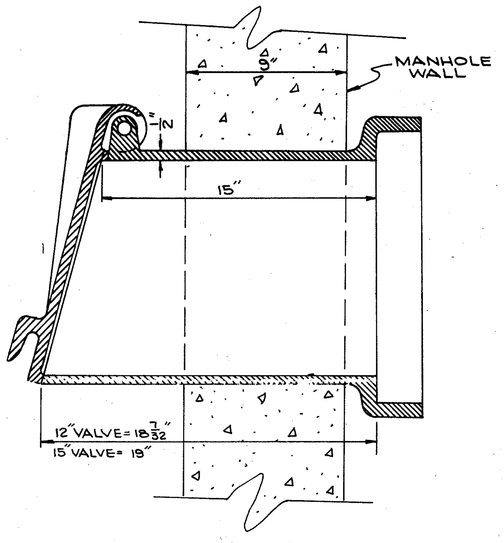



NOTE: THIS SEAL TO BE USED ON SANITARY SEWERS ONLY. THE SEAL IS TO BE PRICE BROTHERS-"KOR-N-SEAL" OR RESSEAL SEAL OR DURA-SEAL OR APPROVED EQUAL.

HOLE IN MANHOLE MAY BE DRILLED AT PLANT OR IN FIELD.

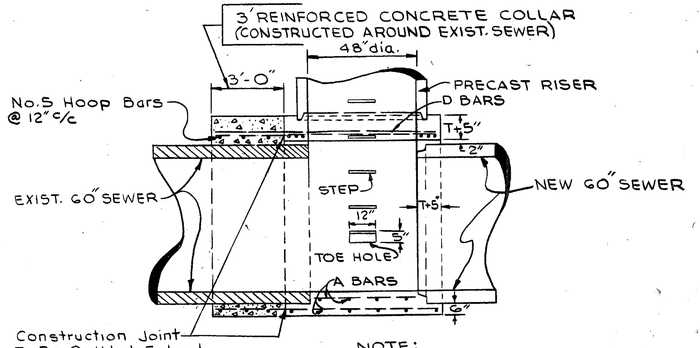
PAYMENT: ITEM SPECIAL ~ " PIPE CONNECTION SEAL, WHICH SHALL INCLUDE FURNISHING AND INSTALLING PIPE CONNECTION AS DETAILED ABOVE.

DETAIL OF PIPE CONNECTION SEAL
TO MANHOLE
NOT TO SCALE




MOUNTING OF FLAP GATE
@ MANHOLE

T = THICKNESS OF INTERCEPTING SEWER PIPE.




NOTE:
CONCRETE COLLAR WILL NOT BE PAID FOR SEPARATE BUT WILL BE INCLUDED IN ITEM 604-STD. NO. 5 MANHOLE W/706.11 JTS, AS PER PLAN-EACH

NOTE:
FOR DETAIL OF STANDARD NO. 5 MANHOLE SEE STATE OF OHIO STD. CONSTRUCTION DRAWING MH-5.

STANDARD NO. 5 MANHOLE
MODIFIED, AS PER PLAN
~NOT TO SCALE

DRAINAGE DETAILS

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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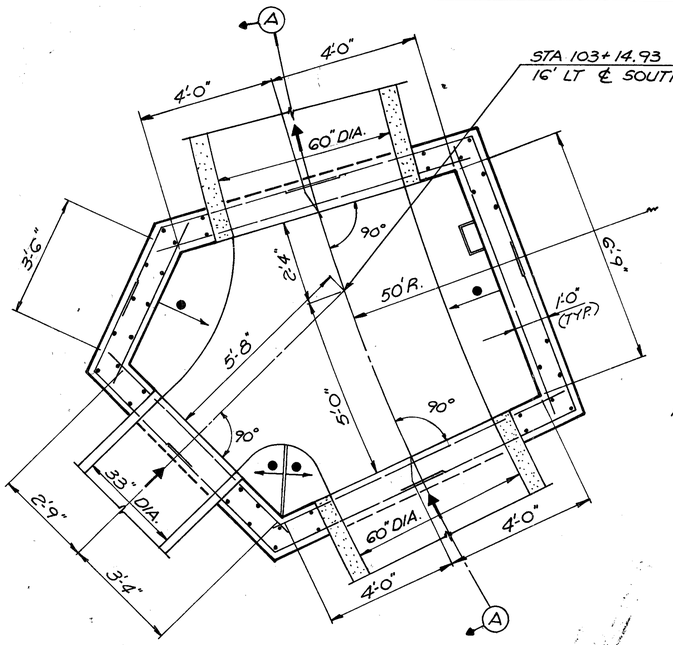
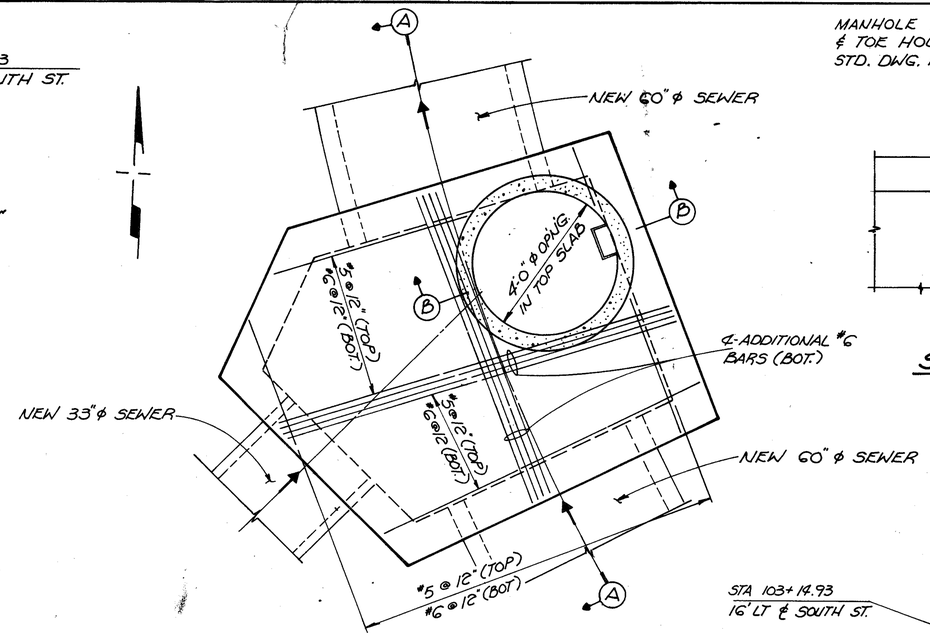
AKRON INNERBELT
SUM -59-0.00



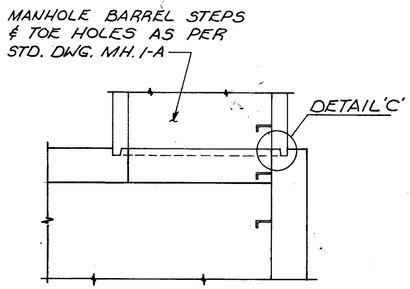

PLAN SECTION



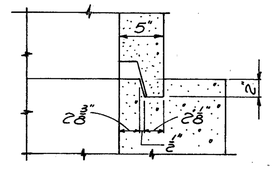

TOP PLAN

JUNCTION CHAMBER

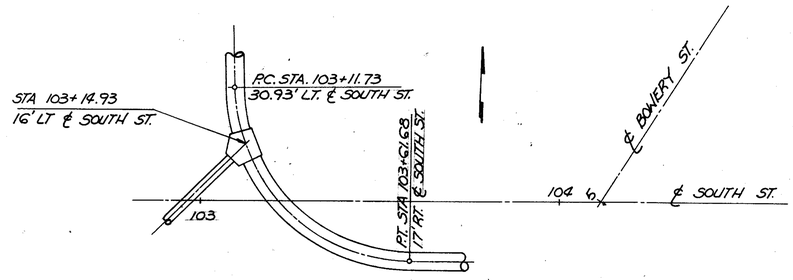
INDICATES ½" PER FOOT SLOPE



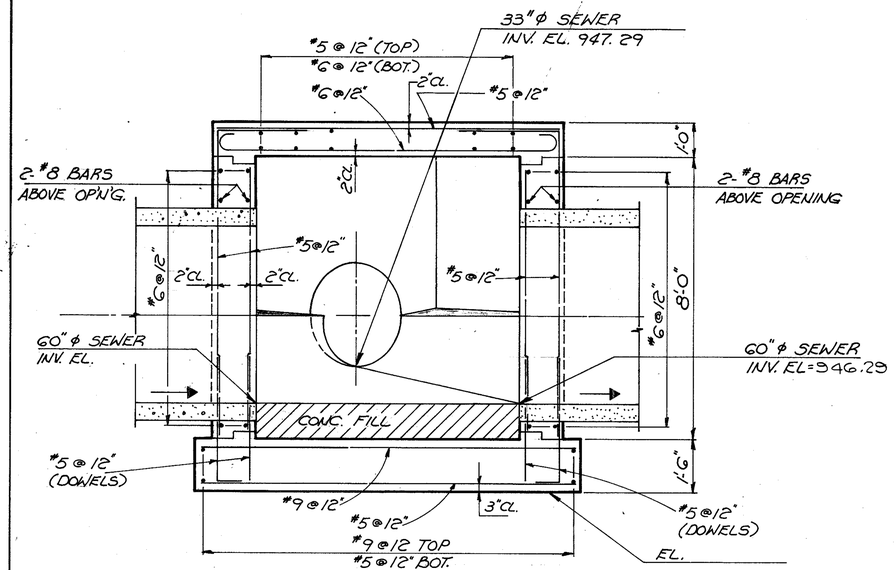

SECTION B-B




DETAIL C




KEY PLAN




SECTION A-A

NOTES

CONCRETE

CLASS 'C' CONCRETE— $f'_c$ = 4000 Psi

REINF. STEEL

A.S.T.M. A615, A616 OR A617 — GRADE 60

JUNCTION CHAMBER
DRAINAGE DETAILS

# QUANTITY SUMMARY
# WATERWORKS

*PROJECT
**100 % CITY
△50.8% CITY 49.2 %PROJECT

CALCULATED BY W.R.S. DATE 4/82
CHECKED BY R.E.R. DATE 6/82

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-ITG2(2) | |

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SUM-59-0.00

| SHEET NUMBER 189 | 191 | 196 | 197 | 198 | 199 | 200 | 201 | % CITY % PROJ. | 100 % CITY | PROJ. | ITEM | QUAN. | UNIT | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | △12 | △12 | **31 | | *12 | *21 | 24 | 31 | 33 | 814 | 88 | LIN. FT. | 6" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED |
| | | **50 | | | | **39 | | | 129 | | 814 | 129 | LIN. FT. | 8" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED |
| **80 | | | | | | **249 | | | 329 | | 814 | 329 | LIN. FT. | 12" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. |
| | | | | *132 *65 | | **128 | | | 260 | 65 | 814 | 325 | LIN. FT. | 16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED |
| **223 | | *110 △385 | *78 △284 | *462 △435 | △151 | | | 855 | 873 | | 814 | 1728 | LIN. FT. | 20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED |
| | | | | | △52 | | | 52 | | | SPECIAL | 52 | LIN. FT. | 20" WATER MAIN STEEL PIPE A.W.W.A. C-200 (20.00" O.D. x 0.375" WALL THICKNESS) INCLUDING FITTINGS, COUPLINGS, SUPPORT ASSEMBLIES, INSULATION AND APPURTENANCES, COMPLETE |
| | | **1 | | | | | | | 1 | | 814 | 1 | EACH | 20" x 6" BLOW-OFF DRAIN, COMPLETE |
| | | | | | △64 | | | 64 | | | SPECIAL | 64 | LIN. FT. | 30" STEEL CASING PIPE A.W.W.A. C-202-64T (30.00" O.D. x 0.375" WALL THICKNESS) |
| | | △1 | △1 | **3 | | **1 | *1 | 2 | 4 | 1 | 814 | 7 | EACH | 6" GATE VALVE (HUB ENDS) WITH VALVE BOX, COMPLETE |
| | | **1 | | | | | | | 1 | | 814 | 1 | EACH | 8" GATE VALVE (HUB ENDS) WITH VALVE BOX COMPLETE. |
| | | | | | | **1 | | | 1 | | 814 | 1 | EACH | 12" GATE VALVE (HUB ENDS) WITH VALVE BOX COMPLETE |
| | | | | **1 | | **1 | | | 2 | | 814 | 2 | EACH | 16" BUTTERFLY VALVE WITH VICTAULIC JOINTS AND VICTAULIC ADAPTERS WITH VALVE BOX, COMPLETE |
| **2 | | **1 | | **1 | | | | | 4 | | 814 | 4 | EACH | 20" BUTTERFLY VALVE WITH VICTAULIC JOINTS AND VICTAULIC ADAPTERS WITH VALVE BOX, COMPLETE. |
| | | | | | △1 | | | 1 | | | 814 | 1 | EACH | 1" MANUAL AIR RELEASE ASSEMBLY, COMPLETE |
| | | | | | | | *LUMP | | | LUMP | SPECIAL | LUMP | LUMP | RECONNECT EXISTING 16" AND 6" WATER LINES |
| | | △1 | △1 | **2 | | **1 | */ | 2 | 3 | 1 | 814 | 6 | EACH | FURNISHING AND SETTING 6" FIRE HYDRANT, COMPLETE |
| | | | | | *1 | | | | | 1 | 814 | 1 | EACH | FIRE HYDRANT ADJUSTED TO GRADE |
| *1 | | | | **1 | | *1 | | | 1 | 2 | 814 | 3 | EACH | FIRE HYDRANT REMOVED AND DISPOSED OF |
| | | | | | | **85 | | | 85 | | 814 | 85 | LIN. FT. | RELOCATE, RETAP AND RECONNECT EXISTING SERVICE BRANCHES, AS PER PLAN |
| | | | | | | *1 | | | | 1 | 814 | 1 | EACH | SERVICE BOX ADJUSTED TO GRADE |
| | | | | | *2 | | | | | 2 | 814 | 2 | EACH | VALVE BOX ADJUSTED TO GRADE |
| | | *1 | *17 | *18 | | *6 | *7 | | | 49 | 814 | 49 | EACH | SERVICE BOX REMOVED |
| **1 | *2 | **1 | | *3 | | *3 **1 | | | 3 | 8 | 814 | 11 | EACH | VALVE & VALVE BOX REMOVED |
| | | | | | | *1 | *7 | | | 8 | 814 | 8 | EACH | 1½" SERVICE BRANCH PLUGGED @ EXIST. MAIN |

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# WATERWORK NOTES

SCOPE OF WORK

THE WORK CONTEMPLATED UNDER THIS CONTRACT COMPRISES THE FURNISHING AND INSTALLING OF DUCTILE IRON CEMENT LINE PIPE, WITH ALL APPURTENANCES, COMPLETE IN ALL DETAILS, TESTED AND READY FOR OPERATION. THE CONTRACTOR SHALL DO ALL THE WORK AND FURNISH ALL THE LABOR AND MATERIALS NECESSARY FOR THE PROPER AND FINAL COMPLETION OF THIS CONTRACT IN THE MANNER AND UNDER THE CONDITIONS HEREIN SPECIFIED AND PROVIDED, AND IN ACCORDANCE WITH THE CONTRACT DRAWINGS.

DEFINITIONS

WHEREVER IN THESE SPECIFICATIONS OR IN OTHER CONTRACT DOCUMENTS THE FOLLOWING TERMS OR PRONOUNS IN PLACE OF THEM ARE USED, THE INTENT AND MEANING SHALL BE INTERPRETED AS FOLLOWS:

THE STATE

THE STATE IS THE STATE OF OHIO ACTING THROUGH ITS AUTHORIZED REPRESENTATIVE.

ENGINEER

THE ENGINEER IS DIVISION DEPUTY DIRECTOR OR DIVISION ENGINEER, THE DIVISION CONSTRUCTION ENGINEER OR THE DIVISION MAINTENANCE ENGINEER OR THE PROJECT ENGINEER ASSIGNED TO ADMINISTER THE CONTRACT.

THE CITY

THE CITY IS THE DIRECTOR, DEPARTMENT OF PUBLIC UTILITIES OF THE CITY OF AKRON.

STATUS OF CITY INSPECTOR

INSPECTORS AS DESIGNATED BY THE DIRECTOR OF PUBLIC UTILITIES SHALL BE AUTHORIZED TO INSPECT ALL WORK DONE AND MATERIALS FURNISHED. SUCH INSPECTION MAY EXTEND TO ALL OR ANY PART OF THE WATERWORKS, AND TO THE PREPARATION OR MANUFACTURE OF THE MATERIALS TO BE USED IN THE WATERWORKS. THE CITY INSPECTORS AS DESIGNATED BY THE DIRECTOR OF PUBLIC UTILITIES SHALL MAKE WORK INSTRUCTIONS THROUGH THE PROJECT ENGINEER.

ACCESS TO WORK AND PLACE OF MANUFACTURE

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND DIRECTOR OF PUBLIC UTILITIES, AT LEAST SEVEN (7) DAYS PRIOR TO THE COMMENCEMENT OF THE MANUFACTURE OF ANY MATERIALS, OF THE TIME AND PLACE WHERE THE MANUFACTURE IS TO COMMENCE, IN ORDER THAT A REPRESENTATIVE OF THE ENGINEER AND DIRECTOR MAY BE PRESENT TO INSPECT THE MANUFACTURE. THE CONTRACTOR SHALL PROVIDE, WITHOUT CHARGE OR EXPENSE TO THE STATE AND CITY, ALL NECESSARY ASSISTANCE TO THE ENGINEER AND DIRECTOR WHEN REQUIRED FOR INSPECTION OR VERIFICATION OF WORK DONE, DIMENSIONS, DETAILED DRAWINGS AND ELEVATIONS.

(A) FIGURED DIMENSIONS ON DRAWINGS SHALL TAKE PRECEDENCE OVER MEASUREMENTS BY SCALE, AND DETAILED DRAWINGS ARE TO TAKE PRECEDENCE OVER GENERAL DRAWINGS AND SHALL BE CONSIDERED AS EXPLANATORY OF THEM AND NOT AS INDICATING EXTRA WORK. IF, HOWEVER, ANY OF THE DETAILED DRAWINGS SHOW MORE ELABORATE OR EXPENSIVE WORK THAN IS SPECIFIED AND INDICATED BY THE CONTRACT DRAWINGS, NOTICE THEREOF MUST BE GIVEN TO THE ENGINEER BY THE CONTRACTOR WITHIN TEN (10) DAYS AFTER THE RECEIPT OF SUCH DETAILED DRAWINGS IN ORDER THAT THE DRAWINGS MAY BE AMENDED OR THE ADDITIONAL EXPENSE ON ACCOUNT OF SUCH WORK MAY BE ADJUSTED AND AUTHORIZED. IF THE ENGINEER DOES NOT RECEIVE SUCH NOTICE FROM THE CONTRACTOR WITHIN TEN (10) DAYS AFTER DETAILED DRAWINGS HAVE BEEN RECEIVED BY HIM, IT IS HEREBY AGREED THAT THE CONTRACTOR ACCEPTS THE DRAWINGS AND WILL EXECUTE THEM WITHOUT CLAIM FOR EXTRA COMPENSATION.

FLOODS AND FREEZING WEATHER

PROPER FACILITIES SHALL BE PROVIDED FOR PROTECTING THE WORK FROM DAMAGE BY FLOOD, RAIN OR FROST, AND WORK DONE IN FREEZING WEATHER SHALL BE DONE IN SUCH MANNER AS THE ENGINEER MAY APPROVE. VALVES SHALL BE PROTECTED FROM FREEZING UNTIL BACKFILLED IN THE COMPLETED WORK.

ADDITIONAL WORK

(A) ATTENTION IS CALLED TO THE FACT THAT THE WORK ON THIS CONTRACT INCLUDES CERTAIN PERFORMANCES AS INCIDENTAL TO THE ITEMIZED REQUIREMENTS HEREOF AND, THOUGH NOT EXCLUSIVE, ARE AS FOLLOWS: TO PERFORM ALL EXCAVATION, BACKFILLING, SHEETING, BRACING, AND TO TEST THE INSTALLATION, FOR THE PERFORMANCE HEREIN DESCRIBED AND FOR OTHER INCIDENTAL PERFORMANCES OF LIKE NATURE, THE STATE WILL MAKE NO SPECIFIC OR SEPARATE PAYMENT OF ALLOWANCE, BUT THE COST THEREOF SHALL BE INCLUDED IN THE PRICES STIPULATED TO BE PAID FOR THE VARIOUS ITEMS OF THE WORK TO BE DONE UNDER THIS CONTRACT.

(B) PRELIMINARY FLUSHING: BEFORE BEING PLACED IN SERVICE ALL DIRT AND FOREIGN MATTER SHALL BE REMOVED FROM THE NEW WATER MAIN OR EXTENSIONS TO EXISTING MAINS BY A THOROUGH FLUSHING THROUGH THE HYDRANTS OR BY OTHER APPROVED MEANS. EACH VALVED SECTION OF NEWLY LAID PIPE SHALL BE FLUSHED INDEPENDENTLY. THIS SHALL BE DONE AFTER THE PRESENT TEST AND MAY BE DONE BEFORE OR AFTER THE TRENCH HAS BEEN BACKFILLED.

(C) CHLORINATION: FOLLOWING PRELIMINARY FLUSHING, THE NEWLY LAID WATER PIPE SHALL BE CHLORINATED. THE PROCESS OF CHLORINATING, THE METHOD OF PROCEDURE, THE CHLORINATING AGENT, AND THE RATE OF APPLICATION SHALL BE DETERMINED BY THE ENGINEER. THE CITY WILL FURNISH THE NECESSARY LABOR AND MATERIAL REQUIRED FOR SUCH CHLORINATION AND INSTALL THE NECESSARY TAPS AT THE ENDS OF THE WATER MAIN SECTIONS TO BE CHLORINATED, NO CHARGE WILL BE ASSESSED THE CONTRACTOR FOR ANY MATERIAL, LABOR, TOOLS, EQUIPMENT, AND INCIDENTALS FURNISHED BY THE CITY OF AKRON, DIVISION OF WATER, FOR THE CHLORINATION AND THE SAMPLING OF THE WATER. THE CONTRACTOR SHALL FURNISH THE NECESSARY LABOR FOR EXCAVATING AND BACKFILLING WHICH WILL BE REQUIRED FOR THE INSTALLATION OF TAPS FOR INJECTING THE CHLORINE SOLUTION, OPERATING PUMPS AND FLUSING MAINS.

(D) FINAL FLUSHING AND TEST: FOLLOWING CHLORINATION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE NEWLY LAID PIPE AT ITS EXTREMITIES UNTIL THE REPLACEMENT WATER THROUGHOUT ITS LENGTH SHALL, UPON TEST, BOTH CHEMICALLY AND BACTERIOLOGICALLY, BE PROVEN EQUAL TO THE WATER QUALITY SERVED THE PUBLIC FROM THE EXISTING WATER SUPPLY SYSTEM.

(E) FOR THE PERFORMANCES DESCRIBED IN PARAGRAPHS B, C, AND D, THE STATE WILL MAKE NO SPECIFIC OR SEPARATE PAYMENT OR ALLOWANCES, BUT THE COST THEREOF SHALL BE INCLUDED IN THE PRICES STIPULATED TO BE PAID FOR EACH LINEAR FOOT OF PIPE FURNISHED AND INSTALLED.

TESTS, INSPECTION AND REPORTS

NOT WITHSTANDING THE REQUIREMENTS OF ANY OTHER PROVISIONS OF THESE SPECIFICATIONS, THE CONTRACTOR SHALL ARRANGE FOR AND PAY ALL COSTS INVOLVED FOR SHOP INSPECTION OF ALL MATERIALS FURNISHED, MANUFACTURE OF ALL PIPE, VALVES, FITTINGS, ETC., FIELD AND SHOP WELDS AND WELDING, FURNISH TO THE STATE AND THE CITY COPIES OF ALL SHOP, FABRICATION, MANUFACTURE AND OTHER RELATED INSPECTION REPORTS OF MATERIALS FURNISHED. THIS INSPECTION SHALL BE DONE BY A RECOGNIZED INSPECTION LABORATORY APPROVED BY THE CITY.

IN THE CASE OF ANY ITEM NOT SPECIFICALLY MENTIONED IN THE "WATERWORK NOTES," THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, "CONSTRUCTION AND MATERIAL SPECIFICATIONS - JANUARY 1, 1983" SHALL GOVERN.

MAINTENANCE OF SERVICE AND CONNECTING RELOCATED MAINS

THE CONTRACTOR SHALL FOLLOW STRICTLY THE SEQUENCE OF CONSTRUCTION SHOWN ON THE PLANS. ALL EXISTING FIRE HYDRANT LEADS AND HOUSE SERVICES SHALL BE HAND TUNNELED USING SPECIAL CARE TO AVOID ANY DAMAGE WHICH MIGHT REQUIRE SHUTTING DOWN THE EXISTING MAIN UNTIL THE NEW MAIN IS READY TO BE PLACED IN SERVICE.

WHEN THE NEW MAINS HAVE BEEN TESTED AND CHLORINATED AND ARE READY TO BE CONNECTED TO THE OLD MAIN, THE CONTRACTOR SHALL MAKE SUCH CONNECTIONS AT A TIME DESIGNATED BY THE CITY. PRIOR TO SHUTTING DOWN THE EXISTING MAINS, THE CONTRACTOR SHALL TAKE SUITABLE PRECAUTIONS TO ASSURE A MINIMUM INTERRUPTION TO SERVICE, INCLUDING THE FOLLOWING:

1. PERFORM ALL NECESSARY EXCAVATION, INCLUDING BELL HOLES EXPOSING THE EXISTING MAIN SUFFICIENTLY FOR THE OPERATION OF THE PIPE SAW BY THE CITY.

2. REMOVE THE CAP OR PLUG FROM THE END OF THE NEW MAIN.

3. SWAB THE INSIDE OF ALL PIPES, BENDS AND SLEEVES TO BE USED IN CONNECTION THOROUGHLY WITH A CHLORINE SOLUTION OF AT LEAST 100 P.P.M.

4. MAKE UP AS MUCH OF THE CONNECTION AS POSSIBLE OUTSIDE THE DITCH TO ELIMINATE THE NEED FOR CAULKING MOST OF THE NECESSARY JOINTS DURING THE SHUTDOWN. BY CAREFUL MEASUREMENT ALL PIPE CUTS CAN BE MADE BY THE CONTRACTOR PRIOR TO SHUTTING DOWN.

5. HAVE SUFFICIENT MANPOWER AND EQUIPMENT ON THE SITE TO PERFORM THE OPERATION IN A MINIMUM OF TIME.

PAINTING

(A) IT IS THE INTENTION OF THESE SPECIFICATIONS TO PROVIDE THAT ALL METAL WORK SUBJECT TO CORROSION SHALL BE SATISFACTORILY PROTECTED BY A DURABLE COATING OF PAINT OR OTHER APPROVED MATERIAL AND THAT ALL METAL SURFACES NOT BURIED IN EARTH, OR IN CONCRETE, SHALL BE LEFT CLEAN AND WELL-PAINTED AT THE COMPLETION OF THE CONTRACT. UNLESS OTHERWISE SPECIFIED, THE PROTECTION SHALL BE AT LEAST THAT GIVEN BY THREE (3) COATS OF APPROVED PAINT. THE FIRST COAT IS TO BE APPLIED AT THE SHOP BEFORE THE METAL HAS RUSTED AND AFTER ALL GREASE, DIRT AND SCALE HAS BEEN REMOVED. BOLTS AND NUTS SHALL NOT BE SHOP-COATED, BUT SHALL RECEIVE THREE (3) COATS OF APPROVED PAINT AFTER INSTALLATION.

(B) ALL METAL WORK WHICH HAS NOT BEEN COATED BEFORE THE ARRIVAL ON THE JOB SHALL BE GIVEN A TEMPORARY PROTECTIVE COATING OF SUCH A NATURE AS TO PERMIT THE READY ADHERENCE OF FUTURE COATINGS. THE TEMPORARY COATING SHALL BE A GOOD GRADE ASPHALTIC PAINT OR OTHER APPROVED MATERIAL.

THIS TEMPORARY PROTECTION SHALL APPLY PARTICULARLY TO THE FOLLOWING MATERIAL, AND ELSEWHERE WHEN IN THE OPINION OF THE ENGINEER, SUCH PROTECTION IS NECESSARY.

(1) VALVE BOXES AND COVERS.

(C) ALL SURFACES OF METAL WHICH WILL BE IN CONTACT AFTER ASSEMBLING SHALL BE PAINTED, AT LEAST ONE COAT, BEFORE ASSEMBLING. THE FINAL COAT OF PAINT ON ALL EXPOSED WORK SHALL BE GIVEN SHORTLY BEFORE THE COMPLETION OF THE CONTRACT.

(D) WHERE PAINTING CLAUSES APPEAR HEREINAFTER, THEY SHALL TAKE PRECEDENCE OVER THIS SECTION, EXCEPT THAT TEMPORARY PROTECTION HEREIN DESCRIBED MAY BE REQUIRED.

(E) ALL OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE PARTICULAR ITEM REQUIRING THE PAINTING.

HANDLING PIPE AND ACCESSORIES

(A) UNLOADING: DUCTILE IRON PIPE, FITTINGS, VALVES HYDRANTS, AND OTHER ACCESSORIES SHALL, UNLESS OTHERWISE DIRECTED, BE UNLOADED AT THE POINT OF DELIVERY, HAULED TO AND DISTRIBUTED AT THE SITE OF THE PROJECT BY THE CONTRACTOR: THEY SHALL AT ALL TIMES BE HANDLED WITH CARE TO AVOID DAMAGE, IN LOADING AND UNLOADING THEY SHALL BE LIFTED BY HOISTS OR SLID, OR ROLLED ON SKIDWAYS IN SUCH MANNER AS TO AVOID SHOCK. UNDER NO CIRCUMSTANCES SHALL THEY BE DROPPED. PIPE HANDLED ON SKIDWAYS MUST NOT BE SKIDDED OR ROLLED AGAINST PIPE ALREADY ON THE GROUND.

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# WATERWORK NOTES

(B) AT SITE OF WORK: IN DISTRIBUTING THE MATERIAL AT THE SITE OF THE WORK, EACH PIECE SHALL BE UNLOADED OPPOSITE OR NEAR THE PLACE WHERE IT IS TO BE LAID IN THE TRENCH.

(C) PROTECTION OF PIPE COATING: PIPE SHALL BE HANDLED IN SUCH MANNER THAT A MINIMUM AMOUNT OF DAMAGE TO THE COATING WILL RESULT. ANY DUCTILE IRON PIPE OR FITTING, THE COATING OF WHICH HAS BEEN DAMAGED IN SHIPPING OR HANDLING, SHALL HAVE THE DAMAGED PORTION WELL-CLEANED AND COVERED WITH AN ASPHALT PAINT, APPROVED BY THE ENGINEER, BEFORE BEING PLACED IN THE WORK. THE CONTRACTOR SHALL THOROUGHLY COAT ALL EXPOSED PARTS OF BOLTS AND NUTS WITH AN APPROVED ASPHALT PAINT AFTER ALL PIPE HAS BEEN LAID AND BEFORE BACKFILLING HAS BEEN PLACED. ALL FIELD COATING SHALL BE FURNISHED BY THE CONTRACTOR.

(D) PIPE KEPT CLEAN: THE INTERIOR OF THE PIPE, FITTINGS AND OTHER ACCESSORIES SHALL BE KEPT FREE FROM DIRT AND FOREIGN MATTER AT ALL TIMES.

(E) FROST PROTECTION: VALVES AND HYDRANTS BEFORE INSTALLATION SHALL BE DRAINED AND STORED IN A MANNER THAT WILL PROTECT THEM FROM DAMAGE BY FREEZING.

CHANGES IN WATER PIPES:

(A) IN SUCH LOCATIONS AS MAY BE INDICATED ON THE CONTRACT DRAWINGS OR AS ORDERED BY THE ENGINEER TO CHANGE THE LOCATION OF HOUSE CONNECTIONS, SUCH CHANGES WILL BE MADE AS WORK TO BE DONE BY THE CITY. THE CONTRACTOR SHALL NOTIFY THE CITY IN AMPLE TIME TO PERMIT THE CITY TO MAKE SUCH CHANGES AND AVOID UNNECESSARY DELAY IN THE COMPLETION OF THE WORK. THE CONTRACTOR SHALL ALSO COOPERATE WITH THE CITY IN MAKING THESE CHANGES AND SHALL DO ALL EXCAVATING, BACKFILLING, SEEDING, SODDING AND REPAVING AS MAY BE REQUIRED. PAYMENT FOR THE WORK PERFORMED BY THE CONTRACTOR WILL BE AT THE UNIT PRICE BID FOR THE APPROPRIATE SERVICE CONNECTION. SEE WORK TO BE DONE BY THE CITY.

(B) WHEREVER IT BECOMES NECESSARY, IN THE OPINION OF THE ENGINEER, TO CHANGE THE LOCATION OR ELEVATION OF WATER MAINS AND WHERE CONNECTIONS ARE TO BE MADE BETWEEN EXISTING DISTRIBUTION MAINS AND WATER MAINS UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING WATER LINE MATERIALS REQUIRED TO MAKE THE CONNECTION, AND SHALL FURNISH AND INSTALL COMPLETE, ALL THE DUCTILE IRON PIPE, FITTINGS AND VALVES TO MAKE THE CONNECTIONS INDICATED. THE CONTRACTOR SHALL ALSO FURNISH ALL NECESSARY LABOR, MATERIALS, TOOLS, AND EQUIPMENT AND MAKE THE EXCAVATION, BACKFILL AND REPAVING FOR SUCH CONNECTIONS. PAYMENT FOR THIS WILL BE INCLUDED IN PRICE BID UNDER APPROPRIATE ITEM FOR SIZE OF WATER MAIN OR CONNECTION TO BE INSTALLED. ALL PIPES, VALVES AND APPURTENANCES REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, (SEE WORK TO BE DONE BY THE CITY).

EXCAVATION -

(A) THE CONTRACTOR SHALL REMOVE ALL EXISTING STRUCTURES, ROADWAYS, DRIVEWAYS AND OTHER SIMILAR MATERIALS AND MAKE TO THE LINES AND GRADES GIVEN, ALL EXCAVATION NECESSARY FOR THE PROPER CONSTRUCTION OF THE WATER MAIN, PIPE CONNECTIONS AND APPURTENANT STRUCTURES, INCLUDING TUNNEL AND SHAFT EXCAVATION. THE EXCAVATION SHALL INCLUDE THE REMOVAL, HANDLING, REHANDLING AND DISPOSAL OF MATERIALS ENCOUNTERED IN THE WORK AND SHALL INCLUDE ALL PUMPING, BAILING, DRAINING, SHEETING AND BRACING. MOREOVER, THE CONTRACTOR MUST ASSUME ALL RESPONSIBILITY FOR ANY ADDED EXPENSE OR OTHER LIABILITY WHICH MAY ARISE BY MEANS OF QUICKSAND, OBSTACLES OR CONDITIONS FORESEEN OR UNFORESEEN AND ENCOUNTERED IN THE WORK OF THIS CONTRACT.

(B) TRENCHES SHALL IN EVERY CASE BE OF SUFFICIENT WIDTH TO PERMIT SOLID PACKING OR REFILL UNDER AND AROUND PIPES, AND SATISFACTORY CONSTRUCTION OF ALL APPURTENANCES AND FOR SUCH SHEETING AND BRACING, PUMPING AND DRAINING AS MAY BE NECESSARY.

(C) THE TRENCH SHALL BE DUG TO THE ALIGNMENT AND DEPTH REQUIRED AND ONLY SO FAR IN ADVANCE OF PIPE LAYING AS THE ENGINEER SHALL PERMIT. THE TRENCH SHALL BE SO BRACED AND DRAINED THAT WORKMEN MAY WORK THEREIN SAFELY AND EFFICIENTLY. IT IS ESSENTIAL THAT THE DISCHARGE FROM PUMPS BE LED TO NATURAL DRAINAGE CHANNELS, TO DRAINS, OR TO SEWERS.

(D) THE TRENCH WIDTH MAY VARY WITH AND DEPEND UPON THE DEPTH OF TRENCH AND THE NATURE OF THE EXCAVATED MATERIAL ENCOUNTERED, BUT IN ANY CASE SHALL BE OF AMPLE WIDTH TO PERMIT THE PIPE TO BE LAID AND JOINTED PROPERLY AND OF THE BACKFILL TO BE PLACED AND COMPACTED PROPERLY. THE MINIMUM WIDTH OF UNSHEETED TRENCH SHALL BE EIGHTEEN (18) INCHES AND FOR PIPE TEN (10) INCHES OR LARGER, AT LEAST TWELVE (12) INCHES LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE FOR DUCTILE IRON AND STEEL PIPE. EXCEPT BY CONSENT OF THE ENGINEER, THE MAXIMUM CLEAR WIDTH OF TRENCH SHALL BE NOT MORE THAN TWO (2) FEET GREATER THAN THE OUTSIDE PIPE DIAMETER. IF SHEETING AND BRACING IS USED, THE TRENCH WIDTH SHALL BE INCREASED ACCORDINGLY.

(E) THE TRENCH, UNLESS OTHERWISE SPECIFIED, SHALL HAVE A FLAT BOTTOM CONFORMING TO THE GRADE TO WHICH THE PIPE IS TO BE LAID. THE PIPE SHALL BE LAID UPON SOUND SOIL CUT TRUE AND EVEN, SO THAT THE BARREL OF THE PIPE WILL HAVE A BEARING FOR ITS FULL LENGTH.

(F) ANY PART OF THE TRENCH EXCAVATED BELOW GRADE SHALL BE CORRECTED WITH APPROVED MATERIAL, THOROUGHLY COMPACTED.

(G) WHEN THE UNCOVERED TRENCH BOTTOM AT SUBGRADE IS SOFT AND IN THE OPINION OF THE ENGINEER CANNOT SUPPORT THE PIPE, A FURTHER DEPTH AND/OR WIDTH SHALL BE EXCAVATED AND REFILLED TO PIPE FOUNDATION GRADE AS REQUIRED UNDER (F), OR OTHER APPROVED MEANS SHALL BE ADOPTED TO ASSURE A FIRM FOUNDATION FOR THE PIPE.

(H) LEDGE ROCK, BOULDERS, LARGE STONES, AND SHALE SHALL BE REMOVED TO PROVIDE A CLEARANCE OF AT LEAST SIX (6) INCHES BELOW ALL PARTS OF THE PIPE, VALVES, OR FITTINGS, AND TO A CLEAR WIDTH OF NINE (9) INCHES ON EACH SIDE OF ALL DUCTILE IRON AND STEEL PIPE.

(I) EXCAVATION BELOW SUBGRADE IN ROCK, SHALE OR IN BOULDERS SHALL BE REFILLED TO SUBGRADE WITH APPROVED MATERIAL, THOROUGHLY COMPACTED.

(J) BELL HOLES OF AMPLE DIMENSIONS SHALL BE DUG IN EARTH TRENCHES AT EACH JOINT TO PERMIT THE JOINTING TO BE MADE PROPERLY. ADEQUATE CLEARANCE FOR PROPERLY JOINTING PIPE LAID IN ROCK SHALL BE PROVIDED AT BELL HOLES.

(K) THE USE OF EXCAVATING MACHINERY WILL BE PERMITTED EXCEPT IN PLACES WHERE OPERATION OF SAME WILL CAUSE DAMAGE TO TREES, BUILDINGS, OR EXISTING STRUCTURES ABOVE OR BELOW GROUND, IN WHICH CASE HAND METHODS SHALL BE EMPLOYED.

(L) TREES, FENCES, POLES AND ALL OTHER PROPERTY SHALL BE PROTECTED UNLESS THEIR REMOVAL IS AUTHORIZED. ANY PROPERTY DAMAGED SHALL BE SATISFACTORILY RESTORED BY THE CONTRACTOR.

(M) HYDRANTS UNDER PRESSURE, VALVE PIT COVERS, VALVE BOXES, CURB STOP BOXES, FIRE OR POLICE CALL BOXES, OR OTHER UTILITY CONTROLS SHALL BE LEFT UNOBSTRUCTED AND ACCESSIBLE DURING THE CONSTRUCTION PERIOD.

(N) THE CONTRACTOR SHALL MAINTAIN ALL EXCAVATIONS IN GOOD ORDER DURING THE CONSTRUCTION SO AS NOT TO HINDER OR INJURE THE PIPE LAYING, MASONRY OR OTHER WORK. HE SHALL TAKE ALL REASONABLE PRECAUTIONS TO PREVENT MOVEMENT OF THE SIDES OF SUCH EXCAVATION, AND SHALL REMOVE AT HIS OWN EXPENSE ANY MATERIAL SLIDING INTO THE EXCAVATION.

SHEETING AND BRACING

(A) THE CONTRACTOR SHALL FURNISH AND PUT IN PLACE SUCH SHEETING AND BRACING AS MAY BE REQUIRED TO SUPPORT THE SIDES OF TRENCHES OR OTHER EXCAVATION AND SHALL REMOVE SUCH SHEETING AND BRACINGS, AS THE TRENCH OR EXCAVATION IS FILLED UP.

(B) WHENEVER THE EXCAVATIONS FOR THE WORK HEREIN TO BE DONE ARE IMMEDIATELY ADJACENT TO OTHER SUBSURFACE STRUCTURES, THE CONTRACTOR SHALL FURNISH AND PLACE SHEETING AND BRACING WHERE NOTED ON CONTRCT DRAWINGS AND AS MAY BE NECESSARY, SO AS TO REDUCE TO A MINIMUM THE POSSIBILITY OF INJURING OR DAMAGING THE SAME.

(C) IF THE ENGINEER IS OF THE OPINION THAT AT ANY POINT SUFFICIENT OR PROPER SUPPORTS, SHEETING, OR BRACINGS, HAVE NOT BEEN PROVIDED, HE MAY ORDER ADDITIONAL SUPPORTS SHEETING OR BRACING, AT THE EXPENSE OF THE CONTRACTOR, AND THE COMPLIANCE WITH SUCH ORDERS BY THE CONTRACTOR SHALL NOT RELIEVE OR RELEASE HIM FROM HIS RESPONSIBILITY FOR SUFFICIENCY OF SUCH SUPPORTS.

REMOVAL OF EXCAVATED MATERIAL

THIS ITEM SHALL BE AS SPECIFIED IN SECTION 203.05 OF STATE OF OHIO, DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS DATED JANUARY 1, 1983.

LAYING PIPE

(A) PROPER IMPLEMENTS, TOOLS, AND FACILITIES, SATISFACTORY TO THE ENGINEER SHALL BE PROVIDED AND USED BY THE CONTRACTOR FOR THE SAFE AND CONVENIENT, PROSECUTION OF THE WORK. ALL PIPE, FITTINGS, AND VALVES SHALL BE CAREFULLY LOWERED INTO THE TRENCH PIECE BY PIECE BY MEANS OF DERRICK, PROPER SLINGS, AND OTHER SUITABLE TOOLS OR EQUIPMENT, IN SUCH MANNER AS TO PREVENT DAMAGE TO PIPE OR COATING. UNDER NO CIRCUMSTANCES SHALL PIPE OR ACCESSORIES BE DROPPED OR DUMPED INTO THE TRENCH. IF ANY DEFECTIVE PIECE BE DISCOVERED WHILE PIPE IS SUSPENDED OR AFTER BEING LAID, A NEW PIECE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AT THE CONTRACTOR AT THE SITE OF THE WORK.

(B) ALL FOREIGN MATTER OR DIRT SHALL BE REMOVED FROM THE INSIDE OF THE PIPE BEFORE IT IS LOWERED INTO ITS POSITION IN THE TRENCH, AND IT SHALL BE KEPT CLEAN BY APPROVED MEANS DURING AND AFTER LAYING.

(C) AT TIMES WHEN PIPE LAYING IS NOT IN PROGRESS, THE OPEN ENDS OF PIPE SHALL BE CLOSED BY APPROVED MEANS, AND NO TRENCH WATER SHALL BE PERMITTED TO ENTER THE PIPE. NO PIPE SHALL BE LAID IN WATER, OR WHEN THE TRENCH CONDITIONS OR THE WEATHER IS UNSUITABLE FOR SUCH WORK, EXCEPT BY PERMISSION OF THE ENGINEER.

(D) WHEREVER NECESSARY TO DEFLECT PIPE FROM A STRAIGHT LINE, EITHER IN THE VERTICAL OR HORIZONTAL PLANE TO AVOID OBSTRUCTIONS, TO PLUMB STEMS, OR FOR OTHER REASONS, THE DEGREE OF DEFLECTION SHALL BE APPROVED BY THE ENGINEER.

(E) BEFORE LAYING DUCTILE IRON PIPE, ALL LUMPS, BLISTERS AND EXCESS COAL TAR COATING SHALL BE REMOVED FROM THE BELL AND SPIGOT ENDS OF EACH PIPE. THE PIPE ENDS SHALL THEN BE KEPT CLEAN UNTIL JOINTS ARE MADE.

BACKFILLING -

(A) THIS WORK INCLUDES ALL BACKFILLING, TOGETHER WITH RAMMING, PUDDLING AND ROLLING, AS REQUIRED, THE REGRADING OF GROUNDS, THE REPLACING OF SURFACE AND SUBSURFACE STRUCTURES, THE PLACING AND MAINTAINING OF TEMPORARY SIDEWALKS, AND DRIVEWAYS, THE FURNISHING OF SUITABLE MATERIAL FOR BACKFILL, RESEEDING LAWNS AND REPLACING TREES AND SHRUBBERY DAMAGED BY THE CONTRACTOR, AND ALL APPURTENANT WORK INCIDENTAL THERETO. PAVEMENTS, CURBS, SIDEWALKS AND DRIVEWAYS WITHIN THE LIMITS OF THE WORK SHALL BE TEMPORARILY SURFACED, MAINTAINED AND FINALLY REPLACED OR REPAVED AS SET FORTH UNDER "ROAD SURFACES, SIDEWALKS, DRIVEWAYS AND CURBING" (SEE 2ND COLUMN).

(B) BACKFILL, UNLESS OTHERWISE SPECIFIED, MAY BE MADE WITH MATERIAL EXCAVATED FROM THE TRENCHES, PROVIDING SAME IS SATISFACTORY TO THE ENGINEER. IF IN THE OPINION OF THE ENGINEER, THE MATERIAL EXCAVATED IS UNSATISFACTORY, THEN THE CONTRACTOR SHALL FURNISH AT HIS OWN EXPENSE OTHER MATERIAL SUITABLE FOR BACKFILL. ALL BACKFILL SHALL BE FREE FROM SLAG, CINDERS, RUBBISH AND OTHER OBJECTIONABLE MATERIAL.

# WATERWORK NOTES

(C) BEFORE LAYING THE PIPE, THE BOTTOM OF THE TRENCH SHALL BE BROUGHT TO THE GRADE OF THE BOTTOM OF THE PIPE EXCEPT AT FIELD JOINTS. WHEREVER THE BOTTOM OF THE TRENCH HAS BEEN EXCAVATED BELOW THE BOTTOM OF THE PIPE, THE CONTRACTOR SHALL PLACE SAND OR OTHER MATERIAL SATISFACTORY TO THE ENGINEER TO BRING THE BOTTOM OF THE TRENCH TO THE GRADE OF THE BOTTOM OF THE PIPE. THIS BED SHALL BE THOROUGHLY TAMPED BEFORE THE PIPE IS LAID.

(D) UNLESS OTHERWISE SPECIFIED, THE BACKFILL UNDER, AROUND AND TO A DEPTH OF ONE (1) FOOT ABOVE THE TOP OF ALL PIPE SHALL BE MADE WITH MATERIAL SATISFACTORY TO THE ENGINEER, WHICH MATERIAL SHALL BE FREE FROM STONE AND OTHER OBJECTIONABLE MATERIAL NOTED ABOVE, THE CONTRACTOR MUST USE SPECIAL CARE IN PLACING THIS PORTION OF THE BACKFILL, SO AS TO AVOID INJURING, DISTORTING OR MOVING THE PIPE WHEN COMPACTING SAME. ABOVE THIS LEVEL THE BACKFILL SHALL BE MADE WITH MATERIAL SATISFACTORY TO THE ENGINEER. HOWEVER, WHERE SPECIFIED, SAND SHALL BE USED FOR THE ENTIRE PORTION OF THE BACKFILL - SEE PARAGRAPH (H).

(E) BACKFILLING AS NOTED IN PARAGRAPH (D) SHALL BE TAMPED IN THIN LAYERS, SIMULTANEOUSLY ON EACH SIDE OF THE PIPE, AND THOROUGHLY COMPACTED SO AS TO PROVIDE A SOLID BACKING AGAINST THE EXTERNAL SURFACE OF THE PIPE.

(F) ONLY AFTER THE BACKFILL PREVIOUSLY MENTIONED HAS BEEN SATISFACTORILY COMPACTED, MAY WORK PROCEED IN PLACING THE REMAINING BACKFILL WHICH MUST BE CAREFULLY PLACED AND COMPACTED BY TAMPING, PUDDLING, OR ROLLING. ALL PRECAUTIONS MUST BE TAKEN TO ELIMINATE FUTURE SETTLEMENT. THE NUMBER OF MEN TAMPING SHALL BE NOT LESS THAN THE NUMBER BACKFILLING, AND ADDITIONAL MEN SHALL BE KEPT IN THE TRENCH TO SPREAD THE MATERIAL.

(G) BACKFILLING SHALL NOT BE DONE IN FREEZING WEATHER, EXCEPT BY PERMISSION OF THE ENGINEER, AND IT SHALL NOT BE MADE WITH FROZEN MATERIAL, NOR SHALL ANY FILL BE MADE WHERE THE MATERIAL ALREADY IN THE DITCH IS FROZEN.

(H) THE ENTIRE BACKFILL SHALL BE MADE WITH SAND WHERE PERMANENT PAVEMENTS, CURBS, DRIVEWAYS, OR SIDEWALKS, HAVE BEEN OPENED FOR OR UNDERCUT BY THE EXCAVATION.

(I) ALL SAND TO BE USED FOR BACKFILL SHALL BE A NATURAL BANK SAND, GRADED FROM FINE TO COARSE, NOT LUMPY OR FROZEN, AND FREE FROM SLAG, CINDERS, ASHES, RUBBISH, OR OTHER DELETERIOUS OR OBJECTIONABLE MATERIAL. IT SHALL NOT CONTAIN A TOTAL OF MORE THAN 10 PERCENT BY WEIGHT OF LOAM AND CLAY, AND ALL MATERIAL MUST BE CAPABLE OF BEING PASSED THROUGH A 3/4 INCH SIEVE. NOT MORE THAN 5 PERCENT SHALL REMAIN ON A NO. 4 SIEVE.

## DUCTILE IRON PIPE AND FITTINGS

### WORK INCLUDED:

THE CONTRACTOR SHALL FURNISH ALL THE MATERIALS FOR AND SHALL PROPERLY CONSTRUCT AND CONNECT IN PLACE AT THE LOCATIONS SHOWN ON THE DRAWINGS OR AS DIRECTED, ALL DUCTILE IRON PIPE AND FITTINGS, INCLUDING ALL EXCAVATION WORK, THE CUTTING INTO AND REMOVAL OF EXISTING PIPE, BACKFILLING, SAND BACKFILL AND REPAVING, ALL AS REQUIRED FOR THE PROPER COMPLETION OF THE WORK INCLUDED UNDER THIS CONTRACT.

(A) ALL CENTRIFUGALLY CAST DUCTILE IRON PIPE SHALL BE MANUFACTURED IN STRICT CONFORMITY WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE STANDARD A.N.S.I. - A 21.51-1971 AS APPROVED BY THE AMERICAN WATER WORKS ASSOCIATION, A.W.W.A. C-151-71 RESPECTIVELY. THE ABOVE STANDARDS CONSTITUTE AN ESSENTIAL PART OF THIS CONTRACT AND ARE HEREBY MADE SUCH PART THEREOF.

(B) ALL DUCTILE IRON PIPE AND FITTINGS, UNLESS OTHERWISE SHOWN IN THE PLANS, SHALL BE CEMENT LINED AND OF THE SIZE AND CLASS NOTED ON THE RESPECTIVE CONTRACT DRAWINGS. EVERY PIPE SHALL BE MARKED IN ACCORDANCE WITH AMERICAN NATIONAL STANDARD A.N.S. A 21.51-1971 AND WITH THE LETTERS A.W.W.

(C) THE THICKNESS OF THE CENTRIFUGALLY CAST DUCTILE IRON PIPE SHALL CONFORM TO THE FOLLOWING:

| SIZE | WORKING PRESSURE | STANDARD THICKNESS | CLASS |
|---|---|---|---|
| 4" | 350 | 0.32" | 53 |
| 6" | 350 | 0.34" | 53 |
| 8" | 350 | 0.36" | 53 |
| 12" | 350 | 0.40" | 53 |
| 16" | 350 | 0.43" | 53 |
| 20" | 350 | 0.45" | 53 |

ALL FITTINGS, SUCH AS BENDS, TEES, CROSSES, OFFSETS, HYDRANT BRANCHES, ETC., SHALL HAVE BELL AND BELL, OR BELL AND SPIGOT ENDS WITH CAST LEAD JOINTS. PIPE BETWEEN SHORT LENGTHS OF PIPES, BETWEEN OFFSETS OR BENDS, AND ON HYDRANT BRANCHES SHALL ALSO BE OF BELL AND SPIGOT TYPE WITH LEAD JOINTS.

(D) ALL PIPE SHALL HAVE BELL AND SPIGOT ENDS FOR CAST LEAD JOINTS OR A SLIP ON TYPE JOINT WITH COMPRESSED RUBBER RING INSERTS, ALL PIPE AND FITTINGS SHALL BE CEMENT LINED.

(E) GASKETS SHALL BE OF RUBBER OR OTHER EQUALLY EFFECTIVE PROTECTION AGAINST UNEVEN DISTORTION OF THE GASKET.

(F) WHERE FITTINGS ARE SHOWN WHICH ARE NOT COVERED BY THE ABOVE SPECIFICATIONS, THEY, IN SUCH PARTICULARS AS ARE LACKING THEREON, SHALL CONFORM TO THE DIMENSIONS AND OTHERWISE MEET THE SPECIFICATIONS FOR THE RESPECTIVE TYPE WHICH ARE CARRIED IN THE LATEST REVISIONS TO THE CURRENT EDITION OF THE "HANDBOOK OF CAST IRON PIPE" BY THE CAST IRON PIPE RESEARCH ASSOCIATION, OR WHICH ARE OTHERWISE SHOWN ON THE CONTRACT DRAWINGS.

(G) WHEREVER CHANGES IN LINE AND GRADES OF THE MAIN AS SHOWN ON THE DRAWINGS ARE NOT STANDARD FITTING DEFLECTIONS, THE CONTRACTOR WILL BE PERMITTED TO SUBMIT DETAILS FOR APPROVAL OF THE CITY INSPECTOR USING COMBINATIONS OF STANDARD FITTINGS AND SMALL DEFLECTIONS (NOT TO EXCEED A MAXIMUM OF ONE-HALF (1/2) INCH JOINT OPENING) IN THE ADJOINING LENGTHS OF PIPE.

(H) PLUGS FOR BELL AND SPIGOT PIPE SHALL BE FURNISHED WITH TWO (2) PLUGGED ONE (1) INCH TAPS FOR DRAIN AND AIR COCK CONNECTIONS.

(I) CLOSURE PIECES SHALL BE ACCURATELY MEASURED AND CUT IN THE FIELD AND INSTALLED USING SOLID TYPE PATTERN SLEEVES AS SHOWN OR AS REQUIRED.

(J) TESTS, INSPECTION, REPORTS AND ANALYSES OF TESTS OF SAMPLES FOR ALL MATERIALS SHALL BE FURNISHED AS SET FORTH ELSEWHERE IN THESE NOTES.

(K) BITUMASTIC COATING SHALL BE APPLIED ON THE EXTERIOR OF ALL DUCTILE IRON PIPE AND FITTINGS IN ACCORDANCE WITH AWWA SPECIFICATIONS.

### CEMENT LINING:

ALL DUCTILE IRON PIPE AND FITTINGS, UNLESS OTHERWISE SHOWN IN THE PLANS, SHALL BE GIVEN A CEMENT MORTAR LINING AT THE POINT OF MANUFACTURE. THE LINING SHALL CONFORM TO THE AMERICAN STANDARD SPECIFICATION. CEMENT LINED PIPE SHALL BE LINED IN ACCORDANCE WITH A.N.S.I. STANDARD FOR CEMENT MORTAR LINING FOR CAST IRON PIPE AND FITTINGS - A21.4-1971 AS APPROVED BY THE AMERICAN WATER WORKS ASSOCIATION (A.W.W.A. C-104-71) OR LATEST REVISION THEREOF.

### MARKING:

ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE MARKED IN ACCORDANCE WITH A.W.W.A. C-110-71 AND WITH THE LETTERS A.W.W.

### LAYING

(A) PROPER AND SUITABLE TOOLS AND APPLIANCES FOR THE SAFE AND CONVENIENT HANDLING AND LAYING OF THE PIPES AND FITTINGS SHALL BE USED. GREAT CARE SHALL BE TAKEN TO PREVENT THE PIPE COATING FROM BEING DAMAGED PARTICULARLY ON THE INSIDE OF PIPES AND FITTINGS AND ANY SUCH DAMAGE SHALL BE REMEDIED AS DIRECTED. ALL PIPES AND FITTINGS SHALL BE CAREFULLY EXAMINED BY THE CONTRACTOR FOR DEFECTS JUST BEFORE LAYING AND NO PIPE OR FITTINGS SHALL BE LAID WHICH IS KNOWN TO BE DEFECTIVE.

(B) IF ANY DEFECTIVE PIPE IS DISCOVERED AFTER HAVING BEEN LAID, IT SHALL BE REMOVED AND REPLACED WITH A SOUND PIPE OR FITTING IN A SATISFACTORY MANNER BY THE CONTRACTOR AT HIS OWN EXPENSE. ALL PIPES AND FITTINGS SHALL BE THOROUGHLY CLEANED BEFORE THEY ARE LAID, SHALL BE KEPT CLEAN UNTIL THEY ARE USED IN THE COMPLETED WORK AND WHEN LAID SHALL CONFORM TO THE LINES AND GRADES GIVEN BY THE ENGINEER. OPEN ENDS OF PIPES SHALL BE KEPT PLUGGED WITH A BULKHEAD DURING CONSTRUCTION. IN NO EVENT SHALL ANY PORTION OF THE DAMAGED PIPE BE PERMITTED TO REMAIN IN THE LINE. ANY APPROVAL STAMPS FOUND ON THE PIPE SHALL BE REMOVED OR THE PIPE BROKEN UP FOR SCRAP.

(C) PIPE LAID IN TRENCH SHALL BE LAID TO A FIRM AND EVEN BEARING FOR ITS FULL LENGTH, PRECAUTIONS SHALL BE TAKEN AGAINST FLOATING.

(D) IT IS THE INTENTION OF THESE SPECIFICATIONS TO SECURE FIRST CLASS WORKMANSHIP IN THE PLACING OF PIPE AND ACCESSORIES. IN SUCH DETAILS AS ARE NOT SPECIFICALLY MENTIONED HEREIN OR CALLED FOR ON THE DRAWINGS, THE CONTRACTOR WILL BE REQUIRED TO CONFORM WITH THE APPLICABLE SECTIONS OF THE LATEST "STANDARD SPECIFICATIONS FOR LAYING CAST IRON PIPE" AS ADOPTED BY THE AMERICAN WATER WORKS ASSOCIATION.

### CUTTING PIPE

WHENEVER THE PIPES REQUIRE CUTTING TO FIT INTO THE LINES, THE WORK SHALL BE DONE IN A SATISFACTORY MANNER SO AS TO LEAVE A SMOOTH END AT RIGHT ANGLES TO THE AXIS OF THE PIPE. IN NO EVENT SHALL FLAME CUTTING BE USED. WHEN A PIECE OF PIPE IS CUT TO FIT INTO THE LINE, NO PAYMENT WILL BE MADE FOR THE PORTION CUT OFF AND NOT USED IN THE LINE.

### JOINTS - PUSH-ON

(A) LEAD JOINTS: IN JOINTING ALL BELL AND SPIGOT PIPE AND FITTINGS HAVING LEAD JOINTS, THE SPIGOT OF EACH PIPE SHALL BE PROPERLY SEATED IN THE BELL OF THE NEXT ADJACENT PIPE AND ADJUSTED SO AS TO GIVE A UNIFORM ANNULAR SPACE. THE JOINT SHALL BE MADE WITH TWISTED HARD JUTE AND SOFT PIG LEAD. BEFORE PLACING THE JUTE, IT SHALL BE STERILIZED EITHER BY BOILING OR BY DIPPING IN A CONCENTRATED SOLUTION OF "HTH." THE JUTE SHALL BE TWISTED AND THOROUGHLY DRIVEN INTO THE BELL SO THAT THE LEAD, AFTER HAVING BEEN CAULKED, SHALL HAVE THE FOLLOWING DEPTH:

| SIZE OF PIPE | DEPTH OF LEAD |
|---|---|
| 4" - 20" | 2-1/2 INCHES |
| SLEEVES | SOLID |

THE FURNACE AND MELTING POT SHALL BE KEPT NEAR THE JOINT TO BE POURED AND EACH JOINT SHALL BE MADE WITH ONE POURING. DROSS SHALL NOT BE ALLOWED TO ACCUMULATE IN THE MELTING POT. THE JOINTS SHALL BE THOROUGHLY CAULKED BY COMPETENT PIPE JOINERS AND IN SUCH MANNER AS WILL SECURE A TIGHT JOINT WITHOUT OVERSTRAINING THE IRON OF THE BELL.

GASKETS AND LUBRICANT FURNISHED UNDER THESE SPECIFICATIONS FOR PUSH-ON JOINTS, SHALL BE MANUFACTURED IN ACCORDANCE WITH A.N.S.I. STANDARD A 21.11-1971, AS APPROVED BY THE AMERICAN WATER WORKS ASSOCIATION (A.W.W.A. C111-71) OR LATEST REVISION THEREOF.

# WATERWORK NOTES

PAINTING:

AFTER ERECTION, ALL EXPOSED OR DAMAGED COATINGS AND ALL BOLTS FOR LUGGED JOINTS SHALL BE CLEANED AND PAINTED WITH THREE (3) FIELD COATS OF INERTOL 50 OR BITUMASTIC 50 OR APPROVED EQUAL.

DRAWINGS

(A) THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, DUPLICATE PRINTS OF ALL SHOP DRAWINGS FOR DUCTILE IRON PIPE AND FITTINGS AND MISCELLANEOUS DETAILS WHICH ARE NOT STANDARD CONSTRUCTION, AND ARE NOT MENTIONED IN THE REGULAR CATALOGUE OF THE COMPANY FURNISHING THE PIPE. NO WORK SHALL BE DONE IN THE SHOP UNTIL AFTER THE DRAWINGS HAVE BEEN APPROVED.

MEASUREMENT

THE NUMBER OF LINEAL FEET OF DUCTILE IRON PIPE MAINS AND CONNECTIONS TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF LINEAL FEET FURNISHED AND PLACED IN ACCORDANCE WITH THESE SPECIFICATIONS AS MEASURED ALONG THE AXIS OF THE PIPING INCLUDING FITTINGS AND VALVES CONNECTED UP IN PLACE. FOR CONNECTION BETWEEN NEW AND EXISTING MAINS, MEASUREMENT SHALL BE THE DISTANCE FROM CENTERLINE TO CENTERLINE OF MAINS AND THE ACTUAL LENGTH OF EXISTING MAIN ORDERED TO BE REMOVED TO MAKE THE CONNECTION.

PAYMENT

THE FOOTAGE MEASURED AS PROVIDED ABOVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER LINEAR FOOT FOR "ITEM 814 - WATER MAIN" CLASSIFIED AS TO THE SIZE AND TYPE, WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, HAULING, PLACING, CUTTING INTO AND CONNECTION OF THE PIPE, PIPE BENDS, C.I. PLUGS AND CLAMPS AT DEAD ENDS, CONCRETE TRUST BLOCKS OR CONCRETE ANCHORS, SHEETING AND BRACING, SAND BACKFILL, WATER USED FOR COMPACTION, INCIDENTAL CONCRETE, THE REMOVAL OF ALL SURPLUS EXCAVATION AND DISCARDED MATERIAL, REPAVING, AND FOR THE FURNISHING OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM, EXCEPT FOR THE ITEMS SPECIFICALLY LISTED AS SEPARATE PAY ITEMS.

THE CHLORINATION BY THE CITY OF AKRON, DIVISION OF WATER, FOR THE NEWLY LAID WATER MAINS WHICH IS DESCRIBED UNDER "ADDITIONAL WORK, PART C CHLORINATION" WILL BE AT NO EXPENSE TO THE CONTRACTOR.

MISCELLANEOUS METAL WORK

WORK INCLUDED:

(A) THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MISCELLANEOUS METAL WORK WHICH IS REQUIRED FOR THE PROPER COMPLETION OF THE WORK INCLUDED UNDER THIS CONTRACT AND IS NOT SPECIFICALLY INCLUDED UNDER THE OTHER ITEMS OF THESE SPECIFICATIONS.

(B) IN GENERAL, THE WORK SHALL INCLUDE THE FURNISHING AND INSTALLING OF VALVE BOXES, EXTENSION STEMS AND BRACE, STRUCTURAL MEMBERS, BRONZE BOLTS, AND OTHER SIMILAR ITEMS REQUIRED FOR THE PROPER COMPLETION OF THE WORK.

MATERIALS:

ALL CASTINGS SHALL CONFORM TO THE REQUIREMENTS OF ITEM 814 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS EXCEPT THAT THE CAST IRON SHALL BE CLASS NO. 30. ALL BRONZE BOLTS AND NUTS SHALL CONFORM TO U.S. STANDARD SIZES, AND SHALL BE CLEAN CUT AND HAVE WELL FITTED THREADS. ALL BRONZE BOLTS AND NUTS SHALL BE OF TOBIN OR MANGANESE BRONZE, OR OF SIMILAR APPROVED MATERIALS.

CLEANING AND TESTING:

ALL CASTINGS SHALL BE THOROUGHLY CLEANED AND SUBJECTED TO A CAREFUL HAMMER TEST. NO CASTINGS SHALL BE COATED UNLESS CLEAN AND FREE FROM RUST, AND APPROVED IN THESE RESPECTS BY THE ENGINEER OR HIS AUTHORIZED INSPECTOR IMMEDIATELY BEFORE BEING DIPPED.

COATING:

EACH CASTING SHALL BE SPRAYED OR BRUSHED INSIDE AND OUT WITH ONE COAT OF ASPHALTIC COMPOUND VARNISH. THE VARNISH SHALL BE MADE OF HIGH GRADE ASPHALT FLUXED AND BLENDED WITH PROPERLY TREATED DRYING OILS AND THINNED TO A PROPER CONSISTENCY WITH A VOLATILE SOLVENT. THE VARNISH SHALL BE BLACK ASPHALT VARNISH.

OTHER METHODS OF COATING AND TYPES OF COATING MATERIALS SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. IN ADDITION TO THE SHOP COAT THE CASTINGS SHALL RECEIVE TWO (2) COATS OF APPROVED PAINT.

INSPECTION:

THE ENGINEER OR HIS AUTHORIZED ASSISTANT, SHALL HAVE THE RIGHT TO INSPECT THE MATERIAL AND WORK DONE, AS THE INTERESTS OF THE CITY OR STATE MAY REQUIRE. SUCH INSPECTION SHALL NOT RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM SAID WORK STRICTLY IN ACCORDANCE WITH THE SPECIFICATIONS, OR ANY MODIFICATION THEREOF, AS HEREIN PROVIDED, AND WORK NOT SO CONSTRUCTED SHALL BE REMOVED AND MADE GOOD BY THE CONTRACTOR, AT HIS OWN EXPENSE.

DEFECTIVE CASTINGS WHICH MAY HAVE PASSED THE INSPECTOR AT THE WORKS, OR ELSEWHERE, SHALL BE AT ALL TIMES LIABLE TO REJECTION WHEN DISCOVERED, UNTIL THE DATE OF FINAL PAYMENT UNDER THIS CONTRACT.

VALVE BOXES AND COVERS:

THE CONTRACTOR SHALL FURNISH AND INSTALL, OVER EACH VERTICALLY SET VALVE AT THE LOCATIONS SHOWN ON THE DRAWINGS, OR AS REQUIRED, VALVE BOXES AND COVERS OF THE TYPES AND SIZES INDICATED ON THE CONTRACT PLANS. THESE SHALL BE CAREFULLY LOCATED OVER THE VALVE NUTS, AND SHALL BE SET PLUMB AND TRUE TO ELEVATION AS REQUIRED.

PAINTING:

ALL MISCELLANEOUS METAL WORK NOT GALVANIZED SHALL BE THOROUGHLY CLEANED AND GIVEN THREE (3) COATS OF COAL TAR PITCH, INERTOL 50, BITUMASTIC 50, OR APPROVED EQUAL.

PAYMENT:

THE FABRICATING, FURNISHING, ERECTING, MACHINING, FITTING, ADJUSTING, BOLTING, CLEANING AND PAINTING OF MISCELLANEOUS METAL WORK, INCLUDING THE FURNISHING OF ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT "ITEM 814" IN WHICH IT IS A PART. NO SEPARATE PAYMENT WILL BE MADE FOR MISCELLANEOUS WORK.

CERTIFICATION -

SHOULD THE CITY HAVE NO INSPECTOR AT THE WORKS, THE CONTRACTOR SHALL FURNISH A SWORN STATEMENT THAT THE INSPECTION AND ALL OF THE SPECIFIED TESTS HAVE BEEN MADE AND THE RESULTS THEREOF COMPLY WITH THE REQUIREMENTS OF HIS STANDARD.

TEMPORARY PLUGS

WHEN THE CONTRACTOR INSTALLS A WATER MAIN PLUG AND SUBSEQUENTLY REMOVES THE SAME PLUG UNDER PHASE CONSTRUCTION, SAID PLUG SHALL BE CLASSIFIED AS A TEMPORARY PLUG.

TEMPORARY PLUGS WILL NOT BE PAID FOR UNDER A SEPARATE PAY ITEM.

PAYMENT FOR TEMPORARY PLUGS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR LINEAL FEET OF ITEM 814 - WATER MAINS TYPE AND SIZE SPECIFIED ON THE PLANS.

FLOATING

THE CONTRACTOR SHALL TAKE EVERY PRECAUTION AGAINST THE FLOATING OF THE PIPE DUE TO WATER COMING INTO THE TRENCH, OR THROUGH CAVING IN, FLUSHING OR PUDDLING. IN CASE OF SUCH FLOATING THE CONTRACTOR SHALL REPLACE THE PIPE AT HIS OWN EXPENSE, AND MAKE WHOLLY GOOD ANY INJURY OR DAMAGE WHICH MAY HAVE RESULTED.

TESTING -

AFTER THE PIPE HAS BEEN LAID AND THE MIDDLE PORTION OF EACH LENGTH BACKFILLED, LEAVING THE JOINTS EXPOSED, THE MAINS SHALL BE SLOWLY FILLED WITH WATER AND TESTED UNDER LOCAL LINE PRESSURE. WHILE UNDER THIS PRESSURE, THE MAIN SHALL BE INSPECTED FOR POOR JOINTS AND DEFECTIVE PIPE. IF THE MAIN AS LAID IS FOUND SATISFACTORY BY THE ENGINEER, THE TRENCH MAY BE BACKFILLED; OTHERWISE THE DEFECTIVE JOINTS SHALL BE REPAIRED OR DEFECTIVE PIPE REPLACED AND THE TEST REPEATED.

AFTER THE MAIN HAS BEEN FILLED WITH WATER AND WHEN IN THE OPINION OF THE ENGINEER FURTHER TESTING IS REQUIRED, A LEAKAGE TEST SHALL BE MADE UNDER A PRESSURE OF 50 POUNDS PER SQUARE INCH GREATER THAN MAXIMUM STATIC LINE PRESSURE. THE DURATION OF THE TEST SHALL BE 15 MINUTES AND THE LEAKAGE DURING THE TEST SHALL NOT EXCEED 75 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS. IN THE EVENT THAT THE MAIN FAILS TO MEET THE TEST REQUIREMENTS, THE ENGINEER MAY ORDER THE CONTRACTOR TO EXPOSE THE JOINTS AND DO OTHER WORK TO BRING THE LEAKAGE WITHIN THE SPECIFIED LIMIT.

THE MAIN SHALL BE TESTED IN LENGTHS OF NOT MORE THAN 2,000 FEET. THE CONTRACTOR SHALL FURNISH THE NECESSARY PUMPS, AND CONNECTIONS FOR MAKING THE TESTS AND SHALL INSTALL AND REMOVE THE TEMPORARY BULKHEADS FURNISHED BY THE CITY. THE CITY WILL FURNISH GAUGES AND MEASURING DEVICES FOR THE TEST AND WILL MAKE ALL TAPS INTO THE PIPE, BUT THE CONTRACTOR SHALL FURNISH ALL ASSISTANCE NECESSARY FOR CONDUCTING THE TEST.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE TRENCH, PIPING OF ANY APPURTENANCES WHICH MAY ARISE FROM OR IN CONNECTION WITH THE TESTS AND ALL DAMAGED PIPE OR APPURTENANCES SHALL BE REPLACED BY THE CONTRACTOR IMMEDIATELY.

CLOSING VALVES

THE CLOSING OF ALL GATE VALVES ON EXISTING MAINS FOR MAKING CONNECTIONS, TESTS, OR FOR ANY OTHER CAUSE SHALL BE DONE BY THE CITY AND SUFFICIENT NOTICE SHALL BE GIVEN TO THE CITY, BY THE CONTRACTOR, SO THAT THE WORK MAY BE DONE WITH A MINIMUM OF INCONVENIENCE TO THE PUBLIC AND DELAY TO THE CONTRACTOR.

VALVES (814.02)

4", 6", 8", 12" GATE VALVES

PLACING AND TESTING

(A) ALL VALVES SHALL BE SET ACCURATELY AND CAREFULLY TO THE LINES AND GRADES GIVEN. ALL CONNECTIONS TO PIPE SHALL HAVE THE NECESSARY FLANGE, LEAD, SCREWED, VICTAULIC OR SOLDERED ENDS AS REQUIRED UNDER THE FOLLOWING ITEMS: CAST IRON PIPE AND FITTINGS, FURNISHING AND SETTING 6" (SIX INCH) HYDRANT, AS SHOWN ON THE VALVE SCHEDULE.

(B) AFTER THE VALVES ARE SET IN PLACE AND READY TO OPERATE, THE CONTRACTOR SHALL TEST THEM UNDER WORKING PRESSURE AND CONDITIONS HEREIN SPECIFIED UNDER THE SPECIFICATION "TESTING MAINS" AND ANY VALVE FOUND TO LEAK SHALL BE MADE WATERTIGHT AND IF FOUND TO BE OF FAULTY DESIGN, SHALL BE SATISFACTORILY REPAIRED OR REPLACED BY THE CONTRACTOR.

PAINTING

(A) IRON BODY VALVES SHALL EITHER BE DIPPED IN ASPHALT PAINT AND ALL BRONZE PARTS CLEANED, OR ALL IRON CASTINGS SHALL BE PAINTED INSIDE BEFORE ASSEMBLING WITH TWO (2) COATS OF AN APPROVED PAINT, AND, AFTER PASSING THE HYDRAULIC TEST SHALL BE GIVEN AT LEAST TWO (2) COATS OF APPROVED PAINT OUTSIDE.

(B) AFTER ERECTION, ALL EXPOSED METAL SURFACES OF VALVES EXCEPT BRASS OR BRONZE SHALL BE PAINTED WITH TWO (2) FIELD COATS OF COAL TAR PITCH PAINT INERTOL 66 OR KOPPERS BITUMASTIC 50, OR APPROVED EQUAL.

| FHWA REG | STATE | PROJECT | |
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AKRON INNERBELT
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# WATERWORK NOTES

INSPECTION

THE ENGINEER, OR HIS AUTHORIZED DESIGNATE WILL INSPECT THE MATERIAL AND WORK DONE, AS THE INTERESTS OF THE RESPECTIVE CITIES OR STATE MAY REQUIRE. SUCH OFFICE SHALL HAVE UNRESTRICTED ACCESS TO THE CONTRACTOR'S PLANT AND TO ALL PARTS OF THE WORK AND OTHER PLACES AT WHICH THE PREPARATION OF THE MATERIAL AND THE CONSTRUCTION OF THE DIFFERENT PARTS OF THE WORK TO BE DONE UNDER THESE SPECIFICATIONS ARE CARRIED ON, AND HE SHALL RECEIVE ALL FACILITIES AND ASSISTANCE TO CARRY OUT HIS WORK OF INSPECTION AND TESTING, IN A MANNER SATISFACTORY TO THE ENGINEER. SUCH INSPECTION SHALL NOT RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM SAID WORK STRICTLY IN ACCORDANCE WITH THE SPECIFICATIONS, OR ANY MODIFICATIONS THEREOF, AS HEREIN PROVIDED, AND WORK NOT SO CONSTRUCTED SHALL BE REMOVED AND MADE GOOD BY THE CONTRACTOR, AT HIS OWN EXPENSE.

DRAWINGS

(A) PRIOR TO THE MANUFACTURE OF ANY VALVES, THE CONTRACTOR SHALL SUBMIT FOR THE APPROVAL OF THE ENGINEER AND DIRECTOR OF PUBLIC UTILITIES OF THE CITY OF AKRON COMPLETE WORKING, DETAIL, AND DIMENSION DRAWINGS SHOWING THICKNESSES AND KINDS OF MATERIAL AND SIMILAR INFORMATION.

(B) ONE PRINT OF EACH OF THE DRAWINGS SUBMITTED WILL BE RETURNED WITH THE CRITICISMS OR APPROVAL OF THE ENGINEER. IN CASE THE DRAWINGS ARE NOT APPROVED, THE CONTRACTOR SHALL AGAIN SEND FOR APPROVAL, DUPLICATE REVISED PRINTS OF THE DRAWINGS TO TAKE CARE OF THE CRITICISMS NOTED. AFTER THE DRAWINGS HAVE BEEN FINALLY APPROVED, THE CONTRACTOR SHALL FURNISH TO THE ENGINEER THREE PRINTS OF EACH DRAWING: REPRODUCIBLE ON CLOTH OR .003 THICKNESS MYLAR SHALL BE FURNISHED TO THE DIRECTOR OF PUBLIC UTILITIES OF THE CITY OF AKRON, ONE TO OHIO DEPARTMENT OF TRANSPORTATION AND ONE RETURNED TO THE CONTRACTOR.

PAYMENT

THE UNIT PRICE STIPULATED FOR EACH "ITEM 814-VALVES WITH VALVE BOXES" CLASSIFIED AS TO SIZE AND TYPE SHALL INCLUDE THE FURNISHING, PLACING, TESTING AND PAINTING OF THE GATE VALVES, OPERATING NUTS AND OTHER ACCESSORIES AND APPURTENANCES AND THE FURNISHING OF ALL LABOR, TOOLS AND APPLIANCES NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN. VALVE BOXES SHALL BE INCLUDED FOR PAYMENT IN "ITEM 814-VALVES WITH VALVE BOX"

ITEM 814 - PLUGGING EXISTING WATER MAINS AND BRANCHES AND PLUGGING SERVICE CONNECTIONS

WORK INCLUDED:

THE WORK INCLUDED UNDER THESE ITEMS SHALL CONSIST OF THE PLUGGING OF EXISTING WATER MAINS AND BRANCHES, AND THE PLUGGING OF SERVICE CONNECTIONS AT THE LOCATIONS SHOWN ON THE DRAWINGS OR AS ORDERED, INCLUDING CAST IRON PLUGS OR CAPS WITH CLAMPS AND CONCRETE PIERS, ALL EXCAVATIONS, SHEETING AND BRACING, CONCRETE, SAND BACKFILL, TEMPORARY REPAVING AND PERMANENT REPAVING, ALL AS REQUIRED FOR THE PROPER COMPLETION OF THE WORK INCLUDED UNDER THIS CONTRACT.

(A) PLUGGING MAINS AND BRANCHES:

WHEN INDICATED ON THE PLANS OR AS ORDERED, THE CONTRACTOR SHALL MAKE PIPE CUTS, REMOVE AND SALVAGE FITTINGS AND SHALL BULKHEAD, PLUG OR CAP MAINS, TEES OR CROSSES, PLUG CONNECTIONS AT MAIN OR BRANCHES, SHALL DO ALL THE EXCAVATION, BACKFILLING AND REPAVING, ALL AS REQUIRED.

(B) PLUGGING SERVICE CONNECTION:

THE CONTRACTOR SHALL DO ALL NECESSARY EXCAVATION, SHEETING AND BRACING, SAND BACKFILLING, BACKFILLING AND REPAVING REQUIRED FOR THIS ITEM, BUT THE AKRON WATER DEPARTMENT WILL FURNISH THE PLUG AND PLUG THE SERVICE CONNECTION. THE CONTRACTOR SHALL ARRANGE WITH THE AKRON WATER DEPARTMENT FOR THE NECESSARY WORK UNDER THIS ITEM.

MEASUREMENT:

THE EXISTING WATER AND BRANCHES PLUGGED OR SERVICE CONNECTIONS PLUGGED TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF EACH LISTED AND ESTIMATED SEPARATELY, COMPLETED AND ACCEPTED.

BASIS OF PAYMENT:

THE UNIT PRICE STIPULATED FOR (A) "ITEM 814 - PLUGGING EXISTING WATER MAINS AND BRANCHES" CLASSIFIED AS TO SIZE SHALL CONSTITUTE FULL COMPENSATION FOR PERFORMING ALL THE REQUIREMENTS OF THIS ITEM INCLUDING FURNISHING ALL NECESSARY MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS TO MAKE THIS A COMPLETE ITEM OF WORK. THE ITEM SHALL BE PAID FOR ON PER "EACH" BASIS.

THE UNIT PRICE STIPULATED FOR (B) "ITEM 814 - PLUGGING SERVICE CONNECTIONS" SHALL CONSTITUTE FULL COMPENSATION FOR PERFORMING ALL THE REQUIREMENTS OF THIS ITEM INCLUDING FURNISHING ALL NECESSARY MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS TO MAKE THIS A COMPLETE ITEM OF WORK. THE ITEM SHALL BE PAID FOR ON PER "EACH" BASIS.

THE MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS FURNISHED BY THE CITY OF AKRON, DIVISION OF WATER, WILL BE AT NO EXPENSE TO THE CONTRACTOR. THE WORK PERFORMED BY THE CITY OF AKRON APPLIES TO (B) PLUGGING SERVICE CONNECTIONS.

REMOVING AND RESETTING OF HYDRANT

WORK INCLUDED:

THE CONTRACTOR SHALL PERFORM ALL OPERATIONS NECESSARY FOR THE PROPER REMOVAL OF THE HYDRANT AT THE LOCATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL INSPECT, CLEAN AND RESET THE HYDRANT AT THE LOCATION SHOWN ON THE CONTRACT DRAWINGS, FURNISHING ALL MATERIAL, LABOR, TOOLS AND EQUIPMENT REQUIRED FOR THE PROPER COMPLETION OF THE WORK INCLUDED UNDER THIS CONTRACT.

SETTING:

THE HYDRANT SHALL BE RESET AS REQUIRED IN THE SECTION ON "SETTING" UNDER "ITEM FURNISHING AND SETTING 6" FIRE HYDRANT".

PAYMENT:

(A) THE UNIT PRICE STIPULATED TO BE PAID FOR EACH "ITEM 814 - FIRE HYDRANT REMOVED AND RESET, AS PER PLAN" WHICH PRICE AND PAYMENT SHALL INCLUDE THE REMOVING, INSPECTION, CLEANING, SETTING, CONNECTING, TESTING, PAINTING, EXCAVATION, SHEETING AND BRACING, BACKFILLING, SEEDING AND SODDING, REPAVING AND THE FURNISHING OF ALL LABOR, MATERIAL, TOOLS, AND APPLIANCES NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN.

(B) THE PIPE WILL BE PAID FOR UNDER "DUCTILE IRON PIPE AND FITTINGS".

PLAIN CONCRETE MASONRY

THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR THE CONSTRUCTION, COMPLETE, OF ALL MISCELLANEOUS MASONRY STRUCTURES, INCLUDING ALL ANCHORS AND PIERS AT PIPE BENDS AND UNDER LINE VALVES, AND OTHER APPURTENANT WORK TOGETHER WITH THE HAULING, MIXING, PLACING, ALL AS SPECIFIED, REQUIRED OR SHOWN ON THE CONTRACT DRAWINGS.

HYDRANTS:

THE 6" FIRE HYDRANTS SHALL BE CITY OF AKRON STANDARD AND SHALL CONFORM TO THE CITY SPECIFICATIONS ON FILE AT 65 SOUTH HIGH STREET, AKRON, OHIO AND THE HYDRANT DETAIL SHOWN ON SHEET 00.

SETTING:

(A) GENERAL LOCATION: HYDRANT SHALL BE LOCATED IN A MANNER TO PROVIDE COMPLETE ACCESSIBILITY AND IN SUCH MANNER THAT THE POSSIBILITY OF DAMAGE FROM VEHICLES OR INJURY TO PEDESTRIANS WILL BE MINIMIZED. UNLESS OTHERWISE DIRECTED THE SETTING OF ANY FIRE HYDRANT SHALL CONFORM TO THE FOLLOWING:

(B) LOCATION REGARDING CURB LINES: WHEN PLACED BEHIND CURB, THE HYDRANT BARREL SHALL BE SET SO THAT CENTER OF BARREL WILL BE NO LESS THAN 3 FEET FROM THE GUTTER FACE OF THE CURB OR DEVIATE FROM LOCATION INDICATED ON CONTRACT DRAWINGS EXCEPT BY CONSENT OF THE ENGINEER.

(C) LOCATION REGARDING SIDEWALK: WHEN SET IN THE LAWN SPACE BETWEEN THE CURB AND THE SIDEWALK OR BETWEEN THE SIDEWALK AND THE PROPERTY LINE, NO PORTION OF THE HYDRANT OR NOZZLE CAP SHALL BE WITHIN 6 INCHES OF THE PROPERTY LINE.

(D) POSITION OF NOZZLES: THE HYDRANT SHALL STAND PLUMB WITH NOZZLE POINTING TOWARD CURB. WHERE HYDRANT BRANCH PIPING IS PARALLEL WITH, OR NOT AT RIGHT-ANGLES TO CURB, THE CONTRACTOR SHALL RELEASE SWIVEL HEAD BOLTS AND ADJUST HYDRANT NOZZLES TO FACE CURB AT PROPER ANGLE. HYDRANT WITHOUT SWIVEL HEADS WILL BE ADJUSTED BY THE CITY WHERE NECESSARY TO CORRECT ANGLE ON NOZZLES WITH CURBING. ELEVATION SHALL CONFORM TO THE ESTABLISHED GRADE WITH TOPS OF FROST CASING AT LEAST FOUR INCHES ABOVE GRADE.

(E) CONNECTION TO MAIN: THE FIRE HYDRANT SHALL BE CONNECTED TO THE MAIN PIPE WITH A CAST IRON BRANCH CONTROLLED BY THE INDEPENDENT GATE VALVE OF THE SAME SIZE AS FIRE HYDRANT EXCEPT AS OTHERWISE DIRECTED.

(F) DRAINAGE AT HYDRANT: DRAINAGE SHALL BE PROVIDED AT BASE OF THE HYDRANT BY FILLING AROUND ELBOW WITH COARSE GRAVEL OR CRUSHED STONE TO AT LEAST SIX INCHES ABOVE THE WASTE OPENING. WHEREVER HYDRANT IS SET IN ROCK, CLAY OR OTHER IMPERVIOUS SOIL, THE TRENCH SHALL BE WIDENED AND DEEPENED ON EACH SIDE OF HYDRANT BASE. WHICH SPACE SHALL BE FILLED COMPACTLY WITH COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND OF SUFFICIENT QUANTITY TO ABSORB ALL SPECIAL-WATER TO BE DRAINED FROM HYDRANT WHEN VALVE IS CLOSED.

(G) ANCHORAGE FOR HYDRANT: THE HYDRANT SHALL BE SET ON A STONE SLAB OR SIMILAR FOUNDATION AND BASE OF HYDRANT AND HYDRANT TEE WELL BRACED AGAINST UNEXCAVATED EARTH AT THE END OF THE TRENCH WITH CONCRETE BACKING OR IT SHALL BE TIED TO THE PIPE WITH SUITABLE RODS OR CLAMPS AS DIRECTED BY THE ENGINEEER. SEE HYDRANT SETTING DETAIL SHEET 00.

(H) CLEANING: HYDRANT SHALL BE THOROUGHLY CLEANED OF DIRT OR FOREIGN MATTER BEFORE SETTING.

PAYMENT:

(A) THE UNIT PRICE STIPULATED TO BE PAID FOR EACH "ITEM 814 - FURNISHING AND SETTING 6" FIRE HYDRANT" SHALL INCLUDE FURNISHING THE HYDRANT, IN ACCORDANCE WITH RESPECTIVE SPECIFICATION SET FORTH ELSEWHERE IN THESE NOTES, SETTING, TESTING, PAINTING, THE EXCAVATION, SHEETING AND BRACING, BACKFILLING, AND THE FURNISHING OF ALL LABOR, MATERIAL, TOOLS AND APPLIANCES NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN.

(B) THE PIPE WILL BE PAID FOR UNDER "DUCTILE IRON PIPE AND FITTINGS".

(C) THE VALVES WILL BE PAID FOR UNDER "VALVES".

(D) THE VALVE BOX WILL BE PAID FOR UNDER "VALVES".

30" STEEL CASING PIPE (PROTECTIVE COATINGS)

CASING PIPE JOINTS SHALL BE WELDED WATER TIGHT. THE EXTERIOR OF STEEL CASING PIPE SHALL BE GIVEN ONE COAT OF COAL TAR PRIMER AND TWO COATS OF COAL TAR ENAMEL. THE INTERIOR OF THE PIPE SHALL BE GIVEN ONE COAT OF COAL TAR PRIMER AND ONE COAT OF COAL TAR ENAMEL. ALL COATING MATERIALS AND APPLICATION SHALL BE IN ACCORDANCE WITH A.W.W.A. C-203-62.

| FHWA REG. | STATE | PROJECT | |
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| 5 | OHIO | M-1T62(2) | |

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AKRON INNERBELT
SUM - 59 - 0.00

# WATERWORK NOTES

MASONRY MATERIAL:

(A) THE MATERIAL FURNISHED BY THE CONTRACTOR FOR THE VARIOUS KINDS OF MASONRY CONSTRUCTION TO BE CONSTRUCTED SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

(B) PORTLAND CEMENT, A.S.T.M. C 150, TYPE 1. STATE OF OHIO DEPARTMENT OF TRANSPORTATION SPEC. 701.04.

(C) AGGREGATE FOR PORTLAND CEMENT CONCRETE STATE OF OHIO DEPARTMENT OF TRANSPORTATION SPEC. 703.02.

PAYMENT FOR CONCRETE MASONRY SHALL BE INCLUDED WITH THE PERTINENT "ITEM 814" AND NO SEPARATE PAYMENT WILL BE MADE.

REMOVAL ITEMS

ALL MATERIALS CONSISTING OF VALVES, CURB BOXES , VALVE BOXES, AND ALL APPURTENANCES WHICH ARE INDICATED FOR REMOVAL BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CITY OF AKRON PUBLIC UTILITIES BUREAU.

THE UNIT PRICE STIPULATED FOR EACH "ITEM 814 - (ITEM) REMOVED" SHALL CONSTITUTE FULL COMPENSATION FOR PERFORMING ALL THE REQUIREMENTS OF THIS ITEM INCLUDING EXCAVATION, REMOVING AND DISPOSING OF THE "ITEM", BACKFILLING, SEEDING AND SODDING, REPAVING AND FOR THE FURNISHING OF ALL NECESSARY MATERIALS, LABOR, TOOLS, EQUIPMENT, AND INCIDENTALS TO MAKE THIS A COMPLETE ITEM OF WORK.

SERVICE BOXES ADJUSTED TO GRADE

ALL WORK REQUIRED UNDER THIS ITEM WILL BE PERFORMED BY THE CONTRACTOR.

ELECTROLYSIS BONDS AND TEST TAPS

GENERAL

UNLESS INDICATED OR SPECIFIED OTHERWISE, INSTALLATION, MATERIAL AND EQUIPMENT SHALL CONFORM TO THE SPECIFICATIONS SHOWN IN THE CONTRACT DRAWINGS AND SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE AND THE ELECTRICAL CODES OF THE STATE OF OHIO AND THE POLITICAL SUBDIVISIONS, AS APPLICABLE TO THE LOCATION IN WHICH THE WORK IS TO BE PERFORMED AND WITH THE APPROVAL OF THE ENGINEER. SEE DETAIL SHEET NO. 205.

ELECTRICAL WORK:

THE WORK COVERED BY THIS SUBSECTION CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, APPLIANCES, AND MATERIALS AND IN PERFORMING ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF ALL ELECTRICAL WORK COMPLETE IN STRICT ACCORDANCE WITH THIS SECTION AND THE CONTRACT DRAWINGS AND APPROVAL OF THE ENGINEER.

TERMINALS:

THE TERMINALS SHALL BE CLEARLY MARKED TO SHOW POLARITY AND SHALL BE READILY ACCESSIBLE FOR TESTING. THE NEGATIVE TERMINAL SHALL BE CLEARLY MARKED OR PERMANENTLY TAGGED "ANODE." THE ANODE LEADS SHALL TERMINATE IN THE TERMINAL BOXES SHOWN ON THE DRAWINGS. SUFFICIENT SLACK SHALL BE LEFT IN THE WELL TO PERMIT MOVEMENT OF THE WIRES DUE TO SOIL SETTLEMENT.

MEASUREMENT AND PAYMENT:

CORROSION CONTROL AS SHOWN ON THE CONTRACT DRAWINGS WILL NOT BE MEASURED FOR PAYMENT, BUT WILL BE INCLUDED IN PAYMENT FOR RESPECTIVE WATER MAIN PIPE.

16" THROUGH 20" BUTTERFLY VALVES

VALVES AND OPERATORS SHALL BE MANUFACTURED IN CONFORMITY WITH AWWA STANDARD C-504-70 AND THE LATEST REVISIONS THEREOF EXCEPT AS MAY BE AMENDED HEREIN. VALVES SHALL BE DESIGNED TO WORK WITH SHAFT IN A HORIZONTAL POSITION AND SHALL HAVE ENCLOSED GEARS, AND SHALL BE MANUALLY OPERATED THROUGH A VALVE BOX BY TURNING A 2-INCH SQUARE OPERATING NUT TO THE RIGHT OR CLOCKWISE TO OPEN. VALVES SHALL BE DESIGNED FOR COMPLETE BURIAL.

THE VALVES FURNISHED UNDER THESE SPECIFICATIONS SHALL BE SHORT BODY, CLASS 150-A RUBBER SEATED, CAST IRON BUTTERFLY VALVES, AS MANUFACTURED BY HENRY PRATT COMPANY, OR EQUAL. THEY SHALL BE EQUIPPED WITH NI-RESIST DISCS, STAINLESS STEEL THROUGH SHAFTS, NYLON BEARINGS AND HYCAR RUBBER SEATS. VALVES ARE TO BE USED AS CONTROL VALVES IN THE WATER DISTRIBUTION SYSTEM IN AREAS WHERE THE LINE PRESSURE IS APPROXIMATELY 100 PSI. VALVE BODIES ARE TO BE PREPARED WITH SHOULDERED ENDS FOR STYLE NO. 44N VICTAULIC COUPLINGS USING STAINLESS STEEL BOLTS AND NUTS. FLANGED-END OR WAFTER-STYLE VALVES WILL NOT BE ACCEPTABLE.

VALVES SHALL RECEIVE THE STANDARD ASPHALT VARNISH FINISH IN ACCORDANCE WITH AWWA C-504-70 SECTION 16.

VALVES SHALL BE SUBJECTED TO ALL OF THE TESTS IN SECTION 13 OF AWWA C-504-70 AND THE MANUFACTURER SHALL SUBMIT RESUTLS OF THESE TESTS ALONG WITH AFFIDAVIT OF COMPLIANCE IN ACCORDANCE WITH SECTION 18.

THE VALVE MANUFACTURER SHALL GUARANTEE THE VALVES AS TO WORKMANSHIP AND MATERIALS AND PROPER OPERATION FOR A PERIOD OF ONE YEAR AFTER THE VALVES ARE PUT IN OPERATION.

PAYMENT

THE UNIT PRICE STIPULATED FOR EACH "ITEM 814 BUTTERFLY VALVE WITH VICTAULIC JOINTS AND VICTAULIC ADAPTERS WITH VALVE BOX, COMPLETE" CLASSIFIED AS TO SIZE AND TYPE SHALL INCLUDE THE FURNISHING, PLACING, TESTING AND PAINTING OF THE BUTTERFLY VALVES, OPERATING NUTS AND OTHER ACCESSORIES AND APPURTENANCES AND THE FURNISHING OF ALL LABOR, TOOLS AND APPLIANCES NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN. VALVE BOXES SHALL BE INCLUDED FOR PAYMENT IN "ITEM 814 BUTTERFLY VALVE WITH VICTAULIC JOINTS AND VICTAULIC ADAPTERS WITH VALVE BOX, COMPLETE"

20" STEEL WATER MAIN

GENERAL

THIS ITEM CONSISTS OF FURNISHING AND INSTALLING A 20" STEEL WATER MAIN ON THE RHODES AVE. BRIDGE.

MATERIALS

STEEL PIPE, FITTINGS AND BENDS SHALL BE IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-200 LATEST REVISION. PIPE SIZE IS NOMINAL 20" WITH 0.375" WALL. PIPE LENGTHS SHALL BE AS SHOWN ON THE PLANS. ENDS SHALL BE PLAIN ENDS FOR USE WITH DRESSER STYLE 62, DRESSER STYLE 38 COUPLINGS, AND DRESSER EXPANSION COUPLING TYPE 2 STYLE 63.

CONSTRUCTION

THE TRANSPORTATION AND HANDLING OF ENAMELED STEEL PIPE SHALL BE AS PROVIDED FOR IN A.W.W.A. SPECIFICATION C-204, COAL TAR ENAMEL PROTECTIVE COATING, PRIOR TO MANUFACTURE OF PIPE, AND FITTINGS, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL ASSEMBLY AND DETAILED SHOP DRAWINGS OF PIPE AND BENDS AND FITTINGS AND SUPPORTS. THE PIPE SHALL BE SUPPORTED FROM THE BRIDGES USING SUPPORT ASSEMBLIES AS SHOWN ON DETAIL SHEETS 204. THE STEEL SHALL BE A.S.T.M. A588-50 AND GRINNEL 24" PIPE ROLL FIGURE 171 WITH GRINNEL 20" PIPE SADDLE FIGURE 162. AFTER THE PIPE HAS BEEN SATISFACTORILY TESTED, THE CONTRACTOR SHALL COMPLETELY COVER ALL DRESSER TYPE COUPLINGS AND PORTIONS OF PIPE WHICH ARE UNCOATED AND UNWRAPPED BY ENCLOSING THE ENDS OF THE PIPE AND THE COUPLINGS WITH A TIGHT CANVAS OR LIGHT GAUGE METAL AND SHALL POUR THE SPACE INCLUDING THE EXTERIOR OF THE DRESSER COUPLINGS FULL OF COMPOUND OF THE SAME TYPE AS USED BY THE MANUFACTURER OF THE PIPE FOR ENAMEL COATING, THE PIPE SHALL THEN BE COVERED WITH 2" JOHNS-MANVILLE "METAL-ON" INSULATION.

PROTECTIVE COATINGS FOR STEEL WATER PIPE

THE STEEL WATER MAINS SHALL BE COATED IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-203-75. THE INSIDE OF ALL PIPE SHALL BE COATED WITH COAL TAR PRIMER FOLLOWED BY A HOT COAT OF COAL TAR ENAMEL APPLIED EITHER BY MECHANICAL OR MANUAL MEANS. THE OUTSIDE OF ALL PIPE TO BE PLACED ABOVE GROUND SHALL HAVE ONE COAT OF COAL TAR PRIMER TYPE A, ONE COAT OF HEAVY-BODIED COAL TAR COATING, ONE COAT OF HEAVY BODIED TAR EMULSION.

PAYMENT

PAYMENT SHALL BE THE LUMP SUM PRICE BID FOR ITEM SPECIAL 20" STEEL WATER MAIN, WHICH PRICE SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM AS SPECIFIED, INCLUDING THE FOLLOWING:

1. ALL PIPE SUPPORT INSTALLED IN PLACE, INCLUDING PIPE STAND, PIPE ROLLERS, PIPE SADDLES, AND 1-½" HANGER RODS.
2. ALL COUPLINGS INSTALLED, INCLUDING THOSE TO CONNECT THE STEEL PIPE TO THE DUCTILE IRON PIPE.
3. ALL INSULATION INSTALLED.

5. ALL NECESSARY MATERIAL, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS TO PROVIDE STERILIZATION AS DEFINED UNDER A.W.W.A. C-601-81.

RELOCATION, RETAP AND RECONNECT EXISTING SERVICE BRANCHES AS PER PLAN

WHERE IT IS REQUIRED TO CONNECT A SERVICE BRANCH FROM A POINT ON THE EXISTING SERVICE LINE TO A NEW WATER MAIN, THE AKRON WATER DEPARTMENT WILL MAKE THE INSTALLATION AT NO CHARGE TO THE CONTRACTOR. THIS WORK INCLUDES FURNISHING SERVICE PIPE AND FITTINGS, ADAPTERS, CURB STOP AND BOX AND CORPORATION COCK (TAPPING SADDLE IF NECESSARY) AND PERFORMING ALL CHANGES NECESSARY TO RECONNECT.

EXCAVATION, BACKFILLING AND SURFACE RESTORATION SHALL BE PERFORMED BY THE CONTRACTOR.

BASIS OF PAYMENT SHALL BE MADE PER LINEAL FOOT ITEM 814 - RELOCATE, RETAP AND RECONNECT EXISTING SERVICE BRANCHES AS PER PLAN.

NEW WATER MAIN APPURTENANCES

WHERE CALLED FOR IN THE PLANS, CERTAIN APPURTENANCES SHALL BE PROVIDED BY THE CONTRACTORS. THE COST OF THESE APPURTENANCES SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH ITEM 814 - (ITEM) AS DESCRIBED BELOW.

THIS COST SHALL INCLUDE ALL LABOR NECESSARY TO BUILD AND INSTALL AND ALL PARTS, FITTINGS AND MATERIALS REQUIRED TO PROVIDE ANY OF THE FOLLOWING:

MANUAL AIR RELEASE (1") - AS DETAILED ON SHEET INCLUDES ALL PARTS AND MATERIALS SHOWN ON THE DETAIL DRAWING FOR MANUAL AIR RELEASE ASSEMBLY.

20"x6" BLOW-OFF DRAIN, COMPLETE

AS DETAILED ON PERTINENT PROFILE SHEETS, INCLUDES THE PROPER SIZE BLOW-OFF FITTING, A CHECK VALVE, A GATE VALVE WITH VALVE BOX, AS DETAILED ON SHEET 205 AND SUFFICIENT, DUCTILE IRON PIPE TO CONNECT THE BLOW-OFF FITTING TO THE MANHOLE, THE MANHOLE AND ENOUGH 12" CONDUIT TO MAKE CONNECTION TO THE STORM SEWER MANHOLE.

FIRE HYDRANT REMOVED AND DISPOSED OF

THE UNIT PRICE STIPULATED FOR EACH "ITEM 814 - FIRE HYDRANT REMOVED AND DISPOSED OF "SHALL CONSTITUTE FULL COMPENSATION FOR PERFORMING ALL THE REQUIREMENTS OF THIS ITEM INCLUDING EXCAVATION, REMOVING AND DISPOSING OF FIRE HYDRANT WHICH MEANS HAULING FIRE HYDRANT TO THE JOHNSON ST. GARAGE, BACKFILLING, SEEDING AND SODDING, REPAVING AND FOR THE FURNISHING OF ALL NECESSARY MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS TO MAKE THIS A COMPLETE ITEM OF WORK.

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

184
455

AKRON INNERBELT
SUM-59-0.00

MANCHESTER RD.

RUSSELL AVE.

H2-2
1001.02

H2-3
930.30

H4-1
978.75

H4-2
974.81

411 412 ℄ WEST EXPRESSWAY 413 414

SOUTH STREET

EX. 6" UNDERDRAIN

MATCH LINE STA. 415+00 SEE SHEET 185

NOTE
FOR WATER MAIN SPECIFICATIONS SEE SHEETS 178 THRU 183.

# WATER MAIN PLAN
## WEST EXPRESSWAY – 411+00 TO 415+00

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

185
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

H4-2
974.31

H4-3
965.78

H4-4
963.80

24" V.P.

C.S.

12"

SEE SHEET 184

MATCH LINE STA. 415+00

416 ℄ WEST EXPRESSWAY 417 418 419

EX. 6" UNDERDRAIN

SEE SHEET 186

MATCH LINE STA. 420+00

417

418 ℄ RAMP G

419

420

EX. 6" UNDERDRAIN

EX. 6" UNDERDRAIN

NOTE: FOR WATER MAIN SPECIFICATIONS SEE SHEET 178 THRU 183.

12" C.S. 18" C.S. 18" C.S. 18" C.S.

SOUTH STREET

W 20' W 20' W 20' W 20'

WATER MAIN PLAN
WEST EXPRESSWAY – 415+00 TO 420+00

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

186
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

H4-4
983.80

H4-5
983.44

966.4

24" V.P.
C.S.
30" V.P.
8" W.
6" G.
4" W.
3" G.
12"

MATCH LINE STA. 420+00 SEE SHEET 185

421 ℄ WEST EXPRESSWAY 422 423 424

MATCH LINE STA. 425+00 SEE SHEET 187

EX. 6" UNDERDRAIN

EX. 6" UD

NOTE: FOR WATER MAIN SPECIFICATIONS SEE SHEETS 178 THRU 183.

RAMP G

SOUTH STREET

18" 20" 30" 33" 15" (APPROX.)

WATER MAIN PLAN
WEST EXPRESSWAY – 420 + 00 TO 425 + 00

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

187
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

H4-6
966.40

H6-1
969.50

H6-2
970.0

30" V.P. C.S.

RAMP H

EX. 6" U.D.

EX. 8" U.D.

EX. 6" UNDERDRAIN

MATCH LINE STA. 425+00
SEE SHEET 182

MATCH LINE STA. 429+50
SEE SHEET 188

℄ WEST EXPRESSWAY

426 427 428 429

112 ℄ RAMP EN 113

RETAINING WALL

NOTE: FOR WATER MAIN SPECIFICATIONS SEE SHEET 178 THRU 183.

EX. 12"

(ABAN.) 36" (B.F.G.)

12" (ABAN.)

36" (B.F.G.) (ABAN.)

SOUTH STREET

WATER MAIN PLAN
WEST EXPRESSWAY - 425+00 TO 429+50

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

188
455

AKRON INNERBELT
SUM-59-0.00

H6-2
970.0

H6-3
965.31

RUSSELL AVE.

℄ RUSSELL AVE.

RAMP H

NOTE
FOR COMPLETE WATERWORKS SPECFICATIONS
SEE SHEET 178 THRU 183.

℄ BOWERY ST.

EX. 6" UNDERDRAIN

MATCH LINE STA. 429+50
SEE SHEET 187

MATCH LINE STA. 434+50
SEE SHEET 189

℄ WEST EXPRESSWAY

℄ RAMP EN

℄ SOUTH STREET

33" BRICK C.S.

WATER MAIN PLAN
WEST EXPRESSWAY 429+50 - 434+50

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

189
455

AKRON INNERBELT
SUM-59-0.00

## ITEM 814 – ESTIMATED QUANTITIES

| REF. NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-31 | 12" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. | 40 | LIN. FT. |
| W-33, W-34 | 20" BUTTERFLY VALVE WITH VICTAULIC JOINTS & VICTAULIC ADAPTERS W/ VALVE BOX COMPLETE | 2 | EACH |
| W-35 | 20" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. | 223 | LIN. FT. |
| W-38 | 12" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. | 40 | LIN. FT. |
| W-100 | VALVE & VALVE BOX REMOVED | 1 | EACH |

Completed

MATCH LINE STA. 434+50 SEE SHEET 188

MATCH LINE STA 126+00 SEE SHEET 190

MATCH LINE STA 123+50 SEE SHEET 190

B RAMP SW

B RAMP EN

C WEST EXPRESSWAY

C RUSSELL AVE.

C DART AVE.

SOUTH STREET

FOR CONTINUATION OF 20" WATER MAIN ALONG DART AVE. SEE PLAN SHEET Nº 196.

EX. 6" UNDERDRAIN

EX. 6" U.D.

36" W.L. & G.E. DUCTS

EXIST. PAVED GUTTER

EX. PIER FOOTINGS

8" W.M. (TO BE ABANDONED)

PROP. STM SEW.

40'-12" WATER MAIN DUCTILE IRON PIPE W/PUSH-ON JOINTS & FITTINGS CLASS 53 ANSI WITH LEAD JOINTS ALL CEMENT LINED.

223'-20" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS & FITTINGS CLASS 53 ANSI WITH LEAD JOINTS ALL CEMENT LINED.

REMOVE EX VALVES & BOXES, BULKHEAD PIPE OPENINGS.

40'-12" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS & FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED

12"-45° HORIZ. BEND (W-31)

12"-45° HORIZ. BEND (W-32)

12"-45° HORIZ. BEND (W-37)

12"x10" REDUCER

20"x12" REDUCER

10" W.M. (TO BE ABANDONED)

PROP 8" W.M. SEE SHT 202

FUTURE 20" W.M. BY OTHERS

FUTURE 20" W.M. BY OTHERS

NOTE:
FOR WATER MAIN SPECIFICATIONS SEE SHEET 178 THRU 183.
FOR DETAILS OF WATER MAIN WORK IN DART AVE. SEE SHEET NO. 203
FOR FITTING SIZES AND LOCATIONS SEE SHT. 203.

# WATER MAIN PLAN
## WEST EXPRESSWAY – 434+50 TO RAMP SW 126+00 & RAMP EN 123+50

FORM D.D.A.

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

190
455

AKRON INNERBELT
SUM-59-0.00

MATCH LINE STA. 126+00
SEE SHEET 182

MATCH LINE STA. 123+50
SEE SHEET 182

℄ RAMP SW

MATCH LINE STA. 127+00
SEE SHEET 181

MATCH LINE STA. 127+50
SEE SHEET 181

RAMP W-10

℄ RUSSELL AVE.

℄ RAMP EN

℄ WEST EXPRESSWAY

RAMP W-11

℄ SOUTH STREET

NOTE: FOR WATER MAIN SPECIFICATIONS
SEE SHEET 178 THRU 183.

WATER MAIN PLAN
RAMP EN 123 + 50 — 127 + 50
RAMP SW 126 + 00 — 127 + 00

FORM D D A-5

CALCULATED BY WRS DATE 10-13-82
CHECKED BY REB DATE 10-15-82

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

191
455

AKRON INNERBELT
SUM-59-0.00

#945 TAKEN
#941 TAKEN
TAKEN #935
#927 TAKEN
#923 TAKEN
#921 TAKEN
#913 TAKEN
#907 TAKEN
#903 TAKEN
#897 TAKEN
#891 TAKEN
#943 TAKEN
#930 TAKEN
#928 TAKEN
#335 TAKEN
#333 TAKEN
#324 TAKEN
#325 TAKEN
#320 TAKEN
#319 TAKEN
#316 TAKEN
#315 TAKEN
#311 TAKEN
#304 TAKEN
#302 TAKEN
#896 TAKEN
#894 TAKEN
#886 TAKEN
#882 TAKEN
#301 TAKEN
#297 TAKEN
#891 TAKEN
#887 TAKEN
#295 TAKEN

RUSSELL COURT
6" W.M. (TO BE ABANDONED)

MATCH LINE STA. 127+00
SEE SHEET 190

MATCH LINE STA. 127+00
SEE SHEET 190

MATCH LINE STA. 132+00
SEE SHEET 192

MATCH LINE STA. 131+50
SEE SHEET 192

℄ RAMP SW

℄ RAMP EN

RUSSELL AVE.

℄ WEST EXPRESSWAY

442

RAMP W-10

KENYON ST.

6" W.M. (TO BE ABANDONED)

8" SAN.

RUSSELL AVE.
STA. 59+86.35 LT. ℄
FIRE HYDRANT
REMOVED & HAULED
TO YARD
disposal

REMOVE VALVE & BOX, BULKHEAD PIPE OPENINGS

REMOVE VALVE & BOX, BULKHEAD PIPE OPENINGS

Completed

## ITEM 814 — ESTIMATED QUANTITIES

| REF. NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-125 | FIRE HYDRANT REMOVED AND DISPOSED OF | 1 | EACH |
| W-147 | VALVE & VALVE BOX REMOVED | 1 | EACH |
| W-148 | VALVE & VALVE BOX REMOVED | 1 | EACH |
| | | | |
| | | | |
| | | | |

NOTE
FOR COMPLETE WATERWORKS SPECIFICATIONS
SEE SHEET NO. 178 THRU 183 .

WATER MAIN PLAN
RAMP EN 127+50 – 131+50
RAMP SW 127+00 – 132+00

FORM D D A-5

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

192
455

AKRON INNERBELT
SUM-59-0.00

℄ RHODES AVE.

EXIST. RHODES AVE.

PROP. 16" WATER MAIN FOR PLAN SEE SHEET 198.

℄ DART AVE.

℄ RAMP SW

℄ RAMP EN

MATCH LINE STA. 132+00 SEE SHEET 191

MATCH LINE STA. 131+50 SEE SHEET 191

MATCH LINE STA. 135+50 SEE SHEET 193

KENYON ST.

G.V.M. (TO BE ABANDONED) SEE SHEET 201.

EXIST. BOULEVARD

EXIST. RHODES AVE.

PROP. 12" WATER MAIN FOR PLAN SEE SHEET 200.

NOTE:
FOR WATER MAIN SPECIFICATIONS SEE SHEET 178 THRU 183.

FOR WATER MAIN WORK IN RHODES AVE. AND DART AVE. SEE SHEET NO. 202.

WATER MAIN PLAN
RAMP EN 131+50 – 135+50
RAMP SW 132+00 – 135+50

FORM D D A-9

| F.H.WA. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

193
455

AKRON INNERBELT
SUM-59-0.00

EX. W.M. REVISED THIS AREA SEE SHEET 199

℄ BOWERY ST.

℄ RHODES AVE.

PROP. 20" WATER MAIN, FOR PLAN SEE SHEET 199.

℄ RAMP SW

℄ RAMP EN

MATCH LINE STA. 135+50 SEE SHEET 192

MATCH LINE STA. 140+50 SEE SHEET 194

THORNTON ST.

REMOVE EX. HYDRANT & VALVE BOX, BULKHEAD PIPE OPENINGS (SEE SHT. 200).

OHIO CANAL

36"W O.L. DUCTS

℄ DART EXTENSION

PROP. 12" WATER MAIN, FOR PLAN SEE SHEET 200.

℄ DART AVE.

NOTE
FOR WATER MAIN SPECIFICATIONS SEE SHEETS 178 THRU 183.

FOR WATER MAIN PROFILES RHODES AVE. AND DART AVE. SEE SHEET 202, 203 & 203A.

PROP. 12" WATER MAIN, FOR PLAN SEE SHEET 200A.

# WATER MAIN PLAN
## RAMP EN 135+50 - 140+50
## RAMP SW 135+50 - 140+50

FORM D D A-9

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

194
455

AKRON INNERBELT
SUM-59-0.00

SEE SHEET 192.

20" P.S. (Aban.)
36" B.S.
20" P.S. (Aban.)
42" B.S.
20" P.S. (Aban.)
42"

41 42 43 44

℄ RHODES AVE.

8"W.P.G.
8"W.P.G.
8"W.P.G.

12" 12"

O.R. DUCTS

51 ℄ THORNTON ST.

141 ℄ RAMP SW

143 144 ℄ INNERBELT

MATCH LINE STA. 140+50
SEE SHEET 193

MATCH LINE STA. 145+00
SEE SHEET 195

℄ RAMP EN 52

141

36" (B.G.)

53

12"

PROP. 12" WATER MAIN,
FOR PLAN SEE SHEET 200A.

12" P.S. 12" P.S. 36" P.S.

241 242 243 244

℄ DART AVE.

5'-5" ELEC. CONDUITS

5'-5" ELECT. CONDUITS

12" 12" 12" 12"

NOTE: FOR WATER MAIN SPECIFICATIONS
SEE SHEETS 178 THRU 183

# WATER MAIN PLAN
# INNERBELT 140 + 50 — 145 + 00

FORM D D A-5

| FHWA REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

195/455

AKRON INNERBELT
SUM-59-0.00

MATCH LINE STA. 145+00
SEE SHEET 194

℄ RHODES AVE.

℄ INNERBELT

℄ DART AVE.

S. B. TEMPORARY CONNECTION

N.B. TEMPORARY CONNECTION

NOTE: FOR WATER MAIN SPECIFICATIONS
SEE SHEET 178 THRU 183.

WATER MAIN PLAN
INNERBELT 145+00 – 150+00

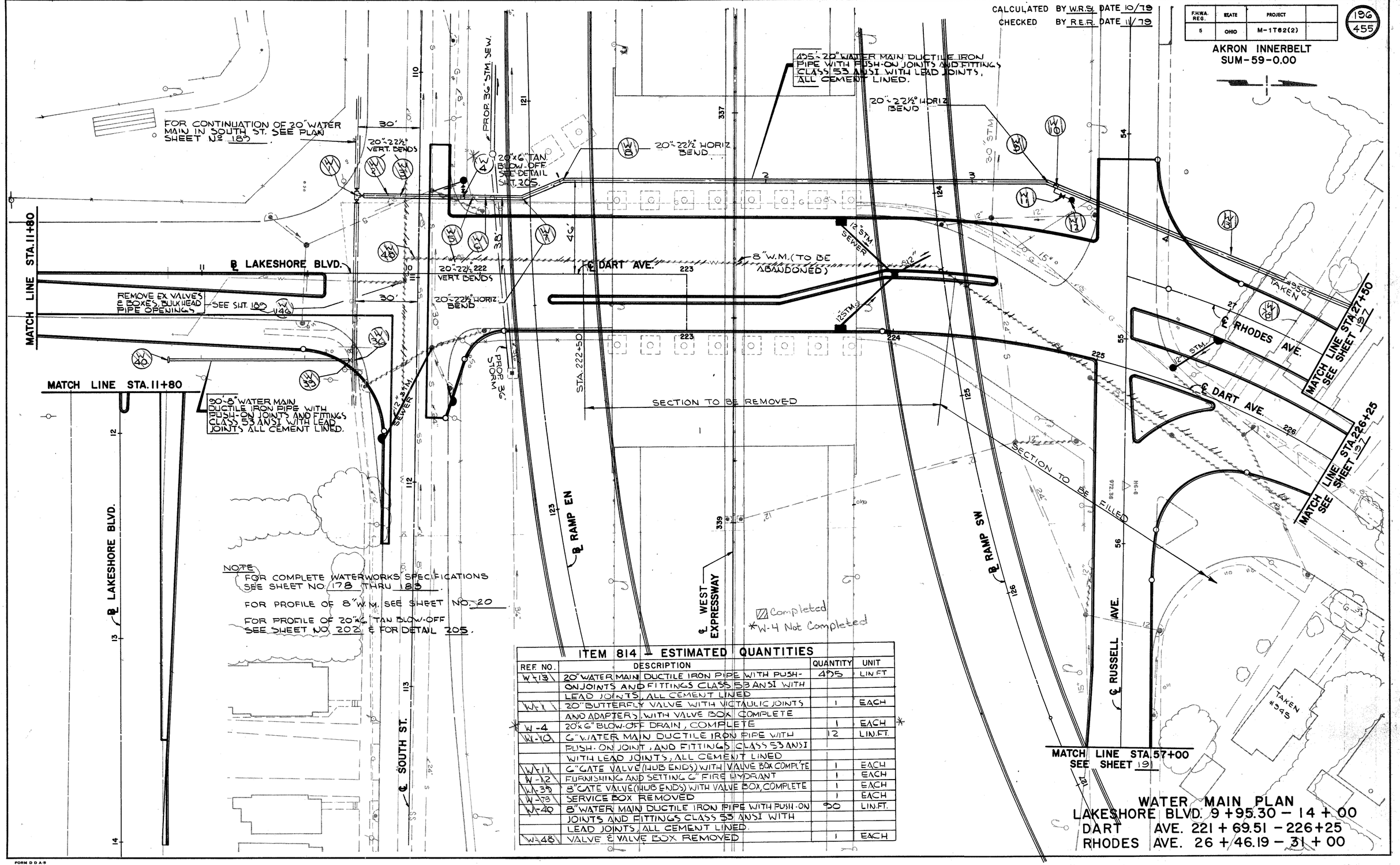
FORM D D A-5

CALCULATED BY W.R.S. DATE 10/79
CHECKED BY R.E.R. DATE 11/79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

196/455

AKRON INNERBELT
SUM-59-0.00




NOTE
FOR COMPLETE WATERWORKS SPECIFICATIONS SEE SHEET NO. 178 THRU 188.
FOR PROFILE OF 8" W.M. SEE SHEET NO. 20
FOR PROFILE OF 20" ℄ TAN BLOW-OFF SEE SHEET NO. 202 & FOR DETAIL 205.

ITEM 814 — ESTIMATED QUANTITIES

| REF. NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-13 | 20" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 425 | LIN FT |
| W-1 | 20" BUTTERFLY VALVE WITH VICTAULIC JOINTS AND ADAPTERS, WITH VALVE BOX COMPLETE | 1 | EACH |
| W-4 | 20"x6" BLOW-OFF DRAIN, COMPLETE | 1 | EACH |
| W-10 | 6" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINT, AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 12 | LIN.FT. |
| W-11 | 6" GATE VALVE (HUB ENDS) WITH VALVE BOX COMPLTE | 1 | EACH |
| W-12 | FURNISHING AND SETTING 6" FIRE HYDRANT | 1 | EACH |
| W-39 | 8" GATE VALVE (HUB ENDS) WITH VALVE BOX, COMPLETE | 1 | EACH |
| W-78 | SERVICE BOX REMOVED | 1 | EACH |
| W-40 | 8" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. | 90 | LIN.FT. |
| W-48 | VALVE & VALVE BOX REMOVED | 1 | EACH |

WATER MAIN PLAN
LAKESHORE BLVD. 9+95.30 — 14+00
DART AVE. 221+69.51 — 226+25
RHODES AVE. 26+46.19 — 31+00

FORM D D A-9

CALCULATED BY W.R.S. DATE 10/79
CHECKED BY R.E.R. DATE 11/79

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

197
455

AKRON INNERBELT
SUM-59-0.00

Completed

## ITEM 814 – ESTIMATED QUANTITIES

| REF. NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-16 | 6" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 12 | LIN.FT. |
| W-19 | 20" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 362 | LIN.FT. |
| W-17 | 6" GATE VALVE (HUB ENDS) WITH VALVE BOX, COMPLETE | 1 | EACH |
| W-18 | FURNISHING AND SETTING 6" FIRE HYDRANT | 1 | EACH |
| W-79:W-84 | SERVICE BOX REMOVED | 10 | EACH |
| W100:W-103 | SERVICE BOX REMOVED | 7 | EACH |

NOTE:
FOR COMPLETE WATERWORK SPECIFICATIONS SEE SHEETS 178 THRU 183
FOR PROFILE OF 20" WATER MAIN SEE SHEET 203.

OHIO CANAL
RUSSELL
RHODES AVE.
BOULEVARD ST.
DART AVE.
RAMP SW
AVENUE
COURT
RUSSELL
362'-20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.
20"-22½° HORIZ. BEND
20"-11¼° HORIZ. BEND
MATCH LINE STA. 27+50 SEE SHEET 196
MATCH LINE STA. 226+25 SEE SHEET 196
MATCH LINE STA. 31+00 SEE SHEET 198
MATCH LINE STA. 229+25 SEE SHEET 198
STA. 228+50
SECTION TO BE FILLED
8" W.M. TO BE ABAND.
#950 TAKEN
#954 TAKEN
#952 TAKEN
#948 TAKEN
#944 TAKEN
#940 TAKEN
#938 TAKEN
#932 TAKEN
#928 TAKEN
#922 TAKEN
#945 TAKEN
#941 TAKEN
#935 TAKEN
#927 TAKEN
#923 TAKEN
#921 TAKEN
#943 TAKEN

WATER MAIN PLAN
DART AVE. 226+25 - 229+25
RHODES AVE. 27+50 - 31+00

FORM D D A-5

CALCULATED BY W.R.S. DATE 11/79
CHECKED BY R.E.R. DATE 11/82

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

198
455

AKRON INNERBELT
SUM-59-0.00

Completed

## ITEM 814 — ESTIMATED QUANTITIES

| REF NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-20 | 20" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 459 | LIN. FT. |
| W-21 | 6" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 12 | LIN. FT. |
| W-22 | 6" GATE VALVE (HUB ENDS) W/VALVE BOX COMPLETE | 1 | EACH |
| W-23 | FURNISHING AND SETTING 6" FIRE HYDRANT | 1 | EACH |
| W-25 | 20" BUTTERFLY VALVE WITH VICTAULIC JOINTS AND ADAPTERS, WITH VALVE BOX COMPLETE | 1 | EACH |
| W-45 | FIRE HYDRANT REMOVED AND DISPOSED OF | 1 | EACH |
| W-45, W-46 | VALVE & VALVE BOX REMOVED | 2 | EACH |
| W-47 | VALVE & VALVE BOX REMOVED | 1 | EACH |
| W-16, W-24 | SERVICE BOX REMOVED | 9 | EACH |
| W-65 | 20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS ALL CEMENT LINED | 38 | LIN. FT. |
| W-66 | FURNISHING AND SETTING 6" FIRE HYDRANT | 1 | EACH |
| W-44, W-44 | SERVICE BOX REMOVED | 4 | EACH |
| W-40, W-53 | SERVICE BOX REMOVED | 5 | EACH |
| W-67 | 6" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. | 19 | EACH |
| W-69 | 6" GATE VALVE (HUB ENDS) W/VALVE BOX COMPLETE | 2 | EACH |
| W-69 | 16" BUTTERFLY VALVE WITH VICTAULIC JOINTS AND ADAPTERS, WITH VALVE BOX COMPLETE | 1 | EACH |
| W-70 | 16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS ALL CEMENT LINED | 1976 | LIN. FT. |

NOTE:
FOR COMPLETE WATERWORK SPECIFICATIONS SEE SHEETS 178 THRU 183

FOR PROFILE OF 20" W.M. SEE SHEET 202 & 203

OHIO CANAL

38'-20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED

36" W.M.

O.E. DUCTS

MATCH LINE SEE SHEET 199 STA. 36+00

20"-11¼° HORIZ. BEND

20"-45° HORIZ. BEND

20"-11¼° HORIZ. BEND

459'-20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

197'-16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED

#908½ #908 #906½ #886 #890 #896 #898 #906 #910 #912

COURT

PROP. 21" STM. SEWER

STA. 31+00 LINE SHEET 197

MATCH LINE SEE SHEET 197

FIRE HYDRANT REMOVED AND HAULED TO YARD.

20"-11¼° HORIZ. BEND

20"-11¼° HORIZ. BEND

20"-11¼° HORIZ. BEND

℄ RHODES AVE.

EXISTING RHODES AVE.

20"x16" REDUCER

16"-22½° HORIZ. BEND

20"-22½° VERT. BEND

8" W.M. (TO BE ABANDONED)

#872

BOULEVARD ST.

8" SAN. SEWER

REMOVE VALVE & VALVE BOX, BULKHEAD PIPE OPENINGS

℄ DART AVE.-233+60

12" SAN. SEWER

STA. 234+00 LINE SHEET 200

MATCH LINE SEE SHEET 200

#921 #913 #907 #903 #897 #891 #887 #883 #879 #875

RUSSELL

℄ W.M. (TO BE ABANDONED)

KENYON RUSSELL CT. & LOOP ABANDONED

RAMP SW

RAMP EN

WATER MAIN PLAN
DART AVE. 229+25 - 234+00
RHODES AVE. 31+00 - 36+00

FORM D D A-8

CALCULATED BY W.R.S. DATE 4/82
CHECKED BY RER DATE 6/82

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

199
455

AKRON INNERBELT
SUM-59-0.00

Completed

## ITEM 814 — ESTIMATED QUANTITIES

| REF NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-36 | FIRE HYDRANT ADJUSTED TO GRADE | 1 | EACH |
| W-58 | 20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 151 | LIN. FT. |
| W-60-W-61 | 20" WATER MAIN STEEL PIPE A.W.W.A. C-200 (20.00" O.D. x 0.375 WALL THICKNESS) INCLUDING ALL APPURTENANCES | 52 | LIN. FT. |
| W-58A | 30" STEEL CASING PIPE A.W.W.A C-202-64T (30.00" O.D. x 0.375" WALL THICKNESS) | 64 | LIN. FT. |
| W-54-W-55 | EXISTING VALVE BOX ADJUSTED TO GRADE | 2 | EACH |
| W-63 | 1" MANUAL AIR RELEASE ASSEMBLY, COMPLETE | 1 | EACH |

NOTE:
FOR COMPLETE WATERWORKS SPECIFICATIONS SEE SHEET NO. 78 THRU 83

FOR PROFILE OF 20" W.M. SEE SHEET NO. 208

FOR DETAILS OF 1" MANUAL AIR RELEASE ASSEMBLY SEE SHEET NO. 204

FOR DETAILS OF 20" W.M. ON STRUCTURE SEE DETAIL SHEET NO. 204

MATCH LINE SEE SHEET 192 STA. 36+00

EX. RHODES AVE.

OHIO CANAL

℄ BOWERY ST.

℄ RHODES AVE.

℄ RAMP SW

℄ RAMP EN

THORNTON ST.

EXIST. 20" W.M.

30" STEEL CASING SLEEVE

"MANUAL AIR RELEASE

O.E. DUCTS

45'-20" WATER MAIN DUCTILE IRON WITH PUSH ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED

52'-20" WATER MAIN STEEL PIPE A.W.W.A. C-200 (20.00" O.D. x 0.375" WALL THICKNESS) INCLUDING ALL FITTINGS, COUPLINGS, SUPPORT ASSEMBLIES, INSULATION AND APPURTENANCES COMPLETE.

103'-20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

20"-22½° VERT. BEND

20"-22½° HORIZ. BEND

WATER MAIN PLAN
RHODES AVE. 36 + 00 - 40 + 20.42
BOWERY ST. 38 + 25 - 40 + 20.42

FORM D D A-5

CALCULATED BY W.R.S. DATE 4/82

CHECKED BY R.E.R DATE 11/82

| FHWA REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

200
455

AKRON INNERBELT
SUM-59-0.00

EXISTING RHODES AVE.

℄ RAMP SW

℄ RAMP EN

℄ DART AVE.

℄ DART EXTENSION

BOULEVARD ST.

#872 TAKEN (W-92)

#868 TAKEN (W-93)

FIRE HYDRANT REMOVED & HAULED TO YARD (W-98)

REMOVE VALVE & BOX BULKHEAD PIPE OPENINGS (W-151)

5'30" STM. SEWER

12" SAN. SEWER

12" STM. SEWER

8" W.M. TO BE ABANDONED

E.X. 12" STM. SEWER

12" STM. SEWER

PROP. 192'-12" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

PROP 39'-8" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS ALL CEMENT LINED.

EXIST. 6' CONC. WALK

8"45° HORIZ. BEND

MATCH LINE STA. 234+00 SEE SHEET 198

16" W.M.

12" STM. SEWER

16-22½° HORIZ. BENDS

12" W.M.

18" STM. SEWER

8" SAN. SEWER

* EX. SERVICE BRANCHES TO BE RETAPPED & RECONNECTED

12" STM. SEWER

12" W.M.

12"8" REDUCER

12"45° HORIZ. BEND

EXIST. 6' CONC. WALK

PROP 112'-16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI W/LEADS JOINTS, ALL CEMENT LINED.

#871 TAKEN

#867 TAKEN

PROP 16'-16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

TAKEN #855

#851

PROP 57'-12" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED

EXISTING RHODES AVE.

* NOTE: WATER SERVICES FOR W-91-W-97A WILL BE TRANSFERRED FROM THE EXISTING 8" W.MAIN, TO BE ABANDONED, TO THE NEW 12" WATER MAIN WHEN THE NEW W.M. IS COMPLETED, TESTED AND BACTERIA TESTS ARE APPROVED. EXCAVATION OF SERVICE TRENCHES BY THE CONTRACTOR, SERVICE CONNECTION BY THE AKRON WATER DEPT., ALL AT PROJECT EXPENSE.

NOTE:

FOR COMPLETE WATERWORK SPECIFICATIONS SEE SHEETS 178 THRU 183.

FOR PROFILE OF 16" & 20" WATER MAIN SEE SHEET 202.

## ITEM 814 — ESTIMATED QUANTITIES

| REF. NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-91 | 6" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 12 | LIN. FT. |
| W-149 | VALVE & VALVE BOX REMOVED | 1 | EACH |
| W-150 | VALVE & VALVE BOX REMOVED | 1 | EACH |
| W-151 | VALVE & VALVE BOX REMOVED | 1 | EACH |
| W-152 | 16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 16 | LIN. FT. |
| W-71 | 16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 112 | LIN. FT. |
| W-77 | FURNISHING AND SETTING 6" FIRE HYDRANT | 1 | EACH |
| W-98 | FIRE HYDRANT REMOVED AND DISPOSED OF | 1 | EACH |
| W-76 | 6" GATE VALVE (HUB ENDS) W/VALVE BOX, COMPLETE | 1 | EACH |
| W-72 | 16" BUTTERFLY VALVE W/VICTAULIC JOINTS AND VICTAULIC ADAPTERS WITH VALVE BOX, COMPLETE | 1 | EACH |
| W-126-A | 8" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. | 39 | LIN. FT. |

Completed

## ITEM 814 — ESTIMATED QUANTITIES

| REF. NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-91 | 1¼" SERVICE BRANCH PLUGGED @ EXISTING MAIN | 1 | EACH |
| W-89-W-98 | SERVICE BOX REMOVED | 6 | EACH |
| W-126 | 12" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. | 192 | LIN. FT. |
| W-129 | 12" GATE VALVE (HUB ENDS) W/ADAPTERS & VALVE BOX COMPLETE. | 1 | EACH |
| W-94-W-97A | RELOCATE, RETAP, AND RECONNECT EXISTING SERVICE BRANCHES AS PER PLAN | 85 | LIN. FT. |
| W-99 | VALVE & VALVE BOX REMOVED | 1 | EACH |
| W-128 | 12" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED. | 57 | LIN. FT. |

## WATER MAIN PLAN

DART AVE. 234 + 00.00 - 238 + 00

DART EXT. 234 + 66.45 - 237 + 58.86

FORM D D A-5

CALCULATED BY W.R.S. DATE 10/79
CHECKED BY R.E.R. DATE 11/82

| FHWA REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

201
455

AKRON INNERBELT
SUM-59-0.00

NOTE: 1
FOR COMPLETE WATERWORK SPECIFICATIONS SEE SHEETS 178 THRU 183.

☑ Completed

## ITEM 814 - ESTIMATED QUANTITIES

| REF. NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| W-107 | 6" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED | 21 | LIN. FT. |
| W-101 | 6" GATE VALVE (HUB ENDS) W/VALVE BOX | 1 | EACH |
| W-108 | FURNISHING AND SETTING 6" FIRE HYDRANT | 1 | EACH |
| W-100-106 | 1 ½" SERVICE BRANCH PLUGGED @ EXIST. MAIN | 7 | EACH |
| W-100-106 | SERVICE BOX REMOVED | 7 | EACH |
| W-109 | ITEM SPECIAL - RECONNECT EXISTING 16" AND 6" WATER LINES | LUMP | LUMP |

TAKEN #295
TAKEN
#291 TAKEN
#887 TAKEN
#285 TAKEN
#883 TAKEN
#277
#275
#1158
#1154
#1150
#854
#886 TAKEN
#880 TAKEN
#882 TAKEN
#878 TAKEN
#874 TAKEN
#872 TAKEN
#870 TAKEN
TAKEN #868
#875
#871
#867
TAKEN #1112
TAKEN #1116
TAKEN #1124
TAKEN #1111
#1119 TAKEN
#1123 TAKEN
#1127
#856

RUSSELL AVENUE
KENYON STREET
RHODES AVENUE
LA/RW

6" W TO BE ABANDONED
8" SAN. SEWER
16" W
8" SAN.
18" STM. SEWER
6" SAN. SEWER
12" W
6" W
8" SAN.
16" G
4" G
5' 18" STM SEWER
1½" G
LA

W-101 TAKEN #1116
W-108 TAKEN #1124
W-100 TAKEN #1112
W-108 TAKEN #1111
W-100 TAKEN #1119
W-104 TAKEN #1123
W-108 TAKEN #1127
W-109

RUSSELL AVE.
STA. 63+00, 31' RT. ℄
CUT EX. 6" W.M. & CONNECT 6"x90° HORIZ. BEND, W/CONC. THRUST BLOCK, 6" GATE VALVE, WITH VALVE BOX, 21'-6" D.I. PIPE, 6" FIRE HYDRANT

PROP. 20" W.M.
SEE SHT. 200.

Reconnect Existing 16" Water Line And Existing 6" Water Line As Per Details Shown On This Sheet. All Costs Involved In Removing The Existing Connection And Reconnecting The Existing 16" And 6" Water Lines Shall Be Included In The Lump Sum Price Bid For Item Special, Reconnect Existing 16" And 6" Water Lines.

Exist. Valve
3'-6" Ductile Iron Pipe, Class 53
Exist. Hyd. Tee
6" Solid Sleeve
6"-22½° Bend
6"x24" Offset (MJ & PE)
Exist. 6" W.M.
6" Solid Sleeve
6"-22½° Bend
3'-6" Ductile Iron Pipe, Class 53
Exist. 16" W.M.

WATER MAIN PLAN
EXISTING RHODES AVENUE

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

202
455

CALCULATED BY W.R.S. DATE 4/82
CHECKED BY R.E.R. DATE 11/82

# AKRON INNERBELT
## SUM-59-0.00

BEGIN 20" WATER MAIN
W STA. 0+64 = RHODES AVE. STA. 37+98.5±, 1'RT. ℄
P.H.I. HA 28°30'±, DEFLECT JOINTS & USE 20"-22½° HORIZ. BEND W/CONC. THRUST BLOCK. REMOVE EXIST 20"x16" REDUCER & CONNECT 20"-22½° HORIZ. BEND W/ 3'-20" SOLID D.I. NIPPLE W/ADAPTERS

END D.I. PIPE, BEGIN STEEL PIPE
W STA. 1+60.86 = RHODES AVE.
STA. 36+29.54, 1.5'RT. ℄
CONNECT 20"D.I. PIPE TO 20" STEEL PIPE WITH DRESSER REDUCING COUPLING-STYLE 62

END STEEL PIPE, BEGIN D.I. PIPE
W STA. 2+12.86 = RHODES AVE.
STA. 36+47.54, 1.5'RT. ℄
CONNECT 20" STEEL PIPE TO 20"D.I. PIPE WITH DRESSER REDUCING COUPLING-STYLE 62

52'-20" WATER MAIN
STEEL PIPE A.W.W.A. C-200
(20.00" O.D. x 0.375" WALL THICKNESS) INCLUDING ALL FITTINGS COUPLINGS, SUPPORT ASSEMBLIES INSULATION AND APPURTENANCES COMPLETE (FOR DETAILS SEE SHT. 204.

W STA. 2+47.57 = RHODES AVE. STA 36+12.83, 1.5'RT. ℄
1"x1" CORP. COCK-HAND OPERATED AIR RELEASE ASSEMBLY-(SEE DETAIL ON SHEET NO. 204.)

W STA. 3+65 = DART AVE. STA 233+60.84'LT. ℄
16" BUTTERFLY VALVE W/VICTAULIC JTS. & ADAPTERS W/VALVE BOX COMPLETE; ONE 16"x6" TEES SPACED 6' EACH SIDE OF 16" VALVE W/CONC THRUST BLOCKS; 100'-D.I. PIPE, 2-16" GATE VALVES W/ VALVE BOXES, 6"-D.I. HORIZ. BEND, 6"x6" TEE & NEW 6" FIRE HYDRANT. SEE PLAN SHEET 138.

103'-20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED

℄ RHODES AVE.
PROP. GRADE
EXIST. 20" WATER MAIN
NORTH ABUT.
OHIO CANAL
SOUTH ABUT.
W STA. 2+43.07
END 30" STEEL CASING SLEEVE
W STA. 1+29.04
BEGIN 30" STEEL CASING SLEEVE
EX. O.E. DUCTS
EX. 36" W.M.

87.14'-20" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED
EXIST. GRADE
6"G 30"x6" TEE

W STA. 3+06
RHODES AVE STA. 35+61.7'RT. ℄
PHI HA 22½°-16"-22½° HORIZ. BEND W/CONC THRUST BLOCK
W STA. 3+04
20"x16" REDUCER

100'-16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

FOR CONTINUATION OF 20" W.M. SEE THIS SHEET.

W STA. 1+17.88 = RHODES AVE. STA. 37+41.96, 1.5'RT. ℄
P.V.I. VA 22½°-20"-22½° VERT. BEND W/CONC. ANCHOR

W STA. 1+22.75 = RHODES AVE. STA. 37+36.65, 1.5'RT. ℄
P.V.I. VA 22½°-20"-22½° VERT. BEND W/CONC. ANCHOR

W STA. 2+53.97 = RHODES AVE. STA. 36+02.43, 1.5'RT. ℄
P.V.I. VA 22½°-20"-22½° VERT. BEND W/CONC. ANCHOR

W STA. 2+65.57 = RHODES AVE. STA. 35+97.12, 1.5'RT. ℄
P.V.I. VA 22½°-20"-22½° VERT. BEND W/CONC. ANCHOR

W STA. 2+80 = RHODES AVE. STA. 35+85.15'RT. ℄
PHI 11¼°-20"-11¼° HORIZ. BEND W/CONC. THRUST BLOCK

W STA. 3+00 = RHODES AVE. STA. 35+64.6'RT. ℄
20"x20"x16" TEE, W/CONC. THRUST BLOCK

SOUTH ST.
FOR PROFILE 20" W.M. SEE SHT. 203.
PROP. GRADE
EXIST. GRADE
20"-8" DUCTILE IRON PIPE W/PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI W/LEAD JOINTS ALL CEMENT LINED.
8" WATER MAIN - LAKESHORE BL'V'D
FOR PLAN SEE SHT. 196

## 16" & 20" WATER MAIN - RHODES AVE.

SCALE: HORZ: 1"=20'-0"
VERT: 1"=20'-0"

W STA. 5+85 = DART AVE. STA. 234+86.18'RT. ℄
PHI. HA 22½°-16"-22½° HORIZ. BEND W/CONC. THRUST BLOCK

W STA. 5+58 = DART AVE. STA. 234+60.7'RT. ℄
P.H.I. HA 22½°-16"-22½° HORIZ. BEND W/CONC. THRUST BLOCK

END 16" WATER MAIN
W STA. 6+10 =
DART AVE. STA. 235+11.18'RT. ℄
16"x16" TEE, WITH CONC. THRUST BLOCK

EXIST. 8" W.M.
DART AVE. ℄
EXIST. GRADE
PROP. GRADE - DART AVE.
FOR CONTINUATION SEE THIS SHEET
PROP. 12" STM. SEWER ELEV. = 912.76
FOR CONTINUATION OF 12" W.M. SEE SHEET NO. 203A.
EX. 8" SAN. SEWER ELEV. = 961.10

209'-16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

W STA. 4+58 = DART AVE. STA. 233+60.7'RT. ℄
PHI HA 90°-16"-90° HORIZ. BEND W/CONC. THRUST BLOCK

FOR CONTINUATION OF 16" W.M. IN EXIST. RHODES SEE THIS SHEET.

W STA. 5+88 = DART AVE. STA. 234+89.18'RT. ℄
16"x16"x6" TEE, W/CONC. THRUST BLOCK
8'-6" D.I. PIPE, 6" GATE VALVE, W/VALVE BOX, 6" FIRE HYDRANT

## 16" WATER MAIN - CONT. - RHODES AVE. TO DART AVE.

NOTE: PROPOSED WATER MAIN SHOULD BE LAID WITH AXIS OF PIPE 5.0 FT. BELOW GRADE OF STREET UNLESS OTHERWISE SHOWN. WHERE CONFLICTS ARISE WITH OTHER UTILITIES, HORIZ. AND VERT. JOINT DEFLECTIONS MAY BE USED TO ACHEIVE ALIGNMENT, AS DIRECTED BY THE ENGINEER.

FOR COMPLETE WATER MAIN SPECIFICATIONS SEE SHEETS 178 - 183.

FOR WATER MAIN QUANTITIES SEE SHEET 177

16"-W STA. 6+09 = DART AVE. STA. 235+11.18'RT. ℄
16" x 16" TEE, W/CONC. THRUST BLOCK

W STA. 0+02.5 = DART AVE. STA. 235+11.20.5'RT. ℄
16" BUTTERFLY VALVE W/VICTAULIC J'TS. & ADAPTERS W/VALVE BOX COMPLETE

EXIST. GRADE
EXIST. 16" W.M.

W STA. 0+15 = DART AVE. STA. 235+11.38'RT. ℄
CUT EXIST. 16" W.M. & CONNECT NEW W/3'-16" SOLID SLEEVE & ADAPTERS

16'-16" WATER MAIN DUCTILE IRON WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

## 16" WATER MAIN - EX. RHODES AVE.

* THE ELEVATION IS UNKNOWN ON THE EXISTING 16" WATER MAIN IN RHODES AVE. PRECAUTIONARY MEASURES SHOULD BE TAKEN BEFORE PROPOSED WORK BEGINS. THE EXISTING WATER MAIN SHOULD BE UNCOVERED AND THE ELEVATION VERIFIED PRIOR TO CONSTRUCTION.

20"W STA. 0+51
30"x16" STA. 110+60.2'LT. ℄
20"x6" TAN. BLOW-OFF

SOUTH ST. STA. 110+52.2'LT. ℄
STANDARD WATER MANHOLE
TOP ELEV. = 974.8

17'-12" CONDUIT TYPE B 706.01, 706.02 OR 706.06 W/ 706.11 OR 706.12 JOINTS @ 1.00% IN-INV. = 928.84, OUT-INV. = 928.67

SOUTH ST. STA. 110+57.5'LT. ℄
EXIST. STORM MANHOLE - CONNECT 12" DRAIN, INV. = 928.67 FROM NEW M.H.

10'-6" DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

6" CHECK VALVE
6" GATE VALVE W/VALVE BOX

STA. 111+27.2'LT. ℄ LAKESHORE BL'V'D
40"-BLUE CLAD W/CLAMPS & CONC PIER

6" BLOW-OFF DRAIN
DART AVE. & SOUTH ST.
FOR PLAN SEE SHT. 196.

## WATER MAIN PROFILES

AA B/P# 71942R

| | | | |
|---|---|---|---|
| CALC. BY. W.R.S. DATE 4/82 | M-1T82(2) | OHIO | 203 |
| CHKD. BY. R.E.R. DATE 11/82 | | F.H.W.A. REGION 5 | |

AKRON INNERBELT
SUM-59-0.00

W STA. 0+00 = SOUTH ST. STA. 110+60, 30' RT. ℄
20"x20" TEE W/CONC. THRUST BLOCK
20" BUTTERFLY VALVE W/VICTAULIC JOINTS & ADAPTERS, W/VALVE BOX

W STA. 0+15 = SOUTH ST. STA. 110+60, 15' RT. ℄
P.V.I. VA 22½°, 20'-22½° VERT. BEND W/CONC. ANCHOR

W STA. 0+51 = SOUTH ST. STA. 110+60, 21' LT. ℄
20"x6" TAN. BLOW-OFF, 10'-6" D.I. PIPE CL. 53
1-6" GATE VALVE W/VALVE BOX, 1-6" CHECK VALVE
1-MANHOLE (SEE DETAIL SHEET NO. 203.
17'-12" COND. TYPE B, 706.01, 706.02 OR 706.08
W/706.11 OR 706.12 JOINTS.

EX. 6" SAN. SEWER
℄ SOUTH ST.
EX. 12" STORM ℞ 308.2
EX. 30" STORM ℞ 308.2
CLEAR. 6" MIN.
EX. 12" PIPE (TO BE ABAN)
EXIST. GRADE
PROP. GRADE
℄ RUSSELL AVE.
6" U.D.

W STA. 0+80 = DART AVE. STA. 222+38.58 LT. ℄
P.H.I. HA 22½°, 20'-22½° HORIZ. BEND W/CONC. THRUST BLOCK

W STA. 1+01.5± = DART AVE. STA. 222+40.46' LT. ℄
P.H.I. HA 22½°, 20'-22½° HORIZ. BEND, W/CONC. THRUST BLOCK

600'-20" WATER MAIN DUCTILE IRON PIPE W/PUSH-ON JOINTS & FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

W STA. 5+20 = DART AVE. STA. 226+18.725 = LT. ℄
P.H.I. HA = 22½°, 20'-22½° HORIZ. BEND W/CONC. THRUST BLOCK

FOR CONTINUATION SEE PROFILE BELOW

W STA. 0+21 = SOUTH ST. STA. 110+60, 10' RT. ℄
P.V.I. VA 22½°, 20'-22½° VERT. BEND W/CONC. ANCHOR

W STA. 0+76 = SOUTH ST. STA. 110+60, 46' LT. ℄
P.V.I. VA 22½°, 20'-22½° VERT. BEND W/CONC. ANCHOR

W STA. 0+70 = SOUTH ST. STA. 110+60, 40' LT. ℄
P.V.I. VA 22½°, 20'-22½° VERT. BEND W/CONC. ANCHOR

30" STORM SEWER ℞ 303.4

W STA. 3+36.5± = DART AVE. STA. 224+66.80' LT. ℄
P.H.I. HA = 22½°, 20'-22½° HORIZ. BEND W/CONC. THRUST BLOCK

W STA. 3+41 = DART AVE. STA. 224+66, 70.5' LT. ℄
20"x20"x6" TEE W/CONC. THRUST BLOCK
12'-6" D.I. PIPE, 6" GATE VALVE W/VALVE BOX, 6"-90° HORIZ. BEND, NEW 6" FIRE HYDRANT

DART AVE. & RHODES AVE.
20" WATER MAIN
FOR PLAN SEE SHT. 196.

W STA. 7+53 = DART AVE. STA. 228+24.62' LT. ℄
20"x20"x6" TEE, W/CONC. THRUST BLOCK,
12'-6" D.I. PIPE, 6" GATE VALVE W/VALVE BOX,
6"-90° HORIZ. BEND, NEW 6" FIRE HYDRANT

EXIST. GRADE
PROP. GRADE
6" CLEAR. MIN.
PROP. 21" STM. SEWER ℞ - 266.82
EX. 24" STM. SEWER (ABANDONED)

600'-20" WATER MAIN DUCTILE IRON PIPE W/PUSH-ON JOINTS & FITTINGS CLASS 53 ANSI WITH LEAD JOINTS, ALL CEMENT LINED.

W STA. 10+23 = RHODES AVE. STA. 33+38' 20.5' LT. ℄
20"x20"x6" TEE W/CONC. THRUST BLOCK
12'-6" D.I. PIPE, 6" GATE VALVE W/VALVE BOX & NEW 6" FIRE HYDRANT.

W STA. 11+80 = RHODES AVE. STA. 34+31.17' LT. ℄
P.H.I. HA 11¼°, 20'-11¼° HORIZ. BEND WITH CONC. THRUST BLOCK

W STA. 6+24 = DART AVE. STA. 227+68, 62' LT. ℄
P.H.I. HA = 9°, USE 20'-11¼° HORIZ. BEND W/CONC. THRUST BLOCK

W STA. 11+32 = RHODES AVE. STA. 33+60, 17' LT. ℄
P.H.I. HA 11¼°, 20'-11¼° HORIZ. BEND WITH CONC. THRUST BLOCK

W STA. 11+02 = RHODES AVE. STA. 33+46, 0 LT. ℄
P.H.I. HA 11¼°, 20'-11¼° HORIZ. BEND WITH CONC. THRUST BLOCK

FOR CONTINUATION SEE PROFILE BELOW

BEGIN RELOC. WATER MAIN
W STA. 0+00 = SOUTH ST. STA. 109+17, 4.5± RT. ℄
REMOVE EXIST. 12"x10" REDUCER AND CONNECT TO EXIST. 12" W.M. W/3-12" D.I. SOLID NIPPLE W/ADAPTERS, P.H.I. HA 45° 12"-45° HORIZ. BEND W/CONC. THRUST BLOCK

223'-20" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS & FITTINGS CLASS 53 ANSI WITH LEAD JOINTS ALL CEMENT LINED.

END RELOC. WATER MAIN
W STA. 3+04 = SOUTH ST. STA. 111+34.5, 5.5± RT. ℄
CUT EXIST. 10" W.M., P.H.I. HA 45° CONNECT 12"-45° HORIZ. BEND W/CONC. THRUST BLOCK, 12"x10" REDUCER & 3'-10" D.I. SOLID NIPPLE W/ADAPTERS

W STA. 0+39 = SOUTH ST. STA. 109+43.30' RT. ℄
P.H.I. HA 45° 12"-45° HORIZ. BEND W/CONC. THRUST BLOCK

EXIST. 12" STORM SEWER ℞ - 258.55

℄ LAKESHORE BLVD.
EX. 8" W.M. (TO BE ABAND)

W STA. 2+30 20"x20"x8" TEE W/CONC. THRUST BLOCK

W STA. 2+64± 20"x12" REDUCER

EX. 12" W.M.
EXIST. GROUND PROFILE
20"x20" TEE
4" GAS
EXIST. 10" W.M.
100'± DEFLECT PIPE JTS.

W STA. 0+41.5± 20"x12" REDUCER

W STA. 1+58 = SOUTH ST. STA. 110+62.30' RT. ℄
20" BUTTERFLY VALVE W/VICTAULIC JOINTS & ADAPTERS & VALVE BOX COMPLETE

40'-12" WATER MAIN DUCTILE IRON PIPE W/PUSH-ON JTS & FITTINGS CLASS 53 ANSI WITH LEAD JTS ALL CEMENT LINED.

W STA. 1+53 = SOUTH ST. STA. 110+57.30' RT. ℄
20" BUTTERFLY VALVE W/VICT. JTS & ADAPTERS & VALVE BOX, COMPLETE.

40'-12" WATER MAIN DUCTILE IRON PIPE WITH PUSH-ON JOINTS & FITTINGS CLASS 53 ANSI WITH LEAD JOINTS ALL CEMENT LINED.

W STA. 2+67 = SOUTH ST. STA. 111+71, 30' RT. ℄
P.H.I. HA 45° 12"-45° HORIZ. BEND W/CONC. THRUST BLOCK

RELOC. 20" WATER MAIN
SOUTH ST.
FOR PLAN SEE SHT. 196.

W STA. 12+93 = RHODES AVE. STA. 35+50.8 LT. ℄
P.H.I. HA 12° 30', 20'-11¼° BEND WITH CONC. THRUST BLOCK (DEFLECT JOINTS TO ACHIEVE ALIGNMENT)

116'-20" WATER MAIN DUCTILE IRON PIPE W/PUSH-ON JOINTS & FITTINGS CLASS 53 ANSI WITH LEAD JOINTS ALL CEMENT LINED

PROP. GRADE
EXIST. GRADE
℄ RHODES AVE.

W STA. 13+35 = RHODES AVE. STA. 35+64.54' RT. ℄
20" BUTTERFLY VALVE W/HYDRAULIC ENDS & ADAPTERS W/VALVE BOX COMPLETE

W STA. 13+10 = RHODES AVE. STA. 35+64 ℄
P.H.I. HA 45° 20'-45° HORIZ. BEND, WITH CONC. THRUST BLOCK.

W STA. 13+16 = RHODES AVE. STA. 35+65.6' RT. ℄
20"x20" TEE W/CONC. THRUST BLOCK

DART AVE. & RHODES AVE
20" WATER MAIN

NOTE: PROPOSED WATER MAIN SHOULD BE LAID WITH AXIS OF PIPE 5.0FT. BELOW GRADE OF STREET UNLESS OTHERWISE SHOWN. WHERE CONFLICTS ARISE WITH OTHER UTILITIES, HORIZ. AND VERT. JOINT DEFLECTIONS MAY BE USED TO ACHIEVE ALIGNMENT, AS DIRECTED BY THE ENGINEER.

FOR COMPLETE WATER MAIN SPECIFICATIONS SEE SHEETS 178-183.

FOR WATER MAIN QUANTITIES SEE SHEET 177.

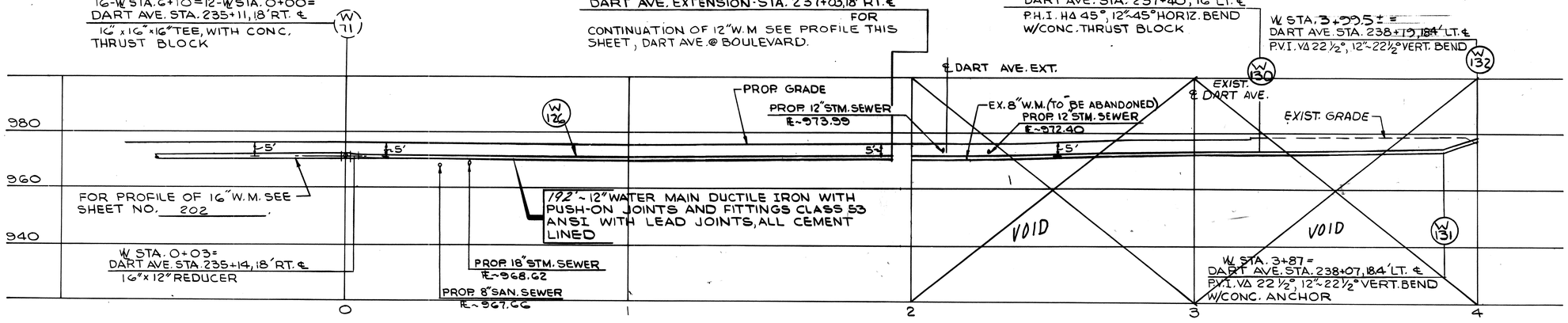
WATER MAIN PROFILES

CALCULATED BY W.R.S. DATE 4/82
CHECKED BY R.E.R. DATE 11/82

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

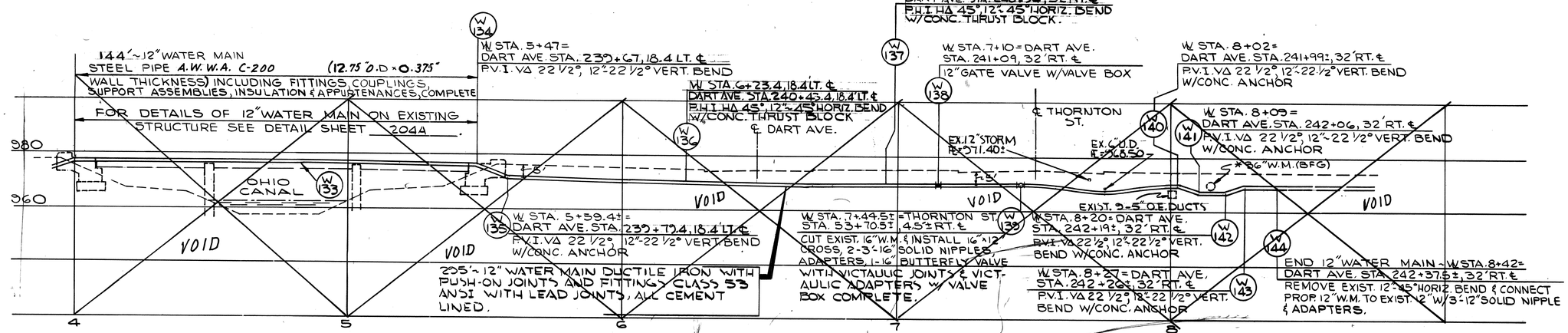
2034
455

**AKRON INNERBELT**
**SUM-59-0.00**



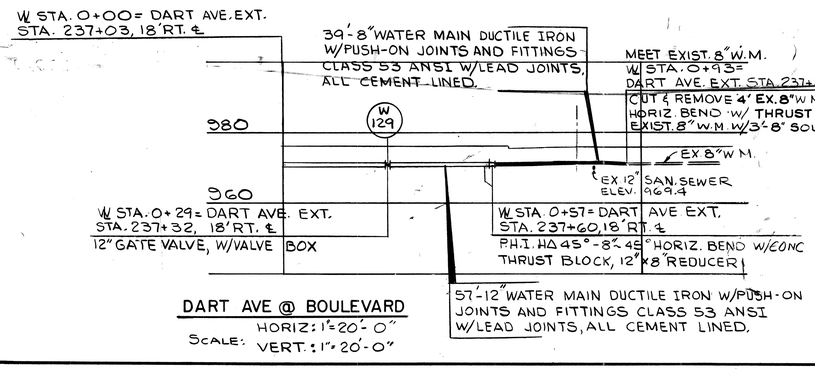

## 12" WATER MAIN — DART AVE.

SCALE: HORZ: 1"=20'-0"
VERT: 1"=20'-0"




## 12" WATER MAIN — DART AVE.

SCALE: HORIZ.: 1"=20'-0"
VERT.: 1"=20'-0"




DART AVE @ BOULEVARD
HORIZ: 1"=20'-0"
SCALE: VERT.: 1"=20'-0"

* THE ELEVATION IS UNKNOWN ON THE EXISTING 36" RAW WATER MAIN (BFG) IN THORNTON ST. PRECAUTIONARY MEASURES SHOULD BE TAKEN BEFORE PROPOSED WORK BEGINS, THE EXISTING WATER MAIN SHOULD BE UNCOVERED AND THE ELEVATIONS VERIFIED PRIOR TO CONSTRUCTION.

NOTE: PROPOSED WATER MAIN SHOULD BE LAID WITH AXIS OF PIPE 5.0FT. BELOW GRADE OF STREET UNLESS OTHERWISE SHOWN. WHERE CONFLICTS ARISE WITH OTHER UTILITIES, HORIZ. AND VERT. JOINT DEFLECTIONS MAY BE USED TO ACHEIVE ALIGNMENT, AS DIRECTED BY THE ENGINEER.

FOR COMPLETE WATER MAIN SPECIFICATIONS SEE SHEETS 178 THRU 183.

FOR WATER MAIN QUANTITIES SEE SHEET 177.

FOR WATER MAIN DETAILS SEE SHEET 204.

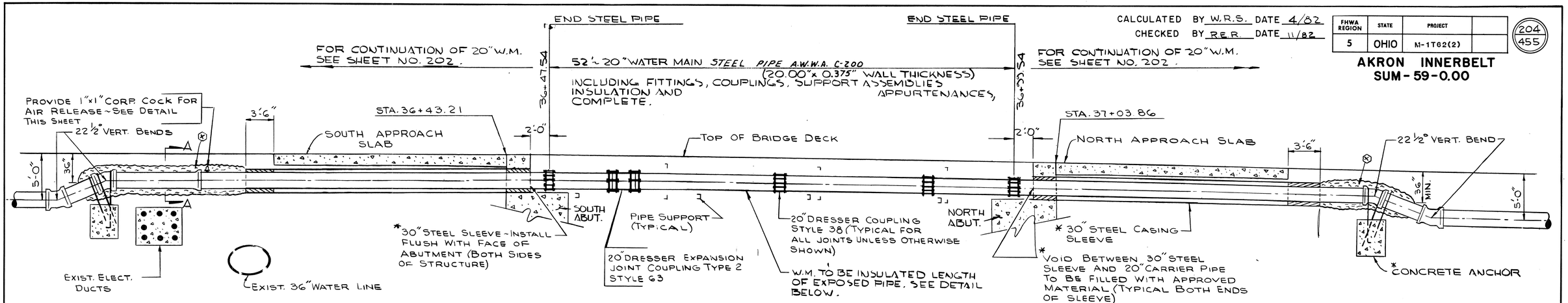
# WATER MAIN PROFILES

CALCULATED BY W.R.S. DATE 4/82
CHECKED BY R.E.R. DATE 11/82

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

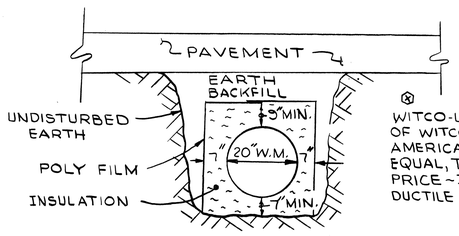
(204/455)

**AKRON INNERBELT**
**SUM-59-0.00**




*TYPICAL - BOTH ENDS OF BRIDGE

NOTE: 30" STEEL CASING SLEEVE SHALL BE INSTALLED TO PREVENT FORMATION OF A WATERWAY UNDER ROADWAY AND WITH AN EVEN BEARING THROUGH OUT ITS LENGTH AND SLOPE TO ONE END.



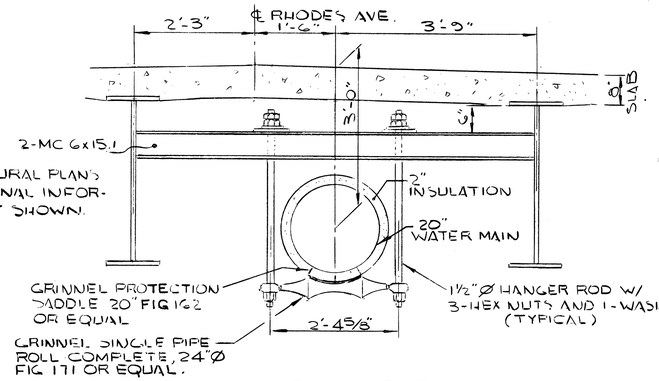

SECTION A-A
POURED INSULATION/LESS 36" COVER

⊗ WITCO-LITE BY THE PIONEER DIVISION OF WITCO CHEMICAL, GILSO-GUARD BY THE AMERICAN GILSONITE COMPANY OR APPROVED EQUAL, TO BE INCLUDED IN THE BID PRICE - ITEM 814 - 20" WATER MAIN DUCTILE IRON PIPE.

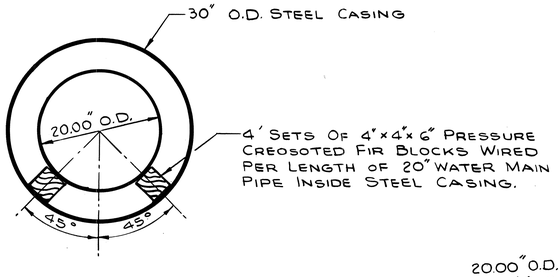
## 20" WATER MAIN - RHODES AVE. STRUCTURE

SCALE: 1" = 5'-0"

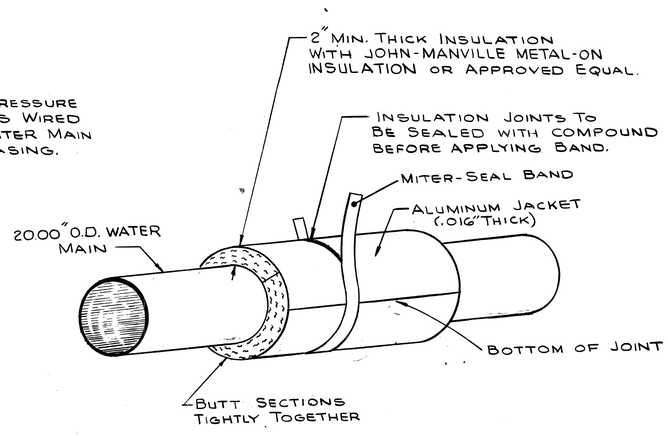
FOR WATER MAIN SPECIFICATIONS SEE SHEETS 178 - 183.



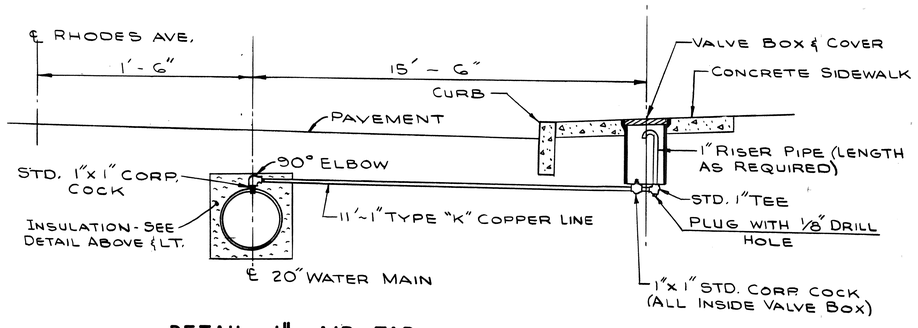

PIPE SUPPORT DETAILS
NOT TO SCALE




DETAIL 20" W.M SET IN STEEL SLEEVE CASING
SCALE: 1" = 1'-0"




DETAIL - PIPE INSULATION ON BRIDGE
NO SCALE




DETAIL 1" AIR TAP
HAND OPERATED AIR RELEASE ASSEMBLY
NOT TO SCALE

**WATER MAIN DETAILS**

| FHWA REG | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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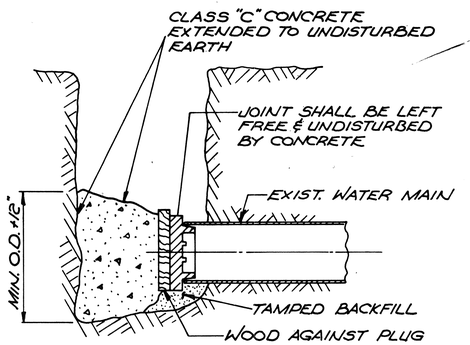
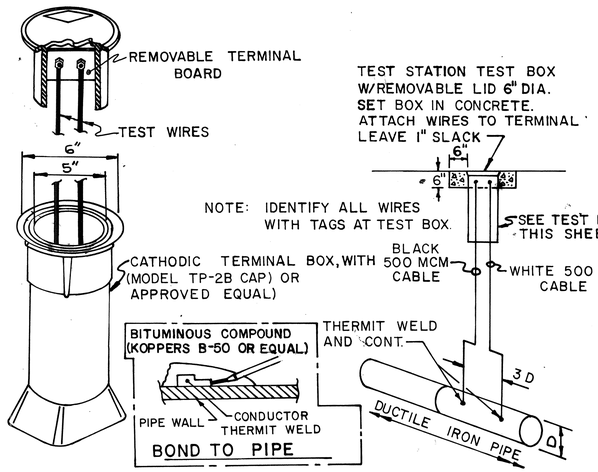
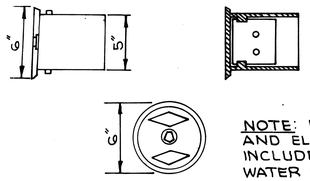



## DETAIL
## REACTION BACKING AT PLUG OR CAP

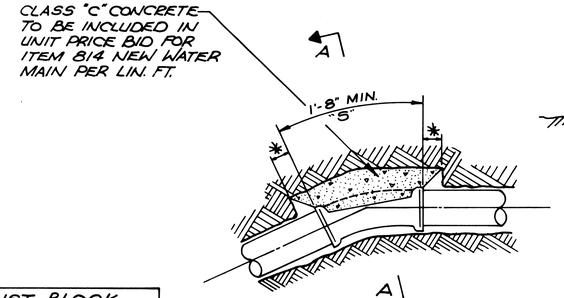
CLASS "C" CONCRETE TO BE INCLUDED IN UNIT PRICE BID FOR ITEM "WATER MAIN, CUT & PLUG" PER EACH.



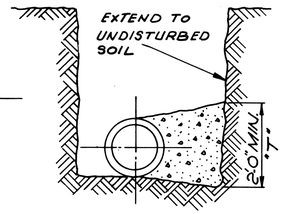

## TEST STATION DETAIL




NOTE: PAYMENT FOR ELECTROLYSIS BONDS AND ELECTROLYSIS TEST TAPS SHALL BE INCLUDED IN PAYMENT FOR RESPECTIVE WATER MAIN PIPE.




NOTE: JOINTS SHALL NOT BE OBSTRUCTED BY CONCRETE.




## SECTION A-A

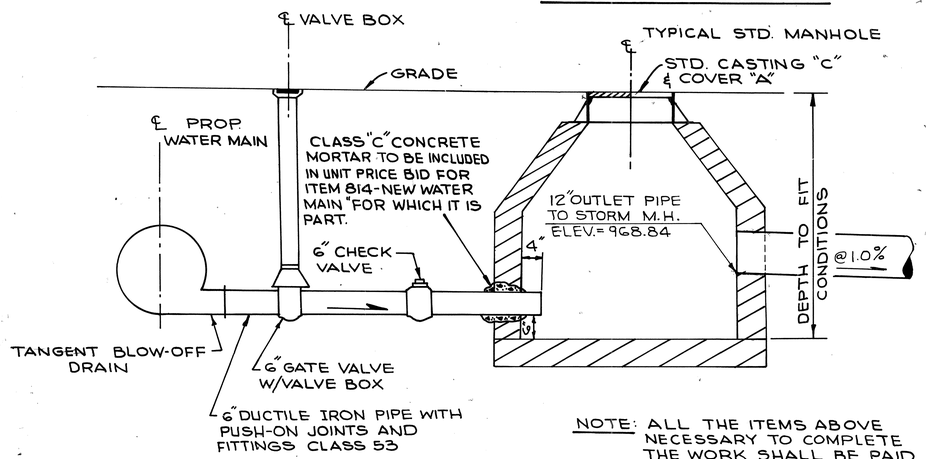
## DETAIL
## HORIZ. CONCRETE THRUST BLOCK

TO BE USED WHERE REACTION BACKING IS REQUIRED FOR BEND.

| THRUST BLOCK | | | |
|---|---|---|---|
| PIPE SIZE | BEND ANGLE | DIMENSIONS "S" | DIMENSIONS "T" |
| | | | |
| | | | |
| 6" | 90° | 1'-8" | 2'-0" |
| | | | |
| 8" | 11¼° | 1'-8" | 2'-0" |
| 8" | 22½° | 1'-8" | 2'-0" |
| 8" | 45° | 1'-8" | 2'-0" |
| 8" | 90° | 1'-8" | 1'-8" |
| | | | |
| 12" | 22½° | 2'-0" | 2'-3" |
| 20" | 22½° | 2'-0" | 2'-3" |

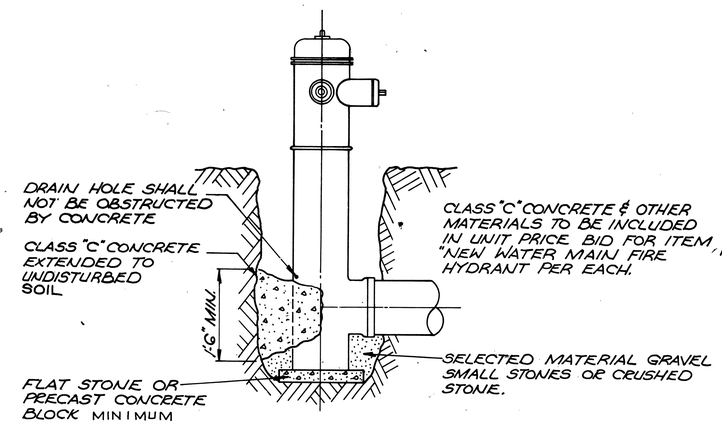
| ANCHORAGE BLOCK | | | | |
|---|---|---|---|---|
| PIPE SIZE | BEND ANGLE | DIMENSIONS "X" | DIMENSIONS "Y" | DIMENSIONS "Z" |
| | | | | |
| 12" | 22½° | 2'-6" | 3'-0" | 3'-0" |
| 20" | 22½° | 3'-0" | 3'-9" | 3'-9" |

## TEST STATION TEST BOX

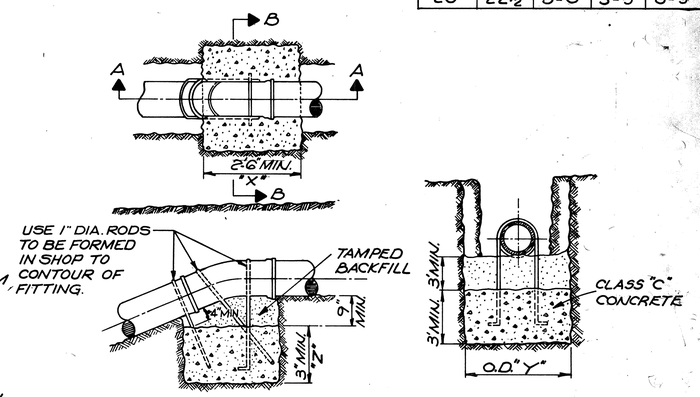



NOTE: ALL THE ITEMS ABOVE NECESSARY TO COMPLETE THE WORK SHALL BE PAID FOR IN "ITEM 814-6" BLOW-OFF DRAIN, COMPLETE" FOR WHICH IT IS A PART.

## 6" BLOW-OFF DRAIN DETAILS
NO SCALE




## DETAIL
## FIRE HYDRANT SETTING




## SECTION A-A

## SECTION B-B

## DETAIL
## REACTION ANCHORAGE

TO BE USED WHERE REACTION BACKING IS REQUIRED FOR VERTICAL BENDS
NO SCALE

# TRAFFIC CONTROL GENERAL NOTES

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS

REFERENCES TO SUPPLEMENTAL SPECIFICATIONS 857, 858, 859, 957, 958, AND 959 ON THE TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS IN THESE PLANS SHALL BE CONSIDERED TO READ AS RESPECTIVE REFERENCES TO ITEMS 630, 631, 632, 730, 731, AND 732.

614 TEMPORARY MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS

INCIDENTAL TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC IN ACCORDANCE WITH 614.03, EXISTING TRAFFIC SIGNALS AT THE INTERSECTION(S) OF LAKESHORE BOULEVARD AND SOUTH STREET, RUSSELL AVENUE AND DART AVENUE (BOULEVARD STREET) SHALL BE TEMPORARILY MAINTAINED UNTIL THE NEW TRAFFIC SIGNAL INSTALLATION IS IN OPERATION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL INSTALLATIONS UNDER THE FOLLOWING CONDITIONS:

A) EXISTING SIGNAL INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACT TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURBS THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

B) NEW SIGNAL INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE NORMAL MAINTENANCE OF EXISTING SIGNALS SHALL BE THE RESPONSIBILITY OF THE CITY OF AKRON. OUTAGES, OTHER THAN THAT OF NORMAL WEAR, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE CITY OF AKRON AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL OUTAGES SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHOUT UNDUE DELAY AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE. IF THE SIGNAL CANNOT IMMEDIATELY BE PLACED BACK INTO SERVICE, POLICE PROTECTION FOR THE INTERSECTION SHALL BE PROVIDED AT THE CONTRACTORS EXPENSE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHOUT UNDUE DELAY AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTRAGE. IF THE SIGNAL CANNOT IMMEDIATELY BE PLACED BACK INTO SERVICE, POLICE PROTECTION FOR THE INTERSECTION SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHOUT UNDUE DELAY AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION, THAN THE ALLOTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO OR CANNOT RESPOND TO AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE OR CITY OF AKRON FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

614 TEMPORARY MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS (CONTINUED)

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE IN THE FOLLOWING MEHTODS (OR ANOTHER METHOD AS MAY BE AGREED BY THE CONTRACTOR, LOCAL AGENCY AND THE ENGINEER):

1. _____ AM TO _____ PM WEEKDAYS WITH THE CITY OF AKRON PROVIDING COVERAGE FROM _____ PM TO _____ AM WEEKDAYS, AND WEEKENDS AT THE CONTRACTOR'S EXPENSE AS PREVIOUSLY PROVIDED HEREIN.

2. COMPLETE CITY MAINTENANCE AT THE CONTRACTOR'S EXPENSE, AS PREVIOUSLY PROVIDED HEREIN.

THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM.

WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 6 HOURS AND SHALL NOT INCLUDE THE HOURS OF 7 A.M. TO 9:30 A.M. AND 3 P.M. TO 6 P.M. ON WEEKDAYS. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED BY OFF-DUTY CITY OF AKRON POLICE, HIRED BY THE CONTRACTOR.

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.24.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTENANCE OF TRAFFIC. SEE MAINTENANCE OF TRAFFIC GENERAL NOTES SHEET NO. 24

625 POWER SUPPLY FOR TRAFFIC SIGNALS

ELECTRIC POWER SHALL BE OBTAINED FROM THE OHIO EDISON COMPANY AT THE LOCATION INDICATED ON THE PLANS. POWER SUPPLIED SHALL BE 120 VOLTS.

OHIO EDISON COMPANY (216-384-5095)
111 CASCADE PLAZA
AKRON, OHIO 44308

625 CONCRETE PULLBOX, BY SIZE, AS PER PLAN

CONCRETE PULLBOXES SHALL BE FURNISHED AND INSTALLED WHERE INDICATED ON THE PLANS. SIZE, MANUFACTURING DETAILS AND COVER MATERIAL SHALL BE AS DETAILED ON SHEET 234. PULLBOX COVERS SHALL DISPLAY THE WORD "TFC SIG" FORMED ON THE SURFACE OR DISPLAYED ON AN ATTACHED METAL PLATE, IN ACCORDANCE WITH 713.09.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE FOR EACH CONCRETE PULLBOX, BY SIZE, FURNISHED AND INSTALLED, INCLUDING AGGREGATE.

625 EACH CONCRETE PULLBOX, BY SIZE, AS PER PLAN

630 REMOVAL OF OVERHEAD MOUNTED SIGN SUPPORT AND STORAGE

IN ADDITION TO THE REQUIREMENTS OF 630.12, ALL CANTILEVER SUPPORTS REMOVED SHALL BE STORED FOR PICK UP BY THE CITY OF AKRON. ALL SPAN SUPPORTS REMOVED SHALL BE STORED FOR PICK UP BY THE STATE OF OHIO. PAYMENT FOR THIS WORK WILL BE MADE AT THE CONTRACT BID PER EACH, 630 REMOVAL OF OVERHEAD MOUNTED SIGN SUPPORT AND STORAGE.

631 SIGN SERVICE

IN LIEW OF THE REQUIREMENTS OF 631.05, CABLE FOR SIGN SERVICE SHALL BE RATED THE SAME AS THE HIGHWAY LIGHTING DISTRIBUTION AND CIRCUIT CABLE USED ON THIS PROJECT.

631 ENCLOSURE PADLOCKS

DISCONNECT SWITCH ENCLOSURES FURNISHED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 631.08 SHALL INCLUDE A PADLOCK EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNON 660, WITH LOCK BODY OF BRONZE OR BRASS, AND KEYING IN ACCORDANCE WITH THE FOREGOING SPECIFICATION.

631 BALLAST WIRING ENCLOSURE

BALLAST ENCLOSURES SHALL BE FURNISHED AND INSTALLED ON OVERHEAD SIGN SUPPORTS AS SHOWN ON TC-32.10 OR DETAILED IN THE PLANS. THE ENCLOSURE SHALL BE MOUNTED ON BRACKETS WHICH ARE A PART OF NEW OVERHEAD SUPPORTS OR SEPARATELY FURNISHED FOR EXISTING SUPPORTS OR OVERPASS STRUCTURES.

ENCLOSURES SHALL BE WEATHERPROOF NEMA TYPE 4 IN ACCORDANCE WITH PLAN DETAILS, FABRICATED OF 0.06 INCH STEEL GALVANIZED IN ACCORDANCE WITH 711.02. THE FRONT COVER SHALL BE REMOVABLE AND BEAR A WARNING SIGN CONFORMING TO 713.20, PARAGRAPH 8D. CONDUIT FITTINGS AND ATTACHMENT HARDWARE SHALL BE FURNISHED WITH THE ENCLOSURE. ENCLOSURES SHALL CONTAIN A STEEL PANEL COMPLYING WITH 713.20, PARAGRAPH 8E FOR INSTALLING TERMINAL BLOCKS AND BUSBARS, RATED AT 600 VOLTS AND PROVIDED WITH MARKER STRIPS AND CAPABLE OF TERMINATING THE WIRE GAGE USED. BALLASTS SHALL BE ARRANGED IN THE ENCLOSURE IN THE SAME RELATIVE POSITION AS THEIR ASSOCIATED LUMINAIRE ON THE SIGN SUPPORT STRUCTURE.

ENCLOSURES SHALL BE OF TWO SIZES: TYPE A FOR SPAN TYPE SUPPORTS AS SHOWN ON TC-32.10 AND TYPE B FOR SINGLE POLE AND OVERPASS STRUCTURES AS DETAILED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING TABLE:

| | TYPE A | TYPE B |
|---|---|---|
| SIZE (NOMINAL), INCHES | 42 X 12 X 10 | 18 X 12 X 10 |
| BARRIER TERMINAL BLOCK, NO. UNITS NO. TERMINALS (MIN) | 2, 10 | 2, 4 |
| SOLID INSULATED BUSBAR; NO. UNITS NO. TERMINAS (MIN) | 2, 11 | 2, 5 |
| SOLID UNINSULATED BUSBAR; NO. UNITS NO. TERMINALS (MIN) | 1, 11 | 1, 5 |

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE FOR EACH ENCLOSURE, FURNISHED, IN PLACE, COMPLETE AND READY FOR SERVICE.

631 BALLAST ENCLOSURE, BY TYPE

631 BALLAST WIRING ENCLOSURE MOUNTING BRACKET ASSEMBLY

BALLAST ENCLOSURE MOUNTING BRACKET ASSEMBLIES SHALL BE FURNISHED FOR INSTALLATION ON EXISTING OVERHEAD SIGN SUPPORTS BY BOLTS IN TAPPED HOLES AND ON CONCRETE STRUCTURES BY EXPANSION BOLTS. BRACKETS SHALL BE IN ACCORDANCE WITH PLAN DETAILS AND GALVANIZED IN ACCORDANCE WITH 711.02. BRACKETS SHALL BE OF TWO SIZES: TYPE A FOR SPAN TYPE SUPPORTS AND SHOWN ON TC-32.10 AND TYPE B FOR SINGLE POLE AND OVER PASS STRUCTURES AS DETAILED IN THE PLANS AND ON TC-32.11.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE FOR EACH ASSEMBLY WHICH SHALL INCLUDE ALL NECESSARY BRACKETS, FIELD DRILLING AND HARDWARE, FURNISHED AND IN PLACE.

631 BALLAST ENCLOSURE MOUNTING BRACKET ASSEMBLY, BY TYPE

630/632 FOUNDATION CONDUIT

UNLESS OTHERWISE DETAILED IN THE PLANS, ALL SIGN SUPPORT OR SIGNAL SUPPORT FOUNDATIONS SHALL CONTAIN A MINIMUM OF ONE 2 INCH CAPPED CONDUIT ELL IN CONFORMANCE WITH STANDARD DRAWING TC-21.20.

632 SIGNAL SUPPORT, TC-9.30, DESIGN 1, AS PER PLAN

ONLY ONE ROUND ARM SHALL BE FURNISHED AND INSTALLED FOR THE ATTACHMENT OF TRAFFIC SIGNALS. A 1 3/8" DIAMETER HOLE, WITH 1" I.D. GROMMET OR BUSHING, SHALL BE DRILLED ON THE UNDERSIDE OF THE ARM AT THE CENTERLINE AND 4'-0" LEFT OF THE CENTER OF THE ARM, ALSO 4'-0" RIGHT OF THE CENTER OF THE ARM FOR THE PASSAGE OF SIGNAL CABLE. ONE THREADED STEEL 1 1/4" PIPE COUPLING OR SHORT NIPPLE SHALL BE WELDED INTO THE POLE 2'-0" FROM THE TOP OF THE POLE AS DETAILED ON SHEET NO. 234. ALL SHARP EDGES INSIDE THE POLE AND PIPE OR NIPPLE SHALL BE REMOVED. ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND HARDWARE NECESSARY TO PERFORM THE REQUIRED WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE PER EACH 632 SIGNAL SUPPORT, TC-9.30, DESIGN 1, AS PER PLAN.

632 COMBINATION SIGNAL SUPPORT, TC-81.20 DESIGN _____, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 632.14, A SECOND ARM SHALL BE FURNISHED AND INSTALLED FOR THE ATTACHMENT OF A GUIDE SIGN. ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND HARDWARE NECESSARY TO PERFORM THE REQUIRED WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE PER EACH 632 COMBINATION SIGNAL SUPPORT, TC-81.20 DESIGN _____, AS PER PLAN.

632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION

THE CONTRACTOR SHALL NOTIFY THE CITY OF AKRON, DIVISION OF TRAFFIC ENGINEERING, AT 375-2851, TWENTY-FOUR HOURS BEFORE REMOVAL OF ANY EXISTING TRAFFIC SIGNAL EQUIPMENT. THE CITY WILL RECEIVE ALL EXISTING TRAFFIC SIGNAL EQUIPMENT. ALL REMOVALS SHALL BE PERFORMED IN THE PRESENCE OF A DESIGNATED REPRESENTATIVE OF THE CITY OF AKRON, BUREAU OF TRAFFIC ENGINEERING. ITEMS SHALL BE SUITABLY PROTECTED UNTIL DELIVERED TO TRAFFIC ENGINEERING DIVISION, 1420 TRIPLETT BOULEVARD, BY THE CONTRACTOR. IN ACCORDANCE WITH 614.03, ITEMS SHALL NOT BE REMOVED UNTIL A NEW OR TEMPORARY SIGNAL INSTALLATION IS IN OPERATION, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE FOR EACH TRAFFIC SIGNAL INSTALLATION REMOVED.

632 EACH REMOVAL OF TRAFFIC SIGNAL INSTALLATION.

AKRON INNERBELT
SUM-59-0.00

620 Delineators, By Type, Flexible Post Mounted, As Per Plan

This item shall consist of furnishing and installing delineators as specified. The reflectors shall be either Type C or D and shall be approximately 3 inches by 6 inches with a minimum area of 18 square inches. The reflector shall be reflective sheeting bonded directly to the delineator post (not screwed or bolted).

The Seal Test as described in 620.03 shall not apply.

The flexible posts shall be white non-metallic, ultraviolet resistant, and designed to withstand repeated automobile impacts at 55 MPH and return to a vertical position with little or no damage to the vehicle. The posts shall be capable of being hand driven. Where adverse soil conditions cause the delineator post to exceed 1/4 inch per foot out of plumb in any direction, the Contractor may drive a pilot shaft before driving the post.

Flexible delineator posts shall be one of the following designs or approved equal:

1. Design 1 flexible post shall be manufactured from lexan with a 24 inch length of No. 1 steel drive post bolted to the bottom of the flexible portion. The total length of the composite post shall be 78 inches. The width of the post shall be 3.25 inches.

2. Design 2 flexible post shall be manufactured from fiberglass reinforced plastic with a T cross-section. The post shall be 72 inches long and 3.60 inches wide.

3. Design 3 flexible post shall be manufactured from fiberglass reinforced plastic with a curved cross-section. The post shall be 72 inches long and 3.60 inches wide.

4. Design 4 flexible post shall be manufactured from fiberglass reinforced plastic with a curved cross-section. The post shall be 27 inches long and 3.25 inches in width. These posts may be installed by the Contractor in lieu of Designs 1, 2 or 3 when delineators would be placed behind guardrail. These posts shall be installed on the front of the wooden guardrail blockouts facing approacning traffic by installing either two 5/16 inch diameter by 1 1/2 inch long, zinc coated lag screws with zinc coated 5/16 inch flat washers or two 5/16 inch diameter by 1 1/2 inch long, zinc coated indented hex washer-head lag screws.

Payment will be at the contract unit price for each delineator which shall include furnishing and installing the post and all necessary hardware, labor and equipment.

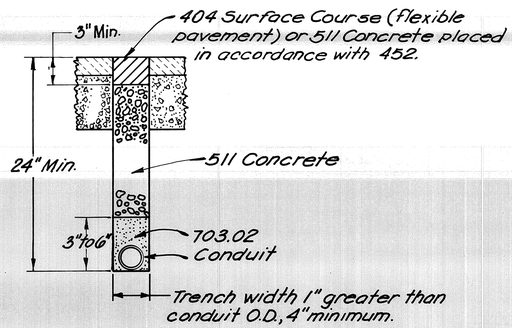
620 EACH DELINEATORS, TYPE (C OR D), FLEXIBLE POST MOUNTED, AS PER PLAN

630 Overhead Sign Support, TC-12.30, As Per Plan
632 Signal Support, TC-9.30, As Per Plan.
630 Combination Signal Support, TC-81.20, As Per Plan.
In lieu of overhead sign supports and signal supports used on city streets, being galvanized, they shall be given one shop coat of zinc-rich base paint (Zinc Dust Paint) conforming to Federal Specification TT-P-641, Type II and one shop coat of "Matte Black", Weather Resistant Paint, As Approved by the Engineer. Particular attention should be paid to the base area for protection against corrosive elements used for ice and snow removal from roadway surfaces.
A second coat of "Matte Black" Paint shall be applied in the field after erection, at a temperature above 50°F.

The following is a listing of the supports to be painted:
Sign No. 27, Sta. 114+00 South St.
Sign No. 31, Sta. 233+40 Dart Ave.
Sign No. 32, Sta. 40+20 Rhodes Ave.
Sign No. 36, Sta. 65+75 Rhodes Ave.
Signal SP-1, Sta. 10+40 Lakeshore Blvd.
Signal SP-2, Sta. 221+98 Dart Ave.
Signal SP-3, Sta. 54+40 Russell Ave.
Signal SP-4, Sta. 54+96 Russell Ave.
Signal SP-5, Sta. 55+32.16 Russell Ave.

Payment for the above work shall be included in the individual bid items for each support.

625 Trench in Paved Areas
In lieu of the details on Standard Construction Drawing HL-11, the contractor may provide the narrow slit type trench as detailed below.




NARROW SLIT TYPE TRENCH

| CALC. BY / DATE | FHWA REGION | STATE | PROJECT | OHIO | 2068 |
|---|---|---|---|---|---|
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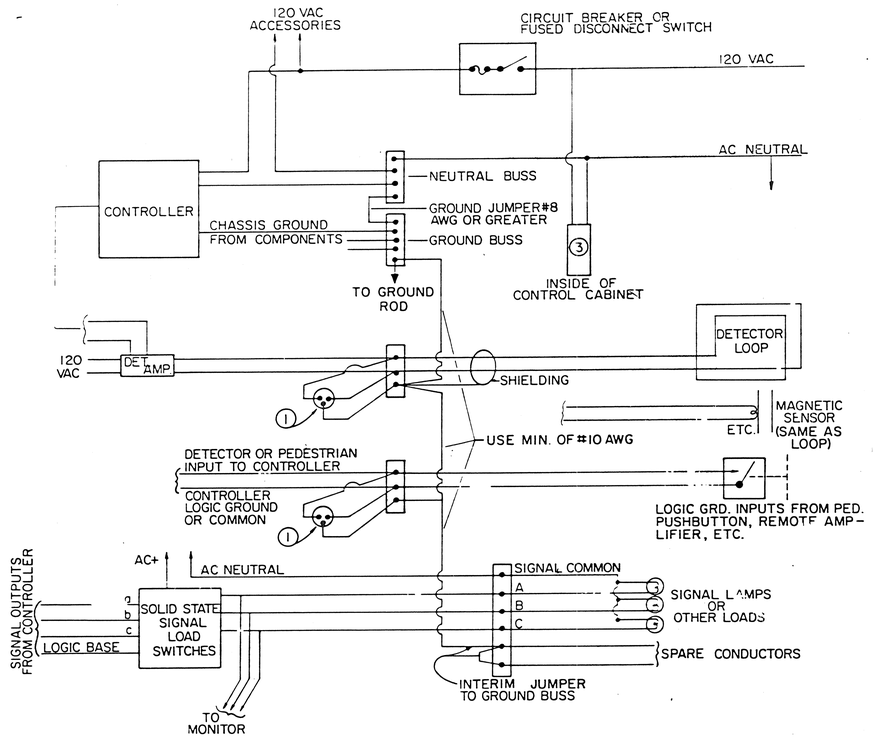
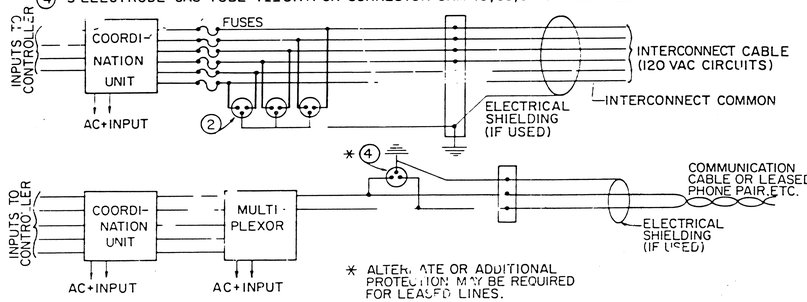



(1) 3 ELECTRODE GAS TUBE-TII340A-20 OR SURRESTOR SRA-16 OR EQUIVALENT (FOR LOOP AMP NOT EXCEEDING 20V ON LOOP CIRCUIT)
(2) 3 ELECTRODE GAS TUBE-TII 317B OR SURRESTOR SPA-60A OR EQUIVALENT
(3) POWER LINE ARRESTOR (3 ELECTRODE) TII 412A-(2 ) OR SURRESTOR SPA 300
NOTE: ALL UNUSED CONDUCTORS MUST BE GROUNDED AT BOTH ENDS AND ALL ARRESTORS SHOULD BE MOUNTED AS CLOSE AS POSSIBLE TO THE FIRST TERMINATION OF INCOMING PROTECTED LINE.
(4) 3 ELECTRODE GAS TUBE-TII 317A OR SURRESTOR SRA-16, 63, 64 OR EQUIVALENT




LIGHTNING PROTECTION SYSTEM

# CONTROLLER SPECIFICATIONS

| FHWA REGION | STATE | PROJECT | |
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| 5 | OHIO | M-1T62(2) | |

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861 CONTROLLER, PRETIMED, 29 CIRCUITS, SOLID STATE DIGITAL MICRO-PROCESSOR, AS PER PLAN

CITY OF AKRON, OHIO TRAFFIC ENGINEERING DIVISION SPECIFICATIONS
FOR PRETIMED CONTROLLERS

THE FOLLOWING SPECIFICATIONS ARE WRITTEN WITH THE UNDERSTANDING THAT THEY ARE, MORE OR LESS ADAPTED TO STANDARD EQUIPMENT.

GENERAL:

29-CIRCUIT TYPE SECONDARY TRAFFIC CONTROLLERS

SPECIFICATIONS - 29-CIRCUIT TYPE SECONDARY TRAFFIC CONTROLLERS -

THE PURPOSE OF THIS SPECIFICATION IS TO SET FORTH THE MINIMUM DESIGN AND OPERATING REQUIREMENTS FOR SECONDARY CONTROLLERS WHICH SHALL BE RESPONSIVE TO AND COMPATIBLE WITH THE EXISTING CROUSE-HINDS SUPER TRAFFLEX MASTER CONTROLLER FOR SUPERVISING AND CONTROLLING:

SECONDARY TRAFFIC CONTROLLERS

1. 3 TIME CYCLES (DIAL SELECTION)

2. 3 RESETS AND OFFSETS

3. EMERGENCY FIRE PRE-EMPTION

4. SHUT DOWN OPERATION

5 REMOTE FLASHING

6. CIRCUIT TRANSFER

THE SECONDARY CONTROLLERS SHALL BE RESPONSIVE TO THE MASTER CONTROL UNIT SO THAT THE TOTAL TIME CYCLE OF THE SECONDARY CONTROLLER WILL CHANGE SIMULTANEOUSLY WITH THE CHANGE IN TIME CYCLE AT THE MASTER CONTROL UNIT. THE SECONDARY CONTROLLERS SHALL REMAIN IN STEP WITH EACH OTHER AND WITH THE MASTER DURING ANY TIME CYCLE CHANGE.

GENERAL:

1. ALL COMPONENT PARTS SHALL BE OF HIGH QUALITY, MEETING THE ACCEPTABLE STANDARDS OF GOOD ENGINEERING PRACTICES.

2. THE CONTROLLER SHALL OPERATE SATISFACTORILY AT ANY TEMPERATURE BETWEEN -30° F. AND +165° F. INSIDE AMBIENT.

3. CERTAIN SECTIONS OF THE FOLLOWING SPECIFICATION REFER TO COMPONENTS AND CIRCUITRY OF AN ELECTRO-MECHANICAL PRETIMED CONTROLLER. HOWEVER, SINCE THE CONTRACTOR MUST PROVIDE A SOLID STATE DIGITAL CONTROL UNIT, THESE SECTIONS ARE TO BE INTERPRETED AS ESTABLISHING THE DESIRED OPERATION ONLY, BUT NOT THE MEANS BY WHICH THIS OPERATION IS ACCOMPLISHED. THE OPERATION SHALL BE ACCOMPLISHED BY SOLID STATE CIRCUITS AS REQUIRED BY 861/961.

4. LIGHTNING PROTECTION SHALL BE AS SHOWN ON SHEET 206B.

POWER:

1. THE CONTROLLER SHALL BE DESIGNED TO OPERATE FROM A 115 VOLT, 60 HZ SINGLE PHASE POWER SOURCE.

2. THE CONTROLLER SHALL FUNCTION SATISFACTORILY AT ANY VOLTAGE, WITHIN PLUS OR MINUS 10% OF THE RATED VOLTAGE.

3. THE CONTROLLER ASSEMBLY SHALL BE RATED WITH THE FOLLOWING SIGNAL LOAD CAPACITIES: 25 AMPERES STANDARD.

VARIATION IN SETTING OF THE TIME CYCLE:

IT SHALL BE POSSIBLE TO VARY THE TIME CYCLE SO THAT ANY TIME CYCLE BETWEEN THE LIMITS OF THIRTY AND ONE-HUNDRED TWENTY SECONDS MAY BE OBTAINED.

DESIGN:

1. DIAL UNIT:

A) CONTROLLERS SHALL BE EXPANSIBLE TYPE HAVING PROVISION FOR A MAXIMUM OF 3 DIAL UNITS.

B) EACH DIAL UNIT SHALL BE PLUG-CONNECTED AND SHALL BE SO CONSTRUCTED THAT IT MAY BE INSTALLED OR REMOVED WITHOUT THE USE OF TOOLS.

C) THE TIMING DIAL OF EACH DIAL UNIT SHALL BE DRIVEN BY A SELF-STARTING SEALED, SYNCHRONOUS MOTOR REQUIRING NO LUBRICATION. THIS MOTOR SHALL HAVE AMPLE TORQUE TO DRIVE THE DIAL AT CONSTANT SPEEDS UNDER ALL NORMAL OPERATING CONDITIONS.

D) THE DIAL UNIT SHALL HAVE A MANUALLY OPERATED RESET SWITCH FOR DE-ENERGIZATION OF THE MOTOR.

E) ON THE FRONT OF EACH TIMING DIAL THERE SHALL BE A CALIBRATED SCALE FOR THE SETTING UP OF EACH INTERVAL OF THE COLOR SEQUENCE. THE DIAL SHALL AT ALL TIMES SHOW A VISUAL INDICATION OF THE PERCENTAGE OF THE TIME CYCLE ALLOCATED TO EACH INTERVAL.

F) THE TIMING DIAL SHALL HAVE AN OFFSET SCALE FOR SETTING THE OFFSET RELATIONSHIP BETWEEN MASTER AND SECONDARY CONTROLLER WITHIN AN INTERCONNECTED SYSTEM.

G) EACH DIAL SHALL BE EQUIPPED WITH COLOR-CODED KEYS WHICH SHALL SNAP IN AND OUT EASILY WITHOUT TOOLS AND SHALL BE SELF-LOCKING.

H) THE DIAL SHALL BE EQUIPPED WITH AN EASILY REMOVABLE TIME CYCLE GEAR, AVAILABLE 30-120 SECONDS IN 5 SECOND STEPS.

I) EACH DIAL UNIT SHALL HAVE A VISUAL INDICATION OF THE TIME CYCLE SET ON THE DIAL.

J) EACH DIAL UNIT SHALL BE EQUIPPED WITH A FIVE CONTACT BLOCK WIRED FOR THE FOLLOWING FUNCTION: 3 RESET CONTACTS, ONE INTERLOCK, AND ONE SIGNAL IMPULSE.

AUTOMATIC RESET:

TIMING OF THE MAIN STREET GREEN RELATIONSHIP BETWEEN THE INTERCONNECTED CONTROLLERS SHALL BE FULLY AUTOMATIC IN ACCORDANCE WITH THE OFFSET TIME SETTING.

IF, FOR ANY REASON, ANY SECONDARY CONTROLLER GETS OUT OF STEP WITH THE SYSTEM, IT SHALL BE BROUGHT INTO ITS PROPER TIME RELATIONSHIP WITHIN ONE TIME CYCLE.

1. TIMING:

A) IT SHALL BE POSSIBLE TO SET UP A SEPARATE AND DISTINCT PROGRAM OF INTERVAL TIMING ON EACH DIAL UNIT.

B) IT SHALL BE POSSIBLE TO TRANSFER OPERATION FROM ONE DIAL TO ANOTHER, REMOTELY, OR AUTOMATICALLY. AUTOMATIC TRANSFER SHALL BE ACCOMPLISHED THROUGH THE USE OF TIME SWITCHES. REMOTE TRANSFER SHALL BE ACCOMPLISHED FROM THE MASTER INTERCONNECT CIRCUIT.

C) THE CONTROLLER SHALL BE SO ARRANGED THAT THE TRANSFER OF THE INTERVAL TIMING FROM ONE DIAL UNIT TO ANOTHER AND/OR ONE SPLIT TO ANOTHER MAY BE ACCOMPLISHED AT THE BEGINNING OF THE MAIN STREET GREEN INTERVAL OR ANY OTHER CHOSEN INTERVAL.

D) THE SWITCHING FROM ONE DIAL TO ANOTHER SHALL BE ACCOMPLISHED THROUGH THE USE OF ELECTRICALLY LATCHED RELAYS. THE CAM UNIT AND DIAL UNIT TIMING MECHANISMS SHALL BE COORDINATED THROUGH INTERLOCK CIRCUITRY.

E) WHEN SPECIFIED, THE INTERNAL CIRCUITRY SHALL BE DESIGNED SO THAT ALL DIAL UNITS MAY RUN SIMULTANEOUSLY TO MAINTAIN THE CORRECT OFFSET RELATIONSHIP BETWEEN CONTROLLERS OPERATING IN INTERCONNECTED SYSTEMS.

F) ANY CHANGES IN OPERATION OF THE CONTROLLER SHALL NOT INTERFERE WITH THE CONTINUED IN-TIME OPERATION OF THE ACTIVE DIAL UNIT. A TRANSFER FROM SUCH SPECIAL OPERATION BACK TO NORMAL AUTOMATIC OPERATION SHALL RE-ESTABLISH A NORMAL TIME CYCLE AND SUBSEQUENTLY THE IN TIME RELATIONSHIP.

RELAYS USED TO PROVIDE OPTIONAL FEATURES (E.G., FLASH TRANSFER) SHALL BE SOCKET MOUNTED.

2. TIMER:

A) THE TIMER SHALL BE EQUIPPED WITH A CAM UNIT FOR OPENING AND CLOSING SIGNAL LIGHT CIRCUITS.

B) THE CAM UNIT SHALL BE DRIVEN BY A SHADED POLE INDUCTION TYPE MOTOR OR SOLENOID OPERATED UNIT.

C) THE SIGNAL LOAD CONTACTS OF THE CAM UNIT SHALL BE RATED AT A MINIMUM OF 10 AMPERES INCANDESCENT LAMP LOAD.

D) THE CAM UNIT SHALL BE EQUIPPED WITH INSERTABLE LOBE TYPE CAMS FOR OPENING AND CLOSING THE SIGNAL CONTACTS. EACH CAM SHALL HAVE A MINIMUM OF 16 LOBE POSITIONS. CAMS SHALL BE COLOR CODED TO FACILITATE IDENTIFICATION (I.E., GREEN, YELLOW OR RED FOR SIGNAL CAMS).

E) EACH TIMER SHALL BE EQUIPPED WITH 29 SIGNAL CIRCUITS.

F) THE TIMER SHALL BE HINGE MOUNTED SO THAT IT MAY BE EASILY SWUNG OUT OR, WITHDRAWN FROM THE CABINET FOR INSPECTION OR MAINTENANCE WITHOUT BREAKING ANY ELECTRICAL CONNECTION OR WITHOUT INTERRUPTING NORMAL OPERATION OF THE TIMER.

G) THE TIMER SHALL BE PLUG CONNECTED TO THE CONTROLLER PANEL SO THAT IT MAY BE REPLACED WITH A SIMILAR UNIT WITHOUT THE NECESSITY OF DISCONNECTING OR RECONNECTING INDIVIDUAL WIRES. THE PLUG CONNECTIONS SHALL BE MS TYPE.

H) THE CAM UNIT RELAY SHALL BE SOCKET-MOUNTED SO IT MAY BE REMOVED AND REPLACED WITHOUT DISCONNECTING OR RECONNECTING THE INDIVIDUAL WIRES.

I) CONTROL RELAYS SHALL BE PLUG IN TYPE AND COMPLETELY INTERCHANGEABLE WITH ONE ANOTHER TO SIMPLIFY MAINTENANCE REQUIREMENTS.

J) CONTROL CIRCUIT WIRING (DIAL UNIT) SHALL BE FUSE PROTECTED.

DUST COVER:

THE TIMER MECHANISM SHALL BE ENCLOSED BY A DUST COVER, REMOVABLE WITH SIMPLE TOOLS.

CONTROLLER PANEL:

ON THE REAR WALL OF THE CONTROLLER CABINET THERE SHALL BE A PANEL UPON WHICH THERE SHALL BE MOUNTED THE FOLLOWING FOR FIELD CONNECTIONS:

SECONDARY TRAFFIC CONTROLLERS

1. TERMINAL WITH NEC CARTRIDGE FUSE CUTOUT FOR THE POWER SUPPLY LINE.

2. TERMINAL UNFUSED FOR THE NEUTRAL SIDE OF POWER SUPPLY LINE.

3. ONE TERMINAL FOR EACH CONDUCTOR FOR SIGNAL LIGHT CABLE WITH A MINIMUM OF TWENTY-NINE SIGNAL CIRCUITS, WIRED COMPLETE, AND A COMMON TERMINAL.

4. ONE TERMINAL WITH FUSE FOR CONTROL CIRCUIT WIRING (DIAL UNIT). FUSE PROTECTION FOR INDEXING AND MANUAL OPERATION.



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# CONTROLLER SPECIFICATIONS

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5. THREE TERMINALS WITH NEC CARTRIDGE FUSE CUTOUTS FOR AUTOMATIC RESET CIRCUITS.

6. TWO TERMINALS WITH NEC CARTRIDGE FUSE CUTOUTS FOR DIAL TRANSFER OPERATION.

7. ONE TERMINAL WITH NEC CARTRIDGE FUSE CUTOUT FOR REMOTE FLASH OPERATION.

8. ONE TERMINAL WITH NEC CARTRIDGE FUSE CUTOUT FOR TRAFFIC SIGNAL SHUT DOWN.

9. TWO TERMINALS WITH NEC CARTRIDGE FUSE CUTOUTS FOR EMERGENCY FIRE PRE-EMPTION.

10. ONE TERMINAL WITH NEC CARTRIDGE FUSE CUTOUT FOR CIRCUIT TRANSFER OPERATION.

11. SEPARATE UNFUSED TERMINAL FOR NEUTRAL CONDUCTOR OF THE INTERCONNECTING CABLE

ALL FIELD TERMINALS SHALL BE PERMANENTLY IDENTIFIED. THE OUT-GOING TRAFFIC CONTROL SIGNAL CIRCUIT SHALL BE OF THE SAME POLARITY AS THE LINE SIDE OF THE POWER SUPPLY. THE COMMON RETURN OF THE SIGNAL CIRCUIT SHALL BE OF THE SAME POLARITY AS THE GROUND SIDE OF THE POWER SUPPLY.

OPERATION:

1. SEQUENCE:
A) THE CONTROLLER SHALL PROVIDE AND ALLOW FOR CONSECUTIVE DIVISIONS OF A TIME CYCLE HEREAFTER TERMED INTERVALS, DURING WHICH COMBINATIONS OF TRAFFIC CONTROL SIGNAL INDICATIONS DO NOT CHANGE.

B) THE CONTROLLER SHALL BE CAPABLE OF PROVIDING ANY NUMBER OF INTERVALS UP TO AT LEAST 16.

IT SHALL BE POSSIBLE TO RESET THE TIMER, IN THE FIELD TO OBTAIN ANY INTERVAL SEQUENCE COMING WITHIN THESE LIMITS, AND ANY FUTURE CHANGE IN SEQUENCE SHALL NOT REQUIRE THE PURCHASE OF ANY NEW PARTS.

~~THE CAM UNIT SHALL BE SUPPLIED WITH A FULL STACK OF CAMS AND CAM CONTACTS.~~

~~SIGNAL CIRCUIT CONTACTS:~~

~~CONTROLLERS SHALL BE PROVIDED WITH A SUITABLE MECHANISM FOR OPENING AND CLOSING SIGNAL LIGHT CIRCUITS THAT CAN BE ARRANGED OR REARRANGED TO CAUSE ANY SIGNAL LIGHT CIRCUIT TO BE ENERGIZED OR DE-ENERGIZED DURING ANY ONE OF THE PREVIOUSLY SPECIFIED INTERVALS.~~

~~THE OPENING OR CLOSING OF THE SIGNAL LIGHT CONTACTS SHALL BE POSITIVE, WITHOUT OBJECTIONABLE DARK INTERVALS, FLICKERING OF LIGHTS, OR CONFLICTING SIGNAL INDICATIONS. ALL CONTACTS SHALL BE OF COIN OR FINE SILVER OF SUFFICIENT CROSS SECTION TO PERFORM THEIR NORMAL FUNCTION WITH MINIMUM HITTING OR BURNING UNDER MAXIMUM CURRENT AND SHALL NOT REQUIRE FINE ADJUSTMENT OR READJUSTMENT FOR SATISFACTORY AND CONTINUOUS OPERATION. THE CONTACTS SHALL BE CAPABLE OF CARRYING 10 AMPERES AND OPERATING ONE MILLION TIMES.~~

MECHANISM:

ALL ~~MECHANISM, MOTORS, OPERATING COILS, BEARINGS~~, CONTACTS, RELAYS, FLASHERS, ETC., SHALL BE SUFFICIENTLY LARGE, STURDY AND ACCESSIBLE TO INSURE RELIABILITY OF OPERATING WITH A MINIMUM OF MAINTENANCE.

~~ALL MOTORS, GEAR REDUCTION, AND DIAL SHAFTS SHALL OPERATE ON ACCURATE BALL-BEARINGS WHICH SHALL BE EQUIPPED WITH OIL IMPREGNATED FELTS, OR OIL RESERVOIRS WITH A SIX-MONTHS SUPPLY OF OIL. THE TIMING MOTOR AND CAM UNIT MUST BE OF UNIT CONSTRUCTION SO THAT EITHER MAY BE REMOVED QUICKLY AND EASILY FROM THE TIMER.~~

~~ALL REDUCTION GEARING SHALL CONSIST OF ACCURATELY CUT SPUR OR HELICAL GEARS, 48 PITCH OR LARGER. THE FACES OF ALL SUCH GEARS SHALL BE NOT LESS THAN 1/8 INCH IN WIDTH.~~

ALL RELAYS, FOR WHATEVER PURPOSE USED, SHALL BE JACK MOUNTED WITH THE WIRING HERETO FASTENED PERMANENTLY TO A SUBBASE SO THAT ANY RELAY MAY BE REPLACED BY SIMPLY REMOVING IT FROM THE SUBBASE AND PLUGGING IN A REPLACEMENT UNIT.

INTERCONNECTING CABLE FAILURE:

IN CASE OF FAILURE OF THE INTERCONNECTING CABLE BETWEEN THE MASTER AND THE LOCAL SECONDARY CONTROLLERS, THE LOCAL SECONDARY CONTROLLERS SHALL CONTINUE TO OPERATE AS ISOLATED CONTROLLERS, MAINTAINING THE COLOR SEQUENCE AND INTERVALS FOR WHICH THE DIALS ARE SET.

WHEN POWER IS RESTORED BETWEEN THE MASTER AND THE SECONDARIES, THE LOCAL SECONDARY CONTROLLER WITHIN A FEW TIME CYCLES, AUTOMATICALLY RE-SYNCHRONIZE THEMSELVES AND RETURN TO THEIR PROPER TIME RELATIONSHIP FOR FULL FLEXIBLE PROGRESSIVE OPERATION.

CABINET:

THE CONTROLLER SHALL BE FURNISHED COMPLETELY HOUSED IN A CAST ALUMINUM WEATHERPROOF CABINET. CONTROLLER CABINET SHALL BE OF CLEAN-CUT DESIGN AND APPEARANCE. THE SIZE OF THE CABINET SHALL BE SUCH AS TO PROVIDE AMPLE SPACE FOR HOUSING THE TIMER, THE PANEL, AND ALL OF THE ASSOCIATED ELECTRICAL DEVICES WHICH ARE TO BE FURNISHED WITH IT, TOGETHER WITH OTHER AUXILIARY DEVICES HEREIN SPECIFIED. A HINGED DOOR SHALL BE PROVIDED PERMITTING COMPLETE ACCESS TO THE INTERIOR OF THE CABINET. WEHN CLOSED, THE DOOR SHALL FIT CLOSELY AGAINST THE GASKETING MATERIAL.

THE DOOR SHALL BE PROVIDED WITH A STRONG LOCK AND KEY. (CITY MASTER)

THE CONTROLLER CABINET SHALL BE ARRANGED FOR BASE MOUNTING AND SHALL BE FINISHED WITH TWO COATS OF HIGH-GRADE ENAMEL, BLACK IN COLOR.

THE MOUNTING OF EQUIPMENT (RELAYS, TERMINAL STRIPS AND FUSES, ETC.) SHALL BE SO ARRANGED AS TO PROVIDE ADEQUATE CLEARANCE FOR SIGNAL CABLE TO ENTER THE TOP OF THE CABINET AND BE ROUTED TO THE FIELD TERMINAL STRIP CONNECTIONS WITH EASE.

FLASHING FEATURE:

FOR USE DURING PERIODS OF LOW TRAFFIC VOLUME OR EMERGENCY CONDITION, MEANS SHALL BE PROVIDED TO PERMIT THE SUBSTITUTION OF FLASHING SIGNAL INDICATION IN PLACE OF THE NORMAL AUTOMATIC TIME CYCLE. THE FLASHING INDICATION SHALL BE AT THE RATE OF 50 AND 60 FLASHES PER MINUTE, WITH APPROXIMATELY 50 PERCENT "ON" AND 50 PERCENT "OFF" PERIODS.

~~THE FLASHING CONTACTS SHALL BE AT LEAST 5/8 INCH IN DIAMETER AND 1/8 INCH THICK.~~

ALL CONTROLLERS SHALL BE EQUIPPED TO REMOTELY ENERGIZE FLASHING OPERATION. FLASHING THE YELLOW SIGNAL ON THE MAJOR ARTERY AND THE RED SIGNAL ON THE MINOR ARTERY.

~~THE MAJOR ARTERY SIGNALS (GREEN, YELLOW, AND RED) SHALL BE ENERGIZED BY CAM CONTACTS 1, 2, AND 3 OR A, B, AND C RESPECTIVELY.~~

~~THE MINOR ARTERY SIGNALS (GREEN, YELLOW AND RED) SHALL BE ENERGIZED BY CAM CONTACTS 4, 5 AND 6 OR D, E AND F RESPECTIVELY.~~

REMOTE FLASH PRE-EMPTION SHALL PRE-EMPT THIS NORMAL CAM CIRCUITRY AND SUPPLY FLASHING POWER TO THE APPROPRIATE FIELD CONNECTIONS OF THE TRAFFIC SIGNAL CABLES.

MANUAL CONTROL:

EACH CONTROLLER SHALL BE EQUIPPED WITH TWO TERMINALS TO WHICH MAY BE CONNECTED A WIRE RESISTING SWITCH

ON THE FACEPLATE OF THE CONTROLLER THERE SHALL BE A TOGGLE SWITCH FOR THROWING THE CONTROLLER FROM AUTOMATIC TO MANUAL OPERATING. TRANSFER FROM MANUAL TO AUTOMATIC OPERATING, OR VICE VERSA, SHALL BE ACCOMPLISHED BY A SINGLE SWITCHING OPERATION. IT SHALL NOT BE NECESSARY WHEN SWITCHING FROM MANUAL TO AUTOMATIC OPERATION, OR VICE VERSA, TO DO SO AT ANY CERTAIN TIME OR TO MAKE ANY ADJUSTMENTS WHATSOEVER. MANUAL SWITCH AND CORD NOT TO BE SUPPLIED,

ON SECONDARY TRAFFIC TYPE CONTROLLERS THE MANUAL-AUTOMATIC SWITCH SHALL ENERGIZE THE CIRCUIT TRANSFER FUSE CUT OUT WHEN MANUAL OPERATION IS IN USE.

EMERGENCY FIRE PRE-EMPTION

EMERGENCY FIRE PRE-EMPTION, WHEN ENERGIZED, SHALL SUPPLY REMOTE POWER TO THE YELLOW BEFORE ALL RED FUSE CUTOUT. THIS SHALL FORCE THE CONTROLLERS TO IMMEDIATELY STOP TIMING AND PRE-EMPT ANY ARTERY DISPLAYING A GREEN OR ARROW RIGHT-OF-WAY INDICATION TO A YELLOW FEATURE.

THE YELLOW BEFORE ALL RED FUSE CUTOUT SHALL BE DE-ENERGIZED FROM A REMOTE SOURCE AFTER PROPER TIMING OF THE YELLOW FEATURE AND REMOTE POWER SHALL BE SUPPLIED TO THE ALL RED FUSE CUTOUT TO ENERGIZE AND DISPLAY RED ON ALL ARTERIES. THIS DISPLAY SHALL PREVAIL UNTIL RELEASED BY THE REMOTE SOURCE TERMINATING EMERGENCY FIRE PRE-EMPTION.

WHEN PRE-EMPTION IS TERMINATED THE CONTROLLER TIMERS SHALL DISPLAY A MAJOR ARTERY GREEN INDICATION FOR A MINIMUM OF 95% OF THE NORMAL MAJOR ARTERY INTERVAL.

EMERGENCY FIRE PRE-EMPTION SHALL HAVE PRECEDENCE OVER REMOTE FLASH OPERATION.

ALL SECONDARY TRAFFIC CONTROLLERS SHALL HAVE FOUR FIELD TERMINALS FOR RED SIGNAL PRE-EMPTION. CAM CONTACTS (3 OR C), (6 OR F), (10 OR K), AND (12 OR M).

ALL CONTROLLERS SHALL BE PROVIDED WITH RELAYS FOR EMERGENCY FIRE PRE-EMPTION HAVING CONTACTS RATED AT 15 AMPERES. THERE SHALL BE TWO NEC FUSE CUTOUTS UTILIZED FOR EMERGENCY FIRE PRE-EMPTION, ONE FOR YELLOW BEFORE FEATURE AND ONE FOR ALL RED FEATURE.

EMERGENCY FIRE PRE-EMPTION SHALL TAKE PRECEDENCE OVER THE CONTROLLER'S NORMAL OPERATION.

WHILE EMERGENCY FIRE PRE-EMPTION IS OPERATING, ALL SECONDARY AND TRAFFIC ACTUATED CONTROLLER SHALL MAINTAIN PROPER OFF-SET IN RESPECT TO THE MASTER DIAL.

SECONDARY TRAFFIC CONTROLLER'S CIRCUIT TRANSFER OPERATION:

WHEN THE CIRCUIT TRANSFER FUSE CUTOUT IS DE-ENERGIZED, FIELD TERMINAL CONNECTIONS (8 OR H), (9 OR J) AND (10 OR K) SHALL FUNCTION ON CAM CONTACTS (1 OR A), (2 OR B) AND (3 OR C) RESPECTIVELY. THIS CAUSES THE MAJOR ARTERY TO FUNCTION IN A NORMAL GREEN, YELLOW AND RED SEQUENCE.

WHEN THE CIRCUIT TRANSFER FUSE CUT OUT IS ENERGIZED, FIELD TERMINAL CONNECTIONS (7 OR G), (8 OR H), (9 OR J) AND (10 OR K) SHALL FUNCTION ON CAM CONTACT (7 OR G), (8 OR H, (9 OR J) AND (10 OR K) RESPECTIVELY. THIS CAUSES ONE DIRECTION ON THE MAJOR ARTERY TO DISPLAY A RED SIGNAL WHILE THE OTHE DIRECTION TRANSFER AND DISPLAYS A LEFT TURN SIGNAL WITH GREEN INDICATIONS.

FIELD TERMINAL CONNECTION (7 OR G) IS UTILIZED FOR THE LEFT TURN ARROW INDICATION ONLY WHEN THE CIRCUIT TRANSFER OPERATION IS IN EFFECT.

SECONDARY TRAFFIC CONTROLLERS SHALL PROVIDE THREE JACK MOUNTED DOUBLE POLE DOUBLE THROW RELAYS HAVING CONTACTS RATED AT 15 AMPERES. ONE RELAY IS UTILIZED AS A TRANSFER CONTROL RELAY AND TWO RELAYS UTILIZED AS CAM CIRCUIT SWITCHING RELAYS.

POWER FROM THE CIRCUIT TRANSFER FUSE CUTOUT SHALL BE SUPPLIED THROUGH A CAM CONTACT TO THE TRANSFER RELAY TO ALLOW TRANSFER OPERATION AT THE PROPER INTERVAL.

A HOLDING CIRCUIT SHALL BE SUPPLIED TO THE TRANSFER RELAY THROUGH A CAM CONTACT TO PREVENT RELEASE OF CIRCUIT TRANSFER UNTIL THE PROPER INTERVAL.

THE CIRCUIT TRANSFER FUSE CUTOUT SHALL BE ENERGIZED BY THE MANUAL AUTOMATIC SWITCH WHEN MANUAL CONTROL IS IN OPERATION.

CIRCUIT TRANSFER OPERATION MAY BE OBTAINED THROUGH REMOTE SOURCE (MASTER, DISPATCHER KEYED, ETC.)

CONTROLLERS SHALL BE DELIVERED FOR BENCH TESTING TO THE CITY OF AKRON BUREAU OF TRAFFIC ENGINEERING, 1420 TRIPLETT BLVD. BLDG. 2, AKRON, OHIO 44306. WHEN NOTIFIED THE CONTRACTOR SHALL PICK-UP THE CONTROLLERS FOR INSTALLATION AT THE INTERSECTIONS.



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| FHWA REGION | STATE | PROJECT | |
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| 5 | OHIO | M-1T62(2) | |

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# TRAFFIC CONTROL SUMMARY

CALCULATED BY T.K.I. DATE 1-3-80
CHECKED BY T.A.K. DATE 1-6-80
REVISED BY HEH 12-5-83

* Totals Shown are the Quantities Remaining Except For those otherwise Noted

| SHEET NUMBER 216 | 217 | 225 | 226 | 233 | * TOTAL | ITEM | UNIT | DESCRIPTION | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | **PAVEMENT MARKINGS** | |
| 24 | | | | | 24 | 620 | EACH | DELINEATOR, TYPE C, BRACKET MOUNTED | 1 |
| 11 | | | | | 11 | 620 | EACH | DELINEATOR, TYPE D, BRACKET MOUNTED | 2 |
| 33 | | | | | 33 | 620 | EACH | DELINEATOR, TYPE C, FLEXIBLE POST, AS PER PLAN | 3 |
| 10 | | | | | 10 | 620 | EACH | DELINEATOR, TYPE D, FLEXIBLE POST, AS PER PLAN | 4 |
| 533 | | | | | 533 | 621 | LIN. FT. | REMOVAL OF PAVEMENT MARKINGS | 5 |
| 4.03 | | | | | 4.03 | 621 | MILES | EDGE LINES | 6 |
| 0.68 | | | | | 0.68 | 621 | MILES | LANE LINES, 4-INCH | 7 |
| 0.07 | | | | | 0.07 | 621 | MILES | CENTER LINES | 8 |
| 4739 | | | | | 4739 | 621 | LIN. FT. | CHANNELIZING LINES | 9 |
| 248 | | | | | 248 | 621 | LIN. FT. | STOP LINES | 10 |
| 501 | | | | | 501 | 621 | LIN. FT. | CROSSWALK LINES | 11 |
| 968 | | | | | 968 | 621 | LIN.FT. | TRANSVERSE LINES, 12-INCH | 12 |
| 474 | | | | | 474 | 621 | LIN. FT. | CURB MARKING | 13 |
| 1096 | | | | | 1096 | 621 | SQ. FT. | ISLAND MARKING | 14 |
| 8 | | | | | 8 | 621 | EACH | LANE ARROWS | 15 |
| 7 | | | | | 7 | 621 | EACH | WORD "ONLY" ON PAVEMENT, 72-INCH | 16 |
| 118 | | | | | 118 | 621 | LIN. FT. | DOTTED LINES, 4-INCH | 17 |
| 563 | | | | | 563 | 621 | LIN. FT. | TRANSVERSE LINES, 24 - INCH | 18 |
| 1.90 | | | | | 1.90 | 621 | MILES | LANE LINES, 6-INCH | 18A |
| | | | | | | | | **ELECTRICAL EQUIPMENT** | |
| | | 10 | | 12 | ~~22~~ 10 | 625 | EACH | GROUND ROD, 713.16 | 19 |
| | | | | 8 | ~~8~~ 0 | 625 | EACH | PULL BOX, 18 INCH CIRCULAR, CONCRETE, AS PER PLAN | 20 |
| | | | | 2 | ~~2~~ 0 | 625 | EACH | PULL BOX, 24 INCH CIRCULAR, CONCRETE, AS PER PLAN | 21 |
| | | | | ~~669~~ | ~~669~~ 41 | 625 | LIN. FT. | TRENCH | 22 |
| | | | | ~~1149~~ | ~~1149~~ 41 | 625 | LIN. FT. | CONDUIT, 3 INCH, 713.07, CONCRETE ENCASED | 23 |
| | | | | ~~170~~ | ~~170~~ 0 | 625 | LIN. FT. | CONDUIT, 3 INCH, 713.04, JACKED UNDER PAVEMENT | 24 |
| | | | | ~~118~~ | ~~118~~ 0 | 625 | LIN. FT. | TRENCH IN PAVED AREAS, TYPE A | 24A |
| | | | | | | | | | |
| | | | | | | | | **TRAFFIC SIGNAL CONTROLLERS** | |
| | | | | 1 | 1 | 861 | EACH | CONTROLLER, PRETIMED, 29 CIRCUITS, SOLID STATE DIGITAL, MICRO-PROCESSOR SECONDARY, AS PER PLAN | 25 |
| | | | | 1 | 1 | 861 | EACH | CONTROLLER, PRETIMED, 29 CIRCUITS, SOLID STATE DIGITAL, MICRO-PROCESSOR MASTER/SECONDARY, AS PER PLAN | 26 |
| | | | | | | | | | 27 |
| | | | 2.2 | | 2.2 | 861 | CU. YD. | CONCRETE FOR CABINET FOUNDATIONS | 28 |
| | | | | | | | | | |
| | | | | | | | | **TRAFFIC SIGNS AND SIGN SUPPORTS** | |
| | 2.7 | 40.4 | | | 43.1 | 630 | CU. YD. | CONCRETE FOR ANCHOR BASE FOUNDATIONS | 29 |
| | | 5.0 | | | 5.0 | 630 | CU. YD. | CONCRETE FOR EMBEDDED FOUNDATIONS | 30 |
| | 356 | | | | 356 | 630 | LIN. FT. | GROUND MOUNTED SUPPORTS, NO. 2 POST | 31 |
| | 196 | | | | 196 | 630 | LIN. FT. | GROUND MOUNTED SUPPORTS, NO. 3 POST | 32 |
| | 283 | 50 | | | 333 | 630 | LIN. FT. | GROUND MOUNTED SUPPORTS, NO. 4 POST | 33 |
| | | 126 | | | 126 | 630 | LIN. FT. | GROUND MOUNTED SUPPORTS, S4x7.7 | 34 |
| | | 37 | | | 37 | 630 | LIN. FT. | GROUND MOUNTED SUPPORTS, W6x9 | 35 |
| | | 38 | | | 38 | 630 | LIN. FT. | GROUND MOUNTED SUPPORTS, W10x12 | 36 |
| | 35 | | | | 35 | 630 | LIN. FT. | ONE WAY SUPPORTS, NO. 4 POST | 37 |
| | | 12 | | | 12 | 630 | EACH | BREAKAWAY BEAM CONNECTION | 38 |
| | | 1 | | | 1 | 630 | EACH | OVERHEAD SIGN SUPPORT, TYPE 7.65, DESIGN 6, SPAN 63 FEET | 39 |
| | | 1 | | | 1 | 630 | EACH | OVERHEAD SIGN SUPPORT, TYPE 7.65, DESIGN 8, SPAN 75 FEET | 40 |

| SHEET NUMBER 216 | 217 | 225 | 226 | 233 | TOTAL | ITEM | UNIT | DESCRIPTION | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | | | 1 | 630 | EACH | OVERHEAD SIGN SUPPORT, TYPE 7.65, DESIGN 8, SPAN 89 FEET | 41 |
| | | 1 | | | 1 | 630 | EACH | OVERHEAD SIGN SUPPORT, TYPE 7.65, DESIGN 8, SPAN 93 FEET | 42 |
| | | 2 | | | 2 | 630 | EACH | OVERHEAD SIGN SUPPORT, TYPE 12.30, DESIGN 3, ARM 14 FEET, AS PER PLAN | 43 |
| | | 1 | | | 1 | 630 | EACH | COMBINATION OVERHEAD SIGN SUPPORT, TYPE 12.30, DESIGN 4, ARM 19 FEET | 44 |
| | | 1 | | | 1 | 630 | EACH | OVERHEAD SIGN SUPPORT, TYPE 12.30, DESIGN 7, ARM 24 FEET, AS PER PLAN | 45 |
| | 1 | | | | 1 | 630 | EACH | OVERHEAD SIGN SUPPORT, TYPE 16.20, DESIGN 4, ARM 43 FEET | 46 |
| | | 27 | | 4 | 31 | 630 | EACH | SIGN ATTACHMENT ASSEMBLY | 47 |
| | | 20 | | 2 | 22 | 630 | EACH | LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21 | 48 |
| | | 1 | | | 1 | 630 | EACH | OVERPASS STRUCTURE MOUNTED SIGN SUPPORT, TYPE 18.24 | 49 |
| | | 1 | | | 1 | 630 | EACH | OVERHEAD SIGN SUPPORT, TYPE 12.30, DESIGN 4, ARM 16 FEET, AS PER PLAN | 50 |
| | | | | 6 | 6 | 630 | EACH | SIGN HANGER ASSEMBLY, MAST ARM | 51 |
| | 1 | 2 | | | 3 | 630 | EACH | SIGN SUPPORT ASSEMBLY, POLE MOUNTED | 52 |
| | 336 | 22 | | | 358 | 630 | SQ. FT. | SIGNS , FLAT SHEET | 53 |
| | | 3833 | | | 3833 | 630 | SQ. FT. | SIGNS , EXTRUSHEET | 54 |
| | | | 15 | | 15 | 630 | EACH | REMOVAL OF OVERLAY SIGN | 55 |
| | | | 14 | | 14 | 630 | EACH | REMOVAL OF GROUND MOUNTED SIGN AND STORAGE | 56 |
| | | | 5 | | 5 | 630 | EACH | REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE | 57 |
| | | | 17 | | 17 | 630 | EACH | REMOVAL OF GROUND MOUNTED POST SUPPORT | 58 |
| | | | 10 | | 10 | 630 | EACH | REMOVAL OF GROUND MOUNTED BEAM SUPPORT | 59 |
| | | | 13 | | 13 | 630 | EACH | REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE | 60 |
| | | | 1 | | 1 | 630 | EACH | REMOVAL OF OVERHEAD SIGN SUPPORT AND STORAGE, TYPE 7.65 | 61 |
| | | | 3 | | 3 | 630 | EACH | REMOVAL OF OVERHEAD SIGN SUPPORT AND STORAGE, TYPE 12.30 | 62 |
| | | 1 | | | 1 | 630 | EACH | REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION | 62A |
| | | | | | | | | **SIGN LIGHTING AND ELECTRICAL SIGNS** | |
| | | 13 | | | 13 | 631 | EACH | SIGN SERVICE | 63 |
| | | 26 | | | 26 | 631 | EACH | SIGNS WIRED | 64 |
| | | 1 | | | 1 | 631 | EACH | SIGNS WIRED, OVERPASS STRUCTURE MOUNTED | 65 |
| | | 12 | | | 12 | 631 | EACH | DISCONNECT SWITCH WITH ENCLOSURE, TYPE X | 66 |
| | | | | | | | | | 67 |
| | | | | | | | | | 68 |
| | | 3 | | | 3 | 631 | EACH | SWITCH ENCLOSURE MOUNTING BRACKET ASSEMBLY | 69 |
| | | 7 | | | 7 | 631 | EACH | BALLAST ENCLOSURE, TYPE A | 70 |
| | | 11 | | | 11 | 631 | EACH | BALLAST ENCLOSURE, TYPE B | 71 |
| | | 3 | | | 3 | 631 | EACH | BALLAST ENCLOSURE MOUNTING BRACKET ASSEMBLY, TYPE A | 72 |
| | | 10 | | | 10 | 631 | EACH | BALLAST ENCLOSURE MOUNTING BRACKET ASSEMBLY, TYPE B | 73 |
| | | 5 | | | 5 | 631 | EACH | BALLAST, TYPE CMRI-100-480 | 74 |
| | | 40 | | | 40 | 631 | EACH | BALLAST, TYPE CMRI-175-480 | 75 |
| | | 3 | | | 3 | 631 | EACH | BALLAST, TYPE CMRI-250-480 | 76 |
| | | | | | | | | | 77 |
| | | 1 | | | 1 | 631 | EACH | BALLAST, TYPE D | 78 |
| | | 5 | | | 5 | 631 | EACH | MERCURY VAPOR LUMINAIRE TC-31.21 100W. LAMP | 79 |
| | | 40 | | | 40 | 631 | EACH | MERCURY VAPOR LUMINAIRE TC-31.21 175W. LAMP | 80 |
| | | 3 | | | 3 | 631 | EACH | MERCURY VAPOR LUMINAIRE TC-31.21 250W. LAMP | 81 |
| | | | | | | | | | 82 |
| | | | | | | | | | 83 |
| | | | | | | | | | 84 |
| | | | | | | | | | 85 |
| | | | | | | | | | 86 |
| | | | | | | | | | 87 |
| | | | | | | | | | 88 |
| | | | 27 | | 27 | 631 | EACH | REMOVAL OF LUMINAIRE AND STORAGE | 89 |

# TRAFFIC CONTROL SUMMARY

CALCULATED BY T.K.I. DATE 1-3-80
CHECKED BY T.A.K. DATE 1-6-80
REVISED BY DEH 12-5-83

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

AKRON INNERBELT
SUM-59-0.00

210
455

| SHEET No. | | | | | TOTAL | ITEM | UNIT | ★ Qty Remaining | DESCRIPTION | |
|---|---|---|---|---|---|---|---|---|---|---|
| 216 | 217 | 225 | 226 | 233 | | | | | | |
| | | | | | | | | | **TRAFFIC SIGNAL EQUIPMENT** | |
| | | | | 10 | 10 | 632 | EACH | 10 | VEHICULAR SIGNAL HEAD, 3-SECTION, 12-INCH LENS, ONE-WAY | 90 |
| | | | | 2 | 2 | 632 | EACH | 2 | VEHICULAR SIGNAL HEAD, 5-SECTION, 12-INCH LENS, ONE-WAY | 91 |
| | | | | 2 | 2 | 632 | EACH | 2 | VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED, 3-SECTION, 12-INCH LENS, ONE-WAY | 92 |
| | | | | 10 | 10 | 632 | EACH | 10 | PEDESTRIAN SIGNAL HEAD, TYPE A-2 | 93 |
| | | | | 2 | 2 | 632 | EACH | 2 | PEDESTRIAN PUSHBUTTON | 94 |
| | | | | | | | | | | 95 |
| | | | | | | | | | | 96 |
| | | | | 12.2 | 12.2 | 632 | CU. YD. | 0.44 | CONCRETE FOR ANCHOR BASE FOUNDATIONS | 97 |
| | | | | 1 | 1 | 632 | EACH | 0 | COMBINATION SIGNAL SUPPORT, TYPE 81.20, DESIGN 11, ARM 42', AS PER PLAN | 98 |
| | | | | 1 | 1 | 632 | EACH | 0 | COMBINATION SIGNAL SUPPORT, TYPE 81.20, DESIGN 4, WITH MAST ARMS 0.179" X 9.0" X 3.68" X 38'-0" AND 0.179" X 9.0" X 5.08" X 28'-0", AS PER PLAN | 99 |
| | | | | 1 | 1 | 632 | EACH | 0 | COMBINATION SIGNAL SUPPORT, TYPE 81.20, DESIGN 3, WITH MAST ARMS 0.179" X 8.0" X 3.8" X 30'-0" AND 0.179" X 7.0" X 4.48" X 18'-0", AS PER PLAN | 100 |
| | | | | 2 | 2 | 632 | EACH | 0 | SIGNAL SUPPORT, TYPE 9.30, DESIGN 1, ARM 10', AS PER PLAN | 101 |
| | | | | 5 | 5 | 632 | EACH | 3 | PEDESTAL, 8 FEET | 102 |
| | | | | 2 | 2 | 632 | EACH | 2 | CONDUIT RISER, 2 INCH DIA. | 103 |
| | | | | 6 | 6 | 632 | EACH | 6 | CABLE SUPPORT ASSEMBLY | 104 |
| | | | | | | | | | | 105 |
| | | | | 2398 | 2398 | 632 | LIN. FT. | 2398 | SIGNAL CABLE, 5-CONDUCTOR NO. 14 AWG. | 106 |
| | | | | 789 | 789 | 632 | LIN. FT. | 789 | SIGNAL CABLE, 7-CONDUCTOR NO. 14 AWG. | 107 |
| | | | | 419 | 419 | 632 | LIN. FT. | 419 | INTERCONNECT CABLE, 12-CONDUCTOR NO. 14 AWG. | 108 |
| | | | | | | | | | | 109 |
| | | | | | | | | | | 110 |
| | | | | 506 | 506 | 632 | LIN. FT. | 506 | POWER CABLE, 2-CONDUCTOR NO. 4 AWG. | 111 |
| | | | | 2 | 2 | 632 | ~~LIN. FT.~~ EACH | | POWER SERVICE | 112 |
| | | | | 14 | 14 | 632 | EACH | 14 | COVERING OF VEHICULAR SIGNAL HEAD | 113 |
| | | | | 2 | 2 | 632 | EACH | 2 | REMOVAL OF TRAFFIC SIGNAL INSTALLATION | 114 |

| SHEET No. | TOTAL | ITEM | UNIT | DESCRIPTION | ★ Qty Remaining |
|---|---|---|---|---|---|
| 24A | | | | TEMPORARY PAVEMENT MARKING | |
| 0.33 | 0.33 | 614 | Mi. | Temporary Edge Lines, Class I, Type R Tape | 0 |
| 12,495 | 12,495 | 614 | Lin. Ft. | Temporary Channelizing Lines, Class I, Type R Tape | 12,420 |

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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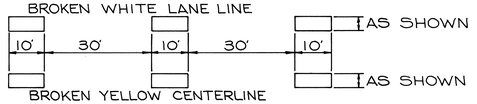
455

AKRON INNERBELT
SUM-59-0.00

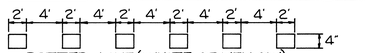
BROKEN WHITE LANE LINE




BROKEN YELLOW CENTERLINE

SOLID WHITE EDGE LINE — 4"

SOLID WHITE CHANNELIZING LINE — 8"

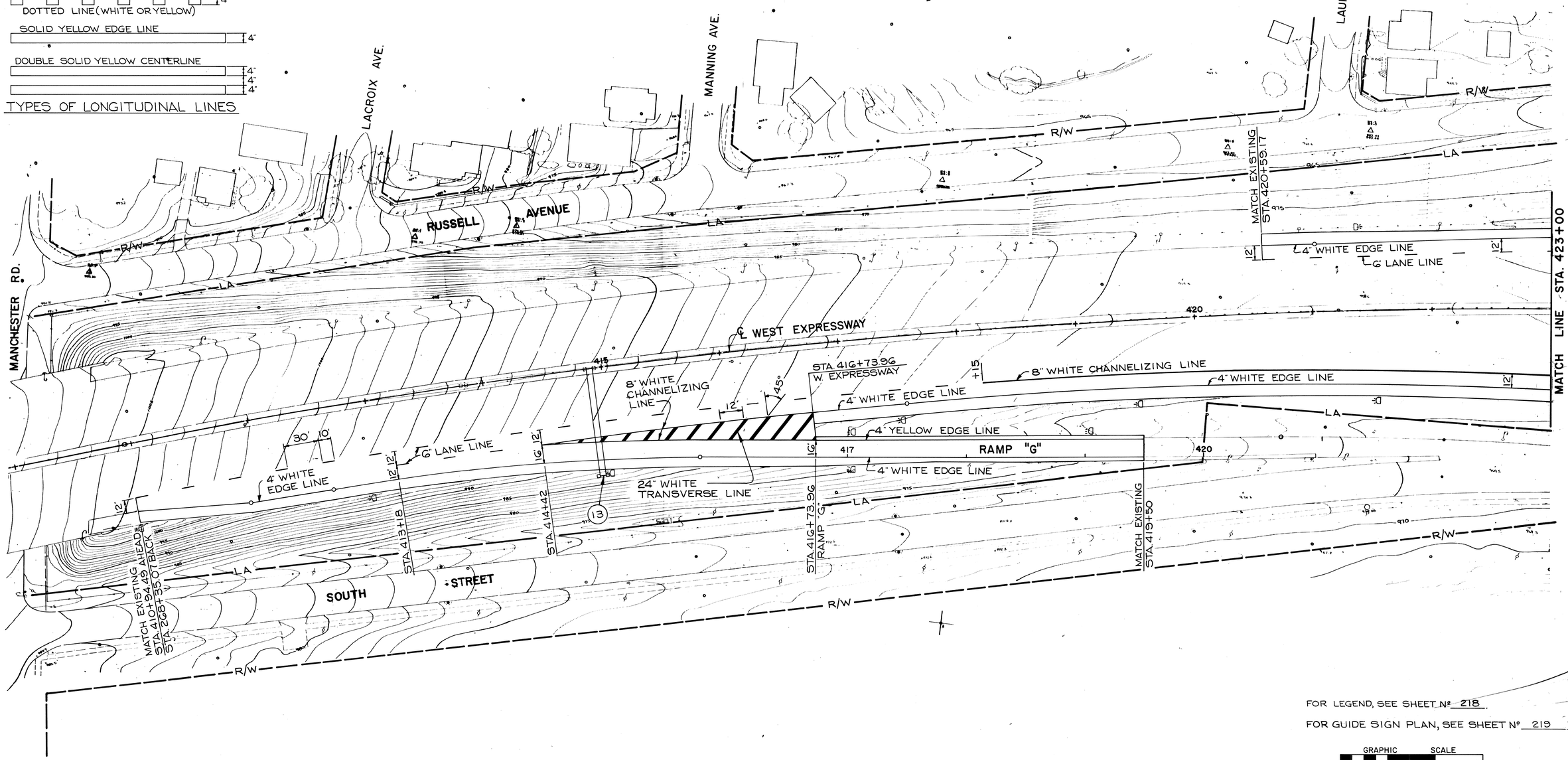



DOTTED LINE (WHITE OR YELLOW)

SOLID YELLOW EDGE LINE — 4"

DOUBLE SOLID YELLOW CENTERLINE — 4" 4" 4"

TYPES OF LONGITUDINAL LINES




FOR LEGEND, SEE SHEET Nº 218.

FOR GUIDE SIGN PLAN, SEE SHEET Nº 219.

GRAPHIC SCALE
0 40 80 120 FEET

# REGULATORY & WARNING SIGNS AND PAVEMENT MARKING PLANS

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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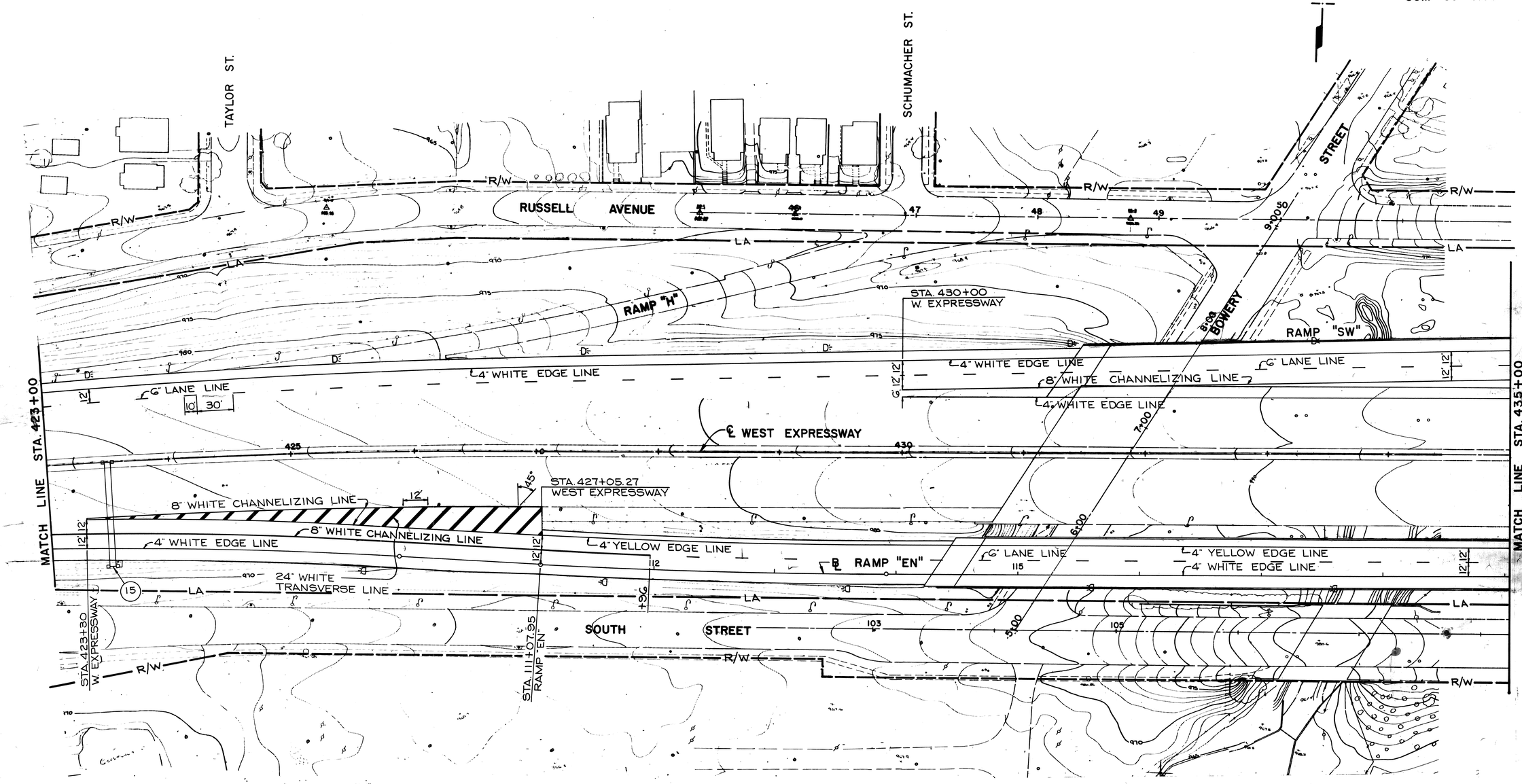
455

AKRON INNERBELT
SUM - 59 - 0.00




FOR LEGEND, SEE SHEET Nº 218

FOR GUIDE SIGN PLAN, SEE SHEET Nº 219

GRAPHIC SCALE
0 40 80 120 FEET

# REGULATORY & WARNING SIGNS AND PAVEMENT MARKING PLANS

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

213
455

AKRON INNERBELT
SUM-59-0.00

R-44R-24
STA. 54+40
MAST ARM
MOUNTED

R-120-24
STA. 54+40
MAST ARM
MOUNTED

R-31K-36
STA. 26+83, 18'LT.

R-44L-24
STA. 54+96
MAST ARM
MOUNTED

R-37R-24
STA. 54+96, 16'LT.
POLE MOUNTED

R-3L-24
STA. 55+83, 21'LT.

R-31B-36
STA. 56+10, 18'RT.
STA. 56+10, 18'LT.

MATCH LINE STA. 27+10 RHODES AVE.
MATCH LINE STA. 225+66 DART AVE.

MATCH LINE STA. 128+00

STA. 121+63.46
RAMP "SW"

STA. 435+03.09
W. EXPRESSWAY

RUSSELL AVENUE

STA. 122+40
RAMP "SW"

R-37R-24
STA. 224+43, 28'LT.

8" WHITE
CHANNELIZING
LINE

℄ RAMP SW

4" WHITE EDGE LINE
4" YELLOW EDGE LINE
6" LANE LINE

R-43R-36
R-41B-30
R-43L-36
STA. 55+15, 18'RT.

R-3R-24
STA. 224+43, 28'LT.

STA. 436+00
W. EXPRESSWAY

R-31P-48 MOD
STA. 222+00, 32'LT.
STA. 223+95, 32'LT.

R-31Q-36
STA. 223+45, 4'RT.
STA. 224+25, 4'RT.

W-49R-48
STA. 439+00
60'LT.

℄ WEST EXPRESSWAY

MATCH LINE STA. 435+00

R-43L-36
R-43R-36
R-41B-30
STA. 221+90
32'LT.

R-3R-24
STA. 222+35, 12.5'RT.

DART AVENUE

℄ RAMP EN

RAMP W-10

RAMP W-11

LA/RW
R/W
LA

SOUTH STREET

PENN AVE.

OWEN AVE.

STA. 109+48, 35'RT.
R-29A-30 R-30A-30 R-29A-30

R-41B-30
STA. 110+45
40'RT.

MATCH LINE STA. 12+65

R-44L-24
STA. 10+40
MAST ARM
MOUNTED

LAKESHORE BOULEVARD

R-37R-24
STA. 10+45, 6'LT.

R-44R-24
STA. 221+98
MAST ARM
MOUNTED

R-37R-24
STA. 222+35
12.5'RT.

R-31Z-36
STA. 10+51, 41'LT.
STA. 11+90, 34'LT.

R-23-24
STA. 221+98
MAST ARM
MOUNTED

R-38R-24
STA. 11+90, 2'LT.

FOR LEGEND, SEE SHEET Nº 218.

FOR REGULATORY SIGN ELEVATION VIEW, SEE SHEET Nº 230.

FOR TRAFFIC SIGNAL PLANS, SEE SHEET Nº 227 & 228.

FOR PAVEMENT MARKINGS ON DART AVE., RHODES AVE., LAKESHORE BLVD., SOUTH ST. AND RUSSELL AVE., SEE SHEETS Nº 227 & 228.

FOR GUIDE SIGN PLAN, SEE SHEET Nº 220.

GRAPHIC SCALE
0 40 80 120 FEET

# REGULATORY & WARNING SIGNS AND PAVEMENT MARKING PLANS

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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455

# AKRON INNERBELT
## SUM-59-0.00

MATCH LINE STA. 27+10 RHODES AVE.
MATCH LINE STA. 225+66 DART AVE.

NO PARKING ANY TIME
R-55-12
45

| | | |
|---|---|---|
| a | STA. 27+25 | 17' LT. |
| b | STA. 27+25 | 17' RT. |
| c | STA. 29+25 | 17' LT. |
| d | STA. 29+25 | 17' RT. |
| e | STA. 31+25 | 17' LT. |
| f | STA. 31+25 | 17' RT. |
| g | STA. 33+25 | 17' LT. |
| h | STA. 33+25 | 17' RT. |
| i | STA. 35+25 | 17' LT. |
| j | STA. 35+25 | 17' RT. |
| k | STA. 37+25 | 17' LT. |
| l | STA. 37+25 | 17' RT. |
| m | STA. 38+75 | 20' LT. |
| n | STA. 39+25 | 21' RT. |
| o | STA. 40+10 | 21' RT. |
| p | STA. 226+25 | 17' LT. |
| q | STA. 226+25 | 23 RT. |
| r | STA. 228+25 | 17' LT. |
| s | STA. 228+25 | 17' RT. |
| t | STA. 230+25 | 17' LT. |
| u | STA. 230+25 | 17' RT. |
| v | STA. 232+25 | 17' LT. |
| w | STA. 232+25 | 17' RT. |
| x | STA. 234+25 | 17' LT. |
| y | STA. 234+25 | 17' RT. |
| z | STA. 236+25 | 17' LT. |
| aa | STA. 236+25 | 19' RT. |
| bb | STA. 236+00 | 17' RT. |

OHIO CANAL
MOUNT AT 45° TO ROADWAY
R-31K-36 STA. 27+83, 18' LT.
ONLY
R/W
℄ RHODES AVENUE
℄ DART AVENUE
74' LANE LINE
℄ RUSSELL COURT
RUSSELL AVENUE
50' RUSSELL AVE.
MATCH LINE STA. 128+00
4" WHITE EDGE LINE
4" YELLOW EDGE LINE
6" LANE LINE
KENYON STREET
BOWERY STREET
NATHAN
END WORK STA. 38+25
MATCH EXISTING STA. 40+20.42
8" WHITE CHANNELIZING LINE
12" WHITE TRANSVERSE LINE
MATCH LINE STA. 140+00
STA. 39+18.68
RAMP SW
RAMP EN
R-41B-30 STA. 236+50, 17' LT.
DO NOT ENTER
ONE WAY
R-43R-36 STA. 237+00, 16' LT.
MATCH EXISTING STA. 241+46.51
STA. 239+50
MATCH LINE
CANAL
12" YELLOW TRANSVERSE LINE
STOP
R-1-36 STA. 236+75, 17' RT. STA. 237+22, 23' RT.
MATCH EXIST. STA. 23+55.86
R-41B-30 STA. 236+80, 16' LT. STA. 236+35, 17' RT.
RIGHT TURN ONLY
R-25A-24 STA. 238+05 19' LT.
W-7-30 STA. 236+50 17' RT.
4" CENTERLINE SOLID, DOUBLE YELLOW
8" YELLOW CHANNELIZING LINE
STA. 236+03.6' LT.
GRAPHIC SCALE 0 40 80 120 FEET

FOR LEGEND, SEE SHEET Nº 218
FOR GUIDE SIGN PLAN, SEE SHEET Nº 220

# REGULATORY & WARNING SIGNS AND PAVEMENT MARKING PLANS

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

215
455

AKRON INNERBELT
SUM - 59 - 0.00

MATCH LINE STA. 40+50

MATCH LINE STA. 140+00

MATCH LINE STA. 239+50

℄ RHODES AVENUE

℄ DART AVENUE

THORNTON STREET

HOWE

R/W

LA

4" WHITE EDGE LINE
4" YELLOW EDGE LINE
6" LANE LINE
10' 30'

FOR PAVEMENT MARKINGS (LEFT SIDE)
SEE SHEETS 215A & 215B

MATCH LINE SUM-59-0.27

REMOVE EXISTING EDGE LINE

REMOVE EXISTING LANE LINE

END PAINT STA. 152+85

FOR LEGEND, SEE SHEET Nº 218

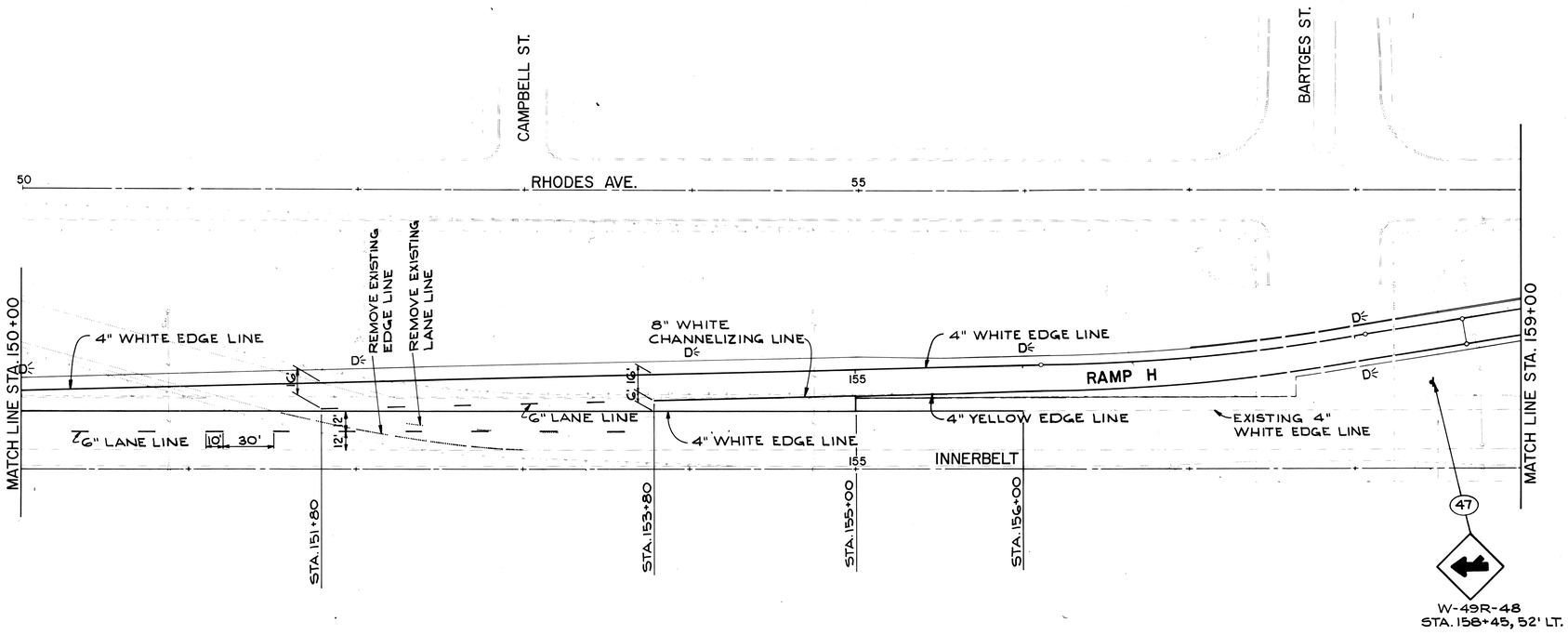
GRAPHIC SCALE
0 40 80 120 FEET

# REGULATORY & WARNING SIGNS AND PAVEMENT MARKING PLANS

AA B/P# 71948R

| CALC. BY. DATE | M-IT62(2) | OHIO | 215A |
|---|---|---|---|
| CHKD. BY. DATE | | F.H.W.A. REGION 5 | 455 |

AKRON INNERBELT
SUM-59-0.00




FOR LEGEND, SEE SHEET Nº 218

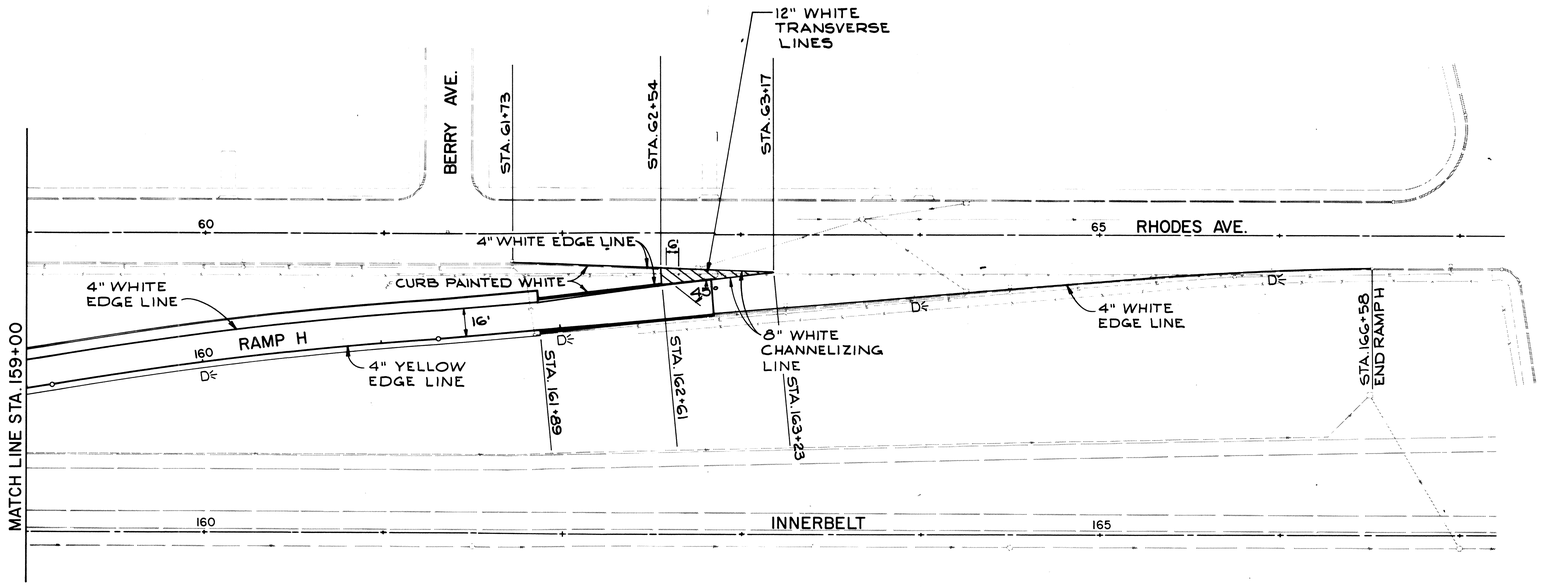
GRAPHIC SCALE
0 40 80 120 FEET

REGULATORY & WARNING SIGNS AND PAVEMENT MARKING PLANS

AA B/Pn 71348R

| CALC. BY. | | M-IT62(2) | OHIO | 215B |
|---|---|---|---|---|
| CHKD. BY. | | | F.H.W.A. REGION 5 | 455 |

AKRON INNERBELT
SUM-59-0.00




FOR LEGEND, SEE SHEET Nº 218.

GRAPHIC SCALE
0 40 80 120 FEET

REGULATORY & WARNING SIGNS AND PAVEMENT MARKING PLANS

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

216
455

# AKRON INNERBELT
# SUM-59-0.00

CALCULATED BY T.K.I. DATE 12-18-79
CHECKED BY T.A.K. DATE 12-19-79

## 4 INCH EDGE LINES (WHITE)

STA. 153+80/35.5' LT. TO STA. 156+00/35.5' LT. INNERBELT 220 L.F.
STA. 145+00/35.5' LT. TO STA. 155+00/60.5' LT. INNERBELT 1001 L.F.
STA. 61+73/16.5' RT. TO STA. 62+54/20' RT. RHODES AVE. 81 L.F.
STA. 161+89/℄ TO STA. 166+58/℄ RAMP 'H' 465 L.F.
STA. 155+00/℄ TO STA. 162+61/19' LT. RAMP 'H' 761 L.F.
STA. 410+94.49/58' RT. TO STA. 416+73.96/97' RT. W. EXPRESSWAY 579 L.F.
STA. 416+73.96/℄ TO STA. 419+50/℄ RAMP 'G' 276 L.F.
STA. 416+73.96/58' RT. TO STA. 427+05.27/94' RT. W. EXPRESSWAY 1031 L.F.
STA. 420+59.17/58' LT. TO STA. 435+03.09/86' LT. W. EXPRESSWAY 1444 L.F.
STA. 430+00/46' LT. TO STA. 436+00/46' LT. W. EXPRESSWAY 600 L.F.
STA. 111+07.95/℄ TO STA. 142+00/℄ RAMP 'EN' 3092 L.F.
STA. 142+00/35.5' RT. TO STA. 150+00/35.5' RT. INNERBELT 800 L.F.
STA. 121+65.46/℄ TO STA. 142+00/℄ RAMP 'SW' 2035 L.F.
STA. 142+00/35.5' LT. TO STA. 145+00/35.5' LT. INNERBELT 300 L.F.
STA. 225+44/℄ TO STA. 226+75/℄ DART AVE. 131 L.F.
STA. 150+00/47.5' RT. TO STA. 152+85/47.5' RT. INNERBELT 285 L.F.

## 4 INCH EDGE LINE (YELLOW)

STA. 155+00/16' LT. TO STA. 161+89/℄ RAMP 'H' 689 L.F.
STA. 416+73.96/16' LT. TO STA. 419+50/16' LT. RAMP 'G' 276 L.F.
STA. 111+07.95/24' LT. TO STA. 142+00/24' LT. RAMP 'EN' 3092 L.F.
STA. 142+00/11.5' RT. TO STA. 152+03/11.5' RT. INNERBELT 1003 L.F.
STA. 122+40/24' RT. TO STA. 142+00/24' RT. RAMP 'SW' 1960 L.F.
STA. 142+00/11.5' LT. TO STA. 153+50/11.5' LT. INNERBELT 1150 L.F.

21,271 L.F.

TOTAL 4 INCH EDGE LINE, 21,271 L.F. ÷ 5,280'/MI. = 4.03 MILES

## 4 INCH LANE LINES

STA. 10+43/12' RT. TO STA. 14+00/12' RT. LAKESHORE BLVD. 357 L.F.
STA. 11+90/17' LT. TO STA. 14+00/11' LT. LAKESHORE BLVD. 210 L.F.

STA. 111+60/℄ TO STA. 112+50/℄ SOUTH ST. 90 L.F.
STA. 223+37/42' LT. TO STA. 224+57/42' LT. DART AVE. 120 L.F.
STA. 56+90/℄ TO STA. 58+12.5/℄ RUSSELL AVE. 123 L.F.
STA. 27+98/℄ TO STA. 40+20.42/6' RT. RHODES AVE. 1222 L.F.
STA. 226+75/℄ TO STA. 241+46.51/℄ DART AVE. 1472 L.F.

3,594 L.F.

TOTAL 4 INCH LANE LINES, 3,594 L.F. ÷ 5,280'/MI. = 0.681 MILES

## 6 INCH LANE LINES

STA. 151+80/37' LT. TO STA. 153+80/42' LT. INNERBELT 200 L.F.
STA. 410+94.49/46' RT. TO STA. 418+15/46' RT. W. EXPRESSWAY 721 L.F.
STA. 413+18/38' RT. TO STA. 414+42/58' RT. W. EXPRESSWAY 124 L.F.
STA. 420+59.17/46' LT. TO STA. 435+03.09/74' LT. W. EXPRESSWAY 1444 L.F.
STA. 111+96/12' LT. TO STA. 142+00/12' LT. RAMP 'EN' 3004 L.F.
STA. 142+00/26.5' RT. TO STA. 152+85/26.5' RT. INNERBELT 1085 L.F.
STA. 121+65.46/12' RT. TO STA. 142+00/12' RT. RAMP 'SW' 2035 L.F.
STA. 142+00/26.5' LT. TO STA. 153+50/26.5' LT. INNERBELT 1150 L.F.
STA. 150+00/35.5' RT. TO STA. 152+85/35.5' RT. INNERBELT 285 L.F.

10,048 L.F.

TOTAL 6 INCH LANE LINES, 10,048 L.F. ÷ 5,280'/MI. = 1.90 MILES

## 620 DELINEATORS

| APPROX. LOCATION | SPACING | BRACKET MOUNTING C | BRACKET MOUNTING D | POST MOUNTING C | POST MOUNTING D |
|---|---|---|---|---|---|
| RAMP "G" | | | | | |
| 410+95/RT. ℄ TO 417+05/RT. "G" | 200' | | | 4 | |
| 417+05/LT. "G" TO 419+05/LT. "G" | 200' | | | | 2 |
| RAMP "EN" | | | | | |
| 417+50/RT. ℄ TO 119+60/RT. "EN" | 200' | 3 | | 7 | |
| 121+20/RT. "EN" TO 135+00/RT. "EN" | 80' | 11 | | 5 | |
| 137+00/RT. "EN" TO 142+20/RT. ℄ | 200' | 4 | | | |
| RAMP "SW" | | | | | |
| 421+38/LT. ℄ TO 121+90/LT. "SW" | 200' | 2 | | 6 | |
| 121+90/RT. "SW" TO 123+50/RT. "SW" | 160' | | | 1 | 1 |
| 124+30/RT. "SW" TO 137+10/RT. "SW" | 80' | | 11 | | 5 |
| 137+10/LT. "SW" TO 138+70/LT. "SW" | 160' | 2 | | | |
| 138+70/LT. "SW" TO 142+70/LT. "SW" | 200' | 2 | | | |

## 620 DELINEATORS (CON'T)

| APPROX. LOCATION | SPACING | BRACKET MOUNTING C | BRACKET MOUNTING D | POST MOUNTING C | POST MOUNTING D |
|---|---|---|---|---|---|
| RAMP "H" | | | | | |
| 145+00/LT. ℄ TO 166+00/RT. "H" | 200 | | | 10 | 2 |
| TOTAL | | 24 | 11 | 33 | 10 |

## 4 INCH DOTTED LANE LINES

STA. 222+28/2.5' LT. DART AVE. TO STA. 111+39/℄ SOUTH ST. 80 L.F.
STA. 110+67/9' RT. TO STA. 111+05/4.5' RT. SOUTH ST. 38 L.F.

TOTAL 4 INCH DOTTED LANE LINES 118 L.F.

## 4 INCH CENTERLINES, SOLID, DOUBLE

STA. 11+90/℄ TO STA. 14+00/℄ LAKESHORE BLVD. 210 L.F.
STA. 11+90/4' LT. TO STA. 12+70/℄ LAKESHORE BLVD. 80 L.F.
STA. 236+95/℄ TO STA. 237+58.86/℄ DART AVE. EXTENSION 64 L.F.

354 L.F.

TOTAL 4 INCH CENTERLINES, SOLID, DOUBLE, 354 L.F. ÷ 5,280' MI. = 0.067 MILES

## 8 INCH CHANNELIZING LINES (WHITE)

STA. 162+61/19' LT. TO STA. 163+23' LT. RAMP 'H' 63 L.F.
STA. 62+54/20' RT. TO STA. 63+17/20' RT. RHODES AVE. 63 L.F.
STA. 153+80/41.5' LT. TO STA. 155+00/44.5' LT. INNERBELT 120 L.F.
STA. 414+42/58' RT. TO STA. 416+73.96/58' RT. W. EXPRESSWAY 232 L.F.
STA. 414+42/58' RT. TO STA. 416+73.96/81' RT. W. EXPRESSWAY 232 L.F.
STA. 418+15/46' RT. TO STA. 427+05.27/82' RT. W. EXPRESSWAY 890 L.F.
STA. 111+07.95/12' LT. TO STA. 111+96/12' LT. RAMP 'EN' 88 L.F.
STA. 423+30/46' RT. TO STA. 427+05.27/46' RT. W. EXPRESSWAY 375 L.F.
STA. 423+30/46' RT. TO STA. 427+05.27/70' RT. W. EXPRESSWAY 375 L.F.
STA. 430+00/52' LT. TO STA. 435+03.09/62' LT. W. EXPRESSWAY 503 L.F.
STA. 121+65.46/24' RT. TO STA. 122+40/24' RT. RAMP 'SW' 75 L.F.
STA. 10+45/25' LT. TO STA. 11+90/17' LT. LAKESHORE BLVD. 145 L.F.
STA. 109+46/1' LT. TO STA. 110+46/1' LT. SOUTH ST. 100 L.F.
STA. 222+37/2.5' & 14.5' LT. TO STA 223+37/30' & 42' LT. DART AVE. 200 L.F.
STA. 223+95/13' LT. TO STA. 224+43/13' LT. DART AVE. 48 L.F.
STA. 55+22/℄ TO STA. 56+90/℄ RUSSELL AVE. 168 L.F.
STA. 55+53/23' LT. TO STA. 55+95/℄ RUSSELL AVE. 42 L.F.
STA. 225+57/22' RT. TO STA. 226+75/1' RT. DART AVE. 118 L.F.
STA. 26+83/℄ TO STA. 27+98/℄ RHODES AVE. 115 L.F.
STA. 235+62/14' RT. TO STA. 236+77/14' RT. DART AVE. 115 L.F.
STA. 235+67/℄ TO STA. 236+35/℄ DART AVE. EXTENSION 68 L.F.
STA. 37+93/14' LT. TO STA. 40+20.42/6' LT. RHODES AVE. 227 L.F.
STA. 38+25/2' RT. BOWERY ST. TO STA. 40+20.42/6' LT. RHODES AVE. 195 L.F.
STA. 109+46/12' RT. TO STA. 110+46/12' RT. SOUTH ST. 100 L.F.

## 8 INCH CHANNELIZING LINES (YELLOW)

STA. 237+38/℄ DART AVE. EXT. TO STA. 236+83/18' RT. DART AVE. 82 L.F.

4,739 L.F.

TOTAL 8 INCH CHANNELIZING LINES, 4,739 L.F. ÷ 5,280'/MI. = 0.898 MILES

# 621 PAVEMENT MARKINGS

## 24 INCH STOP LINES

STA. 10+45 12' TO 38' LT. LAKESHORE BLVD. 26 L.F.
STA. 110+46 14' LT. TO 31' RT. SOUTH ST. 45 L.F.
STA. 222+37 27.5' LT. TO 10.5' RT. DART AVE. 38 L.F.
STA. 224+43 ℄ TO 26' LT. DART AVE. 26 L.F.
STA. 55+22 2' LT. TO 14' RT. RUSSELL AVE. 16 L.F.
STA. 55+78/3' LT. TO STA. 55+82/19' LT. RUSSELL AVE. 16 L.F.
STA. 26+76/20' LT. TO STA. 26+87/14' RT. RHODES AVE. 36 L.F.
STA. 236+77/20' RT. TO STA. 237+19/23' RT. DART AVE. 45 L.F.

TOTAL 24 INCH STOP LINES 248 L.F.

## 12 INCH CROSSWALK LINES

STA. 10+30 36' RT. TO 44' LT. LAKESHORE BLVD. 80 L.F.
STA. 10+38 35' RT. TO 39' LT. LAKESHORE BLVD. 74 L.F.
STA. 110+53 34' RT. TO 14' LT. SOUTH ST. 48 L.F.
STA. 110+61 34' RT. TO 14' LT. SOUTH ST. 48 L.F.
STA. 54+23 14' RT. TO 15' LT. RUSSELL AVE. 29 L.F.
STA. 54+32 14' RT. TO 18' LT. RUSSELL AVE. 32 L.F.
STA. 55+38/27' LT. TO STA. 55+65/39' LT. RUSSELL AVE. 30 L.F.
STA. 55+42/18' LT. TO STA. 55+69/31' LT. RUSSELL AVE. 30 L.F.
STA. 26+54/39' LT. TO STA. 26+71/14' RT. RHODES AVE. 55 L.F.
STA. 26+68/25' LT. TO STA. 26+80/14' RT. RHODES AVE. 41 L.F.
STA. 225+29/14' LT. TO STA. 225+34/2' RT. DART AVE. 17 L.F.
STA. 225+39/14' LT. TO STA. 225+44/2' RT. DART AVE. 17 L.F.

TOTAL 12 INCH CROSSWALK LINES 501 L.F.

## 12 INCH TRANSVERSE LINES (WHITE)

STA. 162+61 TO STA. 163+23 RAMP 'H' 63 L.F.
STA. 55+22 TO STA. 55+90 RUSSELL AVE. 128 L.F.
STA. 235+62 TO STA. 236+77 DART AVE. 38 L.F.
STA. 235+62 TO STA. 236+35 DART AVE. EXTENSION 54 L.F.
STA. 37+93 TO STA. 40+20.42 RHODES AVE. 311 L.F.
STA. 38+25 TO STA. 40+20.42 BOWERY ST. 261 L.F.

## 12 INCH TRANSVERSE LINES (YELLOW)

STA. 11+90 TO STA. 12+70 LAKESHORE BLVD. 37 L.F.
STA. 236+80 TO STA. 237+38 DART AVE. EXTENSION 76 L.F.

TOTAL 12 INCH TRANSVERSE LINES 968 L.F.

## 24 INCH TRANSVERSE LINES (WHITE)

STA. 55+38 TO STA. 55+69 RUSSELL AVE. 61 L.F.
STA. 414+42 TO STA. 416+73.96 W. EXPRESSWAY 184 L.F.
STA. 423+30 TO STA. 427+05.27 W. EXPRESSWAY 318 L.F.

TOTAL 24 INCH TRANSVERSE LINES 563 L.F.

## CURB MARKING (WHITE)

STA. 161+89/17' LT. TO STA. 162+61/19' LT. RAMP 'H' 72 L.F.
STA. 61+73/16.5' RT. TO STA. 62+54/20' RT. RHODES AVE. 81 L.F.

## CURB MARKING (YELLOW)

STA. 10+40 TO STA. 11+90 LAKESHORE BLVD. 321 L.F.

TOTAL CURB MARKING 474 L.F.

## ISLAND MARKING (YELLOW)

STA. 222+35 TO STA. 224+45 DART AVE. 1096 S.F.

TOTAL ISLAND MARKING 1096 S.F.

## LANE ARROWS

STA. 10+73 , 30' LT. LAKESHORE BLVD. 1 EA.
STA. 110+18/7.5' LT. & 5.5', SOUTH ST. 2 EA.
STA. 222+65/4' RT. & 8.5', LT. DART AVE. 2 EA.
STA. 224+37/6.5', LT. DART AVE. 1 EA.

STA. 56+12/7' LT. & RUSSELL AVE. 1 EA.
STA. 27+11 & 7' RT. RHODES AVE. 1 EA.

TOTAL LANE ARROWS 8 EA.

## WORD "ONLY" ON PAVEMENT (6 FOOT)

STA. 11+08/ 28' LT. LAKESHORE BLVD. 1 EA.
STA. 109+83/7.5' LT. & 5.5' RT. SOUTH ST. 2 EA.
STA. 223+00/4' RT. DART AVE. 1 EA.
STA. 224+05/6.5', LT. DART AVE. 1 EA.
STA. 56+47/7' LT. RUSSELL AVE. 1 EA.
STA. 27+46/7' RT. RHODES AVE. 1 EA.

TOTAL WORD "ONLY" ON PAVEMENT 7 EA.

## REMOVAL OF PAVEMENT MARKINGS

STA. 151+75/38.5' LT. TO STA. 153+50/14.5' LT. INNERBELT 175 L.F.
STA. 152+25/38.5' LT. TO STA. 153+50/26.5' LT. INNERBELT 125 L.F.
STA. 151+00/50.5' RT. TO STA. 152+03/14.5' RT. INNERBELT 103 L.F.
STA. 151+55/50.5' RT. TO STA. 152+85/38.5' RT. INNERBELT 130 L.F.

TOTAL REMOVAL OF PAVEMENT MARKINGS 533 L.F.

# PAVEMENT MARKING SUB-SUMMARY

# SIGNING QUANTITIES SUB-SUMMARY

CALCULATED BY T.K.I. DATE 12-5-79
CHECKED BY T.A.K. DATE 12-6-79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

217/455

AKRON INNERBELT
SUM-59-0.00

| LINE No. | REFERENCE No. | STATION | OFFSET & SIDE | R-1-36 9.00 S.F. | R-3L-24 6.00 S.F. | R-3R-24 6.00 S.F. | R-23-24 4.00 S.F. | R-26A-30 7.50 S.F. | R-29A-30 7.50 S.F. | R-30A-30 7.50 S.F. | R-31B-36 7.50 S.F. | R-31K-36 7.50 S.F. | R-31P-48MOD 10.00 S.F. | R-31Q-36 9.00 S.F. | R-31Z-36 3.00 S.F. | R-37R-24 5.00 S.F. | R-38R-24 5.00 S.F. | R-41B-30 6.25 S.F. | R-45L-36 3.00 S.F. | R-43R-36 3.00 S.F. | R-44L-24 5.00 S.F. | R-44R-24 / R-25A-24 5.00 S.F. | R-55-12 1.50 S.F. | R-120-24 4.00 S.F. | W-49R-48 16.00 S.F. | W-71-30 6.25 S.F. | SIGNS FLAT SHEET S.F. | GROUND MOUNTED SUPPORTS, NO.2 POST L.F. | GROUND MOUNTED SUPPORTS, NO.3 POST L.F. | GROUND MOUNTED SUPPORTS, NO. 4 POST L.F. | ONE WAY SUPPORTS, NO. 4 POST EA. | SIGN SUPPORT ASSEMBLY, POLE MOUNTED EA. | OVERHEAD SIGN SUPPORT TYPE 16.20, DES. 4 EA. | CONCRETE FOR ANCHOR BASE FOUNDATIONS C.Y. | DELINEATOR, TYPE X-2, POST MOUNTED 0.63 S.F. EA. | LINE No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | S.F. | L.F. | L.F. | L.F. | EA. | EA. | EA. | C.Y. | EA. | |
| **WEST EXPRESSWAY** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 10 | 439+00 | 60' LT. | | | | | | | | | | | | | | | | | | | | | | 1 | 16.00 | | | 36 | | | | | | | |
| **SOUTH STREET** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 11 | 109+48 | 35' RT. | | | | | 1 | 1 | 1 | | | | | | | | | | | | | | | | 22.50 | | | | | | 1 | 2.71 | | |
| 3 | 12 | 110+45 | 40' RT. | | | | | | | | | | | | | | | 1 | | | | | | | | 6.25 | | , | 14 | | | | | | |
| **LAKESHORE BOULEVARD** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 13 | 10+40 | 44' RT. | | | | | | | | | | | | | | | | | | 1 | | | | | 5.00 | | | | | | | | | | |
| 5 | 14 | 10+45 | 6' LT. | | | | | | | | | | | | | 1 | | | | | | | | | | 5.00 | | 14 | | | | | | | | |
| 6 | 15 | 10+51 | 41' LT. | | | | | | | | | | | | 1 | | | | | | | | | | | 9.00 | | | 14 | | | | | | | |
| 7 | 16 | 11+90 | 34' LT. | | | | | | | | | | | | 1 | | | | | | | | | | | 9.00 | | | 14 | | | | | | | |
| 8 | 17 | 11+90 | 2' LT. | | | | | | | | | | | | | | 1 | | | | | | | | | 5.00 | | 14 | | | | | | | | |
| **RUSSELL AVENUE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 18 | 54+40 | 19' RT. | | | | | | | | | | | | | | | | | | | | | 1 | | 4.00 | | | | | | | | | | |
| 10 | 19 | 54+40 | 19' RT. | | | | | | | | | | | | | | | | | | | 1 | | | | 5.00 | | | | | | | | | | |
| 11 | 20 | 54+9 | LT. | | | | | | | | | | | | | 1 | | | | | | | | | | 5.00 | | | | | 1 | | | | | |
| 12 | 21 | 54+96 | 16' LT. | | | | | | | | | | | | | | | | | | 1 | | | | | 5.00 | | | | | | | | | | |
| 13 | 22 | 55+15 | 18' RT. | | | | | | | | | | | | | | | 1 | 1 | 1 | | | | | | 12.25 | | | | 17.5 | | | | | | |
| 14 | 23 | 55+83 | 21' LT. | | 1 | | | | | | | | | | | | | | | | | | | | | 6.00 | | | 14 | | | | | | | |
| 15 | 24 | 56+10 | 18' LT. | | | | | | | | 1 | | | | | | | | | | | | | | | 7.50 | | 28 | | | | | | | | |
| 16 | 25 | 56+10 | 18' RT. | | | | | | | | 1 | | | | | | | | | | | | | | | 7.50 | | 28 | | | | | | | | |
| **RHODES AVENUE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | 26 | 26+83 | 18' LT. | | | | | | | | | 1 | | | | | | | | | | | | | | 7.50 | | 28 | | | | | | | | |
| 18 | 27 | 27+83 | 18' LT. | | | | | | | | | 1 | | | | | | | | | | | | | | 7.50 | | 28 | | | | | | | | |
| **DART AVENUE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | 28 | 221+90 | 32' LT. | | | | | | | | | | | | | | | 1 | 1 | 1 | | | | | | 12.25 | | | | 17.5 | | | | | | |
| 20 | 29 | 221+98 | 45' RT. | | | | | | | | | | | | | | | | | | | 1 | | | | 5.00 | | | | | | | | | | |
| 21 | 30 | 221+98 | 45' RT. | | | | 1 | | | | | | | | | | | | | | | | | | | 4.00 | | | | | | | | | | |
| 22 | 31 | 222+00 | 32' LT. | | | | | | | | | | | 1 | | | | | | | | | | | | 10.00 | | 28 | | | | | | | | |
| 23 | 32 | 222+35 | 12.5' RT. | | | 1 | | | | | | | | | | 1 | | | | | | | | | | 11.00 | | | 14 | | | | | | | |
| 24 | 33 | 223+45 | 4' RT. | | | | | | | | | | | | 1 | | | | | | | | | | | 9.00 | | | 14 | | | | | | | |
| 25 | 34 | 223+95 | 32' LT. | | | | | | | | | | | 1 | | | | | | | | | | | | 10.00 | | 28 | | | | | | | | |
| 26 | 35 | 224+25 | 4' RT. | | | | | | | | | | | | 1 | | | | | | | | | | | 9.00 | | | 14 | | | | | | | |
| 27 | 36 | 224+43 | 28' LT. | | | 1 | | | | | | | | | | 1 | | | | | | | | | | 11.00 | | | 14 | | | | | | | |
| 28 | 37 | 236+50 | 17' LT. | | | | | | | | | | | | | | | 1 | | | | | | | | 6.25 | | | 14 | | | | | | | |
| 29 | 38 | 238+05 | 19' LT. | | | | | | | | | | | | | | | | | | | | | 1 | | 5.00 | | | 14 | | | | | | | |
| 30 | 39 | 236+75 | 17' RT. | 1 | | | | | | | | | | | | | | | | | | | | | | 9.00 | | | 14 | | | | | | | |
| 31 | 40 | 237+00 | 16' LT. | | | | | | | | | | | | | | | | | 1 | | | | | | 3.00 | 12 | | | | | | | | | |
| 32 | 41 | 237+22 | 23' RT. | 1 | | | | | | | | | | | | | | | | | | | | | | 9.00 | | | 14 | | | | | | | |
| 33 | 42 | 236+50 | 17' RT. | | | | | | | | | | | | | | | | | | | | | | 1 | 6.25 | | | 15 | | | | | | | |
| 34 | 43 | 236+80 | 6' LT. | | | | | | | | | | | | | | | 1 | | | | | | | | 6.25 | | | 14 | | | | | | | |
| 35 | 44 | 236+95 | 17' RT. | | | | | | | | | | | | | | | 1 | | | | | | | | 6.25 | | | 14 | | | | | | | |
| 36 | 45 | SEE SHEET NO. 214 | | | | | | | | | | | | | | | | | | | | | 28 | | | 42.00 | 336 | | | | | | | | | |
| 37 | 46 | 236+03 | 6' LT. | | | | | | | | | | | | | | | | | | | | | | | 0.63 | 8 | | | | | | | | 1 | |
| 38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **INNERBELT** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 39 | 47 | 158+45 | 52' LT. | | | | | | | | | | | | | | | | | | | | | | 1 | 16.00 | | | 36 | | | | | | | |
| TOTALS | | | | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 1 | 6 | 2 | 3 | 2 | 2 | 1 | 28 | 1 | 2 | 1 | 335.88 | 356 | 196 | 283 | 35.0 | 1 | 1 | 2.71 | 1 | |

REGULATORY & WARNING SIGN SUB-SUMMARY

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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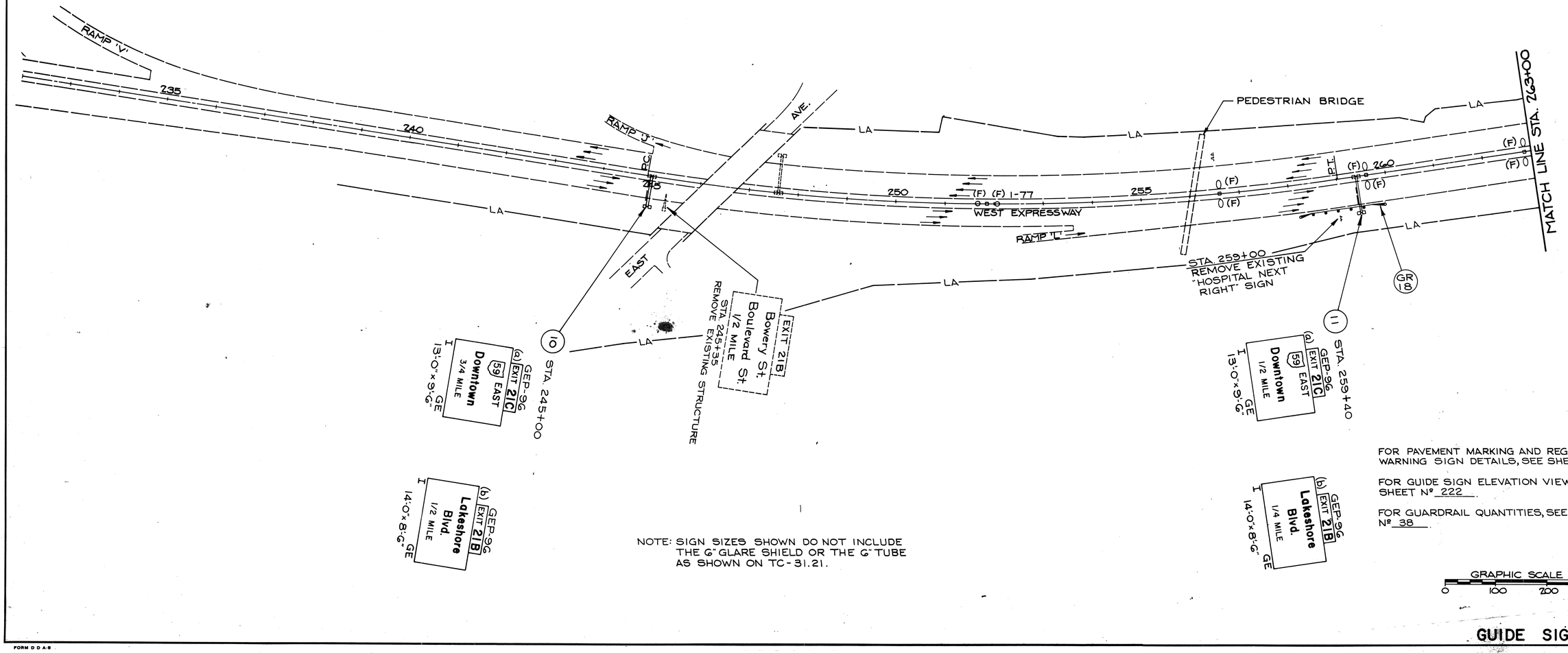
AKRON INNERBELT
SUM-59-0.00

## LEGEND

- EXISTING OVERHEAD SIGN SUPPORT ( SPAN TYPE )
- EXISTING OVERHEAD SIGN SUPPORT ( CANTILEVER TYPE )
- OVERHEAD SIGN SUPPORT ( SPAN TYPE )
- OVERHEAD SIGN SUPPORT ( CANTILEVER TYPE )
- EXISTING GROUND MOUNTED SIGN
- GROUND MOUNTED SIGN
- LUMINAIRE
- GUARDRAIL
- D PROPOSED DELINEATOR




NOTE: SIGN SIZES SHOWN DO NOT INCLUDE THE 6" GLARE SHIELD OR THE 6" TUBE AS SHOWN ON TC-31.21.

FOR PAVEMENT MARKING AND REGULATORY AND WARNING SIGN DETAILS, SEE SHEET Nº 211.

FOR GUIDE SIGN ELEVATION VIEWS, SEE SHEET Nº 222.

FOR GUARDRAIL QUANTITIES, SEE SHEET Nº 38.

GRAPHIC SCALE
0 100 200 300

# GUIDE SIGN PLAN

FORM D D A-8

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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AKRON INNERBELT
SUM-59-0.00

# GUIDE SIGN PLAN

MATCH LINE STA. 263+00

RUSSELL AVE.

RD.

LACROIX AVE.

MANNING AVE.

LAUREL AVE.

TAYLOR ST

RUSSELL AVE.

R/W

LA

I-77 WEST EXPRESSWAY

RAMP 'G'

RAMP 'SW'

RAMP 'EN'

SOUTH ST.

SCHUMACHER ST.

CHECK ST.

BOWERY ST.

MANCHESTER

PC

PT

STA. 263+55 LOT BACK LINE

STA. 410+45 PC

STA. 413+19.42 STRUCTURE REMOVE EXISTING

STA. 415+90± REMOVE EXISTING GORE SIGN "EXIT 21B"

STA. 414+90

STA. 416+84 74' RT. & WEST EXPRESSWAY

STA. 423+50

STA. 427+15 62' RT. & WEST EXPRESSWAY

STA. 102+55 34' RT. & SOUTH ST.

STA. 102+55± REMOVE EXISTING SIGN "+ Boulevard St." BLANK PANEL

STA. 49+35± RUSSELL AVE. REMOVE EXISTING SIGN
"← I-77 SOUTH"
"← I-76 EAST"

STA. 46+18± RUSSELL AVE. REMOVE EXISTING SIGN
"← I-77 NORTH"
"← I-76 WEST"

MATCH LINE STA. 121+00 RAMP 'SW'

(12) STA. 264+00 GEP-96
EXIT 21C
HOSPITAL SECOND RIGHT
GSH 12'-0" × 4'-0"

EXIT 21B
Bowery St.
Boulevard St.
EXIT ONLY
REMOVE EXISTING GUIDE SIGN

EXIT 22A
Main St.
Downtown
1 MILE

(13) STA. 414+90

(14) STA. 416+84
74' RT. & WEST EXPRESSWAY

(76) EAST (77) SOUTH
Youngstown
Canton
I
22'-0" × 12'-0"
GG

EXIT
21B
GF
8'-0" × 5'-0"

(a) GEP-96
EXIT 22A
Main St.
Broadway
1 MILE
I
13'-0" × 8'-6"
GB

(15) STA. 423+50

(b) GEP-96
EXIT 21C
59 EAST
Downtown
EXIT ONLY
I
17'-0" × 9'-6"
GF-1
BLACK ON YELLOW

(b) GEP-96
EXIT 21C
59 EAST
Downtown
ONLY
I
16'-0" × 9'-6"
GE
BLACK ON YELLOW

(c) GEP-96
EXIT 21B
Lakeshore Blvd.
I
17'-0" × 6'-0"
GF-1

EXIT
21C
GF
8'-0" × 5'-0"

(16) STA. 427+15
62' RT. & WEST EXPRESSWAY

(23) STA. 102+55
34' RT. & SOUTH ST.

Bowery St.
Lakeshore Blvd
Dort Ave.
D-4A
11'-0" × 6'-0"

STA. 102+55±
REMOVE EXISTING SIGN
"+ Boulevard St."
BLANK PANEL

NOTE: SIGN SIZES SHOWN DO NOT INCLUDE THE 6" GLARE SHIELD OR THE 6" TUBE AS SHOWN ON TC-31.21.

FOR LEGEND, SEE SHEET Nº 218.

FOR PAVEMENT MARKING AND REGULATORY AND WARNING SIGN DETAILS, SEE SHEET Nº 211.

FOR GUIDE SIGN ELEVATION VIEWS, SEE SHEET Nº 222.

GRAPHIC SCALE
0 100 200 300

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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# AKRON INNERBELT
## SUM-59-0.00

MATCH LINE STA. 121+00 RAMP 'SW'

MATCH LINE STA. 453+00

MATCH LINE STA. 150+00

(24) STA. 101+40

(25) STA. 107+50, 34' RT.

(26) STA. 122+98

(27) STA. 114+00

(28) STA. 224+32

(29) STA. 54+45
22' RT. & RUSSELL AVE.

(30) STA. 56+50
31' LT. & RUSSELL AVE.

(31) STA. 235+84±

(32) STA. 40+20
21' LT. & RHODES AVE.

(33) STA. 42+50
24' RT. & RHODES AVE.

(34) STA. 168+75 LT. INNERBELT

(35) STA. 192+60 LT. INNERBELT

(17) STA. 448+38
52' LT. & WEST EXPRESSWAY

(18) STA. 449+75

(21) STA. 133+00

(22) STA. 133+00

STA. 50+23 RT.
THORNTON ST.

STA. 111+37±
REMOVE EXISTING SIGN
"Boulevard St."
"Lakeshore Blvd."

STA. 110+57±
REMOVE EXIST. SIGN
"I-77 SOUTH"
"I-76 EAST"
ONE WAY

STA. 111+41±
REMOVE EXIST. SIGN
"I-77 SOUTH"
"I-76 EAST"

STA. 115+58±
REMOVE EXISTING SIGN
"I-77 SOUTH"
"I-76 EAST"

STA. 54+62±
REMOVE EXIST SIGN
"I-77 SOUTH"
"I-76 EAST"

STA. 54+93±
REMOVE EXIST. SIGN
"I-77 NORTH"
"I-76 WEST"

STA. 54+98±
REMOVE EXISTING SIGN
"Lakeshore Blvd."
BLANK PANEL
"Boulevard St."

STA. 448+38
REMOVE EXIST. GORE SIGN
"EXIT 21B"

STA. 43+00-3 SIGNS(1-NO.3 POST)
STA. 43+08-3 SIGNS(POLE MOUNTED)
REMOVE EXISTING SIGNS

STA. 168+75 LT. INNERBELT
REMOVE EXISTING GUIDE SIGN

STA. 192+60 LT. INNERBELT
REMOVE EXISTING GUIDE SIGN

STA. 246+14
REMOVE EXISTING STRUCTURE

STA. 449+75
REMOVE EXISTING GUIDE SIGN

REMOVE OVERLAY
2 - STA. 50+12 RT. WOOSTER AVE. ON MAST ARM

REMOVE OVERLAY
1 - STA. 192+60 LT. INNERBELT

REMOVE OVERLAY
1 - STA. 97+50 RT. RAND AVE.
1 - STA. 114+00 RT. RAND AVE.

REMOVE OVERLAY
2 - STA. 50+28 RT. BARTGES ST. ON MAST ARM

REMOVE OVERLAY
1 - STA. 201+50 LT. INNERBELT

REMOVE OVERLAY
1 - STA. 57+00 LT. RHODES AVE.
1 - STA. 66+00 LT. RHODES AVE.
1 - STA. 97+50 LT. RAND AVE.
1 - STA. 104+00 LT. RAND AVE.
1 - STA. 114+00 LT. RAND AVE.

NOTE: SIGN SIZES SHOWN DO NOT INCLUDE THE 6" GLARE SHIELD OR THE 6" TUBE AS SHOWN ON TC-31.21.

FOR REMOVAL OF BARRELS, GUARDRAIL, SIGNS, ETC. FOR TEMPORARY CONNECTION, SEE SHEET Nº 56

FOR LEGEND, SEE SHEET Nº 218

FOR PAVEMENT MARKING AND REGULATORY AND WARNING SIGN DETAILS, SEE SHEET Nº 213

FOR GUIDE SIGN ELEVATION VIEWS, SEE SHEET Nº 223 & 224

FOR TRAFFIC SIGNAL PLAN, SEE SHEET Nº 227 & 228

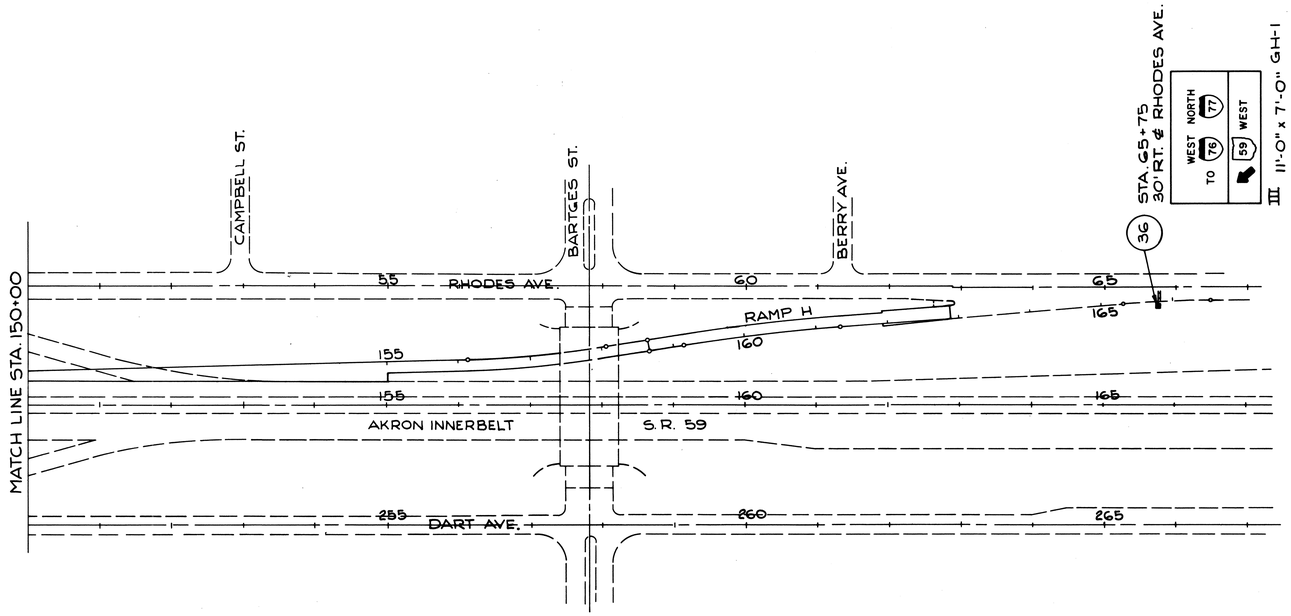
GRAPHIC SCALE
0 100 200 300

# GUIDE SIGN PLAN

AA B/P# 71942R

| | | | |
|---|---|---|---|
| CALC. BY. ____ DATE ____ | M-IT62(2) | OHIO | 220A 455 |
| CHKD. BY. ____ DATE ____ | | F.H.W.A. REGION 5 | |

AKRON INNERBELT
SUM-59-0.00




FOR LEGEND SEE SHEET Nº 218.

FOR PAVEMENT MARKING AND REGULATORY AND WARNING SIGN DETAILS SEE SHEET Nº 215A & 215B

FOR GUIDE SIGN ELEVATION VIEWS SEE SHEET Nº 222

0 100 200 300
Feet

GUIDE SIGN PLAN

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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SUMMIT COUNTY
SUM-59-0.00

MATCH LINE STA. 453+00

EXIT 21B
Boulevard St.
Bowery St.
EXIT ONLY
STA. 455+20
REMOVE EXISTING GUIDE SIGN

(19)

STA. 455+20
GEP-96
EXIT 21C
59 EAST
Dart Ave.
EXIT ONLY
I GE
14'-0" × 9'-6"

BLACK ON YELLOW

GEP-96
(c) EXIT 22A
Main St.
Downtown
EXIT ONLY
I GF-1
16'-0" × 8'-6"

BLACK ON YELLOW

GEP-96
(b) EXIT 21C
59 EAST
Dart Ave.
1/2 MILE
I GE
13'-0" × 9'-6"

(a)
NORTH WEST
77 76
I GG
14'-0" × 7'-0"

20 STA. 483+75

EXIT 22A
Main St.
Downtown
EXIT ONLY

EXIT 21B
Boulevard St.
Bowery St.
EXIT 3/4 MILE
STA. 483+75
REMOVE EXISTING GUIDE SIGNS

NORTH WEST
77 76

PRINCETON ST.
AMHERST ST.
HARVARD ST.
YALE ST.
MAY ST.
COBURN ST.
RUSSELL AVE.
R/W
LA
RAMP 'W8'
RAMP 'W12'
RAMP 'W5'
RAMP 'W7'
RAMP 'W6'
AVE.
LA/RW
ST.
455
460
465
470
475
480
485
I-77
WEST EXPRESSWAY
PC
P.I.
SOUTH ST.
MANILA CT.
MAIN
BROADWAY
SWEITZER

FOR LEGEND, SEE SHEET Nº 218.

FOR GUIDE SIGN ELEVATION VIEWS, SEE SHEET Nº 223.

NOTE: SIGN SIZES SHOWN DO NOT INCLUDE THE 6" GLARE SHIELD OR THE 6" TUBE AS SHOWN ON TC-31.21.

GRAPHIC SCALE
0 100 200 300

# GUIDE SIGN PLAN

FORM D D A-5

CALCULATED BY T.K.I. DATE 12-3-79

CHECKED BY T.A.K. DATE 12-4-79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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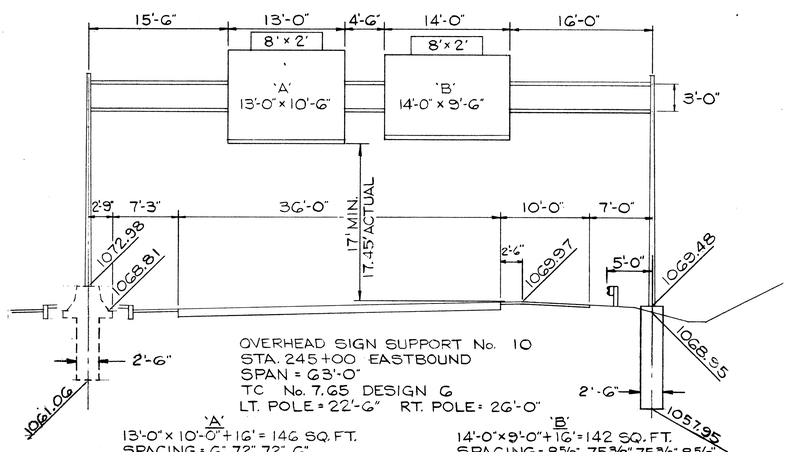
AKRON INNERBELT

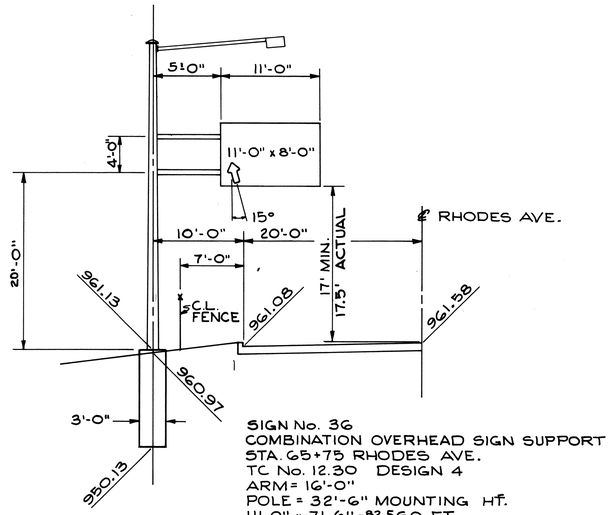
SUM-59-0.00



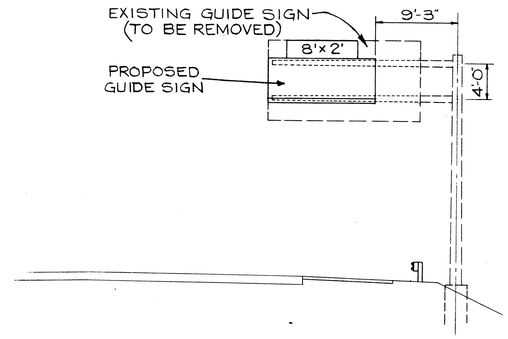

OVERHEAD SIGN SUPPORT No. 10
STA. 245+00 EASTBOUND
SPAN = 63'-0"
TC No. 7.65 DESIGN G
LT. POLE = 22'-6" RT. POLE = 26'-0"

'A'
13'-0"x10'-0"+16' = 146 SQ.FT.
SPACING = 6", 72", 72", 6"
No. OF BRACKETS = 3 HT. = 10'-6"
FIXTURES = 2 AT 175 WATTS

'B'
14'-0"x9'-0"+16' = 142 SQ.FT.
SPACING = 8⅝", 75⅜", 75⅜", 8⅝"
No. OF BRACKETS = 3 HT. = 9'-6"
FIXTURES = 2 AT 175 WATTS

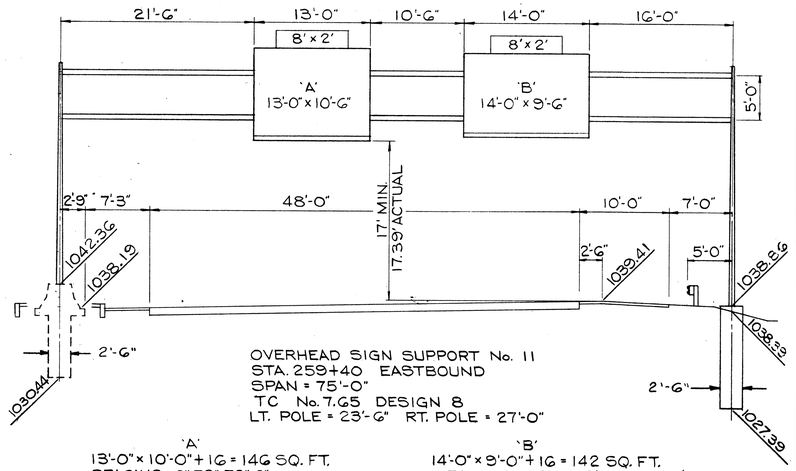



SIGN No. 36
COMBINATION OVERHEAD SIGN SUPPORT
STA. 65+75 RHODES AVE.
TC No. 12.30 DESIGN 4
ARM = 16'-0"
POLE = 32'-6" MOUNTING HT.
11'-0" x 7'-6" = 82.5 SQ.FT.
SPACING = 16 3/8", 99 3/8", 16 1/4"
No. OF BRACKETS = 2 HT. = 8'-0"
FIXTURES = 1 AT 175 WATTS




EXISTING OVERHEAD SIGN SUPPORT No. 12
STA. 264+00 EASTBOUND

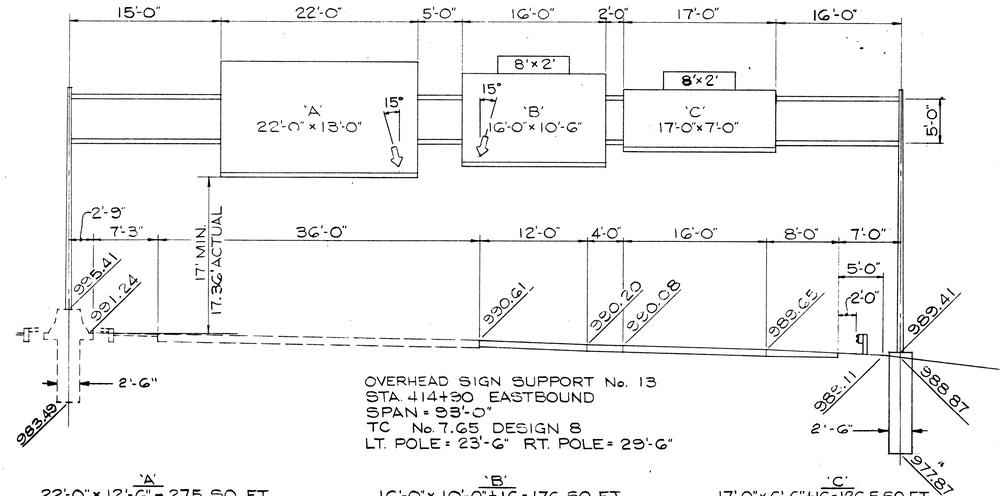
12'-0" x 4'-6" + 16 = 70 SQ.FT.
SPACING = 6", 66", 66", 6"
No. OF BRACKETS = 3 HT. = 5'-0"
FIXTURES = 2 AT 100 WATTS




OVERHEAD SIGN SUPPORT No. 11
STA. 259+40 EASTBOUND
SPAN = 75'-0"
TC No. 7.65 DESIGN 8
LT. POLE = 23'-6" RT. POLE = 27'-0"

'A'
13'-0"x10'-0"+16 = 146 SQ.FT.
SPACING = 6", 72", 72", 6"
No. OF BRACKETS = 3 HT. = 10'-6"
FIXTURES = 2 AT 175 WATTS

'B'
14'-0"x9'-0"+16 = 142 SQ.FT.
SPACING = 8⅝", 75⅜", 75⅜", 8⅝"
No. OF BRACKETS = 3 HT. = 9'-6"
FIXTURES = 2 AT 175 WATTS




OVERHEAD SIGN SUPPORT No. 13
STA. 414+80 EASTBOUND
SPAN = 93'-0"
TC No. 7.65 DESIGN 8
LT. POLE = 23'-6" RT. POLE = 29'-6"

'A'
22'-0" x 12'-6" = 275 SQ.FT.
SPACING = 7", 75⅜", 75⅜", 99⅜", 67⅛"
No. OF BRACKETS = 4 HT. = 13'-0"
FIXTURES = 3 AT 250 WATTS

'B'
16'-0" x 10'-0" + 16 = 176 SQ.FT.
SPACING = 8⅝", 75⅜", 99⅜", 8⅝"
No. OF BRACKETS = 3 HT. = 10'-6"
FIXTURES = 2 AT 175 WATTS

'C'
17'-0" x 6'-6" + 16 = 126.5 SQ.FT.
SPACING = 14⅝", 75⅜", 99⅜", 14⅝"
No. OF BRACKETS = 3 HT. = 7'-0"
FIXTURES = 2 AT 175 WATTS

GUIDE SIGN
ELEVATION VIEWS

CALCULATED BY T.K.I. DATE 12-3-79

CHECKED BY T.A.K. DATE 12-4-79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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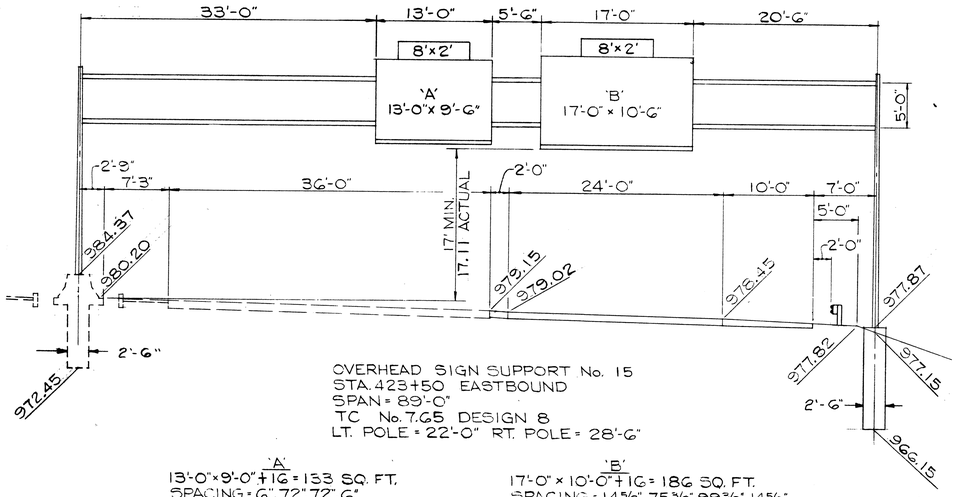
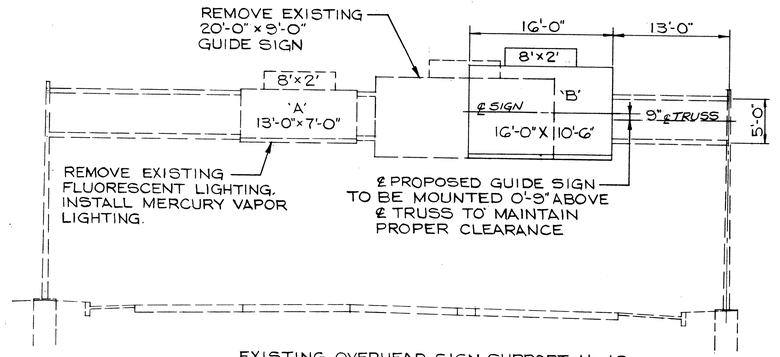
AKRON INNERBELT
SUM-59-0.00




OVERHEAD SIGN SUPPORT No. 15
STA. 423+50 EASTBOUND
SPAN = 89'-0"
TC No. 7.65 DESIGN 8
LT. POLE = 22'-0" RT. POLE = 28'-6"

'A'
13'-0"x9'-0"+1G = 133 SQ. FT.
SPACING = 6", 72", 72", 6"
No. OF BRACKETS = 3 HT. = 9'-6"
FIXTURES = 2 AT 175 WATTS

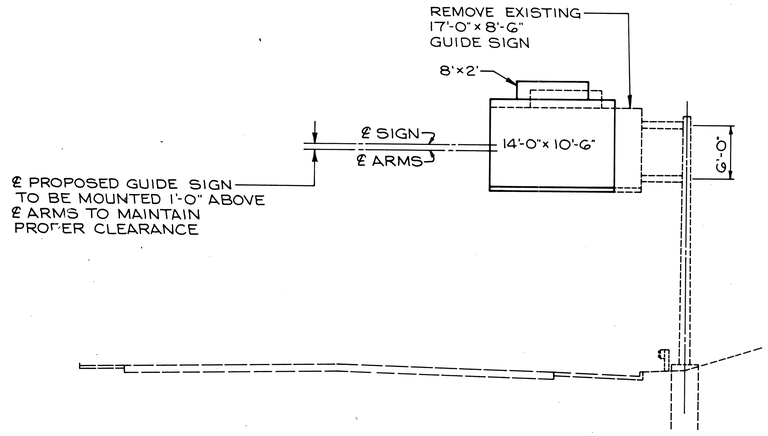
'B'
17'-0" x 10'-0"+1G = 186 SQ. FT.
SPACING = 14⅝", 75⅜", 99⅜", 14⅝"
No. OF BRACKETS = 3 HT. = 10'-6"
FIXTURES = 2 AT 175 WATTS




EXISTING OVERHEAD SIGN SUPPORT No. 18
STA. 449+75 WESTBOUND

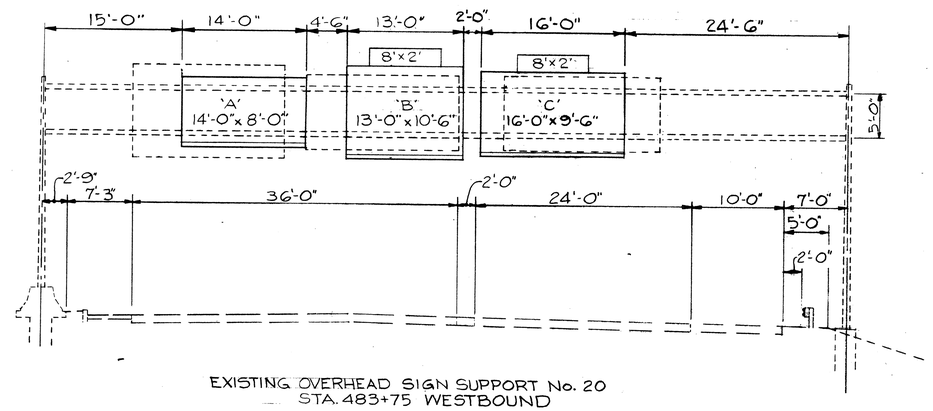
'A' (EXISTING)
13'-0"x6'-6"+1G = 100.5 SQ.FT.
SPACING = 6", 72", 72", 6"
No. OF BRACKETS = 3 HT. = 7'-0"
FIXTURES = 2 AT 175 WATTS

'B'
16'-0"x10'-0"+1G = 176 SQ. FT.
SPACING = 8⅝", 75⅜", 99⅜", 8⅝"
No. OF BRACKETS = 3 HT. = 10'-6"
FIXTURES = 2 AT 175 WATTS




EXISTING OVERHEAD SIGN SUPPORT No. 19
STA. 455+20 WESTBOUND

14'-0"x 10'-0"+1G = 156 SQ. FT.
SPACING = 8⅝", 75⅜", 75⅜", 8⅝"
No. OF BRACKETS = 3 HT. = 10'-6"
FIXTURES = 2 AT 175 WATTS




EXISTING OVERHEAD SIGN SUPPORT No. 20
STA. 483+75 WESTBOUND

'A'
14'-0"x 7'-6"+1G = 105 SQ. FT.
SPACING = 8⅝", 75⅜", 75⅜", 8⅝"
NO. OF BRACKETS = 3, HT. 8'-0"
FIXTURES = 2 AT 175 WATTS

'B'
13'-0"x10'-0"+1G = 146 SQ. FT.
SPACING = 6", 72", 72", 6"
NO. OF BRACKETS = 3, HT. = 10'-6"
FIXTURES = 2 AT 175 WATTS

'C'
16'-0"x 9'-0"+1G = 160 SQ. FT.
SPACING = 8⅝", 75⅜", 99⅜", 8⅝"
NO. OF BRACKETS = 3, HT. 9'-6"
FIXTURES = 2 AT 175 WATTS

GUIDE SIGN
ELEVATION VIEWS

CALCULATED BY T.K.I. DATE 12-4-79

CHECKED BY T.A.K. DATE 12-5-79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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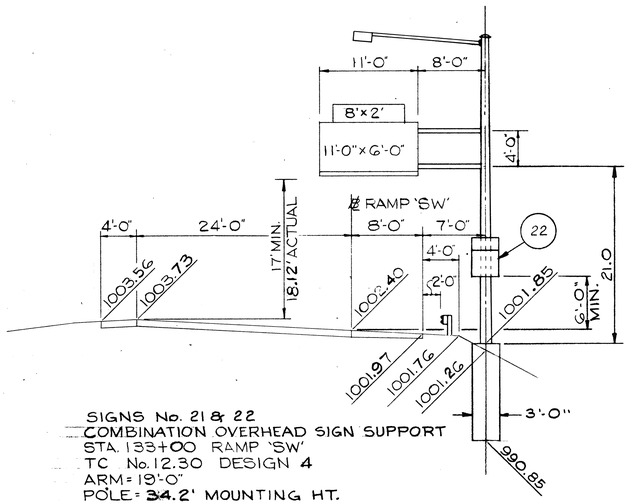
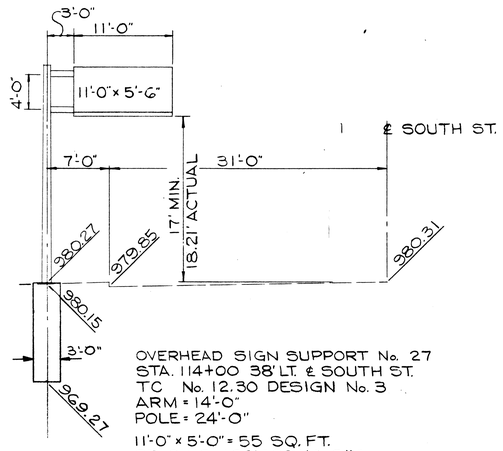
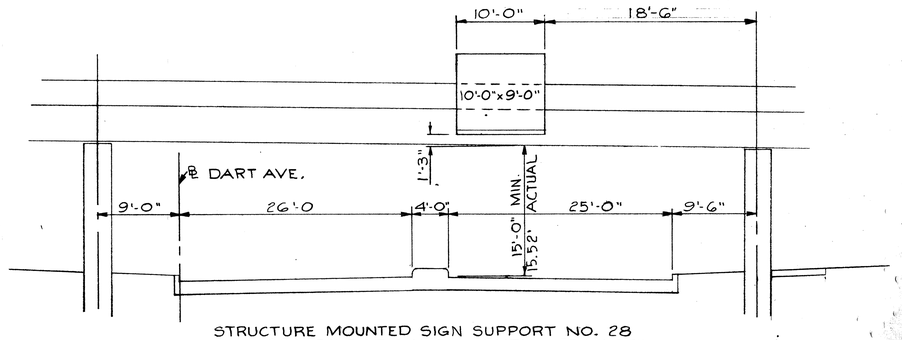
AKRON INNERBELT
SUM-59-0.00




SIGNS No. 21 & 22
COMBINATION OVERHEAD SIGN SUPPORT
STA. 133+00 RAMP 'SW'
TC No. 12.30 DESIGN 4
ARM = 18'-0"
POLE = 34.2' MOUNTING HT.
11'-0" x 5'-6" + 16 = 76.5 SQ. FT.
SPACING = 16 3/8", 99 3/8", 16 1/4"
No. OF BRACKETS = 2 HT. = 6'-0"
FIXTURES = 1 AT 100 WATTS

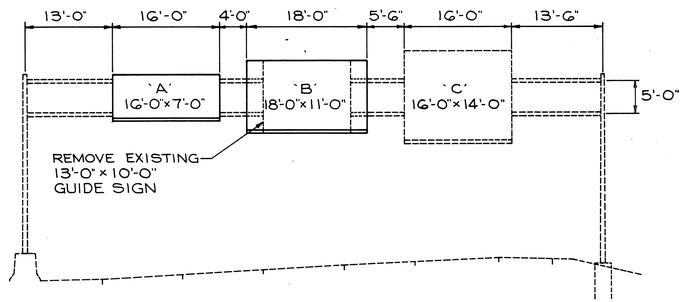



OVERHEAD SIGN SUPPORT No. 27
STA. 114+00 38' LT. ℄ SOUTH ST.
TC No. 12.30 DESIGN No. 3
ARM = 14'-0"
POLE = 24'-0"
11'-0" x 5'-0" = 55 SQ. FT.
SPACING = 16 3/8", 99 3/8", 16 1/4"
No. OF BRACKETS = 2 HT. = 5'-6"
FIXTURES = 1 AT 100 WATTS




STRUCTURE MOUNTED SIGN SUPPORT NO. 28
STA. 224+32 DART AVE. SKEW = 5°45'07"

TYPE TC-18.24
10'-0" x 8'-6" = 85 SQ. FT.
SPACING = 10 3/8", 99 3/8", 10 1/4"
NO. OF BRACKETS = 2, HT. = 9'-0"
FIXTURES = 1 AT 175 WATTS

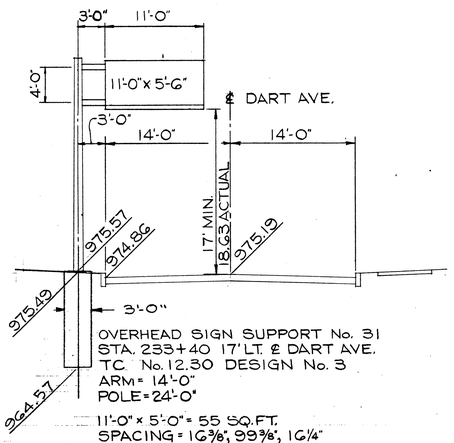



EXISTING OVERHEAD SIGN SUPPORT No. 35
STA. 192+60 LT. INNERBELT

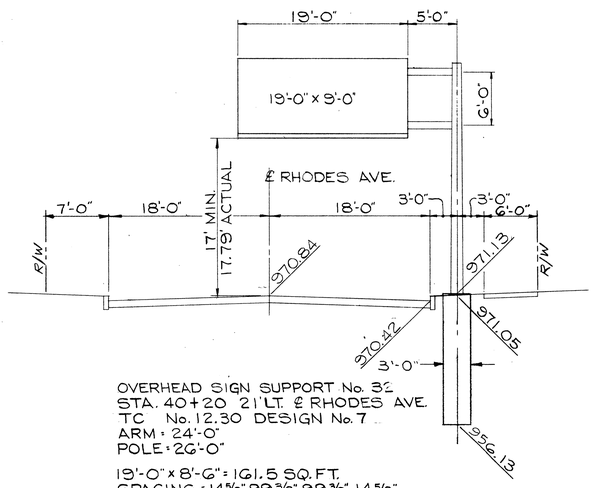
'A'
16'-0" x 6'-6" = 104 SQ. FT.
SPACING = 8 5/8", 7 5 3/8", 99 3/8", 8 5/8"
No. OF BRACKETS = 3 HT. = 7'-0"
FIXTURES = 2 AT 175 WATTS

'B'
18'-0" x 10'-6" = 189 SQ. FT.
SPACING = 8 5/8", 99 3/8", 99 3/8", 8 5/8"
No. OF BRACKETS = 3 HT. = 11'-0"
FIXTURES = 2 AT 175 WATTS

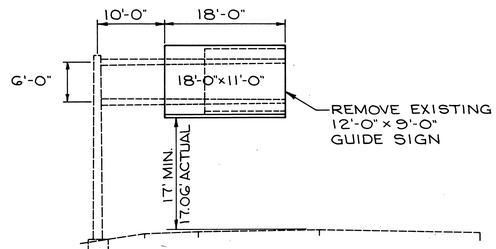
'C' (EXISTING)
16'-0" x 13'-6" = 216 SQ. FT.




OVERHEAD SIGN SUPPORT No. 31
STA. 233+40 17' LT. ℄ DART AVE.
TC No. 12.30 DESIGN No. 3
ARM = 14'-0"
POLE = 24'-0"
11'-0" x 5'-0" = 55 SQ. FT.
SPACING = 16 3/8", 99 3/8", 16 1/4"
No. OF BRACKETS = 2 HT. = 5'-6"
FIXTURES = 1 AT 100 WATTS




OVERHEAD SIGN SUPPORT No. 32
STA. 40+20 21' LT. ℄ RHODES AVE.
TC No. 12.30 DESIGN No. 7
ARM = 24'-0"
POLE = 26'-0"
19'-0" x 8'-6" = 161.5 SQ. FT.
SPACING = 14 5/8", 99 3/8", 99 3/8", 14 5/8"
No. OF BRACKETS = 3 HT. = 9'-0"
FIXTURES = 2 AT 175 WATTS




EXISTING OVERHEAD SIGN SUPPORT No. 34
STA. 168+75 LT. INNERBELT

18'-0" x 10'-6" = 189 SQ. FT.
SPACING = 8 5/8", 99 3/8", 99 3/8", 8 5/8"
No. OF BRACKETS = 3 HT. = 11'-0"
FIXTURES = 2 AT 175 WATTS

GUIDE SIGN
ELEVATION VIEWS

# SIGNING QUANTITIES SUB-SUMMARY

CALCULATED BY T.K.I. DATE 12-11-79
CHECKED BY T.A.K. DATE 12-12-79
REVISED BY BEH 12-5-83

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

225/455

AKRON INNERBELT
SUM-59-0.00

| LINE No. | REFERENCE No. | STATION | OFFSET & SIDE | SIGNS FLAT SHEET S.F. | SIGNS EXTRUSHEET S.F. | | | GROUND MOUNTED SUPPORTS, NO. 4 POST L.F. | GROUND MOUNTED SUPPORTS, SWX7 L.F. | GROUND MOUNTED SUPPORTS, W6X9 L.F. | GROUND MOUNTED SUPPORTS, W10X12 L.F. | BREAKAWAY BEAM CONNECTION EA. | SIGN SUPPORT ASSEMBLY, POLE MOUNTED EA. | SIGN ATTACHMENT ASSEMBLY EA. | SIGN SERVICE EA. | SIGNS WIRED EA. | SIGNS WIRED, OVERPASS STRUCTURE MOUNTED EA. | GROUND ROD 713.16 EA. | MERCURY VAPOR TC-31.21 LUMINAIRE W/100 W. LAMP EA. | MERCURY VAPOR TC-31.21 LUMINAIRE W/175 W. LAMP EA. | MERCURY VAPOR TC-31.21 LUMINAIRE W/250 W. LAMP EA. | | |

# SIGNING QUANTITIES SUB-SUMMARY

CALCULATED BY TK I. DATE 12-11-79
CHECKED BY T.A.K. DATE 12-12-79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

226/455

AKRON INNERBELT
SUM-59-0.00

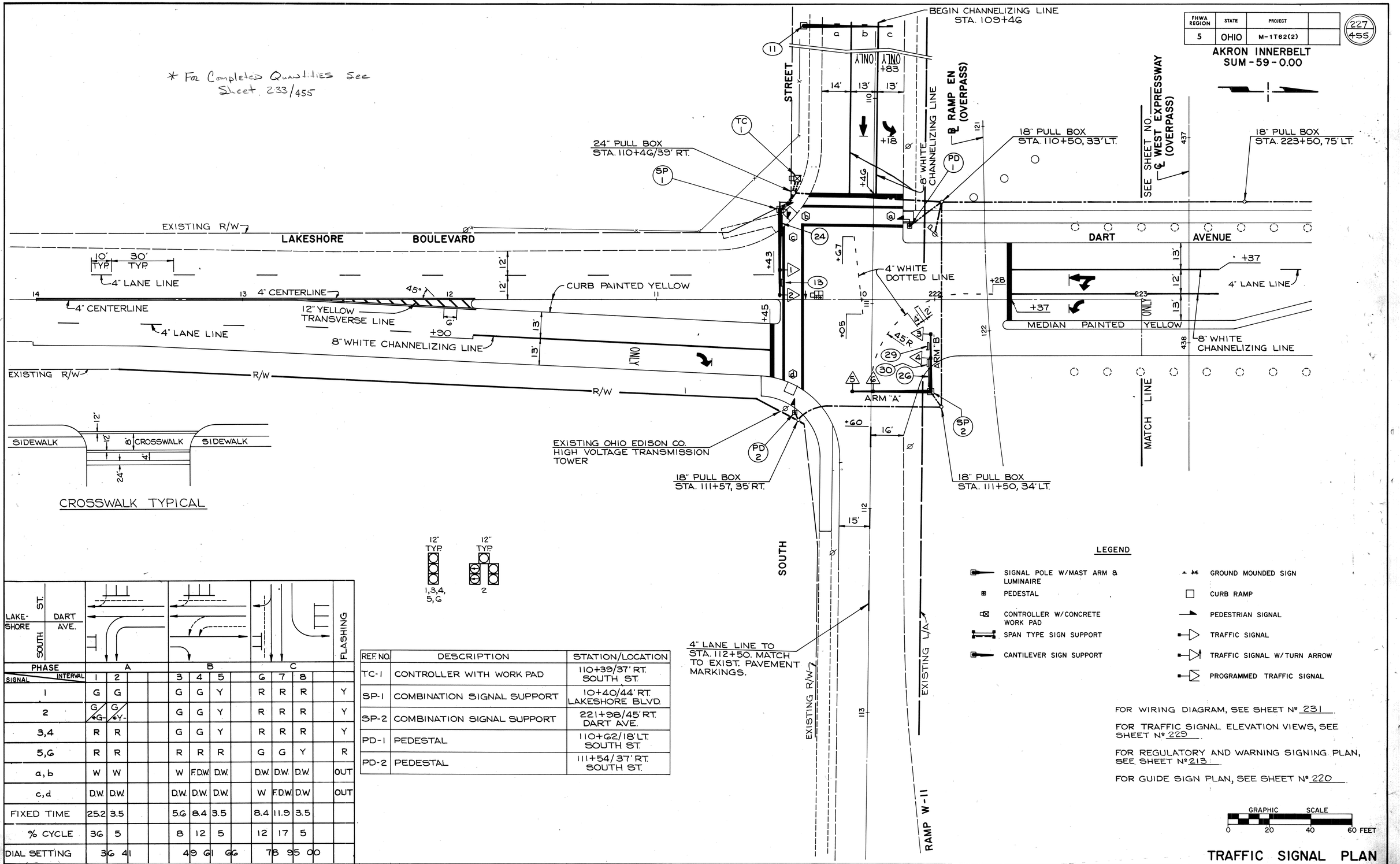
| LINE No. | REFERENCE No. | STATION | OFFSET & SIDE | REMOVAL OF OVERHEAD MOUNTED SIGN & STORAGE | REMOVAL OF OVERHEAD SIGN SUPPORT & STORAGE | REMOVAL OF OVERHEAD SIGN SUPPORT & STORAGE TYPE 12 & 30 | | | REMOVAL OF GROUND MOUNTED SIGN AND STORAGE | REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE | REMOVAL OF GROUND MOUNTED POST SUPPORT | REMOVAL OF GROUND MOUNTED BEAM SUPPORT | | | | REMOVAL OF OVERLAY SIGN | | | REMOVAL OF LUMINAIRE AND STORAGE | | | |

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T82(2) | |

227/455

**AKRON INNERBELT**
**SUM-59-0.00**

* For Completed Quantities See Sheet 233/455







CROSSWALK TYPICAL




| PHASE | A | | | B | | | C | | | FLASHING |
|---|---|---|---|---|---|---|---|---|---|---|
| SIGNAL \ INTERVAL | 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | |
| 1 | G | G | | G | G | Y | R | R | R | Y |
| 2 | G/G | G/Y | | G | G | Y | R | R | R | Y |
| 3,4 | R | R | | G | G | Y | R | R | R | Y |
| 5,6 | R | R | | R | R | R | G | G | Y | R |
| a, b | W | W | | W | F.D.W. | D.W. | D.W. | D.W. | D.W. | OUT |
| c, d | D.W. | D.W. | | D.W. | D.W. | D.W. | W | F.D.W. | D.W. | OUT |
| FIXED TIME | 25.2 | 3.5 | | 5.6 | 8.4 | 3.5 | 8.4 | 11.9 | 3.5 | |
| % CYCLE | 36 | 5 | | 8 | 12 | 5 | 12 | 17 | 5 | |
| DIAL SETTING | 36 41 | | | 49 61 66 | | | 78 95 00 | | | |

| REF. NO | DESCRIPTION | STATION/LOCATION |
|---|---|---|
| TC-1 | CONTROLLER WITH WORK PAD | 110+39/37' RT. SOUTH ST. |
| SP-1 | COMBINATION SIGNAL SUPPORT | 10+40/44' RT. LAKESHORE BLVD. |
| SP-2 | COMBINATION SIGNAL SUPPORT | 221+98/45' RT. DART AVE. |
| PD-1 | PEDESTAL | 110+62/18' LT. SOUTH ST. |
| PD-2 | PEDESTAL | 111+54/37' RT. SOUTH ST. |

**LEGEND**

- SIGNAL POLE W/MAST ARM & LUMINAIRE
- PEDESTAL
- CONTROLLER W/CONCRETE WORK PAD
- SPAN TYPE SIGN SUPPORT
- CANTILEVER SIGN SUPPORT
- GROUND MOUNDED SIGN
- CURB RAMP
- PEDESTRIAN SIGNAL
- TRAFFIC SIGNAL
- TRAFFIC SIGNAL W/TURN ARROW
- PROGRAMMED TRAFFIC SIGNAL

FOR WIRING DIAGRAM, SEE SHEET Nº 231

FOR TRAFFIC SIGNAL ELEVATION VIEWS, SEE SHEET Nº 229

FOR REGULATORY AND WARNING SIGNING PLAN, SEE SHEET Nº 213

FOR GUIDE SIGN PLAN, SEE SHEET Nº 220

GRAPHIC SCALE
0 20 40 60 FEET

# TRAFFIC SIGNAL PLAN

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2), | |

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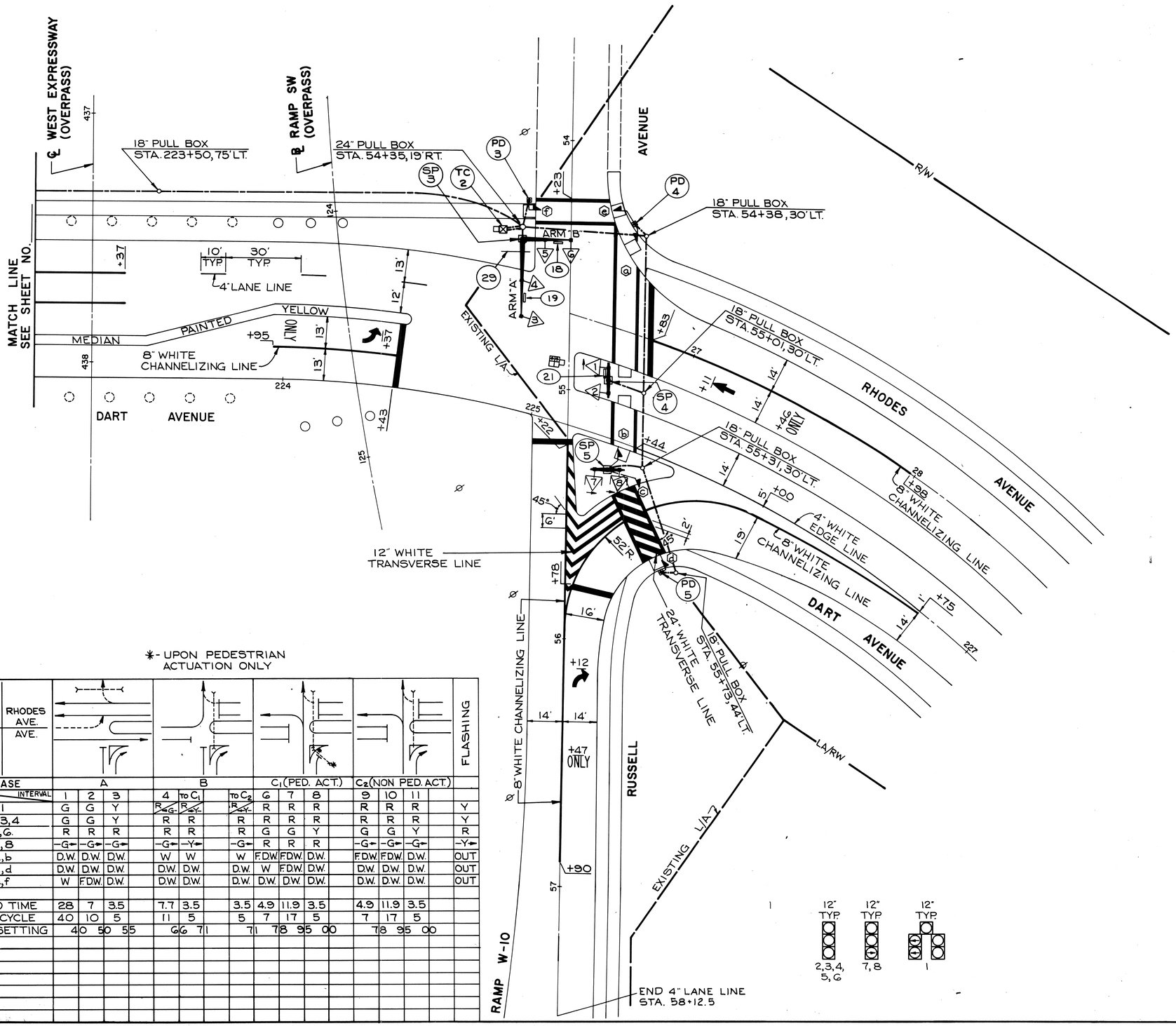
455

# AKRON INNERBELT
## SUM-59-0.00

| REF NO. | DESCRIPTION | STATION/LOCATION |
|---|---|---|
| TC-2 | CONTROLLER WITH WORK PAD | 54+36/27'RT. RUSSELL AVE. |
| SP-3 | COMBINATION SIGNAL SUPPORT | 54+40/19'RT. RUSSELL AVE. |
| SP-4 | SIGNAL SUPPORT | 54+96/16'LT. RUSSELL AVE. |
| SP-5 | SIGNAL SUPPORT | 55+32/16'LT. RUSSELL AVE. |
| PD-3 | PEDESTAL | 54+24/17'RT. RUSSELL AVE. |
| PD-4 | PEDESTAL | 54+33/26'LT. RUSSELL AVE. |
| PD-5 | PEDESTAL | 55+73/38'LT. RUSSELL AVE. |




*- UPON PEDESTRIAN ACTUATION ONLY

| PHASE | A | | | B | | | $C_1$ (PED. ACT.) | | | $C_2$ (NON PED. ACT.) | | | FLASHING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIGNAL \ INTERVAL | 1 | 2 | 3 | 4 | to $C_1$ | to $C_2$ | 6 | 7 | 8 | 9 | 10 | 11 | |
| 1 | G | G | Y | R→G | R→Y | R→Y | R | R | R | R | R | R | Y |
| 2,3,4 | G | G | Y | R | R | R→Y | R | R | R | R | R | R | Y |
| 5,6 | R | R | R | R | R | R→Y | G | G | Y | G | G | Y | R |
| 7,8 | -G← | -G← | -G← | -G← | -Y← | -G← | R | R | R | -G← | -G← | -G← | -Y← |
| a,b | D.W. | D.W. | D.W. | W | W | W | F.D.W. | F.D.W. | D.W. | F.D.W. | F.D.W. | D.W. | OUT |
| * c,d | D.W. | D.W. | D.W. | D.W. | D.W. | D.W. | W | F.D.W. | D.W. | D.W. | D.W. | D.W. | OUT |
| e,f | W | F.D.W. | D.W. | D.W. | D.W. | D.W. | D.W. | D.W. | D.W. | D.W. | D.W. | D.W. | OUT |
| FIXED TIME | 28 | 7 | 3.5 | 7.7 | 3.5 | 3.5 | 4.9 | 11.9 | 3.5 | 4.9 | 11.9 | 3.5 | |
| % CYCLE | 40 | 10 | 5 | 11 | 5 | 5 | 7 | 17 | 5 | 7 | 17 | 5 | |
| DIAL SETTING | 40 | 50 | 55 | 66 | 71 | 71 | 78 | 95 | 00 | 78 | 95 | 00 | |


FOR LEGEND, SEE SHEET Nº 227.

FOR WIRING DIAGRAM, SEE SHEET Nº 232.

FOR TRAFFIC SIGNAL ELEVATION VIEWS, SEE SHEET Nº 230.

FOR REGULATORY AND WARNING SIGNING PLAN, SEE SHEET Nº 213.

FOR GUIDE SIGN PLAN, SEE SHEET Nº 220.


GRAPHIC SCALE
0 20 40 60 FEET

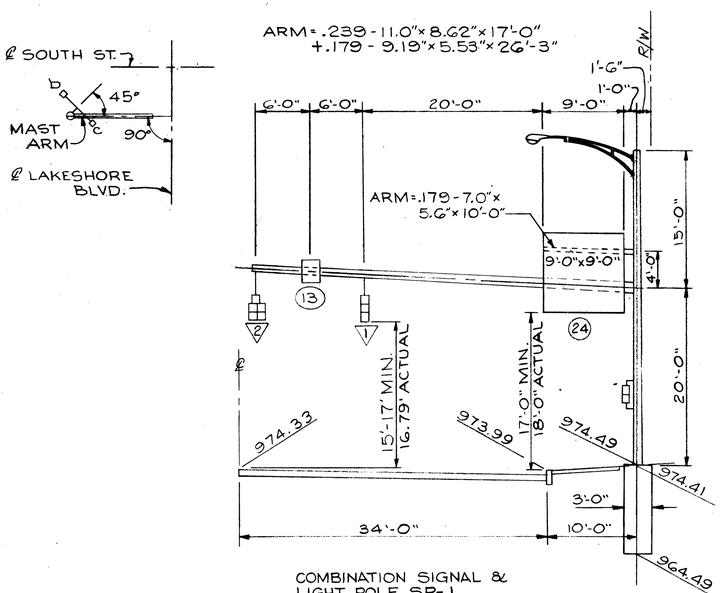
# TRAFFIC SIGNAL PLAN

CALCULATED BY TKJ DATE 12-27-79
CHECKED BY TAK DATE 12-28-79
REVISED BY HEH 12-5-83

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

223
455

# AKRON INNERBELT
# SUM-59-0.00



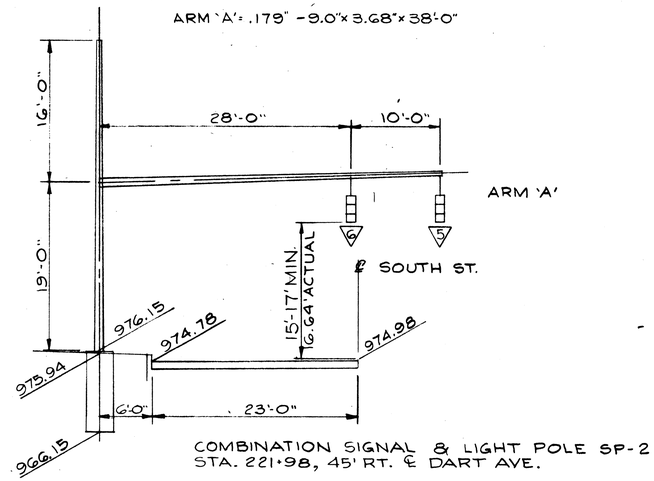

COMBINATION SIGNAL & LIGHT POLE SP-1
STA. 10+40, 44' RT. ℄ LAKESHORE BLVD.
632 - T.C. -81.20 DESIGN No. 11, AS PER PLAN

SIGN NO. 24 - 9'-0" x 8'-6" = 76.5 SQ. FT.
SPACING = 16 3/8", 75 5/8", 16 1/4"
NO. OF BRACKETS = 2, HT. = 9'-0"
FIXTURES = 1 AT 175 WATTS
POLE = 0.239" - 14.0" x 9.10" x 35'-0"

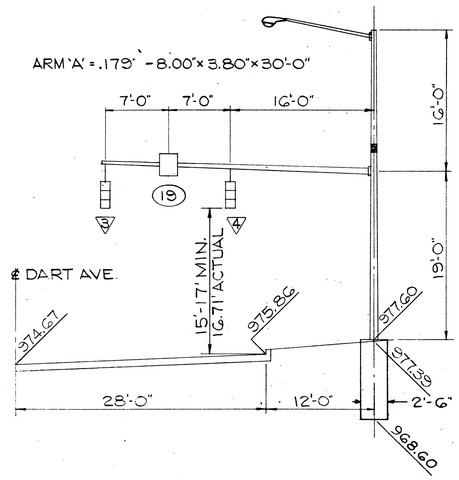
NOTE:

~~SIGN BRACKETS, CLAMPS, HARDWARE AND ETC., TO RIGID MOUNT SIGNS TO MAST ARMS, SHALL BE INCLUDED WITH THE UNIT PRICE BID FOR COMBINATION SIGNAL AND LIGHT POLE.~~
~~FOR MOUNTING DETAILS SEE STANDARD CONSTRUCTION DRAWINGS TC-22.10 AND TC-22.20.~~

SIGN BRACKETS, CLAMPS, HARDWARE AND ETC. SHALL BE PAINTED "MATTE BLACK" IN ACCORDANCE WITH 625.05 AND 713.01,9.

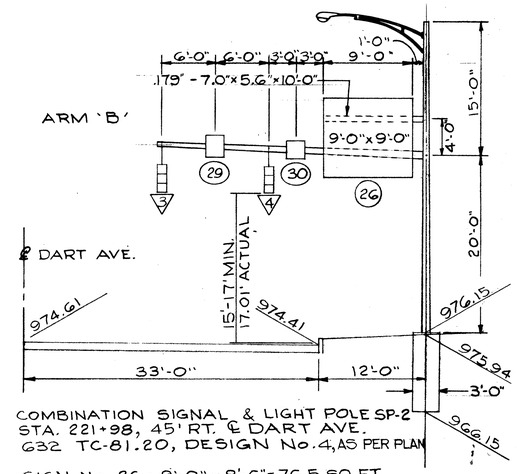



COMBINATION SIGNAL & LIGHT POLE SP-2
STA. 221+98, 45' RT. ℄ DART AVE.




SP-3

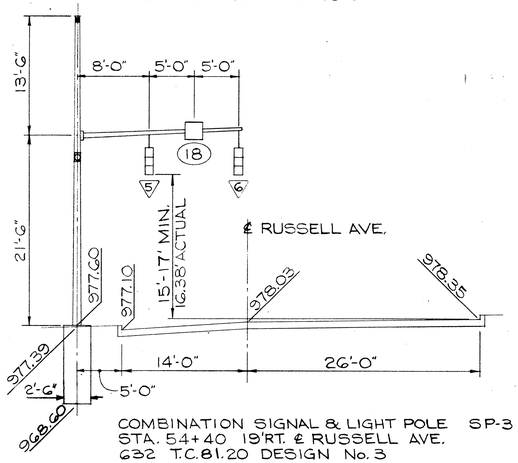
ARM 'B' = .179" - 9.0" x 5.08" x 28'-0"




COMBINATION SIGNAL & LIGHT POLE SP-2
STA. 221+98, 45' RT. ℄ DART AVE.
632 TC-81.20, DESIGN No. 4, AS PER PLAN

SIGN No. 26 - 9'-0" x 8'-6" = 76.5 SQ. FT.
SPACING = 16 3/8", 75 5/8", 16 1/4"
No. OF BRACKETS = 2, HT. = 9'-0"
FIXTURES = 1 AT 175 WATTS
POLE = 0.239" - 13.0" x 8.10" x 35'-0"

ARM 'B' = .179 - 7.0" x 4.48" x 18'-0"




COMBINATION SIGNAL & LIGHT POLE SP-3
STA. 54+40 19' RT. ℄ RUSSELL AVE.
632 T.C.81.20 DESIGN No. 3

POLE = .179 - 12.0" x 7.10" x 35'-0"

# TRAFFIC SIGNAL ELEVATION VIEWS

CALCULATED BY TKL DATE 12-27-79
CHECKED BY TA.K. DATE 12.28.79

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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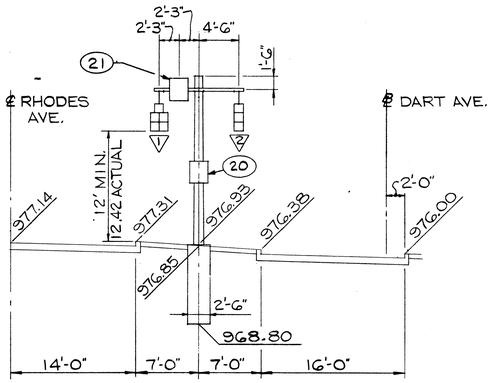
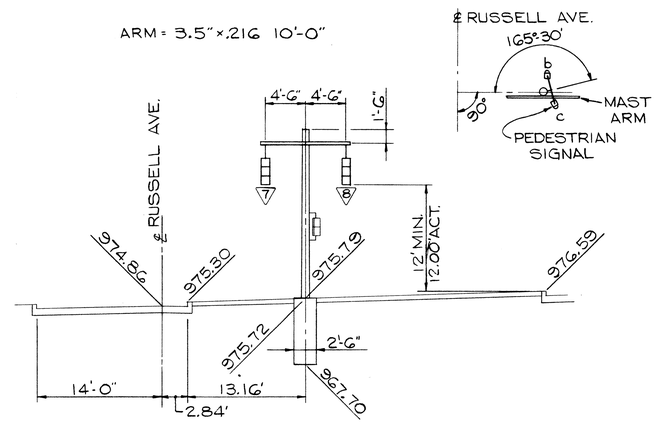
AKRON INNERBELT
SUM-59-0.00

ARM = 3.5"x.216 10'-0"

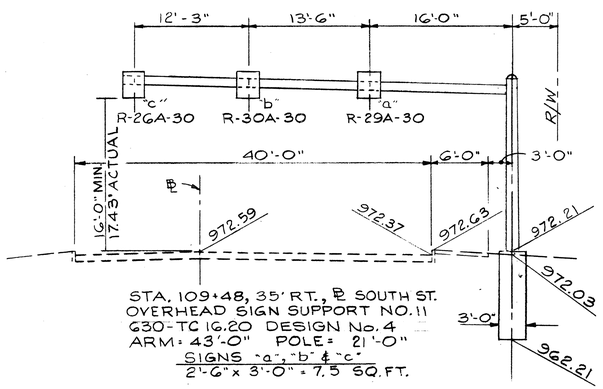



SIGNAL POLE SP-4
STA. 54+96, 16' LT. ℄ RUSSELL AVE.
632 - T.C. 9.30 DESIGN No. 1, AS PER PLAN
POLE = .239 - 10.0" x 7.34" x 19'-0"

ARM = 3.5"x.216 10'-0"




SIGNAL POLE SP-5
STA. 55+32, 16' LT. ℄ RUSSELL AVE.
632 - T.C. 9.30 DESIGN No. 1, AS PER PLAN
POLE = .239 - 10.0" x 7.34" x 19'-0"




STA. 109+48, 35' RT., ℄ SOUTH ST.
OVERHEAD SIGN SUPPORT NO. 11
630-TC 16.20 DESIGN No. 4
ARM = 43'-0" POLE = 21'-0"
SIGNS "a", "b" & "c"
2'-6" x 3'-0" = 7.5 SQ. FT.

NOTE:

~~SIGN BRACKETS, CLAMPS, HARDWARE AND ETC., TO RIGID MOUNT SIGNS TO MAST ARMS, SHALL BE INCLUDED WITH THE UNIT PRICE BID FOR COMBINATION SIGNAL AND LIGHT POLE.~~
~~FOR MOUNTING DETAILS SEE STANDARD CONSTRUCTION DRAWINGS TC-22.10 AND TC-22.20.~~

SIGN BRACKETS, CLAMPS, HARDWARE AND ETC. SHALL BE PAINTED "MATTE BLACK" IN ACCORDANCE WITH 625.05 AND 713.01,9.

TRAFFIC SIGNAL ELEVATION VIEWS

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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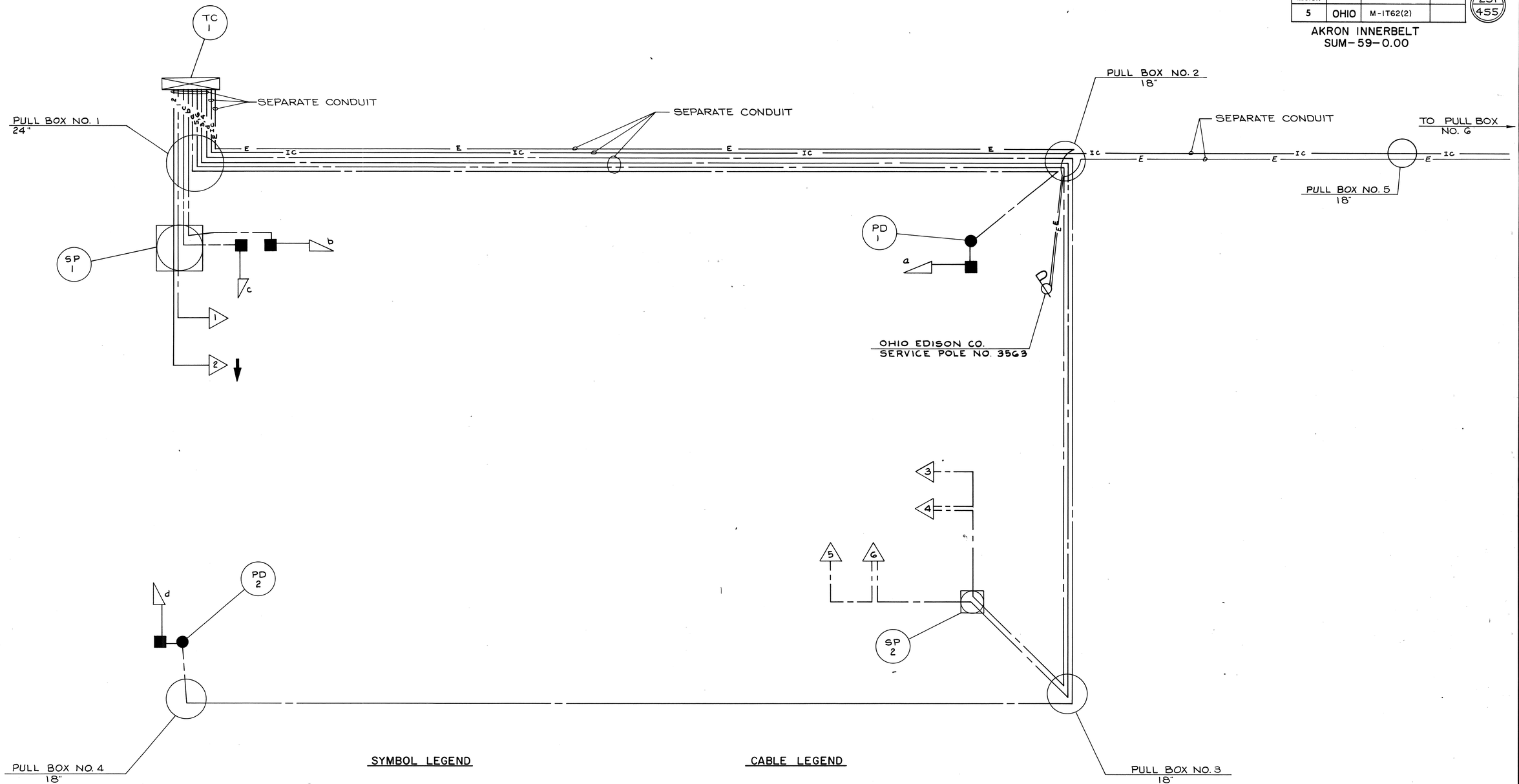
455

AKRON INNERBELT
SUM-59-0.00




## SYMBOL LEGEND

- PULL BOX
- VEHICULAR SIGNAL HEAD, CONVENTIONAL
- VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
- PEDESTRIAN SIGNAL HEAD
- PEDESTRIAN PUSHBUTTON
- TERMINAL STRIP IN SIGNAL CONTROLLER

## CABLE LEGEND

- SIGNAL CABLE, STRANDED 7/C NO. 14 AWG
- SIGNAL CABLE, STRANDED 5/C NO. 14 AWG
- E — POWER CABLE, 2/C NO. 4 AWG
- IC — INTERCONNECT CABLE 12/C NO. 14 AWG STRANDED

NOT TO SCALE
WIRING DIAGRAM

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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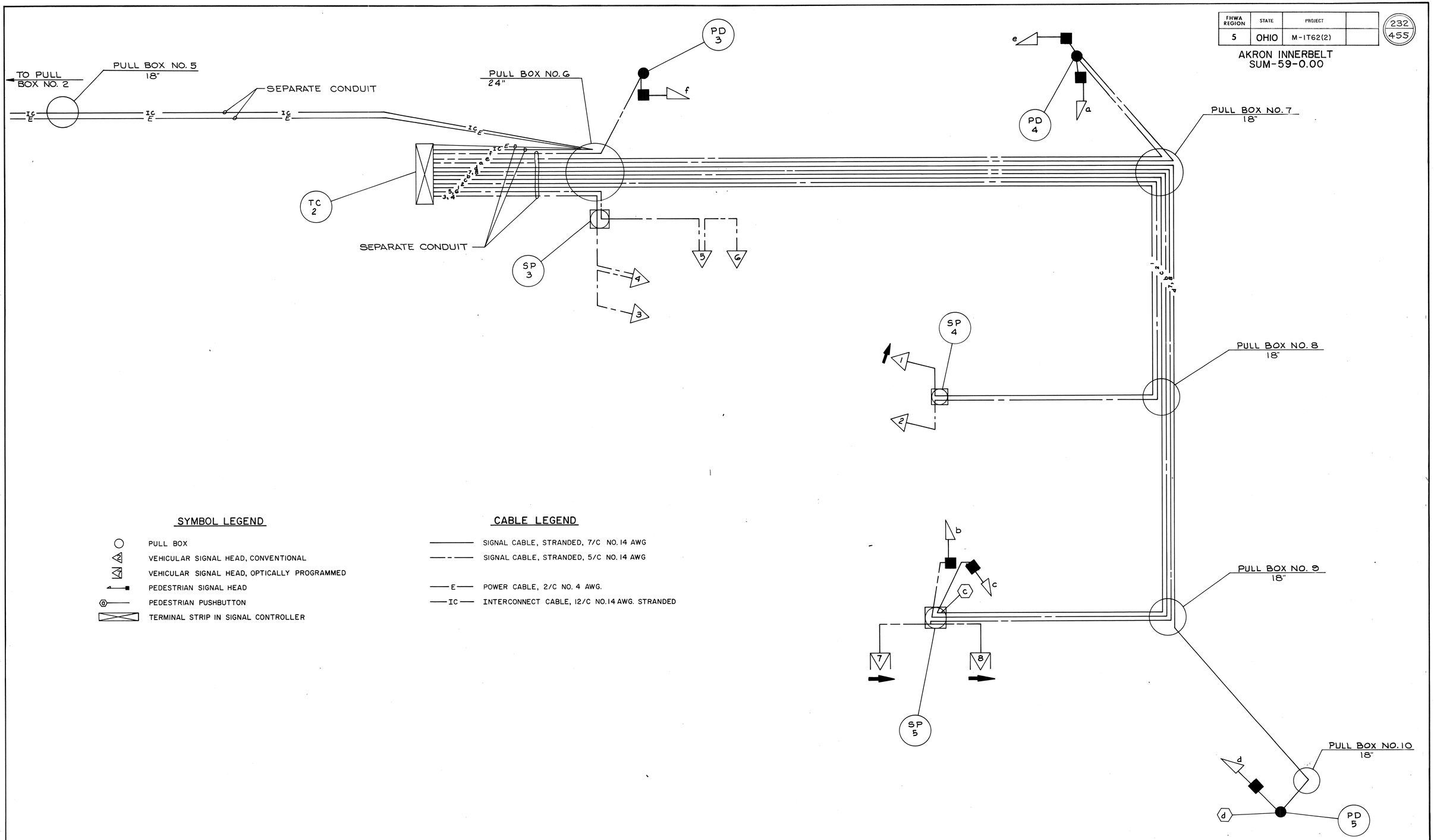
455

AKRON INNERBELT
SUM-59-0.00




## SYMBOL LEGEND

- PULL BOX
- VEHICULAR SIGNAL HEAD, CONVENTIONAL
- VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
- PEDESTRIAN SIGNAL HEAD
- PEDESTRIAN PUSHBUTTON
- TERMINAL STRIP IN SIGNAL CONTROLLER

## CABLE LEGEND

- SIGNAL CABLE, STRANDED, 7/C NO. 14 AWG
- SIGNAL CABLE, STRANDED, 5/C NO. 14 AWG
- E — POWER CABLE, 2/C NO. 4 AWG.
- IC — INTERCONNECT CABLE, 12/C NO. 14 AWG. STRANDED

NOT TO SCALE
WIRING DIAGRAM

CALCULATED BY T.K.I. DATE 1-3-80
CHECKED BY T.A.K. DATE 1-4-80

CODE TYPE 7221

# TRAFFIC SIGNAL QUANTITIES SUB-SUMMARY

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

AKRON INNERBELT
SUM-59-0.00

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455

*SHADED AREAS REPRESENT COMPLETED WORK

| LINE NO. | INTERSECTION NO. | FROM | TO | DISTANCE | TRENCH L.F. | 18" PULL BOX CONCRETE EA. | 24" PULL BOX CONCRETE EA. | CONDUIT 3", 713.07 CONCRETE ENCASED L.F. | CONDUIT 3", 713.04 JACKED UNDER PAVEMENT L.F. | CABLE SUPPORT ASSEMBLY EA. | CONDUIT RISER, 2 IN. EA. | CONTROLLER, 29 CIRCUIT, SECONDARY EA. | CONTROLLER, 29 CIRCUIT, MASTER/SECONDARY EA. | PEDESTAL, 8 FEET EA. | CONCRETE FOR ANCHOR BASE FOUNDATIONS C.Y. | CONCRETE FOR CABINET FOUNDATIONS C.Y. | GROUND ROD EA. | COMBINATION SIGNAL SUPPORT TYPE 81.20, DES.11 42' ARM, AS PER PLAN EACH | COMBINATION SIGNAL SUPPORT TYPE 81.20, DES.4 38' ARM, 28' ARM, AS PER PLAN EACH | COMBINATION SIGNAL SUPPORT TYPE 81.20, DES. 3 30' ARM, 18' ARM, AS PER PLAN EACH | SIGNAL SUPPORT TYPE 9.30 DES. 1 10' ARM, AS PER PLAN EACH | SIGNAL CABLE 7/C, 14 AWG L.F. | SIGNAL CABLE 5/C, 14 AWG L.F. | INTERCONNECT CABLE 12/C, 14 AWG L.F. | POWER CABLE 2/C, 4 AWG L.F. | POWER SERVICE EA. | TRENCH IN PAVED AREAS, TYPE A L.F. | VEHICULAR SIGNAL HEAD 3 SECTION, 12" LENS ONE-WAY EACH | VEHICULAR SIGNAL HEAD 5 SECTION, 12" LENS ONE-WAY EACH | OPTICALLY PROGRAMMED SIGNAL HEAD 3 SECTION, 12" LENS ONE-WAY EACH | PED. SIGNAL HEAD TYPE A-2 EA. | PED. PUSHBUTTON WITH SIGN R-TSC-S EA. | COVERING OF VEHICULAR SIGNALS EA. | SIGN HANGER ASSEMBLY, MAST ARM EA. | SIGN ATTACHMENT ASSEMBLY EA. | LUMINAIRE SUPPORT ASSEMBLY TYPE TC-31.21 EA. | REMOVAL OF TRAFFIC SIGNAL INSTALLATION EA. | LINE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | TC-1 | | 110+39 | — | | | | | | | 1 | | | | | 1.09 | V | | | | | | | | | | | | | | | | | | 1 |
| 2 | | 110+39 | 110+46 RT. | 7' | V | | V | V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| 3 | SP-1 | 110+46 RT. | 10+40 | 10' | V | | | 6 | | 2 | | | | | 2.68 | | V | V | | V | | | | | | | | | | | | | | 1 | 2 | 1 | 3 |
| 4 | | 110+46 RT. | 110+50 LT. | 72' | 2 | V | V | 68 | V | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 5 | PD-1 | 110+50 LT. | 110+62 | 19' | 19 | | | 19 | | | | | | 1 | 0.44 | | 1 | | | | | | | | | | | | | | | | | | | | 5 |
| 6 | | 110+50 LT. | SERVICE POLE | 16' | 16 | | | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| 7 | | 110+50 LT. | 111+50 | 100' | 100 | V | V | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| 8 | SP-2 | 111+50 | 221+98 | 9' | 9 | | | 9 | | 1 | | | | | 2.62 | | V | | V | | | | | | | | | | | | | | | 2 | 2 | 1 | 8 |
| 9 | | 111+50 | 111+57 | 7' | 7 | V | V | 7 | V | V | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| 10 | PD-2 | 111+57 | 111+54 | 4' | 4 | | | 4 | | | | | | 1 | 0.44 | | V | | | | | | | | | | | | | | | | | | | | 10 |
| 11 | | 110+50 LT. | 223+50 | 147' | 21 | V | V | 126 | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | 11 |
| 12 | | 223+50 | 54+35 | 147' | 147 | | V | 126 | | | | | | | | | | | | | | | | | | | | | | | | 86 | | | | | 12 |
| 13 | TC-2 | 54+35 | 54+36 | 8' | 8 | | | 8 | | | | 1 | | | | 1.09 | V | | | | | | | | | | | | | | | 33 | | | | | 13 |
| 14 | SP-3 | 54+35 | 54+40 | 5' | 5 | | | 5 | | 1 | | | | | 1.67 | | V | | | | | X | V | | | | | | | | | | | | 2 | | 14 |
| 15 | PD-3 | 54+35 | 54+24 | 11' | 11 | V | | 11 | V | | | | | 1 | 0.44 | | V | | | | | | | | | | | | | | | | | | | | 15 |
| 16 | | 54+35 | 54+38 | 50' | 50 | V | V | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 16 |
| 17 | PD-4 | 54+38 | 54+33 | 7' | 7 | | | 7 | | | | | | 1 | 0.44 | | V | | | | | | | | | | | | | | | | | | | | 17 |
| 18 | | 54+38 | 55+01 | 63' | 63 | V | V | 63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 |
| 19 | SP-4 | 55+01 | 54+96 | 15' | 15 | | | 15 | | 1 | | | | | 1.48 | | 1 | | | | | | | | | | | | | | | | | | | 1 | | 19 |
| 20 | | 55+01 | 55+31 | 30' | 30 | V | V | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 |
| 21 | SP-5 | 55+31 | 55+32 | 15' | 15 | | | 15 | | 1 | | | | | 1.48 | | 1 | | | | | | | | | | | | | | | | | | | | 21 |
| 22 | | 55+31 | 55+73 | 44' | 44 | V | V | 44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 22 |
| 23 | PD-5 | 55+73 | 55+73 | 6' | 6 | | | 6 | | | | | | 1 | 0.44 | | 1 | | | | | | | | | | | | | | | | | | | | 23 |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 24 |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 26 |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 27 |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 28 |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 29 |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 30 |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 31 |
| 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 32 |
| 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 33 |
| 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 34 |
| 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 35 |
| 36 | | TC-1 | SERVICE POLE | 99' | | | | | | 1 | | | | | | | | | | | | | 139 | 1 | | | | | | | | | | | | 36 |
| 37 | | TC-2 | SERVICE POLE | 322' | | | | | | 1 | | | | | | | | | | | | | 367 | 1 | | | | | | | | | | | | 37 |
| 38 | | TC-1 | TC-2 | 389' | | | | | | | | | | | | | | | | | | | 419 | | | | | | | | | | | | | 38 |
| 39 | | TC-1 | SIGNAL 1 | 78' | | | | | | | | | | | | | 98 | | | | | | | | | | | | | | | 1 | | 1 | | | 39 |
| 40 | | TC-1 | SIGNAL 2 | 90' | | | | | | | | | | | | | | | | | | | 110 | | | | | | | | | | 1 | | 1 | | 40 |
| 41 | | TC-1 | SIGNAL 3, 4 | 257' | | | | | | | | | | | | | 297 | | | | | | | | | | | | | | | 2 | | 2 | | | 41 |
| 42 | | TC-1 | SIGNAL 5, 6 | 220' | | | | | | | | | | | | | 306 | | | | | | | | | | | | | | | 2 | | 2 | | | 42 |
| 43 | | TC-1 | PED. SIGNAL a | 112' | | | | | | | | | | | | | 137 | | | | | | | | | | | | | | | | 1 | | | | | 43 |
| 44 | | TC-1 | PED. SIGNAL b | 31' | | | | | | | | | | | | | 51 | | | | | | | | | | | | | | | | 1 | | | | | 44 |
| 45 | | TC-1 | PED. SIGNAL c | 31' | | | | | | | | | | | | | 51 | | | | | | | | | | | | | | | | 1 | | | | | 45 |
| 46 | | TC-1 | PED. SIGNAL d | 268' | | | | | | | | | | | | | 303 | | | | | | | | | | | | | | | | 1 | | | | | 46 |
| 47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 47 |
| 48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 48 |
| 49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 49 |
| 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| 51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 51 |
| 52 | | TC-2 | SIGNAL 1 | 169' | | | | | | | | | | | | | 199 | | | | | | | | | | | | | | | | 1 | | 1 | | | 52 |
| 53 | | TC-2 | SIGNAL 2 | 169' | | | | | | | | | | | | | 199 | | | | | | | | | | | | | | | 1 | | 1 | | | 53 |
| 54 | | TC-2 | SIGNAL 3, 4 | 83' | | | | | | | | | | | | | 113 | | | | | | | | | | | | | | | 2 | | 2 | | | 54 |
| 55 | | TC-2 | SIGNAL 5, 6, | 73.5' | | | | | | | | | | | | | 104 | | | | | | | | | | | | | | | 2 | | 2 | | | 55 |
| 56 | | TC-2 | SIGNAL 7, 8 | 218' | | | | | | | | | | | | | 263 | | | | | | | | | | | | | | | | 2 | | 2 | | | 56 |
| 57 | | TC-2 | PED. SIGNAL a | 79' | | | | | | | | | | | | | 104 | | | | | | | | | | | | | | | | 1 | | | | | 57 |
| 58 | | TC-2 | PED. SIGNAL b | 180' | | | | | | | | | | | | | 215 | | | | | | | | | | | | | | | | 1 | | | | | 58 |
| 59 | | TC-2 | PED. SIGNAL c | 180' | | | | | | | | | | | | | | | | | | | 220 | | | | | | | | | | 1 | 1 | | | | 59 |
| 60 | | TC-2 | PED. SIGNAL d | 215' | | | | | | | | | | | | | | | | | | | 260 | | | | | | | | | | 1 | 1 | | | | 60 |
| 61 | | TC-2 | PED. SIGNAL e | 79' | | | | | | | | | | | | | 104 | | | | | | | | | | | | | | | | 1 | | | | | 61 |
| 62 | | TC-2 | PED. SIGNAL f | 33' | | | | | | | | | | | | | 53 | | | | | | | | | | | | | | | | 1 | | | | | 62 |
| 63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 63 |
| 64 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 64 |
| 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 65 |
| 66 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 66 |
| 67 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 67 |
| 68 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 68 |
| 69 | | RUSSELL AVE. AND DART AVE. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 69 |
| 70 | | SOUTH ST. AND DART AVE. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 70 |
| | TOTALS | Plan Qty | | | 609 | 8 | 2 | 1149 | 170 | 6 | 2 | 1 | 1 | 5 | 12.17 | 2.18 | 12 | 1 | 1 | 1 | 2 | 789 | 2398 | 419 | 506 | 2 | 119 | | 10 | 2 | 2 | 10 | 2 | 14 | 6 | 4 | 2 | 2 | |
| | | Qty. Remaining | | | 41 | 0 | 0 | 41 | 0 | 6 | 2 | 1 | 1 | 3 | 0.94 | 0.20 | 4 | 0 | 0 | 0 | 0 | 789 | 2398 | 419 | 506 | 2 | 0 | | 10 | 2 | 2 | 10 | 2 | 14 | 6 | 4 | 2 | 2 | |

Foundations Complete Except for Concrete Pad

ITEMS 625 - 632 - 843 TRAFFIC SIGNAL SUB-SUMMARY

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

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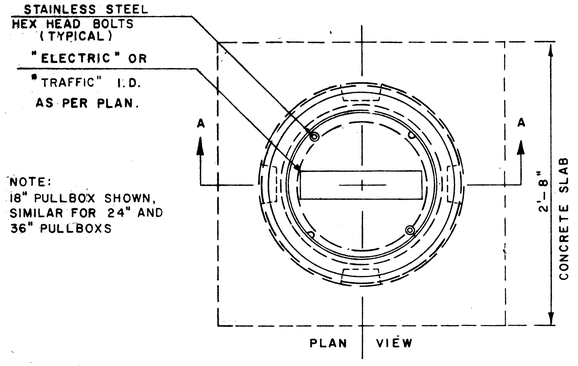
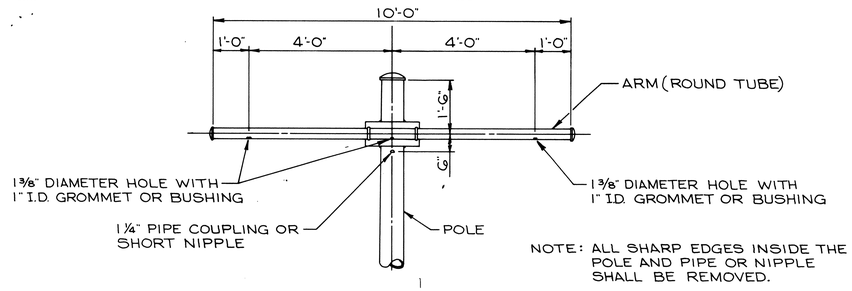
455

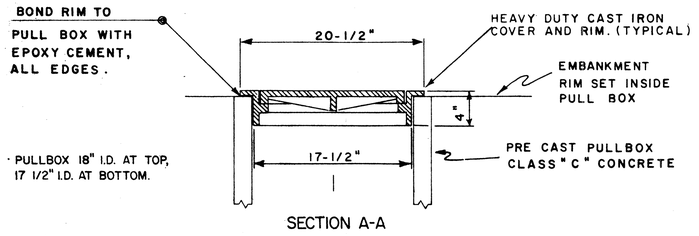
AKRON INNERBELT

SUM-59-0.00

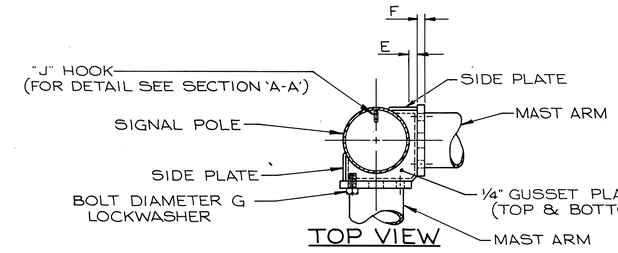


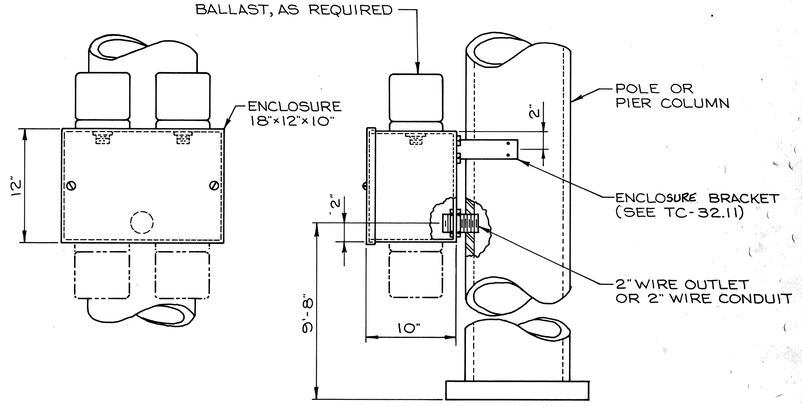

## SIGNAL CABLE OUTLET LOCATION DETAIL FOR TC-9.30



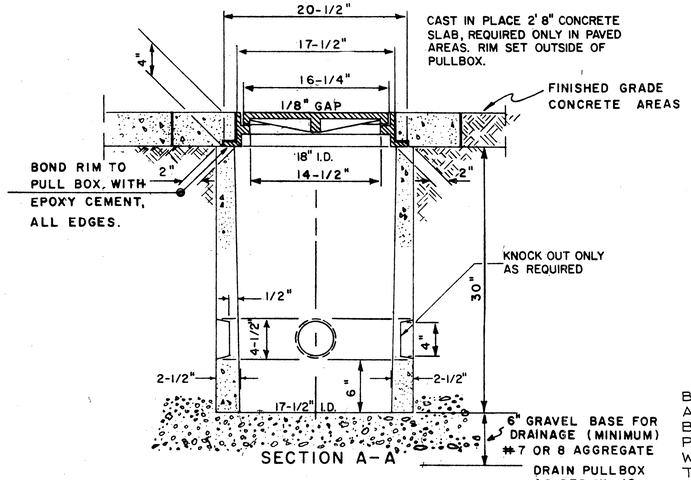

SECTION A-A




TOP VIEW

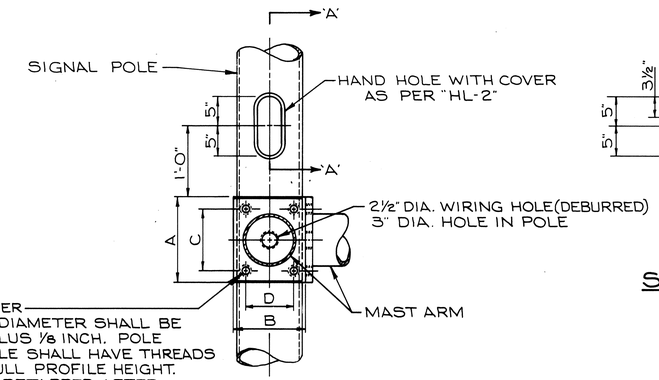


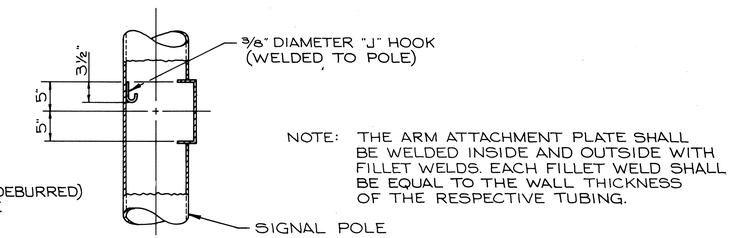

## BALLAST ENCLOSURE TYPE B




SECTION A-A

CITY OF AKRON
STANDARD
CONCRETE PULLBOX.




SECTION 'A-A'

| | | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|---|
| SP-2 | ARM "A" | 14½" | 12" | 10½" | 8" | 1¼" | 1½" | 1¼" |
| | ARM "B" | 14½" | 12" | 10½" | 8" | 1¼" | 1½" | 1¼" |
| SP-3 | ARM "A" | 14½" | 12" | 10½" | 8" | 1¼" | 1½" | 1¼" |
| | ARM "B" | 14½" | 12" | 10½" | 8" | 1¼" | 1¼" | 1¼" |

## DOUBLE SIGNAL MAST ARM ATTACHMENT DETAIL

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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455

AKRON INNERBELT
SUM-59-0.00

# GENERAL LIGHTING NOTES

## SPECIFICATIONS

THESE NOTES ARE SUPPLEMENTAL TO ITEMS 625 AND 713 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS DATED

REFERENCE SHALL BE MADE TO STANDARD CONSTRUCTION DRAWINGS LISTED ON THE TITLE SHEET OF THESE PLANS.

## 625.03 - GENERAL

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS OHIO EDISON COMPANY, III CASCADE PLAZA, AKRON, OHIO 44308, TELEPHONE: 384-5095.

THE PROJECT HAS BEEN DESIGNED ON THE BASIS OF 5% VOLTAGE DROP PERMISSIBLE ON BRANCH CIRCUITS. THE PROJECT WILL RECEIVE 480 VOLT TWO-WIRE SECONDARY SERVICE ONE SIDE GOUNDED FROM OHIO EDISON COMPANY.

THE PROJECT HAS BEEN DESIGNED ON THE BASIS OF FULL LIGHTING WITH 1.2 FOOT CANDLE AVERAGE INITIAL, WITH A MAXIMUM UNIFORMITY RATIO OF 4.0 TO 1.

## 625.07 - 713.11 LUMINAIRES

STYLE B LUMINAIRES SHALL HAVE SINGLE RATED 480 VOLT, 200 WATT, INTEGRAL REGULATOR BALLASTS FOR USE WITH HIGH PRESSURE SODIUM LAMPS AND SHALL BE GENERAL ELECTRIC M400, WESTINGHOUSE OV-25 TUDOR, ITT AMERICAN 400, OR EQUAL APPROVED BY THE ENGINEER.

STYLE C LUMINAIRES SHALL HAVE SINGLE RATED 480 VOLT, 310 WATT, INTEGRAL REGULATOR BALLASTS FOR USE WITH HIGH PRESSURE SODIUM LAMPS AND SHALL BE GENERAL ELECTRIC M-1000, WESTINGHOUSE OV-50 ITT AMERICAN 1000, OR EQUAL APPROVED BY THE ENGINEER.

## 625.07 - 713.13 UNDERPASS LUMINAIRES

UNDERPASS LUMINAIRES SHALL BE NORELCO-LUSTRA WALLPACK OR "QL" WALLPACK UNDERPASS UNIT APPROVED BY THE ENGINEER AND SHALL BE FURNISHED WITH AN INTEGRAL FUSE HOLDER AND 10-AMPERE FUSE. THE INTEGRAL BALLAST SHALL BE OF A REGULATOR TYPE, SINGLE RATED 480 VOLT AND DESIGNED FOR USE WITH A 55 WATT LOW PRESSURE SODIUM LAMP.

INTERSTATE UNDERPASS LUMINAIRES SHALL BE HOLOPHANE "UNDERPASS WALLPACK", WESTINGHOUSE OR GENERAL ELECTRIC UNDERPASS WL250 UNIT OR EQUAL APPROVED BY THE ENGINEER AND SHALL BE FURNISHED WITH AN INTEGRAL FUSE HOLDER AND 10-AMPERE FUSE. THE INTEGRAL HIGH PRESSURE SODIUM BALLAST SHALL BE OF A REGULATOR TYPE RATED 480 VOLTS, 100 WATT.

PENDENT MOUNTED UNDERPASS LUMINAIRES SHALL BE CROUSE-HINDS "WML", HOLOPHANE "WALLPACK", OR AMERICAN ELECTRIC UNDERPASS-LITE OR APPROVED EQUAL TOTALLY ENCLOSED, VERTICAL BURNING LAMP.

## 713.14 LAMPS

LOW PRESSURE SODIUM LAMPS SHALL BE NORELCO "SOX", GL "SUPER SOX" OR EQUAL APPROVED BY THE ENGINEER.
HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC "LUCALOX", WESTINGHOUSE "CERAMALUX", SYLVANIA "LUMALUX" OR EQUAL APPROVED BY THE ENGINEER.

## PULL BOXES, CONCRETE

THIS WORK SHALL CONSIST OF THE FURNISHING AND INSTALLATION OF CONCRETE PULL BOXES AS DETAILED ON SHEET NO. 234.

PULL BOXES SHALL BE AS MANUFACTURED BY SHUMER AND COMPANY, INCORPORATED, NORWALK MANUFACTURING COMPANY, LAKELAND QUICKSET INCORPORATED OR APPROVED EQUAL. THE RIM AND COVER SHALL BE AS MANUFACTURED BY NEENAK FOUNDRY COMPANY, EAST AKRON CASTING COMPANY, LECTROMELT CASTING AND MACHINERY COMPANY OR APPROVED EQUAL. SEE DETAILED ON SHEET 234.

EACH STEEL PLATE COVER SHALL HAVE A BRASS OR STAINLESS STEEL PLATE APPROXIMATELY 1/32 INCH IN THICKNESS AND NOT LESS THAN 2 INCHES IN WIDTH BY 10 INCHES IN LENGTH WITH THE WORD "ELECTRIC" OR "TRAFFIC" ETCHED, ENGRAVED OR DIE-STAMPED THEREON IN LETTERS APPROXIMATELY 5/8 INCHES WIDE BY 1/4 INCHES HIGH, RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE STEEL PLATE COVER, OR THE WORD "ELECTRIC" OR "TRAFFIC" SHALL BE CAST IN THE TOP SURFACE OF THE COVER FORMING LETTERS 1 OR 2 INCHES IN HEIGHT.

BASIS OF PAYMENT WILL BE AT THE CONTRACT BID PRICE PER EACH 625 PULL BOXES, CONCRETE, WHICH PRICE WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, GRANULAR MATERIAL AND INCIDENTALS NECESSARY TO PERFORM THE REQUIRED WORK.

## UNDERDRAINS FOR PULL BOXES

REFERENCE IS MADE TO STANDARD DRAWING HL-10 FOR DETAILS OF DRAINING PULL BOXES. UNDERDRAINS FOR PULL BOXES SHALL BE AS DIRECTED BY THE ENGINEER AND SHALL BE PROVIDED WHERE THE LENGTH REQUIRED FOR A SATISFACTORY OUTLET DOES NOT EXCEED APPROXIMATELY 40 FEET. AN ESTIMATED QUANTITY OF "1240 LINEAR FEET OF ITEM 605,4" SHALLOW PIPE UNDERDRAINS" IS INCLUDED IN THE LIGHTING GENERAL SUMMARY FOR THIS PURPOSE.

## ITEM 625 - CABLE SPLICING KIT

THIS ITEM SHALL CONSIST OF PROVIDING AND INSTALLING AN APPROVED CABLE SPLICING KIT AS DESCRIBED IN PARAGRAPH 5 OF SECTION 713.15 OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE COST OF ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH "ITEM 625 - CABLE SPLICING KIT."

## HIGH VOLTAGE DIRECT CURRENT TEST

A HIGH VOLTAGE DIRECT CURRENT TEST, AS DESCRIBED IN SUPPLEMENTAL SPECIFICATION 839, SHALL BE PERFORMED ON ALL DISTRIBUTION CABLE AND DUCT CABLE SYSTEMS TO BE INSTALLED ON THIS PROJECT. THE TEST SHALL NOT BE PERFORMED UNTIL AFTER ALL NEW CONSTRUCTION, SUCH AS GUARDRAIL, FENCE, DELINEATOR POSTS, SIGN SUPPORTS, ETC. IN THE IMMEDIATE VICINITY OF THE LOCATION OF THE CABLE RUN BEING TESTING, HAS BEEN COMPLETED.

## BRACKET ARMS FOR LUMINAIRE SUPPORT ON COMBINATION POLES

BRACKET ARMS FOR LUMINAIRE SUPPORT SHALL BE .1196 THICK STEEL ELLIPSOIDAL OR ROUND CROSS-SECTION AND TAPERED ITS FULL LENGTH. THIS ARM SHALL BE STRAIGHT AND ATTACHED WITH ONE SIMPLEX CONNECTION SIMILAR TO THE CONNECTION SHOWN ON STANDARD DRAWING HL-2. THE ARM SHALL BE INSTALLED AT FIVE DEGREES (5) ABOVE HORIZONTAL. SEE DETAIL ON SHEET NO. 255.

## MEDIAN BARRIER LIGHT POLE FOUNDATION

THE UNIT PRICE BID FOR EACH "ITEM 625, CONCRETE MEDIAN BARRIER LIGHT POLE FOUNDATION," SHALL BE FULL COMPENSATION FOR EXCAVATION, FORMING AND PLACING THE LIGHT POLE FOUNDATION AS DETAILED, REINFORCING, FURNISHING AND PLACING ANCHOR BOLTS AND CONDUIT ELLS, AND ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

## PADLOCK AND KEYS

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660 A, AND SHALL BE KEYED IN ACCORDANCE WITH 613.08 PARAGRAPH 3. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM (5) BEING LOCKED.

## TEMPORARY LIGHTING AND LIGHTING MAINTAINENCE

EXISTING LIGHTING ON ALL EXISTING ROADWAYS REMAINING OPEN TO TRAFFIC THROUGH THE PROJECT AREA SHALL BE MAINTAINED. SHOULD THE CONTRACTOR REQUIRE THE REMOVAL OF LIGHTING FROM AN EXISTING ROADWAY, THE CONTRACTOR SHALL THEN BE RESPONSIBLE FOR ADEQUATE TEMPORARY LIGHTING OF THAT PORTION OF THE EXISTING ROADWAY AFFECTED BY THE REMOVAL OF THE EXISTING LIGHTING.

ON PERMANENT NEW ROADWAYS OPENED TO TRAFFIC, THE PERMANENT NEW LIGHTING SHALL BE INSTALLED BEFORE OPENING.

UNDER BRIDGES WHEN UNDERPASS LIGHTING IS SPECIFIED, WHERE TRAFFIC IS MAINTAINED THROUGH THE UNDERPASS AND WHEN THE BRIDGE IS IN A STATE OF CONSTRUCTION THAT THE SLAB OR DECK IS FORMED OR CLOSED OFF OVERHEAD, THE UNDERPASS LIGHTING SHALL BE ENERGIZED TEMPORARILY OR FROM THE PERMANENT CIRCUITS. THIS SHALL BE PERFORMED UNTIL THE SAME EIGHT (8) HOUR PERIOD THAT THE UNDERPASS IS CLOSED OFF.

WHEN TEMPORARY LIGHTING REQUIRED DUE TO THE OPERATIONS OF THE CONTRACTOR AND A DETAILED LAYOUT IS NOT SHOWN IN THE PLANS, THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS OF THE PROPOSED DETAILED PLANS TO THE ENGINEER FOR REVIEW AND APPROVAL. THESE PLANS SHALL SHOW LOCATIONS OF POLES, LENGTH OF BRACKET ARMS, TYPE AND SIZE OF LUMINAIRES AND LAMPS, MOUNTING HEIGHT AND OTHER PERTINENT INFORMATION. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED BY THE CONTRACTOR AND THE TEMPORARY LIGHTING INSTALLATIONS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN NO LONGER NEEDED.

THE LUMP SUM BID FOR ITEM SPECIAL TEMPORARY LIGHTING SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE TEMPORARY LIGHTING AS DESCRIBED ABOVE OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL, AND MAINTENANCE OF ANY TEMPORARY LIGHTING REQUIRED.

## 625.21 - 713.10 STRUCTURE JUNCTION BOXES

IN ADDITION TO JUNCTION BOXES AS SHOWN ON STANDARD CONSTRUCTION DRAWING HL-4 NEMA-4. 18" X 8" X 6" JUNCTION BOX SHALL BE HOT-DIPPED GALVANIZED STEEL OR HOT-DIPPED GALVANIZED CAST IRON AND SUPPLIED WITH A GASKETED COVER PLATE OF THE SAME MATERIAL. A 6" X 6" X 4" JUNCTION BOX OF THE SAME TYPE SHALL BE USED FOR SERVICE TO EACH UNDERPASS LUMINAIRE.

EACH JUNCTION BOX COVER SHALL HAVE THE WORD "ELECTRIC" OR "TRAFFIC" CAST IN THE TOP SURFACE OF THE COVER FORMING LETTERS 1 OR 2 INCHES IN HEIGHT.

## TRENCH

ALTERNATE TRENCH ALIGNMENT MAY BE USED AS NOTED ON STANDARD CONSTRUCTION DRAWING HL-1. FOR USE WHERE THERE IS JUST ONE (1) DUCT-CABLE IN THE TRENCH, AND/OR STEEP SLOPES ALONG THE ROADWAY.

## 625.02 HAZARDOUS MATERIALS

NO MATERIAL FURNISHED UNDER THIS SPECIFICATION SHALL CONTAIN POLYCHLORINATED BIPHENYLS (PCBs). TRANSFORMERS, BALLASTS AND CAPACITORS SHALL BE MARKED "NO PCBs" IN ACCORDANCE WITH FEDERAL ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 CER 761.

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AKRON INNERBELT
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# GENERAL LIGHTING NOTES

ITEM SPECIAL SERVICE TO UNDERPASS LIGHTING,

THIS ITEM SHALL CONSIST OF PROVIDING COMPLETE ELECTRICAL SERVICE, EXCEPT FOR LUMINAIRES, LAMPS AND GROUNDING SYSTEM. FOR AN UNDERPASS LIGHTING SYSTEM ON EACH BRIDGE, AS PER PLAN, THE INSTALLATION WORK SHALL INCLUDE CONDUITS, MOUNTINGS, FITTINGS, JUNCTION BOXES AS PER PLAN, CABLES, AND ALL INCIDENTIALS NECESSARY TO COMPLETE, READY TO USE, THE SERVICE AS DETAILED ON SHEETS 249 THRU 255.

THE LUMP SUM PRICE BID FOR "ITEM SPECIAL SERVICE TO UNDERPASS LIGHTING," SHALL INCLUDE PAYMENT FOR ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED. COMPONENT PARTS NOT SPECIFICALLY MENTIONED BUT REQUIRED FOR SATISFACTORY OPERATION OF THIS ITEM SHALL BE FURNISHED AND CONSIDERED PAID AS PART OF THE ITEM.

LIGHT POLE ANCHOR BOLTS FOR BRIDGES AND RETAINING WALLS

ANCHOR BOLTS FOR MOUNTING LIGHT POLES ON BRIDGES AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF 713.01 AND DETAILS SHOWN ON THE PLANS AND STANDARD DRAWINGS FOR THE RESPECTIVE POLES TO BE PLACED THEREON. PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH SET OF THE SIZE REQUIRED AND NECESSARY TO INSTALL ONE POLE, AND THIS PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING AND PLACING THE BOLTS.

625.13 - 713.04 CONDUIT ON STRUCTURES

EXPANSION FITTINGS FOR CONDUIT ON STRUCTURES SHALL BE OZ TYPE AX, CROUSE-HINDS TYPE XJ-4, APPLETON TYPE XJ-4, OR EQUAL APPROVED BY THE ENGINEER. EACH EXPANSION FITTING SHALL HAVE A COPPER EXTERNAL BONDING JUMPER.

625 STRUCTURE GROUNDING

SUM-18-1014 AKRON INNERBELT RAMP "SW" OVER EXISTING BOWERY STREET AND OHIO CANAL.

SUM-59-0000 AKRON INNERBELT RAMP "EN" OVER BOWERY STREET, OHIO CANAL, EXISTING WEST EXPRESSWAY AND RUSSELL AVENUE.

SUM-59-0002 AKRON INNERBELT RAMP "SW" OVER RELOCATED DART AVENUE AND RUSSELL AVENUE.

SUM-59-0016 AKRON INNERBELT RAMP "SW" RELOCATED DART AVENUE AND THORNTON STREET

SUM-59-0017 AKRON INNERBELT RAMP "EN" RELOCATED DART AVEUNE AND THORNTON STREET

ELECTRICAL SERVICE FOR ILLUMINATED SIGNS

THE PAY ITEMS IN THE LIGHTING GENERAL SUMMARY INCLUDE THE PULL BOX OR JUNCTION BOX ADJACENT TO EACH LIGHTED SIGN AND THE ELECTRICAL SERVICE CONNECTIONS LEADING INTO THE BOX, INCLUDING CABLE SPLICING KITS IN THE PULL BOX OR JUNCTION BOX. QUANTITIES FOR ELECTRICAL SERVICE FROM THE CONNECTION IN THE PULL BOX OR JUNCTION BOX TO THE SIGN ARE INCLUDED IN THE TRAFFIC CONTROL GENERAL SUMMARY.

ITEM 625 - CONDUIT JACKED UNDER PAVEMENT, AS PER PLAN

THIS ITEM SHALL CONSIST OF INSTALLING CONDUIT OF THE SIZE OR SIZES INDICATED UNDER EXISTING PAVEMENT AND CONTIGUOUS SHOULDERS BY AN APPROVED METHOD SUCH AS "DRILLING" OR "JACKING."
THE CONTRACTOR SHALL PLACE THE CONDUIT WITH THE LEAST AMOUNT OF DISTURBANCE TO THE EXISTING PAVEMENT, SUBBASE, BERM PAVEMENT, OR SHOULDERS OF THE ROADWAY. ALL PUSH PITS OR ANY NECESSARY EXCAVATIONS SHALL BE BACKFILLED AND RESTORED IN ACCORDANCE WITH 625.01. MEASUREMENT OF THE CONDUIT SHALL BE THE ACTUAL AMOUNT OF LINEAL FEET INSTALLED UNDER PAVEMENT AND SHOULDERS, MEASURED IN PLACE, AS ACCEPTED BY THE ENGINEER. THE UNIT PRICE BID FOR ITEM 625 "CONDUIT JACKED UNDER PAVEMENT, AS PER PLAN" SHALL BE FULL COMPENSATION FOR EXCAVATION, DRILLING OR JACKING, BACKFILLING, COMPACTION, RESTORATION, AND ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

POLYVINYL CHLORIDE PLASTIC CONDUIT

THIS SPECIFICATION COVERS POLYVINYL CHLORIDE CONDUIT FOR EITHER DIRECT BURIAL IN EARTH OR FOR ENCASEMENT IN CONCRETE AND SHALL BE OF THE SIZE AND TYPE SPECIFIED.

CONDUIT FURNISHED UNDER THIS SPECIFICATION SHALL CONFORM TO NEMA STANDARDS PUBLICATION NO. TC6 WITH THE EXCEPTION THAT CONDUIT AND CONDUIT FITTINGS COMPOSED OF ACRYLONITRILE-BUTADIENE-STYRENE (ABS) SHALL NOT BE ACCEPTABLE.

ITEM 625 - CABLE SPLICING KIT

THIS ITEM SHALL CONSIST OF PROVIDING AND INSTALLING AN APPROVED CABLE SPLICING KIT AS DESCRIBED IN PARAGRAPH 5 OF SECTION 713.15 OF THE ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE COST OF ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH "ITEM 625 - CABLE SPLICING KIT."

625 RELOCATE EXISTING INSTALLATION ON NEW FOUNDATION

THIS ITEM CONSISTS OF RELOCATING AN EXISTING LIGHTING INSTALLATION, INCLUDING POLE, BRACKET ARM, LUMINARIE, AND POLE AND BRACKET CABLE, ON A NEW FOUNDATION.

PAYMENT SHALL BE AT THE UNIT PRICE BID FOR EACH INSTALLATION AS SHOWN ON THE PLANS, INVOLVING ALL MATERIAL, LABOR, AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM AS SPECIFIED.

202 REMOVAL OF EXISTING LIGHTING INSTALLATIONS FOR STORAGE

THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING LIGHT POLES, LUMINARIES, BRACKET ARMS, AND POLE WIRING AT THE LOCATION SHOWN ON THE PLANS, AND STORING THEM AT A SITE TO BE DETERMINED BY THE CITY OF AKRON AT THE TIME OF REMOVAL.

AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL STORED ITEMS AND ASSUME OWNERSHIP AT THIS TIME.

PAYMENT SHALL BE UNIT PRICE BID FOR EACH INSTALLATION REMOVED INCLUDING ALL MATERIAL, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

202 REMOVAL OF EXISTING UNDERPASS LIGHTING SYSTEMS

THIS ITEM SHALL CONSIST OF REMOVING ALL EXISTING LUMINAIRES, SURFACE MOUNTED CONDUIT WIRE, JUNCTION BOXES AND ANY MISCELLANEOUS ITEMS INCLUDED IN THE UNDERPASS LIGHTING SYSTEM, UNLESS NOTED, FOR THE FOLLOWING STRUCTURES:

SUM-76-0956
SUM-76-0967

PAYMENT SHALL BE A LUMP SUM PRICE FOR EACH STRUCTURE INCLUDING ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

LIGHT POLES - CITY OF AKRON STANDARD

LIGHT POLES DESIGNATED ON THE PLAN AS "CITY OF AKRON STANDARD" SHALL COMPLY WITH SECTIONS 625.05 AND 713.01 WITH THE FOLLOWING ADDITIONS AND/OR EXCEPTIONS.

ANCHOR BOLTS SHALL BE SUPPLIED WITH DOUBLE NUTS. THE FIRST SET SHALL BE INSTALLED 1/4 INCH MAXIMUM FROM THE TOP OF FOUNDATION AND LEVELED TO ALIGN AND PLUMB THE POLE.

THE POLE SHAFT SHALL BE A EQUILATERAL DIAMOND CROSS SECTION ITS FULL LENGTH, TAPERED THROUGHOUT. SEE DETAIL ON SHEET NO. 256.

THE LUMINAIRE ARM OF THE SAME SHAPE, CROSS SECTION AND TAPER SHALL BE WELDED TO THE POLE AT 6 1/2° WITH A 1/2 INCH BACK UP PLATE. A SMOOTH WIRE WAY SHALL BE PROVIDED BETWEEN THE POLE AND ARM. A 2 INCH SCHEDULE 40 TENON SHALL BE WELDED TO THE END OF THE LUMINAIRE ARM. THE TENON SHALL PROJECT FROM THE END OF THE ARM A MINIMUM OF 6 INCHES.

PAINTING OF POLES - CITY OF AKRON STANDARD

IN LIEU OF POLES AND ARMS USED ON CITY STREETS BEING GALVANIZED, THEY SHALL BE GIVEN ONE SHOP COAT OF ZINC-RICH BASE PAINT (ZINC DUST PAINT) CONFORMING TO FEDERAL SPECIFICATION TT-P-641, TYPE II AND ONE SHOP COAT OF "MATTE BLACK," WEATHER RESISTANT PAINT, AS APPROVED BY THE ENGINEER. THE ALUMINUM BASES SHALL BE PAINTED IN A SIMILAR MANNER APPROVED FOR ALUMINUM. PARTICULAR ATTENTION SHOULD BE PAID TO PAINTING OF THE BASE AREA FOR PROTECTION AGAINST CORROSIVE ELEMENTS USED FOR ICE AND SNOW REMOVAL FROM ROADWAY SURFACES.

A SECOND COAT OF "MATTE BLACK" PAINT SHALL BE APPLIED IN THE FIELD AFTER ERECTION AT A TEMPERATURE ABOVE 50°F. PAYMENT FOR PAINTING SHALL BE INCLUDED IN THE BID ITEM "LIGHT POLE DESIGN AT 10B31.7 CITY OF AKRON STANDARD, AS PER PLAN" AND SHALL INCLUDE THE "MATTE BLACK" PAINT AS SPECIFIED ABOVE AND FIELD PAINTING OF THE POLES, ARMS, AND LUMINAIRES.

CIRCUIT CONNECTION TO SERVICE POLE

ANY NECESSARY DISCONNECTION FROM OR CONNECTION TO AN EXISTING SERVICE POLE OR CONTROL CENTER WILL BE CONSIDERED TO BE PAID FOR IN THE UNIT PRICE BID FOR THE CIRCUIT CABLE.

CALCULATED BY C.D.K. DATE 10-82
CHECKED BY T.K.I. DATE 10-82

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# GENERAL SUMMARY LIGHTING QUANTITIES

AKRON INNERBELT
SUM-59-0.00

| EXISTING | | | STRUCTURE NUMBER | | | | | | | | | | | SHEET NUMBER | | | | | | | QUANT. (REVISED) | ITEM | UNIT | ★ Qty. Remaining | DESCRIPTION | REF. | LINE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0058 248A | 0058 248 | 0067 248 | 0000 245 | 0000 248 | 0000 247 | 0002 246 | 0002 247 | 0014 245 | 0014 246 | 0016 247 | 0016 248 | 0017 247 | 0017 248 | 244 | 245 | 246 | 247 | 248 | 248A | 248B | | | | | | | |
| | | | | | | | | 1 | | | | | | 9 | 7 | 2 | 2 | 4 | 2 | | ~~25~~ 27 | 202 | EACH | 26 | REMOVE AND STORE LIGHT POLE | | 1 |
| | | | | | | | | | | | | | | 9 | 7 | | 2 | 4 | 2 | | 24 | 202 | EACH | 22 | REMOVE LIGHT POLE FOUNDATION | | 2 |
| | | | | | | | | 1 | | | | | | 9 | 7 | 2 | 2 | 2 | | | ~~24~~ 23 | 625 | EACH | 19 | REINSTALL LIGHT POLE | | 3 |
| | | | | | | | | | | | | | | | | | | 3 | | | 3 | 625 | EACH | 3 | LIGHT POLE DESIGN A 12BB 39.0 D | E | 4 |
| | | | | | | 2 | 1 | | | 1 | | | | | | | | | | | 4 | 625 | EACH | 4 | LIGHT POLE DESIGN A 12B 32.5 | F | 5 |
| | | | | | | | | | | | | | | | | 7 | 10 | | 3 | 2 | 22 | 625 | EACH | 10 | LIGHT POLE DESIGN AT 12B 34.2 | J | 6 |
| | | | 2 | 3 | 1 | | | 1 | 1 | 3 | 1 | 3 | 1 | | 4 | | 1 | | | | 21 | 625 | EACH | 21 | LIGHT POLE DESIGN A 12B 32.5 | K | 7 |
| | | | | | | | | | | | | | | 1 | 4 | ~~X~~ 2 | 2 | | | | ~~8~~ 9 | 625 | EACH | 6 | LIGHT POLE DESIGN AT 15B 34.2 | L | 8 |
| | | | | | | | | | | | | | | | | | 3 | | | | 3 | 625 | EACH | 0 | LIGHT POLE DESIGN AT 10B 31.7 CITY OF AKRON STANDARD, AS PER PLAN | Y | 9 |
| | | | | | | | | | | | | | | | | | 5 | | | | 5 | 625 | EACH | 0 | LIGHT POLE DESIGN AT 20B 34.2 | M | 10 |
| | | | | | | | | | | | | | | | | 2 | | | | | 2 | 625 | EACH | 2 | 10'-0" BRACKET ARM | | 11 |
| | | | | | | | | | | | | | | | | 1 | | | | 1 | 2 | 625 | EACH | 2 | 12'-0" BRACKET ARM | | 12 |
| | | | | | | | | | | | | | | 11 | 11 | ~~X~~ 6 | 22 | 2 | 3 | 2 | ~~55~~ 57 | 625 | EACH | 18 | LIGHT POLE FOUNDATION, 24 INCH X 6 FEET DEEP | | 13 |
| | | | 2 | 4 | 1 | 2 | 1 | 2 | 1 | 4 | 1 | 3 | 1 | 10 | 15 | ~~X~~ 14 | ~~28~~ 18 | ~~X~~ 0 | 3 | 2 | ~~89~~ 84 | 625 | EACH | 84 | LUMINAIRE, STYLE B TYPE II 200W. HIGH PRESSURE SODIUM, 713.11 | | 14 |
| | | | | | | | | | | | | | | | | | | 1 | | | 1 | 625 | EACH | 1 | LIGHT POLE DESIGN A 9B 15B 39.0D | D | 15 |
| | | | | | | | | | | | | | | | | | | 8 | | | 8 | 625 | EACH | 8 | LUMINAIRE, STYLE C TYPE II 310W. HIGH PRESSURE SODIUM, 713.11 | | 16 |
| | | | | | | | | | | | | | | | | | 5 | 2 | | 1 | ~~X~~ 8 | 625 | EACH | 8 | LUMINAIRE, CITY OF AKRON 200 W. HIGH PRESSURE SODIUM | | 17 |
| | ~~X~~ 0 | ~~X~~ 0 | ~~X~~ 0 | | | ~~X~~ 0 | | ~~X~~ 0 | ~~X~~ 0 | ~~X~~ 0 | ~~X~~ 0 | ~~X~~ 0 | ~~X~~ 0 | | | | | | | | ~~42~~ 0 | 625 | EACH | 0 | LUMINAIRE UNDERPASS WALL MOUNTED 55W. LOW PRESSURE SODIUM, 713.13 | | 18 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 19 |
| 3 | | | | 6 | | | | | | | | | | | | | | | | | ~~8~~ 21 | 625 | EACH | 21 | LUMINAIRE UNDERPASS WALL MOUNTED 100W. HIGH PRESSURE SODIUM, 713.13 | | 20 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 21 |
| | | | | 6 | | | | | | | | | | | | | | | | | 6 | 625 | EACH | 6 | LUMINAIRE UNDERPASS PENDENT MOUNTED 100W. HIGH PRESSURE SODIUM, 713.13 | | 22 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 23 |
| | | | | | | ~~X~~ 0 | | | | | | | | | | | | | | | ~~X~~ 0 | 625 | EACH | 0 | LUMINAIRE UNDERPASS PENDENT MOUNTED 55W. LOW PRESSURE SODIUM, 713.13 | | 24 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| | | | | | | | | | | | | | | | | 1 | | | | | 1 | 625 | EACH | 0 | MEDIAN PULL BOX | | 26 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 27 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 28 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 29 |
| | | | | | | | | | | | | | | 11 | 13 | ~~X~~ 11 | 21 | 6 | 3 | 2 | ~~86~~ 69 | 625 | EACH | 45 | GROUND ROD, 713.16 | | 30 |
| 15 | | | | | | | | | | | | | | 1285 | 250 | ~~1389~~ 249 | 3407 | | 235 | 307 | ~~1408~~ 7648 | 625 | LIN. FT | 3006 | TRENCH, 24" DEEP | | 31 |
| | | | | | 1 | | 1 | | 1 | | | | | 2 | 2 | ~~X~~ 9 | 11 | 1 | 1 | | ~~8~~ 29 | 625 | EACH | 12 | PULL BOX 18 INCH, CIRCULAR CONCRETE, AS PER PLAN | | 32 |
| | | | | | | | | | | | | | | | | 3 | | | | | 3 | 625 | EACH | 1 | PULL BOX 24 INCH, CIRCULAR CONCRETE, AS PER PLAN | | 33 |
| | | | | | | | | | | | | | | | | | | 4 | | | 4 | 625 | EACH | 4 | MEDIAN BARRIER LIGHT POLE FOUNDATION | | 34 |
| 15 | | | 475 | 807 | 182 | 481 | 110 | 276 | 129 | 690 | 222 | 600 | 232 | | 1137 | | | | | | 5356 | 625 | LIN. FT. | 3986 | CONDUIT 2 INCH, 713.04 | | 35 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 36 |
| | | | | | | | | | | | | | | 72 | 50 | 588 | 258 | | 35 | | 1003 | 625 | LIN. FT. | 336 | CONDUIT 3 INCH, 713.04 | | 37 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 38 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 39 |
| 50 | | 108 | 1000 | 1734 | 394 | 1178 | 250 | 617 | 278 | 1470 | 280 | 1280 | 280 | 126 | 1182 | 1938 | 514 | 1630 | 302 | | 14,606 | 625 | LIN. FT. | 13932 | NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE | | 40 |
| | | | 180 | 180 | 90 | 270 | 85 | 180 | 90 | ~~355~~ 327 | 90 | 270 | 90 | 1000 | 1370 | ~~1887~~ 1873 | 2001 | 824 | 279 | 271 | ~~8552~~ 8712 | 625 | LIN. FT. | 8712 | NO. 10 AWG POLE AND BRACKET CABLE | | 41 |
| | | | | | | | | | | | | | | 1388 | 951 | ~~1403~~ 1073 | 3415 | | 210 | 327 | ~~7964~~ 7984 | 625 | LIN. FT. | 3244 | 1 1/2 INCH DUCT-CABLE W/TWO NO. 4 AWG 5000 VOLT CABLES | | 42 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 43 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 44 |
| | | | 2 | 5 | 1 | 2 | 1 | 2 | 1 | 4 | 1 | 3 | 1 | 10 | 15 | ~~X~~ 14 | 24 | ~~X~~ 6 | 3 | 2 | ~~93~~ 97 | 625 | EACH | 77 | CONNECTOR KIT TYPE II | | 45 |
| | | | 2 | 5 | 1 | 2 | 1 | 2 | 1 | 4 | 1 | 3 | 1 | 10 | 15 | ~~X~~ 14 | 24 | ~~X~~ 6 | 3 | 2 | ~~93~~ 97 | 625 | EACH | 77 | CONNECTOR KIT TYPE III | | 46 |
| | | | 2 | 2 | | | | 4 | | | | | | | | 6 | | | | | 14 | 625 | EACH | 14 | CONNECTOR KIT TYPE VII B | | 47 |
| 2 | | | | | | | | | | | | | | | 4 | 2 | | | 2 | | 10 | 625 | EACH | 10 | CONNECTOR KIT TYPE VII C | | 48 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 49 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 51 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 52 |

CALCULATED BY E.D.R. DATE 10-82
CHECKED BY T.K.I. DATE 10-82

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AKRON INNERBELT
SUM-59-0.00

# GENERAL SUMMARY LIGHTING QUANTITIES

| EXIST. BOWERY ST. BRIDGE | STRUCTURE NUMBERS | | | | | | | | | | | SHEET NUMBER | | | | | 248A | 248B | QUANT. (Revised) | ITEM | UNIT | Qty Rem | AING | DESCRIPTION | LINE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 246 | 0000 245 | 0000 246 | 0000 247 | 0002 246 | 0002 247 | 0014 245 | 0014 246 | 0016 247 | 0016 248 | 0017 247 | 0017 248 | 244 | 245 | 246 | 247 | 248 | | | | | | | | | |
| | | | | | 2 | | 1 | | | | | 2 | 2 | ~~14~~ 15 | 14 | | 2 | | ~~37~~ 38 | 625 | EACH | 24 | | CABLE SPLICING KIT | |
| | 2 | 3 | 1 | 2 | 1 | | 1 | 4 | 1 | 3 | 1 | | 4 | | 1 | | | | 24 | SPECIAL | SET | 24 | | LIGHT POLE ANCHOR BOLTS FOR STRUCTURE 713.01 | |
| | 2 | 5 | 1 | 2 | 1 | 2 | 1 | 5 | 1 | 5 | | | 3 | | | 2 | 1 | | 31 | 625 | EACH | 31 | | JUNCTION BOX 18 X 8 X 6 | |
| | LUMP | | | | | | | | | | | | | | | | | | LUMP | SPECIAL | LUMP | 100% | | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0000 | |
| | | | | LUMP | | | | | | | | | | | | | | | LUMP | SPECIAL | LUMP | 20% | | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0002 | |
| | | | | | | LUMP | | | | | | | | | | | | | LUMP | SPECIAL | LUMP | 20% | | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0014 | |
| | | | | | | | | | LUMP | | | | | | | | | | LUMP | SPECIAL | LUMP | 20% | | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0016 | |
| | | | | | | | | | | | LUMP | | | | | | | | LUMP | SPECIAL | LUMP | 20% | | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0017 | |
| | | | | | | | | | | | | | | | | | LUMP | | LUMP | SPECIAL | LUMP | 20% | | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0058 | |
| | 1 | | | | | | | | | | | | | | | | | | 1 | 625 | EACH | 1 | | STRUCTURE GROUNDING SYSTEM FOR BRIDGE NO. 0000 | |
| | | | | 1 | | | | | | | | | | | | | | | 1 | 625 | EACH | 1 | | STRUCTURE GROUNDING SYSTEM FOR BRIDGE NO. 0002 | |
| | | | | | | 1 | | | | | | | | | | | | | 1 | 625 | EACH | 1 | | STRUCTURE GROUNDING SYSTEM FOR BRIDGE NO. 0014 | |
| | | | | | | | | | 1 | | | | | | | | | | 1 | 625 | EACH | 0 | | STRUCTURE GROUNDING SYSTEM FOR BRIDGE NO. 0016 | |
| | | | | | | | | | | | 1 | | | | | | | | 1 | 625 | EACH | 0 | | STRUCTURE GROUNDING SYSTEM FOR BRIDGE NO. 0017 | |
| | | | | | | | | | | | | | | | | | 1 | | 1 | 625 | EACH | 1 | | STRUCTURE GROUNDING SYSTEM FOR BRIDGE NO. 0058 | |
| | | | | | | | | | | | | | | | | | | | LUMP | SPEC. | LUMP | 40% | | TEMPORARY LIGHTING AND LIGHTING MAINTENANCE | |
| | | | | | | | | | | | | 80 | 80 | 480 | 520 | 40 | 40 | | 1240 | 605 | LIN. FT. | 1240 | | 4 INCH SHALLOW PIPE UNDERDRAINS | |
| | | | | | | | | | | | 1 | 9 | 8 | 2 | 2 | 2 | | | ~~25~~ 24 | 625 | EACH | 23 | | AT-X TRANSFORMER BASE, AS PER PLAN | |
| | | | | | | | | | | | | | LUMP | | | | | | LUMP | 202 | LUMP | 100% | | REMOVE EXISTING UNDERPASS LIGHTING SYSTEM FOR BRIDGE NO. 0956 | |
| | | | | | | | | | | | | | | LUMP | | | | | LUMP | 202 | LUMP | 100% | | REMOVE EXISTING UNDERPASS LIGHTING SYSTEM FOR BRIDGE NO. 0967 | |
| | | | | | | | | | | | | | | | | | | | LUMP | 839 | LUMP | 83% | | HIGH VOLTAGE TEST | |
| | | | | | | | | | | | | | 1 | 1 | | | | | 2 | 625 | EA | 2 | | Transition Junction Boxes | |

LOCATION REFERENCE

W.EX. = WEST EXPRESSWAY
G = RAMP G
EN = RAMP EN
SW = RAMP SW
DA = DART AVE.
RU = RUSSELL AVE.
IB = INNERBELT
SO = SOUTH ST.
TH = THORNTON ST.
LK = LAKESHORE BLVD.
RH = RHODES AVE.
BW = BOWERY ST.
BA = BARTGES ST.
H = RAMP H

# LIGHTING QUANTITIES SUB-SUMMARY

CALCULATED BY C.D.K. DATE 10-82
CHECKED BY T.K.I. DATE 10-82

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

AKRON INNERBELT
SUM-59-0.00

235
455

DO NOT REUSE EXISTING "AT" BASE

H.P.S. : HIGH PRESSURE SODIUM

L.P.S. : LOW PRESSURE SODIUM

| | LINE NO. | SIDE | FROM | TO | PLAN REFERENCE | LIGHT POLE DESIGN A12BB39.0 O.D. "E". | LIGHT POLE DESIGN A 8B 32.5 "F". | LIGHT POLE DESIGN AT 12B 34.2 "J". | LIGHT POLE DESIGN A 12B 32.5 "K". | LIGHT POLE DESIGN AT 15B 34.2 "L". | LIGHT POLE DESIGN AT20B 32.5 "M". | LIGHT POLE DES AT10B31.7 CITY OF AKRON STAND. "Y". | REMOVE AND STORE LIGHT POLE | REMOVE FOUNDATION | REINSTALL LIGHT POLE | 10 FT. BRACKET ARM AS PER PLAN | 12 FT. BRACKET ARM AS PER PLAN | BARRIER MEDIAN LIGHT POLE FOUNDATION | LIGHT POLE FOUNDATION 24" x 6' | LUMINAIRE, STYLE "B", TYPE II 200 W. H.P.S. 713.11 | LUMINAIRE, STYLE C TYPE II 310 W. H.P.S. 713.11 | LUMINAIRE CITY OF AKRON 200 W. H.P.S. WALL MOUNTED 100 W. H.P.S. | LUMINAIRE UNDERPASS PENDENT MOUNTED 100 W. H.P.S. | LUMINAIRE UNDERPASS WALL MOUNTED 55 W. L.P.S. | | | | BARRIER MEDIAN PULL BOX | GROUND ROD | PULL BOX, 18" CIRCULAR CONCRETE | PULL BOX 24" CIRCULAR CONCRETE | TRENCH | CONDUIT 2", 713.04 | LUMINAIRE UNDERPASS PENDENT MOUNTED 55W. L.P.S. | CONDUIT 3", 713.04 JACKED UNDER PAVEMENT | CONDUIT 3", 713.04 | | LIGHT POLE ANCHOR BOLTS FOR STRUCTURE | NO. 10 AWG POLE AND BRACKET CABLE | NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE | 1 1/2" DUCT CABLE W/2, NO. 4 AWG CABLES | MARKERS | CABLE SPLICING KIT | | CONNECTOR KIT TYPE II | CONNECTOR KIT TYPE III | CONNECTOR KIT TYPE VII B | CONNECTOR KIT TYPE VII C | | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0000 | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0002 | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0001 | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0017 | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 1014 | INSTRUCTURE GROUND SYSTEM | JUNCTION BOX 24" X 8" X 6" | TRANSFORMER BASE AS PER PLAN, TYPE AT-X | Transition Junction Box |
|---|---|---|---

# LIGHTING QUANTITIES SUB-SUMMARY

CALCULATED BY E.D.R. DATE 10-82
CHECKED BY T.K.I. DATE 10-82

| FHWA REG | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

240
455

AKRON INNERBELT
SUM-59-0.00

DO NOT REUSE EXISTING "AT" BASE

H.P.S. : HIGH PRESSURE SODIUM

L.P.S. : LOW PRESSURE SODIUM

| | LINE NO. | SIDE | FROM | TO | PLAN REFERENCE | LIGHT POLE DESIGN A12BB39.00 "E" | LIGHT POLE DESIGN A 8 B 32.5 "H" | LIGHT POLE DESIGN AT 12B 34.2 "J" | LIGHT POLE DESIGN A 12B 32.5 "K" | LIGHT POLE DESIGN AT 15B 34.2 "L" | LIGHT POLE DESIGN AT20B 32.5"M" | LIGHT POLE DES. AT10B31.7 CITY OF AKRON STAND. "V" | REMOVE AND STORE LIGHT POLE | REMOVE FOUNDATION | REINSTALL LIGHT POLE | 10 FT. BRACKET ARM AS PER PLAN | 12 FT. BRACKET ARM AS PER PLAN | BARRIER MEDIAN LIGHT POLE FOUNDATION | LIGHT POLE FOUNDATION 24"x 6' | LUMINAIRE, STYLE B, TYPE II 200 W. H.P.S. 713.11 | LUMINAIRE, STYLE C TYPE II 100 W. H.P.S. 713.11 | LUMINAIRE CITY OF AKRON 200 W. H.P.S. | LUMINAIRE UNDERPASS WALL MOUNTED 100 W. H.P.S. | LUMINAIRE UNDERPASS PENDENT MOUNTED 100 W. H.P.S. | LUMINAIRE UNDERPASS WALL MOUNTED 55 W. L.P.S. | | | BARRIER MEDIAN PULL BOX | GROUND ROD | PULL BOX, 18" CIRCULAR CONCRETE | PULL BOX 24" CIRCULAR CONCRETE | TRENCH | CONDUIT 2", 713.04 | LUMINAIRE UNDERPASS PENDENT MOUNTED 55W. L.P.S. | CONDUIT 3", 713.04 JACKED UNDER PAVEMENT | CONDUIT 3", 713.04 | LIGHT POLE ANCHOR BOLTS FOR STRUCTURE | NO. 10 AWG POLE AND BRACKET CABLE | NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE | 1 1/2" DUCT CABLE W/2, NO. 4 AWG CABLES | MARKERS | CABLE SPLICING KIT | | CONNECTOR KIT TYPE II | CONNECTOR KIT TYPE III | CONNECTOR KIT TYPE VII B | CONNECTOR KIT TYPE VII C | | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0016 | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0002 | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0016 | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 0017 | SERVICE TO UNDERPASS LIGHTING FOR BRIDGE NO. 1014 | STRUCTURE GROUND SYSTEM | JUNCTION BOX 18 X 8 X 6 | TRANSFORMER BASE AS PER PLAN TYPE AT-X | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ADDED ON C.O. #17 | | | | UNIT | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | | | EA. | EA. | EA | EA. | L.F. | L.F. | EA. | L.F. | L.F. | | SET | L.F. | L.F. | L.F. | EA. | EA. | | EA | EA | EA | EA | | LUMP | LUMP | LUMP | LUMP | LUMP | EA. | EA | EA. | |
| ★ | 75 | RT. | 55+78 | 57+38 | RU | | | | | | | | 2 | | 2 | | | | 12/ | 2 | | | | | | | | | 2 | 1 | | 160 | | | | | | 160 | | 180 | | 1 | | 2 | 2 | | | | | | | | 2 | |
| | 76 | LT. | | 54+10 | RU | | | ///// | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 92 | | | | | | 1 | 1 | | | | | | | | | |
| | 77 | LT. | 54+10 | 54+45 | RU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 45 | | 2 | | | | | | | | | | | |
| | 78 | LT. | 54+45 | 55+30 | RU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | |
| | 79 | LT. | 55+30 | 55+75 | RU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | |
| | 80 | LT. | 55+75 | 57+20 | RU | | | | | ///// | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 190 | | 2 | | | | | | | | | | |
| | 81 | LT. | 57+20 | 57+98 | RU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 110 | | 2 | | | | | | | | | | |
| XING SP.3 | 82 | LT/RT | 54+45 | 54+33 | RU | | | | | | | ↳ ADDED PER C.O. #17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 99 | | 160/ 85 | | | | | | | | | | | | | |
| XING EX.POLE | 83 | RT. | 54+33 | 54+40 | RU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 84 | LT./RT. | 55+30 | 55+29 | RU | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 85 | RT. | 55+29 | 55+78 | RU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 86 | RT. | 55+29 | 224+80 | DA | | | /// | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 87 | LT. | 110+65 SO | 222+60 | DA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *** | 88 | LT/RT | 222+60 | 228+89 | DA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *** | 89 | LT/RT | 223+83 | 224+22 | DA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 90 | RT. | 222+60 | 223+80 | DA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 91 | RT. | 223+80 | 224+22 | DA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 92 | LT./RT. | 222+08 | 222+08 | DA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SP.1 | 93 | RT. | 222+08 | 221+98 | DA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 94 | LT. | 222+08 | 112+55 | SO | | | /// | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GS27 EX.POLE | 95 | LT. | 112+55 | 113+90 | SO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 96 | LT. | 113+90 | 114+66 | SO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 97 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| XING SP.2 | 98 | LT/RT. | 222+08 | 10+42 | LK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 99 | RT. | 10+42 | 10+42 | LK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 100 | RT. | 10+42 | 12+10 | LK | | | /// | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 101 | RT. | 12+10 | 13+80 | LK | | | /// | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 103 | LT/RT. | 222+08 | 111+57 | SO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 104 | LT. | 111+57 SO | 12+10 | LK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 105 | LT. | 12+10 | 13+80 | LK | | | /// | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SUB-TOTAL ROADWAY | | | | | | 7 | | 1 | | | | | | 2 | 1 | | 4 | 12 | | | | | | | | | 1 | 8 | 8 | 3 | 1989 | | | 588 | | | | 927 | 1938 | 1493 | | 14 | | 12 | 12 | 6 | 2 | | | | | | | |
| ** | SUB-TOTAL SUM-59-0000 | | | | | | | 3 | | | | | | | | | | | 4 | | | 6 | 6 | | | | | | | | | 807 | | | | | | 3 | 180 | 1734 | | | | 5 | 5 | 2 | | | | | | | 5 | |
| *** | SUB-TOTAL SUM-59-0002 | | | | | 2 | | | | | | | | | | | | | 2 | | | | | 2 | | | | | | | | 481 | 2 | | | | | 2 | 270 | 1178 | | | | 2 | 2 | | | LUMP | | | 1 | 2 | |
| * | SUB-TOTAL SUM-18-1014 | | | | | | | 1 | | | | | | | | | | | 1 | | | | | | | | | | | 1 | | 129 | | | | | | 1 | 90 | 278 | | 1 | | 1 | 1 | | | | | | | 1 | |
| **** | SUB-TOTAL SUM-76-0967 | | | | | | | | | | | | | | | | | | | | | | | 12 | | | | | | | | | | | | | | | | 108 | | | | | | | | | | | | | | |
| | SUB-TOTAL STRUCTURES SHEET 246 | | | | | 2 | | 4 | | | | | | | | | | | 7 | | | 6 | 6 | 14 | | | | | 1 | | 1417 | 2 | | | | 6 | 540 | 3298 | | 1 | | 8 | 8 | 2 | | LUMP | | | 1 | 8 | |
| | SUB-TOTAL ROADWAY SHEET 246 | | | | | | 7 | | 1 | | | | | | 2 | 1 | | 4 | 12 | | | | | | | | | 1 | 8 | 8 | 3 | 1989 | | | 588 | | | | 927 | 1938 | 1493 | | 14 | | 12 | 12 | 6 | 2 | | | | | | | |
| *** | 120 | LT. | 128+00 | 128+70 | SW | 1 | | | | | | | | | | | | | 1 | | | | | | | | | | | | | 70 | | | | | | 1 | 85 | 150 | | | | 1 | 1 | | | | | | | | 1 | |
| *** | 121 | LT. | 128+70 | 129+10 | SW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 122 | LT. | 129+10 | 130+50 | SW | | | 1 | | | | | | | | | | | 1 | | | | | | | | | | | | | 10 | 40 | | | | | | | 100 | | 2 | | | | | | | | | | | |
| | 123 | LT. | 130+50 | 132+30 | SW | | | 1 | | | | | | | | | | | 1 | | | | | | | | | | | | | 140 | | | | | | | 92 | | 150 | | | | 1 | 1 | | | | | | | | | |
| GS21 | 124 | LT. | 132+30 | 133+10 | SW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊡ | 125 | LT. | 133+10 | 134+10 | SW | 1 | | | | | | | | | | | | | 1 | | | | | | | | | | | | | 180 | | | | | | | 92 | | 190 | | | | 1 | 1 | | | | | | | | | |
| ⊡ | 126 | LT. | 134+10 | 135+90 | SW | | | | 1 | | | | | | | | | | 1 | | | | | 2 | | | | | | | | 80 | | | | | | | 90 | | 90 | | 2 | | | | | | | | | | |
| ⊡ | 127 | LT. | 135+90 | 137+70 | SW | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | | 10 | 120 | | | | | 1 | 85 | 220 | | | | 1 | 1 | | | | | | | | 2 | |
| ⊡ | 128 | LT. | 137+70 | 139+50 | SW | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | | | 180 | | | | | 1 | 90 | 380 | | | | 1 | 1 | | | | | | | | 1 | |
| | 129 | LT. | 139+50 | 140+00 | SW | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 180 | | | | | 1 | 90 | 380 | | | | 1 | 1 | | | | | | | | 1 | |
| | 130 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | | 110 | | | | | | | | | | | | | |
| ** | 131 | RT. | 128+00 | 128+70 | EN | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | | | 70 | | | | | 1 | 90 | 150 | | | | 1 | 1 | | | | | | | | 1 | |
| ** | 132 | RT. | 128+70 | 129+82 | EN | | | | | | | | | | | | | | | | | | | | | | | | | | | | 112 | | | | | | | | 244 | | 2 | | | | | | | | | | | |
| | 133 | RT. | 129+82 | 130+50 | EN | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 68 | | | | | | | 92 | | 78 | | | | 1 | 1 | | | | | | | | | |
| | 134 | RT. | 130+50 | 132+30 | EN | | 1 | | | | | | | | | | | | 1 | | | | | | | | | | | | | 180 | | | | | | | 92 | | 190 | | | | 1 | 1 | | | | | | | | | |
| | 135 | RT. | 132+30 | 133+00 | EN | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 | | | | | | | | 180 | | | | | 1 | 1 | | | | | | | | |
| ⊞ | 136 | RT. | 133+86 | 134+10 | EN | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | 90 | 68 | | | | | 1 | 1 | | | | | | | | 1 | |
| ⊞ | 137 | RT. | 134+10 | 135+90 | EN | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | | 10 | 190 | | | | | 1 | 90 | 400 | | | | 1 | 1 | | | | | | | | 2 | |
| ⊞ | 138 | RT. | 135+90 | 137+70 | EN | | | | 1 | | | | | | | | | | 1 | | | | | 3 | | | | | | | | | 180 | | | | | 1 | 90 | 380 | | | | 1 | 1 | | | | | | | | 1 | |
| ⊞ | 139 | RT. | 137+70 | 139+50 | EN | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | | | 180 | | | | | 1 | 90 | 380 | | | | 1 | 1 | | | | | | | | 1 | |
| | 140 | RT. | 139+50 | 140+00 | EN | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | 50 | | | | | | | | 120 | | | | | | | | | | | | | |
| | 141 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 142 | LT. | | 27+98 | RH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 92 | | | | | | | | | | | | | |
| | 143 | LT. | 27+98 | 29+75 | RH | | | | | | | | | | | | | | | | | | | | | | | | | | | 177 | | | | | | | 92 | | 187 | | | | | | | | | | | |
| | 144 | LT. | 29+75 | 31+45 | RH | | | | | | | | | | | | | | | | | | | | | | | | | | | 170 | | | | | | | 92 | | 180 | | | | | | | | | | | |
| | 145 | LT. | 31+45 | 33+10 | RH | | | | | | | | | | | | | | | | | | | | | | | | | | | 165 | | | | | | | 92 | | 175 | | | | | | | | | | | |
| | 146 | LT. | 33+10 | 33+40 | RH | | | | | | | | | | | | | | | | | | | | | | | | | | | 180 | | | | | | | | 140 | | | | | | | | | | | |
| | 147 | LT/RT. | 33+40 | 231+67 | DA | | | | | | | | | | | | | | | | | | | | | | | | | | | 1100 | | | 1100 | | | | | 220 | | 1/2 | 1/2 | | | | | | | | | |

⊡ STRUCTURE NO. 0016
⊞ STRUCTURE NO. 0017
**** STRUCTURE NO. 0967

LIGHTING SUB-SUMMARY

# LIGHTING QUANTITIES SUB-SUMMARY

CALCULATED BY E.D.K. DATE 10-82
CHECKED BY T.K.I. DATE 10-82

| FHWA REG | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

241
455

AKRON INNERBELT
SUM-59-0.00

DO NOT REUSE EXISTING "AT" BASE

H.P.S. : HIGH PRESSURE SODIUM

L.P.S. : LOW PRESSURE SODIUM

| | LINE NO. | SIDE | FROM | TO | PLAN REFERENCE |
|---|---|---|---|---|---|
| | | | | | UNIT |
| | 150 | LT. | 33+40 | 34+55 | RH. |
| | 151 | LT. | 34+55 | 36+00 | RH. |
| | 152 | LT. | 36+00 | 37+50 | RH. |
| | 153 | | | | |
| | 154 | LT. | | 38+87 | RH. |
| EX. POLE | 155 | LT. RT. | 38+87 | 38+87 | RH. |
| EX. POLE | 156 | RT. | 38+87 | 40+00 | RH. |
| | 157 | | | | |
| | 158 | RT. | | 226+44 | DA |
| | 159 | RT. | 226+44 | 228+08 | DA |
| | 160 | RT. | 228+08 | 229+72 | DA |
| | 161 | RT. | 229+72 | 231+36 | DA |
| | 162 | RT. | 231+36 | 231+67 | DA |
| | 163 | RT. | 231+67 | 233+00 | DA |
| | 164 | RT. | 233+00 | 233+22 | DA |
| GS 31 | 165 | LT. RT. | 233+22 | 233+80 | DA |
| | 166 | RT. | 233+22 | 235+18 | DA |
| | 167 | LT. | | 236+30 | DA |
| | 168 | LT. | 236+30 | 236+90 | DA |
| | 169 | LT. RT. | 236+90 | 237+10 | DA |
| | 170 | RT. | 237+10 | 237+40 | BU |
| EX. POLE | 171 | RT. | 237+10 | 237+60 | DA |
| | 172 | LT. | 57+98 | 59+20 | RU |
| | 173 | LT. | 59+20 | 61+20 | RU |
| | | SUB TOTAL ROADWAY | | | |
| ** | | SUB TOTAL SUM-59-0000 | | | |
| *** | | SUB TOTAL SUM-59-0002 | | | |
| GS | | SUB TOTAL SUM-59-0016 | | | |
| GS | | SUB TOTAL SUM-59-0017 | | | |
| | | SUB TOTAL STRUCTURES SHEET 247 | | | |
| | | SUB TOTAL ROADWAY SHEET 247 | | | |
| | 188 | | | | |
| GS | 189 | LT. | 140+00 | 141+30 | SW |
| GS | 190 | LT. | 141+30 | 142+22 | SW |
| GS | 191 | RT. | 140+00 | 141+30 | EN |
| GS | 192 | RT. | 141+30 | 142+32 | EN |
| GS | 193 | ℄ | | 143+00 | IB |
| GS | 194 | ℄ | 143+00 | 145+33 | IB |
| GS | 195 | ℄ | 145+33 | 147+66 | IB |
| GS | 196 | ℄ | 147+66 | 149+98.75 | IB |
| GS | 197 | ℄ | 149+98.75 | 150+75 | IB |
| | 198 | | | | |
| GS | 199 | RT. | 50+30 | 51+11 | TH |
| GS | 200 | RT. | 51+11 | 51+62 | TH |
| GS | 201 | RT. | 51+62 | 52+17 | TH |
| GS | 202 | RT. | 52+17 | 52+50 | TH |
| GS | 203 | LT. | | 50+85 | TH |
| GS | 204 | LT. | 50+85 | 51+45 | TH |
| GS | 205 | LT. | 51+45 | 52+20 | TH |
| | 206 | | | | |
| | 207 | | | | |
| | | SUB TOTAL ROADWAY | | | |
| GS | | SUB TOTAL SUM-59-0016 | | | |
| GS | | SUB TOTAL SUM-59-0017 | | | |
| | | SUB TOTAL STRUCTURES SHEET 248 | | | |
| | | SUB TOTAL ROADWAY SHEET 248 | | | |
| | 218 | LT. | 155+00 | 162+00 | H |
| | 219 | RT. | 65+75 | | RH |
| | 220 | LT. | 157+45 | 158+25 | H |
| | 221 | LT. | 154+75 | 154+75 | IB |
| | | SUB TOTAL ROADWAY | | | |
| | | SUB TOTAL SUM-59-0058 | | | |
| | | SUB TOTAL STRUCTURES SH'TS 248A & 248B | | | |
| | | SUB TOTAL ROADWAY SH'TS 248A & 248B | | | |

| | LIGHT POLE DESIGN A12B39'-0"DE" | LIGHT POLE DESIGN A 8B 32.5 "P" | LIGHT POLE DESIGN AT 12B 34.2 "J" | LIGHT POLE DESIGN A 12B 32.5 "K" | LIGHT POLE DESIGN AT 15B 34.2 "L" | LIGHT POLE DESIGN AT 20B 32.5 "M" | LIGHT POLE DES. AT 10B39'-0" CITY OF AKRON STAND. "I" | REMOVE AND STORE LIGHT POLE | REMOVE FOUNDATION | REINSTALL LIGHT POLE | 10 FT. BRACKET ARM AS PER PLAN | 12 FT. BRACKET ARM AS PER PLAN | BARRIER MEDIAN LIGHT POLE FOUNDATION | LIGHT POLE FOUNDATION 24" x 6' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA |
| | | | /// | | | /// | | | | | | | | / |
| | | | /// | | | | | | | | | | | / |
| | | | | | | | /// | | | | | | | / |
| | | | | | | | | 1 | 1 | /// | | | | / |
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| | | | /// | | | | | | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

242
455

AKRON INNERBELT
SUM-59-0.00

## LEGEND

- (F) ○—○—○ (F) FUTURE 400 W. HPS BY OTHERS SAFETY UP-DATE CONTRACT 1985.
- 310 W. HPS TYPE II 39.0' M.H., TWIN
- 200 W. HPS TYPE II 34.2' M.H.
- 200 W. HPS TYPE II 30' M.H. CITY OF AKRON STANDARD
- RELOCATE EXISTING 200 W. HPS ADD ATX BASE ON NEW FOUNDATION
- EXISTING LIGHT POLE TO REMAIN
- RELOCATE EXISTING CITY OF AKRON STANDARD LIGHT POLE
- EXISTING CITY OF AKRON STANDARD LIGHT POLE
- EXISTING LIGHT POLE TO BE REMOVED AND STORED
- 100 W HPS INTERSTATE UNDERPASS LUMINAIRE
- 55 W. LPS CITY STREET UNDERPASS LUMINAIRE
- 1¼", 2", 3" — 713.04 CONDUIT
- 1-1/2" DUCT CABLE W/2 NO. 4 AWG
- 4" MEDIAN RACEWAY
- PULL BOX
- MEDIAN PULL BOX
- SERVICE POLE AND CONTROL CENTER
- CABLE SPLICING KITS
- OVERHEAD SIGN SUPPORT
- COMBINATION POLE

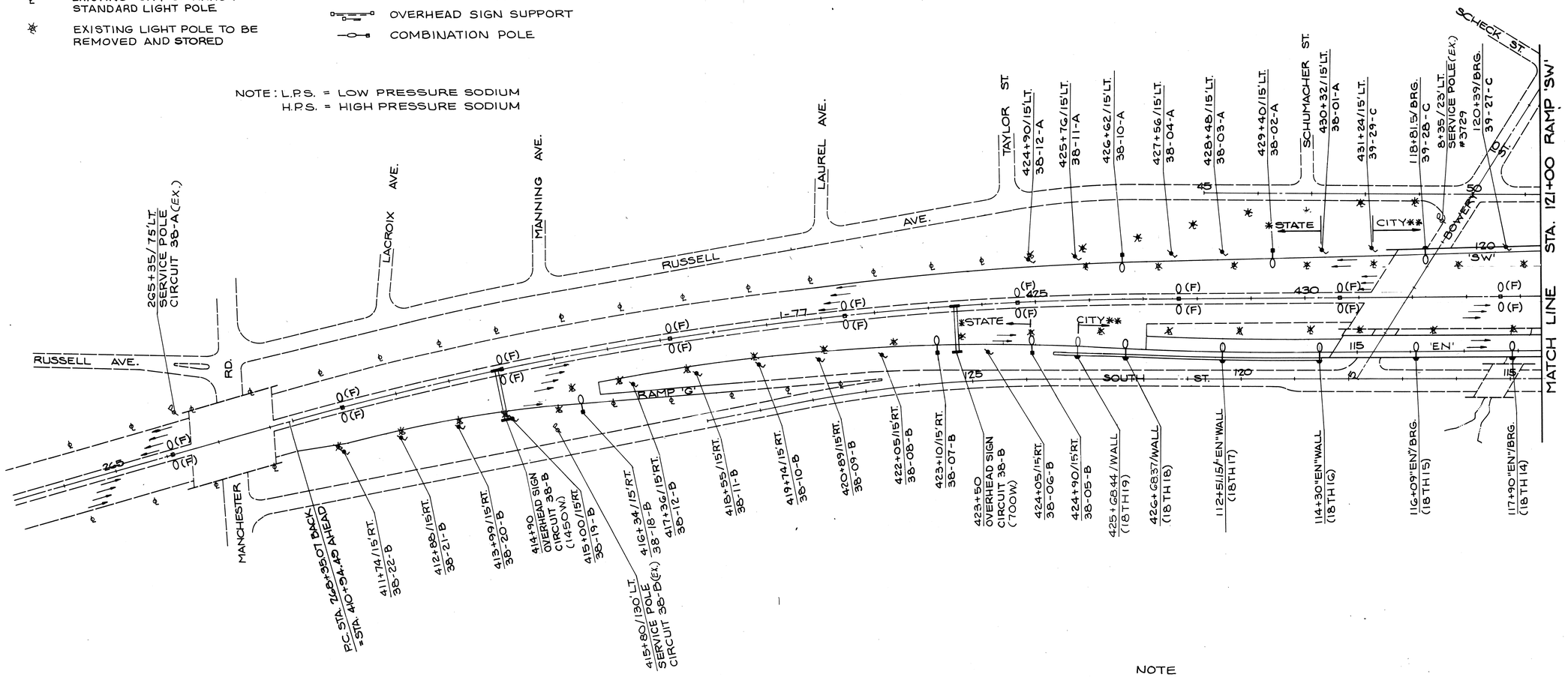
STATION/E.P OFFSET
(18TH G) "E"

TYPICAL LIGHT POLE DESIGNATION: 18 = CIRCUIT NUMBER. TH = CONTROL CENTER LOCATION. G = POLE WITHIN THE CIRCUIT. E = LIGHT POLE REFERENCE LETTER, SEE SHEET Nº 256.

STATION/E.P. OFFSET
38-10-A

CIRCUIT NUMBER 38-A, 38-B, 39-C, 39-D ARE EXISTING CIRCUITS USING OHIO EDISON CIRCUIT NUMBERS. 38 = MAP NUMBER, 10 = POLE NUMBER, A = CIRCUIT LETTER

NOTE: L.P.S. = LOW PRESSURE SODIUM
H.P.S. = HIGH PRESSURE SODIUM




NOTE

| * STATE LIGHTING CIRCUITS | CITY-** LIGHTING CIRCUITS |
|---|---|

GRAPHIC SCALE
0 100 200 300

LIGHTING SCHEMATIC PLAN

FORM D D A-8

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

243
455

AKRON INNERBELT
SUM-59-0.00

MATCH LINE STA. 121+00 RAMP 'SW'

119+74 "EN"/BRG. (18TH13)
121+82/BRG. 39-26-C
121+45 "EN"/BRG. (18TH12)
123+25 "SW"/15'LT. 39-25-C
224+32/BRG. CIRCUIT 19TH SIGN # 28 (175W.)
54+10/7'LT. 39-32-C
54+40/COMB. 39-31-C
27+98/20'LT. (19TH17)
226+44/10'RT. (19TH23)
29+75/20'LT. (19TH16)
228+08/20'RT. (19TH22)
31+45/20'LT. (19TH15)
33+10/20'LT. (19TH14)
34+55/20'LT. (19TH13)
36+00/10'LT. (19TH12)
37+50/10'LT. (19TH11)
38+87/10'LT. (17TH2)
40+60/30'RT. CONTROL CENTER "TH" (EX.)
50+85/5'LT. (17TH11)
MATCH LINE STA. 11+50
10+40/COMB. 39-14-D
#3563 110+65/30'LT. SERVICE POLE (EXIST) (UNDERPASS LIGHTING)
221+98/COMB. 39-13-D SIGN # 26 (175W.)
112+55/12'LT. 39-15-D
PENN AVE.
123+33 "EN"/BRG. (18TH14)
125+10 "EN"/BRG. (18TH10)
126+87 "SW"/BRG. (19TH9)
128+16 "SW"/BRG. (19TH10)
130+50/12'LT. (19TH7)
59+20/15'LT. 39-34-C
132+30 "SW"/12'LT. (19TH6)
134+10 "SW"/BRG. (19TH5)
135+92 "SW"/BRG. (19TH4)
137+65 "SW"/BRG. (19TH3)
139+49 "SW"/BRG. (19TH2)
141+27 "SW"/BRG. (19TH1)
143+00 ℄ (15BR10)
149+98.75 ℄ (15BR7)
126+88 "EN"/BRG. (18TH9)
128+73 "EN"/BRG. (18TH8)
130+50 "EN"/12'RT. (18TH7)
132+30 "EN"/12'RT. (18TH6)
134+00/12'RT. (18TH5)
135+98.64 "EN"/BRG. (18TH4)
137+74.89 "EN"/BRG. (18TH3)
139+47.39 "EN"/BRG. (18TH2)
141+26 "EN"/BRG. (18TH1)
52+50/5'RT. (17TH12)
145+33 ℄ (15BR9)
147+66 ℄ (15BR8)
61+20/15'LT. 39-35-C
233+00/10'RT. (19TH19)
133+00/SIGN#21 CIRCUIT 19TH (100W.)
235+18/10'RT. (19TH18)
235+42/SIGN#21 CIRCUIT NO. 19TH (100W.)
236+30/10'LT. (17TH19)
237+40/10'LT. (17TH18)
57+20/15'LT. 39-33-C
228+14 "SW"/BRG. (19TH8)
231+36/10'RT. (19TH20)
224+80/10'RT. 39-30-C
13+80/10'RT. 39-32-D
12+10/10'RT. 39-31-D
13+80/10'LT. 39-30-D
12+10/10'LT. 39-29-D
MATCH LINE STA. 11+50
LAKESHORE BLVD.
RAYMOND ST.
BOWERY ST.
OHIO CANAL
RELOC
RHODES AVE.
DART AVE.
NATHAN ST.
HOWE AVE.
RHODES AVE.
TEMP CONNECTION
TEMP CONNECTION
AKRON INNERBELT
B.R. 59
DART AVE.
THORNTON ST.
MATCH LINE STA. 150+00
THORNTON STREET UNDERPASS LIGHTING ON CIRCUIT NO. 18TH
SOUTH ST.
OWEN AVE.
RAMP W-10
I-77
(F) WEST EXPRESSWAY
RAMP W-10 (18TH9)
RAMP "SW"
RAMP "EN"
RUSSELL AVE.
RHODES AVE.
KENYON ST.
OBERLIN CT.
OBERLIN ST.
BOULEVARD ST.
VICTORY ST.
EXISTING SERVICE POLE CIRCUIT 39-D
MARION ST.
4+70 RAMP W-10 EXISTING SERVICE POLE CIRCUIT 39-C
0 (F)
435
440
120
110
225
130
135
140
145
240
245
250
40
45
50
55
65
450

FOR LEGEND SEE SHEET NO. 242.

GRAPHIC SCALE
0 100 200 300

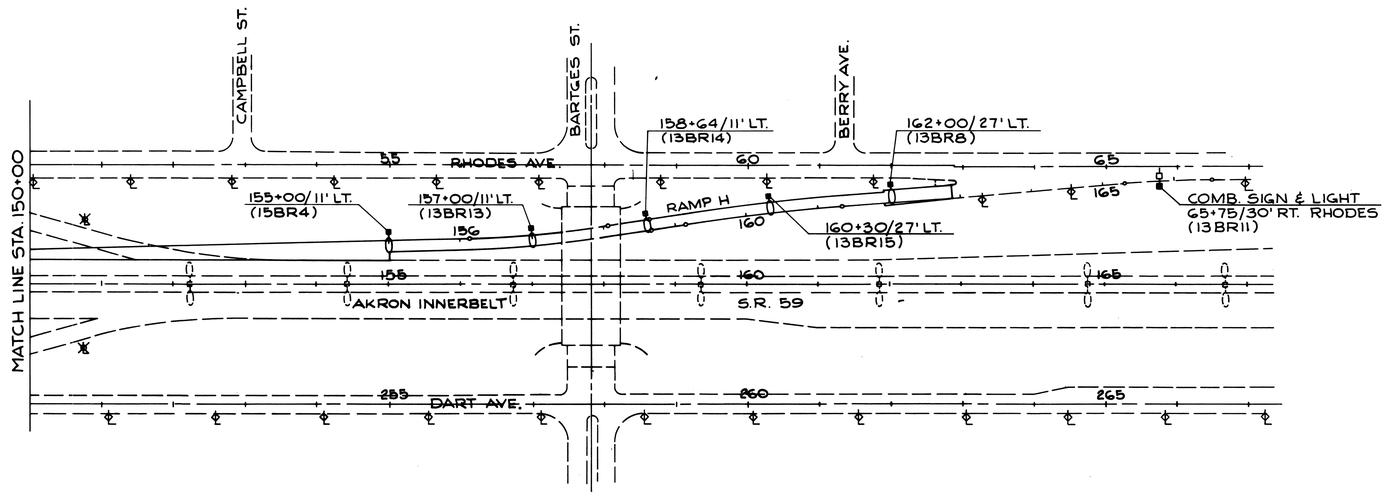
LIGHTING SCHEMATIC PLAN

FORM D D A-5

AA B/Pw 71942R

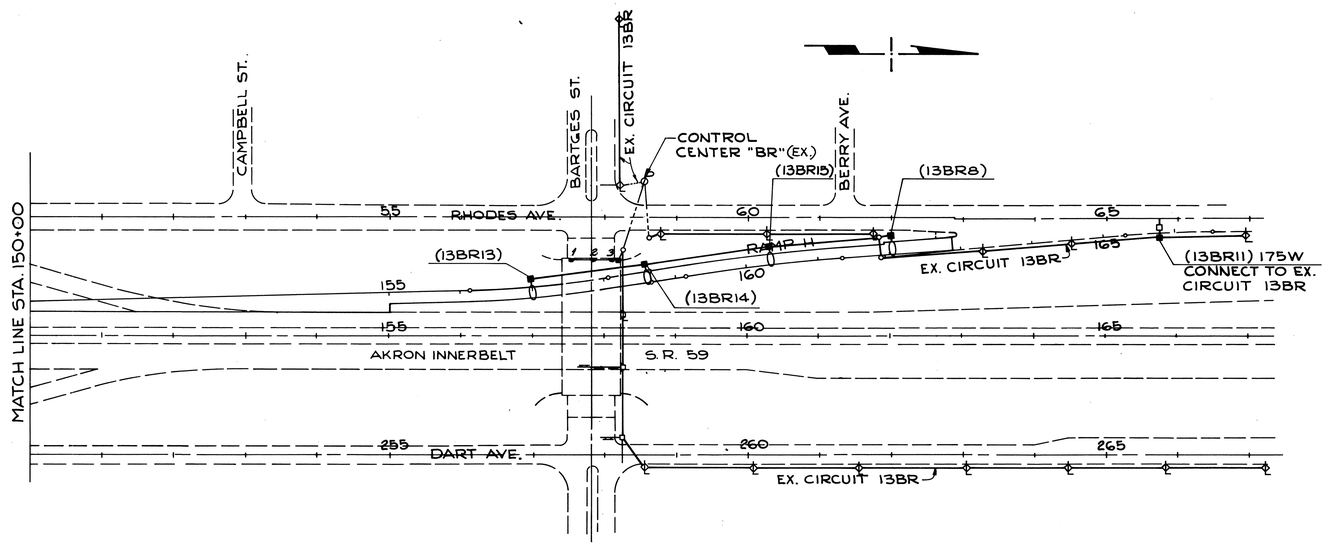
| | | | |
|---|---|---|---|
| CALC. BY. DATE | M-IT62(2) | OHIO | 243A |
| CHKD. BY. DATE | | F.H.W.A. REGION 5 | 455 |

AKRON INNERBELT
SUM-59-0.00




LIGHTING SCHEMATIC PLAN

FOR LEGEND SEE SHEET NO. 242




EXISTING CIRCUIT DIAGRAM
CIRCUIT No. 13BR
PLAN SHEET No. 248A, 248B

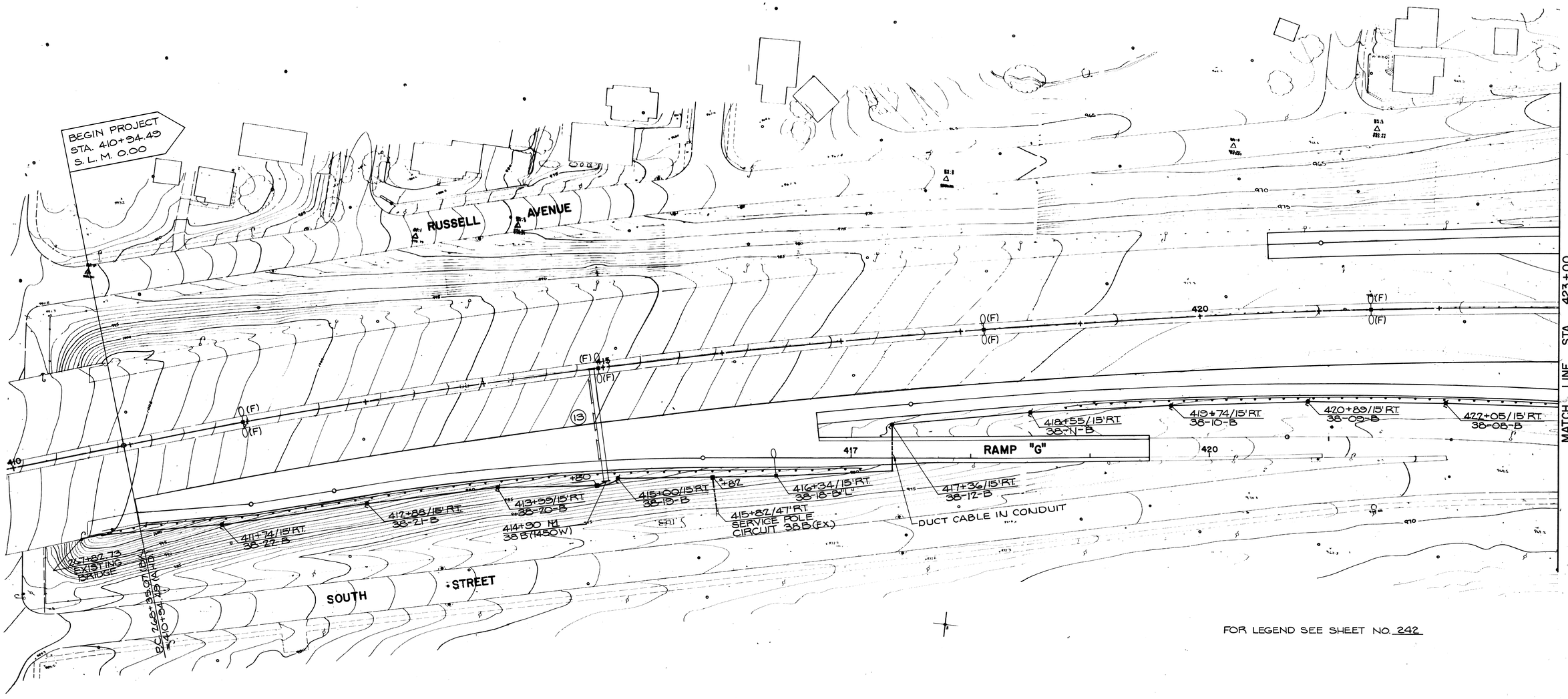
0 100 200 300
Feet

LIGHTING SCHEMATIC PLAN
& CIRCUIT DIAGRAM

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

244
455

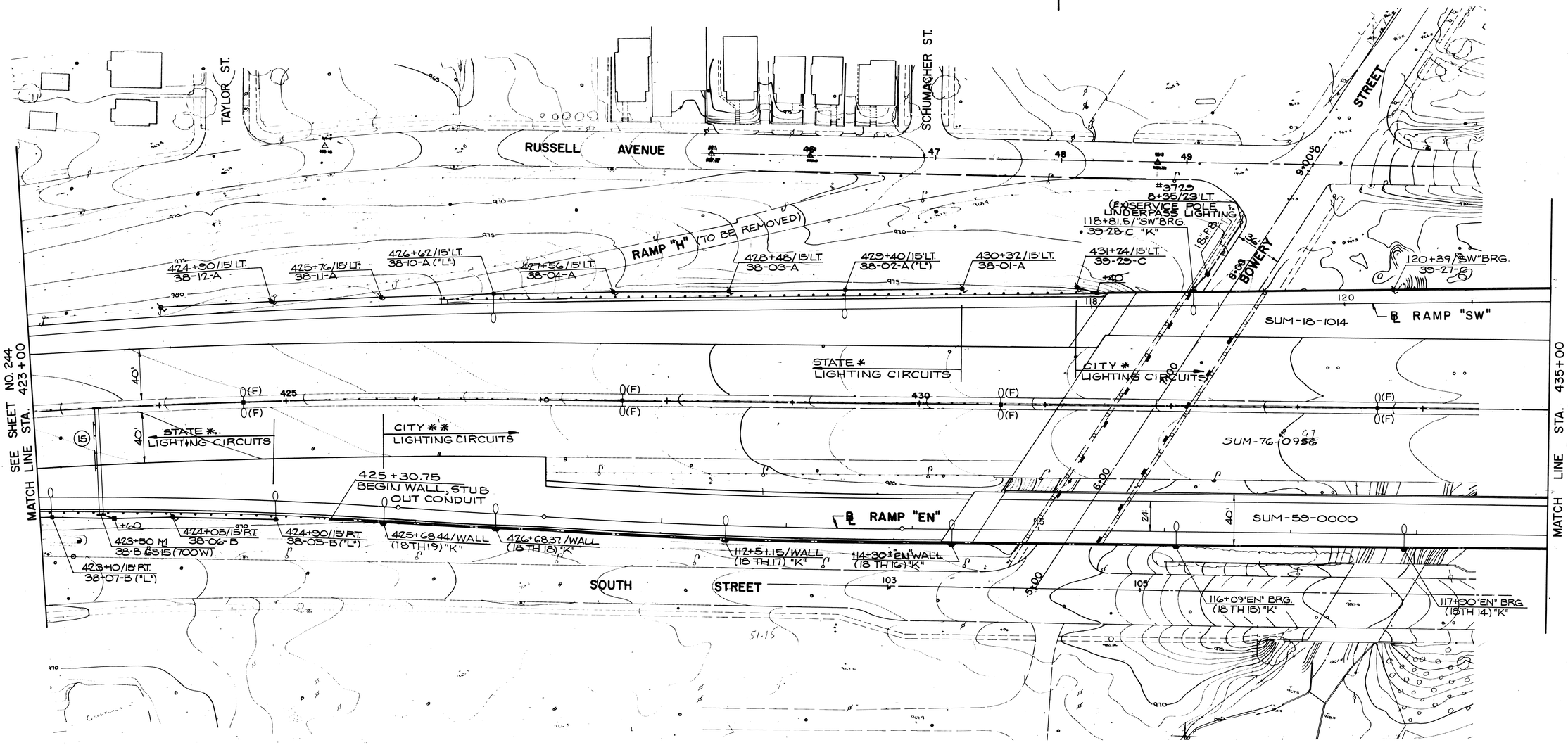
AKRON INNERBELT
SUM - 59 - 0.00



| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

245
455

AKRON INNERBELT
SUM - 59 - 0.00




FOR LEGEND SEE SHEET NO. 242
FOR UNDERPASS LIGHTING SEE SHEET NO. 249

GRAPHIC SCALE
0 40 80 120 FEET

## STA. 423+00 TO STA. 435+00
## LIGHTING PLAN

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

246
455

AKRON INNERBELT
SUM - 59 - 0.00

SEE SHEET NO. 245
MATCH LINE STA. 435+00

SEE SHEET NO. 247
MATCH LINE STA. 225+65

SEE SHEET NO. 247
MATCH LINE STA. 128+00

SEE SHEET NO. 247
MATCH LINE STA. 128+00

RUSSELL AVENUE

54+10/7'LT.
39-37-C("J")

57+20/15'LT.
39-33-C("L")

SP-3
54+40/COMB.
39-31-C

224+80/10'RT.
39-30-C("J")

126+87"SW"/BRG.
(18TH9)"F"

173+25'SW"/15'LT.
39-25-C("L")

224+92/BRG.
GS. 28 (175W)
CIRCUIT 19TH

121+82/BRG.
39-26-C("K")

℄ RAMP SW

SUM-18-1014

SUM-59-0002

125+16"SW"/BRG.
(19TH10)"F"

441+40/℄ W. EXPW'Y
MEDIAN PULL BOX

441+30/℄ W. EXPW'Y
JUNCTION BOX

126+88"EN"/BRG.
(18TH9)"K"

℄ WEST EXPRESSWAY

SUM-59-0000

125+10"EN"/BRG.
(18TH10)"K"

BART

SUM-18-0967

123+33"EN"/BRG.
(18TH11)"K"

℄ RAMP EN

RAMP W-10

RAMP W-11

121+45"EN"/BRG.
(18TH12)"K"

119+70"EN"/BRG.
(18TH13)"K"

221+98/COMB.
39-13-D
GS26(175W)

112+55/12'LT.
39-15-D("J")

114+00
GS27(39-D)
(100W)

SOUTH STREET

#3563
110+65/30'LT.
SERVICE POLE (EX.)

SP-1
10+40/COMB.
39-14-D
6624(175W)

+57
18"PB

PENN AVE.

OWEN AVE.

LAKESHORE BOULEVARD

12+10/10'RT.
39-31-D("J")

12+10/10'LT.
39-29-D("J")

MATCH LINE STA. 12+65

MATCH LINE STA. 12+65

13+80/10'RT.
39-32-D("J")

13+80/10'LT.
39-30-D("J")

FOR LEGEND SEE SHEET NO. 242
FOR UNDERPASS LIGHTING SEE SHEET NO. 250

GRAPHIC SCALE
0 40 80 120 FEET

STA. 435+00 TO STA. 128+00
LIGHTING PLAN

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

247
455

AKRON INNERBELT
SUM - 59 - 0.00

FOR LEGEND SEE SHEET NO. 242
FOR UNDERPASS LIGHTING SEE SHEET NO. 251

SEE SHEET NO. 246 MATCH LINE STA. 225+65

SEE SHEET NO. 246 MATCH LINE STA. 128+00

SEE SHEET NO. 248 MATCH LINE STA. 140+00

OHIO CANAL

NATHAN

BOWERY STREET

℄ RHODES AVENUE

℄ BART AVENUE

RUSSELL COURT

RUSSELL AVENUE

KENYON STREET

R RAMP SW

R RAMP EN

INNERBELT

SUM-59-0007

SUM-59-0000

SUM-59-0016

SUM-59-0017

DUCT-CABLE IN CONDUIT

DUCT CABLE IN CONDUIT

DART

227+35/20'LT. (19TH17) "M"

229+75/20'LT. (19TH16) "M"

226+05/10'RT. (19TH22) "J"

224+45/10'RT. (19TH23) "J"

231+45/20'LT. (19TH15) "M"

229+72/10'RT. (19TH21) "J"

233+10/20'LT. (19TH14) "M"

231+32/10'RT. (19TH20) "J"

234+55/20'LT. (19TH13) "M"

236+00/10'LT. (19TH12) "J"

237+50/10'LT. (19TH11) "Y"

238+87/10'LT. (17TH2)

178+70"SW"/BRG. (18TH8) "K"

130+50"SW"/12'LT. (18TH7) "J"

132+30"SW"/12'LT. (18TH6) "J"

133+00 19TH(GS21) 100 W

239+00/10'RT. (19TH15) "J"

239+40 19TH(GS3) 100 W

134+10"SW"/BRG. (18TH5) "K"

135+30"SW"/BRG. (18TH4) "K"

137+70"SW"/BRG. (18TH3) "K"

139+30"SW"/BRG. (18TH2) "K"

59+20/15'LT. (35-34-C("L"))

61+20/15'LT. (35-35-C("L"))

178+70"EN"/BRG. (18TH8) "K"

130+50"EN"/12'RT. (18TH7) "J"

132+30"EN"/12'RT. (18TH6) "J"

134+00"EN"/BRG. (18TH5) "J"

135+30"EN"/BRG. (18TH4) "K"

137+70"EN"/BRG. (18TH3) "K"

139+30"EN"/BRG. (18TH2) "K"

235+15/10'RT. (19TH18) "Y"

236+30/10'LT. (17TH19) "Y"

237+40/10'LT. (17TH18)

GRAPHIC SCALE
0 40 80 120 FEET

# STA. 128+00 TO STA. 140+00
# LIGHTING PLAN

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

248
455

AKRON INNERBELT
SUM - 59 - 0.00

HOWE

℄ RHODES AVENUE

END PROJECT
STA. 150+00.00
S. L. M. 0.00

MATCH LINE STA. 150+00
SEE SHEET NO. 248A

40+60/30'RT.
SERVICE POLE
CONTROL CENTER "TH"
(EXIST.)

50+85/5'LT.
(17 TH 11)

141+30"SW"/BRG.
(15 TH 1) "K"

CAPPED

143+00/5.6'LT.
(15BR10)"D"

145+33/℄
(15BR9)"E"

147+66/℄
(15BR8)"E"

150+75/℄
EXIST. MEDIAN
PULL BOX

SEE SHEET NO. 247
MATCH LINE STA. 140+00

SUM-59-0016

SUM-59-0017

CAPPED

141+30"EN"/BRG.
(18 TH 1) "K"

149+98.75/℄
(15BR7)"E"

52+50/5'RT.
(17 TH 12)

℄ DART AVENUE

THORNTON STREET

FOR LEGEND SEE SHEET NO. 242
FOR UNDERPASS LIGHTING SEE SHEET NO. 253

GRAPHIC SCALE
0 40 80 120 FEET

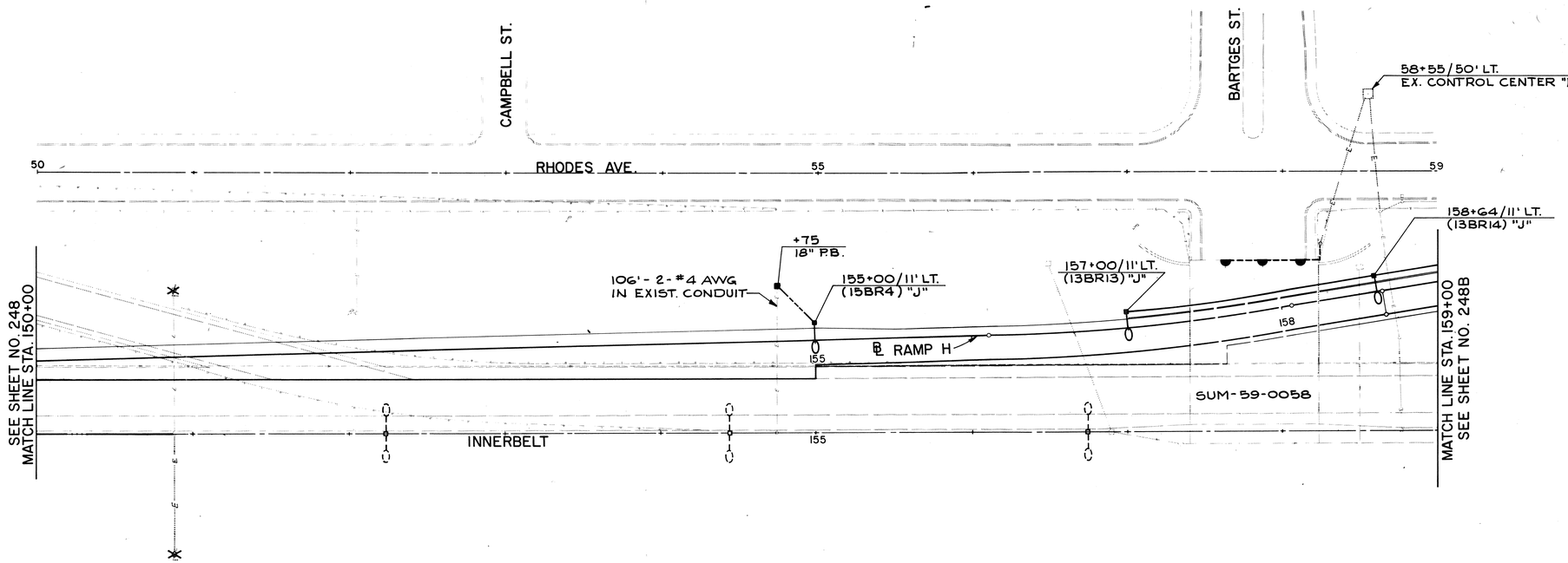
STA. 140+00 TO STA. 150+00
LIGHTING PLAN

AA B/P# 71942R

| CALC. BY. DATE | M-IT62(2) | OHIO |
|---|---|---|
| CHKD. BY. DATE | | F.H.W.A. REGION 5 |

248A
455

AKRON INNERBELT
SUM-59-0.00




FOR LEGEND SEE SHEET NO. 242

FOR UNDERPASS LIGHTING SEE SHEET NO. 253A

GRAPHIC SCALE
0 40 80 120 FEET

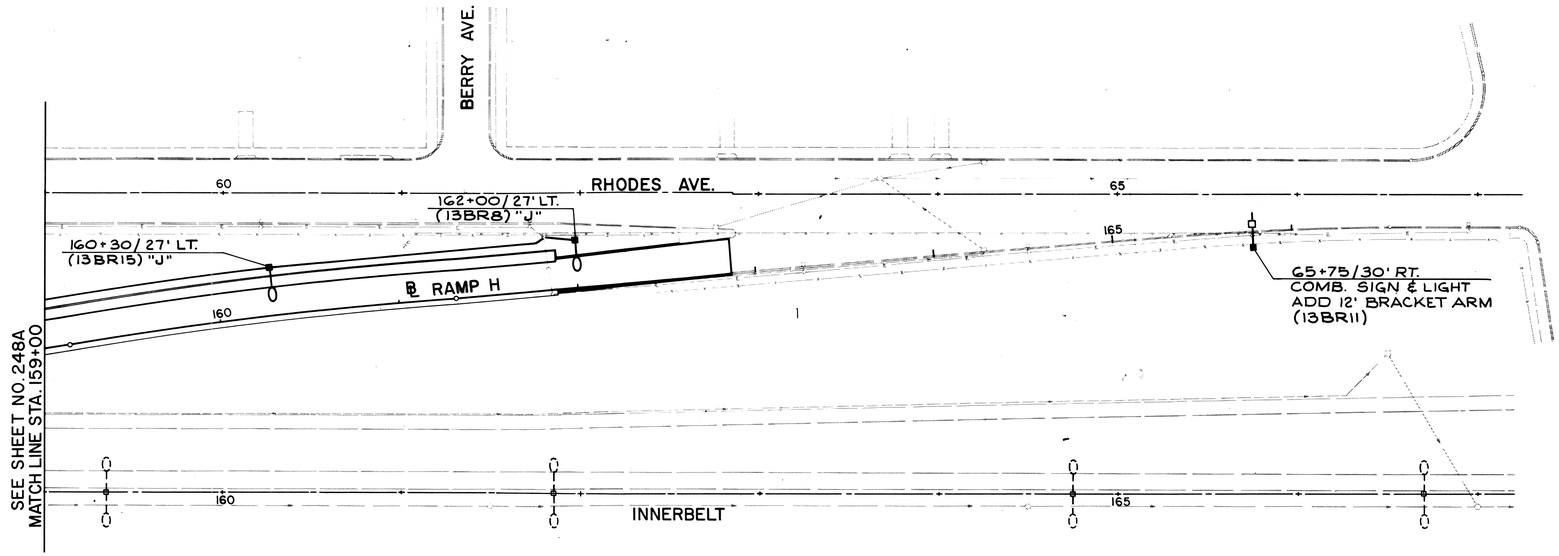
STA. 150+00 TO STA. 159+00
LIGHTING PLAN

AA B/Pe 71943R

| CALC. BY. DATE | M-IT62(2) | OHIO |
|---|---|---|
| CHKD. BY. DATE | | F.H.W.A. REGION 5 |

248B
455

AKRON INNERBELT
SUM-59-0.00




FOR LEGEND SEE SHEET NO. 242

GRAPHIC SCALE
0 40 80 120 FEET

STA. 159+00 TO STA. 167+00
LIGHTING PLAN

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

249
455

AKRON INNERBELT
SUM-59-0.00

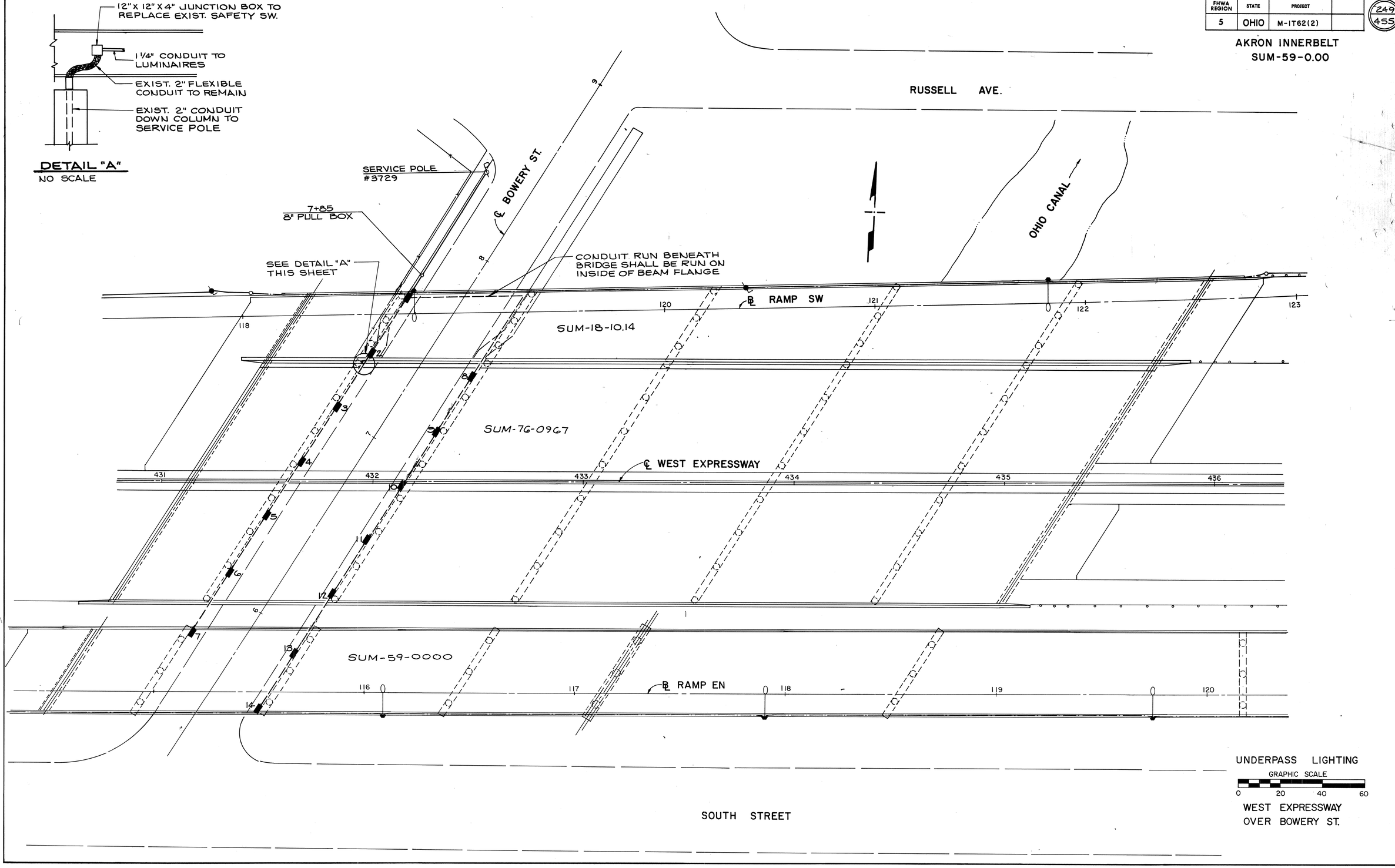
12"X 12" X 4" JUNCTION BOX TO REPLACE EXIST. SAFETY SW.

1¼" CONDUIT TO LUMINAIRES

EXIST. 2" FLEXIBLE CONDUIT TO REMAIN

EXIST. 2" CONDUIT DOWN COLUMN TO SERVICE POLE

**DETAIL "A"**
NO SCALE




UNDERPASS LIGHTING

GRAPHIC SCALE
0 20 40 60

WEST EXPRESSWAY
OVER BOWERY ST.

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

250
455

AKRON INNERBELT
SUM-59-0.00

℄ LAKESHORE BLVD.

℄ DART AVE.

℄ RHODES AVE.

℄ SOUTH ST.

℄ RAMP EN

℄ WEST EXPRESSWAY

℄ RAMP SW

℄ RUSSELL AVE.

SUM-59-0000

SUM-76-0967

SUM-59-0002

SERVICE POLE
#3563

222+60
18" P.B.

1¼" 713.04 CONDUIT

FOR DETAIL
SEE SHT. 249

154'
7 EQUAL SPACES

PENDENT
MOUNTED

CONDUIT RUN BENEATH
BRIDGE SHALL BE RUN ON
INSIDE OF BEAM FLANGE

UNDERPASS LIGHTING

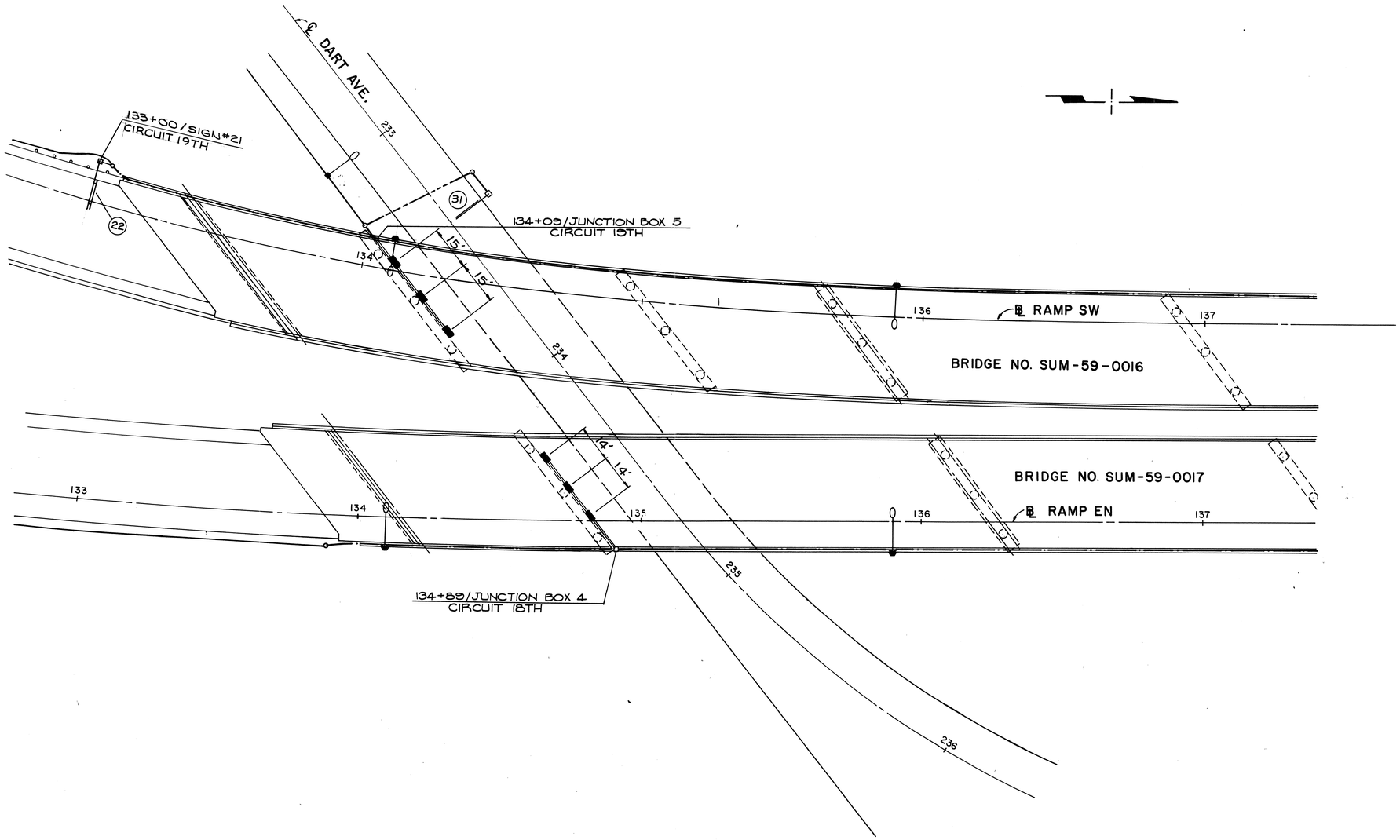
GRAPHIC SCALE
0 20 40 60

AKRON INNERBELT
OVER DART AVE.

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

251
455

AKRON INNERBELT
SUM-59-0.00




UNDERPASS LIGHTING

GRAPHIC SCALE

0 20 40 60

AKRON INNERBELT
OVER DART AVE.

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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455

AKRON INNERBELT
SUM-59-0.00

DART AVE.

℄ WEST EXPRESSWAY

439+76
EX. CIRCUIT 1-PS

441+30 / ℄ W. EXPW'Y
JUNCTION BOX

SERVICE POLE #3563
110+65 / 30' LT.

℄ RAMP EN

BRIDGE NO. SUM-59-0.00

1¼" 713.04 CONDUIT

441+40 / ℄ W. EXPW'Y
MEDIAN PULL BOX

442+80
EX. CIRCUIT 3-PS

LAKESHORE BLVD.

SOUTH STREET

RAMP W-11

Ⓐ = BEAM REFERENCE

UNDERPASS LIGHTING
CONNECTED TO ℄ EXIST.
WEST EXPWY LIGHTING
CIRCUIT NO. 1-PS

UNDERPASS LIGHTING

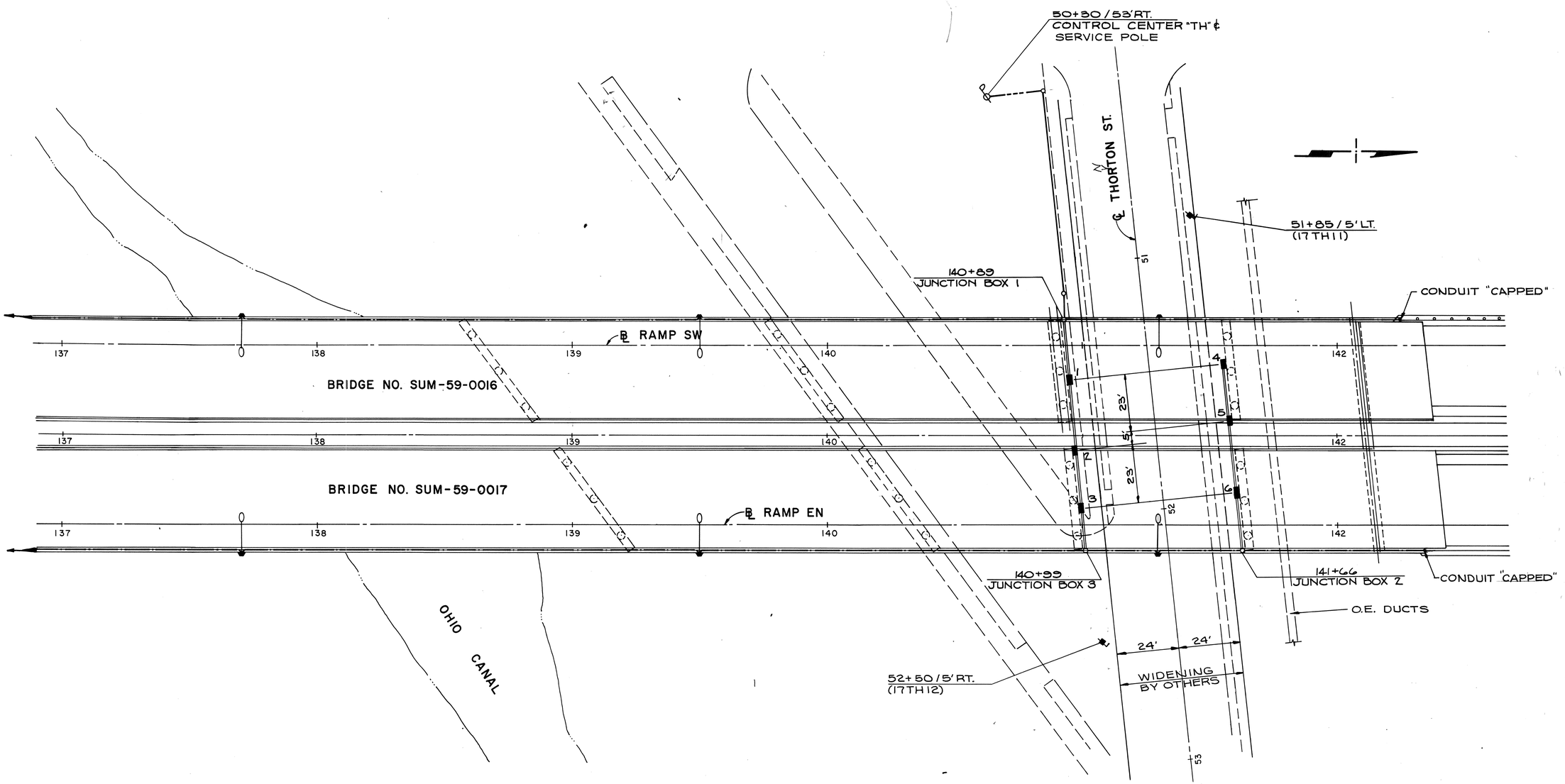
GRAPHIC SCALE
0 20 40 60

RAMP EN
OVER WEST EXPRESSWAY

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

253
455

# AKRON INNERBELT
## SUM-59-0.00




UNDERPASS LIGHTING

GRAPHIC SCALE

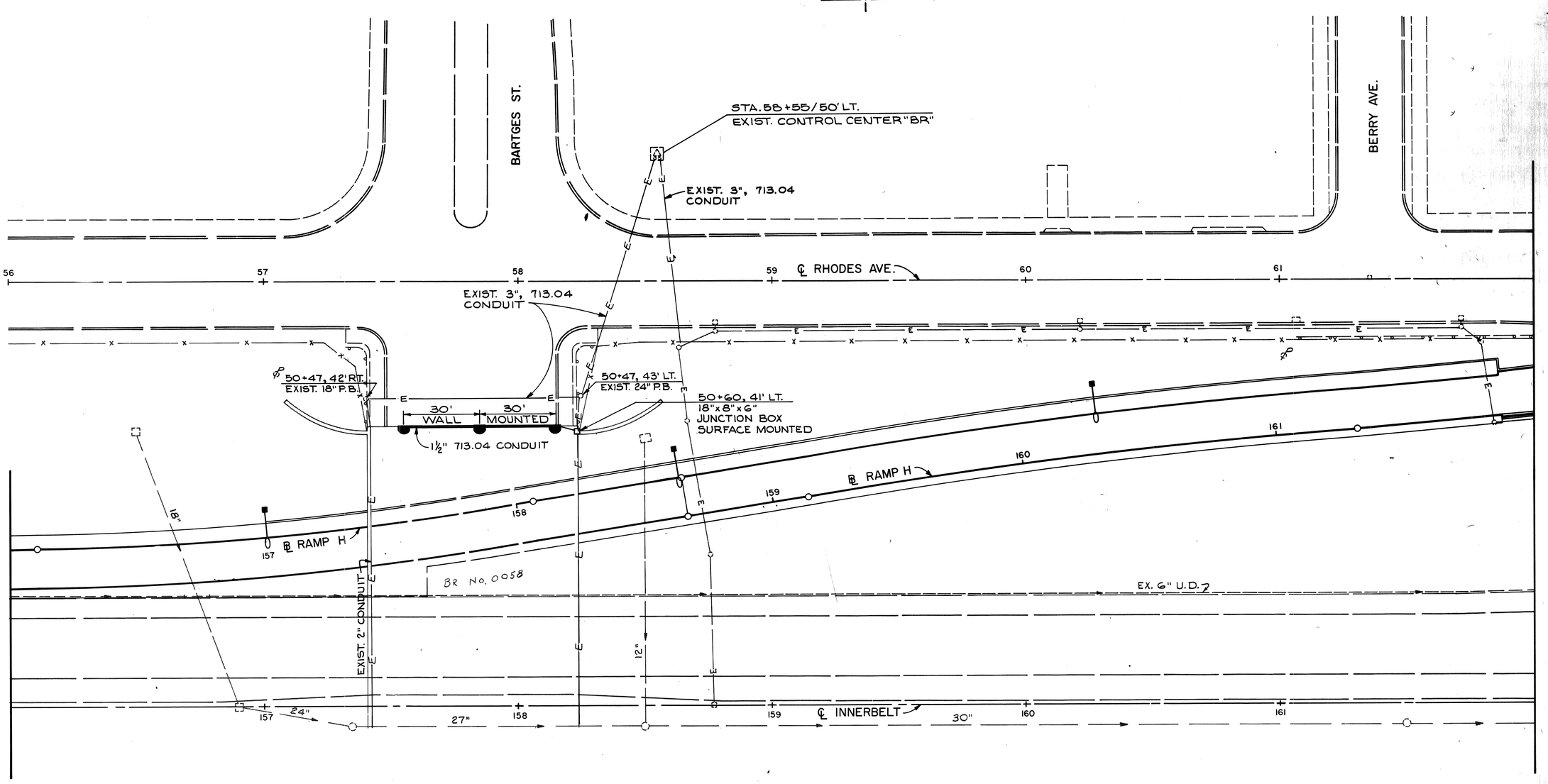
0 20 40 60

AKRON INNERBELT
OVER THORNTON ST.

AA B/Pn 71942R

| | | | |
|---|---|---|---|
| CALC. BY. ____ DATE ____ | M-IT62(2) | OHIO | 253A 455 |
| CHKD. BY. ____ DATE ____ | | F.H.W.A. REGION 5 | |

AKRON INNERBELT
SUM-59-0.00




UNDERPASS LIGHTING

GRAPHIC SCALE

0 20 40 60

BARTGES ST.
OVER RAMP H

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-I T62(2) | |

25A
455

AKRON INNERBELT
SUM-59-0.00

RUSSELL AVE.

SERVICE POLE
#3729

7+85
18" PULL BOX

℄ BOWERY ST.

CONDUIT RUN BENEATH
BRIDGE SHALL BE RUN ON
INSIDE OF BEAM FLANGE

OHIO CANAL

℄ RAMP SW

118 120 121 122 123

℄ WEST EXPRESSWAY

431 432 433 434 435 436

℄ RAMP EN

116 117 118 119 120

SOUTH STREET

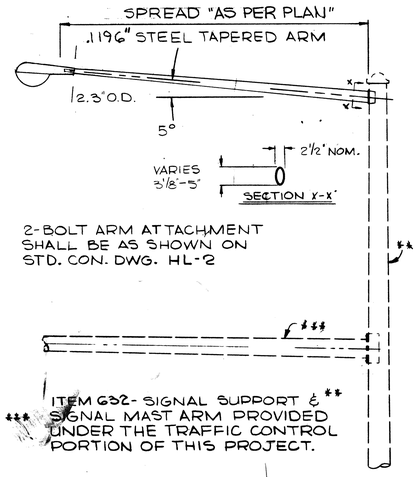
DAYTIME
UNDERPASS LIGHTING

GRAPHIC SCALE
0 20 40 60

WEST EXPRESSWAY
OVER BOWERY ST.

| | |
|---|---|
| CALC. BY. DATE | M-ITG2 (2) |
| CHKD. BY. DATE | F.H.W. REGION |

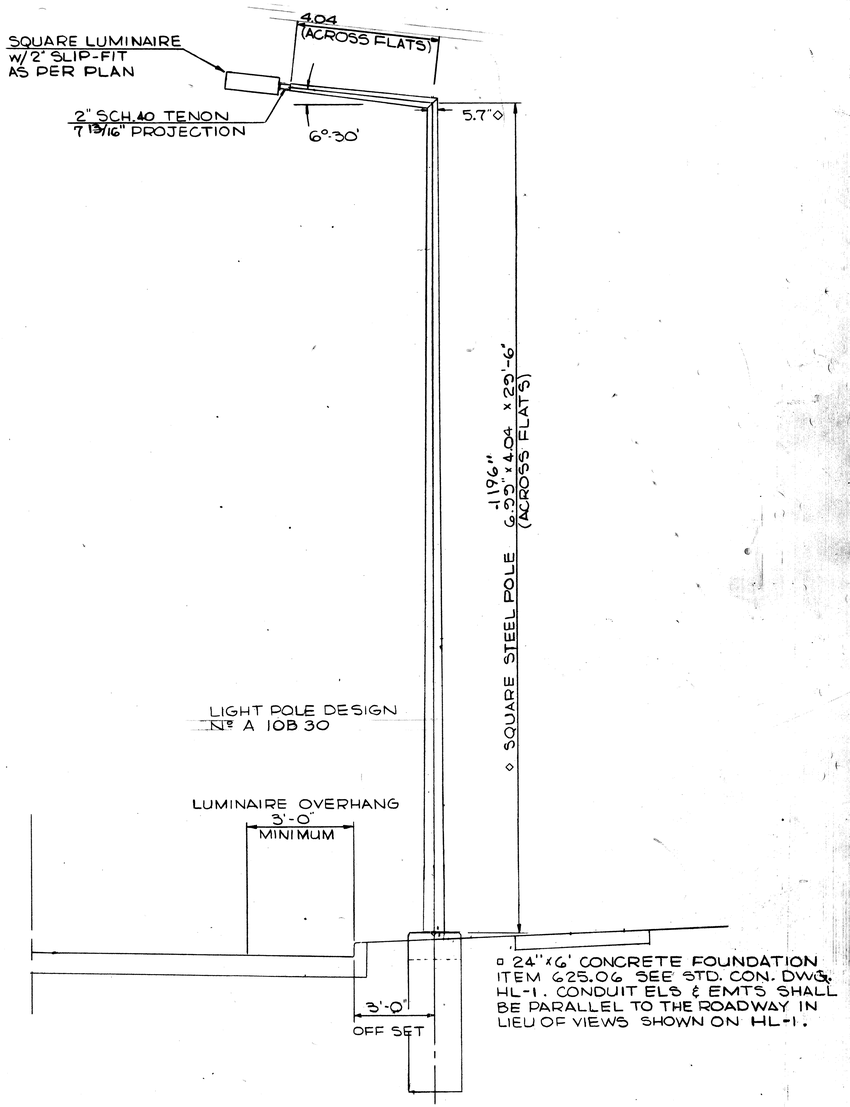
**AKRON INNERBELT**
**SUM-59-0.00**




**LUMINAIRE ARM FOR COMBINATION POLES**

| LIGHT POLE DATA | | | | |
|---|---|---|---|---|
| REFERENCE LETTER | DESIGN NUMBER | FOUNDATION ANCHOR BOLTS: SIZE DIAMETER X LENGTH | FOUNDATION ANCHOR BOLTS: BOLT CIRCLE DIAMETER | TRANSFORMER BASE STYLE |
| D | A9B15B39.0D | 1-1/4"X48" | 8"X18" | MEDIAN MOUNTED-NONE |
| E | A12BB39.0D | 1-1/4"X48" | 8"X18" | MEDIAN MOUNTED-NONE |
| F | A8B32.5 | 1"X40" | 11" | STRUCTURE MOUNTED-NONE |
| J | AT12B 34.2 | 1"X40" | 12-1/2" | AT-X |
| K | A12B32.5 | 1"X40" | 11" | STRUCTURE MOUNTED-NONE |
| L | AT15B34.2 | 1"X40" | 12-1/2" | AT-X |
| Y | AT10B31.7 | 1"X40" | 12-1/2" | AT-X |
| M | AT15B34.2 | 1"X40" | 12-1/2" | AT-X |

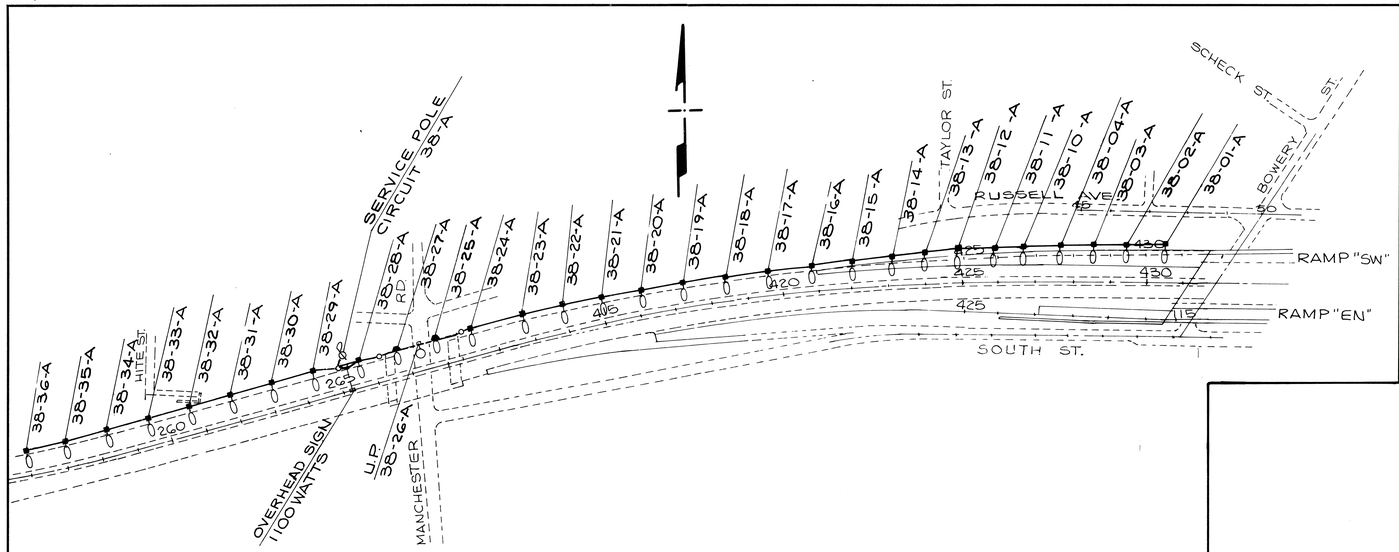
NOTE: FOR EXPLANATION OF DESIGN NUMBER SEE STD. CONST. DWG. NO. HL-8
THE MEDIAN POLE BASE PLATE SHALL BE STEEL 12"X22", 1-1/4" THICK, WITH 1-1/2" DIAMETER HOLES SPACED TO MATCH THE ANCHOR BOLTS AS SHOWN ON STANDARD DRAWING HL-22.




**TYPICAL ROADWAY INSTALLATION**
**CITY OF AKRON LIGHT POLE**

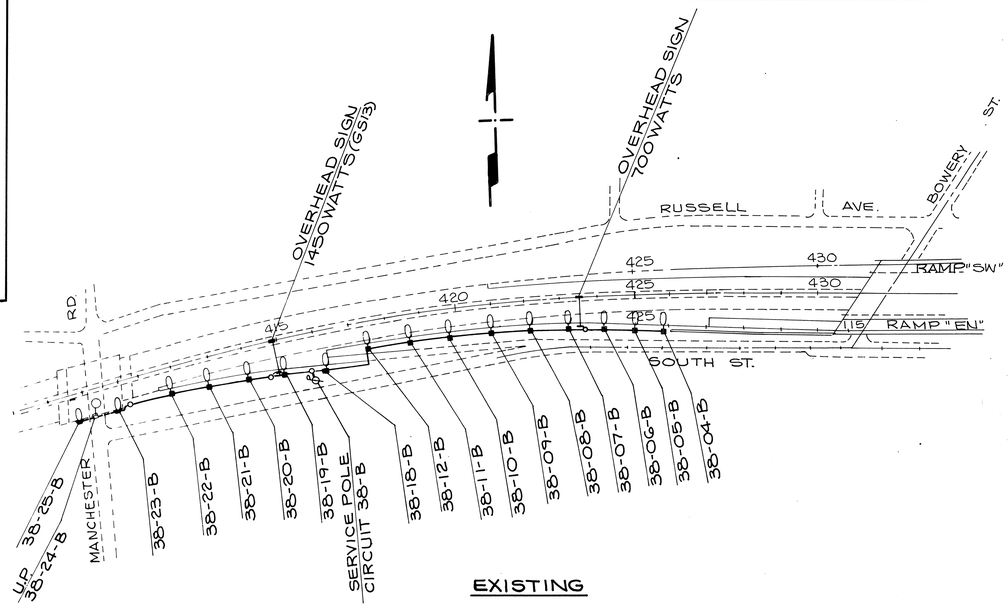
AA B/P# 71942R

| CALC. BY. DATE | M-IT62(2) AKRON INNERBELT SUM-59-0.00 | OHIO F.H.W.A. REGION 5 | 256 455 |
|---|---|---|---|
| CHKD. BY. DATE | | | |



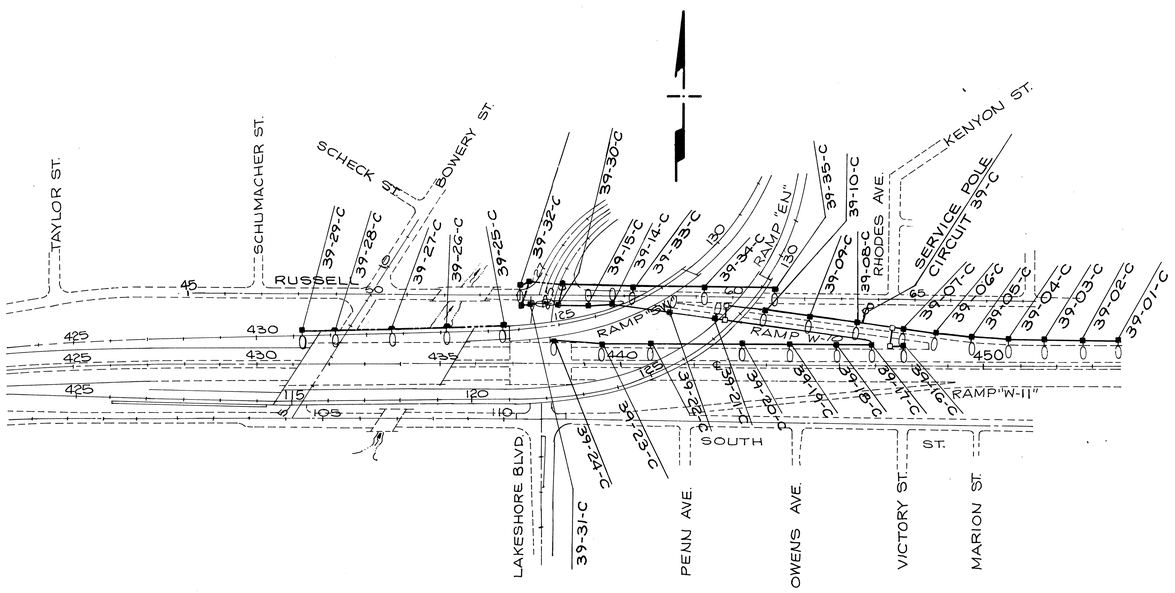

EXISTING

CIRCUIT Nº 38-A
PLAN SHEET Nº 244,245



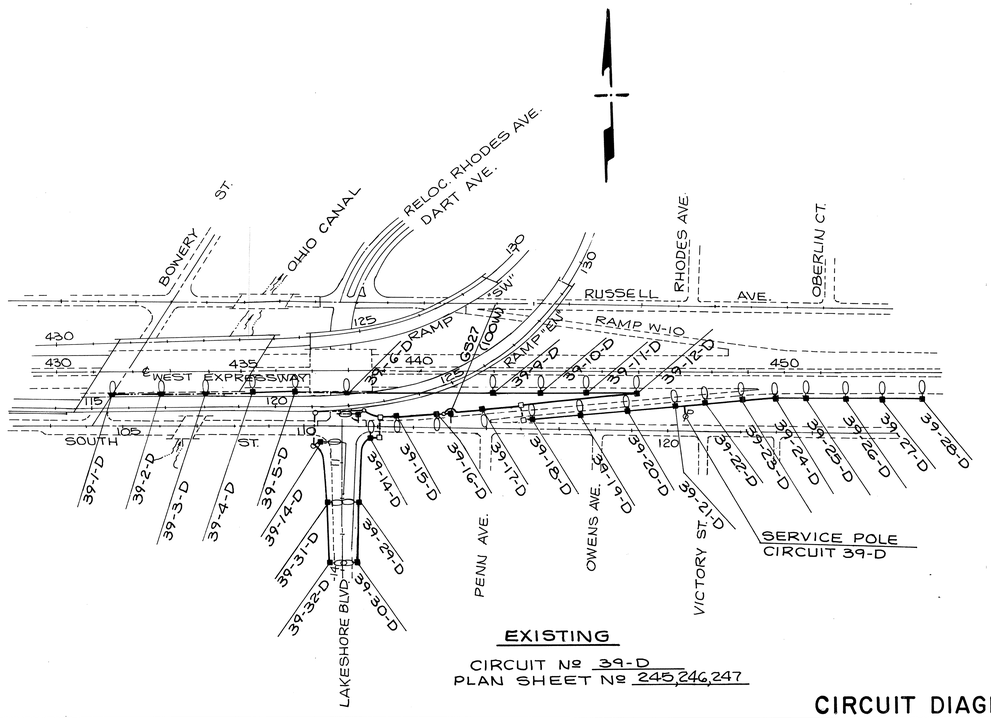

EXISTING

CIRCUIT Nº 38-B
PLAN SHEET Nº 244,245




EXISTING

CIRCUIT Nº 39-C
PLAN SHEET Nº 244,245,246

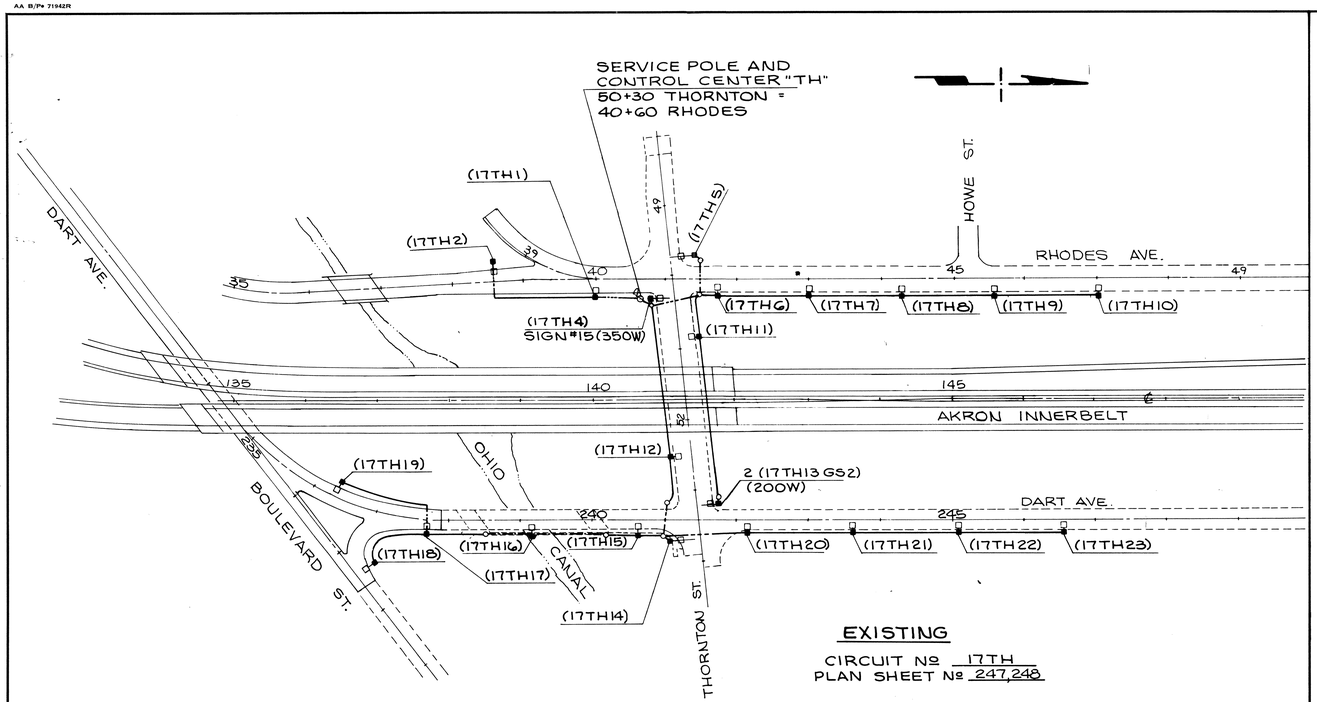



EXISTING

CIRCUIT Nº 39-D
PLAN SHEET Nº 245,246,247

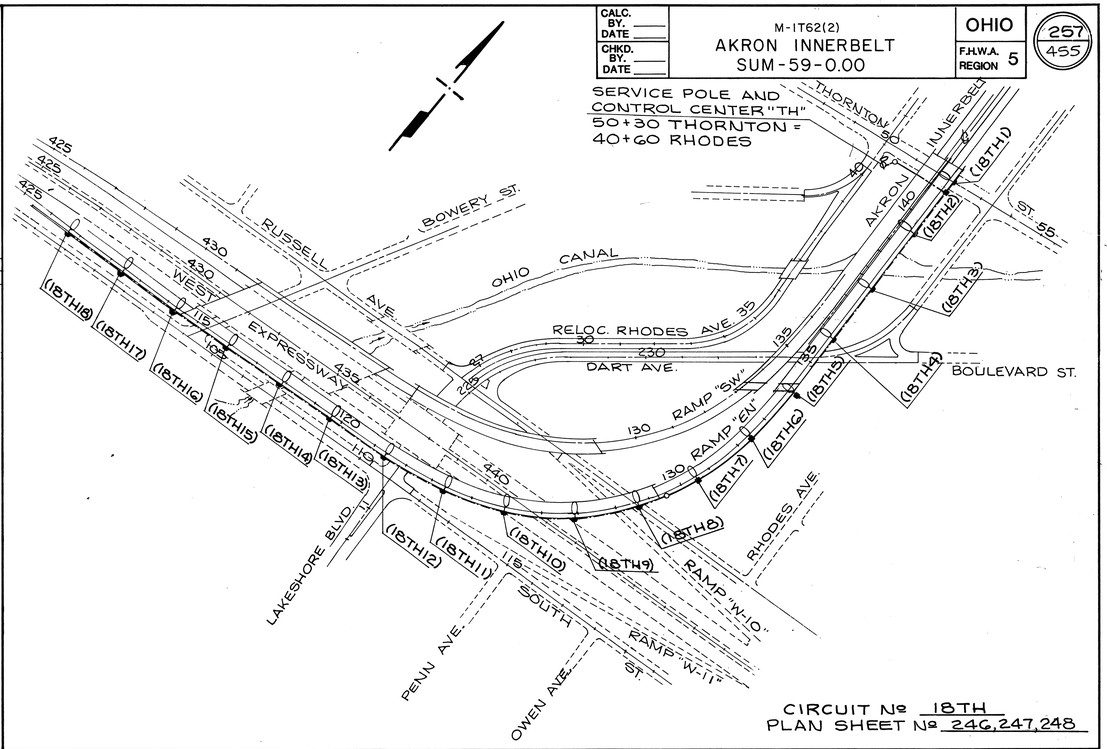
CIRCUIT DIAGRAM

AA B/P# 71942R

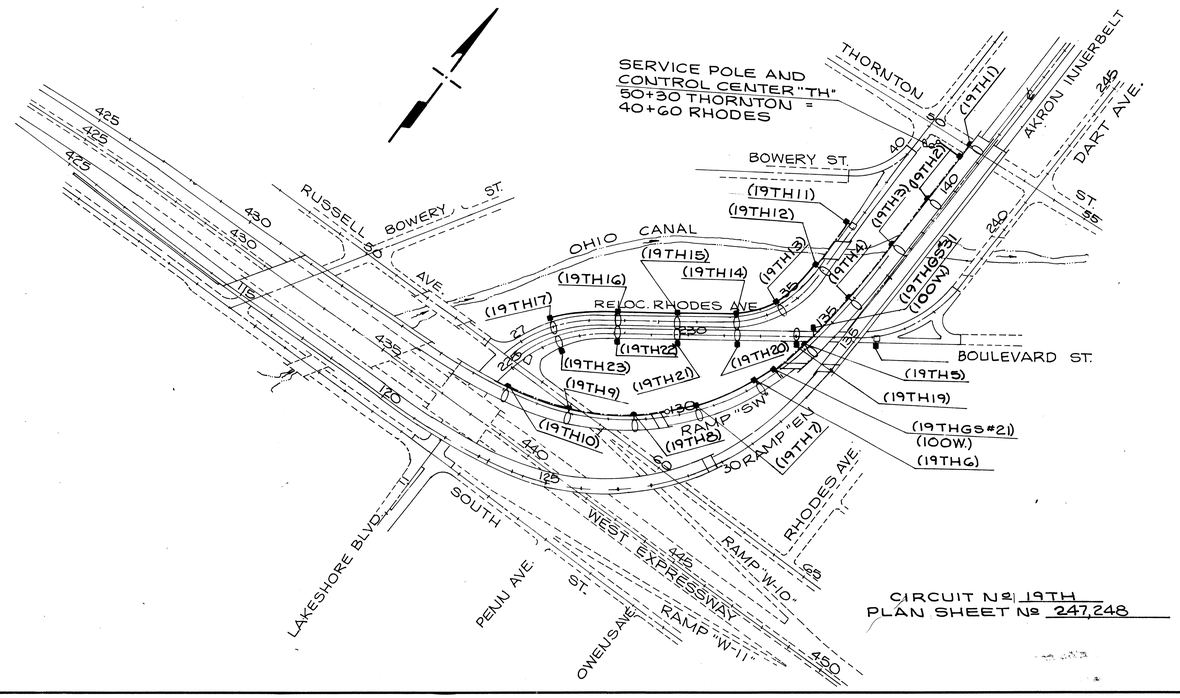



EXISTING

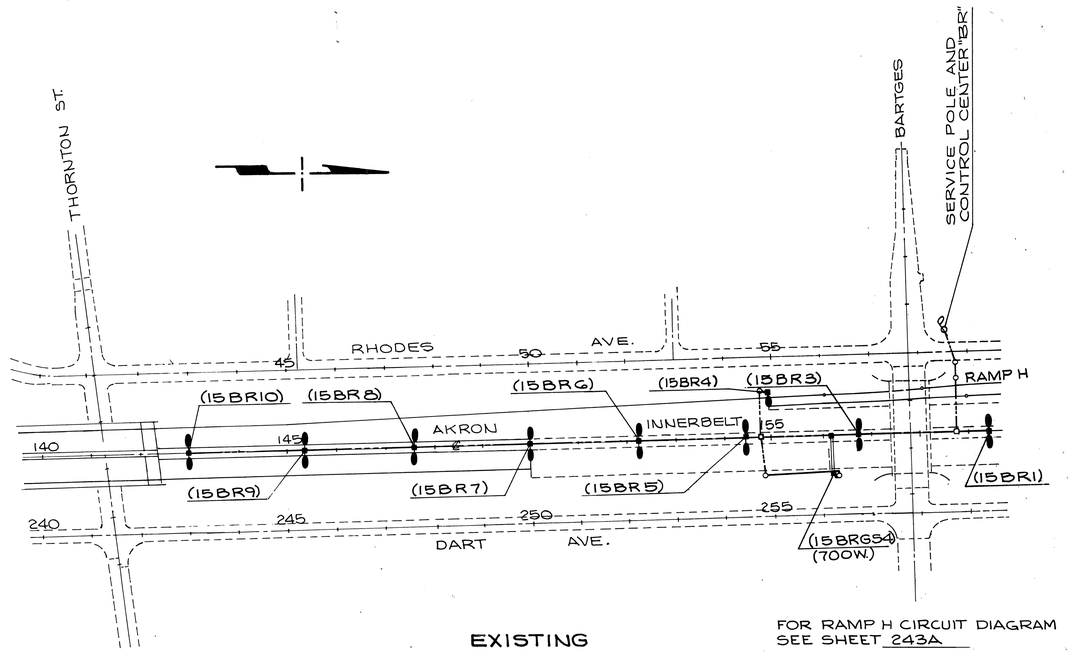
CIRCUIT Nº 17TH
PLAN SHEET Nº 247,248




CIRCUIT Nº 18TH
PLAN SHEET Nº 246,247,248




CIRCUIT Nº 19TH
PLAN SHEET Nº 247,248




EXISTING

CIRCUIT Nº 15BR
PLAN SHEET Nº 248

FOR RAMP H CIRCUIT DIAGRAM SEE SHEET 243A

CIRCUIT DIAGRAM

| FHWA REG | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

238
455

AKRON INNERBELT
SUM - 59 - 0.00

## DESIGN SPECIFICATIONS

THESE STRUCTURES CONFORM TO THE "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977 ALONG WITH 1978 THROUGH 1982 INTERIMS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

## DESIGN DATA

DESIGN LOADING - HS 20-44 (CASE-II) AND THE ALTERNATE MILITARY LOADING.

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 P.S.I. FOR SUPERSTRUCTURE.

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I. FOR SUBSTRUCTURE

STRUCTURAL STEEL - ASTM A-36 UNIT STRESS 20,000 P.S.I.
- ASTM A-588 UNIT STRESS 27,000 P.S.I.

REINFORCING STEEL - ASTM A615, A616, OR A617 - GRADE 60, MINIMUM YIELD STRENGTH 60,000 P.S.I.

DECK PROTECTIVE METHOD

- EPOXY COATED REINFORCING STEEL, TOP MAT ONLY; AND LATEX MODIFIED CONCRETE WEARING SURFACE.

## REFERENCE

REFERENCE SHALL BE MADE TO THE FOLLOWING:

| | |
|---|---|
| STANDARD DRAWING AS-1-81 | DATED 11-27-81 |
| STANDARD DRAWING BR-1 | DATED 5-29-79 |
| STANDARD DRAWING BR-2-82 | DATED 11-01-82 |
| STANDARD DRAWING RB-1-55 | DATED 2-02-59R |
| STANDARD DRAWING SD-1-69 SHEETS 1 THRU 3 | DATED 6-12-69 |
| SUPPLEMENTAL SPECIFICATION 824 | DATED 10-08-82 |
| SUPPLEMENTAL SPECIFICATION 836 | DATED 3-12-75 |
| SUPPLEMENTAL SPECIFICATION 845 | DATED 6-7-83 |
| SUPPLEMENTAL SPECIFICATION 849 | DATED 10-19-81 |
| SUPPLEMENTAL SPECIFICATION 853 | DATED 6-26-78 |
| SUPPLEMENTAL SPECIFICATION 953 | DATED 8-21-80 |
| SUPPLEMENTAL SPECIFICATION 956 | DATED 6-26-78 |

## UTILITY LINES

THE CONTRACTOR IS CAUTIONED OF THE EXISTENCE OF HIGH TENSION ELECTRIC LINES CROSSING THE PROJECT AREA AND SHALL EXERCISE EXTREME CARE WHEN WORKING IN THE VICINITY OF THESE LINES. FOR A LIST OF THE OTHER UTILITIES ON THIS PROJECT REFER TO ROADWAY GENERAL NOTES.

## DEMOLITION OF PORTIONS OF EXISTING STRUCTURE

REMOVAL OF PORTIONS OF EXISTING STRUCTURE AS SHOWN ON THE CONTRACT DRAWINGS SHALL CONFORM IN ALL RESPECT TO ITEM 202 OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL PREPARE DETAILED PROCEDURES AND PLANS FOR REMOVAL OF THE EXISTING STRUCTURE INCLUDING METHODS OF PROTECTING EXISTING OR RELOCATED UTILITIES AND PROTECTING THE PEDESTRIAN AND THE VEHICULAR TRAFFIC WITHIN THE LIMITS OF THE PROJECT. SUCH PLANS SHALL INCLUDE INFORMATION AS TO EQUIPMENT AND MATERIALS TO BE USED, PERSONNEL, SUPERVISION, THE HOURS OF OPERATION AND DURATION OF THE JOB.

THESE PLANS SHALL BE APPROVED BY THE ENGINEER BEFORE COMMENCING ANY DEMOLITION OPERATION. THE REVIEW AND APPROVAL BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF HIS FULL RESPONSIBILITY FOR SAFE DEMOLITION OPERATIONS. THE CONTRACTOR SHALL BE AND SHALL REMAIN RESPONSIBLE FOR A SAFE DEMOLITION OPERATION.

## EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTION 102.05, 105.02, AND 513.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

NO SEPARATE PAYMENT WILL BE MADE FOR ANY FIELD MEASUREMENTS BUT COST THEREOF SHALL BE INCLUDED IN THE COST OF OTHER ITEMS.

THE EXISTING STRUCTURE PLANS MAY BE EXAMINED AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT FOUR OFFICE, 705 OAKWOOD STREET, RAVENNA, OHIO 44266.

## PRECAST PRESTRESSED CONCRETE PILE ALTERNATE

12" PRECAST PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12" CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATION FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES). IF THE PRESTRESSED PILE ALTERNATE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME AS FOR CAST-IN-PLACE REINFORCED CONCRETE PILES PER 507.

## ITEM 507 - PREBORED HOLES (AS PER PLAN)

THE EXISTING BRIDGE ABUTMENTS, WHICH ARE IN THE NEAR VICINITY OF THE NEW BRIDGE ABUTMENTS, ARE SUPPORTED ON FOOTINGS BEARING ON COMPACTED FILL. THE PILES FOR THE NEW ABUTMENT FOOTINGS SHALL BE PLACED IN PREBORED HOLES THROUGH THE EMBANKMENT FOR A DISTANCE OF AT LEAST TEN (10) FEET TO MINIMIZE THE DISTURBANCE TO THE ADJOINING OR NEARBY EXISTING ABUTMENT FOUNDATION.

THE PILES PLACED IN THE PREBORED HOLES SHALL COMMENCE WITH THE ROW NEAREST TO THE EXISTING ABUTMENT AND PROCEED IN THE DIRECTION AWAY FROM THE EXISTING ABUTMENT FOR AT LEAST THE NEXT THREE ROWS. THE PILES WHERE PREBORED HOLES ARE REQUIRED ARE INDICATED ON THE PILING PLANS.

## MEASUREMENT AND PAYMENT

THE LENGTH OF PREBORED HOLES SHALL BE MEASURED IN FEET FROM THE SURFACE OF GROUND AT THE TIME OF BORING (BOTTOM OF FOOTING) TO THE BOTTOM OF HOLE.
THE PAYMENT WILL BE MADE AT CONTRACT UNIT PRICE BID PER LINEAL FOOT FOR ITEM 507 - PREBORED HOLES (AS PER PLAN)".

## ITEM SPECIAL - BEARINGS JACKING AND SHIMMING

(FOR BRIDGE SUM-76-0953 ONLY)

THIS ITEM SHALL CONSIST OF JACKING THE EXISTING BEAMS (AFTER THE EXISTING SUPERSTRUCTURE DECK SLAB HAS BEEN REMOVED) AND SHIMMING, AS SHOWN ON THE PLANS, INCLUDING ALL MATERIALS, LABOR, TOOLS, AND EQUIPMENT NECESSARY TO RESET THE ROCKER BEARINGS IN ORDER THAT THEY CONFORM IN ALL APPLICABLE RESPECTS TO 516. THE COST OF RAISING, SUPPORTING AND LOWERING OF THE BEAMS SHALL BE INCLUDED IN COST OF THIS ITEM. PAYMENT FOR THIS ITEM SHALL BE AT THE PER EACH CONTRACT PRICE BID FOR ITEM SPECIAL - BEARINGS, JACKING AND SHIMMING. THIS PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR ALL MATERIALS INCLUDING SHIMS, 1/8" LEAD PADS, LABOR, TOOLS, EQUIPMENT, AND ALL INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

FOR INFORMATION PURPOSES ONLY, IT IS ESTIMATED 16 BEARINGS NEED TO BE JACKED AND SHIMMED AND ARE LOCATED AT ABUTMENT A-2.

## ITEM SPECIAL - BEARING RESET

(FOR BRIDGE SUM-76-0953 ONLY)

THIS ITEM SHALL CONSIST OF FURNISHING ALL MATERIALS, INCLUDING SHIMS, IF REQUIRED, LABOR, TOOLS, AND EQUIPMENT NECESSARY TO RESET THOSE ROCKER BEARINGS NOT INCLUDED IN THE ITEM "BEARING, JACKING AND SHIMMING," IN ORDER THAT THEY CONFORM IN ALL APPLICABLE RESPECTS TO 516.05. PAYMENT FOR THIS ITEM SHALL BE AT THE PER EACH CONTRACT PRICE BID FOR ITEM SPECIAL - BEARINGS RESET. THIS PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR ALL MATERIALS, INCLUDING SHIMS, LABOR, TOOLS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK. THE COST OF RAISING, SUPPORTING AND LOWERING OF THE BEAMS SHALL BE INCLUDED IN THE COST OF THIS ITEM.

FOR INFORMATIONAL PURPOSES ONLY, IT IS ESTIMATED THAT 64 BEARINGS NEED TO BE RESET. THE ACTUAL NUMBER OF BEARINGS TO BE RESET SHALL BE AS DETERMINED IN THE FIELD BY THE ENGINEER.

## EXISTING BEARING MODIFICATIONS

(FOR BRIDGE SUM-76-0953 ONLY)

THE 1 1/2" SIDE PLATES ATTACHED TO THE SOLE PLATES OF BEARINGS FOR EXISTING BEAMS F, G, AND H SHALL BE REMOVED.

THE CONTRACTOR SHALL EXCERCISE CARE IN REMOVING THESE PLATES SO AS NOT TO DAMAGE THE EXISTING BEAMS OR BEARINGS. IF THE EXISTING BEAMS OR BEARINGS ARE DAMAGED DUE TO THE ABOVE WORK, THE CONTRACTOR SHALL REPAIR OR REPLACE THE SAME, AS DIRECTED BY THE ENGINEER, AT NO EXTRA COST.

NO SEPARATE PAYMENT WILL BE MADE FOR REMOVING THE 1/2" SIDE PLATES AS DESCRIBED ABOVE BUT THE COST THEREOF SHALL BE INCLUDED IN THE COST OF ITEM SPECIAL - BEARINGS RESET OR ITEM SPECIAL - BEARINGS - JACKING AND SHIMMING

## CUTTING OR BENDING OF REINFORCING BARS

ANY CUTTING OR BENDING OF REINFORCING BARS NECESSARY TO ACCOMMODATE THE UTILITY OPENINGS OR ANY OTHER ESSENTIAL ELEMENT OF WORK RELATED TO THE PROJECT, SHALL BE INCLUDED IN THE PRICE BID PER POUND FOR ITEM 509, 'REINFORCING STEEL-GRADE 60' AND/OR ITEM 824 "EPOXY COATED REINFORCING STEEL, GRADE 60" UNLESS OTHERWISE NOTED.

## REPLACEMENT OF EXISTING REINFORCING STEEL

ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT THE EXPENSE OF THE CONTRACTOR. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. PAYMENT FOR SUCH NEW STEEL SHALL BE MADE PER CONTRACT UNIT PRICE BID PER POUND OF ITEM 509, "REINFORCING STEEL - GRADE 60."

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

# STRUCTURAL GENERAL NOTES

## SUM - 59 - 0.00

AKRON OHIO SUMMIT COUNTY
AKRON INNERBELT

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL JSP | CDG | | BKL | JSP | 12-19-82 | |

| FHWA REG | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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455

AKRON INNERBELT
SUM-59-0.00

GRAVEL AGGREGATE

GRAVEL AGGREGATE WILL NOT BE PERMITTED IN ANY PORTLAND CEMENT CONCRETE EXPOSED TO VIEW. GRAVEL AGGREGATE MAY BE USED ONLY IN CONCRETE THAT WILL BE PLACED ONE FOOT OR MORE BELOW THE FINISHED GROUND LINE.

FINISHING MACHINE SUPPORTS

AREAS ALONG THE FASCIA STRINGERS HAVE BEEN DESIGNATED IN THE CONTRACT PLANS WHERE WELDED ATTACHMENTS MAY BE MADE FOR THE CONCRETE FINISHING MACHINE SUPPORTS. ATTACHMENT DETAILS, WHERE PERMITTED, SHOULD NOT EMPLOY FILLET WELDS LONGER THAN TWO INCHES. TO MINIMIZE THE POSSIBILITY OF EDGE DAMAGE, WELDS SHOULD NOT BE CLOSER THAN ONE INCH FROM THE EDGE OF FLANGE.

ROCKER AND BOLSTER BEARINGS

IN LIEU OF A588 STEEL A36 STEEL, GALVANIZED, MAY BE FURNISHED FOR ROCKER AND BOLSTER BEARINGS, INCLUDED WITH A588 STEEL QUANTITY FOR PAYMENT.

CHANNEL LINING ALONG OHIO CANAL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING THE EXISTING CHANNEL LINING ALONG THE CANAL DURING HIS CONSTRUCTION OPERATIONS, ESPECIALLY DURING THE SUBSTRUCTURE WORK. ANY DAMAGE TO THE EXISTING CHANNEL LINING SHALL BE RESTORED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. NO SEPARATE PAYMENT WILL BE MADE FOR RESTORING THE EXISTING CHANNEL LINING BUT THE COST THEREOF SHALL BE INCIDENTAL TO THE OTHER ITEMS OF WORK.

STRUCTURAL SURVEY AND MONITORING OF VIBRATIONS

THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF OHIO, HAVING EXPERTISE IN PREPARING STRUCTURAL SURVEYS AND ASSESSING POSSIBLE CLAIMS FOR STRUCTURAL DAMAGE. A STRUCTURAL SURVEY REPORT SHALL BE PREPARED THAT WILL COVER ALL STRUCTURES ADJACENT TO AND IN AN AREAS DETERMINED BY THE CONTRACTOR'S EXPERT THAT COULD BE AFFECTED BY THE CONSTRUCTION OF THE PROPOSED BRIDGESAND TO ESTABLISH WHATEVER CONTROLS ARE NECESSARY TO BE ABLE TO MONITOR THE EFFECTS OF THE PROPOSED CONSTRUCTION ON THE EXISTING STRUCTURES.

THE CONTRACTOR'S ENGINEER SHALL CONDUCT THIS STRUCTURAL SURVEY IN THE PRESENCE OF THE ENGINEER AND THE OWNER AND TENANTS OF THE SURVEYED STRUCTURES OR THEIR DELEGATED REPRESENTATIVES, AND A REPRESENTATIVE OF THE CITY OF AKRON. A COPY OF THE STRUCTURAL SURVEY REPORT SHALL BE SUBMITTED TO THE ENGINEER FOR HIS REVIEW AND ACCEPTANCE PRIOR TO THE START OF ANY CONSTRUCTION. THE STRUCTURAL SURVEY REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

A. A DETAILED ON-SITE INSPECTION OF THE INTERIOR AND EXTERIOR OF STRUCTURES LOCATED ADJACENT TO THE PROPOSED BRIDGES. THE INSPECTION SHALL BE DOCUMENTED BY ONE-HALF INCH SONY BETTAMAX CASSETTEE COLOR AUDIO-VIDEO TAPING TAKEN BY AN ELECTROGRAPHER. ORIGINAL TAPES AT ALL TIMES SHALL REMAIN IN THE EXCLUSIVE POSSESSION OF THE ELECTROGRAPHER. A COPY OF THESE VIDEO TAPES SHALL BE SUBMITTED TO THE ENGINEER FOR HIS RECORDS.

B. LOCATION AND ELEVATION OF CONTROL POINTS.

C. THE REPORT SHALL NOTE ALL CRACKS AND OTHER STRUCTURE DEFICIENCIES AND PROVIDE DETAILS PERTINENT TO EACH AS TO LOCATION, LENGTH, SIZE, THICKNESS, TYPE, ETC.

THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A VIBRATION AND ACOUSTICS CONSULTANT TO MEASURE AND RECORD THE VIBRATION AND SOUND LEVELS CAUSED BY THE PILE DRIVING OPERATION. THE VIBRATIONS SHALL BE MEASURED WITH A SEISMOGRAPH AND IF THE PARTICLE VELOCITY REACHES TWO INCHES PER SECOND AT ANY STRUCTURE, THE ENGINEER SHALL SUSPEND THE PILE DRIVING OPERATIONS AND A DETERMINATION SHALL BE MADE BY THE DIRECTOR AS TO WHAT MODIFICATIONS MAY BE NECESSARY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CORRECTIONS IF ANY DAMAGES ARE EXPERIENCED AS A RESULT OF THE PILE DRIVING OPERATION.

AFTER THE COMPLETION OF THE CONSTRUCTION OF THE SUBSTRUCTURES AND PRIOR TO THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A SUPPLEMENT TO THE STRUCTURAL SURVEY REPORT CONTAINING A COPY OF ALL MEASUREMENTS TAKEN AND ANY CHANGES IN THE CONDITION OF THE SURVEYED STRUCTURES.

THIS ITEM SHALL BE PAID FOR IN A LUMP SUM AS PER ITEM SPECIAL - "STRUCTURAL SURVEY AND MONITORING OF VIBRATIONS." SEE GENERAL SUMMARY.

STRUCTURAL STEEL CURB FACING

THE STEEL CURB FACING SHALL BE GALVANIZED AND SHALL BE FABRICATED AS DETAILED IN THE CONTRACT DRAWINGS AND SHALL CONFORM IN ALL RESPECTS TO ITEM 513 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT PRICE BID PER POUND FOR ITEM 513 - "STRUCTURAL STEEL (A-36, CURB PLATES, GALVANIZED)" AND SHALL INCLUDE FULL COMPENSATION FOR ALL MATERIALS, PAINTING, LABOR, TOOLS, AND EQUIPMENT NECESSARY TO COMPLETE THIS WORK.

HEAT CURVING OF BEAMS AND GIRDERS

THE HORIZONTALLY CURVED BEAMS AND GIRDERS SHALL BE HEAT CURVED AS PER 513.10 OF THE STANDARD SPECIFICATIONS.

IF THE CONTRACTOR ELECTS NOT TO HEAT CURVE THE BEAMS AND GIRDERS, WHERE PERMITTED BY THE AASHTO SPECIFICATION, THE REQUIRED SHOP CAMBER SHALL BE MODIFIED BY THE CONTRACTOR TO EXCLUDE THE ADJUSTMENT REQUIRED FOR HEAT CURVING, AT NO EXTRA COST TO THE PROJECT

ADDITIONALLY, IF HEAT CURVING IS NOT USED, THE SCREED ELEVATIONS SHALL ALSO BE MODIFIED TO EXCLUDE ONE HALF (1/2) OF THE AMOUNT OF ADJUSTMENT REQUIRED FOR HEAT CURVING, BY THE CONTRACTOR AND AT NO EXTRA COST TO THE PROJECT.

ANY REVISIONS TO THE DEFLECTION AND CAMBER TABLES OR THE SCREED ELEVATIONS SHALL BE SUBMITTED TO THE DIRECTOR PRIOR TO ANY FABRICATION. THE COST OF CHECKING AND REVIEWING THESE REVISIONS SHALL BE BORNE BY THE CONTRACTOR.

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CLEVELAND, OHIO AKRON, OHIO

# STRUCTURAL GENERAL NOTES

SUM-59-0.00

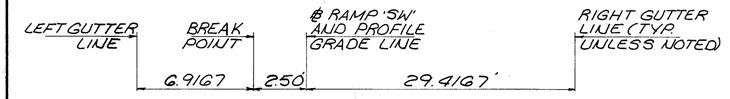
AKRON OHIO SUMMIT COUNTY
AKRON INNERBELT

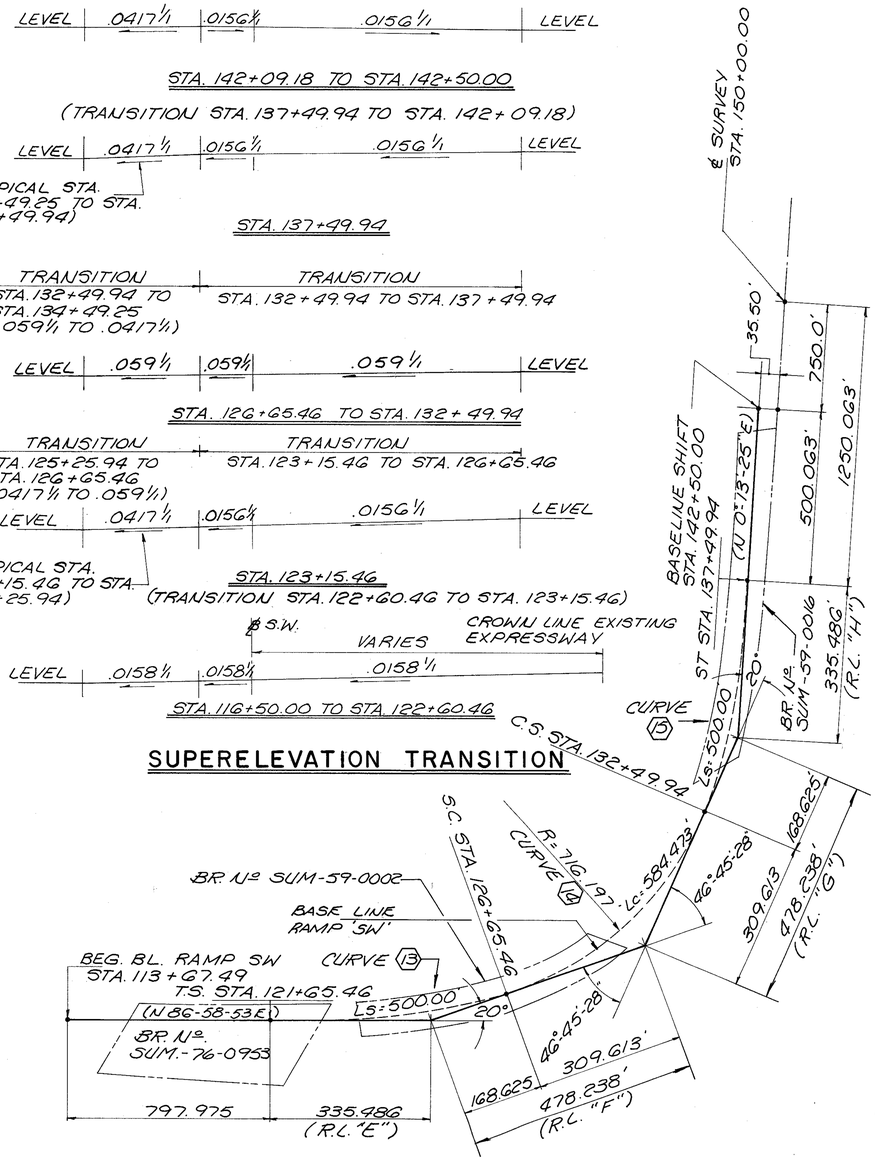
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL JSP | CDG | | BKL | JSP | 12-19-82 | |

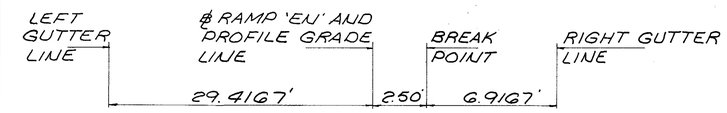
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

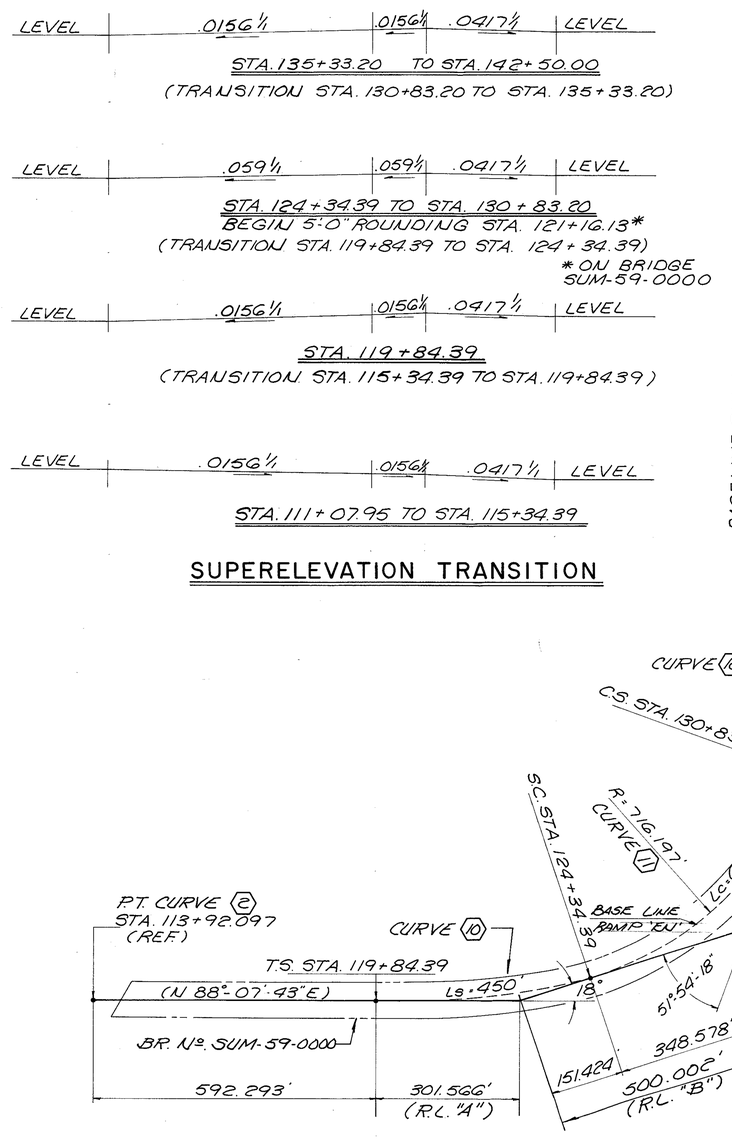
260
455

AKRON INNERBELT
SUM-59-0.00




NOTES

1. FOR ADDITIONAL GEOMETRIC INFORMATION NOT SHOWN, SEE ROADWAY GEOMETRIC SHEETS 6/455 AND 7/455
2. FOR SPIRAL LAYOUT DATA SEE SHEET 260A/455
3. R.L. DENOTES ~ REFERENCE LINE

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# GEOMETRIC LAYOUT & SUPERELEVATION TRANSITION

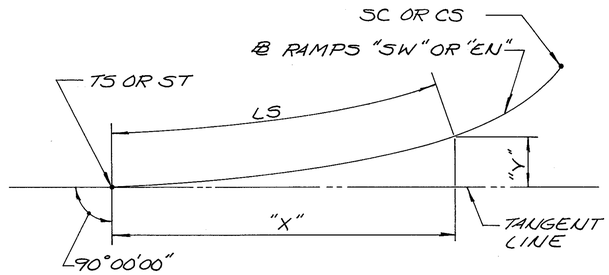
SUM-59-0000

AKRON, OHIO SUMMIT COUNTY

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | CDG | | A.L.H. | JOP | 12-19-82 | |

| BASELINE RAMP "SW" | | |
|---|---|---|
| 500 FT. SPIRAL LAYOUT TABLE | | |
| DIM. X | DIM. Y | LS. |
| 10.000 | .000 | 10.000 |
| 20.000 | .004 | 20.000 |
| 30.000 | .013 | 30.000 |
| 40.000 | .030 | 40.000 |
| 50.000 | .058 | 50.000 |
| 60.000 | .101 | 60.000 |
| 70.000 | .160 | 70.000 |
| 80.000 | .238 | 80.001 |
| 90.000 | .339 | 90.001 |
| 100.000 | .465 | 100.002 |
| 110.000 | .620 | 110.003 |
| 120.000 | .804 | 120.005 |
| 130.000 | 1.023 | 130.007 |
| 140.000 | 1.277 | 140.010 |
| 150.000 | 1.571 | 150.015 |
| 160.000 | 1.907 | 160.020 |
| 170.000 | 2.287 | 170.028 |
| 180.000 | 2.716 | 180.037 |
| 190.000 | 3.194 | 190.048 |
| 200.000 | 3.726 | 200.062 |
| 210.000 | 4.314 | 210.080 |
| 220.000 | 4.961 | 220.101 |
| 230.000 | 5.670 | 230.126 |
| 240.000 | 6.444 | 240.156 |
| 250.000 | 7.285 | 250.191 |
| 260.000 | 8.197 | 260.233 |
| 270.000 | 9.183 | 270.281 |
| 280.000 | 10.245 | 280.337 |
| 290.000 | 11.387 | 290.402 |
| 300.000 | 12.612 | 300.477 |
| 310.000 | 13.923 | 310.563 |
| 320.000 | 15.323 | 320.660 |
| 330.000 | 16.815 | 330.771 |
| 340.000 | 18.403 | 340.896 |
| 350.000 | 20.090 | 351.038 |
| 360.000 | 21.880 | 361.197 |
| 370.000 | 23.776 | 371.375 |
| 380.000 | 25.781 | 381.574 |
| 390.000 | 27.900 | 391.796 |
| 399.999 | 30.136 | 402.042 |
| 409.999 | 32.493 | 412.316 |
| 419.999 | 34.976 | 422.620 |
| 429.999 | 37.588 | 432.955 |
| 439.998 | 40.334 | 443.325 |
| 449.998 | 43.220 | 453.732 |
| 459.997 | 46.248 | 464.180 |
| 469.996 | 49.426 | 474.672 |
| 479.994 | 52.758 | 485.211 |
| 489.992 | 56.249 | 495.801 |
| 493.942 | 57.673 | 500.000 |

| BASELINE RAMP "EN" | | |
|---|---|---|
| 450 FT. SPIRAL LAYOUT TABLE | | |
| DIM. X | DIM. Y | LS. |
| 10.000 | .001 | 10.000 |
| 20.000 | .004 | 20.000 |
| 30.000 | .014 | 30.000 |
| 40.000 | .033 | 40.000 |
| 50.000 | .065 | 50.000 |
| 60.000 | .112 | 60.000 |
| 70.000 | .177 | 70.000 |
| 80.000 | .265 | 80.001 |
| 90.000 | .377 | 90.001 |
| 100.000 | .517 | 100.002 |
| 110.000 | .688 | 110.004 |
| 120.000 | .894 | 120.006 |
| 130.000 | 1.136 | 130.009 |
| 140.000 | 1.419 | 140.013 |
| 150.000 | 1.746 | 150.018 |
| 160.000 | 2.119 | 160.025 |
| 170.000 | 2.542 | 170.034 |
| 180.000 | 3.018 | 180.046 |
| 190.000 | 3.550 | 190.060 |
| 200.000 | 4.141 | 200.077 |
| 210.000 | 4.794 | 210.099 |
| 220.000 | 5.514 | 220.124 |
| 230.000 | 6.302 | 230.155 |
| 240.000 | 7.162 | 240.192 |
| 250.000 | 8.098 | 250.236 |
| 260.000 | 9.112 | 260.287 |
| 270.000 | 10.209 | 270.347 |
| 280.000 | 11.391 | 280.417 |
| 290.000 | 12.662 | 290.498 |
| 300.000 | 14.025 | 300.590 |
| 310.000 | 15.485 | 310.696 |
| 320.000 | 17.045 | 320.817 |
| 330.000 | 18.707 | 330.954 |
| 340.000 | 20.477 | 341.110 |
| 350.000 | 22.359 | 351.285 |
| 360.000 | 24.355 | 361.482 |
| 370.000 | 26.471 | 371.704 |
| 379.999 | 28.710 | 381.951 |
| 389.999 | 31.078 | 392.228 |
| 399.999 | 33.578 | 402.535 |
| 409.999 | 36.216 | 412.877 |
| 419.998 | 38.996 | 423.256 |
| 429.997 | 41.923 | 433.675 |
| 439.997 | 45.004 | 444.138 |
| 445.579 | 46.793 | 450.000 |




## SPIRAL LAYOUT DIAGRAM

FOR "X", "Y", AND LS.
SEE SPIRAL LAYOUT TABLE

## SPIRAL DATA

| RAMP "SW" | RAMP "EN" |
|---|---|
| LS = 500.00' | LS = 450.00' |
| ΘS = 20°00'00" | ΘS = 18°00'00" |
| X = 493.94' | X = 445.38' |
| Y = 57.67' | Y = 46.79' |
| P = 14.48' | P = 11.74' |
| K = 248.99' | K = 224.86' |
| LT = 335.49' | LT = 301.57' |
| ST = 168.62' | ST = 151.42' |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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SUM-59-0.00

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CLEVELAND, OHIO AKRON, OHIO

# SPIRAL LAYOUT TABLES

SUM-59-0.00

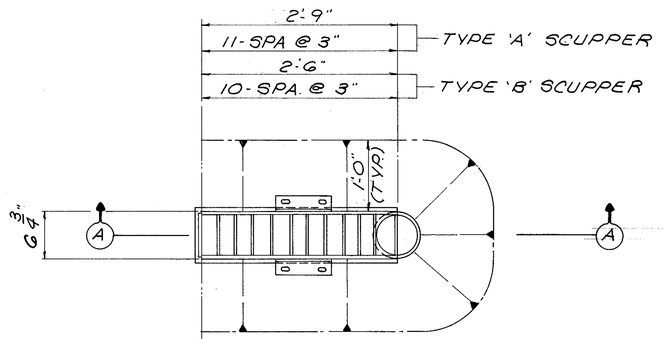
AKRON OHIO SUMMIT COUNTY
AKRON INNERBELT

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| J.C. | M.A.B. | | A.L.H. | J.G.P. | 4-15-83 | |

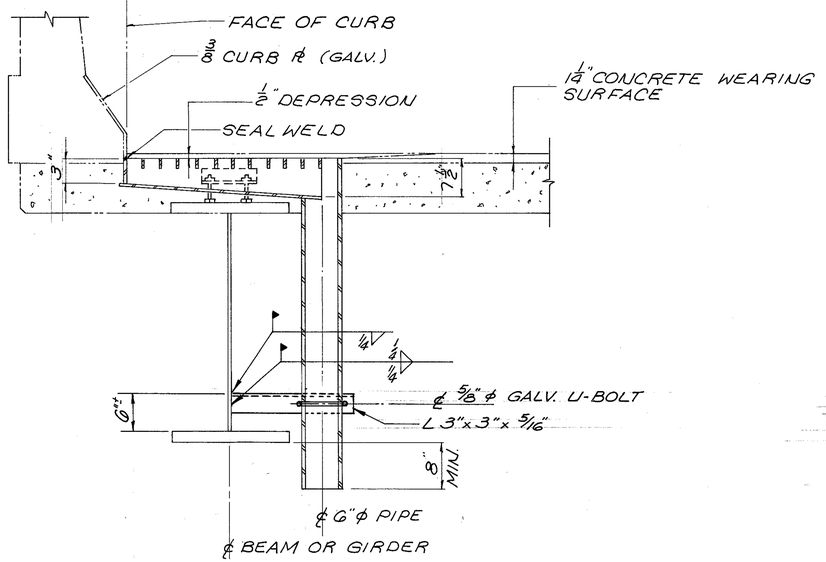
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

261
455

AKRON INNERBELT
SUM-59-0.00



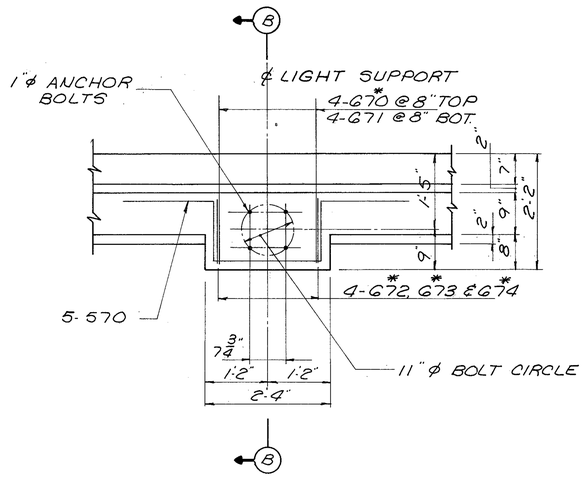

PLAN



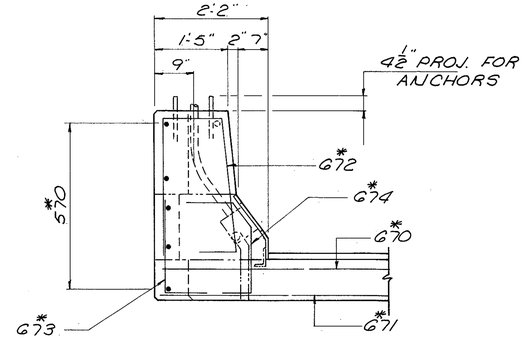

SECTION A-A

SCUPPER DETAIL – TYPE A&B

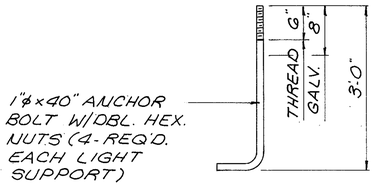
FOR DETAILS NOT SHOWN
SEE STD. DWG. SD-1-69




LIGHT SUPPORT DETAILS




SECTION B-B

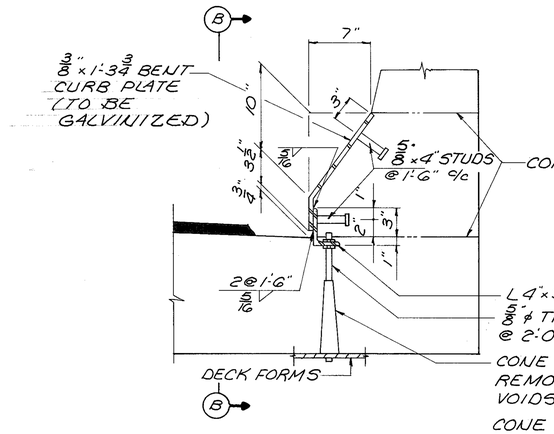



ANCHOR BOLT DETAIL

NOTES

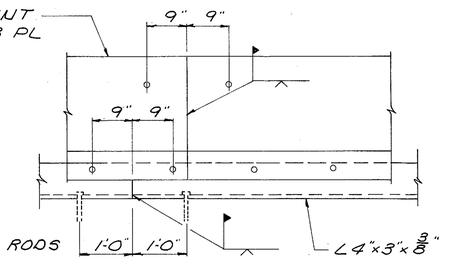
(1) STEEL CURB FACING SHALL BE SO FABRICATED THAT THE 4"x 3" x 3/8" ANGLES WILL BE PARALLEL TO THE FLANGES OF THE EXTERIOR GIRDER BEFORE AND AFTER THE DECK CONCRETE IS POURED. THE 3/8" BENT PLATES SHALL BE FABRICATED IN PROPER LENGTHS AND CAMBER IN ORDER TO PLACE THEM PARALLEL TO THE FINISHED LINE AND GRADE AS SHOWN ON THE PLANS.
JOINTS IN ADJACENT FABRICATED SECTION SHALL BE BUTT WELDED AS INDICATED IN VIEW B-B.

(2) ALL THE STRUCTURAL STEEL FOR CURB PLATE ASSEMBLY SHALL BE ASTM A-36 GALVINIZED, UNLESS OTHERWISE NOTED.




CONE NUTS AND THREADED RODS TO BE INCLUDED IN ITEM 513 - STRUCTURAL STEEL (A-36) Curb Plates, Galvonized, for payment.

CURB PLATE DETAIL
SEE NOTE (1)




VIEW B-B

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CLEVELAND, OHIO AKRON, OHIO

TYPICAL SUPERSTRUCTURE DETAILS

SUM - 59 - 0.00

AKRON OHIO SUMMIT COUNTY
AKRON INNERBELT

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | CDG | | UWW | JAP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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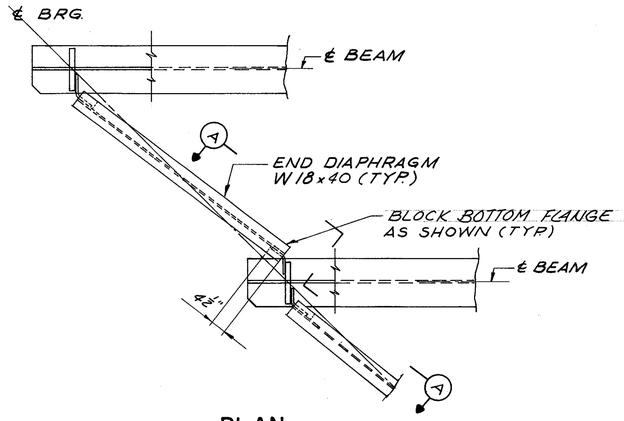
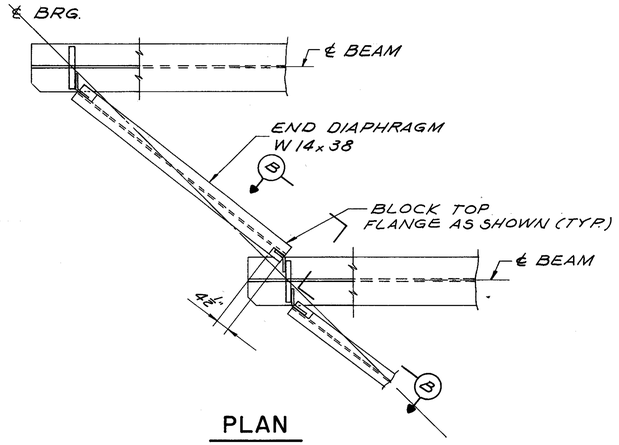
455

AKRON INNERBELT
SUM - 59 - 0.00



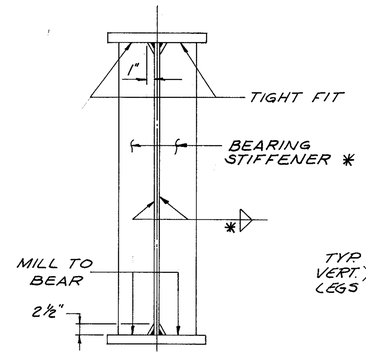

## PLAN

TYPE "A" & "B" DIAPHRAGM



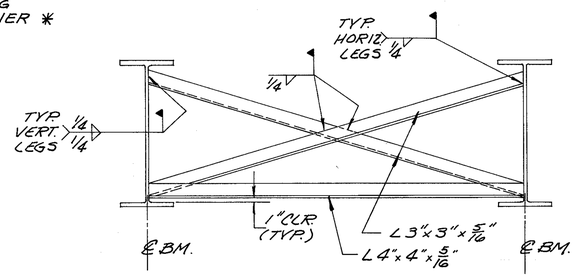

## PLAN

TYPE "C" DIAPHRAGM



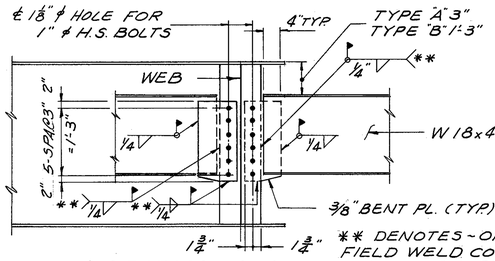

## BEARING STIFFENER

* SEE GIRDER DETAILS FOR SIZES



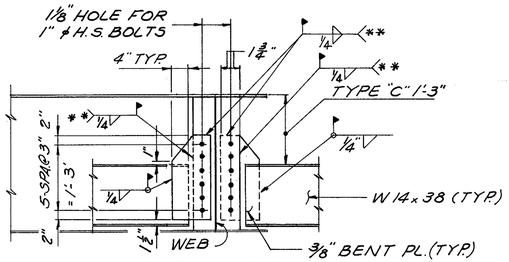

## TYPE X-4 CROSSFRAMES

FOR ROLLED BEAMS IN TANGENT ALIGNMENTS.

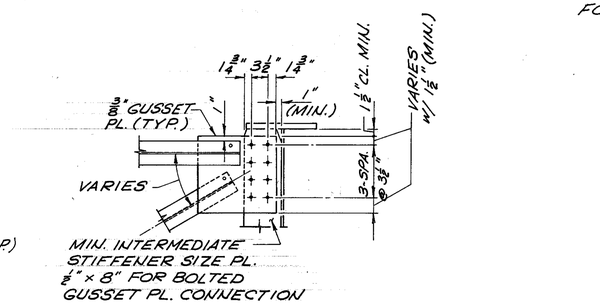



## SECTION A-A

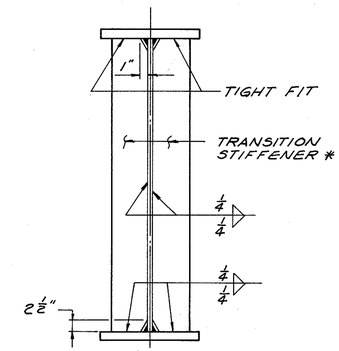
** DENOTES - OPTIONAL FIELD WELD CONNECTION IN LIEU OF A FIELD BOLTED CONNECTION (BENT PLATE TO BEARING STIFFENER




## SECTION B-B

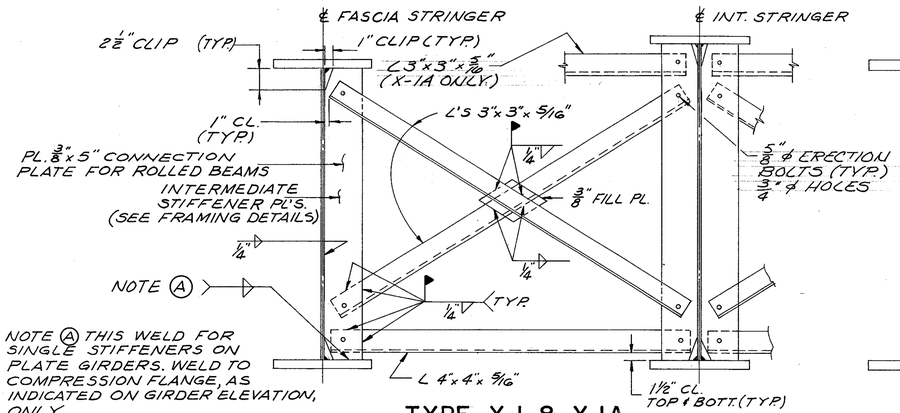



## DETAIL "A"




## TRANSITION STIFFENER

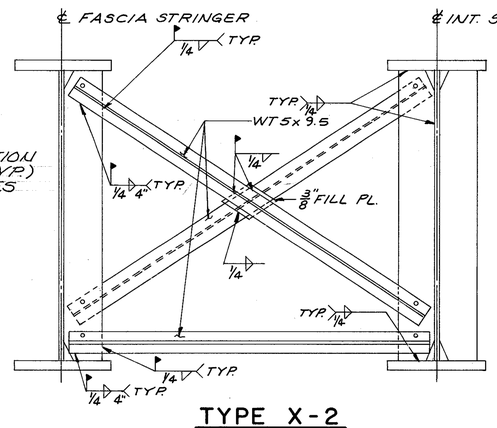
* SEE GIRDER DETAILS FOR SIZES




NOTE (A) THIS WELD FOR SINGLE STIFFENERS ON PLATE GIRDERS. WELD TO COMPRESSION FLANGE, AS INDICATED ON GIRDER ELEVATION, ONLY.

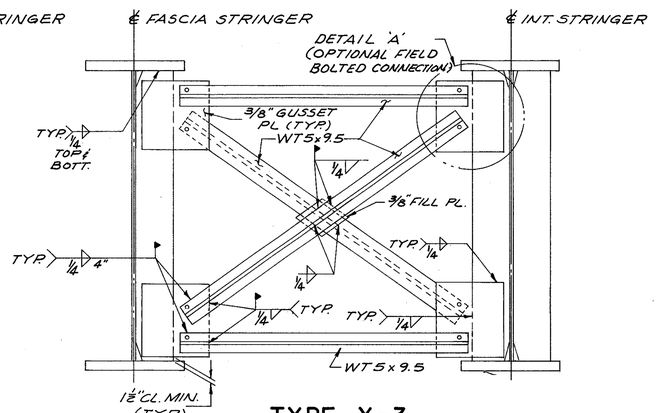
## TYPE X-1 & X-1A CROSSFRAMES

FOR GIRDERS IN TANGENT ALIGNMENT (AS SHOWN AND NOTED)




## TYPE X-2 CROSSFRAMES

FOR ROLLED BEAMS IN CURVED ALIGNMENT (FOR DETAILS NOT SHOWN SEE TYPE X-1)




## TYPE X-3 CROSSFRAMES

FOR GIRDERS IN CURVED ALIGNMENT (FOR DETAILS NOT SHOWN SEE TYPE X-1)

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# TYPICAL FRAMING DETAILS

SUM - 59 - 0.00

AKRON OHIO — SUMMIT COUNTY

AKRON INNERBELT

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | A.L.H. | JSP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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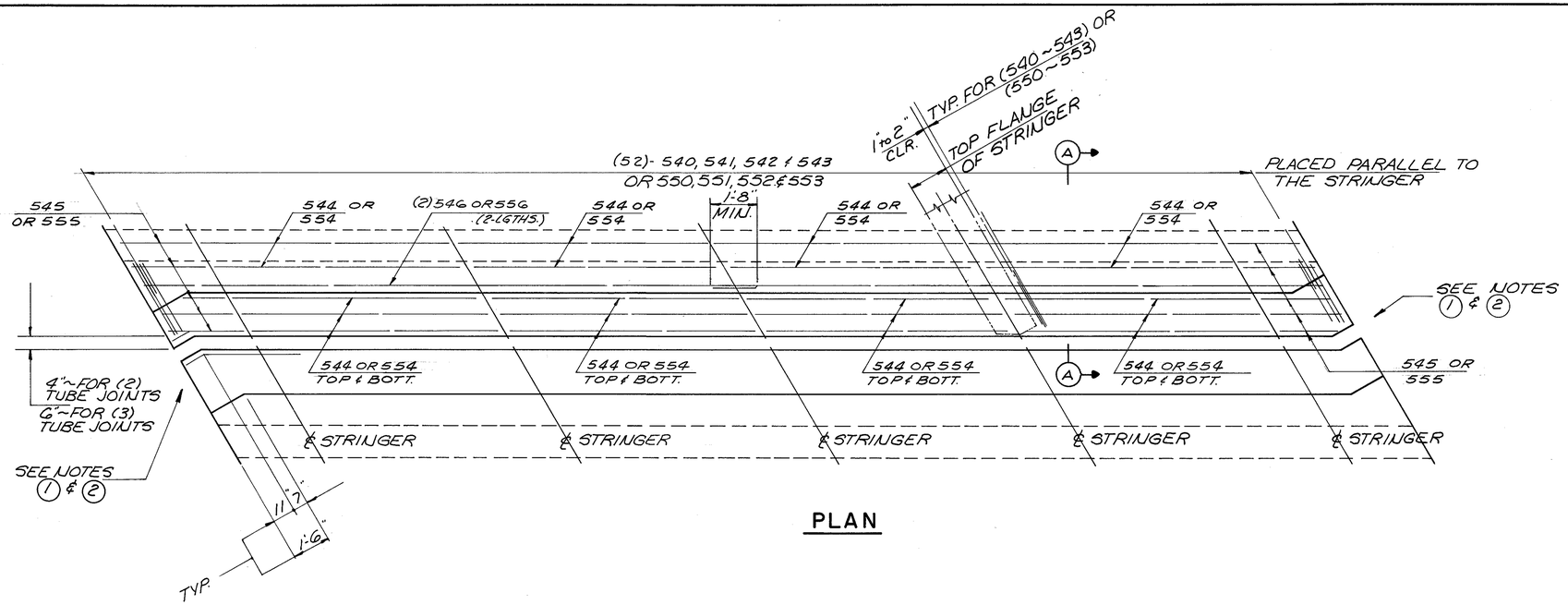
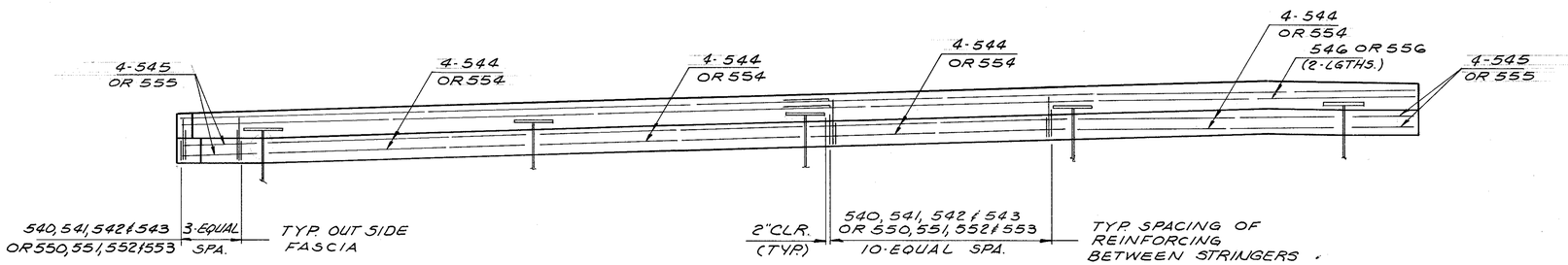
455

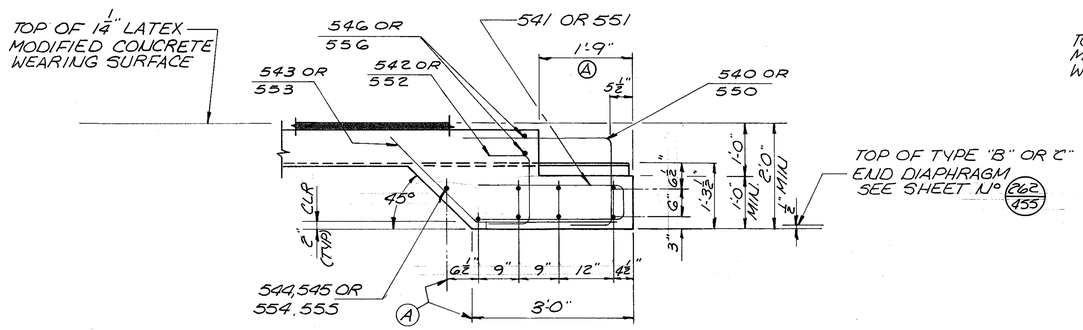
AKRON INNERBELT
SUM-59-0.00



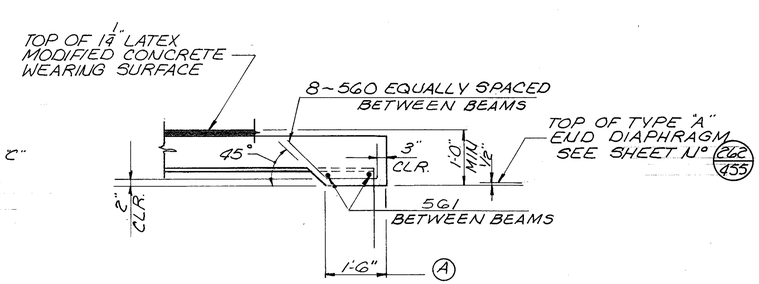

PLAN




ELEVATION




SECTION A-A




SECTION B-B

(A) DIMENSIONS SHOWN ARE PERPENDICULAR TO THE JOINT.

NOTES

(1) DIMENSIONS LOCATING REINFORCING IN THE HAUNCH ARE NOMINAL, DEVIATION FROM THEM MAY BE REQUIRED TO CLEAR THE ANCHORS FOR THE SUPPORT BAR BOXES. FIELD CUT (540 OR 550 BARS) AS REQUIRED TO CLEAR THE SUPPORT BAR BOXES. THE ABOVE WORK IS INCIDENTAL TO ITEM 509, REINFORCING STEEL.

(2) REMAINING CURB REINFORCING, IN THE BLOCKOUT AREA, SHALL BE IN PLACE BEFORE JOINT CONCRETE IS POURED.

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# TYPICAL SUPERSTRUCTURE DETAILS

SUM-59-0.00

AKRON OHIO SUMMIT COUNTY
AKRON INNERBELT

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | A.L.H. | GJP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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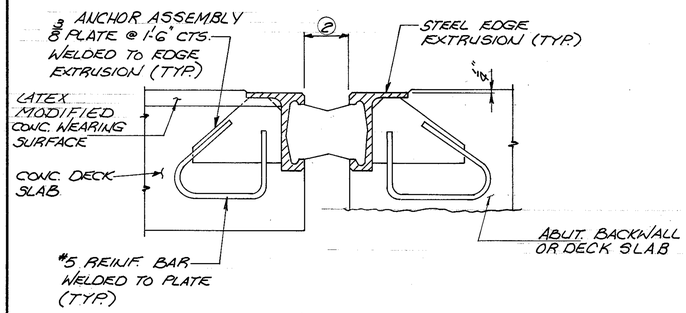
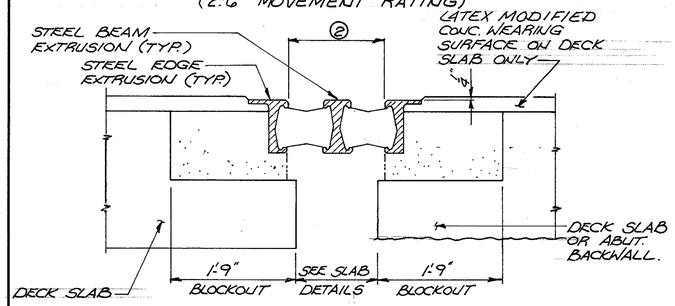
455

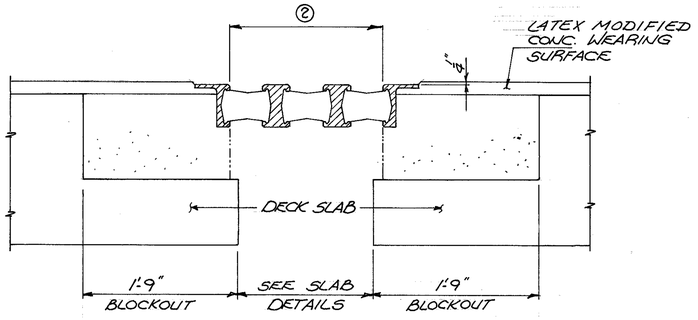
AKRON INNERBELT
SUM - 59 - 0.00



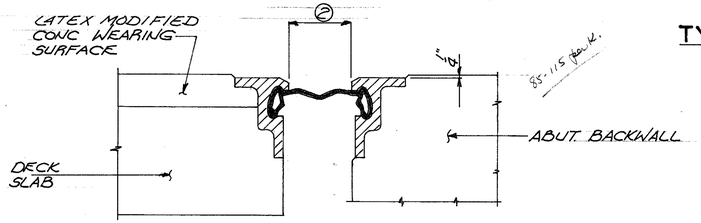

## MODULAR EXPANSION JOINT - TYPE A
(2.6" MOVEMENT RATING)




## MODULAR EXPANSION JOINT - TYPE B
(5.2" MOVEMENT RATING)



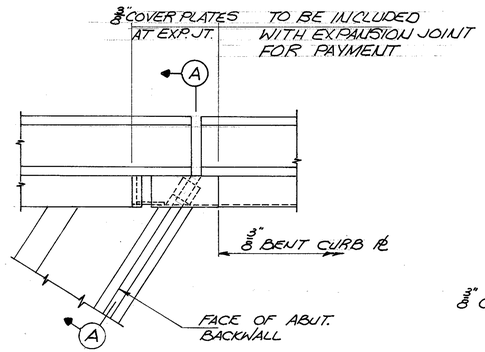

## MODULAR EXPANSION JOINT - TYPE C
(7.8" MOVEMENT RATING)



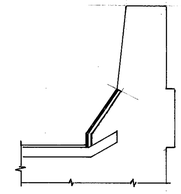

## ELASTOMERIC EXPANSION JOINT
(4" MOVEMENT RATING)

TABLE - EXPANSION JOINT SETTINGS (2)

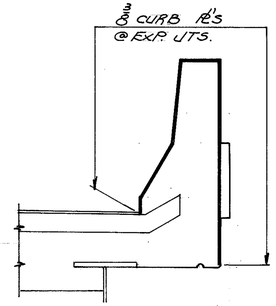
| BRIDGE No | EXP. JT. LOCATION | TEMP / TYPE | 30° | 40° | 50° | 60° | 70° | 80° | 90° |
|---|---|---|---|---|---|---|---|---|---|
| SUM-59-0000 | A-1 | A | 2" | 1 15/16" | 1 13/16" | 1 3/4" | 1 11/16" | 1 9/16" | 1 1/2" |
| | P.4 | B | 6 9/16" | 6 3/8" | 6 3/16" | 6" | 5 13/16" | 5 5/8" | 5 7/16" |
| | P.7 | C | 10 15/16" | 10 5/8" | 10 5/16" | 10" | 9 11/16" | 9 3/8" | 9 1/16" |
| | P.10 | C | 10 15/16" | 10 5/8" | 10 5/16" | 10" | 9 11/16" | 9 3/8" | 9 1/16" |
| | A-2 | A | 2" | 1 15/16" | 1 13/16" | 1 3/4" | 1 11/16" | 1 9/16" | 1 1/2" |
| SUM-59-0002 | A-1 | B | 6 3/4" | 6 1/2" | 6 1/4" | 6" | 5 3/4" | 5 1/2" | 5 1/4" |
| | A-2 | B | 6 3/4" | 6 1/2" | 6 1/4" | 6" | 5 3/4" | 5 1/2" | 5 1/4" |
| SUM-59-0017 | A-1 | A | 2 1/16" | 1 15/16" | 1 7/8" | 1 3/4" | 1 5/8" | 1 9/16" | 1 7/16" |
| | P.3 | A | 2 1/8" | 2" | 1 7/8" | 1 3/4" | 1 5/8" | 1 1/2" | 1 3/8" |
| | P.6 | B | 6 3/4" | 6 1/2" | 6 1/4" | 6" | 5 3/4" | 5 1/2" | 5 1/4" |
| | A-2 | A | 2 1/16" | 1 15/16" | 1 7/8" | 1 3/4" | 1 5/8" | 1 9/16" | 1 7/16" |
| SUM-59-0016 | A-1 | A | 2" | 1 15/16" | 1 13/16" | 1 3/4" | 1 11/16" | 1 9/16" | 1 1/2" |
| | P.3 | B | 6 5/8" | 6 1/2" | 6 1/4" | 6" | 5 3/4" | 5 1/2" | 5 3/8" |
| | P.7 | B | 6 5/8" | 6 1/2" | 6 1/4" | 6" | 5 3/4" | 5 1/2" | 5 3/8" |
| | A-2 | A | 2" | 1 15/16" | 1 13/16" | 1 3/4" | 1 11/16" | 1 9/16" | 1 1/2" |
| SUM-76-0953 | A-1 | ELASTOMERIC EXP. JT. | 2 3/4" | 2 9/16" | 2 7/16" | 2 1/4" | 2 1/16" | 1 15/16" | 1 13/16" |
| | A-2 | ELASTOMERIC EXP. JT. | 2 3/4" | 2 9/16" | 2 7/16" | 2 1/4" | 2 1/16" | 1 15/16" | 1 13/16" |



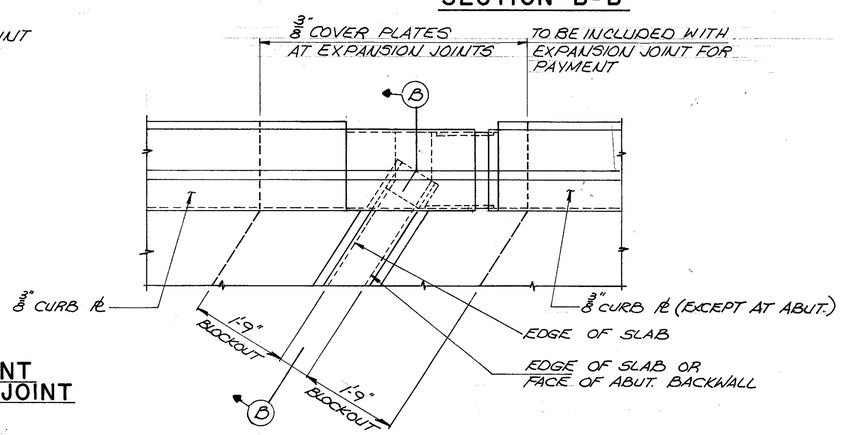

## PLAN AT MODULAR EXPANSION JOINT TYPE A & ELASTOMERIC EXPANSION JOINT



## SECTION A-A




## SECTION B-B




## PLAN AT MODULAR EXPANSION JOINTS TYPES B & C

### NOTES

(1) ANCHOR ASSEMBLY FOR ALL EXPANSION JOINTS SHALL BE AS SHOWN FOR MODULAR EXPANSION JOINT TYPE 'A'.

(2) THE EXPANSION JOINT SETTING IS A DIMENSION BETWEEN THE INSIDE FACES OF EDGE EXTRUSIONS AND IS PERPENDICULAR TO THE ℄ OF BEARING AT THE LOCATIONS INDICATED.

(3) SEE SPECIAL PROVISIONS FOR SPECIFICATIONS OF MODULAR EXPANSION JOINT DEVICE AND ELASTOMERIC EXPANSION JOINT DEVICE.

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CLEVELAND, OHIO — AKRON, OHIO

# EXPANSION JOINT DETAILS
SUM - 59 - 0.00

AKRON OHIO — SUMMIT COUNTY
AKRON INNERBELT

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | A.L.H. | JJP | 12-1982 | 1 |

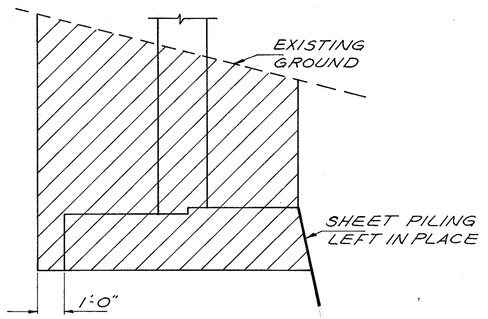
| F. H. W. A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

265/455

AKRON INNERBELT
SUM - 59 - 0.00

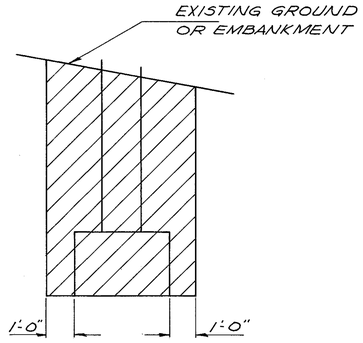
# LIMITS OF EXCAVATION DIAGRAMS

(TYPICAL UNLESS SHOWN OTHERWISE)

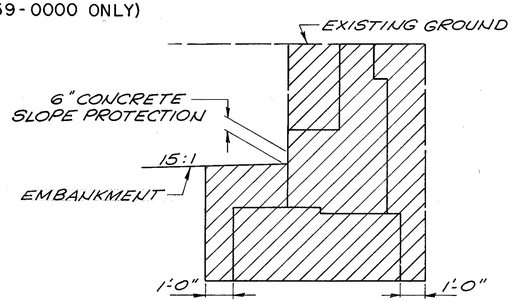



## ABUT. A1 & ABUT. WALL

(SUM-59-0000 ONLY)

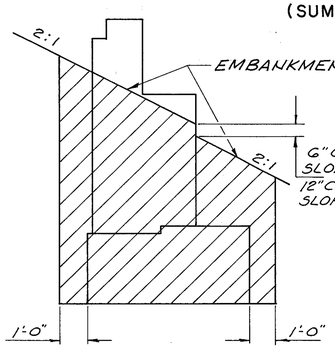



## ABUT. WINGWALLS

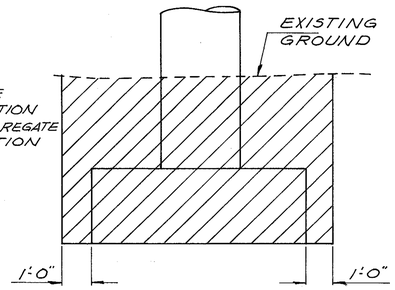



## ABUT. A-2

(SUM-59-0017 ONLY)



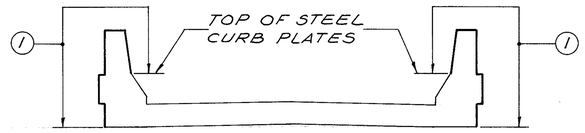

## ABUTMENTS



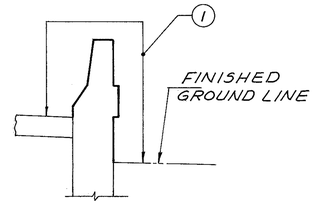

## PIERS

# LIMITS OF SEALING TREATMENT DIAGRAMS

(EXCEPT FOR RHODES AVE.)



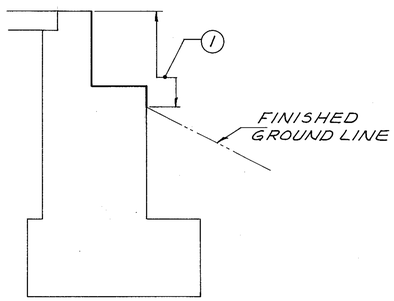

## SUPERSTRUCTURE



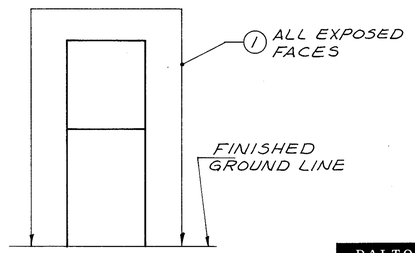

## WALLS

▨ DENOTES LIMITS OF UNCLASSFIED EXCAVATION (ITEM 503).

(1) DENOTES LIMITS OF ITEM SPECIAL "SEALING OF CONCRETE SURFACES, SEE PROPOSAL NOTE".




## ABUTMENTS




## PIERS

(FOR ALL BRIDGES EXCEPT SUM-76-0953)

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CLEVELAND, OHIO — AKRON, OHIO

# LIMITS OF EXCAVATION AND CONCRETE PROTECTION

SUM - 59 - 0.00

AKRON OHIO — SUMMIT COUNTY
AKRON INNERBELT

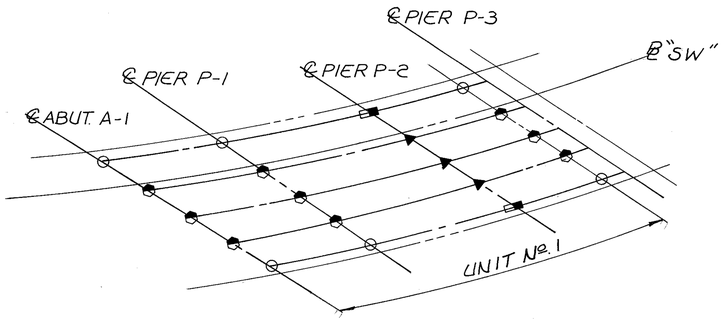
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | A.L.H. | JJP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

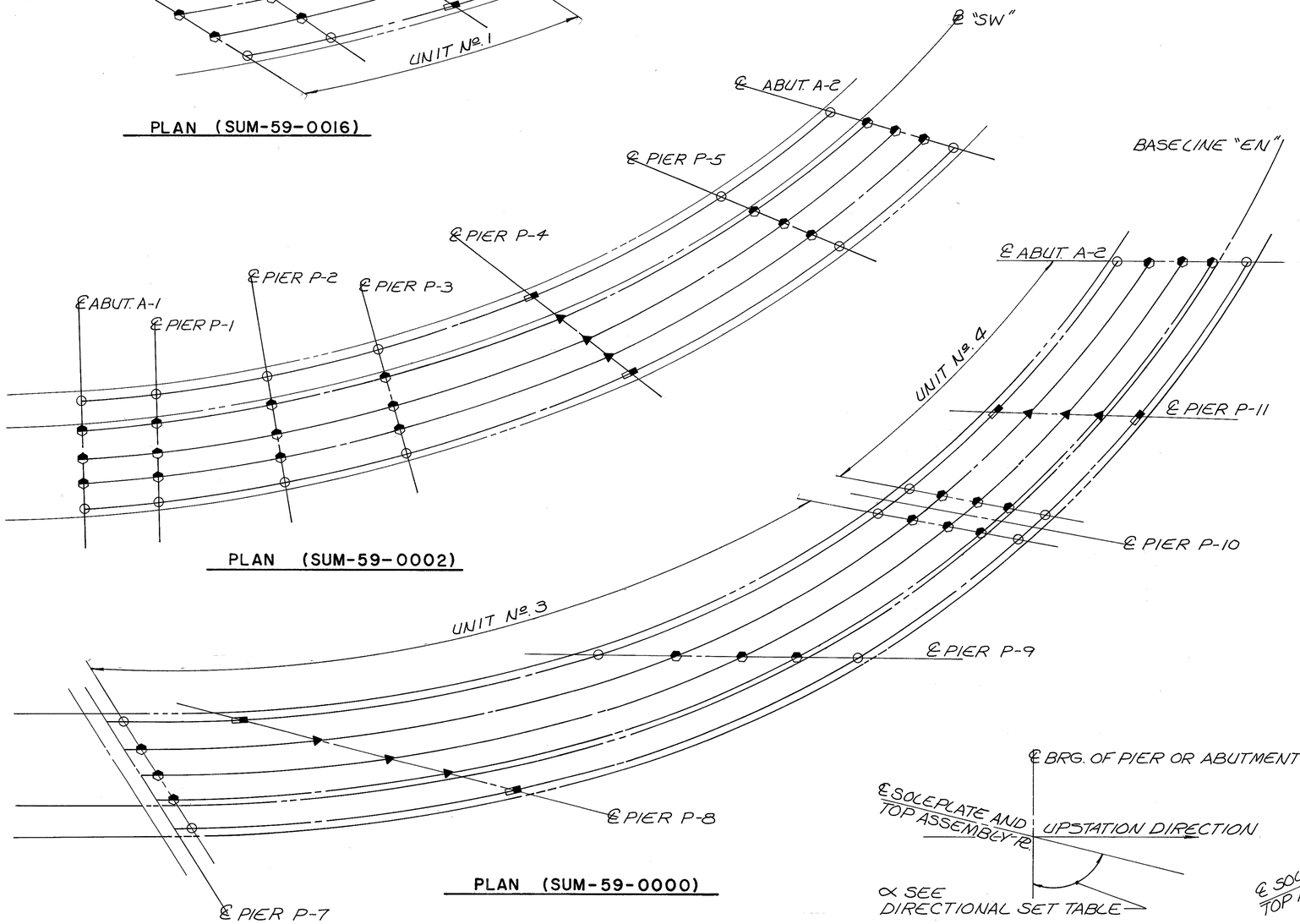
266
455

AKRON INNERBELT
SUM - 59 - 0.00

| LEGEND | | | | |
|---|---|---|---|---|
| TYPE | SYMBOL | TYPE OF BEARING | TRANSLATION MOVEMENT | |
| | | | LONGIT. | TRANSV. |
| E-1 | ◓ | EXP.ᴺ | FREE | FIXED |
| E-2 | ○ | EXP.ᴺ | FREE | FREE |
| F-2 | ▬ | FIXED | FIXED | FREE |
| F-1 | ▶ | FIXED | FIXED | FIXED |

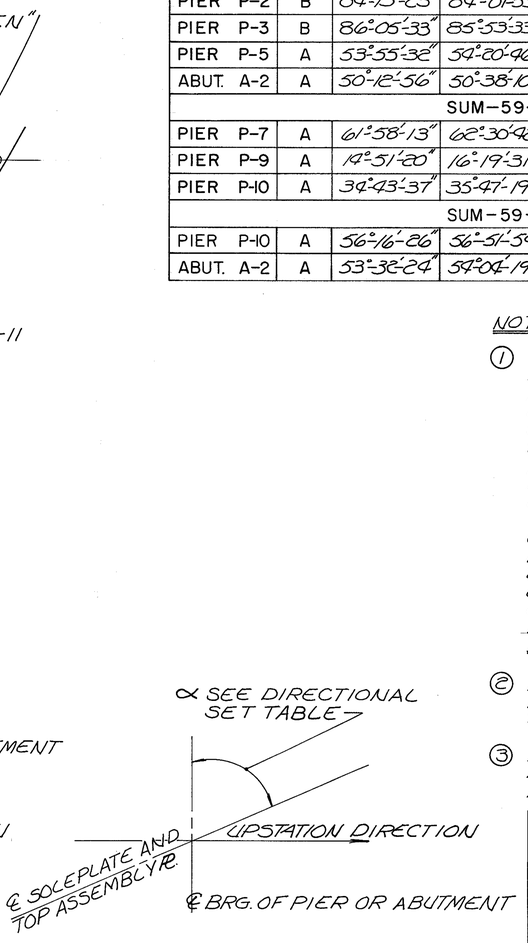



PLAN (SUM-59-0016)




PLAN (SUM-59-0002)

PLAN (SUM-59-0000)




| DIRECTIONAL SET TABLE | | | | | | |
|---|---|---|---|---|---|---|
| LOCATION | DIR'L SET | ∝ BEAM "A" | ∝ BEAM "B" | ∝ BEAM "C" | ∝ BEAM "D" | ∝ BEAM "E" |
| SUM-59-0016 UNIT Nº. 1 | | | | | | |
| ABUT. A-1 | A | 93°-18'-41" | 93°-49'-28" | 94°-18'-33" | 94°-46'-04" | 95°-12'-09" |
| PIER P-1 | A | 95°-08'-52" | 95°-34'-18" | 95°-58'-26" | 96°-21'-21" | 96°-43'-08" |
| PIER P-3 | A | 98°-22'-08" | 98°-38'-58" | 98°-54'-56" | 99°-10'-06" | 99°-24'-30" |
| SUM-59-0002 | | | | | | |
| ABUT. A-1 | B | 78°-27'-06" | 78°-17'-08" | 78°-07'-20" | 77°-57'-43" | 77°-48'-17" |
| PIER P-1 | B | 77°-12'-23" | 77°-02'-42" | 76°-53'-12" | 76°-43'-53" | 76°-34'-46" |
| PIER P-2 | B | 84°-13'-25" | 84°-01'-53" | 83°-50'-34" | 83°-39'-30" | 83°-28'-39" |
| PIER P-3 | B | 86°-05'-33" | 85°-53'-33" | 85°-41'-49" | 85°-30'-22" | 85°-19'-11" |
| PIER P-5 | A | 53°-55'-32" | 54°-20'-96" | 54°-45'-16" | 55°-09'-05" | 55°-32'-13" |
| ABUT. A-2 | A | 50°-12'-56" | 50°-38'-10" | 51°-02'-40" | 51°-26'-29" | 51°-49'-37" |
| SUM-59-0000 UNIT Nº. 3 | | | | | | |
| PIER P-7 | A | 61°-58'-13" | 62°-30'-42" | 63°-03'-38" | 63°-36'-48" | 64°-10'-03" |
| PIER P-9 | A | 14°-51'-20" | 16°-19'-31" | 17°-44'-12" | 19°-05'-20" | 20°-22'-56" |
| PIER P-10 | A | 34°-43'-37" | 35°-47'-19" | 36°-48'-44" | 37°-47'-48" | 38°-44'-32" |
| SUM-59-0000 UNIT Nº. 4 | | | | | | |
| PIER P-10 | A | 56°-16'-26" | 56°-51'-54" | 57°-26'-11" | 57°-57'-21" | 58°-31'-27" |
| ABUT. A-2 | A | 53°-32'-24" | 54°-04'-19" | 54°-35'-13" | 55°-05'-08" | 55°-34'-08" |

NOTES

① THE PLANS FOR BRIDGE Nº.'S SUM-59-0000 AND SUM-59-0016 ARE PARTIAL PLANS SHOWING LOCATIONS AND TYPES OF SPHERICAL BEARINGS ONLY. THE STANDARD ROCKER AND BOLSTER BEARINGS AS PER STANDARD DRAWING RB-1-55 ARE TO BE USED ON THE PORTIONS OF THESE BRIDGES AND THE OTHER BRIDGES IN THIS PROJECT NOT SHOWN ON THIS SHEET. PLEASE REFER TO EACH BRIDGE'S FRAMING PLAN OR FRAMING DETAIL SHEETS FOR SIZES OF REMAINING BEARINGS.

② ALL THE BEARINGS ON BRIDGE Nº. SUM-59-0002 ARE TO BE SPHERICAL BEARINGS.

③ FOR ADDITIONAL NOTES AND DETAILS FOR SPHERICAL BEARINGS, SEE SHTS. 267/455 & 268/455.




DIRECTIONAL SET "A"




DIRECTIONAL SET "B"

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CLEVELAND, OHIO AKRON, OHIO

# SPHERICAL BEARING LOCATIONS AND DETAILS

BR. NO. SUM-59-0000
BR. NO. SUM-59-0002
BR. NO. SUM-59-0016

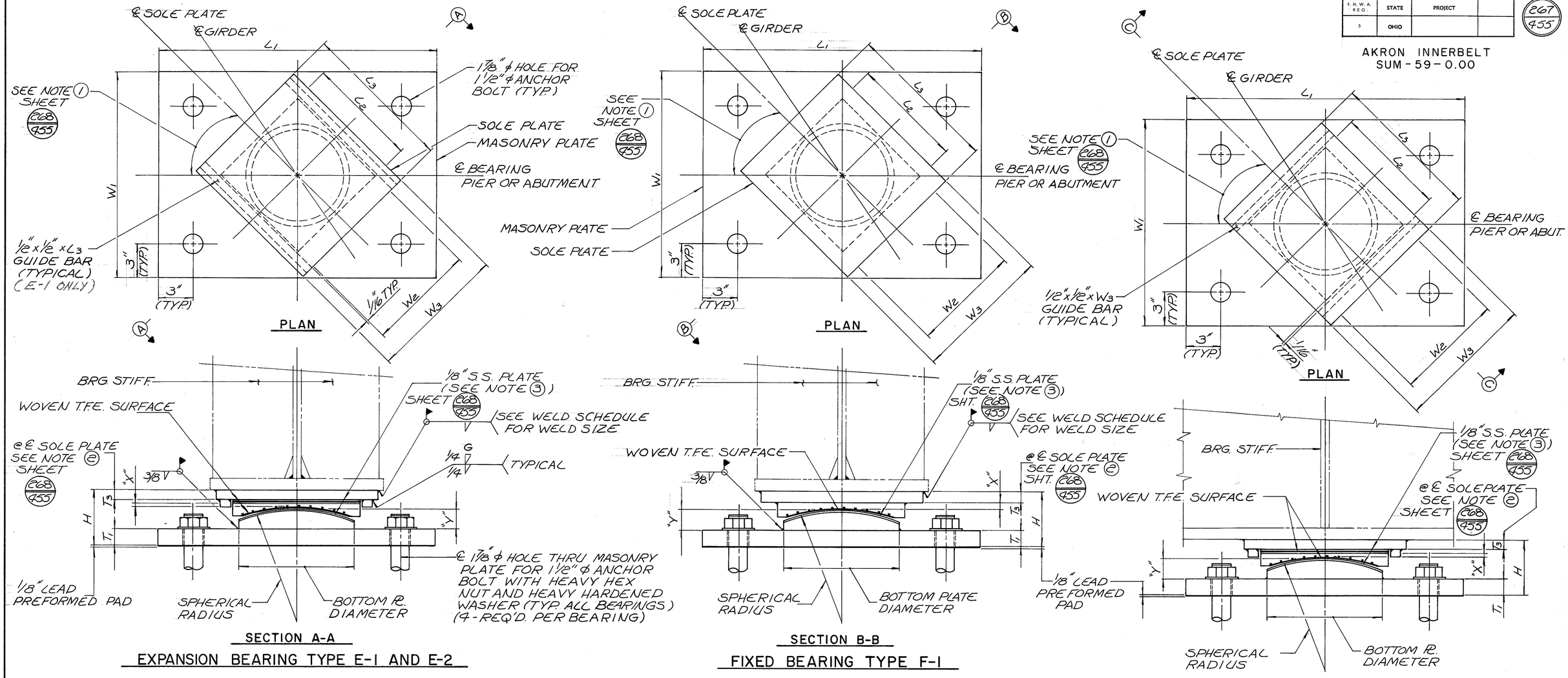
AKRON OHIO SUMMIT COUNTY

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.A.B. | M.A.B. | | BEL | | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

268/455

AKRON INNERBELT
SUM-59-0.00

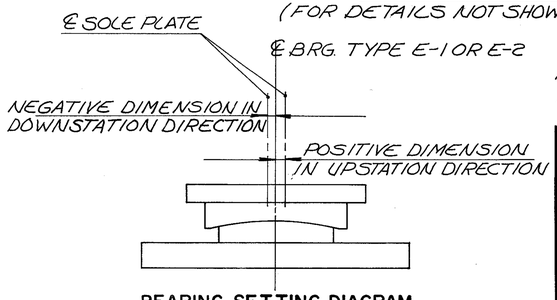



BEARING SETTINGS

| LOCATION | TEMPERATURE (F°) 90° | 80° | 70° | 60° | 50° | 40° | 30° |
|---|---|---|---|---|---|---|---|
| SUM-59-0002 | | | | | | | |
| ABUT. A-1 | -1 1/4 | -15/16 | -11/16 | -7/16 | -1/8 | 1/8 | 7/16 |
| PIER P-1 | -1 1/16 | -13/16 | -9/16 | -3/8 | -1/8 | 1/8 | 3/8 |
| PIER P-2 | -3/4 | -9/16 | -7/16 | -1/4 | -1/16 | 1/16 | 1/4 |
| PIER P-3 | -1/2 | -3/8 | -1/4 | -3/16 | -1/16 | 1/16 | 3/16 |
| PIER P-5 | 1/2 | 3/8 | 5/16 | 3/16 | 1/16 | -1/16 | -3/16 |
| ABUT. A-2 | 7/8 | 11/16 | 1/2 | 5/16 | 1/8 | -1/8 | -5/16 |
| SUM-59-0016 UNIT Nº. 1 | | | | | | | |
| ABUT. A-1 | -9/16 | -7/16 | -5/16 | -3/16 | -1/16 | 1/16 | 3/16 |
| PIER P-1 | -5/16 | -1/4 | -3/16 | -1/8 | -1/16 | 1/16 | 1/8 |
| PIER P-3 | 1/4 | 3/16 | 1/8 | 1/16 | 0 | 0 | -1/16 |

| LOCATION | TEMPERATURE (F°) 90° | 80° | 70° | 60° | 50° | 40° | 30° |
|---|---|---|---|---|---|---|---|
| SUM-59-0000 UNIT Nº. 3 | | | | | | | |
| PIER P-7 | -3/4 | -9/16 | -3/8 | -1/4 | -1/16 | 1/16 | 1/4 |
| PIER P-9 | 7/8 | 11/16 | 1/2 | 5/16 | 1/8 | -1/8 | -5/16 |
| PIER P-10 | 1 1/2 | 1 3/16 | 13/16 | 1/2 | 3/16 | -3/16 | -1/2 |
| SUM-59-0000 UNIT Nº. 4 | | | | | | | |
| PIER P-10 | -3/8 | -1/4 | -3/16 | -1/8 | -1/16 | 1/16 | 1/8 |
| ABUT. A-2 | 7/16 | 5/16 | 1/4 | 1/8 | 1/16 | -1/16 | -1/8 |

| WELD SCHEDULE | |
|---|---|
| PLATE THICKNESS | WELD SIZE |
| UP TO 1 1/2" | 5/16" |
| OVER 1 1/2" TO 2 1/4" | 3/8" |
| OVER 2 1/4" | 1/2" |




BEARING SETTING DIAGRAM

NOTES:
FOR NOTES SEE SHEET 268/455

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

# SPHERICAL BEARING DETAILS

BR. NO. SUM-59-0000
BR. NO. SUM-59-0002
BR. NO. SUM-59-0016

AKRON OHIO SUMMIT COUNTY

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.A.B. | M.A.B. | | BKL | JGP | 12-19-82 | 6-11-84 |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

266/455

AKRON INNERBELT
SUM-59-0.00

## TABLE OF BEARING DIMENSIONS

| LOCATION | VERTICAL (a) REACTION (KIPS) | | HORIZONTAL FORCES (KIPS) | | MOVEMENT (INCHES) (d) | | | SOLE PLATE (INCHES) | SPHERICAL BEARING ASSEMBLY (INCHES) | | | | | MASONRY PLATE | TOTAL BRG. HEIGHT "H" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAXIMUM | MINIMUM | TRANS.(b) | LONG.(c) | POSITIVE | NEGATIVE | TOTAL | $T_3 \times L_3 \times W_3$ | TOP PLATE $L_2 \times W_2$ | DIM. "X" | BOTTOM PLATE | DIM. "Y" | SPERICAL RADIUS | $T_1 \times L_1 \times W_1$ (INCHES) | (INCHES) |
| **SUM-59-0000 UNIT Nº.3** | | | | | | | | | | | | | | | |
| PIER P-7 | 199 | 38 | 14.1 | --- | 1 7/16 | 1 | 2 7/16 | 1 1/8 x 14 1/2 x 13 3/8 | 10 3/4 x 10 3/4 | 1/2 | 9 3/4 ø | 1 13/16 | 10 | 2 x 28 x 20 | 5 11/16 |
| PIER P-8 | 637 | 248 | 48.4 | 53.8 | --- | --- | FIXED | 1 x 19 1/2 x 19 1/2 | 17 1/2 x 17 1/2 | 1/2 | 17 3/4 ø | 2 1/4 | 24 | 2 3/4 x 37 x 22 1/2 | 6 9/16 |
| PIER P-9 | 583 | 238 | 46.6 | --- | 1 1/8 | 1 3/4 | 2 7/8 | 1 x 21 3/4 x 21 5/8 | 17 1/2 x 17 1/2 | 1/2 | 17 3/4 ø | 2 1/4 | 24 | 2 3/4 x 37 x 22 1/2 | 6 3/4 |
| PIER P-10 | 175 | 98 | 20.3 | --- | 2 | 3 | 5 | 1 1/8 x 17 x 13 7/8 | 10 3/4 x 10 3/4 | 1/2 | 9 3/4 ø | 1 13/16 | 10 | 2 1/4 x 35 x 18 | 5 15/16 |
| **SUM-59-0000 UNIT Nº.4** | | | | | | | | | | | | | | | |
| PIER P-10 | 118 | 23 | 13.5 | --- | 11/16 | 7/16 | 1 1/8 | 1 x 11 1/2 x 12 3/8 | 9 1/4 x 9 1/4 | 1/2 | 8 1/4 ø | 1 7/8 | 7 | 1 3/8 x 22 x 18 | 5 |
| PIER P-11 | 352 | 134 | 25.5 | 88 | --- | --- | FIXED | 1 x 16 x 16 | 14 x 14 | 1/2 | 13 1/4 ø | 1 7/8 | 18 | 2 1/2 x 29 x 20 | 5 15/16 |
| ABUT. A-2 | 145 | 91 | 14.7 | --- | 9/16 | 7/8 | 1 7/16 | 3/4 x 12 x 12 3/8 | 9 1/4 x 9 1/4 | 1/2 | 8 1/4 ø | 1 7/8 | 7 | 1 5/8 x 24 x 18 | 5 |
| **SUM-59-0002** | | | | | | | | | | | | | | | |
| ABUT. A-1 | 89 | 14 | 4.9 | --- | 2 7/16 | 1 5/8 | 4 1/16 | 1 x 14 3/4 x 12 3/8 | 9 1/4 x 9 1/4 | 1/2 | 8 1/4 ø | 1 7/8 | 7 | 1 3/8 x 24 x 18 | 5 |
| PIER P-1 | 197 | 64 | 9.8 | --- | 2 1/8 | 1 3/8 | 3 1/2 | 1 1/8 x 15 1/2 x 13 7/8 | 10 3/4 x 10 3/4 | 1/2 | 9 3/4 ø | 1 13/16 | 10 | 2 x 26 x 20 | 5 11/16 |
| PIER P-2 | 212 | 62 | 17.7 | --- | 1 1/2 | 1 | 2 1/2 | 1 1/8 x 14 1/2 x 13 7/8 | 10 3/4 x 10 3/4 | 1/2 | 9 3/4 ø | 1 13/16 | 10 | 2 x 26 x 20 | 5 11/16 |
| PIER P-3 | 266 | 71 | 19.5 | --- | 1 | 5/8 | 1 5/8 | 7/8 x 15 3/4 x 15 1/8 | 12 3/4 x 12 3/4 | 1/2 | 12 1/2 ø | 1 5/8 | 18 | 2 3/8 x 21 1/8 x 15 | 5 5/8 |
| PIER P-4 | 372 | 130 | 30.2 | 29.8 | --- | --- | FIXED | 1 x 16 x 16 | 14 x 14 | 1/2 | 13 3/4 ø | 1 7/8 | 18 | 2 1/2 x 29 x 20 | 5 15/16 |
| PIER P-5 | 372 | 130 | 30.2 | --- | 1 11/16 | 1 1/16 | 2 3/4 | 7/8 x 17 x 17 1/8 | 14 x 14 | 1/2 | 13 3/4 ø | 1 7/8 | 18 | 2 1/2 x 32 x 22 | 6 |
| ABUT. A-2 | 122 | 25 | 13.7 | --- | 1 1/8 | 1 11/16 | 2 13/16 | 1 x 13 1/2 x 12 3/8 | 9 1/4 x 9 1/4 | 1/2 | 8 1/4 ø | 1 7/8 | 7 | 1 3/8 x 25 x 18 | 5 |
| **SUM-59-0016 UNIT Nº.1** | | | | | | | | | | | | | | | |
| ABUT. A-1 | 98 | 19 | 10.2 | --- | 1 1/16 | 11/16 | 1 3/4 | 1 x 12 1/4 x 12 3/8 | 9 1/4 x 9 1/4 | 1/2 | 8 1/4 ø | 1 7/8 | 7 | 1 3/8 x 24 x 18 | 5 |
| PIER P-1 | 225 | 73 | 15.0 | --- | 5/8 | 3/8 | 1 | 7/8 x 15 3/4 x 15 1/8 | 12 3/4 x 12 3/4 | 1/2 | 12 1/2 ø | 1 5/8 | 18 | 2 x 30 x 19 | 5 1/4 |
| PIER P-2 | 225 | 73 | 15.0 | 8.8 | --- | --- | FIXED | 7/8 x 15 x 15 | 12 3/4 x 12 3/4 | 1/2 | 12 1/2 ø | 1 5/8 | 18 | 2 x 30 x 19 | 5 1/16 |
| PIER P-3 | 101 | 20 | 5.4 | --- | 5/16 | 1/2 | 13/16 | 1 x 11 1/4 x 12 3/8 | 9 1/4 x 9 1/4 | 1/2 | 8 1/4 ø | 1 7/8 | 7 | 1 3/8 x 22 x 18 | 5 |

NOTES

(a) THE VERTICAL REACTIONS GIVEN, ARE FOR EACH BEARING AT A SUBSTRUCTURE UNIT.

(b) THE TRANSVERSE HORIZONTAL FORCES SHOWN ARE TO BE RESISTED BY THE FIXED BEARING TYPE F-1, AT THE FIXED PIERS AND BY THE EXPANSION BEARING, TYPE E-1 AT THE EXPANSION PIERS.

(c) THE LONGITUDINAL HORIZONTAL FORCES SHOWN AT THE FIXED PIERS ARE TO BE RESISTED BY THE FIXED BEARING, TYPE F-1 AND F-2

(d) MOVEMENTS SHOWN ARE POSITIVE UPSTATION AND NEGATIVE DOWNSTATION.

NOTES

(1) THE ANGLE BETWEEN THE ℄BEARING AT A SUBSTRUCTURE AND THE ℄ SOLE PLATE IS GIVEN AS DIRECTIONAL SET "A" OR "B" ON SHEET 266/455

(2) BEVEL THE TOPOF SOLE PLATE ALONG CENTERLINE OF GIRDER DIRECTION TO FOLLOW THE ROADWAY SURFACE.

(3) THE STAINLESS STEEL PLATES FOR FLAT SURFACES SHALL BE ATTACHED USING MECHANICAL FASTENERS OR SPOTWELDS, UNIFORMLY SPACED THROUGHOUT THE BEARING AREA AND 1/8" SEAL WELD ALL AROUND THE PLATE. THE WELDS SHALL BE GROUND FLUSH AND THE BEARING AREA GIVEN A 20 MICRO INCH RMS FINISH. SEE 'SPECIAL PROVISIONS' FOR ADDITIONAL INFORMATION.

(4) A FIELD WELDED CONNECTION, AS DETAILED, SHALL BE USED BETWEEN THE BOTTOM ASSEMBLY PLATE AND THE MASONRY PLATE TO ALLOW FOR ANY MINOR FIELD ADJUSTMENT REQUIRED FOR SETTING OF THE BEARINGS.

(5) THE COST OF 1/8" LEAD PREFORMED BEARING PADS SHALL BE INCIDENTAL TO THE COST OF THE BEARINGS.

(6) SEE SHEET 266/455 FOR BEARING LOCATION PLAN.

(7) SEE SHEET 267/455 FOR ADDITIONAL DETAILS.

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CLEVELAND, OHIO AKRON, OHIO

# SPHERICAL BEARING DETAILS

BR. NO. SUM-59-0000
BR. NO. SUM-59-0002
BR. NO. SUM-59-0016

AKRON OHIO SUMMIT COUNTY

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.A.B. | M.A.B. | | BKL | GJP | 12-19-82 | 6-11-84 |

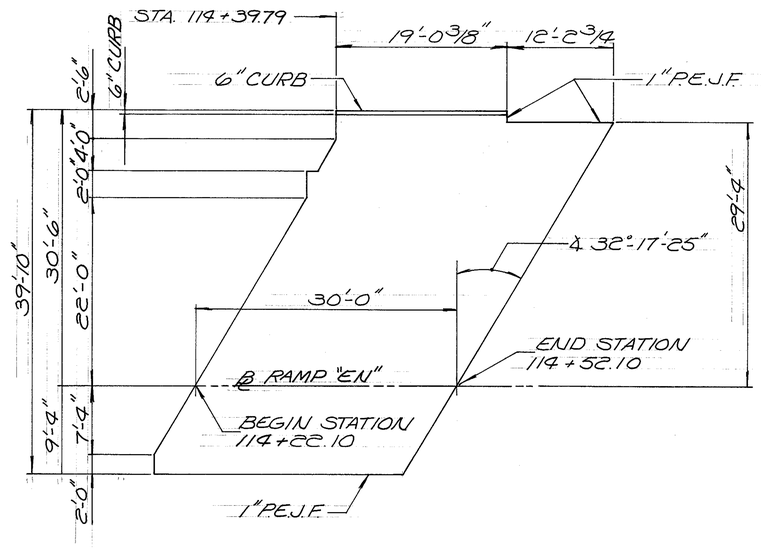
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

269
455

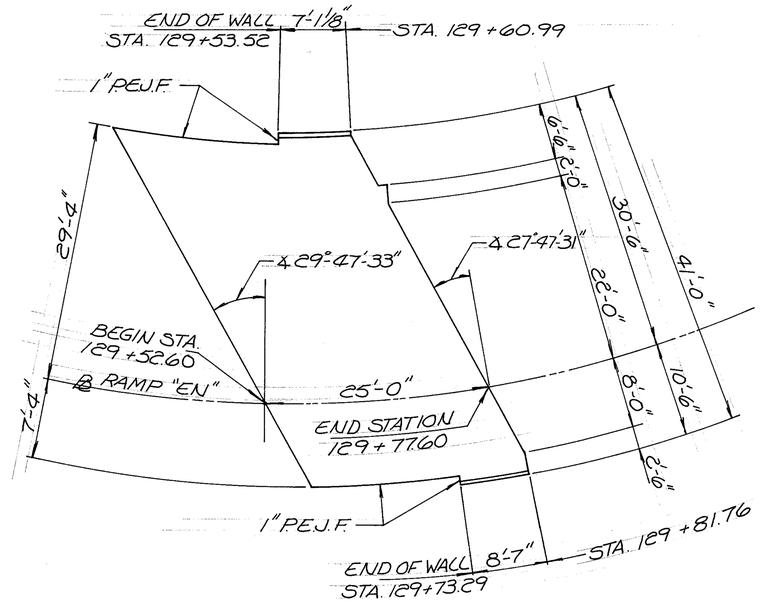
AKRON INNERBELT
SUM - 59 - 0.00

NOTES

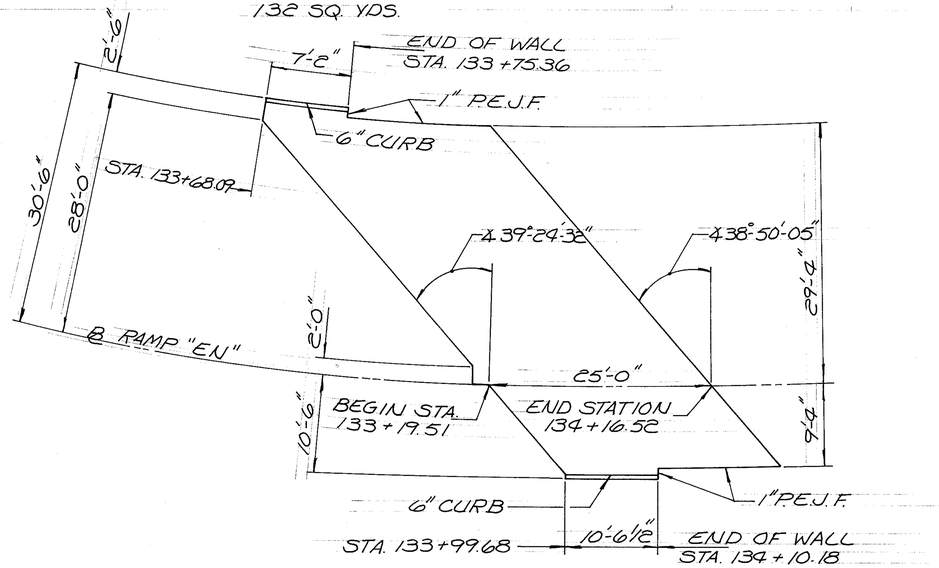
1. FOR ADDITIONAL DETAILS, REINFORCING, AND NOTES SEE STANDARD DRAWINGS AS-1-81 SHEETS 1 THRU 3 AND BR-1.




APPROACH SLAB A-1
(SUM-59-0000)
132 SQ. YDS.




APPROACH SLAB A-2
(SUM-59-0000)
106 SQ. YDS.

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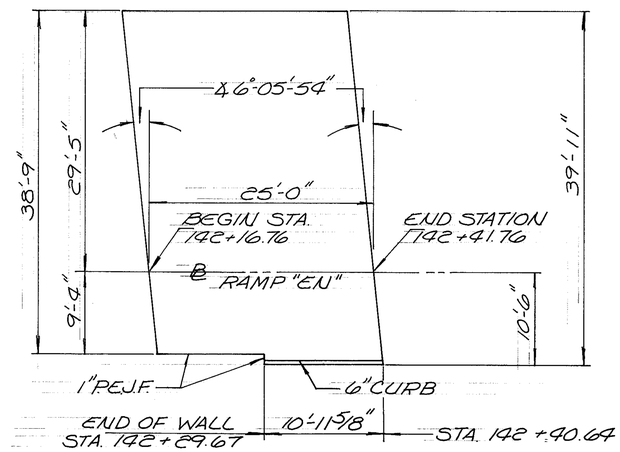


APPROACH SLAB A-2
(SUM-59-0017)
109 SQ. YDS.

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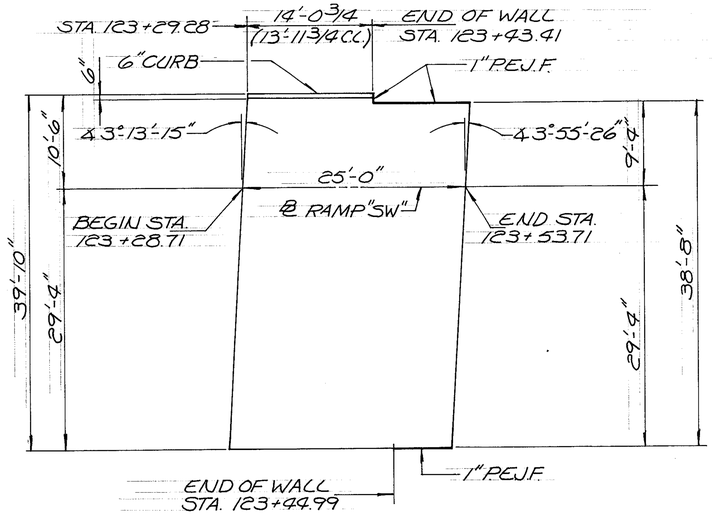
CLEVELAND, OHIO AKRON, OHIO

# APPROACH SLAB LAYOUT

BR. NO. SUM-59-0000
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| ALH JFP | M.A.B. | | A.L.H. | JFP | 12-19-82 | |

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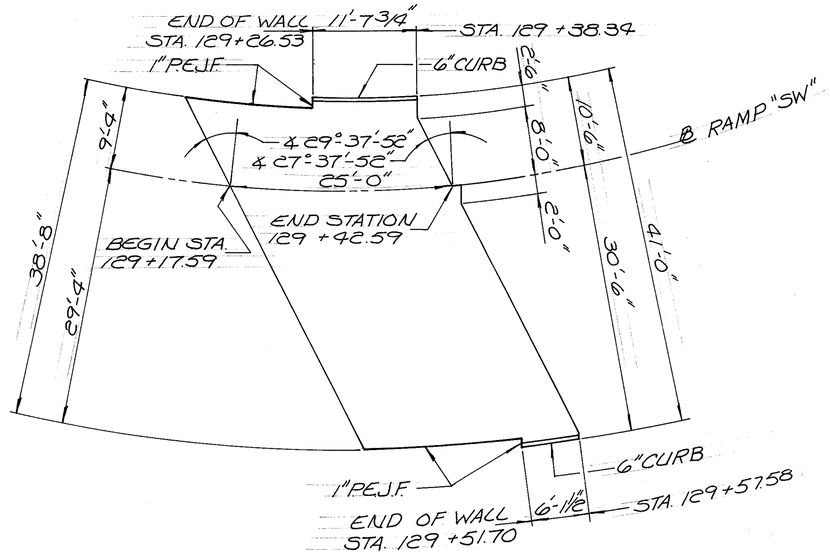
(SUM 59 0002)
710 SQ. YDS.

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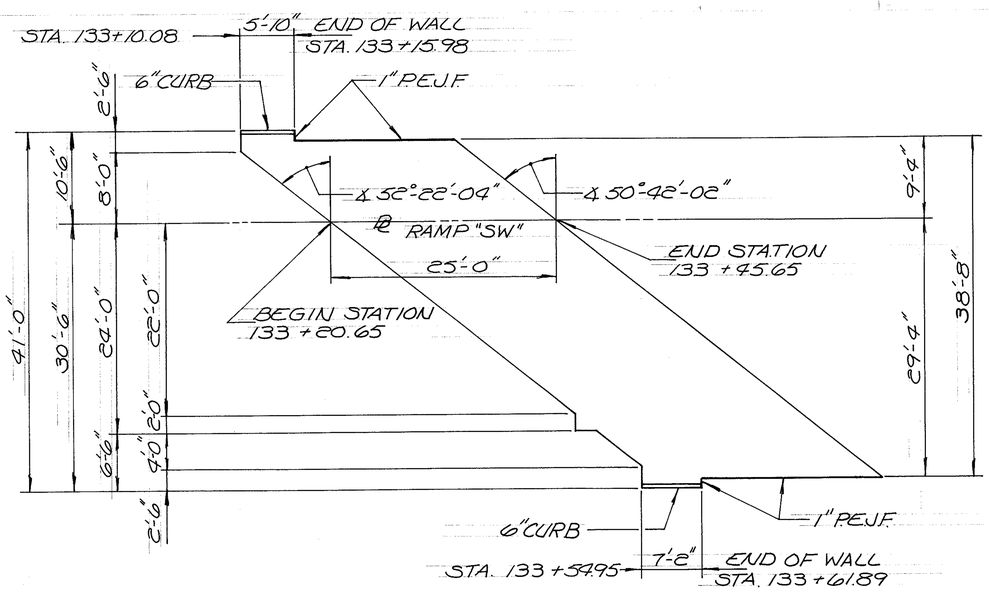
(SUM-59-0002)
110 SQ. YDS.

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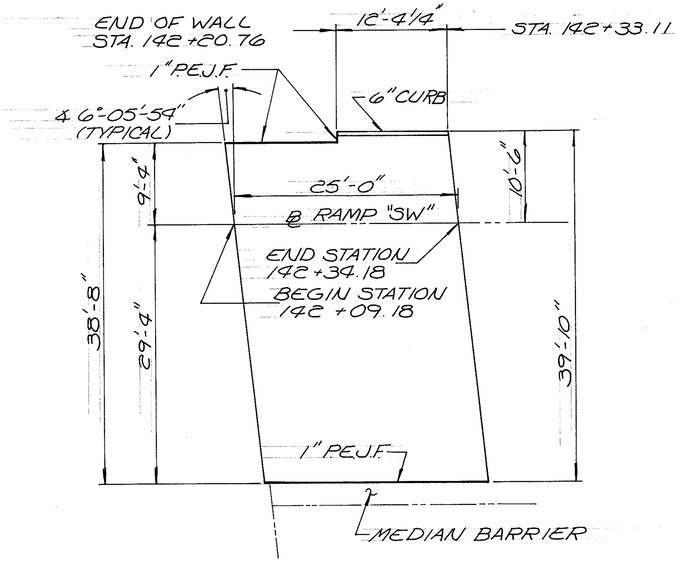
(SUM-59-0016)
109 SQ. YDS.




APPROACH SLAB A-2
(SUM-59-0016)
109 SQ. YDS.

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

270
755

AKRON INNERBELT
SUM - 59 - 0.00

NOTES

1. FOR ADDITIONAL NOTES, REINFORCING, AND DETAILS SEE STANDARD DRAWINGS AS-1-81 SHEETS 1 THRU 3 AND BR-1.

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CLEVELAND, OHIO AKRON, OHIO

# APPROACH SLAB LAYOUT

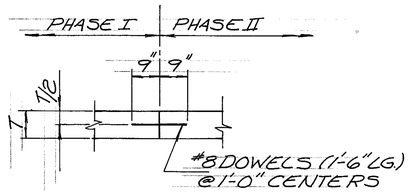
BR. NO. SUM-59-0002
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| ALH JPP | MAB | | ALH | JPP | 12-19-82 | |

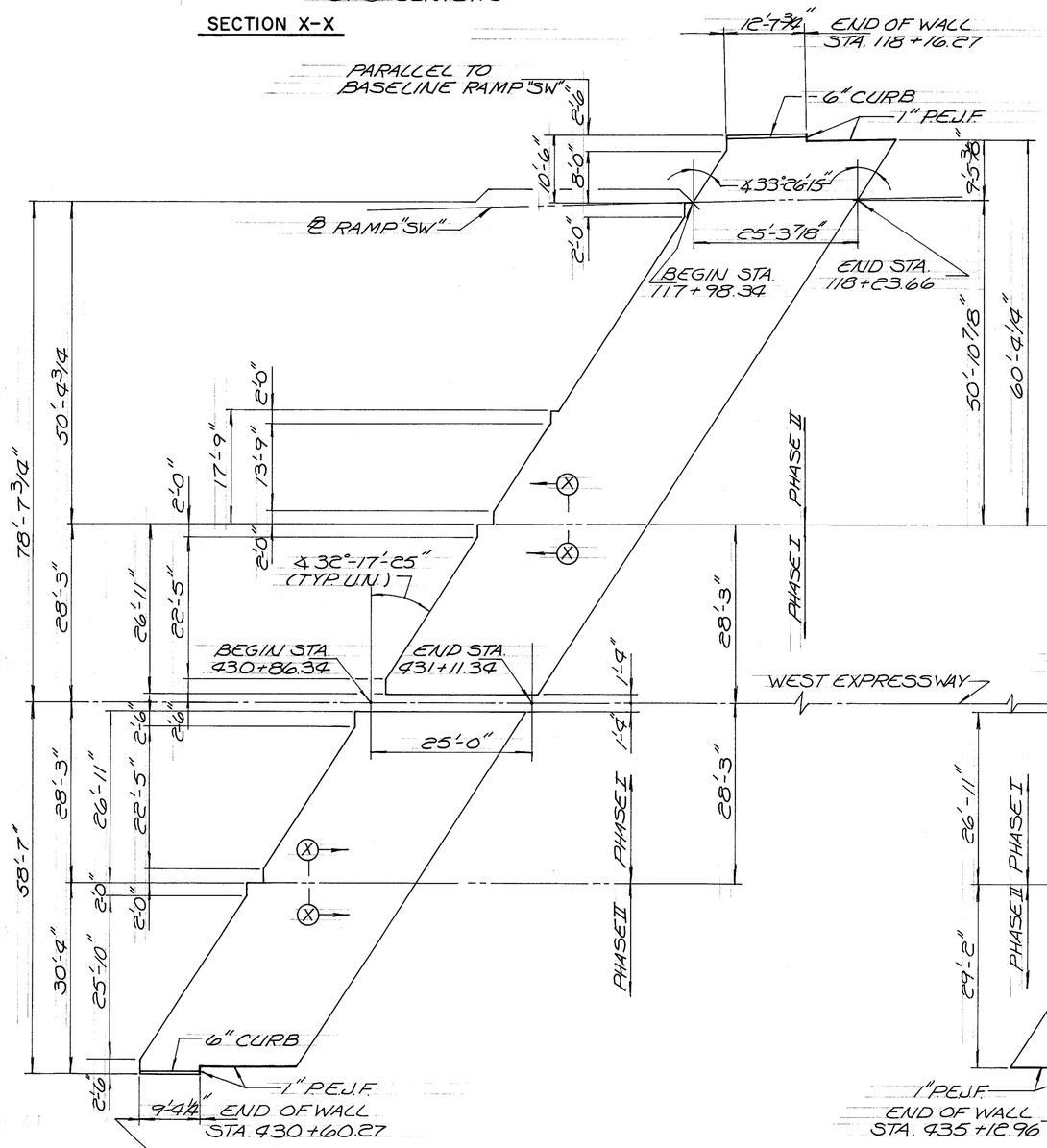
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

271
455

AKRON INNERBELT
SUM - 59 - 0.00




SECTION X-X




APPROACH SLAB A-1
401 SQ. YDS.

APPROACH SLAB A-2
427 SQ. YDS.

NOTES

1. ALL DIMENSIONS ARE PERPENDICULAR TO ℄ WEST EXPRESSWAY UNLESS OTHERWISE SHOWN OR NOTED.
2. FOR ADDITIONAL DETAILS, REINFORCING, AND NOTES SEE STANDARD DRAWINGS AS-1-81 SHEETS 1 THRU 3 AND BR-1.

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CLEVELAND, OHIO AKRON, OHIO

# APPROACH SLAB

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL

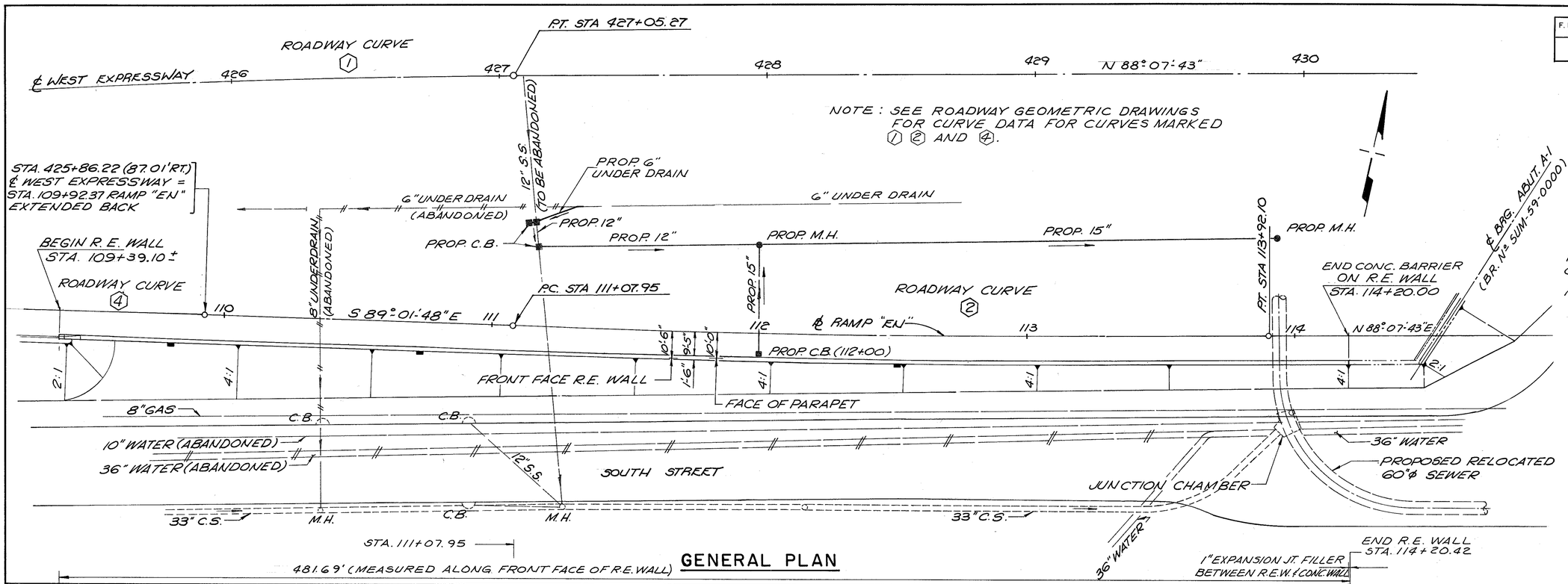
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| ALH JFD | M.A.B. | | A.L.H. | JFD | 12-19-82 | |

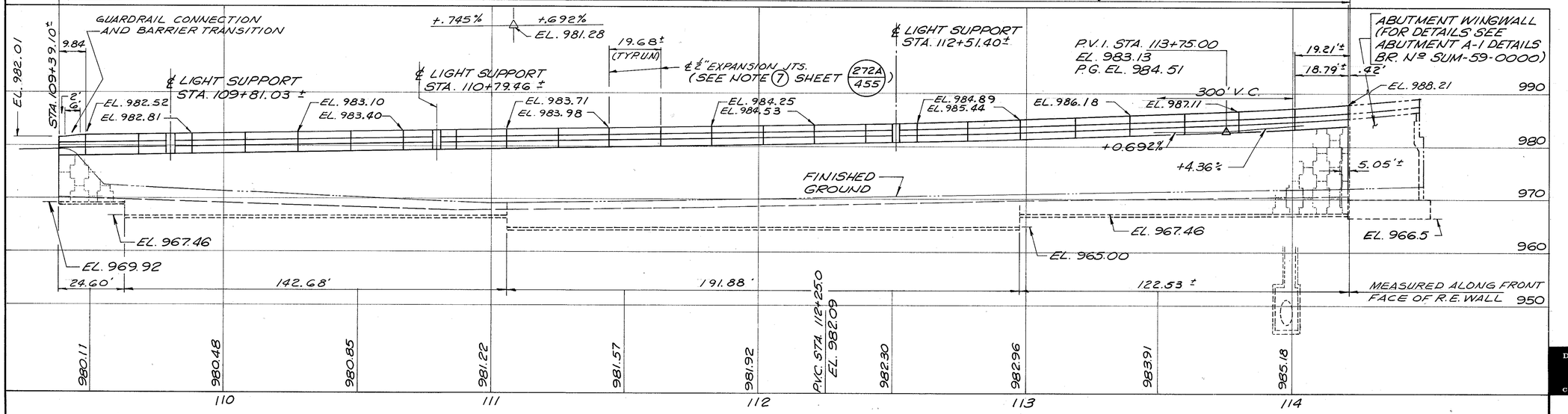
| F. H. W. A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

270
455

AKRON INNERBELT
SUM - 59 - 0.00




## GENERAL PLAN




## ELEVATION

**NOTE**

FOR TYPICAL SECTION, TABLE OF ESTIMATED QUANTITIES AND NOTES SEE SHEET 272A/455.

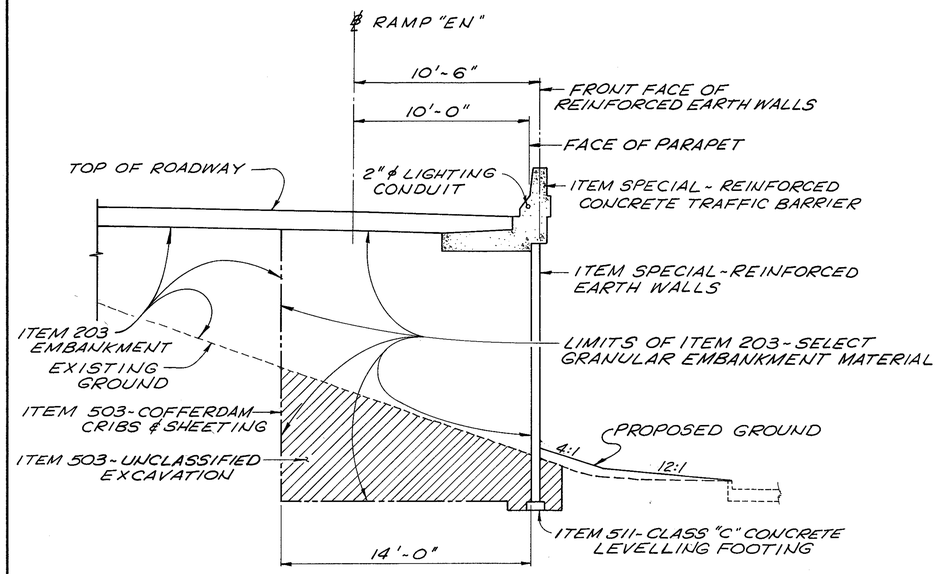
DALTON · DALTON · NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

1 / 2

# GENERAL SITE PLAN
## RETAINING WALL

RETAINING WALL ALONG RAMP "EN" AND SOUTH STREET
AKRON OHIO — SUMMIT COUNTY
STA. 109 + 33.65 TO STA. 114 + 20.50

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| ALH JFP | O.T. | | A.L.H. | JFP | 12-20-82 | |




## TYPICAL SECTION

### ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | WALL | | |
|---|---|---|---|---|---|---|
| 203 | 3390 | C.Y. | SELECT GRANULAR EMBANKMENT | 3390 | | |
| | | | | | | |
| | | | | | | |
| 503 | LUMP | L.S. | COFFERDAMS, CRIBS AND SHEETING | LUMP | | |
| | | | | | | |
| 503 | 1330 | C.Y. | UNCLASSIFIED EXCAVATION | 1330 | | |
| | | | | | | |
| 511 | 9 | C.Y. | CLASS "C" CONCRETE, LEVELLING FOOTING | 9 | | |
| | | | | | | |
| SPEC. | 6930 | S.F. | REINFORCED EARTH WALLS | 6930 | | |
| | | | | | | |
| SPEC. | 482 | L.F. | REINFORCED CONCRETE TRAFFIC BARRIER | 482 | | |
| | | | | | | |
| | | | | | | |

## NOTES

1. FOR DETAILS OF REINFORCED EARTH WALL AND REINFORCED CONCRETE TRAFFIC BARRIER DETAILS REFER TO THE REINFORCED EARTH WALL DRAWINGS, PREPARED BY THE REINFORCED EARTH COMPANY, WHICH HAVE BEEN INCLUDED IN BID AND CONTRACT DOCUMENTS FOR INFORMATION ONLY.
2. SEE THE PROPOSAL [illegible] FOR REINFORCED EARTH WALLS' SPECIFICATIONS.
3. THE REINFORCED EARTH WALL, UP TO AND INCLUDING THE SECOND PANEL FROM THE TOP SHOULD BE CONSTRUCTED AND BACKFILL PLACED AS EARLY AS THE PROJECT CONSTRUCTION SCHEDULE WILL ALLOW, FOR PRIMARY SETTLEMENTS TO OCCUR. THESE SETTLEMENTS MAY BE EXPECTED TO OCCUR WITHIN A SIX MONTH TIME PERIOD.
4. ONCE THE PRIMARY SETTLEMENTS HAVE OCCURED, AND UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL CONSTRUCT THE TOP REINFORCED EARTH PANEL, AND THE REINFORCED CONCRETE TRAFFIC BARRIER, TO THE FINAL LINE AND GRADE SHOWN ON THE DRAWINGS.
5. THE CONCRETE FOOTING FOR THE REINFORCED EARTH WALL SHALL NOT BE FOUNDED ON ORGANIC SOILS. IF ORGANIC SOIL IS ENCOUNTERED, THE CONTRACTOR SHALL REMOVE AND REPLACE THE UNSUITABLE MATERIAL AS DIRECTED BY THE ENGINEER.
6. THE FRONT FACE OF THE REINFORCED EARTH PANELS SHALL HAVE A FRACTURED FIN SURFACE FINISH WITHOUT ANY COLORING.
7. THE EXPANSION JOINTS, IN THE TRAFFIC BARRIER SHALL HAVE ½" EXPANSION JOINT MATERIAL. NO SEPARATE PAYMENT WILL BE MADE FOR THE ½" EXPANSION JOINT MATERIAL BUT THE COST THERE OF SHALL BE INCLUDED WITH THE COST OF ITEM SPECIAL, REINFORCED CONCRETE TRAFFIC BARRIER.
8. THE CONCRETE FOR THE REINFORCED CONCRETE TRAFFIC BARRIER SHALL CONFORM TO ITEM 511, CLASS "S" CONCRETE, SUPERSTRUCTURE AND THE REINFORCING SHALL CONFORM TO ITEM 824, EPOXY COATED REINFORCING STEEL, GRADE 60.
9. THE REINFORCED CONCRETE TRAFFIC BARRIER SHALL HAVE THE 2" DIAMETER LIGHTING CONDUIT AND OTHER ACCESSORIES, NECESSARY FOR PROVIDING ROADWAY LIGHTING. FOR LIGHTING QUANTITIES SEE SHEET 237A/455.
10. THE REINFORCED EARTH WALL DESIGN AND SHOP PLANS SHALL BE PREPARED, SEALED AND SIGNED BY AN ENGINEER, REGISTERED IN THE STATE OF OHIO AND SHALL BE SUBMITTED TO THE OHIO DEPARTMENT OF TRANSPORTATION FOR REVIEW AND APPROVAL AS PER SECTION 501 OF THE OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS SPECIFICATIONS PRIOR TO ANY FABRICATION OR CONSTRUCTION.

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

272A/455

AKRON INNERBELT
SUM-59-0.00

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CLEVELAND, OHIO — AKRON, OHIO

2/2

# RETAINING WALL DETAILS

RETAINING WALL ALONG RAMP "EN" AND SOUTH STREET
AKRON OHIO — SUMMIT COUNTY
STA. 109+33.65 TO STA. 114+20.50

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | D.T. | | ALH. | JJP | 4-15-83 | |

| F.H.W.A. REGN | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

272B
455

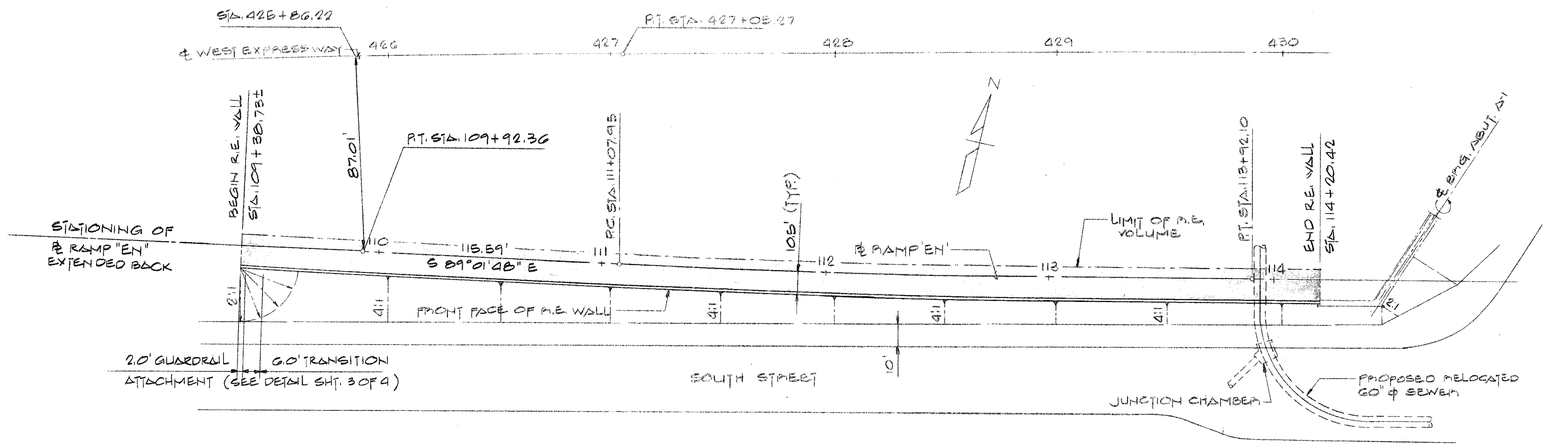
AKRON INNERBELT
SUM-59-00-00

## GENERAL NOTES

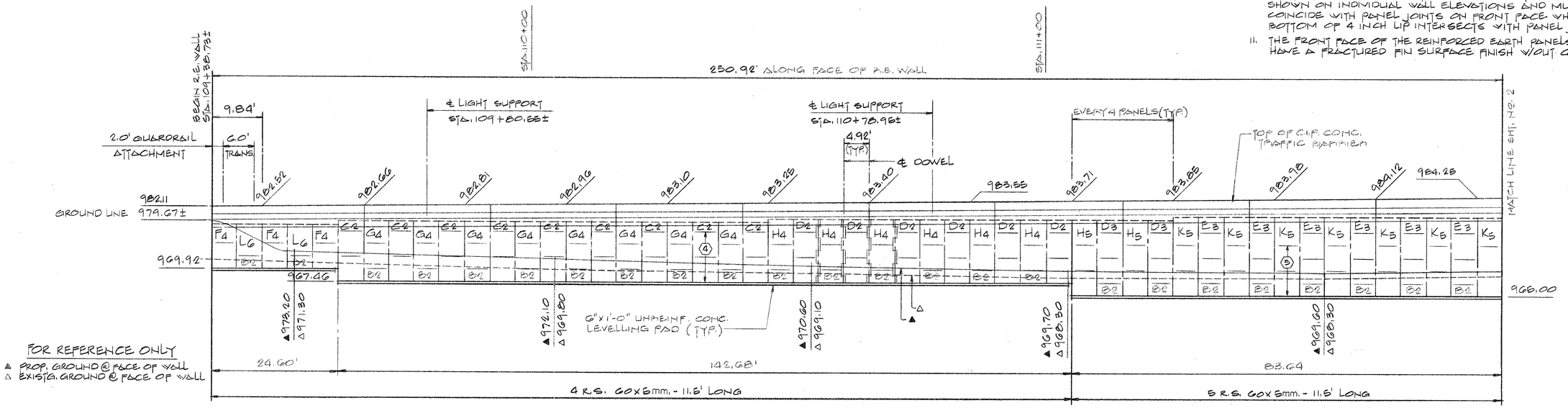
1. ALL PANELS ARE TYPE 'A' UNLESS OTHERWISE NOTED.
2. R.E. WALL IN CURVED SECTION WILL FORM A SERIES OF SHORT CHORDS TO MATCH DESIRED WALL ALIGNMENT.
3. STATIONS SHOWN ARE ALONG ℄ RAMP 'EN'.
4. FOR TYPICAL SECTION THRU WALL SEE SHT. NO. 2 OF 4.
5. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE REINFORCED EARTH VOLUME, METHODS OF CONSTRUCTION AND QUALITY OF PRE-FABRICATED MATERIALS SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
6. FOR LOCATION AND ALIGNMENT OF R.E. WALLS SEE HIGHWAY PLANS.
7. FOR STANDARD PANELS SEE SHT. NO. 4 OF 4.
8. COPING IS NOT REQUIRED BETWEEN CONC. LEVELLING PAD AND LOWER ROW OF R.E. PANELS.
9. SYMBOLS:

   TYPE OF PANEL —— H4 —— NO. TIE STRIPS.

   (5) INDICATES NO. OF TIE STRIPS PER "A" PANEL ONLY.
10. ALL TRAFFIC BARRIER JOINTS SHALL BE LOCATED AS SHOWN ON INDIVIDUAL WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINTS ON FRONT FACE WHERE BOTTOM OF 4 INCH LIP INTERSECTS WITH PANEL JOINTS.
11. THE FRONT FACE OF THE REINFORCED EARTH PANELS SHALL HAVE A FRACTURED FIN SURFACE FINISH W/OUT COLORING.




## PLAN
N.T.S




## ELEVATION - FRONT FACE
SCALE: 1"=10.0'

| PANEL SCHEDULE | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TYPE | NO. OF TIE STRIPS | STANDARD | | | | | | | | | | 4.45' CUT | |
| | | A | B | C | D | E | F | G | H | K | L | AR | OR |
| P3 | 2 | — | 47 | 15 | 6 | — | — | — | — | — | — | — | 1 |
| | 3 | — | — | — | 5 | 11 | — | — | — | — | — | — | — |
| | 4 | 67 | — | — | — | — | 12 | 12 | 6 | — | — | 3 | — |
| | 5 | 110 | — | — | — | — | — | 2 | 5 | 12 | — | — | — |
| | 6 | — | — | — | — | — | — | — | — | — | 2 | — | — |
| | 7 | — | — | — | — | — | — | — | — | — | 9 | — | — |
| PANEL AREA/S.F. | | 24.2 | 12.1 | 8.8 | 12.1 | 14.9 | 17.9 | 20.9 | 24.2 | 27.0 | 30.0 | 21.9 | 09 |

| REINF. STRIP SCHEDULE | | |
|---|---|---|
| TYPE \ LENGTH | 11.5' | 14' |
| 40 x 5mm. | — | — |
| 60 x 5mm. | 1180 | 1126 |

WALL SURFACE AREA = 6,785.3 S.F.

**NOTE:**

THE DESIGN AND THESE DRAWINGS FOR REINFORCED EARTH® HAVE BEEN PREPARED BY THE REINFORCED EARTH COMPANY WHO REMAINS TOTALLY RESPONSIBLE FOR SUCH DESIGN AND DRAWINGS. DALTON DALTON NEWPORT HAS NOT REVIEWED OR CHECKED THE DESIGN AND ASSUMES NO RESPONSIBILITY WHATSOEVER FOR SUCH. DALTON DALTON NEWPORT HAVE REVIEWED OR CHECKED THE DRAWINGS EXCEPT FOR COMPLIANCE TO THE LINE AND GRADE OF THE PROJECT. THE DRAWINGS HAVE BEEN INCLUDED IN THE BID AND CONTRACT DOCUMENTS FOR CONVENIENCE ONLY.

"REINFORCED EARTH" IS THE REGISTERED TRADEMARK OF THE REINFORCED EARTH COMPANY.

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The Reinforced Earth Company is exclusive licensee in the United States under patents issued to Henri Vidal, and the furnishing of this drawing does not constitute an express or implied license under the Vidal patents.

FOR INFORMATION ONLY

reinforced earth **The Reinforced Earth Company**
Roselyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

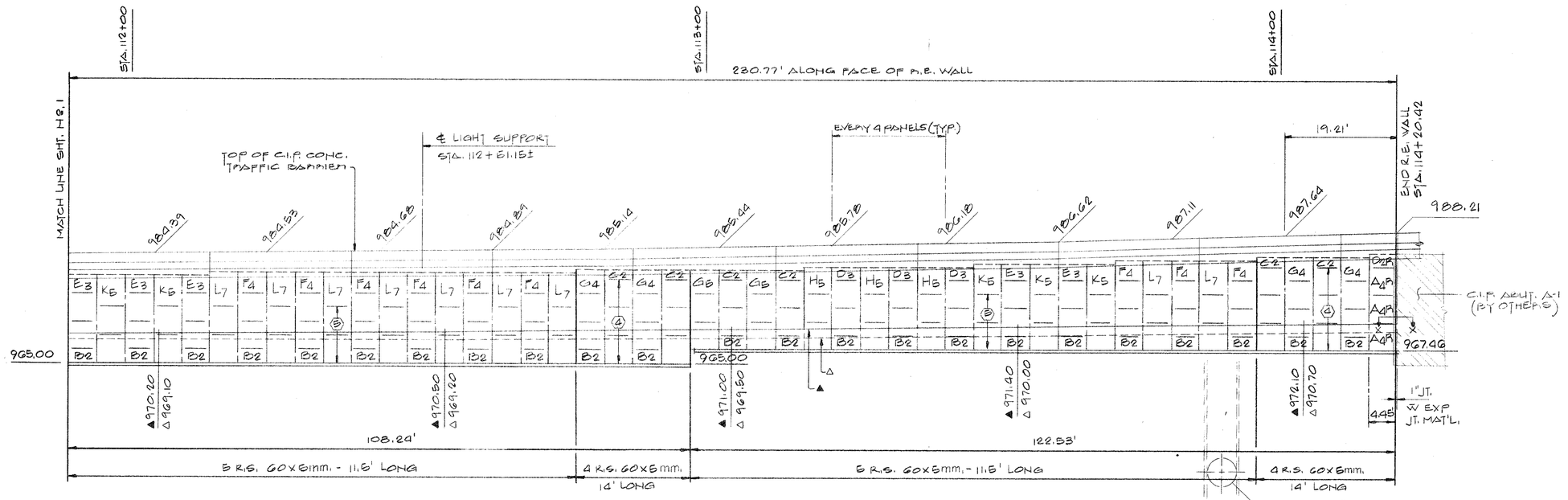
| REV. NO. | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| Structure | REINFORCED EARTH WALL |
| Location | SOUTH ST. RETAINING WALL AKRON INNERBELT PROJ. AKRON, OHIO |
| Owner | OHIO DEPT. OF TRANSPORTATION |
| Drawn By | PES |
| Date | 4/29/83 |
| Checked By | |
| CONTRACT NO. | 916 |
| DRAWING COVERS | PLAN & ELEVATION |
| DRAWING NO. | 1 OF 4 |
| SCALE | AS SHOWN |

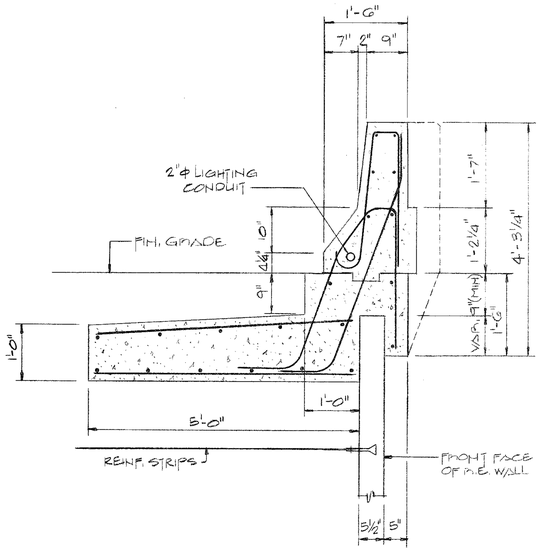
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

272C
455

AKRON INNERBELT
SUM-59-00-00

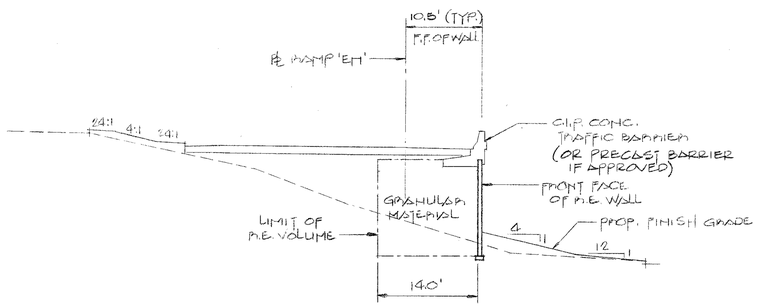



ELEVATION - FRONT FACE
SCALE: 1"=10.0'

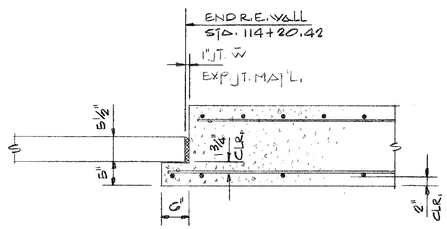



TRAFFIC BARRIER DETAIL
SCALE: 3/4"=1'-0"

NOTE:
ALL REINF. BARS FOR THE TRAFFIC BARRIER SHALL BE #5 @ 12" O.C. AND SHALL BE EPOXY COATED.




SECTION THRU STA. 113+00
SCALE: 1"=10.0'




DETAIL 'X-X'
N.T.S.

FOR INFORMATION ONLY

**NOTE:**

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reinforced earth
**The Reinforced Earth Company**
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434

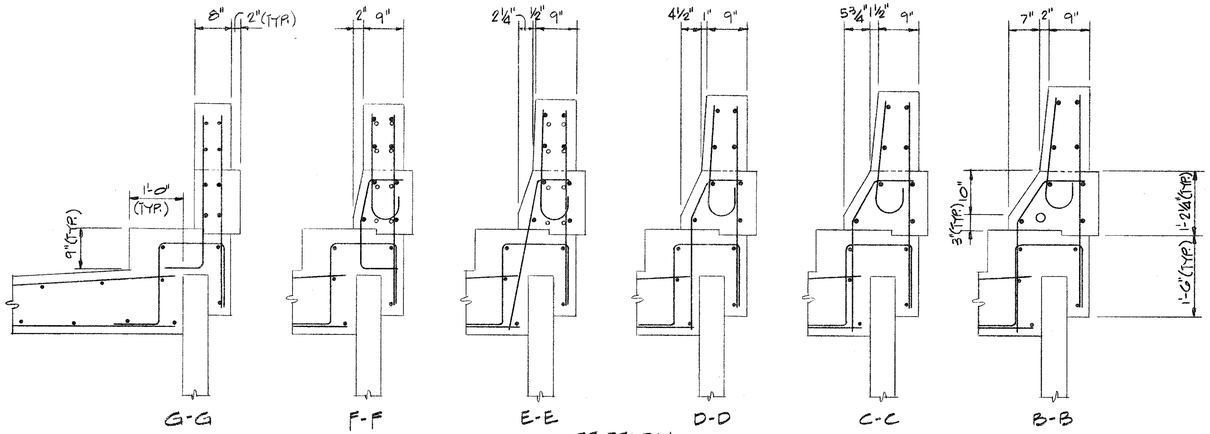

| REV. NO. | DATE | DESCRIPTION |
|---|---|---|
| | | |

| | |
|---|---|
| Structure | REINFORCED EARTH WALL |
| Location | SOUTH ST. RETAINING WALL<br>AKRON INNERBELT PROJ.<br>AKRON, OHIO |
| Owner | OHIO DEPT. OF TRANSPORTATION |
| Drawn By | PSS |
| Checked By | |
| Date | 4/29/83 |
| CONTRACT NO. | 916 |
| DRAWING COVERS | ELEVATION, SECT. & DET. |
| DRAWING NO. | 2 OF 4 |
| SCALE | AS SHOWN |

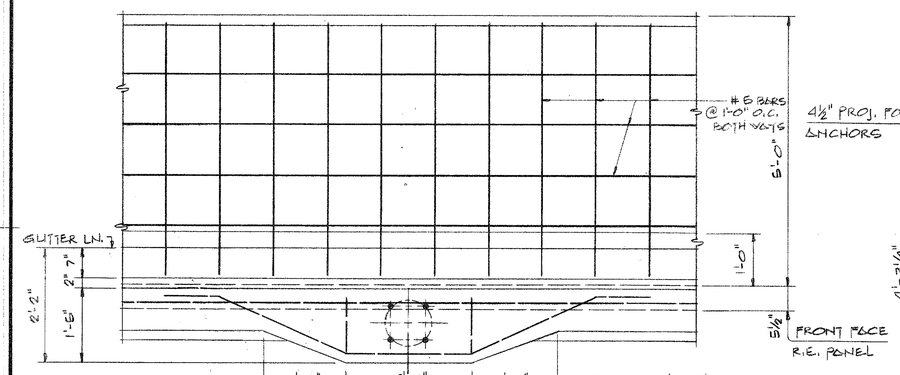
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

272 D
455

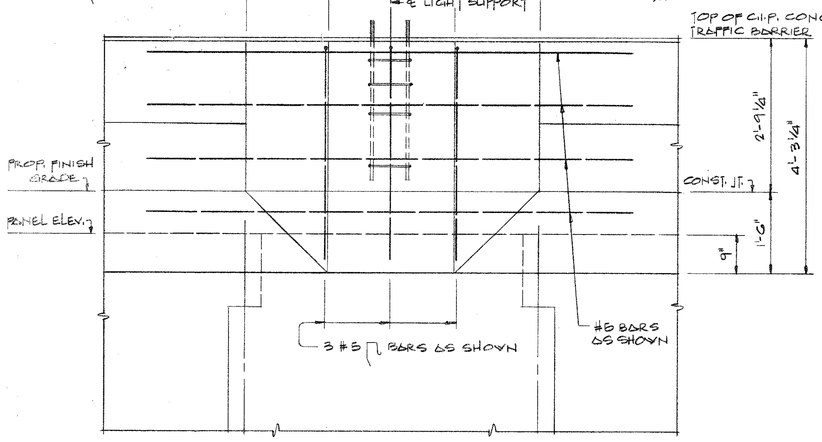
AKRON INNERBELT
SUM-59-00-00



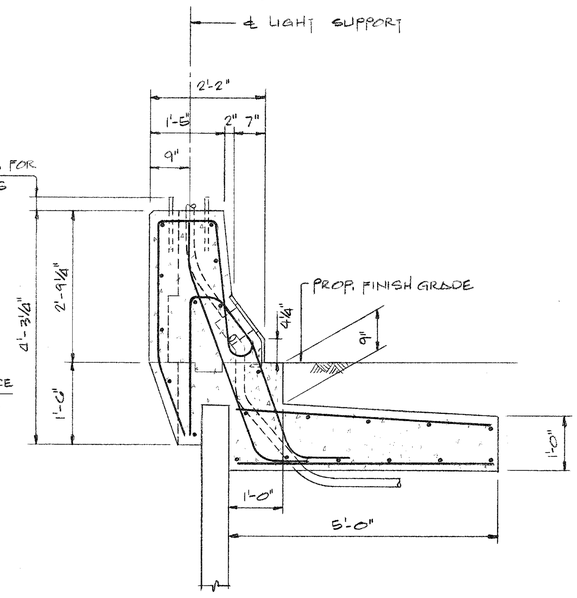

SECTION
SCALE: 3/4"=1'-0"



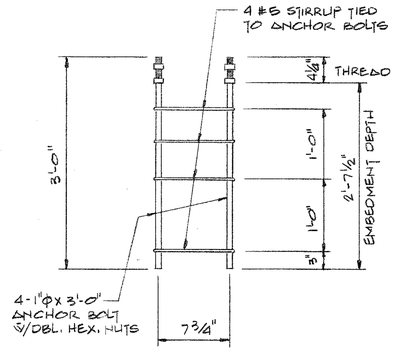

PARTIAL PLAN
SCALE: 3/4"=1'-0"




PARTIAL ELEVATION
SCALE: 3/4"=1'-0"




SECTION ⅄ LIGHT SUPPORT
SCALE: 3/4"=1'-0"




ANCHOR BOLT DETAIL
N.T.S.

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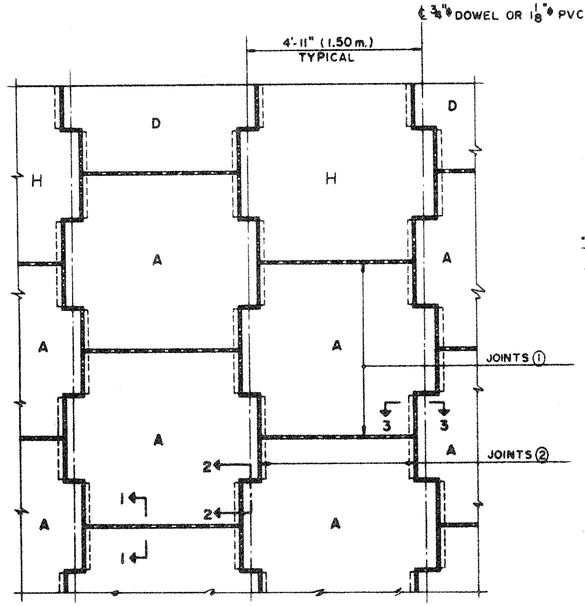
FOR INFORMATION ONLY

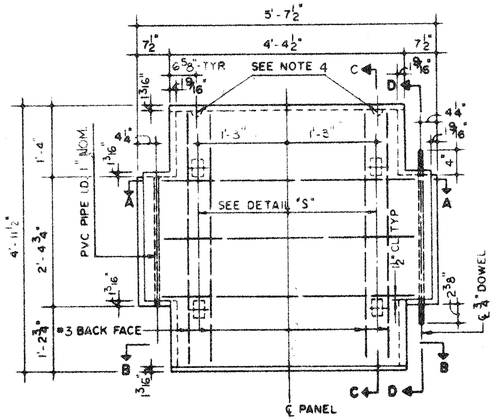

The Reinforced Earth Company
Rosslyn Center, 1700 North Moore Street, Arlington, Virginia 22209
(703) 527-3434


| | |
|---|---|
| Structure | REINFORCED EARTH WALL |
| Location | SOUTH ST. RETAINING WALL |
| | AKRON INNERBELT PROJ. AKRON, OHIO |
| Owner | OHIO DEPT. OF TRANS. |
| Drawn By | PSS |
| Date | 4/29/83 |
| Checked By | |
| CONTRACT NO. | 916 |
| DRAWING COVERS | DETAILS |
| DRAWING NO. | 3 OF 4 |
| SCALE | AS SHOWN |

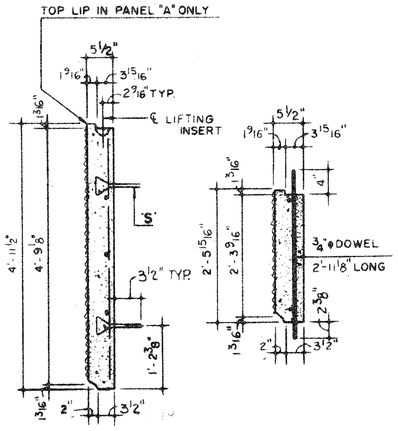
| REV. NO. | DATE | DESCRIPTION |
|---|---|---|




TYPICAL PANEL LAYOUT
SCALE 1"=1'-0"

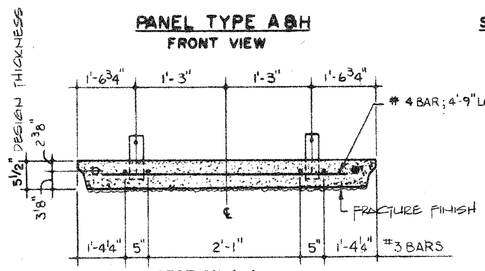



PANEL TYPE A8H
FRONT VIEW

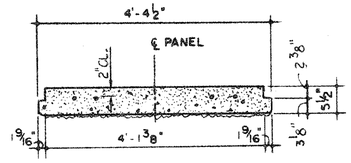



SECTION C-C

SECTION D-D

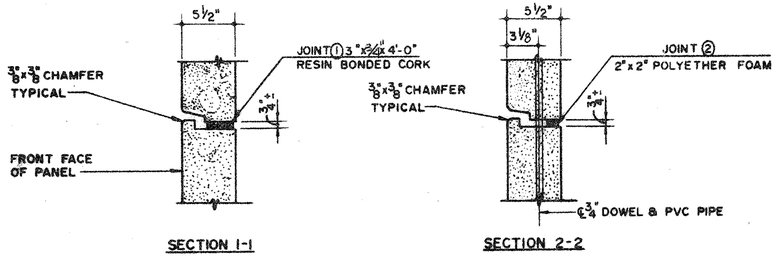



SECTION A-A



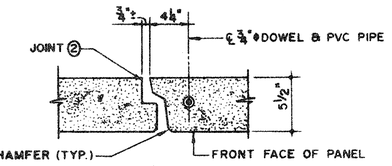

SECTION B-B

TYPICAL PANEL DETAILS
SCALE ¾"= 1'-0"

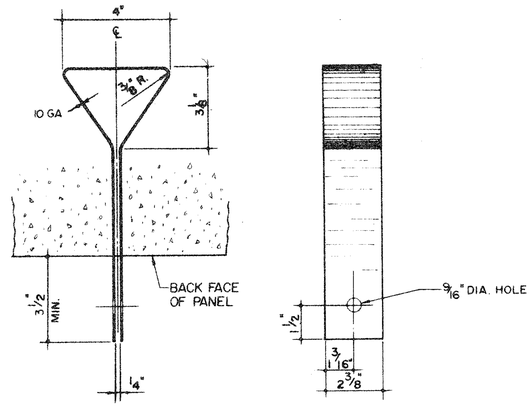



SECTION 1-1

SECTION 2-2




SECTION 3-3
JOINT DETAILS
SCALE: 1½"= 1'-0"




TIE STRIP DETAIL "S"
NOT TO SCALE

NOTE:

1. REINFORCING STEEL TO BE STEEL A615 GRADE 60.
2. ⅜" x ⅜" CHAMFER SHALL BE PROVIDED ON ALL EXPOSED EDGES (FRONT FACE ONLY).
3. ALL PANELS AND OTHER RELATED ELEMENTS WILL BE DETAILED ON SHOP DRAWINGS.
4. ONE TON LIFTING INSERTS.
5. PANEL DESIGN THICKNESS IS 5½" QUANTITY OF CONCRETE WILL INCREASE TO ACCOMMODATE ANY ARCHITECTURAL SURFACE FINISH THAT MAY BE SPECIFIED.
6. THE FRONT FACE OF THE REINFORCED EARTH PANELS SHALL HAVE A FRACTURED FIN SURFACE FINISH W/OUT COLORING.

FOR INFORMATION ONLY

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reinforced earth The Reinforced Earth Company
Rosslyn Center 1700 North Moore Street Arlington Virginia 22209
(703) 527-3434

| | |
|---|---|
| Structure | REINFORCED EARTH WALL |
| Name | SOUTH ST. RETAINING WALL |
| | AKRON, OHIO |
| Owner | OHIO DEPT. OF TRANSPORTATION |
| Drawn By | 4/29/83 |
| Checked By | Date |
| CONTRACT NO | 916 |
| DRAWING COVERS | STANDARD 5½" PANEL DETAILS |
| DRAWING NO | 4 OF 4 |
| SCALE | AS SHOWN |

| REV NO. | DATE | DESCRIPTION |
|---|---|---|

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

273/455

# AKRON INNERBELT
## SUM-59-0.00

### CURVE DATA

BASELINE RAMP "EN"
P.I. STA. 129+10.95
SPIRALS (IN & OUT)

Ls = 450.00'
Θs = 18°-00'-00"
X = 445.58'
Y = 46.79'
P = 11.74'
K = 224.26'
LT = 301.57'
ST = 151.42'

CIRCULAR SECTION
Δ = 87°-54'-18"
Δc = 51°-54'-18"
Dc = 8°-00'-00"
R = 716.197'
T = 348.58'
Lc = 648.82'

### PROPOSED STRUCTURE

TYPE: CONTINUOUS WELDED ℄ GIRDERS AND ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES.

SKEW: VARIES (SEE PLAN)

SPANS: ℄ BEARINGS ALONG ℄
UNIT Nº1 43'-0" 61'-0" 85'-6" 68'-6 7/8"
UNIT Nº2 138'-9 5/8" (163'-0") 111'-5 3/8"
UNIT Nº3 193'-7 5/8" 245'-9 5/16" 156'-6 1/2"
UNIT Nº4 98'-9 5/16" 121'-6" 152'-4"

ROADWAY: 40'-0" F to F CONCRETE PARAPETS - 41'-10" O to O DECK

LOADING: HS-20-44 (CASE II) AND ALTERNATE MILITARY LOADING

WEARING: 1½" LATEX MODIFIED CONC. SURFACE

APPROACH:
SLABS 30'-0" (A-1), 25'-0" (A-2)

ALIGNMENT: TANGENT, CURVE LEFT.

SUPERELEVATION: TRANS. - .059½ MAX.

SLOPE PROTECTION: CONCRETE.

TRAFFIC:
ADT = 15,200 (2000)
ADTT = 760 (2000)

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

1/45

# SITE PLAN

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | JWW | | AJH | gjp | 12-20-82 | 2-A36 |

PROFILE ALONG ℄ BOWERY

PROFILE ALONG ℄ RAMP "EN"

PROFILE ALONG ℄ WEST EXPRESSWAY (N-88°-07'-43"-E)

℄ RAMP "EN" (N-88°-07'-43"-E)

STREET 7 (N-30°-24'-09"-E)

20" PS BOWERY

36" SEG BLK

UNIT Nº1 259'-6"

UNIT Nº2 415'-8 3/8"

END APPROACH SLAB STA 114+52.10

TYPE 2 CURB & GUTTER

PROP. M.H.

RETAINING WALL

℄ BRG ABUT A-1

℄ PIER P-1

℄ PIER P-2

℄ PIER P-3

℄ PIER P-4

℄ SOUTH ST. (N-88°-07'-43"-E)

BL RAMP EN STA 115+28.91 = ℄ BOWERY ST. STA. 5+55.77

3'-0" END REINFORCED EARTH RETAINING WALL STA. 114+20.00

HORIZ. CLR. REQ'D = 6.00' ACTUAL = 6.32'

HORIZ. CLR. REQ'D = 6.00' ACTUAL = 6.24'

43°-17'-25" (TYP. UNLESS NOTED)

℄ BRG. END UNIT Nº1

℄ BRG. BEGIN UNIT Nº2

140'-0" (TO ℄ PIER P-5)

144'-8"

ABAND. 1

ABAND. 2

40'-0" F.to F. PARAPETS

OHIO CANAL

MATCH LINE STA. 118+00 FOR CONTINUATION SEE SHT. 2 145

143'-5 3/16"

SOUTH STREET

980.6

980.86

FOR ADDITIONAL GEOMETRIC LAYOUT DATA REFERENCE LINES AND SUPERELEVATION TRANSITION LAYOUTS SEE SHEET 260 OF 455

NOTE: EARTHWORK LIMITS SHOWN ARE APPROXIMATE ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS

PT. OF MIN. VERT. CLEARANCE

| | REQ'D. | ACTUAL |
|---|---|---|
| ⊕1 = | 15.33' | 15.48' |

FOR AVERAGE ESTIMATED PAY LENGTHS AND TYPES OF PILES SEE PILING PLAN SHEET 10/45.

P.I. STA. 113+75
EL. 983.13
P.G. EL. 984.51

985.18 | 986.74 | 988.62 | 990.76 | 992.94 | 995.12 | 997.30 | 999.48 | 1001.66

END APPROACH SLAB STA 114+52.10

BRIDGE LIMITS = 1500.50'

P.I.T. 115+25 EL. 989.67

PROPOSED PROFILE GRADE

+0.69% +4.36% +4.36%

300' V.C.

EL. 981.26 LT. EL. 973.75 RT.

100 YR. HIGH WATER EL. 968.3

NORMAL H.W. EL. 964.5 L.W. EL. 961.5

MATCH LINE

CONCRETE SLOPE PROTECTION

VARIES

⊕1. ℄ BOWERY ST.

EXIST. GRADE

EL. 972.50 LT. EL. 966.50 RT.

EXIST 60" BS ℄ EL. 996.06 ±

EL. 965.00

12" ℄ C.I.P.R.C.P. (TYP. ABUT. A-1 THRU PIER P-7)

EL. 965.00

EL. 964.00

EL. 964.50

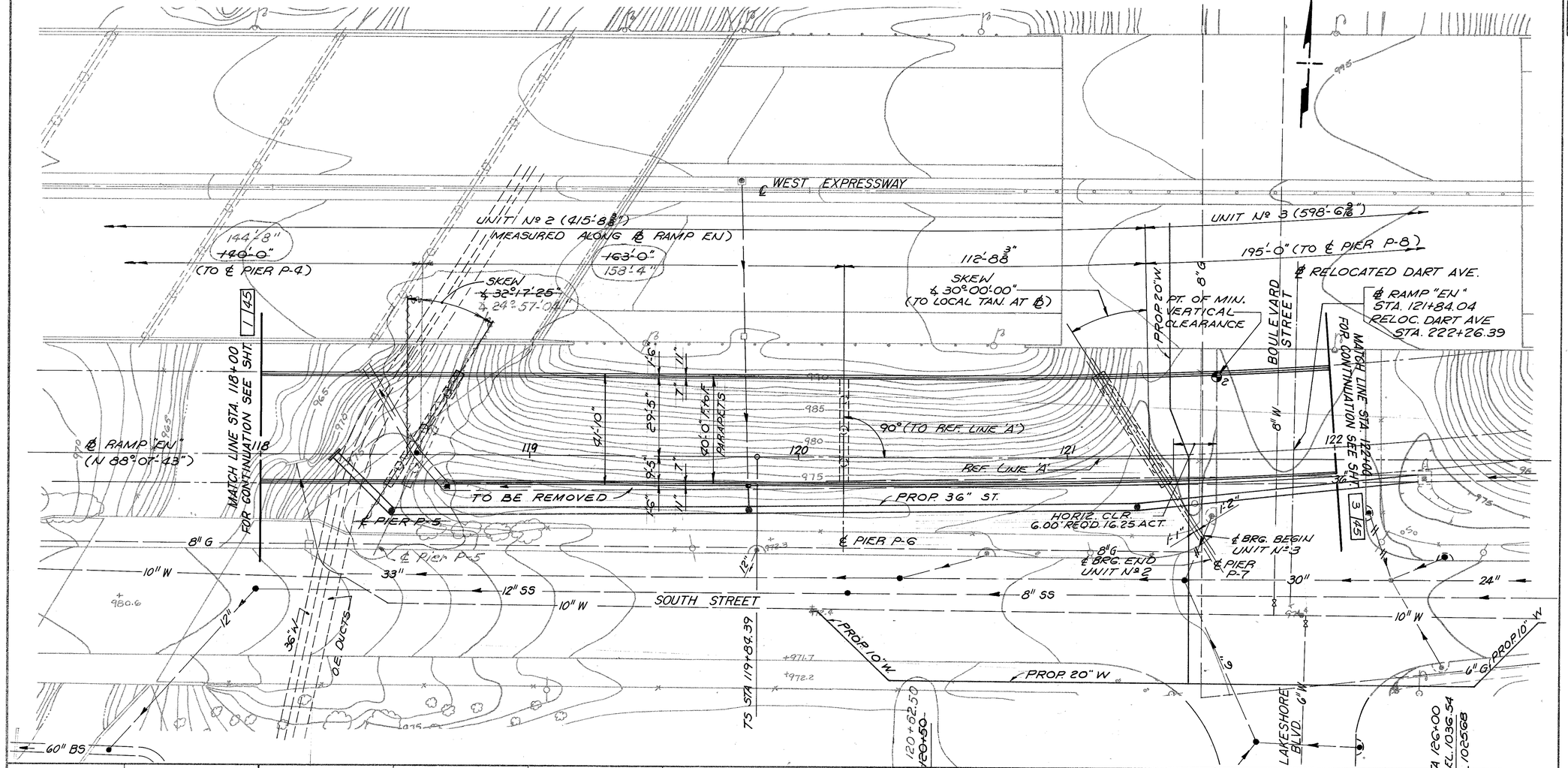
1020 / 1000 / 980 / 960

114 115 116 117 118

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

274
455

AKRON INNERBELT
SUM - 59 - 0.00




PROFILE ALONG ℄ RAMP "E.N"

FOR CURVE DATA (℄ RAMP "EN") SEE SHT. 1/45

PT. OF MIN. VERTICAL CLEAR
℄2 REQ'D. = 15.33' ACTUAL = 34.06'

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

2/45

# SITE PLAN

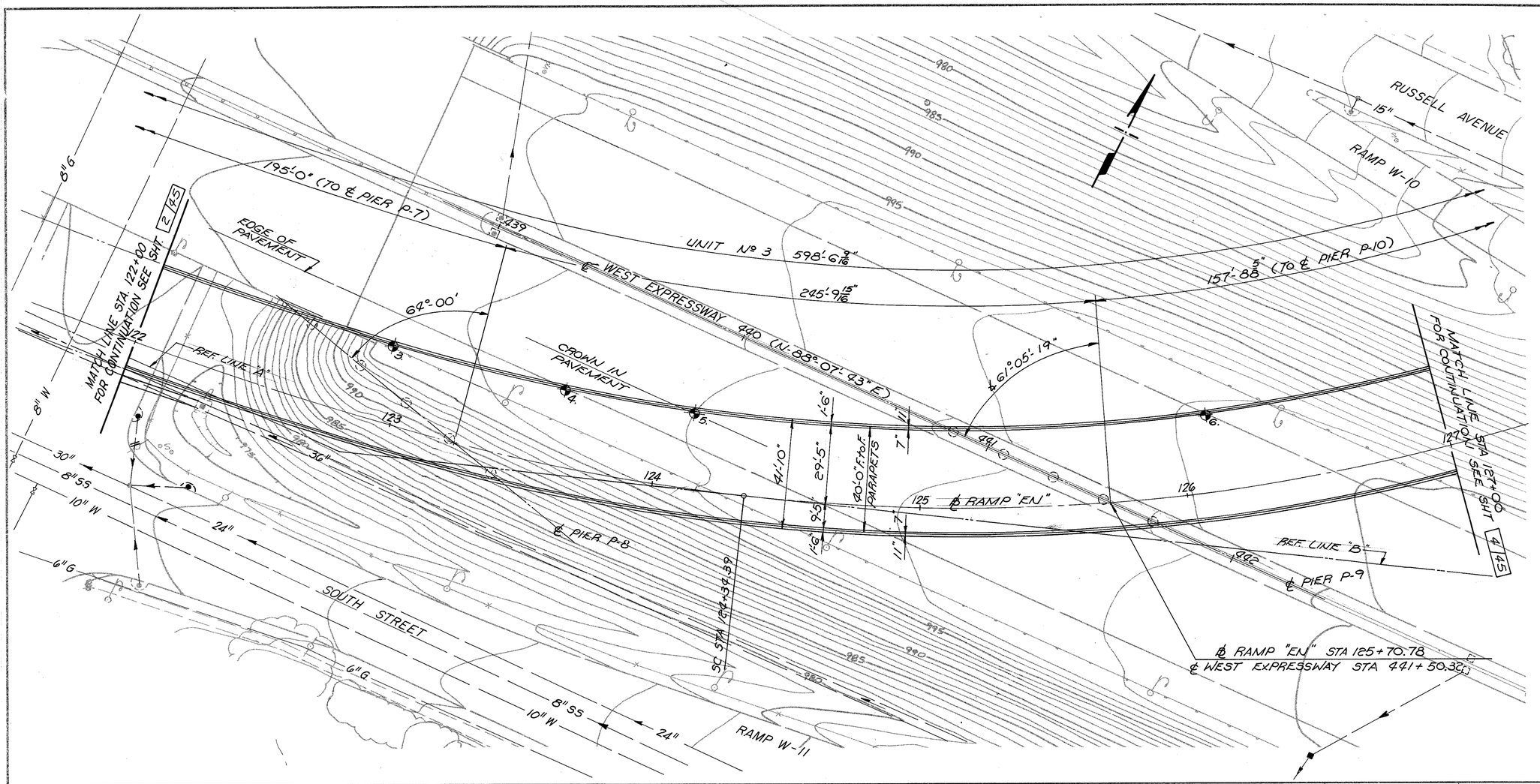
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

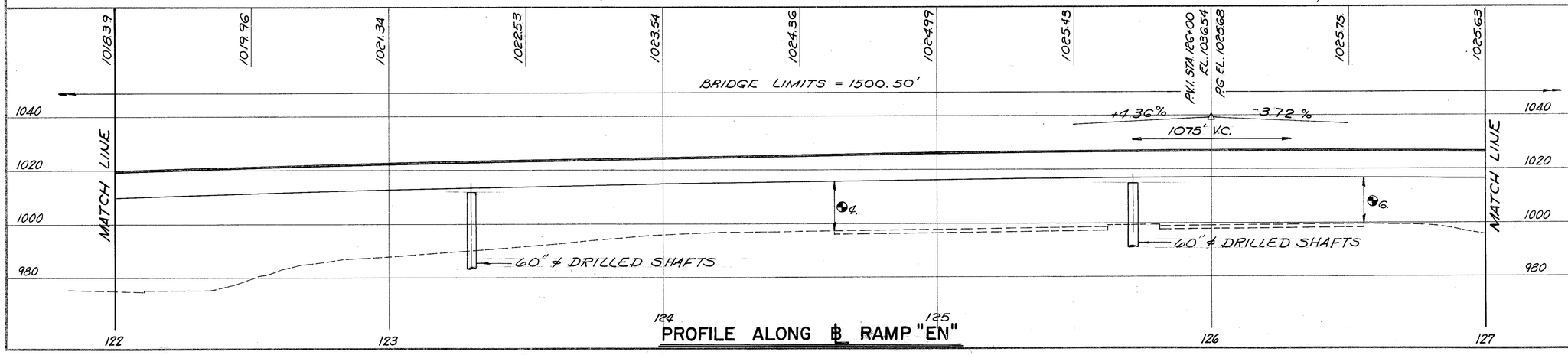
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | JWW | | A.L.H. | JGH | 12-0-82 | 2-4-83 |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

275
455

AKRON INNERBELT
SUM - 59 - 0.00




PROFILE ALONG ℄ RAMP "EN"

FOR CURVE DATA (℄ RAMP "EN")
SEE SHT. 1/45

PT. OF MIN. VERT. CLEARANCE

| | REQUIRED | ACTUAL |
|---|---|---|
| 3. | 15.33' | 15.54' |
| 4. | 15.33' | 15.97' |
| 5. | 15.33' | 16.19' |
| 6. | 15.33' | 16.21' |

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CLEVELAND OHIO AKRON, OHIO

3/45

## SITE PLAN

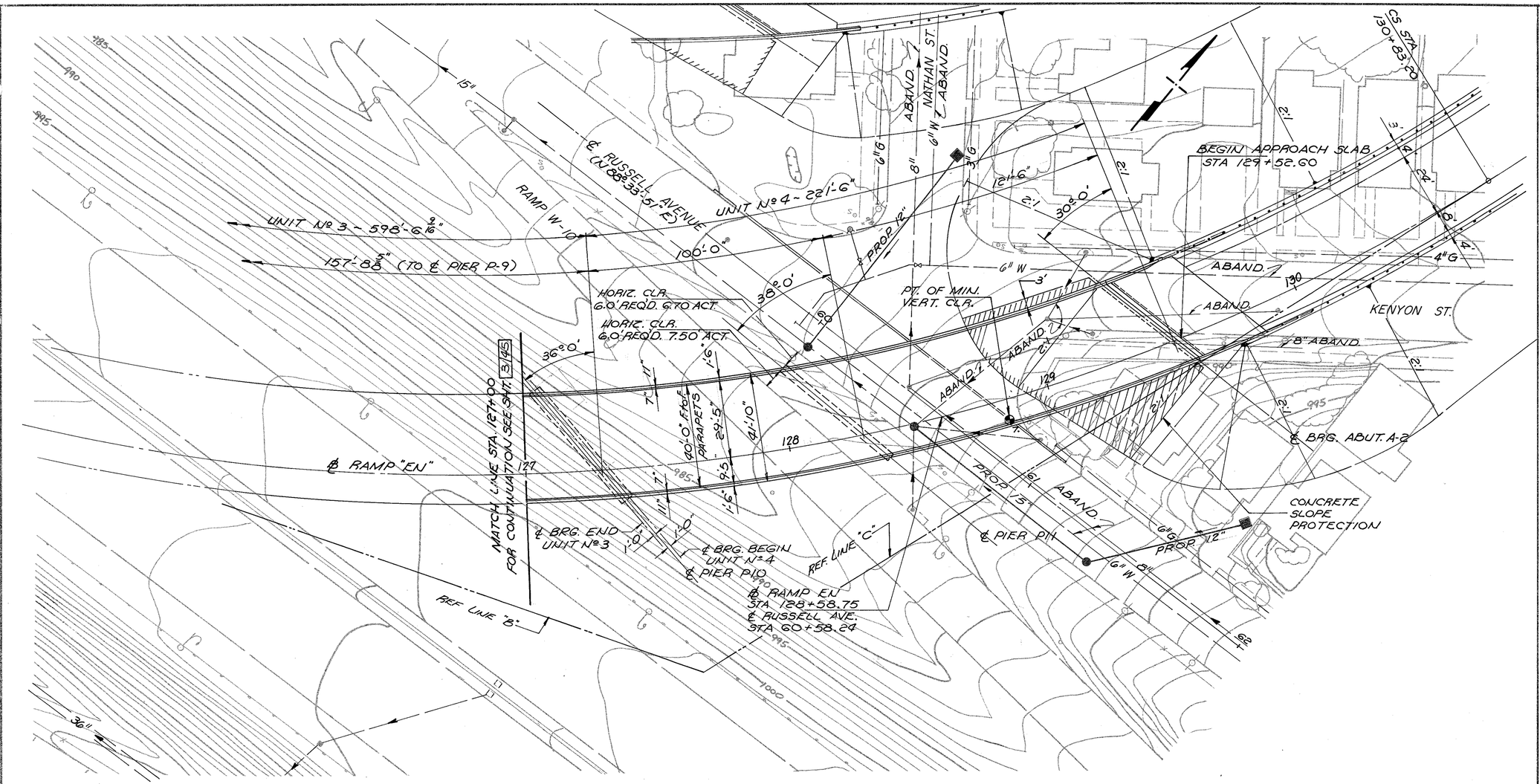
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA 114 + 52.10 TO STA. 129 + 52.60

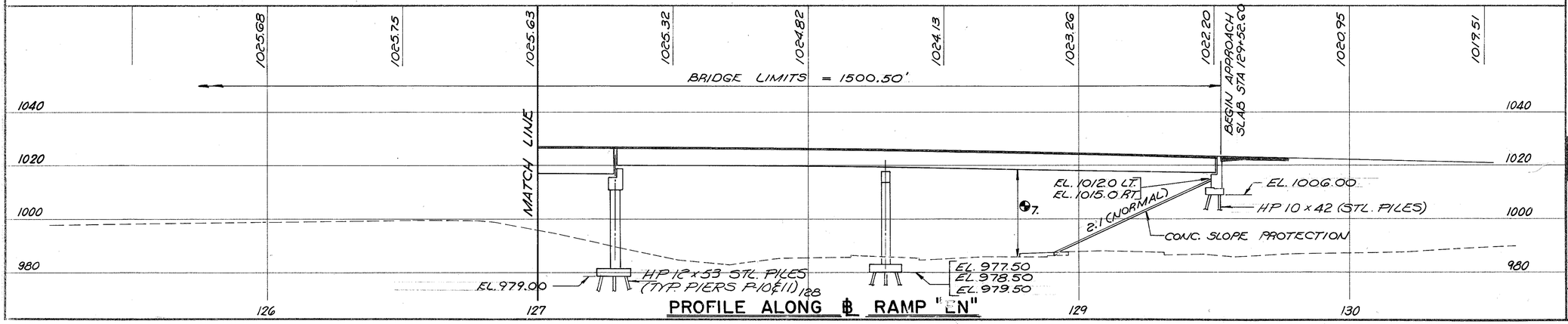
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | JWJ | | ALH | JGP | 12-2052 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

276
455

AKRON INNERBELT
SUM - 59 - 0.00




FOR CURVE DATA (℄ RAMP EN)
SEE SHT. 1 45

PT. OF MIN. VERTICAL CLEARANCE

| | REQ'D | ACTUAL |
|---|---|---|
| 7. | 15.33' | 31.74' |

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CLEVELAND, OHIO — AKRON, OHIO

4 45

## SITE PLAN

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | JWW | | AL H. | JBP | 12-20-72 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

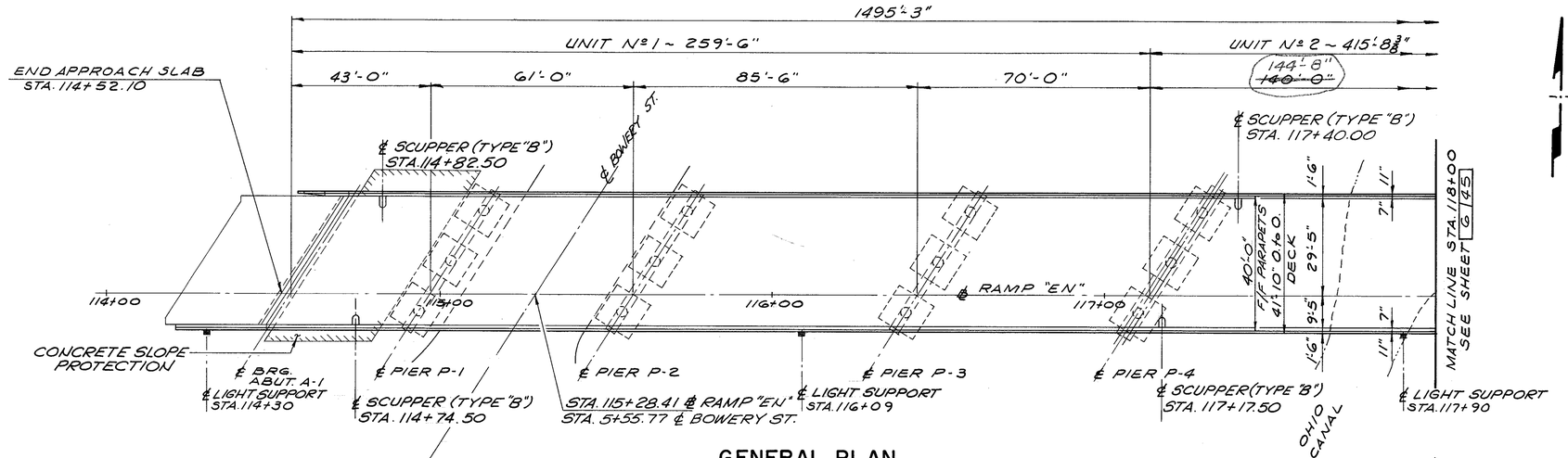
27/455

AKRON INNERBELT
SUM-59-0.00

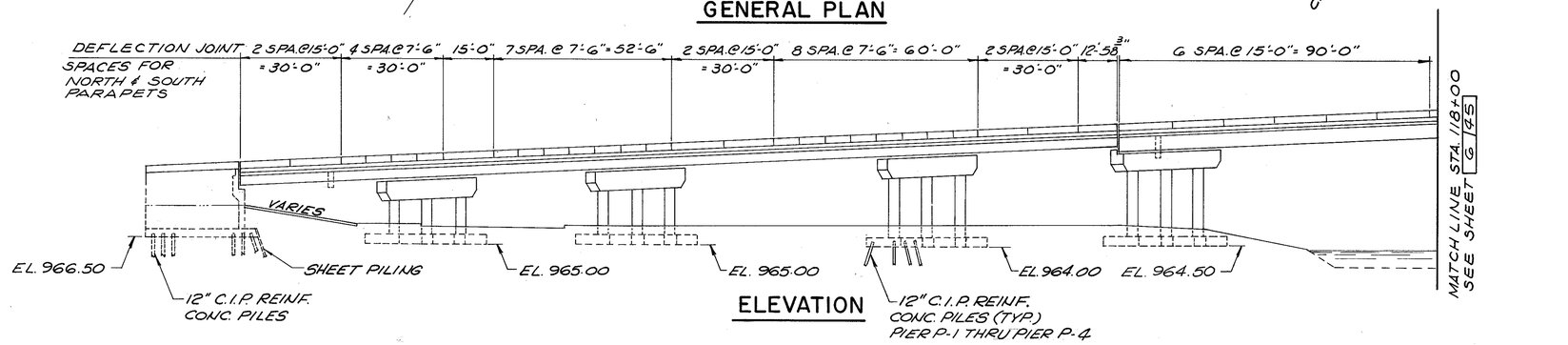
NOTE

(1) FOR TYPICAL PANEL ELEVATIONS SEE SHEET 8/45.

(2) FOR SCUPPER DETAILS AND LIGHT SUPPORT DETAILS SEE SHEET 261/455.




## GENERAL PLAN




## ELEVATION

## ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | PIER | GEN'L. |
|---|---|---|---|---|---|---|---|
| 503 | LUMP | LS | COFFERDAMS, CRIBS AND SHEETING | | | | LUMP |
| 503 | 2377 | CY | UNCLASSIFIED EXCAVATION | | 423 | 1954 | |
| 504 | 740 | SF | STEEL SHEET PILING (LEFT IN PLACE) | | 740 | | |
| | | | (MIN. SEC. MOD. 7.0 $IN^3$ PER FT. OF FTG.) | | | | |
| 505 | LUMP | LS | PILE DRIVING EQUIPMENT MOBILIZATION | | | | LUMP |
| | | | | | | | |
| 506 | LUMP | LS | STATIC LOAD TEST (12" C.I.P.) | | | | LUMP |
| 506 | LUMP | LS | STATIC LOAD TEST (HP 12x53) | | | | LUMP |
| 506 | 1 | EA. | SUBSEQUENT STATIC LOAD TEST (12" C.I.P.) | | | 1 | |
| 507 | 900 | LF | STEEL PILES, HP 10x42 | | 900 | | |
| 507 | 60 | LF | PREBORED HOLES, AS PER PLAN | | 60 | | |
| 507 | 12610 | LF | 12" DIA. C.I.P., REINF. CONCRETE PILES | | 1400 | 11210 | |
| 507 | 1935 | LF | STEEL PILES, HP 12x53 (*) | | | 1935 | |
| SPEC. | 711 | LF | 60" DIA. DRILLED SHAFTS (SOIL) (***) | | | 711 | |
| | | | | | | | |
| | | | | | | | |
| 509 | 470710 | LB. | REINFORCING STEEL (GRADE 60) | 207947 | 20935 | 241828 | |
| 824 | 339150 | LB. | EPOXY COATED REINF. STL. GRADE 60 | 336540 | 2610 | | |
| | | | -483 | | | | |
| 511 | 1924 | CY | CLASS "S" CONCRETE, SUPERSTRUCTURE (*) | 1924 | | (483) | |
| 511 | ~~613~~ | CY | CLASS "C" CONCRETE, PIERS ABOVE FTGS. | | | ~~613~~ | |
| 511 | 175 | CY | CLASS "C" CONCRETE, ABUTS. ABOVE FTGS. | | 175 | | |
| 511 | 865 | CY | CLASS "C" CONCRETE, FOOTINGS | | 168 | 697 | |

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | PIER | GEN'L. |
|---|---|---|---|---|---|---|---|
| 512 | 5 | SY | TYPE "B" WATERPROOFING | | 5 | | |
| 513 | 17660 | EA. | WELDED STUD SHEAR CONNECTORS (*) | 17660 | | | |
| 513 | 2562610 | LB. | STRUCTURAL STEEL (A-588) AISC CATEGORY III (**) | 2562610 | | | |
| 513 | 88375 | LB. | STRUCTURAL STEEL (A-36) CURB PLATES GALVANIZED (AISC CERT. NOT REQUIRED) | 88375 | | | |
| 518 | 101 | CY | POROUS BACKFILL | | 101 | | |
| 518 | 19.50 | LF | 6" NON-PERF. HELICAL C.S.P. INCLUD. SPEC., 707.01 | | 19.50 | | |
| 518 | 41.75 | LF | 6" PERFORATED HELICAL C.S.P. 707.01 | | 41.75 | | |
| 518 | 13 | EA. | SCUPPERS, INCLUDING SUPPORTS | 13 | | | |
| | | | | | | | |
| 523 | 9 | HOUR | DYNAMIC LOAD TEST (12" C.I.P.) | | | | 9 |
| 523 | 3 | HOUR | DYNAMIC LOAD TEST (HP 12x53) | | | | 3 |
| 601 | 662 | SY | CONCRETE SLOPE PROTECTION | | 662 | | |
| 625 | | | SEE LIGHTING SUMMARY SHEET | | | | |
| 845 | 6350 | SY | LATEX MODIFIED CONC. OVERLAY (1¼" THK.) (*) | 6350 | | | |
| | | | | | | | |
| SPEC. | 4006 | SY | SEALING OF CONCRETE SURFACES (*) | 2020 | 230 | 1756 | |
| 516 | 93.70 | LF | MODULAR EXPN. JT. DEVICE (TYPE "A") (**) | 93.70 | | | |
| 516 | 47.32 | LF | MODULAR EXPN. JT. DEVICE (TYPE "B") (**) | 47.32 | | | |
| 516 | 96.09 | LF | MODULAR EXPN. JT. DEVICE (TYPE "C") (**) | 96.09 | | | |
| 516 | 35 | EA. | SPHERICAL BEARINGS (***) | | 5 | 30 | |

(*) SEE PROPOSAL NOTE
(**) AS PER PLAN
(***) SEE SPECIAL PROVISIONS

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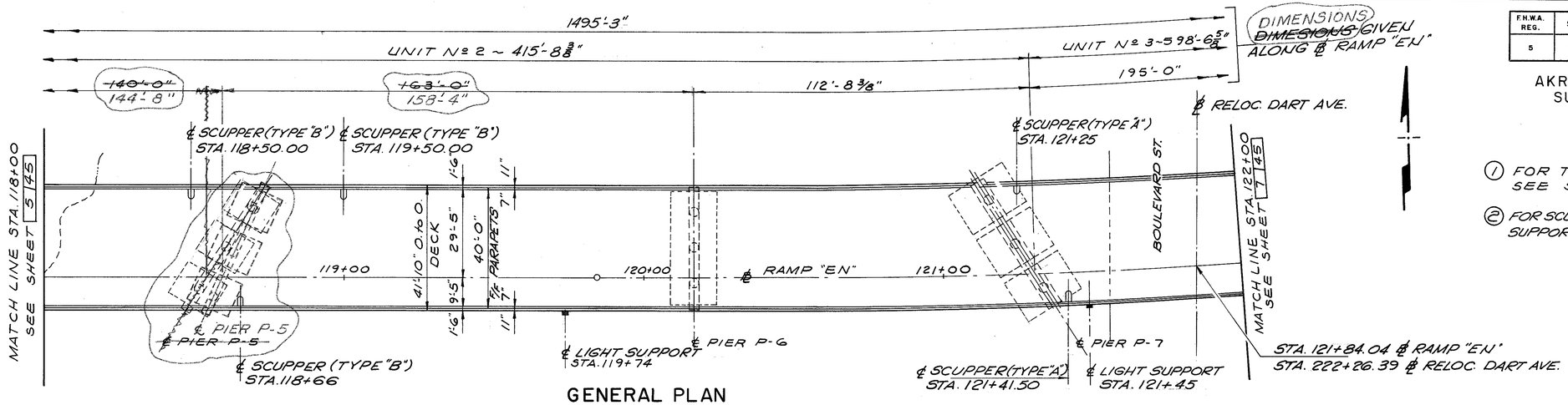
CLEVELAND, OHIO — AKRON, OHIO

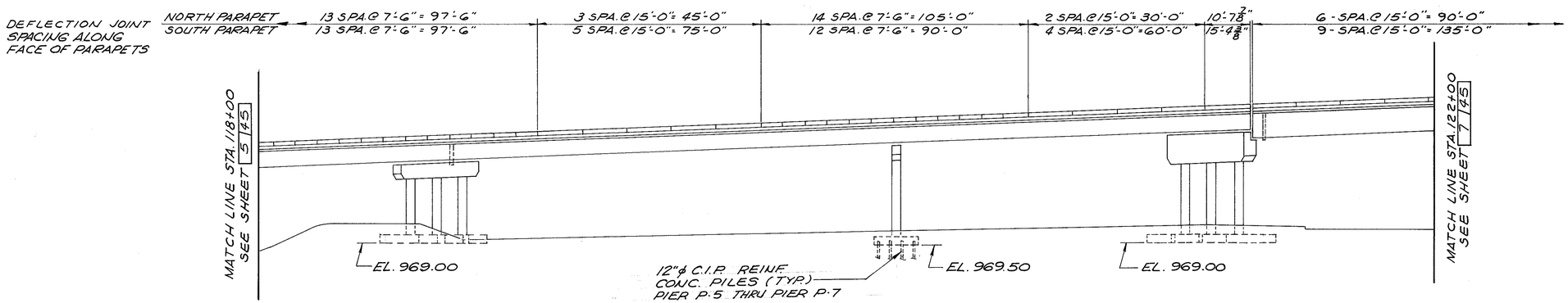
GENERAL PLAN & ELEVATION AND ESTIMATED QUANTITIES 5/45

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| R.L.F. | F.F. | | J.W.W. A.L.H. | | 12-20-84 | 2-4-85 |




## GENERAL PLAN




## ELEVATION

NOTE

(1) FOR TYPICAL PANEL ELEVATIONS SEE SHEET 8/45.

(2) FOR SCUPPER DETAILS AND LIGHT SUPPORT DETAILS SEE SHEET 20/455

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

278/455

AKRON INNERBELT
SUM-59-0.00

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CLEVELAND, OHIO — AKRON, OHIO

# GENERAL PLAN AND ELEVATION

6/45

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE

BR. NO. SUM-59-0000

AKRON OHIO — SUMMIT COUNTY

STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | F.F. | | DWW ALH | JGP | 12-20-84 | 2-4-85 |

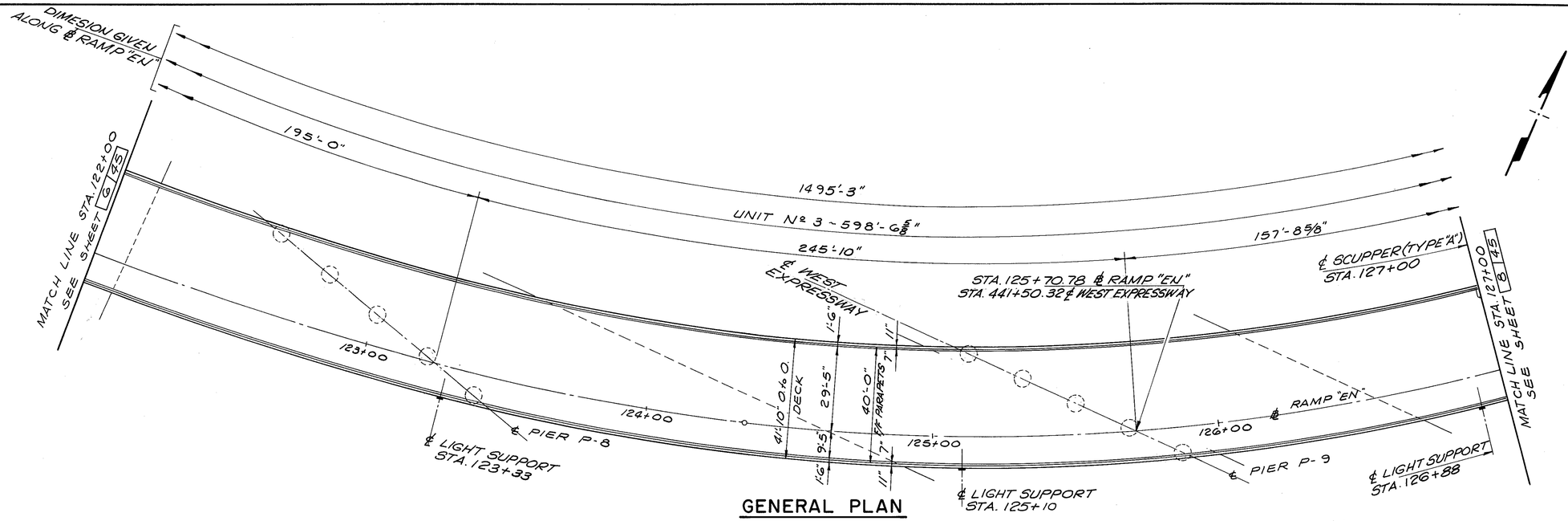
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

279/455

AKRON INNERBELT
SUM-59-0.00

NOTES

1. FOR TYPICAL PANEL ELEVATIONS SEE SHEET 8/45.
2. FOR SCUPPER DETAILS AND LIGHT SUPPORT DETAILS SEE SHEET 261/455

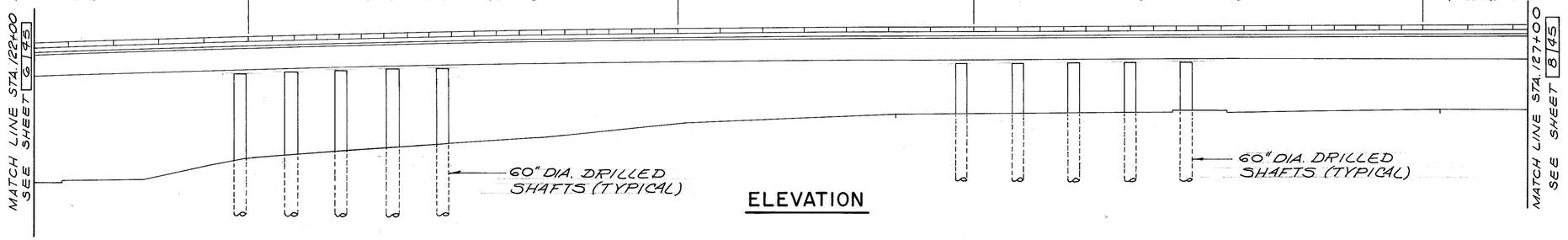



## GENERAL PLAN

NORTH PARAPET: 6-SPA.@15'-0" = 90'-0" | 16-SPA.@7'-6" = 120'-0" | 7-SPA.@15'-0" = 105'-0" | 19-SPA.@7'-6" = 142'-6" | 7-SPA.@15'-0" = 105'-0"

SOUTH PARAPET: 9-SPA.@15'-0" = 135'-0" | 19-SPA.@7'-6" = 142'-6" | 7-SPA.@15'-0" = 105'-0" | 20-SPA.@7'-6" = 150'-0" | 4-SPA.@15'-0" = 60'-0"

DEFLECTION JOINT SPACING ALONG FACE OF PARAPET




## ELEVATION

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7/45

# GENERAL PLAN AND ELEVATION

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE

BR. NO. SUM-59-0000

AKRON OHIO — SUMMIT COUNTY

STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | F.F. | | RLH JWW | JGF | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

280/455

AKRON INNERBELT
SUM-59-0.00

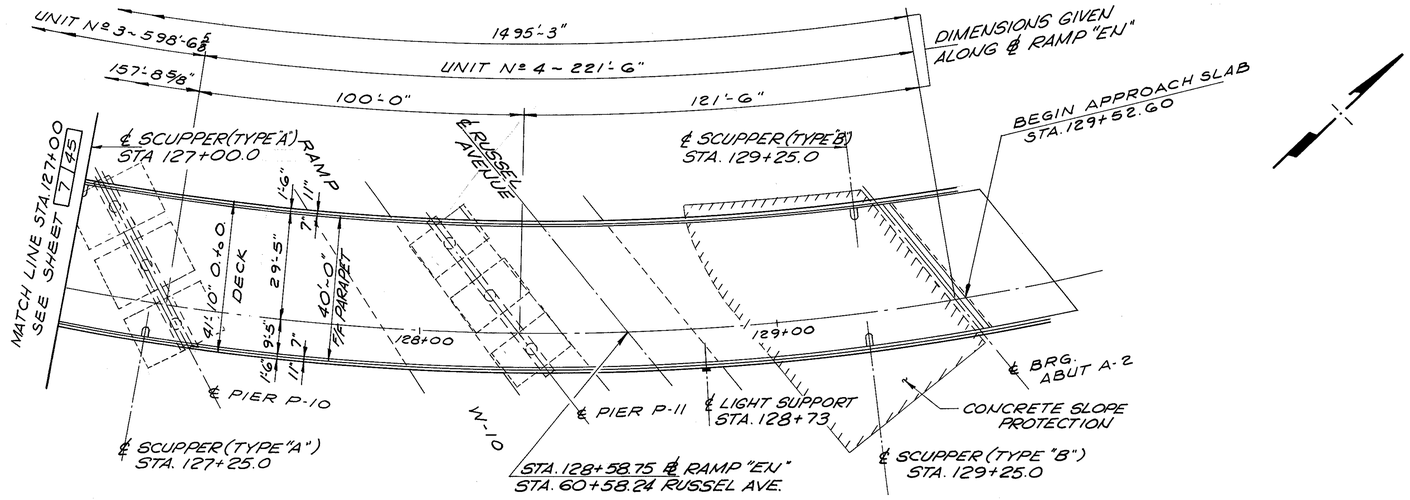
## NOTES

(1) * INDICATES REINFORCING BARS TO BE EPOXY COATED.

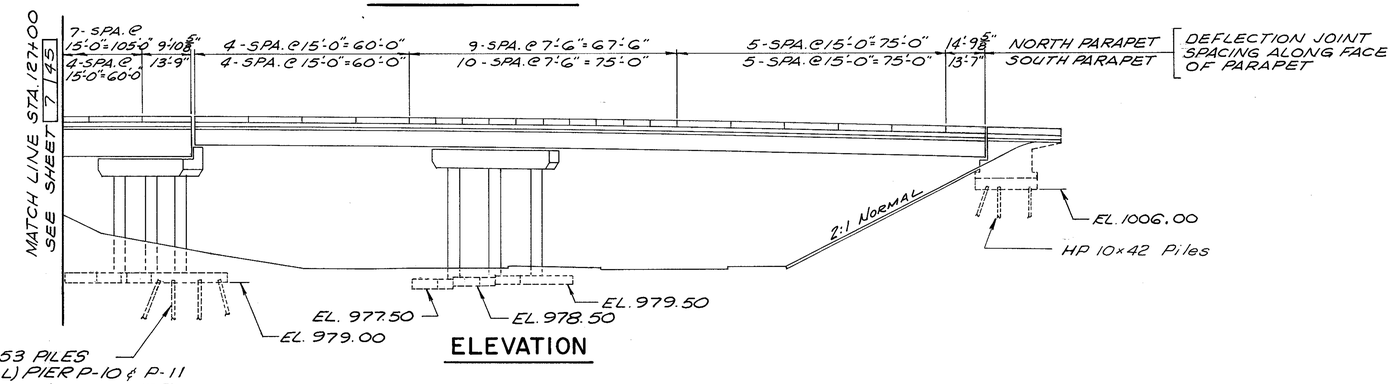
(2) THE PREFIX TO BE ADDED TO ALL REINFORCING BAR MARKS SHOWN ON THIS SHEET ARE AS FOLLOWS:

1S FOR UNIT # 1
2S FOR UNIT # 2
3S FOR UNIT # 3
4S FOR UNIT # 4

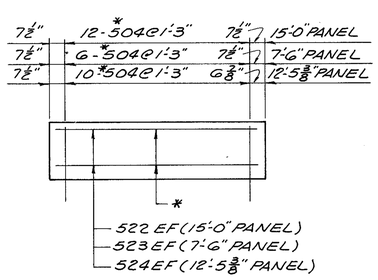
(3) FOR SCUPPER DETAILS AND LIGHT SUPPORT DETAILS SEE SHEET 261/455



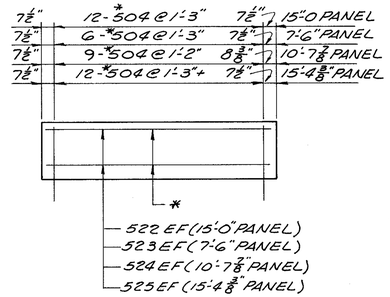

## GENERAL PLAN



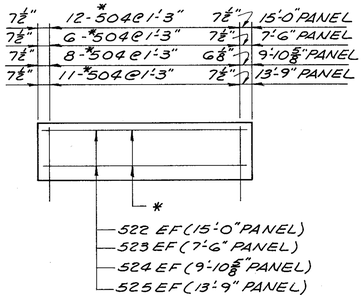

## ELEVATION



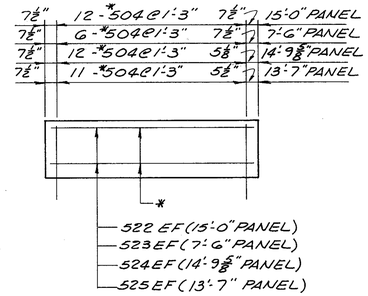

## UNIT #1




## UNIT #2




## UNIT #3




## UNIT #4

## TYPICAL PANEL ELEVATIONS

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# GENERAL PLAN AND ELEVATION

8/45

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | ALH JWW | JOP | 12-20-82 | |

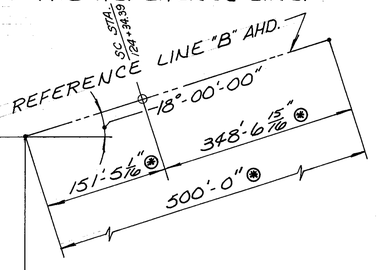
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

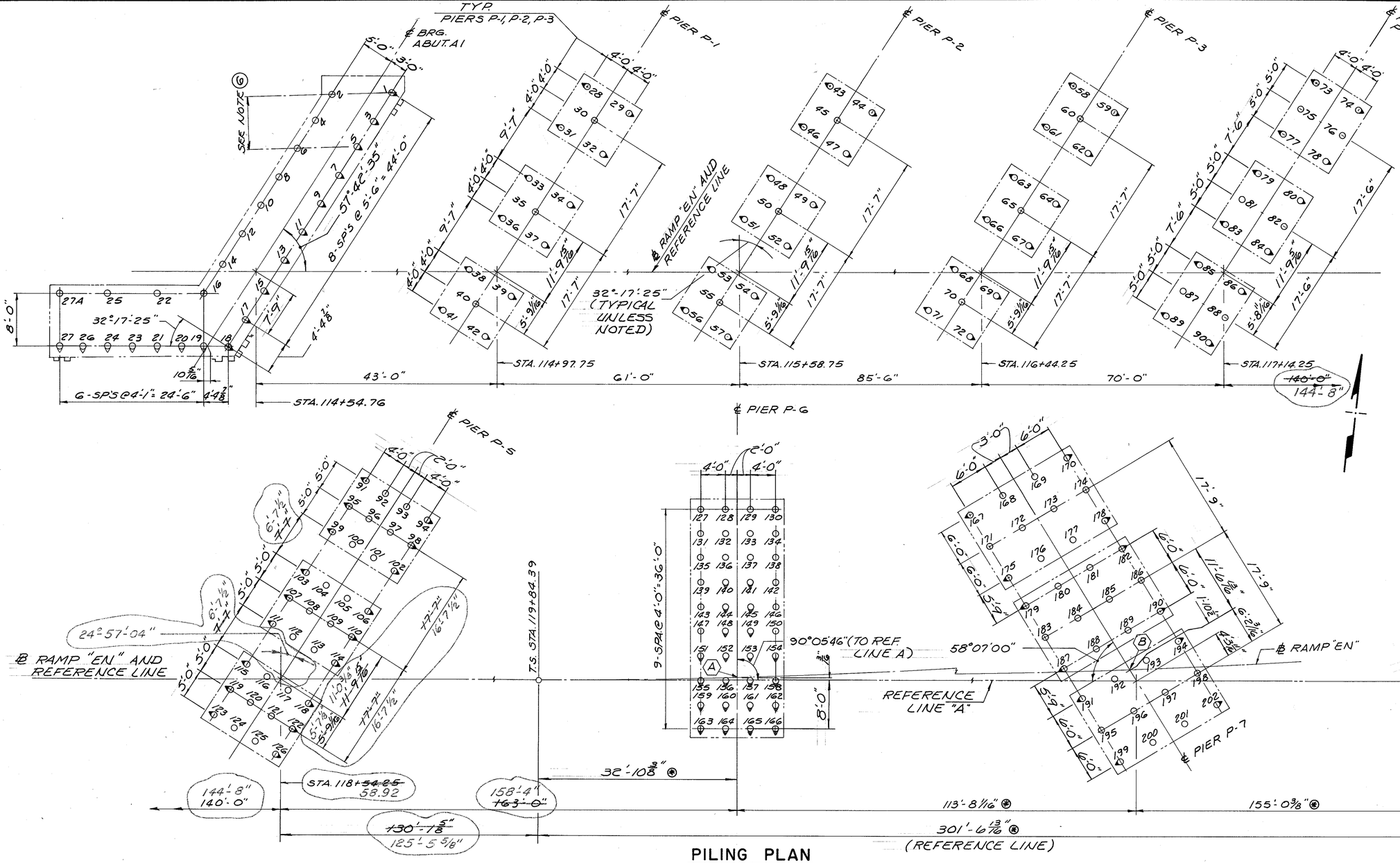
281/455

AKRON INNERBELT
SUM - 59 - 0.00

## NOTES

1. PILES SHOWN THUS ⊖ SHALL BE BATTERED 1:3 IN THE DIRECTION SHOWN.
2. PILES SHOWN THUS ⊖ ↥ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
3. THE 12" CAST-IN-PLACE REINFORCED CONCRETE PILES HAVE A DESIGN LOAD OF 47.5 TONS PER PILE FOR ABUTMENT PILES AND 50 TONS PER PILE FOR PIER PILES.
4. FOR PILE CUT-OFF ELEVATIONS AND ESTIMATED PILE LENGTHS SEE PILE TABLE.
5. STEEL HP 12×53 AND HP10×42 PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE CONSIDERED AS OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR REFUSAL SHALL BE CONSIDERED AS OBTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS. THE DESIGN LOAD IS 50 TONS PER PILE FOR ABUT. PILES AND 70 TONS PER PILE FOR PIER PILES.
6. PILES 1 THRU 6 SHALL BE PREBORED AS PER ITEM-507 "PREBORED HOLES (AS PER PLAN)" SEE GENERAL NOTES SHEET 258/455
7. ⊛ DENOTES DIMENSIONS SHOWN ARE MEASURED ALONG THE REFERENCE LINE.




## PILING PLAN

INDICATES SHEET PILING. SEE ABUT. A-1 DETAILS SHEET 12/45 & 13/45 FOR REQUIRED SECTION MODULUS AND LENGTH.

FOR ADDITIONAL GEOMETRIC LAYOUT DATA SEE SHEETS 260/455, 6/455 AND 7/455

STATIONS
- (A) STA. 120+17.26
- (B) STA. 121+29.95

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9/45

# PILING PLAN

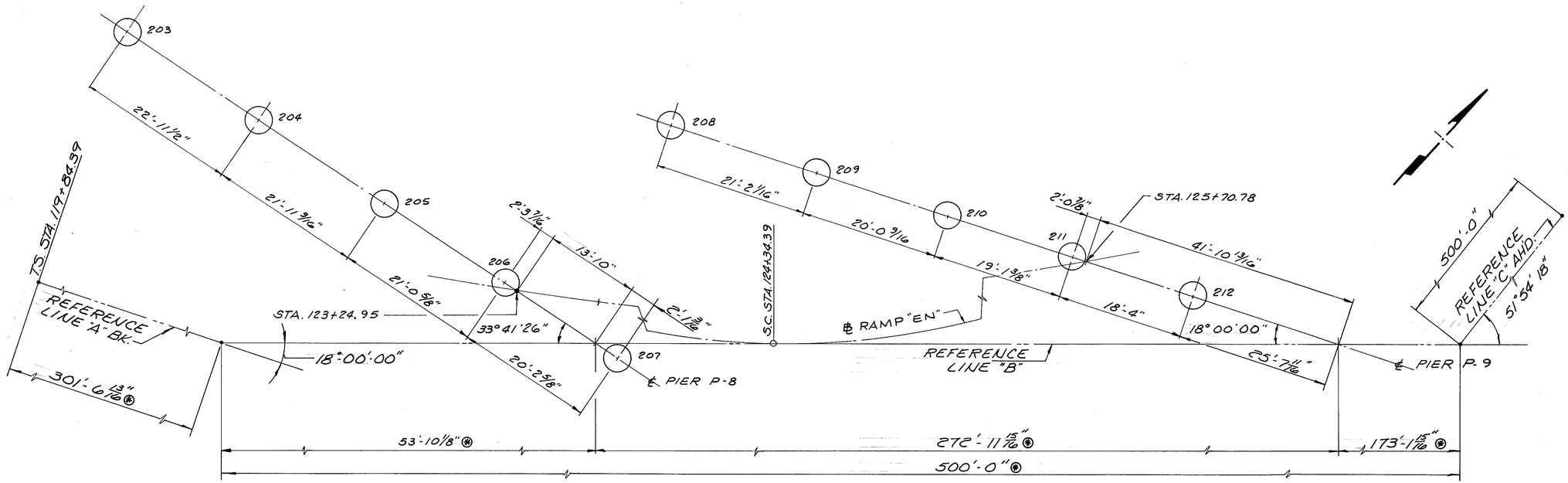
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | JWW | JGP | 12-20-82 | 2-4-85 |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

282/455

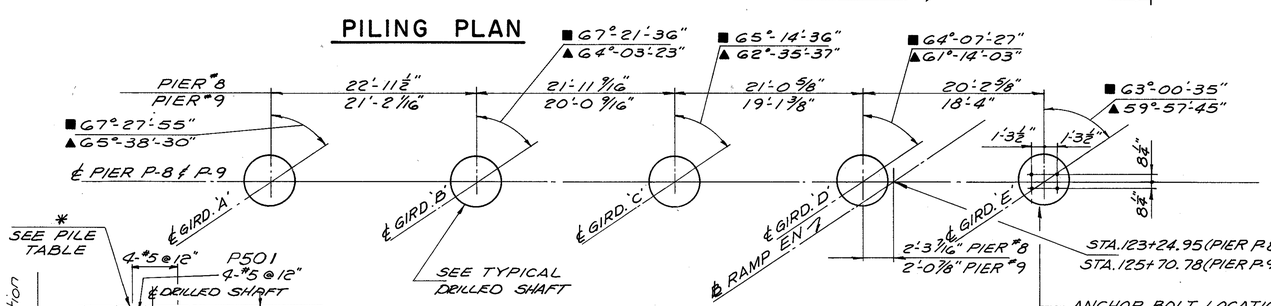
AKRON INNERBELT
SUM-59-0.00




## PILE TABLE

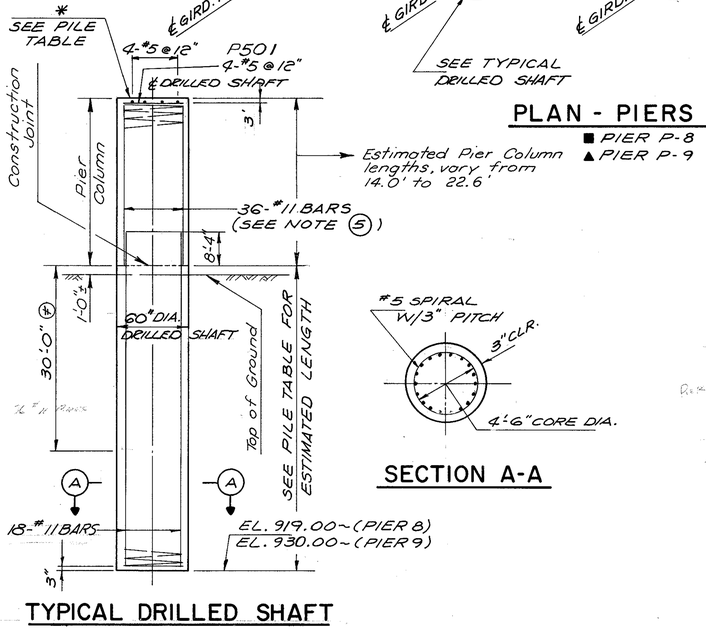
| SUBSTRUCTURE UNIT | PILE NUMBER | PILE TYPE | CUT-OFF ELEVATION | ESTIMATED LENGTH |
|---|---|---|---|---|
| ABUT. A-1 | 1-5 | 12"C.I.P. R.C.P. | 974.50 | 50' |
| ABUT. A-1 | 6-11 | 12"C.I.P. R.C.P. | 971.50 | 50' |
| ABUT. A-1 | 12 THRU 27 & 27A | 12"C.I.P. R.C.P. | 968.50 | 50' |
| PIER P-1 | 28-42 | 12"C.I.P. R.C.P. | 967.00 | 50' |
| PIER P-2 | 43-57 | 12"C.I.P. R.C.P. | 967.00 | 50' |
| PIER P-3 | 58-72 | 12"C.I.P. R.C.P. | 966.00 | 50' |
| PIER P-4 | 73-90 | 12"C.I.P. R.C.P. | 966.50 | 50' |
| PIER P-5 | 91-126 | 12"C.I.P. R.C.P. | 971.00 | 70' |
| PIER P-6 | 127-166 | 12"C.I.P. R.C.P. | 971.50 | 80' |
| PIER P-7 | 167-202 | 12"C.I.P. R.C.P. | 971.00 | 65' |
| PIER P-8 | 203 | 60"DRILLED SHAFTS | 1009.53 * | 68' |
| PIER P-8 | 204 | | 1010.47 * | 75' |
| PIER P-8 | 205 | | 1011.38 * | 74' |
| PIER P-8 | 206 | | 1012.27 * | 73' |
| PIER P-8 | 207 | | 1012.64 * | 71' |
| PIER P-9 | 208 | | 1013.92 * | 70' |
| PIER P-9 | 209 | | 1014.62 * | 70' |
| PIER P-9 | 210 | | 1015.29 * | 70' |
| PIER P-9 | 211 | | 1015.92 * | 70' |
| PIER P-9 | 212 | 60"DRILLED SHAFTS | 1015.99 * | 70' |
| PIER P-10 | 213-248 | HP 12x53 | 981.00 | 35' |
| PIER P-11 | 249-257 | HP 12x53 | 979.50 | 25' |
| PIER P-11 | 258-266 | HP 12x53 | 980.50 | 25' |
| PIER P-11 | 267-275 | HP 12x53 | 981.50 | 25' |
| ABUT. A-2 | 276-293 | HP 10x42 | 1008.00 | 50' |

## PILING PLAN




## PLAN - PIERS P-8 & P-9

■ PIER P-8
▲ PIER P-9




## TYPICAL DRILLED SHAFT




## SECTION A-A

ESTIMATED TOP ELEVATION OF DRILLED SHAFTS 1'-0"± ABOVE GROUND.

| NUMBER | TOP ELEVATION |
|---|---|
| 203 | 987 |
| 204 | 994 |
| 205 | 993 |
| 206 | 992 |
| 207 | 990 |
| 208-212 | 1000 |

## NOTES

1 CONCRETE AND REINFORCING STEEL INSIDE DRILLED SHAFTS TO BE INCLUDED WITH ITEM-SPECIAL "60" DIAMETER DRILLED SHAFTS FOR PAYMENT.

2 THE DESIGN LOAD FOR 60" DIAMETER DRILLED SHAFTS IS 300 TONS.

3 ■ ▲ SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF THE CURVED GIRDER INTERSECTING THE ℄ BEARING.

4 SEE SPECIAL PROVISIONS FOR SPECIFICATION OF THE 60" DIAMETER DRILLED SHAFTS AND THE MECHANICAL CONNECTORS.

5 CONTRACTOR MAY USE APPROVED MECHANICAL CONNECTORS AT LOCATIONS APPROVED BY THE ENGINEER STAGGER CONNECTIONS BY 2'-0" MINIMUM FOR ALTERNATE BARS. LAP LENGTH FOR THE #11 BARS IS 8'-4" MIN.

6 THE ANCHOR BOLTS FOR BEARINGS PLACED ON TOP OF DRILLED SHAFTS SHALL BE PRESET.

7 SPACE REINFORCING WITHIN THE LAP SPLICES OF THE 60"Ø DRILLED SHAFTS TO PROVIDE 2½" MIN. CLEARANCE BETWEEN BARS.

8 ⊛ DENOTES DIMENSIONS SHOWN ARE MEASURED ALONG THE REFERENCE LINE. FOR ADDITIONAL GEOMETRIC LAYOUT DATA SEE SHEETS 260/455, 6/455 AND 7/455

9 Ⓕ THE TOP 30 FEET OF EACH DRILLED SHAFT IS REINFORCED WITH 36 - #11 BARS AND THE REMAINDER OF THE DRILLED SHAFT IS REINFORCED WITH 18 - #11 BARS.

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CLEVELAND, OHIO — AKRON, OHIO

10/45

# PILING PLAN

PIER P-8 & P-9
DRILLED SHAFTS
DETAILS

BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | F.F. | | JJW | JJW | 12-20-82 | |

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

282A
455

AKRON INNERBELT
SUM-59-0.00

# INSPECTION RECORD FOR DRILLED SHAFTS

BRIDGE NO. _____
LOCATION _____
PROJECT NO. _____

GENERAL CONTRACTOR _____
DRILLING CONTRACTOR _____
PROJECT ENGINEER _____

TYPE & MODEL OF DRILLING MACHINERY _____
MAX. CONTINUOUS TORQUE _____ FT.-LB.
CROWD (MAX. CONTINUOUS DOWNWARD FORCE) _____ LBS.

TYPE OF CONCRETE PUMP _____
HOSE DIAMETER _____ INCHES
CAPACITY _____ CU.FT./MIN.

COST PER LINEAL FOOT
ABUT. DRILLED SHAFTS _____
RETAINING WALL DRILLED SHAFTS _____

| SUBSTRUCTURE | | DATE AND TIME OF DRILLING | | APPROX. ELEVATION OF TOP OF OVER BURDEN | LENGTH OF DRILLED SHAFTS | | | | OBSTRUCTIONS ENCOUNTERED | | BEDROCK | | | LENGTH OF CASING (FEET) | CASING GUAGE | REINFORCING STEEL | | | | CONCRETE | | | | | RESULTS OF PROOF TESTING | TOLERENCES (INCH) | | | SHAFT DIA. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | VERTICAL | | SPIRAL | | | | | | | | DEVIATION FROM PLUMB OR PLAN BATTER | | DEVIATION OF COLUMN TOP CENTER FROM PLAN LOCATION HORIZONTALLY | | |
| PIER | NUMBER | STARTED | FINISHED | | EMBEDDED IN FOOTING | THROUGH OVER BURDEN | THROUGH BEDROCK | PAY LENGTH | NUMBER | SIZE (INCH.) | APPROX. ELEVATION OF TOP OF BEDROCK | APPROX. ELEV. OF BOTT. OF BEDROCK SOCKET | LENGTH OF BEDROCK SOCKET (FEET) | | | BAR SIZE NO. | NO. OF REBARS | BAR SIZE NO. | PITCH (INCH) | SLUMP TEST RESULT (INCH.) | CYLINDER STRENGTH $f'_c$ (P.S.I.) | AIR TEMP (F) | TIME NEEDED TO PLACE CONCRETE (HR.) | QUANTITY (CU. YD.) | | N-S | E-W | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

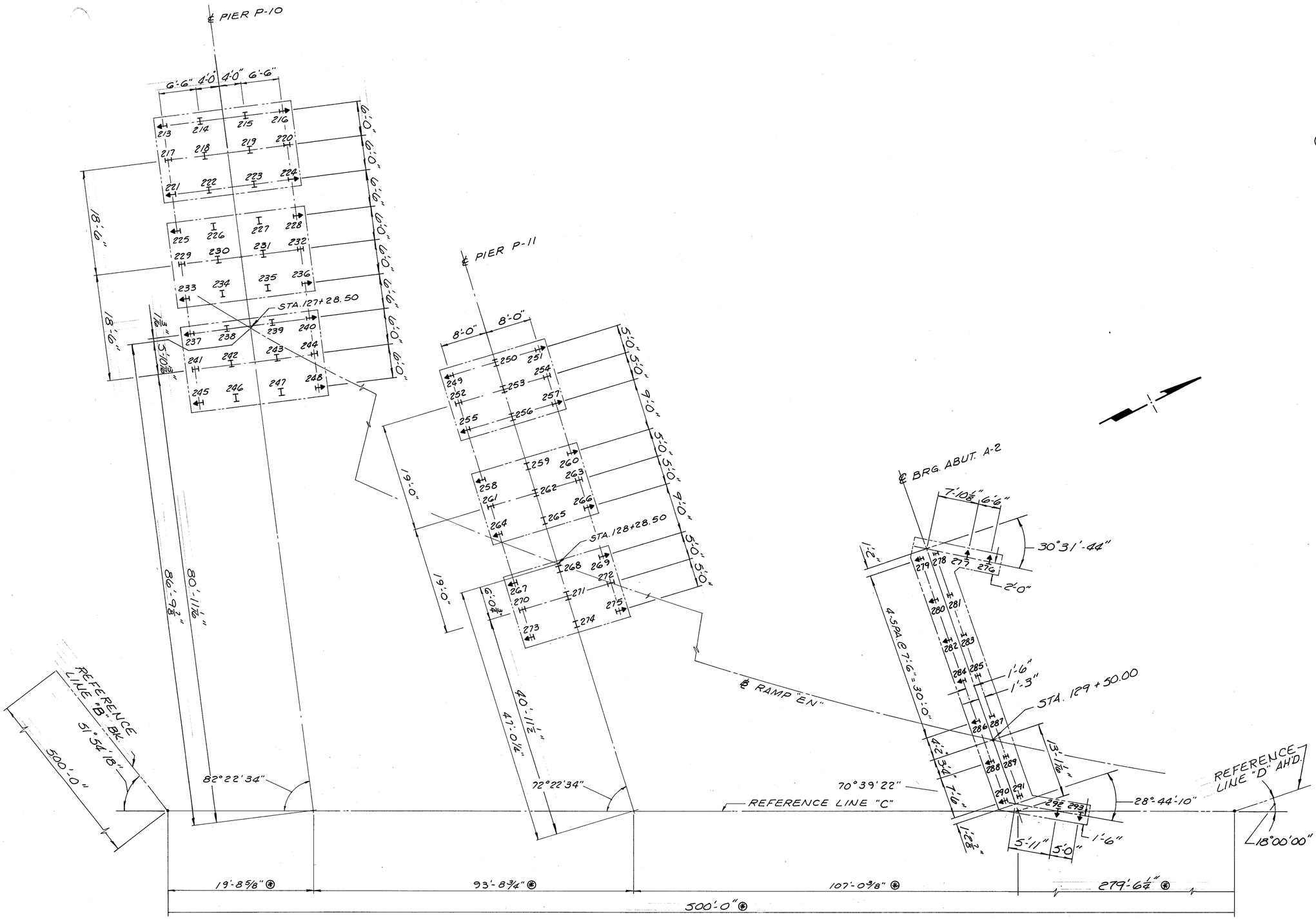
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

283
455

AKRON INNERBELT
SUM-59-0.00

## NOTES

(1) FOR NOTES SEE SHEET 9/45.




PILING PLAN

DALTON · DALTON · NEWPORT

CLEVELAND, OHIO — AKRON, OHIO

11/45

# PILING PLAN

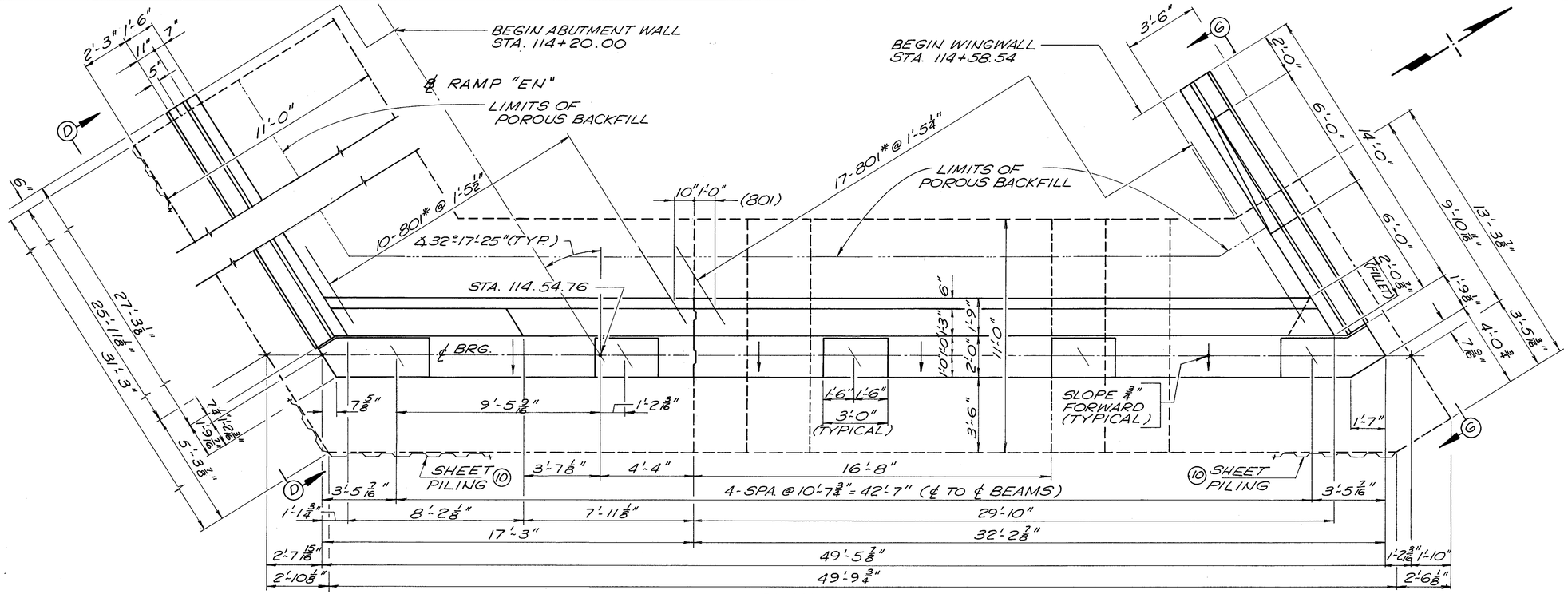
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | F.F. | | JWW | JSP | 12-20-92 | |

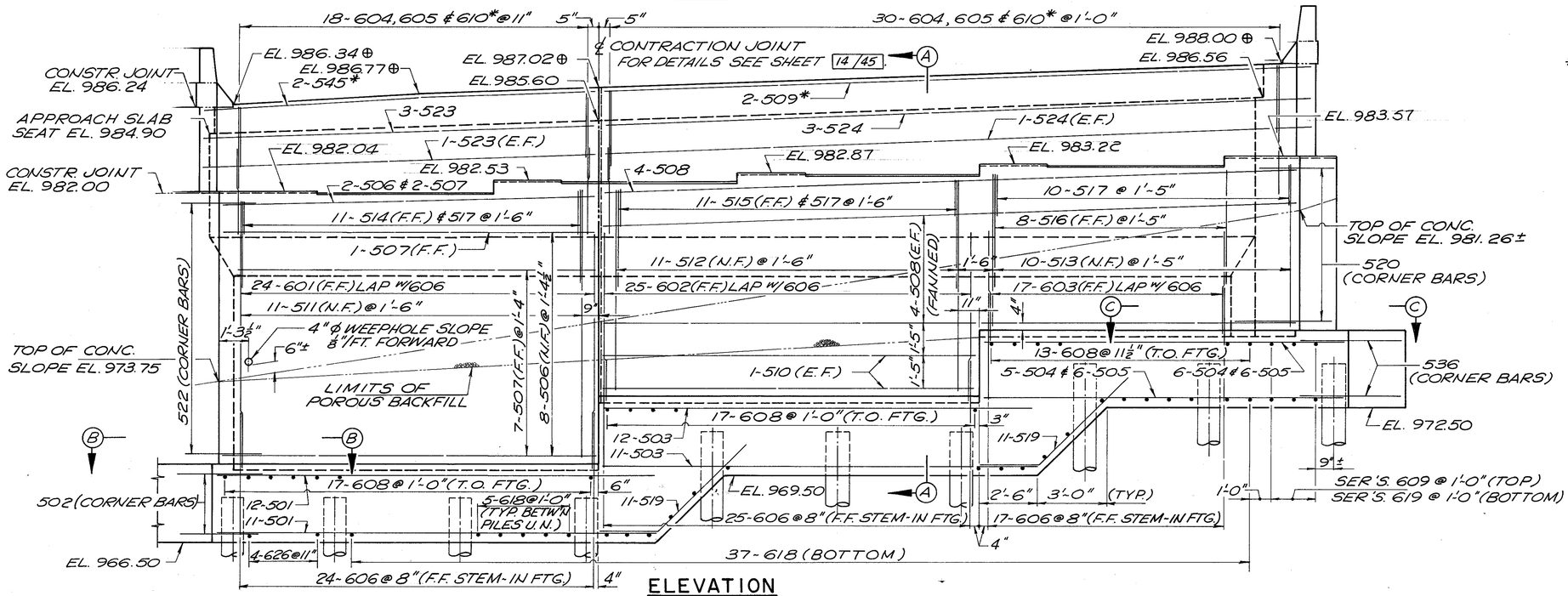
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

284/455

AKRON INNERBELT
SUM-59-0.00




PLAN




ELEVATION

## NOTES

(1) ABBREVIATIONS USED ARE:
N.F. - NEAR FACE
F.F. - FAR FACE
E.F. - EACH FACE
FTG. - FOOTING

(2) BACKWALL ELEVATIONS SHOWN THUS "⊕" ARE GIVEN AS FINAL PAVEMENT ELEVATIONS AT THE FRONT FACE OF THE BACKWALL. SEE DETAIL "X" SHEET 14/45.

(3) THE PREFIX "1A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT UNLESS SHOWN OTHERWISE.

(4) POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WINGS SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WINGWALLS.

(5) FOR PILING PLAN SEE SHEET 9/45.

(6) FOR SECTIONS "A-A", "C-C" & VIEW "G-G" SEE SHT. 14/45, FOR VIEWS "D-D" & SECTION "B-B" SEE SHT. 13/45.

(7) BACKWALL CONCRETE:
IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

* (8) ALL REINFORCING BARS SHOWN THUS "*" ARE EPOXY COATED.

(9) FOR SPECIAL EMBANKMENT NOTES SEE STRUCTURAL GENERAL NOTES.

(10) SHEET PILING LEFT IN PLACE SHALL HAVE A MINIMUM SECTION MODULUS OF 7 IN.³ PER FOOT OF WALL.

(11) REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN.

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CLEVELAND, OHIO AKRON, OHIO

12/45

# ABUTMENT A-1 DETAILS

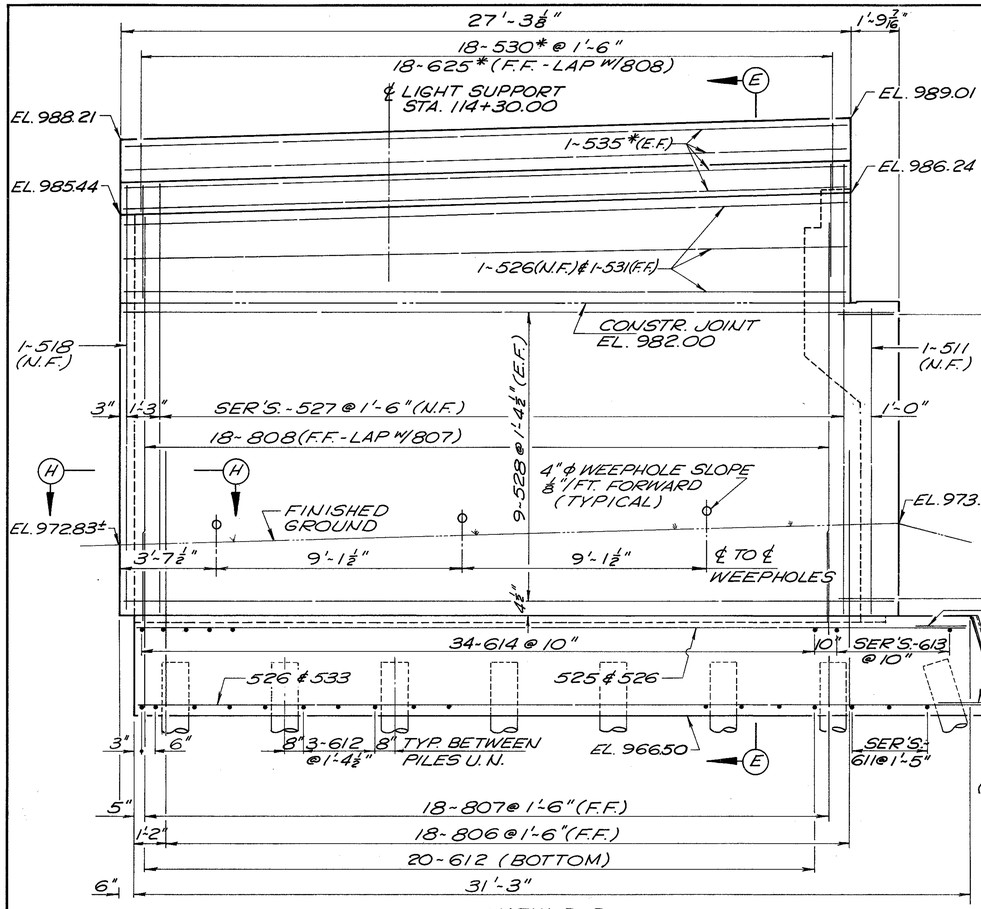
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII | D.T. | | A.H. | GJH | 12-20-82 | |

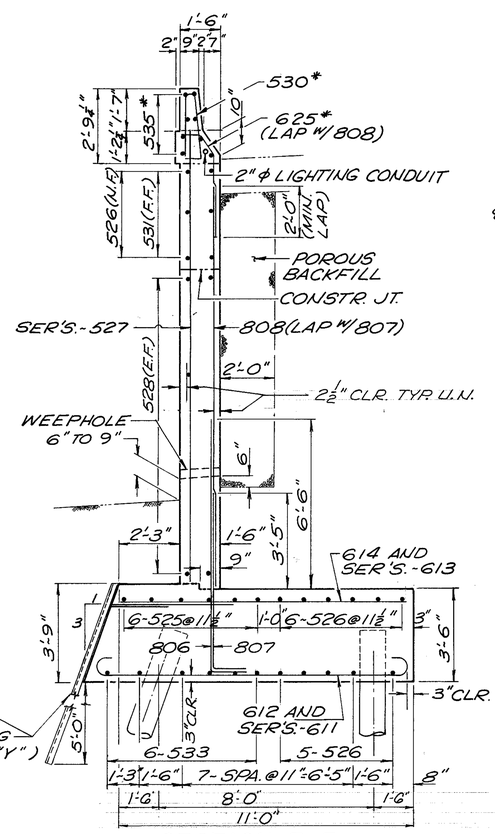
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

285/455

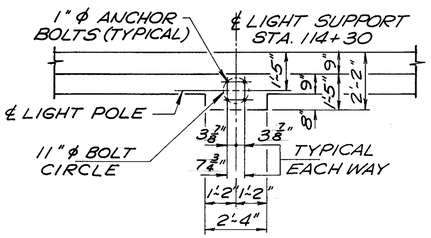
AKRON INNERBELT
SUM-59-0.00



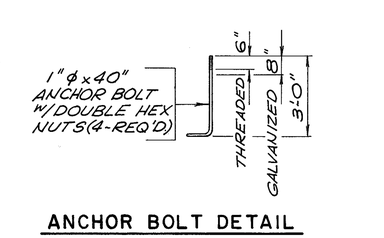

VIEW D-D



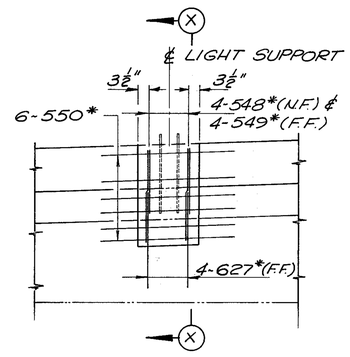

SECTION E-E



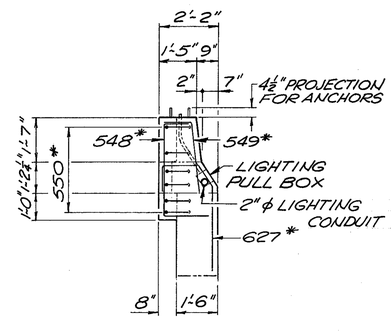

PLAN




ANCHOR BOLT DETAIL

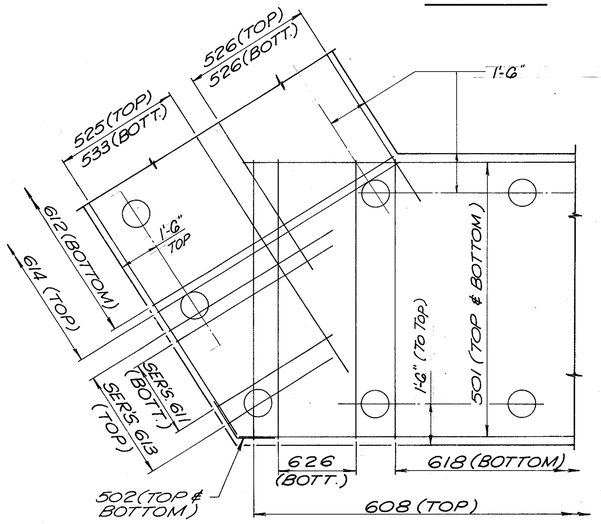



ELEVATION

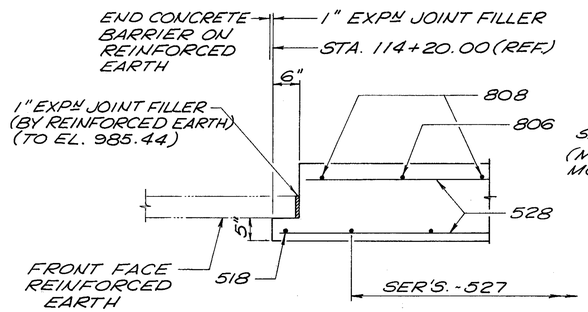



SECTION X-X

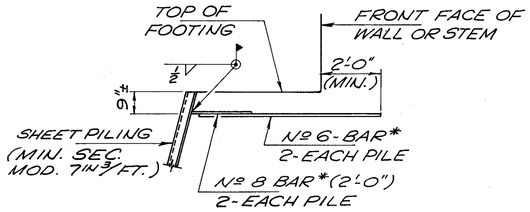
LIGHT SUPPORT DETAILS




SECTION B-B




SECTION H-H




DETAIL "Y"
TO BE INCLUDED WITH SHEET PILING FOR PAYMENT. (ITEM 504)

FOR NOTES SEE SHEET 12/45.

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13/45

# ABUTMENT A-1 DETAILS

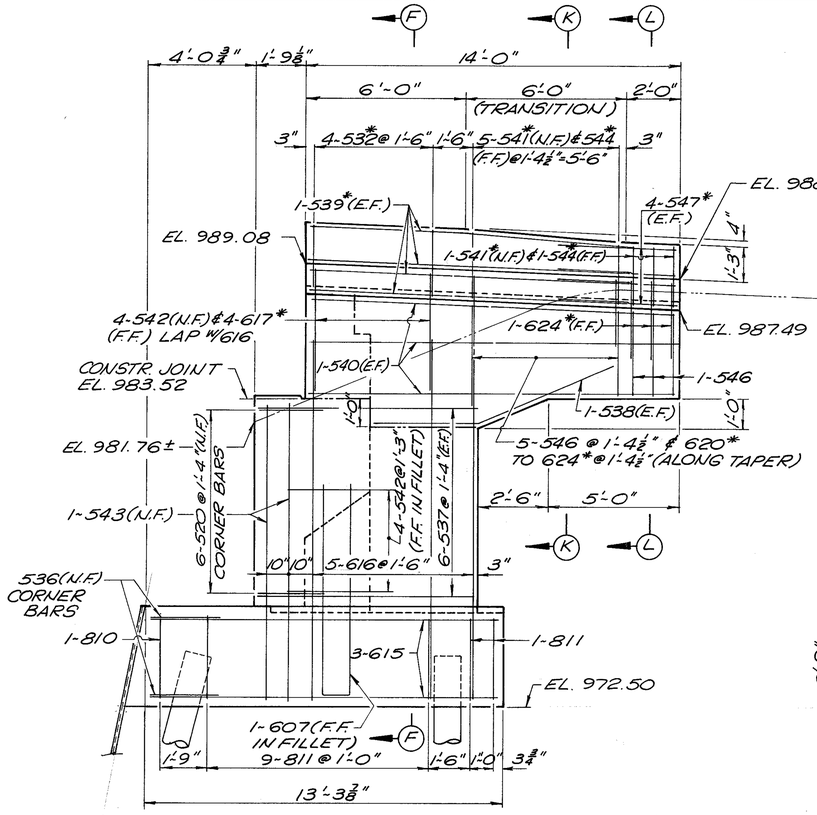
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HII | D.T. | | A.L.H. | JJH | 12-20-82 | |

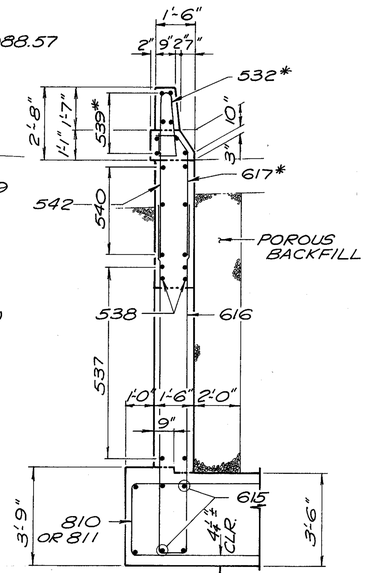
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

286/455

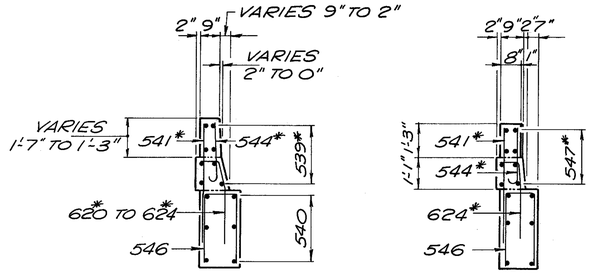
AKRON INNERBELT
SUM - 59 - 0.00




VIEW G-G

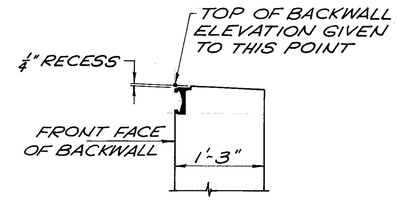



SECTION F-F

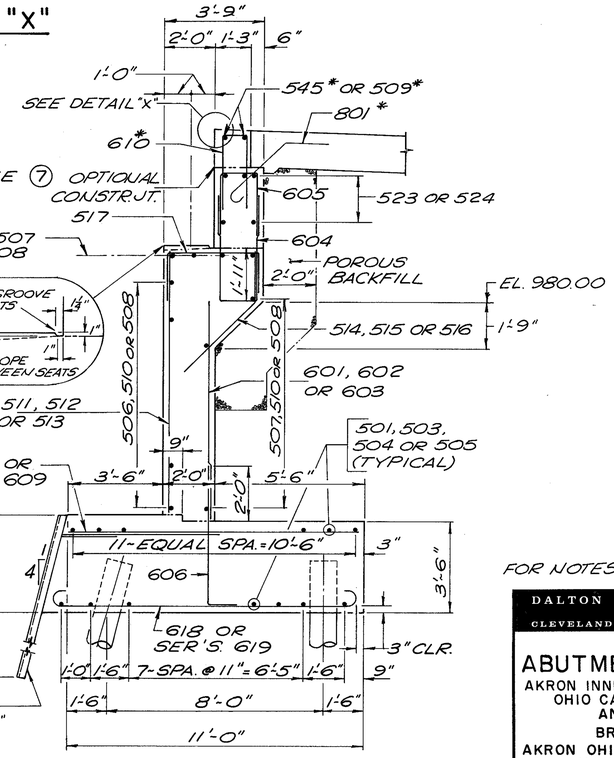



SECTION K-K

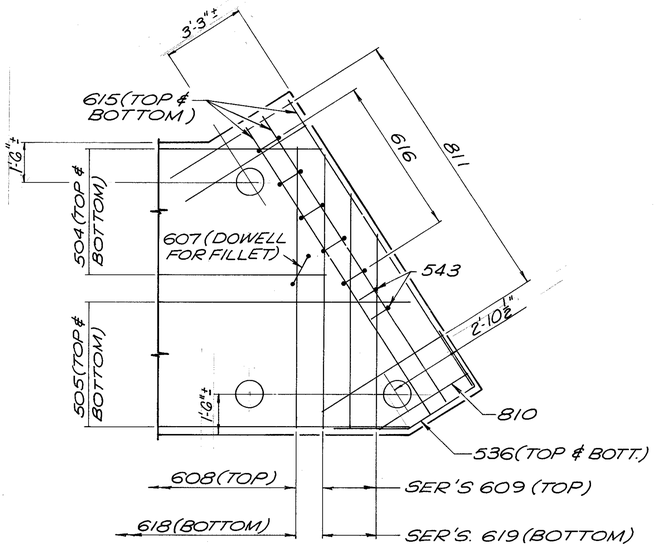
SECTION L-L



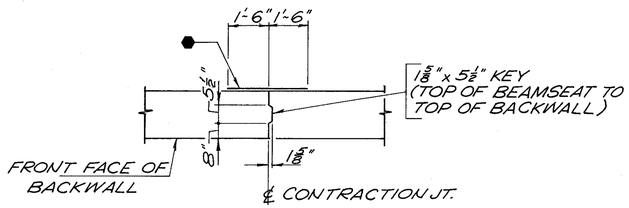

DETAIL "X"



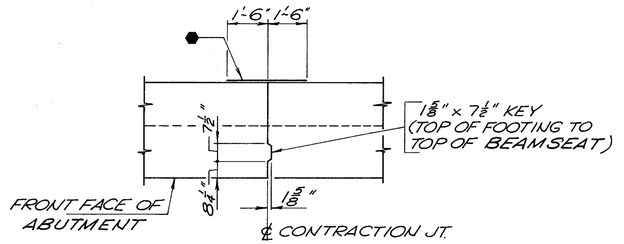

SECTION A-A




SECTION C-C




SECTION THRU BACKWALL




SECTION BELOW SEAT

## CONTRACTION JOINT DETAILS

● TYPE "B" WATERPROOFING FROM TOP OF FOOTING TO BOTTOM OF APPROACH SLAB.

FOR NOTES SEE SHEET 12/45.

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

14/45

# ABUTMENT A-1 DETAILS

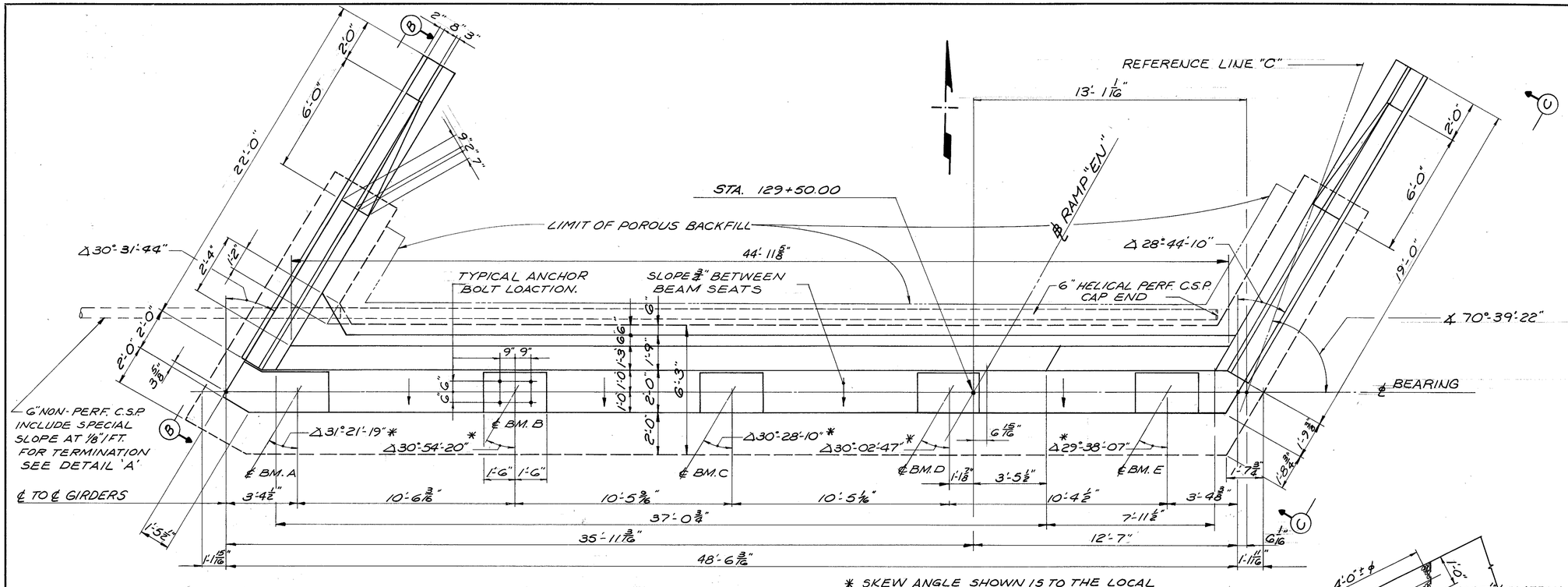
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HH | D.T. | | H.H. | JGF | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

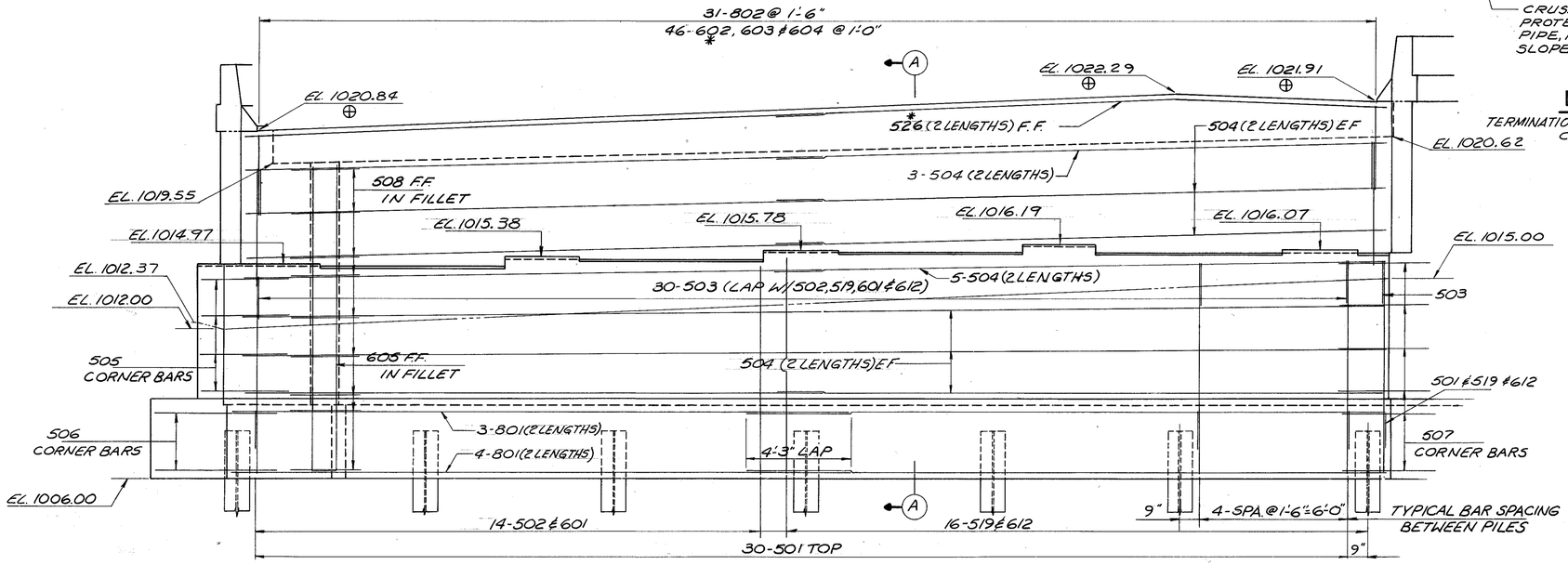
287
455

AKRON INNERBELT
SUM - 59 - 0.00

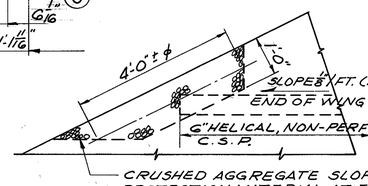



* SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF THE CURVED BEAM AT THE INTERSECTION WITH THE ℄ OF BEARING.

## PLAN




## ELEVATION




## DETAIL 'A'

TERMINATION OF 6" HELICAL, NON-PERFORATED C.S.P. AT SLOPE

## NOTES

1. ABBREVIATIONS USED ARE:
   N.F. - NEAR FACE
   F.F. - FAR FACE
   E.F. - EACH FACE
2. BACKWALL ELEVATIONS SHOWN THUS ⊕ ARE GIVEN AS FINAL PAVEMENT ELEVATIONS AT THE FRONT FACE OF THE BACKWALL. SEE DETAIL "X" SHEET 14/45.
3. THE PREFIX "2A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT UNLESS SHOWN OTHERWISE.
4. POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WINGS SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WING WALLS. 1.5 FT. THICK AT THE ABUTMENT AND 2.0 FT. THICK AT THE WING.
5. EMBANKMENT PROCEDURE:
   THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FT. BACK OF THE ABUTMENT. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENT.
6. FOR PILING PLAN, SEE SHEET 11/45.
7. FOR SECTION "A-A", VIEW "B-B", "C-C" AND ADDITIONAL DETAILS SEE SHEET 16/45.
8. FOR BEARING DETAILS AT ABUTMENT SEE BEARING DETAILS ON SHEETS 266/455 THRU 268/455
9. BACKWALL CONCRETE:
   IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.
10. MINIMUM BAR LAP UNLESS NOTED.
    #5 BAR - 1'-8"
    #6 BAR - 2'-0"
11. REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN.

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CLEVELAND, OHIO — AKRON, OHIO

15/45

# ABUTMENT A-2 DETAILS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | D.T. | | AL | JGP | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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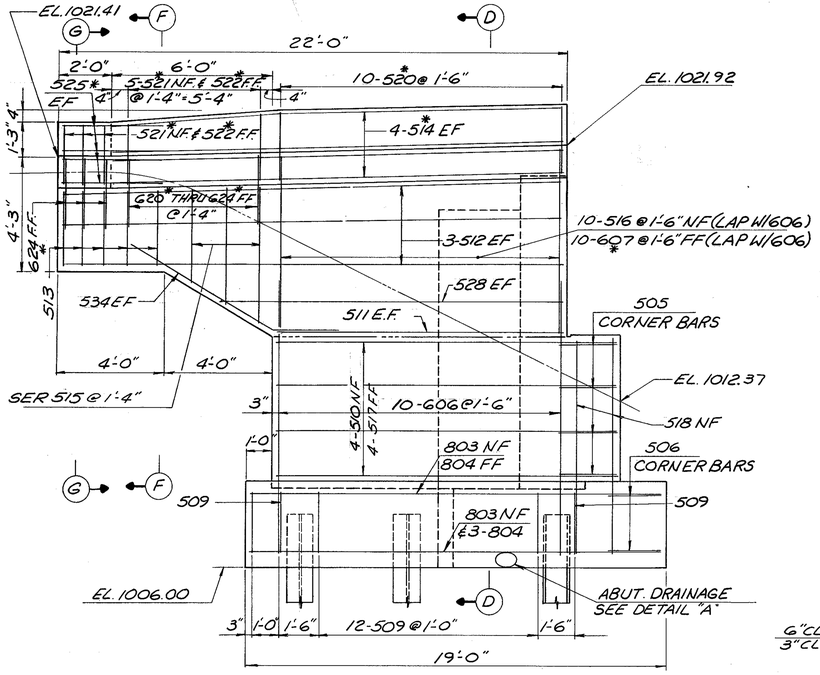
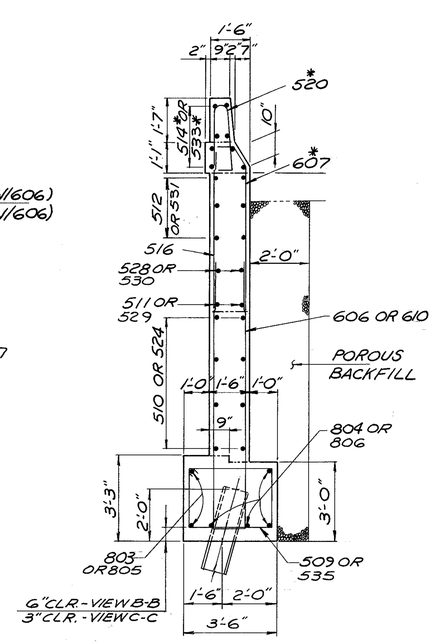
455

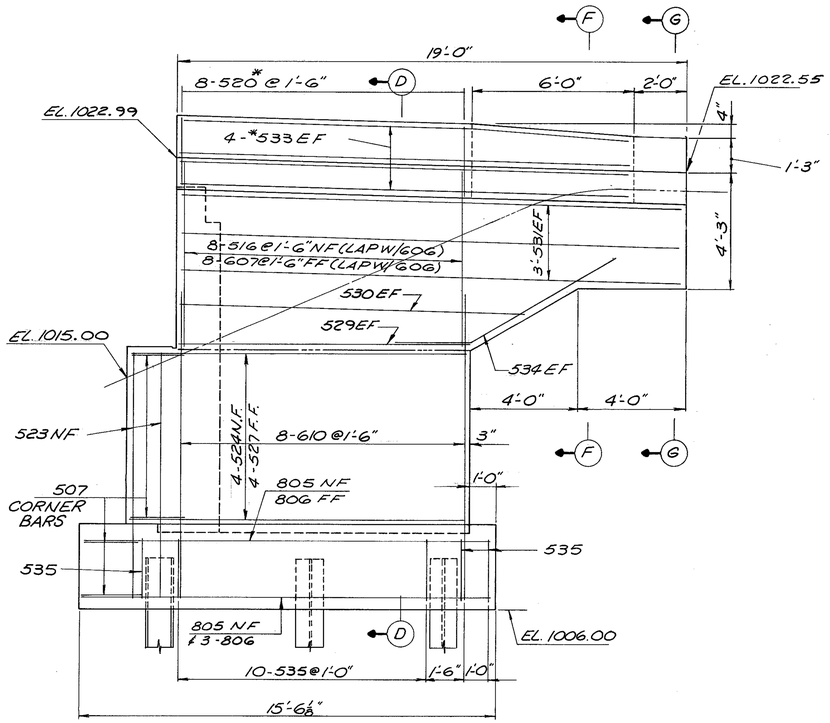
AKRON INNERBELT
SUM-59-0.00




VIEW B-B

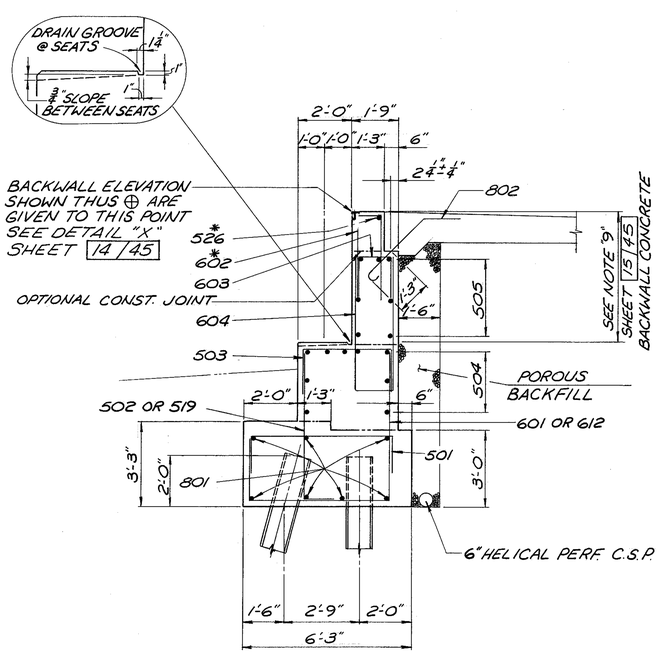



SECTION D-D

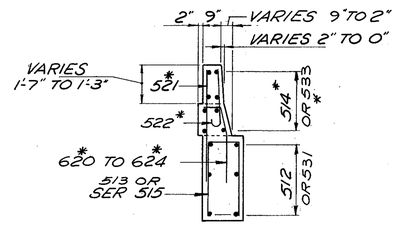



VIEW C-C

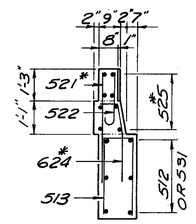
FOR REINFORCING STEEL NOT SHOWN IN CANTILEVER SEE VIEW B-B




SECTION A-A




SECTION F-F




SECTION G-G

NOTES:

* INDICATES REINFORCING BARS TO BE EPOXY COATED.

FOR NOTES AND DETAILS NOT SHOWN HERE SEE ABUTMENT DETAIL SHEET 15/45.

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16/45

# ABUTMENT A-2 DETAILS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | D.T. | | A.L.H. | JJP | 12-20-82 | |

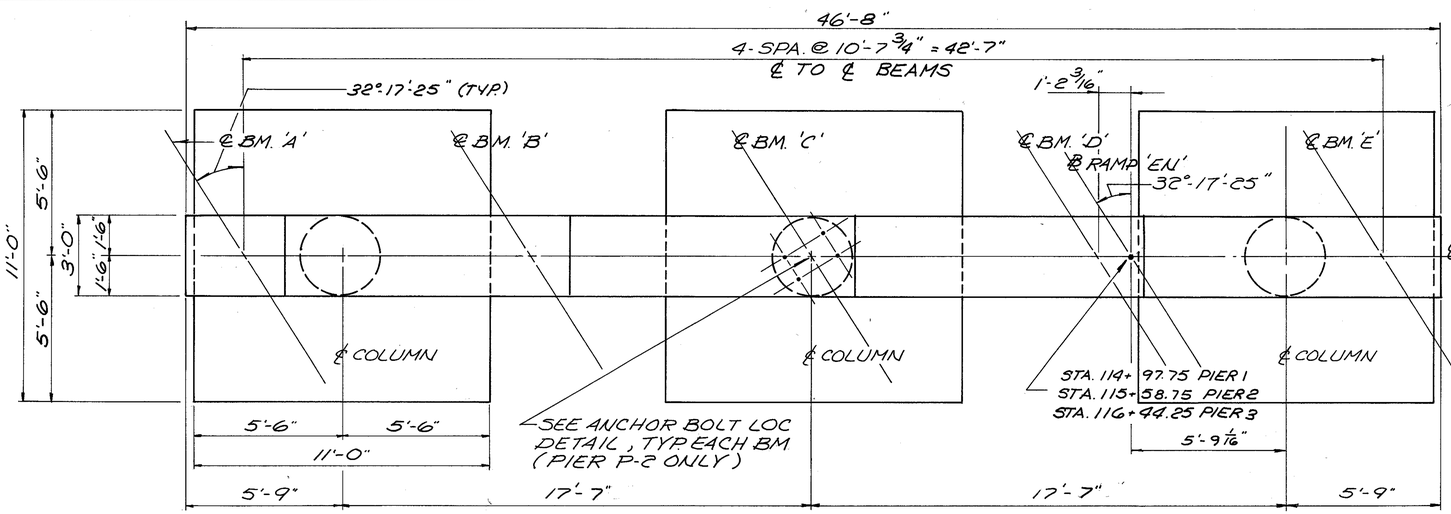
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

289/455

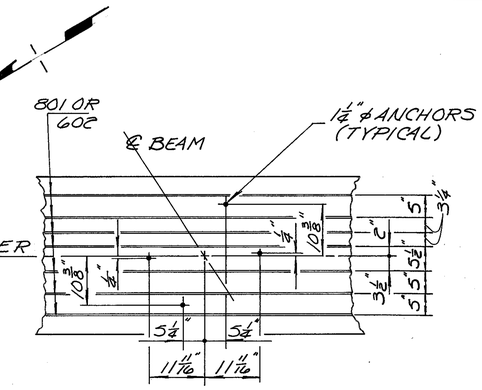
AKRON INNERBELT
SUM - 59 - 0.00

## NOTES

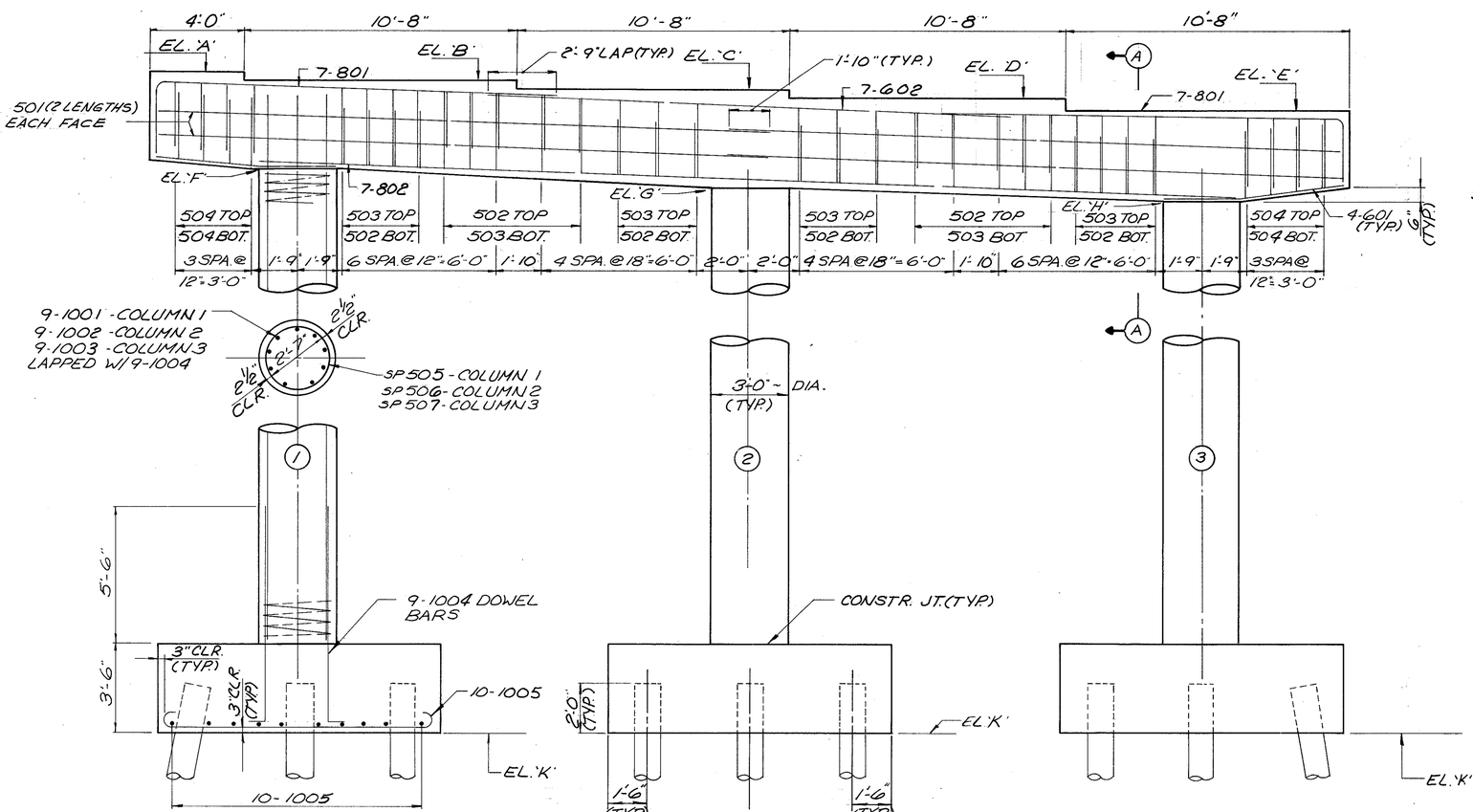
1. FOR PILING PLAN SEE SHEETS 9/45 THRU 11/45
2. THE PREFIX 1P, 2P OR 3P SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIERS P-1, P-2 OR P-3 RESPECTIVELY UNLESS OTHERWISE SHOWN.
3. BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR HOLES OR PRESETTING OF ANCHOR BEARING ANCHORS. THIS APPIES TO PIER P-2 ONLY.



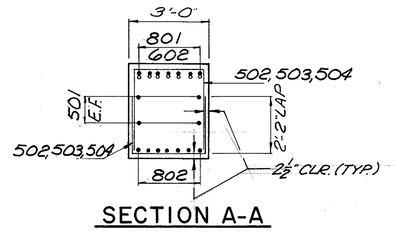

## PLAN PIERS 1, 2, & 3




## ANCHOR BOLT LOCATION DETAIL




## ELEVATION




## SECTION A-A

### ELEVATION TABLE

| | A | B | C | D | E | F | G | H | K |
|---|---|---|---|---|---|---|---|---|---|
| PIER 1 | 984.90 | 984.52 | 984.15 | 983.78 | 983.25 | 981.02 | 980.30 | 979.59 | 965.00 |
| PIER 2 | 987.37 | 987.02 | 986.66 | 986.29 | 985.75 | 983.52 | 982.81 | 982.12 | 965.00 |
| PIER 3 | 990.89 | 990.59 | 990.28 | 989.96 | 989.44 | 987.08 | 986.48 | 985.78 | 964.00 |

DALTON · DALTON · NEWPORT

CLEVELAND, OHIO — AKRON, OHIO

# PIER P-1, P-2 & P-3 17/45 DETAILS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE

BR. NO. SUM-59-0000

AKRON OHIO — SUMMIT COUNTY

STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.S.C. | CDG | | JWW | JP | 12-20-82 | |

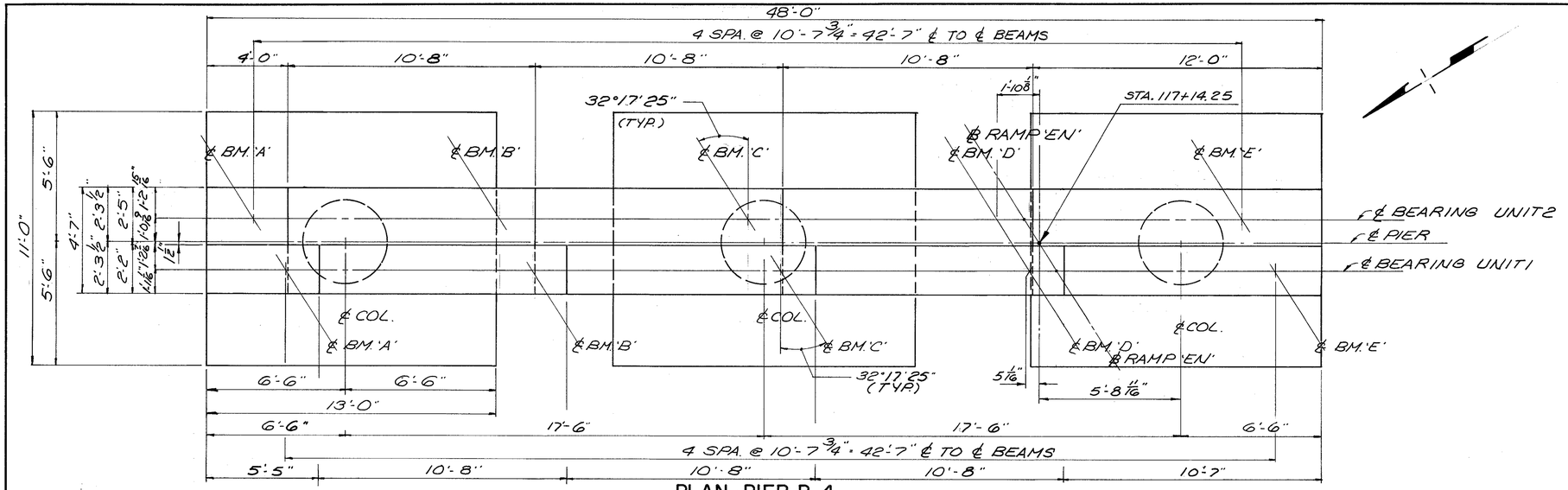
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

290
455

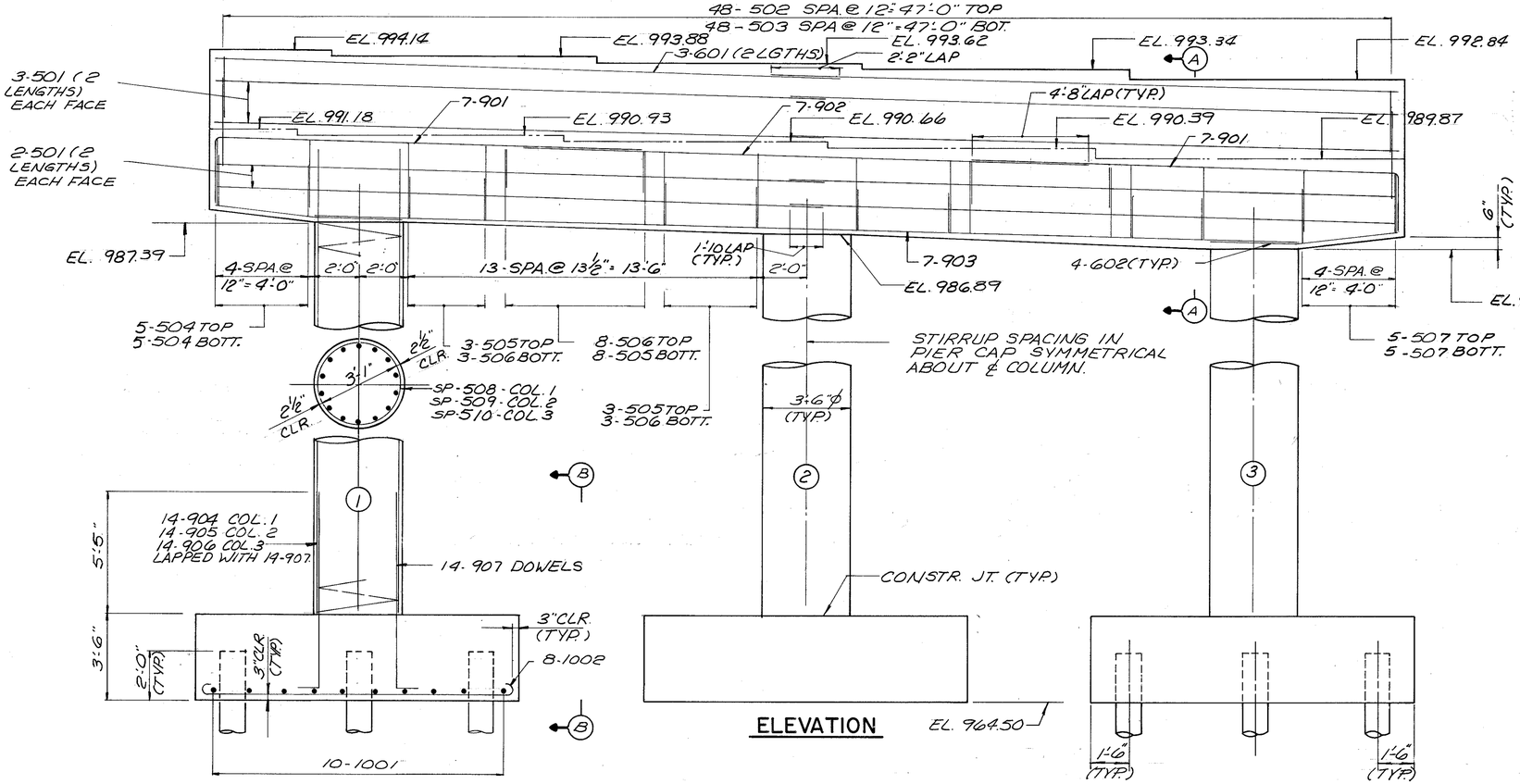
AKRON INNERBELT
SUM - 59 - 0.00

NOTES

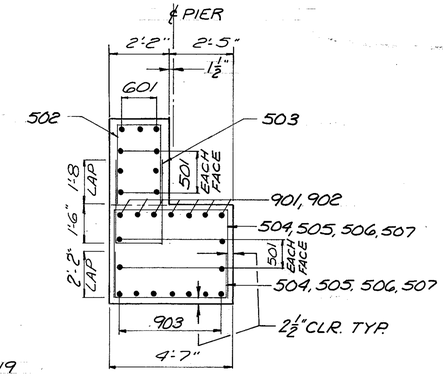
1. THE PREFIX 4P SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-4. UNLESS SHOWN OTHERWISE.
2. FOR PILING PLAN SEE SHEETS 9/45 THRU 11/45.



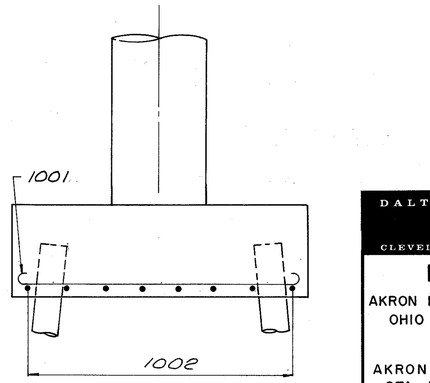

## PLAN - PIER P-4




## ELEVATION




## SECTION A-A




## SECTION B-B

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CLEVELAND, OHIO AKRON, OHIO

# PIER P-4 DETAILS

18/45

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.S.C. | C.D.G. | | J.W.W. | JDP | 12-20-82 | |

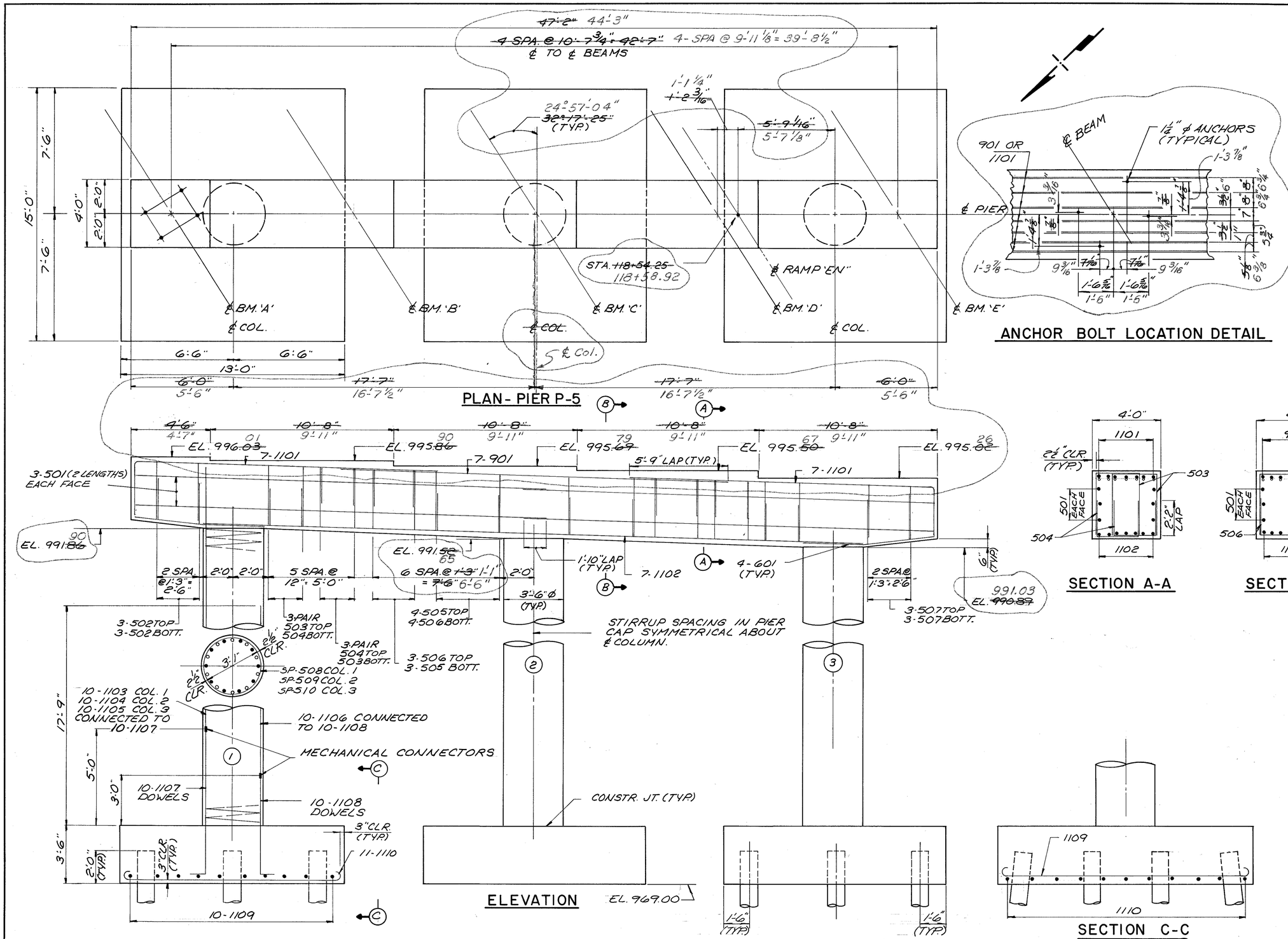
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

291
455

AKRON INNERBELT
SUM-59-0.00

## NOTES

1. THE PREFIX SP SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-5 UNLESS SHOWN OTHERWISE.
2. BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR HOLES OR PRE-SETTING OF BEARING ANCHORS.
3. SPLICES FOR #11 REINFORCING BAR SIZES SHALL BE MADE WITH APPROVED MECHANICAL CONNECTORS, SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION

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CLEVELAND, OHIO AKRON, OHIO

19/45

# PIER P-5 DETAILS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.S.C. | CDG | | VWW | JDP | 12-20-82 | 2-4-85 |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

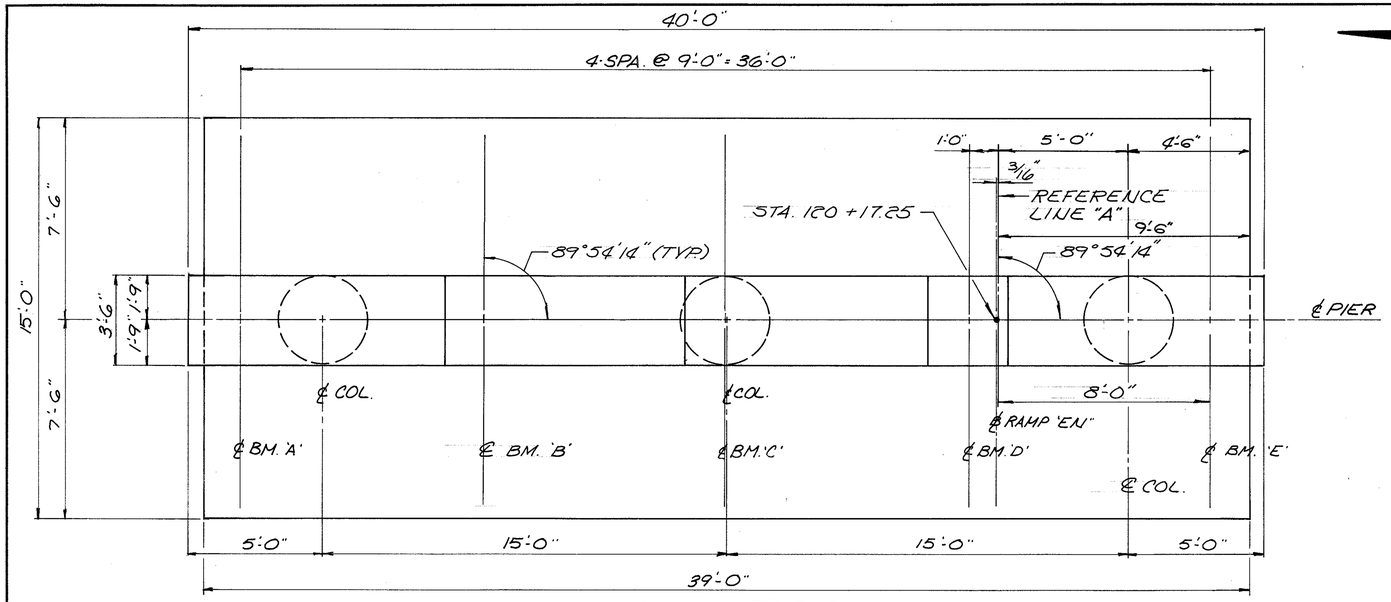
292
455

AKRON INNERBELT
SUM-59-0.00

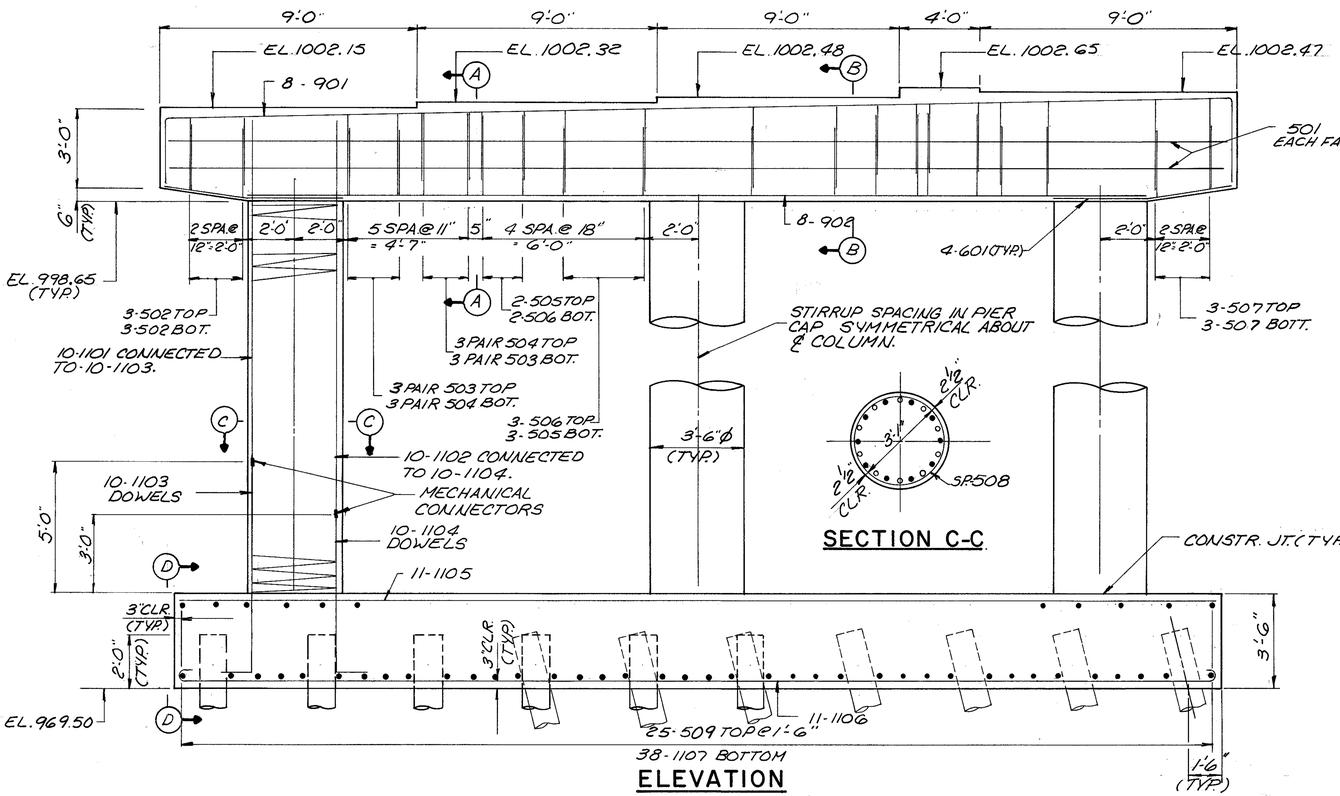
NOTES

(1) THE PREFIX GP SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIEP P-6 UNLESS SHOWN OTHERWISE.

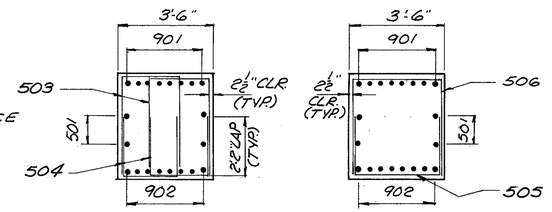
(2) SEE NOTE (3) SHEET 21/45.




PLAN- PIER P-6



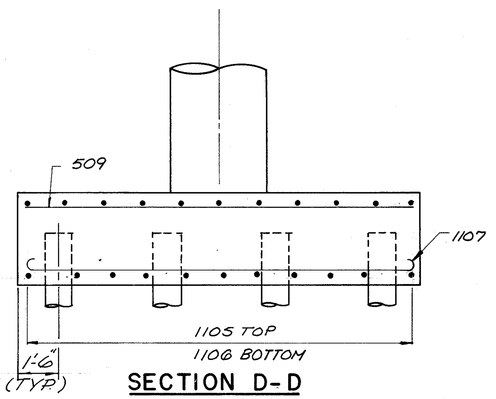

ELEVATION




SECTION A-A




SECTION B-B




SECTION D-D

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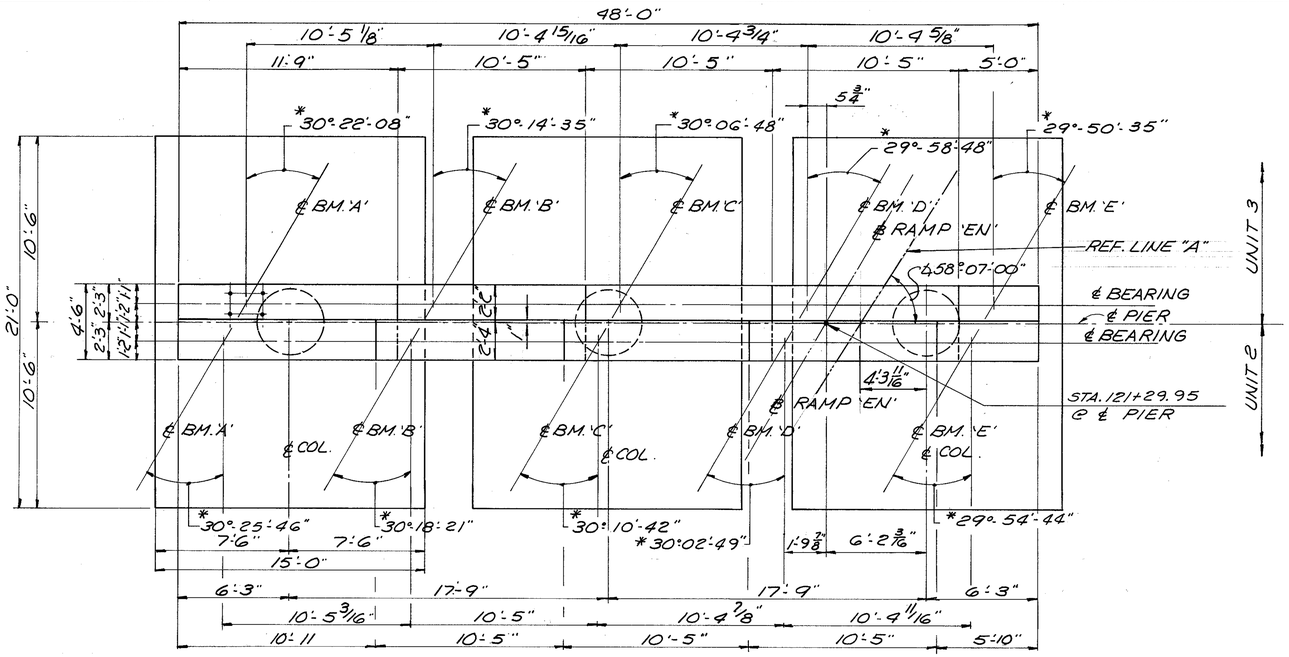
CLEVELAND, OHIO AKRON, OHIO

# PIER P-6 DETAILS

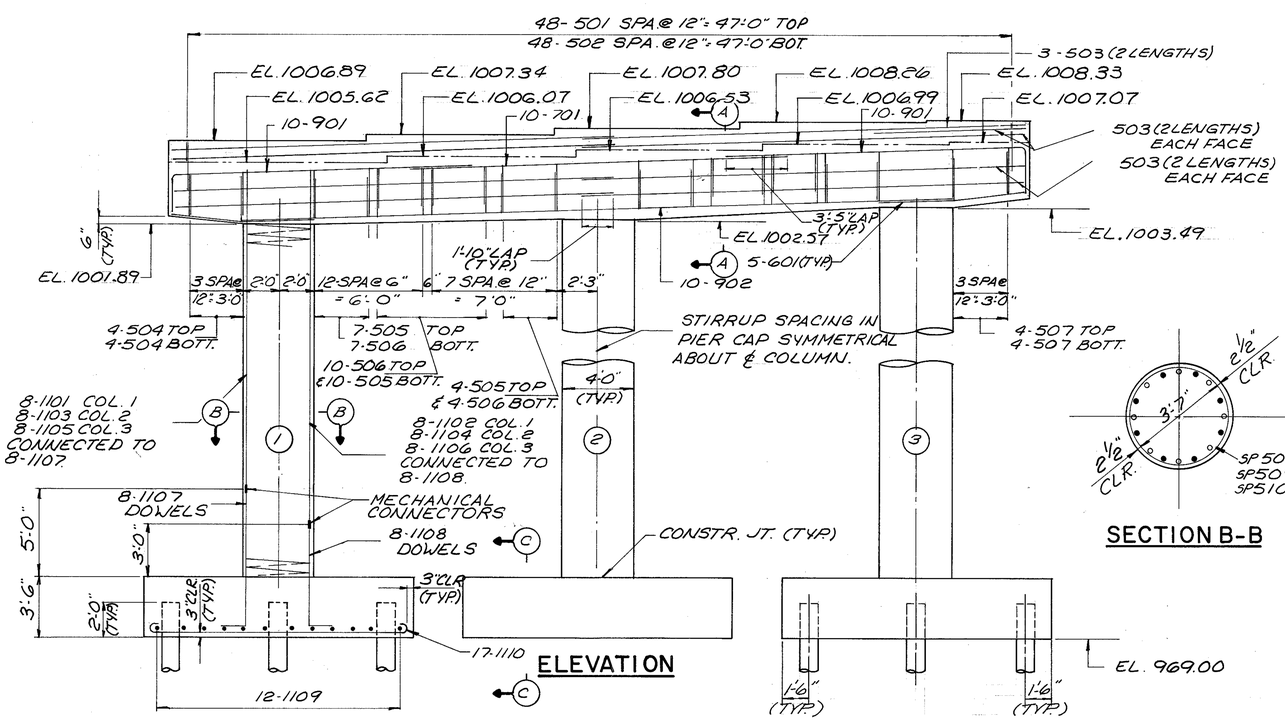
20/45

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

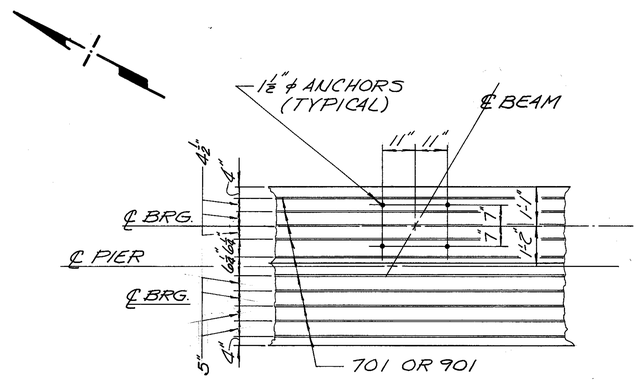
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.S.C. | COG | | JWW | | 12-20-82 | |



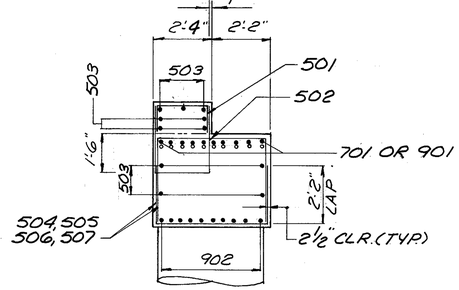

## PLAN - PIER P-7



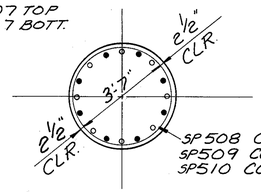

## ELEVATION



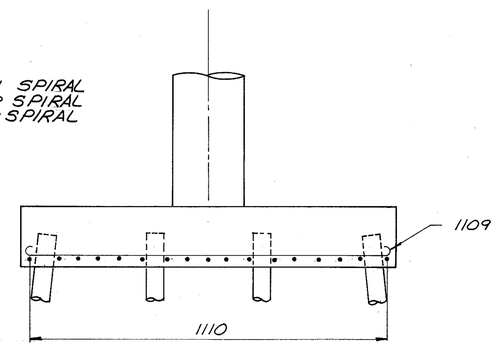

## ANCHOR BOLT LOCATION DETAIL




## SECTION A-A




## SECTION B-B




## SECTION C-C

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

293/455

AKRON INNERBELT
SUM - 59 - 0.00

### NOTES

1. THE PREFIX "7P" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-7 UNLESS SHOWN OTHERWISE.
2. BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR HOLES OR PRE-SETTING OF BEARING ANCHORS.
3. SPLICE FOR #11 REINFORCING BARS SHALL BE MADE WITH APPROVED MECHANICAL CONNECTORS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
4. * SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF CURVED BEAM INTERSECTING THE ℄ BEARING.
5. FOR DETAILS OF UNIT #3 BEARINGS SEE SHEETS 266/455 THRU 268/455.

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CLEVELAND, OHIO — AKRON, OHIO

21/45

# PIER P-7 DETAILS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.S.C. | CDG | | JWW | | 12-20-82 | |

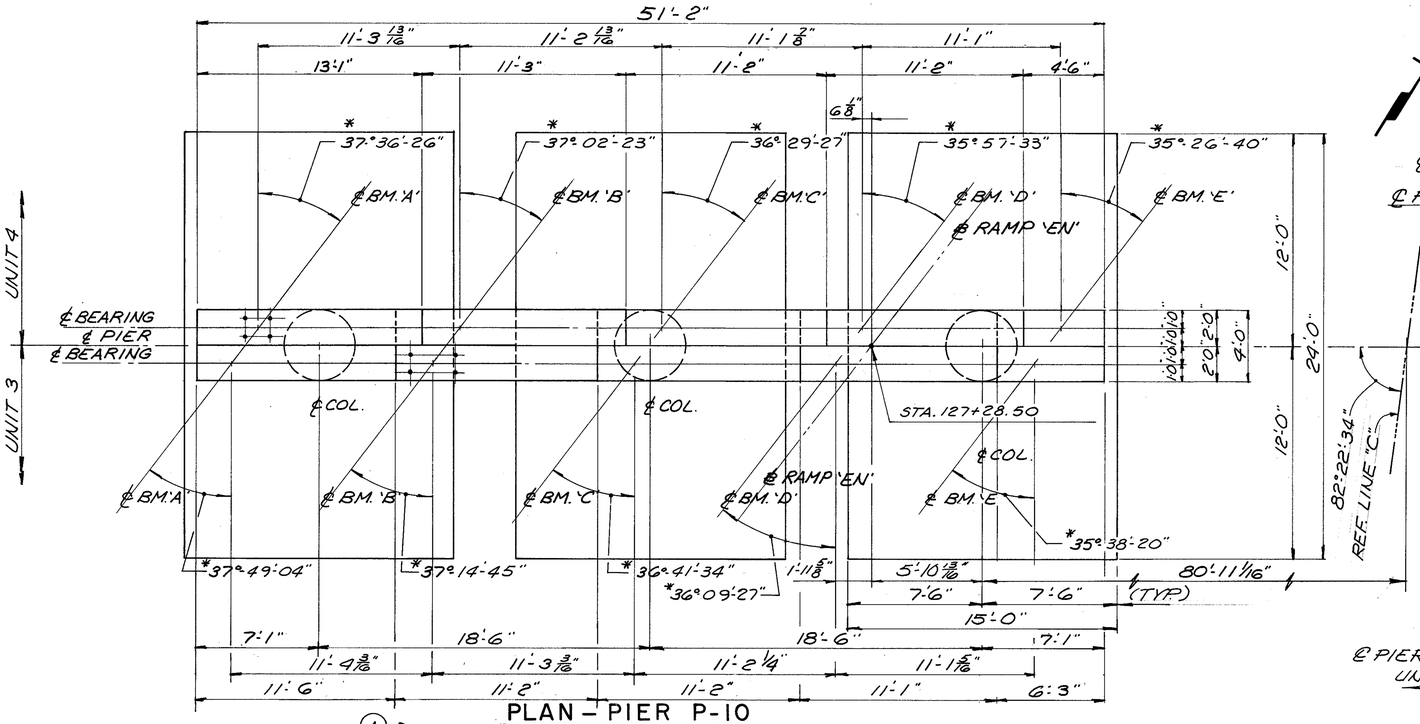
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

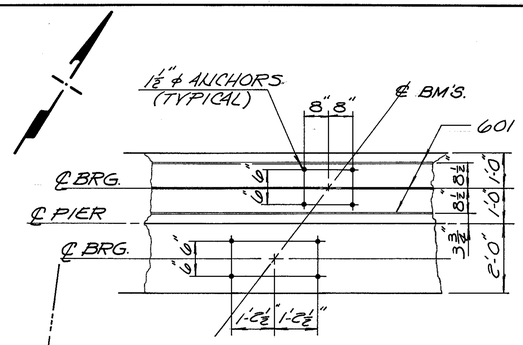
294/455

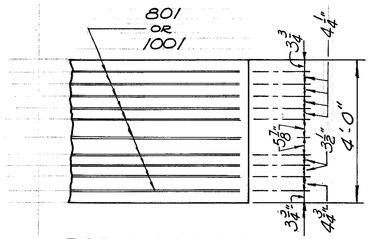
AKRON INNERBELT
SUM-59-0.00

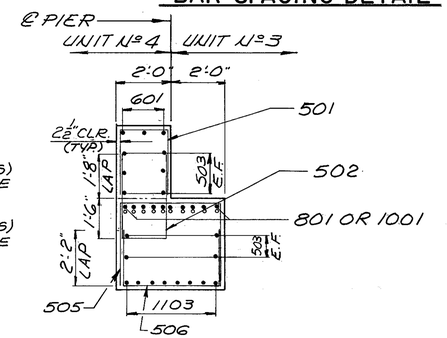
## NOTES

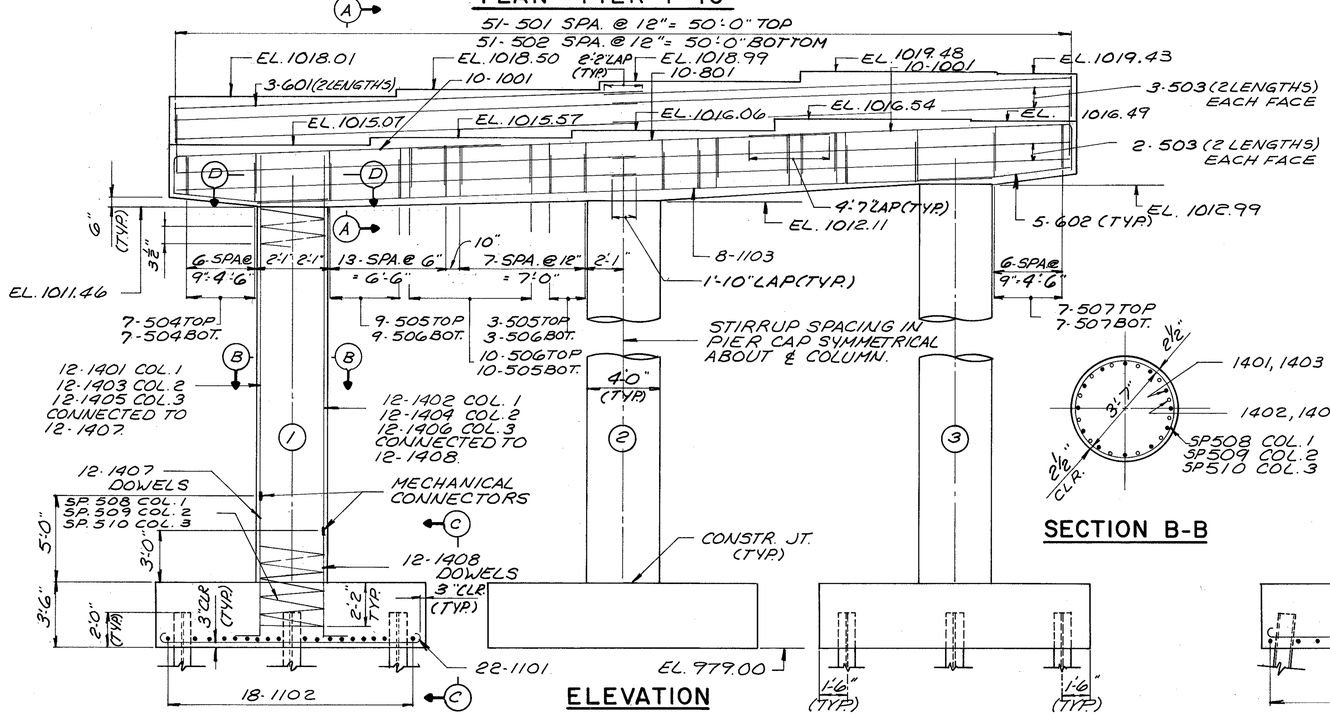
1. THE PREFIX 10P SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-10 UNLESS SHOWN OTHERWISE.
2. FOR BEARING DETAILS SEE SHEETS 266/455 THRU 268/455
3. FOR ADDITIONAL NOTES SEE NOTES (2) (3) & (4) ON SHEET 21/45.

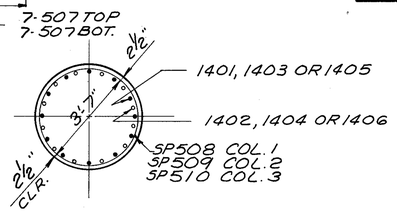


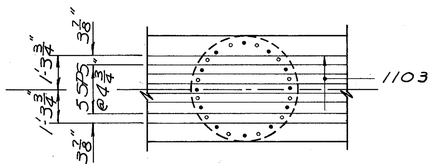



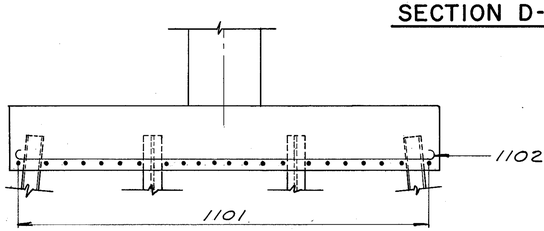

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CLEVELAND, OHIO AKRON, OHIO

# PIER P-10 DETAILS 22/45

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.S.C. | CDG | | JWW | JWW | 12-20-84 | |

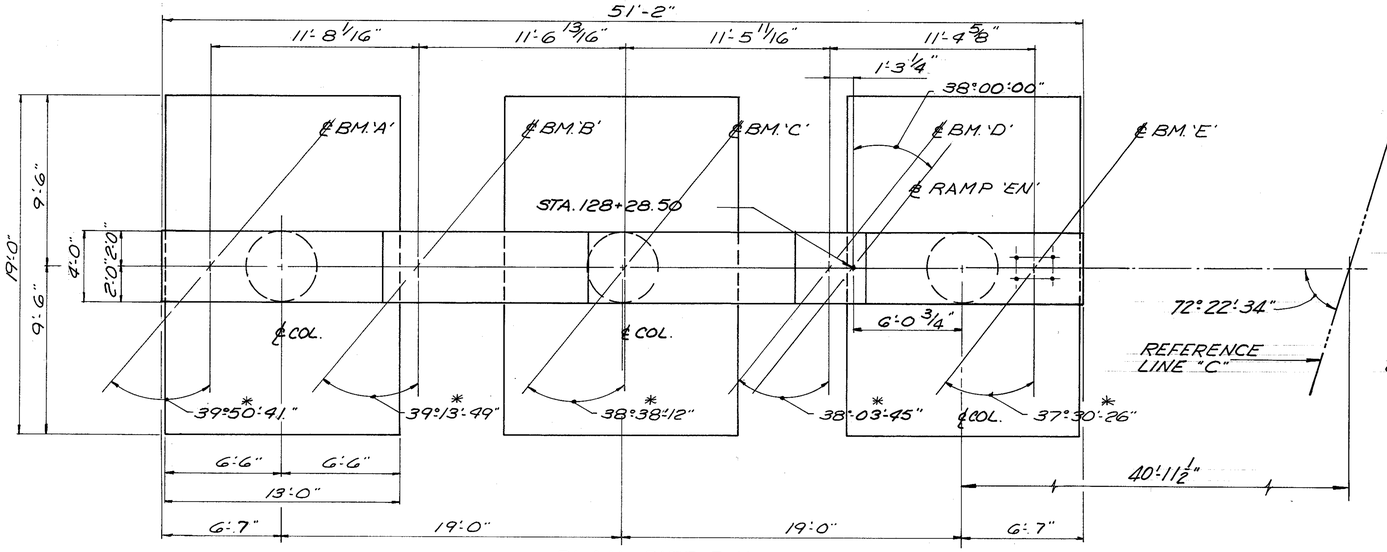
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

295/455

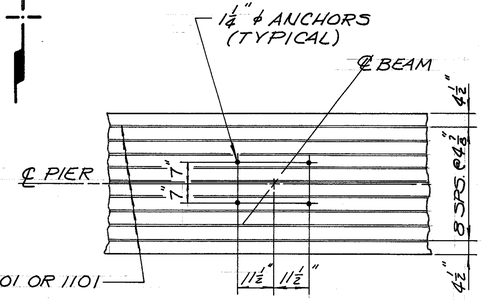
AKRON INNERBELT
SUM - 59 - 0.00

NOTES

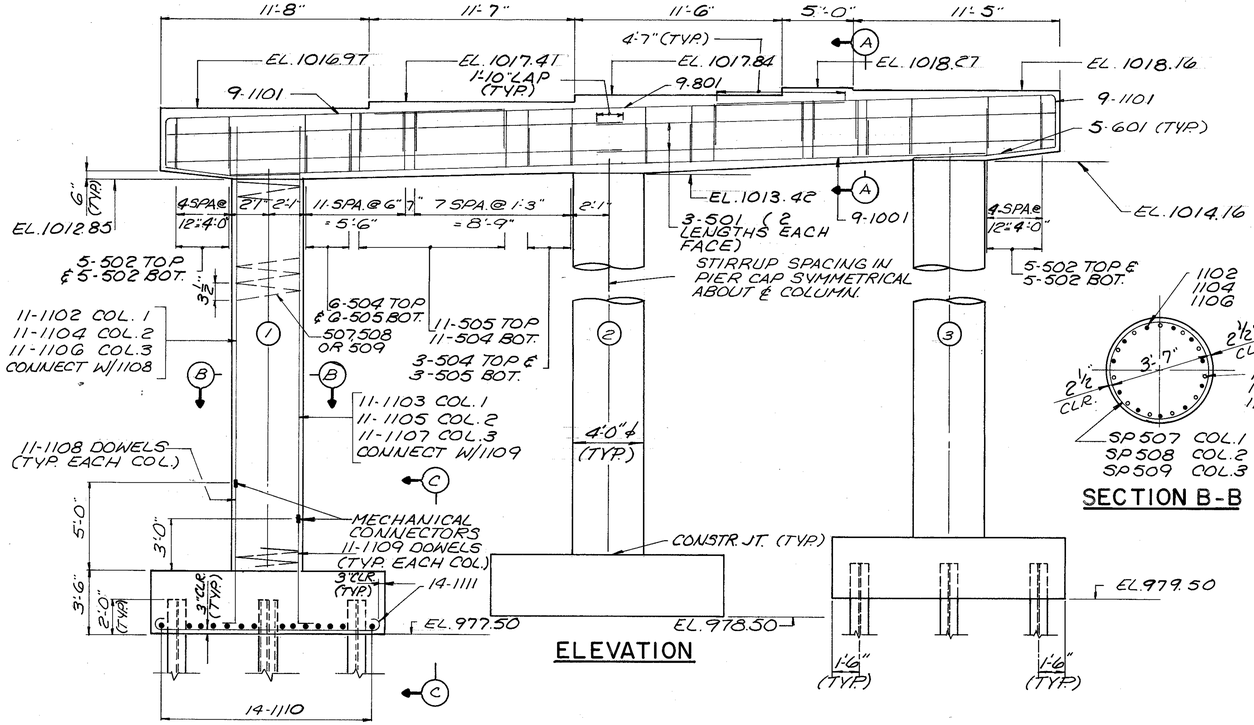
1. THE PREFIX 11P SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-11 UNLESS SHOWN OTHERWISE.
2. FOR BEARING DETAILS SEE SHEET 266/455 THRU 268/455
3. FOR ADDITIONAL NOTES SEE NOTES (2) (3) & (4) ON SHEET 21/45.



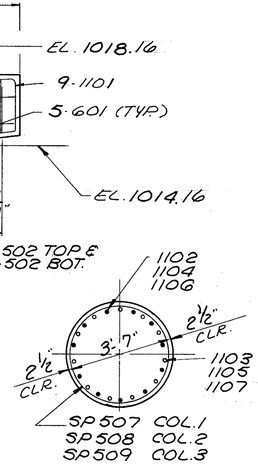

PLAN - PIER P-11



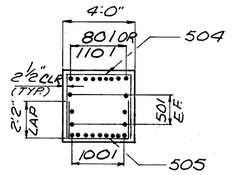

ANCHOR BOLT LOCATION DETAIL



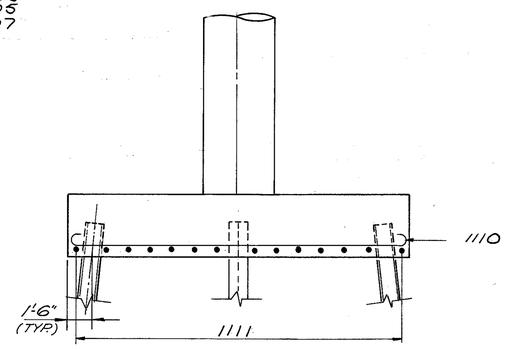

ELEVATION




SECTION B-B




SECTION A-A




SECTION C-C

DALTON · DALTON · NEWPORT

CLEVELAND, OHIO — AKRON, OHIO

23/45

# PIER P-II DETAILS

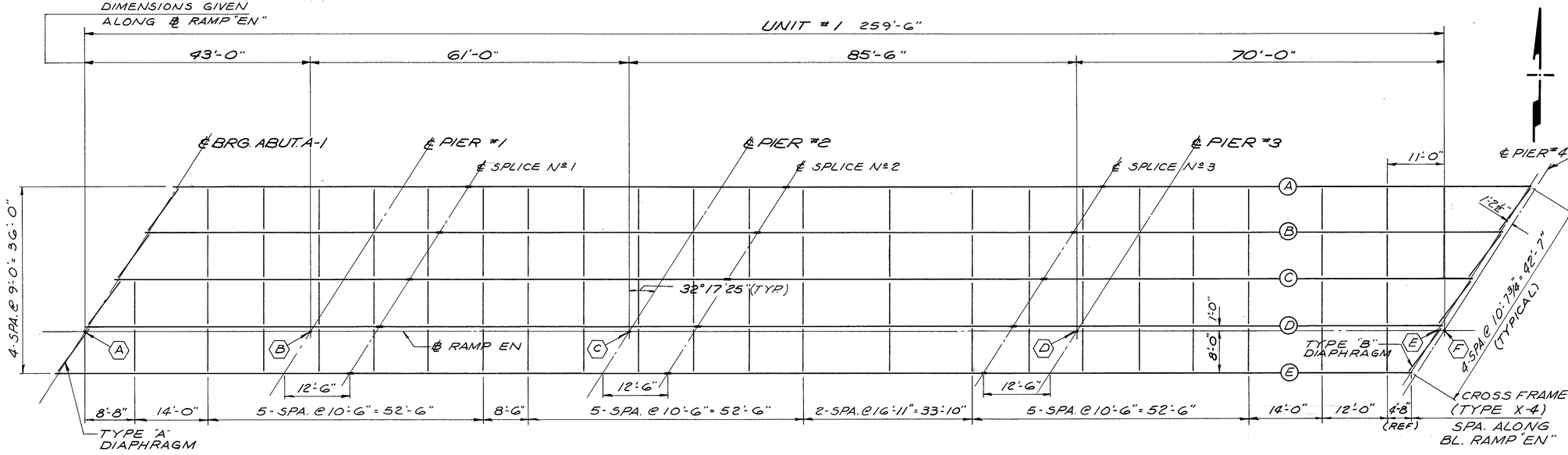
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| M.S.C. | CDG | | JWW | JJH | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

296/455

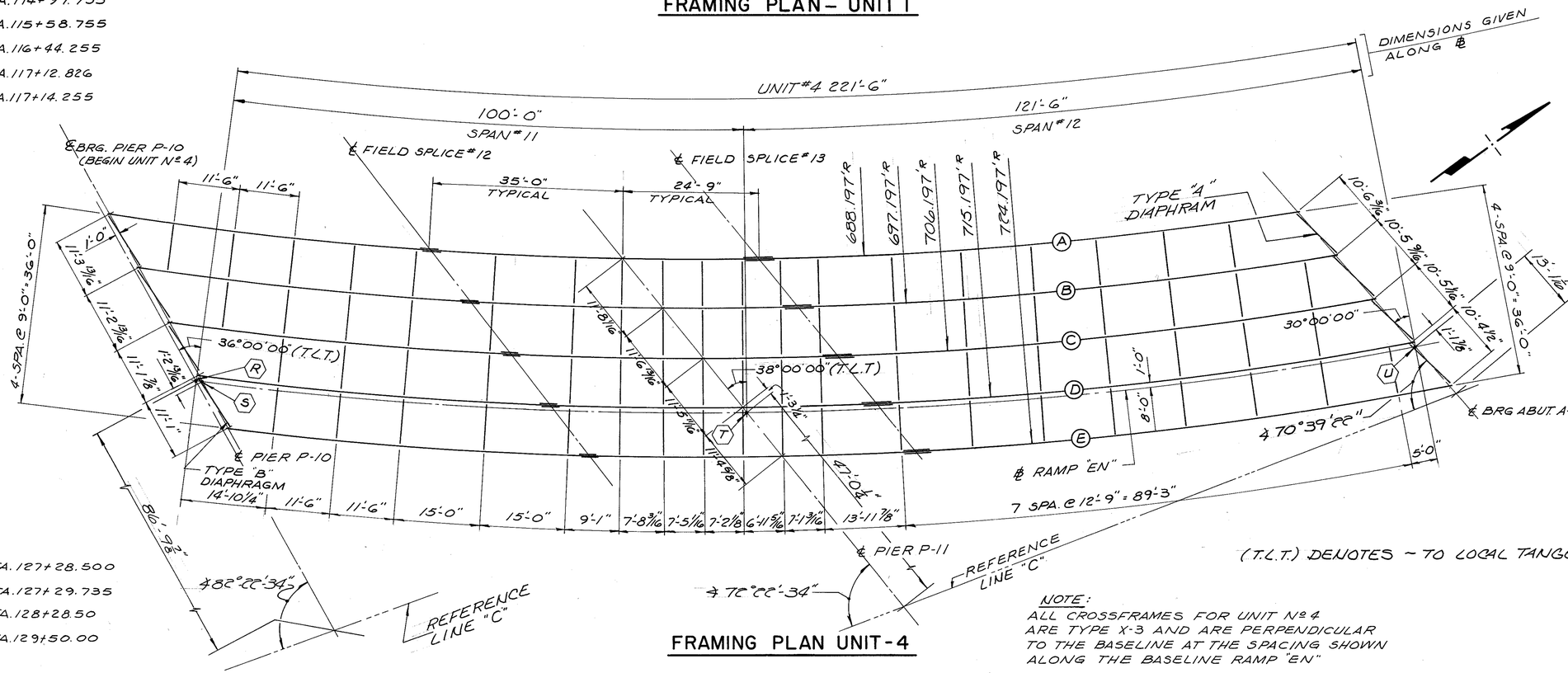
AKRON INNERBELT
SUM- 59- 0.00




- (A) STA. 114+54.755
- (B) STA. 114+97.755
- (C) STA. 115+58.755
- (D) STA. 116+44.255
- (E) STA. 117+12.826
- (F) STA. 117+14.255

## FRAMING PLAN – UNIT I

FOR BEAM ELEVATION SEE SHEET 27/45.




- (R) STA. 127+28.500
- (S) STA. 127+29.735
- (T) STA. 128+28.50
- (U) STA. 129+50.00

(T.L.T.) DENOTES ~ TO LOCAL TANGENT

NOTE:
ALL CROSSFRAMES FOR UNIT Nº 4 ARE TYPE X-3 AND ARE PERPENDICULAR TO THE BASELINE AT THE SPACING SHOWN ALONG THE BASELINE RAMP "EN"

## FRAMING PLAN UNIT-4

### NOTES

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A588, GRADE 50 WEATHERING STEEL, UNLESS NOTED OTHERWISE.
2. INTERMEDIATE STIFFENERS AT LOCATIONS OTHER THAN CROSSFRAMES, SHALL BE PLACED ON ONE SIDE OF THE GIRDER WEB, IN ACCORDANCE WITH MAXIMUM STIFFENER SPACING SHOWN ON THE GIRDER ELEVATION. THESE STIFFENERS SHALL ALTERNATE ON EACH SIDE OF INTERIOR GIRDER WEB. FOR EXTERIOR GIRDER, ALL STIFFENERS SHALL BE PROVIDED ON THE INSIDE.
3. INTERMEDIATE STIFFENERS AT CROSSFRAME LOCATIONS SHALL BE PLACED IN PAIRS, EXCEPT FOR EXTERIOR BEAMS OR GIRDERS.
4. ALL FIELD SPLICES SHALL BE MADE WITH 1" DIAMETER HIGH STRENGTH STEEL BOLTS, CONFORMING TO A325, TYPE 3. THE BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF EXTERIOR GIRDERS AND ON THE BOTTOM OF THE BOTTOM FLANGE PLATES AND ON TOP OF THE TOP FLANGE PLATES.
5. FOR CROSSFRAMES AND FRAMING DETAILS SEE SHEET 262/455
6. FOR BEARING DETAILS FOR UNITS Nº 3 & Nº 4 SEE SHEET 266/455 THRU 268/455
7. FOR DEFLECTION AND CAMBER DETAILS SEE SHEETS 32/45 THRU 34/45.
8. WHERE A SHAPE OR PLATE IS DESIGNATED "CVN" THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS (AASHTO - ZONE 2). ALL FIELD SPLICE MATERIAL, EXCEPT FILL PLATES, SHALL BE "CVN".
9. FOR GIRDER ELEVATION SEE SHEET 29/45.
10. WELDED ATTACHMENTS FOR FINISHING MACHINE SUPPORTS MAY BE MADE TO THE FASCIA GIRDER WHERE ITS TOP FLANGE IS IN COMPRESSION. SEE COMPRESSION FLANGE LOCATIONS, GIRDER ELEVATIONS, SHTS. 27, 28 & 29/45

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24/45

## FRAMING PLAN

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RFL RER | F.F. | | A.L.H. | JJP | 12-20-82 | |

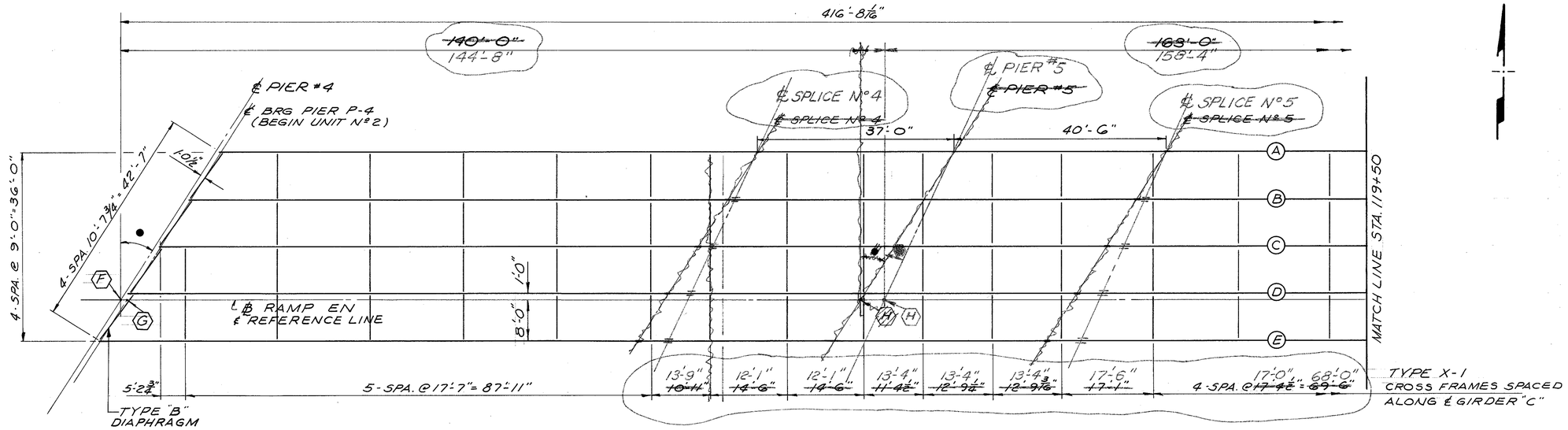
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

297
455

AKRON INNERBELT
SUM – 59 – 0.00

## NOTES

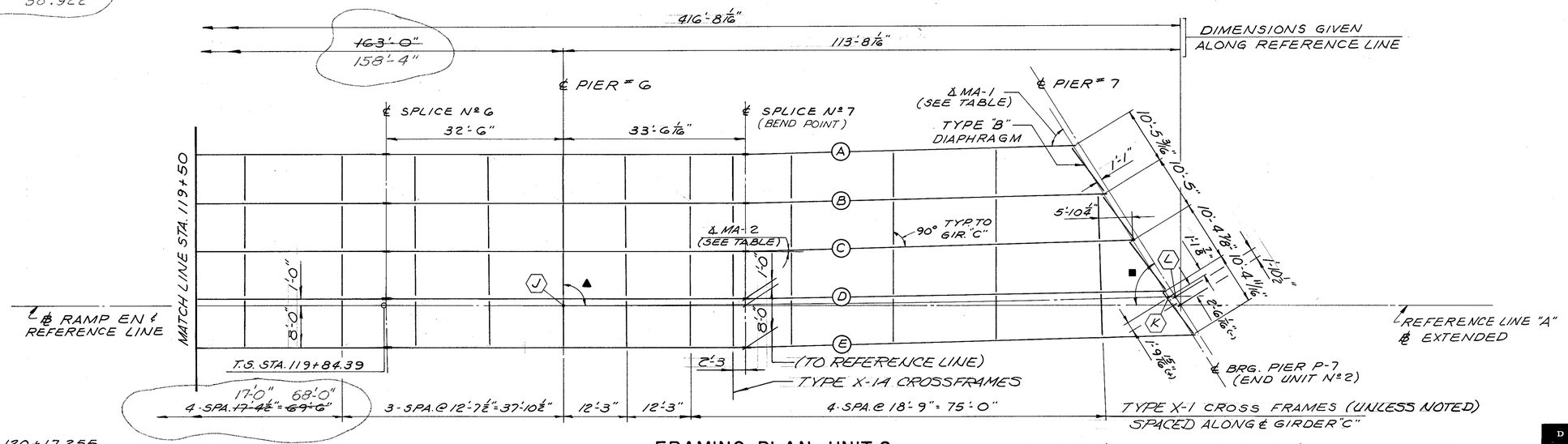
1. FOR ADDITIONAL NOTES SEE SHEET 24/45.
2. FOR GIRDER ELEVATION SEE SHEET 27/45.




● 32°17'25" (TYP)
● 24°57'04"

## FRAMING PLAN – UNIT 2

(F) STA. 117+14.255
(G) STA. 117+15.487
(H) STA. 118+~~54.255~~ 58.922




(J) STA. 120+17.255
(K) STA. 121+28.702
(L) STA. 121+29.953

## FRAMING PLAN – UNIT 2

▲ 90°05'46" ℄ PIER P-6 TO REF. LINE (℄ P-6 TO ℄ GIRDERS)
■ 58°07'00" ℄ PIER P-7 & ℄ BRG. END UNIT 2 TO REF. LINE

| TABLE OF MISCELLANEOUS ANGLES | | |
|---|---|---|
| LOCATION | MA-1 | MA-2** |
| GIRDER A | 59°-07'-31.7" | 1°-00'-26.9" |
| GIRDER B | 59°-09'-54.2" | 1°-02'-49.4" |
| GIRDER C | 59°-12'-27.8" | 1°-05'-22.9" |
| GIRDER D | 59°-15'-10.9" | 1°-08'-06.1" |
| GIRDER E | 59°-18'-02.3" | 1°-10'-57.5" |

(**) DENOTES SPLICE Nº7 BEND ANGLE

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## FRAMING PLAN

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM – 59 – 0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| ALF | F.F. | | A.H. | JJF | 12-20-82 | 2-4-85 |

| F.H.W.A. REG. | STATE | PROJECT | |
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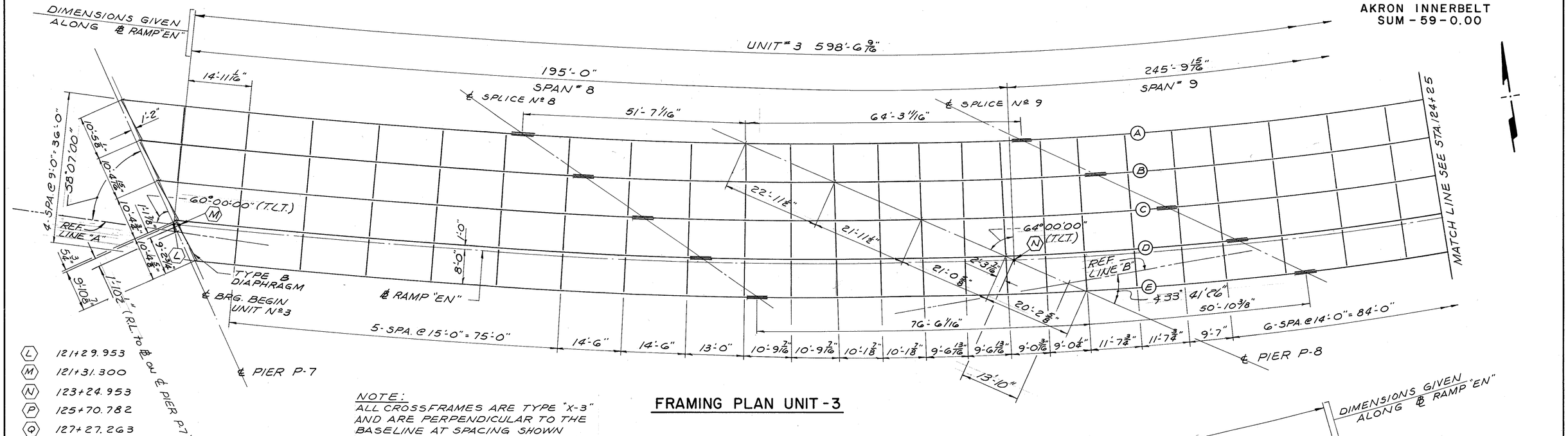
| 5 | OHIO | | |

298/455

AKRON INNERBELT
SUM - 59 - 0.00

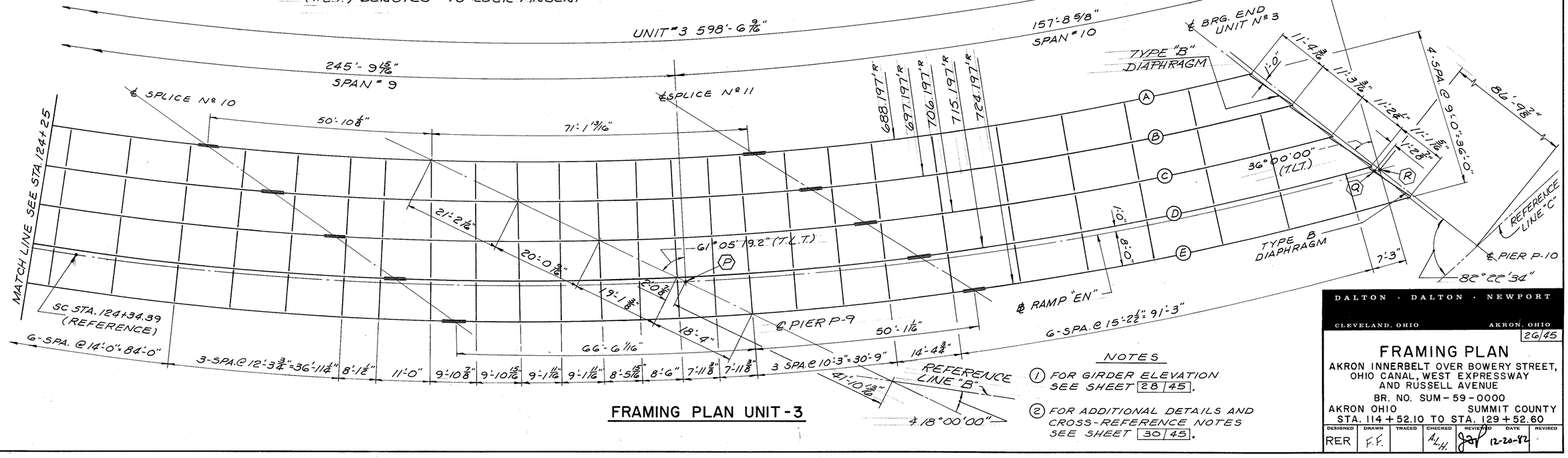



| | |
|---|---|
| L | 121+29.953 |
| M | 121+31.300 |
| N | 123+24.953 |
| P | 125+70.782 |
| Q | 127+27.263 |
| R | 127+28.500 |

NOTE:
ALL CROSS FRAMES ARE TYPE "X-3" AND ARE PERPENDICULAR TO THE BASELINE AT SPACING SHOWN ALONG THE BASELINE OF RAMP "EN".

(T.L.T.) DENOTES ~ TO LOCAL TANGENT

## FRAMING PLAN UNIT - 3




## FRAMING PLAN UNIT - 3

NOTES

1. FOR GIRDER ELEVATION SEE SHEET 28/45.
2. FOR ADDITIONAL DETAILS AND CROSS-REFERENCE NOTES SEE SHEET 30/45.

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26/45

## FRAMING PLAN

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE

BR. NO. SUM - 59 - 0000

AKRON OHIO — SUMMIT COUNTY

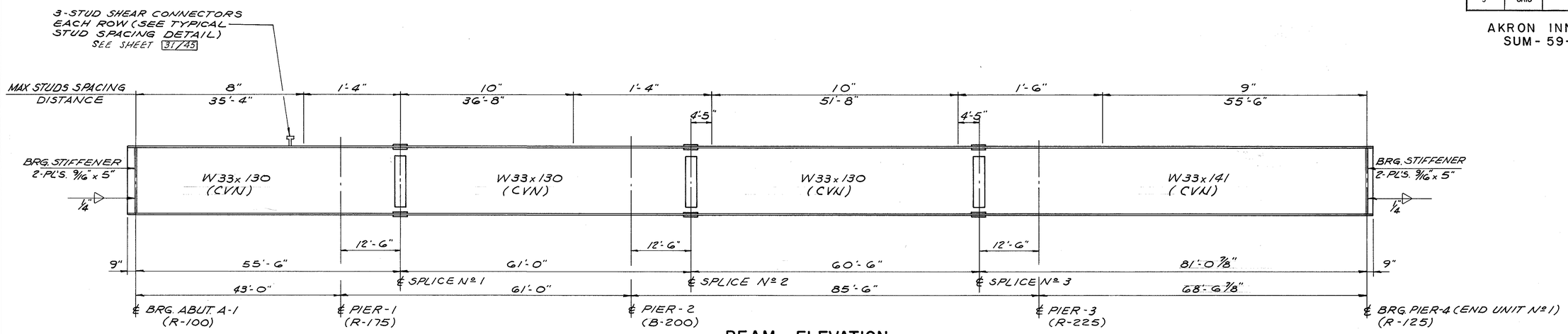
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | A.L.H. | JBP | 12-20-82 | - |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

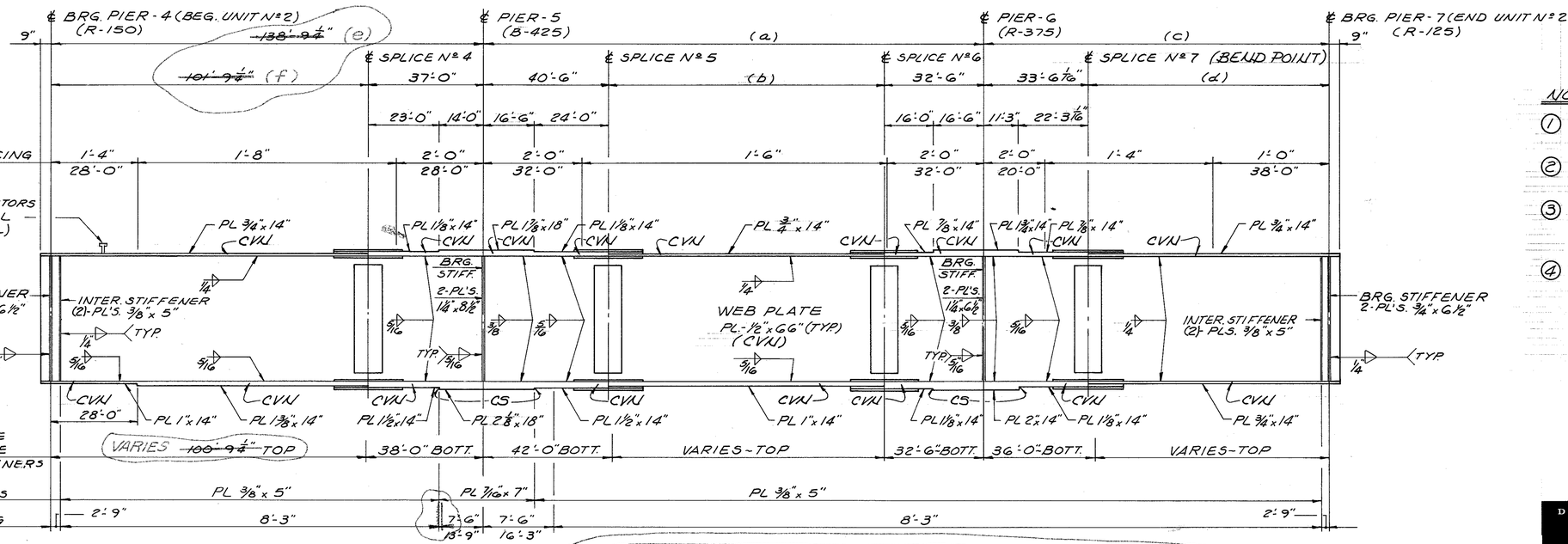
299/455

AKRON INNERBELT
SUM-59-0.00




## BEAM ELEVATION

UNIT - 1




## GIRDER ELEVATION

UNIT - 2

| "a" | "b" |
|---|---|
| 145'-3 1/8" | 72'-3 1/8" |
| 149'-5 9/16" | 76'-5 9/16" |
| 153'-7 15/16" | 80'-7 15/16" |
| 157'-10 3/8" | 84'-10 3/8" |
| 162'-0 13/16" | 89'-0 13/16" |

TABLE OF GIRDER DIMENSIONS FOR UNIT Nº 2

| "f" | GIRDER | DIMENSION | "a" | "b" | "c" | "d" | "e" |
|---|---|---|---|---|---|---|---|
| 101'-9 1/4" | | A | ~~145'-3 1/8"~~ | ~~72'-3 1/8"~~ | 94'-4 7/16" | 60'-10 3/8" | 138'-9 1/4" |
| 103'-3 1/4" | | B | ~~150'-11 9/16"~~ | ~~77'-11 9/16"~~ | 99'-10 3/8" | 66'-4 5/16" | 140'-3 1/4" |
| 104'-9 1/4" | | C | ~~156'-7 15/16"~~ | ~~83'-7 15/16"~~ | 105'-4 1/4" | 71'-10 3/16" | 141'-9 1/4" |
| 106'-3 1/4" | | D | ~~162'-4 3/8"~~ | ~~89'-4 3/8"~~ | 110'-10 1/16" | 77'-4" | 143'-3 1/4" |
| 107'-9 1/4" | | E | ~~168'-0 13/16"~~ | ~~95'-0 13/16"~~ | 116'-3 3/4" | 82'-9 11/16" | 144'-9 1/4" |

NOTES

1. FOR ADDITIONAL FRAMING DETAILS SEE SHEET 31/45
2. FOR ADDITIONAL NOTES SEE SHEET 24/45
3. C.S. INDICATES BUTT WELDS SUBJECT TO COMPRESSIVE STRESSES ONLY.
4. ALL FLANGE AND BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS THE WELD REINFORCEMENTS NEED NOT BE GROUND FLUSH.

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# BEAM AND GIRDER ELEVATIONS

27/45

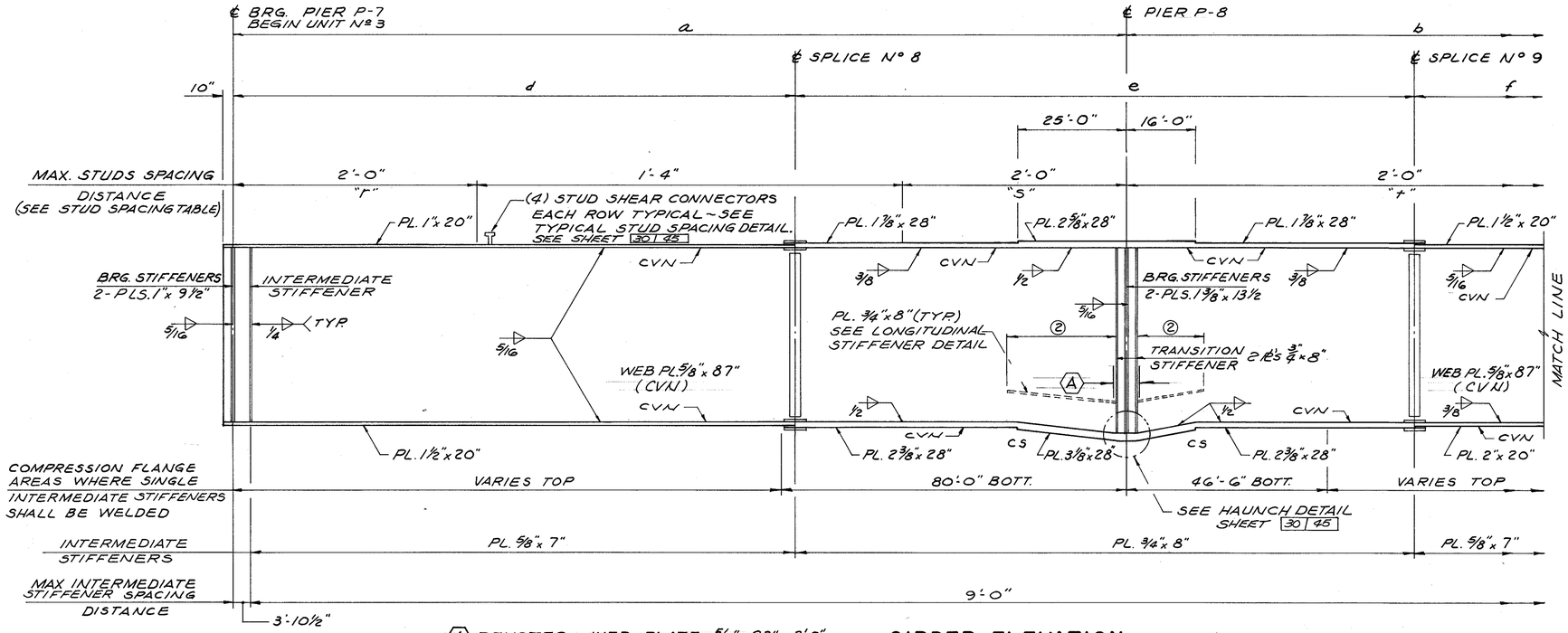
AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| ALF | F.F. | | M.H. | | 12-20-82 | 2-4-85 |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

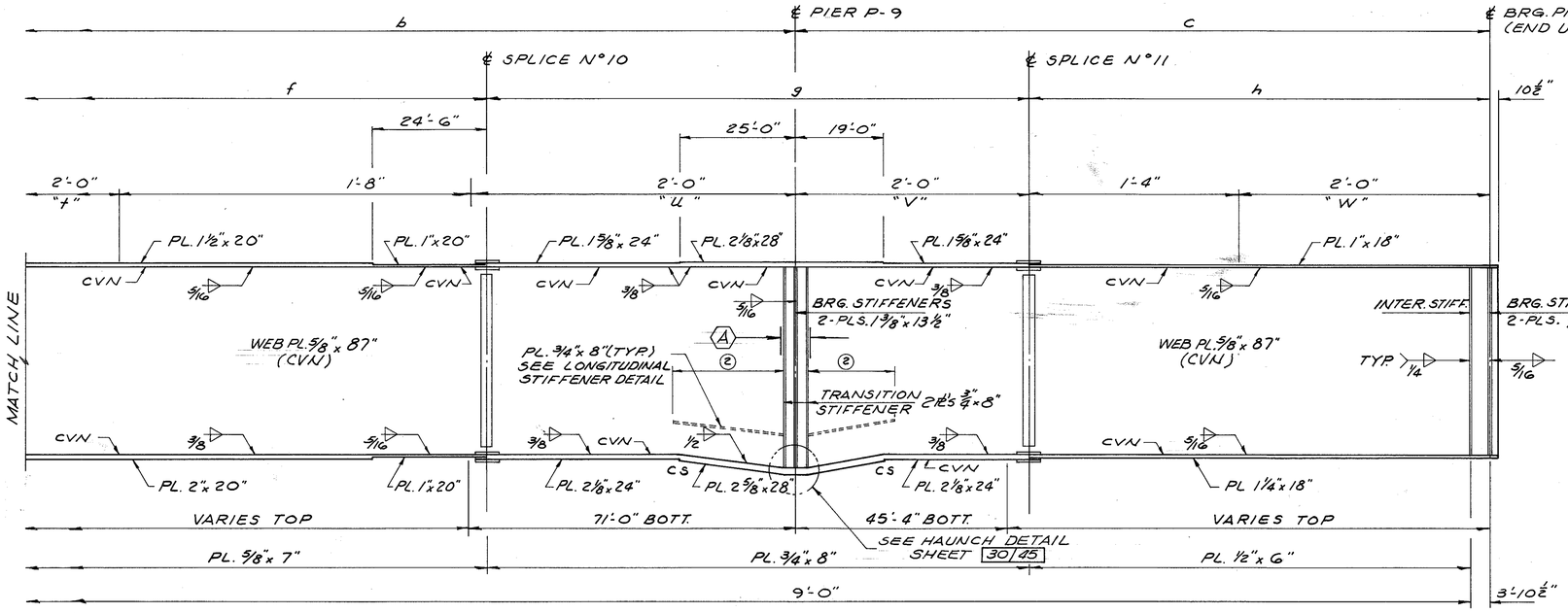
300/455

AKRON INNERBELT
SUM-59-0.00




(A) DENOTES: WEB PLATE 5/8" x 93" x 3'-0" (CVN) WORK WITH HAUNCH DETAIL ~ SEE SHEET 30/45.

## GIRDER ELEVATION
UNIT-3




## GIRDER ELEVATION
UNIT-3

TABLE OF STUD SPACING LIMIT DISTANCES

| GIRDER | DIMENSION | "r" | "s" | "t" | "u" | "v" | "w" |
|---|---|---|---|---|---|---|---|
| | A | 56'-0" | 52'-0" | 118'-0" | 51'-0" | 72'-0" | 55'-0" |
| | B | 60'-0" | 58'-0" | 118'-0" | 55'-6" | 66'-0" | 56'-0" |
| | C | 64'-0" | 64'-0" | 118'-0" | 59'-0" | 60'-0" | 57'-0" |
| | D | 69'-0" | 71'-0" | 117'-0" | 63'-0" | 55'-0" | 58'-0" |
| | E | 72'-0" | 77'-0" | 117'-0" | 66'-0" | 50'-0" | 59'-6" |

### NOTES

(1) FOR DIMENSIONS "a" THRU "h" SEE TABLE OF GIRDER DIMENSIONS FOR UNIT Nº 3, HAUNCH DETAIL, LONGITUDINAL STIFFENER DETAIL, TYPICAL STUD SPACING DETAIL AND SPLICE DETAILS SEE SHEET 30/45.

(2) LONGITUDINAL STIFFENERS SHALL BE PROVIDED FOR VARIABLE DEPTH GIRDERS AT PIERS P-8 & P-9 AS SHOWN ON THE PLANS. LONGITUDINAL STIFFENERS SHALL EXTEND FROM THE TRANSITION STIFFENER AT A PIER TO THE FIRST INTERMEDIATE STIFFENER BEYOND THE VARIABLE DEPTH ZONE.

(3) C.S. INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESS ONLY

(4) FOR ADDITIONAL FRAMING NOTES SEE SHEET 24/45.

(5) ALL FLANGE AND BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS. THE WELD REINFORCEMENTS NEED NOT BE GROUND FLUSH.

(6) GIRDERS IN UNIT Nº 3 ARE TO BE BUILT CURVED, PARALLEL TO THE BASELINE, SEE FRAMING PLAN, SHEET 26/45

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28/45

## GIRDER ELEVATION

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | A.L.H. | JSP | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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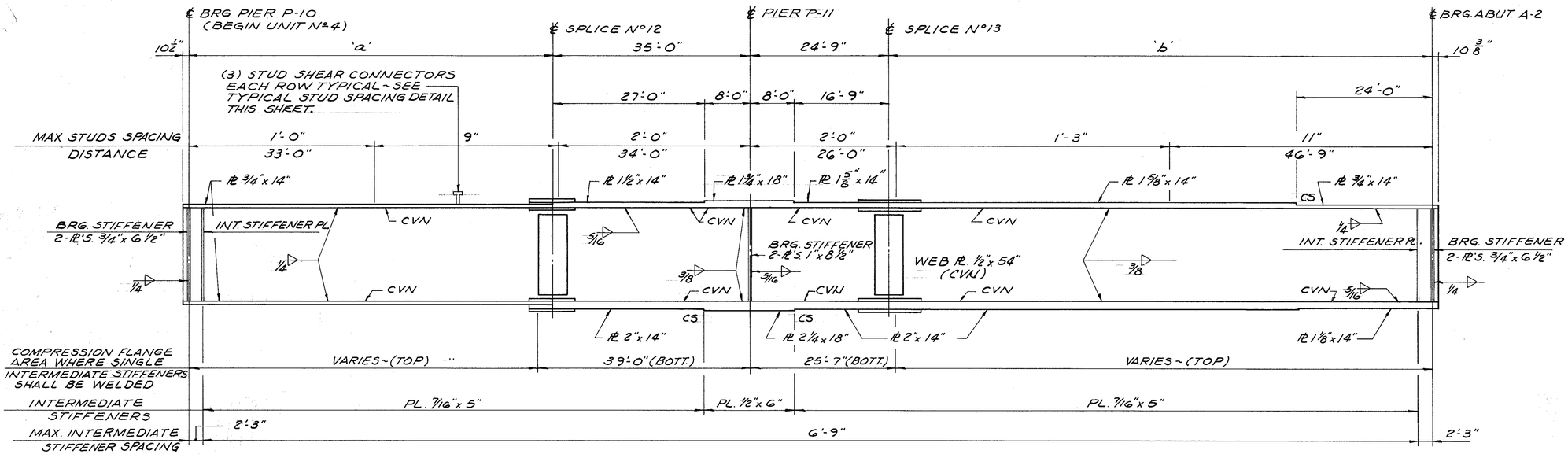
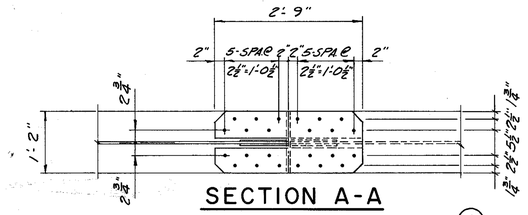
455

AKRON INNERBELT
SUM - 59 - 0.00

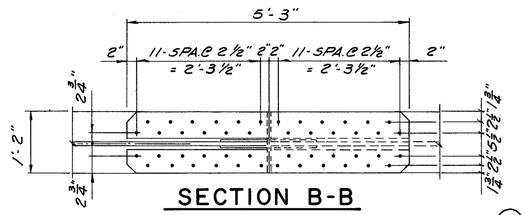



## GIRDER ELEVATION

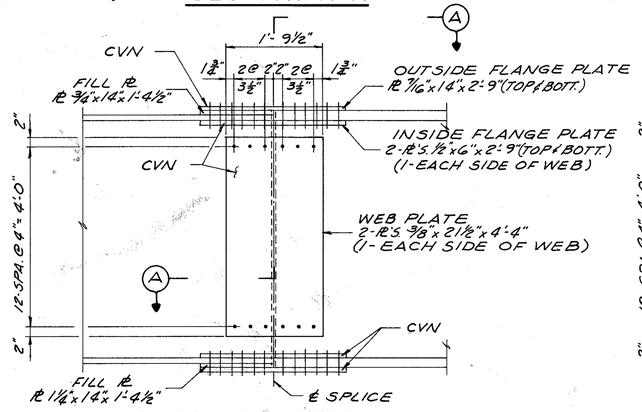
UNIT - 4




## SECTION A-A

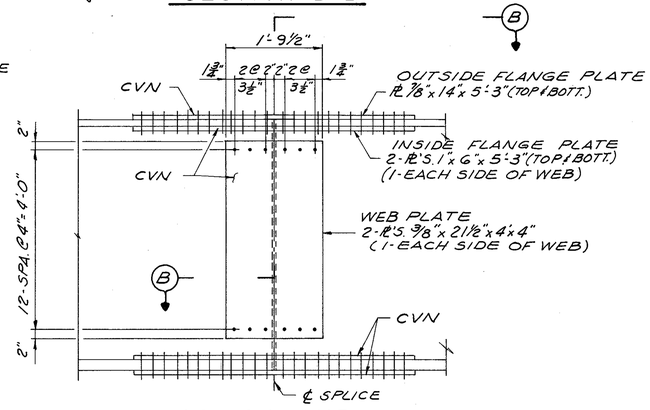



## SECTION B-B




## SPLICE DETAIL

FOR SPLICE Nº 12



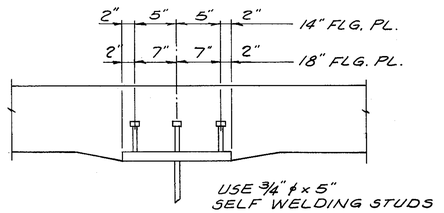

## SPLICE DETAIL

FOR SPLICE Nº 13

| TABLE OF DISTANCES | | | |
|---|---|---|---|
| | DIMENSION | 'a' | 'b' |
| GIRDER | A | 58'-2 7/8" | 97'-10 9/16" |
| | B | 60'-0 5/16" | 97'-5 3/4" |
| | C | 61'-9 11/16" | 97'-1 3/8" |
| | D | 63'-6 3/16" | 96'-9 1/16" |
| | E | 65'-3 7/8" | 96'-5 7/8" |

NOTES

1. GIRDERS IN UNIT Nº 4 ARE TO BE BUILT CURVED, PARALLEL TO THE BASELINE, SEE FRAMING PLAN SHEET 24/45
2. SEE NOTES (3) AND (5) ON SHEET 28/45
3. FOR ADDITIONAL FRAMING NOTES SEE SHEET 24/45




## TYPICAL STUD SPACING

(UNIT Nº 4)

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29/45

## GIRDER ELEVATION

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE

BR. NO. SUM-59-0000

AKRON OHIO — SUMMIT COUNTY

STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
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| 5 | OHIO | | |

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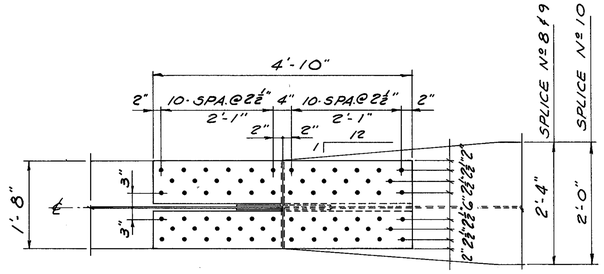
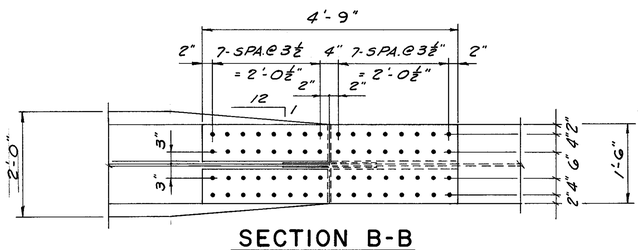
455

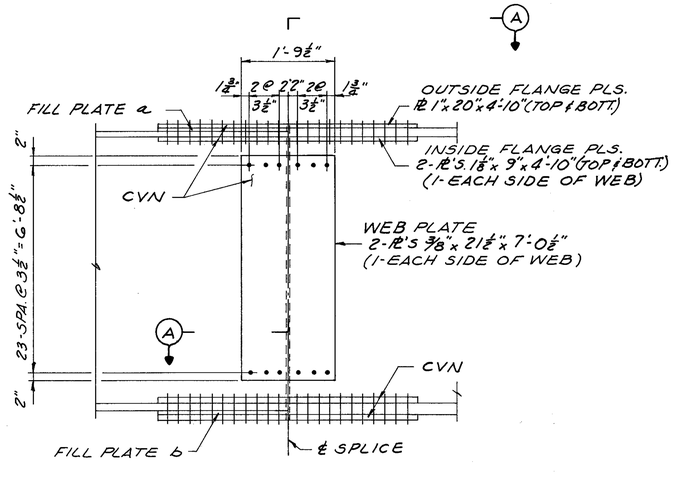
AKRON INNERBELT
SUM - 59 - 0.00




## SECTION A-A

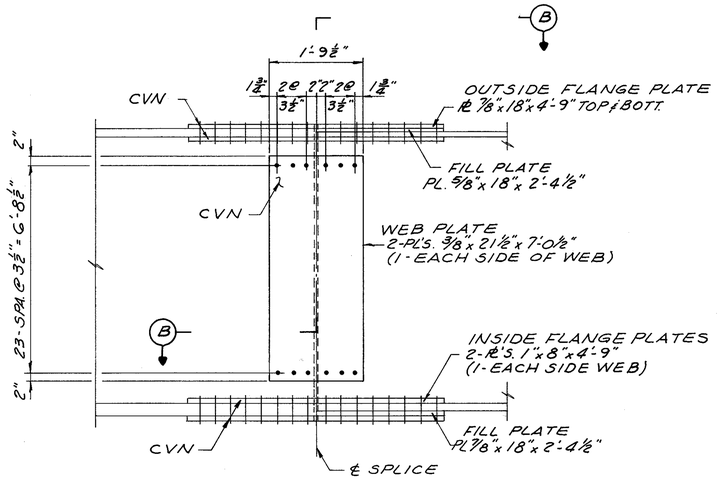



## SECTION B-B




## SPLICE DETAIL

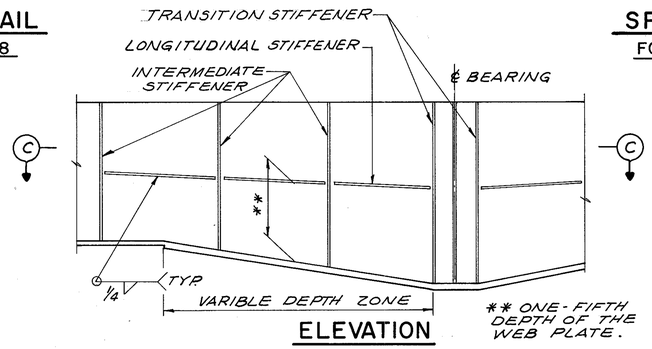
FOR SPLICE № 8
9 & 10 SIMILAR



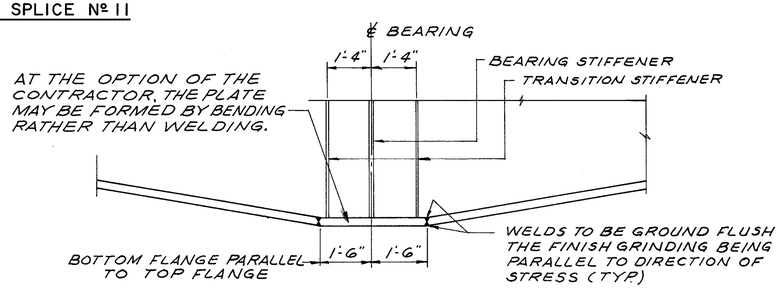

## SPLICE DETAIL

FOR SPLICE № 11

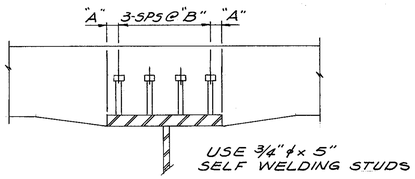
| TABLE OF FILL PLATES | | |
|---|---|---|
| SPL. | PL. | SIZE |
| 8 | a | 7/8" x 20" x 2'-5" |
| | b | 7/8" x 20" x 2'-5" |
| 9 | a | 3/8" x 20" x 2'-5" |
| | b | 3/8" x 20" x 2'-5" |
| 10 | a | 5/8" x 20" x 2'-5" |
| | b | 1⅛" x 20" x 2'-5" |




## ELEVATION

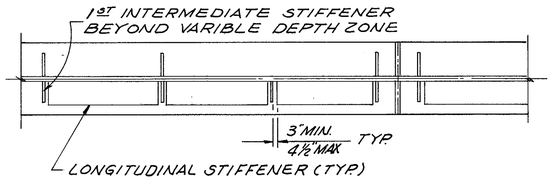



## HAUNCH DETAIL




## TYPICAL STUD SPACING

| TABLE OF STUD SPACING | | |
|---|---|---|
| FLG. WIDTH | "A" | "B" |
| 18" | 2 1/16" | 4 3/8" |
| 20" | 1 15/16" | 5 3/8" |
| 24" | 2 1/16" | 6 3/8" |
| 28" | 2" | 8" |




## SECTION C-C

## LONGITUDINAL STIFFENER DETAIL

| TABLE OF GIRDER DIMENSIONS FOR UNIT № 3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | DIMENSION | a | b | c | d | e | f | g | h |
| GIRDER | A | 144'-4 1/8" | 243'-5 1/4" | 184'-4 3/8" | 92'-9 1/16" | 115'-10 3/4" | 128'-3 7/16" | 121'-11 15/16" | 113'-3 1/16" |
| | B | 161'-1 3/8" | 244'-3 5/16" | 174'-5 13/16" | 102'-4 7/16" | 119'-2 1/4" | 128'-5 1/2" | 120'-3 3/8" | 109'-6 15/16" |
| | C | 176'-11 3/4" | 245'-0 1/8" | 165'-6 5/16" | 111'-9" | 122'-2" | 128'-7 13/16" | 118'-10 1/16" | 106'-1 5/16" |
| | D | 192'-0 5/16" | 245'-8 5/16" | 157'-4 3/16" | 120'-10 13/16" | 124'-10 9/16" | 128'-10 9/16" | 117'-7 1/2" | 102'-10" |
| | E | 206'-4" | 246'-6 1/2" | 149'-9 3/4" | 129'-9 15/16" | 127'-4 3/8" | 129'-2 1/8" | 116'-7 1/8" | 99'-8 1/16" |

SEE SHEET 28 | 45 FOR LOCATIONS OF DIMENSIONS "a" THRU "h"

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# FRAMING DETAILS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

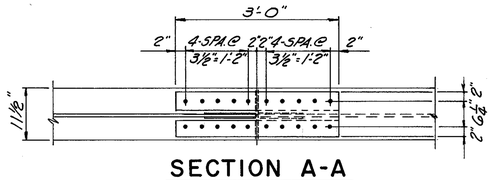
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | A.L.H. | JDJ | 12-20-92 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

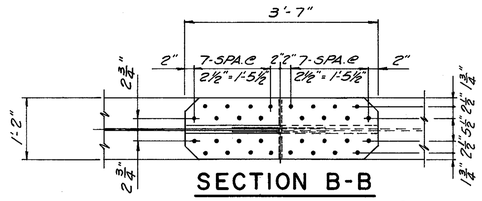
303
455

AKRON INNERBELT
SUM-59-0.00

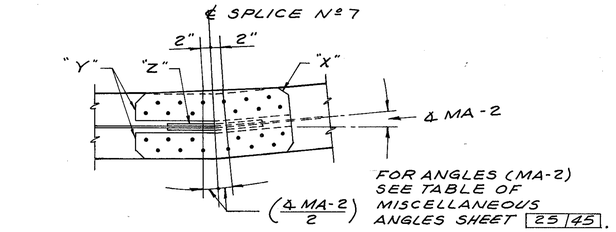
"X" ~ OUTSIDE FLG. PL. = 7/16" (CVN)
"Y" ~ INSIDE FLG. PL. = 1/2" (CVN)
"Z" ~ BENT WEB PL. = 3/8" (CVN)




## SECTION A-A



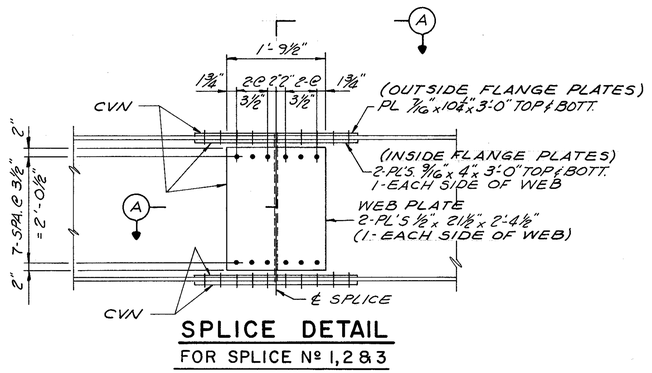

## SECTION B-B




FOR ANGLES (MA-2) SEE TABLE OF MISCELLANEOUS ANGLES SHEET 25/45.

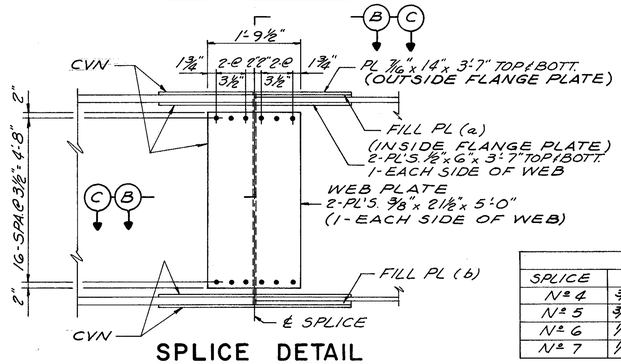
## SECTION "C-C"

(WORK WITH SECTION "B-B")




## SPLICE DETAIL

FOR SPLICE Nº 1, 2 & 3

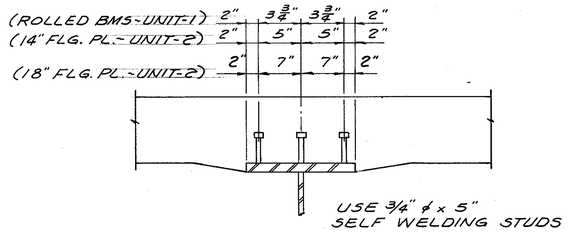



## SPLICE DETAIL

FOR SPLICE Nº 4, 5, 6 & 7

( SECTION "C-C" FOR SPLICE Nº 7)

| | FILL PLATES | |
|---|---|---|
| SPLICE | (a) | (b) |
| Nº 4 | 3/8" x 14" x 1'-9 1/2" | 1/8" x 14" x 1'-9 1/2" |
| Nº 5 | 3/8" x 14" x 1'-9 1/2" | 1/2" x 14" x 1'-9 1/2" |
| Nº 6 | 1/8" x 14" x 1'-9 1/2" | 1/8" x 14" x 1'-9 1/2" |
| Nº 7 | 1/8" x 14" x 1'-9 1/2" | 3/8" x 14" x 1'-9 1/2" |




## TYPICAL STUD SPACING

| BEARING UNITS | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOLSTER Nº | ROCKER Nº | DIMENSIONS (INCHES) | | | | | | | | | | | | |
| | | A | B | C | D | F | G | H | K | L | M | R | T | Y |
| | R-375 | 4" | 23" | 4 1/2" | 3 3/4" | 7/8" | 14" | 22 3/8" | 16" | 31" | 28" | 14" | 3 3/4" | 1 15/16" |
| B 425 | | 4 1/2" | 25" | 4 1/2" | 4" | 7/8" | 15" | 23 3/8" | 17" | 34" | 31" | 15" | 4" | 2 3/16" |
| | | | | | | | | | | | | | | |

NOTES: FOR DETAILS NOT SHOWN, SEE STANDARD DRAWING RB-1-55
ANCHOR BOLTS FOR BOLSTERS IN ALL CASES SHALL EXTEND A MINIMUM OF 1'-3" INTO THE CONCRETE.

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

31/45

# SPLICE DETAILS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | A.L.H. | | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

304/455

AKRON INNERBELT
SUM-59-0.00

NOTES

(1) FOR NOTES SEE SHT. 35/45

UNIT Nº. 1

| LOCATION | BEAM A | | | | BEAM B | | | | BEAM C | | | | BEAM D | | | | BEAM E | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 1 @ A-1 | | | | | | | | | | | | | | | | | | | | |
| 1/4 PT. | .0210 | .1320 | -.2544 | -.1014 | .0210 | .1320 | -.2544 | -.1014 | .0210 | .1320 | -.2543 | -.1013 | .0210 | .1320 | -.2543 | -.1013 | .0210 | .1320 | -.2543 | -.1013 |
| 1/2 PT. | .0270 | .1610 | -.3390 | -.1510 | .0270 | .1610 | -.3392 | -.1512 | .0270 | .1610 | -.3391 | -.1511 | .0270 | .1610 | -.3390 | -.1510 | .0270 | .1610 | -.3391 | -.1511 |
| 3/4 PT. | .0125 | .0780 | -.2542 | -.1637 | .0125 | .0780 | -.2545 | -.1640 | .0125 | .0780 | -.2543 | -.1638 | .0125 | .0780 | -.2543 | -.1638 | .0125 | .0780 | -.2544 | -.1639 |
| ℄ PIER P-1 | | | | | | | | | | | | | | | | | | | | |
| ℄ SPL. Nº 1 | .0113 | .2064 | .1478 | .3655 | .0113 | .2064 | ---- | .2178 | .0113 | .2064 | -.1511 | .0667 | .0113 | .2064 | -.2629 | -.0451 | .0113 | .2064 | -.3292 | -.1115 |
| 1/2 PT. | .0180 | .1180 | .1873 | .3233 | .0180 | .1180 | .1096 | .2456 | .0180 | .1180 | -.0344 | .1016 | .0180 | .1180 | -.2493 | -.1133 | .0180 | .1180 | -.4006 | -.2646 |
| 3/4 PT. | -.0070 | -.0385 | .0937 | .0982 | -.0070 | -.0385 | .0550 | .0095 | -.0070 | -.0385 | -.0173 | -.0628 | -.0070 | -.0385 | -.1223 | -.1678 | -.0070 | -.0385 | -.2128 | -.2583 |
| ℄ PIER P-2 | | | | | | | | | | | | | | | | | | | | |
| ℄ SPL. Nº 2 | .0843 | .5353 | ---- | .6195 | .0843 | .5353 | ---- | .6195 | .0843 | .5353 | ---- | .6195 | .0843 | .5353 | ---- | .6195 | .0843 | .5353 | ---- | .6195 |
| 1/4 PT. | .1560 | .9880 | ---- | 1.1440 | .1560 | .9880 | ---- | 1.1440 | .1560 | .9880 | ---- | 1.1440 | .1560 | .9880 | ---- | 1.1440 | .1560 | .9880 | ---- | 1.1440 |
| 1/2 PT. | .2450 | 1.5430 | ---- | 1.7880 | .2450 | 1.5430 | ---- | 1.7880 | .2450 | 1.5430 | ---- | 1.7880 | .2450 | 1.5430 | ---- | 1.7880 | .2450 | 1.5430 | ---- | 1.7880 |
| 3/4 PT. | .1345 | .8565 | ---- | .9910 | .1345 | .8565 | ---- | .9910 | .1345 | .8565 | ---- | .9910 | .1345 | .8565 | ---- | .9910 | .1345 | .8565 | ---- | .9910 |
| ℄ SPL. Nº 3 | .0650 | .4194 | ---- | .4844 | .0650 | .4194 | ---- | .4844 | .0650 | .4194 | ---- | .4844 | .0650 | .4194 | ---- | .4844 | .0650 | .4194 | ---- | .4844 |
| ℄ PIER P-3 | | | | | | | | | | | | | | | | | | | | |
| 1/4 PT. | .0500 | .3185 | ---- | .3685 | .0500 | .3185 | ---- | .3685 | .0500 | .3185 | ---- | .3685 | .0500 | .3185 | ---- | .3685 | .0500 | .3185 | ---- | .3685 |
| 1/2 PT. | .1260 | .7920 | ---- | .9180 | .1260 | .7920 | ---- | .9180 | .1260 | .7920 | ---- | .9180 | .1260 | .7920 | ---- | .9180 | .1260 | .7920 | ---- | .9180 |
| 3/4 PT. | .1085 | .6810 | ---- | .7895 | .1085 | .6810 | ---- | .7895 | .1085 | .6810 | ---- | .7895 | .1085 | .6810 | ---- | .7895 | .1085 | .6810 | ---- | .7895 |
| ℄ BRG. UNIT 1 @ P-4 | | | | | | | | | | | | | | | | | | | | |

UNIT Nº. 2

| LOCATION | BEAM A | | | | BEAM B | | | | BEAM C | | | | BEAM D | | | | BEAM E | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 2 @ P-4 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .2982 | 1.0897 | ---- | 1.3880 | .2890 | 1.2312 | ---- | 1.5202 | .2800 | 1.1907 | ---- | 1.4707 | .2690 | 1.1477 | ---- | 1.4167 | .2582 | .9480 | ---- | 1.2062 |
| 1/4 PT. | .5215 | 1.9045 | ---- | 2.4260 | .5055 | 2.1460 | ---- | 2.6515 | .4875 | 2.0700 | ---- | 2.5575 | .4675 | 1.9890 | ---- | 2.4565 | .4475 | 1.6375 | ---- | 2.0850 |
| 3/8 PT. | .6360 | 2.3172 | ---- | 2.9532 | .6132 | 2.6002 | ---- | 3.2135 | .5892 | 2.4962 | ---- | 3.0855 | .5625 | 2.3847 | ---- | 2.9472 | .5340 | 1.9505 | ---- | 2.4845 |
| 1/2 PT. | .6290 | 2.2860 | ---- | 2.9150 | .6030 | 2.5470 | ---- | 3.1500 | .5740 | 2.4270 | ---- | 3.0010 | .5430 | 2.2970 | ---- | 2.8400 | .5110 | 1.8590 | ---- | 2.3700 |
| 5/8 PT. | .4975 | 1.8030 | ---- | 2.3005 | .4720 | 1.9845 | ---- | 2.4565 | .4435 | 1.8650 | ---- | 2.3085 | .4125 | 1.7360 | ---- | 2.1485 | .3810 | 1.3782 | ---- | 1.7592 |
| ℄ SPL. Nº 4 | .3333 | 1.2015 | ---- | 1.5347 | .3109 | 1.2994 | ---- | 1.6104 | .2863 | 1.1954 | ---- | 1.4817 | .2599 | 1.0835 | ---- | 1.3434 | .2323 | .8322 | ---- | 1.0644 |
| 3/4 PT. | .3060 | 1.1020 | ---- | 1.4080 | .2845 | 1.1875 | ---- | 1.4720 | .2610 | 1.0875 | ---- | 1.3485 | .2355 | .9795 | ---- | 1.2150 | .2090 | .7465 | ---- | .9555 |
| 7/8 PT. | .1205 | .4257 | ---- | .5462 | .1075 | .4392 | ---- | .5467 | .0935 | .3790 | ---- | .4725 | .0787 | .3145 | ---- | .3932 | .0625 | .2122 | ---- | .2747 |
| ℄ PIER P-5 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | -.0180 | -.0287 | .0369 | -.0099 | .0005 | .0450 | .0248 | .0703 | .0217 | .1395 | | .1612 | .0465 | .2480 | ---- | .2945 | .0732 | .3207 | ---- | .3940 |
| 1/4 PT. | .0455 | .2480 | .0739 | .3674 | .0870 | .4670 | .0497 | .6037 | .1350 | .6795 | .0256 | .8401 | .1882 | .9169 | ---- | 1.1051 | .2342 | .9709 | ---- | 1.2051 |
| ℄ SPL. Nº 5 | .0665 | .3359 | .0824 | .4848 | .1038 | .5465 | .0534 | .7036 | .1497 | .7246 | .0266 | .8959 | .1890 | .9205 | ---- | 1.1095 | .2490 | 1.0295 | ---- | 1.2785 |
| 3/8 PT. | .1390 | .6245 | .1108 | .8743 | .1997 | .9895 | .0746 | 1.2638 | .2700 | 1.2997 | .0386 | 1.6083 | .3487 | 1.6500 | ---- | 1.9987 | .4360 | 1.7615 | ---- | 2.1975 |
| 1/2 PT. | .2060 | .8820 | .1477 | 1.2357 | .2750 | 1.3230 | .0996 | 1.6976 | .3530 | 1.6700 | .0515 | 2.0745 | .4420 | 2.0610 | ---- | 2.5030 | .5380 | 2.1520 | ---- | 2.6900 |
| 5/8 PT. | .2027 | .8485 | .1846 | 1.2358 | .2620 | 1.2415 | .1244 | 1.6279 | .3297 | 1.5385 | .0643 | 1.9326 | .4050 | 1.8697 | ---- | 2.2747 | .4870 | 1.9320 | ---- | 2.4190 |
| 3/4 PT. | .1415 | .5830 | .2216 | .9461 | .1800 | .8415 | .1493 | 1.1708 | .2240 | 1.0320 | .0771 | 1.3331 | .2725 | 1.2420 | ---- | 1.5145 | .3255 | 1.2770 | ---- | 1.6025 |
| ℄ SPL. Nº 6 | .1241 | .5096 | .2263 | .8600 | .1503 | .6988 | .1542 | 1.0033 | .1781 | .8146 | .0805 | 1.0732 | .2062 | .9341 | ---- | 1.1903 | .2398 | .9143 | ---- | 1.1490 |
| 7/8 PT. | .0570 | .2312 | .1249 | .4131 | .0725 | .3320 | .0879 | .4924 | .0905 | .4062 | .0471 | .5439 | .1092 | .4875 | ---- | .5967 | .1302 | .4982 | ---- | .6285 |
| ℄ PIER P-6 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | -.0002 | .0087 | .1148 | .1233 | -.0015 | .0090 | .1425 | .1500 | -.0028 | .0093 | .1729 | .1794 | -.0045 | .0097 | .2055 | .2108 | -.0055 | .0117 | .3698 | .3760 |
| 1/4 PT. | .0250 | .1230 | .2318 | .3798 | .0290 | .1715 | .2872 | .4877 | .0335 | .2070 | .3476 | .5881 | .0395 | .2505 | .4133 | .7033 | .0475 | .2635 | .7242 | 1.0352 |
| ℄ SPL. Nº 7 | .0552 | .2532 | .3321 | .6405 | .0589 | .3235 | .3877 | .7701 | .0619 | .3493 | .4445 | .8557 | .0652 | .3872 | .5014 | .9538 | .0709 | .3674 | .8291 | 1.2674 |
| 3/8 PT. | .0615 | .2800 | .3529 | .6944 | .0737 | .3977 | .4365 | .9080 | .0877 | .4640 | .5279 | 1.0797 | .1052 | .5880 | .6267 | 1.3200 | .1275 | .6150 | 1.0586 | 1.8011 |
| 1/2 PT. | .0920 | .4110 | .4783 | .9813 | .1120 | .5870 | .5824 | 1.2814 | .1350 | .7170 | .6909 | 1.5429 | .1630 | .8720 | .8031 | 1.8381 | .1970 | .9090 | 1.2944 | 2.4004 |
| 5/8 PT. | .1017 | .4477 | .5275 | 1.0770 | .1245 | .6422 | .6238 | 1.3906 | .1512 | .7857 | .7236 | 1.6606 | .1830 | .9555 | .8267 | 1.9652 | .2207 | .9957 | 1.3118 | 2.5283 |
| 3/4 PT. | .0875 | .3825 | .4620 | .9320 | .1075 | .5490 | .5376 | 1.1941 | .1305 | .6730 | .6161 | 1.4196 | .1580 | .8185 | .6970 | 1.6735 | .1910 | .8520 | 1.1050 | 2.1480 |
| 7/8 PT. | .0515 | .2220 | .2852 | .5587 | .0627 | .3192 | .3283 | .7103 | .0767 | .3915 | .3733 | .8416 | .0925 | .4760 | .9193 | .9878 | .1117 | .4952 | .6695 | 1.2765 |
| ℄ BRG. UNIT 2 @ P-7 | | | | | | | | | | | | | | | | | | | | |

LEGEND

(a) DEFLECTION DUE TO WEIGHT OF STEEL.

(b) DEFLECTION DUE TO REMAINING DEAD LOAD.

(c) ADJUSTMENT REQUIRED FOR VERTICAL AND HORIZONTAL CURVE.

(d) REQUIRED SHOP CAMBER.

Superseded by sheet 3045/455

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

32/45

# TABLE OF DEFLECTION AND CAMBER

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE

BR. NO. SUM-59-0000

AKRON OHIO SUMMIT COUNTY

STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | M.A.B. | | AL.H. | JJP | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

3045/455

AKRON INNERBELT
SUM-59-0.00

NOTES

(1) FOR NOTES SEE SHT. 35/45

## UNIT NO. 1

| LOCATION | BEAM A | | | | BEAM B | | | | BEAM C | | | | BEAM D | | | | BEAM E | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 1 @ A-1 | | | | | | | | | | | | | | | | | | | | |
| 1/4 PT. | .0210 | .1320 | -.2544 | -.1014 | .0210 | .1320 | -.2544 | -.1014 | .0210 | .1320 | -.2543 | -.1013 | .0210 | .1320 | -.2543 | -.1013 | .0210 | .1320 | -.2543 | -.1013 |
| 1/2 PT. | .0270 | .1610 | -.3390 | -.1510 | .0270 | .1610 | -.3392 | -.1512 | .0270 | .1610 | -.3391 | -.1511 | .0270 | .1610 | -.3390 | -.1510 | .0270 | .1610 | -.3391 | -.1511 |
| 3/4 PT. | .0125 | .0780 | -.2542 | -.1637 | .0125 | .0780 | -.2545 | -.1640 | .0125 | .0780 | -.2543 | -.1638 | .0125 | .0780 | -.2543 | -.1638 | .0125 | .0780 | -.2544 | -.1639 |
| ℄ PIER P-1 | | | | | | | | | | | | | | | | | | | | |
| ℄ SPL. Nº 1 | .0113 | .2064 | .1478 | .3655 | .0113 | .2064 | ---- | .2178 | .0113 | .2064 | -.1511 | .0667 | .0113 | .2064 | -.2629 | -.0451 | .0113 | .2064 | -.3292 | -.1115 |
| 1/2 PT. | .0180 | .1180 | .1873 | .3233 | .0180 | .1180 | .1096 | .2456 | .0180 | .1180 | -.0344 | .1016 | .0180 | .1180 | -.2493 | -.1133 | .0180 | .1180 | -.4006 | -.2646 |
| 3/4 PT. | -.0070 | -.0385 | .0937 | .0482 | -.0070 | -.0385 | .0550 | .0095 | -.0070 | -.0385 | -.0173 | -.0628 | -.0070 | -.0385 | -.1223 | -.1678 | -.0070 | -.0385 | -.2128 | -.2583 |
| ℄ PIER P-2 | | | | | | | | | | | | | | | | | | | | |
| ℄ SPL. Nº 2 | .0843 | .5353 | ---- | .6195 | .0843 | .5353 | ---- | .6195 | .0843 | .5353 | ---- | .6195 | .0843 | .5353 | ---- | .6195 | .0843 | .5353 | ---- | .6195 |
| 1/4 PT. | .1560 | .9880 | ---- | 1.1440 | .1560 | .9880 | ---- | 1.1440 | .1560 | .9880 | ---- | 1.1440 | .1560 | .9880 | ---- | 1.1440 | .1560 | .9880 | ---- | 1.1440 |
| 1/2 PT. | .2450 | 1.5430 | ---- | 1.7880 | .2450 | 1.5430 | ---- | 1.7880 | .2450 | 1.5430 | ---- | 1.7880 | .2450 | 1.5430 | ---- | 1.7880 | .2450 | 1.5430 | ---- | 1.7880 |
| 3/4 PT. | .1345 | .8565 | ---- | .9910 | .1345 | .8565 | ---- | .9910 | .1345 | .8565 | ---- | .9910 | .1345 | .8565 | ---- | .9910 | .1345 | .8565 | ---- | .9910 |
| ℄ SPL. Nº 3 | .0650 | .4194 | ---- | .4844 | .0650 | .4194 | ---- | .4844 | .0650 | .4194 | ---- | .4844 | .0650 | .4194 | ---- | .4844 | .0650 | .4194 | ---- | .4844 |
| ℄ PIER P-3 | | | | | | | | | | | | | | | | | | | | |
| 1/4 PT. | .0500 | .3185 | ---- | .3685 | .0500 | .3185 | ---- | .3685 | .0500 | .3185 | ---- | .3685 | .0500 | .3185 | ---- | .3685 | .0500 | .3185 | ---- | .3685 |
| 1/2 PT. | .1260 | .7920 | ---- | .9180 | .1260 | .7920 | ---- | .9180 | .1260 | .7920 | ---- | .9180 | .1260 | .7920 | ---- | .9180 | .1260 | .7920 | ---- | .9180 |
| 3/4 PT. | .1085 | .6810 | ---- | .7895 | .1085 | .6810 | ---- | .7895 | .1085 | .6810 | ---- | .7895 | .1085 | .6810 | ---- | .7895 | .1085 | .6810 | ---- | .7895 |
| ℄ BRG. UNIT 1 @ P-4 | | | | | | | | | | | | | | | | | | | | |

## UNIT NO. 2

| LOCATION | BEAM A | | | | BEAM B | | | | BEAM C | | | | BEAM D | | | | BEAM E | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 2 @ P-4 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .2852 | 1.0422 | ---- | 1.3275 | .2947 | 1.2532 | ---- | 1.5480 | .3035 | 1.2940 | ---- | 1.5975 | .3137 | 1.3360 | ---- | 1.6497 | .3235 | 1.1837 | ---- | 1.5072 |
| 1/4 PT. | .4990 | 1.8205 | ---- | 2.3195 | .5150 | 2.1860 | ---- | 2.7010 | .5310 | 2.2555 | ---- | 2.7865 | .5470 | 2.3265 | ---- | 2.8735 | .5635 | 2.0600 | ---- | 2.6235 |
| 3/8 PT. | .6077 | 2.2132 | ---- | 2.8210 | .6257 | 2.6522 | ---- | 3.2780 | .6445 | 2.7325 | ---- | 3.3770 | .6632 | 2.8145 | ---- | 3.4777 | .6820 | 2.4892 | ---- | 3.1712 |
| 1/2 PT. | .6000 | 2.1780 | ---- | 2.7780 | .6160 | 2.6040 | ---- | 3.2200 | .6330 | 2.6770 | ---- | 3.3100 | .6500 | 2.7500 | ---- | 3.4000 | .6670 | 2.4280 | ---- | 3.0950 |
| 5/8 PT. | .4727 | 1.7115 | ---- | 2.1842 | .4837 | 2.0375 | ---- | 2.5212 | .4952 | 2.0847 | ---- | 2.5800 | .5067 | 2.1335 | ---- | 2.6402 | .5172 | 1.8757 | ---- | 2.3930 |
| ℄ SPL. No. 4 | .3149 | 1.1351 | ---- | 1.4501 | .3163 | 1.3225 | ---- | 1.6389 | .3169 | 1.3252 | ---- | 1.6420 | .3172 | 1.3263 | ---- | 1.6435 | .3168 | 1.1406 | ---- | 1.4574 |
| 3/4 PT. | .2890 | 1.0400 | ---- | 1.3290 | .2940 | 1.2280 | ---- | 1.5220 | .2985 | 1.2475 | ---- | 1.5460 | .3030 | 1.2660 | ---- | 1.5690 | .3070 | 1.1045 | ---- | 1.4115 |
| 7/8 PT. | .1127 | .3970 | ---- | .5097 | .1125 | .4612 | ---- | .5737 | .1130 | .4612 | ---- | .5742 | .1127 | .4600 | ---- | .5727 | .1125 | .3932 | ---- | .5057 |
| ℄ PIER No. 5 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | -.0122 | -.0072 | .0379 | .0184 | -.0060 | .0173 | .0257 | .0369 | .0013 | .0500 | ---- | .0513 | .0090 | .0850 | ---- | .0940 | .0177 | .1115 | ---- | .1292 |
| 1/4 PT. | .0555 | .2845 | .0755 | .4155 | .0735 | .4065 | .0510 | .5310 | .0930 | .4970 | .0264 | .6164 | .1150 | .5955 | ---- | .7105 | .1389 | .6136 | ---- | .7525 |
| ℄ SPL. No. 5 | .0776 | .3750 | .0842 | .5368 | .0917 | .4925 | .0552 | .6393 | .1063 | .5595 | .0278 | .6936 | .1222 | .6293 | ---- | .7515 | .1390 | .6140 | ---- | .7530 |
| 3/8 PT. | .1510 | .6700 | .1129 | .9339 | .1807 | .9037 | .0762 | 1.1607 | .2125 | 1.0490 | .0394 | 1.3009 | .2472 | 1.2050 | ---- | 1.4522 | .2850 | 1.1945 | ---- | 1.4795 |
| 1/2 PT. | .2190 | .9290 | .1502 | 1.2982 | .2540 | 1.2270 | .1013 | 1.5823 | .2910 | 1.3950 | .0523 | 1.7383 | .3310 | 1.5740 | ---- | 1.9050 | .3740 | 1.5330 | ---- | 1.9070 |
| 5/8 PT. | .2142 | .8910 | .1870 | 1.2923 | .2440 | 1.1605 | .1261 | 1.5306 | .2757 | 1.3010 | .0652 | 1.6419 | .3085 | 1.4482 | ---- | 1.7567 | .3445 | 1.3932 | ---- | 1.7377 |
| 3/4 PT. | .1505 | .6160 | .2237 | .9902 | .1680 | .7890 | .1508 | 1.1078 | .1870 | .8710 | .0778 | 1.1358 | .2065 | .9545 | ---- | 1.1610 | .2270 | .9060 | ---- | 1.1330 |
| ℄ SPL. No. 6 | .1326 | .5400 | .2283 | .9009 | .1421 | .6640 | .1522 | .9612 | .1517 | .7020 | .0807 | .9344 | .1602 | .7352 | ---- | .8954 | .1686 | .6663 | ---- | .8348 |
| 7/8 PT. | .0620 | .2495 | .1261 | .4376 | .0680 | .3110 | .0877 | .4667 | .0735 | .3345 | .0462 | .4542 | .0790 | .3565 | ---- | .4355 | .0847 | .3295 | ---- | .4142 |
| ℄ PIER No. 6 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | -.0040 | -.0057 | .1143 | .1045 | -.0007 | .0108 | .1421 | .1521 | .0030 | .0330 | .1726 | .2086 | .0080 | .0627 | .2055 | .2762 | .0145 | .0835 | .3699 | .4679 |
| 1/4 PT. | .0175 | .0915 | .2308 | .3398 | .0280 | .1650 | .2865 | .4795 | .0415 | .2375 | .3472 | .6262 | .0585 | .3290 | .4133 | .8008 | .0790 | .3740 | .7245 | 1.1775 |
| ℄ SPL No. 7 | .0446 | .2098 | .3309 | .5853 | .0562 | .3090 | .3869 | .7520 | .0699 | .3832 | .4439 | .8971 | .0862 | .4702 | .5014 | 1.0578 | .1043 | .4852 | .8294 | 1.4189 |
| 3/8 PT. | .0502 | .2345 | .3516 | .6364 | .0702 | .3792 | .4355 | .8850 | .0957 | .5105 | .5273 | 1.1335 | .1262 | .6695 | .6266 | 1.4223 | .1622 | .7350 | 1.0589 | 1.9561 |
| 1/2 PT. | .0790 | .3570 | .4770 | .9130 | .1070 | .5580 | .5817 | 1.2467 | .1410 | .7310 | .6904 | 1.5624 | .1820 | .9420 | .8030 | 1.9270 | .2300 | 1.0190 | 1.2947 | 2.5437 |
| 5/8 PT. | .0892 | .3962 | .5264 | 1.0119 | .1185 | .6097 | .6230 | 1.3513 | .1540 | .7892 | .7231 | 1.6664 | .1970 | 1.0075 | .8268 | 2.0313 | .2462 | 1.0812 | 1.3123 | 2.6398 |
| 3/4 PT. | .0775 | .3410 | .4611 | .8796 | .1020 | .5210 | .5370 | 1.1600 | .1320 | .6705 | .6158 | 1.4183 | .1675 | .8510 | .6970 | 1.7155 | .2090 | .9095 | 1.1053 | 2.2238 |
| 7/8 PT. | .0455 | .1995 | .2845 | .5295 | .0600 | .3025 | .3280 | .6905 | .0770 | .3882 | .3731 | .8383 | .0975 | .4912 | .4192 | 1.0079 | .1207 | .5240 | .6695 | 1.3143 |
| ℄ BRG UNIT 2 @ P-7 | | | | | | | | | | | | | | | | | | | | |

LEGEND

(a) DEFLECTION DUE TO WEIGHT OF STEEL.

(b) DEFLECTION DUE TO REMAINING DEAD LOAD.

(c) ADJUSTMENT REQUIRED FOR VERTICAL AND HORIZONTAL CURVE.

(d) REQUIRED SHOP CAMBER.

Supersedes sheet 304/455

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

# TABLE OF DEFLECTION AND CAMBER

32/45

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | M.A.B. | | AL.H. | RAP | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

305/455

AKRON INNERBELT
SUM-59-0.00

UNIT Nº 3

| LOCATION | BEAM A | | | | | BEAM B | | | | | BEAM C | | | | | BEAM D | | | | | BEAM E | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (a) | (b) | (c) | (d) | (e) | (a) | (b) | (c) | (d) | (e) | (a) | (b) | (c) | (d) | (e) | (a) | (b) | (c) | (d) | (e) |
| ℄ BRG. UNIT 3 ℄ P-7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/10 PT. | .1093 | .3125 | .3600 | .8765 | 1.6583 | .1641 | .4531 | .4200 | 1.0811 | 2.1183 | .2266 | .6094 | .5000 | 1.2897 | 2.6257 | .3047 | .8594 | .6300 | 1.4990 | 3.2931 | .4219 | 1.1094 | .7800 | 1.7065 | 4.0178 |
| 1/5 PT. | .1953 | .5625 | .6600 | 1.5580 | 2.9758 | .2969 | .8125 | .7900 | 1.9820 | 3.8214 | .4063 | 1.1250 | .9100 | 2.2928 | 2.2928 | .5547 | 1.4844 | 1.1500 | 2.6647 | 5.8538 | .7657 | 1.9766 | 1.3900 | 3.0335 | 7.1658 |
| 3/10 PT. | .2500 | .7187 | .8400 | 2.0452 | 3.8539 | .3672 | 1.0313 | .9800 | 2.5225 | 4.9010 | .5156 | 1.4453 | 1.1700 | 3.0092 | 6.1401 | .7188 | 1.8984 | 1.4500 | 3.4974 | 7.5646 | .9141 | 2.4219 | 1.6800 | 3.9816 | 8.9976 |
| 2/5 PT. | .2656 | .7500 | .8600 | 2.3372 | 4.2128 | .3750 | 1.1093 | 1.0400 | 2.8828 | 5.4071 | .5547 | 1.5156 | 1.2400 | 3.4391 | 6.7494 | .7187 | 1.9766 | 1.4400 | 3.9970 | 8.1323 | .8907 | 2.4141 | 1.6600 | 4.5504 | 9.5152 |
| 1/2 PT. | .2109 | .6484 | .7500 | 2.4346 | 4.0439 | .3359 | 1.0078 | .9500 | 3.0032 | 5.2969 | .4844 | 1.3750 | 1.1300 | 3.5826 | 6.5720 | .6018 | 1.7031 | 1.2800 | 4.1636 | 7.7483 | .6953 | 1.9609 | 1.3400 | 4.7401 | 8.7363 |
| 3/5 PT. | .1406 | .4843 | .5300 | 2.3372 | 3.4921 | .2656 | .7969 | .7400 | 2.8831 | 4.6856 | .3516 | 1.0391 | .8400 | 3.4392 | 5.6699 | .4141 | 1.2188 | .9000 | 3.9972 | 6.5301 | .4297 | 1.2891 | .8600 | 4.5505 | 7.1693 |
| ℄ SPL. Nº 8 | .1085 | .3976 | .4765 | 2.2405 | 3.2231 | .2282 | .7032 | .6784 | 2.7865 | 4.3963 | .2987 | .9117 | .7754 | 3.3374 | 5.3232 | .3495 | 1.0573 | .8321 | 3.8841 | 6.1231 | .3482 | 1.0748 | .7974 | 4.4205 | 6.6409 |
| 7/10 PT. | .0625 | .2734 | .4000 | 2.0951 | 2.7810 | .1563 | .5234 | .5600 | 2.5227 | 3.7624 | .1797 | .6250 | .6300 | 3.0093 | 4.9440 | .1953 | .6719 | .6700 | 3.4975 | 5.0347 | .1563 | .5703 | .6500 | 3.9817 | 5.3583 |
| 4/5 PT. | .0078 | .1015 | .2700 | 1.5583 | 1.9376 | .0547 | .2344 | .3700 | 1.9221 | 2.5812 | .0391 | .2422 | .4200 | 2.2928 | 2.9941 | .0234 | .1879 | .4500 | 2.6647 | 3.3260 | -.0782 | .0313 | .4300 | 3.0338 | 3.4169 |
| 9/10 PT. | -.0234 | .0001 | .1300 | .8765 | .9832 | -.0156 | .0390 | .1900 | 1.0811 | 1.2945 | -.0469 | .0010 | .2100 | 1.2897 | 1.4538 | -.0607 | -.0599 | .2200 | 1.4990 | 1.5984 | -.1407 | -.2032 | .2200 | 1.7063 | 1.5829 |
| ℄ PIER P-8 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/10 PT. | .1875 | .2812 | .2900 | 2.3199 | 3.0786 | .2265 | .3672 | .3300 | 2.3232 | 3.2469 | .2422 | .9297 | .3400 | 2.3644 | 3.3763 | .2969 | .5625 | .3700 | 2.4419 | 3.6713 | .3984 | .7344 | .4200 | 2.4588 | 4.0116 |
| 1/5 PT. | .5078 | .8984 | .5800 | 4.0668 | 6.0530 | .5859 | 1.0469 | .6600 | 4.0816 | 6.3744 | .6406 | 1.2109 | .6900 | 4.1732 | 6.7147 | .7734 | 1.4922 | .7400 | 4.3378 | 7.3434 | .9844 | 1.9609 | .8400 | 4.3807 | 8.1660 |
| ℄ SPL. Nº 9 | .7656 | 1.3849 | .8914 | 4.8653 | 7.9072 | .7741 | 1.4305 | .8916 | 4.7048 | 7.8009 | .7851 | 1.4924 | .8590 | 4.6329 | 7.7693 | .8683 | 1.6835 | .8335 | 4.6316 | 8.0169 | 1.0249 | 2.0342 | .8748 | 4.9880 | 8.4218 |
| 3/10 PT. | .9218 | 1.6796 | 1.0500 | 5.2411 | 8.9225 | .9922 | 1.8750 | 1.1600 | 5.2754 | 9.3026 | 1.0938 | 2.0938 | 1.2200 | 5.4262 | 9.8338 | 1.2813 | 2.5156 | 1.2400 | 5.6877 | 10.7246 | 1.6016 | 3.0781 | 1.3700 | 5.7660 | 11.8157 |
| 2/5 PT. | 1.2656 | 2.3984 | 1.5200 | 5.8425 | 11.0265 | 1.3281 | 2.5469 | 1.5600 | 5.9041 | 11.3391 | 1.4375 | 2.8203 | 1.6100 | 6.1237 | 11.9915 | 1.6719 | 3.2734 | 1.6300 | 6.4911 | 13.0664 | 1.9922 | 3.9453 | 1.7100 | 6.6028 | 14.2503 |
| 1/2 PT. | 1.4609 | 2.8203 | 1.7800 | 5.8713 | 11.9325 | 1.4922 | 2.8984 | 1.7800 | 5.9680 | 12.1386 | 1.6075 | 3.1410 | 1.7800 | 6.2655 | 12.7940 | 1.8125 | 3.5625 | 1.7800 | 6.7619 | 13.9169 | 2.0937 | 4.0391 | 1.7800 | 6.8439 | 14.7567 |
| 3/5 PT. | 1.4531 | 2.7812 | 1.7600 | 5.3273 | 11.3216 | 1.4531 | 2.0847 | 1.7300 | 5.4497 | 10.7175 | 1.5391 | 2.9844 | 1.7000 | 6.0632 | 12.2867 | 1.6956 | 3.2546 | 1.6400 | 6.5018 | 13.0920 | 1.8516 | 3.5156 | 1.5500 | 6.5985 | 13.9657 |
| 7/10 PT. | 1.2187 | 2.3281 | 1.9800 | 4.3364 | 9.3632 | 1.2031 | 2.2969 | 1.9200 | 4.9349 | 9.8544 | 1.2500 | 2.3594 | 1.3600 | 5.3809 | 10.3503 | 1.3281 | 2.9766 | 1.2400 | 5.6955 | 10.7402 | 1.3594 | 2.9531 | 1.1000 | 5.7163 | 10.6288 |
| ℄ SPL. Nº 10 | .8248 | 1.5473 | .9938 | 3.5762 | 6.9421 | .8908 | 1.6836 | 1.0420 | 4.2054 | 7.8218 | .9820 | 1.8143 | 1.0512 | 4.7410 | 8.5885 | 1.0921 | 2.0011 | 1.0069 | 5.1787 | 9.2787 | 1.1814 | 2.0948 | .9238 | 5.3572 | 9.5573 |
| 4/5 PT. | .7812 | 1.4609 | .9400 | 3.9636 | 6.6457 | .7734 | 1.4531 | .9000 | 3.8545 | 6.9810 | .7813 | 1.4063 | .8200 | 4.1430 | 7.1506 | .7813 | 1.3750 | .7000 | 4.3930 | 7.1993 | .7734 | 1.2734 | .5200 | 4.3475 | 6.9143 |
| 9/10 PT. | .3359 | .5937 | .4700 | 2.0182 | 3.4178 | .3359 | .5781 | .4500 | 2.2096 | 3.5736 | .3047 | .5156 | .4100 | 2.3493 | 3.5796 | .2969 | .4531 | .3500 | 2.4446 | 3.5446 | .2891 | .3828 | .2900 | 2.4420 | 3.4039 |
| ℄ PIER P-9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/10 PT. | -.1171 | -.1406 | ---- | 1.4948 | 1.2371 | -.0859 | -.0469 | ---- | 1.3039 | 1.1711 | -.0687 | -.0076 | ---- | 1.1937 | 1.0674 | -.0559 | .0293 | ---- | 1.0077 | .9811 | -.0781 | .0234 | ---- | .8909 | .8362 |
| 1/5 PT. | -.1093 | .0156 | ---- | 2.6575 | 2.5638 | -.0625 | .1563 | .2100 | 2.3181 | 2.6219 | -.0312 | .2344 | .1900 | 2.0334 | 2.4266 | -.0234 | .2656 | .2100 | 1.7915 | 2.2937 | -.0547 | .2422 | .1700 | 1.5838 | 1.9413 |
| 3/10 PT. | .0001 | .4375 | .2500 | 3.4879 | 4.1755 | .0625 | .5859 | .4300 | 3.0424 | 4.1208 | .0859 | .6328 | .3800 | 2.6688 | 3.7675 | .0781 | .6484 | .4200 | 2.3512 | 3.4977 | .0312 | .6016 | .3400 | 2.0788 | 3.0516 |
| ℄ SPL. Nº 11 | .1542 | .9069 | .5762 | 3.9358 | 5.5731 | .1750 | .9347 | .6676 | 3.3846 | 5.1619 | .1734 | .8999 | .6158 | 2.9243 | 4.6134 | .1362 | .8299 | .5686 | 2.5351 | 4.0697 | .0795 | .7465 | .4965 | 2.2032 | 3.4756 |
| 2/5 PT. | .1796 | .9843 | .6300 | 3.9861 | 5.7800 | .2188 | 1.0703 | .7600 | 3.4772 | 5.5263 | .2344 | 1.0859 | .7800 | 3.0500 | 5.1503 | .2031 | 1.0391 | .7400 | 2.6871 | 4.6693 | .1719 | 1.0234 | .6500 | 2.3757 | 4.2210 |
| 1/2 PT. | .3750 | 1.5156 | 1.1000 | 4.1521 | 7.1427 | .3750 | 1.5000 | 1.1200 | 3.6219 | 6.6169 | .3516 | 1.4375 | 1.0700 | 3.1772 | 6.0363 | .3203 | 1.3671 | 1.0100 | 2.7991 | 5.4965 | .2969 | 1.4062 | .9100 | 2.4747 | 5.0878 |
| 3/5 PT. | .5156 | 1.8359 | 1.3600 | 3.9862 | 7.6977 | .4766 | 1.7265 | 1.3000 | 3.4771 | 6.9802 | .4219 | 1.6094 | 1.2200 | 3.0500 | 6.3013 | .3983 | 1.5391 | 1.1900 | 2.6871 | 5.7645 | .3828 | 1.5781 | 1.0500 | 2.3758 | 5.3867 |
| 7/10 PT. | .5625 | 1.8671 | 1.4000 | 3.4878 | 7.3174 | .4844 | 1.6797 | 1.2900 | 3.0425 | 6.4966 | .4219 | 1.5469 | 1.1800 | 2.6688 | 5.8176 | .3906 | 1.4609 | 1.1200 | 2.3511 | 5.3226 | .3906 | 1.4766 | 1.0200 | 2.0789 | 4.9661 |
| 9/5 PT. | .4765 | 1.5156 | 1.1800 | 2.6574 | 5.8295 | .3906 | 1.3359 | 1.0200 | 2.3181 | 5.0646 | .3359 | 1.2344 | .9500 | 2.0335 | 4.5538 | .3047 | 1.1641 | .8900 | 1.7915 | 4.1503 | .3359 | 1.1875 | .8200 | 1.5839 | 3.9273 |
| 9/10 PT. | .2656 | .8515 | .6400 | 1.4947 | 3.2518 | .2266 | .7500 | .5600 | 1.3039 | 2.8405 | .1953 | .6953 | .5500 | 1.1439 | 2.5845 | .1719 | .6406 | .4900 | 1.0076 | 2.3101 | .1719 | .6484 | .4500 | .8909 | 2.1612 |
| ℄ BRG. UNIT 3 ℄ P-10 | | | | | | | | | | | | | | | | | | | | | | | | | |

LEGEND

(a) DEFLECTION DUE TO WEIGHT OF STEEL.

(b) DEFLECTION DUE TO REMAINING DEAD LOAD.

(c) ADJUSTMENT REQUIRED FOR HEAT CURVING.

(d) ADJUSTMENT REQUIRED FOR VERTICAL CURVE.

(e) REQUIRED SHOP CAMBER.

NOTES

(1) FOR NOTES SEE SHT. 35/45.

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

33/45

# TABLE OF DEFLECTION AND CAMBER

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE

BR. NO. SUM-59-0000

AKRON OHIO — SUMMIT COUNTY

STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | M.A.B. | | A.L.H. | J.D.P. | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

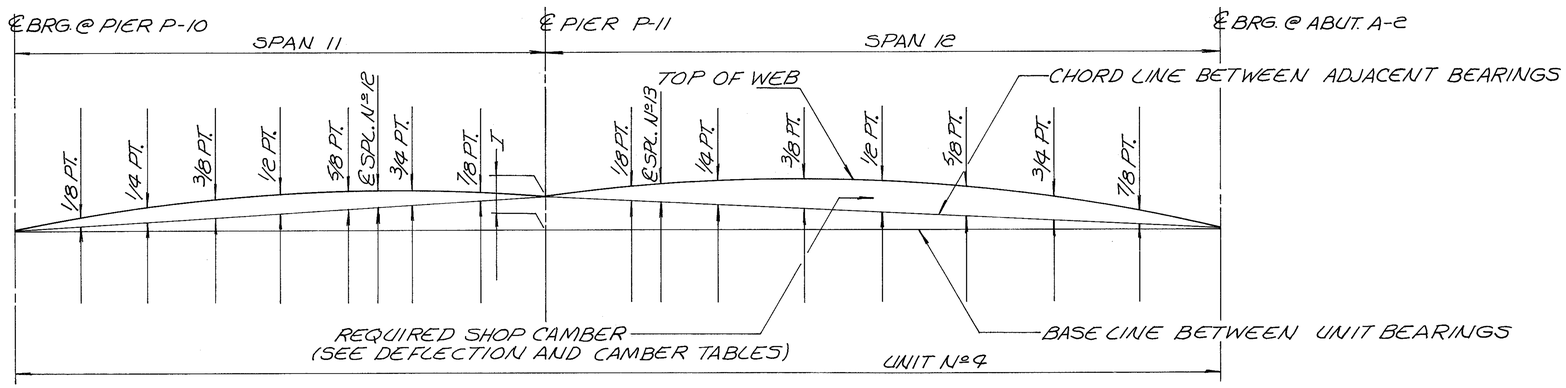
306
455

AKRON INNERBELT
SUM - 59 - 0.00

UNIT Nº 4

| LOCATION | BEAM A | | | | | BEAM B | | | | | BEAM C | | | | | BEAM D | | | | | BEAM E | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (a) | (b) | (c) | (d) | (e) | (a) | (b) | (c) | (d) | (e) | (a) | (b) | (c) | (d) | (e) | (a) | (b) | (c) | (d) | (e) |
| ℄ BRG. UNIT 4 ℄ P-10 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .0362 | .2500 | 1.0750 | .9694 | 1.8257 | .0350 | .2775 | .9000 | .9701 | 1.6826 | .0417 | .3432 | .8675 | .9756 | 1.7281 | .0332 | .3090 | .9925 | .9806 | 1.8103 | .0325 | .3935 | .9525 | .9854 | 1.8139 |
| 1/4 PT. | .0705 | .4770 | 1.9600 | .7961 | 2.8036 | .0665 | .5080 | 1.4200 | .8057 | 2.8002 | .0605 | .5395 | 1.9400 | .8151 | 2.8551 | .0500 | .5390 | 1.6000 | .8239 | 3.0129 | .0460 | .5860 | 1.5400 | .8323 | 3.0043 |
| 3/8 PT. | .0792 | .5630 | 1.3950 | .9952 | 3.0325 | .0627 | .5630 | 1.5350 | 1.0073 | 3.1680 | .0582 | .6052 | 1.5900 | 1.0189 | 3.2229 | .0397 | .6210 | 1.6600 | 1.0298 | 3.3506 | .0242 | .6170 | 1.6775 | 1.0405 | 3.3592 |
| 1/2 PT. | .0480 | .4690 | 1.0100 | 1.0615 | 2.5885 | .0330 | .4940 | 1.3500 | 1.0744 | 2.9414 | .0240 | .4850 | 1.2300 | 1.0867 | 2.8257 | -.0010 | .4850 | 1.2800 | 1.0985 | 2.8625 | -.0170 | .4850 | 1.5000 | 1.1099 | 3.0779 |
| * | .0074 | .2857 | .5612 | .9956 | 1.8498 | -.0070 | .2850 | .7350 | 1.0073 | 2.0203 | -.0260 | .2715 | .7250 | 1.0189 | 1.9894 | -.0465 | .1760 | .3750 | 1.0298 | 1.5343 | -.0652 | .2380 | .4550 | 1.0405 | 1.6682 |
| ** | .0072 | .2850 | .5600 | .9952 | 1.8475 | -.0086 | .2735 | .7069 | .9999 | 1.9717 | -.0303 | .2492 | .6685 | 1.0034 | 1.8908 | -.0525 | .1917 | .3312 | 1.0061 | 1.4266 | -.0728 | .1930 | .3871 | 1.0084 | 1.5157 |
| 3/4 PT. | -.0290 | .0775 | .1600 | .7961 | 1.0046 | -.0370 | .0775 | .2100 | .8058 | 1.0563 | -.0590 | .0730 | .2050 | .8151 | 1.0341 | -.0770 | .0080 | .1050 | .8239 | .8599 | -.0945 | .0075 | .1300 | .8323 | .8753 |
| 7/8 PT. | -.0337 | -.0945 | ---- | .9694 | .3862 | -.0482 | -.0475 | ---- | .9700 | .3743 | -.0522 | -.0355 | ---- | .9756 | .3878 | -.0655 | -.0662 | ---- | .9806 | .3488 | -.0825 | -.1172 | ---- | .9855 | .2858 |
| ℄ PIER P-11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .1245 | .3245 | .3850 | .8034 | 1.5774 | .1242 | .3635 | .2650 | .7777 | 1.5305 | .1975 | .4062 | .3350 | .7534 | 1.6422 | .1597 | .4637 | .3725 | .7306 | 1.7266 | .1972 | .5075 | .3750 | .7092 | 1.7890 |
| ℄ SPL. Nº 13 | .2367 | .6493 | .5271 | 1.1833 | 2.5964 | .1988 | .6681 | .4387 | 1.1481 | 2.4537 | .2681 | .7502 | .5421 | 1.1149 | 2.6751 | .2972 | .8472 | .6031 | 1.0834 | 2.8310 | .3501 | .9751 | .6149 | 1.0533 | 2.9935 |
| 1/4 PT. | .3085 | .8675 | .7150 | 1.3772 | 3.2682 | .2905 | .8985 | .6050 | 1.3330 | 3.1270 | .3450 | .9950 | .7250 | 1.2915 | 3.3565 | .3765 | 1.0790 | .7700 | 1.2525 | 3.4780 | .4400 | 1.2190 | .7800 | 1.2155 | 3.6545 |
| 3/8 PT. | .9647 | 1.3520 | 1.1500 | 1.7214 | 4.6882 | .9875 | 1.4687 | .9975 | 1.6664 | 4.6201 | .5327 | 1.5792 | 1.1675 | 1.6145 | 4.8940 | .5685 | 1.6680 | 1.1825 | 1.5655 | 4.9845 | .6967 | 1.8690 | 1.1850 | 1.5195 | 5.1753 |
| 1/2 PT. | .5670 | 1.7190 | 1.9200 | 1.8362 | 5.5422 | .5980 | 1.8280 | 1.4600 | 1.7774 | 5.6634 | .6390 | 1.9370 | 1.4400 | 1.7220 | 5.7380 | .6920 | 2.0630 | 1.4600 | 1.6699 | 5.8849 | .7730 | 2.2650 | 1.9400 | 1.6208 | 6.0988 |
| 5/8 PT. | .5627 | 1.7152 | 1.9250 | 1.7216 | 5.4246 | .5925 | 1.8162 | 1.2500 | 1.6664 | 5.3251 | .6277 | 1.9685 | 1.9275 | 1.6145 | 5.6382 | .6892 | 2.0467 | 1.9000 | 1.5657 | 5.6967 | .7550 | 2.2512 | 1.9275 | 1.5195 | 5.9532 |
| 3/4 PT. | .9560 | 1.3910 | 1.0900 | 1.3772 | 4.3142 | .9880 | 1.4920 | 1.0450 | 1.3329 | 4.3579 | .5125 | 1.5860 | 1.1800 | 1.2915 | 4.5700 | .5630 | 1.7675 | 1.1950 | 1.2525 | 4.7380 | .6130 | 1.8315 | 1.1800 | 1.2157 | 4.8402 |
| 7/8 PT. | .2562 | .8320 | .6350 | .8034 | 2.5267 | .2912 | .8872 | .6225 | .7776 | 2.5786 | .2937 | .9110 | .6850 | .7534 | 2.6431 | .3210 | .9972 | .6975 | .7305 | 2.7462 | .3577 | 1.0892 | .7000 | .7090 | 2.8560 |
| ℄ BRG. @ ABUT. A-2 | | | | | | | | | | | | | | | | | | | | | | | | | |

* DENOTES ℄ SPL. Nº 12 BM. "A" OR 5/8 PT. BEAMS "B" THRU "E"
** DENOTES 5/8 PT. BEAM "A" OR ℄ SPL. Nº 12 BEAMS "B" THRU "E"




| LAYOUT DIAGRAM OFFSETS | |
|---|---|
| BEAM OR GIDER | I |
| A | 5 9/16" |
| B | 5 1/2" |
| C | 5 1/2" |
| D | 5 7/16" |
| E | 5 3/8" |

LAYOUT DIAGRAM UNIT Nº 4

NOTES

(1) FOR NOTES SEE SHT 35/45.

LEGEND

(a) DEFLECTION DUE TO WEIGHT OF STEEL.

(b) DEFLECTION DUE TO REMAINING DEAD LOAD.

(c) ADJUSTMENT REQUIRED FOR HEAT CURVING.

(d) ADJUSTMENT REQUIRED FOR VERTICAL CURVE.

(e) REQUIRED SHOP CAMBER.

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34/45

# TABLE OF DEFLECTION AND CAMBER

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE

BR. NO. SUM-59-0000

AKRON OHIO SUMMIT COUNTY

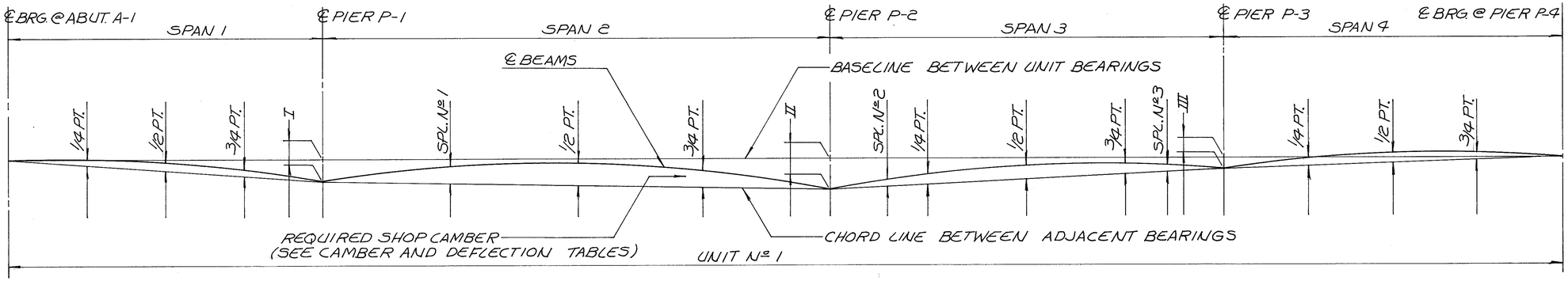
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | M.A.B. | | A.L.H. | JBP | 12-20-82 | |

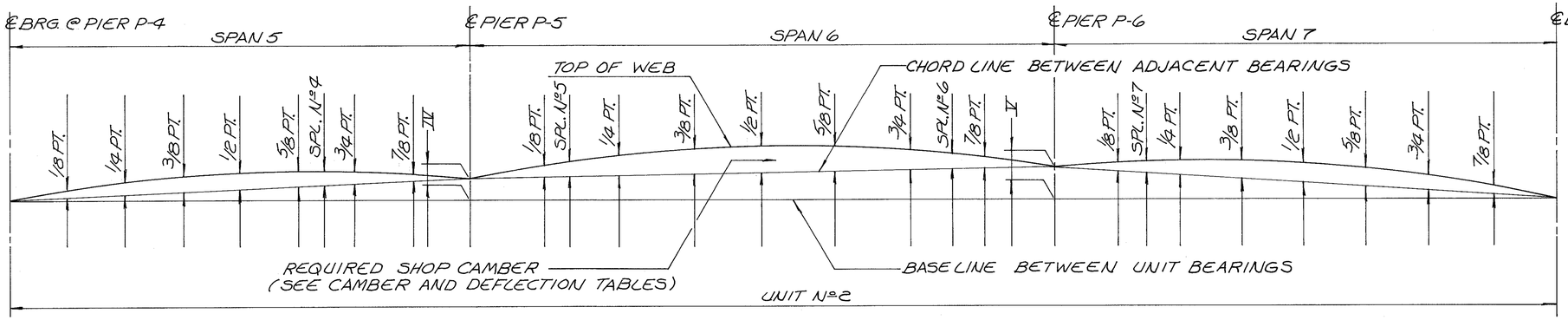
| F. H. W. A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

307
455

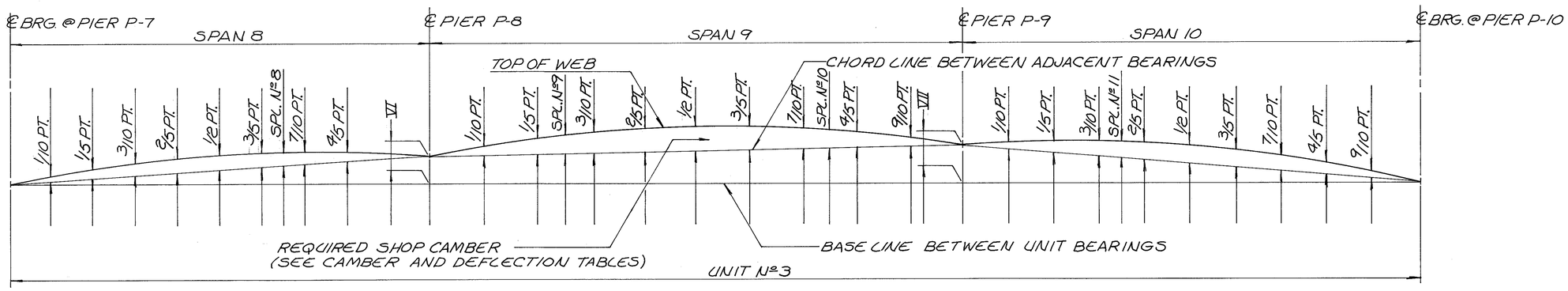
AKRON INNERBELT
SUM - 59 - 0.00




## LAYOUT DIAGRAM UNIT Nº 1




## LAYOUT DIAGRAM UNIT Nº 2




## LAYOUT DIAGRAM UNIT Nº 3

| LAYOUT DIAGRAM OFFSETS | | | | | | | |
|---|---|---|---|---|---|---|---|
| BEAM OR GIDER | I | II | III | IV | V | VI | VII |
| A | 7/8" | 3/8" | 1/8" | 11/16" | 1 3/16" | 2'-2 13/16" | 2'-6 7/8" |
| B | 1 3/8" | 7/8" | 3/8" | 11/16" | 1 1/4" | 2'-5 5/8" | 2'-7 3/16" |
| C | 1 15/16" | 1 7/16" | 5/8" | 11/16" | 1 5/16" | 2'-8 5/16" | 2'-7 3/16" |
| D | 2 7/16" | 2 1/16" | 15/16" | 11/16" | 1 7/16" | 2'-10 7/8" | 2'-7 1/16" |
| E | 2 3/4" | 2 9/16" | 1 1/8" | 3/4" | 1 11/16" | 3'-0 1/16" | 2'-6 1/4" |

## NOTES

1. FOR FRAMING PLANS AND GIRDER DETAILS, SEE SHTS. 24/45 THRU 31/45.
2. FOR DEFLECTION AND CAMBER TABLES, SEE SHTS. 32/45 THRU 34/45.
3. A POSITIVE CAMBER VALUE MEANS THE CAMBER ABOVE AND A NEGATIVE CAMBER VALUE MEANS THE CAMBER BELOW THE CHORD BETWEEN THE ADJACENT BEARINGS IN THAT SPAN.
4. ALL DEFLECTIONS ARE GIVEN IN DECIMALS OF AN INCH.
5. SEE STRUCTURE GENERAL NOTES FOR HEAT CURVING OF BEAMS AND GIRDERS.

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35/45

# LAYOUT AND CAMBER DIAGRAMS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | M.A.B. | | M.L.H. | JGP | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

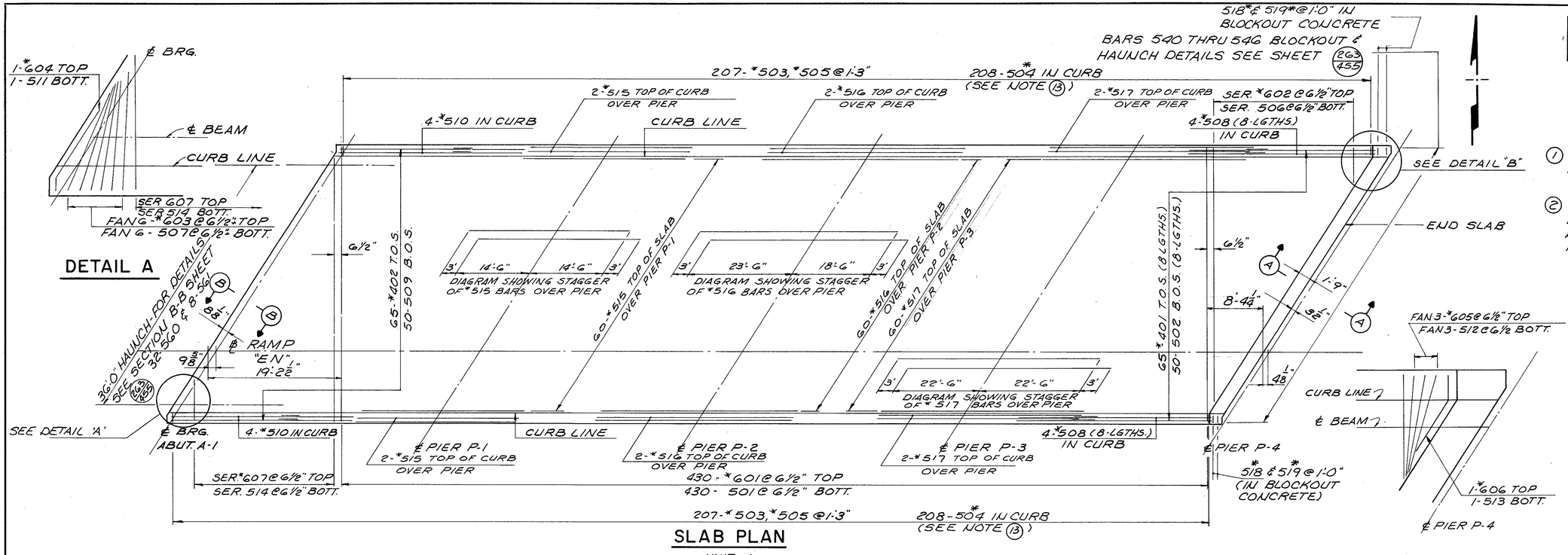
308/455

AKRON INNERBELT
SUM-59-0.00

**NOTE**

(1) FOR TRANSVERSE SECTION AND NOTES SEE SHEET 38/45

(2) THE PREFIX IS OR 2S SHALL BE ADDED TO ALL REINFORCING BAR MARKS FOR UNITS 1 OR 2 RESPECTIVELY

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36/45

# SLAB PLAN

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | JBP | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

309/455

AKRON INNERBELT
SUM-59-0.00

BARS 550 THRU 556 FOR BLOCKOUT & HAUNCH-SEE TYPICAL DETAIL'S SHEET (263/455)

2-*518 & *519 (IN BLOCKOUT CONCRETE)

SER *603 @ 6½" TOP
SER 511 @ 6½" BOTT.
4-*510 IN CURB

455-*503, *505 @ 1:3"

458-*504 IN CURB (SEE NOTE (13))

2-*516 TOP OF CURB OVER PIER (5 LGTHS.)

2-*517 TOP OF CURB OVER PIER (5 LGTHS.)

4-*508 (20 LGTHS.) IN CURB

2-*518 & *519 (IN BLOCKOUT CONCRETE)

SEE DETAIL "A"

60-*516 (5 LGTHS.) TOP OF SLAB OVER PIER

60-*517 (5 LGTHS.) TOP OF SLAB OVER PIER

65-*402 T.O.S.
50-502 B.O.S.

65-*403 T.O.S. LAP WITH 40-*

65-*401 T.O.S. (19 LGTHS.)
50-501 B.O.S. (20 LGTHS.)

DIAGRAM SHOWING STAGGER OF *516 BARS OVER PIER (STAGGER LAPS)

DIAGRAM SHOWING BARS OVER PIER (STAGGER LAPS)

STAGGER OF *517

℄ RAMP "EN"

FAN 4-*606 @ 6½" TOP
FAN 4-514 @ 6½" BOTT.

SER 603 @ G½"
SER 511 @ G½"

CURB LINE
℄ BEAM

℄ PIER P-7
℄ PIER P-8
℄ PIER P-9

4-*509 IN CURB

2-*516 TOP OF CURB OVER PIER (5 LGTHS.)

2-*517 TOP OF CURB OVER PIER (5 LGTHS.)

4-*508 (20 LGTHS.) IN CURB

1044-*601 @ 6½" TOP
1044-506 @ 6½" BOTT.
482-*503, 505 @ 1:3"

485-*504 IN CURB (SEE NOTE (13))

SER. *602 @ G½" TOP
SER. 507 @ 6½" BOTT.

BARS 540 THRU 546 FOR BLOCKOUT & HAUNCH SEE TYPICAL DETAIL'S SHEET (263/455)

2-*518 & *519 (IN BLOCKOUT CONCRETE)

## SLAB PLAN
UNIT-3

## DETAIL B

℄ PIER P-10

1-*605 TOP
1-513 BOTT.

℄ BEAM
CURB LINE

SER G02 @ G½" TOP
SER 507 @ G½" BOTT.

FAN 5-*604 @ 6½" TOP
FAN 5-512 @ 6½" BOTT.

℄ PIER P-10

SEE DETAIL "B"

2-*518 & *519 @ 1'-0"
IN BLOCKOUT CONCRETE

BARS SPACED RADIALLY ALONG ℄

1-*607 TOP
1-515 BOTT.

2-*516 & *517 (IN BLOCKOUT CONC.)

℄ PIER P-7

## DETAIL A

SER. *603 @ 6½" TOP
SER 511 @ 6½" BOTT.
4-*510 IN CURB

172-*503, *505 @ 1:3"

174-*504 (IN CURB-SEE NOTE (13))

4-*508 (7 LGTHS.) IN CURB

2-*515 TOP OF CURB OVER PIER (3 LGTHS.)

DETAIL C

FAN 6-*604 @ 6½" TOP
FAN 6-512 @ 6½" BOTT.

SER G03 TOP
SER 511 BOTT.

CURB LINE
℄ BEAM

BEGIN SLAB

1-606 TOP
1-514 BOTT.

℄ PIER P-10

## DETAIL C

SER. *402 T.O.S.
SER. 502 B.O.S.

60-*515 (3 LGTHS.) TOP OF SLAB OVER PIER

DIAGRAM SHOWING BARS OVER PIER

STAGGER OF *515

65-*401 T.O.S. (7 LGTHS.)
50-501 B.O.S. (7 LGTHS.)

36'-0" HAUNCH-FOR DETAILS SEE SECTION B-B SHEET (263/455) (32-560 & 8-561)

DETAIL D

℄ BRG. ABUT. A-2

4-*508 (7 LGTHS.) IN CURB

SER. *602 @ G½" TOP
SER. 507 @ 6½" BOTT.

℄ PIER P-11

2-*515 TOP OF CURB OVER PIER (3 LGTHS.)

360-*601 @ 6½" TOP
360-506 @ 6½" BOTT.
177-*503, *505 @ 1:3"

179-*504 (IN CURB-SEE NOTE (13))

BARS 540 THRU 546 FOR BLOCKOUT & HAUNCH-SEE TYPICAL DETAIL'S SHEET (263/455)

## SLAB PLAN
UNIT-4

℄ BRG. ABUT. A-2

1-*605 TOP
1-513 BOTT.

℄ BEAM
CURB LINE

SER G02 TOP
SER 507 BOTT.

FAN 5-*604 @ G½" TOP
FAN 5-512 @ G½" BOTT.

## DETAIL D

SPACED RADIALLY ALONG ℄

### NOTES

1. FOR TRANSVERSE SECTION AND NOTES SEE SHEET 38/45.
2. THE PREFIX 35 OR 45 SHALL BE ADDED TO ALL REINFORCING BAR MARKS FOR UNITS 3 OR 4 RESPECTIVELY.

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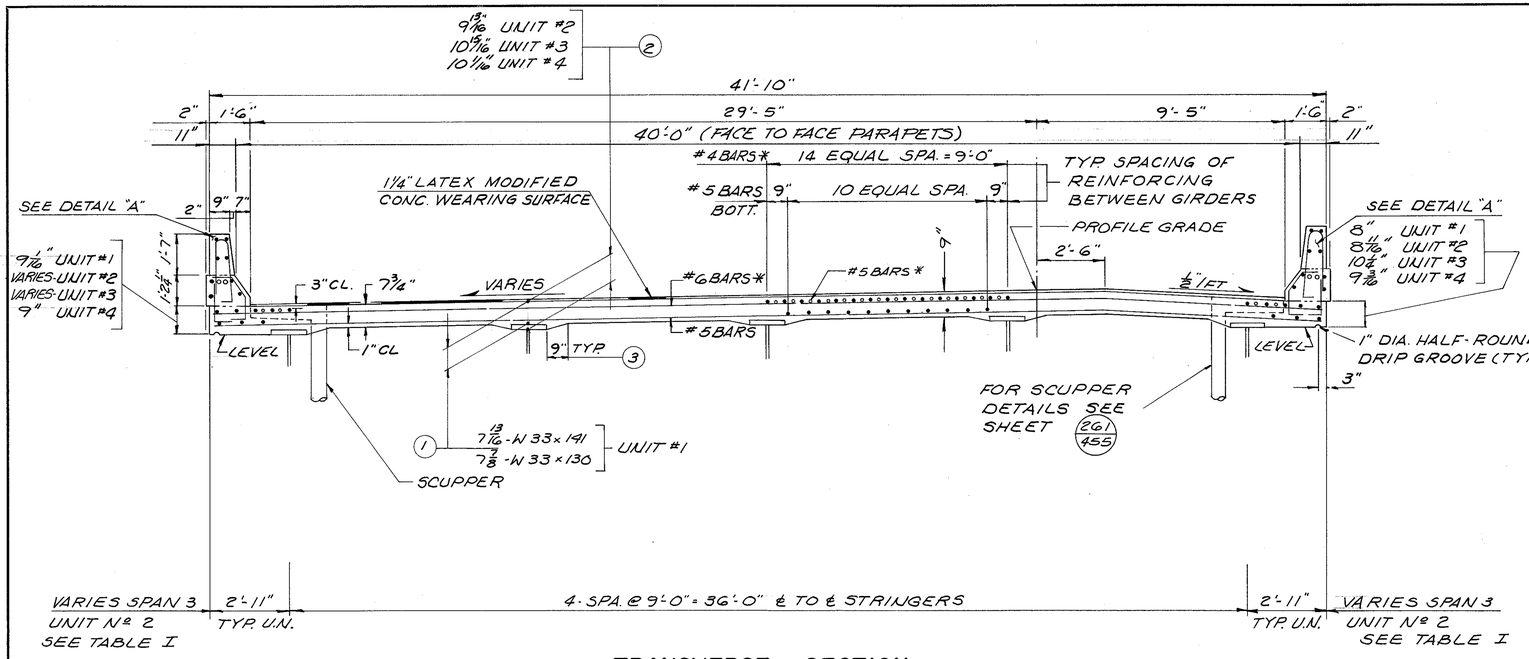
37/45

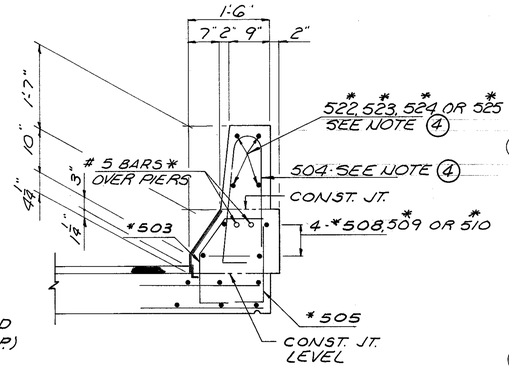
## SLAB PLAN

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | JWW | 12-20-82 | |




## TRANSVERSE SECTION




## DETAIL A

FOR ADDITIONAL DETAIL OF CURB PLATE SEE SHEET 261/455.

| TABLE I | | |
|---|---|---|
| SLAB OFFSET TABLE UNIT Nº 2 | | |
| LOCATION | ℄ GIRDER "A" TO LT. EDGE OF SLAB | ℄ GIRDER "E" TO RT. EDGE OF SLAB |
| ℄ PIER P-6 | 2'-11 3/16" | 2'-10 3/4" |
| 1/4 PT. | 3'-0 1/16" | 2'-11 11/16 |
| 1/2 PT. | 2'-11 5/16" | 3'-0 3/8" |
| 3/4 PT. | 2'-10 11/16" | 3'-1 5/8" |
| ℄ BRG. END UNIT P-7 | 2'-11" | 2'-11 |
| | | |
| | | |
| | | |
| | | |

DIMENSIONS SHOWN ARE PERPENDICULAR TO THE ℄ OF GIRDERS.

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|---|---|---|---|
| 5 | OHIO | | |

310/455

AKRON INNERBELT
SUM-59-0.00

NOTES

1. THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.
2. THIS IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFIRMATION REQUIRED TO PLACE IT PARELLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18.
3. A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH).
4. FOR SPACING & LOCATION OF REINFORCING SEE GENERAL PLAN SHEET 8/45.
5. FOR FORMING ELEVATION TABLE SEE SHEET 39/45.
6. TRANSVERSE AND LONGITUDINAL REINFORCEMENT SHALL BE FIELD BENT AS REQUIRED. PAYMENT SHALL BE INCLUDED WITH ITEM 509, REINFORCING STEEL.
7. ALL REINFORCING BARS SHOWN THUS * ARE EPOXY COATED.
8. PROFILE GRADE IS GIVEN TO TOP OF FINISHED PAVEMENT.
9. FOR LOCATION OF LIGHT STANDARD SUPPORTS, SEE GENERAL PLAN SHEETS 5/45 THRU 8/45.
10. FOR ELECTRICAL CONDUIT ON BRIDGE, SEE LIGHTING PLANS.
11. FOR SCUPPER LOCATIONS SEE GENERAL PLAN SHEET 5/45 THRU 8/45.

FOR SCUPPER DETAILS SEE SHEET 261/455.

12. FOR SECTIONS 'A-A' & 'B-B' SEE SHEET 263/455.
13. FOR CROSSFRAME TYPE AND LOCATIONS SEE FRAMING PLANS, FOR CROSSFRAME DETAILS SEE SHEET 262/455

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38/45

# TRANSVERSE SECTION

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

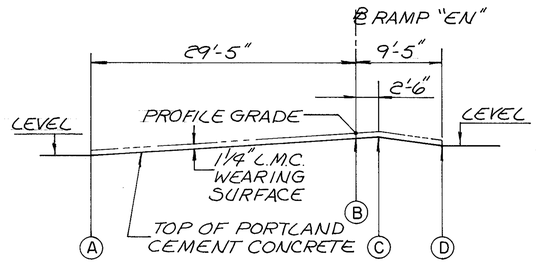
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | | 12-20-82 | |

| SCREED ELEVATIONS UNIT 1 | | | | |
|---|---|---|---|---|
| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
| ℄ ABUT. A-1 | 987.936 | 986.805 | 986.711 | 986.272 |
| 1/4 PT. | 988.355 | 987.199 | 987.103 | 986.658 |
| 1/2 PT. | 988.779 | 987.599 | 987.501 | 987.050 |
| 3/4 PT. | 989.208 | 988.004 | 987.904 | 987.447 |
| ℄ PIER P-1 | 989.652 | 988.423 | 988.321 | 987.859 |
| 1/4 PT. | 990.332 | 989.065 | 988.960 | 988.490 |
| 1/2 PT. | 990.962 | 989.718 | 989.610 | 989.132 |
| 3/4 PT. | 991.582 | 990.369 | 990.263 | 989.784 |
| ℄ PIER P-2 | 992.219 | 991.038 | 990.934 | 990.454 |
| 1/4 PT. | 993.190 | 992.052 | 991.952 | 991.472 |
| 1/2 PT. | 994.125 | 993.030 | 992.934 | 992.454 |
| 3/4 PT. | 994.956 | 993.905 | 993.812 | 993.333 |
| ℄ PIER P-3 | 995.773 | 994.765 | 994.676 | 994.197 |
| 1/4 PT. | 996.512 | 995.539 | 995.453 | 994.974 |
| 1/2 PT. | 997.264 | 996.326 | 996.243 | 995.764 |
| 3/4 PT. | 997.967 | 997.064 | 996.984 | 996.505 |
| ℄ PIER P-4 | 998.623 | 997.755 | 997.678 | 997.199 |

| SCREED ELEVATIONS UNIT 2 | | | | |
|---|---|---|---|---|
| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
| ℄ PIER P-4 | 998.733 | 997.871 | 997.794 | 997.315 |
| 1/8 PT. | 999.545 | 998.723 | 998.649 | 998.153 |
| 1/4 PT. | 1000.334 | 999.549 | 999.479 | 998.970 |
| 3/8 PT. | 1001.089 | 1000.339 | 1000.271 | 999.755 |
| 1/2 PT. | 1001.807 | 1001.088 | 1001.023 | 1000.507 |
| 5/8 PT. | 1002.488 | 1001.797 | 1001.735 | 1001.226 |
| 3/4 PT. | 1003.150 | 1002.490 | 1002.432 | 1001.933 |
| 7/8 PT. | 1003.815 | 1003.191 | 1003.136 | 1002.648 |
| ℄ PIER P-5 | 1004.500 | 1003.921 | 1003.869 | 1003.389 |
| 1/8 PT. | 1005.248 | 1004.830 | 1004.790 | 1004.341 |
| 1/4 PT. | 1006.022 | 1005.775 | 1005.746 | 1005.329 |
| 3/8 PT. | 1006.803 | 1006.724 | 1006.708 | 1006.309 |
| 1/2 PT. | 1007.575 | 1007.697 | 1007.692 | 1007.266 |
| 5/8 PT. | 1008.322 | 1008.519 | 1008.527 | 1008.173 |
| 3/4 PT. | 1009.053 | 1009.355 | 1009.375 | 1009.042 |
| 7/8 PT. | 1009.759 | 1010.180 | 1010.214 | 1009.903 |
| ℄ PIER P-6 | 1010.476 | 1011.028 | 1011.075 | 1010.787 |
| 1/8 PT. | 1010.957 | 1011.636 | 1011.695 | 1011.929 |
| 1/4 PT. | 1011.496 | 1012.269 | 1012.333 | 1012.090 |
| 3/8 PT. | 1011.939 | 1012.899 | 1012.980 | 1012.760 |
| 1/2 PT. | 1012.930 | 1013.526 | 1013.618 | 1013.418 |
| 5/8 PT. | 1012.906 | 1014.122 | 1014.224 | 1014.043 |
| 3/4 PT. | 1013.363 | 1014.685 | 1014.797 | 1014.633 |
| 7/8 PT. | 1013.802 | 1015.217 | 1015.338 | 1015.189 |
| ℄ PIER P-7 | 1014.225 | 1015.723 | 1015.853 | 1015.718 |

| SCREED ELEVATIONS UNIT 3 | | | | |
|---|---|---|---|---|
| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
| ℄ PIER P-7 | 1014.323 | 1015.823 | 1015.953 | 1015.817 |
| 1/10 PT. | 1014.888 | 1016.651 | 1016.797 | 1016.718 |
| 1/5 PT. | 1015.430 | 1017.426 | 1017.588 | 1017.559 |
| 3/10 PT. | 1015.944 | 1018.147 | 1018.322 | 1018.320 |
| 2/5 PT. | 1016.425 | 1018.799 | 1018.987 | 1018.998 |
| 1/2 PT. | 1016.873 | 1019.386 | 1019.587 | 1019.594 |
| 3/5 PT. | 1017.297 | 1019.919 | 1020.130 | 1020.133 |
| 7/10 PT. | 1017.704 | 1020.425 | 1020.646 | 1020.647 |
| 4/5 PT. | 1018.099 | 1020.909 | 1021.138 | 1021.143 |
| 9/10 PT. | 1018.484 | 1021.383 | 1021.620 | 1021.633 |
| ℄ PIER P-8 | 1018.862 | 1021.855 | 1022.098 | 1022.127 |
| 1/10 PT. | 1019.531 | 1022.482 | 1022.720 | 1022.737 |
| 1/5 PT. | 1020.179 | 1023.093 | 1023.327 | 1023.343 |
| 3/10 PT. | 1020.803 | 1023.673 | 1023.902 | 1023.899 |
| 2/5 PT. | 1021.370 | 1024.180 | 1024.405 | 1024.381 |
| 1/2 PT. | 1021.858 | 1024.593 | 1024.810 | 1024.739 |
| 3/5 PT. | 1022.248 | 1024.898 | 1025.106 | 1024.987 |
| 7/10 PT. | 1022.546 | 1025.108 | 1025.307 | 1025.137 |
| 4/5 PT. | 1022.821 | 1025.240 | 1025.429 | 1025.228 |
| 9/10 PT. | 1023.051 | 1025.350 | 1025.530 | 1025.312 |
| ℄ PIER P-9 | 1023.256 | 1025.453 | 1025.624 | 1025.392 |
| 1/10 PT. | 1023.422 | 1025.530 | 1025.696 | 1025.446 |
| 1/5 PT. | 1023.586 | 1025.616 | 1025.775 | 1025.508 |
| 3/10 PT. | 1023.753 | 1025.695 | 1025.849 | 1025.566 |
| 2/5 PT. | 1023.908 | 1025.761 | 1025.911 | 1025.618 |
| 1/2 PT. | 1024.037 | 1025.801 | 1025.947 | 1025.649 |
| 3/5 PT. | 1024.111 | 1025.804 | 1025.947 | 1025.641 |
| 7/10 PT. | 1024.124 | 1025.761 | 1025.902 | 1025.588 |
| 4/5 PT. | 102 .066 | 1025.673 | 1025.812 | 1025.495 |
| 9/10 PT. | 1023.940 | 1025.541 | 1025.678 | 1025.358 |
| ℄ PIER P-10 | 1023.766 | 1025.377 | 1025.513 | 1025.192 |

| SCREED ELEVATIONS UNIT 4 | | | | |
|---|---|---|---|---|
| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
| ℄ PIER P-10 | 1023.753 | 1025.361 | 1025.497 | 1025.175 |
| 1/8 PT. | 1023.754 | 1025.341 | 1025.475 | 1025.150 |
| 1/4 PT. | 1023.714 | 1025.288 | 1025.420 | 1025.090 |
| 3/8 PT. | 1023.632 | 1025.188 | 1025.318 | 1024.982 |
| 1/2 PT. | 1023.510 | 1025.040 | 1025.168 | 1024.835 |
| 5/8 PT. | 1023.368 | 1024.844 | 1024.970 | 1024.632 |
| 3/4 PT. | 1023.214 | 1024.675 | 1024.799 | 1024.448 |
| 7/8 PT. | 1023.067 | 1024.509 | 1024.631 | 1024.269 |
| ℄ PIER P-11 | 1022.929 | 1024.347 | 1024.468 | 1024.104 |
| 1/8 PT. | 1022.765 | 1024.181 | 1024.300 | 1023.937 |
| 1/4 PT. | 1022.604 | 1024.010 | 1024.128 | 1023.771 |
| 3/8 PT. | 1022.420 | 1023.821 | 1023.938 | 1023.579 |
| 1/2 PT. | 1022.200 | 1023.592 | 1023.709 | 1023.350 |
| 5/8 PT. | 1021.919 | 1023.298 | 1023.414 | 1023.056 |
| 3/4 PT. | 1021.578 | 1022.956 | 1023.071 | 1022.701 |
| 7/8 PT. | 1021.193 | 1022.549 | 1022.664 | 1022.293 |
| ℄ ABUT. A-2 | 1020.759 | 1022.095 | 1022.209 | 1021.830 |




KEY TRANSVERSE SECTION

Ⓐ LEFT GUTTER LINE

Ⓑ BASE LINE RAMP "EN"

Ⓒ BREAKLINE

Ⓓ RIGHT GUTTER LINE

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

311/455

AKRON INNERBELT
SUM-59-0.00

NOTES

(1) Ⓐ THRU Ⓓ ELEVATIONS SHOWN ARE TOP OF CONCRETE SLAB ELEVATIONS WHICH ARE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE AND THE 1 1/4" LATEX MODIFIED CONCRETE WEARING SURFACE.

(2) THE SCREED ELEVATIONS GIVEN FOR UNIT Nº'S 3 AND 4 REFLECT THE ADJUSTMENT REQUIRED DUE TO HEAT CURVING OF THE GIRDERS. IF THE CONTRACTOR ELECTS NOT TO HEAT CURVE THE GIRDERS, THE SCREED ELEVATIONS WILL HAVE TO BE MODIFIED. SEE STRUCTURE GENERAL NOTES FOR ADDITIONAL INFORMATION.

Superseded by sheet 3115/455

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

3945

# SCREED ELEVATIONS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

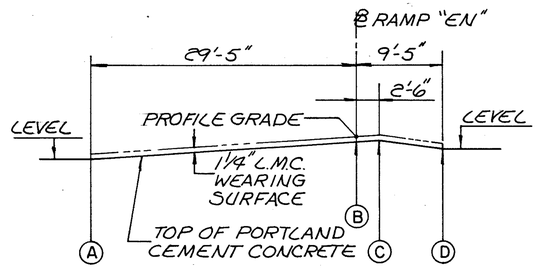
| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | M.AB. | | A.L.H. | JDP | 12-20-82 | |

| SCREED ELEVATIONS UNIT 1 | | | | |
|---|---|---|---|---|
| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
| ℄ ABUT. A-1 | 987.936 | 986.805 | 986.711 | 986.272 |
| 1/4 PT. | 988.355 | 987.199 | 987.103 | 986.658 |
| 1/2 PT. | 988.779 | 987.599 | 987.501 | 987.050 |
| 3/4 PT. | 989.208 | 988.004 | 987.904 | 987.447 |
| ℄ PIER P-1 | 989.652 | 988.423 | 988.321 | 987.859 |
| 1/4 PT. | 990.332 | 989.065 | 988.960 | 988.490 |
| 1/2 PT. | 990.962 | 989.718 | 989.610 | 989.132 |
| 3/4 PT. | 991.582 | 990.369 | 990.263 | 989.784 |
| ℄ PIER P-2 | 992.219 | 991.038 | 990.934 | 990.454 |
| 1/4 PT. | 993.190 | 992.052 | 991.952 | 991.472 |
| 1/2 PT. | 994.125 | 993.030 | 992.934 | 992.454 |
| 3/4 PT. | 994.956 | 993.905 | 993.812 | 993.333 |
| ℄ PIER P-3 | 995.773 | 994.765 | 994.676 | 994.197 |
| 1/4 PT. | 996.512 | 995.539 | 995.453 | 994.974 |
| 1/2 PT. | 997.264 | 996.326 | 996.243 | 995.764 |
| 3/4 PT. | 997.967 | 997.064 | 996.984 | 996.505 |
| ℄ PIER P-4 | 998.623 | 997.755 | 997.678 | 997.199 |

| SCREED ELEVATIONS UNIT 2 | | | | |
|---|---|---|---|---|
| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
| ℄ PIER P-4 | 998.733 | 997.871 | 997.794 | 997.315 |
| 1/8 PT. | 999.540 | 998.764 | 998.693 | 998.207 |
| 1/4 PT. | 1000.324 | 999.628 | 999.562 | 999.074 |
| 3/8 PT. | 1001.077 | 1000.451 | 1000.390 | 999.903 |
| 1/2 PT. | 1001.793 | 1001.227 | 1001.172 | 1000.691 |
| 5/8 PT. | 1002.474 | 1001.957 | 1001.908 | 1001.438 |
| 3/4 PT. | 1003.138 | 1002.667 | 1002.622 | 1002.168 |
| 7/8 PT. | 1003.804 | 1003.381 | 1003.342 | 1002.902 |
| ℄ PIER P-5 | 1004.491 | 1004.125 | 1004.091 | 1003.662 |
| 1/8 PT. | 1005.241 | 1004.995 | 1004.971 | 1004.562 |
| 1/4 PT. | 1006.017 | 1005.900 | 1005.886 | 1005.494 |
| 3/8 PT. | 1006.801 | 1006.814 | 1006.810 | 1006.433 |
| 1/2 PT. | 1007.574 | 1007.708 | 1007.713 | 1007.351 |
| 5/8 PT. | 1008.322 | 1008.560 | 1008.575 | 1008.230 |
| 3/4 PT. | 1009.051 | 1009.382 | 1009.407 | 1009.080 |
| 7/8 PT. | 1009.760 | 1010.195 | 1010.231 | 1009.923 |
| ℄ PIER P-6 | 1010.476 | 1011.028 | 1011.075 | 1010.787 |
| 1/8 PT. | 1010.955 | 1011.641 | 1011.699 | 1011.435 |
| 1/4 PT. | 1011.443 | 1012.270 | 1012.340 | 1012.099 |
| 3/8 PT. | 1011.935 | 1012.906 | 1012.987 | 1012.770 |
| 1/2 PT. | 1012.425 | 1013.532 | 1013.624 | 1013.427 |
| 5/8 PT. | 1012.902 | 1014.127 | 1014.228 | 1014.050 |
| 3/4 PT. | 1013.360 | 1014.688 | 1014.800 | 1014.638 |
| 7/8 PT. | 1013.800 | 1015.218 | 1015.339 | 1015.192 |
| ℄ PIER P-7 | 1014.225 | 1015.723 | 1015.853 | 1015.718 |

| SCREED ELEVATIONS UNIT 3 | | | | |
|---|---|---|---|---|
| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
| ℄ PIER P-7 | 1014.323 | 1015.823 | 1015.953 | 1015.817 |
| 1/10 PT. | 1014.888 | 1016.651 | 1016.797 | 1016.718 |
| 1/5 PT. | 1015.430 | 1017.426 | 1017.588 | 1017.559 |
| 3/10 PT. | 1015.944 | 1018.147 | 1018.322 | 1018.320 |
| 2/5 PT. | 1016.425 | 1018.799 | 1018.987 | 1018.998 |
| 1/2 PT. | 1016.873 | 1019.386 | 1019.587 | 1019.594 |
| 3/5 PT. | 1017.297 | 1019.919 | 1020.130 | 1020.133 |
| 7/10 PT. | 1017.704 | 1020.425 | 1020.646 | 1020.647 |
| 4/5 PT. | 1018.099 | 1020.909 | 1021.138 | 1021.143 |
| 9/10 PT. | 1018.484 | 1021.383 | 1021.620 | 1021.633 |
| ℄ PIER P-8 | 1018.862 | 1021.855 | 1022.098 | 1022.127 |
| 1/10 PT. | 1019.531 | 1022.482 | 1022.720 | 1022.737 |
| 1/5 PT. | 1020.179 | 1023.093 | 1023.327 | 1023.343 |
| 3/10 PT. | 1020.803 | 1023.673 | 1023.902 | 1023.899 |
| 2/5 PT. | 1021.370 | 1024.180 | 1024.405 | 1024.381 |
| 1/2 PT. | 1021.858 | 1024.593 | 1024.810 | 1024.739 |
| 3/5 PT. | 1022.248 | 1024.898 | 1025.106 | 1024.987 |
| 7/10 PT. | 1022.546 | 1025.108 | 1025.307 | 1025.137 |
| 4/5 PT. | 1022.821 | 1025.240 | 1025.429 | 1025.228 |
| 9/10 PT. | 1023.051 | 1025.350 | 1025.530 | 1025.312 |
| ℄ PIER P-9 | 1023.256 | 1025.453 | 1025.624 | 1025.392 |
| 1/10 PT. | 1023.422 | 1025.530 | 1025.696 | 1025.446 |
| 1/5 PT. | 1023.586 | 1025.616 | 1025.775 | 1025.508 |
| 3/10 PT. | 1023.753 | 1025.695 | 1025.849 | 1025.566 |
| 2/5 PT. | 1023.908 | 1025.761 | 1025.911 | 1025.618 |
| 1/2 PT. | 1024.037 | 1025.801 | 1025.947 | 1025.649 |
| 3/5 PT. | 1024.111 | 1025.804 | 1025.947 | 1025.641 |
| 7/10 PT. | 1024.184 | 1025.761 | 1025.902 | 1025.588 |
| 4/5 PT. | 102 .066 | 1025.673 | 1025.812 | 1025.495 |
| 9/10 PT. | 1023.940 | 1025.541 | 1025.678 | 1025.358 |
| ℄ PIER P-10 | 1023.766 | 1025.377 | 1025.513 | 1025.192 |

| SCREED ELEVATIONS UNIT 4 | | | | |
|---|---|---|---|---|
| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
| ℄ PIER P-10 | 1023.753 | 1025.361 | 1025.497 | 1025.175 |
| 1/8 PT. | 1023.754 | 1025.341 | 1025.475 | 1025.150 |
| 1/4 PT. | 1023.714 | 1025.288 | 1025.420 | 1025.090 |
| 3/8 PT. | 1023.632 | 1025.188 | 1025.318 | 1024.982 |
| 1/2 PT. | 1023.510 | 1025.040 | 1025.168 | 1024.835 |
| 5/8 PT. | 1023.368 | 1024.844 | 1024.970 | 1024.632 |
| 3/4 PT. | 1023.214 | 1024.675 | 1024.799 | 1024.448 |
| 7/8 PT. | 1023.067 | 1024.509 | 1024.631 | 1024.269 |
| ℄ PIER P-11 | 1022.929 | 1024.347 | 1024.468 | 1024.104 |
| 1/8 PT. | 1022.765 | 1024.181 | 1024.300 | 1023.937 |
| 1/4 PT. | 1022.604 | 1024.010 | 1024.128 | 1023.771 |
| 3/8 PT. | 1022.420 | 1023.821 | 1023.938 | 1023.579 |
| 1/2 PT. | 1022.200 | 1023.592 | 1023.709 | 1023.350 |
| 5/8 PT. | 1021.919 | 1023.298 | 1023.414 | 1023.056 |
| 3/4 PT. | 1021.578 | 1022.956 | 1023.071 | 1022.701 |
| 7/8 PT. | 1021.193 | 1022.549 | 1022.664 | 1022.293 |
| ℄ ABUT. A-2 | 1020.759 | 1022.095 | 1022.209 | 1021.830 |




## KEY TRANSVERSE SECTION

Ⓐ LEFT GUTTER LINE

Ⓑ BASE LINE RAMP "EN"

Ⓒ BREAKLINE

Ⓓ RIGHT GUTTER LINE

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

3115/455

AKRON INNERBELT
SUM-59-0.00

NOTES

(1) Ⓐ THRU Ⓓ ELEVATIONS SHOWN ARE TOP OF CONCRETE SLAB ELEVATIONS WHICH ARE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ACCOWANCE HAS BEEN MADE FOR DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE AND THE 1 1/4" LATEX MODIFIED CONCRETE WEARING SURFACE.

(2) THE SCREED ELEVATIONS GIVEN FOR UNIT Nº'S 3 AND 4 REFLECT THE ADJUSTMENT REQUIRED DUE TO HEAT CURVING OF THE GIRDERS. IF THE CONTRACTOR ELECTS NOT TO HEAT CURVE THE GIRDERS, THE SCREED ELEVATIONS WILL HAVE TO BE MODIFIED. SEE STRUCTURE GENERAL NOTES FOR ADDITIONAL INFORMATION.

Supersedes sheet 3/1/455

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

3945

# SCREED ELEVATIONS

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | M.A.B. | | A.L.H. | J.G.P. | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

312/455

AKRON INNERBELT
SUM-59-0.00

FOR NOTES SEE SHEET 45/45.

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| ABUTMENT A-1 | | | | | | | | | |
| 1A501 | 23 | 19'-7" | ST. | | | | | | 470 |
| 1A502 | 2 | 5'-11" | 12 | 3'-0" | 3'-0" | 1'-10" | | | 12 |
| 1A503 | 23 | 18'-9" | ST. | | | | | | 450 |
| 1A504 | 11 | 12'-3" | ST. | | | | | | 141 |
| 1A505 | 12 | 15'-9" | ST. | | | | | | 197 |
| 1A506 | 10 | 16'-2" | ST. | | | | | | 169 |
| 1A507 | 10 | 17'-0" | ST. | | | | | | 177 |
| 1A508 | 12 | 30'-3" | ST. | | | | | | 379 |
| * 1A509 | 2 | 30'-0" | ST. | | | | | | 63 |
| 1A510 | 4 | 16'-2" | ST. | | | | | | 67 |
| 1A511 | 12 | 11'-6" | ST. | | | | | | 144 |
| 1A512 | 11 | 9'-1" | ST. | | | | | | 104 |
| 1A513 | 10 | 6'-9" | ST. | | | | | | 70 |
| 1A514 | 11 | 5'-8" | 12 | 1'-9" | 4'-0" | 2'-10" | | | 65 |
| 1A515 | 11 | 6'-1" | 12 | 2'-2" | 4'-0" | 2'-10" | | | 70 |
| 1A516 | 8 | 6'-10" | 12 | 2'-11" | 4'-0" | 2'-10" | | | 57 |
| 1A517 | 32 | 6'-5" | 2 | 1'-8" | 3'-4" | | | | 214 |
| 1A518 | 1 | 16'-0" | ST. | | | | | | 17 |
| 1A519 | 22 | 7'-10" | 12 | 2'-0" | 5'-11" | 4'-2" | | | 180 |
| 1A520 | 6 | 5'-4" | 16 | 2'-0" | 1'-6" | 1'-8" | 2'-0" | | 33 |
| 1A522 | 9 | 3'-11" | 12 | 2'-0" | 2'-0" | 1'-3" | | | 37 |
| 1A523 | 5 | 17'-6" | ST. | | | | | | 91 |
| 1A524 | 5 | 30'-0" | ST. | | | | | | 156 |
| 1A525 | 6 | 30'-9" | ST. | | | | | | 192 |
| 1A526 | 14 | 26'-10" | ST. | | | | | | 392 |
| SERIES | 1-SET | 16'-2" | | | | | | | |
| OF | OF 18= | TO | ST | | | | | 9/16" | 311 |
| 1A527 | 18 BAR | 17'-0" | | | | | | | |
| 1A528 | 18 | 28'-7" | ST. | | | | | | 537 |
| * 1A530 | 18 | 5'-11" | 23 | 2'-4" | 2'-7" | | | | 111 |
| 1A531 | 3 | 26'-3" | ST. | | | | | | 82 |
| * 1A532 | 4 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 23 |
| 1A533 | 6 | 31'-9" | ST. | | | | | | 199 |
| * 1A535 | 8 | 26'-10" | ST. | | | | | | 224 |
| 1A536 | 2 | 6'-6" | 16 | 2'-0" | 2'-8" | 1'-8" | 2'-0" | | 14 |
| 1A537 | 12 | 7'-10" | ST. | | | | | | 98 |
| 1A538 | 2 | 9'-2" | 12 | 3'-10" | 5'-4" | 2'-0" | | | 19 |
| * 1A539 | 8 | 11'-7" | ST. | | | | | | 97 |
| 1A540 | 6 | 13'-7" | ST. | | | | | | 85 |
| * 1A541 | 8 | 4'-6" | ST. | | | | | | 38 |
| 1A542 | 8 | 5'-3" | ST. | | | | | | 44 |
| 1A543 | 2 | 11'-4" | 1 | 1'-0" | 10'-5" | | | | 24 |
| * 1A544 | 8 | 2'-8" | 6 | 2'-1" | | | | | 22 |
| * 1A545 | 2 | 17'-6" | ST | | | | | | 37 |
| 1A546 | 8 | 7'-11" | 2 | 3'-6" | 1'-2" | | | | 66 |
| * 1A547 | 8 | 4'-4" | ST | | | | | | 36 |
| * 1A548 | 4 | 5'-9" | 3 | 1'-9" | 3'-4" | 11" | | | 24 |
| * 1A549 | 4 | 3'-5" | 36 | 11" | 2'-7" | 4" | | | 14 |
| * 1A550 | 6 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 40 |
| | | | | | | | | | |
| 1AG01 | 24 | 10'-0" | ST. | | | | | | 360 |
| 1AG02 | 25 | 7'-0" | ST. | | | | | | 263 |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 1AG03 | 17 | 4'-0" | ST. | | | | | | 102 |
| 1AG04 | 48 | 9'-1" | 2 | 4'-0" | 1'-5" | | | | 655 |
| 1AG05 | 48 | 6'-1" | 2 | 2'-6" | 1'-5" | | | | 439 |
| 1AG06 | 66 | 6'-2" | 1 | 1'-1" | 5'-3" | | | | 611 |
| 1AG07 | 1 | 17'-8" | 2 | 8'-3" | 1'-6" | | | | 27 |
| 1AG08 | 47 | 10'-6" | ST | | | | | | 741 |
| SERIES | 1-SET | 7'-3" | | | | | | | |
| OF | OF 3 = | TO | ST. | | | | | 1'-6" | 39 |
| 1AG09 | 3 BAR | 10'-3" | | | | | | | |
| * 1AG10 | 48 | 5'-6" | 2 | 2'-5" | 1'-0" | | | | 397 |
| SERIES | 1-SET | 8'-7" | | 7'-11" | | | | | |
| OF | OF 3 = | TO | 6 | TO | | | | 10" | 35 |
| 1AG11 | 3 BAR | 6'-11" | | 6'-3" | | | | | |
| 1AG12 | 20 | 12'-10" | 7 | 11'-6" | | | | | 386 |
| SERIES | 1-SET | 7'-3" | | | | | | | |
| OF | OF 6 = | TO | ST | | | | | 6" | 54 |
| 1AG13 | 6 BAR | 4'-9" | | | | | | | |
| 1AG14 | 31 | 10'-6" | ST. | | | | | | 489 |
| 1AG15 | 6 | 12'-10" | ST | | | | | | 116 |
| 1AG16 | 5 | 26'-2" | 2 | 12'-8" | 1'-2" | | | | 197 |
| * 1AG17 | 4 | 5'-11" | 19 | 9" | 7" | 8" | 4'-5" | | 36 |
| 1AG18 | 37 | 12'-7" | 7 | 11'-3" | | | | | 699 |
| SERIES | 1-SET | 8'-8" | | 8'-0" | | | | | |
| OF | OF 3 = | TO | 6 | TO | | | | 1'-6" | 46 |
| 1AG19 | 3 BAR | 11'-8" | | 11'-0" | | | | | |
| * 1AG20 | 1 | 3'-11" | 19 | 9" | 6" | 8" | 2'-6" | | 6 |
| * 1AG21 | 1 | 3'-9" | 19 | 8" | 5" | 8" | 2'-6" | | 6 |
| * 1AG22 | 1 | 3'-9" | 19 | 8" | 4" | 8" | 2'-6" | | 6 |
| * 1AG23 | 1 | 3'-8" | 19 | 7" | 3" | 8" | 2'-6" | | 6 |
| * 1AG24 | 1 | 3'-7" | 19 | 7" | 2" | 8" | 2'-6" | | 5 |
| * 1AG25 | 18 | 5'-0" | 19 | 9" | 6" | 8" | 3'-7" | | 135 |
| 1AG26 | 4 | 11'-8" | 6 | 11'-0" | | | | | 70 |
| * 1AG27 | 4 | 6'-4" | 56 | | | | | | 38 |
| | | | | | | | | | |
| | | | | | | | | | |
| * 1A801 | 27 | 5'-1" | 38 | 2'-10" | 1'-5" | 1'-0" | | | 366 |
| 1A806 | 18 | 11'-5" | 1 | 1'-10" | 9'-9" | | | | 549 |
| 1A807 | 18 | 8'-4" | 1 | 1'-10" | 6'-8" | | | | 400 |
| 1A808 | 18 | 14'-9" | ST. | | | | | | 709 |
| 1A810 | 1 | 9'-0" | 2 | 2'-10" | 3'-8" | | | | 24 |
| 1A811 | 11 | 10'-9" | 2 | 2'-10" | 5'-5" | | | | 316 |
| | | | | | | | | | |
| | NON EPOXY COATED = 12690 | | | | | | | | |
| | EPOXY COATED = 1730 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| ABUTMENT A-2 | | | | | | | | | |
| 2A501 | 31 | 8'-3" | 2 | 1'-7" | 5'-4" | | | | 267 |
| 2A502 | 14 | 8'-11" | 1 | 8" | 8'-4" | | | | 130 |
| 2A503 | 31 | 7'-2" | 2 | 2'-0" | 3'-5" | | | | 232 |
| 2A504 | 36 | 25'-0" | ST | | | | | | 939 |
| 2A505 | 4 | 5'-1" | 16 | 2'-0" | 1'-3" | 1'-9" | 2'-0" | | 21 |
| 2A506 | 2 | 6'-4" | 16 | 2'-0" | 2'-6" | 1'-9" | 2'-0" | | 13 |
| 2A507 | 6 | 3'-11" | 12 | 2'-0" | 2'-0" | 1'-9" | | | 25 |
| 2A508 | 9 | 5'-4" | ST. | | | | | | 50 |
| 2A509 | 15 | 11'-2" | 14 | 2'-4" | 3'-0" | | | | 175 |
| 2A510 | 4 | 15'-7" | ST. | | | | | | 65 |
| 2A511 | 2 | 13'-9" | ST. | | | | | | 29 |
| 2A512 | 6 | 21'-8" | ST. | | | | | | 136 |
| 2A513 | 10 | 4'-8" | 2 | 1'-1" | 2'-9" | | | | 49 |
| * 2A514 | 8 | 21'-7" | ST. | | | | | | 180 |
| SERIES | 2-SETS | 7'-10" | | 3'-6" | | | | | |
| OF | OF 3 = | TO | 2 | TO | 1'-1" | | | 1'-10" | 60 |
| 2A515 | 6 BAR | 11'-6" | | 5'-4" | | | | | |
| 2A516 | 18 | 6'-6" | ST. | | | | | | 122 |
| 2A517 | 4 | 14'-0" | ST. | | | | | | 58 |
| 2A518 | 2 | 8'-7" | ST. | | | | | | 18 |
| 2A519 | 17 | 9'-11" | 1 | 8" | 9'-4" | | | | 176 |
| * 2A520 | 18 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 105 |
| * 2A521 | 16 | 4'-8" | ST. | | | | | | 78 |
| * 2A522 | 16 | 2'-8" | 6 | 2'-1" | | | | | 45 |
| 2A523 | 2 | 9'-7" | ST. | | | | | | 20 |
| 2A524 | 4 | 12'-4" | ST | | | | | | 51 |
| 2A525 | 16 | 4'-4" | ST. | | | | | | 72 |
| * 2A526 | 2 | 25'-0" | ST. | | | | | | 52 |
| 2A527 | 4 | 11'-3" | ST. | | | | | | 47 |
| 2A528 | 2 | 15'-9" | ST. | | | | | | 33 |
| 2A529 | 2 | 10'-9" | ST. | | | | | | 22 |
| 2A530 | 2 | 12'-10" | ST. | | | | | | 27 |
| 2A531 | 6 | 18'-8" | ST. | | | | | | 117 |
| * 2A533 | 8 | 16'-9" | ST. | | | | | | 140 |
| 2A534 | 8 | 8'-9" | 12 | 2'-0" | 6'-9" | 3'-4" | | | 73 |
| 2A535 | 13 | 11'-8" | 14 | 2'-7" | 3'-0" | | | | 158 |
| | | | | | | | | | |
| | | | | | | | | | |
| 2AG01 | 14 | 15'-10" | 3 | 8'-4" | 5'-4" | 2'-6" | | | 333 |
| 2AG02 | 46 | 6'-11" | 2 | 3'-2" | 11" | | | | 478 |
| 2AG03 | 46 | 5'-1" | 2 | 2'-0" | 1'-5" | | | | 351 |
| 2AG04 | 46 | 12'-11" | 2 | 5'-11" | 1'-5" | | | | 892 |
| 2AG05 | 1 | 27'-6" | 2 | 13'-2" | 1'-6" | | | | 41 |
| 2AG06 | 10 | 22'-5" | 2 | 10'-10" | 1'-1" | | | | 337 |
| * 2AG07 | 18 | 7'-1" | 19 | 9" | 6" | 8" | 5'-8" | | 192 |
| 2AG10 | 8 | 24'-9" | 2 | 12'-0" | 1'-1" | | | | 297 |
| 2AG12 | 17 | 16'-11" | 3 | 9'-4" | 5'-4" | 2'-7" | | | 432 |
| * 2AG20 | 2 | 3'-11" | 19 | 9" | 6" | 8" | 2'-6" | | 12 |
| * 2AG21 | 2 | 3'-9" | 19 | 8" | 5" | 8" | 2'-6" | | 11 |
| * 2AG22 | 2 | 3'-9" | 19 | 8" | 4" | 8" | 2'-6" | | 11 |
| * 2AG23 | 2 | 3'-8" | 19 | 7" | 3" | 8" | 2'-6" | | 11 |
| * 2AG24 | 8 | 3'-7" | 19 | 7" | 2" | 8" | 2'-6" | | 43 |

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

40/45

# REINFORCING SCHEDULE

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. CDG | F.F. | | A.L.H. | J.S.P. | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

313/455

AKRON INNERBELT
SUM-59-0.00

FOR NOTES SEE SHEET 45/45.

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 2A801 | 14 | 27'-3" | ST. | | | | | | 1019 |
| 2A802 | 31 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 400 |
| 2A803 | 2 | 18'-6" | ST. | | | | | | 99 |
| 2A804 | 4 | 15'-6" | ST. | | | | | | 166 |
| 2A805 | 2 | 15'-0" | ST. | | | | | | 80 |
| 2A806 | 4 | 12'-8" | ST. | | | | | | 135 |
| | | NON EPOXY COATED = 8245 | | | | | | | |
| | | EPOXY COATED = 880 | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-1 = | | | | 8737 |

PIER P-1

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 1P501 | 8 | 24'-0" | ST. | | | | | | 200 |
| 1P502 | 24 | 6'-8" | 2 | 2'-2" | 2'-7" | | | | 167 |
| 1P503 | 24 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 213 |
| 1P504 | 16 | 7'-8" | 2 | 2'-8" | 2'-7" | | | | 128 |
| 1P601 | 8 | 7'-0" | 12 | 3'-0" | 4'-0" | 6" | | | 84 |
| 1P602 | 7 | 20'-10" | ST. | | | | | | 219 |
| 1P801 | 14 | 17'-11" | 1 | 2'-7" | 15'-6" | | | | 670 |
| 1P802 | 7 | 38'-2" | ST. | | | | | | 713 |
| 1P1001 | 9 | 15'-8" | ST. | | | | | | 607 |
| 1P1002 | 9 | 14'-10" | ST. | | | | | | 574 |
| 1P1003 | 9 | 14'-2" | ST. | | | | | | 549 |
| 1P1004 | 27 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1171 |
| 1P1005 | 60 | 13'-4" | 7 | 10'-6" | | | | | 3442 |
| | | NON EPOXY COATED = 8737 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-1 = | | | | 8737 |

PIER P-2

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 2P501 | 8 | 24'-0" | ST. | | | | | | 200 |
| 2P502 | 24 | 6'-8" | 2 | 2'-2" | 2'-7" | | | | 167 |
| 2P503 | 24 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 213 |
| 2P504 | 16 | 7'-8" | 2 | 2'-8" | 2'-7" | | | | 128 |
| 2P601 | 8 | 7'-0" | 12 | 3'-0" | 4'-0" | 6" | | | 84 |
| 2P602 | 7 | 20'-10" | ST. | | | | | | 219 |
| 2P801 | 14 | 17'-11" | 1 | 2'-7" | 15'-6" | | | | 670 |
| 2P802 | 7 | 38'-2" | ST. | | | | | | 713 |
| 2P1001 | 9 | 18'-1" | ST. | | | | | | 700 |
| 2P1002 | 9 | 17'-4" | ST. | | | | | | 671 |
| 2P1003 | 9 | 16'-8" | ST. | | | | | | 645 |
| 2P1004 | 27 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1171 |
| 2P1005 | 60 | 13'-4" | 7 | 10'-6" | | | | | 3442 |
| | | NON EPOXY COATED = 9023 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-2 = | | | | 9023 |

PIER P-3

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 3P501 | 8 | 24'-0" | ST. | | | | | | 200 |
| 3P502 | 24 | 6'-8" | 2 | 2'-2" | 2'-7" | | | | 167 |
| 3P503 | 24 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 213 |
| 3P504 | 16 | 7'-8" | 2 | 2'-8" | 2'-7" | | | | 128 |
| 3P601 | 8 | 7'-0" | 12 | 3'-0" | 4'-0" | 6" | | | 84 |
| 3P602 | 7 | 20'-10" | ST. | | | | | | 219 |
| 3P801 | 14 | 17'-11" | 1 | 2'-7" | 15'-6" | | | | 670 |
| 3P802 | 7 | 38'-2" | ST. | | | | | | 713 |
| 3P1001 | 9 | 22'-8" | ST. | | | | | | 878 |
| 3P1002 | 9 | 22'-1" | ST. | | | | | | 855 |
| 3P1003 | 9 | 21'-4" | ST. | | | | | | 826 |
| 3P1004 | 27 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1171 |
| 3P1005 | 60 | 13'-4" | 7 | 10'-6" | | | | | 3442 |
| | | NON EPOXY COATED = 9566 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-3 = | | | | 9566 |

PIER P-4

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 4P501 | 20 | 25'-9" | ST. | | | | | | 537 |
| 4P502 | 48 | 7'-0" | 2 | 2'-9" | 1'-9" | | | | 350 |
| 4P503 | 48 | 7'-10" | 2 | 3'-2" | 1'-9" | | | | 392 |
| 4P504 | 10 | 9'-3" | 2 | 2'-8" | 4'-2" | | | | 96 |
| 4P505 | 28 | 10'-1" | 2 | 3'-1" | 4'-2" | | | | 294 |
| 4P506 | 28 | 8'-3" | 2 | 2'-2" | 4'-2" | | | | 241 |
| 4P507 | 10 | 9'-5" | 2 | 2'-9" | 4'-2" | | | | 98 |
| 4P601 | 6 | 24'-11" | ST. | | | | | | 225 |
| 4P602 | 8 | 8'-0" | 12 | 3'-6" | 4'-6" | 6" | | | 96 |
| 4P901 | 14 | 20'-0" | 1 | 2'-11" | 17'-4" | | | | 952 |
| 4P902 | 7 | 22'-3" | ST. | | | | | | 530 |
| 4P903 | 7 | 38'-6" | ST. | | | | | | 916 |
| 4P904 | 14 | 22'-5" | ST. | | | | | | 1067 |
| 4P905 | 14 | 21'-11" | ST. | | | | | | 1043 |
| 4P906 | 14 | 21'-3" | ST. | | | | | | 1012 |
| 4P907 | 42 | 9'-9" | 1 | 1'-7" | 8'-5" | | | | 1392 |
| 4P1001 | 30 | 13'-4" | 7 | 10'-6" | | | | | 1721 |
| 4P1002 | 24 | 15'-4" | 7 | 12'-6" | | | | | 1584 |
| | | NON EPOXY COATED = 12546 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-4 = | | | | 12546 |

PIER P-5

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 5P501 | 12 | 24'-3" | ST. | | | | | | 304 |
| 5P502 | 6 | 9'-4" | 2 | 3'-0" | 3'-7" | | | | 58 |
| 5P503 | 24 | 9'-5" | 2 | 3'-7" | 2'-6" | | | | 236 |
| 5P504 | 24 | 6'-7" | 2 | 2'-2" | 2'-6" | | | | 165 |
| 5P505 | 14 | 10'-6" | 2 | 3'-7" | 3'-7" | | | | 153 |
| 5P506 | 14 | 7'-8" | 2 | 2'-2" | 3'-7" | | | | 112 |
| 5P507 | 6 | 9'-0" | 2 | 2'-10" | 3'-7" | | | | 56 |
| 5P601 | 8 | 7'-6" | 12 | 3'-6" | 4'-0" | 6" | | | 90 |
| 5P901 | 7 | 17'-0" | ST | | | | | | 405 |
| 5P1101 | 14 | 23'-5" | 1 | 3'-0" | 20'-8" | | | | 1742 |
| 5P1102 | 7 | 38'-8" | ST. | | | | | | 1438 |
| 5P1103 | 10 | 17'-11" | ST. | | | | | | 952 |
| 5P1104 | 10 | 17'-6" | ST. | | | | | | 930 |
| 5P1105 | 10 | 16'-11" | ST. | | | | | | 899 |
| 5P1106 | 30 | 14'-9" | ST. | | | | | | 2351 |
| 5P1107 | 30 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 1554 |
| 5P1108 | 30 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 1235 |
| 5P1109 | 30 | 17'-8" | 7 | 14'-6" | | | | | 2816 |
| 5P1110 | 33 | 15'-8" | 7 | 12'-6" | | | | | 2747 |
| | | NON EPOXY COATED = 18243 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-5 = | | | | 18243 |

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CLEVELAND, OHIO · AKRON, OHIO

4/45

# REINFORCING SCHEDULE

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114+52.10 TO STA. 129+52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. CDG | F.F. | | M.H. | JJH | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |



AKRON INNERBELT
SUM-59-0.00

FOR NOTES SEE SHEET 45/45.

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| **PIER P-6** | | | | | | | | | |
| 6P501 | 4 | 39'-7" | ST. | | | | | | 165 |
| 6P502 | 6 | 8'-2" | 2 | 2'-8" | 3'-1" | | | | 51 |
| 6P503 | 24 | 8'-1" | 2 | 3'-1" | 2'-2" | | | | 202 |
| 6P504 | 24 | 6'-9" | 2 | 2'-5" | 2'-2" | | | | 169 |
| 6P505 | 10 | 7'-8" | 2 | 2'-5" | 3'-1" | | | | 80 |
| 6P506 | 10 | 9'-0" | 2 | 3'-1" | 3'-1" | | | | 94 |
| 6P507 | 6 | 8'-6" | 2 | 2'-10" | 3'-1" | | | | 53 |
| 6P509 | 25 | 14'-6" | ST. | | | | | | 378 |
| 6P601 | 8 | 6'-6" | 12 | 3'-6" | 3'-0" | 6" | | | 78 |
| 6P901 | 8 | 44'-5" | 3 | 2'-11" | 39'-7" | 2'-5 | | | 1208 |
| 6P902 | 8 | 33'-6" | ST. | | | | | | 911 |
| 6P1101 | 30 | 23'-9" | ST. | | | | | | 3786 |
| 6P1102 | 30 | 25'-9" | ST. | | | | | | 4104 |
| 6P1103 | 30 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 1554 |
| 6P1104 | 30 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 1235 |
| 6P1105 | 11 | 38'-6" | ST. | | | | | | 2250 |
| 6P1106 | 11 | 41'-8" | 7 | 38'-6" | | | | | 2435 |
| 6P1107 | 38 | 17'-8" | 7 | 14'-6" | | | | | 3567 |
| | NON EPOXY COATED = 22320 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIEP P-6 = | | | | 22320 |
| **PIER P-7** | | | | | | | | | |
| 7P501 | 47 | 4'-10" | 2 | 1'-7" | 1'-11" | | | | 237 |
| 7P502 | 47 | 7'-10" | 2 | 3'-1" | 1'-11" | | | | 384 |
| 7P503 | 22 | 24'-9" | ST. | | | | | | 568 |
| 7P504 | 8 | 9'-4" | 2 | 2'-9" | 4'-1" | | | | 78 |
| 7P505 | 42 | 10'-0" | 2 | 3'-1" | 4'-1" | | | | 438 |
| 7P506 | 42 | 8'-10" | 2 | 2'-6" | 4'-1" | | | | 387 |
| 7P507 | 8 | 9'-0" | 2 | 2'-7" | 4'-1" | | | | 75 |
| 7P601 | 10 | 8'-0" | 12 | 4'-0" | 4'-0" | 6" | | | 120 |
| 7P701 | 10 | 19'-6" | ST. | | | | | | 399 |
| 7P901 | 20 | 19'-9" | 1 | 2'-7" | 17'-5" | | | | 1343 |
| 7P902 | 10 | 39'-6" | ST. | | | | | | 1343 |
| 7P1101 | 8 | 27'-5" | ST. | | | | | | 1165 |
| 7P1102 | 8 | 29'-5" | ST. | | | | | | 1250 |
| 7P1103 | 8 | 28'-2" | ST. | | | | | | 1197 |
| 7P1104 | 8 | 30'-2" | ST. | | | | | | 1282 |
| 7P1105 | 8 | 29'-1" | ST. | | | | | | 1236 |
| 7P1106 | 8 | 31'-1" | ST. | | | | | | 1321 |
| 7P1107 | 24 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 1243 |
| 7P1108 | 24 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 988 |
| 7P1109 | 36 | 23'-8" | 7 | 20'-6" | | | | | 4527 |
| 7P1110 | 51 | 17'-8" | 7 | 14'-6" | | | | | 4787 |
| | NON EPOXY COATED = 24368 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-7 = | | | | 24368 |
| **PIER P-10** | | | | | | | | | |
| 10P501 | 51 | 6'-6" | 2 | 2'-7" | 1'-7" | | | | 346 |
| 10P502 | 51 | 7'-10" | 2 | 3'-3" | 1'-7" | | | | 417 |
| 10P503 | 20 | 26'-3" | ST. | | | | | | 548 |
| 10P504 | 14 | 8'-8" | 2 | 2'-8" | 3'-7" | | | | 127 |
| 10P505 | 44 | 9'-6" | 2 | 3'-1" | 3'-7" | | | | 436 |
| 10P506 | 44 | 7'-8" | 2 | 2'-2" | 3'-7" | | | | 352 |
| 10P507 | 14 | 8'-6" | 2 | 2'-7" | 3'-7" | | | | 124 |
| 10P601 | 6 | 26'-6" | ST. | | | | | | 239 |
| 10P602 | 10 | 8'-10" | 12 | 4'-0" | 4'-10" | 6" | | | 133 |
| 10P801 | 10 | 18'-0" | ST. | | | | | | 481 |
| 10P1001 | 20 | 5'-2" | 1 | 2'-7" | 2'-10" | | | | 445 |
| 10P1101 | 66 | 17'-8" | 7 | 14'-6" | | | | | 6195 |
| 10P1102 | 54 | 26'-8" | 7 | 23'-6" | | | | | 7651 |
| 10P1103 | 8 | 41'-0" | ST. | | | | | | 1743 |
| 10P1401 | 12 | 27'-0" | ST. | | | | | | 2479 |
| 10P1402 | 12 | 29'-0" | ST. | | | | | | 2662 |
| 10P1403 | 12 | 27'-8" | ST. | | | | | | 2540 |
| 10P1404 | 12 | 29'-8" | ST. | | | | | | 2723 |
| 10P1405 | 12 | 28'-7" | ST. | | | | | | 2624 |
| 10P1406 | 12 | 30'-7" | ST. | | | | | | 2808 |
| 10P1407 | 36 | 10'-2" | 1 | 2'-7" | 8'-0" | | | | 2800 |
| 10P1408 | 36 | 8'-2" | 1 | 2'-7" | 6'-0" | | | | 2249 |
| | NON EPOXY COATED = 40122 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-10 = | | | | 40122 |
| **PIER P-11** | | | | | | | | | |
| 11P501 | 12 | 26'-4" | ST. | | | | | | 330 |
| 11P502 | 20 | 9'-2" | 2 | 2'-11" | 3'-7" | | | | 191 |
| 11P503 | 10 | 9'-2" | 2 | 2'-11" | 3'-7" | | | | 96 |
| 11P504 | 40 | 10'-6" | 2 | 3'-7" | 3'-7" | | | | 438 |
| 11P505 | 40 | 7'-8" | 2 | 2'-2" | 3'-7" | | | | 320 |
| 11P601 | 10 | 8'-4" | 12 | 4'-0" | 4'-4" | 6" | | | 125 |
| 11P801 | 9 | 21'-4" | ST. | | | | | | 513 |
| 11P1001 | 9 | 42'-0" | ST. | | | | | | 1627 |
| 11P1101 | 18 | 22'-2" | 1 | 3'-1" | 19'-4" | | | | 2120 |
| 11P1102 | 11 | 29'-11" | ST. | | | | | | 1748 |
| 11P1103 | 11 | 31'-11" | ST. | | | | | | 1865 |
| 11P1104 | 11 | 29'-6" | ST. | | | | | | 1724 |
| 11P1105 | 11 | 31'-6" | ST. | | | | | | 1841 |
| 11P1106 | 11 | 29'-3" | ST. | | | | | | 1709 |
| 11P1107 | 11 | 31'-3" | ST. | | | | | | 1826 |
| 11P1108 | 33 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 1709 |
| 11P1109 | 33 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 1359 |
| 11P1110 | 42 | 21'-8" | 7 | 18'-6" | | | | | 4835 |
| 11P1111 | 42 | 15'-8" | 7 | 12'-6" | | | | | 3496 |
| | NON EPOXY COATED = 27872 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| | | | | | TOTAL PIER P-11 = | | | | 27872 |
| **PIER P-8** | | | | | | | | | |
| 8P501 | 40 | 4'-6" | 2 | 10½" | 3'-0" | | | | 188 |
| 8P1101 | 72 | 22'-0" | ST. | | | | | | 8416 |
| 8P1102 | 36 | 20'-0" | ST. | | | | | | 3825 |
| 8P1103 | 36 | 18'-0" | ST. | | | | | | 3443 |
| 8P1104 | 36 | 16'-0" | ST. | | | | | | 3060 |
| | NON EPOXY COATED = 18932 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| | | | | | TOTAL PIER P-8 = | | | | 18932 |
| **PIER P-9** | | | | | | | | | |
| 9P501 | 40 | 4'-6" | 2 | 10½" | 3'-0" | | | | 188 |
| 9P1101 | 36 | 13'-6" | ST. | | | | | | 2582 |
| 9P1102 | 36 | 14'-0" | ST. | | | | | | 2677 |
| 9P1103 | 36 | 15'-0" | ST. | | | | | | 2869 |
| 9P1104 | 72 | 15'-6" | ST. | | | | | | 5929 |
| | NON EPOXY COATED = 14245 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| | | | | | TOTAL PIER P-9 = | | | | 14245 |

The lengths for the vertical and spiral reinforcing steel for Pier Columns 8 and 9 are estimated lengths. Actual lengths can be determined during construction.

DALTON · DALTON · NEWPORT
CLEVELAND OHIO AKRON OHIO

42/45

# REINFORCING SCHEDULE

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. CDG | F.F. | | 4L4. | JDP | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

315/455

AKRON INNERBELT
SUM-59-0.00

FOR NOTES SEE SHEET 45/45.

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | **SUPERSTRUCTURE S-1** | | | | | | | | | |
| * | 15401 | 520 | 30'-0" | ST. | | | | | | 10421 |
| * | 15402 | 65 | 28'-8" | ST. | | | | | | 1245 |
| | 15501 | 430 | 41'-4" | ST. | | | | | | 18538 |
| | 15502 | 400 | 30'-0" | ST. | | | | | | 12516 |
| * | 15503 | 414 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 1331 |
| * | 15504 | 416 | 5'-8" | 23 | 2'-2" | 2'-6" | | | | 2459 |
| * | 15505 | 414 | 2'-3" | 1 | 10" | 1'-6" | | | | 972 |
| | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF 38= | TO | ST. | | | | | 11 11/16" | 888 |
| | 15506 | 38 BAR | 5'-4" | | | | | | | |
| | 15507 | 6 | 6'-6" | ST. | | | | | | 41 |
| * | 15508 | 64 | 30'-0" | ST. | | | | | | 2003 |
| | 15509 | 50 | 31'-4" | ST. | | | | | | 1634 |
| * | 15510 | 8 | 32'-11" | ST. | | | | | | 275 |
| | 15511 | 1 | 4'-10" | 12 | 11" | 4'-0" | 2'-2" | | | 5 |
| | 15512 | 3 | 5'-0" | ST. | | | | | | 16 |
| | 15513 | 1 | 4'-3" | 12 | 1'-4" | 3'-0" | 1'-8" | | | 4 |
| | SERIES | 1-SET | 40'-1" | | | | | | | |
| | OF | OF 37= | TO | ST. | | | | | 11 1/8" | 902 |
| | 15514 | 37 BAR | 6'-8" | | | | | | | |
| * | 15515 | 64 | 32'-0" | ST. | | | | | | 2136 |
| * | 15516 | 64 | 45'-0" | ST. | | | | | | 3004 |
| * | 15517 | 64 | 48'-0" | ST. | | | | | | 3204 |
| * | 15518 | 4 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 14 |
| * | 15519 | 4 | 2'-7" | 1 | 10" | 1'-10" | | | | 11 |
| * | 15522 | 56 | 14'-6" | ST. | | | | | | 847 |
| * | 15523 | 152 | 7'-0" | ST. | | | | | | 1110 |
| * | 15524 | 8 | 12'-0" | ST. | | | | | | 100 |
| | 15540 | 52 | 5'-7" | 3 | 3'-6" | 1'-7" | 9" | | | 303 |
| | 15541 | 52 | 6'-8" | 9 | 3'-2" | 7" | | | | 362 |
| | 15542 | 52 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 167 |
| | 15543 | 52 | 5'-7" | 12 | 3'-2" | 2'-6" | 1'-7" | | | 303 |
| | 15544 | 32 | 10'-5" | ST. | | | | | | 348 |
| | 15545 | 16 | 3'-2" | ST. | | | | | | 53 |
| | 15546 | 4 | 25'-6" | ST. | | | | | | 106 |
| | 15560 | 32 | 2'-7" | 16 | 7" | 1'-4" | 8" | 10" | | 86 |
| | 15561 | 8 | 10'-4" | ST. | | | | | | 86 |
| * | 15570 | 5 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 33 |
| | | | | | | | | | | |
| * | 15601 | 430 | 41'-4" | ST. | | | | | | 26696 |
| * | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF 38= | TO | ST | | | | | 11 11/16" | 1279 |
| | 15602 | 38 BAR | 5'-4" | | | | | | | |
| * | 15603 | 6 | 6'-6" | ST. | | | | | | 59 |
| * | 15604 | 1 | 4'-10" | 12 | 11" | 4'-0" | 2'-2" | | | 7 |
| * | 15605 | 3 | 5'-0" | ST. | | | | | | 23 |
| * | 15606 | 1 | 4'-10" | 12 | 11" | 4'-0" | 2'-2" | | | 7 |
| * | SERIES | 1-SET | 40'-1" | | | | | | | |
| | OF | OF 37= | TO | ST. | | | | | 11 1/8" | 1299 |
| | 15607 | 37 BAR | 6'-8" | | | | | | | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| * | 15670 | 4 | 6'-0" | ST. | | | | | | 36 |
| | 15671 | 4 | 6'-0" | ST. | | | | | | 36 |
| * | 15672 | 4 | 6'-8" | 60 | | | | | | 40 |
| * | 15673 | 4 | 2'-2" | 1 | 10" | 1'-6" | | | | 13 |
| * | 15674 | 4 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 19 |
| | | | NON EPOXY COATED = 36394 | | | | | | | |
| | | | EPOXY COATED = 58643 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | **SUPERSTRUCTURE S-2** | | | | | | | | | |
| * | 25401 | 845 | 30'-0" | ST. | | | | | | 16934 |
| * | SERIES | 1-SET | 28'-0" | | | | | | | |
| | OF | OF 32= | TO | ST. | | | | | 8 7/8" | 353 |
| | 25402 | 32 BAR | 5'-0" | | | | | | | |
| * | 25403 | 33 | 25'-0" | ST. | | | | | | 551 |
| * | SERIES | 1-SET | 28'-0" | | | | | | | |
| | OF | OF 33= | TO | ST. | | | | | 8 5/8" | 364 |
| | 25404 | 33 BAR | 5'-0" | | | | | | | |
| | 25501 | 650 | 30'-0" | ST. | | | | | | 20338 |
| | SERIES | 1-SET | 31'-0" | | | | | | | |
| | OF | OF 25= | TO | ST. | | | | | 11½" | 508 |
| | 25502 | 25 BAR | 8'-0" | | | | | | | |
| * | 25503 | 640 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 2058 |
| * | 25504 | 645 | 5'-8" | 23 | 2'-2" | 2'-6" | | | | 3812 |
| * | 25505 | 640 | 2'-3" | 1 | 10" | 1'-6" | | | | 1502 |
| | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF 36= | TO | ST. | | | | | 11 3/16" | 870 |
| | 25506 | 36 BAR | 6'-10" | | | | | | | |
| | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF 37= | TO | ST. | | | | | 11 3/16" | 878 |
| | 25507 | 37 BAR | 6'-0" | | | | | | | |
| * | 25508 | 108 | 30'-0" | ST. | | | | | | 3379 |
| * | 25509 | 4 | 11'-4" | ST. | | | | | | 47 |
| * | 25511 | 4 | 30'-6" | ST. | | | | | | 127 |
| | 25512 | 25 | 25'-0" | ST. | | | | | | 652 |
| | SERIES | 1-SET | 32'-0" | | | | | | | |
| | OF | OF 25= | TO | ST. | | | | | 1'-0" | 521 |
| | 25513 | 25 BAR | 8'-0" | | | | | | | |
| | 25514 | 693 | 41'-4" | ST. | | | | | | 29876 |
| | 25515 | 4 | 5'-6" | ST. | | | | | | 23 |
| | 25516 | 2 | 4'-6" | 12 | 1'-4" | 3'-3" | 1'-8" | | | 9 |
| | 25517 | 5 | 6'-4" | ST. | | | | | | 33 |
| * | 25518 | 192 | 34'-6" | ST. | | | | | | 6909 |
| * | 25519 | 192 | 31'-6" | ST. | | | | | | 6308 |
| * | 25520 | 8 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 29 |
| * | 25521 | 8 | 2'-7" | 1 | 10" | 1'-10" | | | | 22 |
| * | 25522 | 104 | 14'-6" | ST. | | | | | | 1573 |
| * | 25523 | 208 | 7'-0" | ST. | | | | | | 1519 |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| * | 25524 | 4 | 10'-2" | ST. | | | | | | 42 |
| * | 25525 | 4 | 14'-10" | ST. | | | | | | 62 |
| | 25540 | 104 | 5'-7" | 3 | 3'-6" | 1'-7" | 9" | | | 606 |
| | 25541 | 104 | 6'-9" | 9 | 3'-2" | 8" | | | | 732 |
| | 25542 | 104 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 334 |
| | 25543 | 104 | 5'-7" | 12 | 3'-2" | 2'-6" | 1'-7" | | | 606 |
| | 25544 | 32 | 10'-4" | ST. | | | | | | 345 |
| | 25545 | 16 | 3'-2" | ST. | | | | | | 53 |
| | 25546 | 8 | 25'-6" | ST. | | | | | | 213 |
| | 25554 | 32 | 10'-3" | ST. | | | | | | 342 |
| | 25555 | 16 | 2'-10" | ST. | | | | | | 47 |
| * | 25570 | 10 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 66 |
| | | | | | | | | | | |
| * | 25601 | 693 | 41'-4" | ST. | | | | | | 43023 |
| * | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF 36= | TO | ST. | | | | | 11 3/16" | 1253 |
| | 25602 | 36 BAR | 6'-10" | | | | | | | |
| * | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF 37= | TO | ST. | | | | | 11 3/16" | 1264 |
| | 25603 | 37 BAR | 6'-0" | | | | | | | |
| * | 25604 | 4 | 5'-6" | ST. | | | | | | 33 |
| * | 25605 | 2 | 4'-6" | 12 | 1'-4" | 3'-3" | 1'-8" | | | 14 |
| * | 25606 | 5 | 6'-4" | ST. | | | | | | 48 |
| * | 25670 | 8 | 6'-0" | ST. | | | | | | 72 |
| | 25671 | 8 | 6'-0" | ST. | | | | | | 72 |
| * | 25672 | 8 | 6'-8" | 60 | | | | | | 80 |
| * | 25673 | 8 | 2'-2" | 1 | 10" | 1'-6" | | | | 26 |
| * | 25674 | 8 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 37 |
| | | | NON EPOXY COATED = 57058 | | | | | | | |
| | | | EPOXY COATED = 91507 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | **SUPERSTRUCTURE S-3** | | | | | | | | | |
| * | 35401 | 1235 | 30'-0" | ST. | | | | | | 24749 |
| * | SERIES | 1-SET | 7'-0" | | | | | | | |
| | OF | OF 65= | TO | ST. | | | | | 6 3/8" | 1042 |
| | 35402 | 65 BAR | 41'-0" | | | | | | | |
| * | 35403 | 65 | 18'-6" | ST. | | | | | | 803 |
| | | | | | | | | | | |
| | 35501 | 1000 | 30'-0" | ST. | | | | | | 31290 |
| | SERIES | 1-SET | 5'-0" | | | | | | | |
| | OF | OF 50= | TO | ST. | | | | | 7 3/16 | 1069 |
| | 35502 | 50 BAR | 36'-0" | | | | | | | |
| * | 35503 | 937 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 3013 |
| * | 35504 | 943 | 5'-8" | 23 | 2'-2" | 2'-6" | | | | 5573 |
| * | 35505 | 937 | 2'-1" | 1 | 8" | 1'-6" | | | | 2036 |
| | 35506 | 1044 | 41'-4" | ST. | | | | | | 45008 |

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO · AKRON, OHIO

43/45

# REINFORCING SCHEDULE

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. CDG | F.F. | | A.L.H. | JDP | 12-20-82 | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF 49= | TO | ST. | | | | | 8 3/16" | 1156 |
| | 35507 | 49 BAR | 5'-9" | | | | | | | |
| * | 35508 | 160 | 30'-0" | ST. | | | | | | 5006 |
| * | 35509 | 4 | 40'-0" | ST. | | | | | | 167 |
| * | 35510 | 4 | 6'-6" | ST. | | | | | | 27 |
| | SERIES | 1-SET | 39'-4" | | | | | | | |
| | OF | OF 37= | TO | ST. | | | | | 11 1/4" | 868 |
| | 35511 | 37 BAR | 5'-8" | | | | | | | |
| | 35512 | 5 | 5'-3" | ST. | | | | | | 27 |
| | 35513 | 1 | 4'-6" | 12 | 1'-4" | 3'-3" | 1'-10" | | | 5 |
| | 35514 | 4 | 5'-0" | ST. | | | | | | 21 |
| | 35515 | 1 | 4'-10" | 12 | 1'-4" | 3'-6" | 1'-9" | | | 5 |
| * | 35516 | 320 | 32'-11" | ST. | | | | | | 10986 |
| * | 35517 | 320 | 32'-6" | ST. | | | | | | 10847 |
| * | 35518 | 8 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 29 |
| * | 35519 | 8 | 2'-7" | 1 | 10" | 1'-10" | | | | 22 |
| * | 35522 | 160 | 14'-6" | ST. | | | | | | 2420 |
| * | 35523 | 296 | 7'-0" | ST. | | | | | | 2161 |
| * | 35524 | 4 | 9'-4" | ST. | | | | | | 39 |
| * | 35525 | 4 | 13'-3" | ST. | | | | | | 55 |
| | 35540 | 104 | 5'-7" | 3 | 3'-6" | 1'-7" | 9" | | | 606 |
| | 35541 | 52 | 6'-9" | 9 | 3'-2" | 8" | | | | 366 |
| | 35542 | 104 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 334 |
| | 35543 | 104 | 5'-6" | 12 | 3'-2" | 2'-5" | 1'-7" | | | 597 |
| | 35544 | 32 | 10'-2" | ST. | | | | | | 339 |
| | 35545 | 16 | 2'-10" | ST. | | | | | | 47 |
| | 35546 | 4 | 25'-6" | ST. | | | | | | 106 |
| | 35551 | 52 | 7'-1" | 9 | 3'-4" | 8" | | | | 384 |
| | 35554 | 32 | 10'-10" | ST. | | | | | | 362 |
| | 35555 | 16 | 3'-6" | ST. | | | | | | 58 |
| | 35556 | 4 | 26'-10" | ST. | | | | | | 112 |
| * | 35570 | 20 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 132 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| * | 35601 | 1044 | 41'-4" | ST. | | | | | | 64814 |
| * | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF 49= | TO | ST. | | | | | 8 3/16" | 1665 |
| | 35602 | 49 BAR | 5'-9" | | | | | | | |
| * | SERIES | 1-SET | 39'-4" | | | | | | | |
| | OF | OF 37= | TO | ST. | | | | | 11 1/4" | 1250 |
| | 35603 | 37 BAR | 5'-8" | | | | | | | |
| * | 35604 | 5 | 5'-3" | ST. | | | | | | 39 |
| * | 35605 | 1 | 4'-9" | 12 | 1'-4" | 3'-6" | 2'-1" | | | 7 |
| * | 35606 | 4 | 5'-0" | ST. | | | | | | 30 |
| * | 35607 | 1 | 4'-9" | 12 | 1'-4" | 3'-6" | 1'-9" | | | 7 |
| * | 35670 | 16 | 6'-0" | ST. | | | | | | 144 |
| | 35671 | 16 | 6'-0" | ST. | | | | | | 144 |
| * | 35672 | 16 | 6'-8" | 60 | | | | | | 160 |
| * | 35673 | 16 | 2'-2" | 1 | 10" | 1'-6" | | | | 52 |
| * | 35674 | 16 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 74 |
| | | | | | | | | | | |
| | | | | | | | | | | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| | | NON EPOXY COATED = 82904 | | | | | | | | |
| | | EPOXY COATED = 137349 | | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | | | | | | |
| | SUPERSTRUCTURE S-4 | | | | | | | | | |
| * | 45401 | 455 | 30'-0" | ST. | | | | | | 9118 |
| * | SERIES | 1-SET | 15'-6" | | | | | | | |
| | OF | OF 65= | TO | ST. | | | | | 1 5/16" | 825 |
| | 45402 | 65 BAR | 22'-6" | | | | | | | |
| | 45501 | 350 | 30'-0" | ST. | | | | | | 10951 |
| | SERIES | 1-SET | 18'-6" | | | | | | | |
| | OF | OF 50= | TO | ST. | | | | | 1 1/2" | 1121 |
| | 45502 | 50 BAR | 24'-6" | | | | | | | |
| * | 45503 | 349 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 1122 |
| * | 45504 | 353 | 5'-8" | 23 | 2'-2" | 2'-6" | | | | 2086 |
| * | 45505 | 349 | 2'-1" | 1 | 8" | 1'-6" | | | | 758 |
| | 45506 | 360 | 41'-4" | ST. | | | | | | 15520 |
| | SERIES | 1-SET | 39'-10" | | | | | | | |
| | OF | OF 38= | TO | ST. | | | | | 10 13/16" | 918 |
| | 45507 | 38 BAR | 6'-6" | | | | | | | |
| * | 45508 | 56 | 30'-0" | ST. | | | | | | 1752 |
| * | 45509 | 4 | 24'-0" | ST. | | | | | | 100 |
| * | 45510 | 4 | 18'-0" | ST. | | | | | | 75 |
| | SERIES | 1-SET | 39'-5" | | | | | | | |
| | OF | OF 47= | TO | ST. | | | | | 8 11/16" | 1113 |
| | 45511 | 47 BAR | 6'-0" | | | | | | | |
| | 45512 | 11 | 6'-0" | ST. | | | | | | 69 |
| | 45513 | 1 | 4'-9" | 12 | 9" | 4'-0" | 2'-0" | | | 5 |
| | 45514 | 1 | 5'-3" | 12 | 1'-4" | 4'-0" | 2'-5" | | | 5 |
| * | 45515 | 192 | 29'-5" | ST. | | | | | | 5891 |
| * | 45516 | 4 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 14 |
| * | 45517 | 4 | 2'-7" | 1 | 10" | 1'-10" | | | | 11 |
| * | 45522 | 72 | 14'-6" | ST. | | | | | | 1089 |
| * | 45523 | 76 | 7'-0" | ST. | | | | | | 555 |
| * | 45524 | 4 | 14'-5" | ST. | | | | | | 60 |
| * | 45525 | 4 | 13'-3" | ST. | | | | | | 55 |
| | 45540 | 52 | 5'-7" | 3 | 3'-6" | 1'-7" | 9" | | | 303 |
| | 45541 | 52 | 7'-1" | 9 | 3'-4" | 8" | | | | 384 |
| | 45542 | 52 | 3'-0" | 2 | 1'-0" | 1'-3" | | | | 163 |
| | 45543 | 52 | 5'-8" | 12 | 3'-3" | 2'-6" | 1'-7" | | | 307 |
| | 45544 | 32 | 10'-10" | ST. | | | | | | 362 |
| | 45545 | 16 | 3'-2" | ST. | | | | | | 53 |
| | 45546 | 4 | 26'-10" | ST. | | | | | | 112 |
| | 45560 | 32 | 2'-7" | 16 | 7" | 1'-4" | 8" | 10" | | 86 |
| | 45561 | 8 | 10'-0" | ST. | | | | | | 83 |
| * | 45570 | 5 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 33 |
| * | 45601 | 357 | 41'-4" | ST. | | | | | | 22164 |
| * | SERIES | 1-SET | 39'-10" | | | | | | | |
| | OF | OF 38= | TO | ST. | | | | | 10 13/16" | 1322 |
| | 45602 | 38 BAR | 6'-6" | | | | | | | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| * | SERIES | 1-SET | 39'-5" | | | | | | | |
| | OF | OF 47= | TO | ST. | | | | | 8 11/16" | 1603 |
| | 45603 | 47 BAR | 6'-0" | | | | | | | |
| * | 45604 | 11 | 6'-0" | ST. | | | | | | 99 |
| * | 45605 | 1 | 4'-8" | 12 | 9" | 4'-0" | 2'-0" | | | 7 |
| * | 45606 | 1 | 5'-3" | 12 | 1'-4" | 4'-0" | 2'-5" | | | 8 |
| * | 45670 | 4 | 6'-0" | ST. | | | | | | 36 |
| | 45671 | 4 | 6'-0" | ST. | | | | | | 36 |
| * | 45672 | 4 | 6'-8" | 60 | | | | | | 40 |
| * | 45673 | 4 | 2'-2" | 1 | 10" | 1'-6" | | | | 13 |
| * | 45674 | 4 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 19 |
| | | | | | | | | | | |
| | | NON EPOXY COATED = 31384 | | | | | | | | |
| | | EPOXY COATED = 48609 | | | | | | | | |
| | (*) DENOTES BARS TO BE EXPOXY COATED | | | | | | | | | |

| P. H. W. A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

316
455

AKRON INNERBELT
SUM - 59- 0.00

FOR NOTES SEE SHEET 45 45.

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CLEVELAND, OHIO AKRON, OHIO

44 45

# REINFORCING SCHEDULE

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. CDG | F.F. | | A.L.H. | JJP | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

317/455

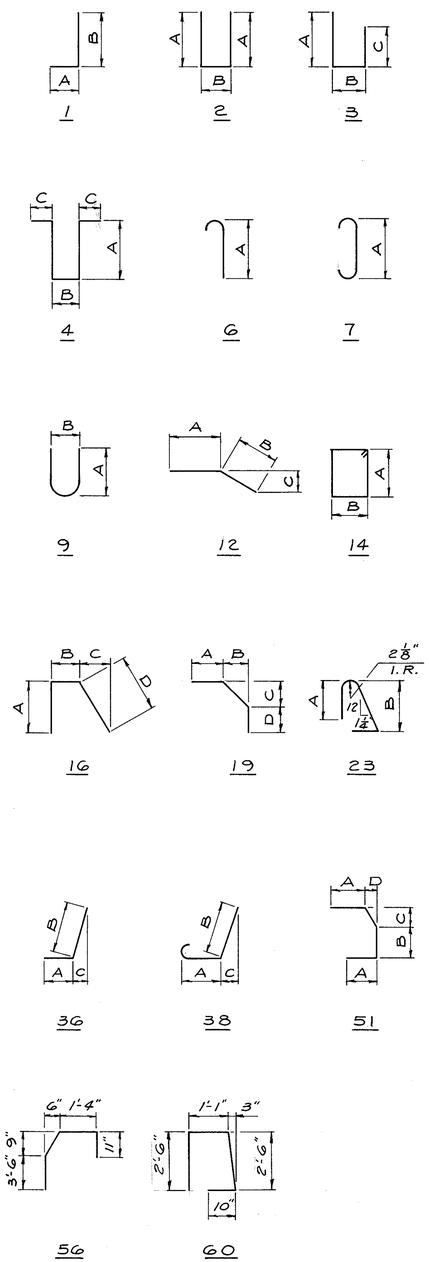
AKRON INNERBELT
SUM - 59 - 0.00

## SPIRAL REINFORCING SCHEDULE

| MARK | Nº REQ'D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
|---|---|---|---|---|---|
| **SPIRALS - PIER P-1** | | | | | |
| 1P-SP505 | 1 | 2'-7" | 12'-7" | 3.50 | 423 |
| 1P-SP506 | 1 | 2'-7" | 11'-10" | 3.50 | 399 |
| 1P-SP507 | 1 | 2'-7" | 11'-2" | 3.50 | 378 |
| TOTAL SPIRALS PIER P-1 = | | | | | 1200 |
| **SPIRALS - PIER P-2** | | | | | |
| 2P-SP505 | 1 | 2'-7" | 15'-1" | 3.50 | 515 |
| 2P-SP506 | 1 | 2'-7" | 14'-4" | 3.50 | 479 |
| 2P-SP507 | 1 | 2'-7" | 13'-8" | 3.50 | 458 |
| TOTAL SPIRALS PIER P-2 = | | | | | 1452 |
| **SPIRALS - PIER P-3** | | | | | |
| 3P-SP505 | 1 | 2'-7" | 19'-8" | 3.50 | 664 |
| 3P-SP506 | 1 | 2'-7" | 19'-0" | 3.50 | 642 |
| 3P-SP507 | 1 | 2'-7" | 18'-4" | 3.50 | 621 |
| TOTAL SPIRALS PIER P-3 = | | | | | 1927 |
| **SPIRALS - PIER P-4** | | | | | |
| 4P-SP508 | 1 | 3'-1" | 19'-5" | 3.50 | 770 |
| 4P-SP509 | 1 | 3'-1" | 18'-11" | 3.50 | 751 |
| 4P-SP510 | 1 | 3'-1" | 18'-3" | 3.50 | 725 |
| TOTAL SPIRALS PIER P-4 = | | | | | 2246 |
| **SPIRALS - PIER P-5** | | | | | |
| 5P-SP508 | 1 | 3'-1" | 19'-5" | 3.50 | 770 |
| 5P-SP509 | 1 | 3'-1" | 19'-1" | 3.50 | 757 |
| 5P-SP510 | 1 | 3'-1" | 18'-5" | 3.50 | 732 |
| TOTAL SPIRALS PIER P-5 = | | | | | 2259 |

## SPIRAL REINFORCING SCHEDULE

| MARK | Nº REQ'D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
|---|---|---|---|---|---|
| **SPIRALS - PIER P-6** | | | | | |
| 6P-SP508 | 3 | 3'-1" | 25'-9" | 3.50 | 3033 |
| TOTAL SPIRALS PIER P-6 = | | | | | 3033 |
| **SPIRALS - PIER P-7** | | | | | |
| 7P-SP508 | 1 | 3'-7" | 29'-6" | 3.50 | 1325 |
| 7P-SP509 | 1 | 3'-7" | 30'-2" | 3.50 | 1354 |
| 7P-SP510 | 1 | 3'-7" | 31'-1" | 3.50 | 1394 |
| TOTAL SPIRALS PIER P-7 = | | | | | 4073 |
| **SPIRALS - PIER P-10** | | | | | |
| 10P-SP508 | 1 | 3'-7" | 31'-2" | 3.50 | 1397 |
| 10P-SP509 | 1 | 3'-7" | 31'-10" | 3.50 | 1427 |
| 10P-SP510 | 1 | 3'-7" | 32'-9" | 3.50 | 1467 |
| TOTAL SPIRALS PIER P-10 = | | | | | 4291 |
| **SPIRALS - PIER P-11** | | | | | |
| 11P-SP507 | 1 | 3'-7" | 31'-11" | 3.50 | 1430 |
| 11P-SP508 | 1 | 3'-7" | 31'-6" | 3.50 | 1412 |
| 11P-SP509 | 1 | 3'-7" | 31'-3" | 3.50 | 1401 |
| TOTAL SPIRALS PIER P-11 = | | | | | 4243 |
| **SPIRALS - PIER 8 & 9 *** | | | | | |
| 8P-SP501 | 2 | 4'-6" | 22'-0" | 3 | 2831 |
| 8P-SP502 | 1 | 4'-6" | 16'-0" | 3 | 1041 |
| 8P-SP503 | 1 | 4'-6" | 18'-0" | 3 | 1166 |
| 8P-SP504 | 1 | 4'-6" | 20'-0" | 3 | 1291 |
| 9P-SP501 | 2 | 4'-6" | 15'-6" | 3 | 2020 |
| 9P-SP502 | 1 | 4'-6" | 13'-6" | 3 | 885 |
| 9P-SP503 | 1 | 4'-6" | 14'-0" | 3 | 917 |
| 9P-SP504 | 1 | 4'-6" | 15'-0" | 3 | 979 |
| TOTAL SPIRALS PIER 8+9 = | | | | | 11130 |




NON EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL = | 20,935 LBS |
| PIER | TOTAL = | 241,828 LBS |
| SUPERSTRUCTURE | TOTAL = | 207,947 LBS |
| GRAND | TOTAL = | 470,710 LBS |

EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL = | 2,610 LBS |
| PIER | TOTAL = | 0 LBS |
| SUPERSTRUCTURE | TOTAL = | 336,540 LBS |
| GRAND | TOTAL = | 339,150 LBS |

(1) FOR SPIRAL REINFORCING OVER 15'-0". FOUR ANGLE SPACERS WEIGHING APPROX. 1.01 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(2) FOR SPIRAL REINFORCING UNDER 15'-0" FOUR ANGLE SPACERS WEIGHING APPROX. .80 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(3) THE LENGTH SHOWN IN THE STEEL SCHEDULE FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE TOP OF THE COLUMN INCLUDING THREE (3) CLOSED COILS (ONE AND ONE HALF CLOSED COILS AT THE ENDS OF EACH SPIRAL UNIT.)

(4) REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDON SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

* SPIRAL LENGTHS FOR PIERS 8 & 9 HAVE BEEN ESTIMATED. ACTUAL LENGTHS CAN BE DETERMINED DURING CONSTRUCTION.

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45/45

# REINFORCING SCHEDULE

AKRON INNERBELT OVER BOWERY STREET, OHIO CANAL, WEST EXPRESSWAY AND RUSSELL AVENUE
BR. NO. SUM-59-0000
AKRON OHIO — SUMMIT COUNTY
STA. 114 + 52.10 TO STA. 129 + 52.60

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. CDG | F.F. | | A.L.H. | | 12-20-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

318/455

# AKRON INNERBELT
SUM-59-0.00

## CURVE DATA

BASELINE RAMP SW (SPIRAL IN)
P.I. STA 125+00.95
T.S. STA 121+65.46
S.C. STA 126+65.46
$L_s$ = 500.00'
$L_T$ = 335.49'
$S_T$ = 168.62'
$L_c$ = 497.30'
$\theta_s$ = 20°-00'-00"

CIRCULAR CURVE
P.I. STA. 129+75.08
C.S. STA. 132+49.94
$\Delta c$ = 46°-95'-28"
Dc = 8°00'-00"
R = 716.20'
T = 309.61'
L = 584.47'

℄ RELOCATED DART
P.I. STA 226+06.18
$\Delta$ = 54°-31'-44"
Dc = 14°00'-00"
R = 409.26'
T = 210.91'
Lc = 389.49'

## PROPOSED STRUCTURE

TYPE: CONTINUOUS WELDED PLATED GIRDERS AND ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.

SKEW: VARIES (SEE PLAN)
SPANS: c/c BEARINGS ALONG ℄ 49'-3", 76'-7", 76'-6", 117'-9", 142'-6", 92'-9"

ROADWAY: 40'-0" F. TO F. CONC. BARRIERS, 41'-10" O. to O.

LOADING: HS-20-44 (CASE II) AND ALTERNATE MILITARY LOADING
WEARING: 1½" LATEX MODIFIED SURFACE CONCRETE OVERLAY

APPROACH: 25'-0" (AS-1-81) SLABS.

ALIGNMENT: CURVE LT.
SUPERELEVATION: VARIES
SLOPE PROTECTION: CONCRETE

TRAFFIC:
ADT: = 15,200 (2000)
ADTT: = 760 (2000)

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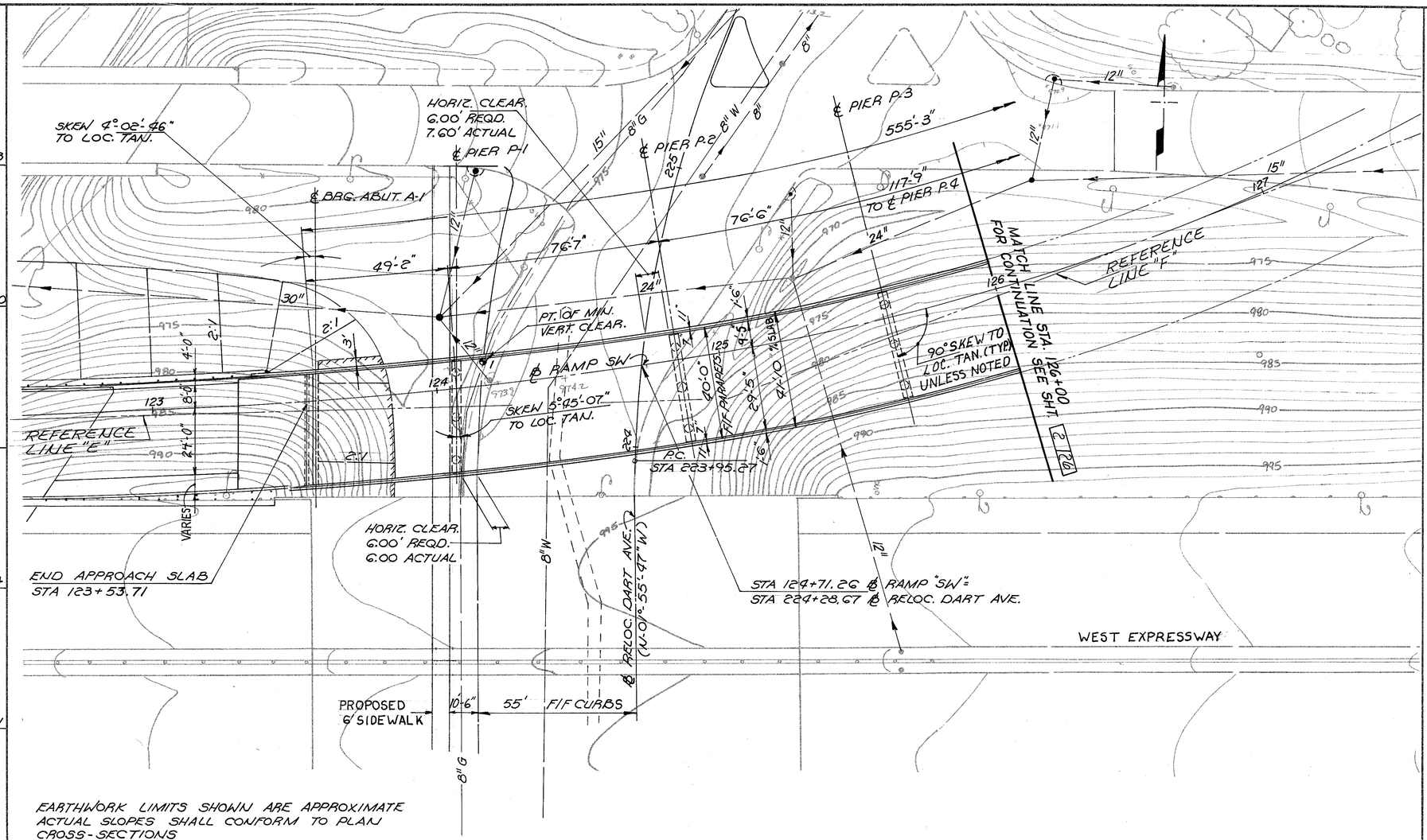
1/126

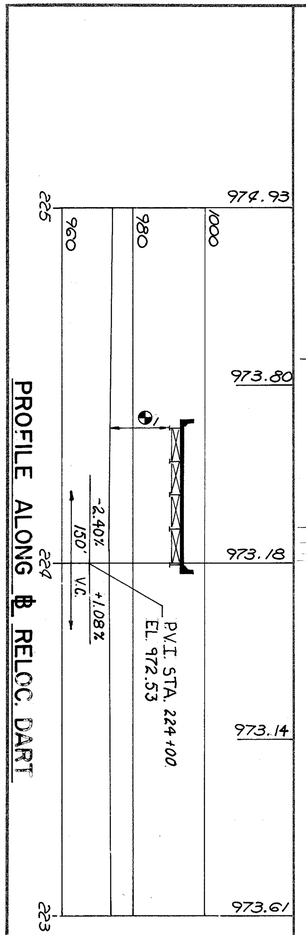
## SITE PLAN

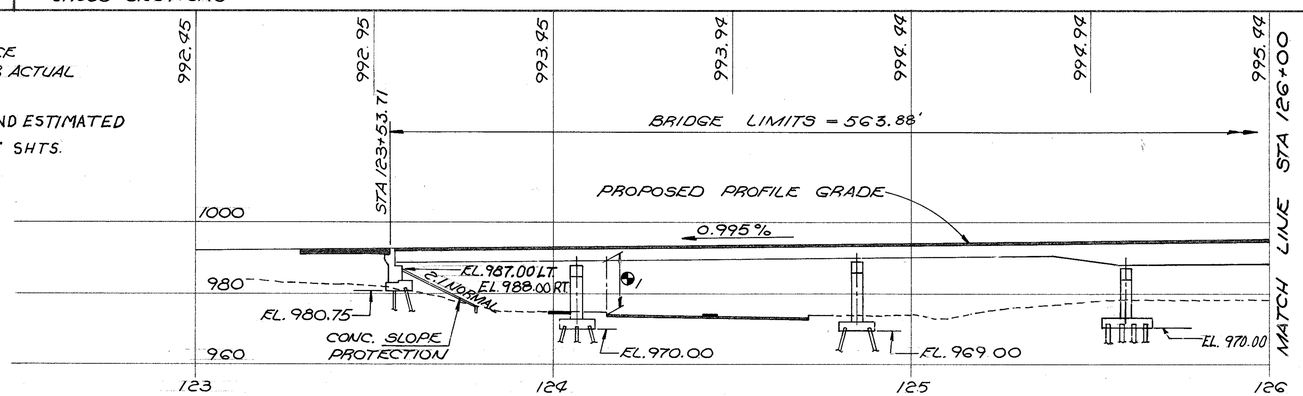
AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| H.H. M.S.C. | J.W.W. | | R.J.P. | J.J.P. | 12-15-82 | |




PROFILE ALONG ℄ RAMP "SW"

℄ VERTICAL CLEARANCE 15.33' REQD., 15.48 ACTUAL

FOR PILE TYPES AND ESTIMATED PAY LENGTHS SEE SHTS. 5/126 & 6/126

FOR ADDITIONAL GEOMETRIC LAYOUT DATA, REFERENCE LINES AND SUPERELEVATION TRANSITION LAYOUTS SEE SHEET 260 OF 455

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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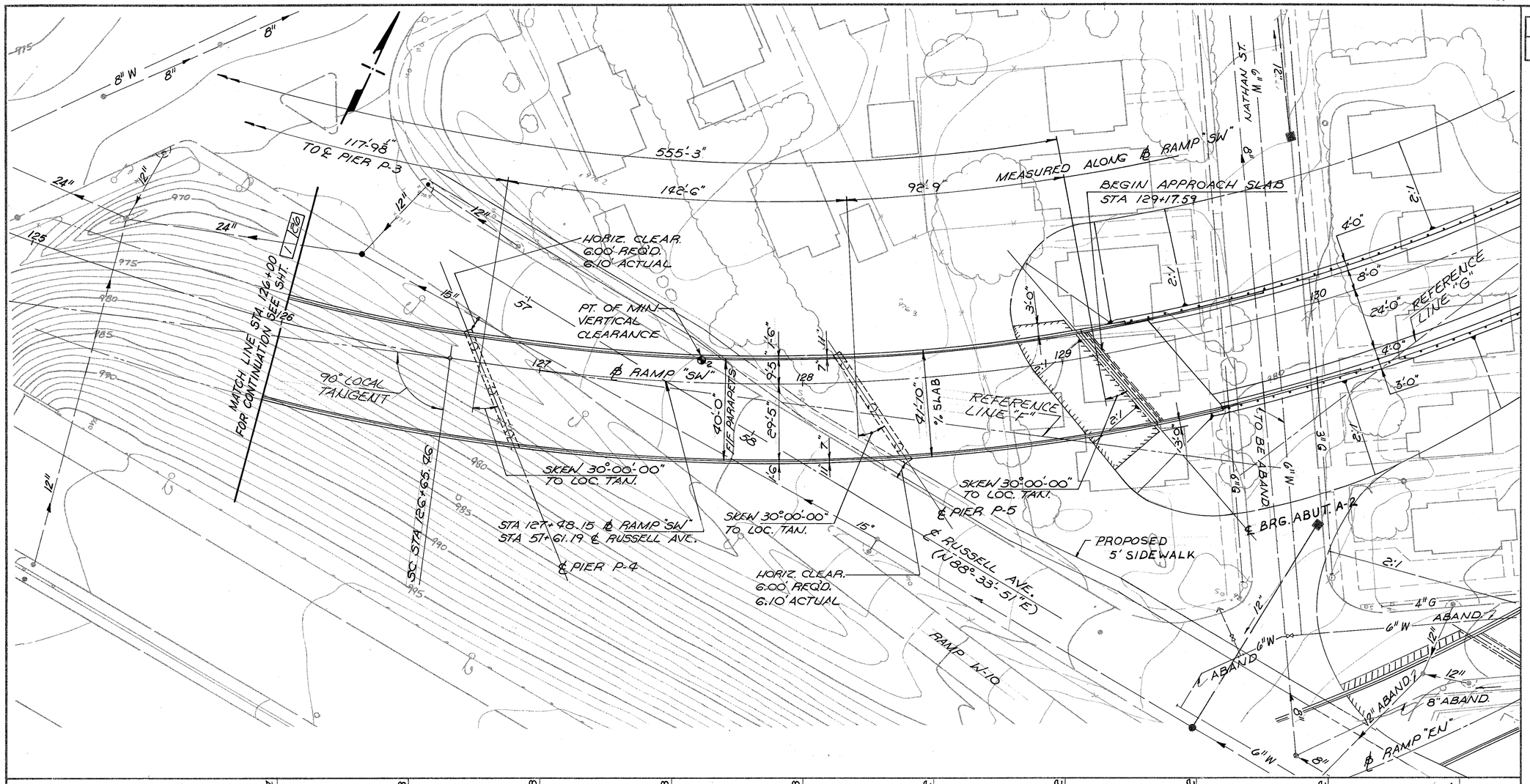
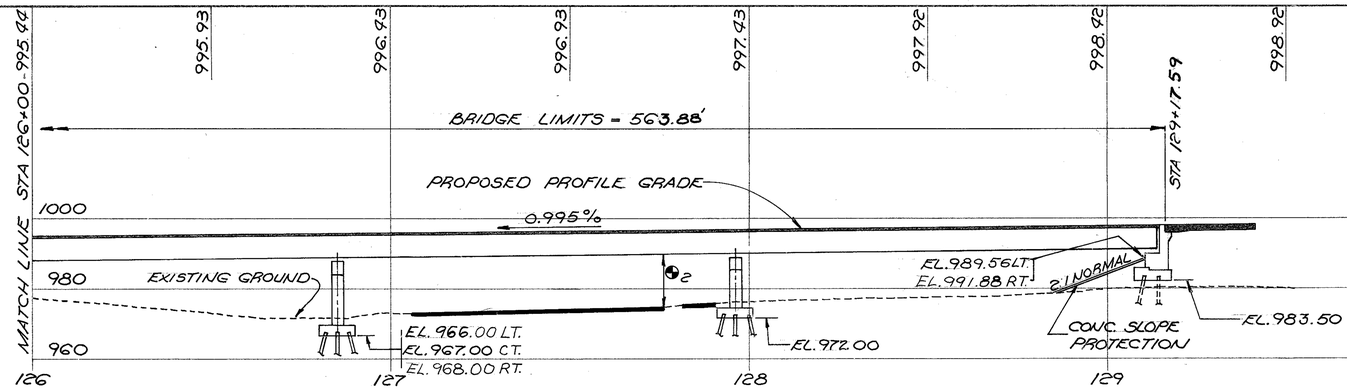
AKRON INNERBELT
SUM-59-0.00




PROFILE ALONG ℄ RAMP "SW"

℄2 VERTICAL CLEARANCE 15.33' REQ'D, 15.34' ACTUAL.

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2 of 20

# SITE PLAN

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

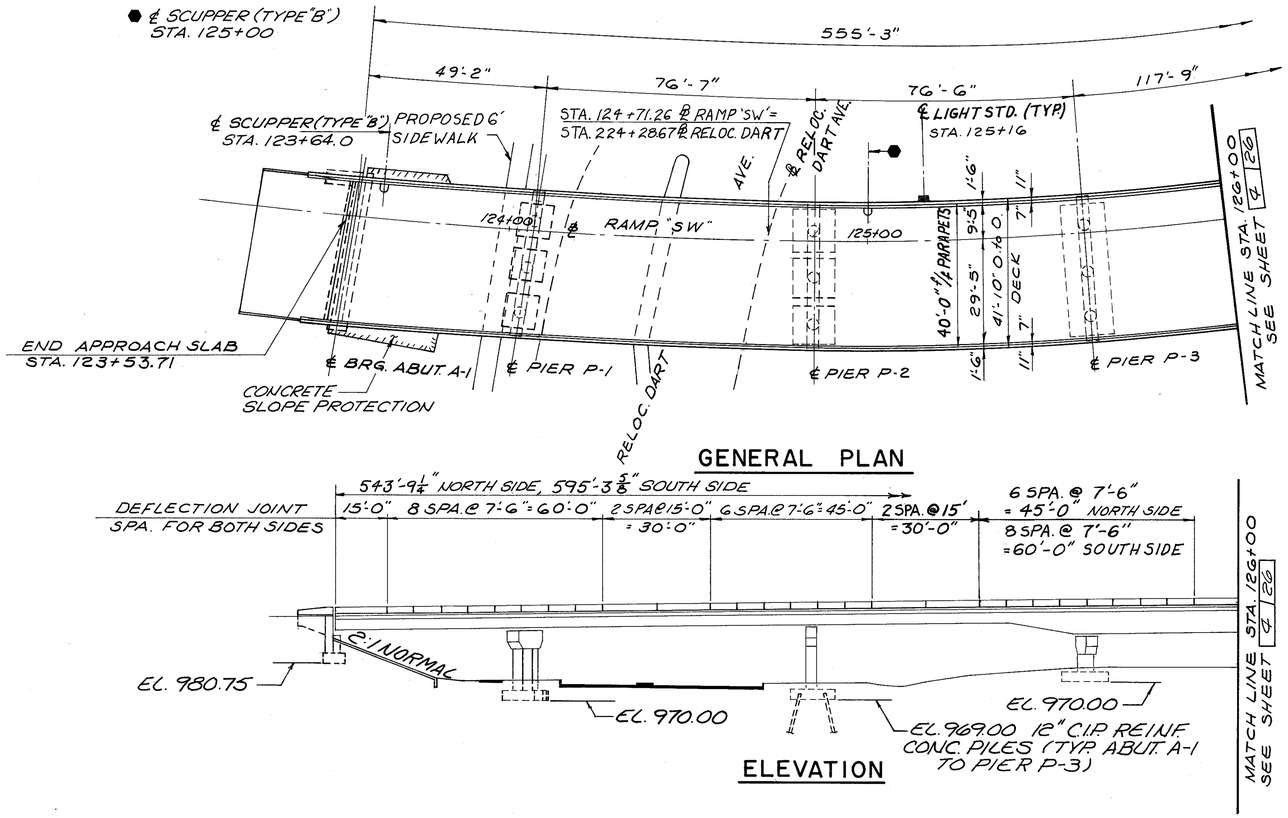
BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII MSC | JWN | | R.J.P. | gjf | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

320/455

AKRON INNERBELT
SUM-59-0.00




## GENERAL PLAN




## ELEVATION

### ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | PIER | GEN'L. |
|---|---|---|---|---|---|---|---|
| 503 | LUMP | LS | COFFERDAMS, CRIBS AND SHEETING | | | | LUMP |
| 503 | 1130 | CY | UNCLASSIFIED EXCAVATION | | 297 | 833 | |
| 505 | LUMP | LS | PILE DRIVING EQUIPMENT MOBILIZATION | | | | LUMP |
| 506 | LUMP | LS | STATIC LOAD TEST (12" C.I.P.) | | | | LUMP |
| 506 | LUMP | LS | STATIC LOAD TEST (HP 12×53) | | | | LUMP |
| 507 | 60 | LF | PREBORED HOLES, AS PER PLAN | | 60 | | |
| 507 | 5730 | LF | 12" DIA. C.I.P. REINF. CONCRETE PILES | | 1105 | 4625 | |
| 507 | 4185 | LF | STEEL PILES, HP 12×53 (*) | | | 4185 | |
| 507 | 1020 | LF | STEEL PILES, HP 10×42 | | 1020 | | |
| 509 | 176822 | LB | REINFORCING STEEL, GRADE 60 | 80806 | 14006 | 82010 | |
| 824 | 138951 | LB | EPOXY COATED REINF. STEEL GRADE 60 | 135857 | 3094 | — | |
| 511 | 728 | CY | CLASS "S" CONCRETE, SUPERSTRUCTURE (*) | 728 | | | |
| 511 | 147 | CY | CLASS "C" CONCRETE, PIERS ABOVE FTGS. | | | 147 | |
| 511 | 140 | CY | CLASS "C" CONCRETE, ABUTS. ABOVE FTGS. | | 140 | | |
| 511 | 418 | CY | CLASS "C" CONCRETE, FOOTINGS | | 79 | 339 | |
| 512 | 4 | SY | TYPE "B" WATERPROOFING | | 4 | | |
| 513 | 720560 | LB | STRUCTURAL STEEL, A-588 (AISC CATEGORY III (**)) | 720560 | | | |
| 513 | 35080 | LB | STRUCTURAL STEEL (A-36) CURB PLATES, GALVANIZED (AISC CERT. NOT REQ'D.) | 35080 | | | |
| 513 | 7635 | EA. | WELDED STUD SHEAR CONNECTORS (*) | 7635 | | | |
| 515 | 19 | S.F. | 1" PREFORMED EXPN. JT. FILLER | | 19 | | |
| 518 | 79 | CY | POROUS BACKFILL | | 79 | | |
| 518 | 46 | LF | 6" NON-PERF. HELICAL C.S.P. INCLUD. SPEC. 707.01 | | 46 | | |
| 518 | 80 | LF | 6" PERFORATED HELICAL C.S.P. 707.01 | | 80 | | |
| 518 | 2 | EA. | SCUPPERS, INCLUDING SUPPORTS | 2 | | | |
| 523 | 3 | HOUR | DYNAMIC LOAD TEST (12" C.I.P.) | | | | 3 |
| 523 | 3 | HOUR | DYNAMIC LOAD TEST (HP 12×53) | | | | 3 |
| 601 | 318 | SY | CONCRETE SLOPE PROTECTION | | 318 | | |
| 625 | | | SEE LIGHTING SUMMARY SHEET | | | | |
| 845 | 2457 | SY | LATEX MODIFIED CONC. OVERLAY (1¼" THK.) (*) | 2457 | | | |
| 516 | 35 | EA. | SPHERICAL BEARINGS (***) | | 10 | 25 | |
| SPEC. | 1411 | SY | SEALING OF CONCRETE SURFACES | (*) 772 | 146 | 493 | |
| 516 | 87 | LF | MODULAR EXPN. JT. DEVICE (TYPE "B") (**) | | 87 | | |

(*) SEE PROPOSAL NOTE
(**) AS PER PLAN
(***) SEE SPECIAL PROVISIONS

NOTES

1. FOR SCUPPER AND LIGHT SUPPORT DETAILS SEE SHEET 261/455.

QUANTITIES CHECKED BY:
M.A.B. 11-02-82

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CLEVELAND, OHIO AKRON, OHIO

3/26

**GENERAL PLAN & ELEVATION AND ESTIMATED QUANITIES**
AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.
BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HK II MSC | F.F. | | R.J.P. | JAP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

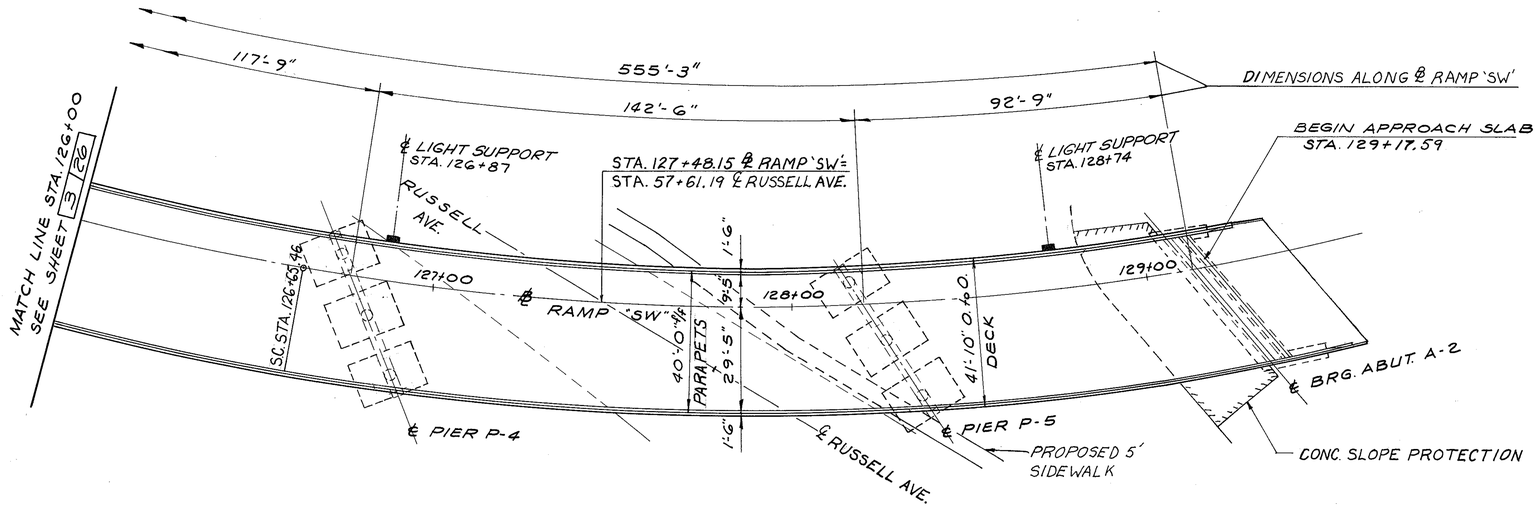
321/455

AKRON INNERBELT
SUM - 59 - 0.00

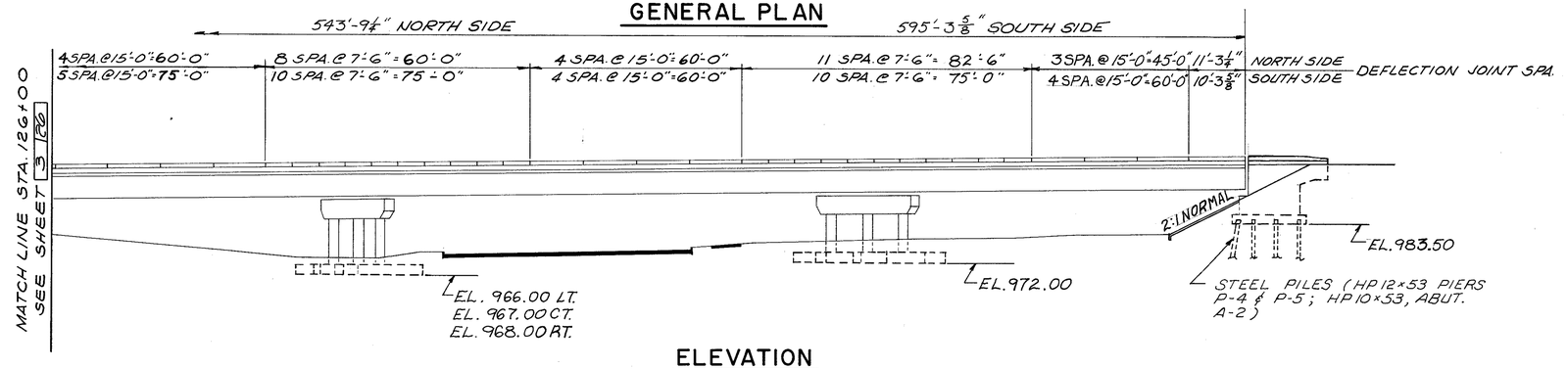
## NOTES

FOR LIGHT SUPPORT DETAILS SEE SHEET 221/455.

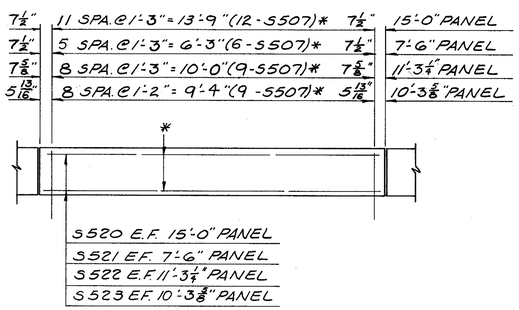
* REINFORCING BARS SHOWN THUS "*" ARE EPOXY COATED.




## GENERAL PLAN




## ELEVATION




## TYPICAL PANEL DETAILS

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CLEVELAND, OHIO — AKRON, OHIO

4/126

# GENERAL PLAN & ELEVATION

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HII MSC | F.F. | | R.J.P. | JJP | 12-15-82 | |

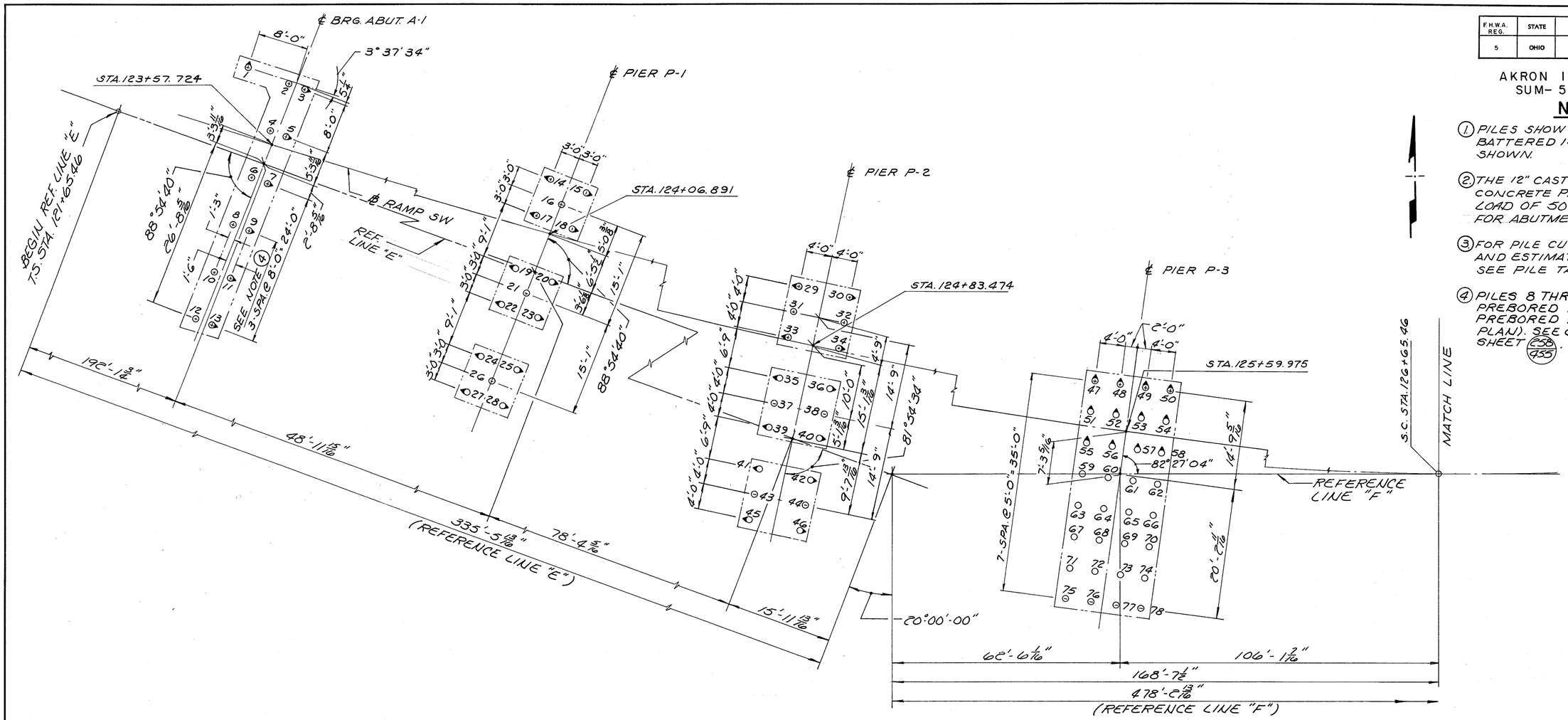
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

322/455

AKRON INNERBELT
SUM-59-0.00

## NOTES

1. PILES SHOW THUS ⊙ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
2. THE 12" CAST-IN-PLACE REINFORCED CONCRETE PILES HAVE A DESIGN LOAD OF 50 TONS PER PILE. FOR ABUTMENT & PIER PILES.
3. FOR PILE CUT-OFF ELEVATIONS AND ESTIMATED PILE LENGTHS SEE PILE TABLE.
4. PILES 8 THRU 13 SHALL BE PREBORED AS PER ITEM 507 PREBORED HOLES (AS PER PLAN). SEE GENERAL NOTES SHEET 238/455.




## PILING PLAN

## PILE TABLE

| SUBSTRUCTURE UNIT | PILE NUMBER | PILE TYPE | CUT-OFF ELEVATION | ESTIMATED LENGTH |
|---|---|---|---|---|
| ABUT. A-1 | 1-13 | 12"C.I.P. R.C.P. | 982.75 | 85' |
| PIER P-1 | 14-28 | 12"C.I.P. R.C.P. | 972.00 | 75' |
| PIER P-2 | 29-46 | 12"C.I.P. R.C.P. | 971.00 | 70' |
| PIER P-3 | 47-78 | 12"C.I.P. R.C.P. | 972.00 | 70' |

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CLEVELAND, OHIO — AKRON, OHIO

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# PILING PLAN

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | MSC R.J.P. | JJP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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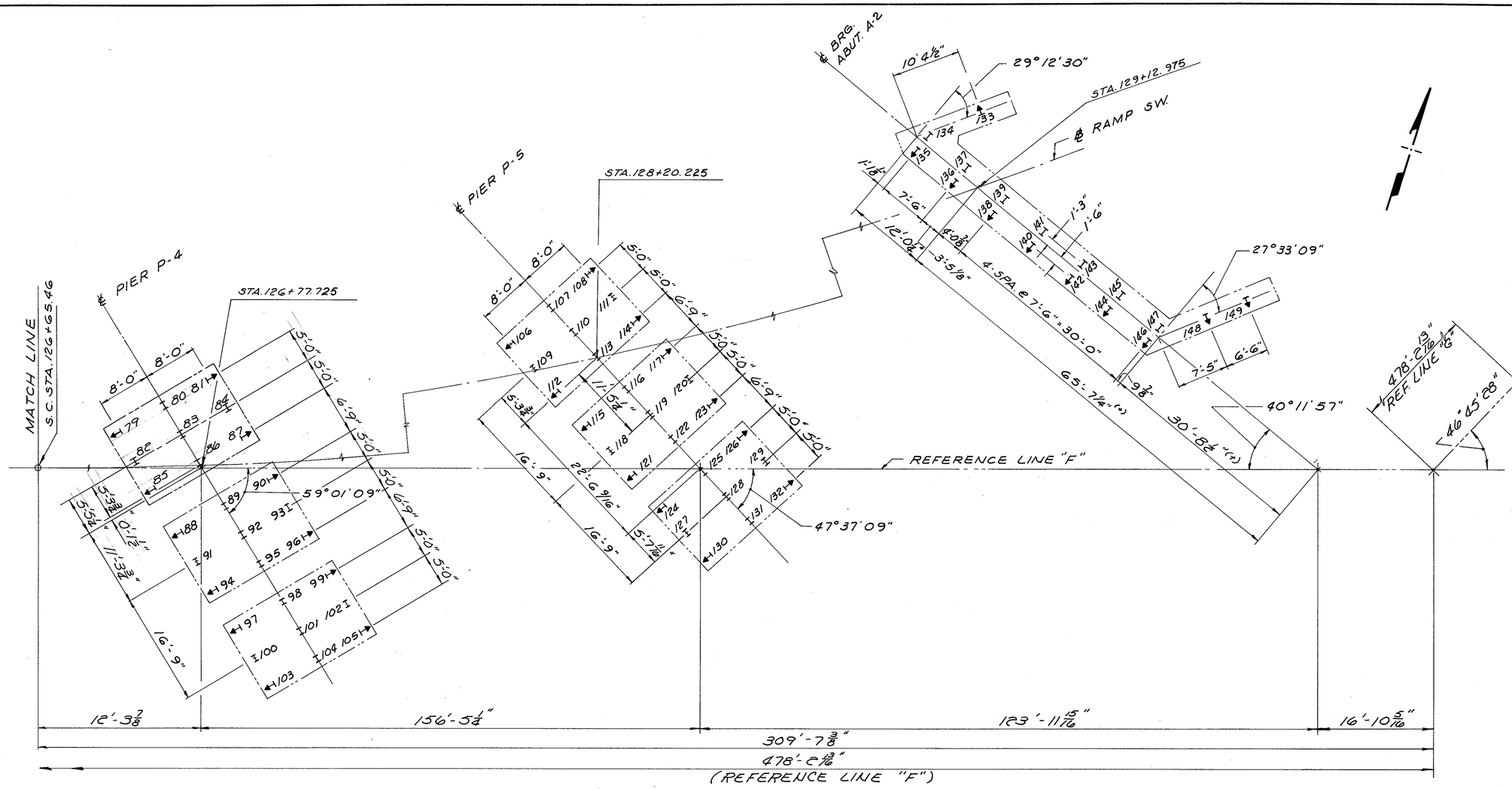
AKRON INNERBELT
SUM-59-0.00




## PILING PLAN

## NOTES

1. FOR PILE CUT-OFF ELEVATIONS AND ESTIMATED PILE LENGTHS SEE PILE TABLE, SHEET 5/26.
2. STEEL HP 12×53 AND HP10×42 PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE CONSIDERED AS OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR REFUSAL SHALL BE CONSIDERED AS OBTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS. THE DESIGN LOAD IS 50 TONS PER PILE FOR ABUT. PILES AND 70 TONS PER PILE FOR PIER PILES.
3. FOR ADDITIONAL NOTES SEE SHEET 5/26.

## PILE TABLE

| SUBSTRUCTURE UNIT | PILE NUMBER | PILE TYPE | CUT-OFF ELEVATION | ESTIMATED LENGTH |
|---|---|---|---|---|
| PIER P-4 | 79-87 | HP 12 x 53 | 968.00 | 90' |
| PIER P-4 | 88-96 | HP 12 x 53 | 969.00 | 90' |
| PIER P-4 | 97-105 | HP 12x 53 | 970.00 | 90' |
| PIER P-5 | 106-132 | HP 12 x 53 | 974.00 | 65' |
| ABUT. A-2 | 133-149 | HP 10x42 | 985.50 | 60' |
| | | | | |

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6/26

# PILING PLAN

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

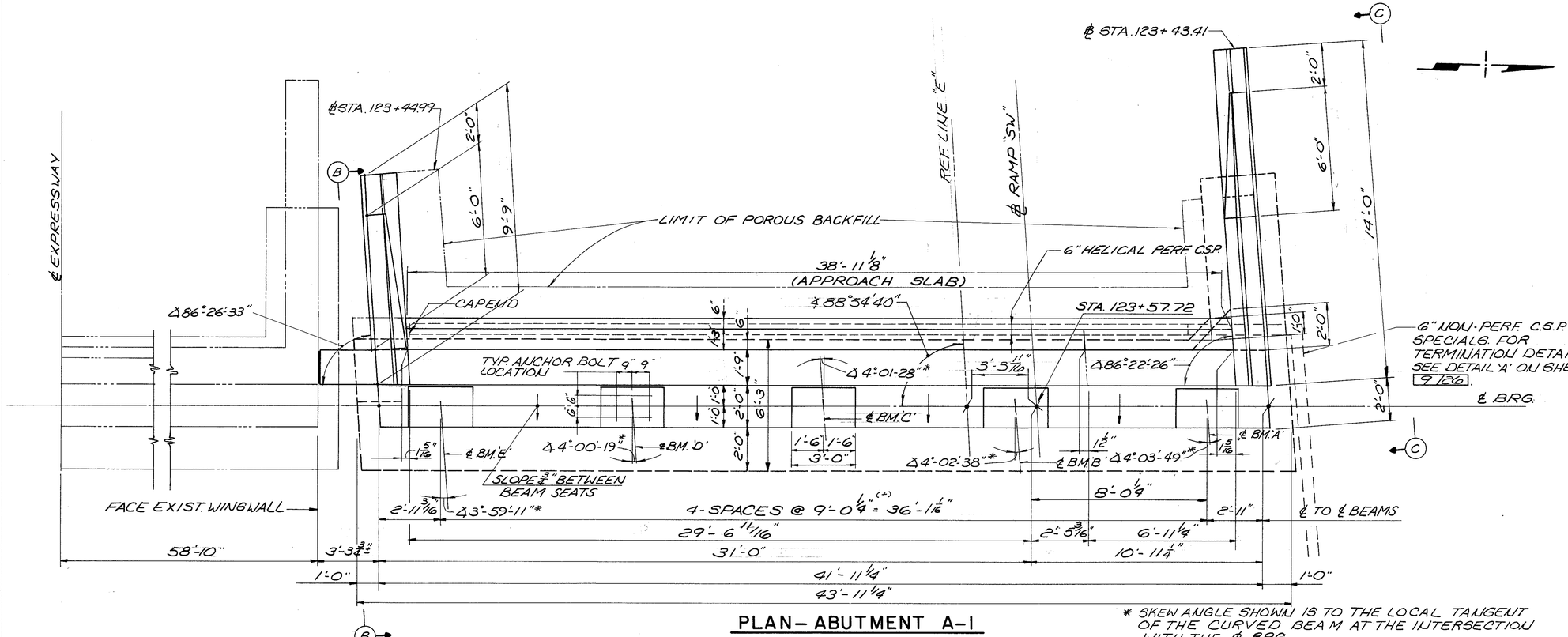
BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | MSC R.J.P. | JJH | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

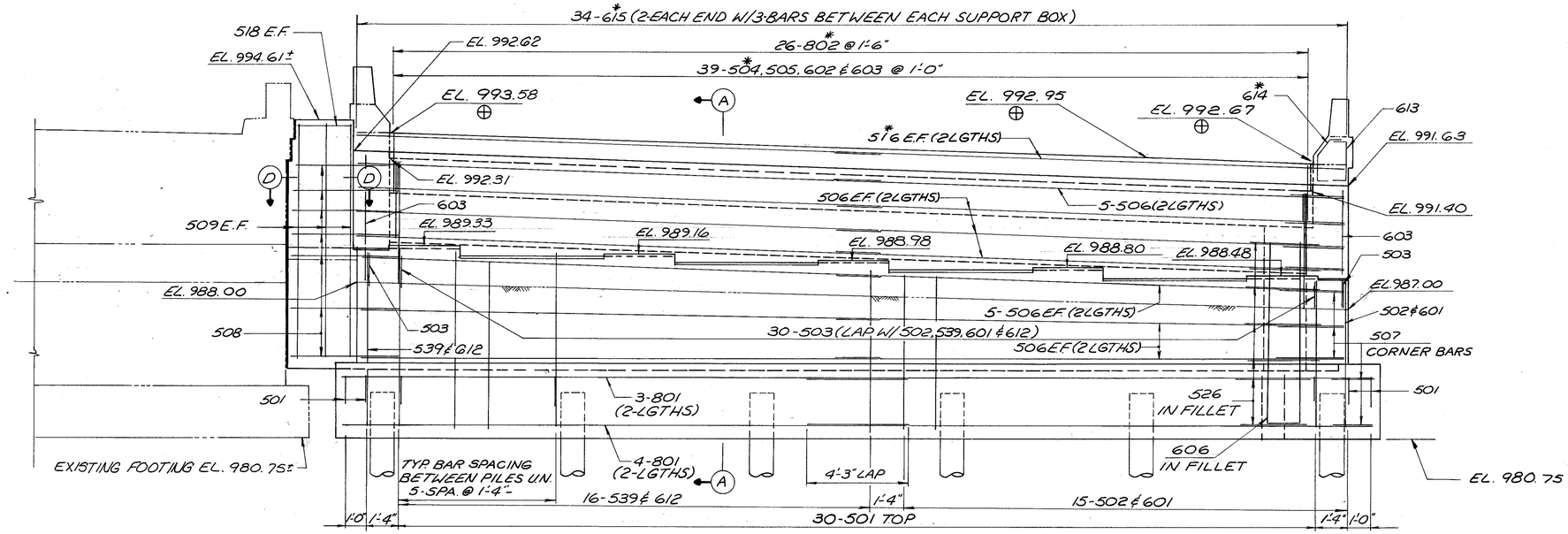
324/455

AKRON INNERBELT
SUM - 59 - 0.00




## PLAN— ABUTMENT A-I

* SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF THE CURVED BEAM AT THE INTERSECTION WITH THE ℄ BRG.




## ELEVATION

### NOTES

1. ABBREVIATIONS USED ARE:
   NF-NEAR FACE
   FF-FAR FACE
   EF-EACH FACE
2. BACKWALL ELEVATIONS SHOWN THUS ⊕ ARE GIVEN AS FINAL PAVEMENT ELEVATIONS SEE SECTION A-A SHEET 8 26.
3. THE PREFIX "1A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT UNLESS SHOWN OTERWISE.
4. POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WINGS SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WING WALLS. 1.5 FT. THICK AT ABUTMENT AND 2.0 FT. THICK AT WINGS.
5. EMBANKMENT PROCEDURE:
   THE EMBANKMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENT.
6. FOR PILING PLAN, SEE SHEET 5 26 & 6 26.
7. FOR SECTIONS "A-A, "D-D", VIEWS "B-B", "C-C" AND ADDITIONAL DETAILS SEE SHEET 8 26.
8. FOR LOCATION OF 6*5 REINFORCING BARS CO-ORDINATE WITH EXPANSION JOINT CONTRACTORS DRAWINGS.
9. PORTIONS OF PARAPET AND CURB TO BE CONSTRUCTED AFTER EXPANSION JOINT IS IN PLACE.
10. FOR DETAILS OF ABUTMENT BEARINGS SEE BEARING DETAILS ON SHEETS 266/455 THRU 268/455.
11. REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN.

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7 26

# ABUTMENT A-I DETAILS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

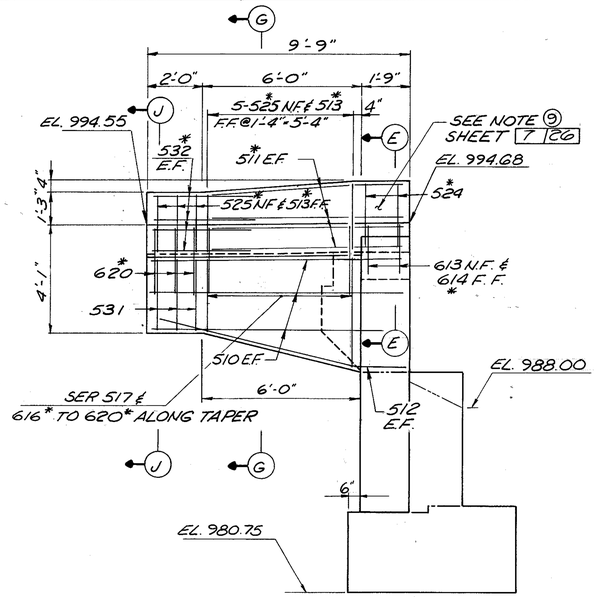
BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | D.T. | | R.J.P. | JGP | 12-15-82 | |

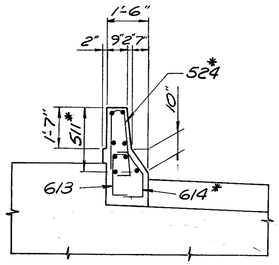
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

325
455

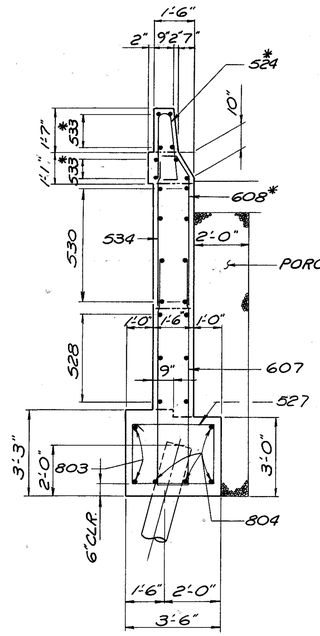
AKRON INNERBELT
SUM-59-0.00



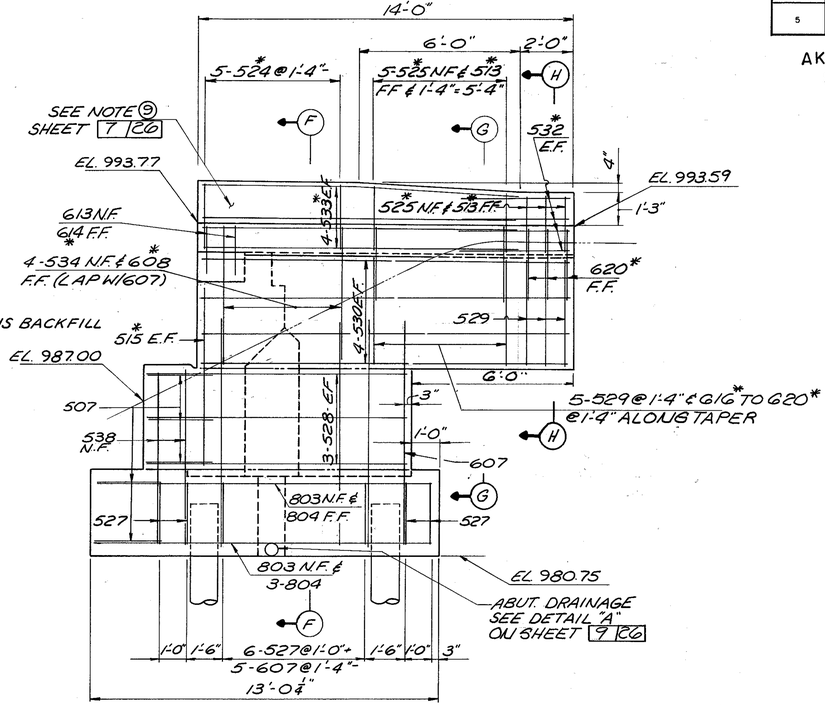

VIEW B-B



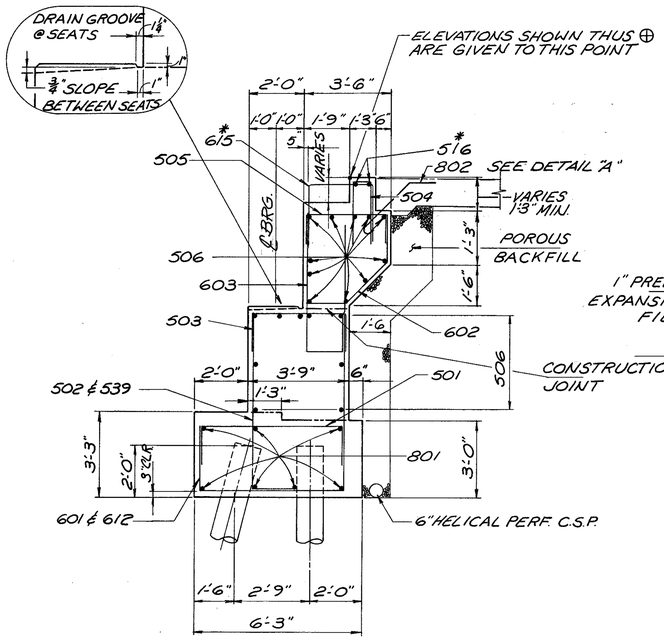

SECTION E-E



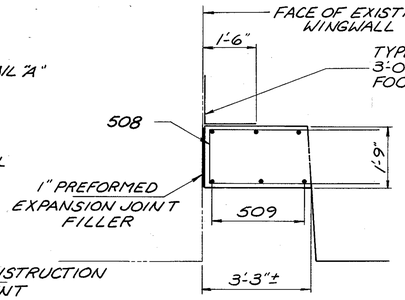

SECTION F-F




VIEW C-C




SECTION A-A

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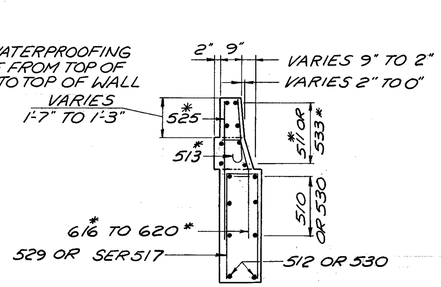
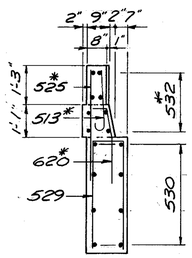
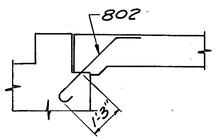


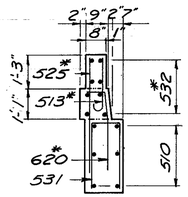

SECTION G-G




SECTION H-H




DETAIL A




SECTION J-J

NOTES

* INDICATES REINFORCING BARS TO BE EPOXY COATED.

FOR NOTES AND DETAILS NOT SHOWN, SEE ABUTMENT DETAIL SHEET 7 26.

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8 26

# ABUTMENT A-1 DETAILS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

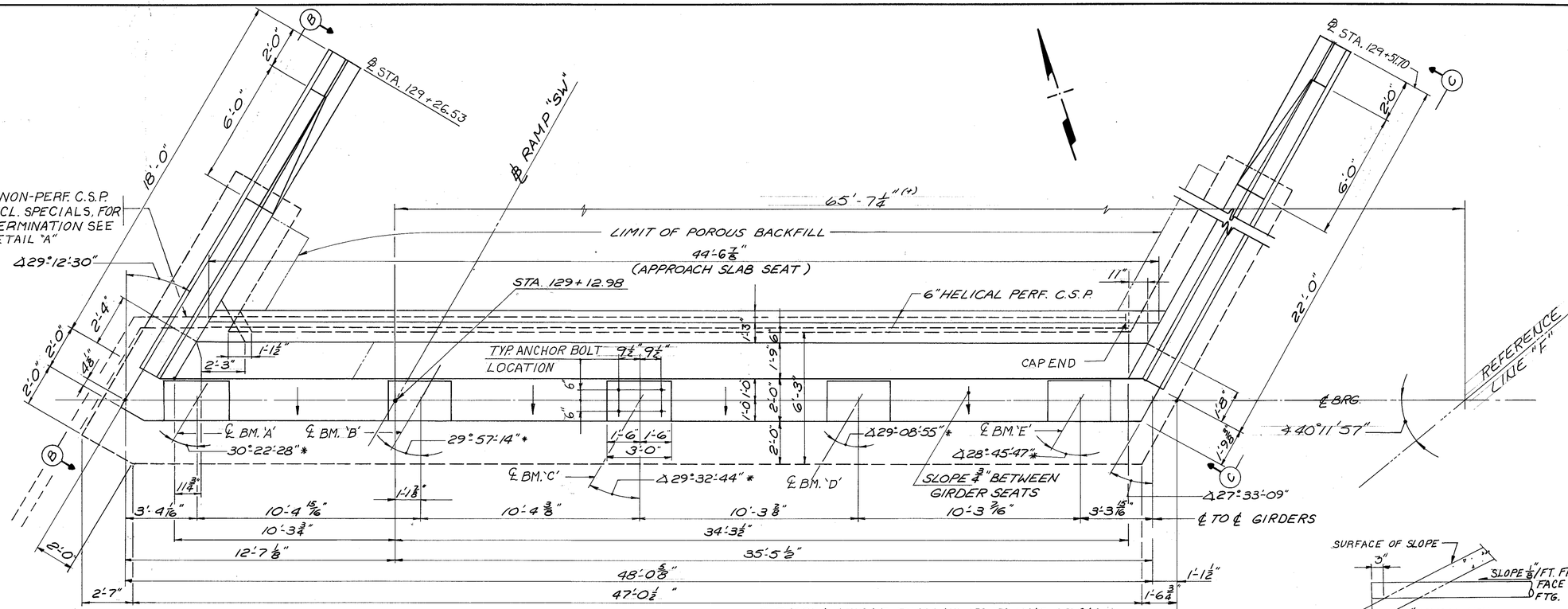
BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | D.T. | | R.J.P. | gjp | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

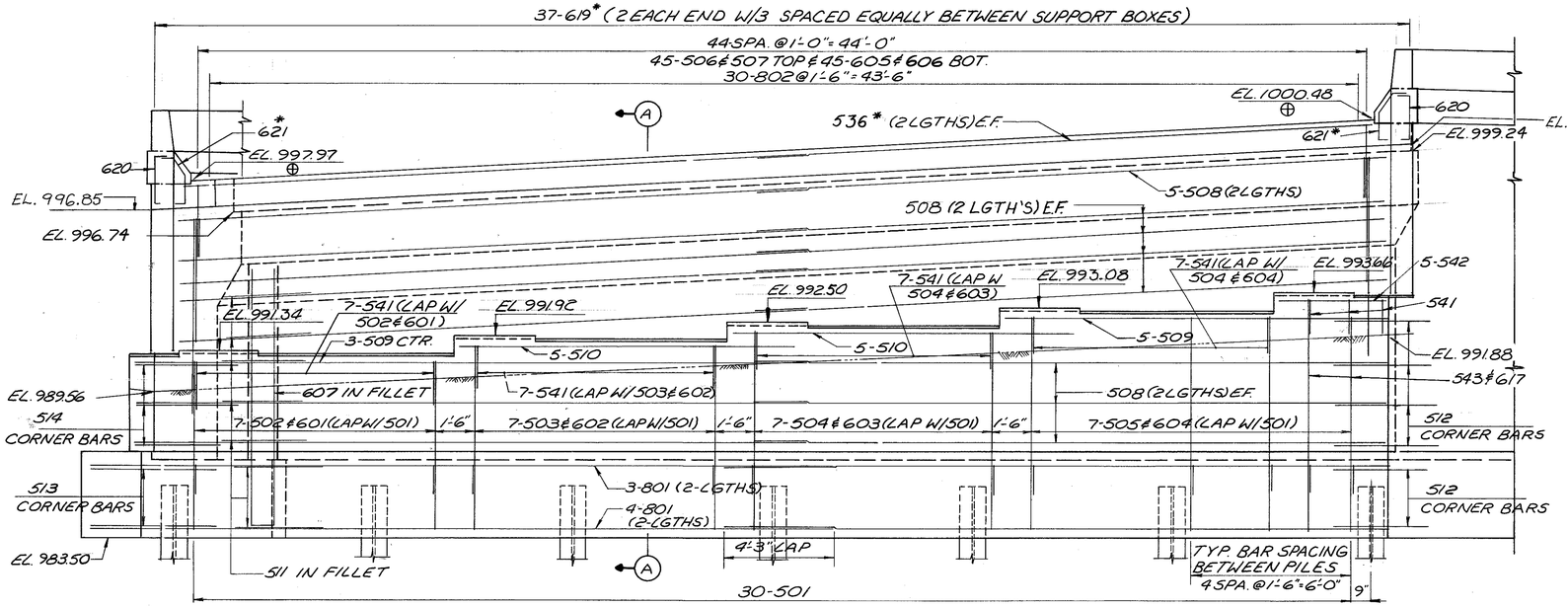
326/455

AKRON INNERBELT
SUM-59-0.00

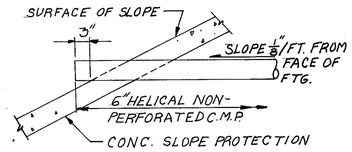



PLAN

* SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF THE CURVED BEAM AT THE INTERSECTION WITH THE ℄ OF BRG.




ELEVATION




DETAIL-A

TERMINATION OF 6" NON-PERFORATED HELICAL C.S.P. AT SLOPE

## NOTES

1. ABBREVIATIONS USED ARE:
   NF - NEAR FACE
   FF - FAR FACE
   EF - EACH FACE
2. ELEVATIONS SHOWN THUS ⊕ ARE GIVEN AS FINAL PAVEMENT ELEVATIONS SEE SECTION A-A SHEET 10/26.
3. THE PREFIX "2A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT UNLESS SHOWN OTHERWISE.
4. POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WING, SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WING WALL. 1.5 FT. THICK AT THE ABUTMENT AND 2.0 FT. THICK AT THE WING.
5. EMBANKMENT PROCEDURE:
   THE EMBANKMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENT.
6. FOR PILING PLAN, SEE SHEET 5/26, 6/26.
7. FOR SECTION "A-A", VIEWS "B-B", "C-C" AND ADDITIONAL DETAILS SEE SHEET 10/26.
8. FOR LOCATION OF 6/9* REINFORCING BARS CO-ORDINATE WITH EXPANSION JOINT CONTRACTORS DRAWINGS.
9. PORTIONS OF PARAPET AND CURB TO BE CONSTRUCTED AFTER EXPANSION JOINT IS IN PLACE.
10. FOR DETAILS OF ABUTMENT BEARINGS SEE BEARING DETAILS ON SHEETS 266/455 THRU 268/455.
11. REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN.

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CLEVELAND, OHIO — AKRON, OHIO

9/26

# ABUTMENT A-2 DETAILS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

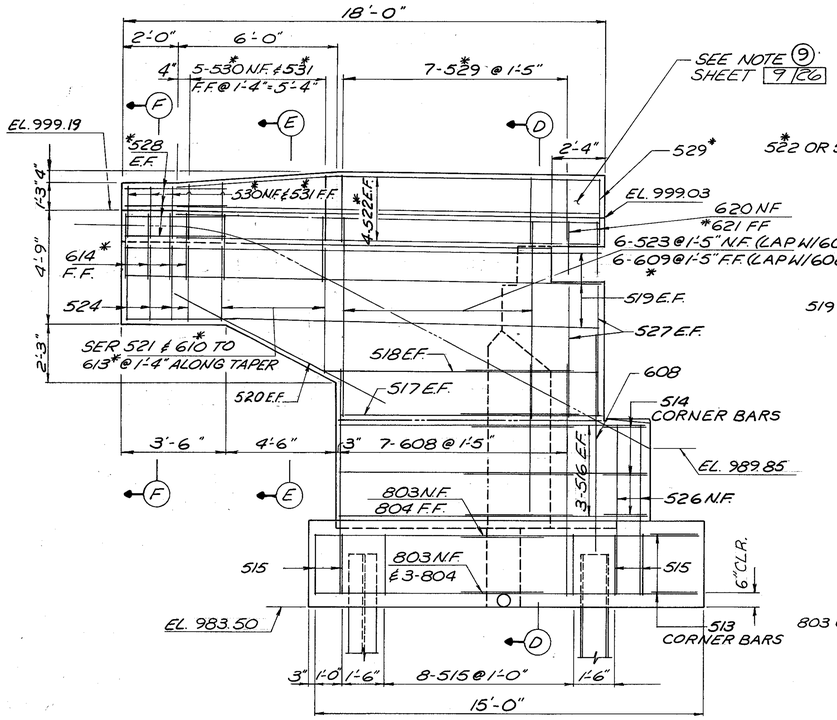
BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

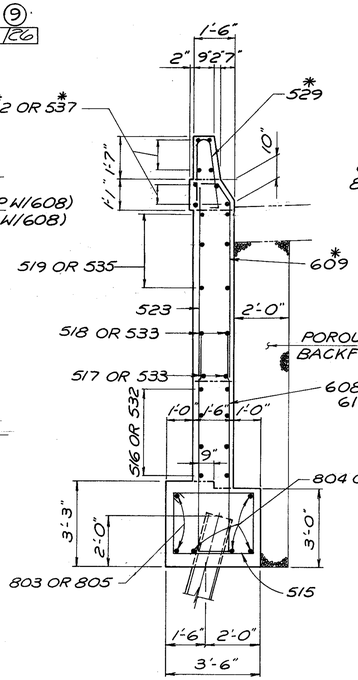
| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | D.T. | | R.J.P. | JGP | 12-15-82 | |

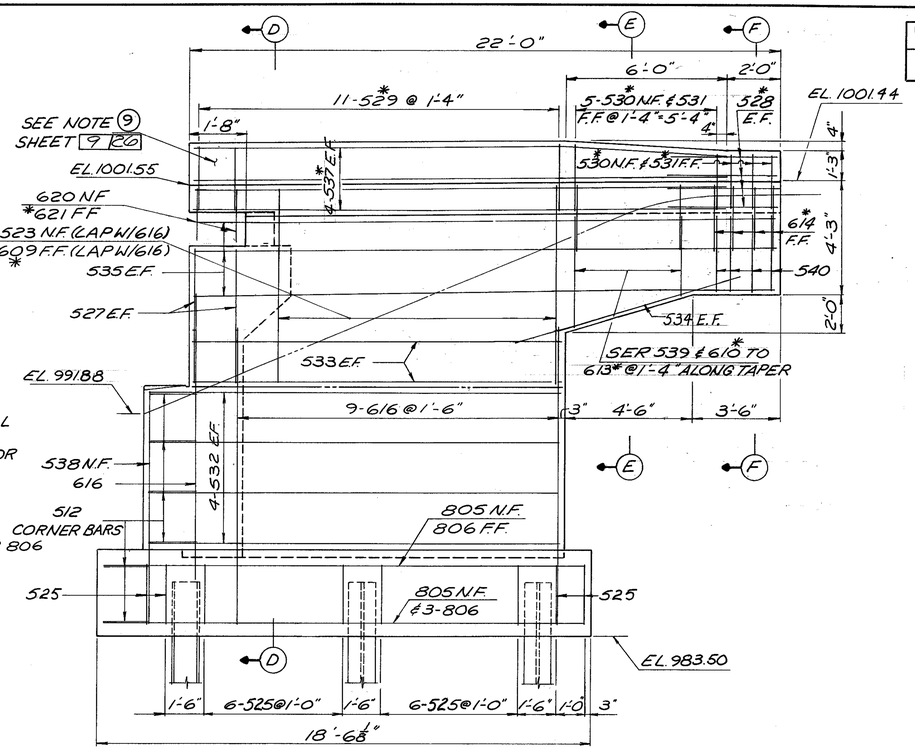
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

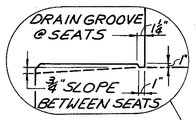
327
455

AKRON INNERBELT
SUM - 59 - 0.00

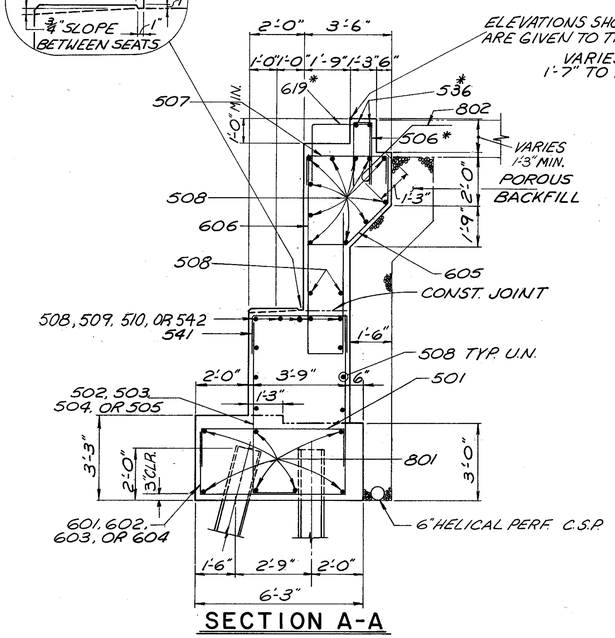


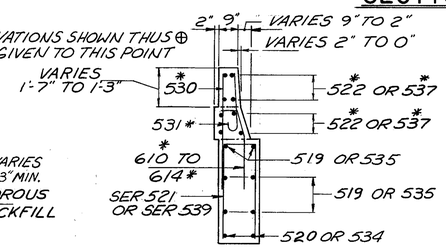




## VIEW B-B

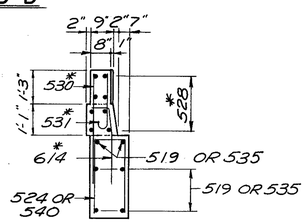



## SECTION A-A

## SECTION D-D




## SECTION E-E




## SECTION F-F

## VIEW C-C

## NOTES

* INDICATES REINFORCING BARS TO BE EPOXY COATED.

FOR NOTES AND DETAILS NOT SHOWN SEE ABUTMENT DETAIL SHEET 9/26.

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CLEVELAND, OHIO — AKRON, OHIO

10/26

# ABUTMENT A-2 DETAILS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

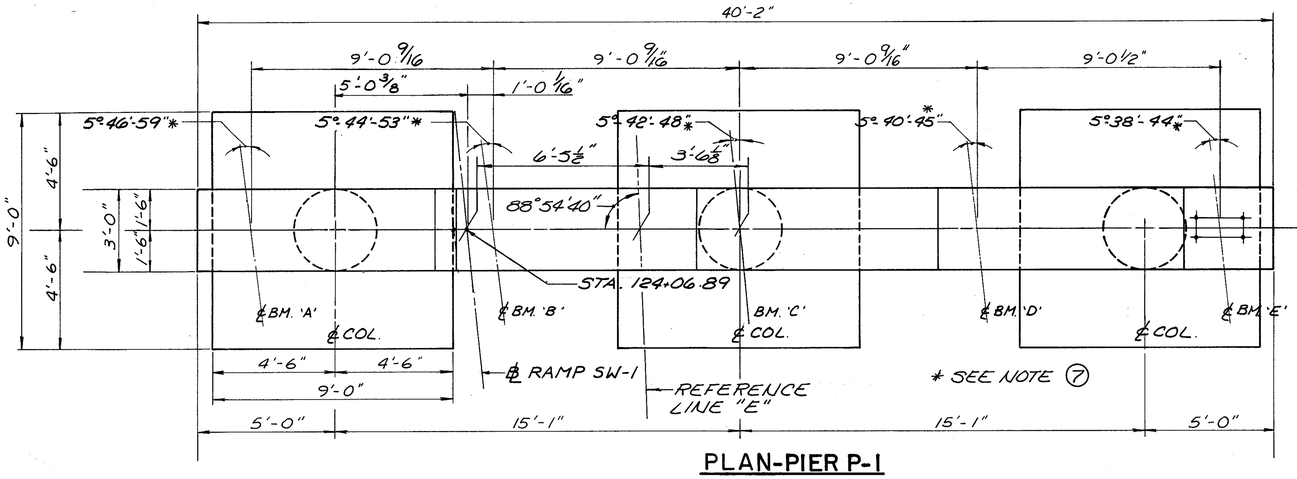
BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BRL | D.T. | | R.J.P. | JJP | 12-16-82 | |

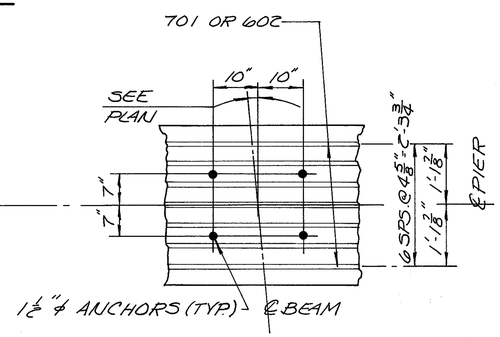
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

328/455

AKRON INNERBELT
SUM-59-0.00



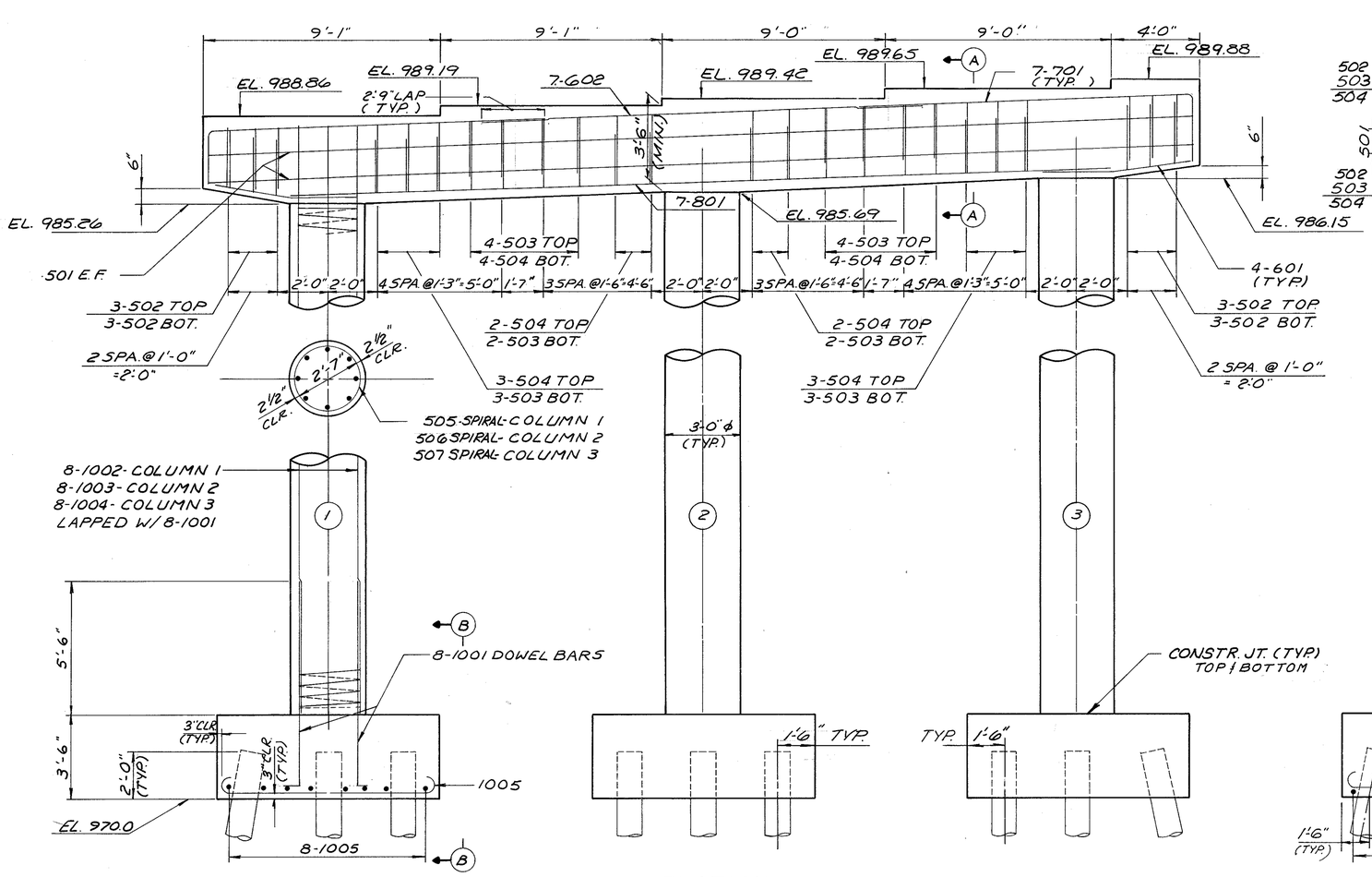

PLAN-PIER P-1



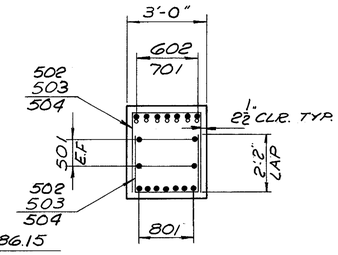

ANCHOR BOLT LOCATION DETAIL
(TYPICAL EACH BEAM)

NOTES

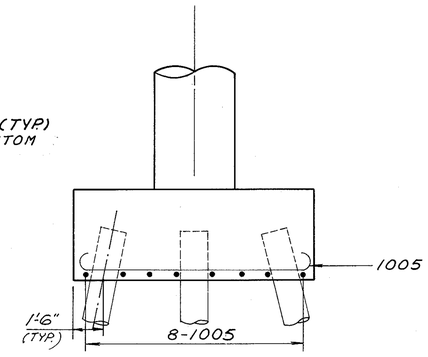
1. SPLICES FOR #11 REINFORCING BAR SIZES SHALL BE MADE WITH APPROVED MECHANICAL CONNECTORS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
2. ALL ANCHOR BOLTS SHALL BE PRE-SET IN CONCRETE.
3. THE PREFIX "1P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS SHOWN OTHERWISE.
4. FOR PILING PLAN, SEE SHEET 5/26.
5. FOR LOCATIONS AND DETAILS OF LIGHTING CONDUITS AND LIGHT FIXTURES AT PIER P-1 SEE LIGHTING PLANS.
6. FOR CIRCUT GROUNDING DETAILS AT PIERS, SEE LIGHTING PLANS.
7. SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF THE CURVED BEAM AT THE INTERSECTION WITH THE ℄ OF PIER.
8. REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE PRE-SETTING OF ANCHOR BAR HOLES.
9. FOR DETAILS OF BEARINGS SEE SEE SHEETS 266/455 THRU 268/455.




ELEVATION




SECTION A-A




VIEW B-B

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11/26

# PIER P-1 DETAILS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

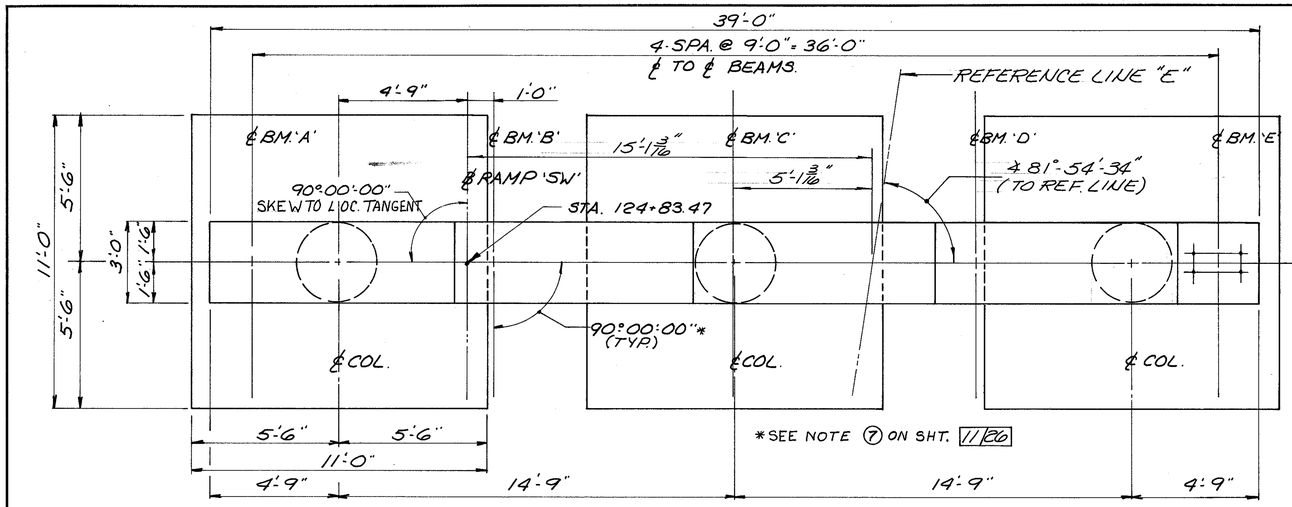
BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | D.T. | | R.J.P. | JJH | 12-15-82 | |

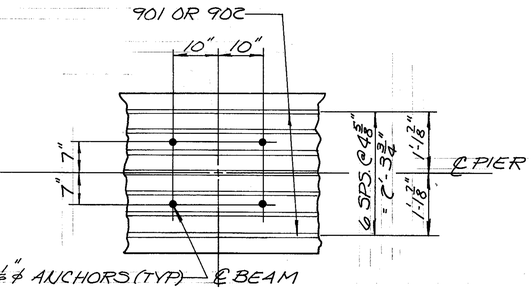
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |



AKRON INNERBELT
SUM - 59- 0.00



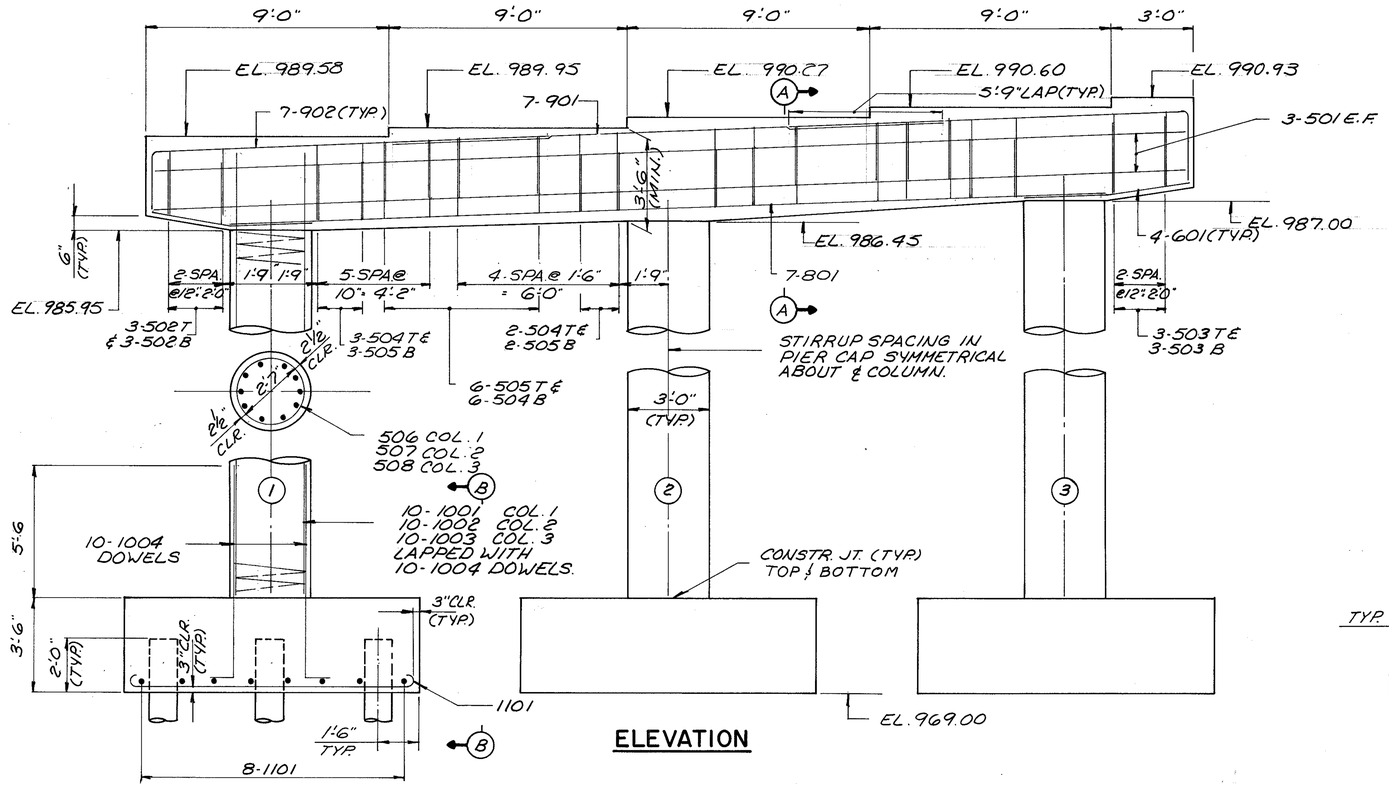

## PLAN – PIER P-2



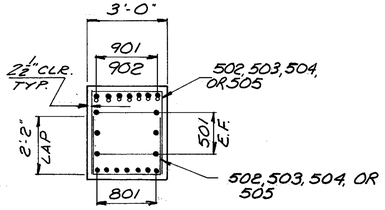

## ANCHOR BOLT LOCATION DETAIL
(TYPICAL EACH BEAM)

## NOTES

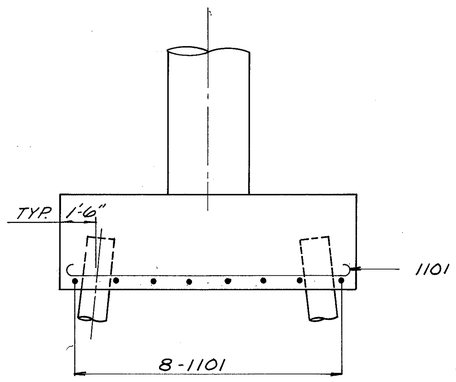
① THE PREFIX "2P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS SHOWN OTHERWISE.
② FOR ADDITIONAL NOTES SEE SHEET 11/26.




## ELEVATION




## SECTION A-A




## SECTION B-B

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO — AKRON, OHIO
12/26

# PIER P-2 DETAILS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

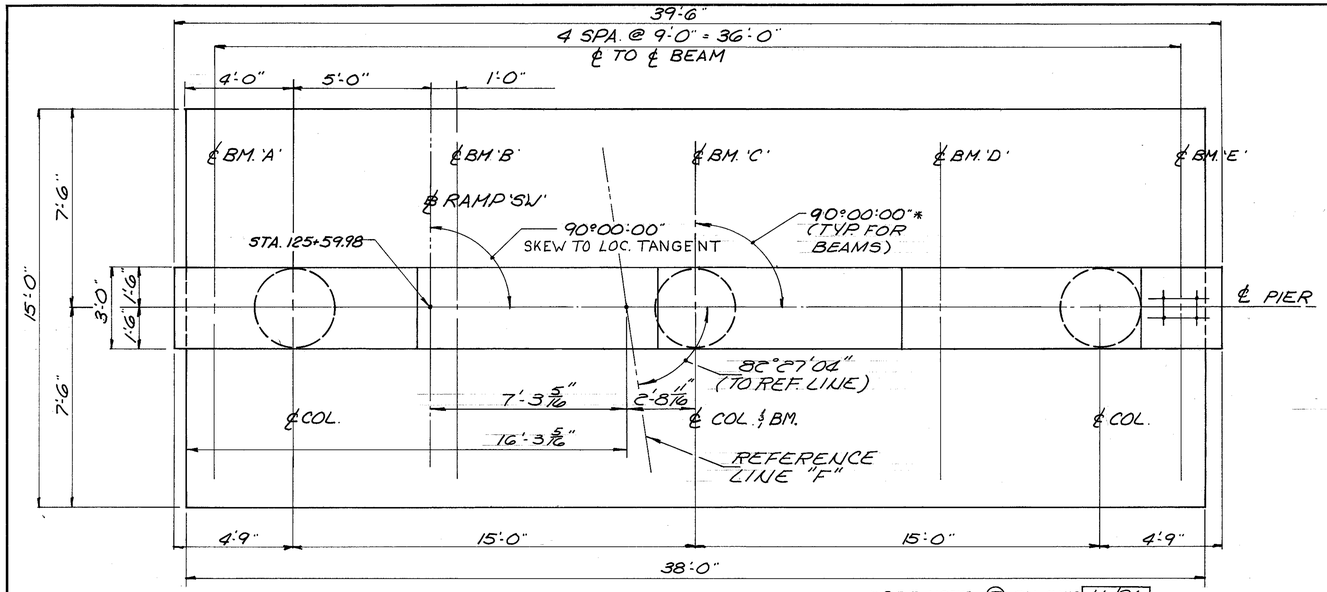
BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | COG | | R.J.P. | JJP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

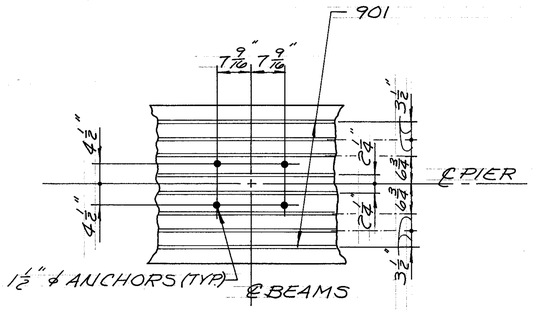
330/455

AKRON INNERBELT
SUM-59-0.00




PLAN-PIER P-3

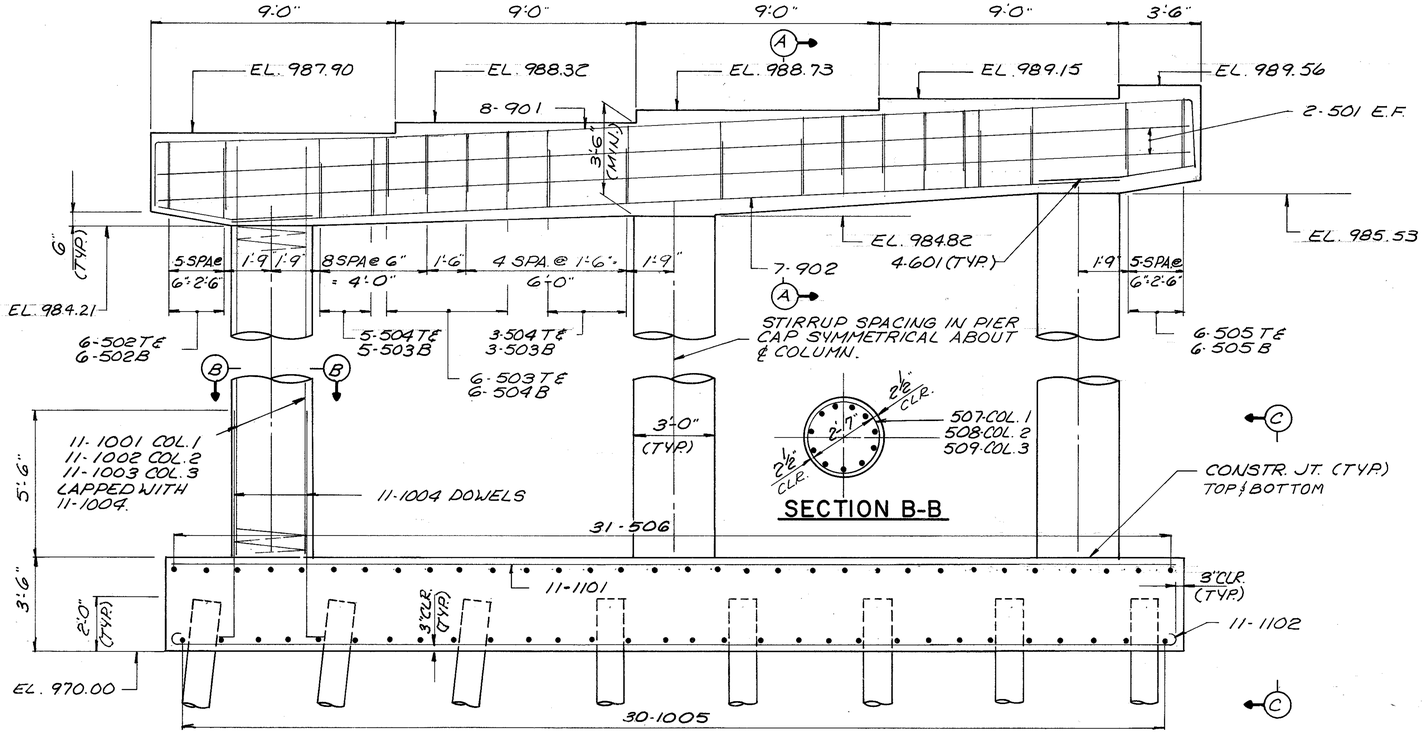
* SEE NOTE ⑦ ON SHT. 11/26



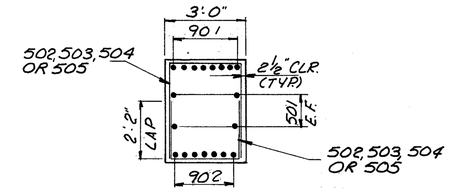

ANCHOR BOLT LOCATION DETAIL
(TYPICAL EACH BEAM)

NOTES

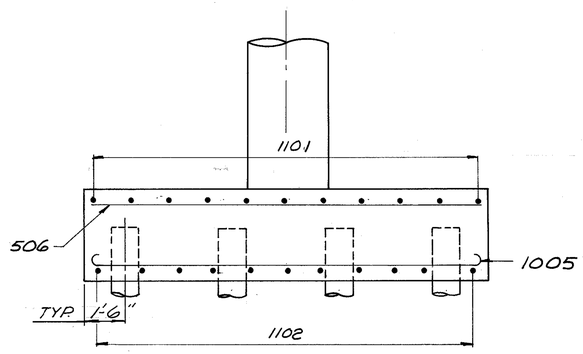
① THE PREFIX "3P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS SHOWN OTHERWISE.
② FOR ADDITIONAL NOTES SEE SHEET 11/26.




ELEVATION




SECTION A-A




SECTION C-C

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

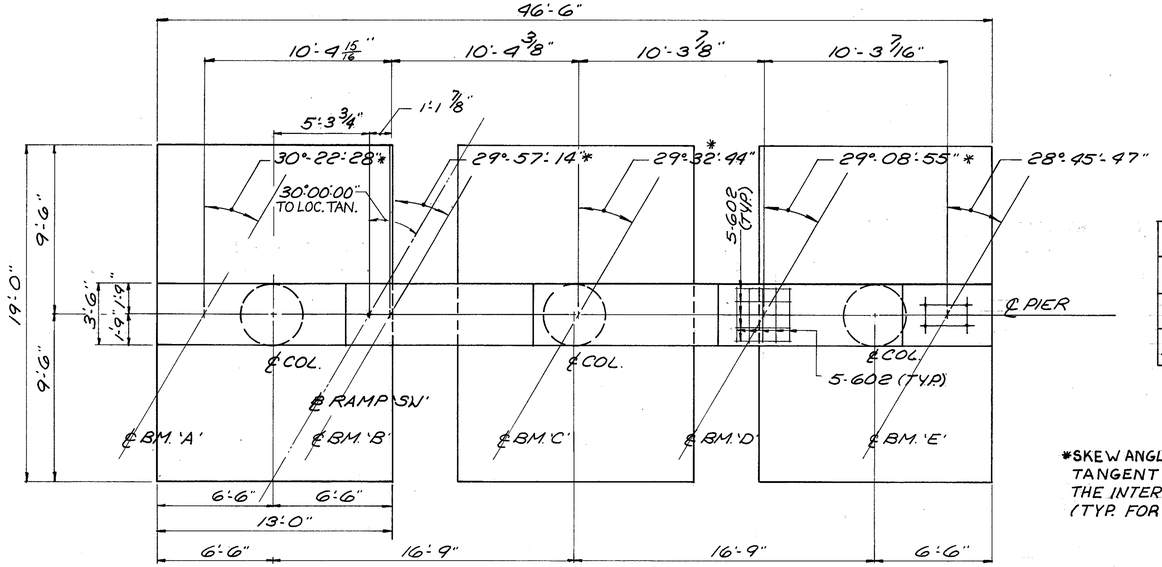
13/26

# PIER P-3 DETAILS

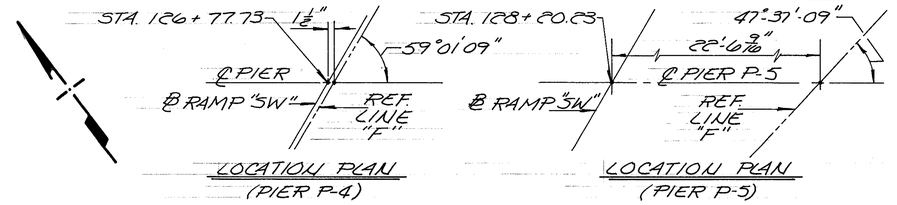
AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | COG | | R.J.P. | JGH | 12-15-82 | |




## PLAN PIERS P-4 & P-5




LOCATION PLAN (PIER P-4)

LOCATION PLAN (PIER P-5)

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

331/455

AKRON INNERBELT
SUM-59-0.00

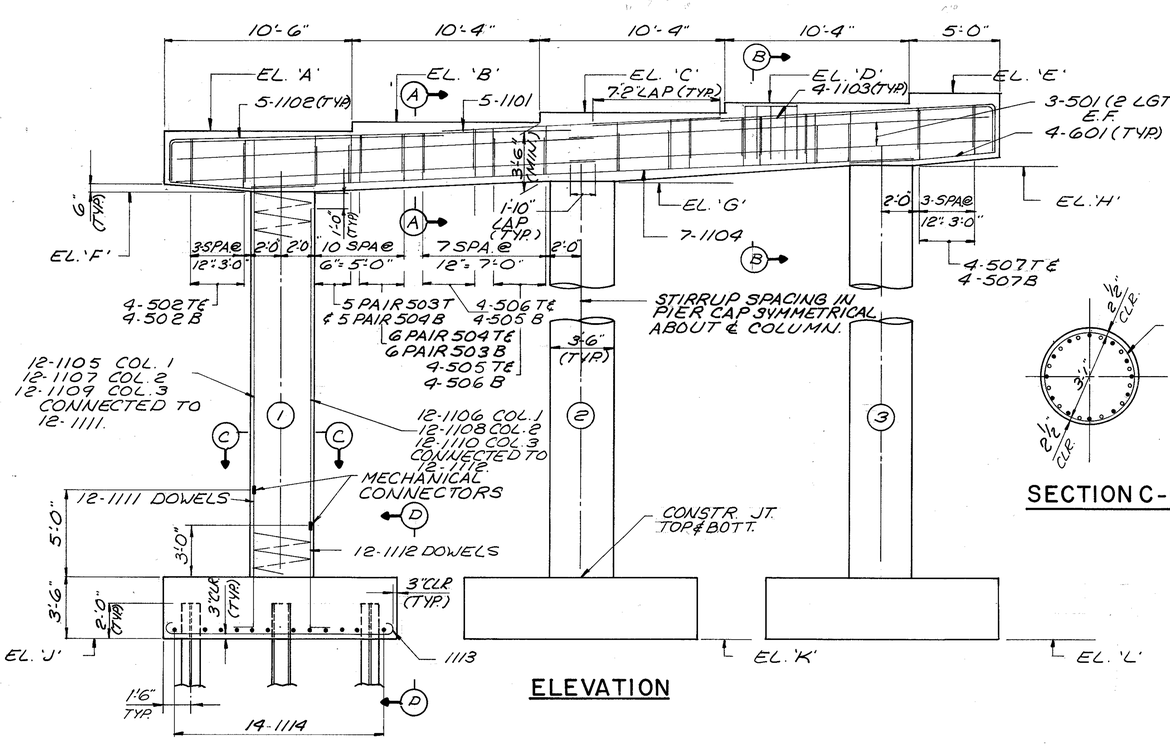
ELEVATION TABLE

| | A | B | C | D | E | F | G | H | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PIER P-4 | 988.82 | 989.40 | 989.98 | 990.56 | 991.14 | 985.19 | 985.90 | 986.96 | 966.00 | 967.00 | 968.00 |
| PIER P-5 | 990.26 | 990.84 | 991.42 | 992.01 | 992.58 | 986.63 | 987.34 | 988.41 | 972.00 | 972.00 | 972.00 |

*SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF THE CURVED BEAM AT THE INTERSECTION WITH THE ℄ OF PIER (TYP. FOR P-4 & P-5)

## NOTES

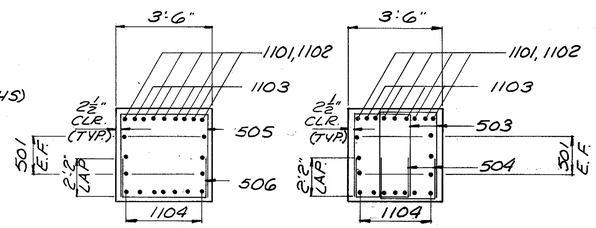
1. THE PREFIX "4P" OR "5P" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-4 OR P-5 RESPECTIVELY UNLESS SHOWN OTHERWISE.
2. FOR ADDITIONAL NOTES SEE SHEET 11/26.




## ELEVATION

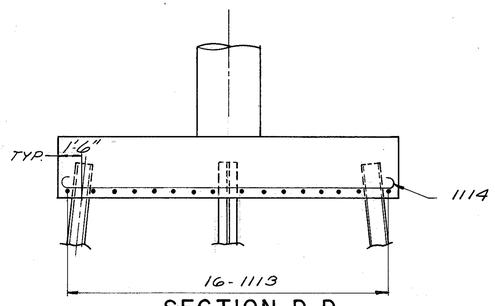



## SECTION C-C

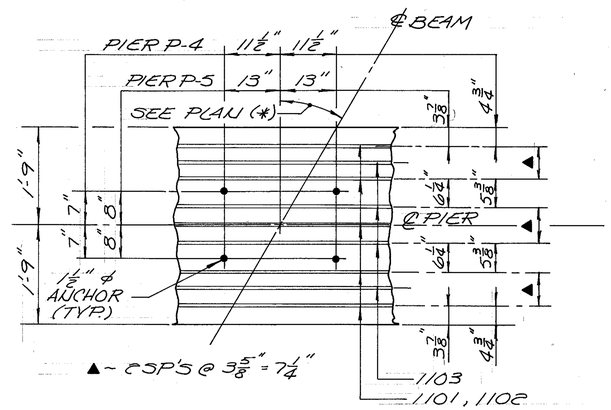



## SECTION A-A

## SECTION B-B




## SECTION D-D




## ANCHOR BOLT LOCATION DETAIL

(TYPICAL EACH BEAM)

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CLEVELAND, OHIO — AKRON, OHIO

# PIER P-4 & PIER P-5 DETAILS

14/26

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

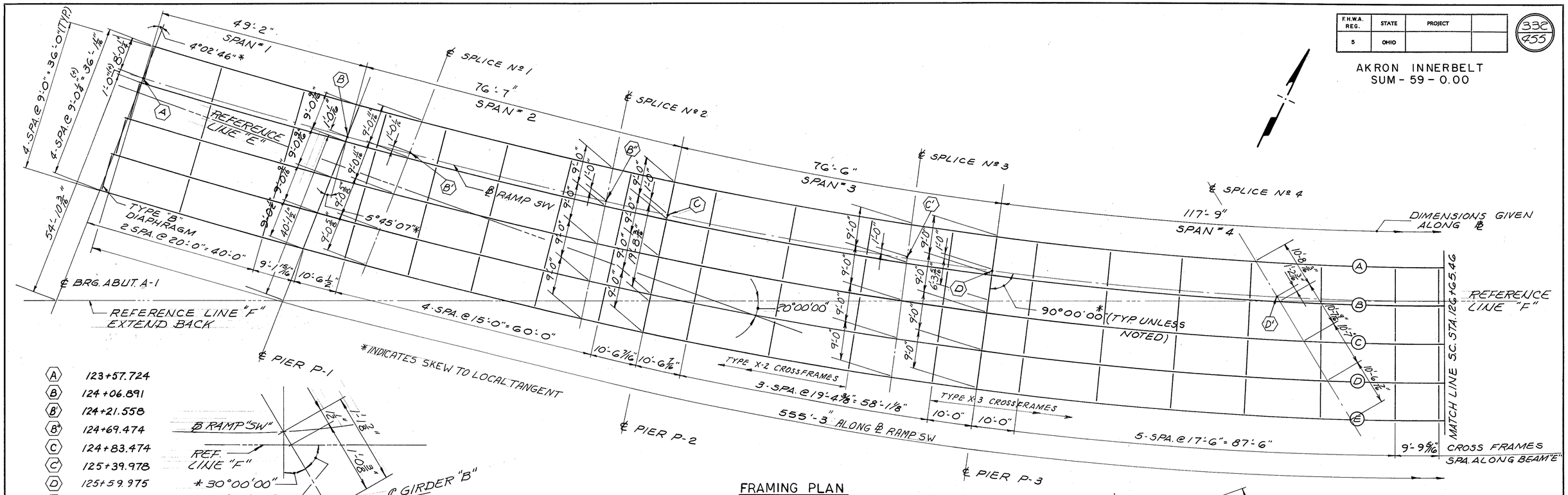
BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | R.J.P. | JJP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

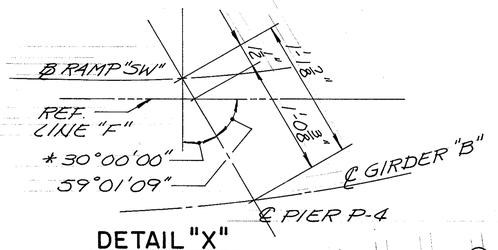
336/455

AKRON INNERBELT
SUM - 59 - 0.00

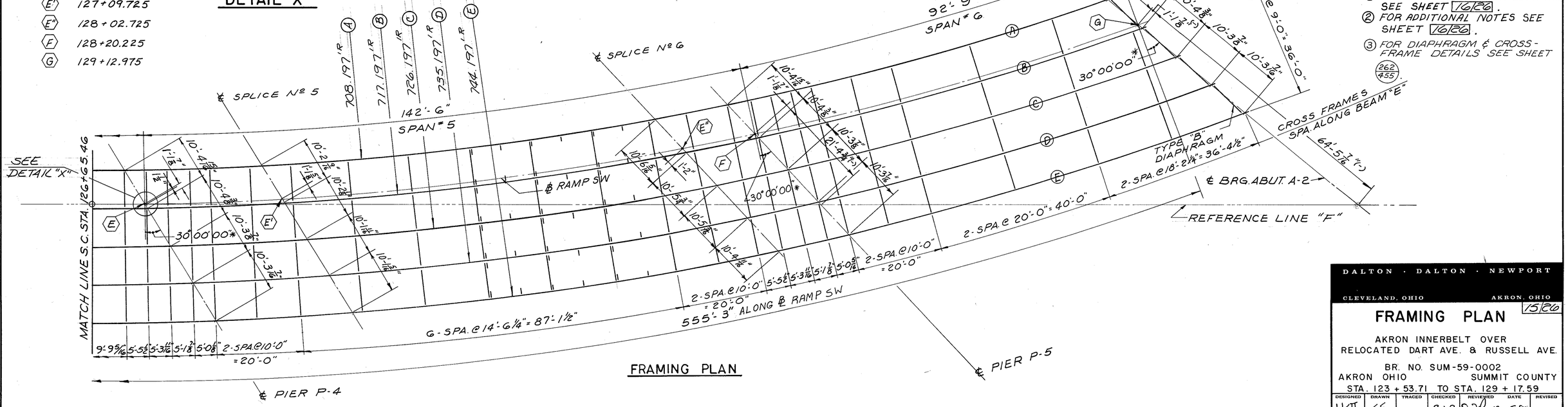



FRAMING PLAN

| | |
|---|---|
| A | 123+57.724 |
| B | 124+06.891 |
| B' | 124+21.558 |
| B" | 124+69.474 |
| C | 124+83.474 |
| C' | 125+39.978 |
| D | 125+59.975 |
| D' | 126+32.725 |
| E | 126+77.725 |
| E' | 127+09.725 |
| E" | 128+02.725 |
| F | 128+20.225 |
| G | 129+12.975 |




DETAIL "X"




FRAMING PLAN

## NOTES

1. FOR BEAM AND GIRDER ELEVATION SEE SHEET 1626.
2. FOR ADDITIONAL NOTES SEE SHEET 1626.
3. FOR DIAPHRAGM & CROSS-FRAME DETAILS SEE SHEET 262/455.

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1526

# FRAMING PLAN

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

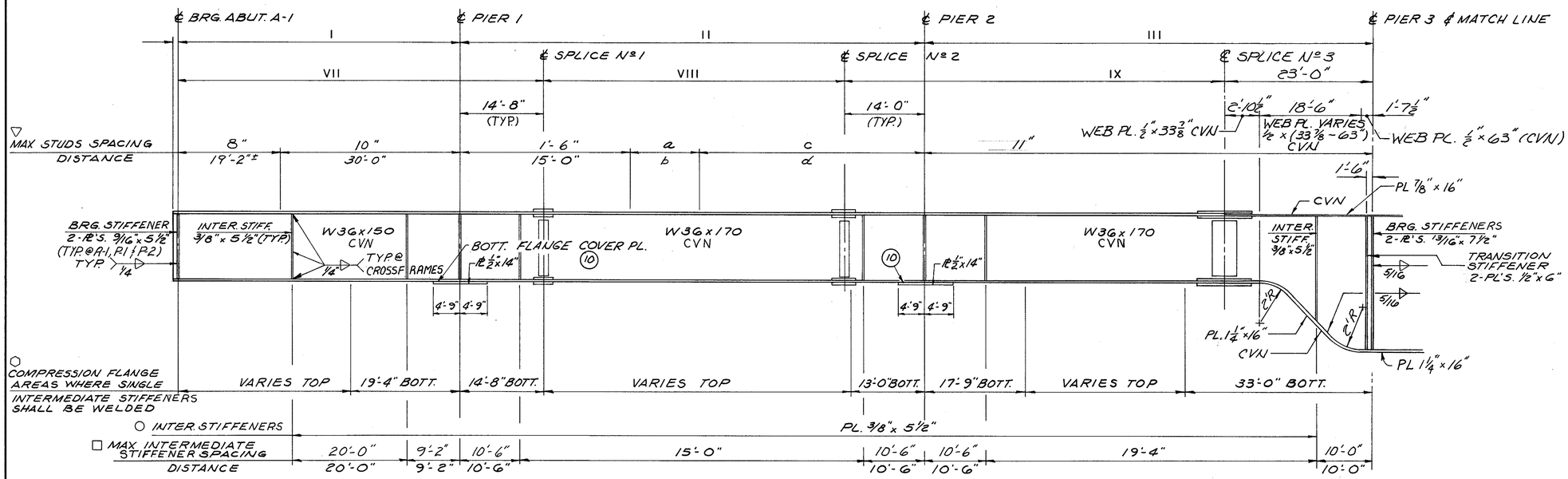
BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII | F.F. | | R.J.P. | RJP | 12-15-82 | |

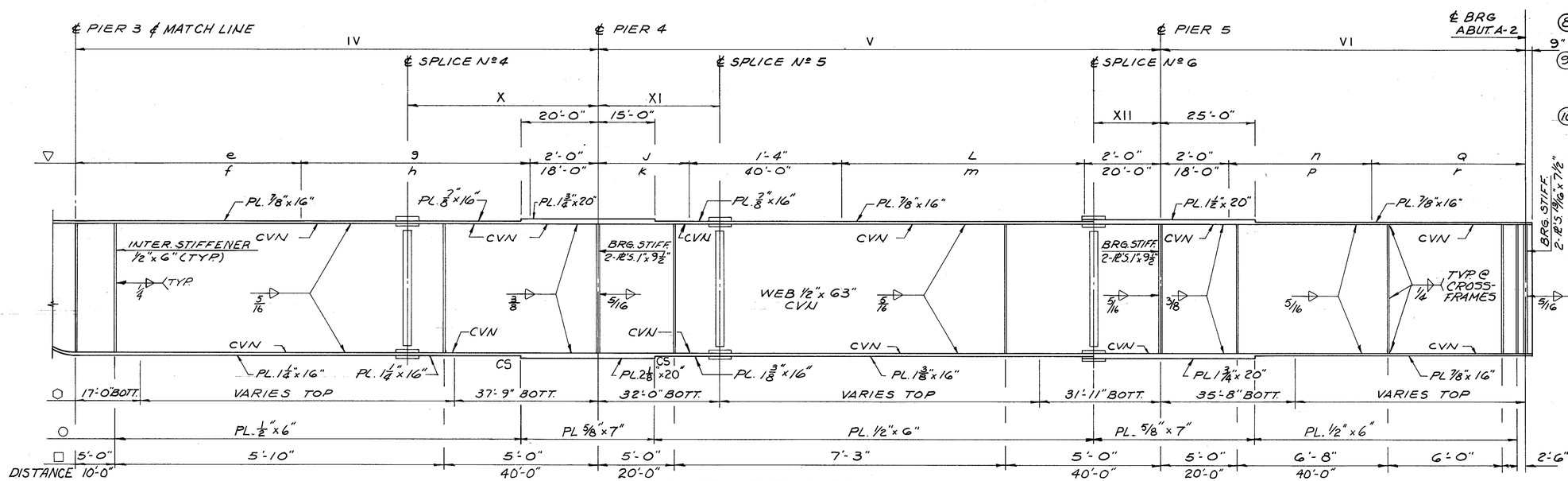
| FHWA REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

333/455

AKRON INNERBELT
SUM-59-0.00




## BEAM ELEVATION




## GIRDER ELEVATION

## NOTES

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A588 , GRADE 50 WEATHERING STEEL, UNLESS NOTED OTHERWISE.
2. INTERMEDIATE STIFFENERS AT LOCATIONS OTHER THAN CROSSFRAMES, SHALL BE PLACED ON ONE SIDE OF THE GIRDER WEB, IN ACCORDANCE WITH MAXIMUM STIFFENER SPACING SHOWN ON THE GIRDER ELEVATION. THESE STIFFENERS SHALL ALTERNATE ON EACH SIDE OF INTERIOR GIRDER WEB FOR EXTERIOR GIRDERS, ALL STIFFENERS SHALL BE PROVIDED ON THE INSIDE.
3. INTERMEDIATE STIFFENERS AT CROSSFRAME LOCATIONS SHALL BE PLACED IN PAIRS, EXCEPT FOR EXTERIOR BEAMS OR GIRDERS.
4. WHERE A SHAPE OR PLATE IS DESIGNATED "CVN" THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS (AASHTO ZONE 2). ALL FIELD SPLICE MATERIAL, EXCEPT FILL PLATES, SHALL BE "CVN".
5. WELDED ATTACHMENTS FOR FINISHING MACHINE SUPPORTS MAY BE MADE TO THE FASCIA STRINGER WHERE ITS TOP FLANGE IS IN COMPRESSION. SEE NOTE ○
6. FOR FRAMING DETAILS SEE SHEET 15 of 26.
7. FOR BEARING DETAILS SEE SHEETS 266/455 THRU. 268/455.
8. FOR DEFLECTION AND CAMBER DETAILS SEE SHEET 18 of 26 AND 19 of 26.
9. CS - INDICATES BUTT WELDS SUBJECT TO COMPRESSIVE STRESSES ONLY.
10. FOR BOTTOM FLANGE COVER PLATE DETAIL SEE SHEET 17 of 26.
11. AT THE OPTION OF THE CONTRACTOR THE PLATE MAY BE FORMED BY BENDING RATHER THAN WELDING.
12. FOR TABLE OF VARIABLE DIMENSIONS SEE SHEET 17 of 26
13. ALL FLANGE AND BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS. THE WELD REINFORCEMENTS NEED NOT BE GROUND FLUSH.

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CLEVELAND, OHIO AKRON, OHIO

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# GIRDER ELEVATIONS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

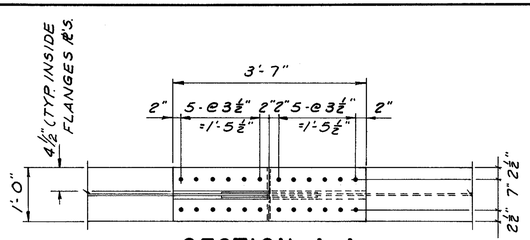
BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII | F.F. | | R.J.P. | JAP | 12-15-82 | |

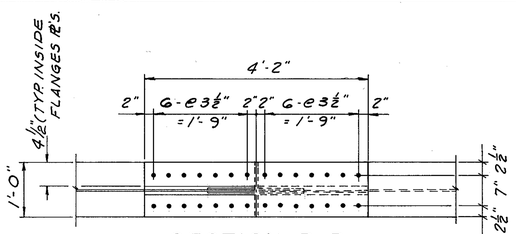
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

334/455

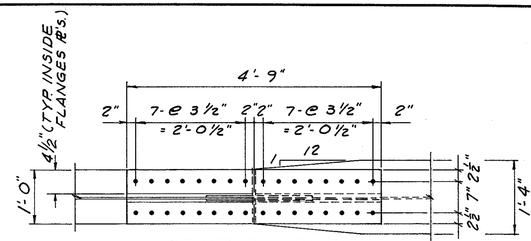
AKRON INNERBELT
SUM-59-0.00



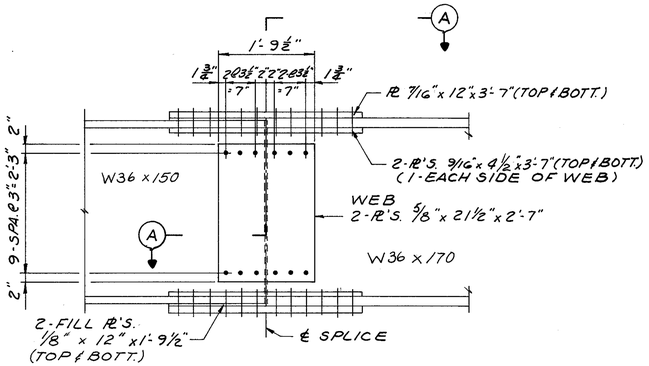

SECTION A-A



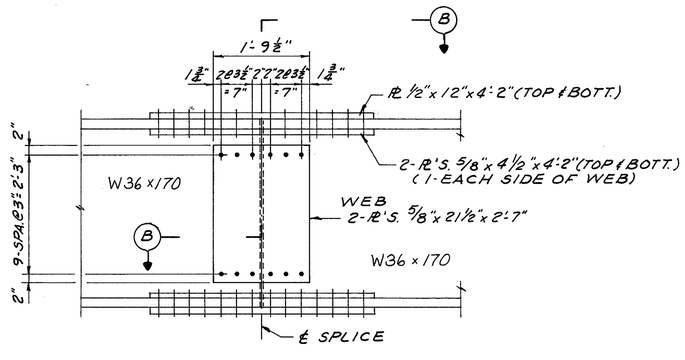

SECTION B-B



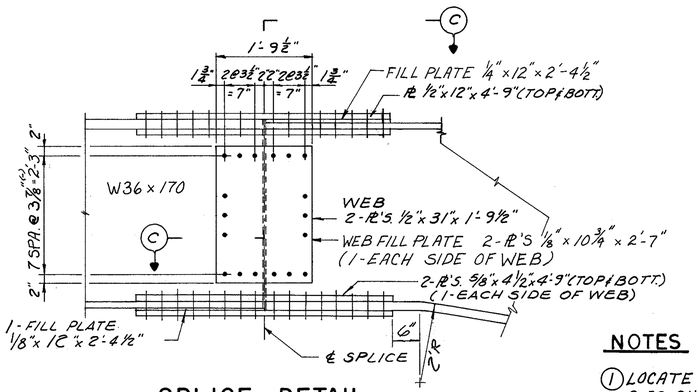

SECTION C-C




SPLICE DETAIL
FOR SPLICE Nº 1



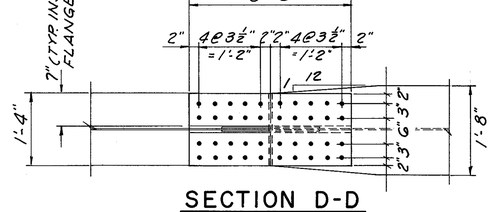

SPLICE DETAIL
FOR SPLICE Nº 2



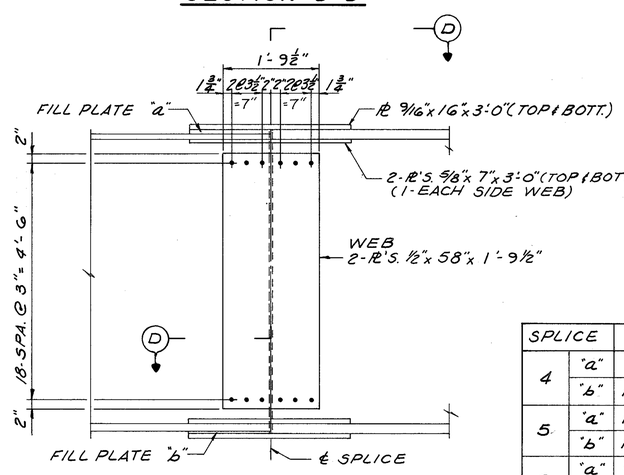

SPLICE DETAIL
FOR SPLICE Nº 3

## NOTES

1. LOCATE CONNECTORS IN GROUPS OF 3 AS SHOWN. SHEAR CONNECTORS MAY BE SHIFTED TO CLEAR BOLT HEADS ON SPLICES. FOR SPACING ALONG BEAMS AND GIRDERS SEE ELEVATIONS. STUD WELDING SHALL BE IN ACCORDANCE WITH A.W.S. D1.1-80, SECTION 4, PART F.
2. ALL FIELD SPLICES SHALL BE MADE WITH 1" DIAMETER HIGH STRENGTH STEEL BOLTS, CONFORMING TO A325, TYPE 3. THE BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF EXTERIOR GIRDER AND ON THE BOTTOM OF THE BOTTOM FLANGE PLATES AND ON TOP OF THE TOP FLANGE PLATES.
3. FOR ADDITIONAL NOTES, SEE SHEET 16|26.




SECTION D-D

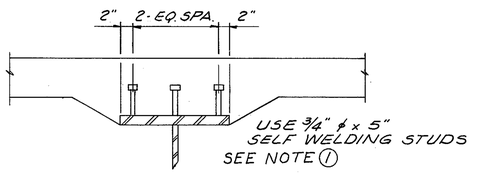



SPLICE DETAIL
FOR SPLICE Nº 6
4 & 5 SIMILAR

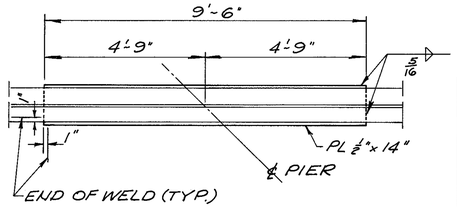
| SPLICE | | FILL PLATE |
|---|---|---|
| 4 | "a" | NOT NEEDED |
| | "b" | NOT NEEDED |
| 5 | "a" | NOT NEEDED |
| | "b" | NOT NEEDED |
| 6 | "a" | 5/8"x16"x1'-6" |
| | "b" | 3/8"x16"x1'-6" |

| GIRDER | DIMENSIONS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII |
| A | 49'-2" | 75'-3 9/16" | 75'-10 1/16" | 111'-11 9/16" | 140'-10 7/8" | 91'-8 9/16" | G3'-10" | 46'-7 9/16" | 66'-10 1/16" | 44'-11 1/16" | 32'-0" | 17'-6 1/16" |
| B | 49'-2" | 76'-8 15/16" | 76'-6 15/16" | 118'-5 1/16" | 142'-8 3/8" | 92'-10 9/16" | G3'-10" | 48'-0 15/16" | 67'-6 7/8" | 45'-0 1/16" | 32'-0" | 17'-6" |
| C | 49'-2" | 78'-2 1/4" | 77'-3 1/8" | 125'-0" | 144'-5 7/8" | 94'-0 9/16" | G3'-10" | 49'-6 1/4" | 68'-3 1/8" | 45'-0 1/16" | 32'-0 1/16" | 17'-5 15/16" |
| D | 49'-1 15/16" | 79'-7 9/16" | 77'-11 3/8" | 131'-6" | 146'-3 3/8" | 95'-2 1/2" | G3'-9 15/16" | 50'-11 9/16" | 68'-11 3/8" | 45'-0 7/8" | 32'-0 3/16" | 17'-5 13/16" |
| E | 49'-1 15/16" | 81'-0 15/16" | 78'-7 9/16" | 137'-11 13/16" | 148'-0 7/8" | 96'-4 1/2" | G3'-9 15/16" | 52'-4 15/16" | 69'-7 5/8" | 45'-1 7/16" | 32'-0 5/16" | 17'-6" |

| GIRDER | DIMENSIONS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a | b | c | d | e | f | g | h | J | k | L | m | n | p | Q | r |
| A | 9" | VARIES | 14" | 15'-2" | 14" | VARIES | 13" | 37'-11" | 24" | 40'-0" | 15" | VARIES | 14" | VARIES | 12" | 35'-0" |
| B | 9" | ↕ | ↕ | 14'-0" | 16" | ↕ | 16" | 44'-0" | ↕ | 36'-0" | 17" | ↕ | 12" | ↕ | 14" | 42'-0" |
| C | 10" | ↕ | ↕ | 14'-0" | ↕ | ↕ | ↕ | 49'-4" | ↕ | 32'-0" | ↕ | ↕ | 17" | ↕ | 10" | 29'-2" |
| D | 10" | ↕ | ↕ | 12'-10" | ↕ | ↕ | ↕ | 54'-8" | ↕ | 28'-0" | ↕ | ↕ | 15" | ↕ | 12" | 35'-0" |
| E | 11" | VARIES | 14" | 11'-8" | 16" | VARIES | 16" | 60'-0" | 24" | 24'-0" | 17" | VARIES | 14" | VARIES | 14" | 40'-10" |




TYPICAL STUD SPACING




BOTTOM FLANGE
COVER PLATE DETAIL

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CLEVELAND, OHIO — AKRON, OHIO

17|26

# SPLICE DETAILS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123+53.71 TO STA. 129+17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII | F.F. | | R.J.P. | JGP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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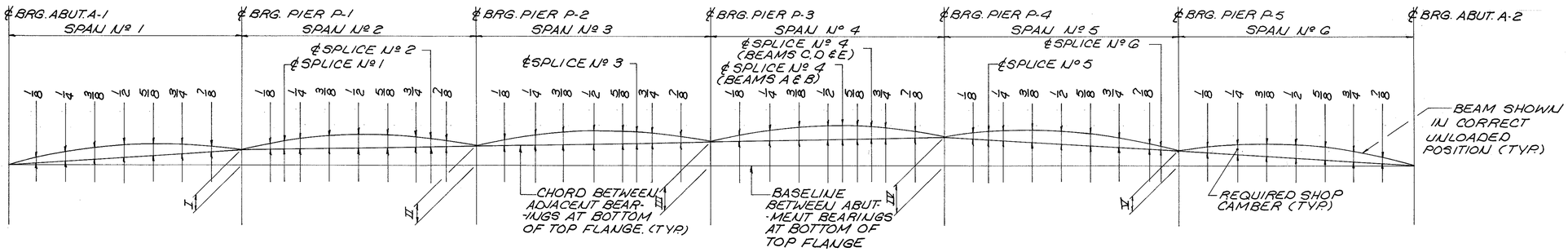
AKRON INNERBELT
SUM-59-0.00




## LAYOUT DIAGRAM

| LAYOUT DIAGRAM OFFSETS | | | | | |
|---|---|---|---|---|---|
| BEAM OR GIRDER | I | II | III | IV | V |
| A | 0" | 0" | -1/4" | -1 1/16" | -2/16" |
| B | 1/16" | 1/16" | 1/8" | 9/16" | 1/16" |
| C | 3/8" | 15/16" | 1 2/16" | 2" | 1 3/16" |
| D | 11/16" | 1 3/4" | 2 13/16" | 3 3/4" | 1 1/2" |
| E | 1" | 2 11/16" | 4 3/16" | 5 1/2" | 2 3/16" |

NOTE: A NEGATIVE OFFSETS INDICATES THAT THE DIMENSION IS BELOW THE BASELINE BETWEEN ABUTMENT BEARINGS.

| BEAM A | | | | | |
|---|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) | (e) |
| ABUTMENT A-1-SW1 | | | | | |
| 1/8 PT. | .0065 | .0380 | .1300 | .0000 | .1745 |
| 1/4 PT. | .0140 | .0740 | .2100 | .0000 | .2980 |
| 3/8 PT. | .0147 | .0755 | .2150 | .0000 | .3052 |
| 1/2 PT. | .0100 | .0530 | .1400 | .0000 | .2030 |
| 5/8 PT. | .0065 | .0320 | .0600 | .0000 | .0985 |
| 3/4 PT. | .0040 | .0175 | .0250 | .0000 | .0465 |
| 7/8 PT. | .0015 | .0030 | .0125 | .0000 | .0170 |
| PIER P-1 | | | | | |
| 1/8 PT. | .0447 | .1720 | .1625 | .0000 | .3792 |
| ℄ SPL. Nº 1 | .0663 | .3029 | .2530 | .0000 | .6223 |
| 1/4 PT. | .0820 | .4220 | .3600 | .0000 | .8640 |
| 3/8 PT. | .1102 | .6487 | .5425 | .0000 | 1.3015 |
| 1/2 PT. | .1370 | .7160 | .6000 | .0000 | 1.4530 |
| 5/8 PT. | .1062 | .6600 | .5275 | .0000 | 1.2937 |
| 3/4 PT. | .0780 | .4060 | .3300 | .0000 | .8140 |
| ℄ SPL. Nº 2 | .0595 | .2527 | .2147 | .0000 | .5269 |
| 7/8 PT. | .0400 | .1287 | .1475 | .0000 | .3162 |
| PIER P-2 | | | | | |
| 1/8 PT. | .0115 | .0897 | .1025 | .0350 | .2387 |
| 1/4 PT. | .0235 | .1865 | .2400 | .0698 | .5198 |
| 3/8 PT. | .0332 | .2817 | .3850 | .1048 | .8048 |
| 1/2 PT. | .0430 | .3010 | .4900 | .1397 | .9237 |
| 5/8 PT. | .0260 | .2265 | .3400 | .1308 | .7233 |
| ℄ SPL. Nº 3 | .0115 | .1277 | .1728 | .0919 | .4038 |
| 3/4 PT. | .0105 | .1170 | .1550 | .0871 | .3696 |
| 7/8 PT. | .0040 | .0427 | .0600 | .0437 | .1505 |
| PIER P-3 | | | | | |
| 1/8 PT. | .0467 | .1720 | .1875 | .0000 | .4062 |
| 1/4 PT. | .0885 | .3745 | .3750 | -.0225 | .8155 |
| 3/8 PT. | .1122 | .4607 | .4800 | -.0339 | 1.0191 |
| 1/2 PT. | .0950 | .4380 | .4300 | -.0452 | .9178 |
| ℄ SPL. Nº 4 | .0578 | .3156 | .2930 | -.0540 | .6124 |
| 5/8 PT. | .0497 | .2660 | .2425 | -.0566 | .5016 |
| 3/4 PT. | .0260 | .0765 | .0850 | -.0679 | .1196 |
| 7/8 PT. | .0150 | -.0140 | .0400 | -.0791 | -.0381 |
| PIER P-4 | | | | | |
| 1/8 PT. | .1017 | .3127 | | .0000 | .6395 |

| BEAM A CONTINUED | | | | | |
|---|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) | (e) |
| ℄ SPL. Nº 5 | .2216 | .7197 | .4223 | .0000 | 1.3637 |
| 1/4 PT. | .2500 | .8260 | .4750 | .0000 | 1.5510 |
| 3/8 PT. | .3937 | 1.3310 | .7475 | .0000 | 2.4722 |
| 1/2 PT. | .4530 | 1.5450 | .8600 | .0000 | 2.8580 |
| 5/8 PT. | .4147 | 1.3667 | .7950 | .0000 | 2.5765 |
| 3/4 PT. | .2820 | .9840 | .5200 | .0000 | 1.7860 |
| 7/8 PT. | .1485 | .3890 | .2375 | .0000 | .7750 |
| ℄ SPL. Nº 6 | .1478 | .3847 | .2360 | .0000 | .7685 |
| PIER P-5 | | | | | |
| 1/8 PT. | -.0305 | -.0675 | -.0025 | .0000 | -.1005 |
| 1/4 PT. | -.0420 | -.0745 | -.0150 | .0000 | -.1315 |
| 3/8 PT. | -.0287 | .0115 | -.0275 | .0000 | -.0448 |
| 1/2 PT. | .0190 | .1650 | .2600 | .0000 | .4440 |
| 5/8 PT. | .0392 | .2665 | .3825 | .0000 | .6882 |
| 3/4 PT. | .0600 | .3115 | .4850 | .0000 | .8565 |
| 7/8 PT. | .0522 | .2642 | .4375 | .0000 | .7540 |
| ABUTMENT A-2 SW-1 | | | | | |

| BEAM B | | | | | |
|---|---|---|---|---|---|
| ABUTMENT A-1 SW-1 | | | | | |
| 1/8 PT. | .0052 | .0377 | .1625 | .0000 | .2055 |
| 1/4 PT. | .0115 | .0765 | .2400 | .0000 | .3280 |
| 3/8 PT. | .0102 | .0717 | .2275 | .0000 | .3095 |
| 1/2 PT. | .0040 | .0470 | .1600 | .0000 | .2110 |
| 5/8 PT. | .0027 | .0205 | .0500 | .0000 | .0732 |
| 3/4 PT. | .0015 | .0135 | .0400 | .0000 | .0550 |
| 7/8 PT. | .0002 | .0072 | .0225 | .0000 | .0300 |
| PIER P-1 | | | | | |
| 1/8 PT. | .0650 | .2887 | .2500 | .0000 | .6037 |
| ℄ SPL. Nº 1 | .0994 | .5579 | .3823 | .0000 | 1.0395 |
| 1/4 PT. | .1135 | .7190 | .5000 | .0000 | 1.3325 |
| 3/8 PT. | .1372 | .9025 | .6300 | .0000 | 1.6097 |
| 1/2 PT. | .1610 | .8750 | .6200 | .0000 | 1.6560 |
| 5/8 PT. | .1260 | .7500 | .5200 | .0000 | 1.3960 |
| 3/4 PT. | .0920 | .4930 | .3400 | .0000 | .9250 |
| ℄ SPL. Nº 2 | .0721 | .3390 | .2271 | .0000 | .6383 |
| 7/8 PT. | .0497 | .2150 | .1525 | .0000 | .4172 |

| BEAM B CONTINUED | | | | | |
|---|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) | (e) |
| PIER P-2 | | | | | |
| 1/8 PT. | .0012 | .0277 | .0875 | .0000 | .1165 |
| 1/4 PT. | .0030 | .1095 | .2150 | .0000 | .3275 |
| 3/8 PT. | .0062 | .2032 | .3875 | .0000 | .5970 |
| 1/2 PT. | .0100 | .2290 | .4400 | .0000 | .6790 |
| 5/8 PT. | -.0047 | .1400 | .2750 | .0000 | .4102 |
| ℄ SPL. Nº 3 | -.0142 | .0613 | .1050 | .0000 | .1521 |
| 3/4 PT. | -.0145 | .0525 | .0950 | .0000 | .1330 |
| 7/8 PT. | -.0100 | .0085 | .0275 | .0000 | .0260 |
| PIER P-3 | | | | | |
| 1/8 PT. | .0827 | .2970 | .2100 | .0000 | .5897 |
| 1/4 PT. | .1570 | .6485 | .4150 | .0000 | 1.2205 |
| 3/8 PT. | .1952 | .8710 | .5750 | .0000 | 1.6412 |
| 1/2 PT. | .1880 | .9380 | .5700 | .0000 | 1.6960 |
| ℄ SPL. Nº 4 | .1435 | .6966 | .4097 | .0000 | 1.2498 |
| 5/8 PT. | .1405 | .6800 | .4025 | .0000 | 1.2230 |
| 3/4 PT. | .0630 | .3050 | .2400 | .0000 | .6080 |
| 7/8 PT. | .0200 | .0942 | .1150 | .0196 | .2489 |
| PIER P-4 | | | | | |
| 1/8 PT. | .0912 | .2972 | .2000 | .0000 | .5885 |
| ℄ SPL. Nº 5 | .2047 | .7501 | .3806 | .0000 | 1.3354 |
| 1/4 PT. | .2415 | .8830 | .4450 | .0000 | 1.5695 |
| 3/8 PT. | .4180 | 1.4335 | .7275 | .0000 | 2.5790 |
| 1/2 PT. | .4950 | 1.7470 | .8800 | .0000 | 3.1220 |
| 5/8 PT. | .4447 | 1.5192 | .7900 | .0000 | 2.7540 |
| 3/4 PT. | .3085 | 1.0695 | .5450 | .0000 | 1.9230 |
| 7/8 PT. | .1430 | .4922 | .2625 | .0000 | .8977 |
| ℄ SPL. Nº 6 | .1398 | .4811 | .2575 | .0000 | .8785 |
| PIER P-5 | | | | | |
| 1/8 PT. | -.0177 | -.0497 | .0000 | .0000 | -.0675 |
| 1/4 PT. | -.0320 | -.0580 | .0000 | .0000 | -.0900 |
| 3/8 PT. | -.0095 | .0980 | .1200 | .0000 | .2085 |
| 1/2 PT. | .0290 | .2950 | .3700 | .0000 | .6940 |
| 5/8 PT. | .0530 | .3280 | .5000 | .0000 | .8810 |
| 3/4 PT. | .0510 | .3045 | .4500 | .0000 | .8055 |
| 7/8 PT. | .0325 | .1625 | .2650 | .0000 | .4600 |
| ABUTMENT A-2 SW-1 | | | | | |

(1) FOR FRAMING PLAN AND BEAM & GIRDER ELEVATIONS SEE SHEETS 15 26 THRU 16 26.

(2) A POSITIVE CAMBER VALUE MEANS THE CAMBER ABOVE AND A NEGATIVE CAMBER VALUE MEANS THE CAMBER BELOW THE CHORD BETWEEN ADJACENT BEARINGS IN THAT SPAN.

(3) FOR DEFLECTION AND CAMBER TABLES FOR BEAMS C, D & E SEE SHEET 19 26.

(4) ALL DEFLECTIONS ARE GIVEN IN DECIMALS OF AN INCH.

(5) SEE STRUCTURE GENERAL NOTES FOR HEAT CURVING OF BEAM AND GIRDERS.

LEGEND

(a) DEFLECTION DUE TO WEIGHT OF STEEL

(b) DEFLECTION DUE TO REMAINING DEAD LOAD

(c) ADJUSTMENT REQUIRED FOR HEAT CURVING

(d) ADJUSTMENT REQUIRED FOR VERTICAL CURVE.

(e) REQUIRED SHOP CAMBER

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

# DEFLECTION & CAMBER TABLES

18 26

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII | CDG | | R.J.P. | JJP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

336
455

AKRON INNERBELT
SUM- 59 - 0.00

## BEAM C

| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ | ⓔ |
|---|---|---|---|---|---|
| ABUTMENT A-1 SW-1 | | | | | |
| 1/8 PT. | .0050 | .0370 | .1250 | .0000 | .1670 |
| 1/4 PT. | .0100 | .0665 | .2300 | .0000 | .3065 |
| 3/8 PT. | .0120 | .0787 | .2600 | .0000 | .3507 |
| 1/2 PT. | .0060 | .0650 | .2300 | .0000 | .3010 |
| 5/8 PT. | .0005 | .0155 | .0625 | .0000 | .0785 |
| 3/4 PT. | -.0015 | -.0380 | -.0150 | .0000 | -.0545 |
| 7/8 PT. | -.0012 | -.0345 | -.0025 | .0000 | -.0382 |
| PIER P-1 | | | | | |
| 1/8 PT. | .0470 | .2557 | .1750 | .0000 | .4777 |
| ℄SPL.№1 | .0847 | .4333 | .2629 | .0000 | .7808 |
| 1/4 PT. | .1115 | .6245 | .4000 | .0000 | 1.1360 |
| 3/8 PT. | .1505 | .9107 | .6100 | .0000 | 1.6712 |
| 1/2 PT. | .1850 | 1.0290 | .6800 | .0000 | 1.8940 |
| 5/8 PT. | .1527 | .8775 | .6100 | .0000 | 1.6402 |
| 3/4 PT. | .1120 | .6180 | .4000 | .0000 | 1.1300 |
| ℄SPL.№2 | .0833 | .4478 | .2505 | .0000 | .7816 |
| 7/8 PT. | .0585 | .3120 | .1750 | .0000 | .5455 |
| PIER P-2 | | | | | |
| 1/8 PT. | -.0062 | -.0112 | .0475 | .0000 | .0300 |
| 1/4 PT. | -.0150 | .0525 | .1300 | .0000 | .1675 |
| 3/8 PT. | -.0192 | .1012 | .3325 | .0000 | .4145 |
| 1/2 PT. | -.0230 | .1230 | .4300 | .0000 | .5300 |
| 5/8 PT. | -.0355 | .0975 | .1400 | .0000 | .2020 |
| ℄SPL.№3 | -.0413 | .0498 | -.3328 | .0000 | -.3244 |
| 3/4 PT. | -.0410 | .0470 | -.3500 | .0000 | -.3440 |
| 7/8 PT. | -.0240 | .0182 | -.2850 | .0000 | -.2907 |
| PIER P-3 | | | | | |
| 1/8 PT. | .1252 | .4412 | .2600 | .0333 | .8598 |
| 1/4 PT. | .2570 | .9375 | .5100 | .0667 | 1.7712 |
| 3/8 PT. | .3197 | 1.3122 | .6775 | .1000 | 2.4095 |
| 1/2 PT. | .3120 | 1.3450 | .7000 | .1334 | 2.4904 |
| 5/8 PT. | .2380 | 1.0352 | .5300 | .1669 | 1.9701 |
| ℄SPL.№4 | .2241 | .9811 | .4998 | .1708 | 1.8759 |
| 3/4 PT. | .1160 | .5540 | .3150 | .2002 | 1.1852 |
| 7/8 PT. | .0157 | .1462 | .1525 | .1960 | .5105 |
| PIER P-4 | | | | | |
| 1/8 PT. | .1052 | .3282 | .1975 | .0000 | .6310 |
| ℄SPL.№5 | .2175 | .7734 | .3702 | .0000 | 1.3611 |
| 1/4 PT. | .2580 | .9290 | .4500 | .0000 | 1.6370 |
| 3/8 PT. | .4332 | 1.5897 | .7550 | .0000 | 2.7780 |
| 1/2 PT. | .5310 | 1.8750 | .9100 | .0000 | 3.3160 |
| 5/8 PT. | .4780 | 1.7080 | .8225 | .0000 | 3.0085 |
| 3/4 PT. | .3200 | 1.1975 | .5600 | .0000 | 2.0775 |
| 7/8 PT. | .1020 | .5077 | .2750 | .0000 | .8847 |
| ℄SPL.№6 | .0959 | .4870 | .2664 | .0000 | .8493 |
| PIER P-5 | | | | | |
| 1/8 PT. | -.0365 | -.1170 | .0000 | .0000 | -.1535 |
| 1/4 PT. | -.0285 | -.0470 | .0000 | .0000 | -.0755 |
| 3/8 PT. | -.0002 | .1760 | .1650 | .0000 | .3407 |
| 1/2 PT. | .0410 | .3280 | .4000 | .0000 | .7690 |
| 5/8 PT. | .0585 | .3750 | .5200 | .0000 | .9535 |
| 3/4 PT. | .0610 | .3435 | .4700 | .0000 | .8745 |
| 7/8 PT. | .0372 | .2167 | .2625 | .0000 | .5165 |
| ABUTMENT A-2 SW-1 | | | | | |

## BEAM D

| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ | ⓔ |
|---|---|---|---|---|---|
| ABUTMENT A-1 SW-1 | | | | | |
| 1/8 PT. | .0027 | .0337 | .1700 | .0000 | .2065 |
| 1/4 PT. | .0065 | .0505 | .2550 | .0000 | .3120 |
| 3/8 PT. | .0080 | .0560 | .2125 | .0000 | .2765 |
| 1/2 PT. | .0040 | .0310 | .1100 | .0000 | .1450 |
| 5/8 PT. | -.0022 | -.0010 | .0000 | .0000 | -.0032 |
| 3/4 PT. | -.0050 | -.0300 | .0000 | .0000 | -.0350 |
| 7/8 PT. | -.0025 | -.0177 | .0000 | .0000 | -.0202 |
| PIER P-1 | | | | | |
| 1/8 PT. | .0625 | .1860 | .2000 | .0000 | .4485 |
| ℄SPL.№1 | .0994 | .3359 | .2952 | .0000 | .7305 |
| 1/4 PT. | .1400 | .6270 | .4250 | .0000 | 1.1920 |
| 3/8 PT. | .1950 | 1.0665 | .6275 | .0000 | 1.8890 |
| 1/2 PT. | .2150 | 1.1560 | .7100 | .0000 | 2.0810 |
| 5/8 PT. | .1840 | 1.0130 | .6625 | .0000 | 1.8595 |
| 3/4 PT. | .1405 | .6955 | .4450 | .0000 | 1.2810 |
| ℄SPL.№2 | .0938 | .4136 | .2733 | .0000 | .7807 |
| 7/8 PT. | .0625 | .2025 | .1975 | .0000 | .4625 |
| PIER P-2 | | | | | |
| 1/8 PT. | -.0297 | -.0297 | -.0250 | .0000 | -.0845 |
| 1/4 PT. | -.0370 | -.0330 | -.0450 | .0000 | -.1150 |
| 3/8 PT. | -.0457 | -.0265 | -.0725 | .0000 | -.1447 |
| 1/2 PT. | -.0580 | -.0190 | -.1700 | .0000 | -.2470 |
| 5/8 PT. | -.0680 | -.0772 | -.3700 | .0000 | -.5152 |
| ℄SPL.№3 | -.0687 | -.1581 | -.4556 | .0000 | -.6824 |
| 3/4 PT. | -.0680 | -.1630 | -.4550 | .0000 | -.6860 |
| 7/8 PT. | -.0387 | -.1677 | -.2850 | .0000 | -.4915 |
| PIER P-3 | | | | | |
| 1/8 PT. | .1837 | .6642 | .3000 | .0811 | 1.2291 |
| 1/4 PT. | .3290 | 1.3435 | .6000 | .1619 | 2.4344 |
| 3/8 PT. | .4495 | 1.7542 | .7950 | .2428 | 3.2415 |
| 1/2 PT. | .4380 | 1.7810 | .8100 | .3236 | 3.3526 |
| 5/8 PT. | .3120 | 1.4100 | .6250 | .4045 | 2.7515 |
| ℄SPL.№4 | .2712 | 1.2507 | .5526 | .4257 | 2.5002 |
| 3/4 PT. | .1720 | .7815 | .3850 | .4853 | 1.8238 |
| 7/8 PT. | .0665 | .2460 | .1975 | .3726 | .8826 |
| PIER P-4 | | | | | |
| 1/8 PT. | .0822 | .3440 | .1975 | .0000 | .6237 |
| ℄SPL.№5 | .2263 | .8368 | .3666 | .0000 | 1.4297 |
| 1/4 PT. | .2895 | 1.0315 | .4600 | .0000 | 1.7810 |
| 3/8 PT. | .4960 | 1.6822 | .7750 | .0000 | 2.9532 |
| 1/2 PT. | .5810 | 2.0940 | .9300 | .0000 | 3.6050 |
| 5/8 PT. | .4802 | 1.7627 | .8350 | .0000 | 3.0780 |
| 3/4 PT. | .2735 | .9375 | .5500 | .0000 | 1.7610 |
| 7/8 PT. | .1365 | .4842 | .2500 | .0000 | .8707 |
| ℄SPL.№6 | .1306 | .4674 | .2392 | .0000 | .8372 |
| PIER P-5 | | | | | |
| 1/8 PT. | -.0755 | -.0630 | .0000 | .0000 | -.1375 |
| 1/4 PT. | -.0600 | -.0350 | .0000 | .0000 | -.0950 |
| 3/8 PT. | .0147 | .0687 | .1425 | .0000 | .2260 |
| 1/2 PT. | .0610 | .2950 | .4100 | .0000 | .7660 |
| 5/8 PT. | .0720 | .3827 | .5300 | .0000 | .9847 |
| 3/4 PT. | .0670 | .3670 | .4850 | .0000 | .9190 |
| 7/8 PT. | .0462 | .1990 | .3275 | .0000 | .5727 |
| ABUTMENT A-2 SW-1 | | | | | |

## BEAM E

| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ | ⓔ |
|---|---|---|---|---|---|
| ABUTMENT A-1 SW-1 | | | | | |
| 1/8 PT. | .0012 | .0090 | .1000 | .0000 | .1102 |
| 1/4 PT. | .0025 | .0190 | .2100 | .0000 | .2315 |
| 3/8 PT. | .0030 | .0260 | .1850 | .0000 | .2140 |
| 1/2 PT. | -.0020 | -.0050 | .0000 | .0000 | -.0070 |
| 5/8 PT. | -.0105 | -.0557 | -.2425 | .0000 | -.3087 |
| 3/4 PT. | -.0095 | -.0465 | -.1600 | .0000 | -.2160 |
| 7/8 PT. | -.0047 | -.0237 | -.0850 | .0000 | -.1135 |
| PIER P-1 | | | | | |
| 1/8 PT. | .0785 | .3282 | .2100 | .0000 | .6167 |
| ℄SPL.№1 | .1134 | .5047 | .3002 | .0000 | .9183 |
| 1/4 PT. | .1560 | .7425 | .4400 | .0000 | 1.3385 |
| 3/8 PT. | .2110 | 1.0975 | .6775 | .0000 | 1.9860 |
| 1/2 PT. | .2400 | 1.2030 | .7500 | .0000 | 2.1930 |
| 5/8 PT. | .2142 | 1.1052 | .6600 | .0000 | 1.9795 |
| 3/4 PT. | .1555 | .7580 | .4650 | .0000 | 1.3785 |
| ℄SPL.№2 | .1052 | .4675 | .3100 | .0000 | .8828 |
| 7/8 PT. | .0750 | .3050 | .2250 | .0000 | .6050 |
| PIER P-2 | | | | | |
| 1/8 PT. | -.0390 | -.1057 | -.1150 | .0000 | -.2597 |
| 1/4 PT. | -.0785 | -.1500 | -.1700 | .0000 | -.3985 |
| 3/8 PT. | -.0940 | -.1740 | -.1875 | .0000 | -.4555 |
| 1/2 PT. | -.0950 | -.1990 | -.3000 | .0000 | -.5940 |
| 5/8 PT. | -.1037 | -.2685 | -.4125 | .0000 | -.7847 |
| ℄SPL.№3 | -.1090 | -.3074 | -.4269 | .0000 | -.8433 |
| 3/4 PT. | -.1090 | -.3070 | -.4250 | .0000 | -.8410 |
| 7/8 PT. | -.0760 | -.2420 | -.2500 | .0000 | -.5680 |
| PIER P-3 | | | | | |
| 1/8 PT. | .2150 | .8005 | .3475 | .1443 | 1.5073 |
| 1/4 PT. | .4225 | 1.6700 | .6900 | .2886 | 3.0711 |
| 3/8 PT. | .5475 | 2.1547 | .9200 | .4329 | 4.0551 |
| 1/2 PT. | .5780 | 2.2550 | .9500 | .5773 | 4.3603 |
| 5/8 PT. | .4110 | 1.7525 | .7450 | .7216 | 3.6301 |
| ℄SPL.№4 | .3287 | 1.4537 | .4800 | .7781 | 2.5809 |
| 3/4 PT. | .2205 | 1.0145 | .2375 | .8659 | 1.2206 |
| 7/8 PT. | .0742 | .3597 | .1715 | .5491 | .8226 |
| PIER P-4 | | | | | |
| 1/8 PT. | .0900 | .3590 | .2000 | .0000 | .6490 |
| ℄SPL.№5 | .2495 | .9381 | .3673 | .0000 | 1.5548 |
| 1/4 PT. | .3125 | 1.1680 | .4650 | .0000 | 1.9455 |
| 3/8 PT. | .5350 | 1.9005 | .7975 | .0000 | 3.2330 |
| 1/2 PT. | .5670 | 2.2650 | .9600 | .0000 | 3.7920 |
| 5/8 PT. | .5860 | 1.9607 | .8425 | .0000 | 3.3892 |
| 3/4 PT. | .3750 | 1.3280 | .5600 | .0000 | 2.2630 |
| 7/8 PT. | .1640 | .5782 | .2625 | .0000 | 1.0047 |
| ℄SPL.№6 | .1534 | .5357 | .2482 | .0000 | .9372 |
| PIER P-5 | | | | | |
| 1/8 PT. | -.0285 | -.0935 | .0000 | .0000 | -.1220 |
| 1/4 PT. | -.0330 | -.0170 | .0000 | .0000 | -.0500 |
| 3/8 PT. | -.0007 | .1090 | .1275 | .0000 | .2357 |
| 1/2 PT. | .0410 | .2950 | .3600 | .0000 | .6960 |
| 5/8 PT. | .0742 | .4100 | .4950 | .0000 | .9792 |
| 3/4 PT. | .0750 | .3775 | .4900 | .0000 | .9425 |
| 7/8 PT. | .0390 | .2220 | .2900 | .0000 | .5510 |
| ABUTMENT A-2 SW-1 | | | | | |

FOR NOTES SEE SHEET 18/26

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

19/26

# DEFLECTION & CAMBER TABLES

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

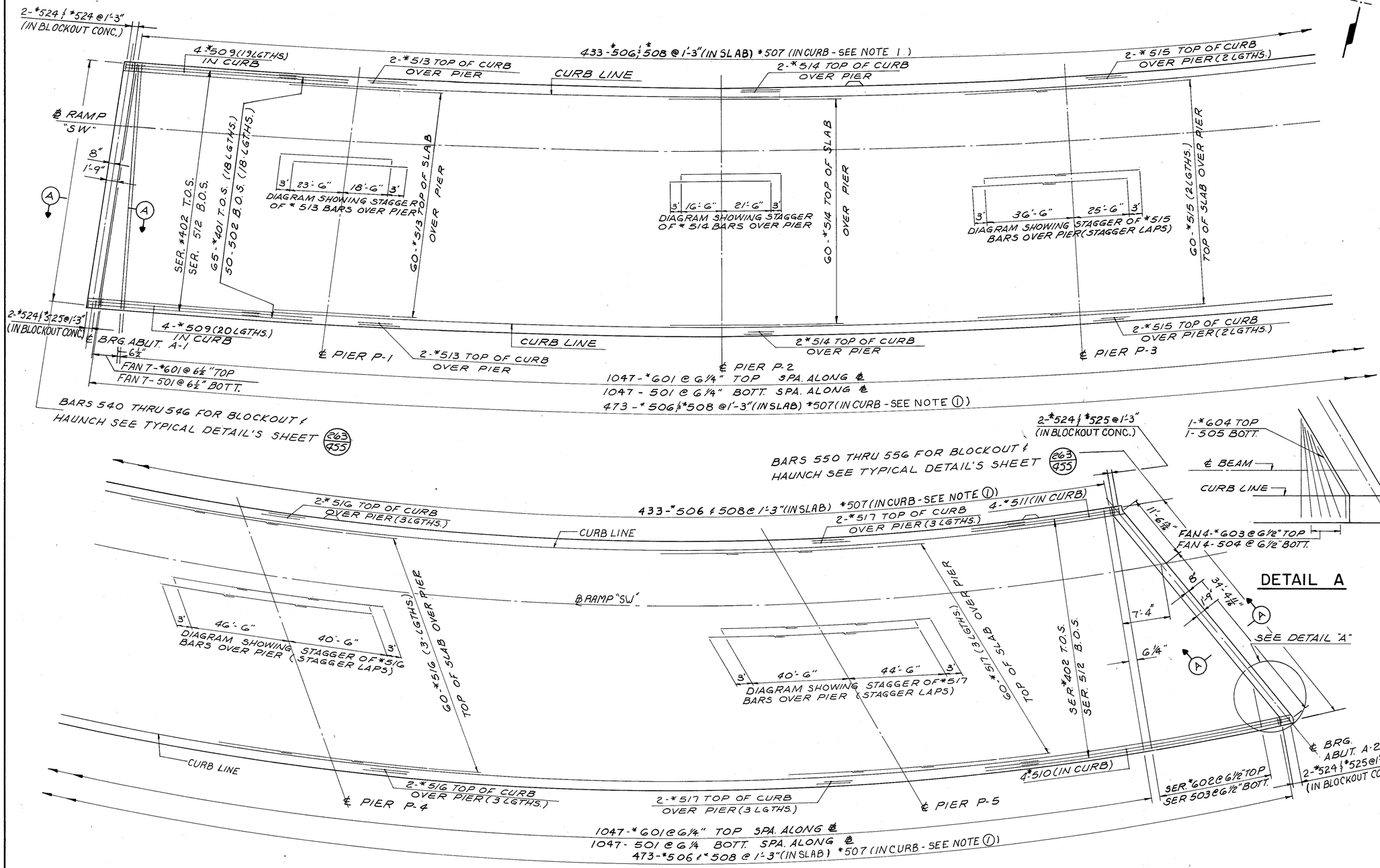
BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII | CDS | | R.J.P. | JJP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

337/455

AKRON INNERBELT
SUM - 59 - 0.00




## NOTES

1. SEE GENERAL PLAN AND ELEVATION SHEET 4/26 FOR LOCATION AND NUMBER OF MARK *507, *520, *521 *522 & *523 BARS.
2. TYPICAL BAR LAPS SHALL BE AS FOLLOWS: #4 BARS (1'-4"), #5 BARS (1'-8")
3. FOR SECTION "A-A" SEE SHT. 263/455
4. FOR ADDITIONAL NOTES SEE SHEET 21/26.
5. ABBREVIATIONS ARE:
   B.O.S. = BOTTOM OF SLAB
   T.O.S. = TOP OF SLAB
   LGTHS. = LENGTHS

## DETAIL A

## SLAB PLAN

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

20/26

# SLAB PLAN

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

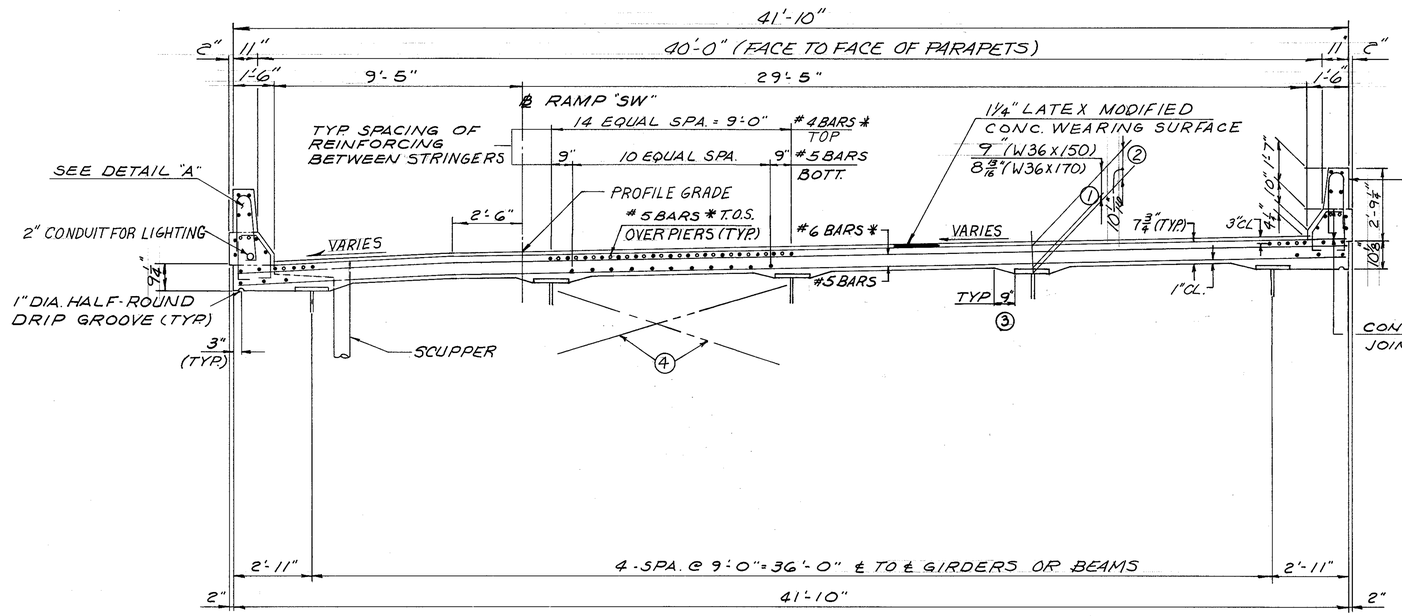
BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | R.J.P. | JGP | 12-15-82 | |

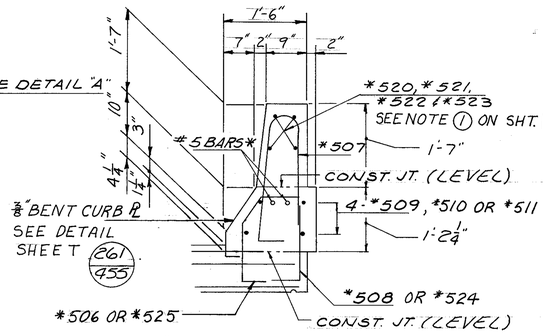
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

338/455

AKRON INNERBELT
SUM-59-0.00




TRANSVERSE SECTION




DETAIL A

## NOTES

① THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

② THIS IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18.

③ A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.)

④ FOR CROSSFRAMES SEE FRAMING PLAN AND FRAMING DETAIL SHEETS.

⑤ FOR FORMING ELEVATION TABLE SEE SHEETS 22/26

⑥ TRANSVERSE AND LONGITUDINAL REINFORCEMENT SHALL BE FIELD BENT AS REQUIRED. PAYMENT SHALL BE INCLUDED WITH ITEM 509

⑦ ALL REINFORCING BARS SHOWN THUS * ARE EPOXY COATED.

⑧ PROFILE GRADE IS GIVEN TO TOP OF FINISHED PAVEMENT.

⑨ FOR LOCATION OF LIGHT STANDARD SUPPORTS, SEE GENERAL PLAN SHEETS 3/26 AND 4/26.

⑩ FOR ELECTRICAL CONDUIT ON BRIDGE, SEE LIGHTING PLANS.

⑪ FOR SCUPPER LOCATIONS SEE GENERAL PLAN SHEET. FOR SCUPPER DETAILS SEE 26/455.

⑫ FOR ADDITIONAL NOTES SEE SHEET 20/26.

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CLEVELAND, OHIO AKRON, OHIO

21/26

# TRANSVERSE SECTION

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | R.J.P. | JJP | 12-15-82 | |

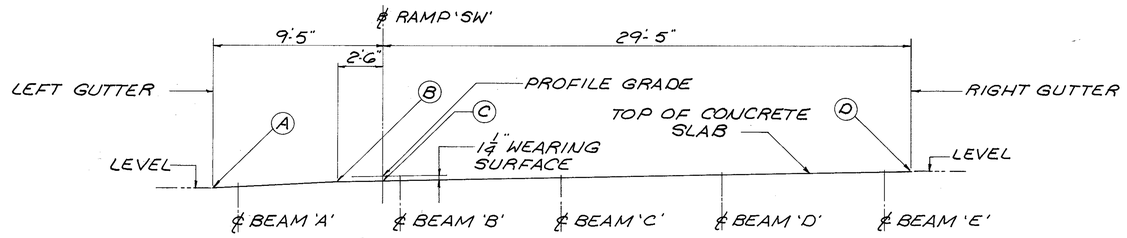
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

339
455

AKRON INNERBELT
SUM - 59 - 0.00

## TABLE OF SCREED ELEVATIONS

| LOCATION | Ⓐ | Ⓑ | Ⓒ | Ⓓ |
|---|---|---|---|---|
| ℄ BRG. A-1 | 992.588 | 992.871 | 992.921 | 993.508 |
| 1/8 PT. | 992.656 | 992.940 | 992.993 | 993.595 |
| 1/4 PT. | 992.722 | 993.006 | 993.060 | 993.682 |
| 3/8 PT. | 992.782 | 993.064 | 993.120 | 993.764 |
| 1/2 PT. | 992.836 | 993.119 | 993.177 | 993.836 |
| 5/8 PT. | 992.891 | 993.171 | 993.231 | 993.903 |
| 3/4 PT. | 992.942 | 993.230 | 993.291 | 993.990 |
| 7/8 PT. | 993.006 | 993.288 | 993.351 | 994.077 |
| ℄ PIER P-1 | 993.064 | 993.346 | 993.411 | 994.164 |
| 1/8 PT. | 993.177 | 993.472 | 993.540 | 994.336 |
| 1/4 PT. | 993.297 | 993.610 | 993.682 | 994.515 |
| 3/8 PT. | 993.414 | 993.723 | 993.798 | 994.689 |
| 1/2 PT. | 993.514 | 993.812 | 993.890 | 994.836 |
| 5/8 PT. | 993.597 | 993.890 | 993.971 | 994.959 |
| 3/4 PT. | 993.659 | 993.953 | 994.037 | 995.058 |
| 7/8 PT. | 993.719 | 994.014 | 994.102 | 995.145 |
| ℄ PIER P-2 | 993.793 | 994.081 | 994.173 | 995.245 |
| 1/8 PT. | 993.897 | 994.179 | 994.274 | 995.362 |
| 1/4 PT. | 994.003 | 994.284 | 994.381 | 995.486 |
| 3/8 PT. | 994.109 | 994.391 | 994.491 | 995.613 |
| 1/2 PT. | 994.205 | 994.487 | 994.591 | 995.736 |
| 5/8 PT. | 994.283 | 994.565 | 994.672 | 995.856 |
| 3/4 PT. | 994.350 | 994.643 | 994.752 | 995.982 |
| 7/8 PT. | 994.424 | 994.728 | 994.841 | 996.125 |
| ℄ PIER P-3 | 994.501 | 994.819 | 994.934 | 996.285 |
| 1/8 PT. | 994.647 | 994.992 | 995.114 | 996.594 |
| 1/4 PT. | 994.795 | 995.170 | 995.298 | 996.908 |
| 3/8 PT. | 994.929 | 995.336 | 995.470 | 997.186 |
| 1/2 PT. | 995.048 | 995.481 | 995.622 | 997.423 |
| 5/8 PT. | 995.150 | 995.593 | 995.740 | 997.601 |
| 3/4 PT. | 995.250 | 995.695 | 995.848 | 997.756 |
| 7/8 PT. | 995.364 | 995.812 | 995.972 | 997.876 |
| ℄ PIER P-4 | 995.495 | 995.943 | 996.105 | 998.003 |
| 1/8 PT. | 995.707 | 996.153 | 996.316 | 998.218 |
| 1/4 PT. | 995.938 | 996.390 | 996.552 | 998.474 |
| 3/8 PT. | 996.168 | 996.625 | 996.787 | 998.726 |
| 1/2 PT. | 996.368 | 996.834 | 996.997 | 998.940 |
| 5/8 PT. | 996.528 | 996.989 | 997.151 | 999.087 |
| 3/4 PT. | 996.662 | 997.118 | 997.281 | 999.200 |
| 7/8 PT. | 996.778 | 997.236 | 997.398 | 999.302 |
| ℄ PIER P-5 | 996.912 | 997.361 | 997.523 | 999.421 |
| 1/8 PT. | 997.022 | 997.472 | 997.635 | 999.528 |
| 1/4 PT. | 997.136 | 997.587 | 997.749 | 999.650 |
| 3/8 PT. | 997.258 | 997.720 | 997.883 | 999.781 |
| 1/2 PT. | 997.398 | 997.862 | 998.025 | 999.922 |
| 5/8 PT. | 997.527 | 997.986 | 998.148 | 1000.052 |
| 3/4 PT. | 997.651 | 998.097 | 998.260 | 1000.165 |
| 7/8 PT. | 997.760 | 998.193 | 998.355 | 1000.259 |
| ℄ BRG. A-2 | 997.835 | 998.284 | 998.446 | 1000.343 |




## KEY TRANSVERSE SECTION

Ⓐ LEFT GUTTER LINE

Ⓑ BREAK LINE

Ⓒ BASE LINE RAMP "SW"

Ⓓ RIGHT GUTTER LINE

NOTES

(1) ELEVATIONS Ⓐ THRU Ⓓ SHOWN ARE TOP OF CONCRETE SLAB ELEVATIONS WHICH ARE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE AND THE 1 1/4" CONCRETE WEARING SURFACE.

(2) SEE STRUCTURE GENERAL NOTES FOR THE EFFECT OF HEAT CURVING ON SCREED ELEVATION.

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CLEVELAND, OHIO — AKRON, OHIO

22/26

# SCREED ELEVATIONS

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| A.L.H. | CDG | | R.J.P. | JGP | 12-15-82 | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ABUTMENT A-1 | | | | | | |
| | 1A501 | 34 | 8'-3" | 2 | 1'-7" | 5'-4" | | | | 293 |
| | 1A502 | 16 | 8'-1" | 1 | 10" | 7'-4" | | | | 135 |
| | 1A503 | 32 | 7'-2" | 2 | 2'-0" | 3'-5" | | | | 239 |
| * | 1A504 | 39 | 6'-0" | 2 | 2'-8" | 11" | | | | 244 |
| | 1A505 | 39 | 5'-1" | 2 | 1'-1" | 3'-2" | | | | 207 |
| | 1A506 | 40 | 21'-8" | ST. | | | | | | 904 |
| | 1A507 | 5 | 3'-11" | 13 | 2'-0" | 2'-0" | 2" | | | 20 |
| | 1A508 | 7 | 11'-4" | 2 | 5'-1" | 1'-5" | | | | 83 |
| | 1A509 | 6 | 10'-8" | ST. | | | | | | 67 |
| | 1A510 | 6 | 9'-4" | ST. | | | | | | 58 |
| * | 1A511 | 8 | 7'-7" | ST. | | | | | | 63 |
| | 1A512 | 2 | 8'-8" | 12 | 1'-7" | 7'-1" | 1'-5" | | | 18 |
| * | 1A513 | 16 | 2'-8" | 6 | 2'-1" | | | | | 45 |
| * | 1A515 | 2 | 7'-9" | ST. | | | | | | 16 |
| * | 1A516 | 4 | 21'-8" | ST. | | | | | | 90 |
| | SERIES | 1-SET | 8'-3" | | 3'-8" | | | | | |
| | OF | OF 5 = | TO | 2 | TO | 1'-2" | | | 7" | 37 |
| | 1A517 | 5 BAR | 5'-11" | | 2'-6" | | | | | |
| | 1A518 | 2 | 2'-7" | ST. | | | | | | 5 |
| * | 1A524 | 7 | 5'-10" | 23 | 2'-4" | 2'-6" | | | | 43 |
| * | 1A525 | 16 | 4'-7" | ST. | | | | | | 76 |
| | 1A526 | 6 | 6'-0" | ST. | | | | | | 38 |
| | 1A527 | 10 | 11'-2" | 14 | 2'-4" | 3'-0" | | | | 116 |
| | 1A528 | 6 | 9'-7" | ST. | | | | | | 60 |
| | 1A529 | 8 | 8'-3" | 2 | 3'-8" | 1'-2" | | | | 69 |
| | 1A530 | 8 | 13'-7" | ST. | | | | | | 113 |
| | 1A531 | 3 | 5'-11" | 2 | 2'-6" | 1'-2" | | | | 19 |
| * | 1A532 | 16 | 4'-4" | ST. | | | | | | 72 |
| * | 1A533 | 8 | 11'-7" | ST. | | | | | | 97 |
| | 1A534 | 4 | 5'-0" | ST. | | | | | | 21 |
| | 1A538 | 2 | 7'-1" | ST. | | | | | | 15 |
| | 1A539 | 17 | 8'-7" | 1 | 10" | 7'-10" | | | | 152 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 1A601 | 16 | 14'-10" | 3 | 7'-3" | 5'-4" | 2'-7" | | | 356 |
| | 1A602 | 39 | 4'-9" | 19 | 1'-5" | 1'-9" | 1'-6" | 1'-2" | | 278 |
| | 1A603 | 41 | 10'-5" | 2 | 4'-8" | 1'-5" | | | | 641 |
| | 1A606 | 1 | 18'-0" | 2 | 8'-7" | 1'-2" | | | | 27 |
| | 1A607 | 6 | 18'-8" | 2 | 8'-11" | 1'-2" | | | | 168 |
| * | 1A608 | 4 | 5'-10" | 19 | 9" | 6" | 8" | 4'-5" | | 35 |
| | 1A612 | 17 | 15'-4" | 3 | 7'-9" | 5'-4" | 2'-7" | | | 392 |
| | 1A613 | 4 | 2'-7" | 2 | 6" | 1'-11" | | | | 16 |
| * | 1A614 | 4 | 3'-6" | 20 | 1'-2" | 9" | 7" | | | 21 |
| * | 1A615 | 34 | 5'-4" | 3 | 2'-3" | 2'-5" | 1'-0" | | | 272 |
| * | 1A616 | 2 | 3'-11" | 19 | 9" | 6" | 8" | 2'-6" | | 12 |
| * | 1A617 | 2 | 3'-9" | 19 | 8" | 5" | 8" | 2'-6" | | 11 |
| * | 1A618 | 2 | 3'-9" | 19 | 8" | 4" | 8" | 2'-6" | | 11 |
| * | 1A619 | 2 | 3'-8" | 19 | 7" | 3" | 8" | 2'-6" | | 11 |
| * | 1A620 | 8 | 3'-7" | 19 | 7" | 2" | 8" | 2'-6" | | 43 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 1A801 | 14 | 23'-10" | ST. | | | | | | 891 |
| | 1A802 | 26 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 336 |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1A803 | 2 | 12'-6" | ST. | | | | | | 67 |
| | 1A804 | 4 | 10'-6" | ST. | | | | | | 112 |
| | | | NON EPOXY COATED = 5953 | | | | | | | |
| | | | EPOXY COATED = 1162 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | ABUTMENT A-2 | | | | | | |
| | 2A501 | 30 | 8'-6" | 2 | 1'-7" | 5'-7" | | | | 266 |
| | 2A502 | 7 | 8'-1" | 1 | 10" | 7'-4" | | | | 59 |
| | 2A503 | 7 | 8'-7" | 1 | 10" | 7'-10" | | | | 63 |
| | 2A504 | 7 | 9'-1" | 1 | 10" | 8'-4" | | | | 66 |
| | 2A505 | 7 | 9'-9" | 1 | 10" | 9'-0" | | | | 71 |
| * | 2A506 | 45 | 6'-0" | 2 | 2'-8" | 11" | | | | 282 |
| | 2A507 | 45 | 6'-3" | 2 | 1'-8" | 3'-2" | | | | 293 |
| | 2A508 | 38 | 24'-10" | ST. | | | | | | 984 |
| | 2A509 | 8 | 14'-3" | ST. | | | | | | 119 |
| | 2A510 | 10 | 13'-0" | ST. | | | | | | 136 |
| | 2A511 | 7 | 6'-0" | ST. | | | | | | 44 |
| | 2A512 | 6 | 3'-11" | 12 | 2'-0" | 2'-0" | 1'-9" | | | 25 |
| | 2A513 | 2 | 6'-5" | 16 | 2'-0" | 2'-7" | 1'-9" | 2'-0" | | 13 |
| | 2A514 | 3 | 4'-11" | 16 | 2'-0" | 1'-1" | 1'-9" | 2'-0" | | 15 |
| | 2A515 | 12 | 11'-2" | 14 | 2'-4" | 3'-0" | | | | 140 |
| | 2A516 | 6 | 11'-8" | ST. | | | | | | 73 |
| | 2A517 | 2 | 9'-8" | ST. | | | | | | 20 |
| | 2A518 | 2 | 11'-3" | ST. | | | | | | 23 |
| | 2A519 | 6 | 17'-7" | ST. | | | | | | 110 |
| | 2A520 | 2 | 9'-0" | ST. | | | | | | 19 |
| | SERIES | 1-SET | 11'-3" | | 5'-2" | | | | | |
| | OF | OF 4 = | TO | 2 | TO | 1'-2" | | | 1'-4" | 39 |
| | 2A521 | 4 BAR | 7'-3" | | 3'-2" | | | | | |
| * | 2A522 | 8 | 15'-7" | ST. | | | | | | 130 |
| | 2A523 | 14 | 7'-7" | ST. | | | | | | 111 |
| | 2A524 | 4 | 7'-3" | 2 | 3'-2" | 1'-2" | | | | 30 |
| | 2A525 | 16 | 11'-8" | 14 | 2'-7" | 3'-0" | | | | 195 |
| | 2A526 | 2 | 7'-2" | ST. | | | | | | 15 |
| | 2A527 | 8 | 5'-9" | ST. | | | | | | 48 |
| | 2A528 | 16 | 4'-4" | ST. | | | | | | 72 |
| * | 2A529 | 19 | 5'-10" | 23 | 2'-4" | 2'-6" | | | | 116 |
| * | 2A530 | 16 | 4'-7" | ST. | | | | | | 76 |
| * | 2A531 | 16 | 2'-8" | 6 | 2'-1" | | | | | 45 |
| | 2A532 | 8 | 15'-3" | ST. | | | | | | 127 |
| | 2A533 | 4 | 13'-6" | ST. | | | | | | 56 |
| | 2A534 | 2 | 9'-0" | ST. | | | | | | 19 |
| | 2A535 | 6 | 21'-7" | ST. | | | | | | 135 |
| * | 2A536 | 4 | 28'-10" | ST. | | | | | | 120 |
| * | 2A537 | 8 | 19'-7" | ST. | | | | | | 163 |
| | 2A538 | 1 | 9'-5" | ST. | | | | | | 10 |
| | | | | | | | | | | |
| | | | | | | | | | | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | SERIES | 1-SET | 10'-3" | | 4'-8" | | | | | |
| | OF | OF 4 = | TO | 2 | TO | 1'-2" | | | 1'-4" | 34 |
| | 2A539 | 4 BAR | 6'-3" | | 2'-8" | | | | | |
| | 2A540 | 4 | 6'-3" | 2 | 2'-8" | 1'-2" | | | | 26 |
| | 2A541 | 38 | 6'-8" | 2 | 1'-9" | 3'-5" | | | | 264 |
| | 2A542 | 5 | 4'-0" | ST. | | | | | | 21 |
| | 2A543 | 2 | 10'-6" | 1 | 10" | 9'-9" | | | | 22 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 2AG01 | 7 | 14'-11" | 3 | 7'-4" | 5'-4" | 2'-7" | | | 157 |
| | 2AG02 | 7 | 15'-5" | 3 | 7'-10" | 5'-4" | 2'-7" | | | 162 |
| | 2AG03 | 7 | 15'-11" | 3 | 8'-4" | 5'-4" | 2'-7" | | | 167 |
| | 2AG04 | 7 | 16'-7" | 3 | 9'-0" | 5'-4" | 2'-7" | | | 174 |
| | 2AG05 | 45 | 5'-7" | 19 | 1'-10" | 1'-9" | 1'-9" | 1'-5" | | 377 |
| | 2AG06 | 45 | 15'-11" | 2 | 7'-5" | 1'-5" | | | | 1076 |
| | 2AG07 | 1 | 22'-3" | 2 | 10'-6" | 1'-7" | | | | 33 |
| | 2AG08 | 8 | 19'-2" | 2 | 9'-2" | 1'-2" | | | | 230 |
| * | 2AG09 | 14 | 8'-4" | 19 | 9" | 6" | 8" | 6'-11" | | 175 |
| * | 2AG10 | 2 | 3'-11" | 19 | 9" | 6" | 8" | 2'-6" | | 12 |
| * | 2AG11 | 2 | 3'-9" | 19 | 8" | 5" | 8" | 2'-6" | | 11 |
| * | 2AG12 | 2 | 3'-9" | 19 | 8" | 4" | 8" | 2'-6" | | 11 |
| * | 2AG13 | 2 | 3'-7" | 19 | 7" | 2" | 8" | 2'-6" | | 11 |
| * | 2AG14 | 8 | 3'-7" | 19 | 7" | 2" | 8" | 2'-6" | | 43 |
| * | 2AG16 | 10 | 24'-6" | 2 | 11'-10" | 1'-2" | | | | 368 |
| * | 2AG17 | 2 | 17'-3" | 3 | 9'-8" | 5'-4" | 2'-7" | | | 52 |
| * | 2AG19 | 37 | 5'-4" | 3 | 2'-3" | 2'-5" | 1'-0" | | | 296 |
| | 2AG20 | 4 | 2'-7" | 2 | 6" | 1'-11" | | | | 16 |
| * | 2AG21 | 4 | 3'-6" | 20 | 1'-2" | 9" | 7" | | | 21 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 2A801 | 14 | 27'-2" | ST. | | | | | | 1015 |
| | 2A802 | 30 | 5'-2" | 38 | 2'-11" | 1'-5" | 1'-0" | | | 414 |
| | 2A803 | 2 | 14'-6" | ST. | | | | | | 77 |
| | 2A804 | 4 | 12'-2" | ST. | | | | | | 130 |
| | 2A805 | 2 | 18'-0" | ST. | | | | | | 96 |
| | 2A806 | 4 | 15'-6" | ST. | | | | | | 166 |
| | | | NON EPOXY COATED = 8053 | | | | | | | |
| | | | EPOXY COATED = 1932 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | PIER P-1 | | | | | | |
| | 1P501 | 4 | 39'-9" | ST. | | | | | | 166 |
| | 1P502 | 12 | 8'-0" | 2 | 2'-10" | 2'-7" | | | | 100 |
| | 1P503 | 18 | 7'-0" | 2 | 2'-4" | 2'-7" | | | | 131 |
| | 1P504 | 18 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 160 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 1P601 | 8 | 6'-3" | 12 | 3'-0" | 3'-3" | 6" | | | 75 |
| | 1P602 | 7 | 17'-10" | ST. | | | | | | 187 |
| | | | | | | | | | | |
| | 1P701 | 14 | 16'-3" | 1 | 2'-8" | 13'-9" | | | | 465 |

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|---|---|---|---|
| 5 | OHIO | | |

340
455

AKRON INNERBELT
SUM-59-0.00

FOR NOTES SEE SHEET 26|26.

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

23|26

# REINFORCING SCHEDULE

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HCII MSC | F.F. | | R.J.P. | JDD | 12-15-82 | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 1P801 | 7 | 33'-2" | ST. | | | | | | 620 |
| 1P1001 | 24 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1041 |
| 1P1002 | 8 | 14'-10" | ST. | | | | | | 511 |
| 1P1003 | 8 | 15'-5" | ST. | | | | | | 531 |
| 1P1004 | 8 | 15'-8" | ST. | | | | | | 539 |
| 1P1005 | 48 | 11'-4" | 7 | 8'-6" | | | | | 2341 |
| | NON EPOXY COATED = 6867 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-1 = | | | | 6867 |

## PIER P-2

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 2P501 | 6 | 39'-1" | ST. | | | | | | 245 |
| 2P502 | 6 | 8'-0" | 2 | 2'-10" | 2'-7" | | | | 50 |
| 2P503 | 6 | 8'-8" | 2 | 3'-2" | 2'-7" | | | | 54 |
| 2P504 | 22 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 195 |
| 2P505 | 22 | 7'-4" | 2 | 2'-6" | 2'-7" | | | | 168 |
| 2P601 | 8 | 6'-3" | 12 | 3'-0" | 3'-3" | 6" | | | 75 |
| 2P801 | 7 | 32'-6" | ST. | | | | | | 607 |
| 2P901 | 7 | 21'-0" | ST. | | | | | | 500 |
| 2P902 | 14 | 17'-3" | 1 | 2'-8" | 14'-10" | | | | 821 |
| 2P1001 | 10 | 16'-5" | ST. | | | | | | 706 |
| 2P1002 | 10 | 17'-3" | ST. | | | | | | 742 |
| 2P1003 | 10 | 17'-7" | ST. | | | | | | 757 |
| 2P1004 | 30 | 10'-3" | 1 | 2'-0" | 8'-6" | | | | 1323 |
| 2P1101 | 48 | 13'-8 | 7 | 10'-6" | | | | | 3485 |
| | NON EPOXY COATED = 9728 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-2 = | | | | 9728 |

## PIER P-3

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 3P501 | 4 | 39'-1" | ST. | | | | | - | 163 |
| 3P502 | 12 | 8'-0" | 2 | 2'-10" | 2'-7" | | | | 100 |
| 3P503 | 28 | 6'-8" | 2 | 2'-2" | 2'-7" | | | | 195 |
| 3P504 | 28 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 248 |
| 3P505 | 12 | 8'-2" | 2 | 2'-11" | 2'-7" | | | | 102 |
| 3P506 | 31 | 14'-6" | ST. | | | | | | 469 |
| 3P901 | 8 | 44'-3" | 2 | 2'-10" | 39'-1" | | | | 1204 |
| 3P902 | 7 | 33'-0" | ST. | | | | | | 785 |
| 3P1001 | 11 | 13'-11" | ST. | | | | | | 659 |
| 3P1002 | 11 | 14'-9" | ST. | | | | | | 698 |
| 3P1003 | 11 | 15'-2" | ST. | | | | | | 718 |
| 3P1004 | 33 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1432 |
| 3P1005 | 30 | 17'-4" | 7 | 14'-6" | | | | | 2238 |
| 3P1101 | 11 | 37'-6" | ST. | | | | | | 2192 |
| 3P1102 | 11 | 40'-8" | 7 | 37'-6" | | | | | 2377 |
| | NON EPOXY COATED = 13580 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-3 = | | | | 13580 |

## PIER P-4

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 4P501 | 12 | 24'-0" | ST. | | | | | | 300 |
| 4P502 | 8 | 8'-6" | 2 | 2'-10" | 3'-1" | | | | 71 |
| 4P503 | 44 | 7'-11" | 2 | 3'-1" | 2'-0" | | | | 363 |
| 4P504 | 44 | 6'-11" | 2 | 2'-7" | 2'-0" | | | | 317 |
| 4P505 | 16 | 9'-0" | 2 | 3'-1" | 3'-1" | | | | 150 |
| 4P506 | 16 | 8'-2" | 2 | 2'-8" | 3'-1" | | | | 136 |
| 4P507 | 8 | 9'-8" | 2 | 3'-5" | 3'-1" | | | | 81 |
| 4P601 | 8 | 8'-0" | 12 | 3'-6" | 4'-6" | 6" | | | 96 |
| 4P602 | 50 | 8'-8" | 2 | 3'-0" | 3'-0" | | | | 651 |
| 4P1101 | 5 | 15'-7" | ST. | | | | | | 414 |
| 4P1102 | 10 | 24'-11" | 1 | 2'-9" | 22'-5" | | | | 1324 |
| 4P1103 | 8 | 17-9" | 1 | 2'-9" | 15'-3" | | | | 754 |
| 4P1104 | 7 | 37'-0" | ST. | | | | | | 1376 |
| 4P1105 | 12 | 13'-10" | ST. | | | | | | 882 |
| 4P1106 | 12 | 11'-9" | ST. | | | | | | 749 |
| 4P1107 | 12 | 14'-0" | ST. | | | | | | 893 |
| 4P1108 | 12 | 11'-5" | ST. | | | | | | 728 |
| 4P1109 | 12 | 13'-7" | ST. | | | | | | 866 |
| 4P1110 | 12 | 11'-6" | ST. | | | | | | 733 |
| 4P1111 | 36 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 1865 |
| 4P1112 | 36 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 1482 |
| 4P1113 | 48 | 15'-8" | 7 | 12'-6" | | | | | 3995 |
| 4P1114 | 42 | 21'-8" | 7 | 18'-6" | | | | | 4835 |
| | NON EPOXY COATED = 23061 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-4 = | | | | 23061 |

## PIER P-5

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 5P501 | 12 | 24'-0" | ST. | | | | | | 300 |
| 5P502 | 8 | 8'-6" | 2 | 2'-10" | 3'-1" | | | | 71 |
| 5P503 | 44 | 7'-11" | 2 | 3'-1" | 2'-0" | | | | 363 |
| 5P504 | 44 | 6'-11" | 2 | 2'-7" | 2'-0" | | | | 317 |
| 5P505 | 16 | 9'-0" | 2 | 3'-1" | 3'-1" | | | | 150 |
| 5P506 | 16 | 8'-2" | 2 | 2'-8" | 3'-1" | | | | 136 |
| 5P507 | 8 | 9'-8" | 2 | 3'-5" | 3'-1" | | | | 81 |
| 5P601 | 8 | 8'-0" | 12 | 3'-6" | 4'-6" | 6" | | | 96 |
| 5P602 | 50 | 8'-8" | 2 | 3'-0" | 3'-0" | | | | 651 |
| 5P1101 | 5 | 15'-7" | ST. | | | | | | 414 |
| 5P1102 | 10 | 24'-10" | 1 | 2'-8" | 22'-5" | | | | 1319 |
| 5P1103 | 8 | 17'-8" | 1 | 2'-8" | 15'-3" | | | | 751 |
| 5P1104 | 7 | 37'-0" | ST. | | | | | | 1376 |
| 5P1105 | 12 | 9'-3" | ST. | | | | | | 590 |
| 5P1106 | 12 | 7'-2" | ST. | | | | | | 457 |
| 5P1107 | 12 | 10'-5" | ST. | | | | | | 664 |
| 5P1108 | 12 | 7'-11" | ST. | | | | | | 505 |
| 5P1109 | 12 | 11'-0" | ST. | | | | | | 701 |
| 5P1110 | 12 | 8'-11" | ST. | | | | | | 568 |
| 5P1111 | 36 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 1865 |
| 5P1112 | 36 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 1482 |
| 5P1113 | 48 | 15'-8" | 7 | 12'-6" | | | | | 3995 |
| 5P1114 | 42 | 21'-8" | 7 | 18'-6" | | | | | 4835 |
| | NON EPOXY COATED = 21687 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-5 = | | | | 21687 |

## SUPERSTRUCTURE

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| * S401 | 1170 | 30'-0" | ST. | | | | | | 23447 |
| * SERIES | 2-SETS | 37'-10" | | | | | | | |
| OF | OF 65= | TO | ST | | | | | 4 11/16" | 2200 |
| S402 | 130BAR | 12'-10" | | | | | | | |
| S501 | 1054 | 41'-6" | ST. | | | | | | 45622 |
| S502 | 900 | 30'-0" | ST. | | | | | | 28161 |
| SERIES | 1-SET | 39'-8" | | | | | | | |
| OF | OF 37= | TO | ST. | | | | | 11" | 894 |
| S503 | 37BAR | 6'-8" | | | | | | | |
| S504 | 4 | 5'-9" | ST. | | | | | | 24 |

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|---|---|---|---|
| 5 | OHIO | | |

341/455

AKRON INNERBELT
SUM - 59 - 0.00

FOR NOTES SEE SHEET 26|26.

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CLEVELAND, OHIO AKRON, OHIO

24|26

# REINFORCING SCHEDULE

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HK II MSC | F.F. | | R.J.P. | JDP | 12-16-82 | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | S505 | 1 | 4'-7" | 12 | 1'-4" | 3'-3" | 1'-7" | | | 5 |
| * | S506 | 906 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 2914 |
| * | S507 | 912 | 5'-10" | 23 | 2'-3" | 2'-7" | | | | 5549 |
| * | S508 | 906 | 2'-3" | 1 | 10" | 1'-6" | | | | 2126 |
| * | S509 | 156 | 30'-0" | ST. | | | | | | 4881 |
| * | S510 | 4 | 28'-9" | ST. | | | | | | 120 |
| * | S511 | 4 | 5'-6" | ST. | | | | | | 23 |
| | SERIES | 2-SETS | 41'-0" | | | | | | | |
| | OF | OF50= | TO | ST. | | | | | 6 1/8" | 2973 |
| | S512 | 100BAR | 16'-0" | | | | | | | |
| * | S513 | 64 | 45'-0" | ST. | | | | | | 3004 |
| * | S514 | 64 | 41'-0" | ST. | | | | | | 2737 |
| * | S515 | 128 | 33'-4" | ST. | | | | | | 4450 |
| * | S516 | 192 | 31'-1" | ST. | | | | | | 6225 |
| * | S517 | 192 | 30'-5" | ST. | | | | | | 6091 |
| * | S520 | 136 | 14'-8" | ST. | | | | | | 2080 |
| * | S521 | 324 | 7'-2" | ST. | | | | | | 2422 |
| * | S522 | 4 | 10'-11" | ST. | | | | | | 46 |
| * | S523 | 4 | 9'-11" | ST. | | | | | | 41 |
| * | S524 | 8 | 2'-7" | 1 | 10" | 1'-10" | | | | 22 |
| * | S525 | 8 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 29 |
| | S540 | 52 | 4'-11" | 3 | 2'-9" | 1'-7" | 10" | | | 267 |
| | S541 | 52 | 6'-1" | 9 | 2'-10" | 8" | | | | 330 |
| | S542 | 52 | 3'-1" | 2 | 1'-10" | 1'-4" | | | | 167 |
| | S543 | 52 | 5'-0" | 12 | 2'-10" | 2'-3" | 1'-7" | | | 271 |
| | S544 | 32 | 8'-8" | ST. | | | | | | 289 |
| | S545 | 16 | 2'-7" | ST. | | | | | | 43 |
| | S546 | 4 | 21'-10" | ST. | | | | | | 91 |
| | S550 | 52 | 5'-2" | 3 | 3'-0" | 1'-7" | 10" | | | 280 |
| | S551 | 52 | 6'-1" | 9 | 2'-10" | 8" | | | | 330 |
| | S552 | 52 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 167 |
| | S553 | 52 | 5'-5" | 12 | 3'-3" | 2'-3" | 1'-7" | | | 294 |
| | S554 | 32 | 10'-0" | ST. | | | | | | 334 |
| | S555 | 16 | 3'-1" | ST. | | | | | | 51 |
| | S556 | 4 | 25'-1" | ST. | | | | | | 105 |
| * | S570 | 15 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 99 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| * | SG01 | 1054 | 41'-6" | ST. | | | | | | G5699 |
| * | SERIES | 1-SET | 39'-8" | | | | | | | |
| | OF | OF37= | TO | ST. | | | | | 11" | 1287 |
| | SG02 | 37BAR | 6'-8" | | | | | | | |
| * | SG03 | 4 | 5'-9" | ST. | | | | | | 35 |
| * | SG04 | 1 | 4'-6" | 12 | 1'-4" | 3'-3" | 1'-7" | | | 7 |
| * | SG70 | 12 | 6'-0" | ST. | | | | | | 108 |
| | SG71 | 12 | 6'-0" | ST. | | | | | | 108 |
| * | SG72 | 12 | 6'-8" | 60 | | | | | | 120 |
| * | SG73 | 12 | 2'-2" | 1 | 10" | 1'-6" | | | | 39 |
| * | SG74 | 12 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 56 |
| | | NON EPOXY COATED = | | | 80806 | | | | | |
| | | EPOXY COATED = | | | 135857 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

392
455

AKRON INNERBELT
SUM - 59 - 0.00

FOR NOTES SEE SHEET 26|26.

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CLEVELAND, OHIO AKRON, OHIO

ESC6

# REINFORCING SCHEDULE

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HK II MSC | F.F. | | R.J.P. | JAP | 12-15-82 | |

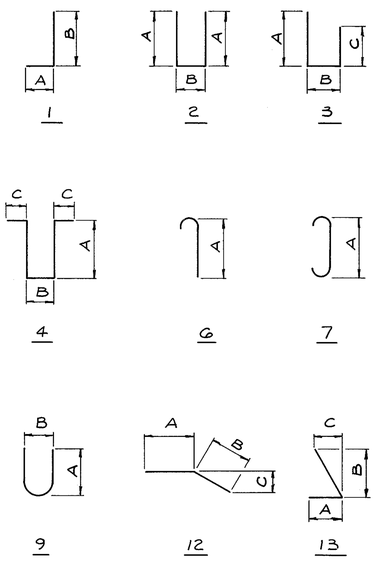
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

343/455

# AKRON INNERBELT
# SUM - 59 - 0.00

| SPIRAL REINFORCING SCHEDULE | | | | | |
|---|---|---|---|---|---|
| MARK | Nº REQ D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
| **SPIRALS - PIER P-1** | | | | | |
| 1P-SP505 | 1 | 2'-7" | 11'-9" | 3.50 | 397 |
| 1P-SP506 | 1 | 2'-7" | 12'-3" | 3.50 | 413 |
| 1P-SP507 | 1 | 2'-7" | 12'-8" | 3.50 | 426 |
| TOTAL SPIRALS PIER P-1 = | | | | | 1236 |
| **SPIRALS - PIER P-2** | | | | | |
| 2P-SP506 | 1 | 2'-7" | 13'-5" | 3.50 | 450 |
| 2P-SP507 | 1 | 2'-7" | 13'-11" | 3.50 | 465 |
| 2P-SP508 | 1 | 2'-7" | 14'-6" | 3.50 | 484 |
| TOTAL SPIRALS PIER P-2 = | | | | | 1399 |
| **SPIRALS - PIER P-3** | | | | | |
| 3P-SP507 | 1 | 2'-7" | 10'-9" | 3.50 | 365 |
| 3P-SP508 | 1 | 2'-7" | 11'-4" | 3.50 | 384 |
| 3P-SP509 | 1 | 2'-7" | 12'-1" | 3.50 | 407 |
| TOTAL SPIRALS PIER P-3 = | | | | | 1156 |
| **SPIRALS - PIER P-4** | | | | | |
| 4P-SP508 | 1 | 3'-1" | 15'-8" | 3.50 | 627 |
| 4P-SP509 | 1 | 3'-1" | 15'-5" | 3.50 | 617 |
| 4P-SP510 | 1 | 3'-1" | 15'-6" | 3.50 | 621 |
| TOTAL SPIRALS PIER P-4 = | | | | | 1865 |

| SPIRAL REINFORCING SCHEDULE | | | | | |
|---|---|---|---|---|---|
| MARK | Nº REQ D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
| **SPIRALS - PIER P-5** | | | | | |
| 5P-SP508 | 1 | 3'-1" | 11'-2" | 3.50 | 446 |
| 5P-SP509 | 1 | 3'-1" | 11'-11" | 3.50 | 474 |
| 5P-SP510 | 1 | 3'-1" | 12'-11" | 3.50 | 511 |
| TOTAL SPIRALS PIER P-5 = | | | | | 1431 |




NON EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL = | 14,006 LBS |
| PIER | TOTAL = | 82,010 LBS |
| SUPERSTRUCTURE | TOTAL = | 80,806 LBS |
| GRAND | TOTAL = | 176,822 LBS |

EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL = | 3,094 LBS |
| PIER | TOTAL = | 0 LBS |
| SUPERSTRUCTURE | TOTAL = | 135,857 LBS |
| GRAND | TOTAL = | 138,951 LBS |

## NOTES

(1) FOR SPIRAL REINFORCING OVER 15'-0". FOUR ANGLE SPACERS WEIGHING APPROX. 1.01 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(2) FOR SPIRAL REINFORCING UNDER 15'-0". FOUR ANGLE SPACERS WEIGHING APPROX. .80 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(3) THE LENGTH SHOWN IN THE STEEL SCHEDULE FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE TOP OF THE COLUMN INCLUDING THREE (3) CLOSED COILS (ONE AND ONE HALF CLOSED COILS AT THE ENDS OF EACH SPIRAL UNIT.)

(4) REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08

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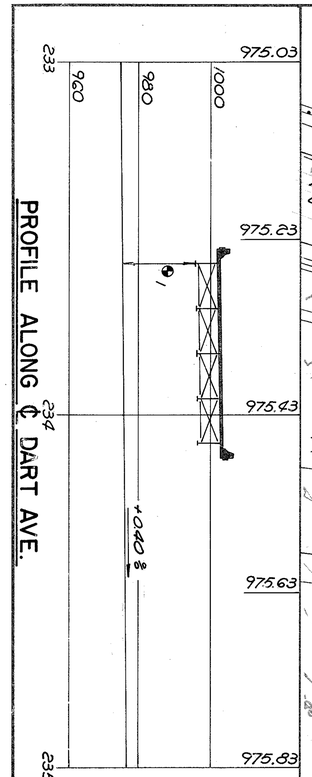
26/26

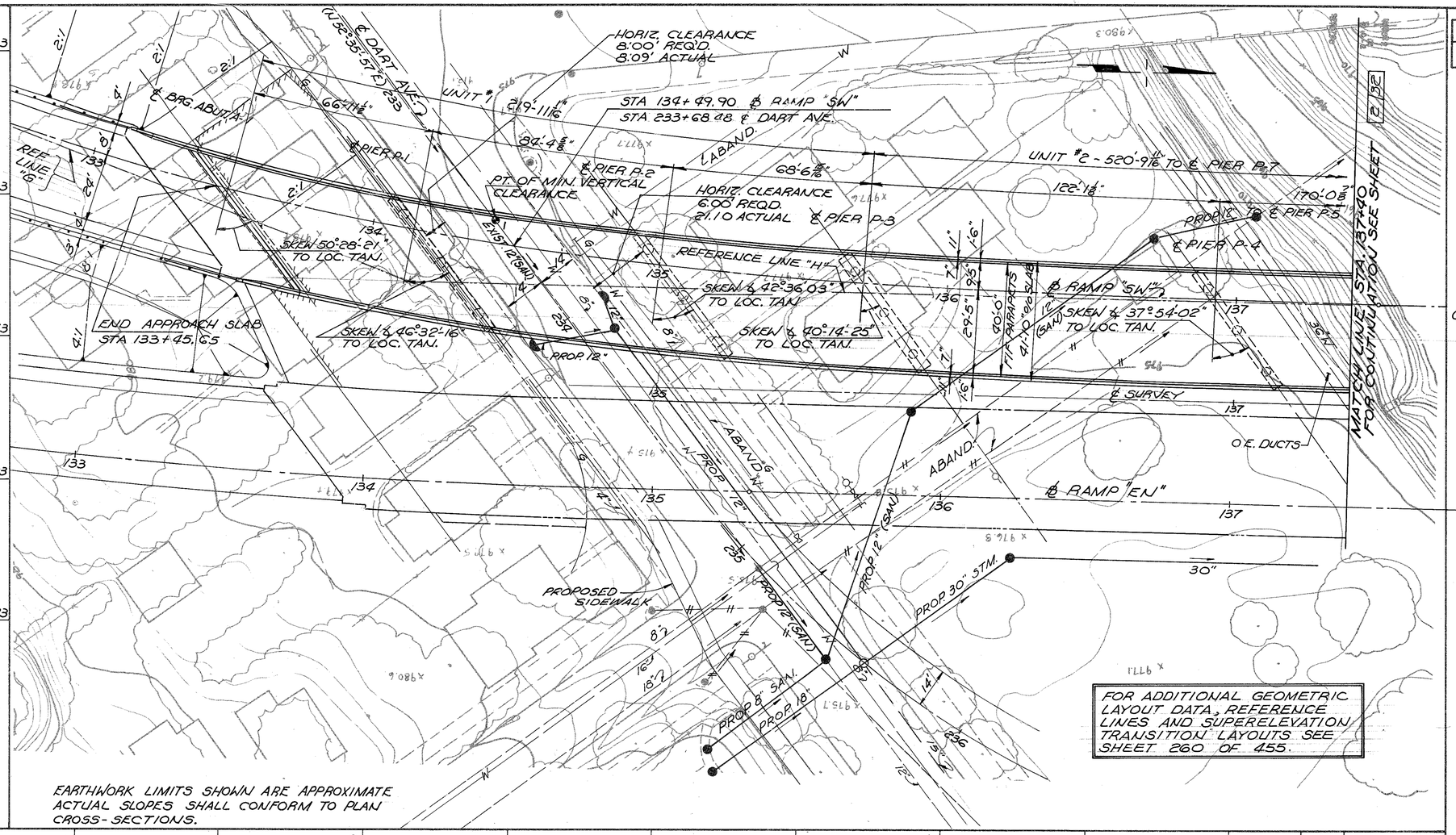
## REINFORCING SCHEDULE

AKRON INNERBELT OVER
RELOCATED DART AVE. & RUSSELL AVE.

BR. NO. SUM-59-0002
AKRON OHIO — SUMMIT COUNTY
STA. 123 + 53.71 TO STA. 129 + 17.59

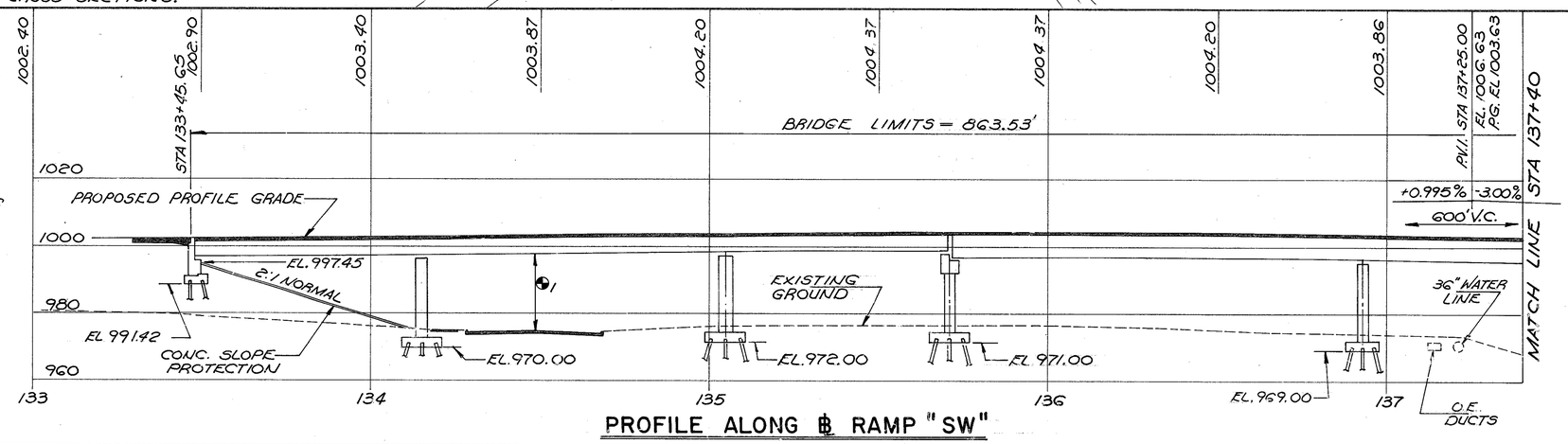
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII MSC | F.F. | | R.J.P. | JOP | 12-15-82 | |




EARTHWORK LIMITS SHOWN ARE APPROXIMATE ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.

FOR ADDITIONAL GEOMETRIC LAYOUT DATA, REFERENCE LINES AND SUPERELEVATION TRANSITION LAYOUTS SEE SHEET 260 OF 455.




PROFILE ALONG ℄ RAMP "SW"

① VERTICAL CLEARANCE 15.33' REQD, 24.66' ACTUAL

② VERTICAL CLEARANCE 15.33' REQD, 17.44' ACTUAL SEE SHEET 2/32

FOR PILE TYPES AND ESTIMATED PAY LENGTHS SEE SHEET 5/32.

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

344/455

AKRON INNERBELT
SUM-59-0.00

## CURVE DATA

BASELINE RAMP "SW" (SPIRAL OUT)

P.I. STA. 134+18.56
C.S. STA. 132+49.94
S.T. STA. 137+49.94

L.S. = 500.00'
L.T. = 335.49'
S.T. = 168.62'
L.C. = 497.30'
Ds = 20°-00'-00"

CENTERLINE RELOCATED DART AVE.

P.I. STA. 236+42.57
P.C. STA. 234.66.45
P.T. STA. 237+93.80

Δ = 52°-22'-32"
Dc = 16°-00'-00"
R = 358.10'
T = 176.11'
L = 327.35'
E = 40.96'
Ch = 316.07'

## PROPOSED STRUCTURE

TYPE: CONTINUOUS WELDED PLATE GIRDERS AND ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SKEW: VARIES (SEE PLAN)
SPANS: ℄ BEARINGS ALONG ℄
UNIT #1-66'-11½", 84'-4⅝", 67'-1⅝"
UNIT #2-120'-9¾", 170'-0⅝", 120'-0", 107'-5⅝"
UNIT #3-66'-0⅛", 50'-0"

ROADWAY: 40'-0" F. TO F. CONC. BARRIERS, 41'-10" O. TO O.

LOADING: HS-20-44 (CASE II) AND ALTERNATE MILITARY LOADING
WEARING: 1¼" LATEX MODIFIED SURFACE CONC.

APPROACH: 25'-0" (AS-1-81) SLABS.

ALIGNMENT: CURVE LT. & TANGENT.
SUPERELEVATION: VARIES
SLOPE PROTECTION: CONCRETE.

TRAFFIC:
ADT: = 15,200 (2000)
ADTT: = 760 (2000)

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## SITE PLAN

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII RER | JWM | | R.J.P. | JJP | 12-15-82 | |

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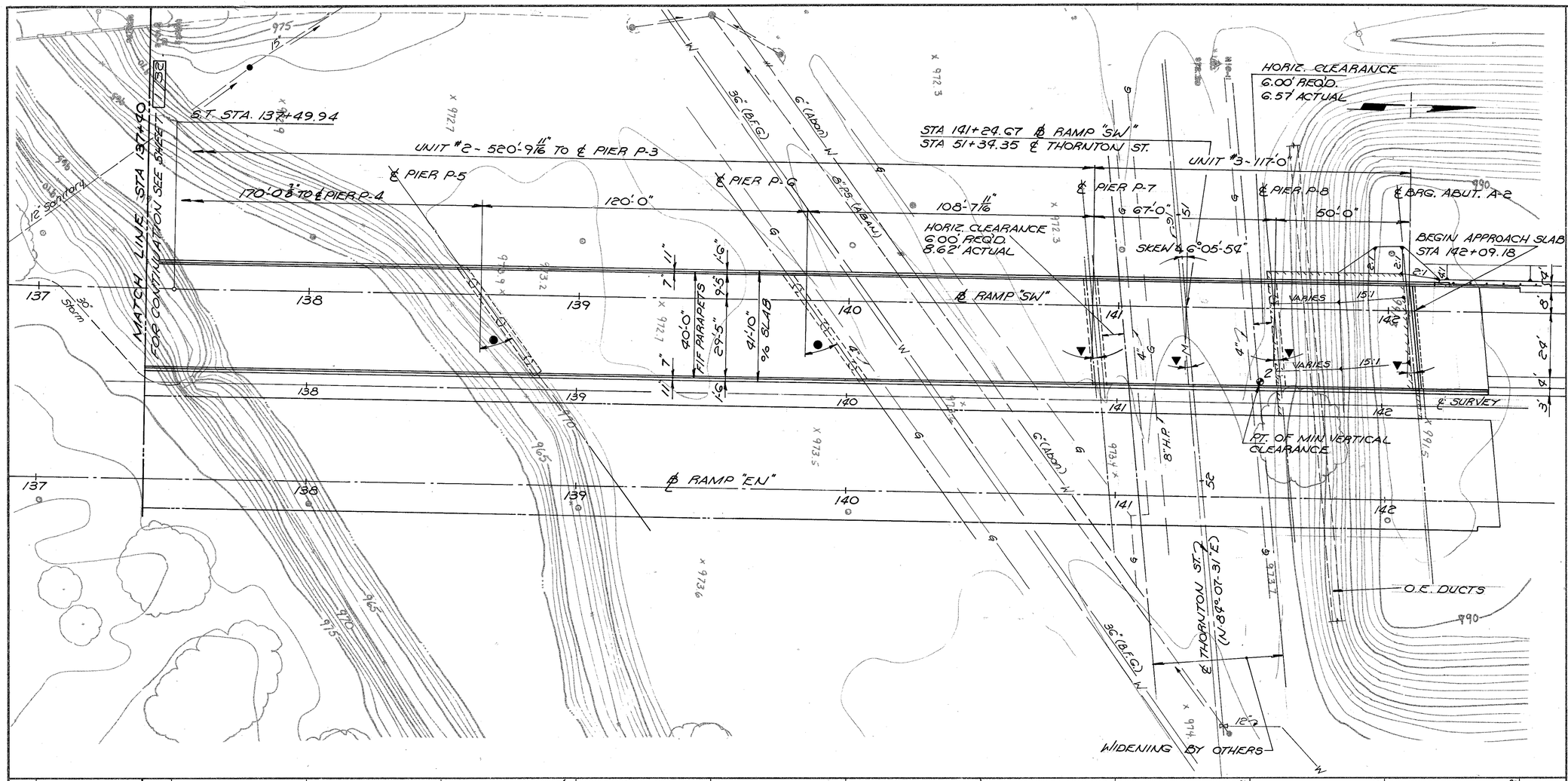
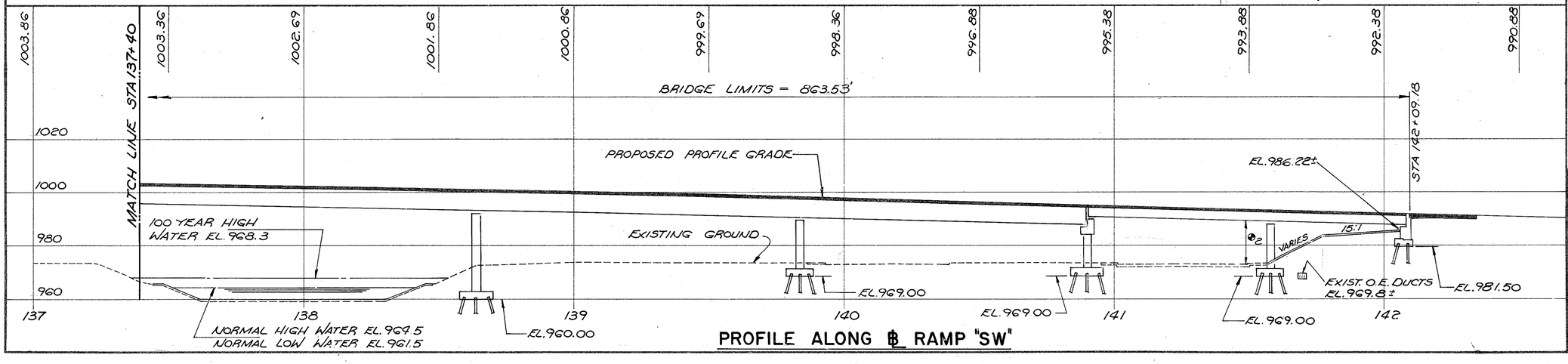
|---|---|---|---|
| 5 | OHIO | | |

345/455

AKRON INNERBELT
SUM-59-0.00




## PROFILE ALONG ℄ RAMP "SW"

SKEW ANGLES
● - ∢ 37°-37'-28"
▼ - ∢ 6°-05'-54"

POINT OF MIN. VERTICAL CLEARANCE
②₂ REQ'D. 15.33 ACTUAL = 17.44

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# SITE PLAN

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
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| HKII RER | JWW | | R.J.P. | JJP | 12-15-82 | |

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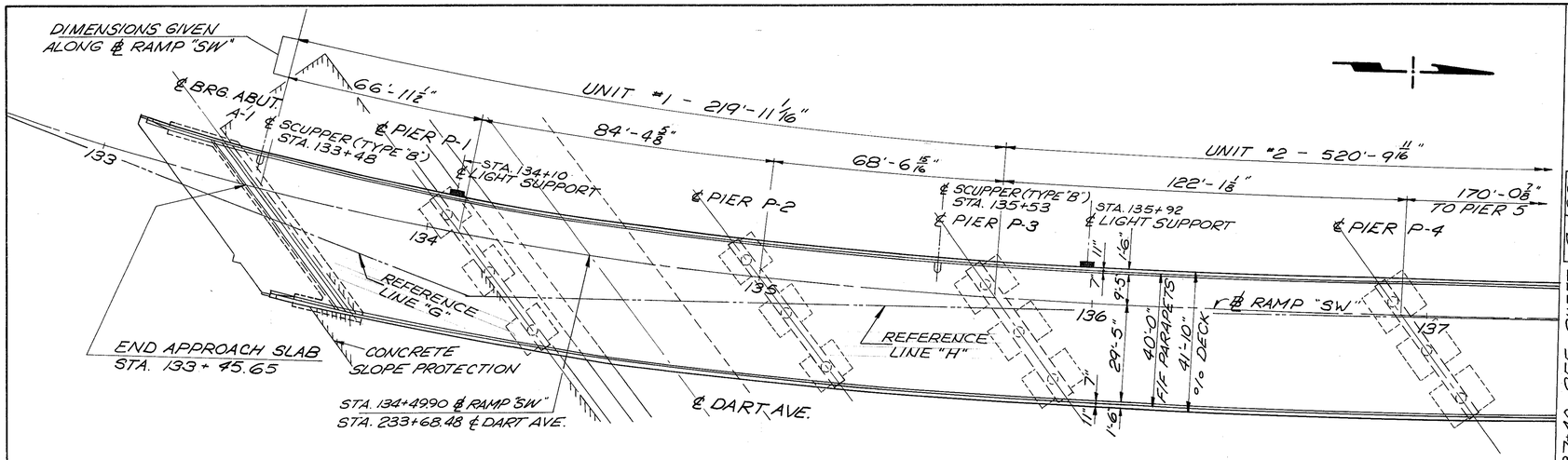
|---|---|---|---|
| 5 | OHIO | | |

346/455

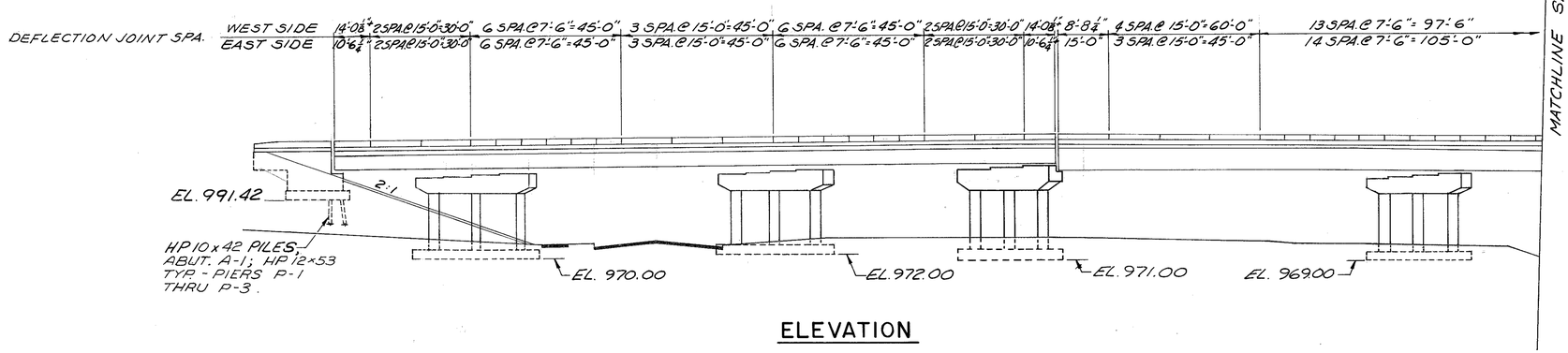
AKRON INNERBELT
SUM - 59 - 0.00

NOTES

(1) FOR SCUPPER DETAILS AND LIGHT SUPPORT DETAILS SEE SHEET 261/455




## GENERAL PLAN




## ELEVATION

MATCHLINE STA. 137+40 SEE SHEET 4/32

## ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | PIER | GEN'L. |
|---|---|---|---|---|---|---|---|
| 503 | LUMP | L.S. | COFFERDAMS, CRIBS AND SHEETING | | | | LUMP |
| 503 | 1475 | C.Y. | UNCLASSIFIED EXCAVATION | | 269 | 1206 | |
| 505 | LUMP | L.S. | PILE DRIVING EQUIPMENT MOBILIZATION | | | | LUMP |
| 506 | LUMP | L.S. | STATIC LOAD TEST (HP 12 x 53) | | | | LUMP |
| 506 | LUMP | L.S. | STATIC LOAD TEST (12" C.I.P.) | | | | LUMP |
| 507 | 1210 | L.F. | STEEL PILES, HP 10 x 42 | | 1210 | | |
| 507 | 2025 | L.F. | STEEL PILES, HP 12 x 53 (*) | | | 2025 | |
| 507 | 8565 | L.F. | 12" CAST-IN-PLACE REIN. CONCRETE PILES | | 825 | 7740 | |
| 509 | 273494 | LB. | REINFORCING STEEL, GRADE 60 | 120179 | 14884 | 138431 | |
| 824 | 194550 | LB. | EPOXY COATED REIN. STEEL, GRADE 60 | 193317 | 1233 | | |
| 511 | 1111 | C.Y. | CLASS "S" CONCRETE, SUPERSTRUCTURE (*) | 1111 | | | |
| 511 | 365 | C.Y. | CLASS "C" CONCRETE, PIERS ABOVE FTGS. | | | 365 | |
| 511 | 113 | C.Y. | CLASS "C" CONCRETE, ABUTMENTS ABOVE FTGS. | | 113 | | |
| 511 | 588 | C.Y. | CLASS "C" CONCRETE, FOOTINGS | | 92 | 496 | |
| 512 | 4 | S.Y. | TYPE "B" WATERPROOFING | | 4 | | |
| 513 | 978900 | LB. | STRUCTURAL STEEL (A-588) CATEGORY III (**) | 978900 | | | |

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | PIER | GEN'L. |
|---|---|---|---|---|---|---|---|
| 513 | 51870 | LB. | STRUCTURAL STEEL (A-36) CURB PLATES | 51870 | | | |
| | | | GALVANIZED (AISC CERT. NOT REQ'D.) | | | | |
| 513 | 10716 | EA. | WELDED STUD SHEAR CONNECTORS (*) | 10716 | | | |
| 515 | 35 | S.F. | 1" PREFORMED EXP.N JOINT FILLER | | 35 | | |
| 518 | 59 | C.Y. | POROUS BACKFILL | | 59 | | |
| 518 | 99 | L.F. | 6" PERFORATED HELICAL C.S.P., 707.01 | | 99 | | |
| 518 | 79 | L.F. | 6" NON-PERFORATED HELICAL C.S.P. | | 79 | | |
| | | | INCLUDING SPECIALS, 707.01 | | | | |
| 518 | 6 | EA. | SCUPPERS INCLUDING SUPPORTS | 6 | | | |
| 523 | 3 | HOUR | DYNAMIC LOAD TESTS (HP 12x53) | | | | 3 |
| 523 | 3 | HOUR | DYNAMIC LOAD TESTS (12" C.I.P.) | | | | 3 |
| 601 | 888 | S.Y. | CONCRETE SLOPE PROTECTION | | 888 | | |
| 625 | | | SEE LIGHTING SUMMARY SHEET | | | | |
| 845 | 3669 | S.Y. | LATEX MODIFIED CONCRETE OVERLAY (1¼" THICK) (*) | 3669 | | | |
| SPEC. | 2471 | S.Y. | SEALING OF CONCRETE SURFACES (*) | 1180 | 129 | 1163 | |
| 516 | 104 | L.F. | MODULAR EXPANSION JOINT DEVICE (TYPE A) (**) | 104 | | | |
| 516 | 94 | L.F. | MODULAR EXPANSION JOINT DEVICE (TYPE B) (**) | 94 | | | |
| SPEC. | 20 | EA. | SPHERICAL BEARINGS (***) | | 5 | 15 | |

(*) SEE PROPOSAL NOTE
(**) AS PER PLAN.
(***) SEE SPECIAL PROVISIONS

QUANTITIES CHECKED BY: JWW 12-21-82

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GENERAL PLAN & ELEVATION AND ESTIMATED QUANITITIES 3/32

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
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| RER | F.F. | | R.J.P. | JDH | 12-15-82 | |

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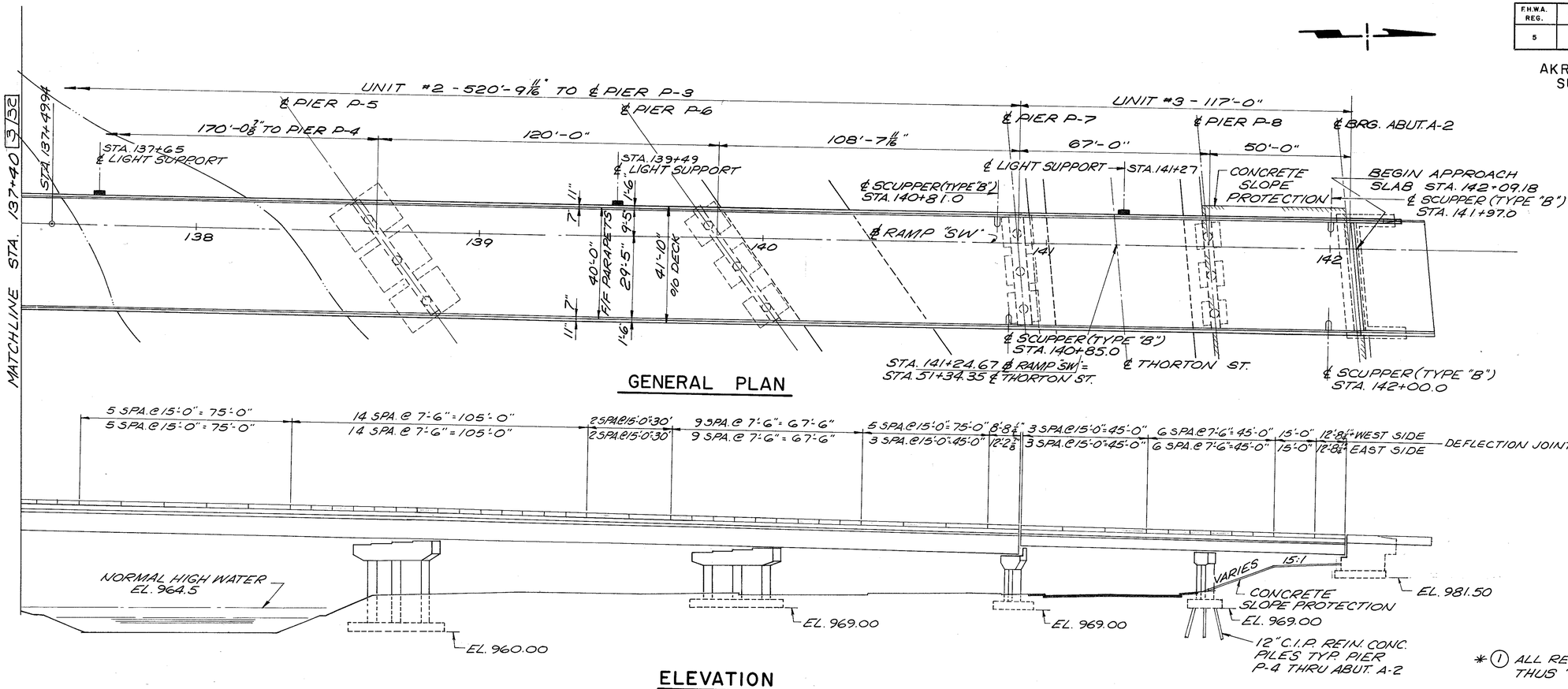
| 5 | OHIO | | |

347/455

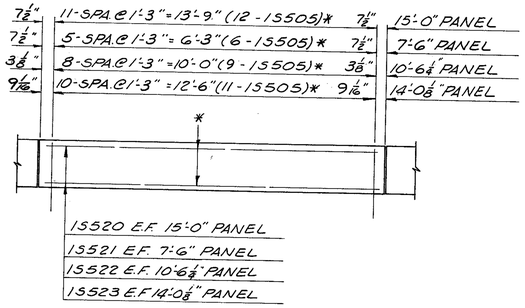
AKRON INNERBELT
SUM-59-0.00



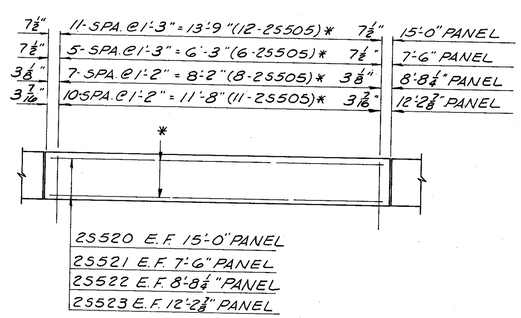

## GENERAL PLAN




## ELEVATION




UNIT Nº 1

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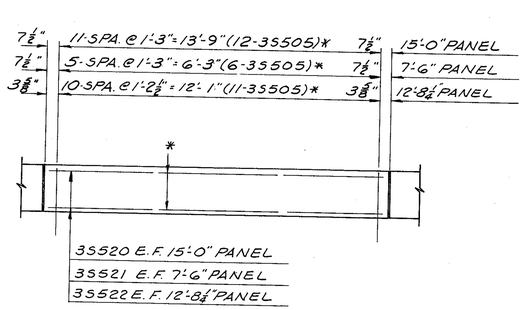


UNIT Nº 3

## TYPICAL PANEL DETAILS

## NOTES

* (1) ALL REINFORCING BARS MARKED THUS "*" ARE EPOXY COATED.

(2) FOR SCUPPER DETAILS AND LIGHT SUPPORT DETAILS SEE SHEET 261/455

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4/32

# GENERAL PLAN & ELEVATION

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
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| RER. | F.F. | | R.J.P. | gdp | 12-15-82 | . |

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348/455

AKRON INNERBELT
SUM - 59 - 0.00

## PILE TABLE

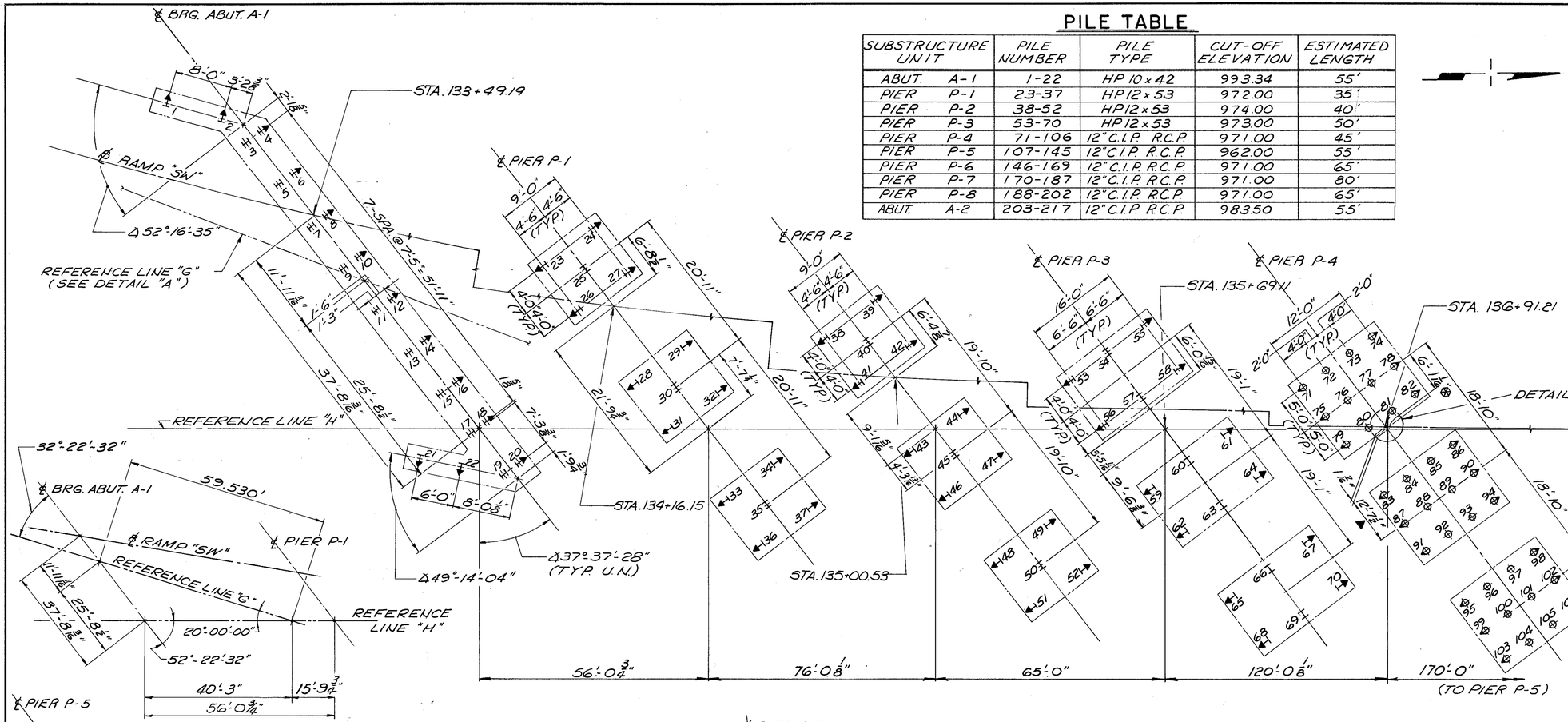
| SUBSTRUCTURE UNIT | | PILE NUMBER | PILE TYPE | CUT-OFF ELEVATION | ESTIMATED LENGTH |
|---|---|---|---|---|---|
| ABUT. | A-1 | 1-22 | HP 10×42 | 993.34 | 55' |
| PIER | P-1 | 23-37 | HP12×53 | 972.00 | 35' |
| PIER | P-2 | 38-52 | HP12×53 | 974.00 | 40' |
| PIER | P-3 | 53-70 | HP12×53 | 973.00 | 50' |
| PIER | P-4 | 71-106 | 12"C.I.P. R.C.P. | 971.00 | 45' |
| PIER | P-5 | 107-145 | 12"C.I.P. R.C.P. | 962.00 | 55' |
| PIER | P-6 | 146-169 | 12"C.I.P. R.C.P. | 971.00 | 65' |
| PIER | P-7 | 170-187 | 12"C.I.P. R.C.P. | 971.00 | 80' |
| PIER | P-8 | 188-202 | 12"C.I.P. R.C.P. | 971.00 | 65' |
| ABUT. | A-2 | 203-217 | 12"C.I.P R.C.P. | 983.50 | 55' |

## NOTES

1. PILES SHOWN THUS ◊↑ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
2. THE 12" CAST-IN-PLACE REINFORCED CONCRETE PILES HAVE A DESIGN LOAD OF 40 TONS PER PILE FOR ABUT. PILES AND 50 TONS PER PILE FOR PIER PILES.
3. FOR PILE CUT-OFF ELEVATIONS AND ESTIMATED PILE LENGTHS SEE PILE TABLE.
4. STEEL HP12×53 & HP10×42 PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE CONSIDERED AS OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR REFUSAL SHALL BE CONSIDERED AS OBTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS. DESIGN LOAD IS 40 TONS PER PILE FOR ABUT. PILES AND 70 TONS PER PILE FOR PIER PILES.

▲ DIMENSION FROM REFERENCE LINE TO ℄ PILES.

⊛ DIMENSION FROM ℄ TO ℄ PILES

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5/32

## PILING PLAN

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

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| MSC | D.T. | | R.J.P | | 12-15-82 | |

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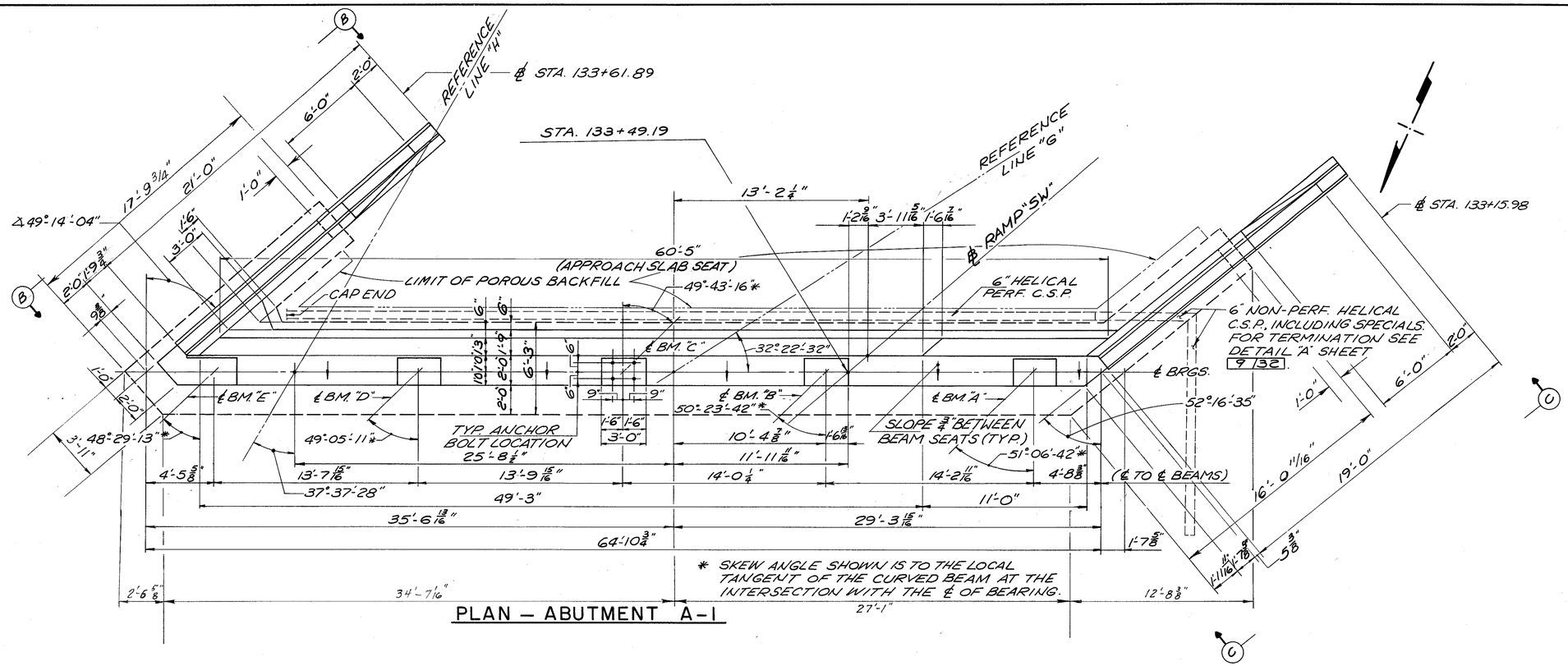
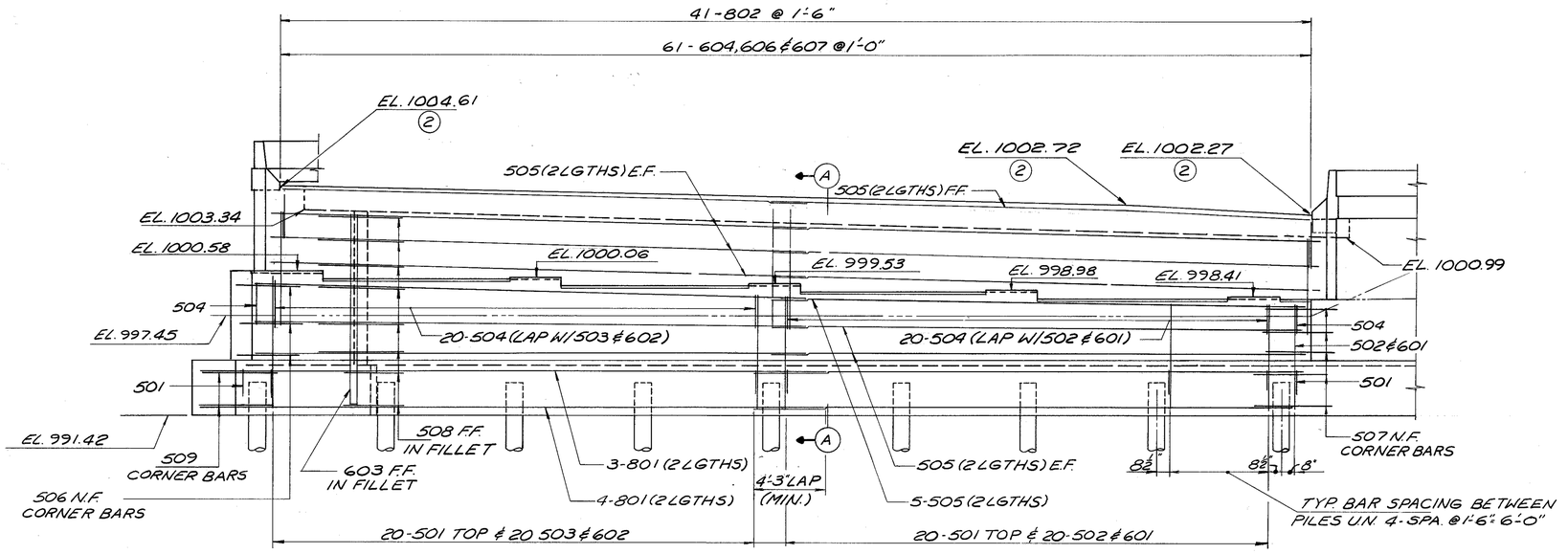
AKRON INNERBELT
SUM – 59 – 0.00




## PLAN – ABUTMENT A-I




## ELEVATION

## NOTES

1. ABBREVIATIONS USED ARE:
   NF - NEAR FACE
   FF - FAR FACE
   EF - EACH FACE
2. BACKWALL ELEVATIONS ARE GIVEN AS FINAL PAVEMENT ELEVATIONS AT FRONT FACE OF BACKWALL SEE DETAIL "B" SEE SHEET 7/32.
3. THE PREFIX "1A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT UNLESS SHOWN OTHERWISE.
4. POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WINGS, SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WING WALLS. 1.5 FT. THICK AT THE ABUTMENT AND 2.0 FT. THICK AT THE WINGS.
5. EMBANKMENT PROCEDURE:
   THE EMBANKMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FT. BACK OF THE ABUTMENT. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENT AND PIER P-1.
6. FOR PILING PLAN SEE SHEET 5/32.
7. FOR SECTION "A-A", VIEW "B-B", "C-C" AND ADDITIONAL DETAILS SEE SHEET 7/32.
8. BACKWALL CONCRETE:
   IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.
9. FOR BEARING DETAILS AT ABUTMENT SEE BEARING DETAILS ON SHEETS 266/455 THRU 268/455.
10. FOR EXPANSION JOINT DETAILS SEE SHEET 26A/455
11. REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN.

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# ABUTMENT A-I DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | D.T. | | R.J.P. | JGP | 12-15-82 | |

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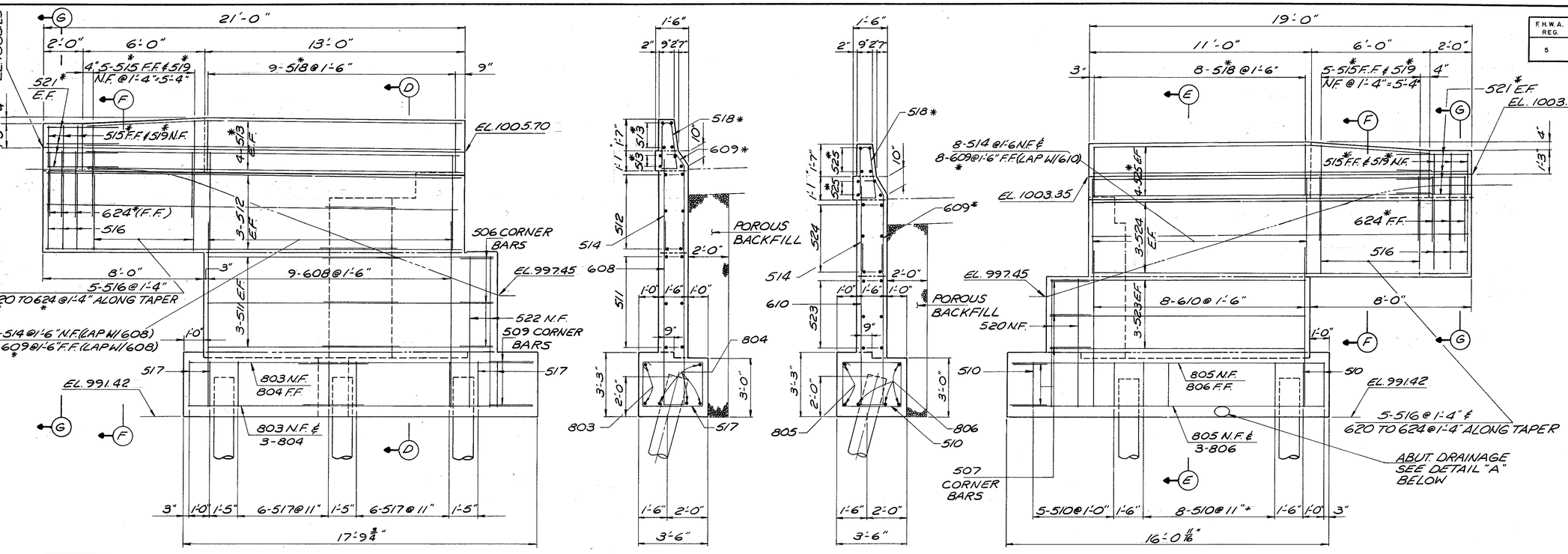
|---|---|---|---|
| 5 | OHIO | | |

350/455

AKRON INNERBELT
SUM-59-0.00

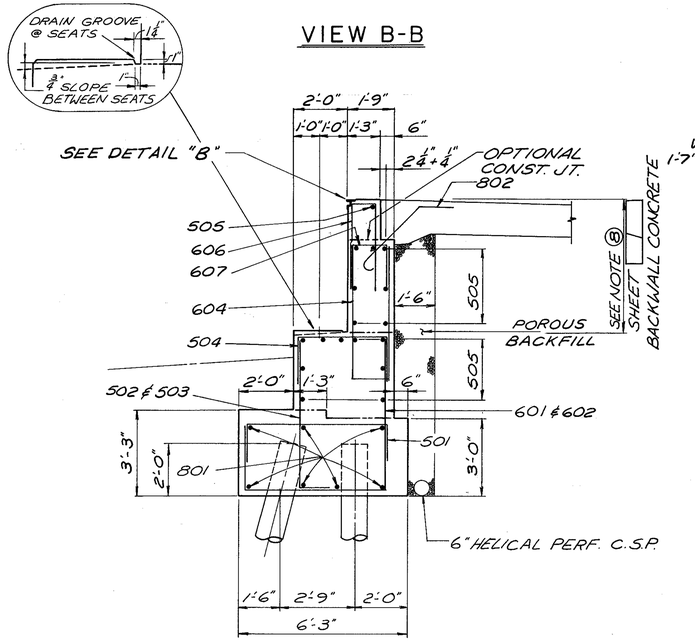



VIEW B-B

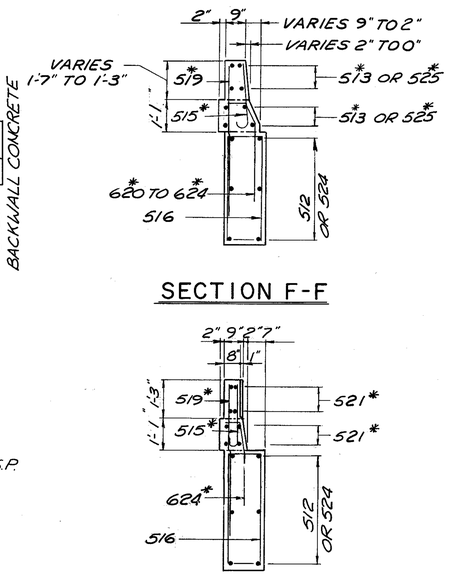
SECTION D-D

SECTION E-E

VIEW C-C



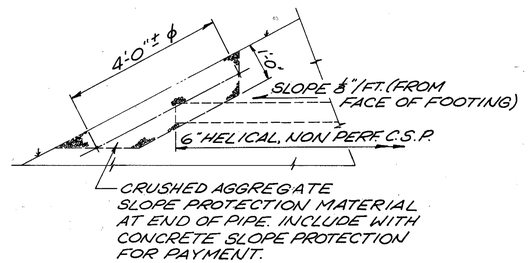

SECTION A-A




SECTION F-F

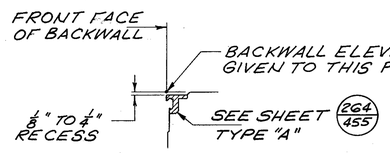



SECTION G-G




DETAIL "A"

TERMINATION OF 6" HELICAL, NON-PERF. C.S.P. AT SLOPE.




DETAIL "B"

## NOTES

*INDICATES REINFORCING BARS TO BE EPOXY COATED.

FOR NOTES AND DETAILS NOT SHOWN HERE, SEE ABUTMENT DETAIL SHEET 6/32.

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# ABUTMENT A-1 DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | D.T. | | R.J.P. | JAP | 12-16-82 | |

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AKRON INNERBELT
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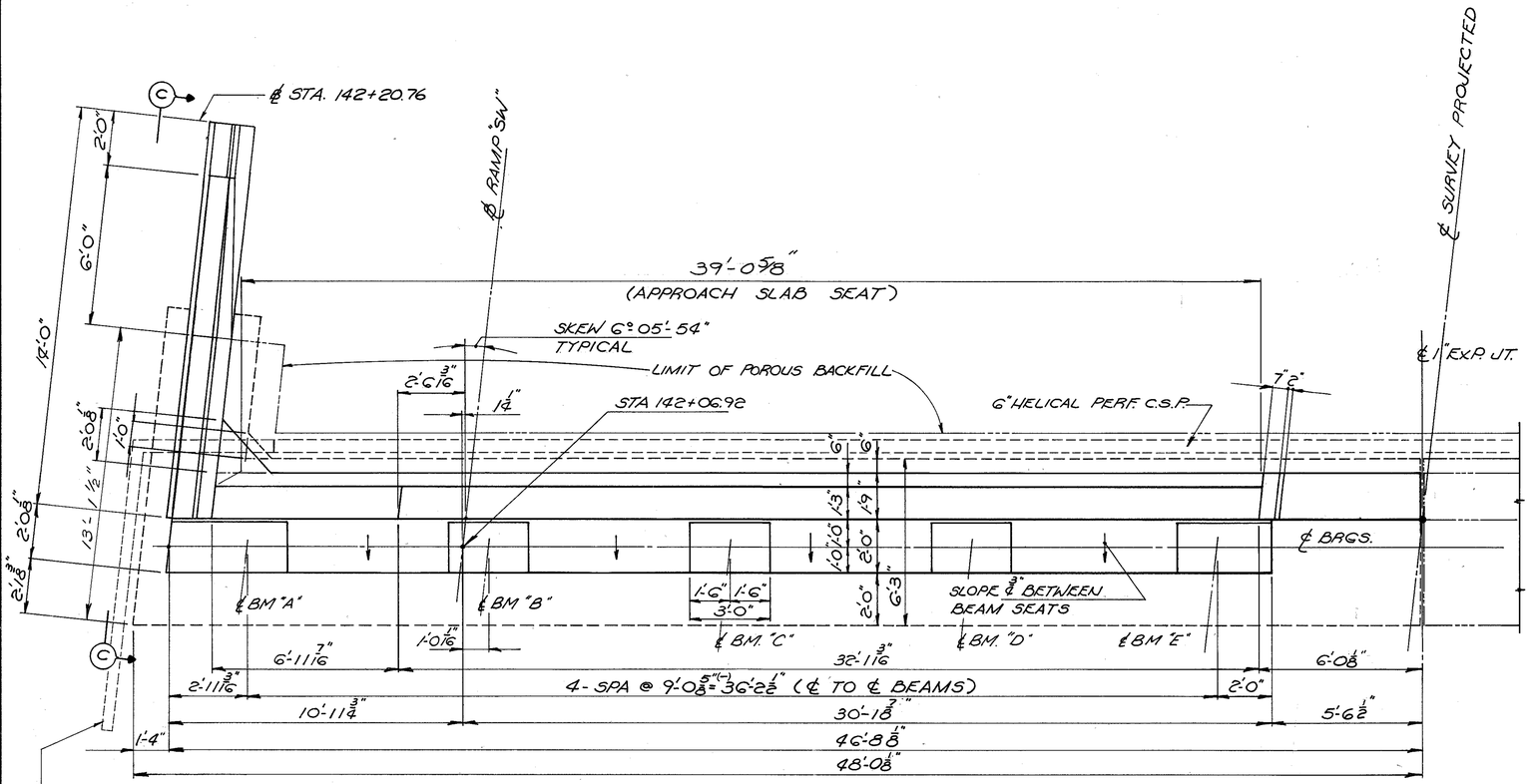
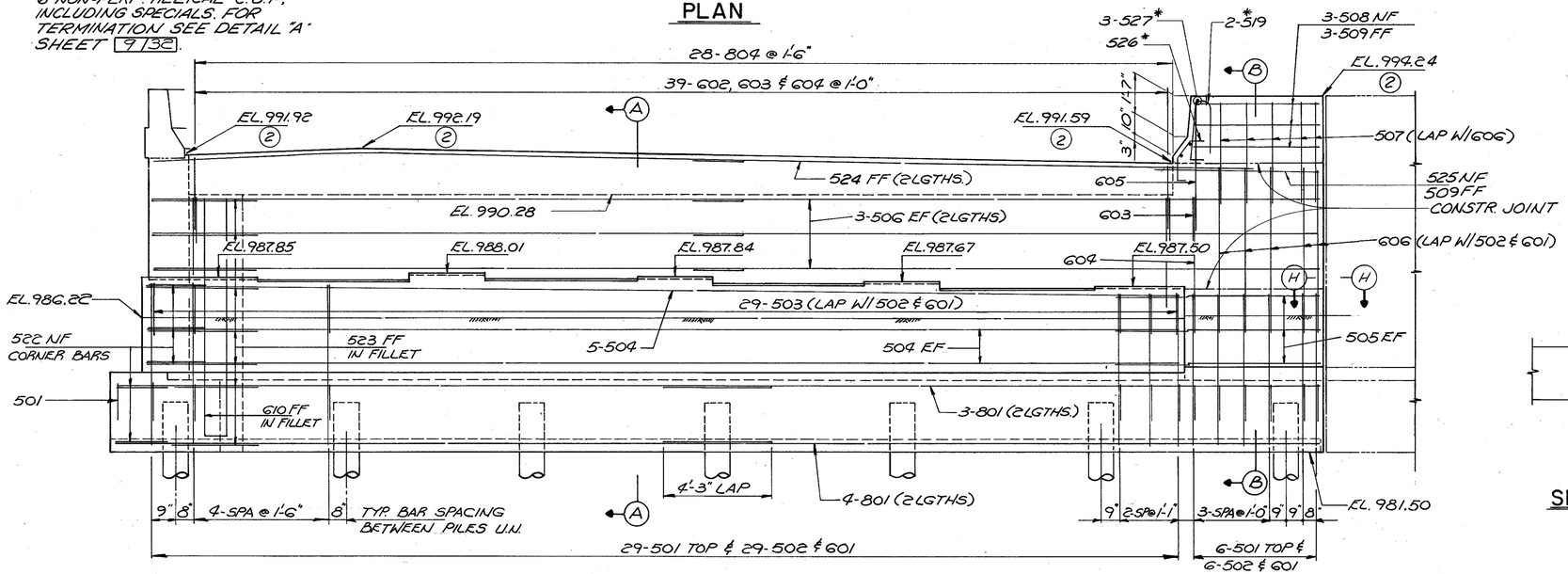
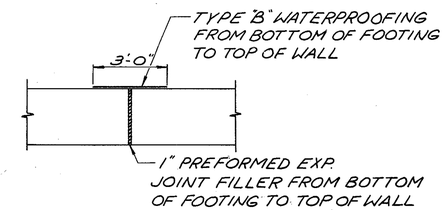



PLAN




ELEVATION




SECTION H-H

## NOTES:

(1) ABBREVIATIONS USED ARE:
NF - NEAR FACE
FF - FAR FACE
EF - EACH FACE

(2) BACKWALL ELEVATIONS ARE GIVEN AS FINAL PAVEMENT ELEVATIONS AT FRONT FACE OF BACKWALL SEE DETAIL "B" SHEET 7 32

(3) THE PREFIX "2A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT UNLESS SHOWN OTHERWISE.

(4) POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WING, SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WING WALL. 15 FT. THICK AT THE ABUTMENT AND 2.0 FT. THICK AT WING.

(5) REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN.

(6) FOR PILING PLAN, SEE SHEET 5 32.

(7) FOR SECTIONS "A-A", "B-B", VIEW "C-C" AND ADDITIONAL DETAILS SEE SHEET 9 32.

(8) BACKWALL CONCRETE:
IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

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# ABUTMENT A-2 DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | JWW | | R.J.P. | RJP | 12-15-82 | |

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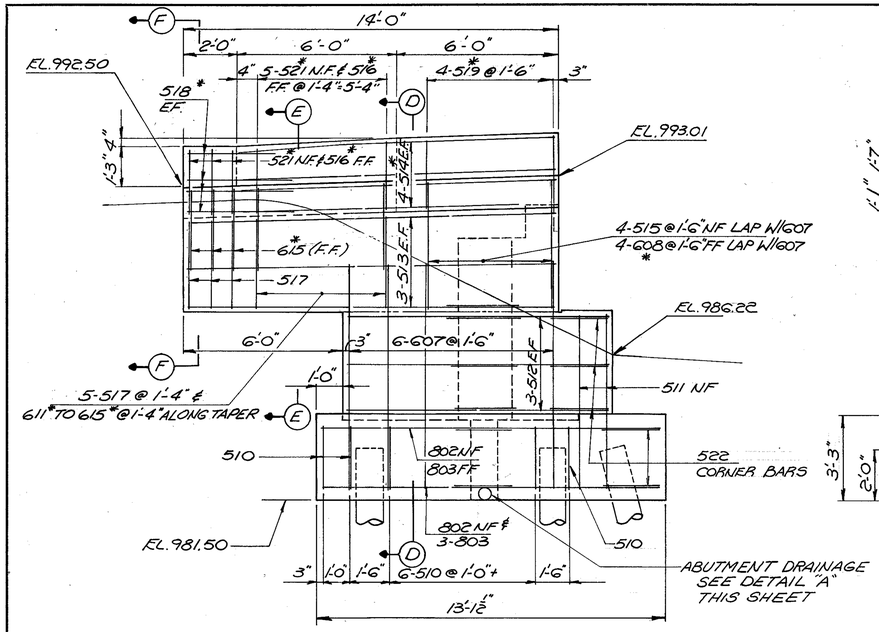
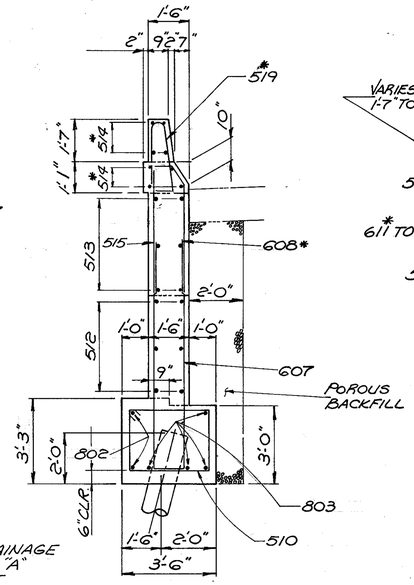
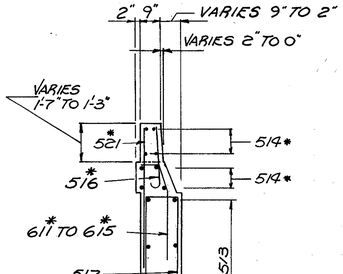
AKRON INNERBELT
SUM-59-0.00



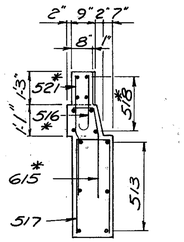

VIEW C-C



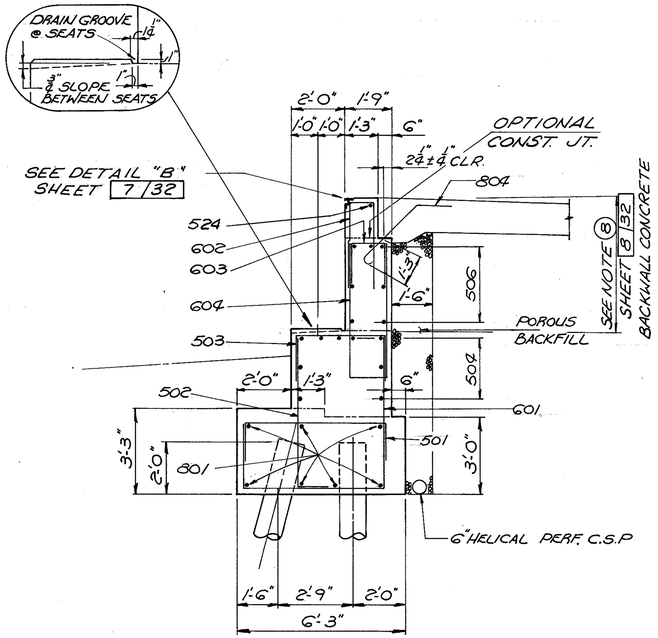

SECTION D-D



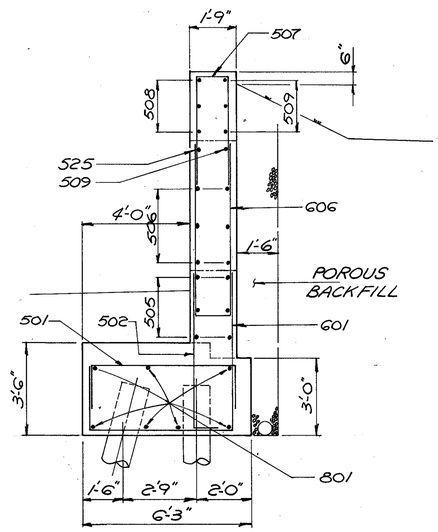

SECTION E-E



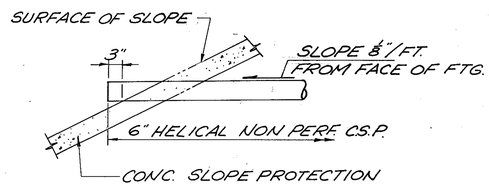

SECTION F-F




SECTION A-A




SECTION B-B




DETAIL "A"

TERMINATION OF 6" HELICAL NON-PERF. C.S.P. AT SLOPE

## NOTES

*(1) *INDICATES REINFORCING BARS TO BE EPOXY COATED.

(2) FOR NOTES AND DETAILS NOT SHOWN HERE, SEE ABUTMENT DETAIL SHEET 8/32.

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# ABUTMENT A-2 DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | JWN | | R.J.P. | JRP | 12-15-82 | |

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| 5 | OHIO | | |

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AKRON INNERBELT
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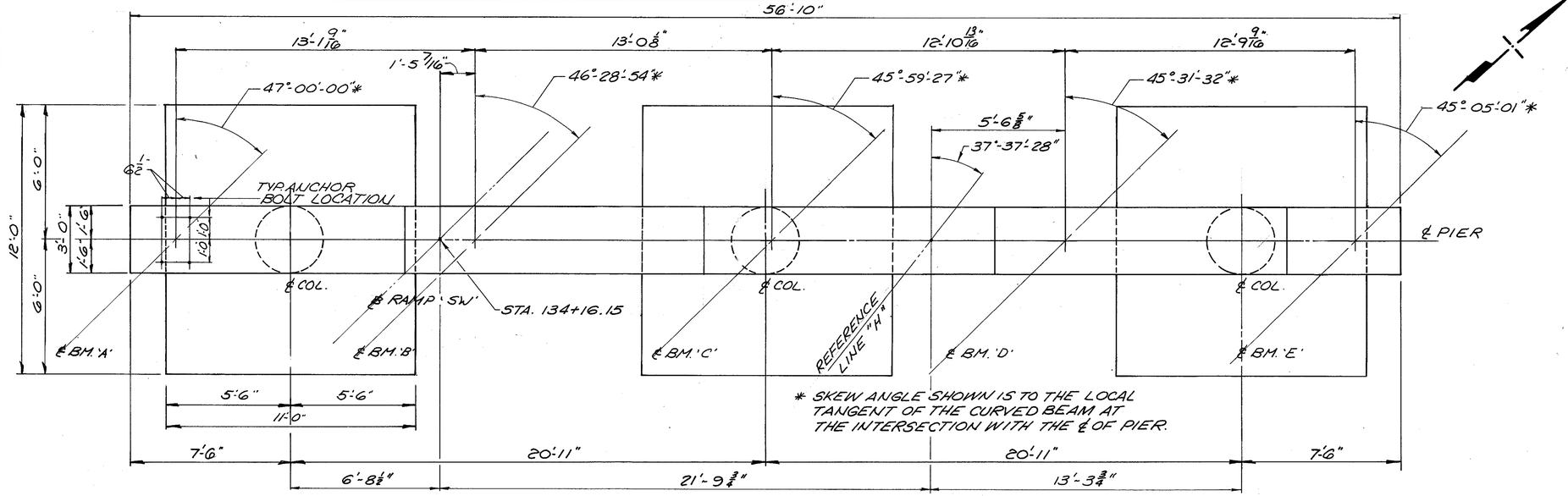
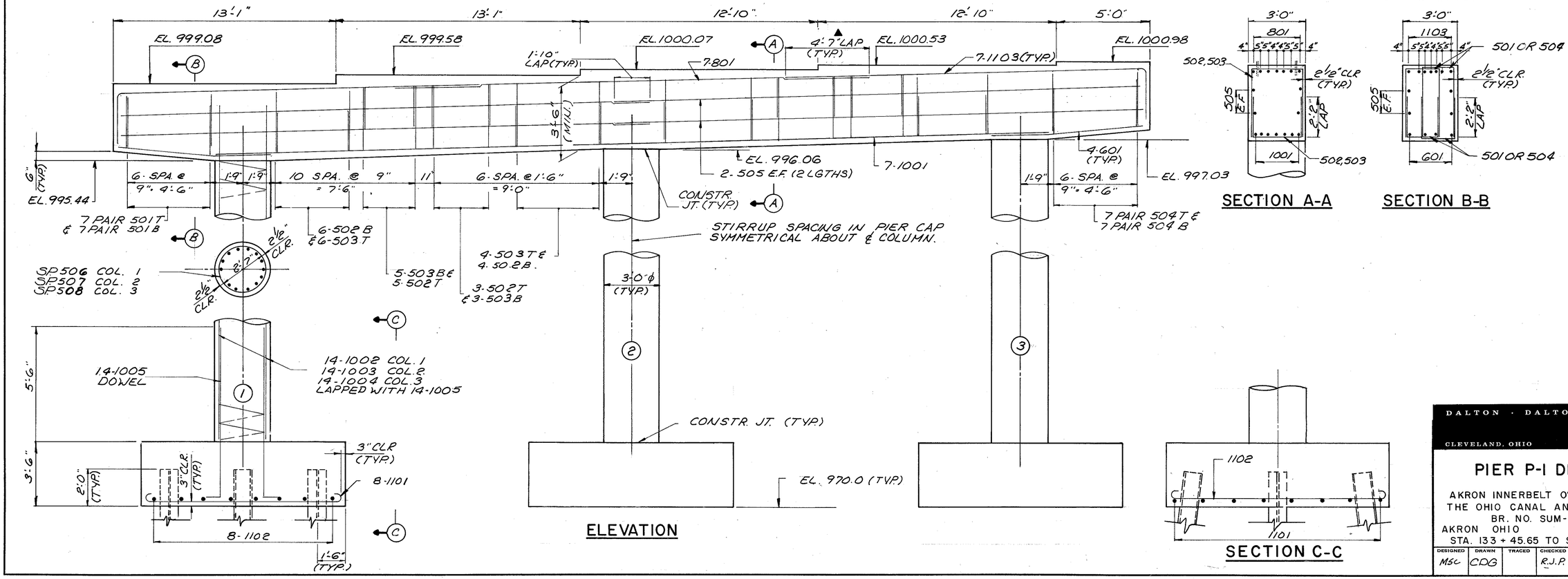



* SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF THE CURVED BEAM AT THE INTERSECTION WITH THE ℄ OF PIER.

## PLAN - PIER P-I




## ELEVATION




## SECTION A-A




## SECTION B-B




## SECTION C-C

## NOTES

1. SPLICES FOR REINFORCING BAR SIZE #11 SHALL BE MADE WITH APPROVED MECHANICAL CONNECTORS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
2. ALL ANCHOR BOLTS SHALL BE PRE-SET IN CONCRETE.
3. THE PREFIX "I.P." SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS SHOWN OTHERWISE.
4. FOR PILING PLAN, SEE SHEET 5/32.
5. FOR LOCATIONS AND DETAILS OF LIGHTING CONDUITS AND LIGHT FIXTURES AT PIER P-1 SEE LIGHTING PLANS.
6. FOR CIRCUIT GROUNDING DETAILS AT PIERS, SEE LIGHTING PLANS.
7. FOR BEARING DETAILS AT PIERS P-1 THRU P-3, SEE BEARING DETAILS ON SHEETS 266/455 THRU 268/455.
8. SEE NOTE (5) SHEET 6/32.
9. ▲ PLACE 801 BARS BELOW 1103 BARS IN LAP SPLICE.

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# PIER P-I DETAILS

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| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
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AKRON INNERBELT
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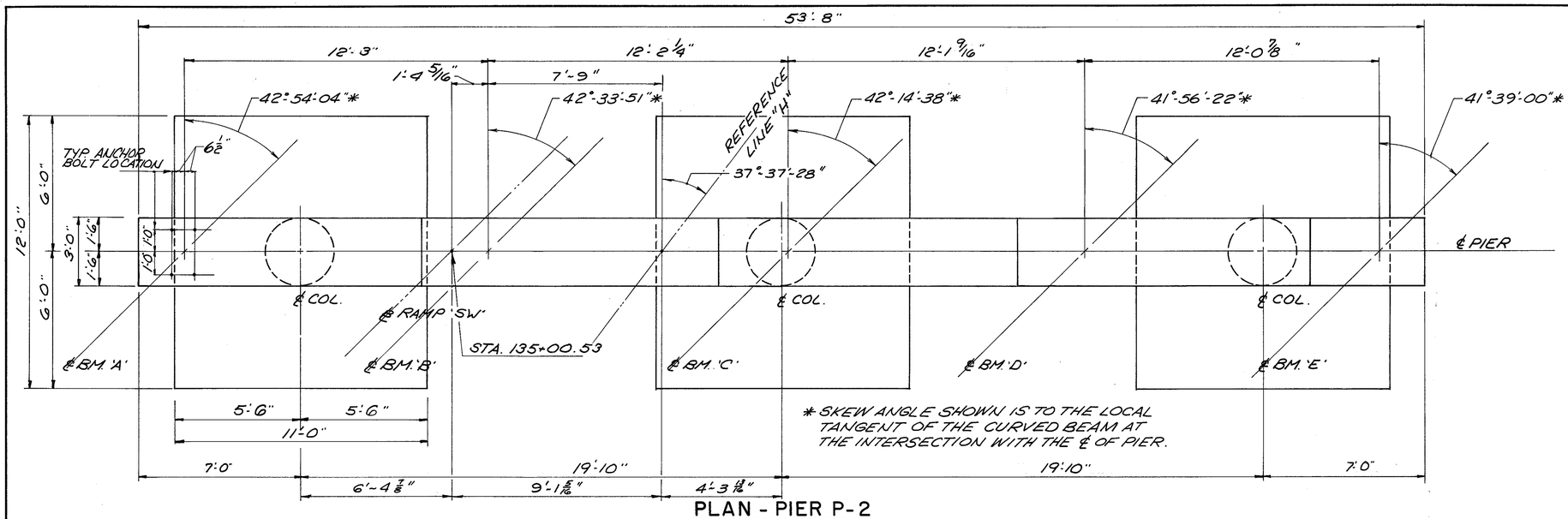
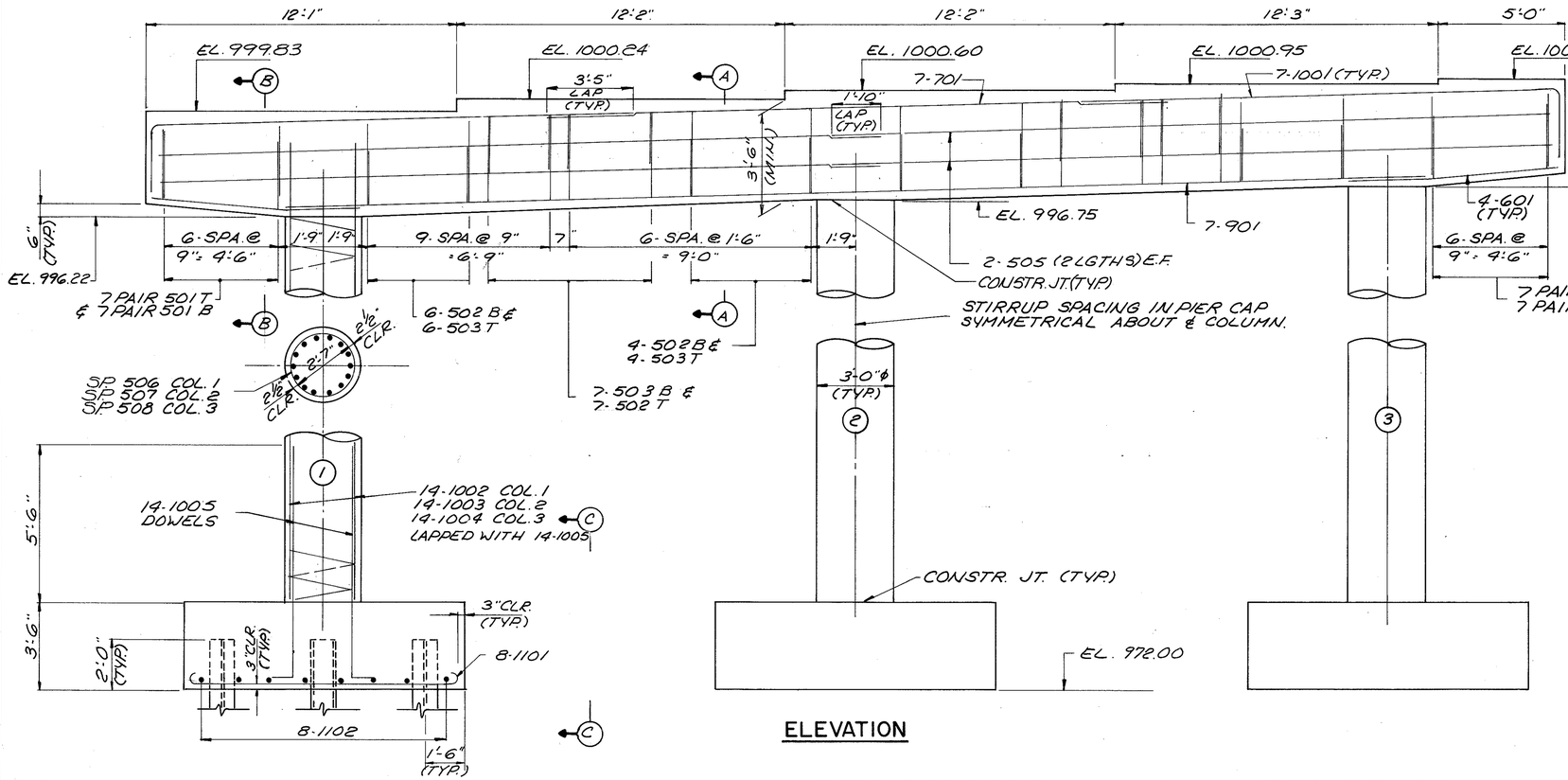
## NOTES

1. THE PREFIX "2P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS SHOWN OTHERWISE.
2. FOR ADDITIONAL NOTES SEE SHEET 10132.

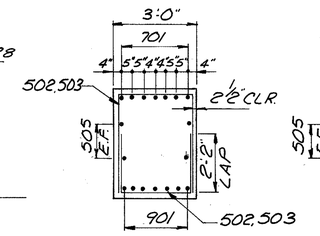



* SKEW ANGLE SHOWN IS TO THE LOCAL TANGENT OF THE CURVED BEAM AT THE INTERSECTION WITH THE ℄ OF PIER.

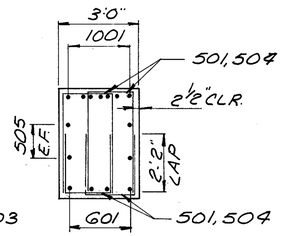
## PLAN - PIER P-2



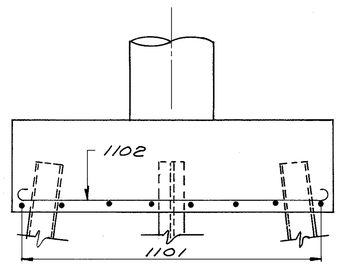

## ELEVATION




## SECTION A-A




## SECTION B-B




## SECTION C-C

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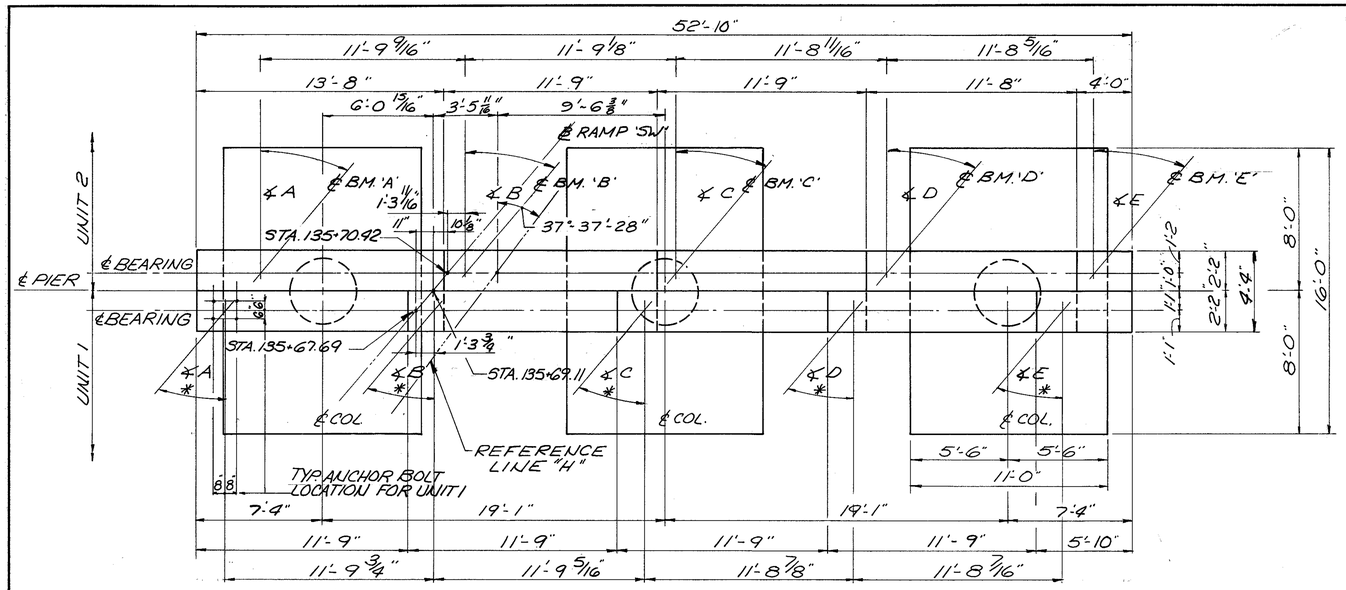
# PIER P-2 DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | R.J.P. | JDP | 12-15-82 | |




PLAN—PIER P-3

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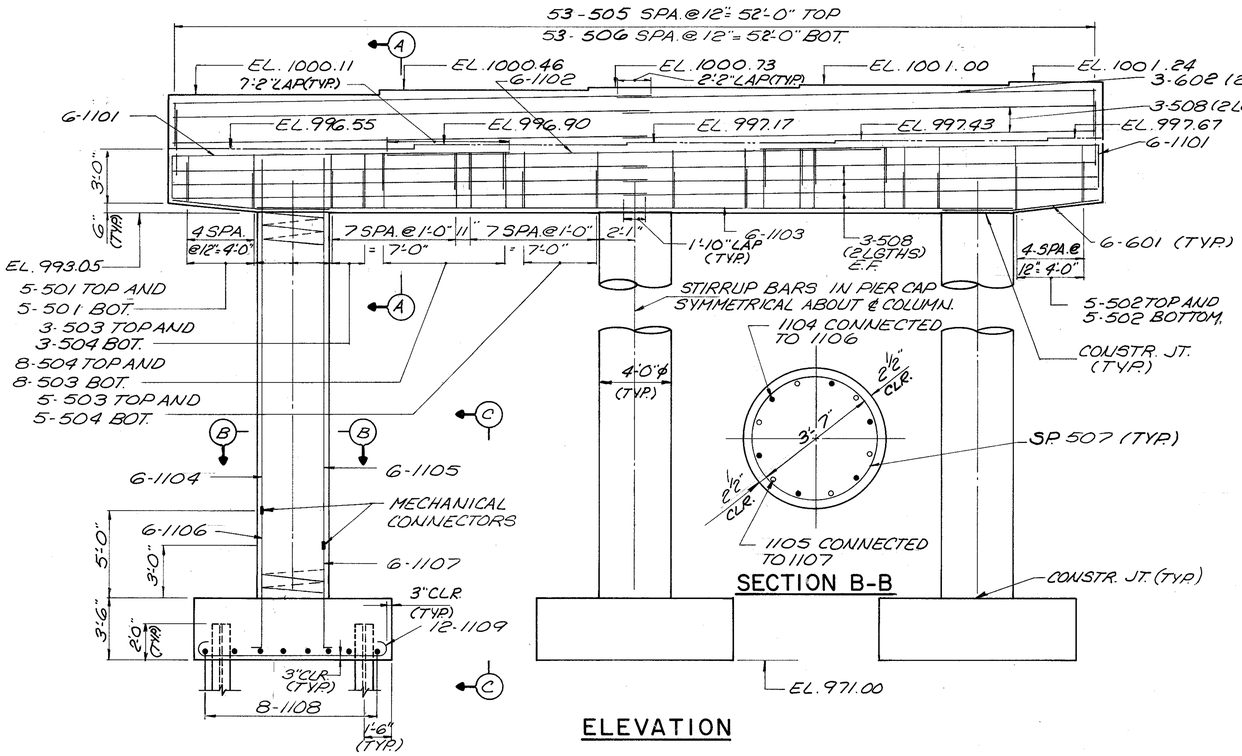
| SKEW ANGLE TABLE | | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| UNIT 1 * | 40°-29'-03" | 40°-15'-25" | 40°-02'-31" | 39°-50'-17" | 39°-38'-44" |
| UNIT 2 | 39°-44'-40" | 39°-30'-24" | 39°-17'-19" | 39°-05'-18" | 38°-54'-21" |

* SKEW ANGLE SHOWN FOR UNIT 1 BEAMS IS TO THE LOCAL TANGENT OF THE CURVED BEAM AT THE INTERSECTION WITH THE ℄ BEARING.

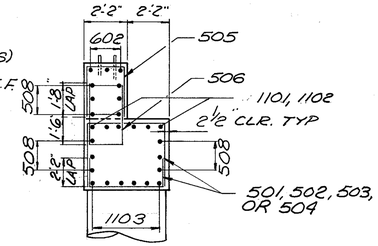
## NOTES

1. THE PREFIX "3P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS SHOWN OTHERWISE.
2. FOR ADDITIONAL NOTES SEE SHEET 10/32.

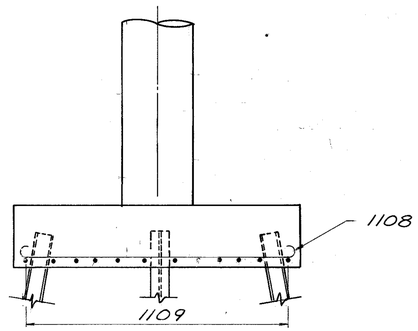



ELEVATION

SECTION B-B




SECTION A-A




SECTION C-C

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# PIER P-3 DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
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AKRON OHIO SUMMIT COUNTY
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| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | R.J.P. | RJP | 12-15-82 | |

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|---|---|---|---|
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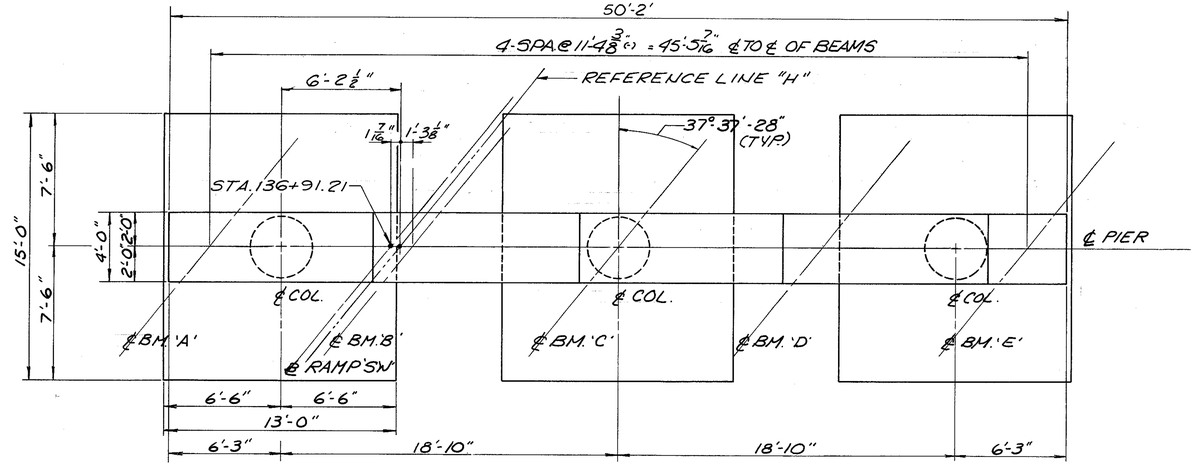
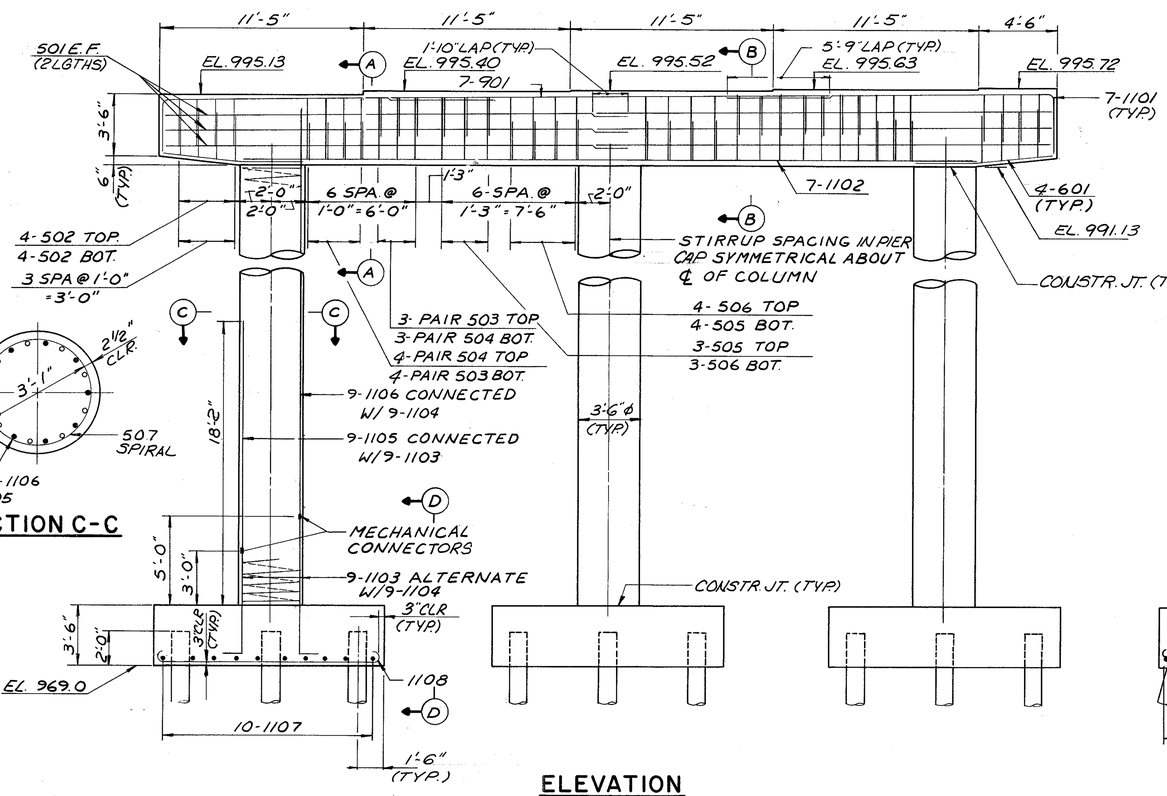
SUM-59-0.00

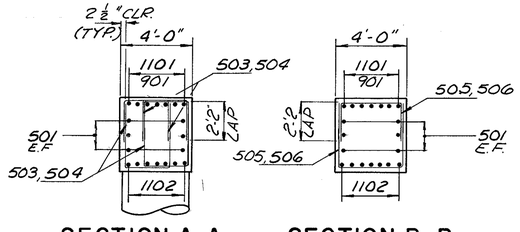
NOTES

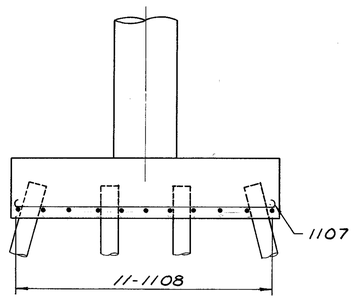
1. THE PREFIX "4P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS SHOWN OTHERWISE.
2. FOR ADDITIONAL NOTES SEE SHEET 10/32.




## PLAN - PIER P-4

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# PIER P-4 DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
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STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | DT | | RJP | JDT | 12-15-82 | |

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|---|---|---|---|
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AKRON INNERBELT
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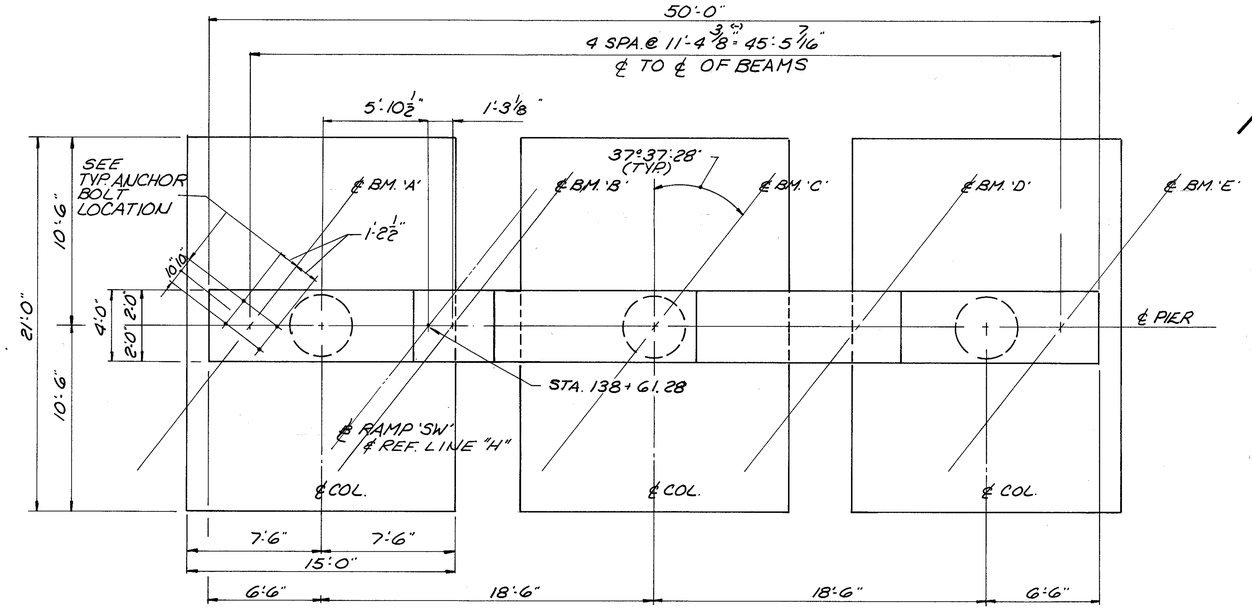
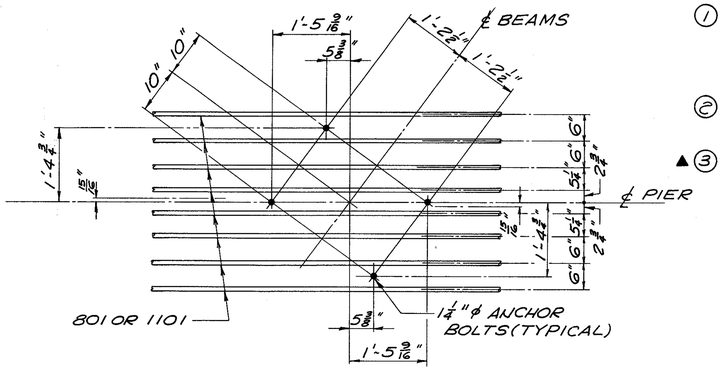


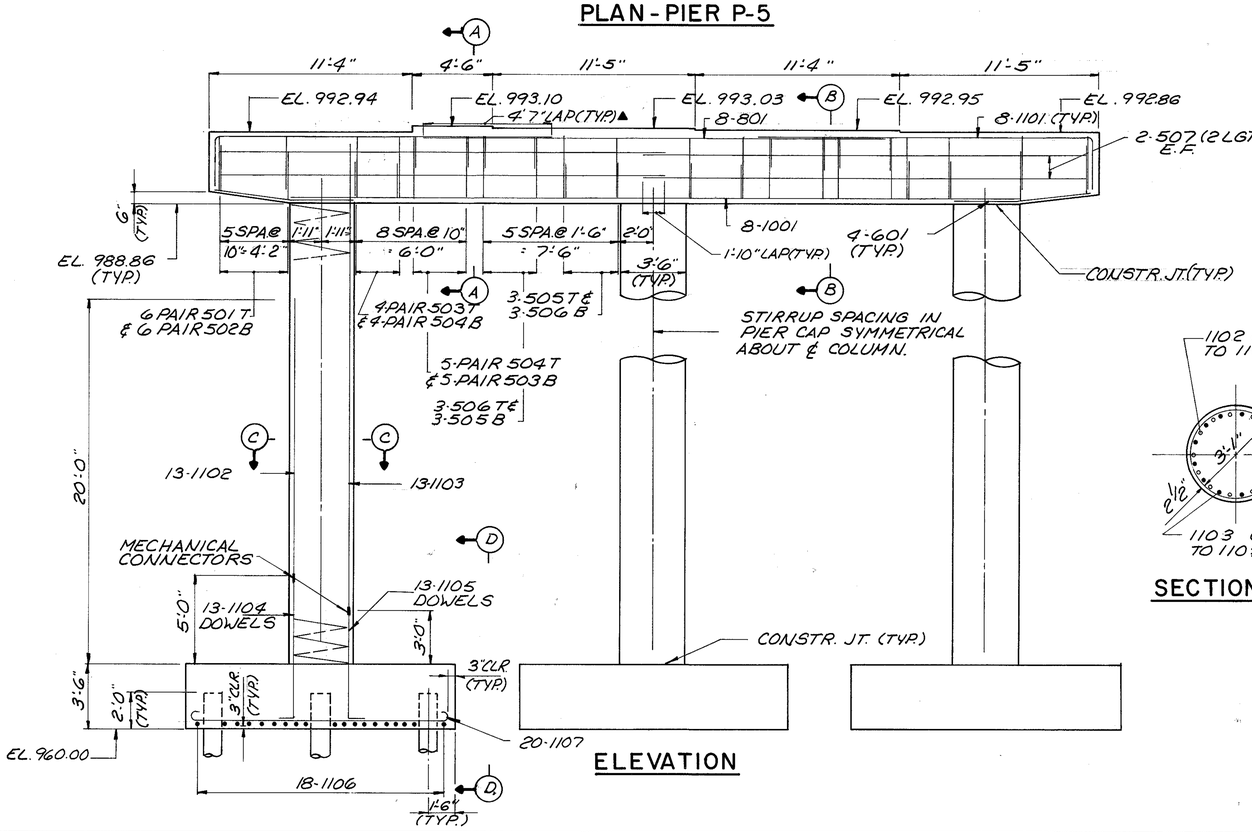

PLAN - PIER P-5



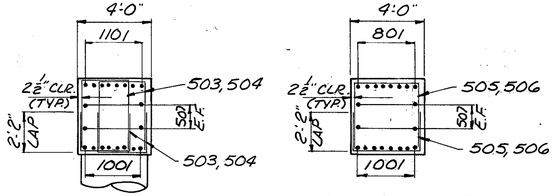

TYPICAL ANCHOR BOLT LOCATION

NOTES

1. THE PREFIX "5P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS SHOWN OTHERWISE.
2. FOR ADDITIONAL NOTES SEE SHEET 10/32.
3. ▲ PLACE 801 BARS BELOW 1101 BARS IN LAP SPLICE.

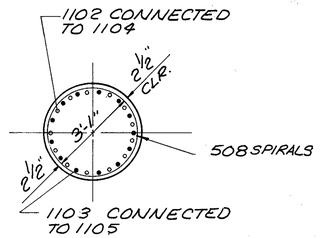



ELEVATION

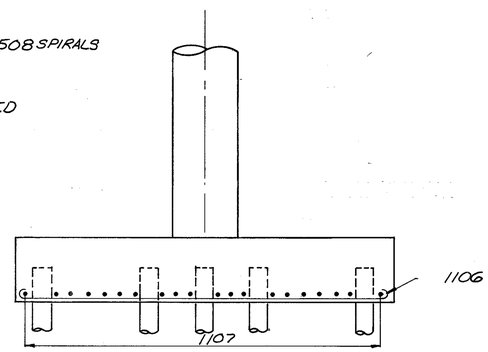



SECTION A-A

SECTION B-B




SECTION C-C




SECTION D-D

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## PIER P-5 DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133+45.65 TO STA. 142+09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | R.J.P. | JGP | 12-5-82 | |

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|---|---|---|---|
| 5 | OHIO | | |

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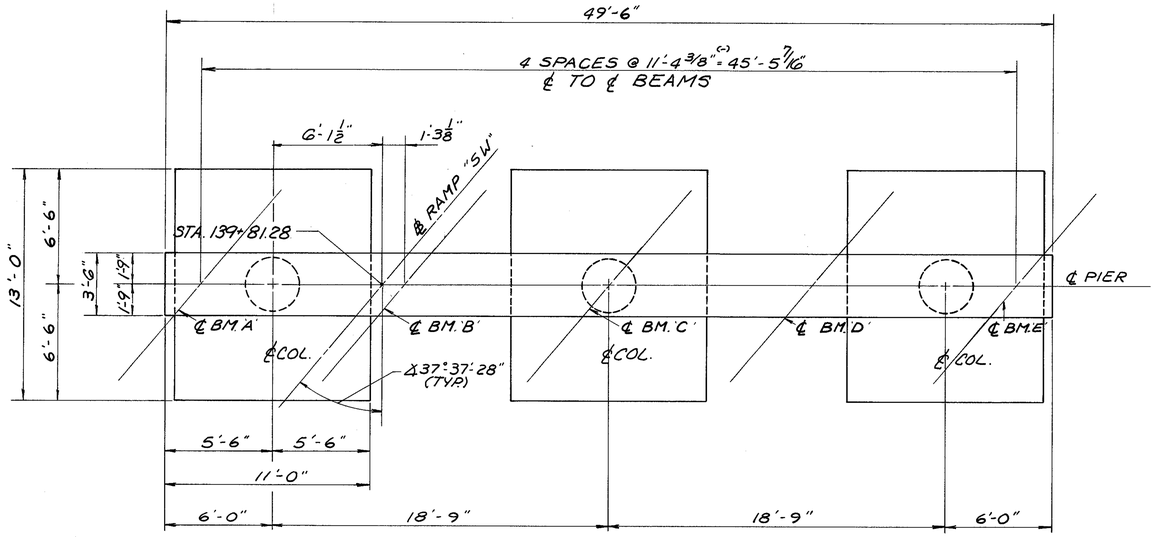
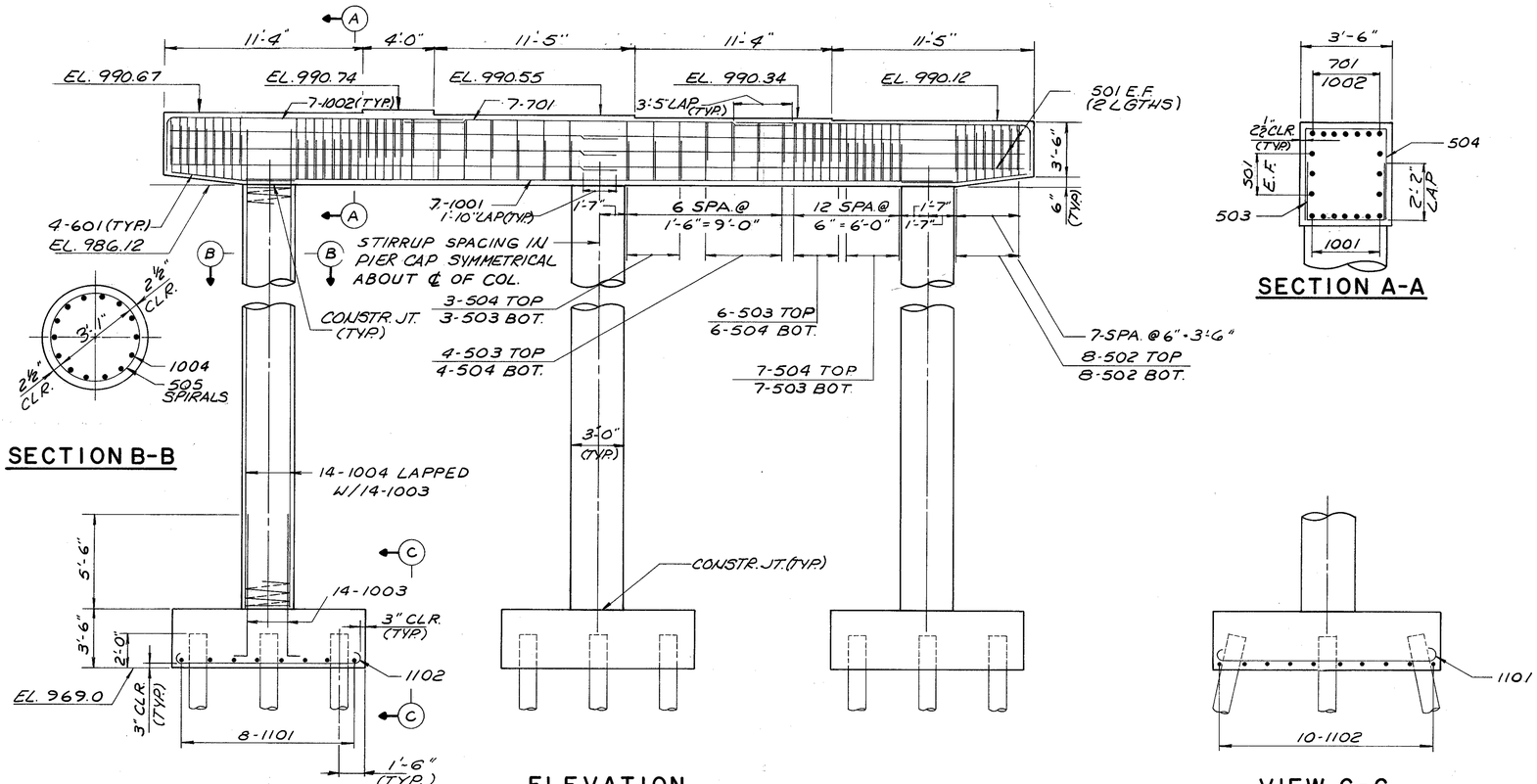
AKRON INNERBELT
SUM-59-0.00

NOTES

1. THE PREFIX "6P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS OTHERWISE NOTED.
2. FOR ADDITIONAL NOTES SEE SHEET 10/32.




PLAN - PIER P-6

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# PIER P-6 DETAILS

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AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | D.T. | | R.J.P. | JAP | 12-16-92 | |

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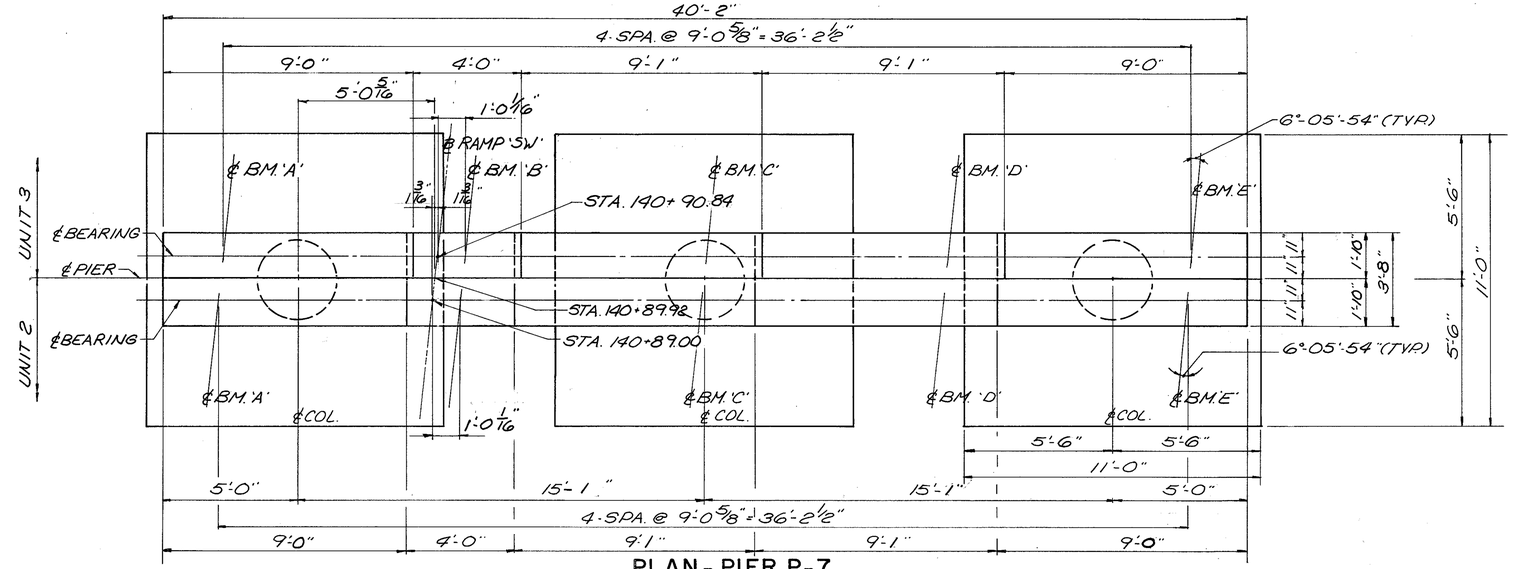
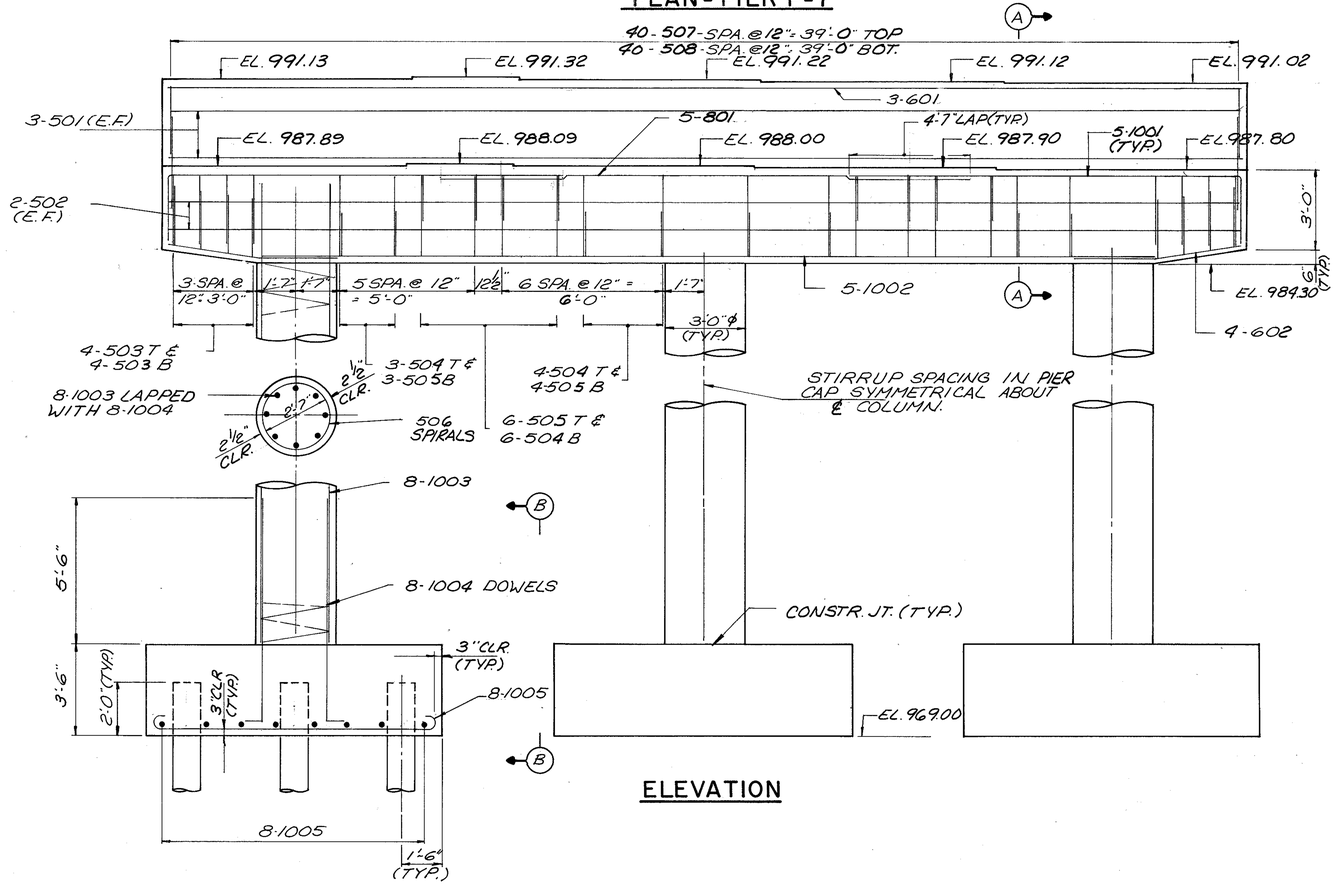
NOTES

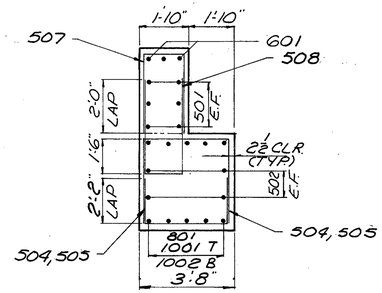
1. THE PREFIX "7P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS OTHERWISE NOTED.
2. FOR LOCATIONS AND DETAILS OF LIGHTING CONDUITS AND LIGHT FIXTURES AT PIER P-7 SEE LIGHTING PLANS.
3. FOR ADDITIONAL NOTES SEE SHEET 10/32.



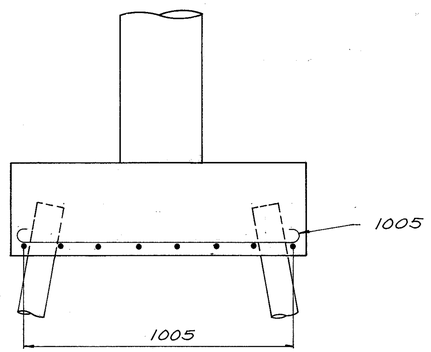

## PLAN - PIER P-7




## ELEVATION




## SECTION A-A




## SECTION B-B

DALTON · DALTON · NEWPORT

CLEVELAND, OHIO — AKRON, OHIO

16/32

## PIER P-7 DETAILS

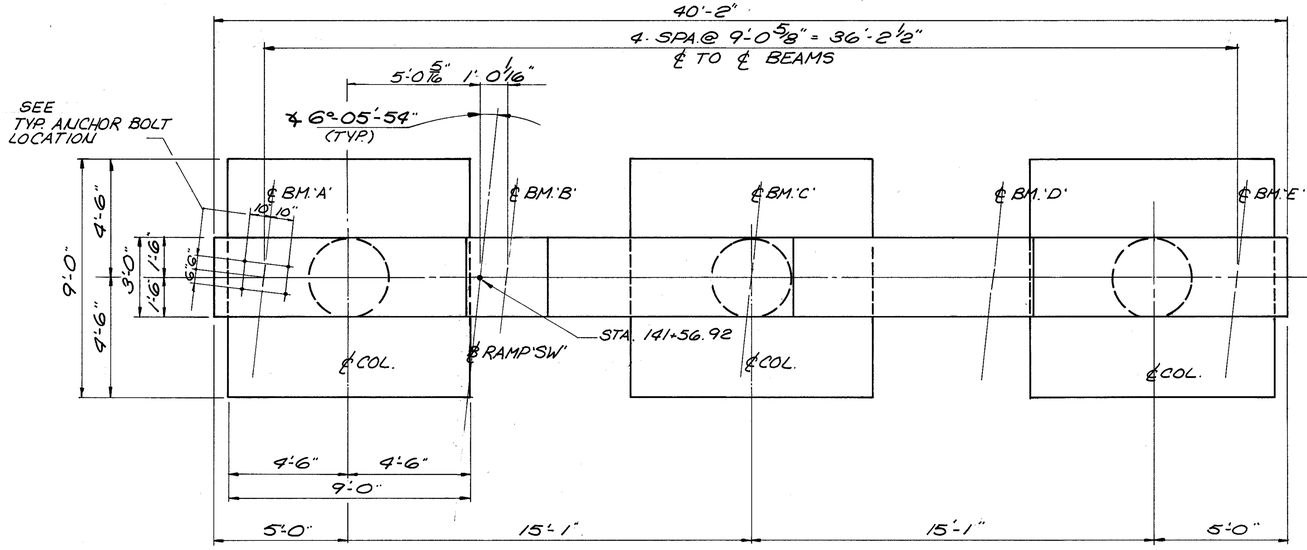
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | R.J.P. | RJP | 12-15-82 | |

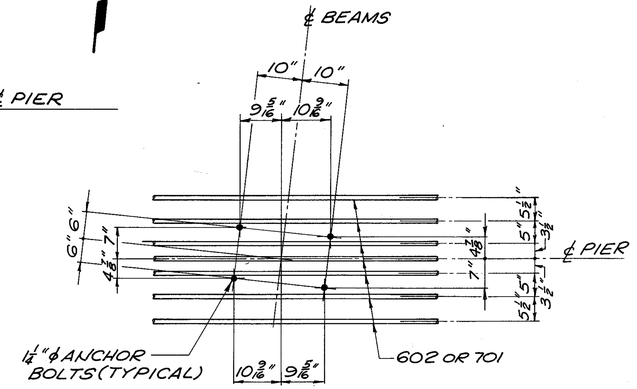
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

360/455

AKRON INNERBELT
SUM-59-0.00




PLAN— PIER P-8

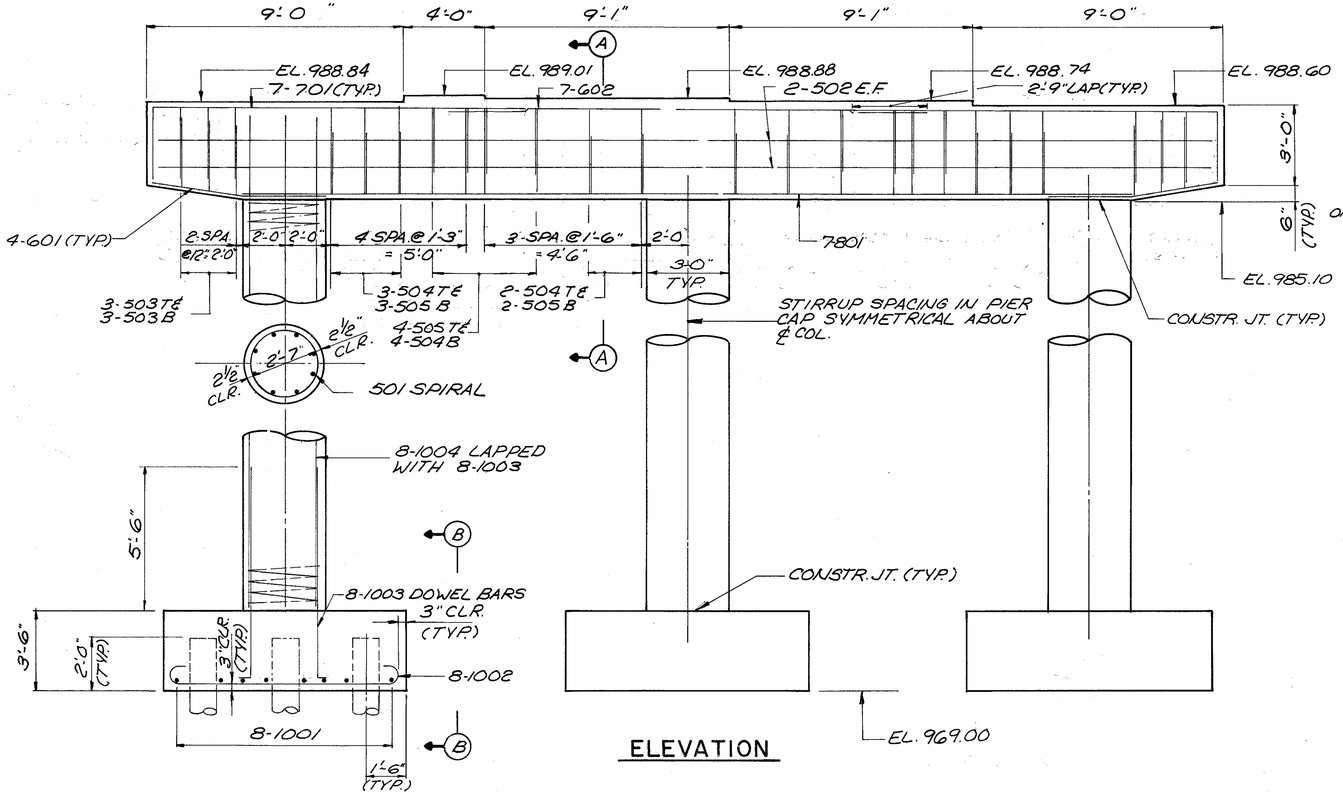



TYPICAL ANCHOR BOLT LOCATION

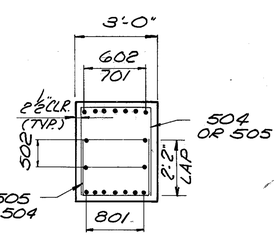
## NOTES

1. THE PREFIX "8P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS UNLESS OTHERWISE NOTED.
2. FOR LOCATIONS AND DETAILS OF LIGHTING CONDUITS AND LIGHT FIXTURES AT PIER P-8 SEE LIGHTING PLANS.
3. FOR ADDITIONAL NOTES SEE SHEET 10/32.

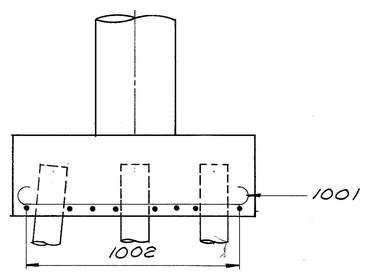
▲ 4. PLACE 602 BARS BELOW 701 BARS IN LAP SPLICE.




ELEVATION




SECTION A—A




SECTION B-B

DALTON · DALTON · NEWPORT

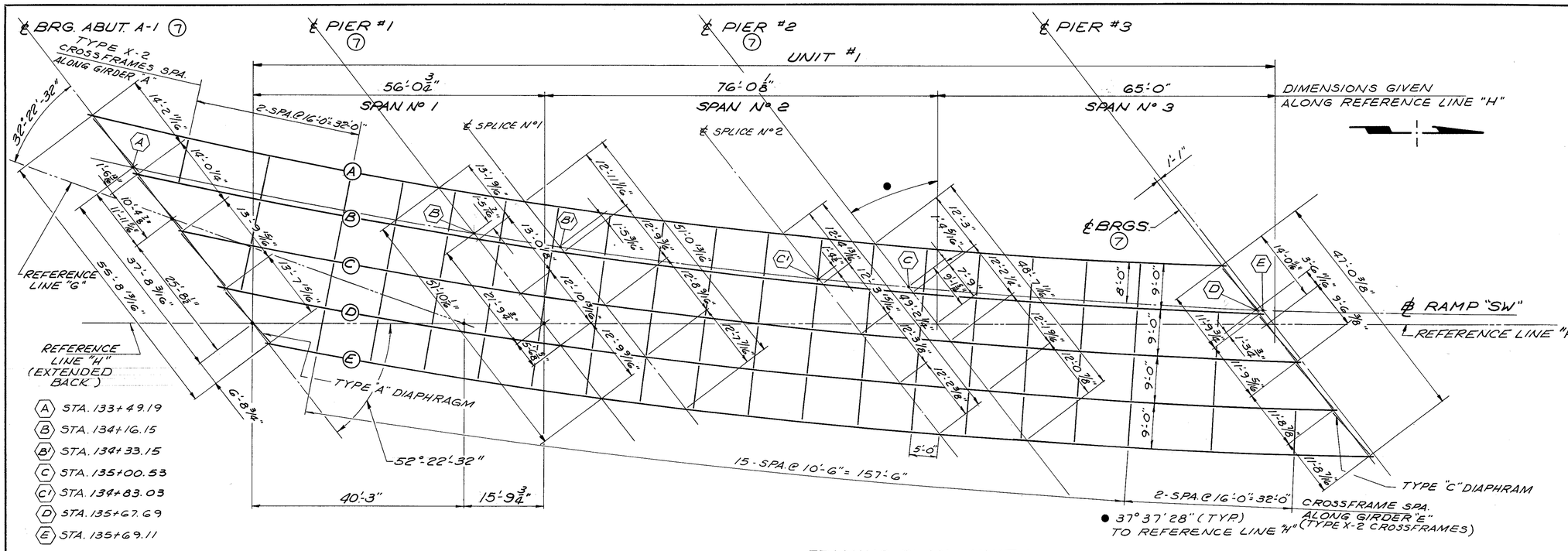
CLEVELAND, OHIO AKRON, OHIO

17/32

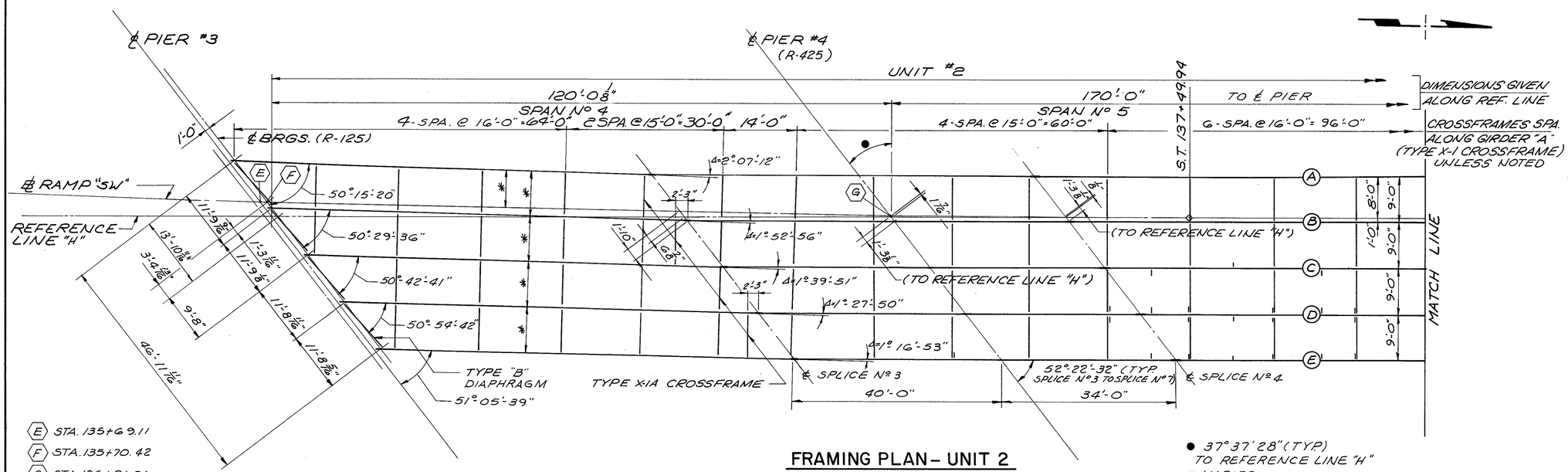
# PIER P-8 DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133+45.65 TO STA. 142+09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | R.J.P. | | 12-15-82 | |




## FRAMING PLAN - UNIT I




## FRAMING PLAN - UNIT 2

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

361/455

AKRON INNERBELT
SUM-59-0.00

## NOTES

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A588, GRADE 50 WEATHERING STEEL, UNLESS NOTED OTHERWISE.
2. INTERMEDIATE STIFFENERS AT LOCATIONS OTHER THAN CROSSFRAMES, SHALL BE PLACED ON ONE SIDE OF THE GIRDER WEB. IN ACCORDANCE WITH MAXIMUM STIFFENER SPACING SHOWN ON THE GIRDER ELEVATION. THESE STIFFENERS SHALL ALTERNATE ON EACH SIDE OF INTERIOR GIRDER WEB. FOR EXTERIOR GIRDERS, ALL STIFFENERS SHALL BE PROVIDED ON THE INSIDE.
3. INTERMEDIATE STIFFENERS AT CROSSFRAME LOCATIONS SHALL BE PLACED IN PAIRS, EXCEPT FOR EXTERIOR BEAMS OR GIRDERS.
4. ALL FIELD SPLICES SHALL BE MADE WITH 1" DIAMETER HIGH STRENGTH STEEL BOLTS, CONFORMING TO A325, TYPE 3. THE BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF EXTERIOR GIRDERS AND ON THE BOTTOM OF THE BOTTOM FLANGE PLATES AND ON TOP OF THE TOP FLANGE PLATES.
5. FOR BEAM AND GIRDER ELEVATIONS SEE SHEETS 20/32 AND 21/32.
6. FOR CROSSFRAMES ℄ FRAMING DETAILS SEE SHEET 362/455.
7. FOR BEARING DETAILS FOR UNIT Nº 1 SEE SHEET 360/455 THRU 360/455
8. FOR DEFLECTION AND CAMBER DETAILS SEE SHEET 22/32 THRU. 24/32.
9. WHERE A SHAPE OR PLATE IS DESIGNATED "CVN" THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS (AASHTO - ZONE 2). ALL FIELD SPLICE MATERIAL, EXCEPT FILL PLATES, SHALL BE "CVN".
10. ALL FLANGE AND WEB BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS. THE WELD REINFORCEMENTS NEED NOT BE GROUND FLUSH.

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18/32

## FRAMING PLAN

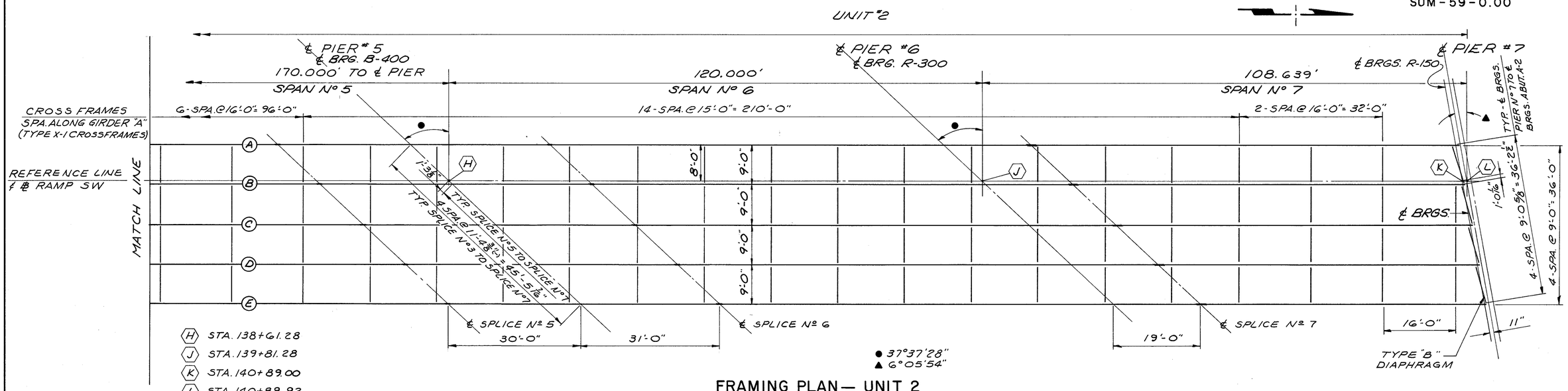
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| HKII RER | F.F. | | R.J.P. | | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

362/455

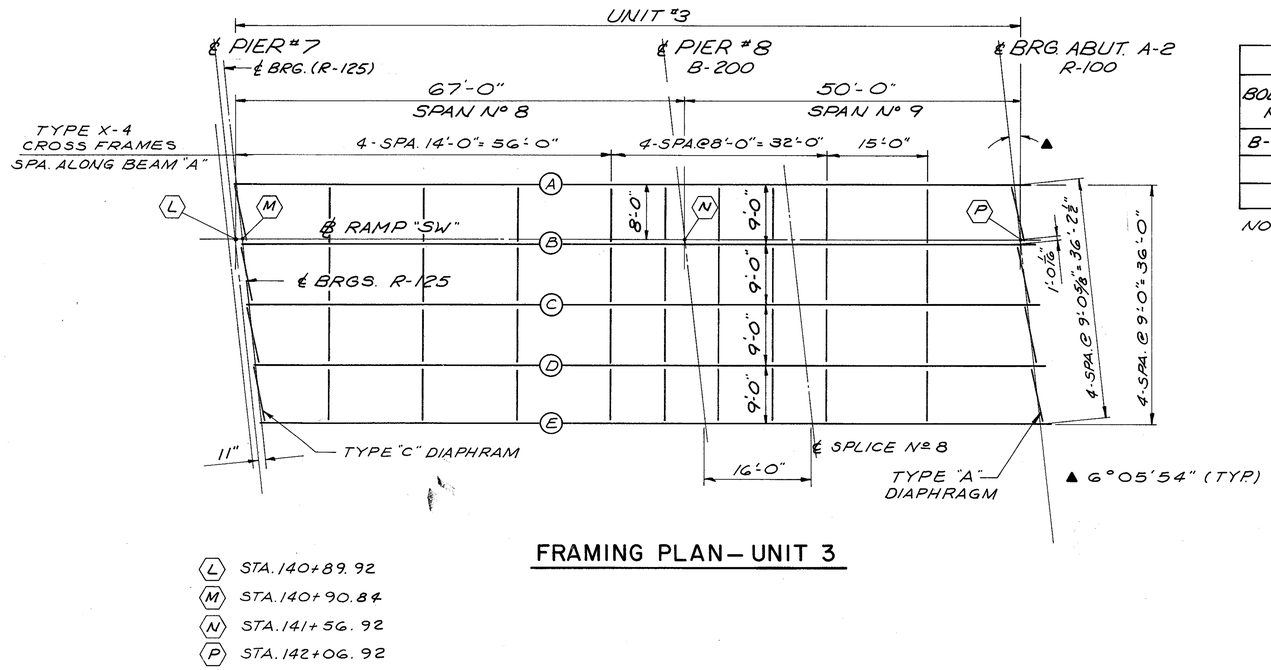
AKRON INNERBELT
SUM-59-0.00




## FRAMING PLAN— UNIT 2

### NOTE

(1) FOR NOTES SEE SHEET 18/32.




## FRAMING PLAN— UNIT 3

## BEARING UNITS

| BOLSTER Nº | ROCKER Nº | DIMENSIONS (INCHES) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | F | G | H | K | L | M | R | T | Y |
| B-400 | | 4 1/2 | 24 | 4 1/2 | – | – | – | 23 1/8 | 17 | 33 | – | 14 1/2 | 4 | 2 3/16 |
| | R-425 | 4 1/2 | 25 | 4 1/2 | 4 | 7/8 | 15 | 23 3/8 | 17 | 34 | 31 | 15 | 4 | 2 3/16 |
| | | | | | | | | | | | | | | |

NOTES: FOR DETAILS NOT SHOWN, SEE STANDARD DRAWING RB-1-55
ANCHOR BOLTS FOR BOLSTERS IN ALL CASES SHALL EXTEND A MINIMUM OF 1'-3" INTO THE CONCRETE.

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19/32

## FRAMING PLAN

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P. | | 12-15-82 | |

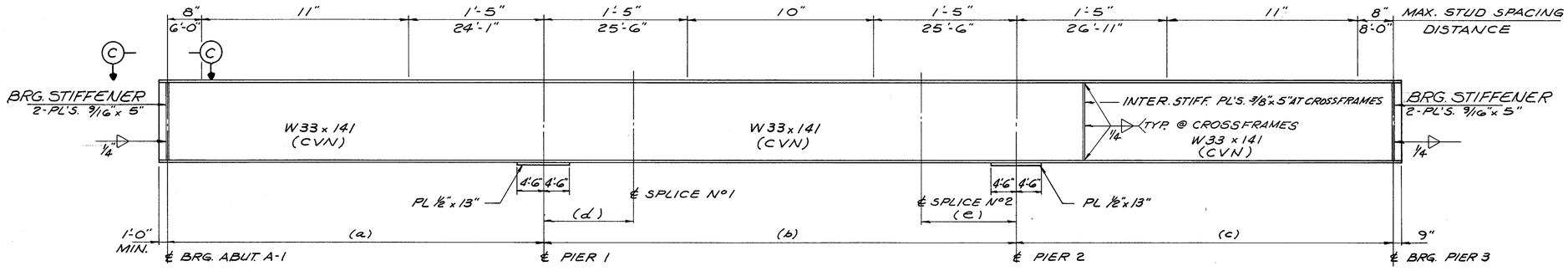
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

363/455

AKRON INNERBELT
SUM-59-0.00

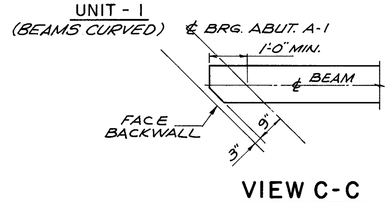
## NOTES

1. LOCATE CONNECTORS IN GROUPS OF 3 AS SHOWN. SHEAR CONNECTORS MAY BE SHIFTED TO CLEAR BOLT HEADS ON SPLICE. FOR SPACING ALONG BEAMS AND GIRDERS SEE ELEVATIONS, STUD WELDING SHALL BE IN ACCORDANCE WITH A.W.S D1.1-80, SECTION 4, PART F.
2. WELDED ATTACHMENTS FOR FINISHING MACHINE SUPPORTS MAY BE MADE TO THE FASCIA GIRDER WHERE ITS TOP FLANGE IS IN COMPRESSION. SEE COMPRESSION FLANGE LOCATIONS, GIRDER ELEVATION, SHEET 21/32.
3. C S: INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESS ONLY.
4. FOR ADDITIONAL NOTES SEE SHEET 18/32.

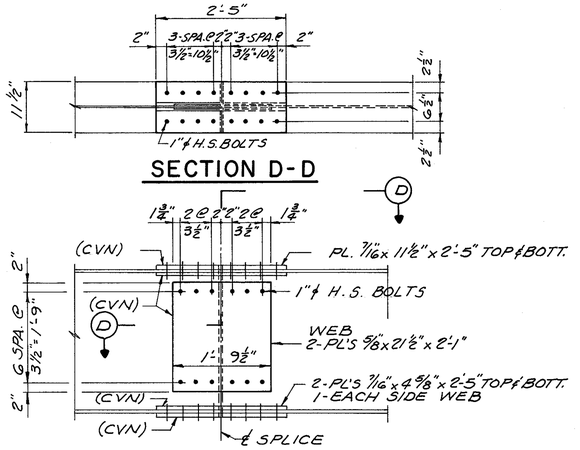



## BEAM ELEVATION

| BEAM | DIMENSIONS | | | | |
|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) |
| A | 67'-8 5/16" | 84'-11 1/4" | 67'-5 1/16" | 17'-1 3/8" | 17'-7 1/8" |
| B | 66'-10 7/16" | 84'-3 3/16" | 67'-1 9/16" | 16'-11 9/16" | 17'-5 7/8" |
| C | 66'-1 7/16" | 83'-8 7/8" | 66'-10 1/4" | 16'-10 1/8" | 17'-4 11/16" |
| D | 65'-5 3/16" | 83'-2 1/2" | 66'-7 3/16" | 16'-8 9/16" | 17'-3 5/8" |
| E | 64'-9 9/16" | 82'-8 7/16" | 66'-4 5/16" | 16'-7 1/16" | 17'-2 5/8" |



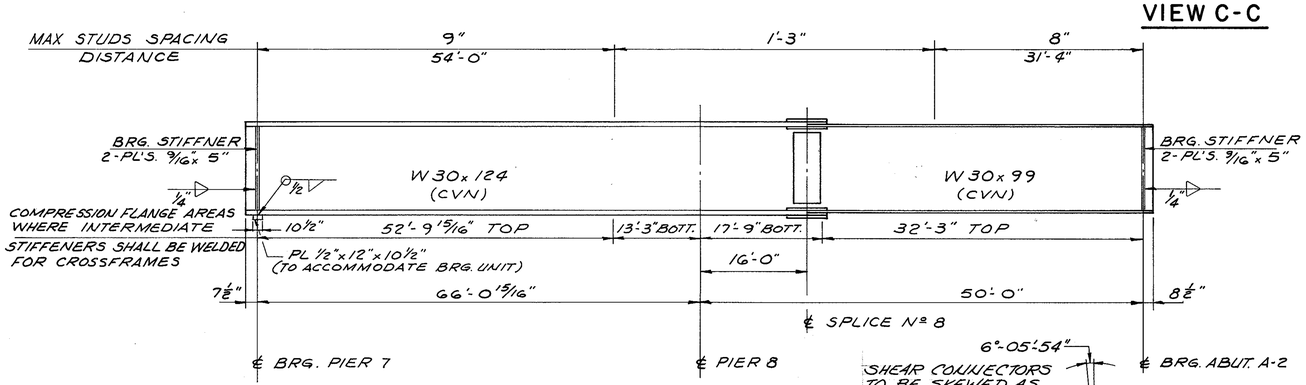

## VIEW C-C



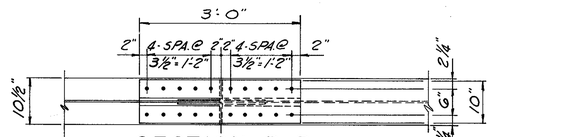

## SECTION D-D



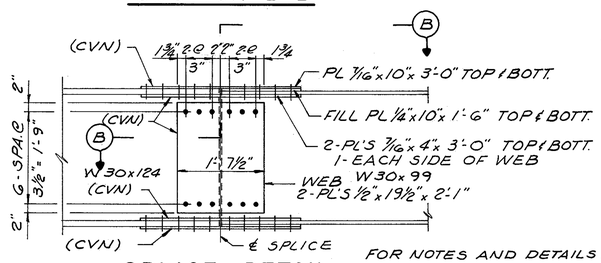

## SPLICE DETAIL
FOR SPLICE Nº 1 & 2




## BEAM ELEVATION
UNIT - 3

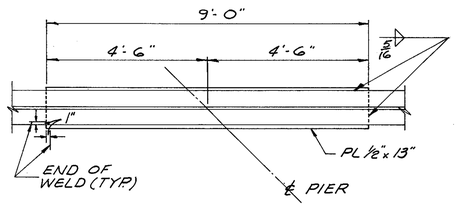



## SECTION B-B

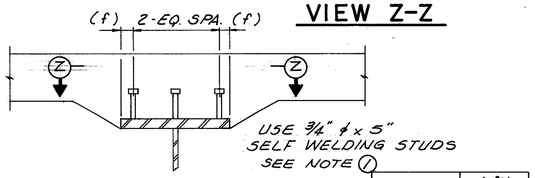



## SPLICE DETAIL
FOR SPLICE Nº 8

FOR NOTES AND DETAILS NOT SHOWN SEE STD. DWG. SD-1-69, SHT. 4.




## BOTTOM FLANGE COVER PLATE DETAIL
UNIT - 1 (ONLY)




## TYPICAL STUD SPACING

| | (f) |
|---|---|
| UNIT-1 | 2" |
| UNIT-2 | 2" |
| UNIT-3 | 1 1/2" |

## VIEW Z-Z

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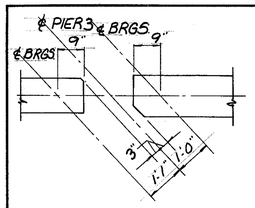
20/32

## FRAMING DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P. | JDP | 12-15-92 | |




| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

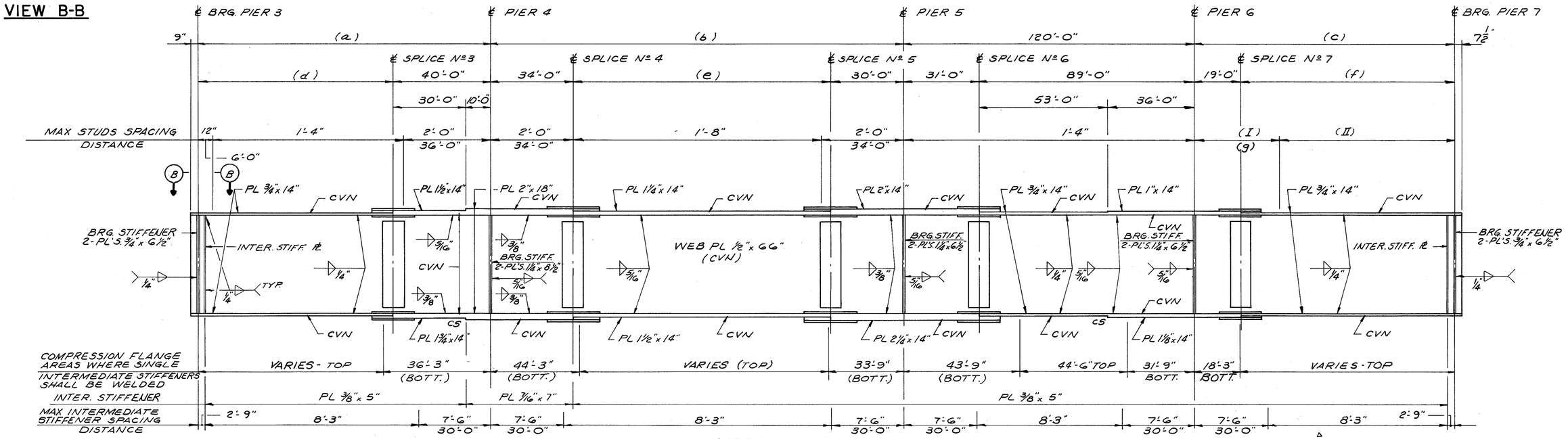
364
455

AKRON INNERBELT
SUM-59-0.00

NOTES

1. FOR NOTES SEE SHEET 18/32 & 20/32.

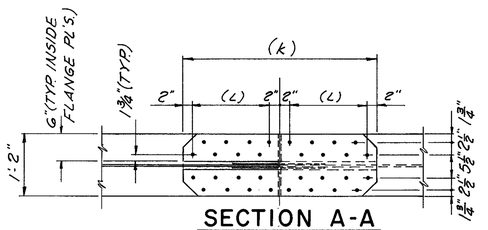
## VIEW B-B




## GIRDER ELEVATION

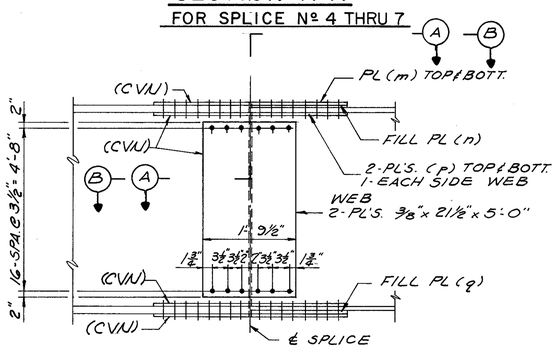
UNIT-2

| GIRDER | DIMENSION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (f) | (I) | (II) | (g) |
| A | 121'-1 3/8" | 170'-0" | 113'-0 5/16" | 81'-1 3/8" | 106'-0" | 94'-0 15/16" | 2'-0" | 1'-3" | 24'-0" |
| B | 120'-10 1/16" | | 107'-0 5/8" | 80'-10 1/16" | | 88'-0 5/8" | 2'-0" | 1'-3" | 24'-0" |
| C | 120'-7" | | 101'-0 13/16" | 80'-7" | | 82'-0 13/16" | 2'-0" | 1'-2" | 22'-0" |
| D | 120'-4 1/4" | | 95'-1 1/4" | 80'-4 1/4" | | 76'-1 1/4" | 1'-3" | 1'-0" | 57'-0" |
| E | 120'-1 13/16" | 170'-0" | 89'-1 1/2" | 80'-1 13/16" | 106'-0" | 70'-1 1/2" | 1'-3" | 1'-0" | 52'-6" |




## SECTION A-A

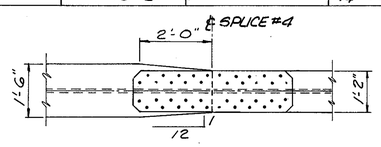
FOR SPLICE Nº 4 THRU 7




## SPLICE DETAIL

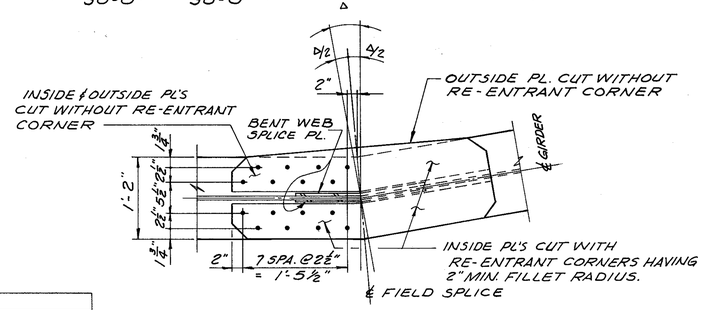
(SECTION B-B FOR SPLICE Nº 3)

| SPLICE PLATE TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| SPLICE | DISTANCE (k) | SPACING (L) | PL (m) | PL (n) | SPLICE | PL (p) | PL (q) | SPLICE |
| 3, 6 & 7 | 3'-7" | 7-SPA. @ 2 1/2" = 1'-5 1/2" | 7/16"x14"x3'-7" | 3/4"x14"x1'-9 1/2"<br>1 1/4"x14"x1'-9 1/2"<br>1/4"x14"x1'-9 1/2" | 3<br>6<br>7 | 2-1/2"x6"x3'-7" | 1"x14"x1'-9 1/2"<br>1 1/2"x14"x1'-9 1/2"<br>3/8"x14"x1'-9 1/2" | 3<br>6<br>7 |
| 4 & 5 | 4'-5" | 9 SPA. @ 2 1/2" = 1'-10 1/2" | 5/8"x14"x4'-5" | 3/4"x14"x2'-2 1/2"<br>3/4"x14"x2'-2 1/2" | 4<br>5 | 2-3/4"x6"x4'-5" | 1/2"x14"x2'-2 1/2"<br>3/4"x14"x2'-2 1/2" | 4<br>5 |




## FLANGE DETAIL

FROM 14" to 18" WIDTH




## SECTION B-B

FOR SPLICE Nº 3

NOTE: GIRDERS CHANGE DIRECTION AT ℄ FIELD SPLICE, FOR Δ SEE FRAMING PLAN, SHEET 18/32. FOR DETAILS NOT SHOWN SEE SECTION A-A & SPLICE DETAIL.

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21/32

## FRAMING DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P | | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

365/455

AKRON INNERBELT
SUM-59-0.00

# UNIT Nº 1

| BEAM A | | | | | |
|---|---|---|---|---|---|
| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ | ⓔ |
| ABUTMENT A-1 | | | | | |
| 1/4 PT. | .0945 | .5565 | .5300 | ---- | 1.1810 |
| 1/2 PT. | .1090 | .6480 | .6200 | ---- | 1.3770 |
| 3/4 PT. | .0445 | .2635 | .2500 | ---- | .5580 |
| PIER P-1 | | | | | |
| ℄ SPL. Nº 1 | .0720 | .4428 | .2940 | .4521 | 1.2339 |
| 1/4 PT. | .0965 | .5900 | .3950 | .5201 | 1.6016 |
| 1/2 PT. | .1720 | 1.0420 | .7100 | .7894 | 2.7134 |
| 3/4 PT. | .0935 | .5725 | .3850 | .5773 | 1.6283 |
| ℄ SPL. Nº 2 | .0715 | .4395 | .2946 | .5040 | 1.3096 |
| PIER P-2 | | | | | |
| 1/4 PT. | .0550 | .3275 | .2850 | .3438 | 1.0113 |
| 1/2 PT. | .1290 | .7650 | .6800 | .4585 | 2.0325 |
| 3/4 PT. | .1095 | .6490 | .5750 | .3440 | 1.6775 |
| ℄ BRG. UNIT 1 @ P-3 | | | | | |

| BEAM B | | | | | |
|---|---|---|---|---|---|
| ⓐ | ⓑ | ⓒ | ⓓ | ⓔ | |
| .0945 | .5565 | .5300 | ---- | 1.1810 | |
| .1090 | .6480 | .6200 | ---- | 1.3770 | |
| .0445 | .2635 | .2500 | ---- | .5580 | |
| .0717 | .4413 | .2930 | .4368 | 1.2427 | |
| .0965 | .5900 | .3950 | .5135 | 1.5950 | |
| .1720 | 1.0420 | .7100 | .6966 | 2.6206 | |
| .0935 | .5725 | .3850 | .5256 | 1.5766 | |
| .0718 | .4410 | .2956 | .4610 | 1.2694 | |
| .0550 | .3275 | .2850 | .3372 | 1.0047 | |
| .1290 | .7650 | .6800 | .4496 | 2.0236 | |
| .1095 | .6490 | .5750 | .3373 | 1.6708 | |

| BEAM C | | | | | |
|---|---|---|---|---|---|
| ⓐ | ⓑ | ⓒ | ⓓ | ⓔ | |
| .0945 | .5565 | .5300 | ---- | 1.1810 | |
| .1090 | .6480 | .6200 | ---- | 1.3770 | |
| .0445 | .2635 | .2500 | ---- | .5580 | |
| .0715 | .4399 | .2920 | .4429 | 1.2462 | |
| .0965 | .5900 | .3950 | .5171 | 1.5986 | |
| .1720 | 1.0420 | .7100 | .6896 | 2.6136 | |
| .0935 | .5725 | .3850 | .5172 | 1.5682 | |
| .0720 | .4424 | .2966 | .4541 | 1.2651 | |
| .0550 | .3275 | .2850 | .3310 | .9985 | |
| .1290 | .7650 | .6800 | .4412 | 2.0152 | |
| .1095 | .6490 | .5750 | .3310 | 1.6645 | |

| BEAM D | | | | |
|---|---|---|---|---|
| ⓐ | ⓑ | ⓒ | ⓓ | ⓔ |
| .0945 | .5565 | .5300 | ---- | 1.1810 |
| .1090 | .6480 | .6200 | .0226 | 1.3996 |
| .0445 | .2635 | .2500 | .0341 | .5921 |
| .0713 | .4385 | .2911 | .4309 | 1.2317 |
| .0965 | .5900 | .3950 | .5039 | 1.5854 |
| .1720 | 1.0420 | .7100 | .6719 | 2.5959 |
| .0935 | .5725 | .3850 | .5038 | 1.5548 |
| .0722 | .4437 | .2974 | .4432 | 1.2565 |
| .0550 | .3275 | .2850 | .3252 | .9927 |
| .1290 | .7650 | .6800 | .4336 | 2.0076 |
| .1095 | .6490 | .5750 | .3254 | 1.6589 |

NOTES

(1) FOR NOTES SEE SHT. 29/32

| BEAM E | | | | | |
|---|---|---|---|---|---|
| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ | ⓔ |
| ABUTMENT A-1 | | | | | |
| 1/4 PT. | .0945 | .5565 | .5300 | .0383 | 1.2193 |
| 1/2 PT. | .1090 | .6480 | .6200 | .0767 | 1.4537 |
| 3/4 PT. | .0445 | .2635 | .2500 | .1091 | .6671 |
| PIER P-1 | | | | | |
| ℄ SPL. Nº 1 | .0710 | .4370 | .2900 | .4197 | 1.2177 |
| 1/4 PT. | .0965 | .5900 | .3950 | .4917 | 1.5732 |
| 1/2 PT. | .1720 | 1.0420 | .7100 | .6558 | 2.5798 |
| 3/4 PT. | .0935 | .5725 | .3850 | .4919 | 1.5429 |
| ℄ SPL. Nº 2 | .0724 | .4449 | .2983 | .4330 | 1.2486 |
| PIER P-2 | | | | | |
| 1/4 PT. | .0550 | .3275 | .2850 | .3202 | .9877 |
| 1/2 PT. | .1290 | .7650 | .6800 | .4268 | 2.0008 |
| 3/4 PT. | .1095 | .6490 | .5750 | .3202 | 1.6537 |
| ℄ BRG. UNIT 1 @ P-3 | | | | | |

LEGEND

ⓐ DEFLECTION DUE TO WEIGHT OF STEEL

ⓑ DEFLECTION DUE TO REMAINING DEAD LOAD

ⓒ ADJUSTMENT REQUIRED FOR HEAT CURVING

ⓓ ADJUSTMENT REQUIRED FOR VERTICAL AND HORIZONTAL CURVE

ⓔ REQUIRED SHOP CAMBER

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

22/32

## DEFLECTION & CAMBER TABLES

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | CDG | | R.J.P. | JAP | 12-5-82 | |

# UNIT Nº 2

| LOCATION | BEAM A ⓐ | BEAM A ⓑ | BEAM A ⓓ | BEAM A ⓔ | BEAM B ⓐ | BEAM B ⓑ | BEAM B ⓓ | BEAM B ⓔ | BEAM C ⓐ | BEAM C ⓑ | BEAM C ⓓ | BEAM C ⓔ | BEAM D ⓐ | BEAM D ⓑ | BEAM D ⓓ | BEAM D ⓔ | BEAM E ⓐ | BEAM E ⓑ | BEAM E ⓓ | BEAM E ⓔ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ℄ BRG. UNIT 2 @ P-3 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .0697 | .4582 | .4512 | .9792 | .0685 | .5275 | .5324 | 1.1284 | .0685 | .5275 | .5346 | 1.1306 | .0682 | .5227 | .5372 | 1.1282 | .0675 | .4475 | .5399 | 1.0549 |
| 1/4 PT. | .1095 | .7735 | .8071 | 1.6901 | .1075 | .8890 | .9272 | 1.9237 | .1075 | .8890 | .9305 | 1.9270 | .1065 | .8815 | .9343 | 1.9223 | .1065 | .7560 | .9387 | 1.8012 |
| 3/8 PT. | .1057 | .8727 | 1.0295 | 2.0080 | .1037 | 1.0037 | 1.1765 | 2.2840 | .1037 | 1.0037 | 1.1799 | 2.2874 | .1035 | .9965 | 1.1836 | 2.2836 | .1027 | .8552 | 1.1883 | 2.1463 |
| 1/2 PT. | .0610 | .7500 | 1.1136 | 1.9246 | .0600 | .8610 | 1.2727 | 2.1937 | .0600 | .8610 | 1.2754 | 2.1964 | .0600 | .8570 | 1.2784 | 2.1954 | .0600 | .7380 | 1.2824 | 2.0804 |
| 5/8 PT. | -.0075 | .4492 | 1.0541 | 1.4959 | -.0072 | .5162 | 1.2093 | 1.7183 | -.0072 | .5162 | 1.2106 | 1.7196 | -.0062 | .5170 | 1.2128 | 1.7235 | -.0060 | .4467 | 1.2156 | 1.6563 |
| ℄ SPL. Nº 3 | -.0300 | .3290 | .9965 | 1.2954 | -.0288 | .3813 | 1.1477 | 1.5002 | -.0283 | .3845 | 1.1505 | 1.5067 | -.0268 | .3894 | 1.1537 | 1.5163 | -.0257 | .3396 | 1.1578 | 1.4716 |
| 3/4 PT. | -.0590 | .1370 | .8464 | .9244 | -.0580 | .1575 | .9795 | 1.0790 | -.0580 | .1575 | .9800 | 1.0795 | -.0565 | .1620 | .9811 | 1.0866 | -.0560 | .1415 | .9827 | 1.0682 |
| 7/8 PT. | -.0647 | -.0515 | .4857 | .3694 | -.0637 | -.0580 | .5782 | .4565 | -.0637 | -.0580 | .5780 | .4563 | -.0625 | -.0535 | .5781 | .4621 | -.0625 | -.0445 | .5788 | .4718 |
| PIER P-4 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .2257 | .5680 | 1.2118 | 2.0056 | .2242 | .6487 | 1.2482 | 2.1182 | .2242 | .6487 | 1.2185 | 2.0915 | .2215 | .6345 | 1.1879 | 2.0439 | .2200 | .5452 | 1.1533 | 1.9185 |
| ℄ SPL. Nº 4 | .3964 | 1.0461 | 1.7944 | 3.2369 | .3930 | 1.1939 | 1.8255 | 3.4123 | .3927 | 1.1929 | 1.7808 | 3.3664 | .3875 | 1.1684 | 1.7298 | 3.2857 | .3845 | 1.0035 | 1.6540 | 3.0419 |
| 1/4 PT. | .5070 | 1.3780 | 2.1128 | 3.9978 | .5035 | 1.5750 | 2.1419 | 4.2204 | .5035 | 1.5750 | 2.0859 | 4.1644 | .4965 | 1.5430 | 2.0158 | 4.0553 | .4930 | 1.3250 | 1.9849 | 3.8029 |
| 3/8 PT. | .7410 | 2.0972 | 2.6677 | 5.5060 | .7347 | 2.3970 | 2.6838 | 5.8156 | .7347 | 2.3970 | 2.6242 | 5.7559 | .7235 | 2.3457 | 2.5813 | 5.6506 | .7187 | 2.0117 | 2.5555 | 5.2860 |
| 1/2 PT. | .8470 | 2.4540 | 2.8744 | 6.1754 | .8390 | 2.8010 | 2.8685 | 6.5085 | .8390 | 2.8010 | 2.8205 | 6.4605 | .8240 | 2.7330 | 2.7862 | 6.3432 | .8180 | 2.3400 | 2.7656 | 5.9236 |
| 5/8 PT. | .7620 | 2.2285 | 2.6972 | 5.6877 | .7530 | 2.5355 | 2.6927 | 5.9812 | .7530 | 2.5355 | 2.6565 | 5.9450 | .7362 | 2.4607 | 2.6306 | 5.8276 | .7292 | 2.1020 | 2.6151 | 5.4464 |
| 3/4 PT. | .5370 | 1.5710 | 2.1591 | 4.2671 | .5290 | 1.7790 | 2.1559 | 4.4639 | .5290 | 1.7790 | 2.1316 | 4.4396 | .5145 | 1.7115 | 2.1142 | 4.3402 | .5080 | 1.4565 | 2.1039 | 4.0684 |
| ℄ SPL. Nº 5 | .3699 | 1.0760 | 1.6736 | 3.1195 | .3637 | 1.2138 | 1.6716 | 3.2492 | .3638 | 1.2141 | 1.6546 | 3.2324 | .3520 | 1.1588 | 1.6424 | 3.1533 | .3465 | .9826 | 1.6352 | 2.9643 |
| 7/8 PT. | .2475 | .7140 | 1.2601 | 2.2216 | .2427 | .8020 | 1.2584 | 2.3031 | .2427 | .8020 | 1.2461 | 2.2908 | .2335 | .7590 | 1.2373 | 2.2298 | .2290 | .6415 | 1.2324 | 2.1029 |
| PIER P-5 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | -.0870 | -.2157 | .6290 | .3263 | -.0842 | -.2262 | .6293 | .3188 | -.0842 | -.2262 | .6291 | .3186 | -.0722 | -.1837 | .6292 | .3732 | -.0682 | -.1427 | .6293 | .4183 |
| 1/4 PT. | -.1205 | -.2625 | 1.0786 | .6956 | -.1100 | -.2550 | 1.0786 | .7136 | -.1100 | -.2550 | 1.0785 | .7135 | -.0905 | -.1645 | 1.0786 | .8236 | -.0820 | -.1080 | 1.0788 | .8888 |
| ℄ SPL. Nº 6 | -.1216 | -.2619 | 1.1022 | .7187 | -.1107 | -.2527 | 1.1023 | .7390 | -.1107 | -.2527 | 1.1023 | .7390 | -.0904 | -.1589 | 1.1020 | .8527 | -.0817 | -.1018 | 1.1023 | .9188 |
| 3/8 PT. | -.1247 | -.2275 | 1.3483 | .9960 | -.1080 | -.1900 | 1.3484 | 1.0504 | -.1080 | -.1900 | 1.3481 | 1.0501 | -.0780 | -.0530 | 1.3481 | 1.2171 | -.0657 | .0070 | 1.3483 | 1.2895 |
| 1/2 PT. | -.1100 | -.1740 | 1.4382 | 1.1542 | -.0890 | -.1070 | 1.4382 | 1.2422 | -.0890 | -.1070 | 1.4381 | 1.2421 | -.0520 | .0660 | 1.4382 | 1.4522 | -.0360 | .1230 | 1.4381 | 1.5251 |
| 5/8 PT. | -.0942 | -.1650 | 1.3483 | 1.0890 | -.0717 | -.0895 | 1.3483 | 1.1870 | -.0717 | -.0895 | 1.3480 | 1.1868 | -.0320 | .0955 | 1.3482 | 1.4117 | -.0167 | .1520 | 1.3482 | 1.4834 |
| 3/4 PT. | -.0800 | -.1855 | 1.0786 | .8131 | -.0610 | -.1245 | 1.0786 | .8931 | -.0610 | -.1245 | 1.0784 | .8929 | -.0255 | .0390 | 1.0784 | 1.0919 | -.0110 | .0955 | 1.0784 | 1.1631 |
| 7/8 PT. | -.0567 | -.1692 | .6290 | .4030 | -.0442 | -.1377 | .6292 | .4472 | -.0442 | -.1377 | .6290 | .4470 | -.0220 | -.0340 | .6293 | .5733 | -.0127 | .0105 | .6293 | .6270 |
| PIER P-6 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .1062 | .4030 | .3589 | .8681 | .0830 | .3602 | .2954 | .7387 | .0830 | .3602 | .2350 | .6783 | .0475 | .1925 | .1775 | .4175 | .0337 | .1117 | .1230 | .2685 |
| ℄ SPL. Nº 7 | .1498 | .5737 | .4459 | 1.1694 | .1250 | .5497 | .3770 | 1.0517 | .1334 | .5876 | .3051 | 1.0261 | .0819 | .3466 | .2297 | .6582 | .0646 | .2249 | .1501 | .4397 |
| 1/4 PT. | .2310 | .8980 | .5585 | 1.6875 | .1820 | .8135 | .4480 | 1.4435 | .1820 | .8135 | .3425 | 1.3380 | .1055 | .4545 | .2421 | .8021 | .0775 | .2750 | .1467 | .4992 |
| 3/8 PT. | .3377 | 1.3337 | .5989 | 2.2704 | .2675 | 1.2165 | .4576 | 1.9416 | .2675 | 1.2165 | .3236 | 1.8076 | .1575 | .6955 | .2110 | 1.0640 | .1167 | .4300 | .1224 | .6691 |
| 1/2 PT. | .4000 | 1.5920 | .4968 | 2.4888 | .3170 | 1.4580 | .3683 | 2.1433 | .3170 | 1.4580 | .2588 | 2.0338 | .1890 | .8460 | .1687 | 1.2037 | .1400 | .5300 | .0978 | .7678 |
| 5/8 PT. | .3875 | 1.5517 | .3725 | 2.3118 | .3080 | 1.4250 | .2762 | 2.0092 | .3080 | 1.4250 | .1941 | 1.9271 | .1845 | .8342 | .1266 | 1.1454 | .1372 | .5262 | .0735 | .7370 |
| 3/4 PT. | .3085 | 1.2385 | .2483 | 1.7953 | .2455 | 1.1395 | .1841 | 1.5691 | .2455 | 1.1395 | .1295 | 1.5145 | .1470 | .6715 | .0844 | .9029 | .1105 | .4255 | .0489 | .5849 |
| 7/8 PT. | .1717 | .6927 | .1241 | .9886 | .1372 | .6380 | .0921 | .8673 | .1372 | .6380 | .0647 | .8400 | .0825 | .3767 | .0423 | .5015 | .0620 | .2392 | .0244 | .3257 |
| ℄ BRG. UNIT 2 @ P-7 | | | | | | | | | | | | | | | | | | | | |

# UNIT Nº 3

| LOCATION | BEAM A ⓐ | BEAM A ⓑ | BEAM A ⓓ | BEAM A ⓔ | BEAM B ⓐ | BEAM B ⓑ | BEAM B ⓓ | BEAM B ⓔ | BEAM C ⓐ | BEAM C ⓑ | BEAM C ⓓ | BEAM C ⓔ | BEAM D ⓐ | BEAM D ⓑ | BEAM D ⓓ | BEAM D ⓔ | BEAM E ⓐ | BEAM E ⓑ | BEAM E ⓓ | BEAM E ⓔ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ℄ BRG. UNIT 3 @ P-7 | | | | | | | | | | | | | | | | | | | | |
| 1/4 PT. | .1315 | 1.1265 | ---- | 1.2580 | .1315 | 1.1265 | ---- | 1.2580 | .1315 | 1.1265 | ---- | 1.2580 | .1315 | 1.1265 | ---- | 1.2580 | .1315 | 1.1265 | ---- | 1.2580 |
| 1/2 PT. | .1680 | 1.4380 | ---- | 1.6060 | .1680 | 1.4380 | ---- | 1.6060 | .1680 | 1.4380 | ---- | 1.6060 | .1680 | 1.4380 | ---- | 1.6060 | .1680 | 1.4380 | ---- | 1.6060 |
| 3/4 PT. | .0920 | .7905 | ---- | .8825 | .0920 | .7905 | ---- | .8825 | .0920 | .7905 | ---- | .8825 | .0920 | .7905 | ---- | .8825 | .0920 | .7905 | ---- | .8825 |
| PIER P-8 | | | | | | | | | | | | | | | | | | | | |
| 1/4 PT. | -.0035 | -.0170 | ---- | -.0205 | -.0035 | -.0170 | ---- | -.0205 | -.0035 | -.0170 | ---- | -.0205 | -.0035 | -.0170 | ---- | -.0205 | -.0035 | -.0170 | ---- | -.0205 |
| ℄ SPL. Nº 8 | .0018 | .0324 | ---- | .0342 | .0018 | .0324 | ---- | .0342 | .0018 | .0324 | ---- | .0342 | .0018 | .0324 | ---- | .0342 | .0018 | .0324 | ---- | .0342 |
| 1/2 PT. | .0180 | .1720 | ---- | .1900 | .0180 | .1720 | ---- | .1900 | .0180 | .1720 | ---- | .1900 | .0180 | .1720 | ---- | .1900 | .0180 | .1720 | ---- | .1900 |
| 3/4 PT. | .0220 | .1990 | ---- | .2210 | .0220 | .1990 | ---- | .2210 | .0220 | .1990 | ---- | .2210 | .0220 | .1990 | ---- | .2210 | .0220 | .0220 | ---- | .2210 |
| ABUTMENT A-2 | | | | | | | | | | | | | | | | | | | | |

(1) FOR NOTES SEE SHEET 24/32.

(2) FOR LEGEND SEE SHEET 22/32.

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

366/455

AKRON INNERBELT
SUM-59-0.00

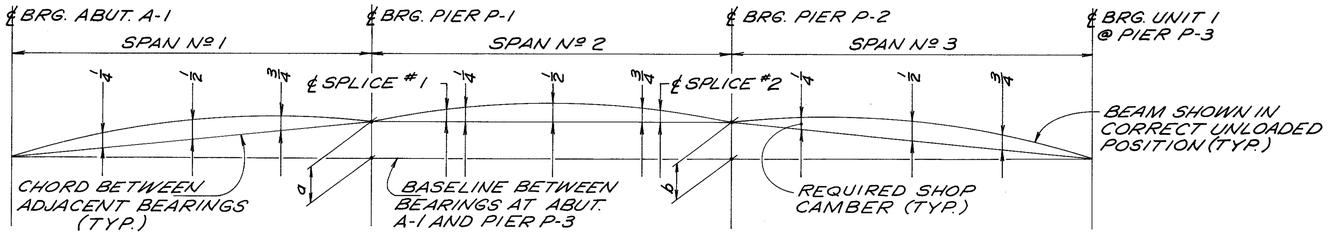
DALTON • DALTON • NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

23/32

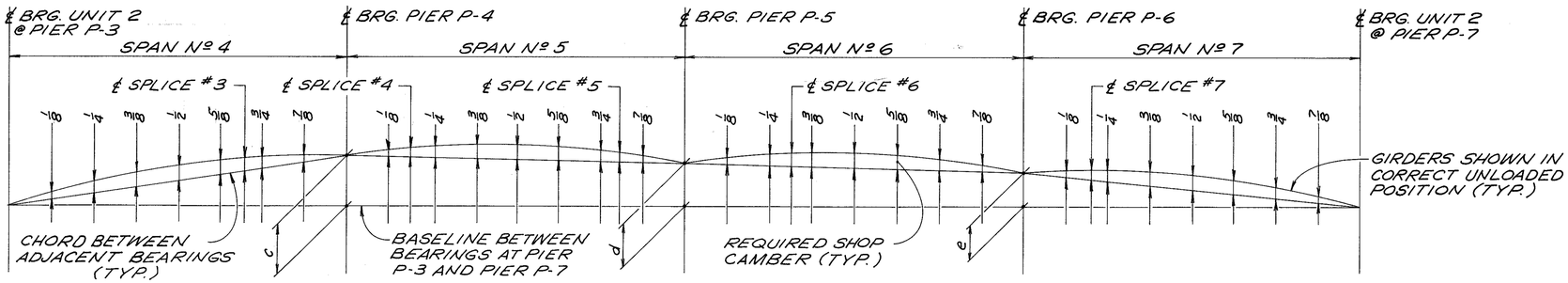
## DEFLECTION & CAMBER TABLES

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

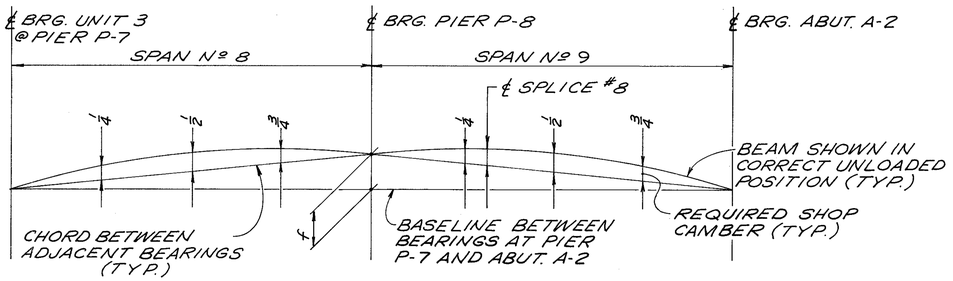
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | CDG | | R.J.P. | JJP | 12-15-82 | |




## UNIT-1 BEAMS A THRU E




## UNIT-2 GIRDERS A THRU E




## UNIT-3 BEAMS A THRU E

| LAYOUT DIAGRAM OFFSETS | | | | | | |
|---|---|---|---|---|---|---|
| BEAM OR GIRDER | a | b | c | d | e | f |
| A | 0'-2 5/8" | 0'-3 1/2" | 1'-10 7/16" | 2'-1 1/16" | 1'-2 3/8" | 0'-0" |
| B | 0'-2 5/8" | 0'-3 3/8" | 1'-9 15/16" | 2'-0 3/16" | 1'-1 3/4" | 0'-0" |
| C | 0'-2 3/4" | 0'-3 1/16" | 1'-9 5/16" | 1'-11 3/16" | 1'-0 5/8" | 0'-0" |
| D | 0'-3" | 0'-3 1/2" | 1'-8 11/16" | 1'-10 1/4" | 0'-11 1/2" | 0'-0" |
| E | 0'-3 3/8" | 0'-3 1/2" | 1'-8 1/16" | 1'-9 3/8" | 0'-10 3/8" | 0'-0" |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

367/455

AKRON INNERBELT
SUM-59-0.00

## NOTES

1. FOR FRAMING PLANS AND BEAM & GIRDER ELEVATIONS SEE SHEETS 18/32 THRU 21/32.
2. A POSITIVE CAMBER VALUE MEANS THE CAMBER ABOVE AND A NEGATIVE CAMBER VALUE MEANS THE CAMBER BELOW THE CHORD BETWEEN ADJACENT BEARINGS IN THAT SPAN.
3. FOR DEFLECTION AND CAMBER TABLES, SEE SHEETS 22/32 THRU 23/32.
4. ALL DEFLECTIONS ARE GIVEN IN DECIMALS OF AN INCH.
5. SEE STRUCTURAL GENERAL NOTES FOR HEAT CURVING OF BEAMS.

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

29/32

# CAMBER DIAGRAMS

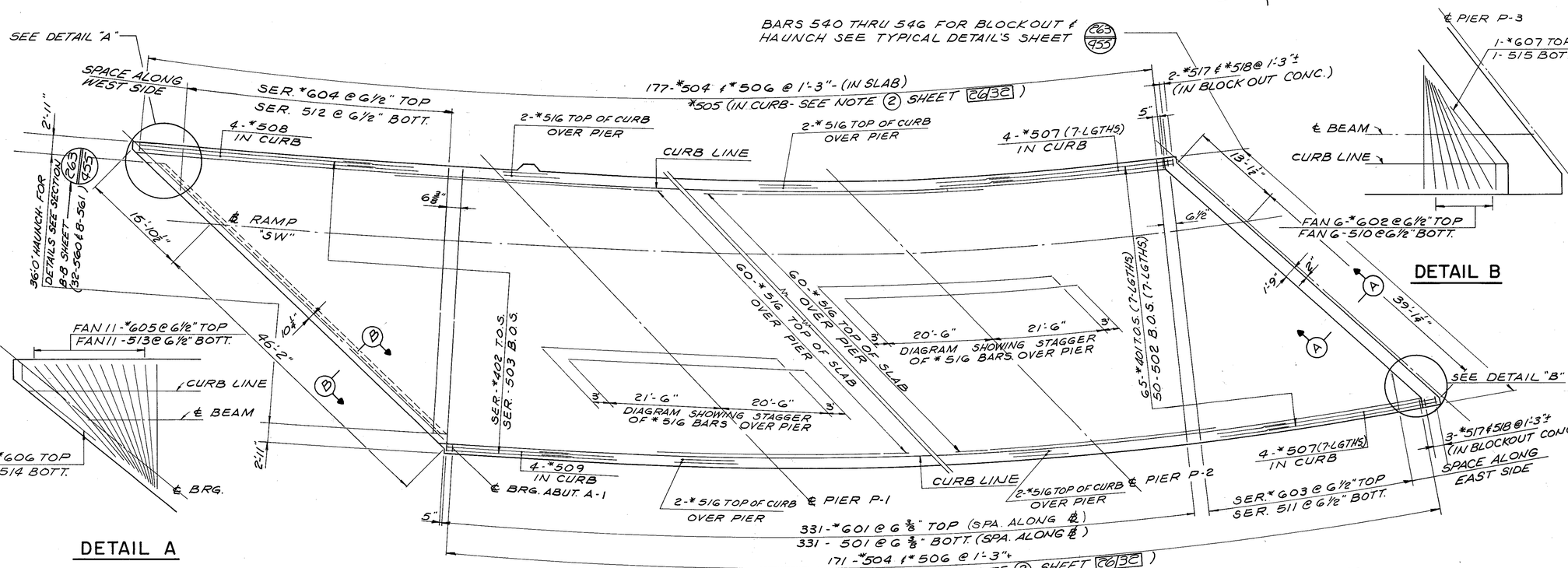
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | D.T. | | R.J.P. | GJP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

368/455

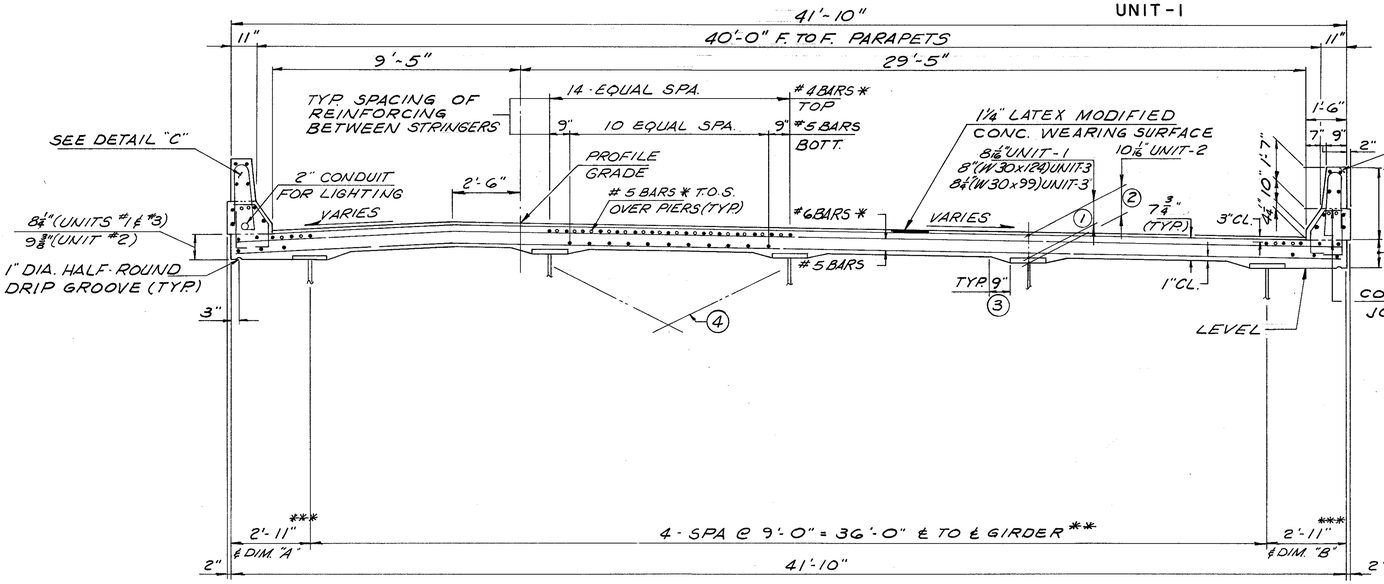
AKRON INNERBELT
SUM-59-0.00




## DETAIL A

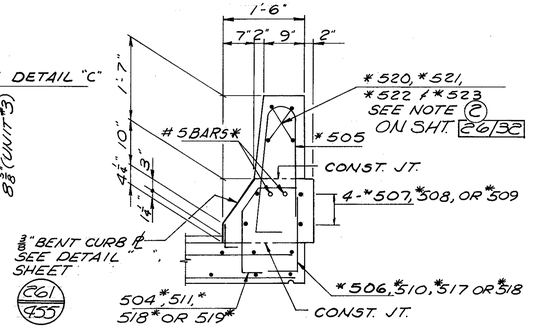
## DETAIL B

## SLAB PLAN
UNIT-1




## TRANSVERSE SECTION

T.O.S. = TOP OF SLAB
BO.S. = BOTTOM OF SLAB




## DETAIL C

** TYP.- UNIT Nº1 & BETWEEN F.S. #3 & ℄ BRG. ABUT. A-2
VARIES- BETWEEN ℄ BRG. PIER Nº3 & F.S. Nº3

*** TYP.- UNIT Nº1 & UNIT Nº2 FROM ST. OF CURVE TO ABUT. A-2
VARIES- ℄ BRG. PIER Nº3 TO ST. OF CURVE (SEE TABLE ON SHEET 26/32.)

## NOTES

(1) THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

(2) THIS IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18.

(3) A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

(4) FOR CROSSFRAME TYPE AND LOCATIONS SEE FRAMING PLANS, FOR CROSS FRAME DETAILS SEE SHEET 262/455.

(5) FOR SCREED ELEVATION TABLE SEE SHEETS 27/32.

(6) TRANSVERSE AND LONGITUDINAL REINFORCEMENT SHALL BE FIELD BENT AS REQUIRED. PAYMENT SHALL BE INCLUDED WITH ITEM 509, REINFORCING STEEL.

(7) ALL REINFORCING BARS SHOWN THUS * ARE EPOXY COATED.

(8) PROFILE GRADE IS GIVEN TO TOP OF FINISHED PAVEMENT.

(9) FOR LOCATION OF LIGHT STANDARD SUPPORTS, SEE GENERAL PLAN SHEETS 3/32 AND 4/32.

(10) FOR ELECTRICAL CONDUIT ON BRIDGE, SEE LIGHTING PLANS.

(11) FOR SCUPPER LOCATIONS SEE GENERAL PLAN SHEET. FOR SCUPPER DETAILS SEE 261/455.

(12) FOR SECTIONS 'A-A' & 'B-B' SEE SHEET 263/455.

(13) FOR ADDITIONAL NOTES SEE SHEET 26/32.

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CLEVELAND, OHIO AKRON, OHIO

25/32

# SLAB PLAN AND TRANVERSE SECTION

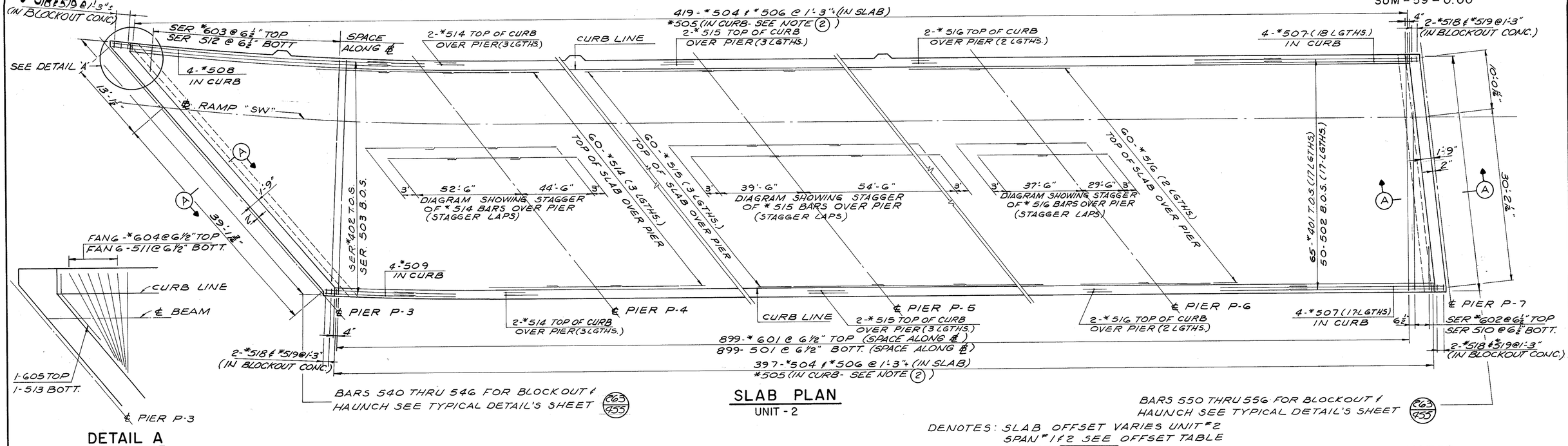
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P. | | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

369/455

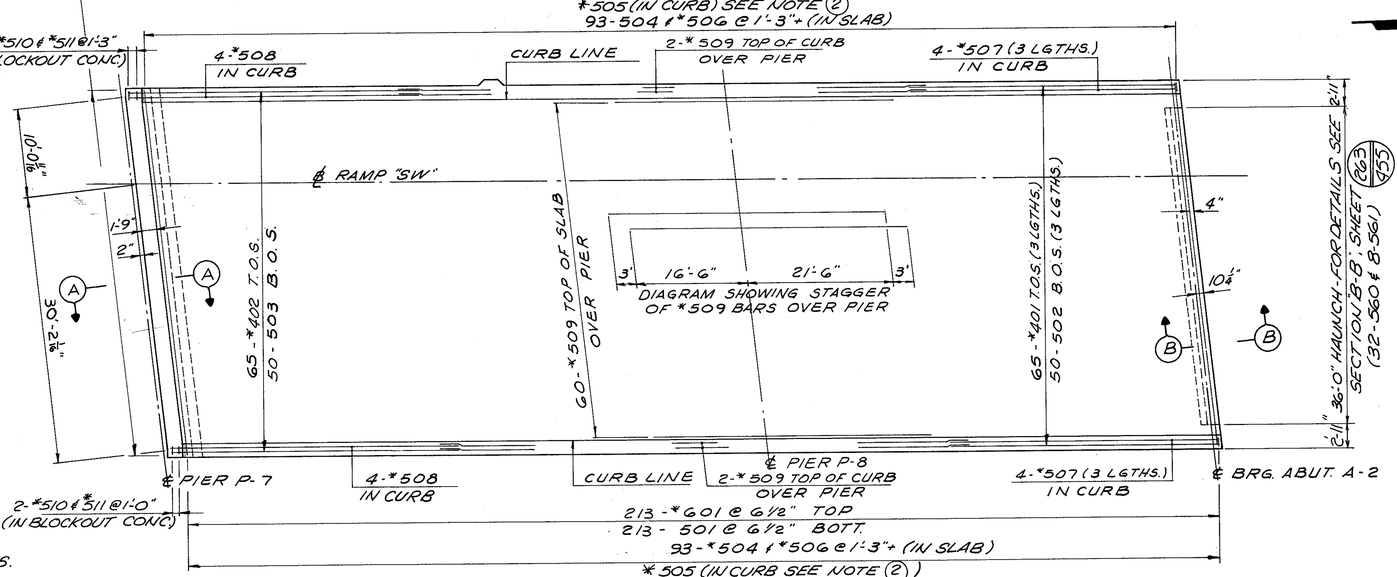
AKRON INNERBELT
SUM – 59 – 0.00




## DETAIL A

## SLAB PLAN
UNIT - 2

DENOTES: SLAB OFFSET VARIES UNIT "2 SPAN" 1 & 2 SEE OFFSET TABLE SHEET 27/32.




## SLAB PLAN
UNIT - 3

BARS 550 THRU 556 FOR BLOCKOUT & HAUNCH SEE TYPICAL DETAIL'S SHEET (263/455)

### SLAB OFFSETS
(SEE TRANSVERSE SECTION)

| LOCATION | DIM. "A" | DIM. "B" |
|---|---|---|
| ℄ BRG. P-3 | 2'-11" | 2'-11" |
| 1/8 | 2'-9 5/16" | 3'-0 3/16" |
| 1/4 | 2'-9 3/16" | 3'-1 1/16" |
| 3/8 | 2'-10 11/16" | 3'-0 3/16" |
| 1/2 | 3'-0 15/16" | 2'-11 5/16" |
| 5/8 | 3'-4 1/16" | 2'-9 1/4" |
| 3/4 | 3'-3 13/16" | 2'-9 5/16" |
| 7/8 | 3'-1 7/8" | 2'-10 3/16" |
| ℄ BRG. P-4 | 3'-0 1/2" | 2'-10 11/16" |
| 1/8 | 2'-11 3/16" | 2'-11" |
| 1/4 | 2'-11 1/16" | —— |
| 3/8 | 2'-11" | —— |
| ST. OF CURVE | 2'-11" | 2'-11" |

SLAB OFFSETS ARE MEASURED FROM THE CENTERLINE OF GIRDER AT THE LOCATION LISTED RADIALLY TO THE EDGE OF SLAB. EIGHTH POINTS ARE MEASURED ALONG CENTERLINE OF EXTERIOR GIRDERS.

## NOTES

1. THE PREFIX "1S, 2S, OR 3S" SHALL BE ADDED TO ALL REINFORCING BAR MARKS SHOWN IN UNITS Nº 1, 2 OR 3 RESPECTIVELY.
2. SEE GENERAL PLAN AND ELEVATION SHEET 4/32 FOR LOCATION AND QUANTITY OF *505, *520, *521, *522 & *523 BARS.
3. TYPICAL BAR LAPS SHALL BE AS FOLLOWS: #4 BARS (1'-4"), #5 BARS (1'-8")
4. FOR ADDITIONAL NOTES SEE SHEET 25/32.
5. FOR ARRANGEMENT OF STUD SHEAR CONNECTORS FOR UNIT Nº 3, SEE TYPICAL STUD SPACING DETAIL, SHEET 20/32.

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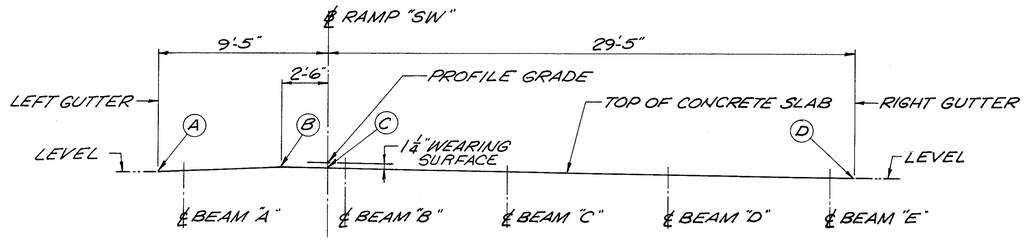
26/32

## SLAB PLAN

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO — SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| B.K.L. | F.F. | | R.J.P. | JDP | 12-15-82 | |




## KEY TRANSVERSE SECTION

(A) LEFT GUTTER LINE

(B) BREAK LINE

(C) BASE LINE RAMP "SW"

(D) RIGHT GUTTER LINE

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

370/455

AKRON INNERBELT
SUM-59-0.00

## NOTES

(1) ELEVATIONS (A) THRU (D) SHOWN ARE TOP OF CONCRETE SLAB ELEVATIONS WHICH ARE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE AND THE 1¼" CONCRETE WEARING SURFACE.

(2) SEE STRUCTURAL GENERAL NOTES FOR THE EFFECT OF HEAT CURVING ON SCREED ELEVATIONS.

UNIT #1

TABLE OF SCREED ELEVATIONS

| LOCATION | (A) | (B) | (C) | (D) |
|---|---|---|---|---|
| ℄ BRG. A-1 | 1002.187 | 1002.630 | 1002.787 | 1004.519 |
| 1/4 PT. | 1002.440 | 1002.869 | 1003.022 | 1004.704 |
| 1/2 PT. | 1002.636 | 1003.052 | 1003.200 | 1004.832 |
| 3/4 PT. | 1002.773 | 1003.176 | 1003.319 | 1004.900 |
| ℄ PIER P-1 | 1002.925 | 1003.314 | 1003.453 | 1004.970 |
| 1/4 PT. | 1003.221 | 1003.592 | 1003.723 | 1005.144 |
| 1/2 PT. | 1003.484 | 1003.830 | 1003.952 | 1005.275 |
| 3/4 PT. | 1003.600 | 1003.934 | 1004.048 | 1005.276 |
| ℄ PIER P-2 | 1003.674 | 1003.997 | 1004.103 | 1005.238 |
| 1/4 PT. | 1003.800 | 1004.116 | 1004.215 | 1005.278 |
| 1/2 PT. | 1003.922 | 1004.230 | 1004.322 | 1005.315 |
| 3/4 PT. | 1003.957 | 1004.258 | 1004.344 | 1005.266 |
| ℄ PIER P-3 | 1003.909 | 1004.203 | 1004.283 | 1005.136 |

UNIT #2

TABLE OF SCREED ELEVATIONS

| LOCATION | (A) | (B) | (C) | (D) |
|---|---|---|---|---|
| ℄ PIER P-3 | 1003.912 | 1004.205 | 1004.284 | 1005.126 |
| 1/8 PT. | 1003.958 | 1004.250 | 1004.324 | 1005.098 |
| 1/4 PT. | 1003.976 | 1004.267 | 1004.336 | 1005.043 |
| 3/8 PT. | 1003.962 | 1004.248 | 1004.311 | 1004.956 |
| 1/2 PT. | 1003.913 | 1004.192 | 1004.250 | 1004.836 |
| 5/8 PT. | 1003.834 | 1004.105 | 1004.157 | 1004.687 |
| 3/4 PT. | 1003.739 | 1004.000 | 1004.048 | 1004.522 |
| 7/8 PT. | 1003.639 | 1003.893 | 1003.935 | 1004.353 |
| ℄ PIER P-4 | 1003.544 | 1003.793 | 1003.830 | 1004.187 |
| 1/8 PT. | 1003.426 | 1003.674 | 1003.704 | 1003.966 |
| 1/4 PT. | 1003.298 | 1003.548 | 1003.571 | 1003.738 |
| 3/8 PT. | 1003.132 | 1003.383 | 1003.399 | 1003.480 |
| 1/2 PT. | 1002.905 | 1003.153 | 1003.162 | 1003.162 |
| 5/8 PT. | 1002.600 | 1002.836 | 1002.839 | 1002.767 |
| 3/4 PT. | 1002.228 | 1002.449 | 1002.445 | 1002.308 |
| 7/8 PT. | 1001.809 | 1002.013 | 1002.003 | 1001.805 |
| ℄ PIER P-5 | 1001.372 | 1001.561 | 1001.545 | 1001.286 |
| 1/8 PT. | 1001.070 | 1001.253 | 1001.232 | 1000.928 |
| 1/4 PT. | 1000.767 | 1000.946 | 1000.921 | 1000.569 |
| 3/8 PT. | 1000.456 | 1000.632 | 1000.602 | 1000.202 |
| 1/2 PT. | 1000.131 | 1000.305 | 1000.270 | 999.820 |
| 5/8 PT. | 999.788 | 999.957 | 999.918 | 999.416 |
| 3/4 PT. | 999.427 | 999.589 | 999.546 | 998.990 |
| 7/8 PT. | 999.054 | 999.209 | 999.161 | 998.546 |
| ℄ PIER P-6 | 998.680 | 998.826 | 998.774 | 998.094 |
| 1/8 PT. | 998.330 | 998.483 | 998.433 | 997.762 |
| 1/4 PT. | 997.974 | 998.136 | 998.088 | 997.426 |
| 3/8 PT. | 997.600 | 997.772 | 997.727 | 997.086 |
| 1/2 PT. | 997.199 | 997.385 | 997.343 | 996.742 |
| 5/8 PT. | 996.771 | 996.975 | 996.936 | 996.388 |
| 3/4 PT. | 996.320 | 996.543 | 996.509 | 996.027 |
| 7/8 PT. | 995.849 | 996.094 | 996.063 | 995.659 |
| ℄ PIER P-7 | 995.366 | 995.625 | 995.606 | 995.286 |

UNIT #3

TABLE OF SCREED ELEVATIONS

| LOCATION | (A) | (B) | (C) | (D) |
|---|---|---|---|---|
| ℄ PIER P-7 | 995.311 | 995.578 | 995.551 | 995.227 |
| 1/4 PT. | 994.912 | 995.179 | 995.149 | 994.793 |
| 1/2 PT. | 994.446 | 994.712 | 994.679 | 994.290 |
| 3/4 PT. | 993.899 | 994.165 | 994.130 | 993.707 |
| ℄ PIER P-8 | 993.340 | 993.606 | 993.568 | 993.113 |
| 1/4 PT. | 992.966 | 993.232 | 993.192 | 992.711 |
| 1/2 PT. | 992.609 | 992.875 | 992.833 | 992.327 |
| 3/4 PT. | 992.238 | 992.504 | 992.460 | 991.929 |
| ℄ BRG. A-2 | 991.849 | 992.107 | 992.068 | 991.514 |

SLAB OFFSET TABLE UNIT Nº 2

| LOCATION | ℄ GIRDER "A" TO LT. EDGE OF SLAB | ℄ GIRDER "E" TO RT. EDGE OF SLAB |
|---|---|---|
| ℄ BRG. BEGIN UN 2 | 2'-11" | 3'-1 3/16" |
| 1/8 PT. | 2'-9 3/4" | 3'-2 5/16" |
| 1/4 PT. | 2'-9 9/16" | 3'-2 7/16" |
| 3/8 PT. | 2'-10 11/16" | 3'-1 1/2" |
| 1/2 PT. | 3'-0 7/8" | 2'-11 7/8" |
| 5/8 PT. | 3'-4 1/8" | 2'-9 7/16" |
| 3/4 PT. | 3'-3 13/16" | 2'-9 5/16" |
| 7/8 PT. | 3'-1 7/8" | 2'-10 1/4" |
| ℄ PIER P-4 | 3'-0 1/2" | 2'-11" |
| 1/8 PT. | 2'-11 1/2" | 2'-11" |
| 1/4 PT. | 2'-11 1/16" | 2'-11" |
| 3/8 PT. TO PIER P-5 | 2'-11" | 2'-11" |

DIMENSIONS SHOWN ARE PERPENDICULAR TO THE ℄ OF GIRDERS.

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CLEVELAND, OHIO AKRON, OHIO

27/32

# SCREED ELEVATIONS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | CDG | | R.J.P. | JJP | 12-16-82 | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | ABUTMENT A-1 | | | | | |
| 1A501 | 42 | 8'-5" | 2 | 1'-8" | 5'-4" | | | | 369 |
| 1A502 | 21 | 7'-1" | 1 | 10" | 6'-4" | | | | 155 |
| 1A503 | 20 | 8'-2" | 1 | 10" | 7'-5" | | | | 170 |
| 1A504 | 42 | 8'-10" | 2 | 2'-10" | 3'-5" | | | | 387 |
| 1A505 | 32 | 33'-3" | ST. | | | | | | 1110 |
| 1A506 | 3 | 5'-7" | 16 | 2'-0" | 1'-9" | 1'-4" | 2'-0" | | 17 |
| 1A507 | 5 | 3'-11" | 12 | 2'-0" | 2'-0" | 1'-3" | | | 20 |
| 1A508 | 8 | 5'-0" | ST. | | | | | | 42 |
| 1A509 | 2 | 7'-5" | 16 | 2'-0" | 3'-7" | 1'-4" | 2'-0" | | 15 |
| 1A510 | 15 | 11'-0" | 14 | 2'-3" | 3'-0" | | | | 172 |
| 1A511 | 6 | 14'-4" | ST. | | | | | | 90 |
| 1A512 | 6 | 20'-8" | ST. | | | | | | 129 |
| * 1A513 | 8 | 18'-7" | ST. | | | | | | 155 |
| 1A514 | 17 | 4'-6" | ST. | | | | | | 80 |
| * 1A515 | 16 | 2'-8" | 6 | 2'-1" | | | | | 45 |
| * 1A516 | 16 | 7'-5" | 2 | 3'-3" | 1'-2" | | | | 124 |
| 1A517 | 16 | 11'-0" | 14 | 2'-3" | 3'-0" | | | | 184 |
| * 1A518 | 17 | 5'-10" | 23 | 2'-4" | 2'-6 | | | | 103 |
| * 1A519 | 16 | 4'-8" | ST. | | | | | | 78 |
| 1A520 | 2 | 6'-8" | ST. | | | | | | 14 |
| * 1A521 | 16 | 4'-4" | ST. | | | | | | 72 |
| 1A522 | 2 | 8'-5" | ST. | | | | | | 18 |
| 1A523 | 6 | 12'-7" | ST. | | | | | | 79 |
| 1A524 | 6 | 18'-8" | ST. | | | | | | 117 |
| * 1A525 | 8 | 16'-7" | ST. | | | | | | 138 |
| | | | | | | | | | |
| | | | | | | | | | |
| * 1AG01 | 21 | 13'-11" | 3 | 6'-4" | 5'-4" | 2'-7" | | | 439 |
| 1AG02 | 20 | 15'-0" | 3 | 7'-5" | 5'-4" | 2'-7" | | | 451 |
| 1AG03 | 1 | 23'-8" | 2 | 11'-3" | 1'-6" | | | | 36 |
| 1AG04 | 61 | 9'-8" | 2 | 4'-4" | 1'-4" | | | | 886 |
| 1AG06 | 61 | 6'-0" | 2 | 2'-9" | 10" | | | | 550 |
| 1AG07 | 61 | 4'-10" | 2 | 1'-11" | 1'-4" | | | | 443 |
| 1AG08 | 9 | 21'-10" | 2 | 10'-6" | 1'-2" | | | | 295 |
| * 1AG09 | 17 | 5'-3" | 19 | 9" | 6" | 8" | 3'-10" | | 134 |
| 1AG10 | 8 | 17'-6" | 2 | 8'-4" | 1'-2" | | | | 210 |
| * 1AG20 | 2 | 4'-0" | 19 | 9" | 6" | 8" | 2'-7" | | 12 |
| * 1AG21 | 2 | 3'-10" | 19 | 8" | 5" | 8" | 2'-7" | | 12 |
| * 1AG22 | 2 | 3'-10" | 19 | 8" | 4" | 8" | 2'-7" | | 12 |
| * 1AG23 | 2 | 3'-9" | 19 | 7" | 3" | 8" | 2'-7" | | 11 |
| * 1AG24 | 6 | 3'-8" | 19 | 7" | 2" | 8" | 2'-7" | | 33 |
| | | | | | | | | | |
| | | | | | | | | | |
| 1A801 | 14 | 35'-11" | ST. | | | | | | 1343 |
| 1A802 | 41 | 6'-2" | 38 | 3'-11" | 1'-5" | 1'-0" | | | 675 |
| 1A803 | 2 | 17'-3" | ST. | | | | | | 92 |
| 1A804 | 4 | 11'-9" | ST. | | | | | | 125 |
| 1A805 | 2 | 15'-8" | ST. | | | | | | 84 |
| 1A806 | 4 | 9'-9" | ST. | | | | | | 104 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | NON EPOXY COATED = | | | | | 8901 | | | |
| | EPOXY COATED = | | | | | 929 | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | ABUTMENT A-2 | | | | | |
| 2A501 | 36 | 8'-3" | 2 | 1'-7" | 5'-4" | | | | 310 |
| 2A502 | 35 | 6'-3" | 1 | 10" | 5'-6" | | | | 228 |
| 2A503 | 29 | 7'-8" | 2 | 2'-3" | 3'-5" | | | | 232 |
| 2A504 | 9 | 40'-6" | ST. | | | | | | 380 |
| 2A505 | 6 | 7'-5" | ST. | | | | | | 46 |
| 2A506 | 12 | 24'-3" | ST. | | | | | | 304 |
| 2A507 | 5 | 9'-8" | 2 | 4'-3" | 1'-5" | | | | 50 |
| 2A508 | 3 | 4'-11" | ST. | | | | | | 15 |
| 2A509 | 4 | 4'-0" | ST. | | | | | | 17 |
| 2A510 | 9 | 11'-2" | 14 | 2'-4" | 3'-0" | | | | 105 |
| 2A511 | 2 | 5'-10" | ST. | | | | | | 12 |
| 2A512 | 6 | 9'-8" | ST. | | | | | | 60 |
| 2A513 | 6 | 13'-8" | ST. | | | | | | 86 |
| * 2A514 | 8 | 11'-8" | ST. | | | | | | 97 |
| 2A515 | 4 | 4'-7" | ST. | | | | | | 19 |
| 2A516 | 8 | 2'-8" | 6 | 2'-1" | | | | | 22 |
| 2A517 | 8 | 7'-11" | 2 | 3'-6" | 1'-2" | | | | 66 |
| 2A518 | 8 | 4'-4" | ST. | | | | | | 36 |
| * 2A519 | 8 | 5'-10" | 23 | 2'-4" | 2'-6" | | | | 49 |
| * 2A521 | 8 | 4'-7" | ST. | | | | | | 38 |
| 2A522 | 5 | 3'-11" | 13 | 2'-0" | 2'-0" | 3" | | | 20 |
| 2A523 | 8 | 6'-0" | ST. | | | | | | 50 |
| 2A524 | 2 | 23'-0" | ST. | | | | | | 48 |
| 2A525 | 1 | 7'-0" | ST. | | | | | | 7 |
| 2A526 | 2 | 3'-5" | 20 | 1'-3" | 7" | 7" | | | 7 |
| * 2A527 | 3 | 1'-5" | ST. | | | | | | 4 |
| | | | | | | | | | |
| | | | | | | | | | |
| 2AG01 | 35 | 13'-1" | 3 | 5'-6" | 5'-4" | 2'-7" | | | 688 |
| 2AG02 | 39 | 8'-0" | 2 | 3'-9" | 10" | | | | 469 |
| 2AG03 | 40 | 5'-1" | 2 | 2'-0" | 1'-5" | | | | 305 |
| 2AG04 | 40 | 10'-1" | 2 | 4'-6" | 1'-5" | | | | 606 |
| 2AG05 | 1 | 12'-5" | 2 | 5'-11" | 11" | | | | 19 |
| 2AG06 | 5 | 12'-9" | 2 | 5'-10" | 1'-5" | | | | 96 |
| 2AG07 | 6 | 16'-10" | 2 | 8'-0" | 1'-2" | | | | 152 |
| * 2AG08 | 4 | 5'-4" | 19 | 7" | 7" | 8" | 4'-0" | | 32 |
| * 2AG09 | 5 | 5'-1" | 19 | 7" | 7" | 8" | 3'-9" | | 38 |
| 2AG10 | 1 | 17'-6" | 2 | 8'-4" | 1'-2" | | | | 26 |
| * 2AG11 | 1 | 3'-11" | 19 | 9" | 6" | 8" | 2'-6" | | 6 |
| * 2AG12 | 1 | 3'-9" | 19 | 8" | 5" | 8" | 2'-6" | | 6 |
| * 2AG13 | 1 | 3'-9" | 19 | 8" | 4" | 8" | 2'-6" | | 6 |
| * 2AG14 | 1 | 3'-8" | 19 | 7" | 3" | 8" | 2'-6" | | 6 |
| * 2AG15 | 4 | 3'-7" | 19 | 7" | 2" | 8" | 2'-6" | | 22 |
| | | | | | | | | | |
| | | | | | | | | | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| 2A801 | 14 | 25'-11" | ST. | | | | | | 969 |
| 2A802 | 2 | 12'-7" | ST. | | | | | | 67 |
| 2A803 | 4 | 9'-10" | ST. | | | | | | 105 |
| 2A804 | 28 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 361 |
| | | | | | | | | | |
| | NON EPOXY COATED = | | | | | 5983 | | | |
| | EPOXY COATED = | | | | | 304 | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | PIER P-1 | | | | | |
| 1P501 | 28 | 7'-0" | 2 | 2'-9" | 1'-9" | | | | 204 |
| 1P502 | 36 | 7'-0" | 2 | 2'-4" | 2'-7" | | | | 263 |
| 1P503 | 36 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 319 |
| 1P504 | 28 | 7'-4" | 2 | 2'-11" | 1'-9" | | | | 214 |
| 1P505 | 8 | 29'-2" | ST. | | | | | | 243 |
| | | | | | | | | | |
| 1PG01 | 8 | 8'-9" | 12 | 3'-0" | 5'-9" | 6" | | | 105 |
| | | | | | | | | | |
| 1P801 | 7 | 20'-0" | ST. | | | | | | 374 |
| | | | | | | | | | |
| 1P1001 | 7 | 44'-10" | ST. | | | | | | 1350 |
| 1P1002 | 14 | 25'-1" | ST. | | | | | | 1511 |
| 1P1003 | 14 | 26'-1" | ST. | | | | | | 1571 |
| 1P1004 | 14 | 26'-6" | ST. | | | | | | 1596 |
| 1P1005 | 42 | 10'-4" | 1 | 1'-10" | 8'-9" | | | | 1868 |
| | | | | | | | | | |
| | | | | | | | | | |
| 1P1101 | 24 | 13'-8" | 7 | 10'-6" | | | | | 1743 |
| 1P1102 | 24 | 14'-8" | 7 | 11'-6" | | | | | 1870 |
| 1P1103 | 14 | 25'-2" | 1 | 2'-7" | 22'-10" | | | | 1872 |
| | | | | | | | | | |
| | NON EPOXY COATED = | | | | | 15103 | | | |
| | EPOXY COATED = | | | | | 0 | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | | | | | |
| | | | | | TOTAL PIER P-1 = | | | | 15103 |
| | | | | | | | | | |
| | | | | PIER P-2 | | | | | |
| 2P501 | 28 | 6'-10" | 2 | 2'-8" | 1'-9" | | | | 200 |
| 2P502 | 34 | 7'-4" | 2 | 2'-6" | 2'-7" | | | | 260 |
| 2P503 | 34 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 301 |
| 2P504 | 28 | 7'-4" | 2 | 2'-11" | 1'-9" | | | | 214 |
| 2P505 | 8 | 27'-6" | ST. | | | | | | 229 |
| | | | | | | | | | |
| | | | | | | | | | |
| 2P601 | 8 | 8'-3" | 12 | 3'-0" | 5'-3" | 6" | | | 99 |
| | | | | | | | | | |
| 2P701 | 7 | 20'-0" | ST. | | | | | | 286 |
| | | | | | | | | | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

371/455

AKRON INNERBELT
SUM-59-0.00

FOR NOTES SEE SHEET 32/32.

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

28/32

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P. | JDP | 12-15-82 | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 2P901 | 7 | 42'-8" | ST. | | | | | | 1015 |
| 2P1001 | 14 | 22'-6" | 1 | 2'-8" | 20'-1" | | | | 1355 |
| 2P1002 | 14 | 23'-10" | ST. | | | | | | 1436 |
| 2P1003 | 14 | 24'-6" | ST. | | | | | | 1476 |
| 2P1004 | 14 | 24'-11" | ST. | | | | | | 1501 |
| 2P1005 | 42 | 10'-4" | 1 | 1'-10" | 8'-9" | | | | 1868 |
| 2P1101 | 24 | 13'-8" | 7 | 10'-6" | | | | | 1743 |
| 2P1102 | 24 | 14'-8" | 7 | 11'-6" | | | | | 1870 |
| | | NON EPOXY COATED = | | | | 13853 | | | |
| | | EPOXY COATED = | | | | 0 | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-2 = | | | | 13853 |

## PIER P-3

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 3P501 | 10 | 9'-0" | 2 | 2'-8" | 3'-11" | | | | 94 |
| 3P502 | 10 | 11'-4" | 2 | 3'-10" | 3'-11" | | | | 118 |
| 3P503 | 32 | 9'-10" | 2 | 3'-1" | 3'-11" | | | | 328 |
| 3P504 | 32 | 9'-8" | 2 | 3'-0" | 3'-11" | | | | 323 |
| 3P505 | 53 | 7'-8" | 2 | 3'-1" | 1'-9" | | | | 424 |
| 3P506 | 53 | 7'-10" | 2 | 3'-2" | 1'-9" | | | | 433 |
| 3P508 | 24 | 27'-2" | ST. | | | | | | 680 |
| 3P601 | 12 | 9'-1" | 12 | 4'-0" | 5'-1" | 6" | | | 164 |
| 3P602 | 6 | 27'-4" | ST. | | | | | | 246 |
| 3P1101 | 12 | 22'-7" | 1 | 2'-7" | 20'-3" | | | | 1440 |
| 3P1102 | 6 | 26'-3" | ST. | | | | | | 837 |
| 3P1103 | 6 | 42'-2" | ST. | | | | | | 1344 |
| 3P1104 | 18 | 16'-8" | ST. | | | | | | 1594 |
| 3P1105 | 18 | 18'-8" | ST. | | | | | | 1785 |
| 3P1106 | 18 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 932 |
| 3P1107 | 18 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 741 |
| 3P1108 | 24 | 18'-8" | 7 | 15'-6" | | | | | 2380 |
| 3P1109 | 36 | 13'-8" | 7 | 10'-6" | | | | | 2614 |
| | | NON EPOXY COATED = | | | | 16477 | | | |
| | | EPOXY COATED = | | | | 0 | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-3 = | | | | 16477 |

## PIER P-4

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 4P501 | 12 | 25'-9" | ST. | | | | | | 322 |
| 4P502 | 16 | 9'-2" | 2 | 2'-11" | 3'-7" | | | | 153 |
| 4P503 | 28 | 7'-7" | 2 | 2'-8" | 2'-6" | | | | 221 |
| 4P504 | 28 | 9'-5" | 2 | 3'-7" | 2'-6" | | | | 275 |
| 4P505 | 14 | 8'-4" | 2 | 2'-6" | 3'-7" | | | | 122 |
| 4P506 | 14 | 10'-6" | 2 | 3'-7" | 3'-7" | | | | 153 |
| 4P601 | 8 | 7'-9" | 12 | 3'-6" | 4'-3" | 6" | | | 93 |
| 4P901 | 7 | 19'-0" | ST. | | | | | | 452 |
| 4P1101 | 14 | 24'-2" | 1 | 3'-1" | 21'-4" | | | | 1798 |
| 4P1102 | 7 | 41'-2" | ST. | | | | | | 1531 |
| 4P1103 | 27 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 1112 |
| 4P1104 | 27 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 1399 |
| 4P1105 | 27 | 15'-2" | ST. | | | | | | 2176 |
| 4P1106 | 27 | 17'-2" | ST. | | | | | | 2463 |
| 4P1107 | 30 | 17'-8" | 7 | 14'-6" | | | | | 2816 |
| 4P1108 | 33 | 15'-8" | 7 | 12'-6" | | | | | 2747 |
| | | NON EPOXY COATED = | | | | 17833 | | | |
| | | EPOXY COATED = | | | | 0 | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-4 = | | | | 17833 |

## PIER P-5

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 5P501 | 24 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 213 |
| 5P502 | 24 | 7'-8" | 2 | 2'-8" | 2'-7" | | | | 192 |
| 5P503 | 36 | 9'-6" | 2 | 3'-7" | 2'-7" | | | | 357 |
| 5P504 | 36 | 7'-2" | 2 | 2'-5" | 2'-7" | | | | 269 |
| 5P505 | 12 | 10'-8" | 2 | 3'-8" | 3'-7" | | | | 134 |
| 5P506 | 12 | 7'-10" | 2 | 2'-3" | 3'-7" | | | | 98 |
| 5P507 | 8 | 25'-8" | ST. | | | | | | 214 |
| 5P601 | 8 | 8'-0" | 12 | 3'-6" | 4'-6" | 6" | | | 96 |
| 5P801 | 8 | 19'-0" | ST. | | | | | | 406 |
| 5P1001 | 8 | 40'-6" | ST. | | | | | | 1394 |
| 5P1101 | 16 | 22'-7" | 1 | 3'-0" | 19'-10" | | | | 1920 |
| 5P1102 | 39 | 15'-0" | ST. | | | | | | 3108 |
| 5P1103 | 39 | 25'-11" | ST. | | | | | | 5370 |
| 5P1104 | 39 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 2020 |
| 5P1105 | 39 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 1606 |
| 5P1106 | 54 | 23'-8" | 7 | 20'-6" | | | | | 6790 |
| 5P1107 | 60 | 17'-8" | 7 | 14'-6" | | | | | 5632 |
| | | NON EPOXY COATED = | | | | 29819 | | | |
| | | EPOXY COATED = | | | | 0 | | | |
| | | | | | TOTAL PIER P-5 = | | | | 29819 |

## PIER P-6

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 6P501 | 12 | 25'-5" | ST. | | | | | | 318 |
| 6P502 | 32 | 8'-8" | 2 | 2'-11" | 3'-1" | | | | 289 |
| 6P503 | 40 | 8'-2" | 2 | 2'-8" | 3'-1" | | | | 341 |
| 6P504 | 40 | 10'-0" | 2 | 3'-7" | 3'-1" | | | | 417 |
| 6P601 | 8 | 7'-3" | 12 | 3'-0" | 4'-3" | 6" | | | 87 |
| 6P701 | 7 | 18'-0" | ST. | | | | | | 258 |
| 6P1001 | 7 | 40'-6" | ST. | | | | | | 1220 |
| 6P1002 | 14 | 21'-10" | 1 | 3'-1" | 19'-0" | | | | 1315 |
| 6P1003 | 42 | 9'-3" | 1 | 1'-0" | 8'-6" | | | | 1672 |
| 6P1004 | 42 | 17'-2" | ST. | | | | | | 3102 |
| 6P1101 | 24 | 15'-8" | 7 | 12'-6" | | | | | 1998 |
| 6P1102 | 30 | 13'-8" | 7 | 10'-6" | | | | | 2178 |
| | | NON EPOXY COATED = | | | | 13195 | | | |
| | | EPOXY COATED = | | | | 0 | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | | | | TOTAL PIER P-6 = | | | | 13195 |

## PIER P-7

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 7P501 | 6 | 39'-9" | ST. | | | | | | 249 |
| 7P502 | 4 | 39'-9" | ST. | | | | | | 166 |
| 7P503 | 16 | 8'-4" | 2 | 2'-8" | 3'-3" | | | | 139 |
| 7P504 | 26 | 9'-2" | 2 | 3'-1" | 3'-3" | | | | 249 |
| 7P505 | 26 | 7'-10" | 2 | 2'-5" | 3'-3" | | | | 212 |
| 7P507 | 40 | 7'-2" | 2 | 3'-0" | 1'-5" | | | | 299 |
| 7P508 | 40 | 8'-2" | 2 | 3'-6" | 1'-5" | | | | 341 |
| 7P601 | 3 | 39'-9" | ST. | | | | | | 179 |
| 7P602 | 8 | 6'-3" | 12 | 3'-0" | 3'-3" | 6" | | | 75 |
| 7P801 | 5 | 19'-8" | ST. | | | | | | 263 |
| 7P1001 | 10 | 17'-0" | 1 | 2'-7" | 14'-8" | | | | 732 |
| 7P1002 | 5 | 33'-2" | ST. | | | | | | 714 |
| 7P1003 | 24 | 14'-11" | ST. | | | | | | 1540 |
| 7P1004 | 24 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1041 |
| 7P1005 | 48 | 13'-4" | 7 | 10'-6" | | | | | 2754 |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

372/455

AKRON INNERBELT
SUM - 59 - 0.00

FOR NOTES SEE SHEET 32/32.

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO · AKRON OHIO

29/32

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P | JGP | 12-15-82 | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| | NON EPOXY COATED = | 8953 | | | | | | | |
| | EPOXY COATED = | 0 | | | | | | | |
| | TOTAL PIER P-7 | | | | | | | | 8953 |

## PIER P-8

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 8P502 | 4 | 39'-9" | ST. | | | | | | 166 |
| 8P503 | 12 | 7'-6" | 2 | 2'-7" | 2'-7" | | | | 94 |
| 8P504 | 18 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 160 |
| 8P505 | 18 | 8'-2" | 2 | 2'-11" | 2'-7" | | | | 153 |
| 8P601 | 8 | 6'-3" | 12 | 3'-0" | 3'-3" | 6" | | | 75 |
| 8P602 | 7 | 17'-10" | ST. | | | | | | 187 |
| 8P701 | 14 | 16'-1" | 1 | 2'-6" | 13'-9" | | | | 460 |
| 8P801 | 7 | 33'-2" | ST. | | | | | | 620 |
| 8P1001 | 24 | 11'-4" | 7 | 8'-6" | | | | | 1170 |
| 8P1002 | 24 | 11'-4" | 7 | 8'-6" | | | | | 1170 |
| 8P1003 | 24 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1041 |
| 8P1004 | 24 | 15'-8" | ST. | | | | | | 1618 |
| | NON EPOXY COATED = | 6914 | | | | | | | |
| | EPOXY COATED = | 0 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | TOTAL PIER P-8 = | | | | | | | | 6914 |

## SUPERSTRUCTURE S-1

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| * | 15401 | 455 | 30'-0" | ST. | | | | | | 9118 |
| * | SERIES | 1-SET | 12'-4" | | | | | | | |
| | OF | OF65= | TO | ST. | | | | | 1½" | 707 |
| | 15402 | 65BAR | 20'-3" | | | | | | | |
| | 15501 | 331 | 41'-6" | ST. | | | | | | 14327 |
| | 15502 | 350 | 30'-0" | ST. | | | | | | 10951 |
| | SERIES | 1-SET | 14'-8" | | | | | | | |
| | OF | OF50= | TO | ST. | | | | | 1 15/16" | 969 |
| | 15503 | 50BAR | 22'-6" | | | | | | | |
| * | 15504 | 348 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 1119 |
| * | 15505 | 352 | 5'-10" | 23 | 2'-3" | 2'-7" | | | | 2142 |
| * | 15506 | 348 | 2'-3" | 1 | 10" | 1'-6" | | | | 817 |
| * | 15507 | 56 | 30'-0" | ST. | | | | | | 1752 |
| * | 15508 | 4 | 24'-4" | ST. | | | | | | 102 |
| * | 15509 | 4 | 17'-4" | ST. | | | | | | 72 |
| | 15510 | 6 | 6'-11" | ST. | | | | | | 43 |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| SERIES | 1-SET | 41'-1" | | | | | | | |
| OF | OF54= | TO | ST. | | | | | 7 9/16" | 1371 |
| 15511 | 54BAR | 7'-7" | | | | | | | |
| SERIES | 1-SET | 40'-3" | | | | | | | |
| OF | OF74= | TO | ST. | | | | | 5 9/16" | 1794 |
| 15512 | 74BAR | 6'-3" | | | | | | | |
| 15513 | 11 | 5'-9" | ST. | | | | | | 66 |
| 15514 | 1 | 5'-8" | 12 | 9" | 5'-0" | 3'-3" | | | 6 |
| 15515 | 1 | 4'-11" | 12 | 1'-4" | 3'-8" | 2'-4" | | | 5 |
| * 15516 | 128 | 45'-0" | ST. | | | | | | 6008 |
| * 15517 | 5 | 2'-7" | 1 | 10" | 1'-10" | | | | 13 |
| * 15518 | 5 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 18 |
| * 15520 | 56 | 14'-8" | ST. | | | | | | 857 |
| * 15521 | 96 | 7'-2" | ST. | | | | | | 718 |
| * 15522 | 8 | 10'-2" | ST. | | | | | | 85 |
| * 15523 | 8 | 13'-8" | ST. | | | | | | 114 |
| 15540 | 52 | 5'-5" | 3 | 3'-3" | 1'-7" | 10" | | | 294 |
| 15541 | 52 | 6'-7" | 9 | 3'-1" | 8" | | | | 357 |
| 15542 | 52 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 167 |
| 15543 | 52 | 5'-8" | 12 | 3'-6" | 2'-3" | 1'-7" | | | 307 |
| 15544 | 32 | 11'-4" | ST. | | | | | | 378 |
| 15545 | 16 | 3'-4" | ST. | | | | | | 56 |
| 15546 | 4 | 27'-8" | ST. | | | | | | 115 |
| 15560 | 32 | 3'-5" | 16 | 7" | 1'-11" | 11" | 1'-1" | | 114 |
| 15561 | 8 | 13'-7" | ST. | | | | | | 113 |
| * 15570 | 5 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 33 |
| * 15601 | 331 | 41'-6" | ST. | | | | | | 20632 |
| * 15602 | 6 | 6'-11" | ST. | | | | | | 62 |
| * SERIES | 1-SET | 41'-1" | | | | | | | |
| OF | OF54= | TO | ST. | | | | | 7 9/16" | 1974 |
| 15603 | 54BAR | 7'-7" | | | | | | | |
| * SERIES | 1-SET | 40'-3" | | | | | | | |
| OF | OF74= | TO | ST. | | | | | 5 9/16" | 2584 |
| 15604 | 74BAR | 6'-3" | | | | | | | |
| * 15605 | 11 | 5'-9" | ST. | | | | | | 95 |
| * 15606 | 1 | 6'-5" | 12 | 9" | 5'-9" | 3'-3" | | | 10 |
| * 15607 | 1 | 4'-11" | 12 | 1'-4" | 3'-8" | 2'-4" | | | 7 |
| * 15670 | 4 | 6'-0" | ST. | | | | | | 36 |
| 15671 | 4 | 6'-0" | ST. | | | | | | 36 |
| * 15672 | 4 | 6'-8" | 60 | | | | | | 40 |
| * 15673 | 4 | 2'-2" | 1 | 10" | 1'-6" | | | | 13 |
| * 15674 | 4 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 19 |
| | NON EPOXY COATED = | 31469 | | | | | | | |
| | EPOXY COATED = | 49147 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | |

## SUPERSTRUCTURE S-2

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| * | 25401 | 1105 | 30'-0" | ST. | | | | | | 22144 |
| * | SERIES | 1-SET | 8'-6" | | | | | | | |
| | OF | OF65= | TO | ST. | | | | | 5" | 948 |
| | 25402 | 65BAR | 35'-2" | | | | | | | |
| | 25501 | 899 | 41'-6" | ST. | | | | | | 38913 |
| | 25502 | 850 | 30'-0" | ST. | | | | | | 26596 |
| | SERIES | 1-SET | 12'-6" | | | | | | | |
| | OF | OF50= | TO | ST. | | | | | 6 15/16" | 1391 |
| | 25503 | 50BAR | 40'-10" | | | | | | | |
| * | 25504 | 816 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 2624 |
| * | 25505 | 825 | 5'-10" | 23 | 2'-3" | 2'-7" | | | | 5019 |
| * | 25506 | 816 | 2'-3" | 1 | 10" | 1'-6" | | | | 1915 |
| * | 25507 | 140 | 30'-0" | ST. | | | | | | 4381 |
| * | 25508 | 4 | 17'-0" | ST. | | | | | | 71 |
| * | 25509 | 4 | 17'-9" | ST. | | | | | | 74 |
| | SERIES | 1-SET | 35'-10" | | | | | | | |
| | OF | OF7= | TO | ST. | | | | | 5'-0 13/16" | 151 |
| | 25510 | 7BAR | 5'-5" | | | | | | | |
| | 25511 | 6 | 4'-9" | ST. | | | | | | 30 |
| | SERIES | 1-SET | 39'-6" | | | | | | | |
| | OF | OF53= | TO | ST. | | | | | 7 7/8" | 1239 |
| | 25512 | 53BAR | 5'-4" | | | | | | | |
| | 25513 | 1 | 4'-9" | 12 | 1'-4" | 3'-6" | 2'-8" | | | 5 |
| * | 25514 | 192 | 34'-10" | ST. | | | | | | 6976 |
| * | 25515 | 192 | 33'-10" | ST. | | | | | | 6775 |
| * | 25516 | 128 | 36'-1" | ST. | | | | | | 4817 |
| * | 25518 | 9 | 2'-7" | 1 | 10" | 1'-10" | | | | 24 |
| * | 25519 | 9 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 32 |
| * | 25520 | 120 | 14'-8" | ST. | | | | | | 1836 |
| * | 25521 | 292 | 7'-2" | ST. | | | | | | 2183 |
| * | 25522 | 8 | 8'-4" | ST. | | | | | | 70 |
| * | 25523 | 4 | 11'-10" | ST. | | | | | | 49 |
| | 25540 | 52 | 5'-5" | 3 | 3'-3" | 1'-7" | 10" | | | 294 |
| | 25541 | 52 | 6'-7" | 9 | 3'-1" | 8" | | | | 357 |
| | 25542 | 52 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 167 |
| | 25543 | 52 | 5'-8" | 12 | 3'-6" | 2'-3" | 1'-7" | | | 307 |
| | 25544 | 32 | 11'-4" | ST. | | | | | | 378 |
| | 25545 | 16 | 3'-4" | ST. | | | | | | 56 |
| | 25546 | 4 | 27'-8" | ST. | | | | | | 115 |
| | 25550 | 52 | 4'-11" | 3 | 2'-9" | 1'-7" | 10" | | | 267 |
| | 25551 | 52 | 6'-1" | 9 | 2'-10" | 8" | | | | 330 |
| | 25552 | 52 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 167 |
| | 25553 | 52 | 4'-11" | 12 | 2'-9" | 2'-3" | 1'-7" | | | 267 |
| | 25554 | 32 | 8'-8" | ST. | | | | | | 289 |
| | 25555 | 16 | 2'-8" | ST. | | | | | | 45 |
| | 25556 | 4 | 21'-11" | ST. | | | | | | 91 |
| * | 25570 | 15 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 99 |
| * | 25601 | 899 | 41'-6" | ST. | | | | | | 36037 |
| * | SERIES | 1-SET | 35'-10" | | | | | | | |
| | OF | OF7= | TO | ST. | | | | | 5'-0 13/16" | 217 |
| | 25602 | 7BAR | 5'-5" | | | | | | | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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455

AKRON INNERBELT
SUM - 59 - 0.00

FOR NOTES SEE SHEET 32 32.

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CLEVELAND, OHIO AKRON, OHIO

30 32

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P. | JDP | 12-15-82 | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| * SERIES | 1-SET | 39'-6" | | | | | | | |
| OF | OF53= | TO | ST. | | | | | 7 7/8" | 1785 |
| 25603 | 53BAR | 5'-4" | | | | | | | |
| * 25604 | 6 | 4'-9" | ST. | | | | | | 43 |
| * 25605 | 1 | 4'-9" | 12 | 1'-4" | 3'-6" | 2'-8" | | | 7 |
| * 25670 | 12 | 6'-0" | ST. | | | | | | 108 |
| 25671 | 12 | 6'-0" | ST. | | | | | | 108 |
| * 25672 | 12 | 6'-8" | 60 | | | | | | 120 |
| * 25673 | 12 | 2'-2" | 1 | 10" | 1'-6" | | | | 39 |
| * 25674 | 12 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 56 |
| | | | | | | | | | |
| | NON EPOXY COATED = 71563 | | | | | | | | |
| | EPOXY COATED = 118449 | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | SUPERSTRUCTURE S-3 | | | | | | | | |
| * 35401 | 204 | 30'-0" | ST. | | | | | | 4088 |
| * 35402 | 65 | 28'-8" | ST. | | | | | | 1245 |
| | | | | | | | | | |
| | | | | | | | | | |
| 35501 | 213 | 41'-8" | ST. | | | | | | 9257 |
| 35502 | 150 | 30'-0" | ST. | | | | | | 4693 |
| 35503 | 50 | 29'-8" | ST. | | | | | | 1547 |
| * 35504 | 186 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 598 |
| * 35505 | 190 | 5'-10" | 23 | 2'-3" | 2'-7" | | | | 1156 |
| * 35506 | 186 | 2'-3" | 1 | 10" | 1'-6" | | | | 436 |
| * 35507 | 24 | 30'-0" | ST. | | | | | | 751 |
| * 35508 | 8 | 31'-5" | ST. | | | | | | 262 |
| * 35509 | 64 | 41'-0" | ST. | | | | | | 2737 |
| * 35510 | 4 | 2'-7" | 1 | 10" | 1'-10" | | | | 11 |
| * 35511 | 4 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 14 |
| * 35520 | 32 | 14'-8" | ST. | | | | | | 490 |
| * 35521 | 48 | 7'-2" | ST. | | | | | | 359 |
| * 35522 | 8 | 12'-4" | ST. | | | | | | 103 |
| 35540 | 52 | 4'-11" | 3 | 2'-9" | 1'-7" | 10" | | | 267 |
| 35541 | 52 | 6'-1" | 9 | 2'-10" | 8" | | | | 330 |
| 35542 | 52 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 167 |
| 35543 | 52 | 4'-11" | 12 | 2'-9" | 2'-3" | 1'-7" | | | 267 |
| 35544 | 32 | 8'-8" | ST. | | | | | | 289 |
| 35545 | 16 | 2'-8" | ST. | | | | | | 45 |
| 35546 | 4 | 21'-11" | ST. | | | | | | 91 |
| 35560 | 32 | 2'-7" | 16 | 7" | 1'-2" | 7" | 1'-0" | | 86 |
| 35561 | 8 | 8'-8" | ST. | | | | | | 72 |
| * 35570 | 5 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 33 |
| | | | | | | | | | |
| | | | | | | | | | |
| * 35601 | 213 | 41'-8" | ST. | | | | | | 13330 |
| * 35670 | 4 | 6'-0" | ST. | | | | | | 36 |
| 35671 | 4 | 6'-0" | ST. | | | | | | 36 |
| * 35672 | 4 | 6'-8" | 60 | | | | | | 40 |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| * 35673 | 4 | 2'-2" | 1 | 10" | 1'-6" | | | | 13 |
| * 35674 | 4 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 19 |
| | NON EPOXY COATED = 17147 | | | | | | | | |
| | EPOXY COATED = 25721 | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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AKRON INNERBELT
SUM-59-0.00

FOR NOTES SEE SHEET 32/32.

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CLEVELAND OHIO AKRON OHIO

31/32

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P. | JOP | 12-15-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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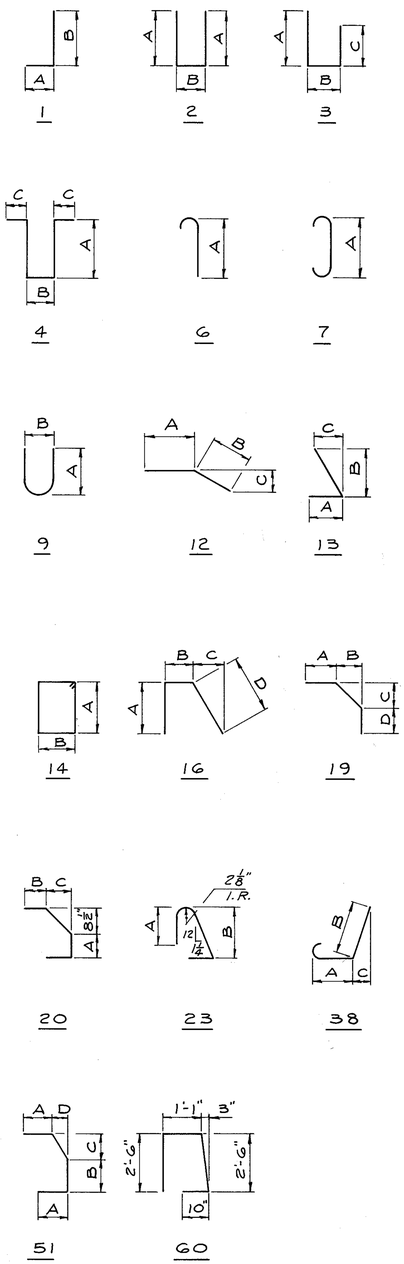
AKRON INNERBELT
SUM - 59 - 0.00

| SPIRAL REINFORCING SCHEDULE | | | | | |
|---|---|---|---|---|---|
| MARK | Nº REQ D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
| SPIRALS - PIER P-1 | | | | | |
| 1P-SP506 | 1 | 2'-7" | 22'-0" | 3.50 | 740 |
| 1P-SP507 | 1 | 2'-7" | 22'-7" | 3.50 | 759 |
| 1P-SP508 | 1 | 2'-7" | 23'-7" | 3.50 | 791 |
| TOTAL SPIRALS PIER P-1 = | | | | | 2290 |
| SPIRALS - PIER P-2 | | | | | |
| 2P-SP506 | 1 | 2'-7" | 20'-8" | 3.50 | 696 |
| 2P-SP507 | 1 | 2'-7" | 21'-3" | 3.50 | 715 |
| 2P-SP508 | 1 | 2'-7" | 21'-11" | 3.50 | 737 |
| TOTAL SPIRALS PIER P-2 = | | | | | 2148 |
| SPIRALS - PIER P-3 | | | | | |
| 3P-SP507 | 3 | 3'-7" | 18'-7" | 3.50 | 2542 |
| TOTAL SPIRALS PIER P-3 = | | | | | 2542 |
| SPIRALS - PIER P-4 | | | | | |
| 4P-SP507 | 3 | 3'-1" | 18'-8" | 3.50 | 2224 |
| TOTAL SPIRALS PIER P-4 = | | | | | 2224 |

| SPIRAL REINFORCING SCHEDULE | | | | | |
|---|---|---|---|---|---|
| MARK | Nº REQ D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
| SPIRALS - PIER P-5 | | | | | |
| 5P&SP508 | 3 | 3'-1" | 25'-5" | 3.50 | 2995 |
| TOTAL SPIRALS PIER P-5 = | | | | | 2995 |
| SPIRALS - PIER P-6 | | | | | |
| 6P-SP505 | 3 | 3'-1" | 13'-8" | 3.50 | 1617 |
| TOTAL SPIRALS PIER P-6 = | | | | | 1617 |
| SPIRALS - PIER P-7 | | | | | |
| 7P-SP506 | 3 | 2'-7" | 11'-10" | 3.50 | 1198 |
| TOTAL SPIRALS PIER P-7 = | | | | | 1198 |
| SPIRALS - PIER P-8 | | | | | |
| 8P-SP501 | 3 | 2'-7" | 12'-7" | 3.50 | 1270 |
| TOTAL SPIRALS PIER P-8 = | | | | | 1270 |




NON EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL= | 14,884 LBS |
| PIER | TOTAL= | 138431 LBS |
| SUPERSTRUCTURE | TOTAL= | 120,179 LBS |
| GRAND | TOTAL= | 273,494 LBS |

EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL= | 1,233 LBS |
| PIER | TOTAL= | 0 LBS |
| SUPERSTRUCTURE | TOTAL= | 193,317 LBS |
| GRAND | TOTAL= | 194,550 LBS |

## NOTES

(1) FOR SPIRAL REINFORCING OVER 15'-0". FOUR ANGLE SPACERS WEIGHING APPROX. 1.01 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(2) FOR SPIRAL REINFORCING UNDER 15'-0". FOUR ANGLE SPACERS WEIGHING APPROX. .80LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(3) THE LENGTH SHOWN IN THE STEEL SCHEDULE FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE TOP OF THE COLUMN INCLUDING THREE (3) CLOSED COILS (ONE AND ONE HALF CLOSED COILS AT THE ENDS OF EACH SPIRAL UNIT.)

(4) REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

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32/32

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0016
AKRON OHIO SUMMIT COUNTY
STA. 133 + 45.65 TO STA. 142 + 09.18

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | R.J.P. | | 12-1582 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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AKRON INNERBELT
SUM-59-0.00

## CURVE DATA

BASELINE RAMP "EN" (SPIRAL OUT)

P.I. STA. 132+34.63
C.S. STA. 130+83.20
S.T. STA. 135+33.20

$L_s$ = 450.00'
$L_T$ = 301.57'
$S_T$ = 151.42'
$L_C$ = 448.03'
$\theta_s$ = 18°-00'-00"

CENTERLINE RELOC. DART AVE.

P.I. STA. 236+42.57
P.C. STA. 234+66.45
P.T. STA. 237+93.80

$\Delta$ = 52°-22'-32"
$D_C$ = 16°-00'-00"
R = 358.10
T = 176.11
L = 327.35
E = 40.96
CH = 316.07'

## PROPOSED STRUCTURE

TYPE: CONTINUOUS COMPOSITE WELDED PLATE GIRDER AND ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES.

SKEW: VARIES (SEE PLAN)

SPANS: c/c BEARINGS ALONG ℄ RAMP "EN"
UNIT N°1. 65'-6½", 76'-1⅜", 63'-8¼"
UNIT N°2: 118'-8⅜", 170'-0", 118'-8¼"
UNIT N°3: 60'-2¼", 67'-0", 50'-0"

ROADWAY: 40'-0" F to F. CONC. BARRIERS, 41'-10" O. to O. SLAB

LOADING: HS-20-44 (CASE II) AND ALTERNATE MILITARY LOADING

WEARING: 1½" LATEX MODIFIED SURFACE CONCRETE.

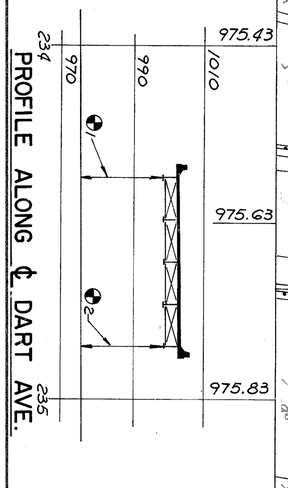
APPROACH SLABS: 25'-0" (AS-1-81)

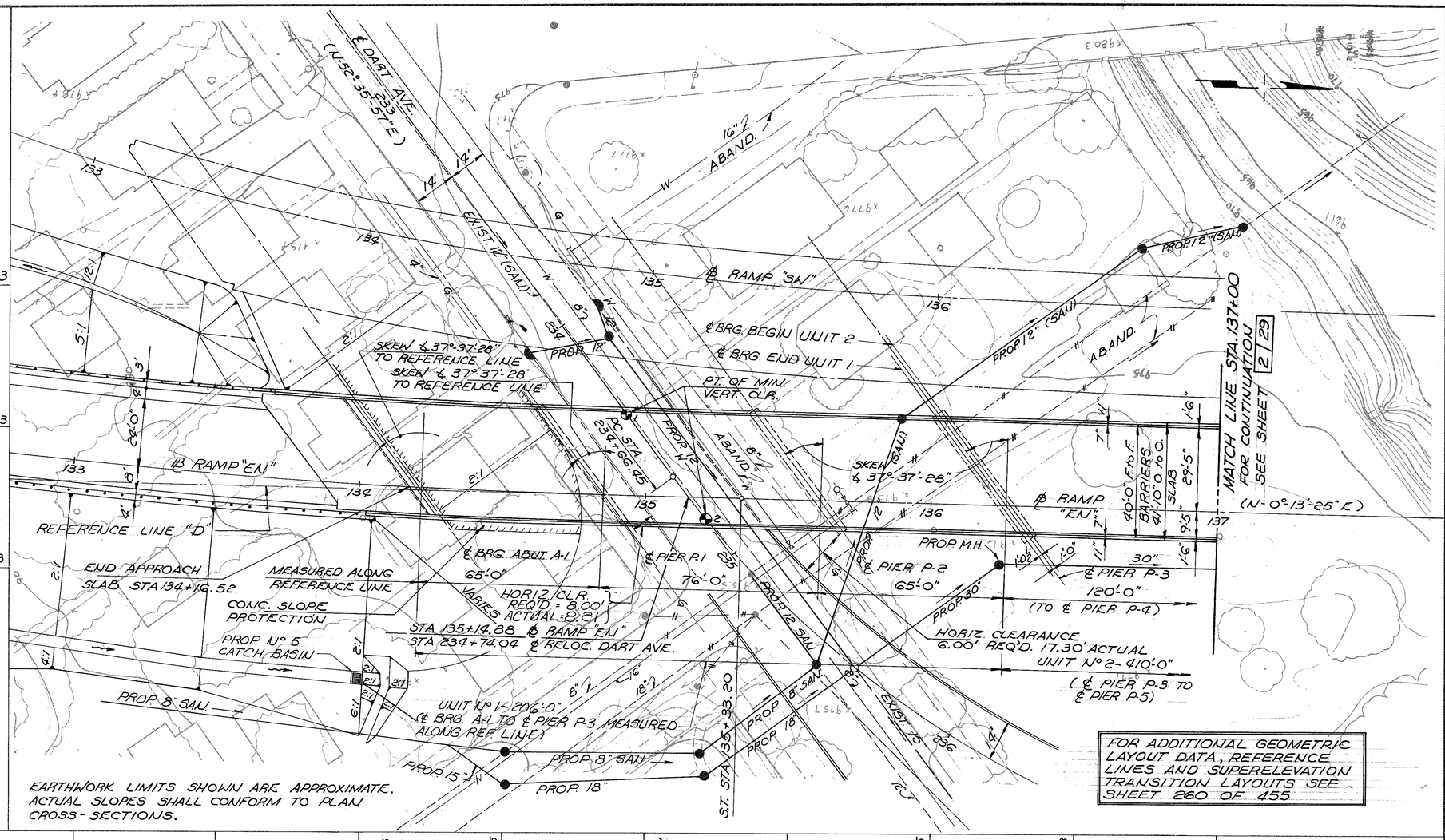
ALIGNMENT: CURVE LT, TANGENT.

SUPERELEVATION: VARIES

SLOPE PROTECTION: CONCRETE

TRAFFIC:
ADT = 15,200 (2000)
ADTT = 760 (2000)



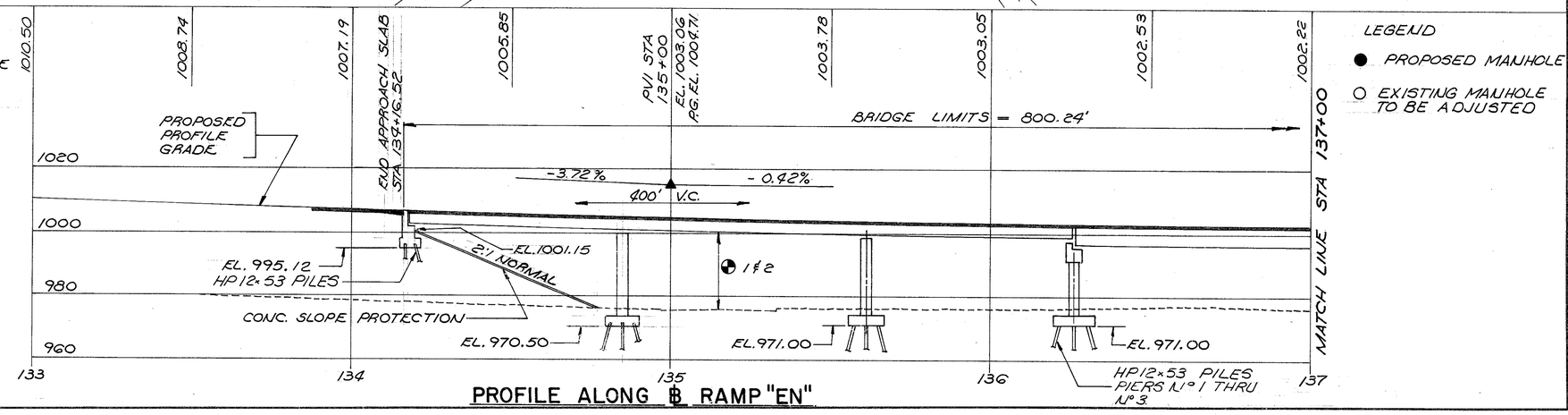




FOR ADDITIONAL GEOMETRIC LAYOUT DATA, REFERENCE LINES AND SUPERELEVATION TRANSITION LAYOUTS SEE SHEET 260 OF 455

PTS. OF VERTICAL CLEARANCE

| | REQUIRED | ACTUAL |
|---|---|---|
| ⊕1 = | 15.33' | 25.42 |
| ⊕2 = | 15.33' | 25.19 |

| | AVERAGE LENGTHS | ESTIMATED PAY FOR PILES |
|---|---|---|
| ABUT. 1 = | 55' | HP12x53 10440 LF STL PILES |
| PIER 1 = | 30' | |
| PIER 2 | 40' | |
| PIER 3 | 50' | |
| PIER 4 | 50 | 12" ø C.I.P. R.C. PILES |
| PIER 5 | 60 | |
| PIER 6 | 70 | |
| PIER 7 | 75 | |
| PIER 8 | 55 | |
| ABUT. 2 | 60 | |




PROFILE ALONG ℄ RAMP "EN"

LEGEND
- ● PROPOSED MANHOLE
- ○ EXISTING MANHOLE TO BE ADJUSTED

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1/29

## SITE PLAN

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134+16.52 TO STA. 142+16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWN | | ALH | JJP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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955

AKRON INNERBELT
SUM-59-0.00

SKEW ANGLES
● = ∢ 37°-37'-28"
▼ = ∢ 6°-05'-54"

PT. OF MIN. VERTICAL CLEARANCE (THORNTON)

| | REQ'D. | ACTUAL |
|---|---|---|
| ◔3 | 15.33' | 17.07 |
| ◔4 | 15.33 | 16.74 |

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2/29

# SITE PLAN

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JNW | | A.L.H. | JJP | 11-4-82 | |

PROFILE ALONG ℄ RAMP "EN"

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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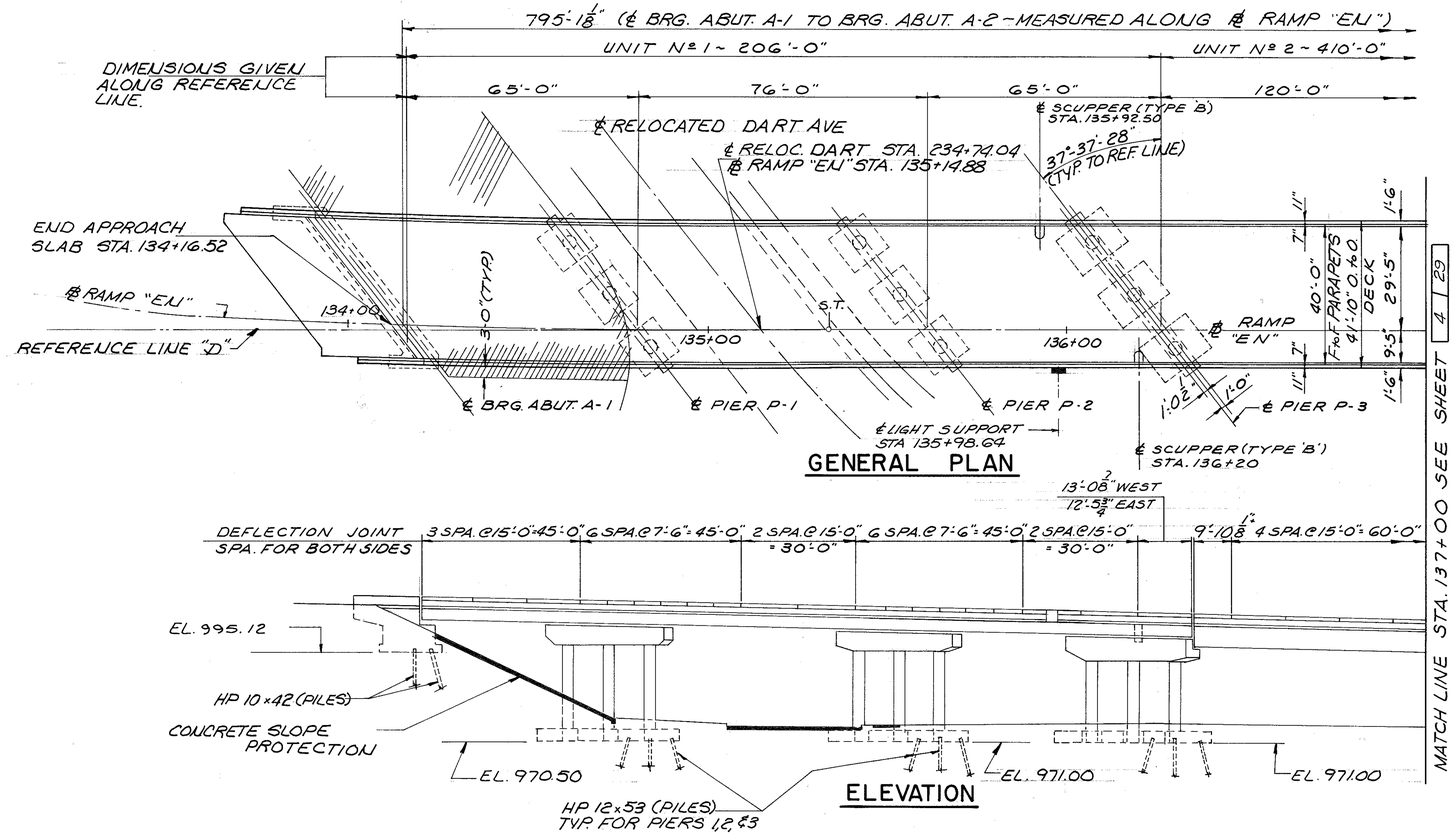
AKRON INNERBELT
SUM-59-0.00




GENERAL PLAN




ELEVATION

MATCH LINE STA. 137+00 SEE SHEET 4/29

NOTE

(1) FOR SCUPPER AND LIGHT STANDARD SUPPORT DETAILS SEE SHEET 261/455.

## ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | PIER | GEN'L. |
|---|---|---|---|---|---|---|---|
| 503 | LUMP | LS | COFFERDAMS, CRIBS AND SHEETING | | | | LUMP |
| 503 | 1729 | CY | UNCLASSIFIED EXCAVATION | | 281 | 1448 | |
| 505 | LUMP | LS | PILE DRIVING EQUIPMENT MOBILIZATION | | | | LUMP |
| 506 | LUMP | LS | STATIC LOAD TEST (12" C.I.P) | | | | LUMP |
| 506 | LUMP | LS | STATIC LOAD TEST (HP 12x53) | | | | LUMP |
| 507 | 8430 | LF | 12" DIA. C.I.P. REINF. CONCRETE PILES | | 900 | 7530 | |
| 507 | 1950 | LF | STEEL PILES, HP 12x53 (*) | | | 1950 | |
| 507 | 935 | LF | STEEL PILES, HP 10x42 | | 935 | | |
| 509 | 264456 | LB | REINFORCING STEEL, GRADE 60 | 111856 | 13573 | 139027 | |
| 864 | 182013 | LB | EPOXY COATED REINF. STEEL GRADE 60 | 180992 | 1021 | 0 | |
| 511 | 1028 | CY | CLASS "S" CONCRETE, SUPERSTRUCTURE(*) | 1028 | | | |
| 511 | 360 | CY | CLASS "C" CONCRETE, PIERS ABOVE FTGS. | | | 360 | |
| 511 | 92 | CY | CLASS "C" CONCRETE, ABUTS. ABOVE FTGS. | | 92 | | |
| 511 | 594 | CY | CLASS "C" CONCRETE, FOOTINGS | | 83 | 511 | |
| 513 | 10905 | EA. | WELDED STUD SHEAR CONNECTORS | 10905 | | | |
| 513 | 899200 | LB | STRUCTURAL STEEL (A-588) AISC CATEGORY III(*) | 899200 | | | |
| 513 | 47800 | LB | STRUCTURAL STEEL (A-36) CURB PLATES, GALVANIZED (AISC CERT. NOT REQ'D.) | 47800 | | | |

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | PIER | GEN'L. |
|---|---|---|---|---|---|---|---|
| 518 | 53 | CY | POROUS BACKFILL | | 53 | | |
| 518 | 97 | LF | 6" NON-PERF HELICAL C.S.P. INCLUD. SPEC., 707.01 | | 97 | | |
| 518 | 85 | LF | 6" PERFORATED HELICAL C.S.P., 707.01 | | 85 | | |
| 518 | 8 | EA. | SCUPPERS INCLUDING SUPPORTS | 8 | | | |
| 523 | 3 | HOUR | DYNAMIC LOAD TESTS (12" C.I.P.) | | | | 3 |
| 523 | 3 | HOUR | DYNAMIC LOAD TESTS (HP 12x53) | | | | 3 |
| 601 | 706 | S.Y. | CONCRETE SLOPE PROTECTION | | 706 | | |
| 625 | | | SEE LIGHTING SUMMARY SHEET | | | | |
| 845 | 3459 | S.Y. | LATEX MODIFIED CONC. OVERLAY (1 1/4" THK)(*) | 3459 | | | |
| 516 | 143 | LF | EXPANSION JOINT DEVICE TYPE A (**) | 143 | | | |
| 516 | 51 | LF | EXPANSION JOINT DEVICE TYPE B (**) | 51 | | | |
| SPEC | 2329 | S.Y. | SEALING OF CONCRETE SURFACES (*) | 1095 | 123 | 1111 | |

(*) SEE PROPOSAL NOTES
(**) AS PER PLAN

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CLEVELAND, OHIO AKRON, OHIO

GENERAL PLAN & ELEVATION AND ESTIMATED QUANITITIES 3/29

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
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| BKL | F.F. | | JWW | JJP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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AKRON INNERBELT
SUM-59-0.00

795'-1 1/8" (℄ BRG. ABUT. A-1 TO ℄ BRG. ABUT. A-2 ~ MEASURED ALONG ℄ RAMP "EN")

UNIT Nº 2 ~ 410'-0" | UNIT Nº 3 ~ 178'-6"

120'-0" | 170'-0" | 120'-0" | 61'-6" | 67'-0" | 50'-0"

MATCH LINE STA. 137+00 SEE SHEET 3/29

OHIO CANAL

℄ SCUPPER (TYPE 'B') STA. 138+00

℄ SCUPPER STA. 140+02 (TYPE 'B')

1'-0 1/2"

℄ BRG'S

℄ THORNTON ST.

STA. 52+05.75 ℄ THORNTON = STA. 141+32.25 ℄ RAMP "EN"

℄ SCUPPER (TYPE 'B') STA. 142+00

11" 1'-6" 7" 11" 1'-6" 7"

40'-0" F.TO F. PARAPET

29'-5" 9'-5"

41'-10" O. TO O. DECK

℄ RAMP "EN"

138+00 | 139+00 | 140+00 | 142+00

0+25

3'-0" MIN.

℄ PIER P-4 | ℄ PIER P-5 | ℄ PIER P-6 | ℄ PIER P-7 | ℄ PIER P-8 | ℄ BRG. ABUT. A-2

℄ LIGHT SUPPORT STA. 137+74.89

℄ LIGHT SUPPORT STA. 139+47.39

℄ LIGHT SUPPORT STA. 141+26

BEGIN APPROACH SLAB STA. 142+16.76

℄ SCUPPER (TYPE 'B') STA. 138+25

℄ SCUPPER (TYPE 'B') STA. 140+30

℄ SCUPPER (TYPE 'B') STA. 142+00

## GENERAL PLAN

11'-6 3/4" WEST
13'-2 1/4" EAST

13-SPA. @ 7'-6" = 97'-6" | 5-SPA. @ 15'-0" = 75'-0" | 13-SPA. @ 7'-6" = 97'-6" | 4 SPA. @ 15'-0" = 60'-0" 9'-10 1/2" | 6 SPA. @ 7'-6" = 45'-0" | 2 SPA. @ 15'-0" = 30'-0" | 5 SPA. @ 7'-6" = 37'-6" | 2 SPA. @ 15'-0" = 30'-0"

3 SPA. @ 15'-0" = 45'-0" (W.P.)
1 SPA. @ 15'-0" = 15'-0" (E.P.)

DEFLECTION JOINT 5 SPA. TYP. BOTH SIDES UNLESS NOTED OTHERWISE

TOP OF WATER EL. 964.5

EL. 970.00

EXISTING CHANNEL LINING

EL. 960.00 (TYP.)

12" ϕ C.I.P. PILES (TYP. PIERS 4, 5, 6, 7 & 8)

EL. 968.00

EL. 968.50

EL. 968.50

EL. 981.50

12" ϕ C.I.P. PILES

## ELEVATION

### TYPICAL PANEL DETAILS
(UNIT Nº 1)

7 1/2" | 11-SPA. @ 1'-3" = 13'-9" (12-15507)* | 7 1/2" | 15'-0" PANEL
7 1/2" | 5-SPA. @ 1'-3" = 6'-3" (6-15507)* | 7 1/2" | 7'-6" PANEL
7 1/2" | 10-SPA. @ 1'-2" = 11'-8" (11-15507)* | 9 3/8" | 13'-0 5/8" PANEL
7 1/2" | 9-SPA. @ 1'-3" = 11'-3" (10-15507)* | 7 1/4" | 12'-5 3/8" PANEL

15520 E.F. 15'-0" PANEL
15521 E.F. 7'-6" PANEL
15522 E.F. 13'-0 7/8" PANEL
15523 E.F. 12'-5 3/8" PANEL

### TYPICAL PANEL DETAILS
(UNIT Nº 2)

7 1/2" | 11-SPA. @ 1'-3" = 13'-9" (12-25507)* | 7 1/2" | 15'-0" PANEL
7 1/2" | 5-SPA @ 1'-3" = 6'-3" (6-25507)* | 7 1/2" | 7'-6" PANEL
5 5/8" | 7-SPA @ 1'-3" = 8'-9" (8-25507)* | 7 1/2" | 9'-10 5/8" PANEL

1-25520 E.F. 15'-0" PANEL
1-25521 E.F. 7'-6" PANEL
1-25522 E.F. 9'-10 5/8" PANEL

### TYPICAL PANEL DETAILS
(UNIT Nº 3)

7 1/2" | 11-SPA. @ 1'-3" = 13'-9" (12-35507)* | 7 1/2" | 15'-0" PANEL
7 1/2" | 5-SPA. @ 1'-3" = 6'-3" (6-35507)* | 7 1/2" | 7'-6" PANEL
5 1/4" | 9-SPA. @ 1'-2" = 10'-6" (10-35507)* | 7 1/2" | 11'-6 3/4" PANEL
5 3/4" | 10-SPA. @ 1'-2 1/2" = 12'-1" (11-35507)* | 7 1/2" | 13'-2 1/4" PANEL

SOUTH END

1-35520 E.F. 15'-0" PANEL
1-35521 E.F. 7'-6" PANEL
1-35522 E.F. 11'-6 3/4" PANEL
1-35523 E.F. 13'-2 1/4" PANEL

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4/29

# GENERAL PLAN AND ELEVATION

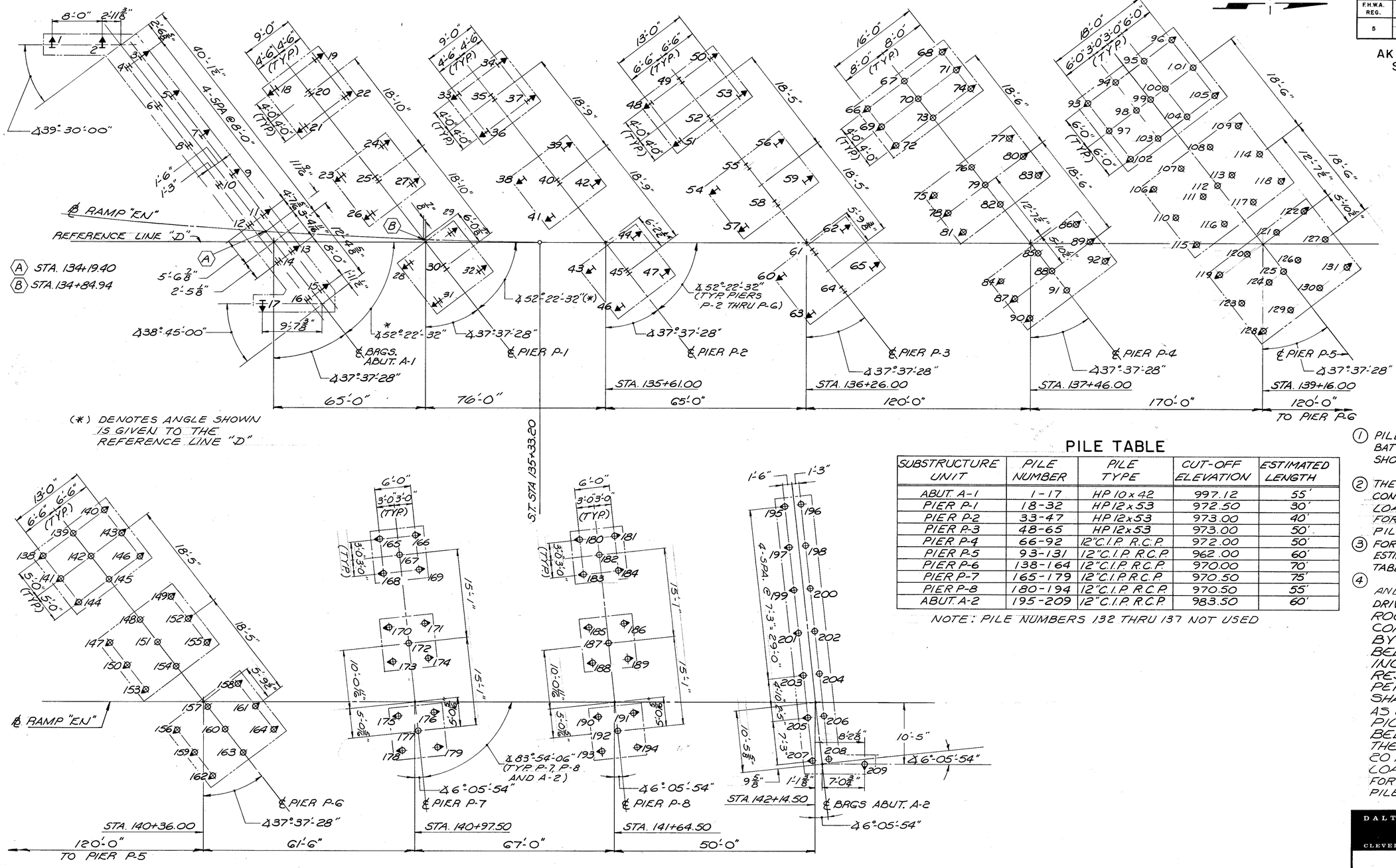
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | JOP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

380/455

AKRON INNERBELT
SUM - 59 - 0.00




## PILE TABLE

| SUBSTRUCTURE UNIT | PILE NUMBER | PILE TYPE | CUT-OFF ELEVATION | ESTIMATED LENGTH |
|---|---|---|---|---|
| ABUT. A-1 | 1-17 | HP 10x42 | 997.12 | 55' |
| PIER P-1 | 18-32 | HP12x53 | 972.50 | 30' |
| PIER P-2 | 33-47 | HP12x53 | 973.00 | 40' |
| PIER P-3 | 48-65 | HP12x53 | 973.00 | 50' |
| PIER P-4 | 66-92 | 12"C.I.P. R.C.P. | 972.00 | 50' |
| PIER P-5 | 93-131 | 12"C.I.P. R.C.P. | 962.00 | 60' |
| PIER P-6 | 138-164 | 12"C.I.P. R.C.P. | 970.00 | 70' |
| PIER P-7 | 165-179 | 12"C.I.P. R.C.P. | 970.50 | 75' |
| PIER P-8 | 180-194 | 12"C.I.P. R.C.P. | 970.50 | 55' |
| ABUT. A-2 | 195-209 | 12"C.I.P. R.C.P. | 983.50 | 60' |

NOTE: PILE NUMBERS 132 THRU 137 NOT USED

## NOTES

1. PILES SHOWN THUS ⊘↕ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
2. THE 12" CAST-IN-PLACE REINFORCED CONCRETE PILES HAVE A DESIGN LOAD OF 40 TONS PER PILE. FOR ABUT. PILES AND 50 TONS PER PILE FOR PIER PILES.
3. FOR PILE CUT-OFF ELEVATIONS AND ESTIMATED PILE LENGTHS SEE PILE TABLE.
4. STEEL HP12x53 AND HP10x42 PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE CONSIDERED AS OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR REFUSAL SHALL BE CONSIDERED AS OBTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS. THE DESIGN LOAD IS 40 TONS PER PILE FOR ABUT. PILES AND 70 TONS PER PILE FOR PIER PILES.

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# PILING PLAN

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

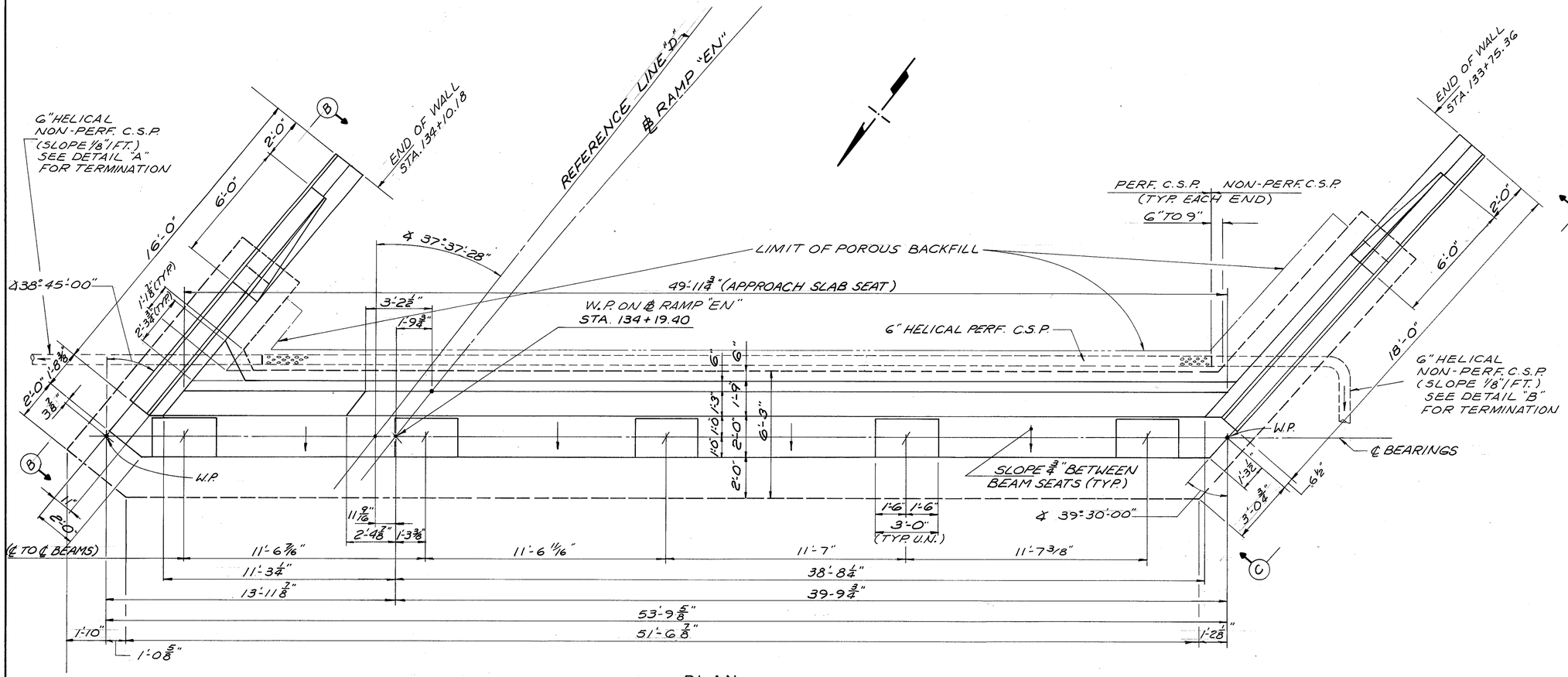
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | F.F. | | A.L.H. | JJP | 11-4-92 | |

PILING PLAN

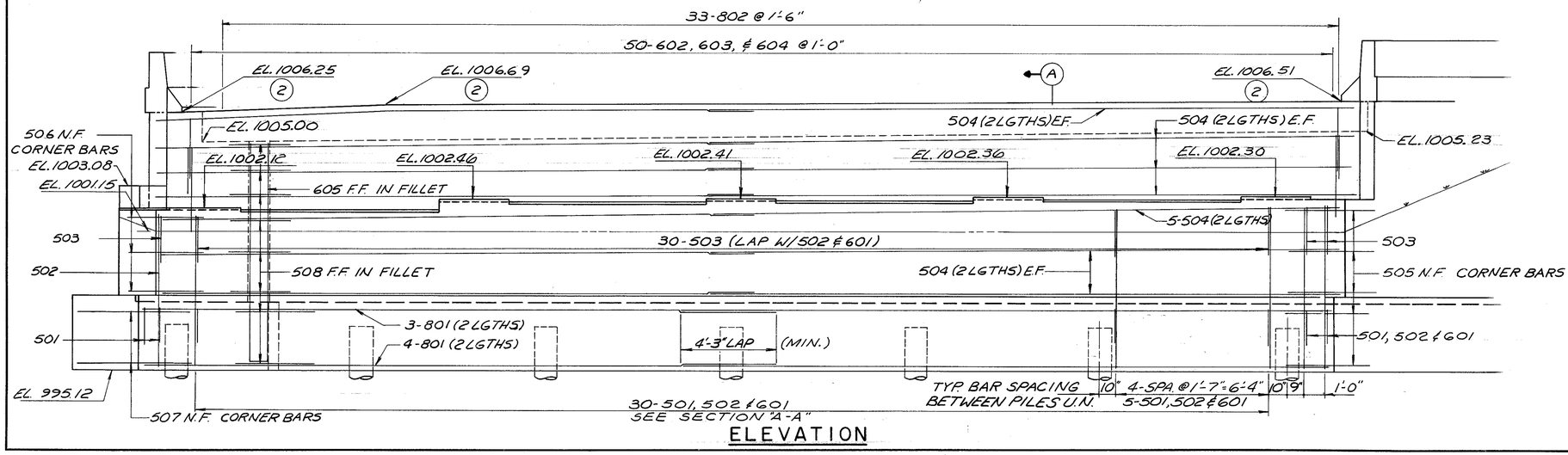
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

381/455

AKRON INNERBELT
SUM-59-0.00




PLAN




ELEVATION

1. ABBREVIATIONS USED ARE:
NF - NEAR FACE
FF - FAR FACE
EF - EACH FACE
WP - WORK POINT

2. BACKWALL ELEVATIONS ARE GIVEN AS FINAL PAVEMENT ELEVATIONS AT FRONT FACE OF BACKWALL.

3. THE PREFIX "A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT UNLESS SHOWN OTHERWISE.

4. POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WINGS, SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WING WALLS 1.5 FT. THICK AT ABUTMENT AND 2.0 FT. THICK AT WINGWALLS.

5. EMBANKMENT PROCEDURE:
THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS, BENCHES, AND PIERS P-1 & P-8 AND THE PILES DRIVEN.

6. FOR SECTIONS "A-A", VIEW "B-B", "C-C" AND ADDITIONAL DETAILS SEE SHEET 7 | 29.

7. FOR PILING PLAN, SEE SHT. 5 | 29

8. FOR EXPANSION JOINT DETAILS SEE SHEET 264/455

9. IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

10. BAR LAPS UNLESS NOTED
No. 5 BARS 1'-8"
No. 6 BARS 2'-0"

11. REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN.

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6 | 29

# ABUTMENT A-1

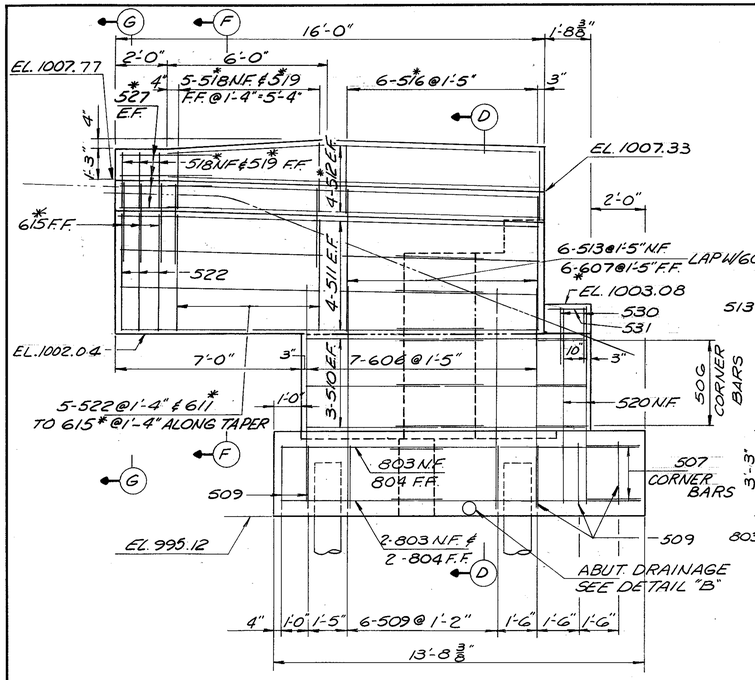
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED, DATE | REVISED |
|---|---|---|---|---|---|
| R.L.F. | D.T. | | A.L.H. | J.D.P. 11-4-82 | |

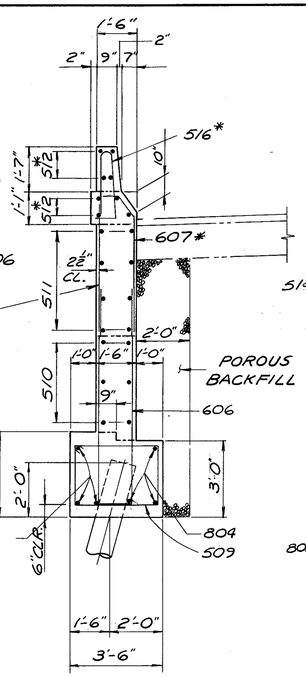
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

382/455

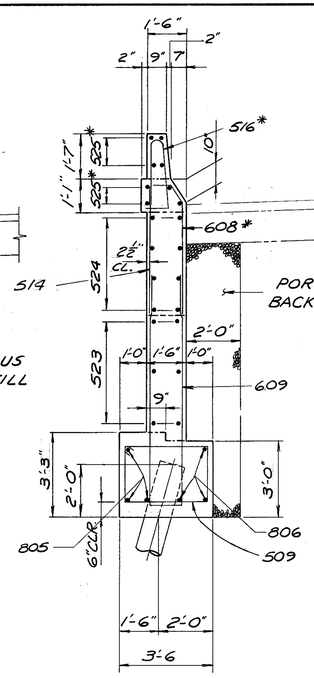
AKRON INNERBELT
SUM-59-0.00



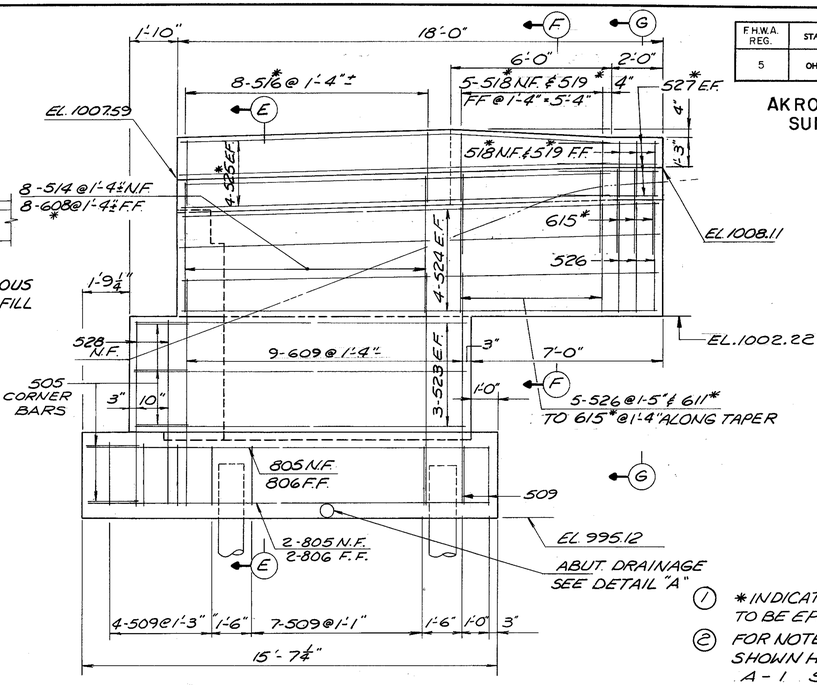

VIEW B-B




SECTION D-D



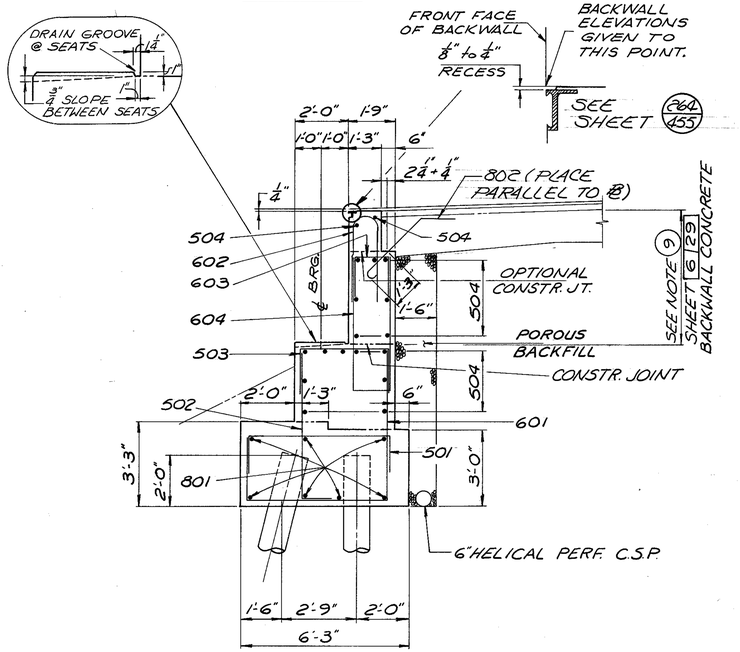

SECTION E-E



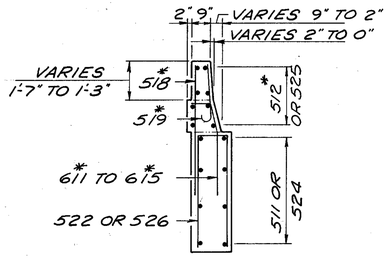

VIEW C-C

NOTES

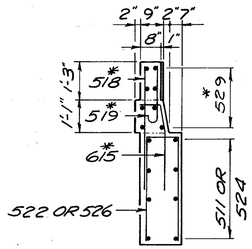
1. * INDICATES REINFORCING BARS TO BE EPOXY COATED.
2. FOR NOTES AND DETAILS NOT SHOWN HERE SEE ABUTMENT A-1 SHEET 6|29.



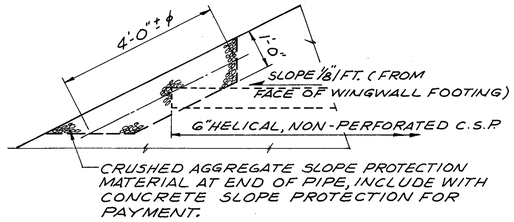

SECTION A-A




SECTION F-F

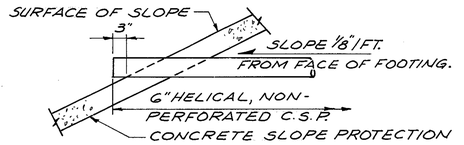



SECTION G-G




DETAIL "A"

TERMINATION OF 6" HELICAL, NON-PERFORATED C.S.P. AT SLOPE




DETAIL "B"

TERMINATION OF 6" HELICAL, NON-PERFORATED C.S.P. AT SLOPE

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7/29

# ABUTMENT A-1 DETAILS

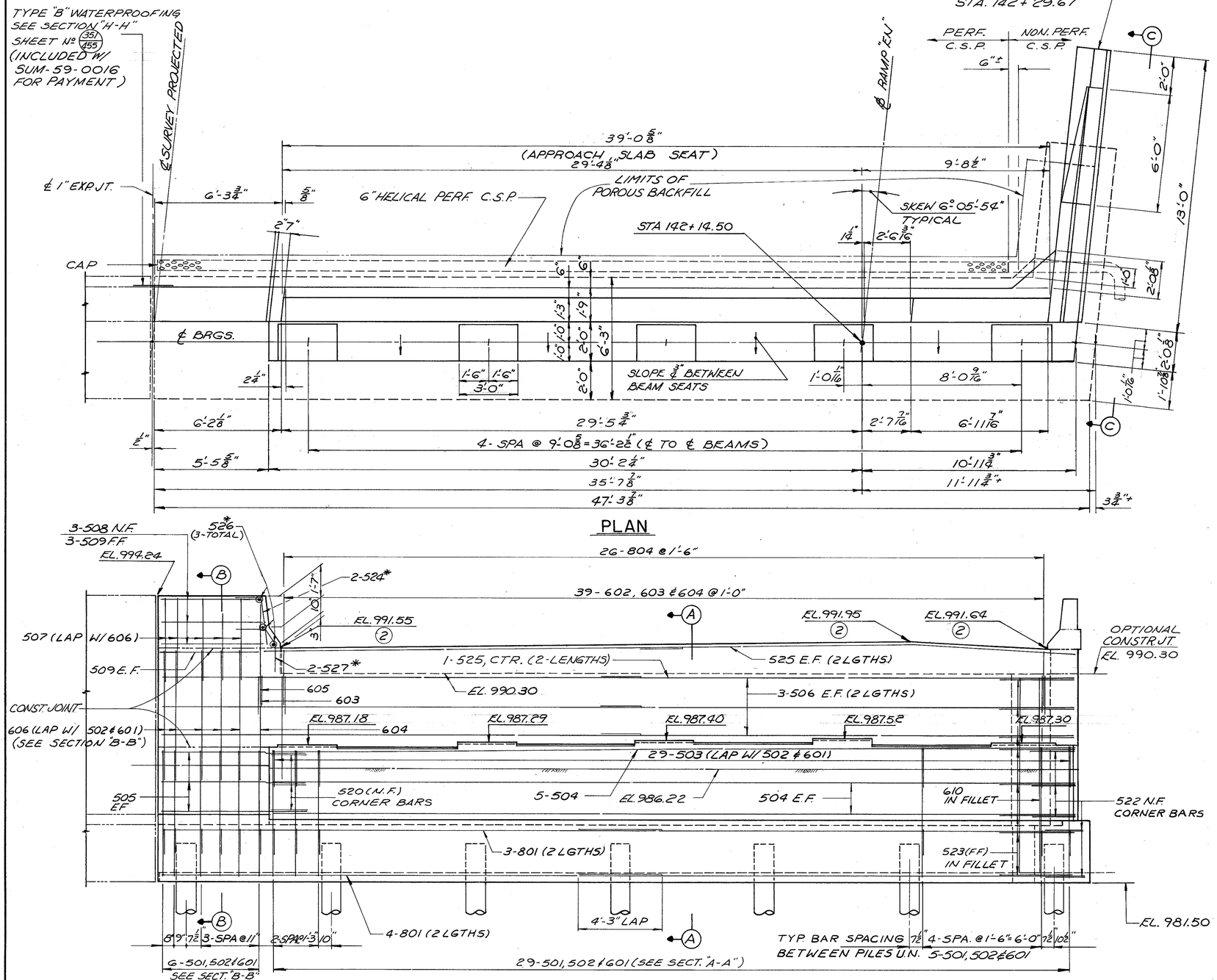
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| R.L.F. | D.T. | | A.L.H. | J.S.P. | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

383/455

AKRON INNERBELT
SUM-59-0.00




ELEVATION

## NOTES

1. ABBREVIATIONS USED ARE:
   NF- NEAR FACE
   FF- FAR FACE
   EF- EACH FACE
2. BACKWALL ELEVATIONS ARE GIVEN AS FINAL PAVEMENT ELEVATIONS AT FRONT FACE OF BACKWALL.
3. THE PREFIX "2A" SHALL BE ADDED TO ALL REINFORING BAR MARKS IN THE ABUTMENT UNLESS SHOWN OTHERWISE.
4. POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WING, SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WING WALL. 1.5 FT. THICK AT THE ABUTMENT AND 2.0 FT. THICK AT WINGWALL.
5. EMBANKMENT PROCEDURE:
   THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS, BENCHES AND PIERS P-1 & P-8 AND THE PILES DRIVEN.
6. FOR PILING PLAN SEE SHEET 5/29.
7. FOR SECTION "A-A", "B-B", VIEW "C-C" AND ADDITIONAL DETAILS SEE SHEET 9/29.
8. FOR EXPANSION JOINT DETAILS SEE SHEET 264/455.
9. BACKWALL CONCRETE:
   IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE BRIDGE SEAT OR BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.
10. BAR LAPS UNLESS NOTED
    #5 BARS = 1'-8"
    #6 BARS = 2'-0"
11. REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN.

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8/29

# ABUTMENT A-2

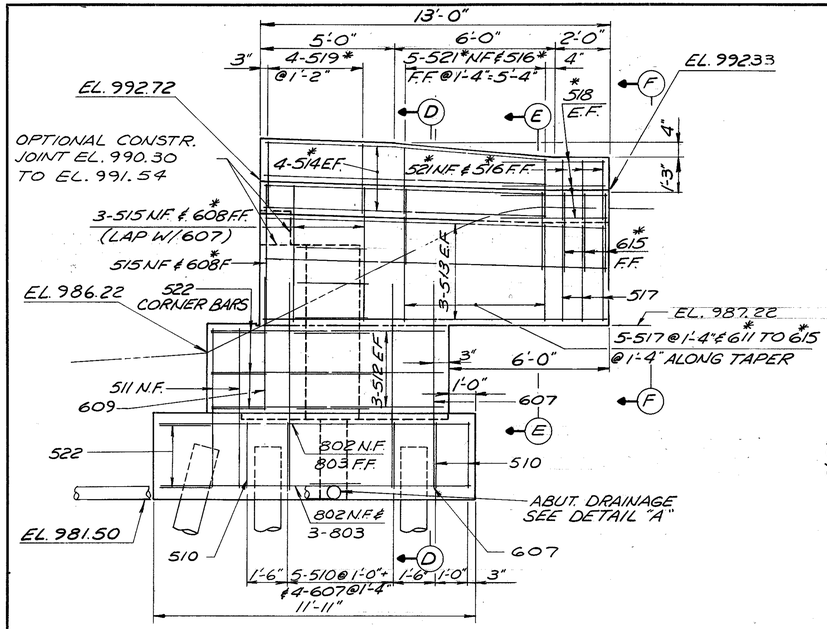
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134+16.52 TO STA. 142+16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | D.T. | | A.L.H. | J.D.P. | 11-4-82 | |

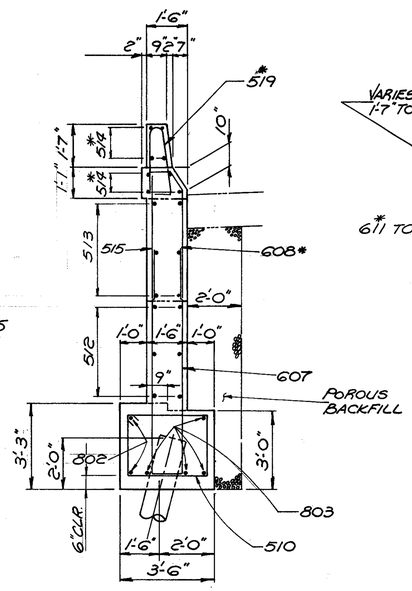
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

384
455

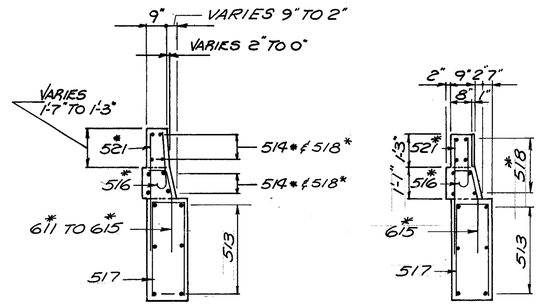
AKRON INNERBELT
SUM-59-0.00




VIEW C-C



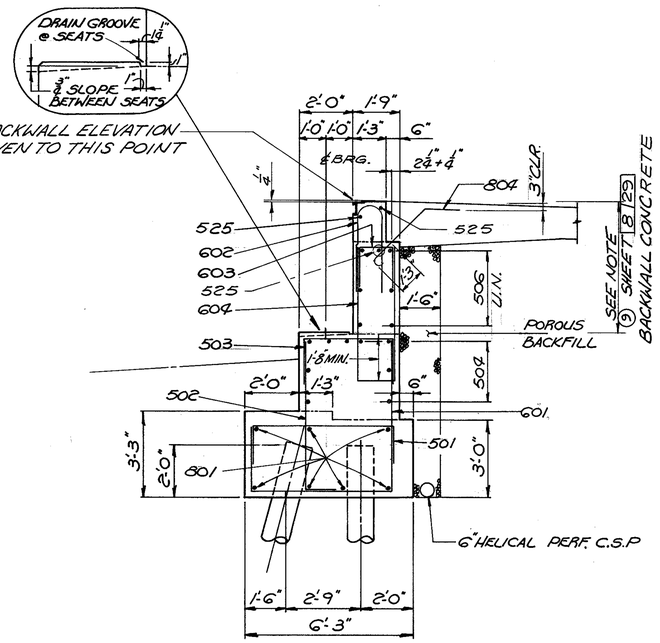

SECTION D-D



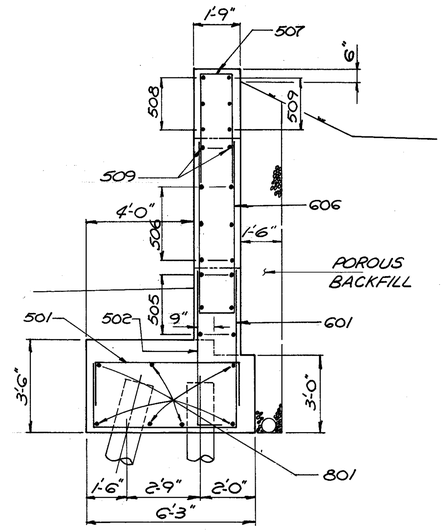

SECTION E-E



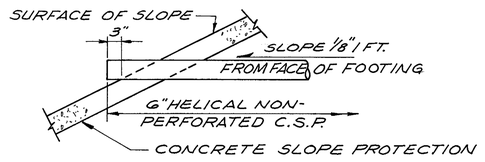

SECTION F-F




SECTION A-A




SECTION B-B




DETAIL "A"

TERMINATION OF 6" HELICAL NON-PERFORATED C.S.P. AT SLOPE

NOTES

1. * INDICATES REINFORCING BARS TO BE EPOXY COATED.
2. FOR NOTES AND DETAILS NOT SHOWN HERE SEE ABUTMENT DETAIL SHEET 8/29.

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CLEVELAND, OHIO — AKRON, OHIO

9/29

# ABUTMENT A-2 DETAILS

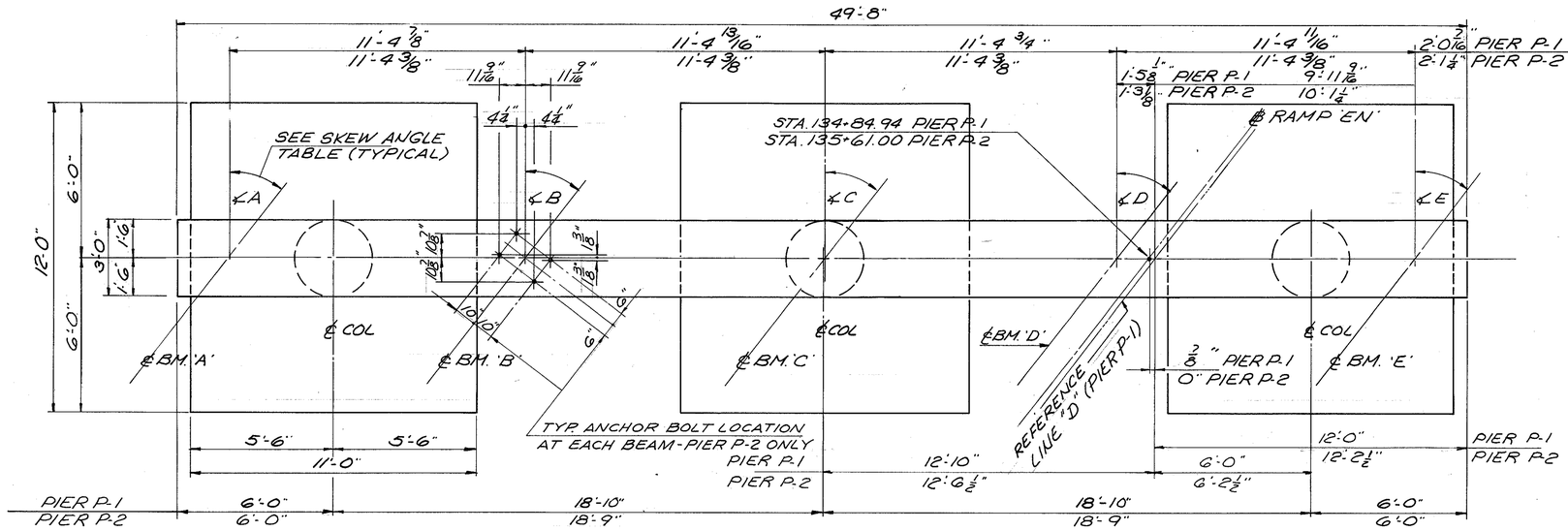
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | JWW | | A.L.H. | JAH | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

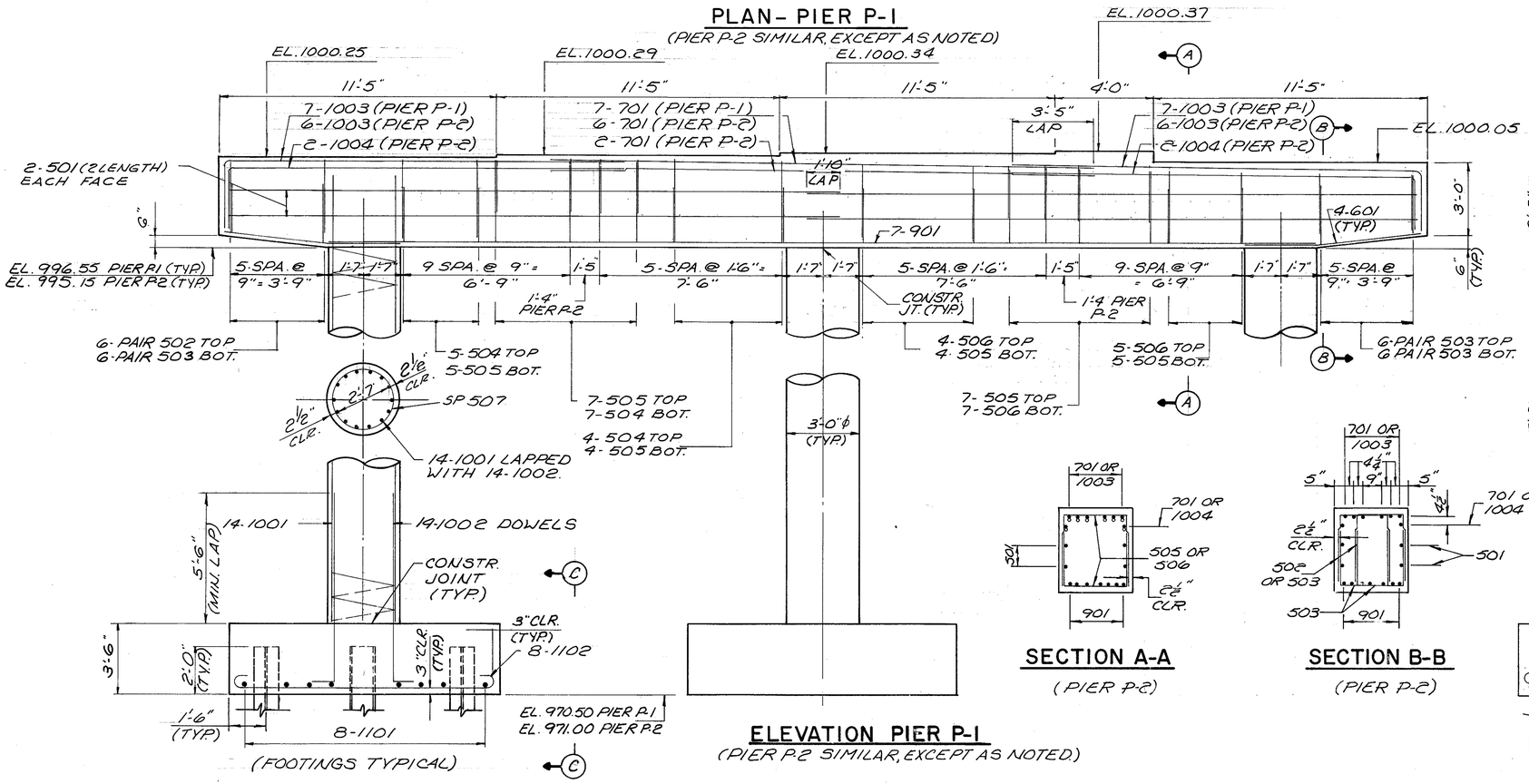
385/455

AKRON INNERBELT
SUM-59-0.00




## PLAN - PIER P-1

(PIER P-2 SIMILAR, EXCEPT AS NOTED)




## ELEVATION PIER P-1

(PIER P-2 SIMILAR, EXCEPT AS NOTED)



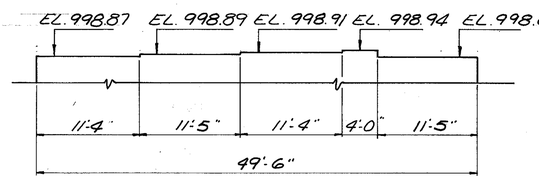

## SECTION A-A

(PIER P-2)



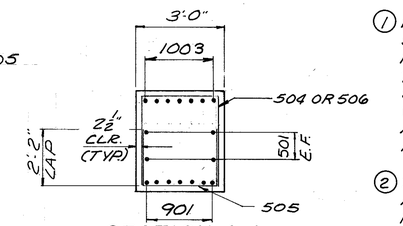

## SECTION B-B

(PIER P-2)



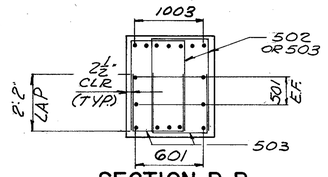

## ELEVATION PIER CAP - PIER P-2

| SKEW ANGLE TABLE | | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| PIER P-1 | 38°-34'-20" | 38°-25'-50" | 38°-18'-14" | 38°-11'-31" | 38°-05'-35" |
| PIER P-2 | 37°-37'-28" | 37°-37'-28" | 37°-37'-28" | 37°-37'-28" | 37°-37'-28" |



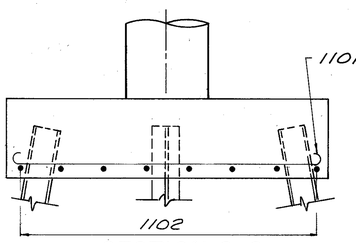

## SECTION A-A

(PIER P-1)




## SECTION B-B

(PIER P-1)




## SECTION C-C

### NOTES

1. BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS (PIER P-2 ONLY).
2. THE PREFIX "1P", "2P", ETC., SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIERS P-1, P-2, ETC. RESPECTIVELY, UNLESS SHOWN OTHERWISE.
3. FOR PILING PLAN SEE SHEET 5 29

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CLEVELAND, OHIO — AKRON, OHIO

10/29

# PIER DETAILS
# PIERS P-1 & P-2

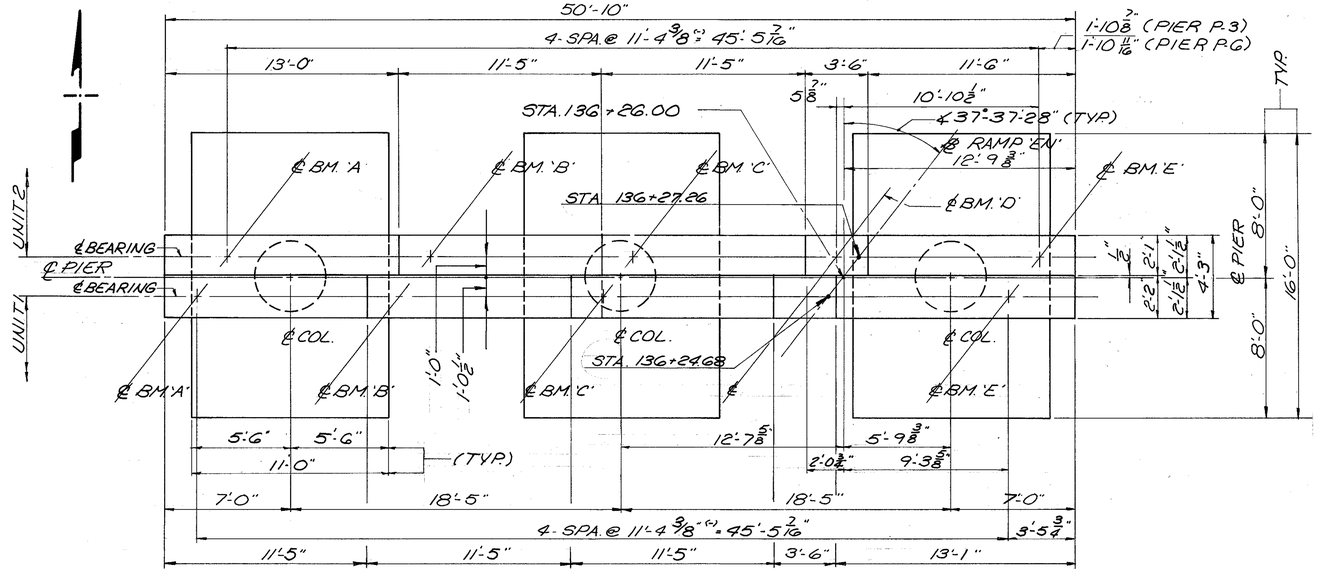
AKRON INNERBELT OVER DAST AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | CDG | | ALH JWW | JAP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

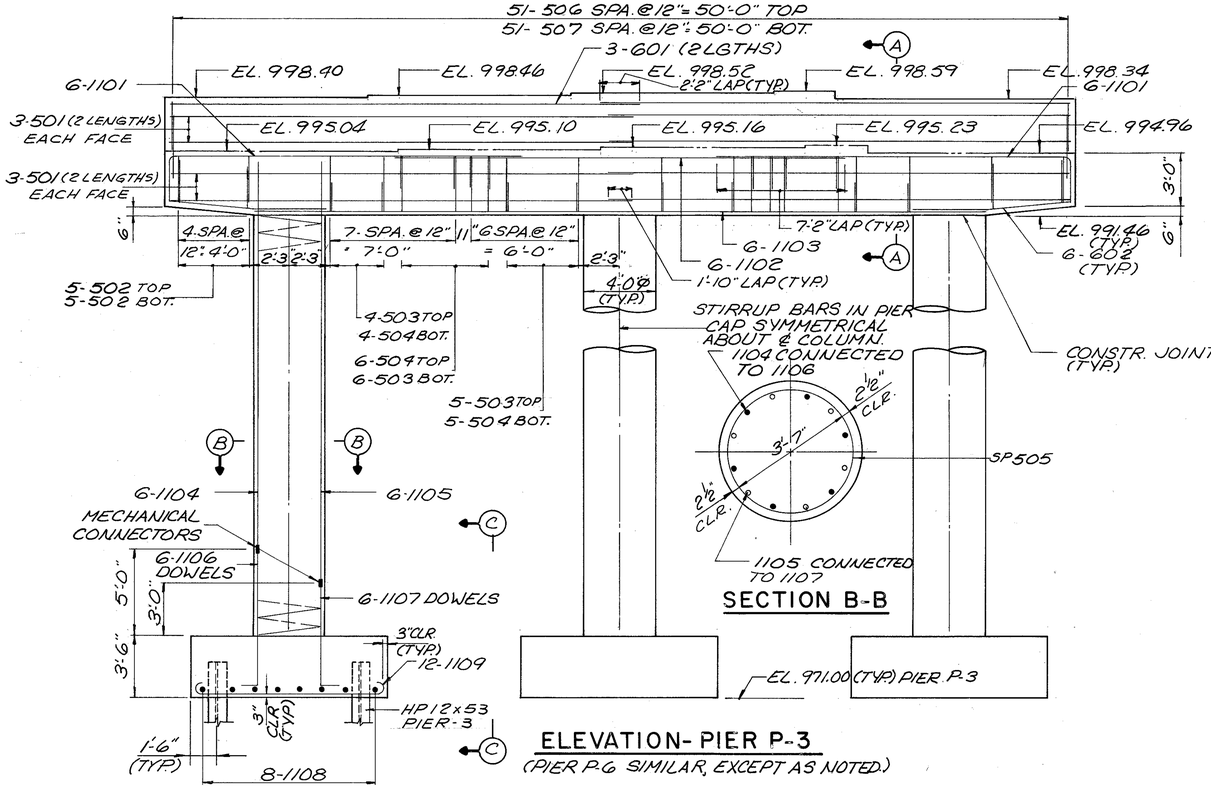
386/455

AKRON INNERBELT
SUM-59-0.00



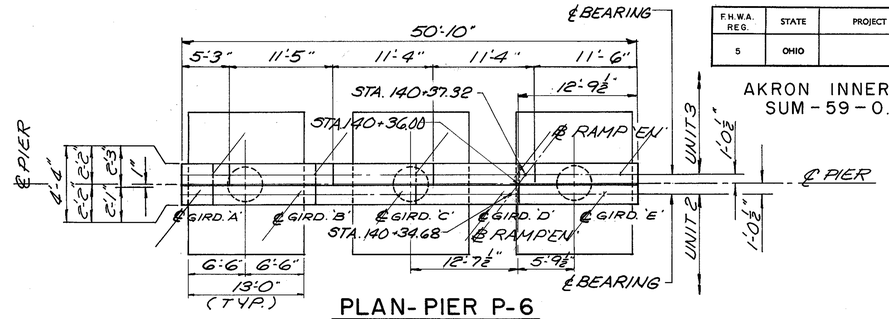

## PLAN-PIER P-3

(PIER P.6 SIMILAR, EXCEPT AS NOTED.)

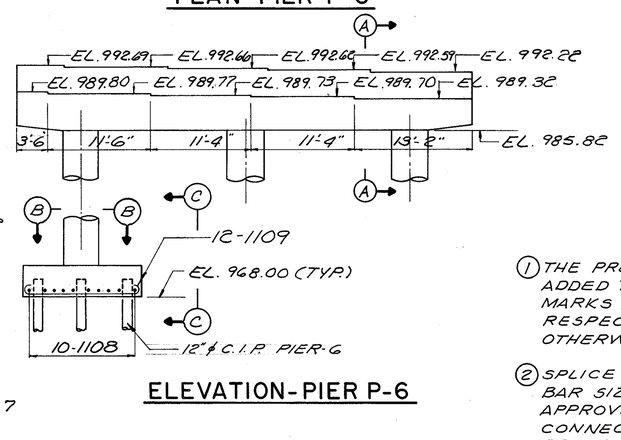



## ELEVATION-PIER P-3

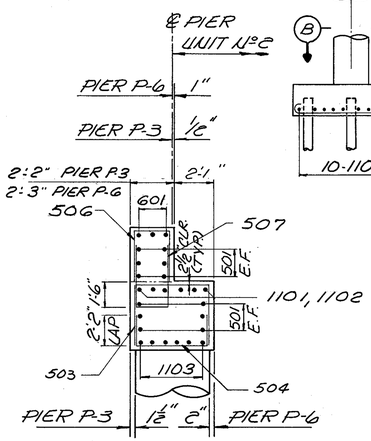
(PIER P.6 SIMILAR, EXCEPT AS NOTED.)



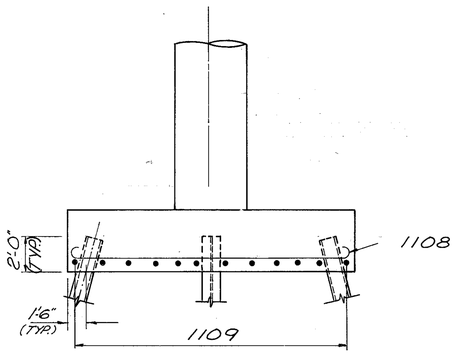

## PLAN-PIER P-6




## ELEVATION-PIER P-6




## SECTION A-A




## SECTION C-C

(PIER P-3 SHOWN, P-6 SIMILAR)

### NOTES

1. THE PREFIX "3 P" OR "6 P" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-3 OR P-6 RESPECTIVELY UNLESS SHOWN OTHERWISE.
2. SPLICE FOR #11 REINFORCING BAR SIZES SHALL BE MADE WITH APPROVED MECHANICAL CONNECTORS. SEE SPECIAL PROVISIONS.

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# PIER DETAILS
# PIERS P-3 & P-6

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BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134+16.52 TO STA. 142+16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | ALH JWW | JWW | 11-4-12 | |

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|---|---|---|---|
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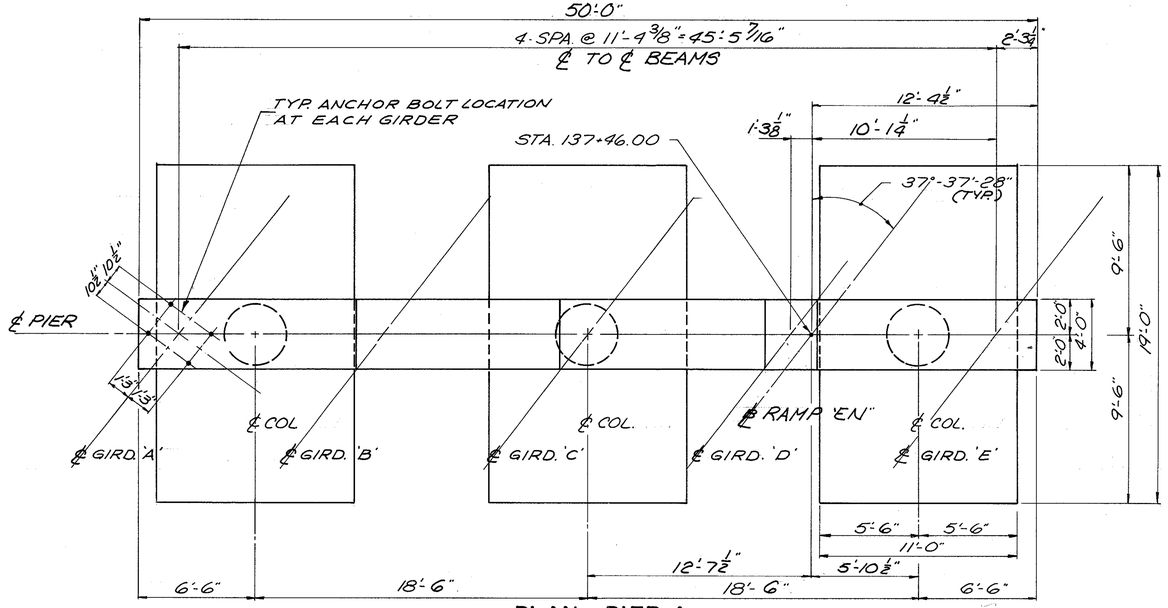
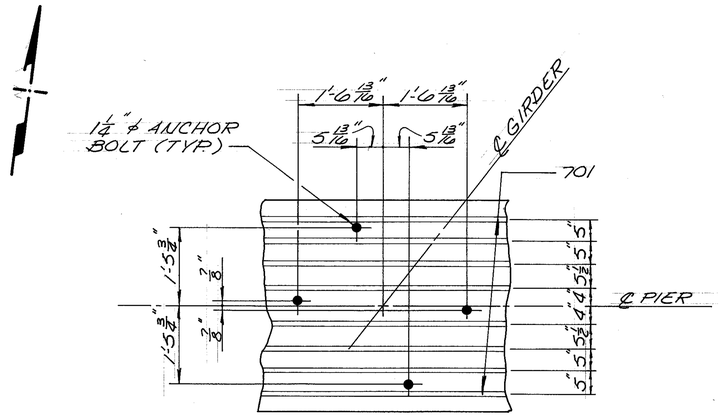
AKRON INNERBELT
SUM-59-0.00




PLAN—PIER 4



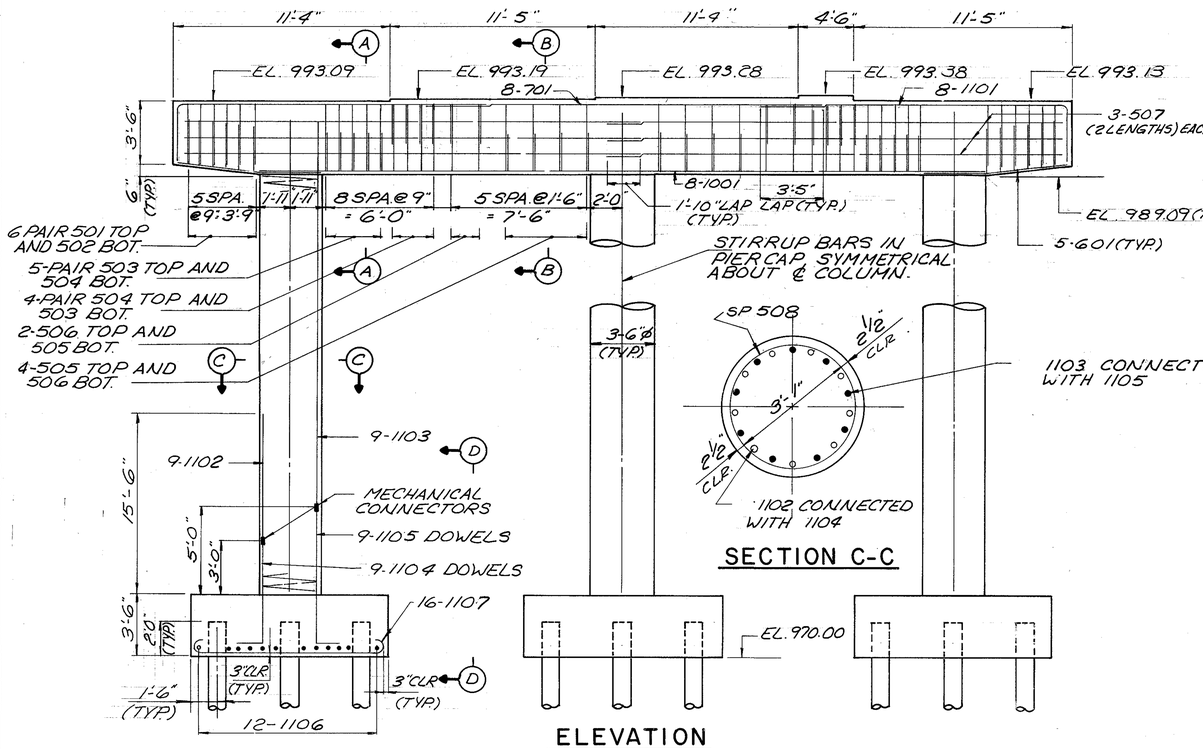

ANCHOR BOLT LOCATION DETAIL

NOTES

(1) THE PREFIX 4P SHALL BE ADDED TO ALL REINFORCING BARS IN PIER P-4 UNLESS SHOWN OTHERWISE.

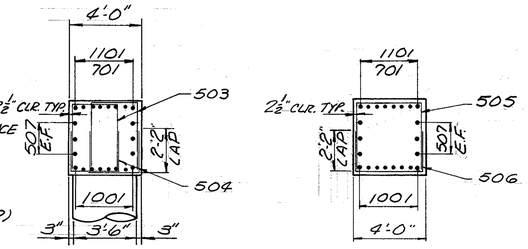
(2) BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR PRESETTING OF BEARING ANCHORS.

(3) SPLICE FOR #11 REINFORCING BAR SIZES SHALL BE MADE WITH APPROVED MECHANICAL CONNECTORS. SEE SPECIAL PROVISIONS.




ELEVATION

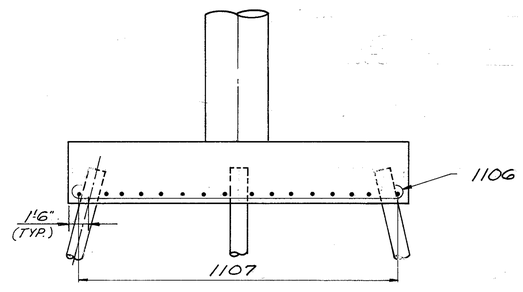
SECTION C-C




SECTION A-A




SECTION B-B




SECTION D-D

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CLEVELAND, OHIO AKRON, OHIO

12/29

# PIER DETAILS
## PIER P-4

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134+16.52 TO STA. 142+16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | ALH JWW | GJP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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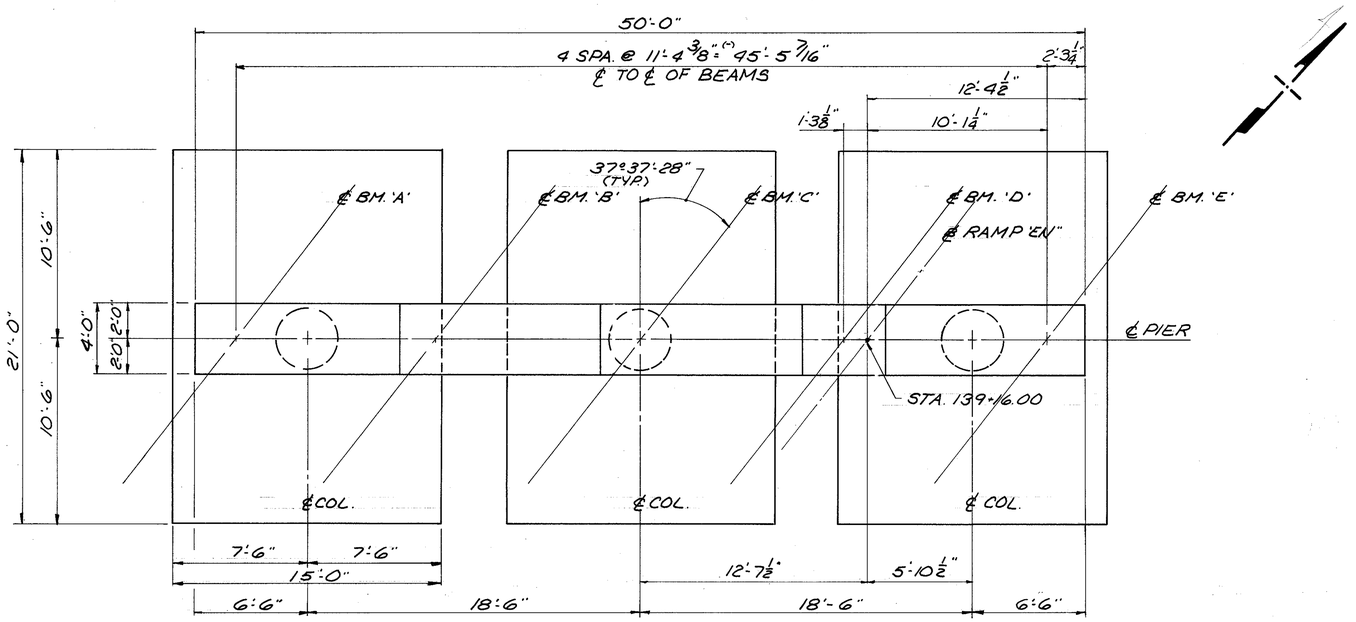
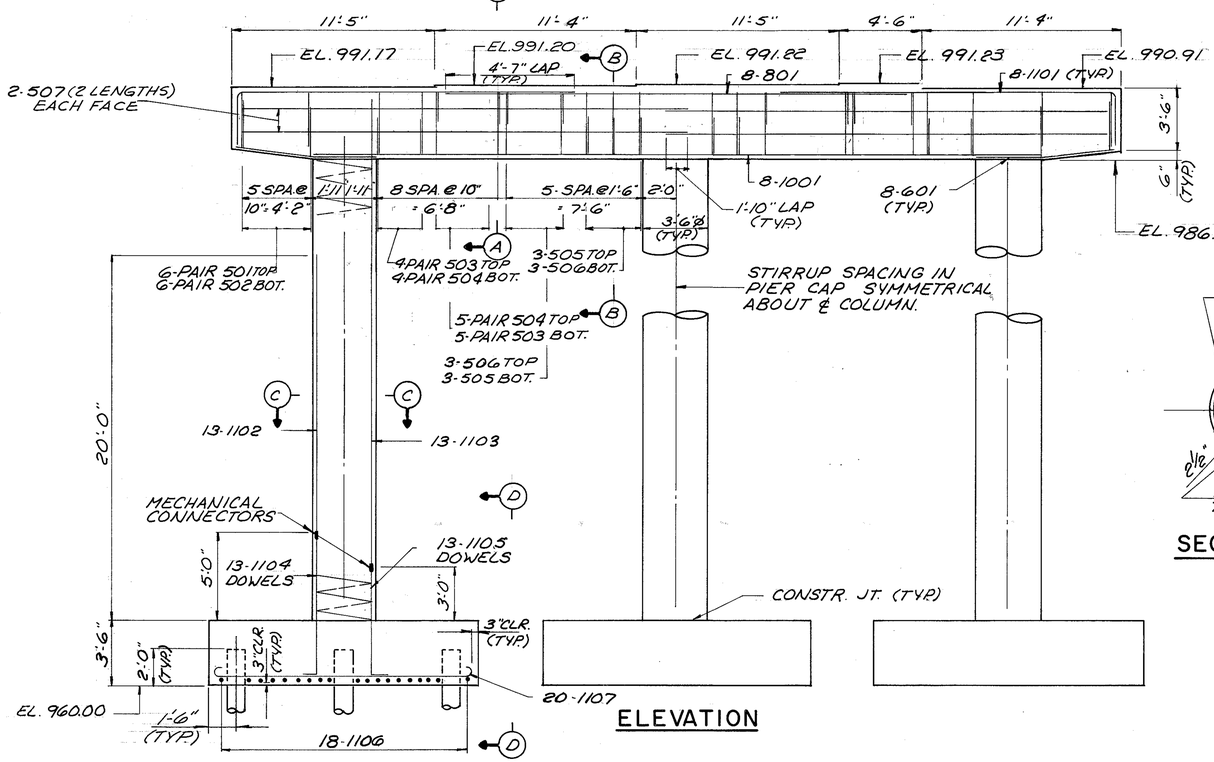
AKRON INNERBELT
SUM - 59 - 0.00

## NOTES

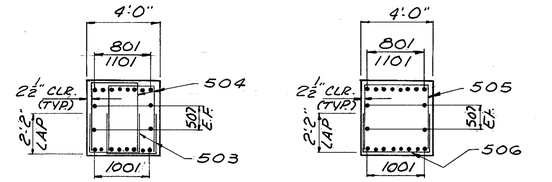
1. THE PREFIX SP SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-5 UNLESS OTHERWISE SHOWN.
2. SPLICE FOR #11 REINFORCING BAR SIZES SHALL BE MADE WITH APPROVED MECHANICAL CONNECTORS. SEE SPECIAL PROVISIONS.
3. CARE SHALL BE TAKEN DURING THE CONSTRUCTION OF PIER P-5 SO AS NOT TO DAMAGE THE EXISTING CHANNEL LINING IN THE CANAL. IF THE CONTRACTOR DAMAGES THE EXISTING LINING HE WILL RESTORE SUCH DAMAGED AREAS TO THE SATISFACTION OF THE ENGINEER AT HIS OWN EXPENSE.




## PLAN - PIER P-5



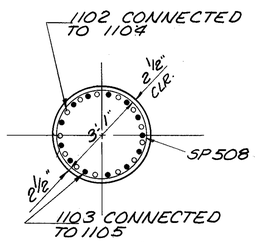

## ELEVATION



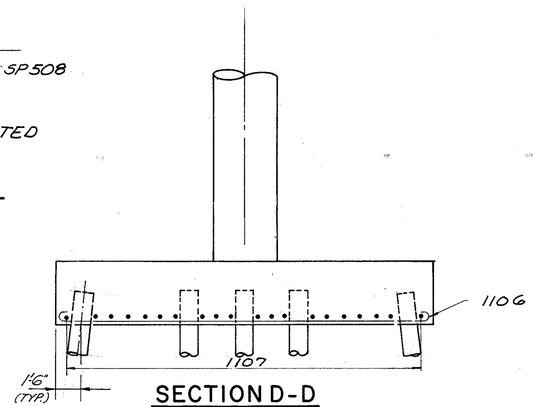

## SECTION A-A




## SECTION B-B




## SECTION C-C




## SECTION D-D

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CLEVELAND, OHIO — AKRON, OHIO

13/29

# PIER DETAILS
# PIER P-5

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | CDG | | ALH JWW | JGP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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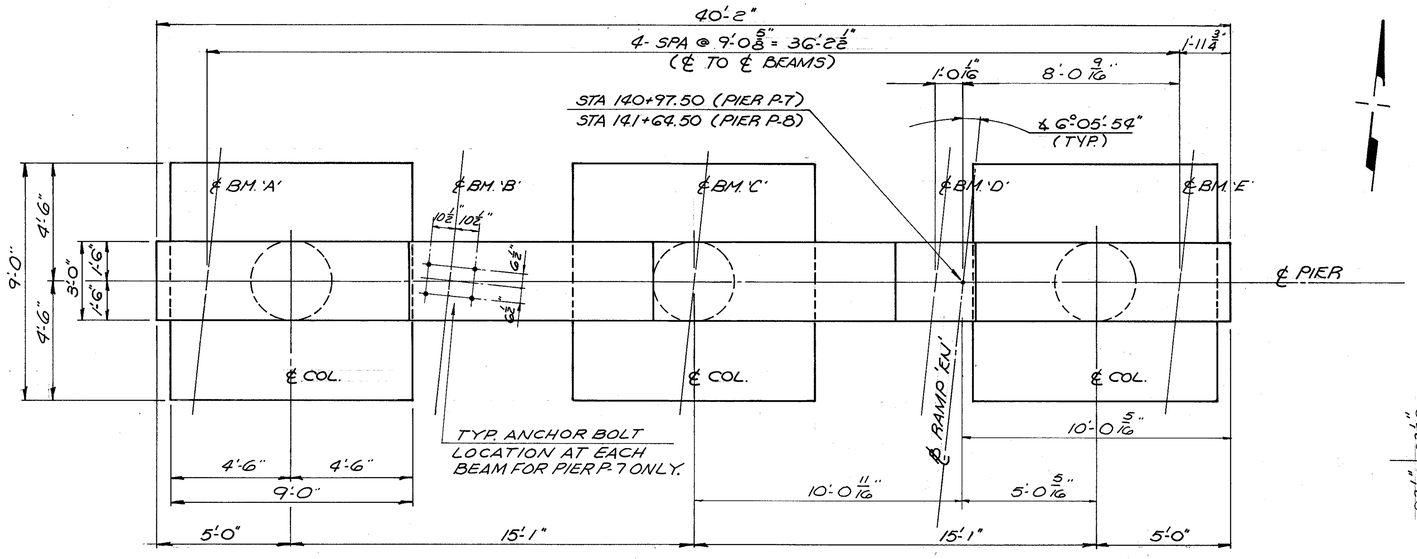
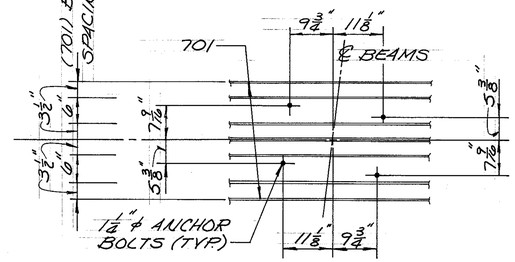
455

AKRON INNERBELT
SUM - 59 - 0.00




PLAN

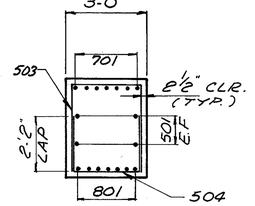
| ELEVATION TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G |
| PIER P.7 | 990.16 | 990.27 | 990.38 | 990.49 | 990.28 | 986.66 | 968.50 |
| PIER P.8 | 988.30 | 988.42 | 988.53 | 988.64 | 988.42 | 984.80 | 968.50 |



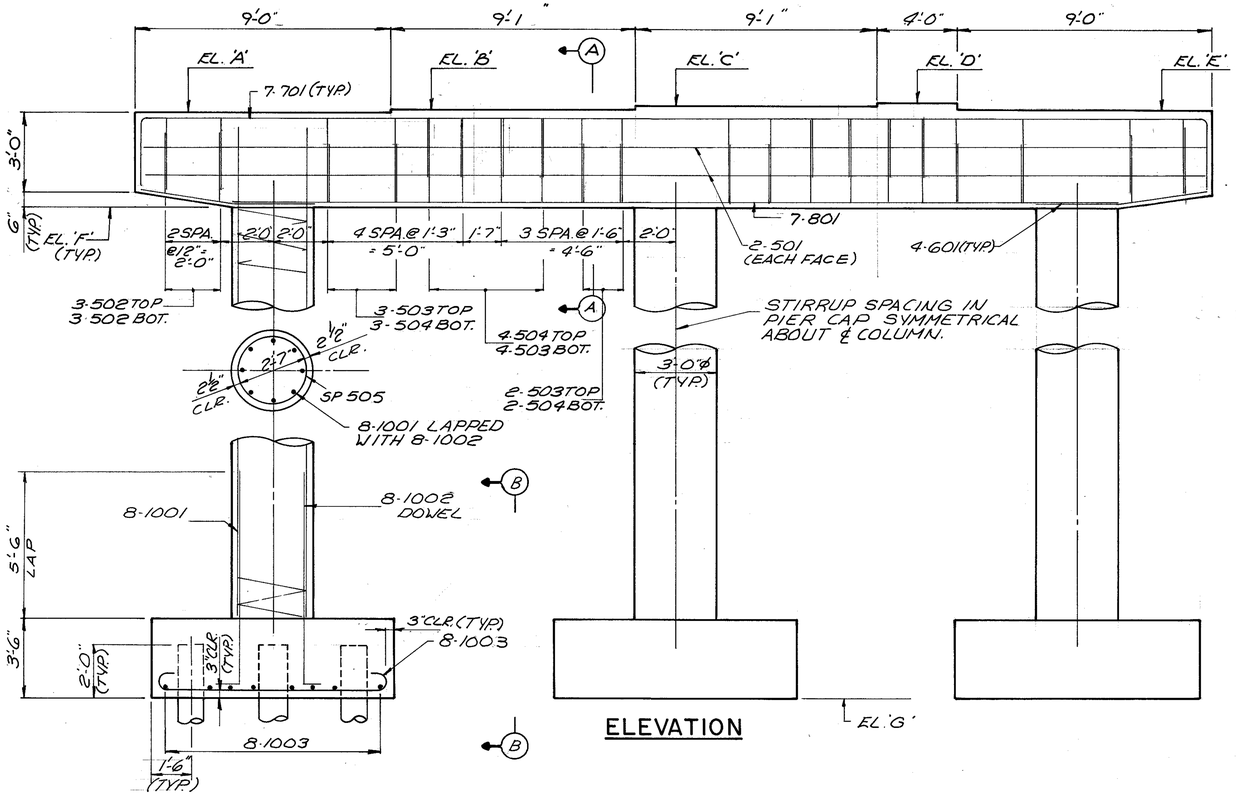

ANCHOR BOLT LOCATION DETAIL
(PIER P-7 ONLY)

NOTES

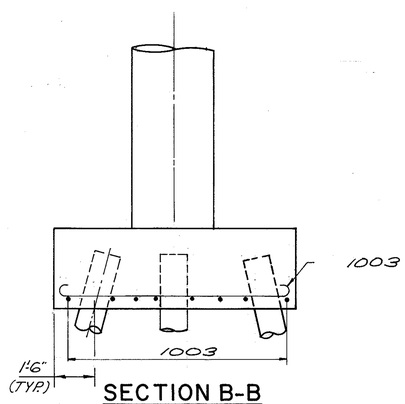
1. THE PREFIX 7P AND 8P SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIERS P-7 AND P-8 RESPECTIVELY. UNLESS SHOWN OTHERWISE.
2. BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS (PIER P-7 ONLY).




SECTION A-A




ELEVATION




SECTION B-B

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CLEVELAND, OHIO AKRON, OHIO

14/29

# PIER DETAILS
# PIERS P-7 & P-8

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | ALH JWW | JJP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
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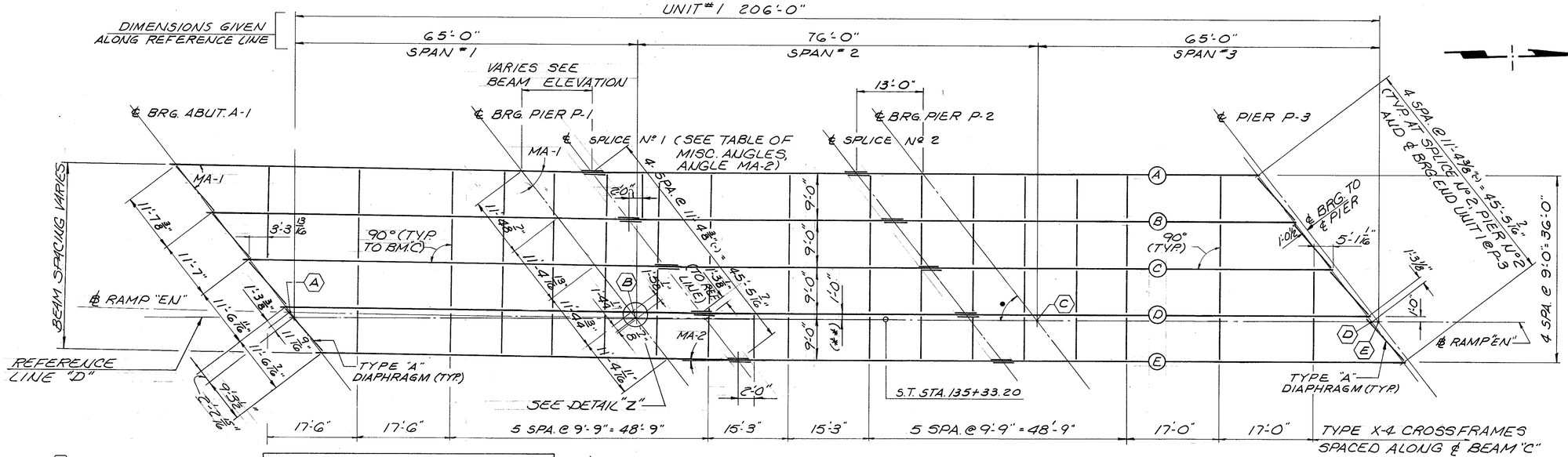
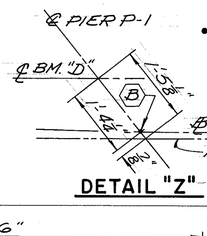
AKRON INNERBELT
SUM-59-0.00




(A) STA. 134+19.404
(B) STA. 134+84.943
(C) STA. 135+61.000
(D) STA. 136+24.685
(E) STA. 136+26.000

| TABLE OF MISCELLANEOUS ANGLES | | |
|---|---|---|
| LOCATION | MA-1 | MA-2 (**) |
| BEAM "A" | 51° 25'-40" | 0°-56'-52" |
| BEAM "B" | 51°-34'-10" | 0°-48'-22" |
| BEAM "C" | 51°-41'-46" | 0°-40'-46" |
| BEAM "D" | 51°-48'-29" | 0°-34'-03" |
| BEAM "E" | 51° 54'-25" | 0°-28'-07" |

** SPLICE BEND ANGLE

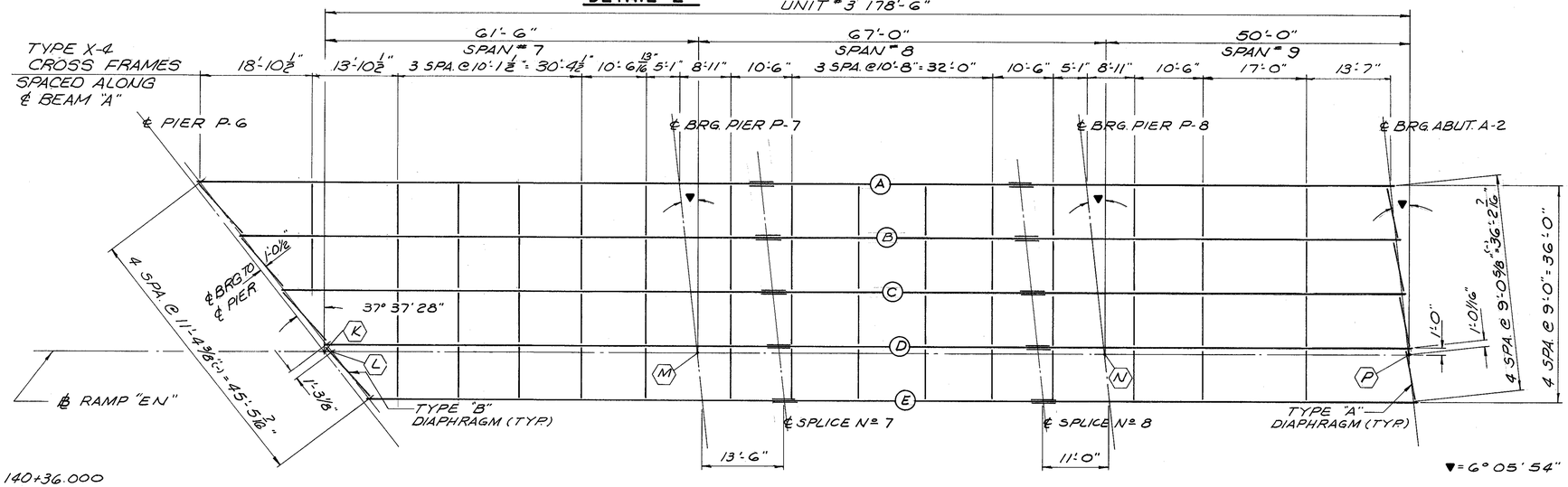



DETAIL "Z"

• ∠ 52°-22'-32" (TYPICAL) ℄ BEARINGS AND SPLICES TO REFERENCE LINE.

## FRAMING PLAN UNIT - 1

(**) DIMENSION SHOWN IS GIVEN TO THE REFERENCE LINE "D" BEAMS ARE PARALLEL TO THE REFERENCE LINE "D" FROM SPLICE Nº 1 TO THE END OF UNIT Nº 1




(K) STA. 140+36.000
(L) STA. 140+37.315
(M) STA. 140+97.500
(N) STA. 141+64.500
(P) STA. 142+14.500

▼ = 6° 05' 54"

## FRAMING PLAN UNIT - 3

### NOTES

(1) ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A588, GRADE 50 WEATHERING STEEL, UNLESS NOTED OTHERWISE.

(2) INTERMEDIATE STIFFENERS AT LOCATIONS OTHER THAN CROSS-FRAMES, SHALL BE PLACED ON ONE SIDE OF THE GIRDER WEB, IN ACCORDANCE WITH MAXIMUM STIFFENER SPACING SHOWN ON THE GIRDER ELEVATION. THESE STIFFENERS SHALL ALTERNATE ON EACH SIDE OF INTERIOR GIRDER WEB. FOR EXTERIOR GIRDERS, ALL STIFFENERS SHALL BE PROVIDED ON THE INSIDE.

(3) INTERMEDIATE STIFFENERS AT CROSSFRAME LOCATIONS SHALL BE PLACED IN PAIRS, EXCEPT FOR EXTERIOR BEAMS OR GIRDERS.

(4) ALL FIELD SPLICES SHALL BE MADE WITH 1" DIAMETER HIGH STRENGTH STEEL BOLTS, CONFORMING TO A325, TYPE 3. THE BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF EXTERIOR GIRDERS AND ON THE BOTTOM OF THE BOTTOM FLANGE PLATES AND TOP OF THE TOP FLANGE PLATES.

(5) FOR BEAM AND GIRDER ELEVATIONS, FIELD SPLICES AND MISCELLANEOUS FRAMING DETAILS, SEE SHEETS 17/29 AND 18/29.

(6) FOR TYPICAL FRAMING DETAILS SEE SHEET 262/455.

(7) FOR DEFLECTION AND CAMBER DETAILS SEE SHEETS 19/29 THRU 21/29.

(8) WHERE A SHAPE OR PLATE IS DESIGNED 'CVN' THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS (AASHTO - ZONE 2). ALL FIELD SPLICE MATERIAL, EXCEPT FILL PLATES, SHALL BE "CVN".

(9) SEE GENERAL NOTE SHEET FOR ADDITIONAL NOTES.

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# FRAMING PLAN 15/29

## UNIT Nº 1 & UNIT Nº 3

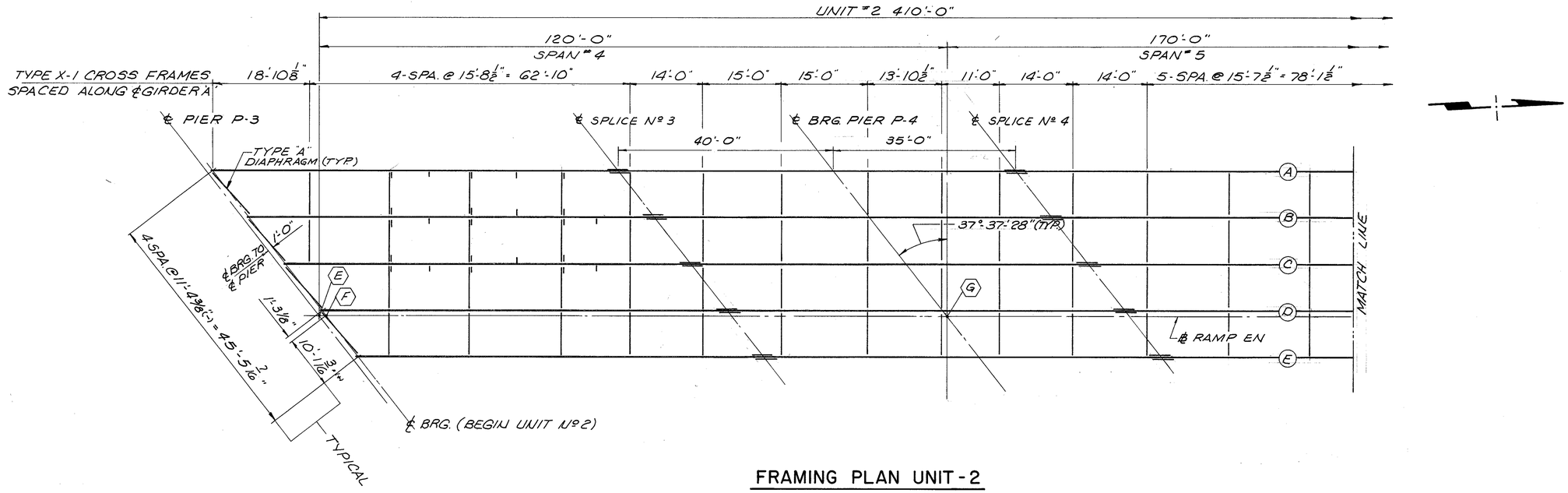
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | F.F. | | ALH | JDP | 11-4-82 | |

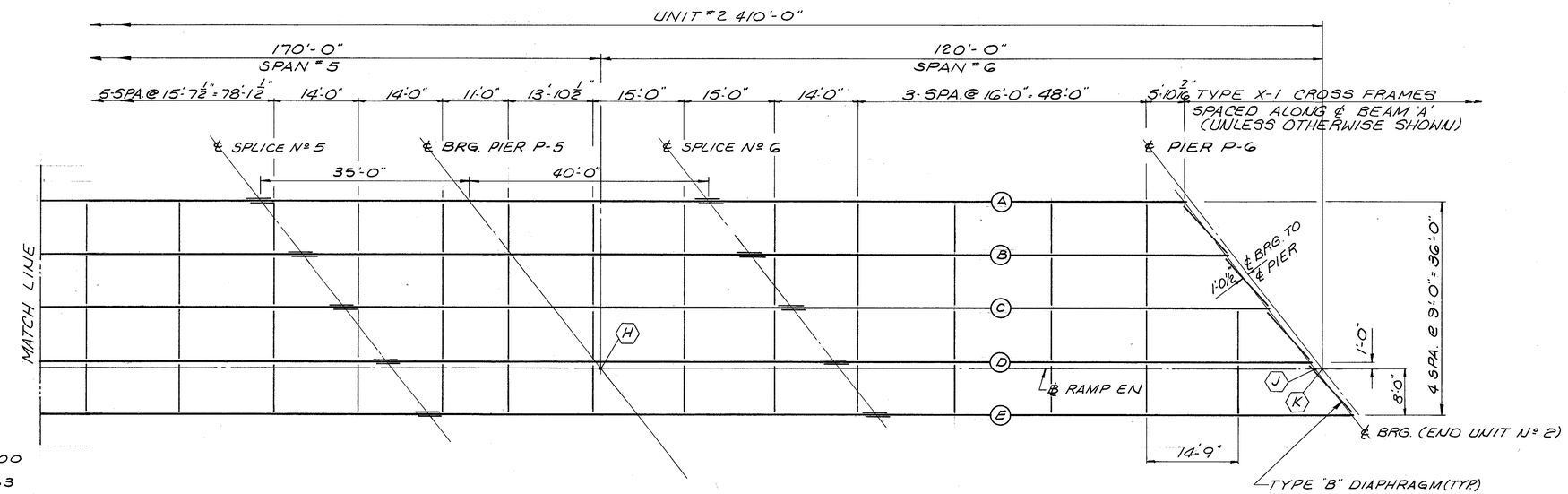
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

391/455

AKRON INNERBELT
SUM-59-0.00




FRAMING PLAN UNIT-2




(E) STA. 136+26.000
(F) STA. 136+27.263
(G) STA. 137+46.000
(H) STA. 139+16.000
(J) STA. 140+34.685
(K) STA. 140+36.000

FRAMING PLAN UNIT-2

NOTES

FOR NOTES SEE SHEET 15/29

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CLEVELAND, OHIO AKRON, OHIO

16/29

# FRAMING PLAN UNIT Nº 2

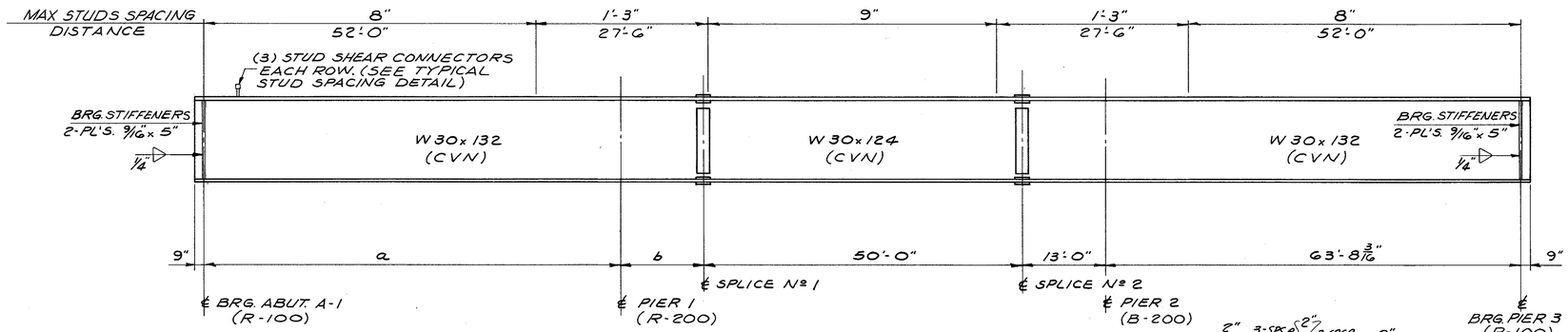
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134+16.52 TO STA. 142+16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | A.L.H. | JGP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

392
455

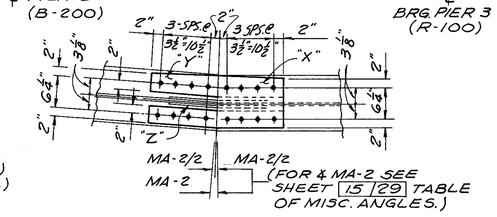
AKRON INNERBELT
SUM - 59 - 0.00




## BEAM ELEVATION

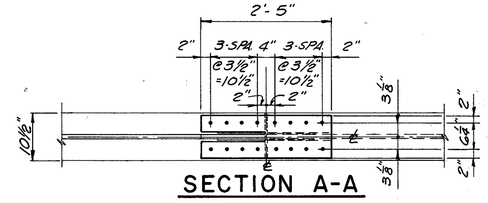
UNIT - 1

"X" OUTSIDE FLG. PLS. 7/16" (C.V.N.)
"Y" INSIDE FLG. PLS. 9/16" (C.V.N.)
"Z" BENT WEB PLS. 1/2" (C.V.N.)

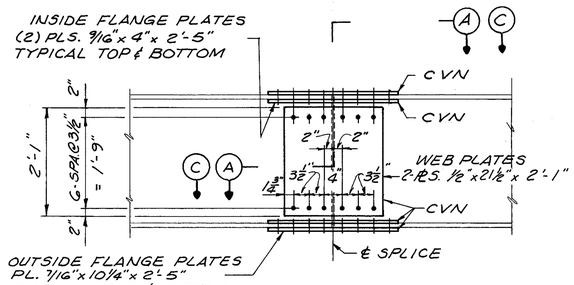



## SECTION C-C

( FOR SPLICE Nº 1 )

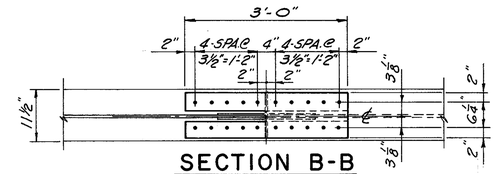



## SECTION A-A

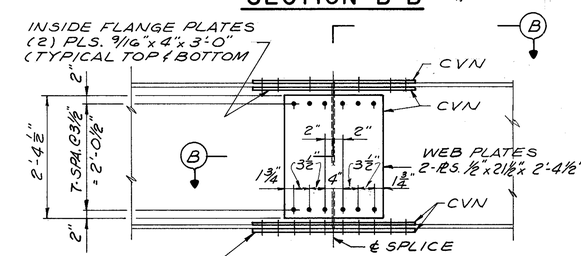



## SPLICE DETAIL

FOR SPLICE Nº 2

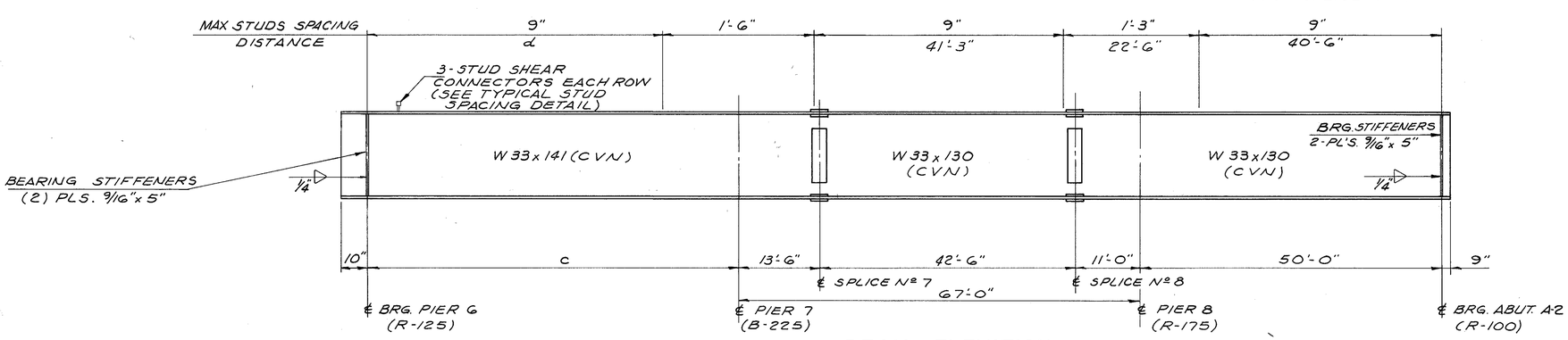



## SECTION B-B




## SPLICE DETAIL

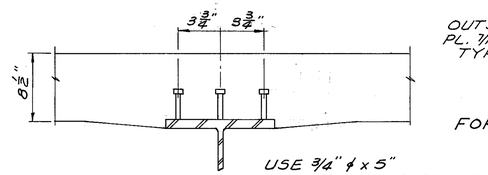
FOR SPLICE Nº 7 & 8




## BEAM ELEVATION

UNIT - 3

| BEAM | DIMENSIONS | | | |
|---|---|---|---|---|
| | a | b | c | d |
| A | 65'-10 1/16" | 13'-2 3/16" | 78'-9 5/16" | 63'-0" |
| B | 65'-8 1/2" | 13'-1 7/8" | 72'-9 5/8" | 58'-6" |
| C | 65'-7 1/8" | 13'-1 9/16" | 66'-9 7/8" | 54'-0" |
| D | 65'-5 13/16" | 13'-1 5/16" | 60'-10 3/16" | 48'-9" |
| E | 65'-4 7/8" | 13'-1 1/8" | 54'-10 1/8" | 44'-3" |




## TYPICAL STUD SPACING

(UNITS Nº 1 & Nº 3)

NOTES:

FOR NOTES SEE SHEET 15 29

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CLEVELAND, OHIO — AKRON, OHIO

17 29

# BEAM ELEVATION AND DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BLF | F.F. | | A.L.H. | JGH | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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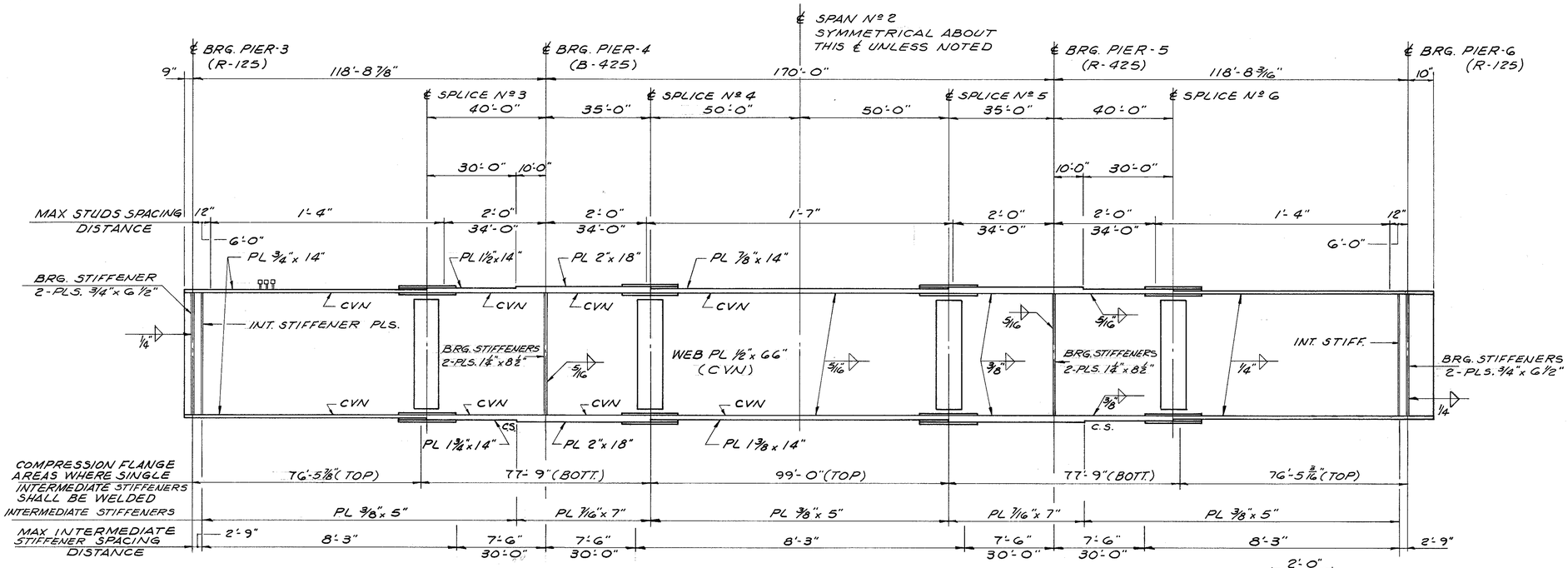
455

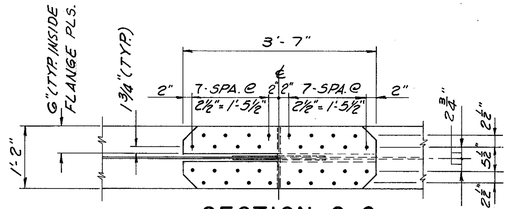
AKRON INNERBELT
SUM-59-0.00



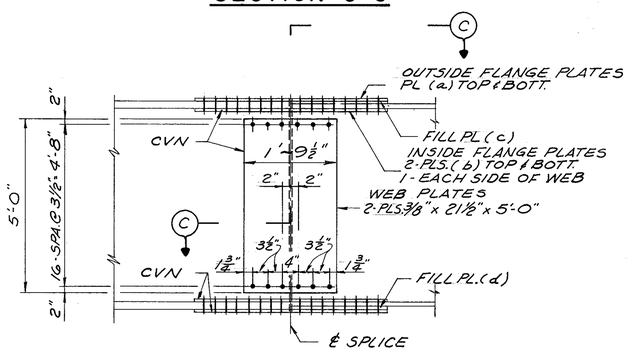

## GIRDER ELEVATION

UNIT - 2

| SPLICE PLATE TABLE | | | | |
|---|---|---|---|---|
| SPLICE | PL (a) | PL (b) | PL (c) | PL (d) |
| 3 ℄ 6 | 7/16" x 14" x 3'-7" | 1/2" x G" x 3'-7" | 3/4" x 14" x 1'-9 1/2" | 1" x 14" x 1'-9 1/2" |
| 4 ℄ 5 | 1/2" x 14" x 3'-7" | 9/16" x G" x 3'-7" | 1 1/8" x 14" x 1'-9 1/2" | 5/8" x 14" x 1'-9 1/2" |




## SECTION C-C



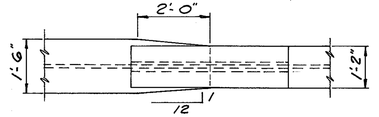

## SPLICE DETAIL

FOR SPLICE Nº 3, 4, 5 & 6

SEE SPLICE PLATE TABLE FOR SIZES OF PLATES (a) THRU (d)

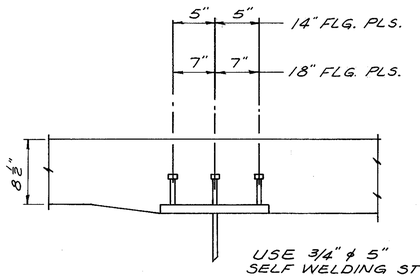
| BEARING UNITS | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOLSTER Nº | ROCKER Nº | DIMENSIONS (INCHES) | | | | | | | | | | | | |
| | | A | B | C | D | F | G | H | K | L | M | R | T | Y |
| B-425 | R-425 | 4 1/2 | 25 | 4 1/2" | 4 | 7/8 | 15 | 23 5/8 | 17 | 34 | 31 | 15 | 4 | 2 3/16 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

NOTES: FOR DETAILS NOT SHOWN, SEE STANDARD DRAWING RB-1-55
ANCHOR BOLTS FOR BOLSTERS IN ALL CASES SHALL EXTEND A MINIMUM OF 1'-3" INTO THE CONCRETE.




## FLANGE DETAIL

AT SPLICE Nº 4
AT SPLICE Nº 5




## TYPICAL STUD SPACING

(UNIT Nº 2)

## NOTES

1. C.S. - INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESS ONLY.
2. FOR ADDITIONAL NOTES SEE SHEET 15 29.
3. WELDED ATTACHMENTS FOR FINISHING MACHINE SUPPORTS MAY BE MADE TO THE FASCIA GIRDER WHERE ITS TOP FLANGE IS IN COMPRESSION. SEE COMPRESSION FLANGE LOCATIONS, GIRDER ELEVATION.
4. ALL FLANGE AND WEB BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS. THE WELD REINFORCEMENTS NEED NOT BE GROUND FLUSH.

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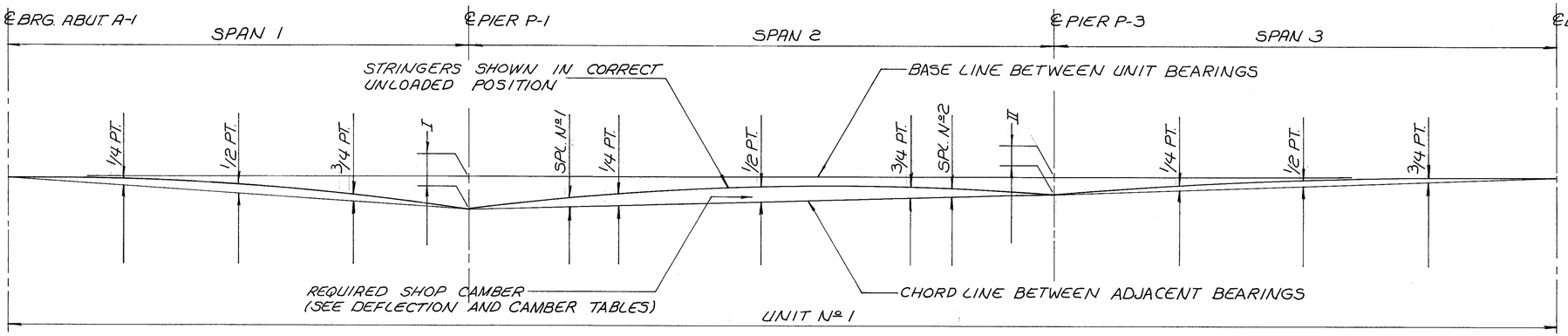
18 29

# GIRDER ELEVATION AND DETAILS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | F.F. | | A.L.H. | JDP | 11-4-82 | |




| F. H. W. A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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AKRON INNERBELT
SUM-59-0.00

NOTES

1. FOR FRAMING PLANS AND GIRDER DETAILS, SEE SHTS. 15/29 THRU 18/29.
2. A POSITIVE CAMBER VALUE MEANS THE CAMBER IS ABOVE AND A NEGATIVE CAMBER VALUE MEANS THE CAMBER IS BELOW THE CHORD BETWEEN THE ADJACENT BEARINGS IN THAT SPAN.
3. ALL DEFLECTIONS ARE GIVEN IN DECIMALS OF AN INCH.

| BEAM A | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. A-1 | | | | |
| 1/4 PT. | .1245 | .8165 | -.4566 | .4844 |
| 1/2 PT. | .1530 | 1.0040 | -.6020 | .5550 |
| 3/4 PT. | .0750 | .4945 | -.4471 | .1224 |
| ℄ PIER P-1 | | | | |
| ℄ SPL. NO. 1 | .0342 | .2356 | -.3918 | -.1220 |
| 1/4 PT. | .0615 | .4200 | -.5065 | -.0250 |
| 1/2 PT. | .1180 | .8000 | -.6367 | .2813 |
| 3/4 PT. | .0615 | .4200 | -.3985 | .0830 |
| ℄ SPL. NO. 2 | .0332 | .2282 | -.2460 | .0154 |
| ℄ PIER P-2 | | | | |
| 1/4 PT. | .0750 | .4945 | -.3762 | .1933 |
| 1/2 PT. | .1530 | 1.0040 | -.5018 | .6552 |
| 3/4 PT. | .1245 | .8165 | -.3764 | .5646 |
| ℄ BRG. UNIT 1 @ P-3 | | | | |

| BEAM B | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. A-1 | | | | |
| 1/4 PT. | .1245 | .8165 | -.4474 | .4936 |
| 1/2 PT. | .1530 | 1.0040 | -.5906 | .5664 |
| 3/4 PT. | .0750 | .4945 | -.4387 | .1308 |
| ℄ PIER P-1 | | | | |
| ℄ SPL. NO. 1 | .0341 | .2346 | -.3719 | -.1032 |
| 1/4 PT. | .0615 | .4200 | -.4797 | .0018 |
| 1/2 PT. | .1180 | .8000 | -.5865 | .3315 |
| 3/4 PT. | .0615 | .4200 | -.3286 | .1529 |
| ℄ SPL. NO. 2 | .0332 | .2288 | -.1743 | .0877 |
| ℄ PIER P-2 | | | | |
| 1/4 PT. | .0750 | .4945 | -.3764 | .1931 |
| 1/2 PT. | .1530 | 1.0040 | -.5019 | .6551 |
| 3/4 PT. | .1245 | .8165 | -.3764 | .5646 |
| ℄ BRG. UNIT 1 @ P-3 | | | | |

| LAYOUT DIAGRAM OFFSETS | | |
|---|---|---|
| BEAM OR GIRDER | I | II |
| A | 3.9670" | 3.1953" |
| B | 4.1005" | 3.6452" |
| C | 4.0545" | 4.0545" |
| D | 4.4243" | 4.4243" |
| E | 4.5424" | 4.5424" |

(a) DEFLECTION DUE TO WEIGHT OF STEEL

(b) DEFLECTION DUE TO REMAINING DEAD LOAD

(c) ADJUSTMENT REQUIRED FOR VERTICAL AND HORIZONTAL CURVE

(d) REQUIRED SHOP CAMBER

| BEAM C | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. A-1 | | | | |
| 1/4 PT. | .1245 | .8165 | -.4393 | .5017 |
| 1/2 PT. | .1530 | 1.0040 | -.5803 | .5767 |
| 3/4 PT. | .0750 | .4945 | -.4312 | .1383 |
| ℄ PIER P-1 | | | | |
| ℄ SPL. NO. 1 | .0340 | .2337 | -.3778 | -.1102 |
| 1/4 PT. | .0615 | .4200 | -.4894 | -.0079 |
| 1/2 PT. | .1180 | .8000 | -.6095 | .3085 |
| 3/4 PT. | .0615 | .4200 | -.3797 | .1018 |
| ℄ SPL. NO. 2 | .0333 | .2292 | -.2980 | -.0354 |
| ℄ PIER P-2 | | | | |
| 1/4 PT. | .0750 | .4945 | -.3764 | .1931 |
| 1/2 PT. | .1530 | 1.0040 | -.5019 | .6551 |
| 3/4 PT. | .1245 | .8165 | -.3764 | .5646 |
| ℄ BRG. UNIT 1 @ P-3 | | | | |

| BEAM D | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. A-1 | | | | |
| 1/4 PT. | .1245 | .8165 | -.4322 | .5088 |
| 1/2 PT. | .1530 | 1.0040 | -.5708 | .5862 |
| 3/4 PT. | .0750 | .4945 | -.4245 | .1450 |
| ℄ PIER P-1 | | | | |
| ℄ SPL. NO. 1 | .0338 | .2329 | -.4089 | -.1422 |
| 1/4 PT. | .0615 | .4200 | -.5357 | -.0542 |
| 1/2 PT. | .1180 | .8000 | -.7057 | .2123 |
| 3/4 PT. | .0615 | .4200 | -.5253 | -.0438 |
| ℄ SPL. NO. 2 | .0334 | .2296 | -.3977 | -.1348 |
| ℄ PIER P-2 | | | | |
| 1/4 PT. | .0750 | .4945 | -.3763 | .1932 |
| 1/2 PT. | .1530 | 1.0040 | -.5018 | .6552 |
| 3/4 PT. | .1245 | .8165 | -.3763 | .5647 |
| ℄ BRG. UNIT 1 @ P-3 | | | | |

| BEAM E | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. A-1 | | | | |
| 1/4 PT. | .1245 | .8165 | -.3458 | .5952 |
| 1/2 PT. | .1530 | 1.0040 | -.4656 | .6914 |
| 3/4 PT. | .0750 | .4945 | -.3525 | .2170 |
| ℄ PIER P-1 | | | | |
| ℄ SPL. NO. 1 | .0337 | .2322 | -.4149 | -.1489 |
| 1/4 PT. | .0615 | .4200 | -.5502 | -.0687 |
| 1/2 PT. | .1180 | .8000 | -.7555 | .1625 |
| 3/4 PT. | .0615 | .4200 | -.5629 | -.0814 |
| ℄ SPL. NO. 2 | .0334 | .2298 | -.4235 | -.1603 |
| ℄ PIER P-2 | | | | |
| 1/4 PT. | .0750 | .4945 | -.3765 | .1930 |
| 1/2 PT. | .1530 | 1.0040 | -.5018 | .6552 |
| 3/4 PT. | .1245 | .8165 | -.3764 | .5646 |
| ℄ BRG. UNIT 1 @ P-3 | | | | |

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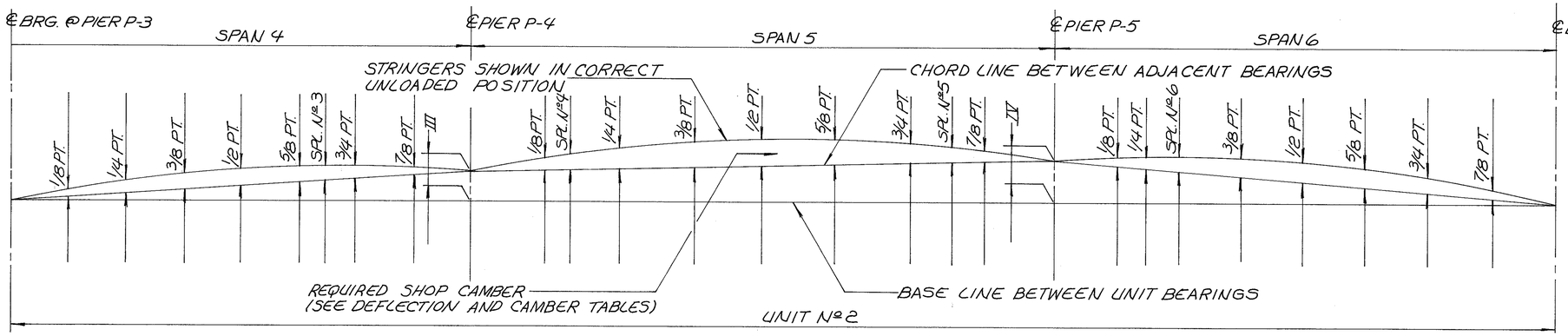
CLEVELAND, OHIO AKRON, OHIO

19/29

# TABLE OF DEFLECTION AND CAMBER

AKRON INNERBELT OVER DART AVE.
THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | M.A.B. | | A.L.H. | JDP | 11-6-82 | |




## LAYOUT DIAGRAM

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

395/455

AKRON INNERBELT
SUM - 59 - 0.00

NOTES

(1) FOR NOTES SEE SHT. 19/29.

(a) DEFLECTION DUE TO WEIGHT OF STEEL
(b) DEFLECTION DUE TO REMAINING DEAD LOAD
(c) ADJUSTMENT REQUIRED FOR VERTICAL CURVE
(d) REQUIRED SHOP CAMBER

| LAYOUT DIAGRAM OFFSETS | | |
|---|---|---|
| BEAM OR GIDER | III | IV |
| A | 7.7056" | 10.9769" |
| B | 8.4942" | 11.2997" |
| C | 9.2203" | 11.5997" |
| D | 9.8881" | 11.8740" |
| E | 10.4964" | 12.1239" |

| | BEAM A | | | | BEAM B | | | | BEAM C | | | | BEAM D | | | | BEAM E | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT Nº2 @ P-3 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .0647 | .5247 | -.6976 | -.1081 | .0647 | .5247 | -.6549 | -.0654 | .0647 | .5247 | -.6017 | -.0122 | .0647 | .5247 | -.5378 | .0517 | .0647 | .5247 | -.4633 | .1262 |
| 1/4 PT. | .1010 | .8910 | -1.1771 | -.1851 | .1010 | .8910 | -1.0917 | -.0997 | .1010 | .8910 | -.9853 | .0067 | .1010 | .8910 | -.8576 | .1344 | .1010 | .8910 | -.7085 | .2835 |
| 3/8 PT. | .0982 | 1.0195 | -1.4386 | -.3208 | .0982 | 1.0195 | -1.3105 | -.1927 | .0982 | 1.0195 | -1.1507 | -.0329 | .0982 | 1.0195 | -.9591 | .1587 | .0982 | 1.0195 | -.7356 | .3821 |
| 1/2 PT. | .0570 | .8990 | -1.4818 | -.5258 | .0570 | .8990 | -1.3112 | -.3552 | .0570 | .8990 | -1.0979 | -.1419 | .0570 | .8990 | -.8425 | .1135 | .0570 | .8990 | -.5446 | .4114 |
| 5/8 PT. | -.0065 | .5737 | -1.3070 | -.7397 | -.0065 | .5737 | -1.0937 | -.5264 | -.0065 | .5737 | -.8272 | -.2600 | -.0065 | .5737 | -.5084 | .0589 | -.0065 | .5737 | -.1869 | .3803 |
| ℄ SPL. Nº 3 | -.0240 | .4605 | -1.2102 | -.7737 | -.0240 | .4605 | -.9839 | -.5474 | -.0240 | .4605 | -.7013 | -.2649 | -.0240 | .4605 | -.3886 | .0499 | -.0240 | .4605 | -.0979 | .3386 |
| 3/4 PT. | -.0540 | .2210 | -.9141 | -.7471 | -.0540 | .2210 | -.6606 | -.4936 | -.0540 | .2210 | -.4038 | -.2368 | -.0540 | .2210 | -.1684 | -.0014 | -.0540 | .2210 | .0459 | .2129 |
| 7/8 PT. | -.0595 | -.0117 | -.3840 | -.4553 | -.0595 | -.0117 | -.2450 | -.3163 | -.0595 | -.0117 | -.1166 | -.1878 | -.0595 | -.0117 | .0000 | -.0712 | -.0595 | -.0117 | .1082 | .0370 |
| ℄ PIER P-4 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | .2132 | .5412 | 1.2233 | 1.9778 | .2132 | .5412 | 1.2234 | 1.9779 | .2132 | .5412 | 1.2233 | 1.9778 | .2132 | .5412 | 1.2233 | 1.9778 | .2132 | .5412 | 1.2234 | 1.9779 |
| ℄ SPL. Nº 4 | .3852 | 1.0483 | 1.8286 | 3.2622 | .3852 | 1.0483 | 1.8287 | 3.2622 | .3852 | 1.0483 | 1.8287 | 3.2622 | .3852 | 1.0483 | 1.8286 | 3.2621 | .3852 | 1.0483 | 1.8286 | 3.2662 |
| 1/4 PT. | .4770 | 1.3355 | 2.0970 | 3.9095 | .4770 | 1.3355 | 2.0971 | 3.9096 | .4770 | 1.3355 | 2.0971 | 3.9096 | .4770 | 1.3355 | 2.0970 | 3.9095 | .4770 | 1.3355 | 2.0971 | 3.9096 |
| 3/8 PT. | .6927 | 2.0232 | 2.6213 | 5.3373 | .6927 | 2.0232 | 2.6213 | 5.3373 | .6927 | 2.0232 | 2.6213 | 5.3373 | .6927 | 2.0232 | 2.6213 | 5.3373 | .6927 | 2.0232 | 2.6214 | 5.3374 |
| 1/2 PT. | .7830 | 2.3210 | 2.7960 | 5.9000 | .7830 | 2.3210 | 2.7961 | 5.9001 | .7830 | 2.3210 | 2.7961 | 5.9001 | .7830 | 2.3210 | 2.7960 | 5.9000 | .7830 | 2.3210 | 2.7961 | 5.9001 |
| 5/8 PT. | .6927 | 2.0232 | 2.6213 | 5.3373 | .6927 | 2.0232 | 2.6212 | 5.3372 | .6927 | 2.0232 | 2.6212 | 5.3372 | .6927 | 2.0232 | 2.6212 | 5.3372 | .6927 | 2.0232 | 2.6211 | 5.3371 |
| 3/4 PT. | .4770 | 1.3355 | 2.0970 | 3.9095 | .4770 | 1.3355 | 2.0970 | 3.9095 | .4770 | 1.3355 | 2.0969 | 3.9094 | .4770 | 1.3355 | 2.0969 | 3.9094 | .4770 | 1.3355 | 2.0970 | 3.9095 |
| ℄ SPL. Nº 5 | .3852 | 1.0483 | 1.8285 | 3.2620 | .3852 | 1.0483 | 1.8283 | 3.2619 | .3852 | 1.0483 | 1.8284 | 3.2620 | .3852 | 1.0483 | 1.8284 | 3.2620 | .3852 | 1.0483 | 1.8284 | 3.2619 |
| 7/8 PT. | .2132 | .5412 | 1.2233 | 1.9778 | .2132 | .5412 | 1.2232 | 1.9777 | .2132 | .5412 | 1.2232 | 1.9777 | .2132 | .5412 | 1.2231 | 1.9776 | .2132 | .5412 | 1.2233 | 1.9778 |
| ℄ PIER P-5 | | | | | | | | | | | | | | | | | | | | |
| 1/8 PT. | -.0595 | -.0117 | .5963 | .5250 | -.0595 | -.0117 | .5962 | .5250 | -.0595 | -.0117 | .5963 | .5250 | -.0595 | -.0117 | .5962 | .5249 | -.0595 | -.0117 | .5963 | .5250 |
| 1/4 PT. | -.0540 | .2210 | 1.0221 | 1.1891 | -.0540 | .2210 | 1.0221 | 1.1891 | -.0540 | .2210 | 1.0222 | 1.1892 | -.0540 | .2210 | 1.0220 | 1.1890 | -.0540 | .2210 | 1.0222 | 1.1892 |
| ℄ SPL. Nº 6 | -.0240 | .4610 | 1.2181 | 1.6551 | -.0240 | .4610 | 1.2180 | 1.6550 | -.0240 | .4610 | 1.2180 | 1.6550 | -.0240 | .4610 | 1.2180 | 1.6550 | -.0240 | .4610 | 1.2181 | 1.6551 |
| 3/8 PT. | -.0065 | .5737 | 1.2776 | 1.8449 | -.0065 | .5737 | 1.2777 | 1.8450 | -.0065 | .5737 | 1.2777 | 1.8450 | -.0065 | .5737 | 1.2776 | 1.8449 | -.0065 | .5737 | 1.2777 | 1.8449 |
| 1/2 PT. | .0570 | .8990 | 1.3629 | 2.3189 | .0570 | .8990 | 1.3629 | 2.3189 | .0570 | .8990 | 1.3629 | 2.3189 | .0570 | .8990 | 1.3627 | 2.3187 | .0570 | .8990 | 1.3629 | 2.3189 |
| 5/8 PT. | .0982 | 1.0195 | 1.2778 | 2.3955 | .0982 | 1.0195 | 1.2777 | 2.3954 | .0982 | 1.0195 | 1.2777 | 2.3954 | .0982 | 1.0195 | 1.2775 | 2.3952 | .0982 | 1.0195 | 1.2777 | 2.3955 |
| 3/4 PT. | .1010 | .8910 | 1.0220 | 2.0140 | .1010 | .8910 | 1.0222 | 2.0142 | .1010 | .8910 | 1.0221 | 2.0141 | .1010 | .8910 | 1.0221 | 2.0141 | .1010 | .8910 | 1.0221 | 2.0141 |
| 7/8 PT. | .0647 | .5247 | .5963 | 1.1858 | .0647 | .5247 | .5963 | 1.1858 | .0647 | .5247 | .5963 | 1.1858 | .0647 | .5247 | .5961 | 1.1856 | .0647 | .5247 | .5964 | 1.1859 |
| ℄ BRG. UNIT 2 @ P-6 | | | | | | | | | | | | | | | | | | | | |

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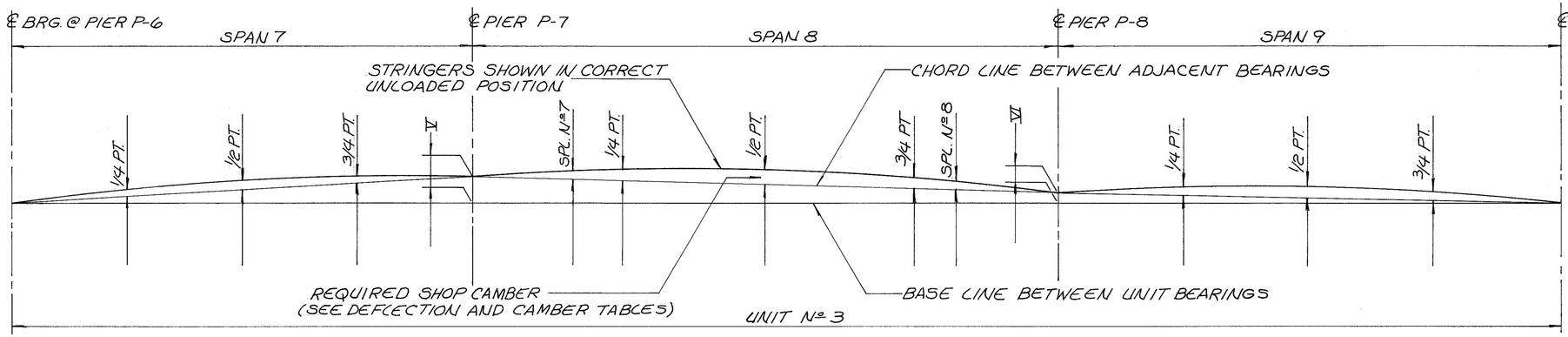
CLEVELAND, OHIO — AKRON, OHIO

20/29

## TABLE OF DEFLECTION AND CAMBER

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | M.A.B. | | A.L.H. | JDP | 11-4-82 | |




## LAYOUT DIAGRAM

| BEAM A | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 3 @ P-6 | | | | |
| 1/4 PT. | .2590 | 1.3815 | .4503 | 2.0908 |
| 1/2 PT. | .3320 | 1.7770 | .6003 | 2.7093 |
| 3/4 PT. | .1860 | .9970 | .4503 | 1.6333 |
| ℄ PIER P-7 | | | | |
| ℄ SPL. Nº 7 | -.0218 | -.1080 | ----- | -.1298 |
| 1/4 PT. | -.0165 | -.0755 | ----- | -.0920 |
| 1/2 PT. | .0160 | .1010 | ----- | .1170 |
| 3/4 PT. | .0135 | .0830 | ----- | .0965 |
| ℄ SPL. Nº 8 | .0061 | .0411 | ----- | .0472 |
| ℄ PIER P-8 | | | | |
| 1/4 PT. | .0270 | .1435 | ----- | .1705 |
| 1/2 PT. | .0530 | .2780 | ----- | .3310 |
| 3/4 PT. | .0420 | .2220 | ----- | .2640 |
| ℄ BRG. ABUT. A-2 | | | | |

| BEAM B | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 3 @ P-6 | | | | |
| 1/4 PT. | .1835 | 1.1435 | .3846 | 1.7116 |
| 1/2 PT. | .2340 | 1.4600 | .5128 | 2.2068 |
| 3/4 PT. | .1280 | .8030 | .3845 | 1.3155 |
| ℄ PIER P-7 | | | | |
| ℄ SPL. Nº 7 | -.0058 | -.0255 | ----- | -.0313 |
| 1/4 PT. | .0015 | .0225 | ----- | .0240 |
| 1/2 PT. | .0350 | .2340 | ----- | .2690 |
| 3/4 PT. | .0235 | .1570 | ----- | .1805 |
| ℄ SPL. Nº 8 | .0123 | .0859 | ----- | .0983 |
| ℄ PIER P-8 | | | | |
| 1/4 PT. | .0235 | .1455 | ----- | .1690 |
| 1/2 PT. | .0480 | .2980 | ----- | .3460 |
| 3/4 PT. | .0395 | .2435 | ----- | .2830 |
| ℄ BRG. ABUT. A-2 | | | | |

| LAYOUT DIAGRAM OFFSETS | | |
|---|---|---|
| BEAM OR GIDER | V | VI |
| A | 1.6300" | .7017" |
| B | 1.4185" | .6086" |
| C | 1.2151" | .5213" |
| D | 1.0228" | .4381" |
| E | .8402" | .3596" |

(a) DEFLECTION DUE TO WEIGHT OF STEEL
(b) DEFLECTION DUE TO REMAINING DEAD LOAD
(c) ADJUSTMENT REQUIRED FOR VERTICAL CURVE
(d) REQUIRED SHOP CAMBER

| BEAM C | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 3 @ P-6 | | | | |
| 1/4 PT. | .1245 | .7780 | .3240 | 1.2265 |
| 1/2 PT. | .1570 | .9820 | .4320 | 1.5710 |
| 3/4 PT. | .0835 | .5220 | .3239 | .9294 |
| ℄ PIER P-7 | | | | |
| ℄ SPL. Nº 7 | .0093 | .0647 | ----- | .0740 |
| 1/4 PT. | .0180 | .1210 | ----- | .1390 |
| 1/2 PT. | .0520 | .3370 | ----- | .3890 |
| 3/4 PT. | .0325 | .2110 | ----- | .2435 |
| ℄ SPL. Nº 8 | .0183 | .1197 | ----- | .1379 |
| ℄ PIER P-8 | | | | |
| 1/4 PT. | .0200 | .1255 | ----- | .1455 |
| 1/2 PT. | .0440 | .2760 | ----- | .3200 |
| 3/4 PT. | .0370 | .2290 | ----- | .2660 |
| ℄ BRG. ABUT. A-2 | | | | |

| BEAM D | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 3 @ P-6 | | | | |
| 1/4 PT. | .0800 | .5000 | .2686 | .8486 |
| 1/2 PT. | .0990 | .6180 | .3582 | 1.0752 |
| 3/4 PT. | .0490 | .3100 | .2686 | .6276 |
| ℄ PIER P-7 | | | | |
| ℄ SPL. Nº 7 | .0213 | .1410 | ----- | .1623 |
| 1/4 PT. | .0315 | .2050 | ----- | .2365 |
| 1/2 PT. | .0660 | .4260 | ----- | .4920 |
| 3/4 PT. | .0400 | .2580 | ----- | .2980 |
| ℄ SPL. Nº 8 | .0228 | .1495 | ----- | .1723 |
| ℄ PIER P-8 | | | | |
| 1/4 PT. | .0175 | .1085 | ----- | .1260 |
| 1/2 PT. | .0410 | .2560 | ----- | .2970 |
| 3/4 PT. | .0350 | .2170 | ----- | .2520 |
| ℄ BRG. ABUT. A-2 | | | | |

| BEAM E | | | | |
|---|---|---|---|---|
| LOCATION | (a) | (b) | (c) | (d) |
| ℄ BRG. UNIT 3 @ P-6 | | | | |
| 1/4 PT. | .0475 | .2540 | .2185 | .5200 |
| 1/2 PT. | .0560 | .3030 | .2912 | .6502 |
| 3/4 PT. | .0250 | .1345 | .2184 | .3779 |
| ℄ PIER P-7 | | | | |
| ℄ SPL. Nº 7 | .0313 | .1759 | ----- | .2072 |
| 1/4 PT. | .0425 | .2360 | ----- | .2785 |
| 1/2 PT. | .0780 | .4290 | ----- | .5070 |
| 3/4 PT. | .0465 | .2545 | ----- | .3010 |
| ℄ SPL. Nº 8 | .0271 | .1489 | ----- | .1761 |
| ℄ PIER P-8 | | | | |
| 1/4 PT. | .0155 | .0810 | ---- | .0965 |
| 1/2 PT. | .0380 | .2050 | ---- | .2430 |
| 3/4 PT. | .0335 | .1775 | ---- | .2110 |
| ℄ BRG. ABUT. A-2 | | | | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

396/455

AKRON INNERBELT
SUM-59-0.00

NOTES

(1) FOR NOTES SEE SHT. 19/29.

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CLEVELAND, OHIO — AKRON, OHIO

21/29

# TABLE OF DEFLECTION AND CAMBER

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM 59 0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RLF | M.A.B. | | A.L.H. | JJP | 11-4-82 | |

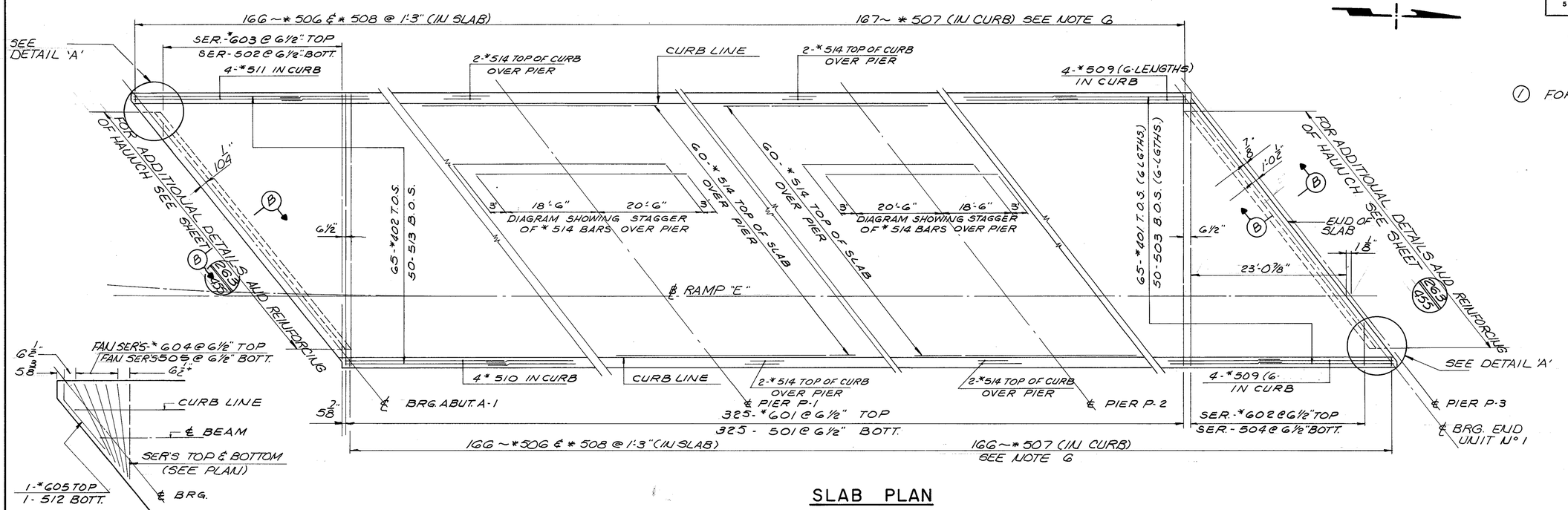
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

397/455

AKRON INNERBELT
SUM - 59 - 0.00

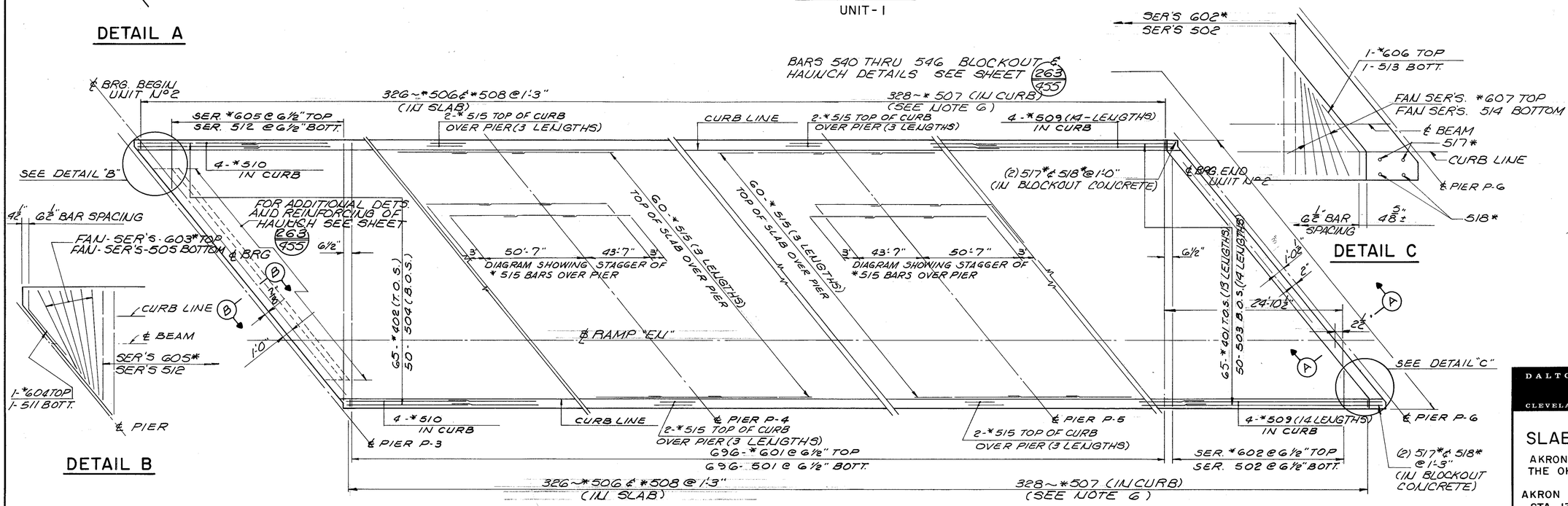
## NOTES

(1) FOR NOTES SEE SHEET 23/29.




## SLAB PLAN
UNIT - 1

## DETAIL A




## DETAIL B

## SLAB PLAN
UNIT - 2

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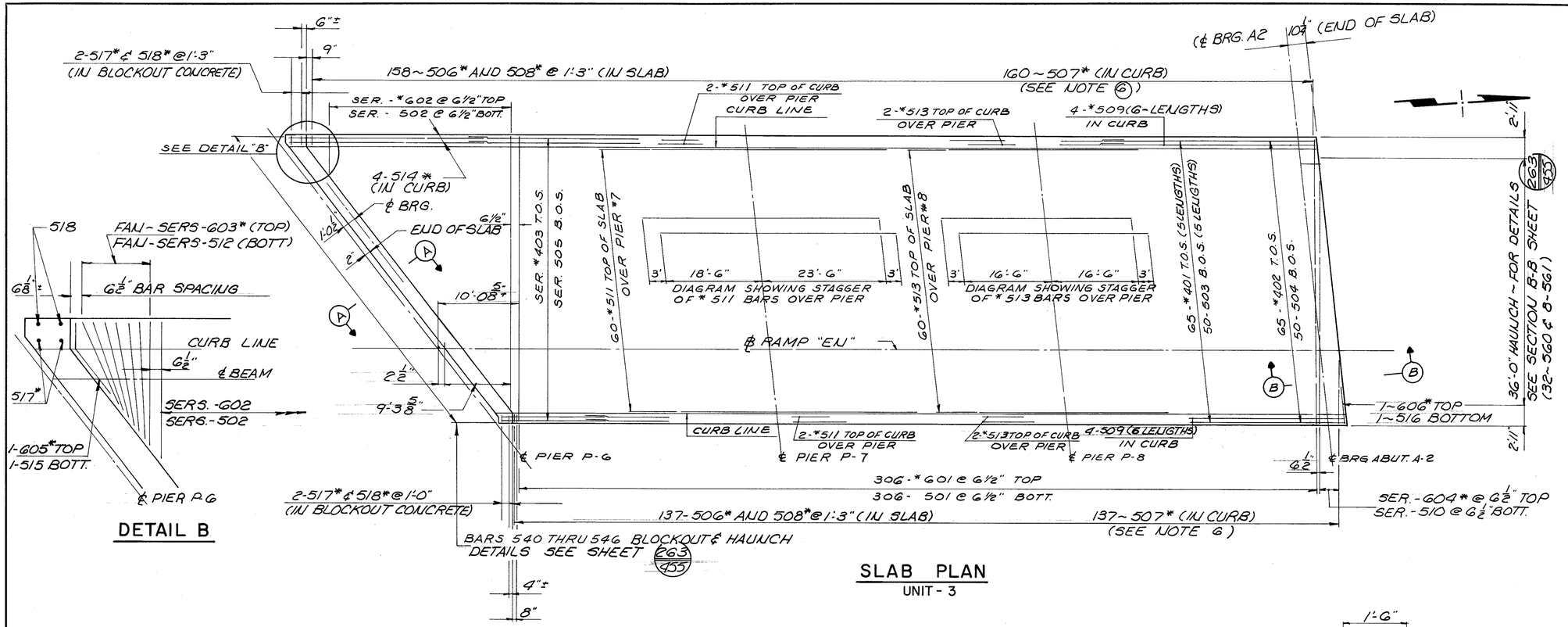
CLEVELAND, OHIO — AKRON, OHIO

22/29

## SLAB PLAN UNIT Nº. 1 & 2

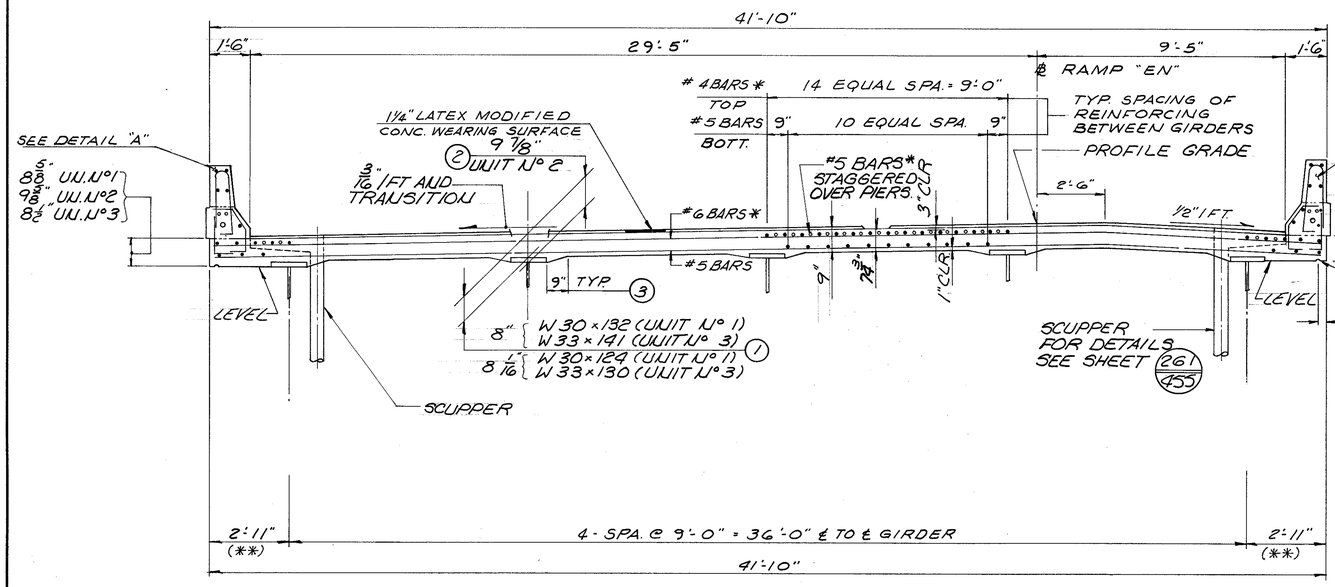
AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | A.L.H. | JJP | 11-4-82 | |

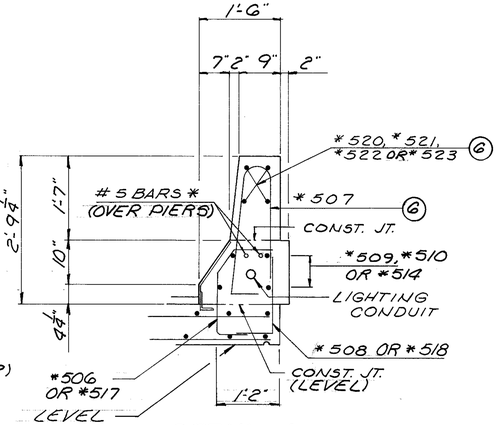



## DETAIL B

## SLAB PLAN
UNIT - 3




## TRANSVERSE SECTION




## DETAIL A

FOR ADDITIONAL DETAIL OF CURB PLATES, SEE SHEET 261 455

(**) DENOTES : SLAB OFFSET VARIES UNIT N° 1, SPANS #1 & #2 ~ SEE SLAB OFFSET TABLE SHEET. 24/29

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

398/455

AKRON INNERBELT
SUM - 59 - 0.00

(1) THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

(2) THIS IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18.

(3) A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.)

(4) FOR CROSSFRAMES SEE FRAMING PLAN AND FRAMING DETAIL SHEETS.

(5) FOR SCREED ELEVATION TABLE SEE SHEET 24/29.

(6) TRANSVERSE AND LONGITUDINAL REINFORCEMENT SHALL BE FIELD BENT AS REQUIRED. PAYMENT SHALL BE INCLUDED WITH ITEM 509, REINFORCING STEEL.

(7) ALL REINFORCING BARS SHOWN THUS * ARE EPOXY COATED.

(8) PROFILE GRADE IS GIVEN TO TOP OF FINISHED PAVEMENT.

(9) FOR LOCATION OF LIGHT STANDARD SUPPORTS, SEE GENERAL PLAN SHEETS 3/29 AND 4/29.

(10) FOR ELECTRICAL CONDUIT ON BRIDGE, SEE LIGHTING PLANS.

(11) FOR SCUPPER LOCATIONS SEE GENERAL PLAN SHEET. FOR SCUPPER DETAILS SEE 261.

(12) FOR SECTIONS "A-A" & "B-B" SEE SHEET 263.

(13) FOR ADDITIONAL NOTES SEE GENERAL NOTE SHEET.

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CLEVELAND, OHIO — AKRON, OHIO

23/29

# SLAB PLAN UNIT Nº. 3

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

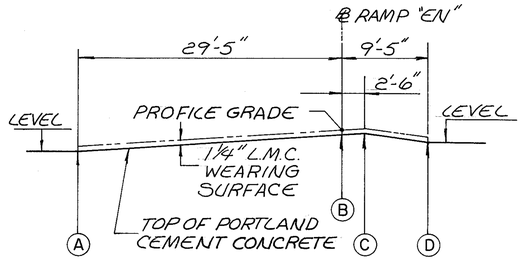
| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | A.L.H. | gpf | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

399/455

AKRON INNERBELT
SUM-59-0.00

| SCREED ELEVATIONS UNIT 1 | | | | |
|---|---|---|---|---|
| LOCATION | (A) | (B) | (C) | (D) |
| ℄ BRG @ A-1 | 1006.372 | 1006.542 | 1006.553 | 1006.115 |
| 1/4 PT. | 1006.011 | 1006.173 | 1006.184 | 1005.754 |
| 1/2 PT. | 1005.620 | 1005.774 | 1005.784 | 1005.362 |
| 3/4 PT. | 1005.194 | 1005.339 | 1005.347 | 1004.934 |
| ℄ PIER P-1 | 1004.792 | 1004.927 | 1004.935 | 1004.530 |
| 1/4 PT. | 1004.441 | 1004.560 | 1004.566 | 1004.169 |
| 1/2 PT. | 1004.116 | 1004.219 | 1004.224 | 1003.835 |
| 3/4 PT. | 1003.759 | 1003.844 | 1003.850 | 1003.472 |
| ℄ PIER P-2 | 1003.413 | 1003.497 | 1003.506 | 1003.136 |
| 1/4 PT. | 1003.186 | 1003.299 | 1003.310 | 1002.948 |
| 1/2 PT. | 1002.981 | 1003.123 | 1003.137 | 1002.782 |
| 3/4 PT. | 1002.738 | 1002.910 | 1002.927 | 1002.578 |
| ℄ BRG. @ P3 | 1002.464 | 1002.666 | 1002.685 | 1002.344 |




KEY TRANSVERSE SECTION

(A) LEFT GUTTER LINE
(B) BASE LINE RAMP "EN"
(C) BREAK LINE
(D) RIGHT GUTTER LINE

NOTES

(1) THE SCREED ELEVATIONS SHOWN ARE TO THE TOP OF THE PORTLAND CEMENT CONC. DECK AND ARE THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE AND THE 1¼" LATEX MODIFIED CONCRETE WEARING SURFACE.

| SCREED ELEVATIONS UNIT 2 | | | | |
|---|---|---|---|---|
| LOCATION | (A) | (B) | (C) | (D) |
| ℄ BRG. @ P-3 | 1002.432 | 1002.640 | 1002.659 | 1002.319 |
| 1/8 PT. | 1002.306 | 1002.541 | 1002.563 | 1002.229 |
| 1/4 PT. | 1002.185 | 1002.447 | 1002.472 | 1002.144 |
| 3/8 PT. | 1002.062 | 1002.352 | 1002.379 | 1002.058 |
| 1/2 PT. | 1001.936 | 1002.254 | 1002.283 | 1001.969 |
| 5/8 PT. | 1001.812 | 1002.157 | 1002.188 | 1001.875 |
| 3/4 PT. | 1001.703 | 1002.057 | 1002.086 | 1001.768 |
| 7/8 PT. | 1001.617 | 1001.953 | 1001.980 | 1001.657 |
| ℄ PIER P-4 | 1001.541 | 1001.854 | 1001.880 | 1001.552 |
| 1/8 PT. | 1001.450 | 1001.733 | 1001.755 | 1001.420 |
| 1/4 PT. | 1001.351 | 1001.603 | 1001.623 | 1001.280 |
| 3/8 PT. | 1001.215 | 1001.435 | 1001.452 | 1001.102 |
| 1/2 PT. | 1001.016 | 1001.206 | 1001.220 | 1000.863 |
| 5/8 PT. | 1000.739 | 1000.897 | 1000.909 | 1000.545 |
| 3/4 PT. | 1000.400 | 1000.528 | 1000.537 | 1000.165 |
| 7/8 PT. | 1000.024 | 1000.120 | 1000.127 | 999.747 |
| ℄ PIER P-5 | 999.639 | 999.704 | 999.708 | 999.322 |
| 1/8 PT. | 999.384 | 999.427 | 999.429 | 999.038 |
| 1/4 PT. | 999.134 | 999.156 | 999.156 | 998.760 |
| 3/8 PT. | 998.881 | 998.881 | 998.879 | 998.478 |
| 1/2 PT. | 998.611 | 998.589 | 998.586 | 998.179 |
| 5/8 PT. | 998.310 | 998.267 | 998.261 | 997.849 |
| 3/4 PT. | 997.974 | 997.909 | 997.902 | 997.485 |
| 7/8 PT. | 997.604 | 997.517 | 997.508 | 997.086 |
| ℄ BRG. @ P-6 | 997.206 | 997.098 | 997.087 | 996.660 |

| SCREED ELEVATIONS UNIT 3 | | | | |
|---|---|---|---|---|
| LOCATION | (A) | (B) | (C) | (D) |
| ℄ BRG. @ P-6 | 997.142 | 997.030 | 997.019 | 996.590 |
| 1/4 PT. | 996.756 | 996.673 | 996.672 | 996.249 |
| 1/2 PT. | 996.263 | 996.271 | 996.279 | 995.880 |
| 3/4 PT. | 995.645 | 995.818 | 995.838 | 995.480 |
| ℄ PIER P-7 | 994.985 | 995.351 | 995.382 | 995.072 |
| 1/4 PT. | 994.477 | 994.865 | 994.896 | 994.589 |
| 1/2 PT. | 993.989 | 994.381 | 994.412 | 994.102 |
| 3/4 PT. | 993.485 | 993.865 | 993.896 | 993.585 |
| ℄ PIER P-8 | 992.976 | 993.341 | 993.372 | 993.062 |
| 1/4 PT. | 992.612 | 992.975 | 993.006 | 992.693 |
| 1/2 PT. | 992.249 | 992.612 | 992.643 | 992.329 |
| 3/4 PT. | 991.869 | 992.234 | 992.265 | 991.951 |
| ℄ BRG. @ A-2 | 991.476 | 991.833 | 991.872 | 991.562 |

| SLAB OFFSET TABLE UNIT Nº 1 | | |
|---|---|---|
| LOCATION | ℄ BEAM "A" TO LT EDGE OF SLAB | ℄ BEAM "E" TO RT. EDGE OF SLAB |
| ℄ BRG. ABUT. A-1 | 2'-11" | 2'-11" |
| 1/4 PT. | 2'-9 5/16" | 3'-0 3/8" |
| 1/2 PT. | 2'-8 1/16" | 3'-0 7/8" |
| 3/4 PT. | 2'-9 1/8" | 3'-0 5/8" |
| ℄ PIER P-1 | 2'-10 1/2" | 2'-11 3/16" |
| 1/4 PT | 2'-11 13/16" | 2'-10 15/16" |
| 1/2 PT | 2'-11 3/16" | 2'-11" |
| 3/4 PT | 2'-11" | 2'-11" |
| ℄ PIER P-2 | 2'-11" | 2'-11" |

DIMENSIONS SHOWN ARE ALONG AND PERPENDICULAR TO THE ℄ OF BEAMS.

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24/29

# SCREED ELEVATIONS

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | M.A.B. | | A.L.H. | JDP | 11-4-82 | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | **ABUTMENT A-1** | | | | | | | | | |
| | 1A501 | 34 | 8'-3" | 2 | 1'-7" | 5'-4" | | | | 293 |
| | 1A502 | 33 | 7'-5" | 1 | 1'-0" | 6'-6" | | | | 255 |
| | 1A503 | 33 | 7'-1" | 3 | 2'-0" | 3'-4" | 2'-0" | | | 244 |
| | 1A504 | 34 | 27'-8" | ST. | | | | | | 981 |
| | 1A505 | 5 | 3'-11" | 36 | 2'-0" | 2'-0" | 1'-3" | | | 20 |
| | 1A506 | 3 | 5'-7" | 16 | 2'-0" | 1'-9" | 1'-7" | 2'-0" | | 17 |
| | 1A507 | 2 | 7'-2" | 16 | 2'-0" | 3'-4" | 1'-7" | 2'-0" | | 15 |
| | 1A508 | 8 | 6'-0" | ST. | | | | | | 50 |
| | 1A509 | 24 | 11'-2" | 14 | 2'-4" | 3'-0" | | | | 280 |
| | 1A510 | 6 | 10'-3" | ST. | | | | | | 64 |
| | 1A511 | 8 | 15'-7" | ST. | | | | | | 130 |
| * | 1A512 | 8 | 13'-7" | ST. | | | | | | 113 |
| | 1A513 | 6 | 5'-0" | ST. | | | | | | 31 |
| | 1A514 | 8 | 5'-1" | ST. | | | | | | 42 |
| * | 1A516 | 14 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 82 |
| * | 1A518 | 16 | 4'-7" | ST. | | | | | | 76 |
| * | 1A519 | 16 | 2'-8" | 6 | 2'-1" | | | | | 45 |
| | 1A520 | 2 | 7'-2" | 1 | 1'-0" | 6'-3" | | | | 15 |
| | 1A522 | 8 | 9'-0" | 2 | 4'-1" | 1'-1" | | | | 75 |
| | 1A523 | 6 | 12'-5" | ST. | | | | | | 78 |
| | 1A524 | 8 | 17'-7" | ST. | | | | | | 147 |
| * | 1A525 | 8 | 15'-7" | ST. | | | | | | 130 |
| | 1A526 | 8 | 9'-4" | 2 | 4'-3" | 1'-1" | | | | 78 |
| * | 1A527 | 16 | 4'-0" | ST. | | | | | | 67 |
| | 1A528 | 2 | 6'-6" | ST. | | | | | | 14 |
| | 1A530 | 2 | 6'-4" | 9 | 3'-0" | 7" | | | | 13 |
| | 1A531 | 2 | 1'-4" | ST. | | | | | | 3 |
| | | | | | | | | | | |
| | 1AG01 | 32 | 14'-1" | 3 | 6'-6" | 5'-4" | 2'-7" | | | 677 |
| | 1AG02 | 50 | 7'-6" | 9 | 3'-6" | 11" | | | | 563 |
| | 1AG03 | 50 | 5'-1" | 2 | 2'-0" | 1'-5" | | | | 382 |
| | 1AG04 | 50 | 10'-3" | 2 | 4'-7" | 1'-5" | | | | 770 |
| | 1AG05 | 1 | 20'-0" | 2 | 9'-5" | 1'-6" | | | | 30 |
| | 1AG06 | 7 | 18'-9" | 2 | 9'-0" | 1'-1" | | | | 197 |
| * | 1AG07 | 6 | 5'-10" | 19 | 9" | 6" | 9" | 4'-4" | | 53 |
| * | 1AG08 | 8 | 5'-11" | 19 | 9" | 6" | 9" | 4'-5" | | 71 |
| | 1AG09 | 9 | 17'-9" | 2 | 8'-6" | 1'-1" | | | | 240 |
| * | 1AG11 | 2 | 3'-11" | 19 | 9" | 6" | 9" | 2'-5" | | 12 |
| * | 1AG12 | 2 | 3'-9" | 19 | 8" | 5" | 9" | 2'-5" | | 11 |
| * | 1AG13 | 2 | 3'-9" | 19 | 8" | 4" | 9" | 2'-5" | | 11 |
| * | 1AG14 | 2 | 3'-7" | 19 | 7" | 3" | 9" | 2'-5" | | 11 |
| * | 1AG15 | 8 | 3'-7" | 19 | 7" | 2" | 9" | 2'-5" | | 43 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 1A801 | 14 | 30'-0" | ST. | | | | | | 1121 |
| | 1A802 | 33 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 426 |
| | 1A803 | 3 | 13'-2" | ST. | | | | | | 105 |
| | 1A804 | 3 | 11'-0" | ST. | | | | | | 88 |
| | 1A805 | 3 | 15'-2" | ST. | | | | | | 121 |
| | 1A806 | 3 | 12'-0" | ST. | | | | | | 96 |
| | | | | | | | | | | |
| | | | | | | | | | | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NON EPOXY COATED | | = | 7661 | | | | | |
| | | EPOXY COATED | | = | 725 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | **ABUTMENT A-2** | | | | | | | | | |
| | 2A501 | 35 | 8'-3" | 2 | 1'-7" | 5'-4" | | | | 301 |
| | 2A502 | 35 | 6'-1" | 1 | 10" | 5'-4" | | | | 222 |
| | 2A503 | 29 | 7'-2" | 2 | 2'-0" | 3'-5" | | | | 217 |
| | 2A504 | 9 | 40'-9" | ST. | | | | | | 383 |
| | 2A505 | 6 | 7'-3" | ST. | | | | | | 45 |
| | 2A506 | 12 | 24'-0" | ST. | | | | | | 300 |
| | 2A507 | 5 | 9'-10" | 2 | 4'-4" | 1'-5" | | | | 51 |
| | 2A508 | 3 | 5'-0" | ST. | | | | | | 16 |
| | 2A509 | 5 | 5'-4" | ST. | | | | | | 28 |
| | 2A510 | 8 | 11'-2" | 14 | 2'-4" | 3'-0" | | | | 93 |
| | 2A511 | 2 | 6'-0" | 1 | 5'-1" | 1'-0" | | | | 13 |
| | 2A512 | 6 | 8'-7" | ST. | | | | | | 54 |
| | 2A513 | 6 | 12'-8" | ST. | | | | | | 79 |
| * | 2A514 | 8 | 10'-8" | ST. | | | | | | 89 |
| | 2A515 | 4 | 4'-1" | ST. | | | | | | 17 |
| * | 2A516 | 8 | 2'-8" | 6 | 2'-1" | | | | | 22 |
| | 2A517 | 8 | 8'-10" | 2 | 4'-0" | 1'-1" | | | | 74 |
| * | 2A518 | 8 | 4'-0" | ST. | | | | | | 33 |
| * | 2A519 | 4 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 23 |
| | 2A520 | 3 | 5'-1" | 1 | 1'-9" | 3'-5" | | | | 16 |
| * | 2A521 | 8 | 3'-5" | ST. | | | | | | 29 |
| | 2A522 | 5 | 3'-11" | 36 | 2'-0" | 2'-0" | 3" | | | 20 |
| | 2A523 | 8 | 6'-6" | ST. | | | | | | 54 |
| * | 2A524 | 2 | 3'-11" | 36 | 1'-6" | 2'-6" | 3" | | | 8 |
| | 2A525 | 6 | 22'-5" | ST. | | | | | | 140 |
| * | 2A526 | 3 | 1'-5" | ST. | | | | | | 3 |
| * | 2A527 | 2 | 3'-11" | 19 | 1'-6" | 7" | 10" | 1'-6" | | 8 |
| | | | | | | | | | | |
| | 2AG01 | 35 | 12'-11" | 3 | 5'-4" | 5'-4" | 2'-7" | | | 679 |
| | 2AG02 | 39 | 7'-10" | 9 | 3'-8" | 11" | | | | 459 |
| | 2AG03 | 40 | 5'-1" | 2 | 2'-0" | 1'-5" | | | | 305 |
| | 2AG04 | 40 | 10'-5" | 2 | 4'-8" | 1'-5" | | | | 626 |
| | 2AG05 | 1 | 12'-7" | 2 | 6'-0" | 11" | | | | 19 |
| | 2AG06 | 5 | 12'-9" | 2 | 5'-10" | 1'-5" | | | | 96 |
| | 2AG07 | 5 | 15'-10" | 2 | 7'-6" | 1'-2" | | | | 119 |
| * | 2AG08 | 4 | 6'-0" | 19 | 9" | 6" | 9" | 4'-6" | | 36 |
| | 2AG09 | 1 | 4'-6" | ST. | | | | | | 7 |
| | 2AG10 | 1 | 17'-5" | 2 | 8'-4" | 1'-1" | | | | 26 |
| * | 2AG11 | 1 | 3'-11" | 19 | 9" | 6" | 9" | 2'-5" | | 6 |
| * | 2AG12 | 1 | 3'-9" | 19 | 8" | 5" | 9" | 2'-5" | | 6 |
| * | 2AG13 | 1 | 3'-9" | 19 | 8" | 4" | 9" | 2'-5" | | 6 |
| * | 2AG14 | 1 | 3'-7" | 19 | 7" | 3" | 9" | 2'-5" | | 5 |
| * | 2AG15 | 4 | 3'-7" | 19 | 7" | 2" | 9" | 2'-5" | | 22 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 2A801 | 14 | 25'-10" | ST. | | | | | | 966 |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2A802 | 2 | 11'-5" | ST. | | | | | | 61 |
| | 2A803 | 4 | 8'-5" | ST. | | | | | | 90 |
| | 2A804 | 26 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 336 |
| | | | | | | | | | | |
| | | NON EPOXY COATED | | = | 5912 | | | | | |
| | | EPOXY COATED | | = | 296 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | **PIER P-1** | | | | | | | | | |
| | 1P501 | 8 | 25'-6" | ST. | | | | | | 213 |
| | 1P502 | 12 | 7'-1" | 2 | 2'-10" | 1'-8" | | | | 89 |
| | 1P503 | 36 | 6'-7" | 2 | 2'-7" | 1'-8" | | | | 247 |
| | 1P504 | 16 | 9'-0" | 2 | 3'-4" | 2'-7" | | | | 150 |
| | 1P505 | 32 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 228 |
| | 1P506 | 16 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 142 |
| | | | | | | | | | | |
| | 1PG01 | 8 | 7'-4" | 12 | 3'-0" | 4'-4" | 6" | | | 88 |
| | | | | | | | | | | |
| | 1P701 | 7 | 22'-3" | ST. | | | | | | 318 |
| | | | | | | | | | | |
| | 1P901 | 7 | 40'-8" | ST. | | | | | | 968 |
| | | | | | | | | | | |
| | 1P1001 | 42 | 25'-8" | ST. | | | | | | 4639 |
| | 1P1002 | 42 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1822 |
| | 1P1003 | 14 | 19'-4" | 1 | 2'-8" | 16'-11" | | | | 1165 |
| | | | | | | | | | | |
| | 1P1101 | 24 | 14'-8" | 7 | 11'-6" | | | | | 1870 |
| | 1P1102 | 24 | 13'-8" | 7 | 10'-6" | | | | | 1743 |
| | | | | | | | | | | |
| | | NON EPOXY COATED | | = | 13682 | | | | | |
| | | EPOXY COATED | | = | 0 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | | TOTAL PIER P-1 | | = | 13682 | | | | | |
| | **PIER P-2** | | | | | | | | | |
| | 2P501 | 8 | 25'-5" | ST. | | | | | | 212 |
| | 2P502 | 12 | 7'-4" | 2 | 2'-10" | 1'-11" | | | | 92 |
| | 2P503 | 36 | 6'-4" | 2 | 2'-4" | 1'-11" | | | | 238 |
| | 2P504 | 16 | 8'-10" | 2 | 3'-3" | 2'-7" | | | | 147 |
| | 2P505 | 32 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 228 |
| | 2P506 | 16 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 142 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 2PG01 | 8 | 7'-4" | 12 | 3'-0" | 4'-4" | 6" | | | 88 |
| | | | | | | | | | | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

400/455

AKRON INNERBELT
SUM – 59 – 0.00

NOTES

(1) FOR NOTES AND BAR BENDING DIAGRAMS SEE SHEET 29/29.

DALTON • DALTON • NEWPORT
CLEVELAND OHIO — AKRON OHIO

25/29

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. | CDG | | A.L.H. | JJP | 11-82 | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 2P701 | 8 | 22'-2" | ST. | | | | | | 362 |
| 2P901 | 7 | 40'-6" | ST. | | | | | | 964 |
| 2P1001 | 42 | 26'-9" | ST. | | | | | | 4834 |
| 2P1002 | 42 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1822 |
| 2P1003 | 12 | 19'-4" | 1 | 2'-8" | 16'-11" | | | | 998 |
| 2P1004 | 4 | 18'-11" | 1 | 2'-3" | 16'-11" | | | | 326 |
| 2P1101 | 24 | 14'-8" | 7 | 11'-6" | | | | | 1870 |
| 2P1102 | 24 | 13'-8" | 7 | 10'-6" | | | | | 1743 |
| | | NON EPOXY COATED = 14066 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | | | TOTAL PIER P-2 = 14066 | | | | | |

PIER P-3

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 3P501 | 24 | 26'-1" | ST. | | | | | | 653 |
| 3P502 | 20 | 8'-9" | 2 | 2'-7" | 3'-10" | | | | 183 |
| 3P503 | 30 | 9'-9" | 2 | 3'-1" | 3'-10" | | | | 305 |
| 3P504 | 30 | 7'-11" | 2 | 2'-2" | 3'-10" | | | | 248 |
| 3P506 | 51 | 7'-6" | 2 | 3'-0" | 1'-9" | | | | 399 |
| 3P507 | 51 | 8'-2" | 2 | 3'-4" | 1'-9" | | | | 434 |
| 3P601 | 6 | 26'-3" | ST. | | | | | | 237 |
| 3P602 | 12 | 8'-9" | 12 | 4'-0" | 4'-9" | 6" | | | 158 |
| 3P1101 | 12 | 21'-11" | 1 | 2'-6" | | | | | 1397 |
| 3P1102 | 6 | 25'-7" | ST | | | | | | 816 |
| 3P1103 | 6 | 40'-10" | ST | | | | | | 1302 |
| 3P1104 | 18 | 15'-1" | ST | | | | | | 1442 |
| 3P1105 | 18 | 17'-1" | ST | | | | | | 1634 |
| 3P1106 | 18 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 932 |
| 3P1107 | 18 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 741 |
| 3P1108 | 24 | 18'-8" | 7 | 15'-6" | | | | | 2380 |
| 3P1109 | 36 | 13'-8" | 7 | 10'-6" | | | | | 2614 |
| | | NON EPOXY COATED = 15875 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | | | TOTAL PIER P-3 = 15875 | | | | | |

PIER P-4

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 4P501 | 24 | 8'-5" | 2 | 3'-1" | 2'-6" | | | | 211 |
| 4P502 | 24 | 7'-7" | 2 | 2'-8" | 2'-6" | | | | 190 |
| 4P503 | 36 | 9'-5" | 2 | 3'-7" | 2'-6" | | | | 354 |
| 4P504 | 36 | 6'-9" | 2 | 2'-3" | 2'-6" | | | | 253 |
| 4P505 | 12 | 10'-6" | 2 | 3'-7" | 3'-7" | | | | 131 |
| 4P506 | 12 | 7'-10" | 2 | 2'-3" | 3'-7" | | | | 98 |
| 4P507 | 12 | 25'-8" | ST. | | | | | | 321 |
| 4P601 | 10 | 8'-0" | 12 | 3'-6" | 4'-6" | 6" | | | 120 |
| 4P701 | 8 | 19'-0" | ST. | | | | | | 311 |
| 4P1001 | 8 | 40'-6" | ST. | | | | | | 1394 |
| 4P1101 | 16 | 21'-5" | 1 | 3'-0" | 18'-8" | | | | 1821 |
| 4P1102 | 27 | 12'-6" | ST. | | | | | | 1793 |
| 4P1103 | 27 | 13'-8" | ST. | | | | | | 1960 |
| 4P1104 | 27 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 1112 |
| 4P1105 | 27 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 1399 |
| 4P1106 | 36 | 21'-8" | 7 | 18'-6" | | | | | 4144 |
| 4P1107 | 48 | 13'-8" | 7 | 10'-6" | | | | | 3485 |
| | | NON EPOXY COATED = 19097 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | | | TOTAL PIER P-2 = 19097 | | | | | |

PIER P-5

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 5P501 | 24 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 213 |
| 5P502 | 24 | 7'-8" | 2 | 2'-8" | 2'-7" | | | | 192 |
| 5P503 | 36 | 9'-6" | 2 | 3'-7" | 2'-7" | | | | 357 |
| 5P504 | 36 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 257 |
| 5P505 | 12 | 10'-6" | 2 | 3'-7" | 3'-7" | | | | 131 |
| 5P506 | 12 | 9'-10" | 2 | 3'-3" | 3'-7" | | | | 123 |
| 5P507 | 8 | 25'-8" | ST. | | | | | | 214 |
| 5P601 | 16 | 8'-0" | 12 | 3'-6" | 4'-6" | 6" | | | 192 |
| 5P801 | 8 | 19'-0" | ST. | | | | | | 406 |
| 5P1001 | 8 | 40'-6" | ST. | | | | | | 1394 |
| 5P1101 | 16 | 22'-7" | 1 | 3'-0" | 19'-10" | | | | 1920 |
| 5P1102 | 39 | 15'-0" | ST. | | | | | | 3108 |
| 5P1103 | 39 | 23'-6" | ST. | | | | | | 4869 |
| 5P1104 | 39 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 2020 |
| 5P1105 | 39 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 2020 |
| 5P1106 | 54 | 23'-8" | 7 | 20'-6" | | | | | 6790 |
| 5P1107 | 60 | 17'-8" | 7 | 14'-6" | | | | | 5632 |
| | | NON EPOXY COATED = 29838 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | | | TOTAL PIER P-5 = 29838 | | | | | |

PIER P-6

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 6P501 | 24 | 26'-1" | ST. | | | | | | 653 |
| 6P502 | 20 | 8'-10" | 2 | 2'-7" | 3'-11" | | | | 184 |
| 6P503 | 30 | 9'-10" | 2 | 3'-1" | 3'-11" | | | | 308 |
| 6P504 | 30 | 8'-0" | 2 | 2'-2" | 3'-11" | | | | 250 |
| 6P506 | 51 | 6'-9" | 2 | 2'-7" | 1'-10" | | | | 359 |
| 6P507 | 51 | 8'-3" | 2 | 3'-4" | 1'-10" | | | | 439 |
| 6P601 | 6 | 26'-3" | ST. | | | | | | 237 |
| 6P602 | 12 | 8'-9" | 12 | 4'-0" | 4'-9" | 6" | | | 158 |
| 6P1101 | 12 | 21'-11" | 1 | 2'-6" | 19'-8" | | | | 1397 |
| 6P1102 | 6 | 25'-7" | ST. | | | | | | 816 |
| 6P1103 | 6 | 40'-10" | ST. | | | | | | 1302 |
| 6P1104 | 18 | 12'-5" | ST. | | | | | | 1187 |
| 6P1105 | 18 | 14'-5" | ST. | | | | | | 1379 |
| 6P1106 | 18 | 9'-9" | 1 | 2'-0" | 8'-0" | | | | 932 |
| 6P1107 | 18 | 7'-9" | 1 | 2'-0" | 6'-0" | | | | 741 |
| 6P1108 | 30 | 18'-8" | 7 | 15'-6" | | | | | 2975 |
| 6P1109 | 36 | 15'-8" | 7 | 12'-6" | | | | | 2997 |
| | | NON EPOXY COATED = 16314 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | | | TOTAL PIER P-6 = 16314 | | | | | |

PIER P-7

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 7P501 | 4 | 39'-9" | ST. | | | | | | 166 |
| 7P502 | 12 | 7'-8" | 2 | 2'-8" | 2'-7" | | | | 96 |
| 7P503 | 18 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 160 |
| 7P504 | 18 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 128 |
| 7P601 | 8 | 6'-3" | 12 | 3'-0" | 3'-3" | 6" | | | 75 |
| 7P701 | 7 | 44'-5" | 2 | 2'-6" | 39'-9" | | | | 636 |
| 7P801 | 7 | 33'-0" | ST. | | | | | | 617 |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

401/455

AKRON INNERBELT
SUM-59-0.00

NOTES

(1) FOR NOTES AND BAR BENDING DIAGRAMS SEE SHEET 29/29.

DALTON · DALTON · NEWPORT
CLEVELAND OHIO — AKRON OHIO

26/29

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134+16.52 TO STA. 142+16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. | CDG | | ALH | JDP | 11-4-82 | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 7P1001 | 24 | 18'-3" | ST. | | | | | | 1885 |
| 7P1002 | 24 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1041 |
| 7P1003 | 48 | 11'-4" | 7 | 8'-6" | | | | | 2341 |
| | NON EPOXY COATED = 7145 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | TOTAL PIER P-7 = 7145 | | | | | | | | |

PIER P-8

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 8P501 | 4 | 39'-9" | ST. | | | | | | 166 |
| 8P502 | 12 | 7'-8" | 2 | 2'-8" | 2'-7" | | | | 96 |
| 8P503 | 18 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 160 |
| 8P504 | 18 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 128 |
| 8PG01 | 8 | 6'-3" | 12 | 3'-0" | 3'-3" | 6" | | | 75 |
| 8P701 | 7 | 44'-5" | 2 | 2'-6" | 39'-9" | | | | 636 |
| 8P801 | 7 | 33'-0" | ST. | | | | | | 617 |
| 8P1001 | 24 | 16'-4" | ST. | | | | | | 1687 |
| 8P1002 | 24 | 10'-1" | 1 | 1'-10" | 8'-6" | | | | 1041 |
| 8P1003 | 48 | 11'-4" | 7 | 8'-6" | | | | | 2341 |
| | NON EPOXY COATED = 6947 | | | | | | | | |
| | EPOXY COATED = 0 | | | | | | | | |
| (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | TOTAL PIER P-8 = 6947 | | | | | | | | |

SUPERSTRUCTURE S-1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| * 15401 | 390 | 30'-0" | ST. | | | | | | 7816 |
| * 15402 | 65 | 35'-6" | ST. | | | | | | 1541 |
| 15501 | 325 | 41'-4" | ST. | | | | | | 14011 |
| SERIES | 1 SET | 40'-3" | | | | | | | |
| OF | OF 54= | TO | ST. | | | | | 8" | 1270 |
| 15502 | 54 BAR | 4'-10" | | | | | | | |
| 15503 | 300 | 30'-0" | ST. | | | | | | 9387 |
| SERIES | 1 SET | 40'-3" | | | | | | | |
| OF | OF 51= | TO | ST. | | | | | 8 2/16" | 1208 |
| 15504 | 51 BAR | 5'-2" | | | | | | | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| SERIES | 2 SETS | 4'-9" | | | | | | | |
| OF | OF 5= | TO | ST. | | | | | 3" | 44 |
| 15505 | 10 BAR | 3'-9" | | | | | | | |
| * 15506 | 333 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 1071 |
| * 15507 | 333 | 5'-10" | 23 | 2'-3" | 2'-7" | | | | 2026 |
| * 15508 | 333 | 2'-3" | 1 | 10" | 1'-6" | | | | 781 |
| * 15509 | 48 | 30'-0" | ST. | | | | | | 1502 |
| * 15510 | 4 | 37'-0" | ST. | | | | | | 154 |
| * 15511 | 4 | 37'-6" | ST. | | | | | | 156 |
| 15512 | 2 | 3'-10" | 12 | 11" | 3'-0" | 1'-10" | | | 8 |
| 15513 | 50 | 37'-6" | ST. | | | | | | 1956 |
| * 15514 | 128 | 42'-0" | ST. | | | | | | 5707 |
| * 15520 | 56 | 14'-8" | ST. | | | | | | 857 |
| * 15521 | 96 | 7'-2" | ST. | | | | | | 718 |
| * 15522 | 4 | 12'-8" | ST. | | | | | | 53 |
| * 15523 | 4 | 12'-0" | ST. | | | | | | 50 |
| 15560 | 64 | 2'-5" | 16 | 7" | 1'-2" | 7" | 10" | | 101 |
| 15561 | 16 | 11'-0" | ST. | | | | | | 184 |
| * 15570 | 5 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 33 |
| * 15601 | 325 | 41'-4" | ST. | | | | | | 20177 |
| * SERIES | 1 SET | 40'-3" | | | | | | | |
| OF | OF 51= | TO | ST. | | | | | 8 2/16" | 1740 |
| 15602 | 51 BAR | 5'-2" | | | | | | | |
| * SERIES | 1 SET | 40'-3" | | | | | | | |
| OF | OF 54= | TO | ST. | | | | | 8" | 1828 |
| 15603 | 54 BAR | 4'-10" | | | | | | | |
| * SERIES | 2 SETS | 4'-9" | | | | | | | |
| OF | OF 5= | TO | ST. | | | | | 3" | 64 |
| 15604 | 10 BAR | 3'-9" | | | | | | | |
| * 15605 | 2 | 3'-10" | 12 | 11" | 3'-0" | 1'-10" | | | 12 |
| * 15670 | 4 | 6'-0" | ST. | | | | | | 36 |
| 15671 | 4 | 6'-0" | ST. | | | | | | 36 |
| * 15672 | 4 | | 60 | | | | | | |
| * 15673 | 4 | 2'-2" | 1 | 10" | 1'-6" | | | | 13 |
| * 15674 | 4 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 19 |
| | NON EPOXY COATED = 28265 | | | | | | | | |
| | EPOXY COATED = 46944 | | | | | | | | |
| (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |

SUPERSTRUCTURE S-2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| * 25401 | 845 | 30'-0" | ST. | | | | | | 16934 |
| * 25402 | 65 | 34'-9" | ST. | | | | | | 1509 |
| 25501 | 696 | 41'-4" | ST. | | | | | | 30005 |
| SERIES | 1 SET | 5'-8" | | | | | | | |
| OF | OF 49= | TO | ST. | | | | | 8 2/16" | 1152 |
| 25502 | 49 BAR | 39'-5" | | | | | | | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 25503 | 700 | 30'-0" | ST. | | | | | | 21903 |
| 25504 | 50 | 10'-9" | ST. | | | | | | 561 |
| SERIES | 1 SET | 5'-5" | | | | | | | |
| OF | OF 6= | TO | ST. | | | | | 3" | 30 |
| 25505 | 6 BAR | 4'-2" | | | | | | | |
| * 25506 | 652 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 2097 |
| * 25507 | 656 | 5'-10" | 23 | 2'-3" | 2'-7" | | | | 3991 |
| * 25508 | 652 | 2'-3" | 1 | 10" | 1'-6" | | | | 1530 |
| * 25509 | 112 | 30'-0" | ST. | | | | | | 3504 |
| * 25510 | 8 | 12'-7" | ST. | | | | | | 105 |
| 25511 | 1 | 3'-8" | 12 | 3'-0" | 9" | 6" | | | 4 |
| SERIES | 1 SET | 40'-1" | | | | | | | |
| OF | OF 50= | TO | ST. | | | | | 8 2/16" | 1193 |
| 25512 | 50 BAR | 5'-8" | | | | | | | |
| 25513 | 1 | 4'-4" | 12 | 3'-0" | 1'-5" | 10" | | | 5 |
| SERIES | 1 SET | 5'-4" | | | | | | | |
| OF | OF 5= | TO | ST | | | | | | 25 |
| 25514 | 5 BAR | 4'-4" | | | | | | | |
| * 25515 | 3844 | 33'-6" | ST | | | | | | 13417 |
| * 25517 | 4 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 14 |
| * 25518 | 4 | 2'-7" | 1 | 10" | 1'-10" | | | | 11 |
| * 25520 | 104 | 14'-8" | ST. | | | | | | 1591 |
| * 25521 | 208 | 7'-2" | ST. | | | | | | 1555 |
| * 25522 | 16 | 9'-6" | ST. | | | | | | 159 |
| 25540 | 52 | 5'-7" | 3 | 3'-6" | 1'-7" | 9" | | | 303 |
| 25541 | 52 | 7'-5" | 9 | 3'-6" | 8" | | | | 402 |
| 25542 | 52 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 167 |
| 25543 | 52 | 5'-7" | 12 | 3'-2" | 2'-6" | 1'-7" | | | 303 |
| 25544 | 20 | 11'-0" | ST. | | | | | | 229 |
| 25545 | 20 | 14'-6" | ST. | | | | | | 302 |
| 25546 | 4 | 27'-4" | ST. | | | | | | 114 |
| 25560 | 32 | 2'-9" | 16 | 7" | 1'-6" | 7" | 10" | | 92 |
| 25561 | 8 | 11'-0" | ST. | | | | | | 92 |
| * 25570 | 10 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 66 |
| * 25601 | 696 | 41'-4" | ST | | | | | | 43210 |
| * SERIES | 1 SET | 5'-8" | | | | | | | |
| OF | OF 49= | TO | ST | | | | | 8 2/16" | 1659 |
| 25602 | 49 BAR | 39'-5" | | | | | | | |
| * SERIES | 1 SET | 5'-5" | ST | | | | | | |
| OF | OF 6= | TO | | | | | | 3" | 43 |
| 25603 | 6 BAR | 4'-2" | | | | | | | |
| * 25604 | 1 | 3'-8" | 12 | 3'-0" | 9" | 6" | | | 6 |
| * SERIES | 1 SET | 40'-1" | | | | | | | |
| OF | OF 50= | TO | ST. | | | | | 8 2/16" | 1718 |
| 25605 | 50 BAR | 5'-8" | | | | | | | |
| * 25606 | 1 | 4'-4" | 12 | 3'-0" | 1'-5" | 10" | | | 7 |
| * SERIES | 1 SET | 5'-4" | | | | | | | |
| OF | OF 5= | TO | ST. | | | | | 3" | 36 |
| 25607 | 5 BAR | 4'-4" | | | | | | | |
| * 25670 | 8 | 6'-0" | ST. | | | | | | 72 |
| 25671 | 8 | 6'-0" | ST. | | | | | | 72 |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

402/455

AKRON INNERBELT
SUM-59-0.00

NOTES

(1) FOR NOTES AND BAR BENDING DIAGRAMS SEE SHEET 29/29.

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

27/29

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134+16.52 TO STA. 142+16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T | CDG | | L.L.H. | JDP | 11-4-82 | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| * | 25G72 | 8 | 6'-8" | GO | | | | | | 80 |
| * | 25G73 | 8 | 2'-2" | 1 | 10" | 1'-6" | | | | 26 |
| * | 25G74 | 8 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 37 |
| | | | NON EPOXY COATED = 56954 | | | | | | | |
| | | | EPOXY COATED = 93377 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | SUPERSTRUCTURE S-3 | | | | | | | | | |
| * | 35401 | 325 | 30'-0" | ST. | | | | | | 6513 |
| * | 32402 | 65 | 15'-0" | ST. | | | | | | 651 |
| * | SERIES | 1 SET | 13'-0" | | | | | | | |
| | OF | OF 65= | TO | ST. | | | | | 4 15/16" | 1136 |
| | 35404 | 65 BAR | 39'-4" | | | | | | | |
| | 35501 | 306 | 41'-4" | ST. | | | | | | 13192 |
| | SERIES | 1 SET | 39'-6" | | | | | | | |
| | OF | OF 48= | TO | ST. | | | | | 8 7/16" | 1151 |
| | 35502 | 48 BAR | 6'-6" | | | | | | | |
| | 35503 | 250 | 30'-0" | ST. | | | | | | 7822 |
| | 35504 | 50 | 15'-0" | ST. | | | | | | 782 |
| | SERIES | 1 SET | 15'-0" | | | | | | | |
| | OF | OF 50= | TO | ST. | | | | | 6 7/16" | 1469 |
| | 35505 | 50 BAR | 41'-4" | | | | | | | |
| * | 35506 | 295 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 949 |
| * | 35507 | 297 | 5'-10" | 23 | 2'-3" | 2'-7" | | | | 1807 |
| * | 35508 | 295 | 2'-3" | 1 | 10" | 1'-6" | | | | 692 |
| * | 35509 | 48 | 30'-0" | ST | | | | | | 1502 |
| | SERIES | 1 SET | 7'-5" | | | | | | | |
| | OF | OF 7= | TO | ST. | | | | | 5'-13/16" | 165 |
| | 35510 | 7 BAR | 37'-10" | | | | | | | |
| * | 35511 | 64 | 45'-0" | ST. | | | | | | 3004 |
| | SERIES | 1 SET | 4'-4" | | | | | | | |
| | OF | OF 7= | TO | ST. | | | | | 3" | 37 |
| | 35512 | 7 BAR | 5'-10" | | | | | | | |
| * | 35513 | 64 | 36'-0" | ST. | | | | | | 2403 |
| * | 35514 | 4 | 27'-6" | ST. | | | | | | 115 |
| | 35515 | 1 | 3'-7" | 12 | 1'-2" | 2'-6" | 1'-7" | | | 4 |
| | 35516 | 1 | 6'-0" | ST. | | | | | | 6 |
| * | 35517 | 4 | 3'-5" | 51 | 10" | 1'-5" | 6" | 4" | | 14 |
| * | 35518 | 4 | 2'-7" | 1 | 10" | 1'-10" | | | | 11 |
| * | 35520 | 44 | 14'-8" | ST. | | | | | | 673 |
| * | 35521 | 88 | 7'-2" | ST. | | | | | | 658 |
| * | 35522 | 4 | 11'-2" | ST. | | | | | | 47 |
| * | 35523 | 4 | 12'-10" | ST. | | | | | | 54 |
| | 35540 | 52 | 5'-7" | 3 | 3'-6" | 1'-7" | 9" | | | 303 |
| | 35541 | 52 | 7'-5" | 9 | 3'-6" | 8" | | | | 402 |
| | 35542 | 52 | 3'-1" | 2 | 1'-0" | 1'-4" | | | | 167 |
| | 35543 | 52 | 5'-7" | 12 | 3'-2" | 2'-6" | 1'-7" | | | 303 |
| | 35544 | 20 | 11'-0" | ST. | | | | | | 229 |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | 35545 | 20 | 14'-6" | ST. | | | | | | 302 |
| | 35546 | 4 | 27'-4" | ST. | | | | | | 114 |
| | 35560 | 32 | 2'-5" | 16 | 7" | 1'-2" | 7" | 10" | | 81 |
| | 35561 | 8 | 8'-8" | ST. | | | | | | 72 |
| * | 35570 | 5 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 33 |
| * | 35601 | 306 | 41'-4" | ST. | | | | | | 18997 |
| * | SERIES | 1 SET | 39'-6" | | | | | | | |
| | OF | OF 48= | TO | ST. | | | | | 8 7/16" | 1658 |
| | 35602 | 48 BAR | 6'-6" | | | | | | | |
| * | SERIES | 1 SET | 4'-4" | | | | | | | |
| | OF | OF 7= | TO | ST. | | | | | 3" | 53 |
| | 35603 | 7 BAR | 5'-10" | | | | | | | |
| * | SERIES | 1 SET | 7'-5" | | | | | | | |
| | OF | OF 7= | TO | ST. | | | | | 5'-13/16" | 238 |
| | 35604 | 7 BAR | 37'-10" | | | | | | | |
| * | 35605 | 1 | 3'-7" | 12 | 1'-2" | 2'-6" | 1'-7" | | | 5 |
| * | 35670 | 4 | 6'-0" | ST. | | | | | | 36 |
| | 35671 | 4 | 6'-0" | ST. | | | | | | 36 |
| * | 35672 | 4 | 6'-8" | GO | | | | | | 40 |
| * | 35673 | 4 | 2'-2" | 1 | 10" | 1'-6" | | | | 13 |
| * | 35674 | 4 | 3'-1" | 51 | 10" | 1'-1" | 6" | 4" | | 19 |
| | NON EPOXY COATED = 26637 | | | | | | | | | |
| | EPOXY COATED = 41321 | | | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|

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|---|---|---|---|
| 5 | OHIO | | |

403/455

AKRON INNERBELT
SUM - 59 - 0.00

NOTES

(1) FOR NOTES AND BAR BENDING DIAGRAMS SEE SHEET [29/29].

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CLEVELAND, OHIO AKRON, OHIO

28/29

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. | CDG | | A.L.H. | JJP | 11-4-82 | |

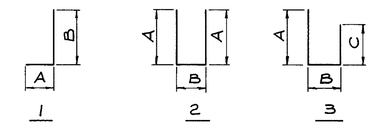
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

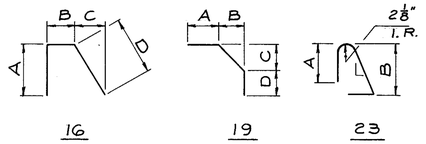
404/455

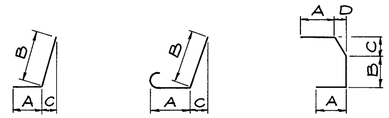
AKRON INNERBELT
SUM-59-0.00

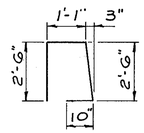
| SPIRAL REINFORCING SCHEDULE | | | | | |
|---|---|---|---|---|---|
| MARK | Nº REQ'D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
| SPIRALS - PIER P-1 | | | | | |
| 1P-SP507 | 3 | 2'-7" | 22'-7" | 3.50 | 2276 |
| TOTAL SPIRALS PIER P-1 = | | | | | 2276 |
| SPIRALS - PIER P-2 | | | | | |
| 2P-SP507 | 3 | 2'-7" | 20'-8" | 3.50 | 2089 |
| TOTAL SPIRALS PIER P-2 = | | | | | 2089 |
| SPIRALS - PIER P-3 | | | | | |
| 3P-SP505 | 3 | 3'-7" | 17'-0" | 3.50 | 2334 |
| TOTAL SPIRALS PIER P-3 = | | | | | 2334 |
| SPIRALS - PIER P-4 | | | | | |
| 4P-SP508 | 3 | 3'-1" | 15'-8" | 3.50 | 1881 |
| TOTAL SPIRALS PIER P-4 = | | | | | 1881 |

| SPIRAL REINFORCING SCHEDULE | | | | | |
|---|---|---|---|---|---|
| MARK | Nº REQ D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
| SPIRALS - PIER P-5 | | | | | |
| 5P-SP508 | 3 | 3'-1" | 23'-5" | 3.50 | 2767 |
| TOTAL SPIRALS PIER P-5 = | | | | | 2767 |
| SPIRALS - PIER P-6 | | | | | |
| 6P-SP505 | 3 | 3'-7" | 14'-4" | 3.50 | 1948 |
| TOTAL SPIRALS PIER P-6 = | | | | | 1948 |
| SPIRALS - PIER P-7 | | | | | |
| 7P-SP505 | 3 | 2'-7" | 14'-9" | 3.50 | 1475 |
| TOTAL SPIRALS PIER P-7 = | | | | | 1475 |
| SPIRALS - PIER P-8 | | | | | |
| 8P-SP505 | 3 | 2'-7" | 12'-10" | 3.50 | 1293 |
| TOTAL SPIRALS PIER P-8 = | | | | | 1293 |




NON EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL = | 13573 |
| PIER | TOTAL = | 139027 |
| SUPERSTRUCTURE | TOTAL = | 111856 |
| GRAND | TOTAL = | 264456 |

EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL = | 1021 |
| PIER | TOTAL = | 0 |
| SUPERSTRUCTURE | TOTAL = | 180992 |
| GRAND | TOTAL = | 182013 |

## NOTES

(1) FOR SPIRAL REINFORCING OVER 15'-0" FOUR ANGLE SPACERS WEIGHING APPROX. 1.01 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(2) FOR SPIRAL REINFORCING UNDER 15'-0" FOUR ANGLE SPACERS WEIGHING APPROX. .80 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(3) THE LENGTH SHOWN IN THE STEEL SCHEDULE FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE TOP OF THE COLUMN INCLUDING THREE (3) CLOSED COILS (ONE AND ONE HALF CLOSED COILS AT EACH END OF THE SPIRAL UNIT.)

(4) REINFORCING STEEL SAMPLES REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

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29/29

# REINFORCING SCHEDULE

AKRON INNERBELT OVER DART AVE., THE OHIO CANAL AND THORNTON ST.
BR. NO. SUM-59-0017
AKRON OHIO — SUMMIT COUNTY
STA. 134 + 16.52 TO STA. 142 + 16.76

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| D.T. | F.F. | | A.L.H. | JDP | 11-4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

405/455

# AKRON INNERBELT
## SUM-59-0.00
## CURVE DATA

BASELINE RAMP "SW"
(SPIRAL IN)

P.I. STA. 125+00.95
T.S. STA. 121+65.46
S.C. STA. 126+65.46
$L_s$ = 500.00'
$L_T$ = 335.49'
$S_T$ = 168.62
$L_c$ = 497.30'
$\theta_s$ = 20°00'00"

## EXISTING STRUCTURE

TYPE: 6 SPAN CONTINUOUS ROLLED BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 43'-0, 61'-0, 3@86'-6" AND 60'-0"
ROADWAY 116'-0" FACE TO FACE OF PARAPETS
LOADING: CF 2000 (57) (ADEQUATE FOR AASTHO ALTERNATE LOADING.)
SKEW: 32°-17'-25" L.F.
WEARING SURFACE: 1" MONOLITHIC CONCRETE.
ALIGNMENT: TANGENT.
APPROACH SLAB: 25'-0" (AS-1-54)

## PROPOSED WIDENING

TYPE: CONTINUOUS ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SKEW: 33°-26'-15" LF

SPANS: 43'-6 3/4", 61'-9 1/2" 3@86'-7 3/8" & 60'-9 3/8" ALONG ℄ & REF. LINE

ROADWAY: VARIABLE (SEE PLAN)
LOADING: HS-20-44 (CASE II) & ALTERNATE MILITARY LOADING (CASE 2)
WEARING. 1 1/4" LATEX MODIFIED CONC SURFACE.

APPROACH SLABS: 25'-0" (AS-1-81)
ALIGNMENT: TANGENT & SPIRAL.
SUPERELEVATION: TRANSITION.
SLOPE PROTECTION:
CONCRETE @ ABUT. A-1, & CRUSHED AGGREGATE @ ABUT. A-2

TRAFFIC
ADT: = 15,200 (2000)
ADTT: = 760 (2000)

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1/27

# SITE PLAN

WIDENING AND DECK REPLACEMENT OF EXPRFSSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO — SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| B.K. | F.F. | | A.L.W. J.W.W. | gjp | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

406
455

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SUM - 59 - 0.00

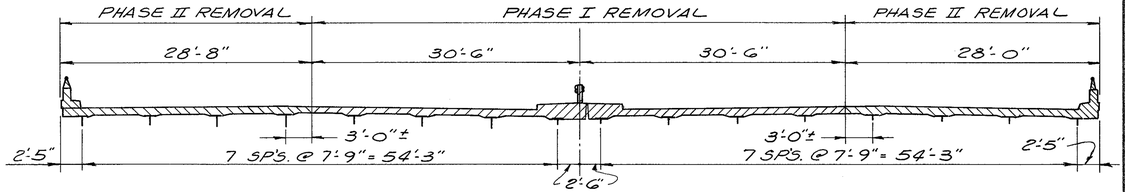
## ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | PIER | GEN'L. |
|---|---|---|---|---|---|---|---|
| ♦ 202 | LUMP | L.S. | PORTIONS OF STRUCTURES REMOVED | | | | LUMP |
| 503 | LUMP | L.S. | COFFERDAMS, CRIBS AND SHEETING | | | | LUMP |
| 503 | 946 | C.Y. | UNCLASSIFIED EXCAVATION | | 416 | 530 | |
| 505 | LUMP | L.S. | PILE DRIVING EQUIPMENT MOBILIZATION | | | | LUMP |
| 506 | LUMP | L.S. | STATIC LOAD TEST | | | | LUMP |
| 507 | 120 | L.F. | PREBORED HOLES, AS PER PLAN | | 120 | | |
| 507 | 4925 | L.F. | 12" CAST-IN-PLACE CONCRETE PILES | | 1600 | 3325 | |
| 509 | 253863 | L.B. | REINFORCING STEEL, GRADE 60 | 187006 | 21334 | 45523 | |
| 824 | 288056 | L.B. | EPOXY COATED REINF. STEEL GRADE 60 | 286435 | 1621 | — | |
| 510 | 26 | EACH | DOWEL HOLES | | 26 | | |
| 511 | 1969 | C.Y. | CLASS "S" CONCRETE, SUPERSTRUCTURE(#) | 1969 | | | |
| 511 | 134 | C.Y. | CLASS "C" CONCRETE, PIERS ABOVE FTG. | | | 134 | |
| 511 | 199 | C.Y. | CLASS "C" CONCRETE, ABUTMENTS ABOVE FTG. | | 199 | | |
| 511 | 245 | C.Y. | CLASS "C" CONCRETE, FOOTINGS | | 66 | 179 | |
| 512 | 12 | S.Y. | TYPE "B" WATERPROOFING | | 12 | | |
| 513 | 520500 | L.B. | STRUCTURAL STEEL (AISC CATEGORY I)(*) | 520500 | | | |
| 513 | 51000 | L.B. | STRUCTURAL STEEL (A-36) CURB PLATES - GALV. (AISC CERT. NOT REQ'D.) | 51000 | | | |
| 514 | LUMP | L.S. | FIELD PAINTING OF NEW STRUCTURAL | LUMP | | | |
| | | | STEEL (SYSTEM B) | | | | |
| 514 | LUMP | L.S. | FIELD PAINTING OF EXISTING STEEL, | LUMP | | | |
| | | | SURFACE PREPARATION | | | | |
| 514 | LUMP | L.S. | FIELD PAINTING OF EXISTING STEEL, | LUMP | | | |
| | | | SPOT PRIME | | | | |
| 514 | LUMP | L.S. | FIELD PAINTING OF EXISTING STEEL, | LUMP | | | |
| | | | COMPLETE COAT PRIME | | | | |
| 514 | LUMP | L.S. | FIELD PAINTING OF EXISTING STEEL, | LUMP | | | |
| | | | COMPLETE COAT FINISH | | | | |
| 516 | 105 | S.F. | 1" PREFORMED EXPANSION JOINT FILLER | | 105 | | |
| 518 | 212 | C.Y. | POROUS BACKFILL | | 212 | | |
| 518 | 76 | L.F. | 6" PERFORATED HELICAL C.S.P., 707.01 | | 76 | | |
| 518 | 56 | L.F. | 6" NON-PERFORATED HELICAL C.S.P. | | 56 | | |
| | | | INCLUDING SPECIAL S. 707.01 | | | | |
| 523 | 3 | HOUR | DYNAMIC LOAD TEST 12" C.I.P. | | | | 3 |
| 601 | 123 | S.Y. | CONCRETE SLOPE PROTECTION | | 123 | | |
| 601 | 308 | S.Y. | CRUSHED AGGREGATE SLOPE PROTECTION | | 308 | | |
| 625 | | | SEE LIGHTING SUMMARY SHEET | | | | |
| 845 | 6934 | S.Y. | LATEX MODIFIED CONCRETE OVERLAY(1¼" THICK)(*) | 6934 | | | |
| SPEC. | 80 | EACH | BEARINGS RESET (***) | | 16 | 64 | |
| SPEC. | 16 | EACH | BEARINGS, JACKING AND SHIMMING(***) | | 16 | | |
| SPEC. | 1326 | S.Y. | SEALING OF CONCRETE SURFACES (*) | 960 | 366 | | |
| 516 | 356.0 | L.F. | ELASTOMERIC EXPANSION JOINT DEVICE (**) | 356.0 | | | |

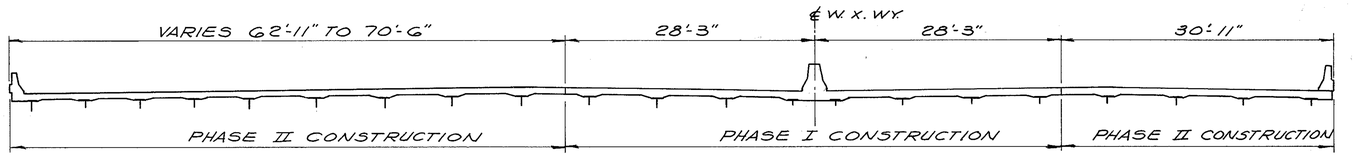
(*) SEE PROPOSAL NOTE
(**) AS PER PLAN
(***) SEE GENERAL NOTES

♦ ITEM 202 - "PORTIONS OF STRUCTURES REMOVED" INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

DECK SLAB, CURBS, PARAPETS, RAILING, RAISED MEDIAN, GUARDRAIL, OVERHEAD LIGHTS, BULB ANGLES, SCUPPERS, CURB PLATES, BACKWALLS, PORTIONS OF WINGWALLS, END CROSSFRAMES & APPROACH SLABS.




REMOVAL PHASING DIAGRAM
(FOR ADDITIONAL REMOVAL DETAILS SEE SHEET 5/27)




CONSTRUCTION PHASING DIAGRAM

## NOTE:

(1) THE SUGGESTED ITEMS OF WORK TO BE DONE FOR REMOVAL OF PORTIONS OF EXISTING STRUCTURE AND THE WIDENING AND REHABILITATION CONSTRUCTION WORK SHALL BE, BUT NOT BE LIMITED TO THE FOLLOWING:

### REMOVAL PHASE I

(A) INSTALL TEMPORARY TRAFFIC BARRIERS TO DIVERT TRAFFIC. (SEE MAINTENANCE OF TRAFFIC PLANS.)

(B) REMOVE SLAB, MEDIAN, GUARDRAIL, APPROACH SLAB, PORTIONS OF ABUTMENT BACKWALL, END CROSSFRAMES AND END-DAM ANGLES AS SHOWN ON THE PLAN.

### CONSTRUCTION PHASE I

(C) INSTALL NEW END DIAPHRAMS, RAISE BEAMS AT ABUTMENT A-2, RESET BEARINGS, REPLACE DECK SLAB, LIGHTING CONDUITS & ANCHORS, BACKWALL AND APPROACH SLABS AS SHOWN ON THE PLAN.

### REMOVAL PHASE II

(D) RELOCATE TEMPORARY TRAFFIC BARRIERS TO DIVERT TRAFFIC. (SEE MAINTENANCE OF TRAFFIC PLANS.)

(E) REMOVE REMAINING PORTIONS OF SLAB, CURBS, PARAPETS APPROACH SLAB, ABUTMENT BACKWALLS & WINGWALLS, END CROSSFRAMES AND END DAM ANGLES AS SHOWN ON THE PLAN.

### CONSTRUCTION PHASE II

(F) DRIVE PILING, CONSTRUCT NEW PORTIONS OF ABUTMENTS AND PIERS, PLACE NEW BEAMS, INSTALL NEW END DIAPHRAMS AND CROSSFRAMES, RAISE EXISTING BEAMS AT ABUTMENT A-2, RESET BEARINGS, CONSTRUCT REMAINING PORTIONS OF ABUTMENT WINGWALLS AND BACKWALL AND APPROACH SLAB AS SHOWN ON THE PLAN.

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**ESTIMATED QUANTITIES AND PHASING DIAGRAMS** 2/27

WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953

AKRON OHIO SUMMIT COUNTY
STA. 431+11.34 TO STA. 435+37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | D.T. | | JWW | JJP | 11-8-82 | |

| F.H.W.A. R.E.G. | STATE | PROJECT | |
|---|---|---|---|
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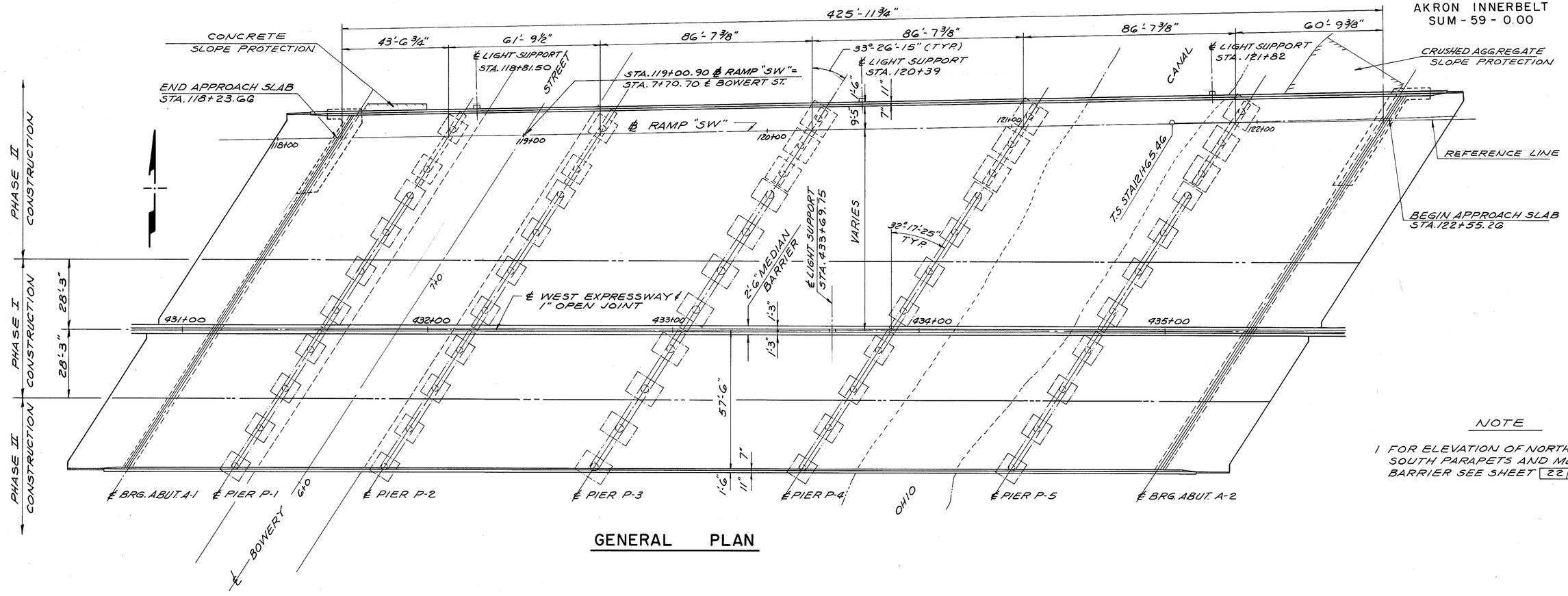
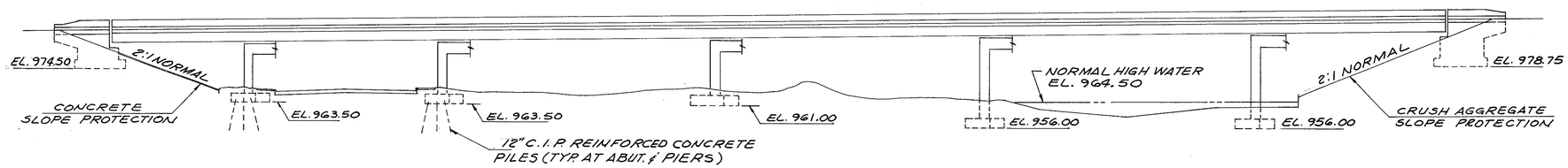



GENERAL PLAN

NOTE

1 FOR ELEVATION OF NORTH AND SOUTH PARAPETS AND MEDIAN BARRIER SEE SHEET 22/27.




ELEVATION

FOOTING ELEVATIONS SHOWN ARE FOR PIER AND ABUTMENT ADDITIONS

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# GENERAL PLAN & ELEVATION

3/27

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953

AKRON OHIO SUMMIT COUNTY

STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | JJP | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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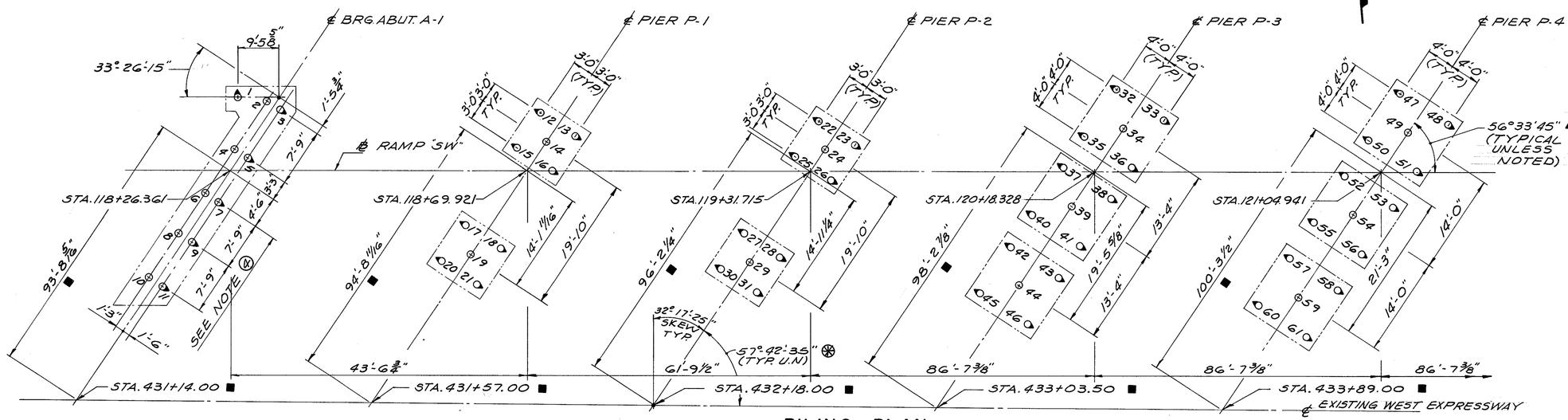
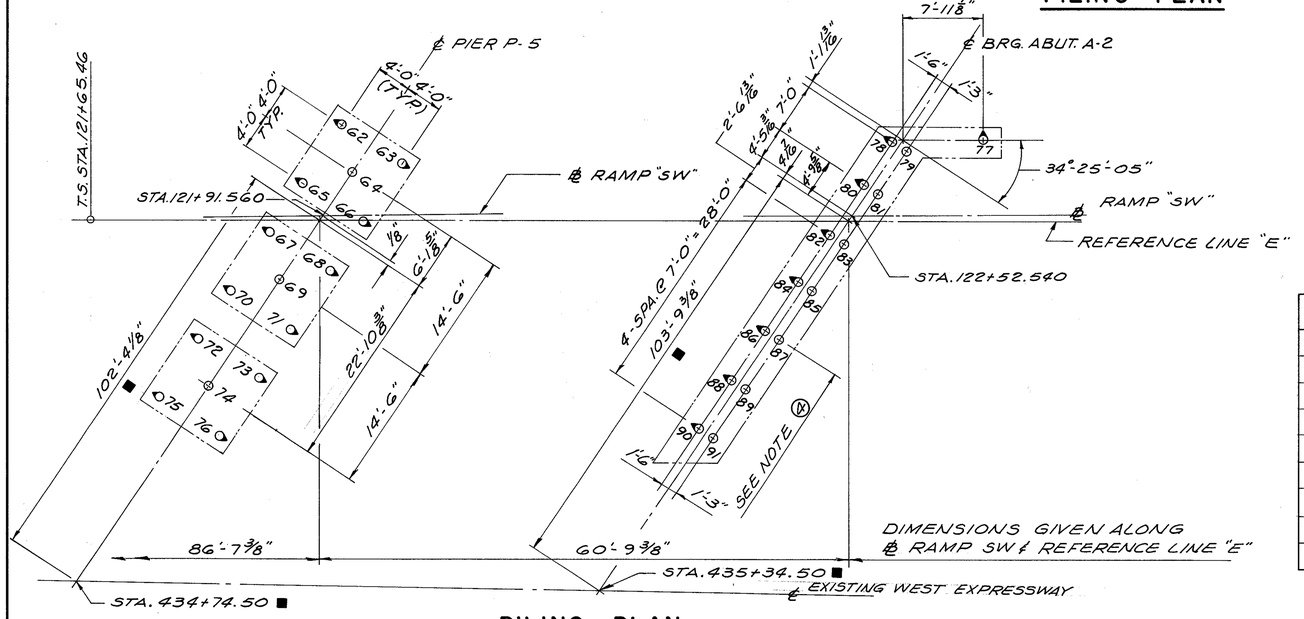



## PILING PLAN




DIMENSIONS GIVEN ALONG ℄ RAMP SW & REFERENCE LINE "E"

## PILING PLAN

⊛ DENOTES ANGLE GIVEN TO THE ℄ WEST EXPRESSWAY (TYPICAL)

▲ DENOTES ANGLE GIVEN TO THE BASELINE RAMP "SW" OR REFERENCE LINE "E" (TYPICAL)

■ DENOTES DATA GIVEN FOR INFORMATION ONLY.

PILE TABLE

| SUBSTRUCTURE UNIT | PILE NUMBER | PILE TYPE | CUT-OFF ELEVATION | ESTIMATED LENGTH |
|---|---|---|---|---|
| ABUT. A-1 | 1-11 | 12" C.I.P. R.C.P. | 976.50 | 50' |
| PIER P-1 | 12-21 | 12" C.I.P. R.C.P. | 965.50 | 40' |
| PIER P-2 | 22-31 | 12" C.I.P. R.C.P. | 965.50 | 45' |
| PIER P-3 | 32-46 | 12" C.I.P. R.C.P. | 963.00 | 45' |
| PIER P-4 | 47-61 | 12" C.I.P. R.C.P. | 958.00 | 60' |
| PIER P-5 | 62-76 | 12" C.I.P. R.C.P. | 958.00 | 60' |
| ABUT. A-2 | 77-91 | 12" C.I.P. R.C.P. | 980.75 | 70' |
| | | | | |
| | | | | |

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NOTES

(1) PILES SHOWN THUS ◊ SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.

(2) THE 12" CAST-IN-PLACE REINFORCED CONCRETE PILES HAVE A DESIGN LOAD OF 50 TONS PER PILE FOR ABUT. PILES AND 50 TONS PER PILE FOR PIER PILES.

(3) FOR PILE CUT-OFF ELEVATIONS AND ESTIMATED PILE LENGTHS SEE PILE TABLE.

(4) IN ORDER TO MINIMIZE DISTURBANCE TO THE EXISTING FOUNDATIONS, THESE ABUTMENT PILES SHALL BE PRE-DRILLED THROUGH THE EXISTING EMBANKMENT A MINIMUM DISTANCE OF 10 FEET BELOW THE PROPOSED FOOTING ELEVATION. PILES Nº 6 THRU Nº 11 AND Nº 86 THRU Nº 91 SHALL BE PRE BORED AS PER ITEM 507~"PRE BORED HOLES, (AS PER PLAN)."

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4/27

# PILING PLAN

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953

AKRON OHIO — SUMMIT COUNTY

STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | R.J.P. J.W.W. | JJP | 11-8-82 | |

NOTE: REMOVAL OF EXISTING APPROACH SLABS SHALL BE INCLUDED WITH ITEM 202 PORTIONS OF STRUCTURES REMOVED FOR PAYMENT.

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|---|---|---|---|
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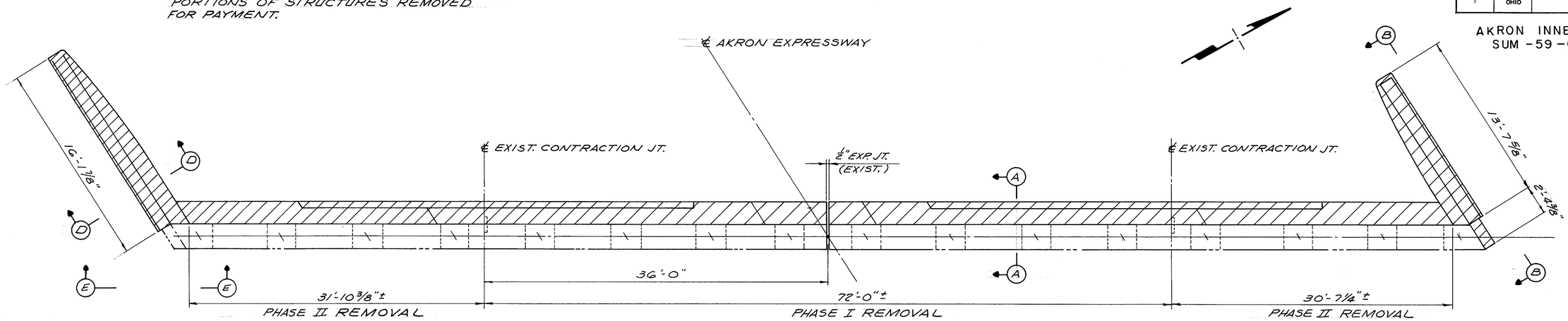
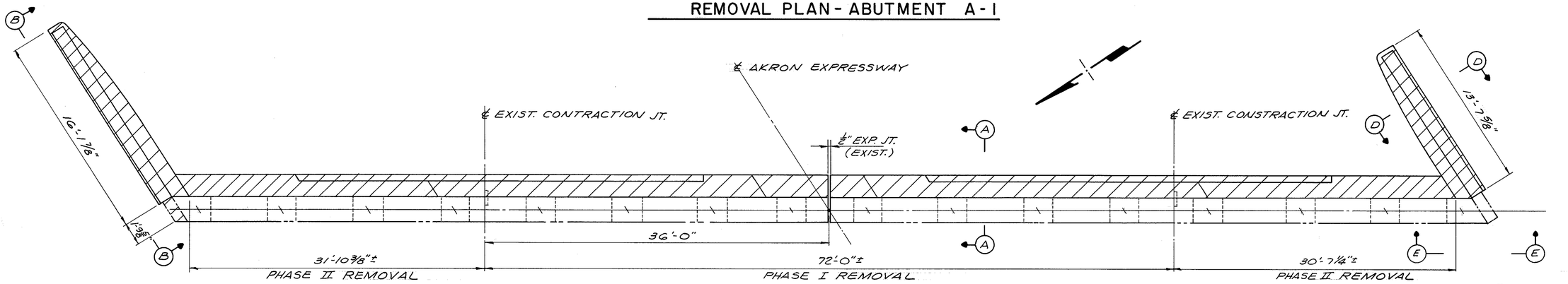


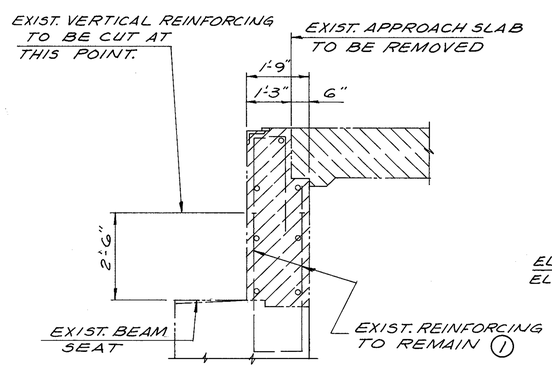

## REMOVAL PLAN - ABUTMENT A-1




## REMOVAL PLAN - ABUTMENT A-2

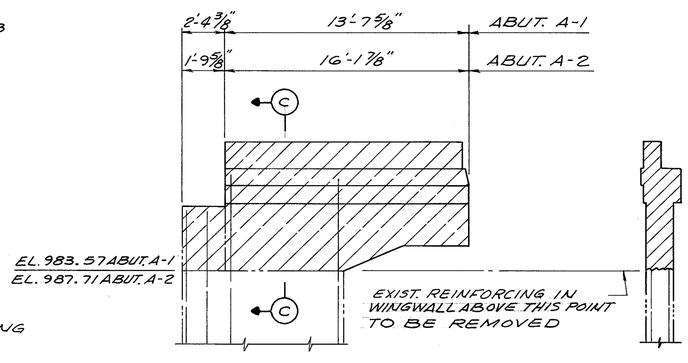
NOTES

(1) SEE GENERAL NOTES



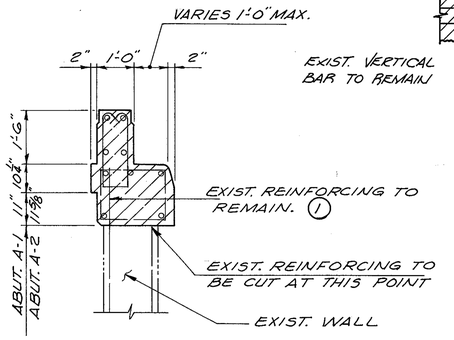

### SECTION A-A

ALL EXISTING REINFORCING TO BE REMOVED EXCEPT AS SHOWN



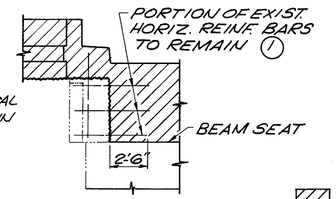

### VIEW B-B

### SECTION C-C




### SECTION D-D

EXIST. REINFORCING TO BE REMOVED EXCEPT AS SHOWN




### VIEW E-E

INDICATES PORTION OF EXIST. STRUCTURE TO BE REMOVED.

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# ABUTMENT REMOVAL DETAILS

5/27

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO — SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | GDP | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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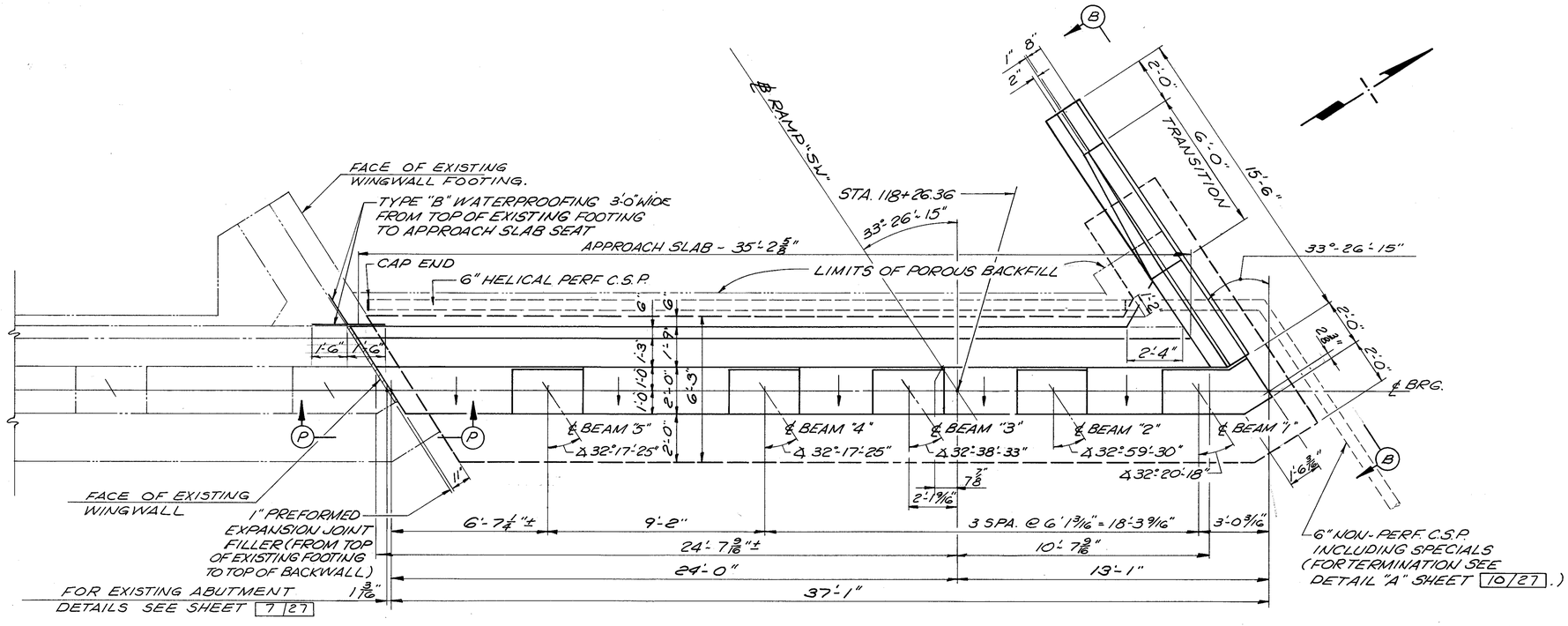
AKRON INNERBELT
SUM-59-0.00




(1) ABBREVIATIONS USED ARE:
N.F. - NEAR FACE
F.F. - FAR FACE
E.F. - EACH FACE

(2) BACKWALL ELEVATIONS SHOWN THUS ⊕ ARE GIVEN AS FINAL PAVEMENT ELEVATIONS AT THE FRONT FACE OF THE BACKWALL.

(3) THE PREFIX "21A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN ABUTMENT A-1 UNLESS SHOWN OTHERWISE.

(4) POROUS BACKFILL, FULL LENGTH OF ABUTMENT AND WING SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE WITHIN THE ROADWAY AREA EXTENDED LATERALLY TO THE WINGWALL. 1.5 FT. THICK AT THE ABUTMENT AND 2.0 FT. THICK AT THE WING. 3.0 FT. THICK AT EXIST. ABUT. SEE SECTION AA SH'T 11/27

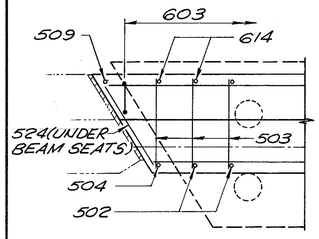
(5) EMBANKMENT PROCEDURE:
THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FT. BACK OF THE ABUTMENT. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENT.

(6) FOR PILING PLAN, SEE SHEET 4/27.

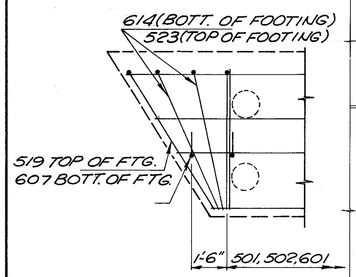
(7) FOR SECTION "A-A", VIEW "B-B" AND ADDITIONAL DETAILS SEE SHEET 10/27. FOR SECTION "P-P" SEE SHEET 8/27.

(8) BACKWALL CONCRETE:
IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

(9) REINFORCING BAR CLEARANCE SHALL BE 2 1/2" UNLESS OTHERWISE SHOWN



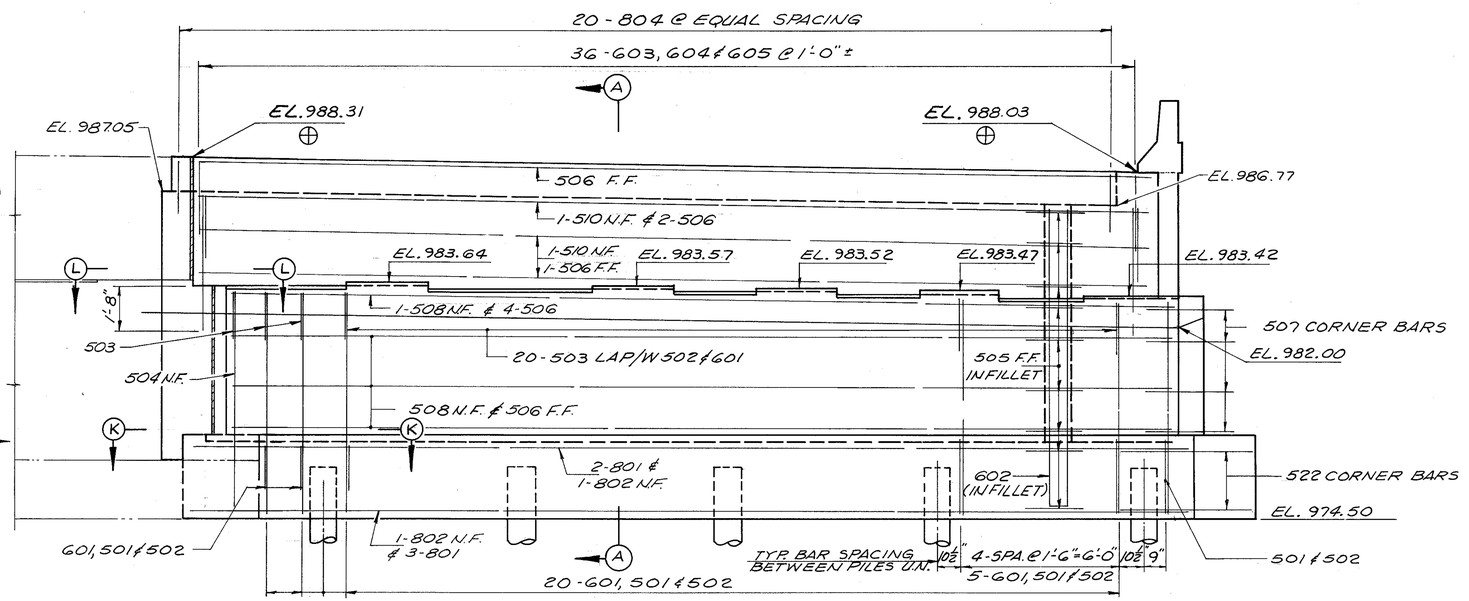

SECTION L-L




SECTION K-K

## PLAN - ABUTMENT A-1

PHASE II CONSTRUCTION
SHOWING NEW PORTION FOR WIDENING




ELEVATION

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6/27

## ABUTMENT A-1 DETAILS

WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO — SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | - | WW | JAP | 11-8-82 | |

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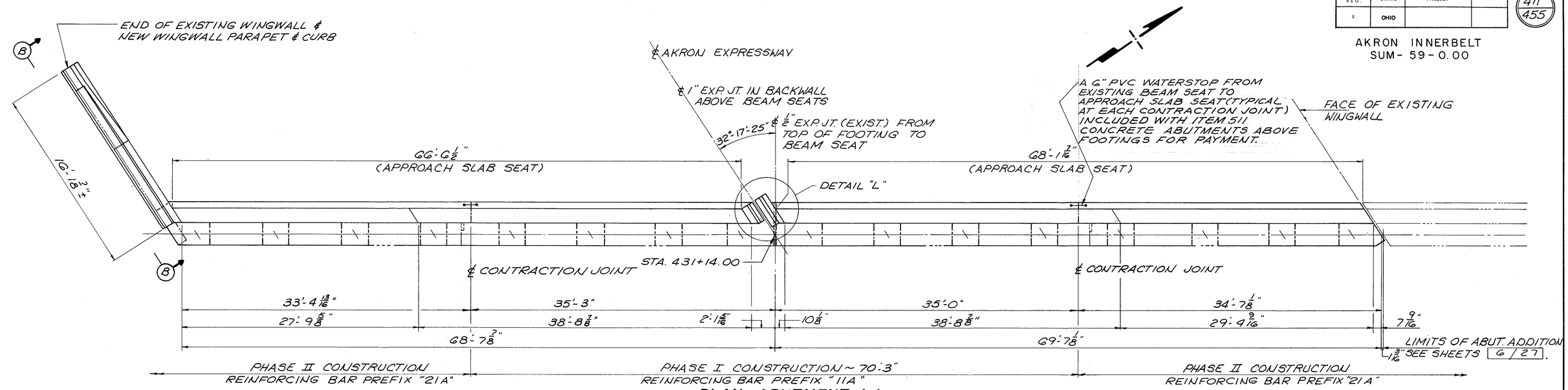
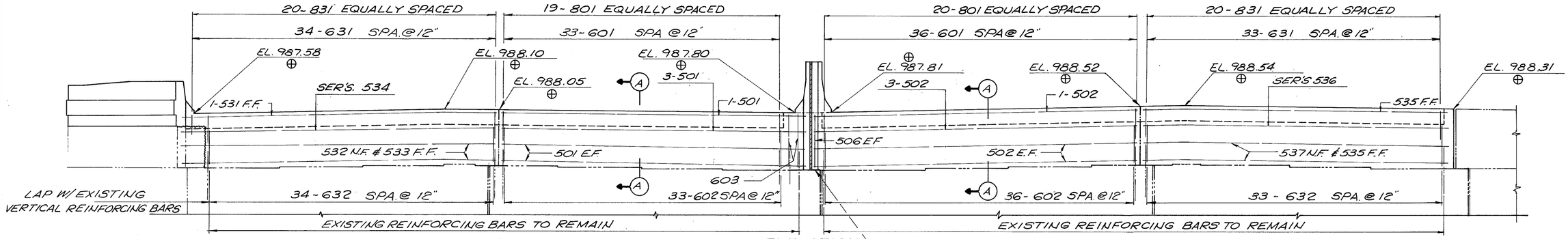



## PLAN - ABUTMENT A-1

SHOWING BACKWALL REPLACEMENT & WINGWALL MODIFICATION




## ELEVATION

BOND BREAKER SEE DETAIL "L" SHEET 11/27

### NOTES

1. THE PREFIX "11A" SHALL BE ADDED TO ALL REINFORCING BARS IN ABUTMENT A-1 (PHASE I CONSTRUCTION) AND "21A" IN ABUTMENT A-1 (PHASE II CONSTRUCTION).
2. FOR SECTION "A-A", VIEW "B-B", DETAIL "L" AND ADDITIONAL DETAILS SEE SHEET 11/27.
3. FOR ADDITIONAL NOTES SEE SHEET 6/27.
4. FOR LIMITS OF REMOVAL SEE SHEET 5/27

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7/27

# ABUTMENT A-1 DETAILS

WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
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STA. 431+11.34 TO STA. 435+37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | CDG | | JWW | JDP | 11-8-82 | |

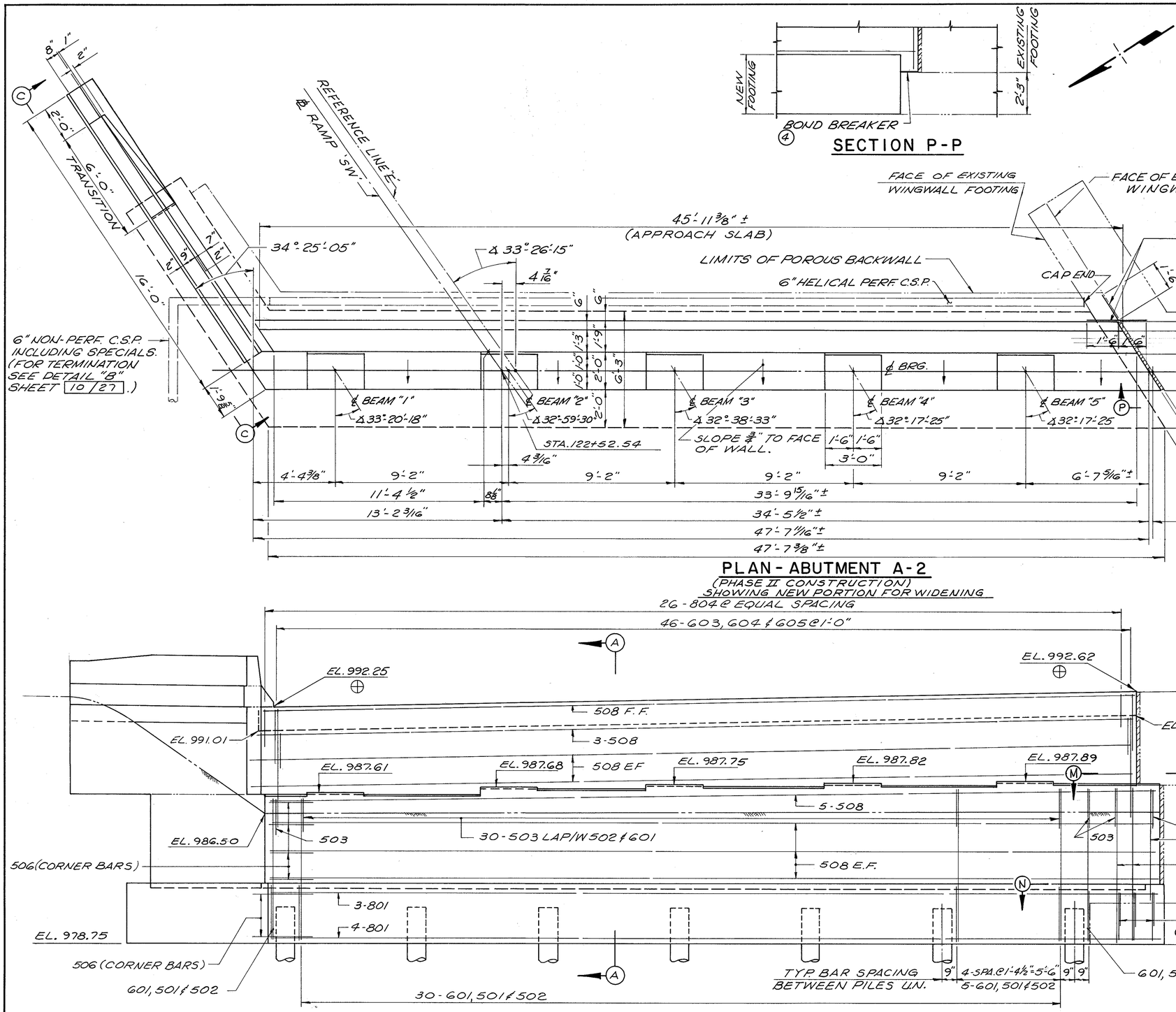
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

412/455

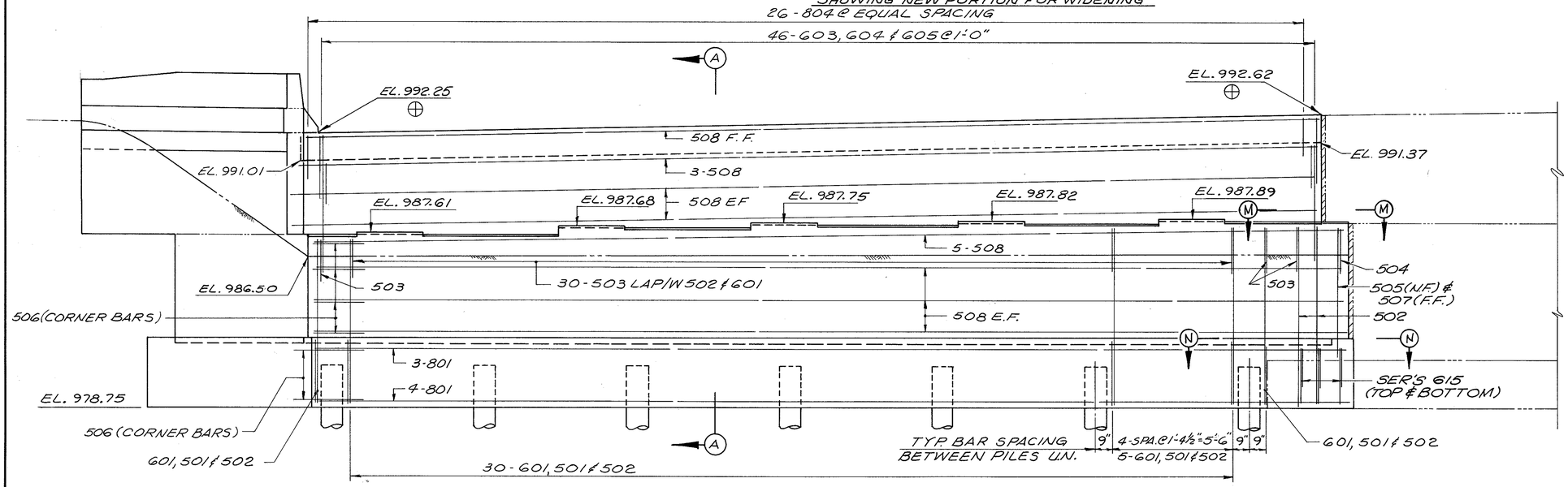
AKRON INNERBELT
SUM - 59 - 0.00

## NOTES

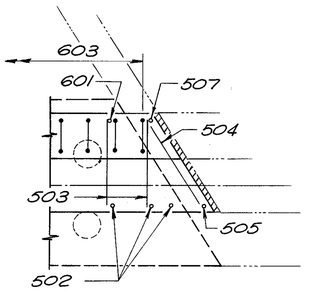
1. THE PREFIX "22A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN ABUTMENT A-2 UNLESS SHOWN OTHERWISE.
2. FOR SECTION "A-A", VIEW "C-C" AND ADDITIONAL DETAILS SEE SHEET 10/27.
3. FOR ADDITIONAL NOTES SEE SHEET 6/27.
4. BOND BREAKER INCLUDED WITH ITEM 511 CONCRETE ABUTMENTS ABOVE FOOTINGS FOR PAYMENT.



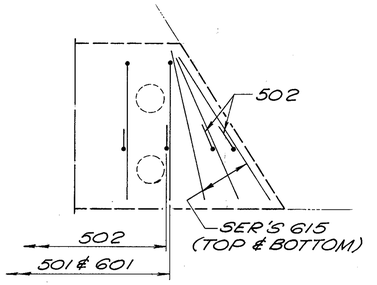

## PLAN - ABUTMENT A-2
(PHASE II CONSTRUCTION)
SHOWING NEW PORTION FOR WIDENING




## ELEVATION




## SECTION M-M




## SECTION N-N

## SECTION P-P

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8/27

# ABUTMENT A-2 DETAILS

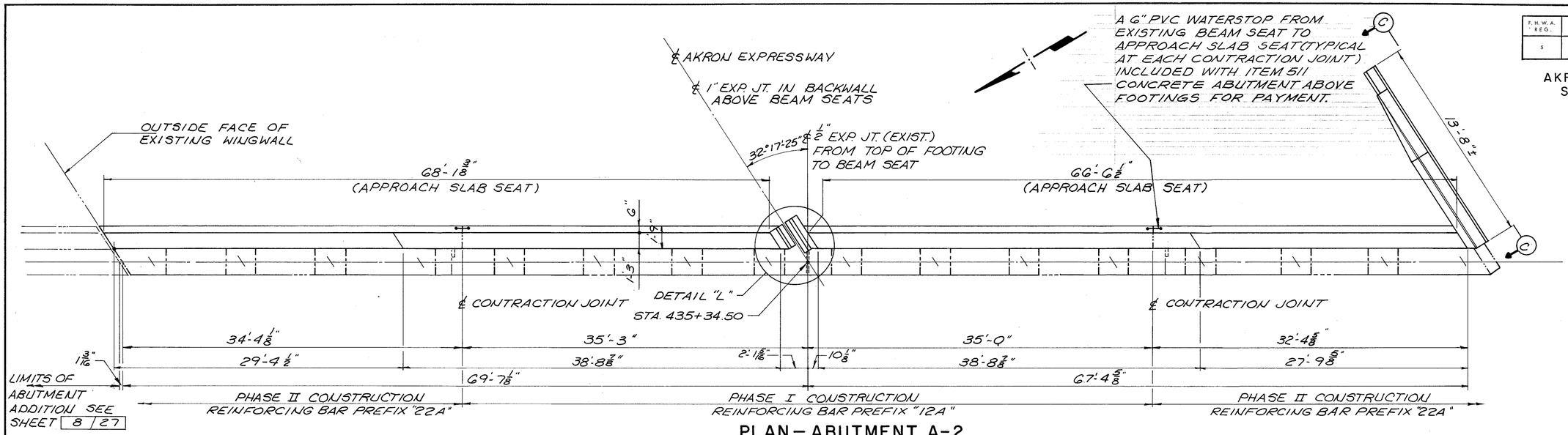
WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO — SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | JSP | 11-8-82 | |

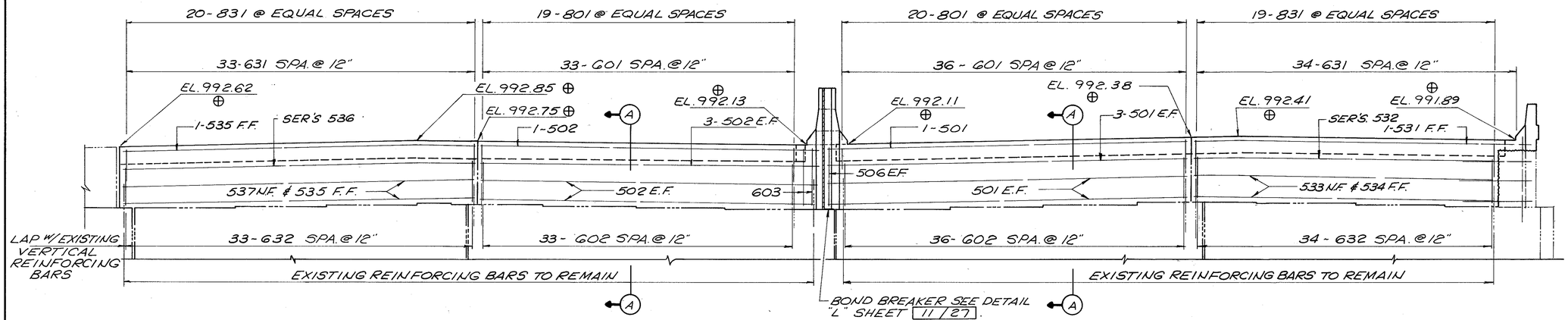
| F. H. W. A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

413/455

AKRON INNERBELT
SUM-59-0.00




## PLAN — ABUTMENT A-2




## ELEVATION

### NOTES

1. ABBREVIATIONS USED ARE:
   N.F. - NEAR FACE
   F.F. - FAR FACE
   E.F - EACH FACE
2. BACKWALL ELEVATION SHOWN THUS "⊕" ARE GIVEN AS FINAL PAVEMENT ELEVATIONS.
3. FOR SECTION "A-A", VIEW "C-C", DETAIL "L" AND ADDITIONAL DETAILS SEE SHEET 11/27.
4. THE PREFIX "12A" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN ABUTMENT A-2 (PHASE I CONSTRUCTION) AND "22A" IN ABUTMENT A-2 (PHASE II CONSTRUCTION).
5. FOR LIMITS OF REMOVAL SEE SHEET 5/27.

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9/27

# ABUTMENT A-2 DETAILS

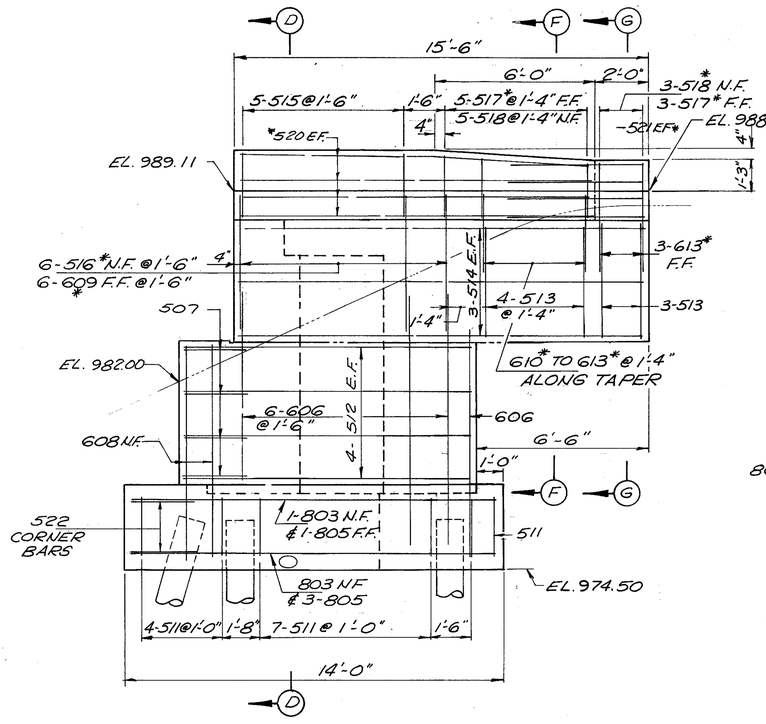
WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | | 11-8-82 | |

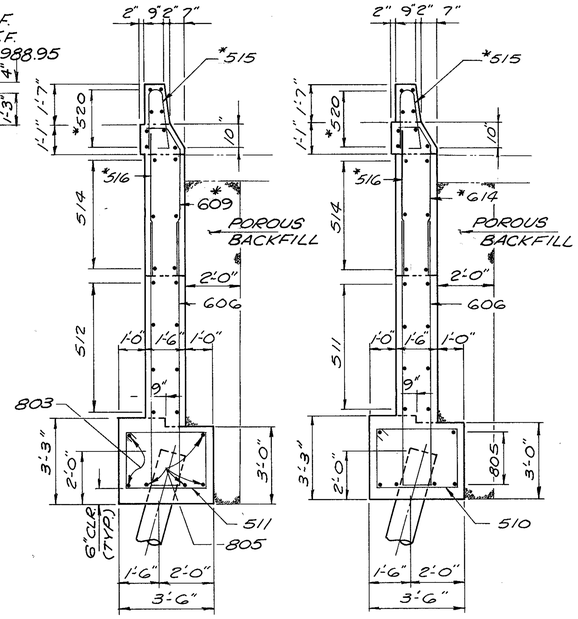
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

414
455

AKRON INNERBELT
SUM – 59– 0.00



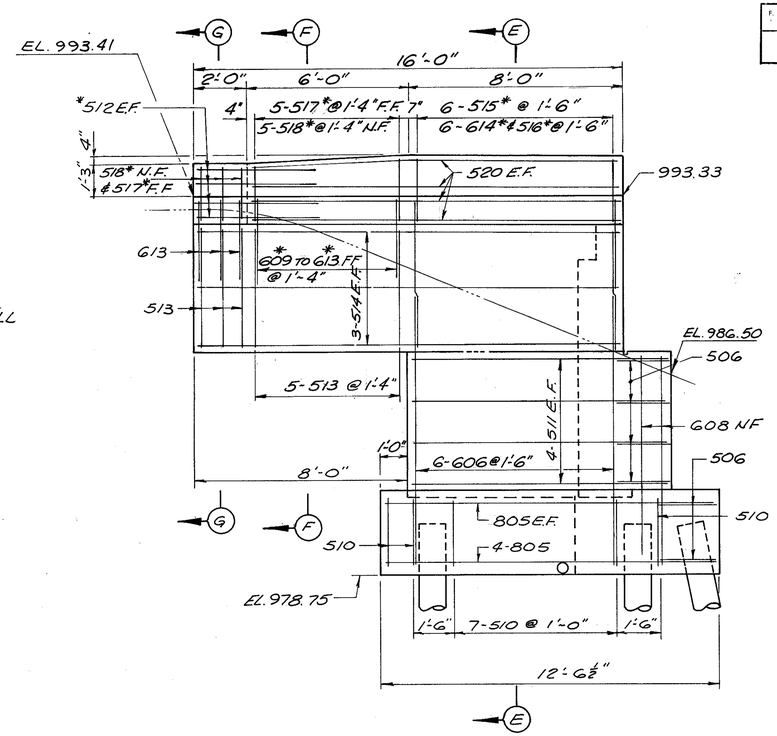

VIEW B-B




SECTION D-D

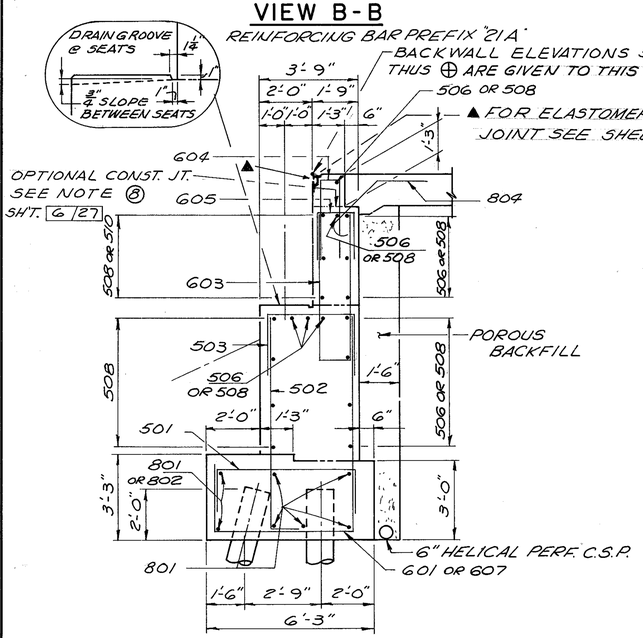



SECTION E-E

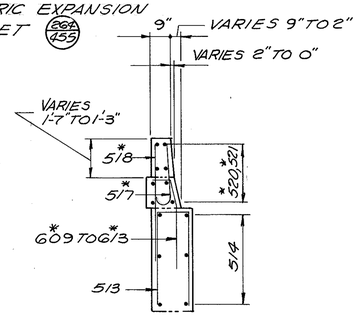



VIEW C-C

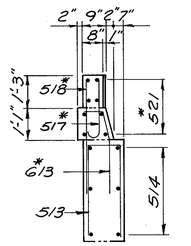
REINFORCING BAR PREFIX "21A"



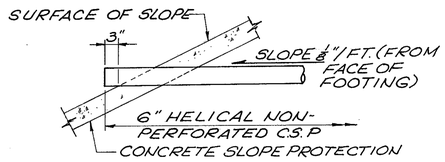

SECTION A-A




SECTION F-F

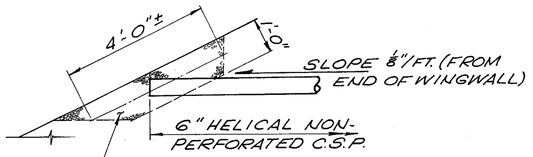



SECTION G-G




DETAIL "A"

TERMINATION OF 6" HELICAL NON-PERFORATED C.S.P. AT SLOPE




DETAIL "B"

TERMINATION OF 6" HELICAL NON-PERFORATED C.S.P. AT SLOPE

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10/27

# ABUTMENT DETAILS

WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO — SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | JSP | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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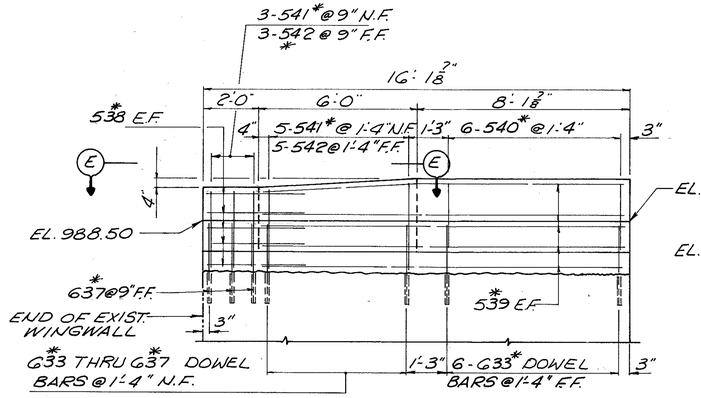
(1) INCLUDED WITH ITEM 511, "CLASS "C" CONCRETE - ABUTMENT ABOVE FOOTING FOR PAYMENT.

(2) REPLACEMENT OF EXISTING APPROACH SLAB SHALL BE INCLUDED IN ITEM 611 "APPROACH SLAB (AS PER PLAN)" FOR PAYMENT.

(3) EXCAVATION REQUIRED FOR BACKWALL REPLACEMENT TO BE PAID FOR UNDER ITEM 503 - "UNCLASSIFIED EXCAVATION."

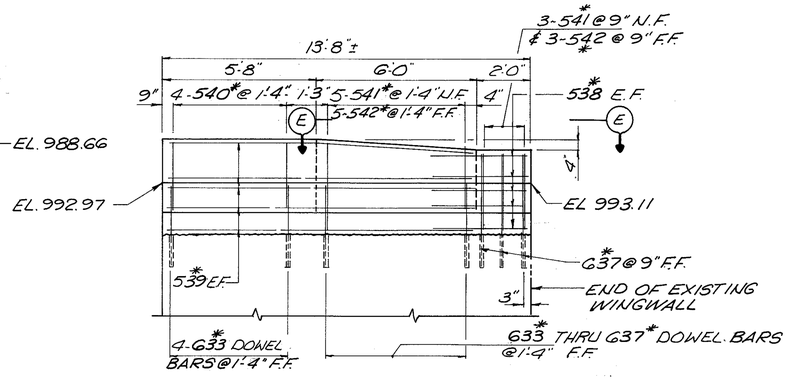
(4) BACKFILL WITHIN LIMITS SHOWN TO BE PAID FOR UNDER ITEM 518 - "POROUS BACKFILL".

(5) FOR NOTE (8) & ADDITIONAL NOTES SEE SHEET G|27.



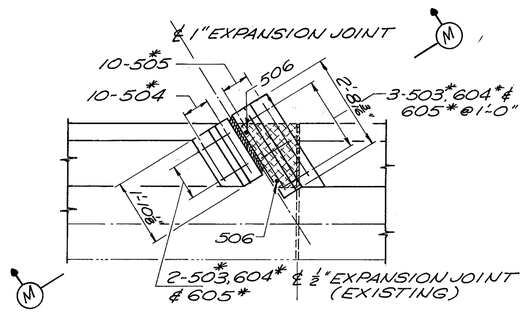

## VIEW B-B

SOUTHWEST WINGWALL ABUTMENT A-1



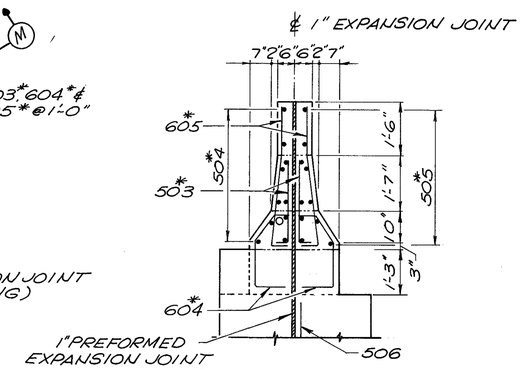

## VIEW C-C

SOUTHEAST WINGWALL ABUTMENT A-2

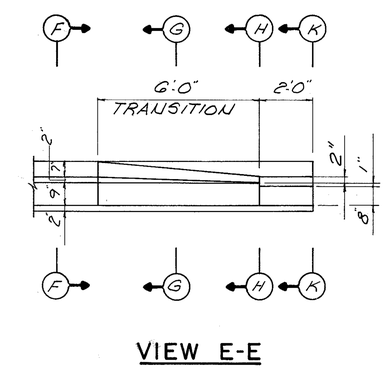



## DETAIL "L"

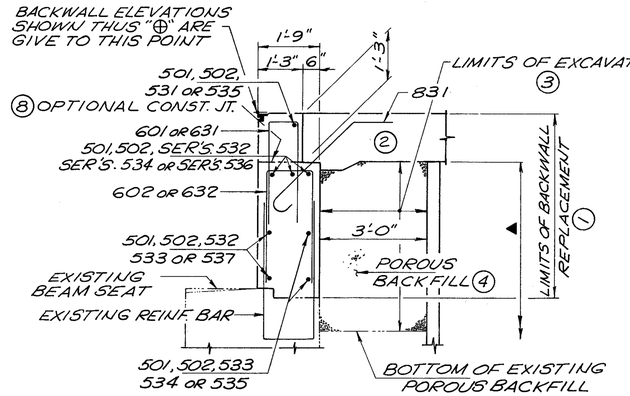
(1) ▨ INDICATES LIMITS OF BOND BREAKER AT BEAM SEAT SEE ELEVATION VIEW, SHEET 9|27.




## SECTION M-M

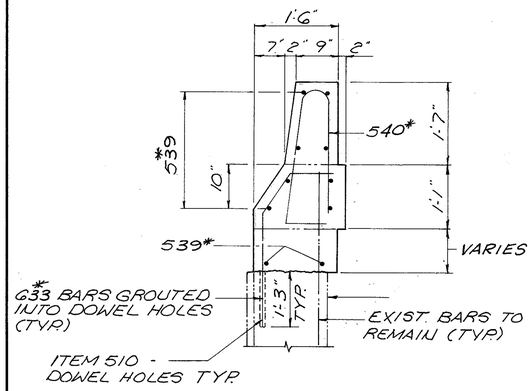



## VIEW E-E

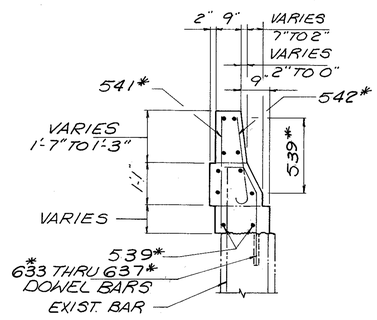



## SECTION A-A

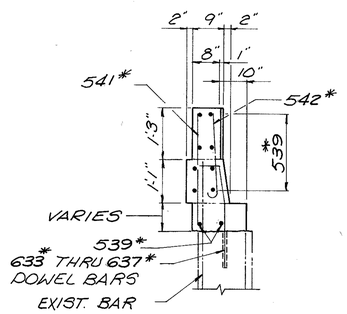
▲ TEMPORARY SHEETING PAID FOR UNDER ITEM 503 COFFERDAMS, CRIBS & SHEETING



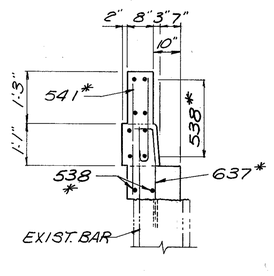

## SECTION F-F




## SECTION G-G




## SECTION H-H




## SECTION K-K

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11/27

# ABUTMENT DETAILS

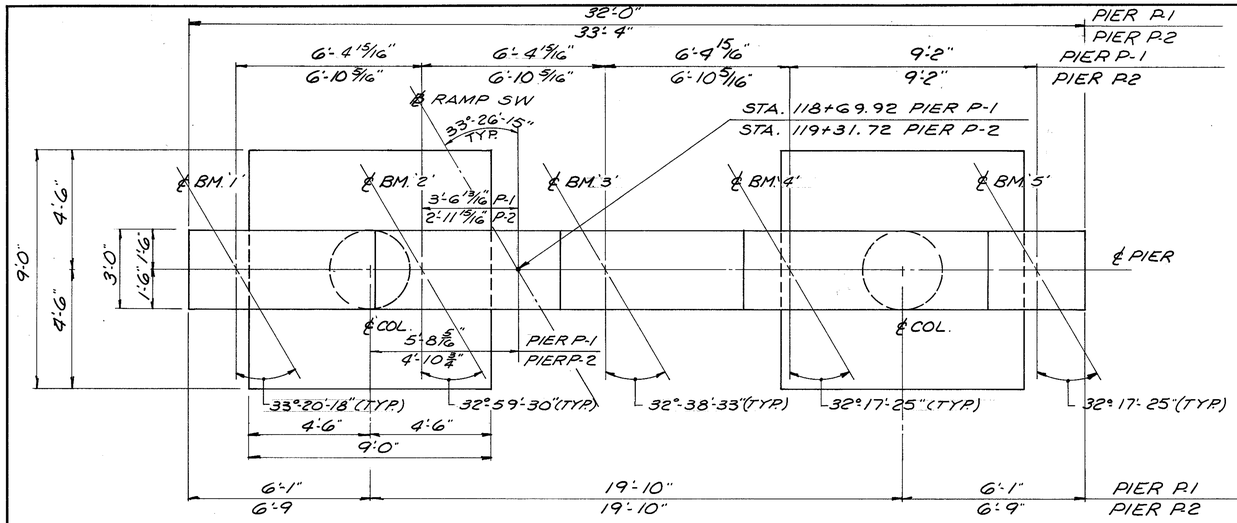
WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953

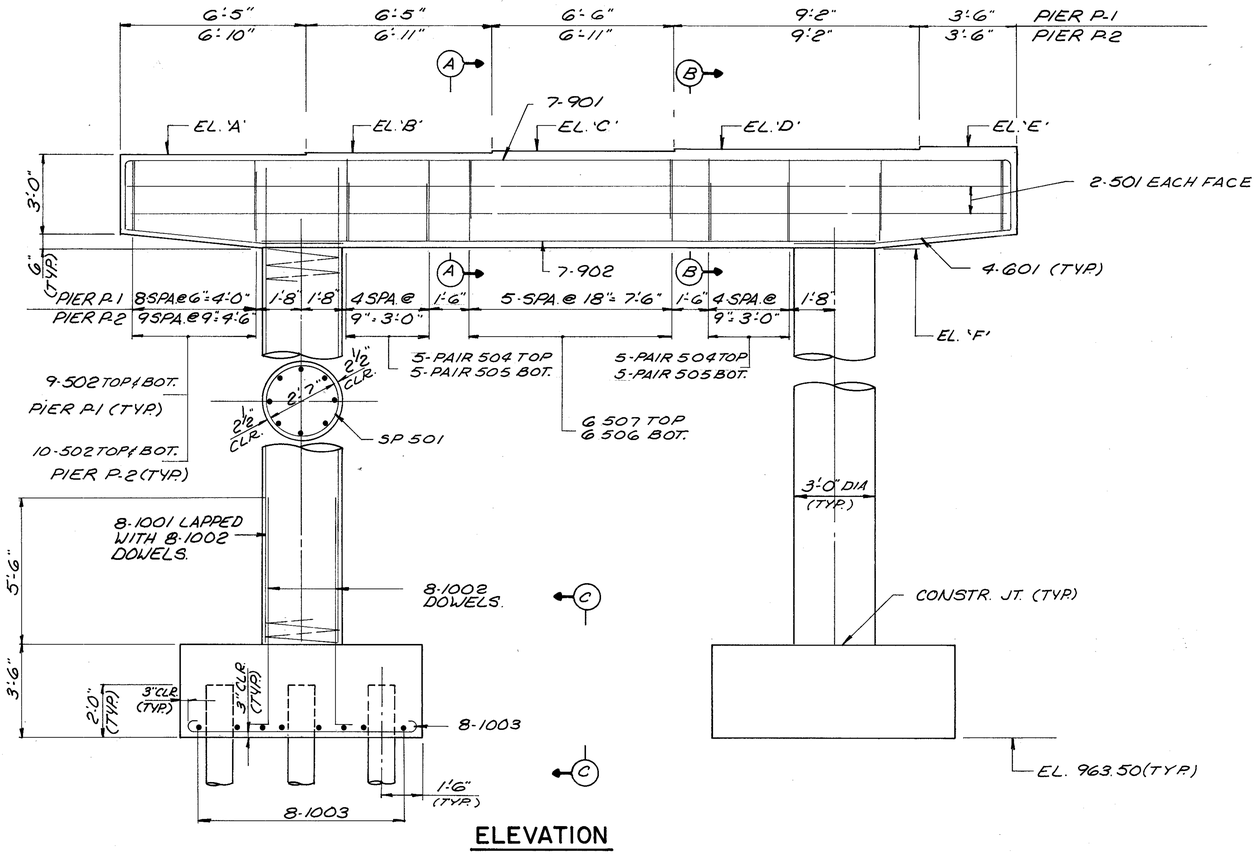
AKRON OHIO — SUMMIT COUNTY

STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | CDG | | JWW | JSP | 11-8-82 | |

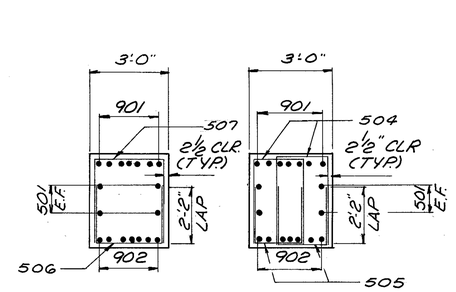



## PLAN

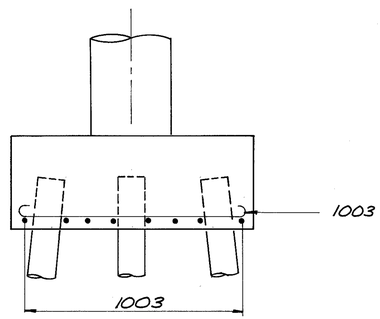



## ELEVATION

| ELEVATION TABLE | | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| PIER P.1 | 983.61 | 983.66 | 983.71 | 983.76 | 983.83 | 980.11 |
| PIER P.2 | 983.97 | 984.03 | 984.08 | 984.13 | 984.20 | 980.47 |




## SECTION A-A SECTION B-B




## SECTION C-C

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

416/455

AKRON INNERBELT
SUM - 59 - 0.00

NOTES

1. THE PREFIX "1P" OR "2P" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS IN PIER P-1 OR P-2 RESPECTIVELY UNLESS SHOWN OTHERWISE.
2. FOR PILING PLAN, SEE SHEET 4 | 27.
3. FOR LOCATIONS AND DETAILS OF LIGHTING CONDUITS AND LIGHT FIXTURES AT PIER P-1 & P-2 SEE LIGHTING PLANS.
4. FOR CIRCUIT GROUNDING DETAILS AT PIERS, SEE LIGHTING PLANS.

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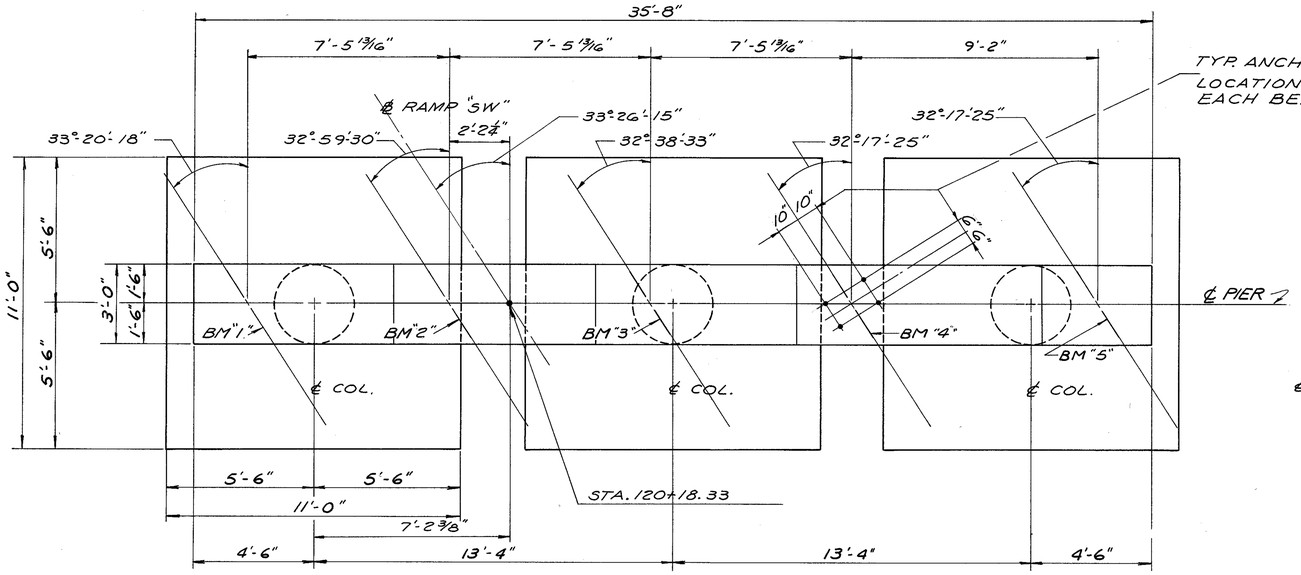
12/27

# PIER P-1 & P-2 DETAILS

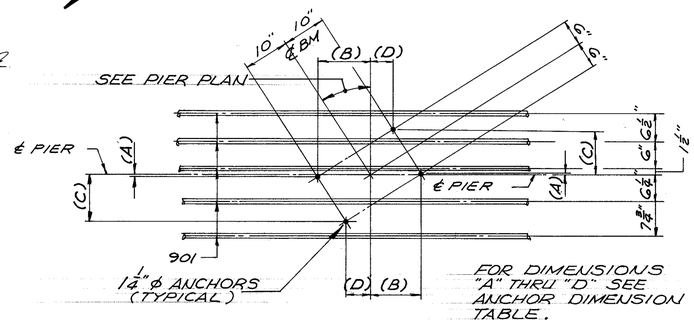
WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | CDG | | RCP WWW | JSP | 11-8-82 | |

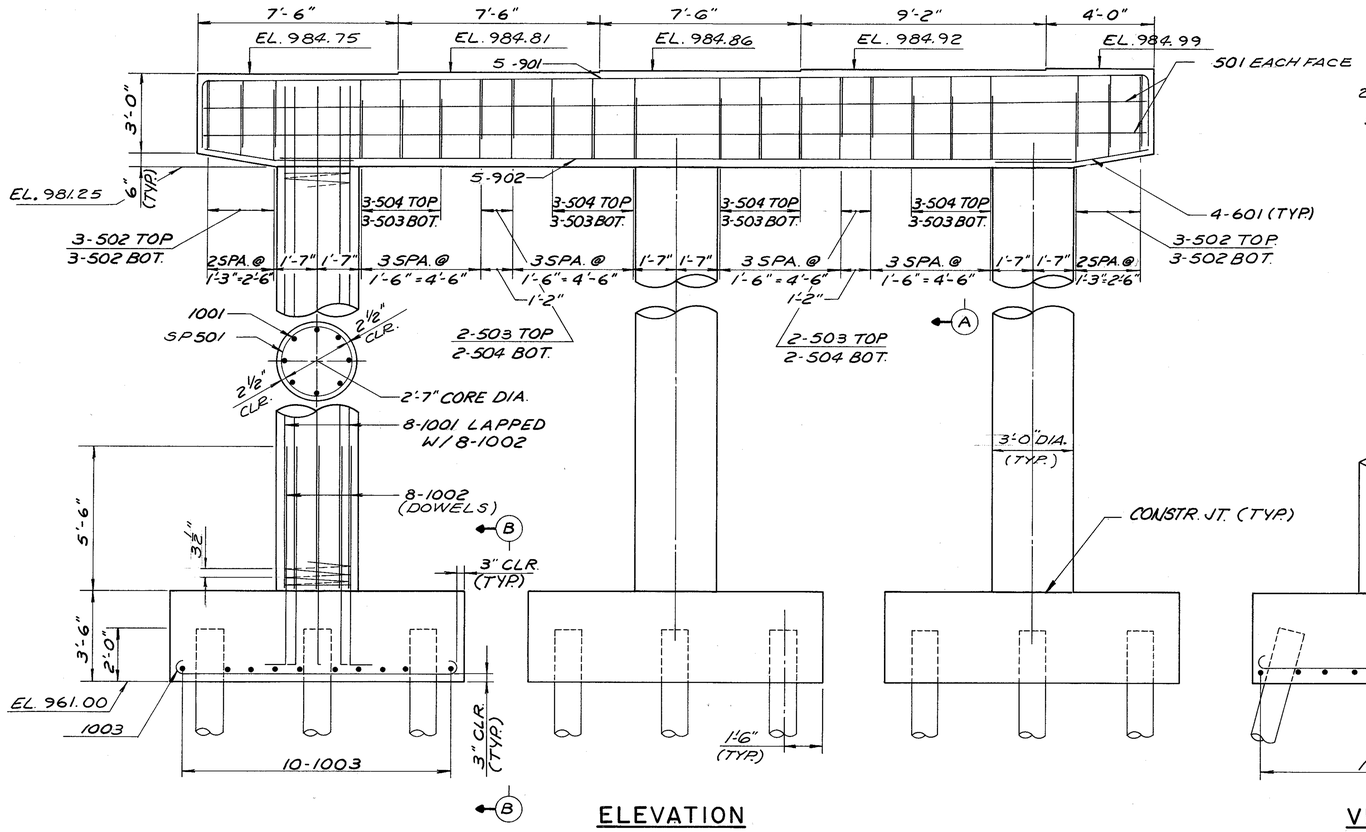



## PLAN - PIER P-3

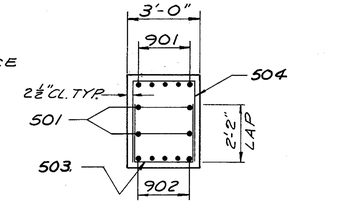
| ANCHOR DIMENSION TABLE | | | | |
|---|---|---|---|---|
| DIMENSION | (A) | (B) | (C) | (D) |
| BM "1" | 1/2" | 11 1/16" | 10 1/2" | 5 1/16" |
| BM "2" | 7/16" | 11 1/16" | 10 1/2" | 5 1/16" |
| BM "3" | 5/16" | 11 1/16" | 10 7/16" | 5 3/16" |
| BM "4" | 1/4" | 11 1/16" | 10 7/16" | 5 1/4" |
| BM "5" | 1/4" | 11 1/16" | 10 7/16" | 5 1/4" |



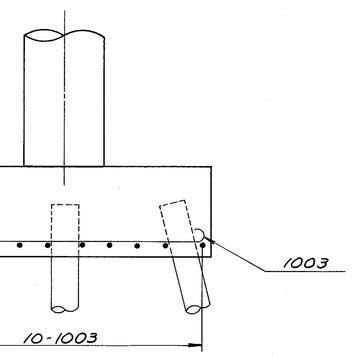

## TYPICAL ANCHOR BOLT LOCATION




## ELEVATION




## SECTION A-A



## VIEW B-B

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

417 / 455

AKRON INNERBELT
SUM - 59 - 0.00

NOTES

1. THE PREFIX "3P" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PIER P-3 UNLESS SHOWN OTHERWISE.
2. BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF BEARING ANCHOR.
3. FOR ADDITIONAL NOTES SEE SHEET 12 | 27

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13/27

# PIER P-3 DETAILS

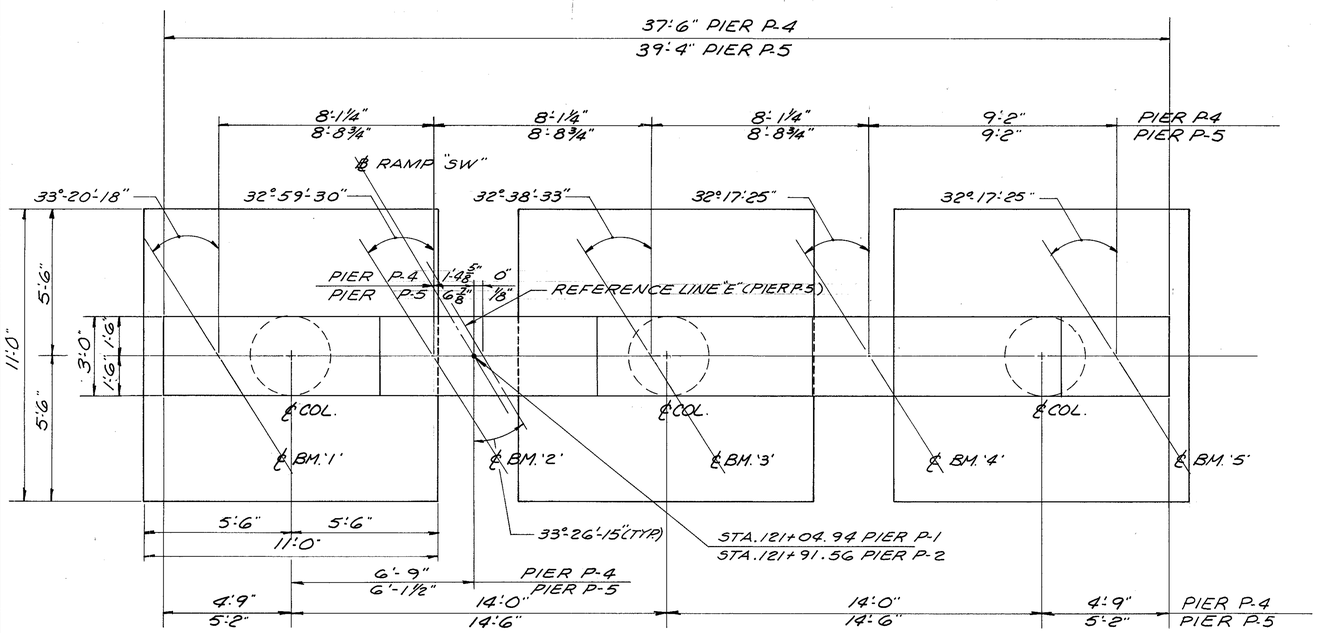
WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 1134 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| NSC | D.T. | | RJP DWW | JJP | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

418
455

AKRON INNERBELT
SUM - 59 - 0.00



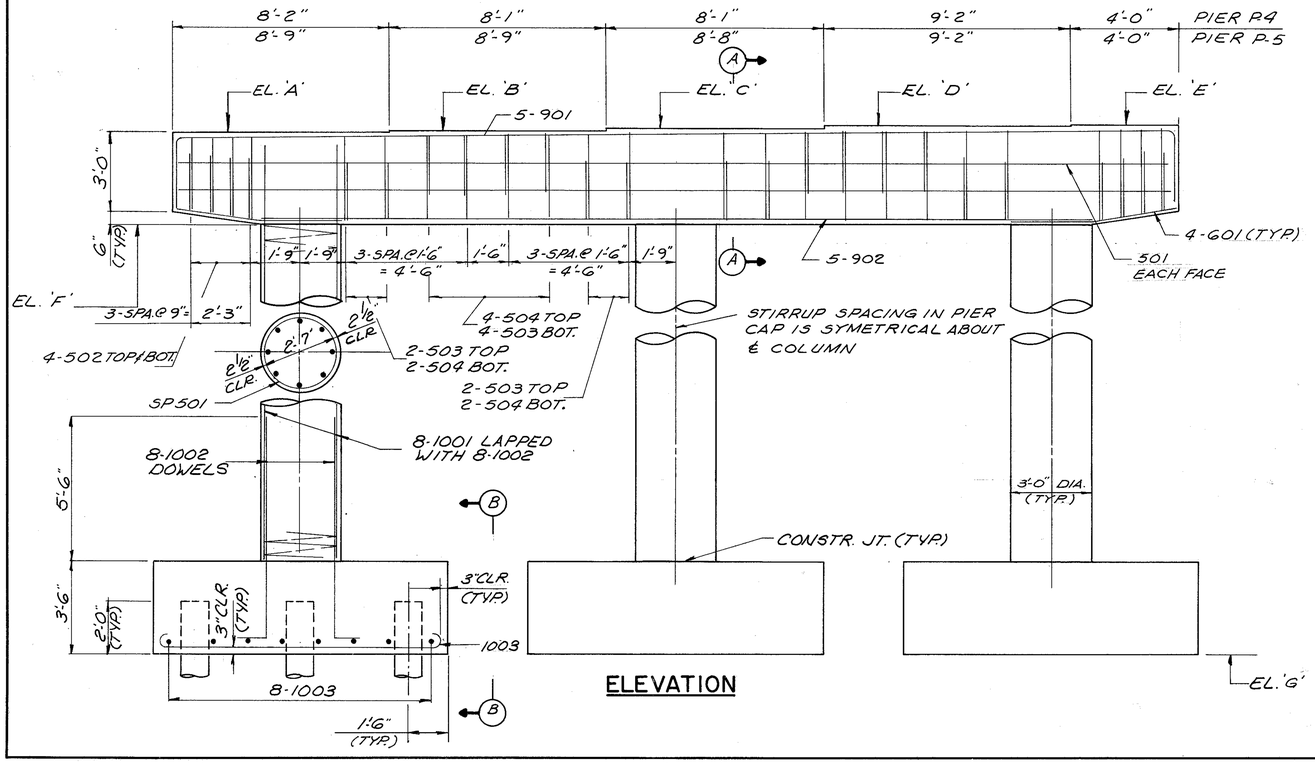

PLAN

| ELEVATION TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G |
| PIER P-4 | 985.61 | 985.67 | 985.73 | 985.79 | 985.87 | 982.11 | 956.00 |
| PIER P-5 | 986.55 | 986.61 | 986.68 | 986.75 | 986.82 | 983.05 | 956.00 |

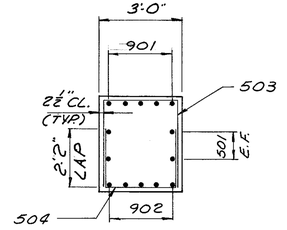
NOTES

(1) THE PREFIX "4" OR "5" SHALL BE ADDED TO ALL PIER REINFORCING BAR MARKS IN PIER P-4 OR P-5 RESPECTIVELY UNLESS SHOWN OTHERWISE.

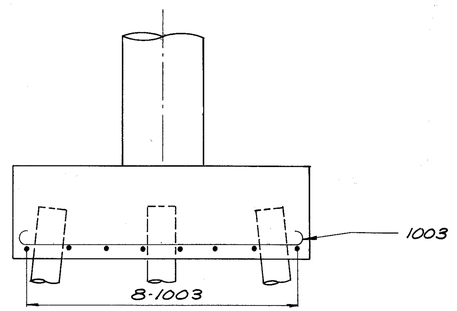
(2) FOR ADDITIONAL NOTES SEE SHEET 12 27.




ELEVATION




SECTION A-A




SECTION B-B

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

# PIER P-4 & P-5 DETAILS

14/27

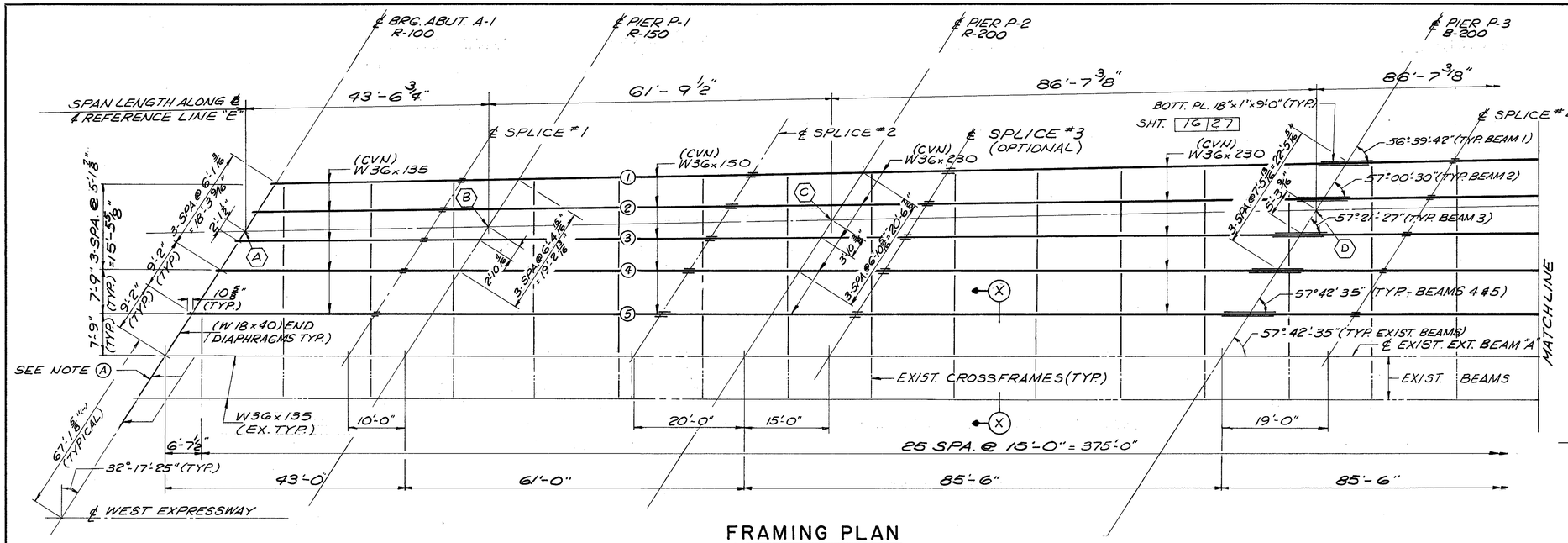
WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| MSC | D.T. | | RJP WJW | JGP | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

419
455

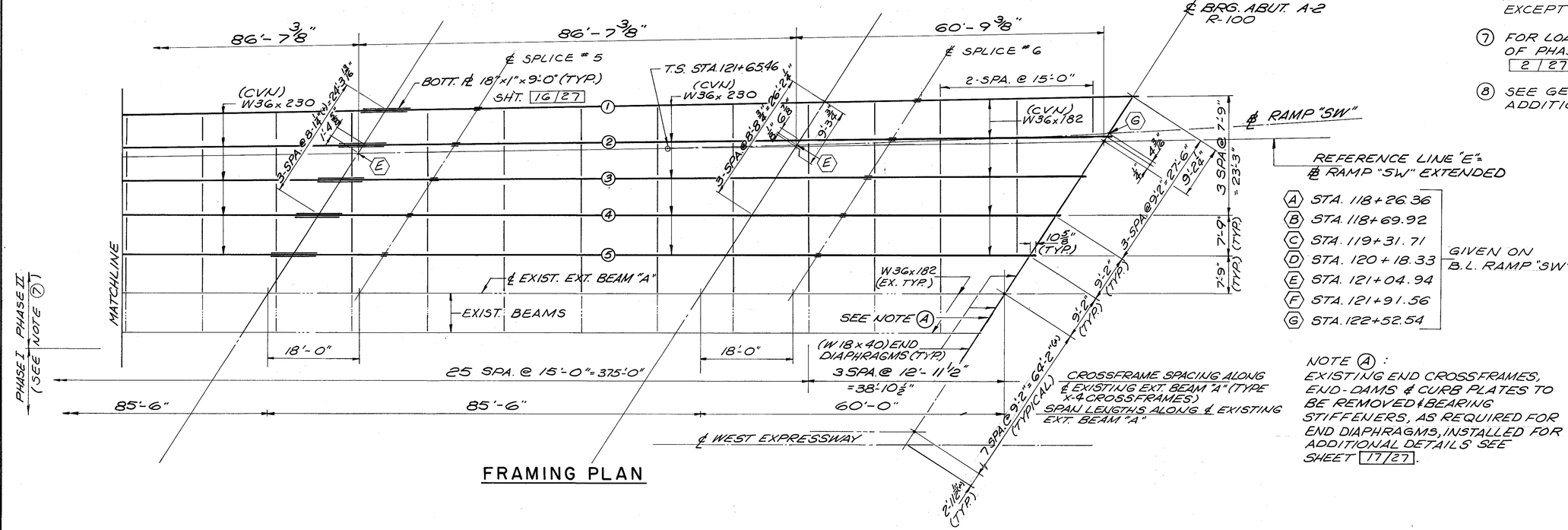
AKRON INNERBELT
SUM-59-0.00




FRAMING PLAN

## NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A36, UNLESS NOTED OTHERWISE.
2. INTERMEDIATE CROSSFRAMES SHALL BE TYPE "X-4" SEE SHEET 26/27 FOR DETAILS.
3. FOR SECTION "X-X" AND TREATMENT OF EXISTING END-DAMS & END CROSSFRAMES SEE SHEET 16/27 & 17/27
4. FOR DEFLECTION AND CAMBER TABLES FOR BEAMS (1) THRU (5) SEE SHEET 18/27.
5. THE 1/2" SIDE PLATES ATTACHED TO THE SOLE PLATES OF THE BEARINGS FOR BEAMS 1, 2 AND 3 SHALL BE OMITTED.
6. WHERE A SHAPE OR PLATE IS DESIGNATED "CVN" THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENT (AASHTO-ZONE 2). ALL FIELD SPLICE MATERIAL, EXCEPT FILL PLATES, SHALL BE "CVN."
7. FOR LOACTION, DIMENSIONS AND DESCRIPTIONS OF PHASE CONSTRUCTION SEE SHEETS 2/27 & 17/27.
8. SEE GENERAL NOTES SHEET FOR ADDITIONAL NOTES.




FRAMING PLAN

| | |
|---|---|
| (A) | STA. 118+26.36 |
| (B) | STA. 118+69.92 |
| (C) | STA. 119+31.71 |
| (D) | STA. 120+18.33 |
| (E) | STA. 121+04.94 |
| (F) | STA. 121+91.56 |
| (G) | STA. 122+52.54 |

GIVEN ON B.L. RAMP "SW"

NOTE (A): EXISTING END CROSSFRAMES, END-DAMS & CURB PLATES TO BE REMOVED & BEARING STIFFENERS, AS REQUIRED FOR END DIAPHRAGMS, INSTALLED FOR ADDITIONAL DETAILS SEE SHEET 17/27.

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CLEVELAND, OHIO AKRON, OHIO

15/27

## FRAMING PLAN

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431+11.34 TO STA. 435+37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | RJP ALH | RJP | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

420/455

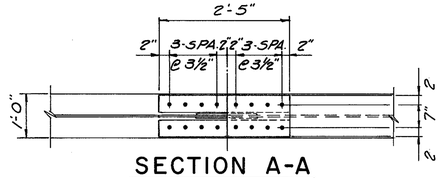
AKRON INNERBELT
SUM-59-0.00

NOTES

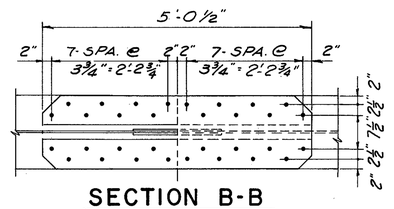
1 SEE SHEET 15/27 FOR NOTES.

2 ALL FIELD SPLICES SHALL BE MADE WITH 1" DIAMETER HIGH STRENGTH STEEL BOLTS, CONFORMING TO A325, TYPE 3. THE BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF EXTERIOR BEAMS AND ON THE BOTTOM OF THE BOTTOM FLANGES AND TOP OF THE TOP FLANGES.

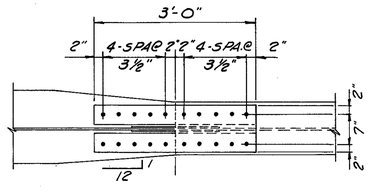
3 ALL SPLICE MATERIAL EXCEPT FILL PLATES SHALL BE "CVN" (AASHTO - ZONE 2)



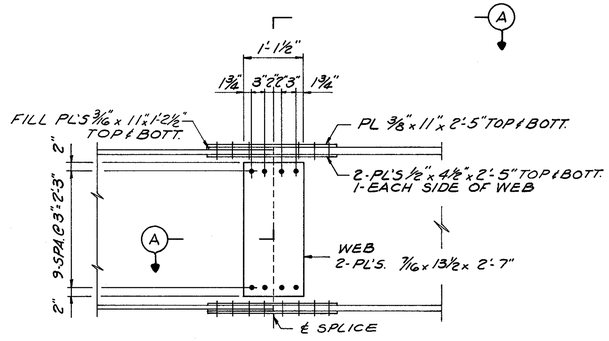

SECTION A-A



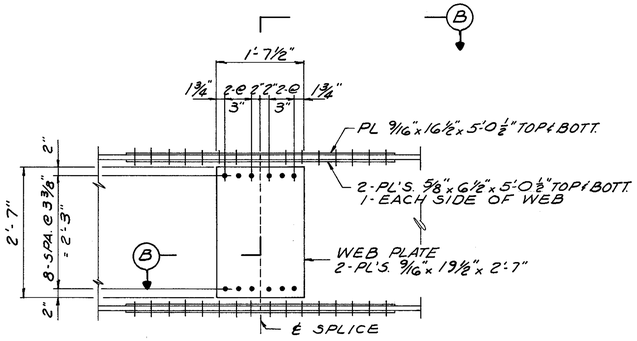

SECTION B-B



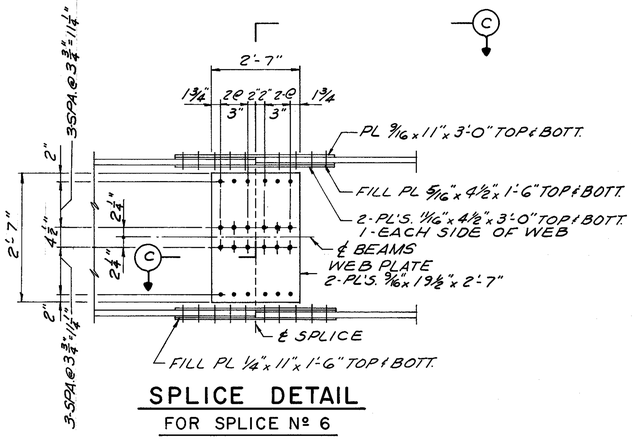

SECTION C-C



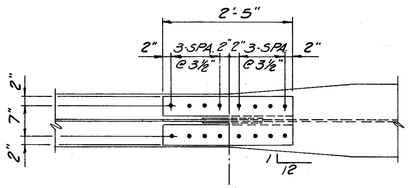

SPLICE DETAIL
FOR SPLICE Nº 1



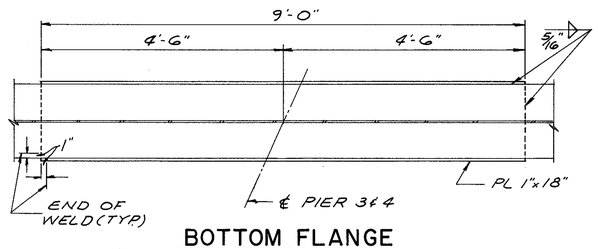

SPLICE DETAIL
FOR SPLICE Nº 3, 4 & 5




SPLICE DETAIL
FOR SPLICE Nº 6



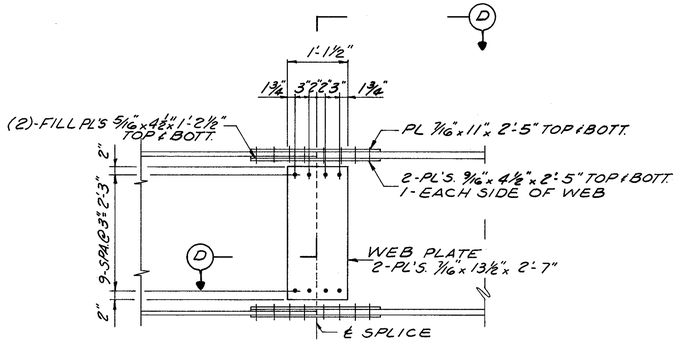

SECTION D-D



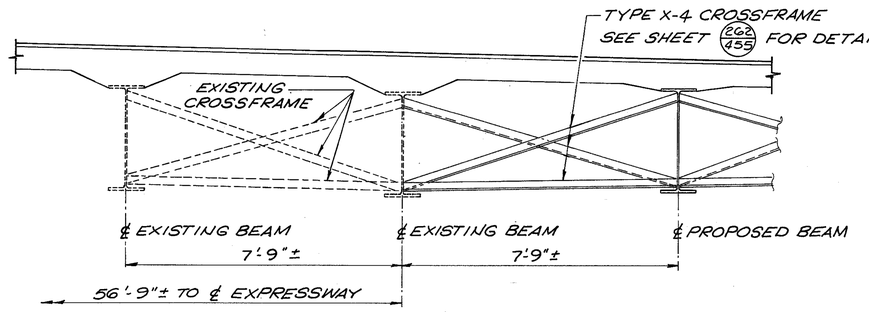

BOTTOM FLANGE

| TABLE OF PROPOSED BEAM LENGTHS | | | | | | | |
|---|---|---|---|---|---|---|---|
| BEAM | ℄ BRG A-1 to F.S.#1 | F.S.#1 to F.S.#2 | F.S.#2 to F.S.#3 | F.S.#3 to F.S.#4 | F.S.#4 to F.S.#5 | F.S.#5 to F.S.#6 | F.S.#6 to ℄ BRG A-2 |
| "A" | 33'-4 1/16" | 51'-7 3/16" | 35'-4 15/16" | 90'-6 5/8" | 85'-5 15/16" | 86'-6 1/16" | 42'-5 15/16" |
| "B" | 33'-3 1/8" | 51'-4 13/16" | 35'-3 5/16" | 90'-2 7/16" | 85'-1 5/16" | 86'-2 1/16" | 42'-3 15/16" |
| "C" | 33'-1 9/16" | 51'-2 3/8" | 35'-1 5/8" | 89'-10 3/16" | 84'-9 15/16" | 85'-10" | 42'-2" |
| "D" & "E" | 33'-0" | 51'-0" | 35'-0" | 89'-6" | 84'-6" | 85'-6" | 42'-0" |

F.S.# - DENOTES FIELD SPLICE NUMBER
DIMENSIONS SHOWN ARE HORIZONTAL WITH NO ADJUSTMENT MADE DUE TO THE SLOPE OF THE GRADE.




SPLICE DETAIL
FOR SPLICE Nº 2




SECTION X-X

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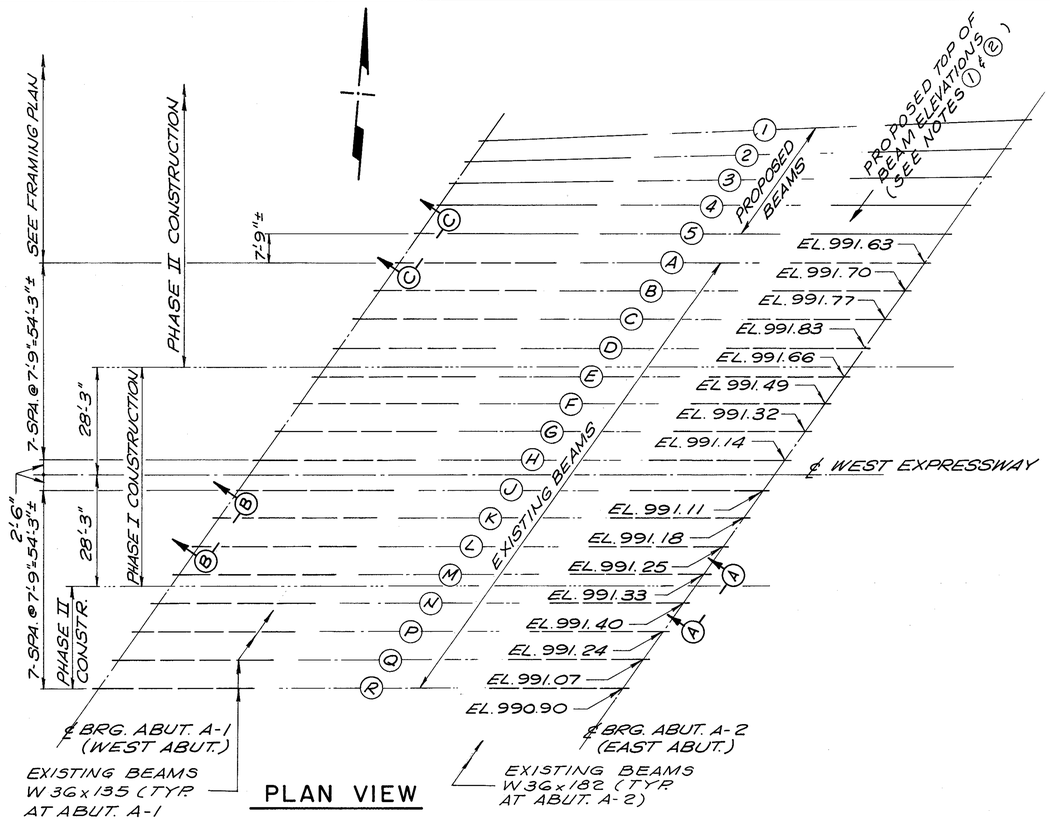
CLEVELAND, OHIO AKRON, OHIO

# SPLICE DETAILS

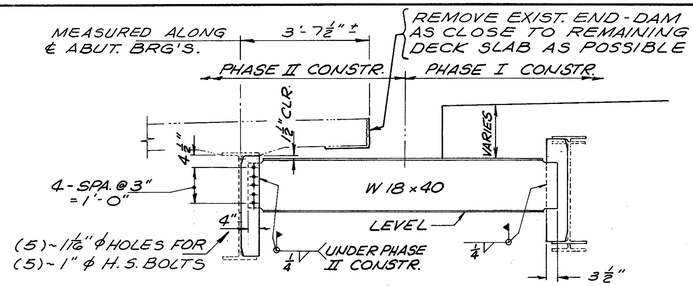
16/27

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BLL | F.F. | | ALH | JJP | 11-8-82 | |

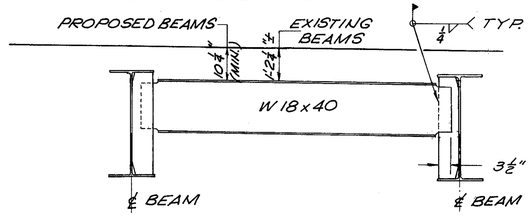



PLAN VIEW



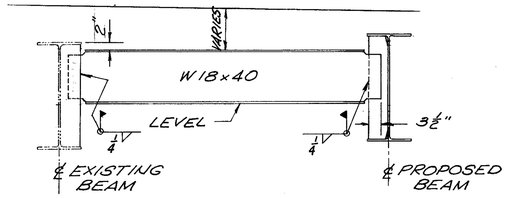

## SECTION A-A

AT ABUTMENT A-2 ONLY
(SEE SUGGESTED JACKING PROCEEDURE NOTES)



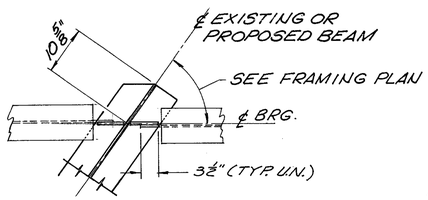

## SECTION B-B

END-DIAPHRAGM BETWEEN EXISTING OR PROPOSED BEAMS

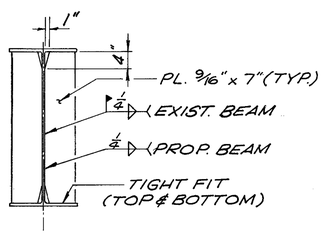



## SECTION C-C

END-DIAPHRAGM FROM EXISTING TO PROPOSED BEAMS



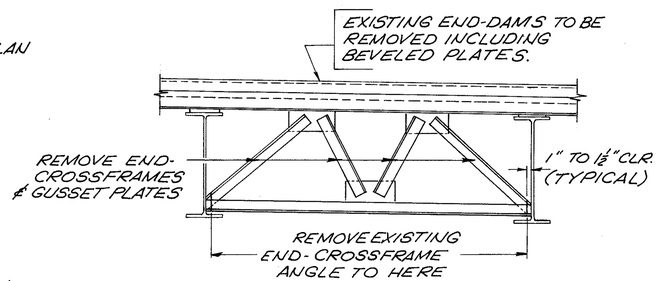

PLAN




ELEVATION

## BEARING STIFFENER DETAIL

(AT ABUTMENTS)




## EXISTING END-CROSSFRAME REMOVAL DETAIL

## SUGGESTED JACKING PROCEEDURE (ABUTMENT A-2 ONLY)

PHASE I CONSTRUCTION

(a) REMOVE SLAB, REMOVE EXISTING END CROSSFRAMES AS SHOWN IN END-CROSSFRAME REMOVAL DETAIL. THE END DAM ENCASED IN REMAINING PORTION OF DECK SLAB SHALL BE CUT OFF AS NEAR TO THE CONCRETE SLAB AS POSSIBLE. SEE SECTION A-A.

(b) INSTALL BEARING STIFFENERS AS REQUIRED.

(c) RAISE END OF BEAM TO PROPER ELEVATION AND SUPPORT. INSTALL SHIM PLATES, AS REQUIRED, UNDER BEARINGS. ABUTMENT A-2 ONLY, SEE NOTE (1) & (2).

(d) INSTALL (W 18 x 40) END DIAPHRAGM AS SHOWN IN SECTION "A-A".

PHASE II CONSTRUCTION

(e) REMOVE SLAB, REMAINING PORTIONS OF END-DAMS AND END-CROSSFRAMES.

(f) INSTALL BEARING STIFFENERS AS REQUIRED.

(g) REMOVE (5) 1" ϕ H.S. BOLTS ATTACHING (W 18 x 40) TO BEARING STIFFENER. RAISE BEAMS TO PROPER ELEVATION AND INSTALL SHIM PLATES AS REQUIRED UNDER BEARINGS (NOTES (1) & (2).)

(h) CLAMP AND WELD (W 18 x 40) DIAPHRAGM TO BEARING STIFFENER AS SHOWN IN SECTION "A-A".

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

421/455

AKRON INNERBELT
SUM - 59 - 0.00

## NOTE

(1) SHIM PLATES AND NEW ⅛" SHEET LEAD PADS SHALL BE PLACED UNDER EXISTING BEARING BASE PLATES. SHIM PLATE THICKNESS SHALL BE, BASED ON THE DIFFERENCE OF THE TOP OF BEAM ELEVATION SHOWN IN PLAN VIEW AND THE EXISTING TOP OF BEAM ELEVATION AS DETERMINED IN THE FIELD. SHIM PLATE LENGTH AND WIDTH SHALL BE THE SAME AS THE BASE PLATE OF THE EXISTING BEARING.

(2) EXISTING BEAMS SHALL BE RAISED TO THE ELEVATION SHOWN. (JACKING LOAD OF 5 KIPS EACH BEAM)

(3) REMOVAL OF EXISTING END DAMS AND END CROSSFRAMES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 202 - PORTIONS OF STRUCTURE REMOVED.

(5) ABUTMENT BEARING STIFFENERS SHALL BE PLACED IN PAIRS ON EXISTING AND PROPOSED BEAMS.

(6) FOR ADDITIONAL PHASE DATA SEE SHEET 2/27.

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CLEVELAND, OHIO — AKRON, OHIO

17/27

# FRAMING DETAILS

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO — SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
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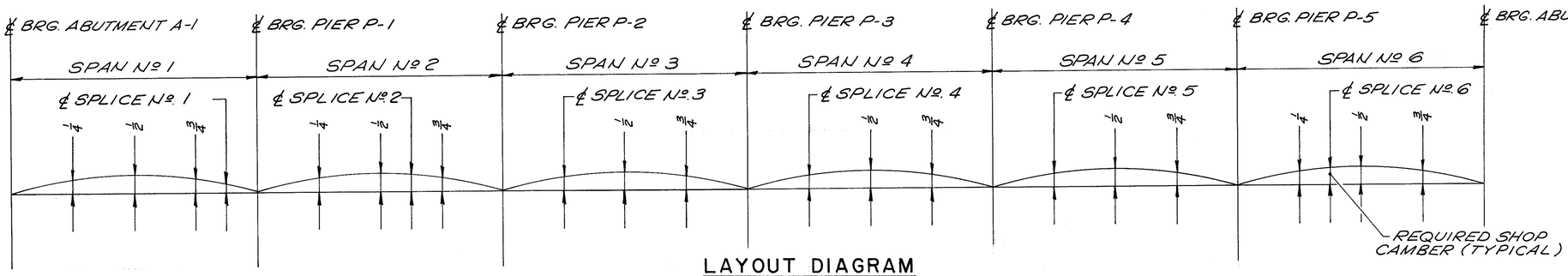
| BKL | D.T. | | ALH | JDB | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

422
455

AKRON INNERBELT
SUM-59-0.00




## LAYOUT DIAGRAM

| BEAM 1 | | | | |
|---|---|---|---|---|
| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ |
| ABUTMENT A-1 | | | | |
| ¼ PT. | .0190 | .0635 | .0000 | .0825 |
| ½ PT. | .0240 | .0770 | .0000 | .1010 |
| ¾ PT. | .0120 | .0370 | .0000 | .0490 |
| ℄ SPL. Nº1 | .0110 | .0335 | .0000 | .0445 |
| PIER P-1 | | | | |
| ¼ PT. | .0400 | .0360 | .0000 | .0400 |
| ½ PT. | .0000 | .0480 | .0000 | .0480 |
| ℄ SPL. Nº 2 | -.0113 | .0127 | .0000 | .0014 |
| ¾ PT. | -.0150 | -.0045 | .0000 | -.0195 |
| PIER P-2 | | | | |
| ℄ SPL. Nº3 | .0817 | .1738 | .0000 | .2555 |
| ½ PT. | .1830 | .4060 | .0000 | .5890 |
| ¾ PT. | .1005 | .2200 | .0000 | .3205 |
| PIER P-3 | | | | |
| ℄ SPL. Nº 4 | .0472 | .1327 | .0000 | .1799 |
| ½ PT. | .1130 | .2980 | .0000 | .4110 |
| ¾ PT. | .0590 | .1555 | .0000 | .2145 |
| PIER P-4 | | | | |
| ℄ SPL. Nº5 | .0749 | .1792 | .0000 | .2542 |
| ½ PT. | .1690 | .4010 | .0000 | .5700 |
| ¾ PT. | .1050 | .2370 | .0000 | .3420 |
| PIER P-5 | | | | |
| ¼ PT. | .0050 | .0565 | .0000 | .0615 |
| ℄ SPL. Nº 6 | .0110 | .0810 | .0000 | .0920 |
| ½ PT. | .0360 | .1670 | .0000 | .2030 |
| ¾ PT. | .0370 | .1515 | .0000 | |
| ABUTMENT A-2 | | | | |

| BEAM 2 | | | | |
|---|---|---|---|---|
| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ |
| ABUTMENT A-1 | | | | |
| ¼ PT. | .0195 | .0665 | .0000 | .0860 |
| ½ PT. | .0240 | .0810 | .0000 | .1050 |
| ¾ PT. | .0130 | .0390 | .0000 | .0520 |
| ℄ SPL. Nº1 | .0120 | .0352 | .0000 | .0471 |
| PIER P-1 | | | | |
| ¼ PT. | .0040 | .0375 | .0000 | .0415 |
| ½ PT. | .0000 | .0480 | .0000 | .0480 |
| ℄ SPL. Nº2 | -.0120 | .0092 | .0000 | -.0028 |
| ¾ PT. | -.0155 | -.0085 | .0000 | -.0240 |
| PIER P-2 | | | | |
| ℄ SPL. Nº3 | .0842 | .1928 | .0000 | .2771 |
| ½ PT. | .1890 | .4450 | .0000 | .6340 |
| ¾ PT. | .1035 | .2390 | .0000 | .3425 |
| PIER P-3 | | | | |
| ℄ SPL. Nº4 | .0492 | .1546 | .0000 | .2038 |
| ½ PT. | .1170 | .3400 | .0000 | .4570 |
| ¾ PT. | .0615 | .1755 | .0000 | .2370 |
| PIER P-4 | | | | |
| ℄ SPL. Nº5 | .0772 | .2101 | .0000 | .2873 |
| ½ PT. | .1740 | .4650 | .0000 | .6390 |
| ¾ PT. | .1080 | .2725 | .0000 | .3805 |
| PIER P-5 | | | | |
| ¼ PT. | .0050 | .0725 | .0000 | .0775 |
| ℄ SPL. Nº6 | .0110 | .1020 | .0000 | .1130 |
| ½ PT. | .0370 | .2050 | .0000 | .2420 |
| ¾ PT. | .0380 | .1845 | .0000 | .2225 |
| ABUTMENT A-2 | | | | |

| BEAM 3 | | | | |
|---|---|---|---|---|
| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ |
| ABUTMENT A-1 | | | | |
| ¼ PT. | .0195 | .0665 | .0000 | .0860 |
| ½ PT. | .0240 | .0810 | .0000 | .1050 |
| ¾ PT. | .0130 | .0390 | .0000 | .0520 |
| ℄ SPL. Nº1 | .0120 | .0352 | .0000 | .0471 |
| PIER P-1 | | | | |
| ¼ PT. | .0040 | .0375 | .0000 | .0415 |
| ½ PT. | .0000 | .0480 | .0000 | .0480 |
| ℄ SPL. Nº2 | -.0120 | .0092 | .0000 | -.0028 |
| ¾ PT. | -.0155 | -.0085 | .0000 | -.0240 |
| PIER P-2 | | | | |
| ℄ SPL. Nº3 | .0842 | .1928 | .0000 | .2771 |
| ½ PT. | .1890 | .4450 | .0000 | .6340 |
| ¾ PT. | .1035 | .2390 | .0000 | .3425 |
| PIER P-3 | | | | |
| ℄ SPL. Nº4 | .0492 | .1546 | .0000 | .2038 |
| ½ PT. | .1170 | .3400 | .0000 | .4570 |
| ¾ PT. | .0615 | .1755 | .0000 | .2370 |
| PIER P-4 | | | | |
| ℄ SPL. Nº5 | .0772 | .2101 | .0000 | .2873 |
| ½ PT. | .1740 | .4650 | .0000 | .6390 |
| ¾ PT. | .1080 | .2725 | .0000 | .3805 |
| PIER P-5 | | | | |
| ¼ PT. | .0050 | .0725 | .0000 | .0775 |
| ℄ SPL. Nº6 | .0110 | .1020 | .0000 | .1130 |
| ½ PT. | .0370 | .2050 | .0000 | .2420 |
| ¾ PT. | .0380 | .1845 | .0000 | .2225 |
| ABUTMENT A-2 | | | | |

| BEAM 4 | | | | |
|---|---|---|---|---|
| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ |
| ABUTMENT A-1 | | | | |
| ¼ PT. | .0190 | .0765 | .0000 | .0955 |
| ½ PT. | .0260 | .0920 | .0000 | .1180 |
| ¾ PT. | .0120 | .0445 | .0000 | .0565 |
| ℄ SPL. Nº1 | .0110 | .0401 | .0000 | .0511 |
| PIER P-1 | | | | |
| ¼ PT. | .0040 | .0440 | .0000 | .0480 |
| ½ PT. | .0000 | .0600 | .0000 | .0600 |
| ℄ SPL. Nº 2 | -.0113 | .0171 | .0000 | .0058 |
| ¾ PT. | -.0150 | -.0035 | .0000 | -.0185 |
| PIER P-2 | | | | |
| ℄ SPL. Nº3 | .0817 | .2056 | .0000 | .2874 |
| ½ PT. | .1830 | .4820 | .0000 | .6650 |
| ¾ PT. | .1005 | .2620 | .0000 | .3625 |
| PIER P-3 | | | | |
| ℄ SPL. Nº4 | .0472 | .1554 | .0000 | .2027 |
| ½ PT. | .1130 | .3510 | .0000 | .4640 |
| ¾ PT. | .0590 | .1850 | .0000 | .2440 |
| PIER P-4 | | | | |
| ℄ SPL. Nº5 | .0749 | .2093 | .0000 | .2843 |
| ½ PT. | .1690 | .4690 | .0000 | .6380 |
| ¾ PT. | .1050 | .2780 | .0000 | .3830 |
| PIER P-5 | | | | |
| ¼ PT. | .0050 | .0660 | .0000 | .0710 |
| ℄ SPL. Nº6 | .0110 | .0940 | .0000 | .1050 |
| ½ PT. | .0360 | .1950 | .0000 | .2310 |
| ¾ PT. | .0370 | .1765 | .0000 | .2135 |
| ABUTMENT A-2 | | | | |

| BEAM 5 | | | | |
|---|---|---|---|---|
| LOCATION | ⓐ | ⓑ | ⓒ | ⓓ |
| ABUTMENT A-1 | | | | |
| ¼ PT. | .0190 | .0880 | .0000 | .1070 |
| ½ PT. | .0260 | .1070 | .0000 | .1330 |
| ¾ PT. | .0120 | .0515 | .0000 | .0635 |
| ℄ SPL. Nº1 | .0110 | .0464 | .0000 | .0574 |
| PIER P-1 | | | | |
| ¼ PT. | .0040 | .0515 | .0000 | .0555 |
| ½ PT. | .0000 | .0710 | .0000 | .0710 |
| ℄ SPL. Nº2 | -.0113 | .0232 | .0000 | .0119 |
| ¾ PT. | -.0150 | -.0005 | .0000 | -.0155 |
| PIER P-2 | | | | |
| ℄ SPL. Nº3 | .0817 | .2259 | .0000 | .3077 |
| ½ PT. | .1830 | .5330 | .0000 | .7160 |
| ¾ PT. | .1005 | .2930 | .0000 | .3935 |
| PIER P-3 | | | | |
| ℄ SPL. Nº4 | .0472 | .1620 | .0000 | .2092 |
| ½ PT. | .1130 | .3740 | .0000 | .4870 |
| ¾ PT. | .0590 | .2000 | .0000 | .2590 |
| PIER P-4 | | | | |
| ℄ SPL. Nº5 | .0749 | .2148 | .0000 | .2898 |
| ½ PT. | .1690 | .4880 | .0000 | .6570 |
| ¾ PT. | .1050 | .2920 | .0000 | .3970 |
| PIER P-5 | | | | |
| ¼ PT. | .0050 | .0610 | .0000 | .0660 |
| ℄ SPL. Nº6 | .0110 | .0890 | .0000 | .1000 |
| ½ PT. | .0360 | .1890 | .0000 | .2250 |
| ¾ PT. | .0370 | .1735 | .0000 | .2105 |
| ABUTMENT A-2 | | | | |

### LEGEND

ⓐ DEFLECTION DUE TO WEIGHT OF STEEL.

ⓑ DEFLECTION DUE TO REMAINING DEAD LOAD.

ⓒ ADJUSTMENT REQUIRED FOR VERTICAL AND HORIZONTAL CURVE.

ⓓ REQUIRED SHOP CAMBER.

### NOTES

1. FOR FRAMING PLAN AND ADDITIONAL DETAILS SEE SHEETS 15/27 THRU 17/27.
2. A POSITIVE CAMBER VALUE MEANS THE CAMBER ABOVE AND A NEGATIVE CAMBER VALUE MEANS THE CAMBER IS BELOW THE CHORD BETWEEN ADJACENT BEARINGS IN THAT SPAN.
3. ALL DEFLECTIONS ARE GIVEN IN DECIMALS OF AN INCH.

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18/27

# DEFLECTION & CAMBER TABLES

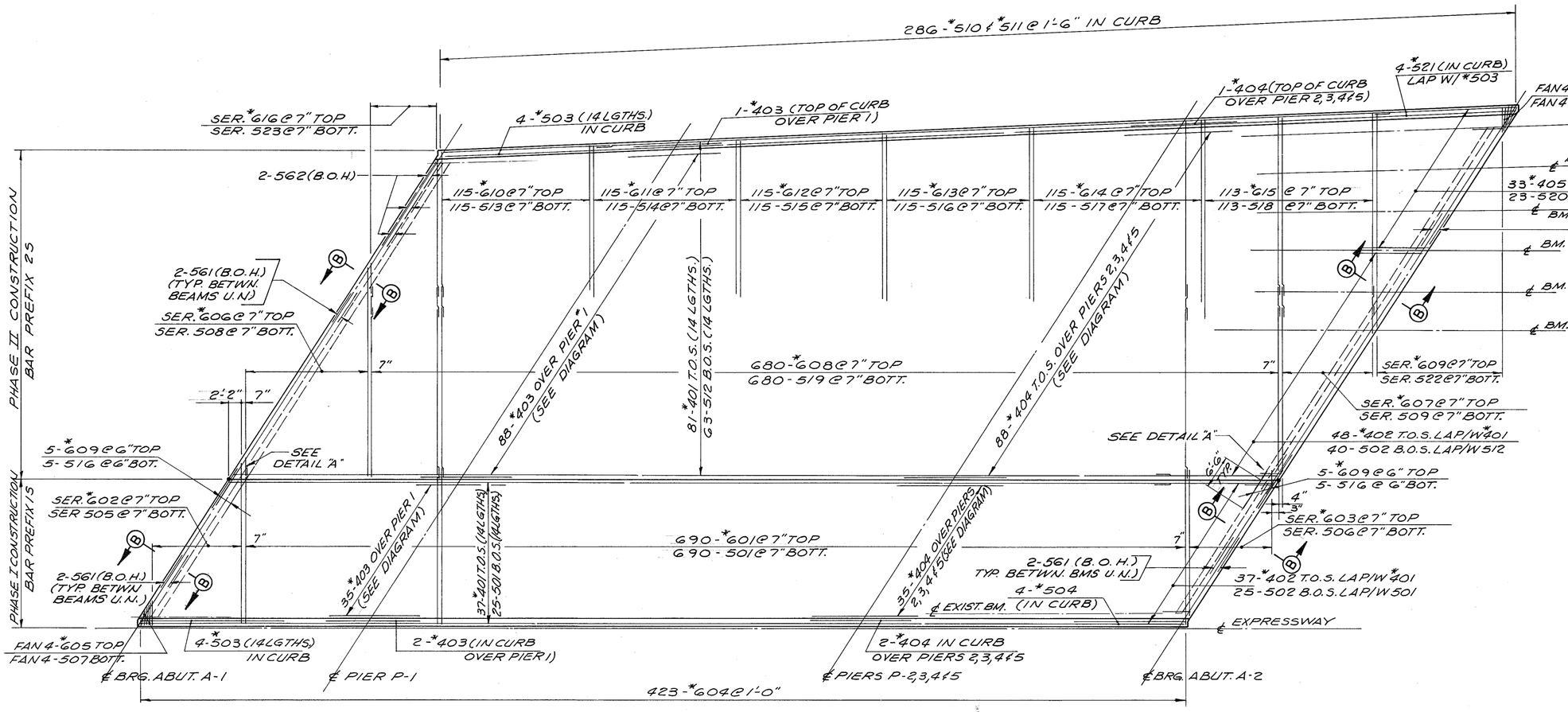
WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431+11.34 TO STA. 435+37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | D.T. | | AL/H | JDP | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

423/455

AKRON INNERBELT
SUM-59-0.00




## SLAB PLAN
WEST BOUND

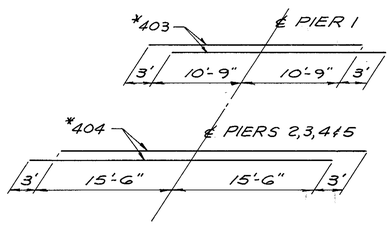
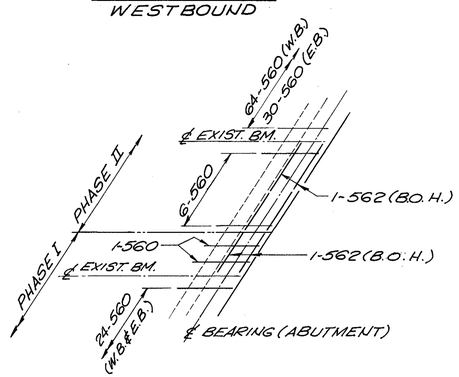



DIAGRAM SHOWING STAGGER OF BARS OVER PIERS




## DETAIL "A"
SHOWING MISCELLANEOUS BARS FOR HAUNCH
(A-2 SHOWN, A-1 SIMILAR) W. B. LANES
(A-1 SHOWN, A-2 SIMILAR) E.B. LANES

## NOTES

1. THE PREFIX "15" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PHASE I CONSTRUCTION. THE PREFIX "25" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PHASE II CONSTRUCTION
2. FOR ADDITIONAL NOTES & DETAILS SEE SHEET 20/27 THRU 23/27
3. FOR ADDITIONAL DETAILS OF END HAUNCH SEE SECTION "B-B" SHEET 263/455
4. B.O.H.-DENOTES BOTTOM OF HAUNCH. B.O.S.-DENOTES BOTTOM OF SLAB T.O.S.-DENOTES TOP OF SLAB

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19/27

## SLAB PLAN

WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

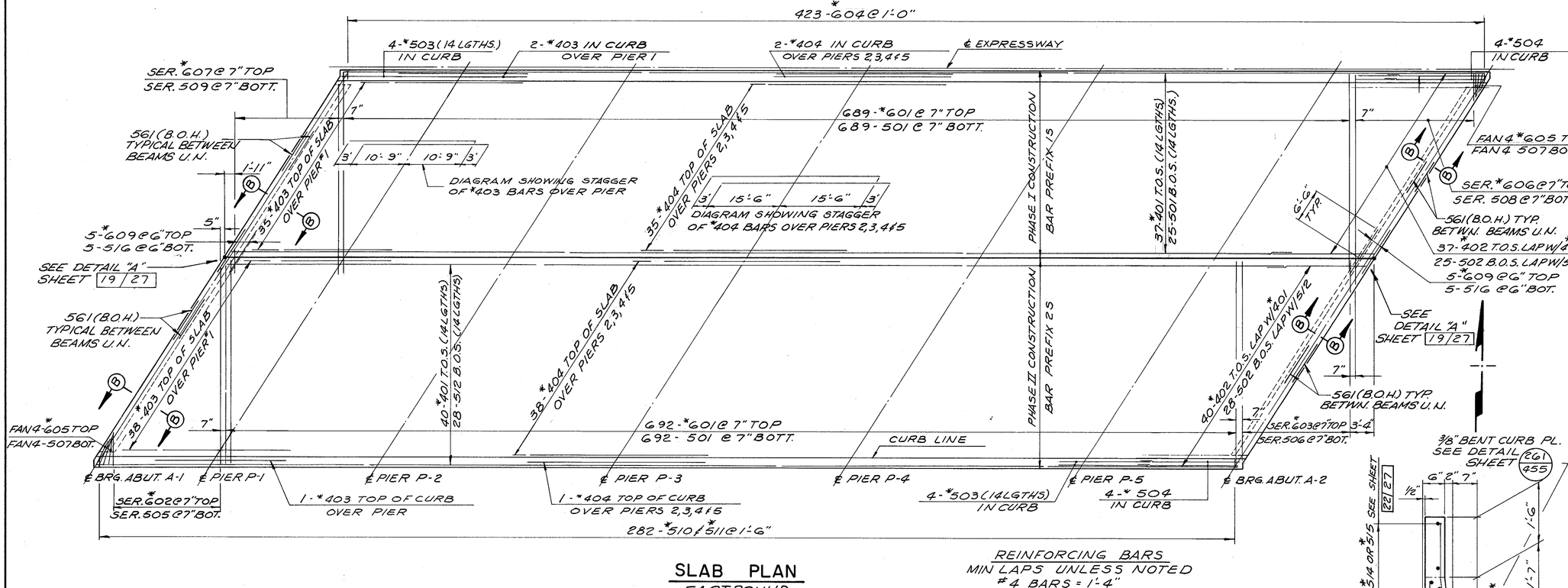
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | JAP | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

424/455

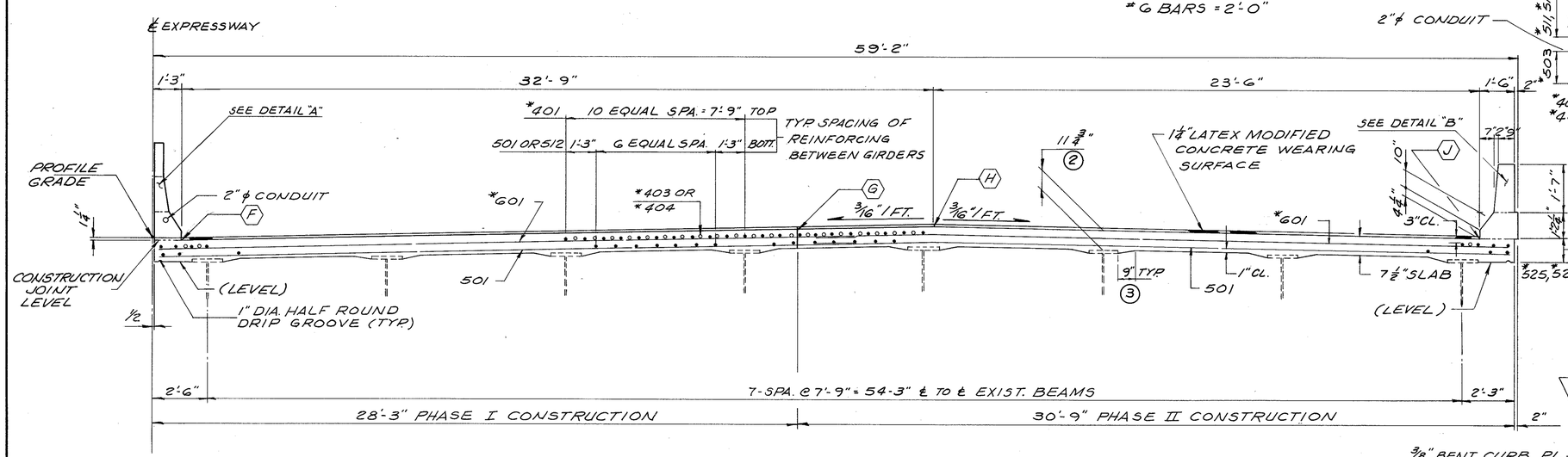
# AKRON INNERBELT
## SUM - 59 - 0.00
## NOTES

1. THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.
2. THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF EXISTING BEAMS WAS OBTAINED USING THE TOP OF BEAM ELEVATIONS FROM EXISTING PLANS. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATIONS FROM IT MAY OCCUR BECAUSE THE TOP OF BEAM OF BEAM ELEVATIONS ARE NOT EXACTLY AS SHOWN ON THE EXISTING PLANS.
3. A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.)
4. THE PREFIX "15" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PHASE I CONSTRUCTION. THE PREFIX "25" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN PHASE II CONSTRUCTION.
5. FOR SCREED ELEVATION TABLES SEE SHEET 21/27.
6. TRANSVERSE AND LONGITUDINAL REINFORCEMENT SHALL BE FIELD BENT AS REQUIRED PAYMENT SHALL BE INCLUDED WITH ITEM 509.
7. ALL REINFORCING BARS SHOWN THUS * ARE EPOXY COATED.
8. PROFILE GRADE IS GIVEN TO TOP OF FINISHED PAVEMENT.
9. FOR LOCATION OF LIGHT STANDARD SUPPORTS, SEE GENERAL PLAN SHEET 3/27
10. FOR ELECTRICAL CONDUIT ON BRIDGE SEE LIGHTING PLANS.
11. FOR SCUPPER LOCATIONS SEE GENERAL PLAN SHEET 3/27.
12. FOR ADDITIONAL NOTES AND DETAILS SEE SHEETS 19/27, 21/27 THRU 23/27

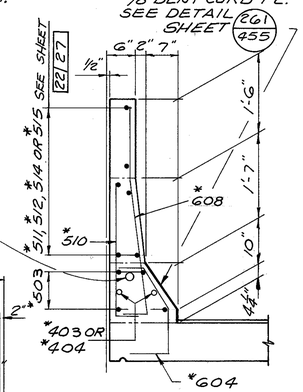



## SLAB PLAN
EASTBOUND

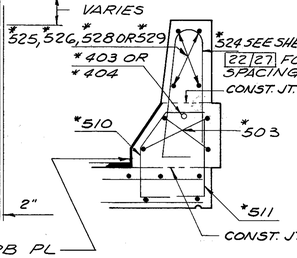
REINFORCING BARS
MIN LAPS UNLESS NOTED
#4 BARS = 1'-4"
#5 BARS = 1'-8"
#6 BARS = 2'-0"




## TRANSVERSE SECTION
EASTBOUND STRUCTURE LANES




## DETAIL A
FOR SPACING OF *510 & *608 BARS SEE SHEET 22/27




## DETAIL B

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# SLAB PLAN AND TRANSVERSE SECTION
20/27

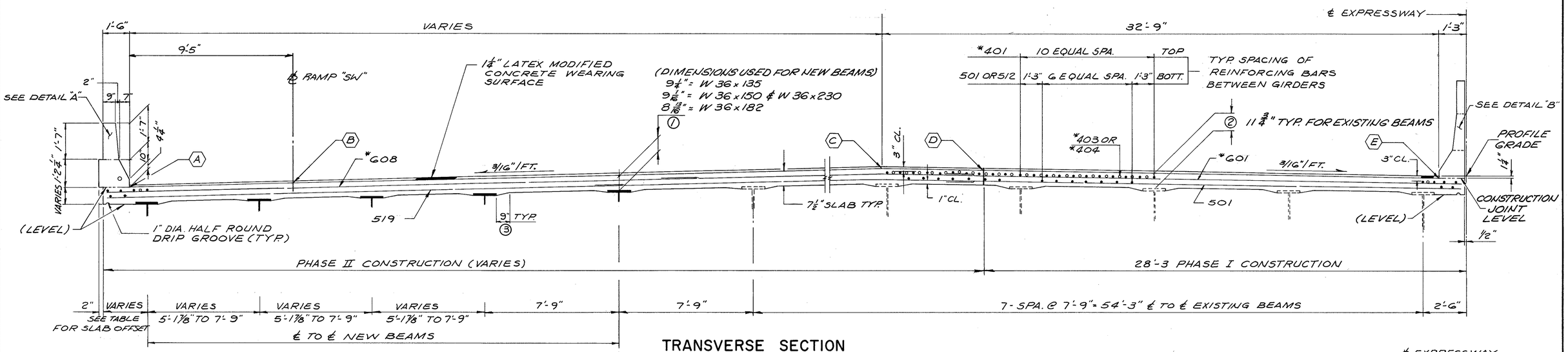
WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO — SUMMIT COUNTY
STA. 431+1134 TO STA. 435+37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JWW | | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

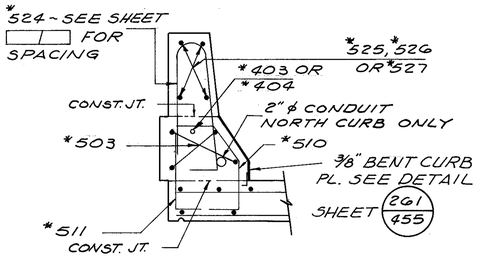
425/455

AKRON INNERBELT
SUM-59-0.00




## TRANSVERSE SECTION

WEST BOUND LANE STRUCTURE




## DETAIL A

### NOTES

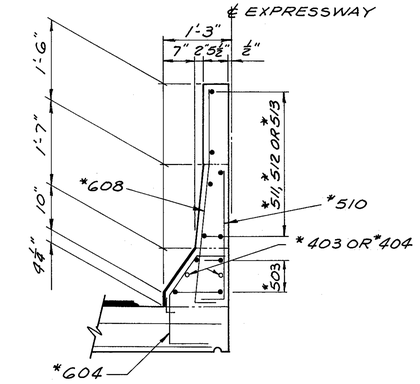
(1) FOR NOTES & DETAILS SEE SHEET 19/27, 20/27, 22/27 & 23/27.

(2) THE SCREED ELEVATIONS SHOWN ARE TO THE TOP OF THE PORTLAND CEMENT DECK AND ARE THOSE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE AND THE 1¼" CONCRETE WEARING SURFACE.

(3) SLAB OFFSET DIMENSIONS ARE GIVEN PERPENDICULAR TO ℄ BEAM.

TABLE OF SCREED ELEVATIONS & SLAB OFFSET

| LOCATION | (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (J) | SLAB OFFSET |
|---|---|---|---|---|---|---|---|---|---|---|
| ℄ BRG. A-1 | 987.940 | 988.027 | 988.403 | 988.316 | 987.720 | 987.704 | 987.951 | 988.004 | 987.486 | 2'-6 3/16" |
| 1/4 PT. | 988.053 | 988.140 | 988.559 | 988.433 | 987.836 | 987.820 | 988.068 | 988.121 | 987.602 | 2'-6 3/8" |
| 1/2 PT. | 988.161 | 988.249 | 988.670 | 988.544 | 987.947 | 987.930 | 988.179 | 988.232 | 987.714 | 2'-6 5/8" |
| 3/4 PT. | 988.266 | 988.353 | 988.775 | 988.649 | 988.052 | 988.036 | 988.284 | 988.337 | 987.819 | 2'-6 7/8" |
| ℄ PIER P1 | 988.370 | 988.458 | 988.881 | 988.754 | 988.158 | 988.142 | 988.390 | 988.443 | 987.924 | 2'-7 1/16" |
| 1/4 PT. | 988.526 | 988.614 | 989.041 | 988.914 | 988.317 | 988.301 | 988.550 | 988.602 | 988.084 | 2'-7 3/8" |
| 1/2 PT. | 988.680 | 988.767 | 989.198 | 989.071 | 988.474 | 988.458 | 988.707 | 988.760 | 988.241 | 2'-7 11/16" |
| 3/4 PT. | 988.828 | 988.915 | 989.347 | 989.221 | 988.625 | 988.609 | 988.856 | 988.909 | 988.391 | 2'-8 1/16" |
| ℄ PIER P2 | 988.981 | 989.069 | 989.503 | 989.376 | 988.781 | 988.764 | 989.012 | 989.065 | 988.546 | 2'-8 3/8" |
| 1/4 PT. | 989.217 | 989.307 | 989.742 | 989.615 | 989.016 | 989.000 | 989.251 | 989.785 | 988.785 | 2'-8 13/16" |
| 1/2 PT. | 989.443 | 989.534 | 989.971 | 989.844 | 989.236 | 989.220 | 989.480 | 989.532 | 989.014 | 2'-9 1/4" |
| 3/4 PT. | 989.642 | 989.731 | 990.175 | 990.048 | 989.450 | 989.434 | 989.684 | 989.737 | 989.218 | 2'-9 11/16" |
| ℄ PIER P3 | 989.838 | 989.925 | 990.375 | 990.249 | 989.653 | 989.636 | 989.884 | 989.937 | 989.418 | 2'-10 1/8" |
| 1/4 PT. | 990.065 | 990.155 | 990.607 | 990.480 | 989.882 | 989.866 | 990.116 | 990.169 | 989.650 | 2'-10 5/8" |
| 1/2 PT. | 990.291 | 990.382 | 990.839 | 990.712 | 990.112 | 990.096 | 990.384 | 990.400 | 989.882 | 2'-11 1/16" |
| 3/4 PT. | 990.493 | 990.582 | 991.043 | 990.916 | 990.318 | 990.302 | 990.552 | 990.605 | 990.086 | 2'-11 1/2" |
| ℄ PIER P4 | 990.694 | 990.781 | 991.248 | 991.121 | 990.525 | 990.509 | 990.756 | 990.809 | 990.291 | 2'-11 15/16" |
| 1/4 PT. | 990.927 | 991.018 | 991.484 | 991.358 | 990.759 | 990.743 | 990.993 | 991.046 | 990.528 | 3'- 3/8" |
| 1/2 PT. | 991.156 | 991.248 | 991.719 | 991.593 | 990.992 | 990.976 | 991.228 | 991.281 | 990.763 | 3'- 1 3/16" |
| 3/4 PT. | 991.356 | 991.447 | 991.922 | 991.796 | 991.197 | 991.181 | 991.431 | 991.484 | 990.965 | 3'- 1 5/16" |
| ℄ PIER P5 | 991.550 | 991.638 | 992.120 | 991.993 | 991.397 | 991.381 | 991.629 | 991.681 | 991.163 | 3'- 1 5/16" |
| 1/4 PT. | 991.705 | 991.794 | 992.277 | 992.150 | 991.553 | 991.537 | 991.786 | 991.838 | 991.320 | 3'- 2 5/8" |
| 1/2 PT. | 991.864 | 991.955 | 992.440 | 992.313 | 991.715 | 991.699 | 991.949 | 992.002 | 991.483 | 3'- 3 11/16" |
| 3/4 PT. | 992.012 | 992.102 | 992.593 | 992.466 | 991.868 | 991.852 | 992.102 | 992.154 | 991.636 | 3'- 5 3/16" |
| ℄ BRG. A-2 | 992.141 | 992.235 | 992.732 | 992.605 | 992.009 | 991.993 | 992.241 | 992.293 | 991.775 | 3'- 7 3/8" |




## DETAIL B

FOR SPACING OF *510 & *608 BARS SEE SHEET 22/27.

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CLEVELAND, OHIO — AKRON, OHIO

21/27

## TRANSVERSE SECTION

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953

AKRON OHIO — SUMMIT COUNTY

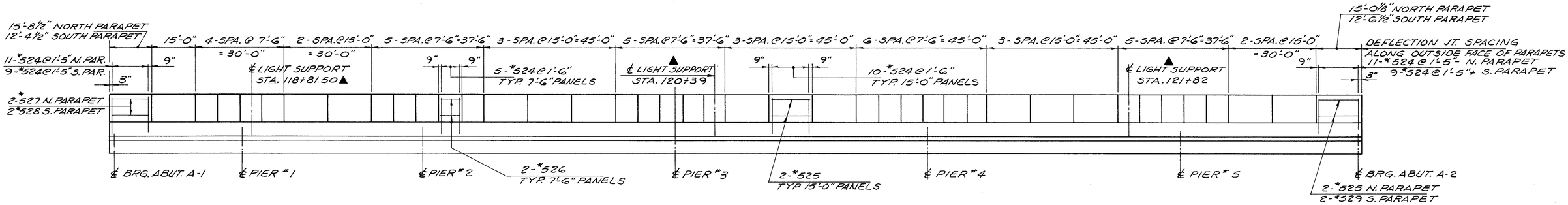
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | WW | JDH | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

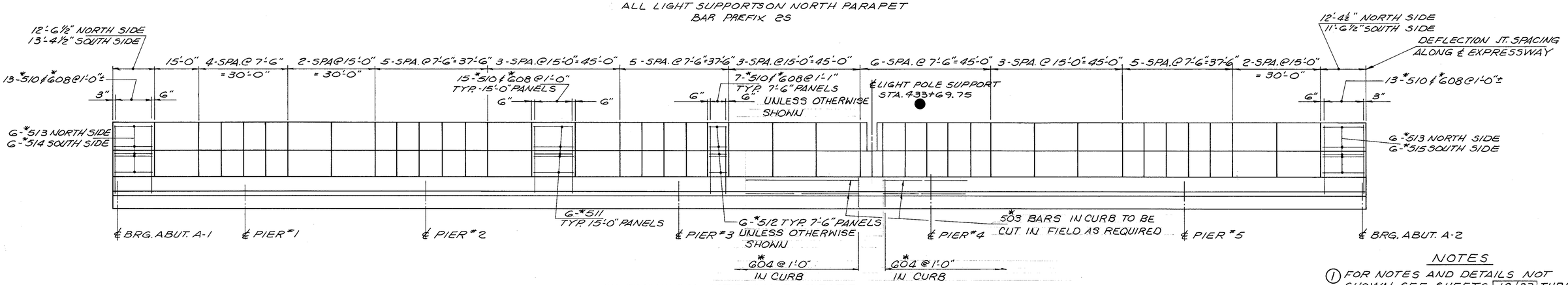
426/455

AKRON INNERBELT
SUM-59-0.00




## ELEVATION NORTH & SOUTH PARAPETS

PHASE II CONSTRUCTION
ALL LIGHT SUPPORTS ON NORTH PARAPET
BAR PREFIX 2S




## ELEVATION MEDIAN BARRIER

SOUTH SIDE SHOWN
NORTH SIDE SIMILAR
PHASE I CONSTRUCTION
BAR PREFIX 15

### NOTES

(1) FOR NOTES AND DETAILS NOT SHOWN SEE SHEETS 19/27 THRU 21/27 & 23/27.

(2) ▲ FOR LIGHT SUPPORT DETAILS SEE SHEET 261/455.

● FOR LIGHT POLE SUPPORT DETAILS SEE SHEET 23/27.

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22/27

# CONCRETE BARRIER DETAILS

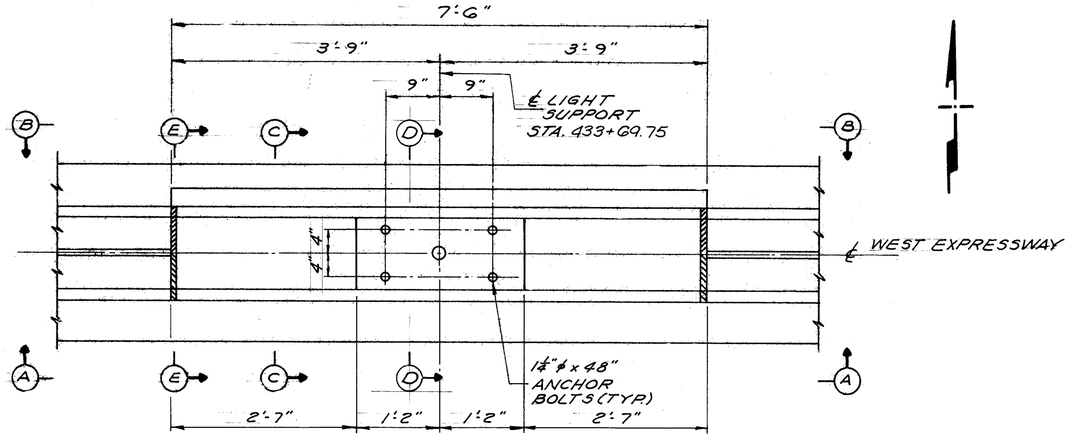
WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | DWN | JJP | 11-8-82 | |

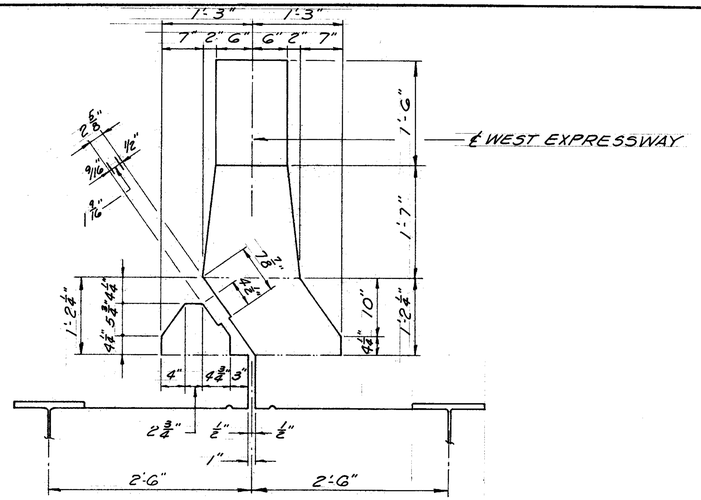
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

427/455

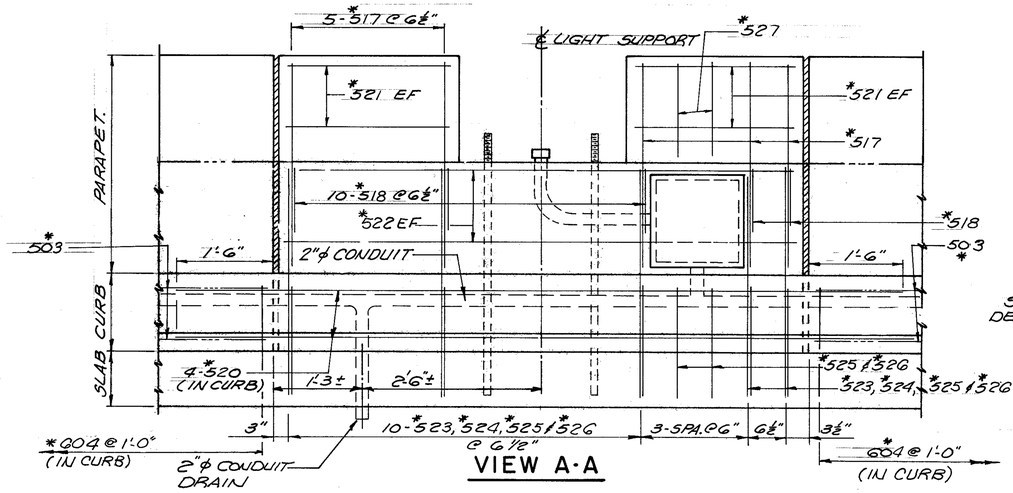
AKRON INNERBELT
SUM-59-0.00



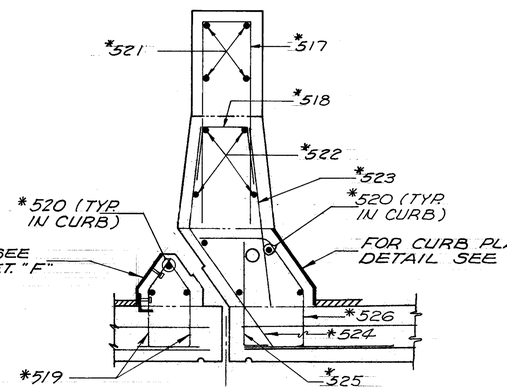

## PLAN MEDIAN LIGHT SUPPORT



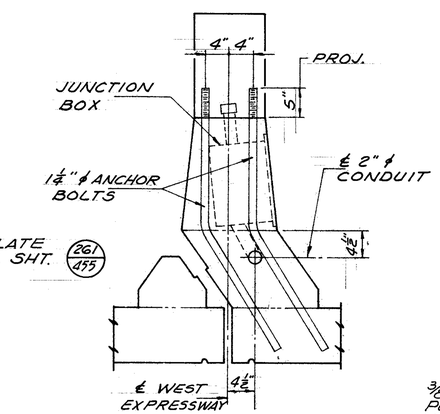

## DETAIL FORMING DIMENSIONS



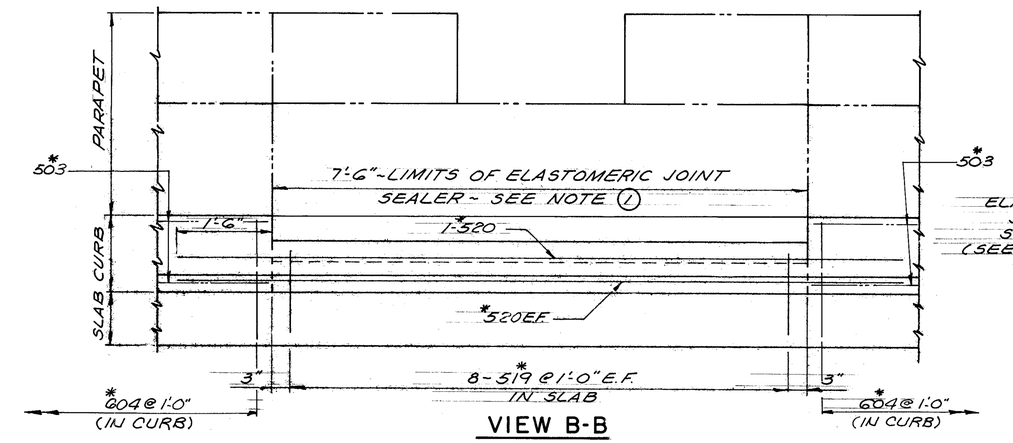

## VIEW A-A



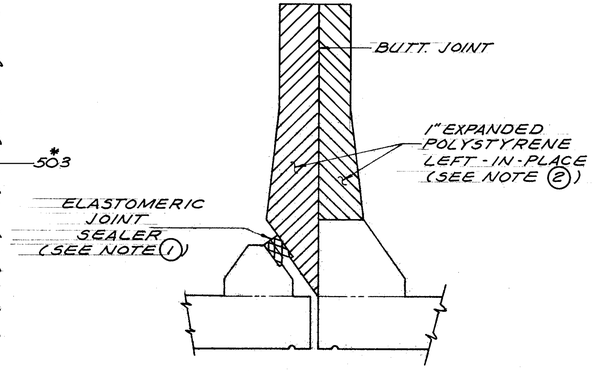

## SECTION C-C



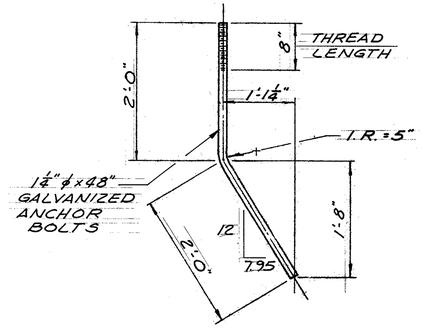

## SECTION D-D




## VIEW B-B

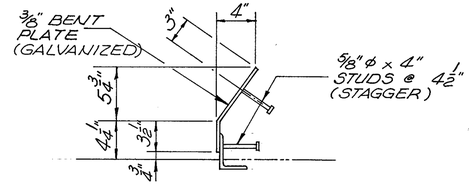



## SECTION E-E




## ANCHOR BOLT DETAIL

(4-REQUIRED, EACH SUPPORT)




## DETAIL F

FOR ADDITIONAL DETAILS NOT SHOWN SEE CURB PLATE DETAIL SHEET 261/455

### NOTES

1. ELASTOMERIC JOINT SEALER (COMPRESSION TYPE-LENGTH 7'-6" EA.) TO BE INCLUDED WITH ITEM 511-CLASS S CONCRETE SUPERSTRUCTURE FOR PAYMENT.
2. 1" EXPANDED POLYSTYRENE TO BE INCLUDED WITH ITEM 511-CLASS S CONCRETE SUPERSTRUCTURE FOR PAYMENT.
3. REINFORCING BARS SHOWN THUS (*) ARE TO BE EPOXY-COATED.
4. THE PREFIX IS SHALL BE ADDED TO ALL REINFORCING BAR MARKS SHOWN ON THIS SHEET.
5. FIELD BENDING OR CUTTING OF REBARS SHALL BE INCLUDED WITH ITEM-509, REINFORCING STEEL FOR PAYMENT.
6. FOR LIGHTING DETAILS NOT SHOWN SEE ROADWAY LIGHTING PLANS.

### ABBREVIATIONS USED ARE

NF - NEAR FACE
FF - FAR FACE
EF - EACH FACE
TYP - TYPICAL
PROJ - PROJECTION
I.R. - INSIDE RADIUS

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

# LIGHT POLE SUPPORT DETAILS

23/27

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL
BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RER | DT | | JWR | DP | 4-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

428/455

AKRON INNERBELT
SUM - 59 - 0.00

FOR NOTES SEE SHEET 27/27.

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| **ABUTMENT A-1 PHASE 1** | | | | | | | | | |
| 1IA501 | 8 | 33'-6" | ST. | | | | | | 280 |
| 1IA502 | 8 | 35'-4" | ST. | | | | | | 295 |
| * 1IA503 | 5 | 2'-10" | 1 | 6" | 2'-5" | | | | 15 |
| * 1IA504 | 10 | 1'-2" | ST. | | | | | | 12 |
| * 1IA505 | 10 | 2'-4" | ST. | | | | | | 24 |
| 1IA506 | 2 | 4'-4" | ST. | | | | | | 9 |
| 1IAG01 | 69 | 6'-1" | 2 | 2'-9" | 11" | | | | 630 |
| 1IAG02 | 69 | 7'-5" | 2 | 3'-2" | 1'-5" | | | | 769 |
| 1IAG03 | 2 | 4'-5" | ST. | | | | | | 13 |
| * 1IAG04 | 5 | 3'-6" | 51 | 4" | 6" | 8" | 1'-3" | | 26 |
| * 1IAG05 | 5 | 4'-2" | 52 | | | | | | 31 |
| 1IA801 | 39 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 503 |
| NON EPOXY COATED = 2499 | | | | | | | | | |
| EPOXY COATED = 108 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| **ABUTMENT A-1 PHASE 2** | | | | | | | | | |
| 12A501 | 8 | 35'-4" | ST. | | | | | | 295 |
| 12A502 | 8 | 33'-6" | ST. | | | | | | 280 |
| * 12A503 | 5 | 2'-10" | 1 | 6" | 2'-5" | | | | 15 |
| * 12A504 | 10 | 1'-2" | ST. | | | | | | 12 |
| * 12A505 | 10 | 2'-4" | ST. | | | | | | 24 |
| 12A506 | 2 | 4'-8" | ST. | | | | | | 10 |
| 12AG01 | 69 | 6'-1" | 2 | 2'-9" | 11" | | | | 630 |
| 12AG02 | 69 | 7'-9" | 2 | 3'-4" | 1'-5" | | | | 803 |
| 12AG03 | 2 | 10'-3" | 2 | 4'-7" | 1'-5" | | | | 31 |
| * 12AG04 | 5 | 3'-6" | 51 | 4" | 6" | 8" | 1'-3" | | 26 |
| * 12AG05 | 5 | 4'-2" | 52 | | | | | | 31 |
| 12A801 | 39 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 503 |
| NON EPOXY COATED = 2552 | | | | | | | | | |
| EPOXY COATED = 108 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| **ABUTMENT A-2 PHASE 1** | | | | | | | | | |
| 21A501 | 22 | 9'-1" | 2 | 2'-0" | 5'-4" | | | | 208 |
| 21A502 | 23 | 9'-0" | 1 | 8" | 8'-5" | | | | 216 |
| 21A503 | 23 | 2'-0" | ST. | | | | | | 48 |
| 21A504 | 1 | 6'-4" | ST. | | | | | | 7 |
| 21A505 | 9 | 5'-0" | ST. | | | | | | 47 |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 21A506 | 12 | 36'-9" | ST. | | | | | | 460 |
| 21A507 | 4 | 5'-1" | 16 | 2'-0" | 1'-3" | 1'-8" | 2'-0" | | 21 |
| 21A508 | 4 | 35'-8" | ST. | | | | | | 149 |
| 21A509 | 1 | 9'-9" | ST. | | | | | | 10 |
| 21A510 | 3 | 35'-9" | ST. | | | | | | 112 |
| 21A511 | 13 | 11'-2" | 14 | 2'-4" | 3'-0" | | | | 151 |
| 21A512 | 8 | 10'-8" | ST. | | | | | | 89 |
| 21A513 | 7 | 9'-3" | 2 | 4'-2" | 1'-2" | | | | 68 |
| 21A514 | 6 | 15'-0" | ST. | | | | | | 94 |
| * 21A515 | 7 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 41 |
| * 21A516 | 6 | 5'-4" | ST. | | | | | | 33 |
| * 21A517 | 8 | 2'-8" | 6 | 2'-1" | | | | | 22 |
| * 21A518 | 8 | 4'-7" | ST. | | | | | | 38 |
| 21A519 | 1 | 7'-11" | 1 | 2'-0" | 6'-0" | | | | 8 |
| * 21A520 | 8 | 13'-2" | ST. | | | | | | 110 |
| * 21A521 | 8 | 4'-4" | ST. | | | | | | 36 |
| 21A522 | 2 | 6'-5" | 16 | 2'-0" | 2'-7" | 1'-9" | 2'-0" | | 13 |
| 21A523 | 2 | 7'-3" | 1 | 2'-0" | 5'-4" | | | | 15 |
| 21A524 | 1 | 5'-11" | 1 | 2'-0" | 4'-0" | | | | 6 |
| 21A531 | 1 | 34'-7" | ST. | | | | | | 36 |
| 21A532 | 2 | 32'-3" | ST. | | | | | | 67 |
| 21A533 | 2 | 33'-4" | ST. | | | | | | 70 |
| SERIES OF | 1-SET OF 3 = | 32'-3" TO | ST. | | | | | 6½" | 103 |
| 21A534 | 3 BAR | 33'-4" | | | | | | | |
| 21A535 | 3 | 32'-6" | ST. | | | | | | 102 |
| SERIES OF | 1-SET OF 3 = | 32'-6" TO | ST. | | | | | 6" | 103 |
| 21A536 | 3 BAR | 33'-6" | | | | | | | |
| 21A537 | 2 | 33'-6" | ST. | | | | | | 70 |
| * 21A538 | 10 | 4'-4" | ST. | | | | | | 45 |
| * 21A539 | 10 | 13'-9" | ST. | | | | | | 143 |
| * 21A540 | 6 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 35 |
| * 21A541 | 8 | 3'-1" | ST | | | | | | 26 |
| * 21A542 | 8 | 2'-8" | 6 | 2'-1" | | | | | 22 |
| 21AG01 | 22 | 16'-0" | 3 | 8'-5" | 5'-4" | 2'-7" | | | 529 |
| 21AG02 | 1 | 24'-2" | 2 | 11'-6" | 1'-6" | | | | 36 |
| 21AG03 | 36 | 11'-9" | 2 | 5'-4" | 1'-5" | | | | 635 |
| 21AG04 | 36 | 6'-7" | 2 | 3'-0" | 11" | | | | 356 |
| 21AG05 | 36 | 5'-1" | 2 | 2'-0" | 1'-5" | | | | 275 |
| 21AG06 | 7 | 21'-6" | 2 | 10'-4" | 1'-2" | | | | 226 |
| 21AG07 | 2 | 14'-6" | 1 | 6'-0" | 8'-8" | | | | 44 |
| 21AG08 | 2 | 8'-5" | ST. | | | | | | 25 |
| * 21AG09 | 6 | 6'-1" | 19 | 9" | 6" | 8" | 4'-8" | | 55 |
| * 21AG10 | 1 | 3'-8" | 19 | 8" | 5" | 8" | 2'-5" | | 6 |
| * 21AG11 | 1 | 3'-8" | 19 | 8" | 4" | 8" | 2'-5" | | 6 |
| * 21AG12 | 1 | 3'-7" | 19 | 7" | 3" | 8" | 2'-5" | | 5 |
| * 21AG13 | 4 | 3'-6" | 19 | 7" | 2" | 8" | 2'-5" | | 21 |
| 21AG14 | 2 | 13'-10" | 1 | 5'-4" | 8'-8" | | | | 42 |
| 21AG31 | 67 | 6'-1" | 2 | 2'-9" | 11" | | | | 612 |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 21AG32 | 67 | 7'-5" | 2 | 3'-2" | 1'-5" | | | | 746 |
| * 21AG33 | 7 | 3'-11" | 19 | 9" | 6" | 8" | 2'-6" | | 41 |
| * 21AG34 | 1 | 3'-9" | 19 | 8" | 5" | 8" | 2'-6" | | 6 |
| * 21AG35 | 1 | 3'-9" | 19 | 8" | 4" | 8" | 2'-6" | | 6 |
| * 21AG36 | 1 | 3'-8" | 19 | 7" | 3" | 8" | 2'-6" | | 6 |
| * 21AG37 | 4 | 3'-7" | 19 | 7" | 2" | 8" | 2'-6" | | 22 |
| 21A801 | 5 | 36'-6" | ST. | | | | | | 487 |
| 21A802 | 2 | 33'-4" | ST. | | | | | | 178 |
| 21A803 | 2 | 13'-6" | ST. | | | | | | 72 |
| 21A804 | 20 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 258 |
| 21A805 | 4 | 11'-6" | ST. | | | | | | 123 |
| 21A831 | 40 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 516 |
| NON EPOXY COATED = 7433 | | | | | | | | | |
| EPOXY COATED = 725 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| **ABUTMENT A-2 PHASE 2** | | | | | | | | | |
| 22A501 | 32 | 9'-1" | 2 | 2'-0" | 5'-4" | | | | 303 |
| 22A502 | 34 | 9'-0" | 1 | 8" | 8'-5" | | | | 319 |
| 22A503 | 33 | 7'-2" | 2 | 2'-0" | 3'-5" | | | | 247 |
| 22A504 | 1 | 6'-0" | 1 | 2'-0" | 4'-1" | | | | 6 |
| 22A505 | 1 | 6'-7" | ST. | | | | | | 7 |
| 22A506 | 6 | 3'-11" | 12 | 2'-0" | 1'-8" | | | | 25 |
| 22A507 | 1 | 9'-10" | ST. | | | | | | 10 |
| 22A508 | 19 | 47'-2" | ST. | | | | | | 935 |
| 22A510 | 10 | 11'-2" | 14 | 2'-4" | 3'-0" | | | | 116 |
| 22A511 | 8 | 9'-5" | ST. | | | | | | 79 |
| * 22A512 | 8 | 4'-4" | ST. | | | | | | 36 |
| 22A513 | 8 | 9'-9" | 2 | 4'-5" | 1'-2" | | | | 81 |
| 22A514 | 6 | 15'-8" | ST. | | | | | | 98 |
| * 22A515 | 6 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 35 |
| * 22A516 | 5 | 5'-5" | ST. | | | | | | 28 |
| * 22A517 | 8 | 2'-8" | 6 | 2'-1" | | | | | 22 |
| * 22A518 | 8 | 4'-7" | ST. | | | | | | 38 |
| * 22A520 | 8 | 13'-8" | ST. | | | | | | 114 |
| 22A531 | 3 | 31'-11" | ST. | | | | | | 100 |
| SERIES OF | 1-SET OF 3 = | 30'-1" TO | ST. | | | | | 7" | 96 |
| 22A532 | 3 BAR | 31'-3" | | | | | | | |
| 22A533 | 2 | 31'-3" | ST. | | | | | | 65 |
| 22A534 | 2 | 30'-1" | ST. | | | | | | 63 |
| 22A535 | 3 | 35'-8" | ST. | | | | | | 112 |
| SERIES OF | 1-SET OF 3 = | 34'-7" TO | ST. | | | | | 6½" | 110 |
| 22A536 | 3 BAR | 35'-8" | | | | | | | |
| 22A537 | 2 | 34'-7" | ST. | | | | | | 72 |
| * 22A538 | 10 | 4'-4" | ST. | | | | | | 45 |

DALTON · DALTON · NEWPORT
CLEVELAND OHIO — AKRON, OHIO

24/27

# REINFORCING SCHEDULE

WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953
AKRON OHIO — SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| J.W.W. | F.F. | | D.T. | | 11-8-82 | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| * | 22A539 | 10 | 11'-8" | ST. | | | | | | 122 |
| * | 22A540 | 4 | 5'-7" | 23" | 2'-2" | 2'-5" | | | | 23 |
| * | 22A541 | 8 | 3'-1" | ST. | | | | | | 26 |
| * | 22A542 | 8 | 2'-8" | G | 2'-1" | | | | | 22 |
| | 22AG01 | 32 | 16'-0" | 3 | 8'-5" | 5'-4" | 2'-7" | | | 769 |
| | 22AG02 | 1 | 9'-8" | 1 | 2'-0" | 7'-10" | | | | 15 |
| | 22AG03 | 46 | 11'-7" | 2 | 5'-3" | 1'-5" | | | | 800 |
| | 22AG04 | 46 | 6'-7" | 2 | 3'-0" | 11" | | | | 455 |
| | 22AG05 | 46 | 5'-1" | 2 | 2'-0" | 1'-5" | | | | 351 |
| | 22AG06 | 6 | 21'-6" | 2 | 10'-4" | 1'-2" | | | | 195 |
| | 22AG08 | 2 | 8'-5" | ST. | | | | | | 25 |
| * | 22AG09 | 1 | 3'-10" | 19 | 9" | 6" | 8" | 2'-5" | | 6 |
| * | 22AG10 | 1 | 3'-8" | 19 | 8" | 5" | 8" | 2'-5" | | 6 |
| * | 22AG11 | 1 | 3'-8" | 19 | 8" | 4" | 8" | 2'-5" | | 6 |
| * | 22AG12 | 1 | 3'-7" | 19 | 7" | 3" | 8" | 2'-5" | | 5 |
| * | 22AG13 | 4 | 3'-6" | 19 | 7" | 2" | 8" | 2'-5" | | 21 |
| * | 22AG14 | 6 | 6'-3" | 19 | 9" | 6" | 8" | 4'-10" | | 56 |
| | SERIES | 2 SETS | 8'-2" | | | 5'-9" | | | | |
| | OF | OF 3 = | TO | 1 | 2'-7" | TO | | | 6" | 78 |
| | 22AG15 | 6 BAR | 9'-2" | | | 6'-9" | | | | |
| | 22AG31 | 67 | 6'-1" | 2 | 2'-9" | 11" | | | | 612 |
| | 22AG32 | 67 | 7'-9" | 2 | 3'-4" | 1'-5" | | | | 780 |
| * | 22AG33 | 5 | 3'-11" | 19 | 9" | 6" | 8" | 2'-6" | | 29 |
| * | 22AG34 | 1 | 3'-9" | 19 | 8" | 5" | 8" | 2'-6" | | 6 |
| * | 22AG35 | 1 | 3'-9" | 19 | 8" | 4" | 8" | 2'-6" | | 6 |
| * | 22AG36 | 1 | 3'-8" | 19 | 7" | 3" | 8" | 2'-6" | | 6 |
| * | 22AG37 | 4 | 3'-7" | 19 | 7" | 2" | 8" | 2'-6" | | 22 |
| | 22A801 | 7 | 47'-3" | ST. | | | | | | 883 |
| | 22A804 | 26 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 336 |
| | 22A805 | 6 | 12'-0" | ST | | | | | | 192 |
| | 22A831 | 40 | 4'-10" | 38 | 2'-7" | 1'-5" | 1'-0" | | | 516 |
| | | | NON EPOXY COATED = 8850 | | | | | | | |
| | | | EPOXY COATED = 680 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |

## PIER P-1

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 1P501 | 4 | 31'-7" | ST. | | | | | | 132 |
| 1P502 | 36 | 7'-6" | 2 | 2'-7" | 2'-7" | | | | 282 |
| 1P504 | 20 | 7'-8" | 2 | 3'-1" | 1'-9" | | | | 160 |
| 1P505 | 20 | 6'-0" | 2 | 2'-3" | 1'-9" | | | | 125 |
| 1P506 | 6 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 53 |
| 1P507 | 6 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 43 |
| 1P601 | 8 | 7'-4" | 12 | 3'-0" | 4'-4" | 6" | | | 88 |
| 1P901 | 7 | 36'-3" | 2 | 2'-7" | 31'-7" | | | | 863 |
| 1P902 | 7 | 22'-10" | ST. | | | | | | 543 |
| 1P1001 | 16 | 16'-2" | ST. | | | | | | 1113 |
| 1P1002 | 16 | 10'-3" | 1 | 2'-0" | 8'-6" | | | | 706 |
| 1P1003 | 32 | 11'-4" | 7 | 8'-6" | | | | | 1561 |
| | | NON EPOXY COATED = 5669 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | TOTAL PIER P-1 = 5669 | | | | | | | |

## PIER P-2

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 2P501 | 4 | 32'-11" | ST. | | | | | | 137 |
| 2P502 | 36 | 7'-6" | 2 | 2'-7" | 2'-7" | | | | 282 |
| 2P504 | 20 | 7'-8" | 2 | 3'-1" | 1'-9" | | | | 160 |
| 2P505 | 20 | 6'-0" | 2 | 2'-3" | 1'-9" | | | | 125 |
| 2P506 | 6 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 53 |
| 2P507 | 6 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 43 |
| 2PG01 | 8 | 8'-0" | 12 | 3'-0" | 5'-0" | 6" | | | 96 |
| 2P901 | 7 | 37'-7" | 2 | 2'-7" | 32'-11" | | | | 894 |
| 2P902 | 7 | 22'-10" | ST. | | | | | | 543 |
| 2P1001 | 16 | 16'-6" | ST. | | | | | | 1136 |
| 2P1002 | 16 | 10'-3" | 1 | 2'-0" | 8'-6" | | | | 706 |
| 2P1003 | 32 | 11'-4" | 7 | 8'-6" | | | | | 1561 |
| | | NON EPOXY COATED = 5736 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | TOTAL PIER P-2 = 5736 | | | | | | | |

## PIER P-3

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 3P501 | 4 | 35'-3" | ST. | | | | | | 147 |
| 3P502 | 12 | 7'-6" | 2 | 2'-7" | 2'-7" | | | | 94 |
| 3P503 | 16 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 114 |
| 3P504 | 16 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 142 |
| 3PG01 | 8 | 5'-9" | 12 | 3'-0" | 2'-9" | 6" | | | 69 |
| 3P901 | 5 | 39'-11" | 2 | 2'-7" | 35'-3" | | | | 679 |
| 3P902 | 5 | 29'-8" | ST. | | | | | | 504 |
| 3P1001 | 24 | 19'-9" | ST. | | | | | | 2040 |
| 3P1002 | 24 | 10'-3" | 1 | 2'-0" | 8'-6" | | | | 1059 |
| 3P1003 | 60 | 13'-4" | 7 | 10'-6" | | | | | 3442 |
| | | NON EPOXY COATED = 8290 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | TOTAL PIER P-3 = 8290 | | | | | | | |

## PIER P-4

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 4P501 | 4 | 37'-1" | ST. | | | | | | 155 |
| 4P502 | 16 | 7'-6" | 2 | 2'-7" | 2'-7" | | | | 125 |
| 4P503 | 16 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 142 |
| 4P504 | 16 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 114 |
| 4PG01 | 8 | 6'-0" | 12 | 3'-0" | 3'-0" | 6" | | | 72 |
| 4P901 | 5 | 41'-9" | 2 | 2'-7" | 37'-1" | | | | 710 |
| 4P902 | 5 | 31'-0" | ST. | | | | | | 527 |
| 4P1001 | 24 | 25'-8" | ST. | | | | | | 2651 |
| 4P1002 | 24 | 10'-3" | 1 | 2'-0" | 8'-6" | | | | 1059 |
| 4P1003 | 48 | 13'-4" | 7 | 10'-6" | | | | | 2754 |
| | | NON EPOXY COATED = 8309 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | TOTAL PIER P-4 = 8309 | | | | | | | |

## PIER P-5

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 5P501 | 4 | 38'-11" | ST. | | | | | | 162 |
| 5P502 | 16 | 7'-6" | 2 | 2'-7" | 2'-7" | | | | 125 |
| 5P503 | 16 | 8'-6" | 2 | 3'-1" | 2'-7" | | | | 142 |
| 5P504 | 16 | 6'-10" | 2 | 2'-3" | 2'-7" | | | | 114 |
| 5PG01 | 8 | 6'-5" | 12 | 3'-0" | 3'-5" | 6" | | | 77 |
| 5P901 | 5 | 43'-7" | 2 | 2'-7" | 38'-11" | | | | 741 |
| 5P902 | 5 | 32'-0" | ST. | | | | | | 544 |
| 5P1001 | 24 | 26'-7" | ST. | | | | | | 2745 |
| 5P1002 | 24 | 10'-3" | 1 | 2'-0" | 8'-6" | | | | 1059 |
| 5P1003 | 48 | 13'-4" | 7 | 10'-6" | | | | | 2754 |
| | | NON EPOXY COATED = 8463 | | | | | | | |
| | | EPOXY COATED = 0 | | | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | TOTAL PIER P-5 = 8463 | | | | | | | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

429/455

AKRON INNERBELT
SUM-59-0.00

FOR NOTES SEE SHEET 27/27.

DALTON · DALTON · NEWPORT
CLEVELAND OHIO AKRON OHIO

25/27

# REINFORCING SCHEDULE

WIDENING AND DECK REPLACEMENT OF EXPRESSWAY BRIDGE OVER BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| J.W.W. | F.F. | | D.T. | J.W.W. | 11-8-82 | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SUPERSTRUCTURE PHASE I | | | | | | |
| * | 15401 | 1036 | 30'-0" | ST. | | | | | | 20761 |
| * | 15402 | 74 | 20'-9" | ST. | | | | | | 1026 |
| * | 15403 | 74 | 24'-6" | ST. | | | | | | 1211 |
| * | 15404 | 284 | 34'-0" | ST. | | | | | | 6450 |
| | 15501 | 2079 | 30'-0" | ST. | | | | | | 65052 |
| | 15502 | 50 | 25'-4" | ST. | | | | | | 1321 |
| * | 15503 | 112 | 30'-0" | ST. | | | | | | 3504 |
| * | 15504 | 8 | 25'-4" | ST. | | | | | | 211 |
| | SERIES | 1-SET | 4'-5" | | | | | | | |
| | OF | OF 30= | TO | ST. | | | | | 11 1/16" | 557 |
| | 15505 | 30 BAR | 31'-2" | | | | | | | |
| | SERIES | 1-SET | 4'-1" | | | | | | | |
| | OF | OF 28= | TO | ST. | | | | | 11 1/16" | 483 |
| | 15506 | 28 BAR | 29'-0" | | | | | | | |
| | 15507 | 8 | 4'-6" | ST. | | | | | | 38 |
| | SERIES | 1-SET | 4'-5" | | | | | | | |
| | OF | OF 31= | TO | ST. | | | | | 11 1/16" | 590 |
| | 15508 | 31 BAR | 32'-1" | | | | | | | |
| | SERIES | 1-SET | 4'-9" | | | | | | | |
| | OF | OF 27= | TO | ST. | | | | | 11 1/16" | 472 |
| | 15509 | 27 BAR | 28'-9" | | | | | | | |
| * | 15510 | 822 | 2'-11" | 1 | 6" | 2'-6" | | | | 2501 |
| * | 15511 | 168 | 14'-6" | ST. | | | | | | 2541 |
| * | 15512 | 300 | 7'-0" | ST. | | | | | | 2190 |
| * | 15513 | 12 | 12'-0" | ST. | | | | | | 150 |
| * | 15514 | 6 | 12'-10" | ST. | | | | | | 80 |
| * | 15515 | 6 | 11'-0" | ST. | | | | | | 69 |
| | 15516 | 20 | 9'-0" | ST. | | | | | | 188 |
| * | 15517 | 8 | 6'-1" | 2 | 2'-10" | 8" | | | | 51 |
| * | 15518 | 12 | 2'-1" | 17 | 10" | 1" | 8" | | | 26 |
| * | 15519 | 16 | 2'-1" | 16 | 9" | 1'-0" | 5" | 6" | | 35 |
| * | 15520 | 7 | 10'-6" | ST. | | | | | | 77 |
| * | 15521 | 8 | 2'-2" | ST. | | | | | | 18 |
| * | 15522 | 4 | 6'-11" | ST. | | | | | | 29 |
| * | 15523 | 12 | 2'-7" | ST. | | | | | | 32 |
| * | 15524 | 12 | 5'-3" | 61 | | | | | | 66 |
| * | 15525 | 12 | 2'-4" | 1 | 9" | 1'-8" | | | | 29 |
| * | 15526 | 14 | 3'-1" | 51 | 9" | 4" | 6" | 1'-2" | | 45 |
| * | 15527 | 2 | 2'-11" | 2 | 1'-3" | 8" | | | | 6 |
| | 15560 | 104 | 2'-7" | 16 | 7" | 1'-4" | 9" | 10" | | 280 |
| | 15561 | 24 | 8'-9" | ST. | | | | | | 219 |
| | 15562 | 8 | 2'-6" | ST. | | | | | | 21 |
| * | 15601 | 1379 | 30'-2" | ST. | | | | | | 62483 |
| * | SERIES | 1-SET | 4'-5" | | | | | | | |
| | OF | OF 30= | TO | ST. | | | | | 11 1/16" | 802 |
| | 15602 | 30 BAR | 31'-2" | | | | | | | |
| * | SERIES | 1-SET | 4'-1" | | | | | | | |
| | OF | OF 28= | TO | ST. | | | | | 11 1/16" | 696 |
| | 15603 | 28 BAR | 29'-0" | | | | | | | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| * | 15604 | 846 | 2'-6" | 51 | 4" | 4" | 6" | 1'-1" | | 3177 |
| * | 15605 | 8 | 4'-6" | ST. | | | | | | 54 |
| * | SERIES | 1 SET | 4'-5" | | | | | | | |
| | OF | OF 31= | TO | ST. | | | | | 11 1/16" | 850 |
| | 15606 | 31 BAR | 32'-1" | | | | | | | |
| * | SERIES | 1 SET | 4'-9" | | | | | | | |
| | OF | OF 27= | TO | ST. | | | | | 11 1/16" | 679 |
| | 15607 | 27 BAR | 28'-9" | | | | | | | |
| * | 15608 | 822 | 4'-2" | 52 | | | | | | 5144 |
| * | 15609 | 20 | 9'-0" | ST. | | | | | | 270 |
| | | | NON EPOXY COATED = 69221 | | | | | | | |
| | | | EPOXY COATED = 115263 | | | | | | | |
| | (*) | DENOTES BARS TO BE EPOXY COATED | | | | | | | | |
| | | | | SUPERSTRUCTURE PHASE 2 | | | | | | |
| * | 25401 | 1694 | 30'-0" | ST. | | | | | | 33948 |
| * | 25402 | 88 | 20'-9" | ST. | | | | | | 1220 |
| * | 25403 | 128 | 24'-6" | ST. | | | | | | 2095 |
| * | 25404 | 512 | 34'-0" | ST. | | | | | | 11629 |
| * | 25405 | 33 | 26'-3" | ST. | | | | | | 579 |
| | 25501 | 692 | 30'-4" | ST. | | | | | | 21893 |
| | 25502 | 68 | 25'-4" | ST. | | | | | | 1797 |
| * | 25503 | 112 | 30'-0" | ST. | | | | | | 3504 |
| * | 25504 | 4 | 25'-4" | ST. | | | | | | 106 |
| | SERIES | 1-SET | 4'-9" | | | | | | | |
| | OF | OF 28= | TO | ST. | | | | | 11 1/16" | 503 |
| | 25505 | 28 BAR | 29'-8" | | | | | | | |
| | SERIES | 1-SET | 4'-10" | | | | | | | |
| | OF | OF 27= | TO | ST. | | | | | 11 1/16" | 474 |
| | 25506 | 27 BAR | 21'-10" | | | | | | | |
| | 25507 | 8 | 4'-6" | ST. | | | | | | 38 |
| | SERIES | 1-SET | 4'-0" | | | | | | | |
| | OF | OF 40= | TO | ST. | | | | | 11 1/16" | 918 |
| | 25508 | 40 BAR | 40'-0" | | | | | | | |
| | SERIES | 1-SET | 9'-7" | | | | | | | |
| | OF | OF 30= | TO | ST. | | | | | 11 1/16" | 718 |
| | 25509 | 30 BAR | 36'-4" | | | | | | | |
| * | 25510 | 568 | 3'-0" | 51 | 9" | 4" | 6" | 1'-1" | | 1777 |
| * | 25511 | 568 | 2'-3" | 1 | 10" | 1'-6" | | | | 1333 |
| | 25512 | 1274 | 30'-0" | ST. | | | | | | 39863 |
| | 25513 | 115 | 27'-10" | ST. | | | | | | 3338 |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | 25514 | 115 | 29'-2" | ST. | | | | | | 3498 |
| | 25515 | 115 | 30'-6" | ST. | | | | | | 3658 |
| | 25516 | 115 | 31'-10" | ST. | | | | | | 3818 |
| | 25517 | 115 | 33'-2" | ST. | | | | | | 3978 |
| | 25518 | 113 | 34'-6" | ST. | | | | | | 4066 |
| | 25519 | 680 | 36'-10" | ST. | | | | | | 26124 |
| | 25520 | 23 | 31'-3" | ST. | | | | | | 750 |
| * | 25521 | 4 | 31'-3" | ST. | | | | | | 130 |
| | SERIES | 1-SET | 4'-6" | | | | | | | |
| | OF | OF 42= | TO | ST. | | | | | 10 13/16" | 1008 |
| | 25522 | 42 BAR | 41'-6" | | | | | | | |
| | SERIES | 1-SET | 5'-10" | | | | | | | |
| | OF | OF 22= | TO | ST. | | | | | 11 1/16" | 356 |
| | 25523 | 22 BAR | 25'-2" | | | | | | | |
| * | 25524 | 570 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 3319 |
| * | 25525 | 116 | 14'-6" | ST. | | | | | | 1754 |
| * | 25526 | 200 | 7'-0" | ST. | | | | | | 1460 |
| * | 25527 | 4 | 15'-2" | ST. | | | | | | 63 |
| * | 25528 | 4 | 11'-10" | ST. | | | | | | 49 |
| * | 25529 | 4 | 12'-0" | ST. | | | | | | 50 |
| | 25560 | 200 | 2'-7" | 16 | 7" | 1'-4" | 9" | 10" | | 539 |
| | 25561 | 28 | 8'-9" | ST. | | | | | | 256 |
| | 25562 | 14 | 5'-9" | ST. | | | | | | 84 |
| * | 25570 | 15 | 6'-4" | 4 | 11" | 2'-0" | 1'-6" | | | 99 |
| * | 25601 | 692 | 30'-5" | ST. | | | | | | 31615 |
| * | SERIES | 1-SET | 4'-9" | | | | | | | |
| | OF | OF 28= | TO | ST. | | | | | 11 1/16" | 724 |
| | 25602 | 28 BAR | 29'-8" | | | | | | | |
| * | SERIES | 1-SET | 4'-10" | | | | | | | |
| | OF | OF 27= | TO | ST. | | | | | 11 1/16" | 683 |
| | 25603 | 27 BAR | 28'-10" | | | | | | | |
| * | 25605 | 8 | 4'-6" | ST. | | | | | | 54 |
| * | SERIES | 1-SET | 4'-0" | | | | | | | |
| | OF | OF 40= | TO | ST. | | | | | 11 1/16" | 1322 |
| | 25606 | 40 BAR | 40'-0" | | | | | | | |
| * | SERIES | 1-SET | 6'-0" | | | | | | | |
| | OF | OF 30= | TO | ST. | | | | | 11 1/16" | 873 |
| | 25607 | 30 BAR | 32'-9" | | | | | | | |
| * | 25608 | 680 | 33'-4" | ST. | | | | | | 34045 |
| * | SERIES | 1-SET | 4'-6" | | | | | | | |
| | OF | OF 42= | TO | ST. | | | | | 10 13/16" | 1451 |
| | 25609 | 42 BAR | 41'-6" | | | | | | | |
| * | 25610 | 115 | 31'-10" | ST. | | | | | | 5499 |
| * | 25611 | 115 | 33'-2" | ST. | | | | | | 5729 |
| * | 25612 | 115 | 34'-6" | ST. | | | | | | 5959 |
| * | 25613 | 115 | 35'-10" | ST. | | | | | | 6189 |
| * | 25614 | 115 | 37'-2" | ST. | | | | | | 6420 |
| * | 25615 | 113 | 38'-6" | ST. | | | | | | 6534 |
| * | SERIES | 1-SET | 9'-8" | | | | | | | |
| | OF | OF 22= | TO | ST. | | | | | 11 1/16" | 639 |
| | 25616 | 22 BAR | 29'-0" | | | | | | | |

SEE SHEET 27/27 FOR CONTINUATION.

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

430
455

AKRON INNERBELT
SUM - 59 - 0.00

FOR NOTES SEE SHEET 1/1.

DALTON • DALTON • NEWPORT
CLEVELAND, OHIO AKRON, OHIO

26/27

# REINFORCING SCHEDULE

WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| J.W.W. | F.F. | | D.T. | J.P. | 11-8-82 | |

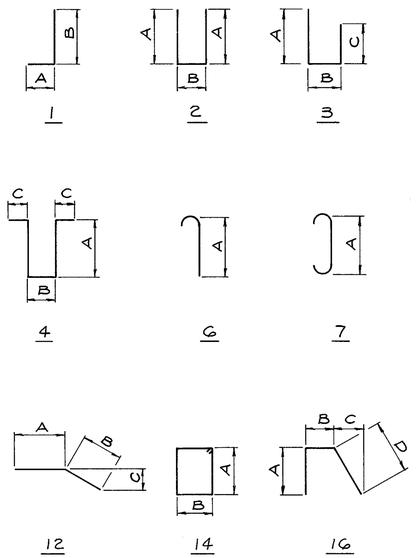
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

431/455

AKRON INNERBELT
SUM - 59 - 0.00

| SPIRAL REINFORCING SCHEDULE | | | | | |
|---|---|---|---|---|---|
| MARK | Nº REQ D. | CORE DIA. OF SPIRAL | LENGTH OF SPIRAL | PITCH INS. | WEIGHT LBS. |
| **SPIRALS - PIER P-1** | | | | | |
| 1P-SP501 | 3 | 2'-7" | 13'-2" | 3.50 | 1325 |
| TOTAL SPIRALS PIER P-1 = | | | | | 1325 |
| **SPIRALS - PIER P-2** | | | | | |
| 2P-SP501 | 3 | 2'-7" | 13'-6" | 3.50 | 1357 |
| TOTAL SPIRALS PIER P-2 = | | | | | 1357 |
| **SPIRALS - PIER P-3** | | | | | |
| 3P-SP501 | 3 | 2'-7" | 16'-10" | 3.50 | 1716 |
| TOTAL SPIRALS PIER P-3 = | | | | | 1716 |
| **SPIRALS - PIER P-4** | | | | | |
| 4P-SP501 | 3 | 2'-7" | 22'-8" | 3.50 | 2284 |
| TOTAL SPIRALS PIER P-4 = | | | | | 2284 |
| **SPIRALS - PIER P-5** | | | | | |
| 5P-SP501 | 3 | 2'-7" | 23'-7" | 3.50 | 2374 |
| TOTAL SPIRALS PIER P-5 = | | | | | 2374 |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| **SUPERSTRUCTURE PHASE 2** | | | | | | | | | | |
| * | 25G70 | 12 | 6'-0" | ST. | | | | | | 108 |
| | 25G71 | 12 | 6'-0" | ST. | | | | | | 108 |
| * | 25G72 | 12 | 6'-8" | 60 | | | | | | 120 |
| * | 25G73 | 12 | 2'-2" | 1 | 10" | 1'-6" | | | | 39 |
| * | 25G74 | 12 | 3'-0" | 51 | 10" | 4" | 6" | 1'-1" | | 54 |
| | | | NON EPOXY COATED = 117785 | | | | | | | |
| | | | EPOXY COATED = 171172 | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | | |




NON EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL = | 21,334 LBS |
| PIER | TOTAL = | 45,523 LBS |
| SUPERSTRUCTURE | TOTAL = | 187,006 LBS |
| GRAND | TOTAL = | 253,863 LBS |

EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL = | 1,621 LBS |
| PIER | TOTAL = | 0 LBS |
| SUPERSTRUCTURE | TOTAL = | 286,435 LBS |
| GRAND | TOTAL = | 288,056 LBS |

NOTES

(1) FOR SPIRAL REINFORCING OVER 15'-0". FOUR ANGLE SPACERS WEIGHING APPROX. 1.01 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(2) FOR SPIRAL REINFORCING UNDER 15'-0". FOUR ANGLE SPACERS WEIGHING APPROX. .80 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT LISTED ABOVE. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

(3) THE LENGTH SHOWN IN THE STEEL SCHEDULE FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE TOP OF THE COLUMN INCLUDING THREE (3) CLOSED COILS (ONE AND ONE HALF CLOSED COILS AT THE ENDS OF EACH SPIRAL UNIT.)

(4) REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

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CLEVELAND, OHIO AKRON, OHIO

27/27

# REINFORCING SCHEDULE

WIDENING AND DECK REPLACEMENT
OF EXPRESSWAY BRIDGE OVER
BOWERY STREET & THE OHIO CANAL

BR. NO. SUM-76-0953
AKRON OHIO SUMMIT COUNTY
STA. 431 + 11.34 TO STA. 435 + 37.16

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| J.M.W. | F.F. | | D.T. | | 11-8-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

436
455

AKRON INNERBELT
SUM-59-0.00

## CURVE DATA

P.I. STA 34+50.41
△ = 55°30'-49"
Dc = 19°00'00"
R = 301.56'
T = 158.70'
Lc = 292.18'
E = 39.21'
CH = 280.88

## EXISTING STRUCTURE

TYPE: ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

ROADWAY: 40'-0" FACE TO FACE OF CURBS WITH (2) 10' SIDEWALKS 60'-0" OUT TO OUT.

LOADING: STATE OF OHIO S-20-46

SKEW: 29°-22'-27" R.F.
WEARING SURFACE: 2"± ASPHALT

ALIGNMENT: TANGENT.
APPROACH: 15'-0"
SLABS

## PROPOSED STRUCTURE

TYPE: ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SKEW: 32°-52'-54" R.F.
SPAN: 54'-3¾" ℄ BRGS.
LOADING: HS 20-44 (CASE II) AND ALTERNATE MILITARY LOADING

ROADWAY: 28'-0" FACE TO FACE CURBS WITH A 5' SIDEWALK ON LEFT. 35'-6" O/O OF DECK.

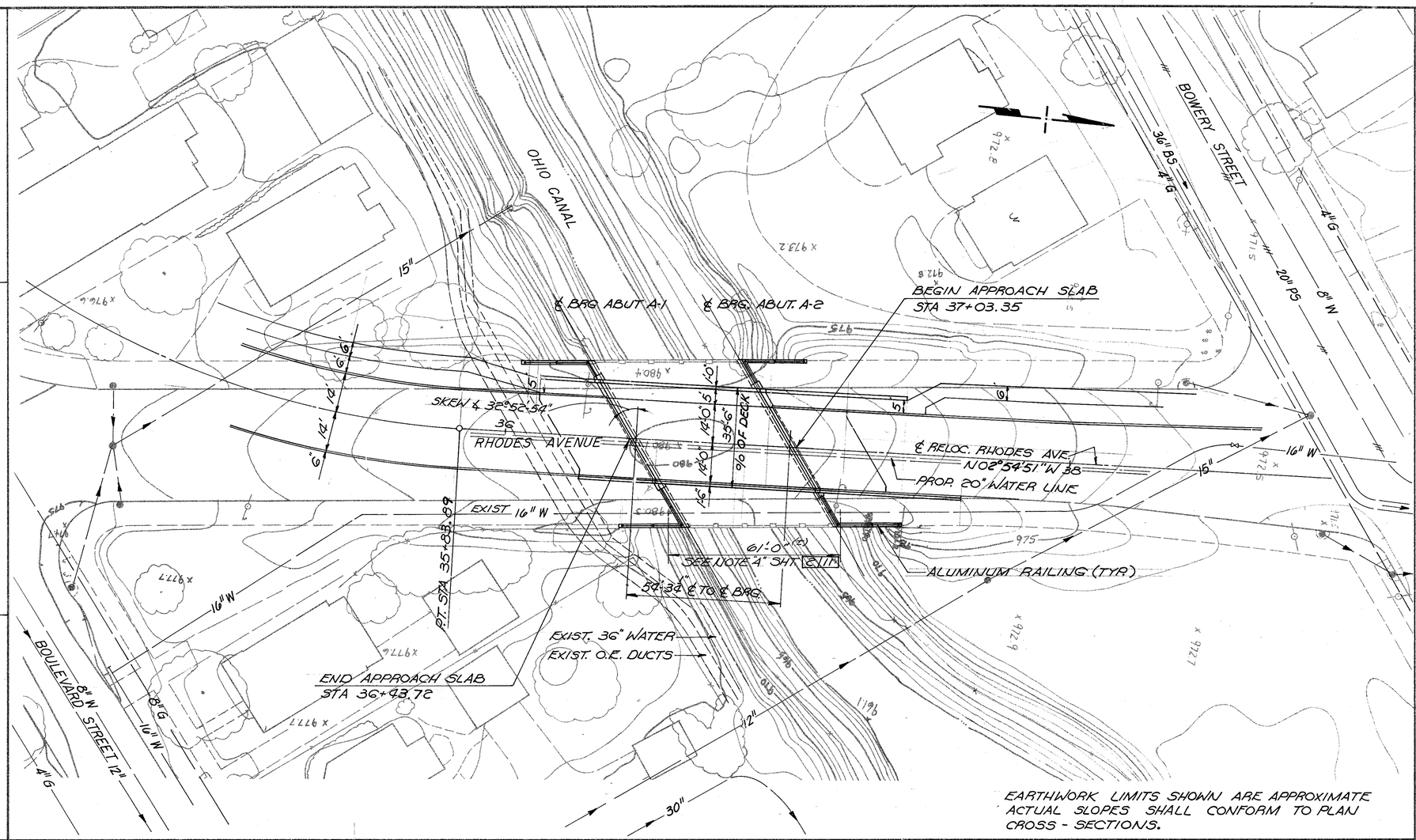
WEARING SURFACE: 1¼" LATEX MODIFIED CONCRETE OVERLAY

APPROACH SLABS: 25'-0" (AS-1-81)
ALIGNMENT: TANGENT
SUPERELEVATION: NONE

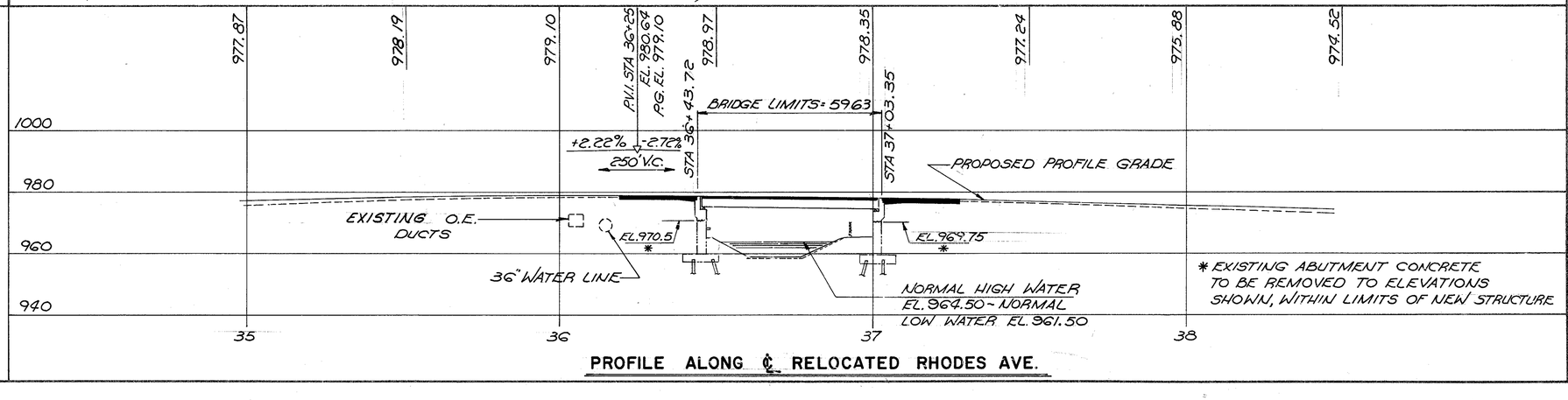
SLOPE PROTECTION: NONE

TRAFFIC:
ADT 10,700 (2000)
ADTT 535 (2000)

BRIDGE TO BE CLOSED TO TRAFFIC DURING TIME OF CONSTRUCTION



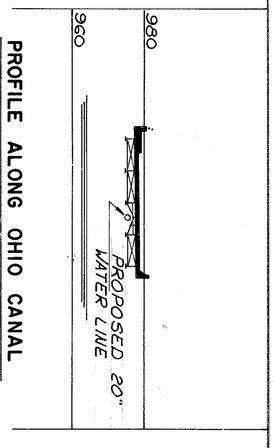

EARTHWORK LIMITS SHOWN ARE APPROXIMATE ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS - SECTIONS.




* EXISTING ABUTMENT CONCRETE TO BE REMOVED TO ELEVATIONS SHOWN, WITHIN LIMITS OF NEW STRUCTURE

PROFILE ALONG ℄ RELOCATED RHODES AVE.

PROFILE ALONG OHIO CANAL




DALTON - DALTON - NEWPORT
CLEVELAND, OHIO AKRON, OHIO

1 / 11

# SITE PLAN

RELOCATED RHODES AVENUE
OVER THE OHIO CANAL

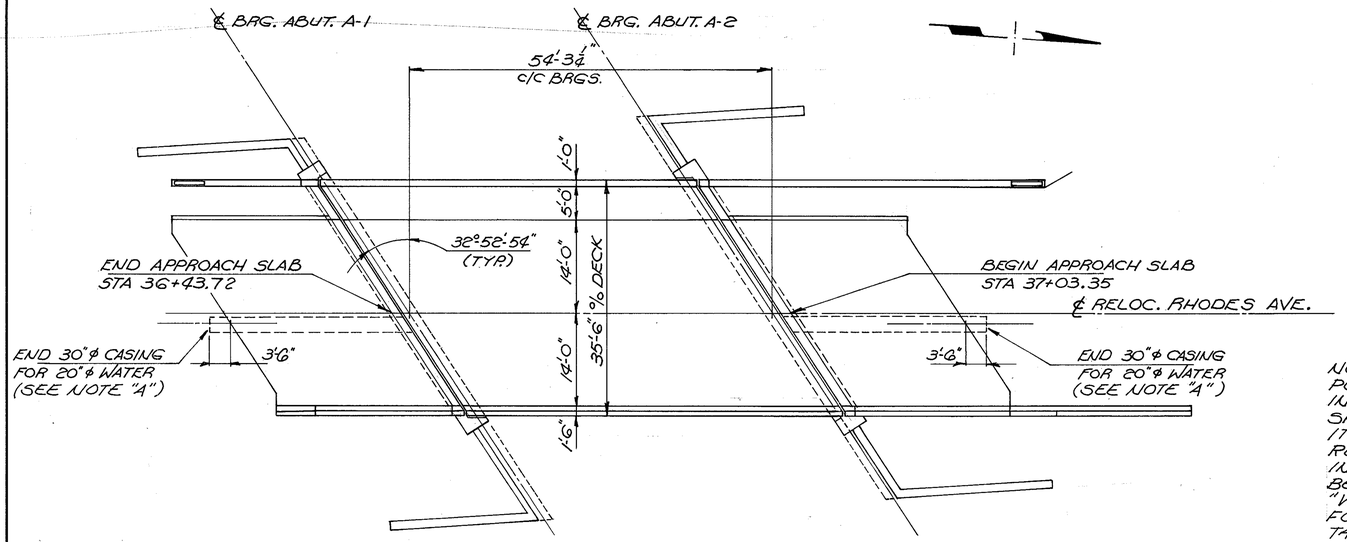
AKRON OHIO SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | JFP | JFP | 12-19-82 | |

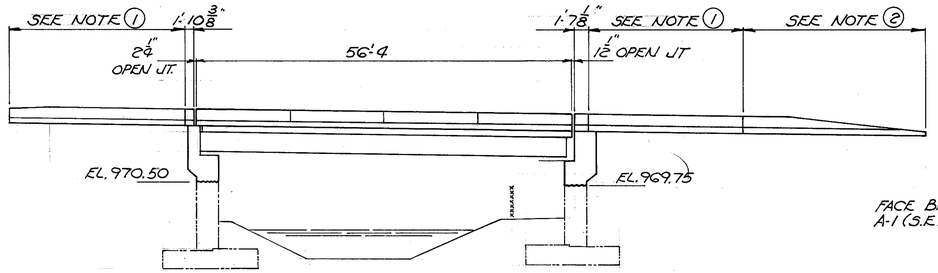
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

433
455

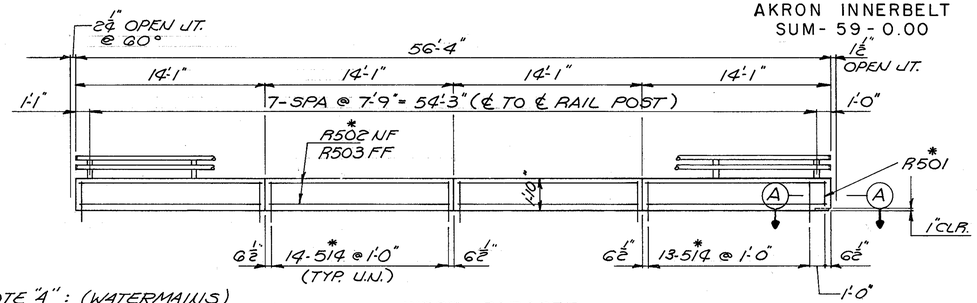
AKRON INNERBELT
SUM-59-0.00




## GENERAL PLAN

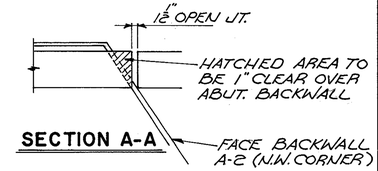



## ELEVATION

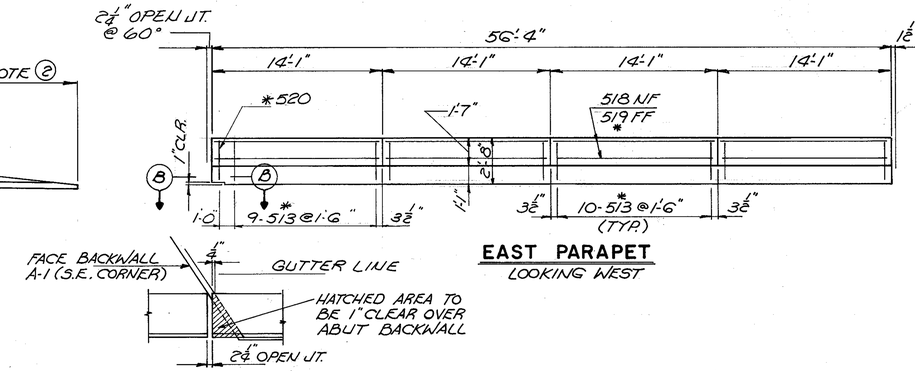



## WEST PARAPET
LOOKING WEST

NOTE "4": (WATERMAINS) PORTIONS OF EXISTING 16"ϕ W.M., IN THE WORK LIMITS OF THE BRIDGE, SHALL BE REMOVED AS PART OF ITEM 202 "PORTIONS OF STRUCTURES REMOVED". PROPOSED 20"ϕ W.M. INCLUDING 30" PIPE SLEEVES TO BE INCLUDED WITH ITEM 814 "WATERMAIN AND SERVICE BRANCHES FOR PAYMENT". SEE SHEET 177 OF 455 TABLE OF WATERMAIN QUANITITIES.




## SECTION A-A




## EAST PARAPET
LOOKING WEST

## SECTION B-B

NOTES

1. SEE SHEET 11/11 FOR PARAPET DETAILS.
2. SEE ROADWAY PLANS FOR DETAILS OF THIS PORTION OF BARRIER.
3. THE PREFIX "S" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE PARAPETS UNLESS OTHERWISE SHOWN.

♦ ITEM 202 - "PORTIONS OF STRUCTURES REMOVED" INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: APPROACH SLABS, DECK SLAB, BRIDGE SIDEWALKS, PARAPETS, RAILING, BEAMS, PORTIONS OF ABUTMENT BACKWALLS AND BEAM SEATS, AND 16"ϕ WATERMAIN AS SHOWN ON THE PLANS.

ESTIMATED QUANTITIES

| | ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | WALL | GEN'L. |
|---|---|---|---|---|---|---|---|---|
| ♦ | 202 | LUMP | L.S. | PORTIONS OF STRUCTURES REMOVED | | | | LUMP |
| | 503 | LUMP | L.S. | COFFERDAMS, CRIBS & SHEETING | | LUMP | | |
| | 503 | 123 | C.Y. | UNCLASSIFIED EXCAVATION | | 76 | 47 | |
| | 509 | 13782 | LBS. | REINFORCING STEEL, GRADE 60 | 6589 | 4910 | 2283 | |
| | 824 | 10489 | LBS. | EPOXY COATED REINF. STEEL, GRADE 60 | 9270 | 1219 | | |
| | 510 | 6 | EA. | DOWEL HOLES | | 6 | | |
| | 511 | 65 | C.Y. | CLASS 'S' CONC. - SUPERSTRUCTURE (*) | 65 | | | |
| | 511 | 83 | C.Y. | CLASS 'C' CONC. - ABUTMENTS ABOVE FTG. | | 83 | | |
| | 511 | 6 | C.Y. | CLASS 'C' CONC. - WALLS ABOVE FTG. | | | 6 | |
| | 511 | 13 | C.Y. | CLASS 'C' CONC. - FOOTINGS | | | 13 | |
| | 512 | 18 | S.Y. | TYPE 'B' WATERPROOFING | | 18 | | |

ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | WALL | GEN'L. |
|---|---|---|---|---|---|---|---|
| 513 | 53304 | LBS. | STRUCTURAL STEEL (A-588) (AISC CATEGORY I) (*) | 53304 | | | |
| 513 | 3000 | LBS. | STRUCTURAL STEEL (A-36, CURB PLATES, GALVANIZED, AISC CERT. NOT REQ'D) | 3000 | | | |
| 516 | 84 | L.F. | ELASTOMERIC COMPRESSION SEAL (**) | 84 | | | |
| 517 | 130.39 | L.F. | RAILING (CONC. PARAPET W/DOUB. PIPE RAIL) | 56.33 | | 74.06 | |
| 517 | 135.18 | L.F. | RAILING (2-PIPE ALUMINUM RAIL) AS PER PLAN (SEE SPECIAL PROVISIONS) | | | | 135.18 |
| 518 | 76 | C.Y. | POROUS BACKFILL | | 76 | | |
| 845 | 169 | S.Y. | LATEX MODIFIED CONC. OVERLAY (*) (1¼" THICK) | 169 | | | |
| SPEC. | 262 | S.Y. | SEALING OF CONCRETE SURFACES (*) | 104 | 115 | 43 | |
| | | | * ~ (SEE PROPOSAL NOTE) | | | | |
| | | | ** ~ (AS PER PLAN) | | | | |

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GENERAL PLAN & ELEVATION AND ESTIMATED QUANITITIES — 2/11

RELOCATED RHODES AVENUE OVER THE OHIO CANAL

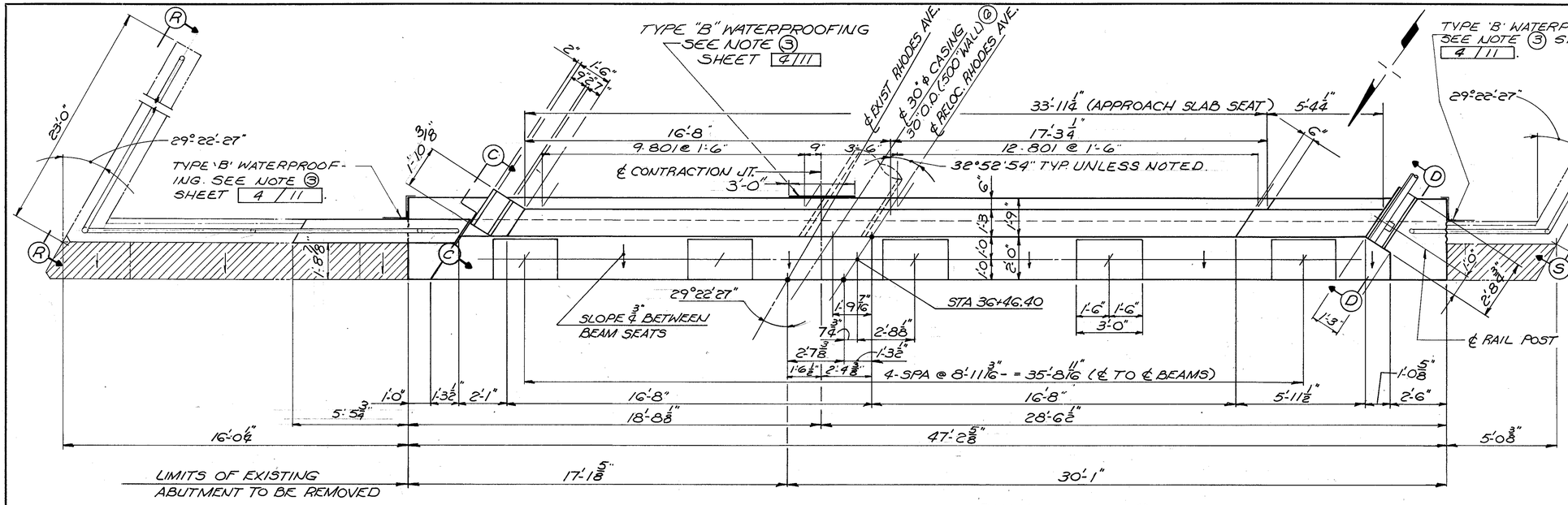
AKRON OHIO — SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | JAP | JAP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

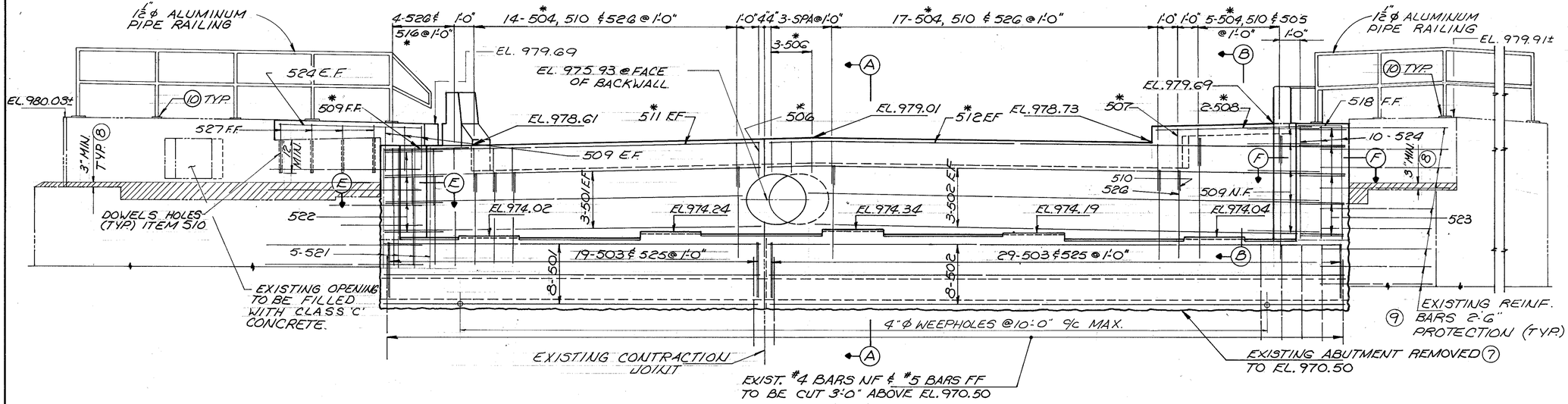
434
455

AKRON INNERBELT
SUM-59-0.00




## PLAN

SEE NOTE ⑧




## ELEVATION

## NOTES

① ABBREVIATIONS USED ARE:
NF - NEAR FACE
FF - FAR FACE
EF - EACH FACE

② BACKWALL ELEVATIONS ARE GIVEN TO THE TOP OF THE 6×4×3/8" ANGLE AT THE FRONT FACE OF BACKWALL.

③ THE PREFIX "A" SHALL BE ADDED TO THE REINFORCING BAR MARKS IN THE ABUTMENT.

④ FOR CONTRACTION JOINT DETAIL SEE SHEET 4/11

⑤ FOR SECTIONS SEE SHEET 5/11

⑥ 30" ϕ CASING SHALL EXTEND 3'-6" BEYOND THE END OF THE APPROACH SLAB. INCLUDE WITH ITEM 814 - "WATERMAIN AND SERVICE BRANCHES."

⑦ SAW CUT 1" DEEP TO PROVIDE A NEAT REMOVAL LINE. MAINTAIN SQUARE REMOVAL LINES OR UNDERCUT SLIGHTLY IF DIRECTED BY THE ENGINEER. COST TO BE INCLUDED WITH ITEM 202 - PORTIONS OF STRUCTURES REMOVED.

⑧ BUILD UP EXISTING SEAT WITH 3" MINIMUM OF CLASS "C" CONCRETE SLOPE TOWARD FACE OF ABUT. AS PER ITEM 519 OR 520 TO BE INCLUDED WITH ITEM 511 FOR PAYMENT.

⑨ WHEN REMOVING THE EXISTING CONCRETE TO THE LINE AS SHOWN, THE CONTRACTOR SHALL LEAVE A MINIMUM OF 2'-6" OF THE EXISTING REINFORCING STEEL PROJECTING FROM THE REMAINING CONCRETE SURFACE. (SEE GENERAL NOTES)

⑩ DRESSING OFF OF THE TOP OF THE EXISTING BACKWALLS AND WINGWALLS, DUE TO RAILING AND SIDEWALK REMOVAL TO ACCOMODATE THE NEW 1½" ϕ ALUMINUM PIPE RAILING, SHALL BE INCLUDED WITH ITEM 511 - CLASS "C" CONC., ABUT. ABOVE FOOTINGS FOR PAYMENT.

⑪ * INDICATES REINFORCING BARS TO BE EPOXY COATED.

⑫ REINFORCING BAR CLEARANCE SHALL BE 2½" UNLESS OTHERWISE SHOWN

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3/11

# ABUTMENT A-1 DETAILS

RELOCATED RHODES AVENUE
OVER THE OHIO CANAL

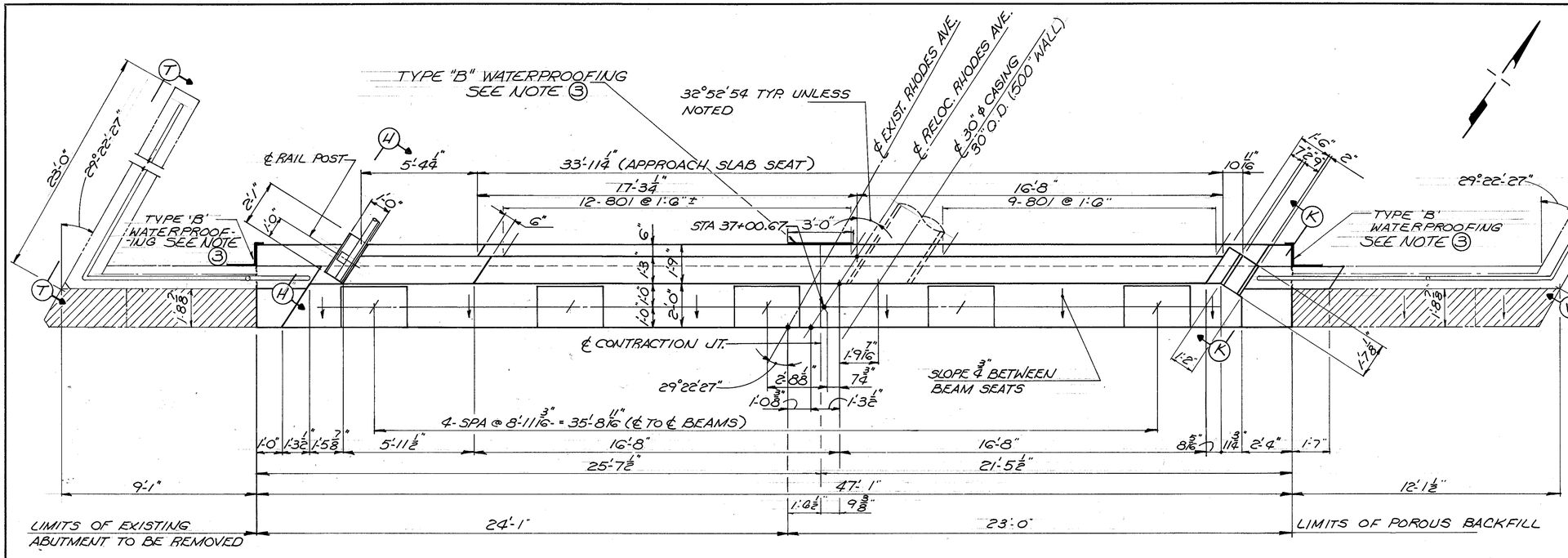
AKRON OHIO — SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWN | | JFP | JFP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

435
455

AKRON INNERBELT
SUM-59-0.00

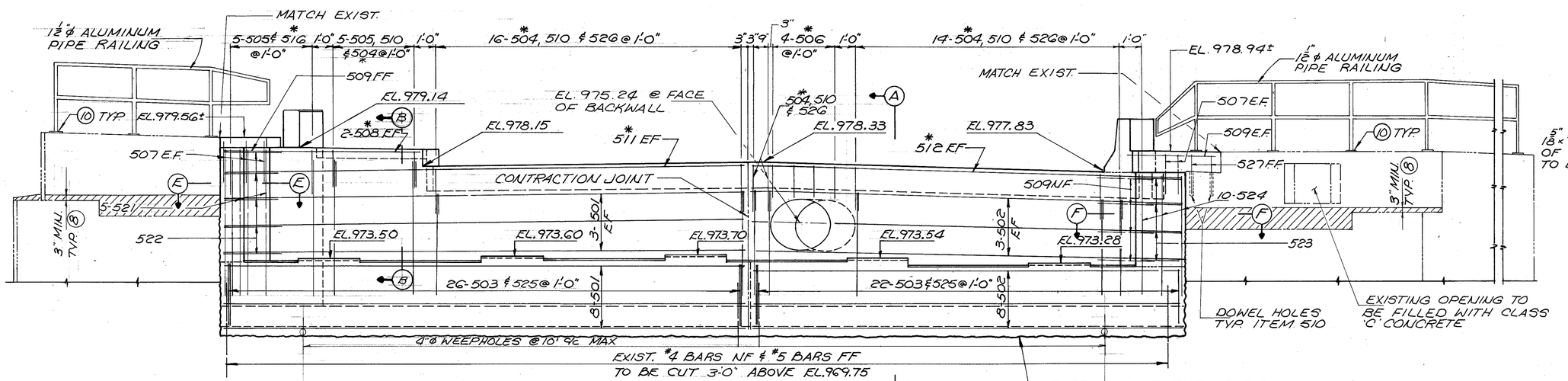



## PLAN

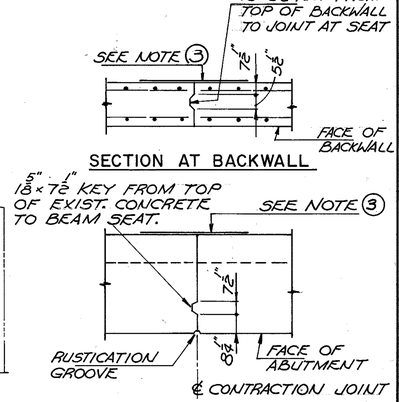
SEE NOTE (8) SHEET 3/11

## ANCHOR BOLT LOCATION

SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.




## ELEVATION




## CONTRACTION JOINT DETAIL

NOTES

(1) SEE SHEET 3/11 FOR ADDITIONAL NOTES

(2) THE PREFIX 2A SHALL BE ADDED TO THE REINFORCING BAR MARKS IN THIS ABUTMENT.

(3) TYPE B WATERPROOFING 3'-0" WIDE FROM TOP OF EXIST. CONCRETE TO BOTTOM OF APPROACH SLAB OR 6" BELOW FINISHED GRADE.

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# ABUTMENT A-2 DETAILS

RELOCATED RHODES AVENUE OVER THE OHIO CANAL

AKRON OHIO SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | JFP | JFP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
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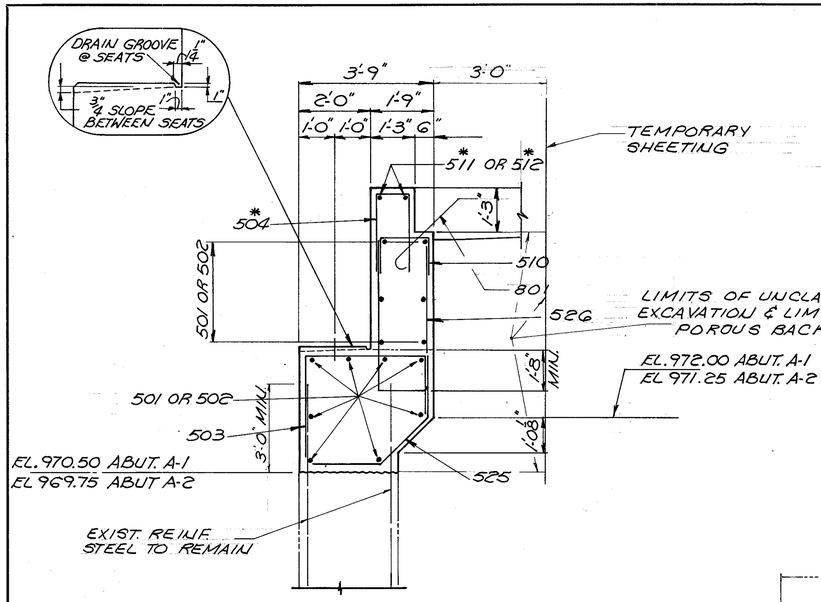
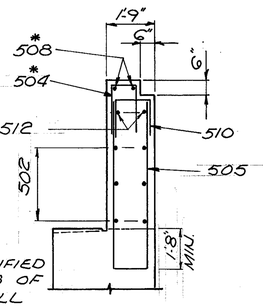
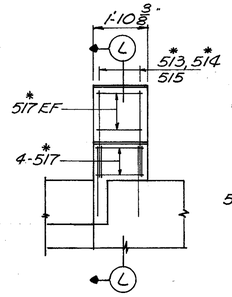
AKRON INNERBELT
SUM - 59 - 0.00



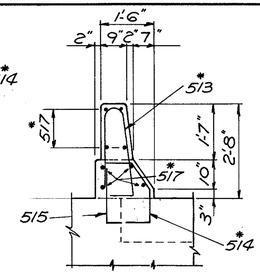

SECTION A-A



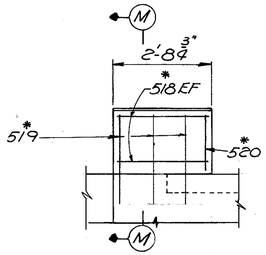

SECTION B-B



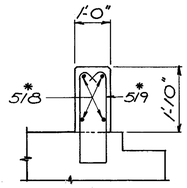

VIEW C-C



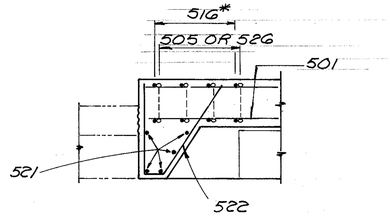

SECTION L-L



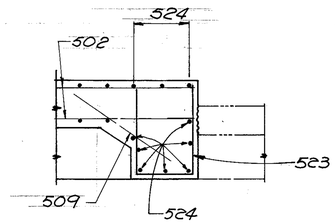

VIEW D-D



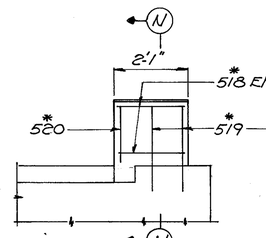

SECTION M-M



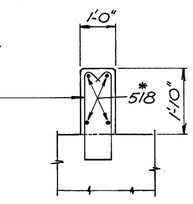

SECTION E-E



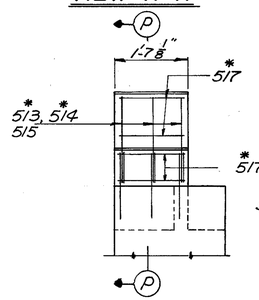

SECTION F-F



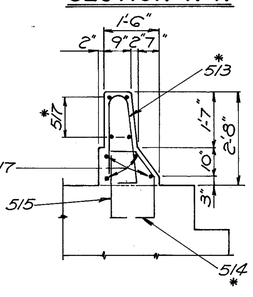

VIEW H-H



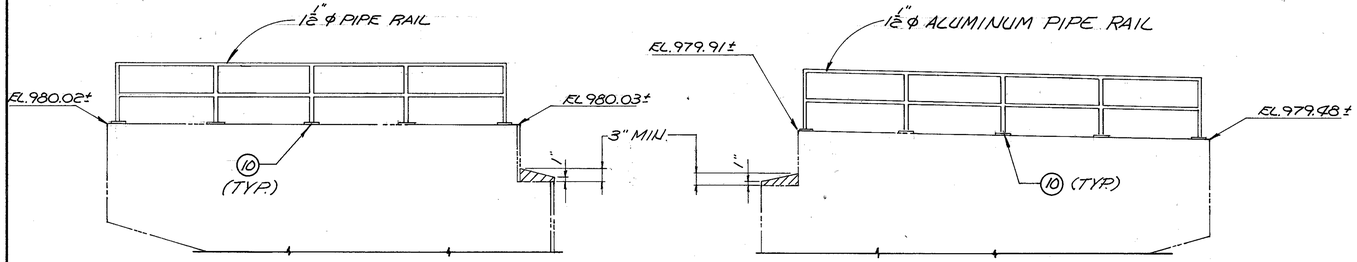

SECTION N-N




VIEW K-K




SECTION P-P

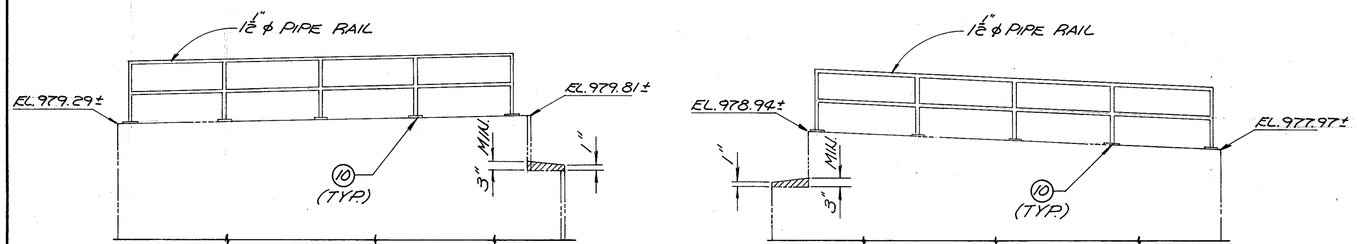



VIEW R-R
EXISTING WINGWALL

VIEW S-S
EXISTING WINGWALL

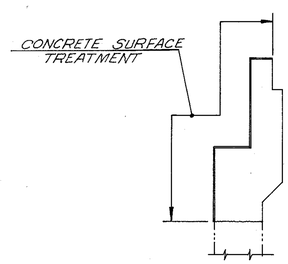
~ SEE NOTE (8) SHEET 3/11

(10) ~ SEE NOTE (10) SHEET 3/11




VIEW T-T
EXISTING WINGWALL

VIEW V-V
EXISTING WINGWALL




LIMITS OF CONCRETE TREATMENT

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5/11

# ABUTMENT DETAILS & SECTIONS

RELOCATED RHODES AVENUE
OVER THE OHIO CANAL

AKRON OHIO — SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | JFP | JFP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

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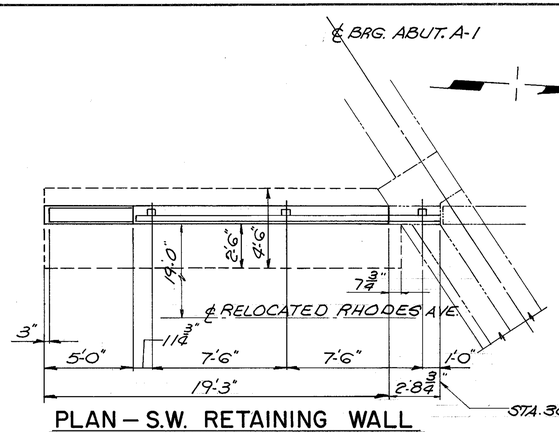
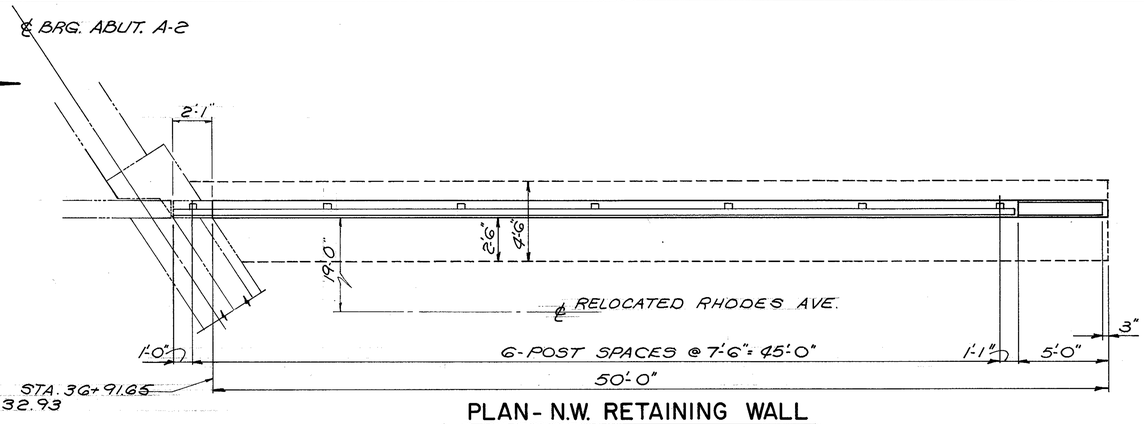
SUM - 59 - 0.00



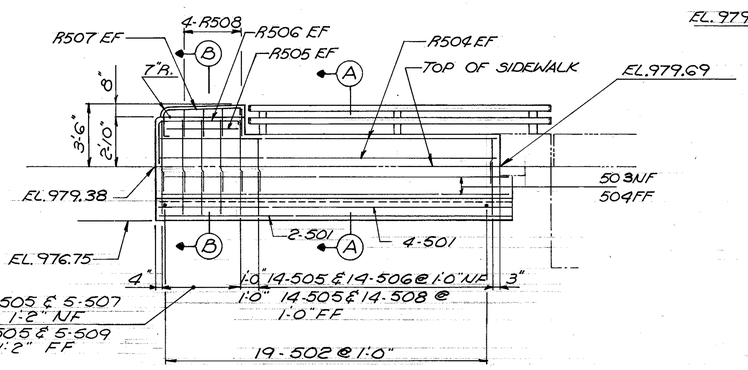

## PLAN — S.W. RETAINING WALL

THE PREFIX 1RW SHALL BE ADDED TO ALL REINF. BARS IN THIS WALL UNLESS OTHERWISE NOTED

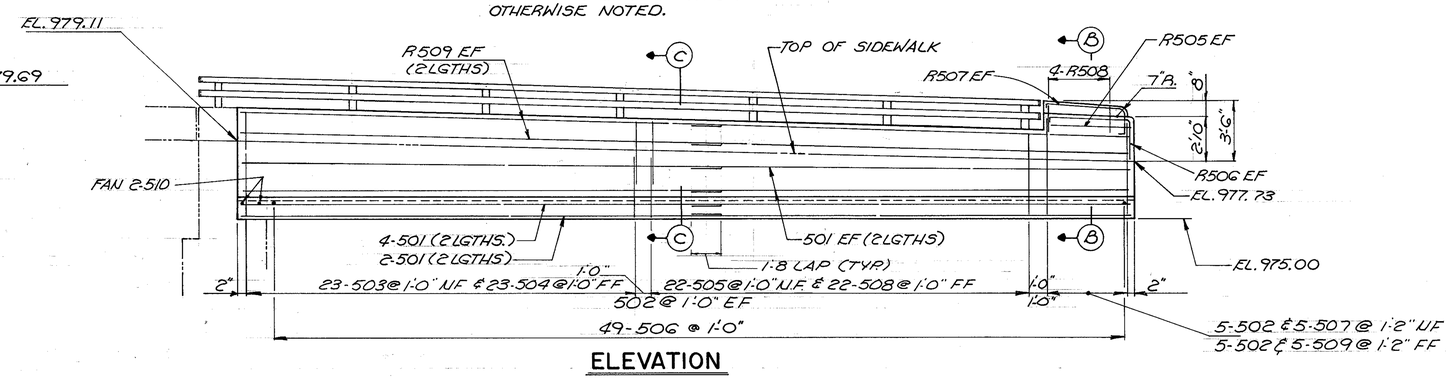



## PLAN - N.W. RETAINING WALL

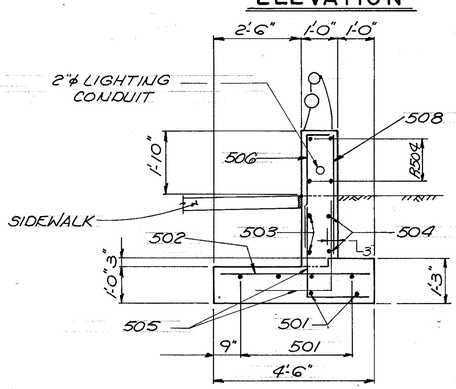
THE PREFIX 2RW SHALL BE ADDED TO ALL REINF. BARS IN THIS WALL UNLESS OTHERWISE NOTED.




## ELEVATION

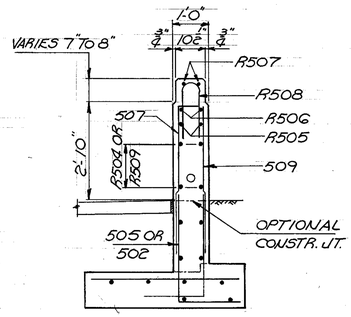



## ELEVATION



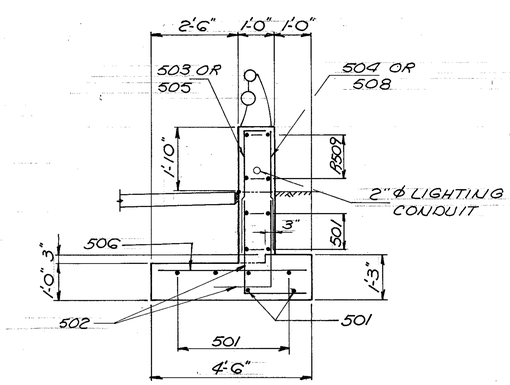

## SECTION A-A

CUT 501 & 502 BARS AS REQUIRED. CUTTING SHALL BE INCLUDED IN COST OF ITEM 509 - REINFORCING STEEL.

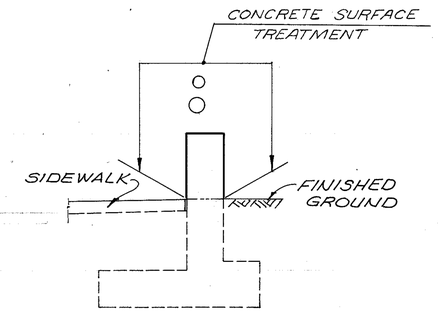



## SECTION B-B

FOR DETAILS NOT SHOWN SEE SECTION A-A & C-C




## SECTION C-C




## LIMITS OF CONCRETE TREATMENT

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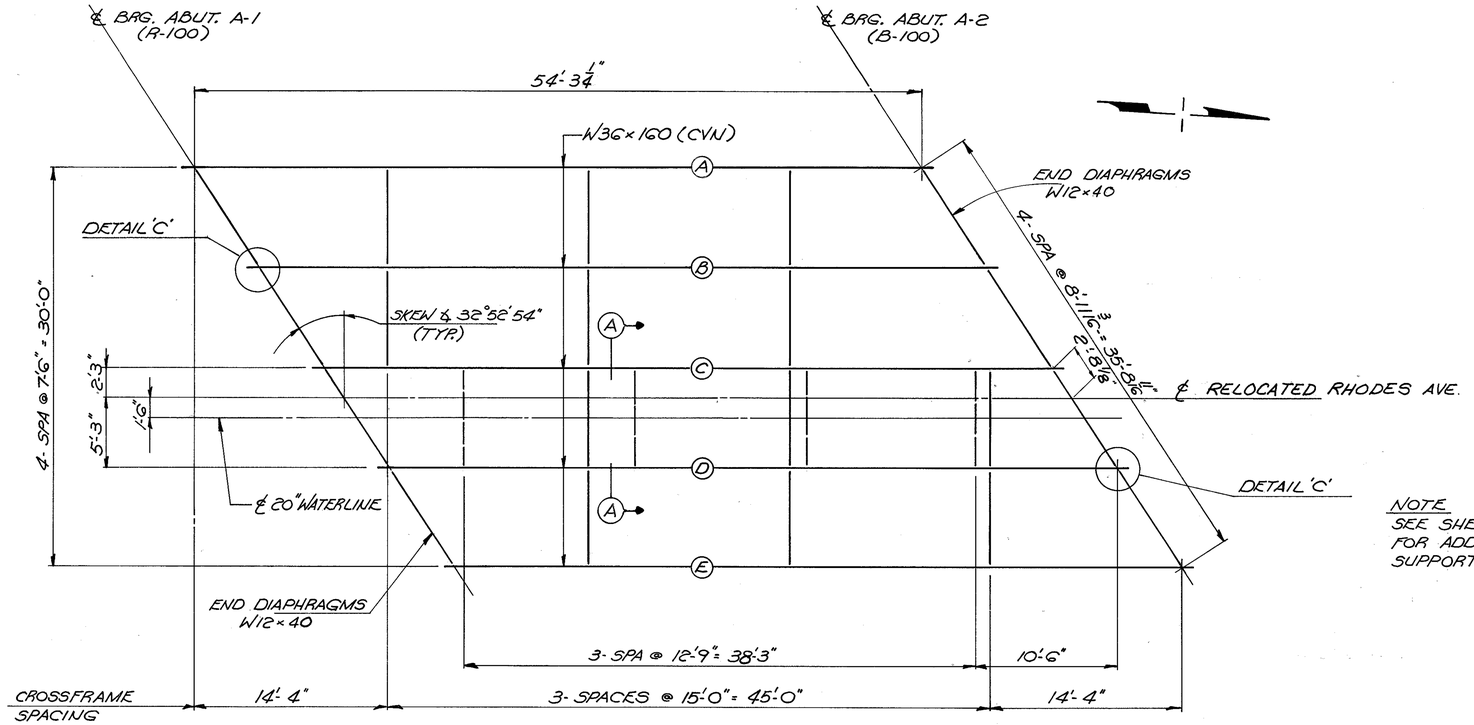
6/11

# RETAINING WALL DETAILS

RELOCATED RHODES AVENUE
OVER THE OHIO CANAL

AKRON OHIO — SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

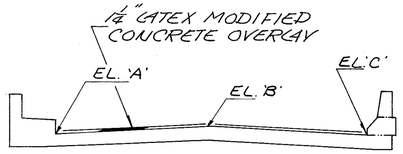
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | JFP | JGH | 12-19-82 | |




## FRAMING PLAN

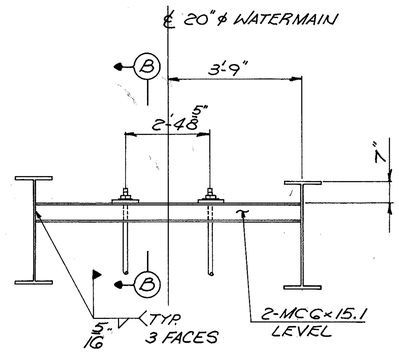



| DEFLECTION AND CAMBER | | | |
|---|---|---|---|
| POINT | 1/4 PT. | 1/2 PT. | 3/4 PT. |
| DEFLECTION DUE TO WEIGHT OF STEEL | 1/16" | 1/8" | 1/16" |
| DEFLECTION DUE TO REMAINING DEAD LOAD | 7/16" | 5/8" | 7/16" |
| ADJUSTMENT REQUIRED FOR VERTICAL CURVE | 5/8" | 7/8" | 5/8" |
| REQUIRED SHOP CAMBER | 1 1/8" | 1 5/8" | 1 1/8" |



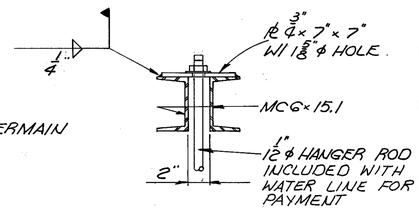

| TABLE OF SCREED ELEVATIONS | | | |
|---|---|---|---|
| LOCATION | EL. 'A' | EL. 'B' | EL. 'C' |
| ℄ BRG. A-1 | 978.616 | 978.896 | 978.496 |
| 1/4 PT. | 978.568 | 978.821 | 978.407 |
| 1/2 PT. | 978.462 | 978.690 | 978.243 |
| 3/4 PT. | 978.288 | 978.493 | 978.021 |
| ℄ BRG. A-2 | 978.057 | 978.238 | 977.741 |

THE ELEVATIONS SHOWN ARE TOP OF CONCRETE SLAB ELEVATIONS WHICH ARE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE SLAB AND 1 1/2" LATEX MODIFIED CONCRETE OVERLAY.

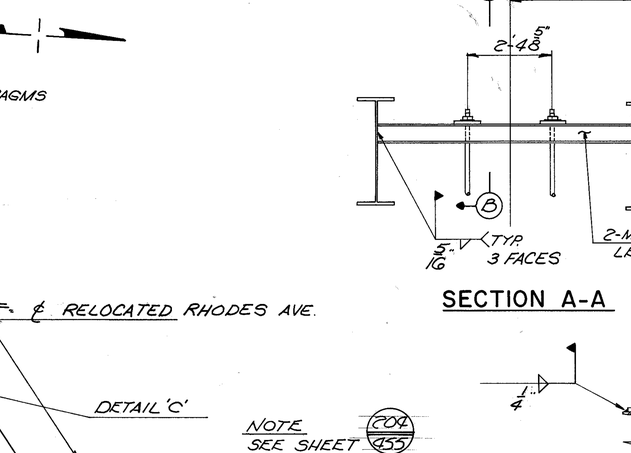



## SECTION A-A

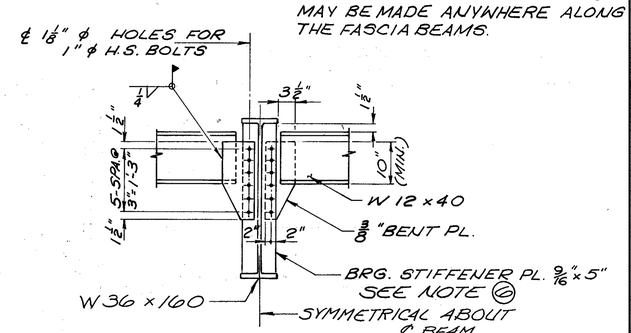
NOTE
SEE SHEET 204 (455)
FOR ADDITIONAL WATERMAIN SUPPORT DETAILS




## SECTION B-B




## DETAIL "C"




## SECTION D-D

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

438/455

AKRON INNERBELT
SUM-59-0.00

### NOTES

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A 588-75, GRADE 50 STEEL UNLESS NOTED OTHERWISE.
2. WHERE A SHAPE OR PLATE IS DESIGNATED "CVN" THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS.
3. FOR INTERMEDIATE CROSSFRAME DETAILS, SEE TRANSVERSE SECTION, SHEET 8/11
4. FOR EXPANSION JOINT DETAILS SEE SHEET 9/11
5. END DIAPHRAGM CONNECTIONS TO HAVE 15/16" ϕ HOLES FOR 7/8" ϕ H.S. BOLTS A325, TYPE 3
6. BEARING STIFFENERS SHALL BE PROVIDED IN PAIRS.
7. WELDED ATTACHMENTS FOR FINISHING MACHINE SUPPORTS MAY BE MADE ANYWHERE ALONG THE FASCIA BEAMS.

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

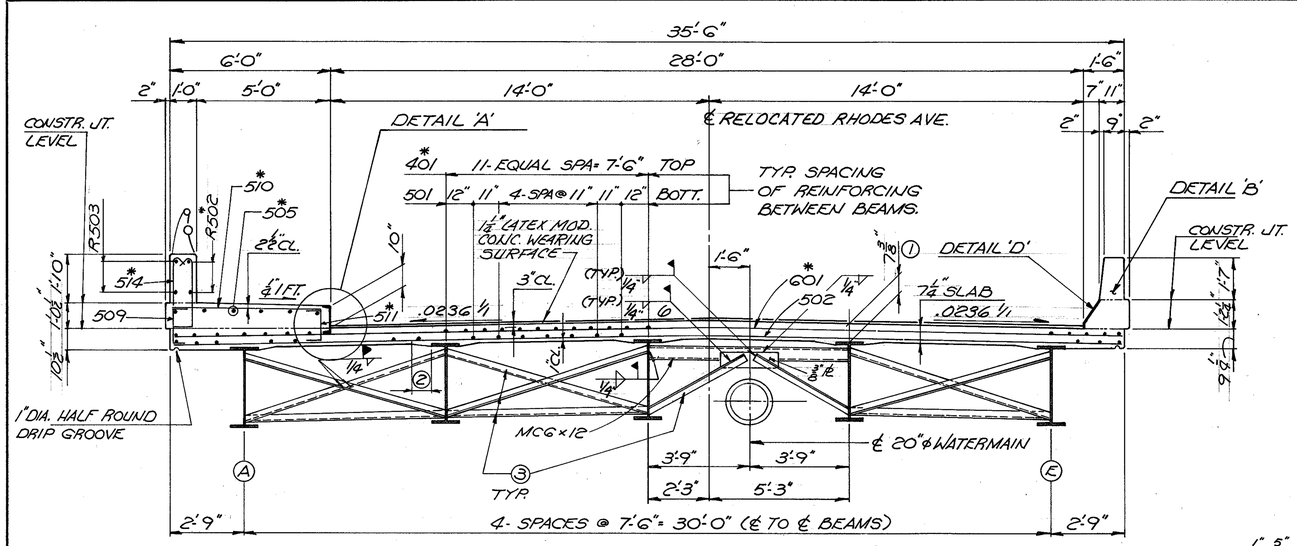
7/11

# FRAMING PLAN

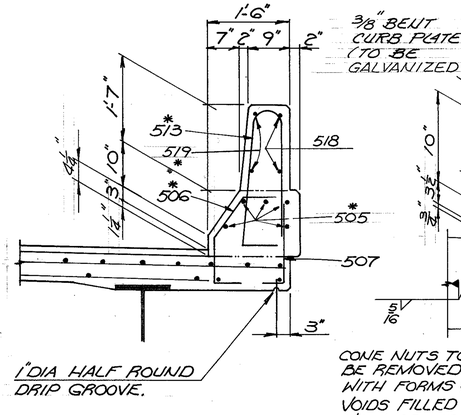
RELOCATED RHODES AVENUE
OVER THE OHIO CANAL

AKRON OHIO — SUMMIT COUNTY
STA. 36+43.72 TO STA. 37+03.35

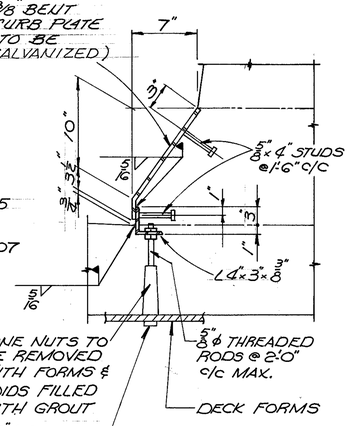
| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | JAP | JAP | 12-19-82 | |




## TRANSVERSE SECTION

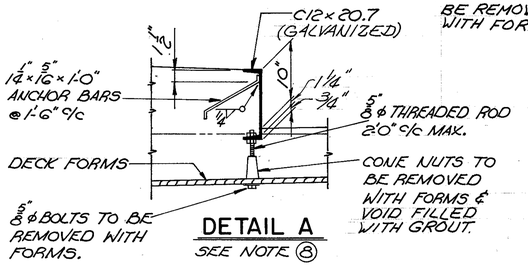



## DETAIL B




## DETAIL D

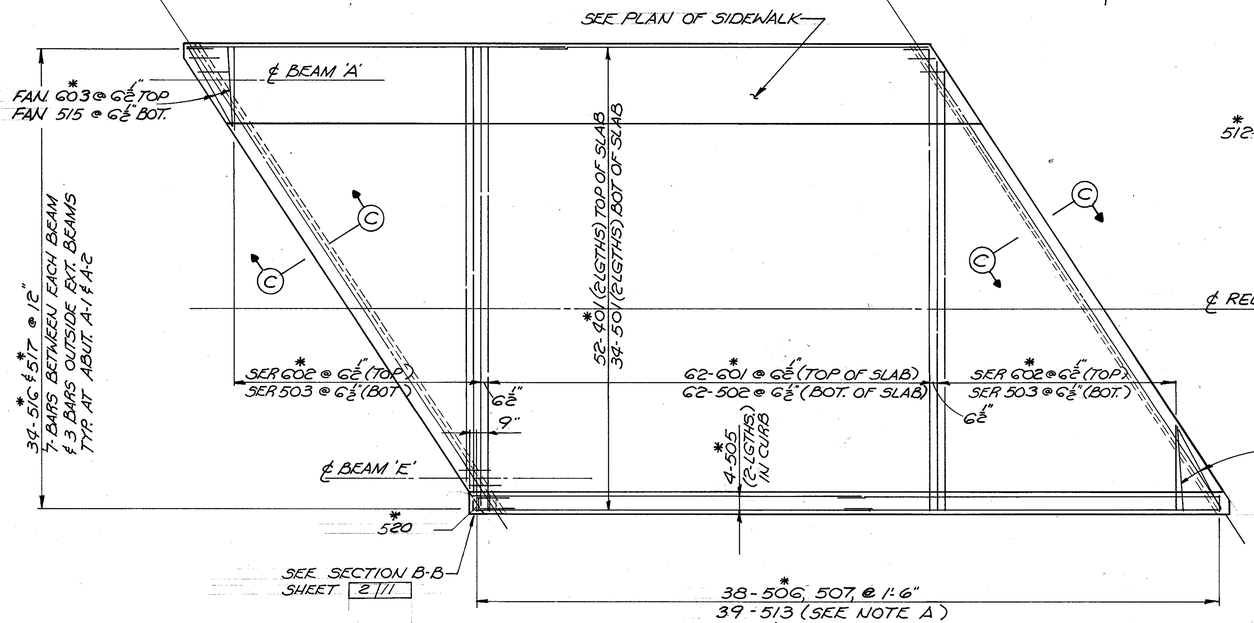
SEE NOTE (8)



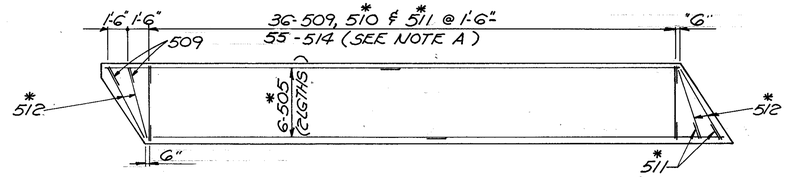

## DETAIL A

SEE NOTE (8)

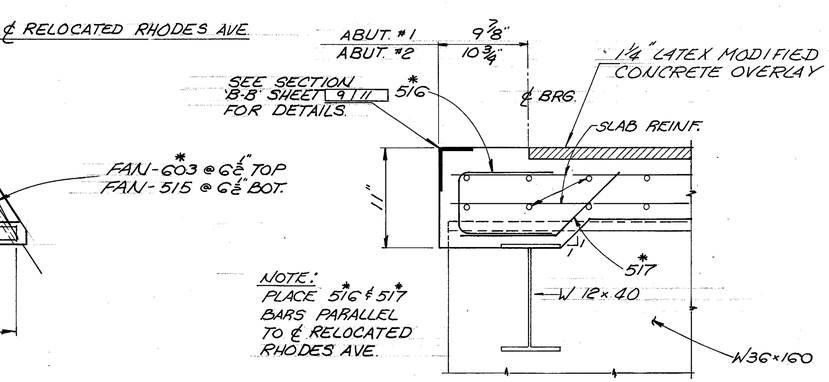
NOTE "A"
FOR SPACING OF 513 OR 514 BARS
SEE SHEET 2/11




## SLAB PLAN




## PLAN OF SIDEWALK




## SECTION C-C

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

439/455

AKRON INNERBELT
SUM - 59 - 0.00

### NOTES

(1) DECK SLAB DEPTH: THE DISTANCE SHOWN FROM THE TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE NOMINAL DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISH GRADE.

(2) THE HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

(3) INTERMEDIATE CROSSFRAME ANGLES 3" x 3" x 5/16 WELD BOTH SIDES OF VERTICAL AND TOP SIDE OF HORIZONTAL LEG TO BEAM WITH 1/4" CONTINUOUS FILLET WELD. THE LENGTH OF HORIZONTAL LEG TO BEAM WELD SHALL BE LESS THAN 2".

(4) TRANSVERSE REINFORCEMENT SHALL BE FIELD BENT AS REQUIRED; PAYMENT SHALL BE INCLUDED WITH ITEM 509 REINFORCING STEEL.

(5) THE PREFIX S SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SUPERSTRUCTURE UNLESS SHOWN OTHERWISE.

(6) TYPICAL BAR LAPS SHALL BE AS FOLLOWS:
- # 4 — 1'-4"
- # 5 — 1'-8"
- # 6 — 2'-0"

(7) * INDICATES REINFORCING BARS TO BE EPOXY COATED.

(8) THE ANCHOR BARS, STUDS AND THE SUPPORT ASSEMBLY FOR CURB CHANNELS AND PLATES SHALL BE PAID FOR UNDER "ITEM 513 STRUCTURAL STEEL (A-36). CURB PLATES GALVANIZED (AISC CERT. NOT REQ'D.)

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO — AKRON, OHIO

8/11

# SLAB PLAN

RELOCATED RHODES AVENUE OVER THE OHIO CANAL

AKRON OHIO — SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | JFP | JGP | 12-7-82 | |

| TEMP °F | 30 | 45 | 60 | 75 | 90 |
|---|---|---|---|---|---|
| DIM. A | 2 1/4" | 2 3/16" | 2 1/8" | 2 1/16" | 2" |

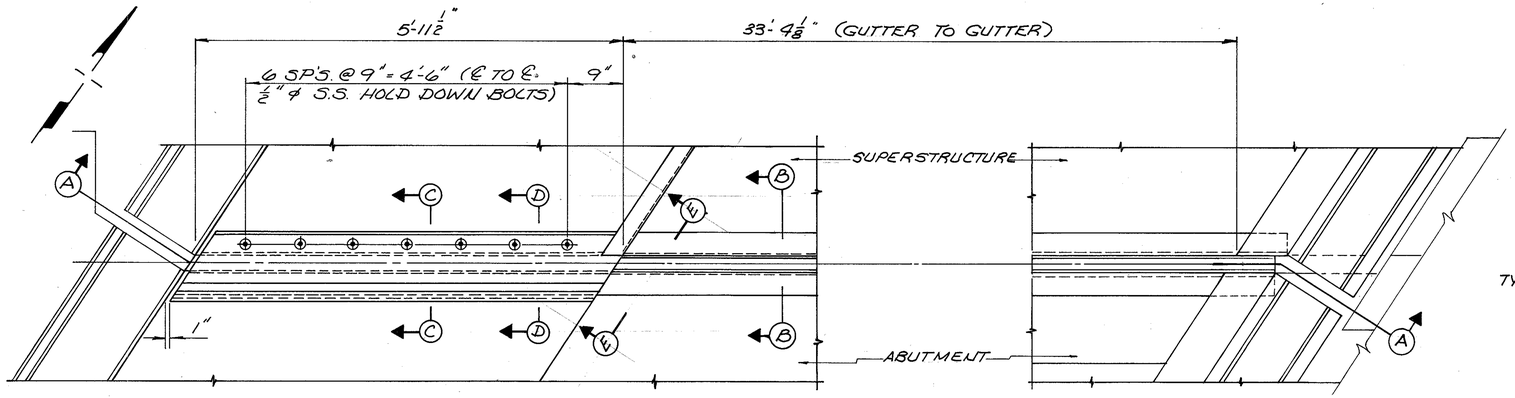
| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

440/455

AKRON INNERBELT
SUM - 59 - 0.00

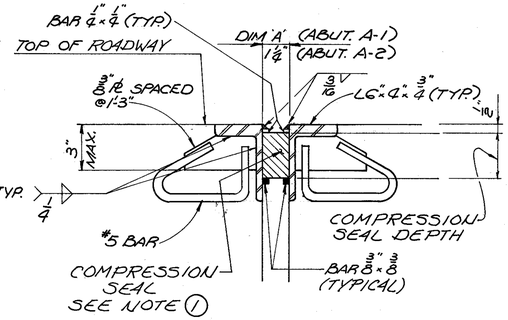
NOTES

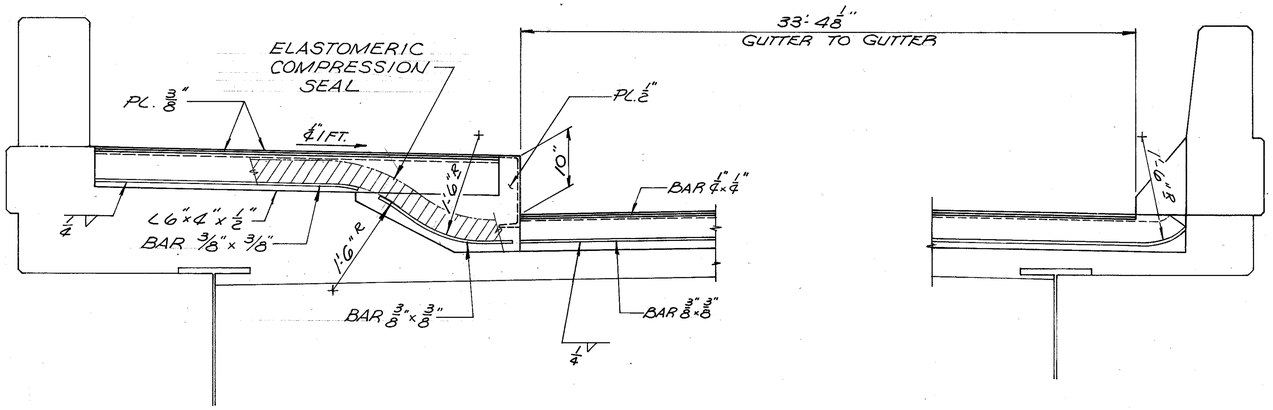
1. THE COMPRESSION SEAL SHALL BE:
   (a) WD-300 (A-1), WD-200 (A-2) AS MANUFACTURED BY WASTON-BOWMAN ASSOC. INC., AMHERST, NEW YORK 14120
   (b) J-300 (A-1), J-200 (A-2) AS MANUFACTURED BY ACME HIGHWAY PRODUCTS CORPORATION, AMHERST, NEW YORK, 14150
   (c) OR APPROVED EQUAL
2. FOR ADDITIONAL INFORMATION SEE SPECIAL PROVISIONS.



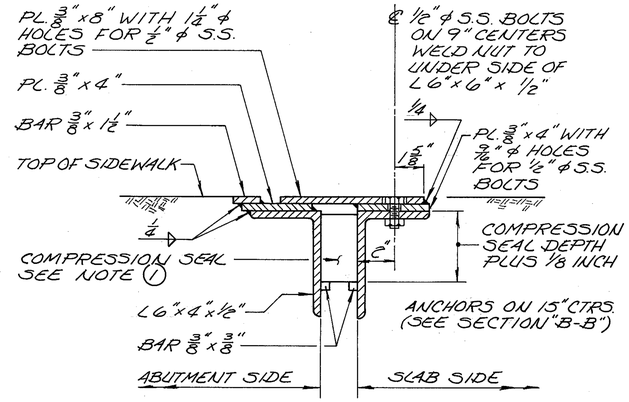

## PARTIAL PLAN OF EXPANSION JOINT

ABUT. A-1 SHOWN, ABUT. A-2 SIMILAR



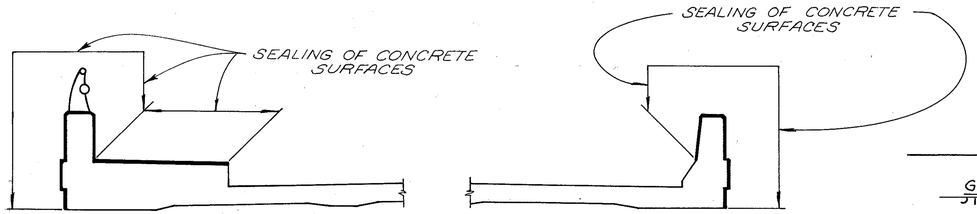




## SECTION A-A

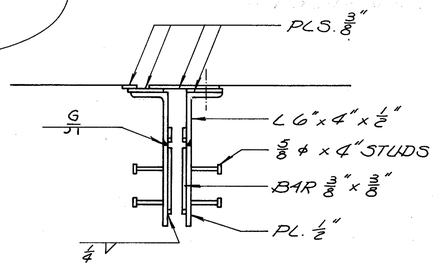



## SECTION C-C

(FOR DETAILS NOT SHOWN SEE SECTION "B-B")

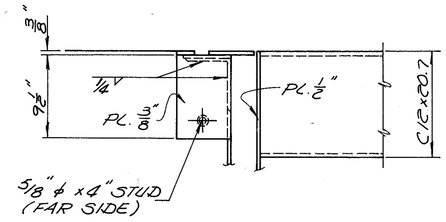



## LIMITS OF SILANE TREATMENT




## SECTION D-D

(FOR DETAILS NOT SHOWN SEE SECTION "B-B" AND SECTION "C-C")




## SECTION E-E

DALTON · DALTON · NEWPORT

CLEVELAND, OHIO — AKRON, OHIO

9/11

# EXPANSION JOINT DETAILS

RELOCATED RHODES AVENUE
OVER THE OHIO CANAL

AKRON OHIO — SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWN | | JFP | JOF | 12-19-82 | |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | **ABUTMENT A-1** | | | | | | | | | |
| | 1A501 | 14 | 18'-4" | ST. | | | | | | 268 |
| | 1A502 | 14 | 28'-2" | ST. | | | | | | 411 |
| | 1A503 | 48 | 7'-11" | 3 | 3'-0" | 3'-5" | 1'-9" | | | 396 |
| * | 1A504 | 36 | 6'-8" | 2 | 3'-0" | 11" | | | | 250 |
| | 1A505 | 5 | 14'-8" | 2 | 6'-9" | 1'-5" | | | | 76 |
| * | 1A506 | 4 | 3'-8" | 2 | 1'-6" | 11" | | | | 15 |
| * | 1A507 | 1 | 8'-8" | 2 | 4'-0" | 11" | | | | 9 |
| * | 1A508 | 2 | 8'-6" | ST. | | | | | | 18 |
| * | 1A509 | 12 | 4'-0" | ST. | | | | | | 50 |
| | 1A510 | 32 | 4'-8" | 2 | 1'-9" | 1'-5" | | | | 156 |
| * | 1A511 | 2 | 18'-4" | ST. | | | | | | 38 |
| * | 1A512 | 2 | 28'-2" | ST. | | | | | | 59 |
| * | 1A513 | 2 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 12 |
| * | 1A514 | 2 | 4'-3" | 20 | 2'-0" | 9" | 6" | | | 9 |
| | 1A515 | 2 | 3'-6" | 1 | 1'-0" | 2'-7" | | | | 7 |
| * | 1A516 | 4 | 7'-2" | 2 | 3'-0" | 1'-5" | | | | 30 |
| * | 1A517 | 8 | 1'-6" | ST. | | | | | | 13 |
| * | 1A518 | 5 | 2'-4" | ST. | | | | | | 12 |
| * | 1A519 | 3 | 8'-2" | 5 | 8" | 3'-4" | | | | 26 |
| * | 1A520 | 1 | 4'-6" | 5 | 8" | 1'-6" | | | | 5 |
| | 1A521 | 5 | 6'-3" | ST. | | | | | | 33 |
| | 1A522 | 4 | 7'-11" | 16 | 3'-5" | 8" | 2'-2" | 4'-0" | | 33 |
| | 1A523 | 5 | 8'-7" | 2 | 3'-5" | 2'-0" | | | | 45 |
| | 1A524 | 10 | 7'-2" | ST. | | | | | | 75 |
| | 1A525 | 48 | 5'-6" | 19 | 1'-9" | 1'-4" | 1'-4" | 2'-0" | | 275 |
| | 1A526 | 36 | 11'-8" | 2 | 5'-3" | 1'-5" | | | | 438 |
| | 1A527 | 4 | 1'-6" | ST. | | | | | | 6 |
| | | | | | | | | | | |
| | 1A801 | 21 | 5'-0" | 38 | 2'-9" | 1'-5" | 1'-0" | | | 280 |
| | | | | | | | | | | |
| | | | NON EPOXY COATED = | | 2499 | | | | | |
| | | | EPOXY COATED = | | 546 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | **ABUTMENT A-2** | | | | | | | | | |
| | 2A501 | 14 | 25'-3" | ST. | | | | | | 369 |
| | 2A502 | 14 | 21'-1" | ST. | | | | | | 308 |
| | 2A503 | 48 | 7'-11" | 3 | 3'-0" | 3'-5" | 1'-9" | | | 396 |
| * | 2A504 | 37 | 6'-8" | 2 | 3'-0" | 11" | | | | 257 |
| | 2A505 | 10 | 14'-8" | 2 | 6'-9" | 1'-5" | | | | 153 |
| * | 2A506 | 4 | 3'-8" | 2 | 1'-6" | 11" | | | | 15 |
| | 2A507 | 10 | 3'-0" | ST. | | | | | | 31 |
| * | 2A508 | 2 | 8'-6" | ST. | | | | | | 18 |
| | 2A509 | 7 | 4'-6" | ST. | | | | | | 33 |
| * | 2A510 | 37 | 4'-8" | 2 | 1'-9" | 1'-5" | | | | 180 |
| * | 2A511 | 2 | 25'-3" | ST. | | | | | | 53 |
| * | 2A512 | 2 | 21'-1" | ST. | | | | | | 44 |
| * | 2A513 | 3 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 17 |
| * | 2A514 | 3 | 4'-3" | 20 | 2'-0" | 9" | 6" | | | 13 |
| | 2A515 | 3 | 3'-6" | 1 | 1'-0" | 2'-7" | | | | 11 |

| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| * | 2A516 | 5 | 7'-2" | 2 | 3'-0" | 1'-5" | | | | 37 |
| * | 2A517 | 8 | 1'-3" | ST. | | | | | | 10 |
| * | 2A518 | 4 | 1'-9" | ST. | | | | | | 7 |
| * | 2A519 | 2 | 8'-2" | 5 | 8" | 3'-4" | | | | 17 |
| * | 2A520 | 1 | 4'-6" | 5 | 8" | 1'-6" | | | | 5 |
| | 2A521 | 5 | 7'-2" | ST. | | | | | | 37 |
| | 2A522 | 5 | 7'-11" | 16 | 3'-5" | 8" | 2'-2" | 4'-0" | | 41 |
| | 2A523 | 4 | 8'-7" | 2 | 3'-5" | 2'-0" | | | | 36 |
| | 2A524 | 10 | 6'-0" | ST. | | | | | | 63 |
| | 2A525 | 48 | 5'-6" | 19 | 1'-9" | 1'-4" | 1'-4" | 2'-0" | | 275 |
| | 2A526 | 32 | 11'-2" | 2 | 5'-0" | 1'-5" | | | | 373 |
| | 2A527 | 2 | 2'-6" | ST. | | | | | | 5 |
| | | | | | | | | | | |
| | 2A801 | 21 | 5'-0" | 38 | 2'-9" | 1'-5" | 1'-0" | | | 280 |
| | | | | | | | | | | |
| | | | NON EPOXY COATED = | | 2411 | | | | | |
| | | | EPOXY COATED = | | 673 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | **SUPERSTRUCTURE** | | | | | | | | | |
| * | S401 | 104 | 28'-8" | ST. | | | | | | 1992 |
| | | | | | | | | | | |
| | S501 | 68 | 28'-10" | ST. | | | | | | 2045 |
| | S502 | 62 | 35'-2" | ST. | | | | | | 2274 |
| | SERIES | 2-SETS | 6'-8" | | | | | | | |
| | OF | OF 34= | TO | ST. | | | | | 10 11/16" | 1454 |
| | S503 | 68 BAR | 34'-4" | | | | | | | |
| * | S505 | 20 | 28'-10" | ST. | | | | | | 601 |
| * | S506 | 38 | 3'-0" | 20 | 9" | 9" | 6" | | | 119 |
| | S507 | 38 | 2'-6" | 1 | 1'-0" | 1'-7" | | | | 99 |
| | S509 | 38 | 3'-2" | 2 | 1'-0" | 1'-5" | | | | 126 |
| * | S510 | 36 | 5'-9" | ST. | | | | | | 216 |
| * | S511 | 38 | 2'-11" | 2 | 1'-0" | 1'-2" | | | | 116 |
| * | S512 | 4 | 6'-9" | ST. | | | | | | 28 |
| * | S513 | 39 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 227 |
| * | S514 | 55 | 6'-6" | 5 | 8" | 2'-6" | | | | 373 |
| | S515 | 12 | 6'-0" | ST. | | | | | | 75 |
| | S516 | 68 | 3'-4" | 3 | 2'-0" | 6" | 1'-1" | | | 236 |
| | S517 | 68 | 2'-4" | 12 | 1'-1" | 1'-3" | 7" | | | 165 |
| | S518 | 8 | 13'-9" | ST. | | | | | | 115 |
| * | S519 | 8 | 13'-9" | ST. | | | | | | 115 |
| * | S520 | 1 | 5'-5" | 23 | 2'-2" | 2'-3" | | | | 6 |
| | | | | | | | | | | |
| * | S601 | 62 | 35'-2" | ST. | | | | | | 3275 |
| * | SERIES | 2-SETS | 6'-8" | | | | | | | |
| | OF | OF 34= | TO | ST. | | | | | 10 11/16" | 2094 |
| | S602 | 68 BAR | 34'-4" | | | | | | | |
| * | S603 | 12 | 6'-0" | ST. | | | | | | |

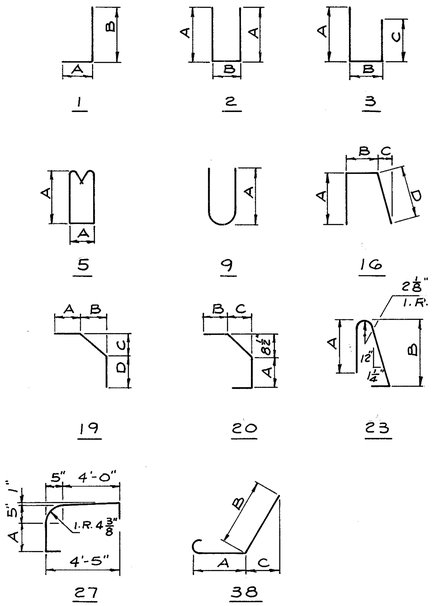
| | MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NON EPOXY COATED = | | | 6589 | | | | | |
| | | EPOXY COATED = | | | 9270 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | **RETAINING WALL RW-1** | | | | | | | | | |
| | 1RW501 | 6 | 19'-5" | ST. | | | | | | 122 |
| | 1RW502 | 19 | 4'-0" | ST. | | | | | | 79 |
| | 1RW503 | 2 | 19'-7" | ST. | | | | | | 41 |
| | 1RW504 | 2 | 18'-11" | ST. | | | | | | 39 |
| | 1RW505 | 38 | 4'-9" | 1 | 1'-7" | 3'-3" | | | | 188 |
| | 1RW506 | 14 | 3'-5" | 1 | 8" | 2'-10" | | | | 50 |
| | 1RW507 | 5 | 4'-4" | 1 | 8" | 3'-9" | | | | 23 |
| | 1RW508 | 14 | 2'-10" | ST. | | | | | | 41 |
| | 1RW509 | 5 | 3'-9" | ST. | | | | | | 20 |
| | | | | | | | | | | |
| | | NON EPOXY COATED = | | | 603 | | | | | |
| | | EPOXY COATED = | | | 0 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | TOTAL RETAINING WALL RW-1 = | | | | | | | | | 603 |
| | **RETAINING WALL RW-2** | | | | | | | | | |
| | 2RW501 | 20 | 26'-6" | ST. | | | | | | 553 |
| | 2RW502 | 100 | 4'-9" | 1 | 1'-7" | 3'-3" | | | | 495 |
| | 2RW503 | 23 | 4'-7" | 1 | 8" | 4'-0" | | | | 110 |
| | 2RW504 | 23 | 4'-0" | ST. | | | | | | 96 |
| | 2RW505 | 22 | 4'-0" | 1 | 8" | 3'-5" | | | | 92 |
| | 2RW506 | 49 | 4'-0" | ST. | | | | | | 204 |
| | 2RW507 | 5 | 4'-4" | 1 | 8" | 3'-9" | | | | 23 |
| | 2RW508 | 22 | 3'-5" | ST. | | | | | | 78 |
| | 2RW509 | 5 | 3'-9" | ST. | | | | | | 20 |
| | 2RW510 | 2 | 4'-6" | ST. | | | | | | 9 |
| | | | | | | | | | | |
| | | NON EPOXY COATED = | | | 1680 | | | | | |
| | | EPOXY COATED = | | | 0 | | | | | |
| | (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| | TOTAL RETAINING WALL RW-2 = | | | | | | | | | 1680 |
| | **RAILING **** | | | | | | | | | |
| * | R501 | 1 | 4'-4" | 5 | 8" | 1'-5" | | | | |
| * | R502 | 8 | 13'-9" | ST. | | | | | | |
| | R503 | 8 | 13'-9" | ST. | | | | | | |
| | R504 | 4 | 18'-11" | ST. | | | | | | |
| | R505 | 4 | 4'-8" | ST. | | | | | | |
| | R506 | 4 | 7'-7" | 3 | 2'-8" | 4'-8" | 6" | | | |
| | R507 | 4 | 7'-2" | 27 | 1'-0" | | | | | |
| | R508 | 8 | 3'-3" | 9 | 1'-6" | 6" | | | | |
| | R509 | 8 | 25'-9" | ST. | | | | | | |

** RAILING REINFORCEMENT BARS WILL BE INCLUDED AS PART OF ITEM 517 FOR PAYMENT.

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

441
455

AKRON INNERBELT
SUM-59-0.00




NON EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL= | 4,910 LBS |
| SUPERSTRUCTURE | TOTAL= | 6,589 LBS |
| RETAINING WALL | TOTAL= | 2,283 LBS |
| | GRAND TOTAL= | 13,782 LBS |

EPOXY COATED REINFORCING STEEL

| | | |
|---|---|---|
| ABUTMENT | TOTAL= | 1,219 LBS |
| SUPERSTRUCTURE | TOTAL= | 9,270 LBS |
| RETAINING WALL | TOTAL= | 0 LBS |
| | GRAND TOTAL= | 10,489 LBS |

NOTE

REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

DALTON · DALTON · NEWPORT
CLEVELAND, OHIO AKRON, OHIO

10/11

# REINFORCING SCHEDULE

RELOCATED RHODES AVENUE
OVER THE OHIO CANAL

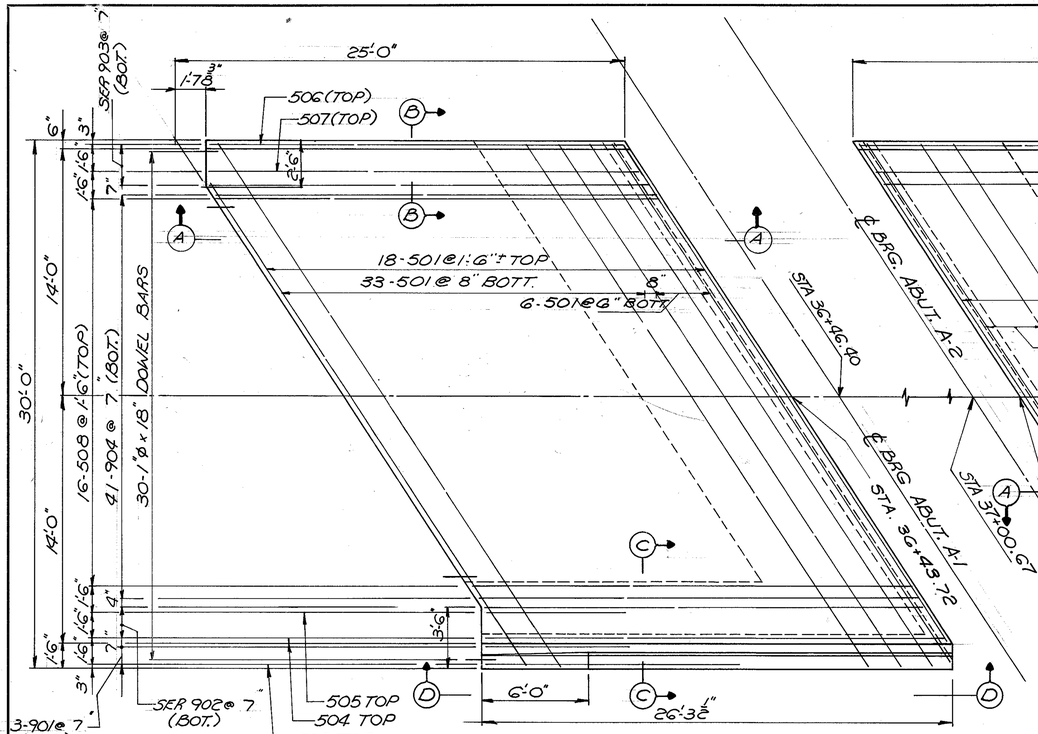
AKRON OHIO SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | F.F. | | JFP | JFP | 12-19-82 | |

| F.H.W.A. REG. | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | | |

442
455

AKRON INNERBELT
SUM-59-0.00

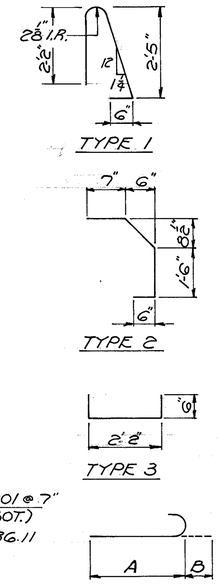


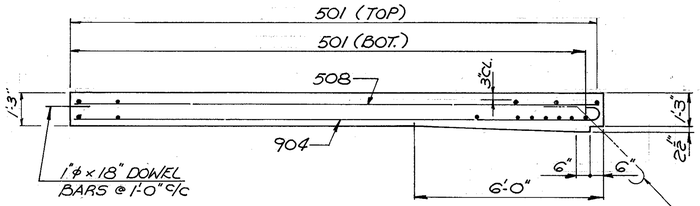

## PLAN APPROACH SLAB AS-1

THE PREFIX IAS SHALL BE ADDED TO ALL REINFORCING BAR MARKS ON THIS SLAB.

## PLAN APPROACH SLAB AS-2

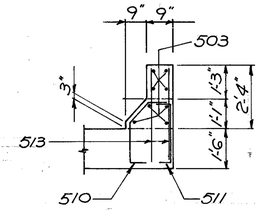
THE PREFIX 2AS SHALL BE ADDED TO ALL REINFORCING BARS ON THIS SLAB.



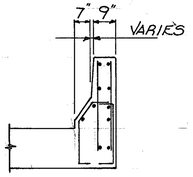




## SECTION A-A

N° 8 DOWEL BARS IN PLACE, INCLUDED WITH ITEM 509, ABUT. REINF STEEL FOR PAYMENT SEE ABUTMENT DETAILS.



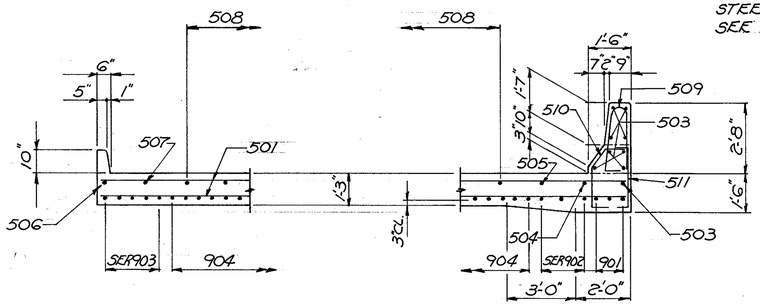

## VIEW F-F




## SECTION G-G

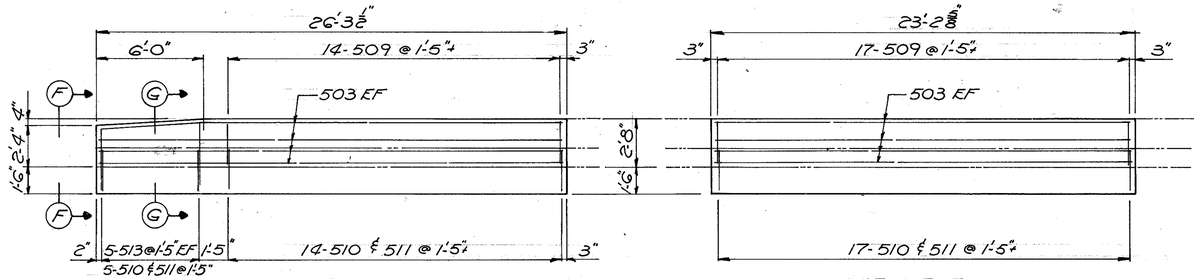
### NOTES

1. FOR DETAILS AND NOTES NOT SHOWN SEE STD. DWG. AS-1-81
2. 501 BARS SHALL BE CUT AS REQUIRED. CUTTING SHALL BE INCLUDED WITH ITEM 611 FOR PAYMENT.




## SECTION B-B

## SECTION C-C




## VIEW D-D

## VIEW E-E

| REINFORCING SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| MARK | N° | LENGTH | TYPE | A | B | WEIGHT |
| APPROACH SLAB AS-1 | | | | | | |
| IAS501 | 57 | 35'-3" | ST. | | | 2095 |
| | | | | | | |
| IAS503 | 9 | 25'-9" | ST | | | 242 |
| IAS504 | 1 | 25'-6" | ST | | | 27 |
| IAS505 | 1 | 24'-8" | ST | | | 26 |
| IAS506 | 1 | 22'-10" | ST | | | 23 |
| IAS507 | 1 | 24'-0" | ST | | | 25 |
| IAS508 | 16 | 24'-6" | ST | | | 409 |
| IAS509 | 14 | 5'-2" | 1 | | | 75 |
| IAS510 | 19 | 3'-3" | 2 | | | 64 |
| IAS511 | 19 | 2'-11" | 3 | | | 58 |
| IAS513 | 10 | 3'-5" | ST. | | | 36 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| IAS901 | 3 | 27'-0" | 4 | 25'-9" | 1'-3" | 275 |
| SERIES OF IAS902 | 1-SET OF 3 = 3 BARS | 25'-11" TO 26'-7" | 4 | 24'-8" TO 25'-4" | 1'-3" | 268 |
| SERIES OF IAS903 | 1-SET OF 5 = 5 BARS | 23'-1" TO 25'-9" | 4 | 22'-10 TO 24'-6" | 1'-3" | 415 |
| IAS904 | 41 | 25'-9" | 4 | 24'-6" | 1'-3" | 3765 |
| 30-1" ø x 18" DOWEL BARS | | | | | | 120 |
| TOTAL APPROACH SLAB AS-1 | | | | | | 7923 |
| APPROACH SLAB AS-2 | | | | | | |
| 2AS501 | 57 | 35'-3" | ST | | | 2095 |
| | | | | | | |
| 2AS503 | 9 | 22'-8" | ST | | | 212 |
| 2AS504 | 1 | 23'-3" | ST | | | 24 |
| 2AS505 | 1 | 24'-3" | ST | | | 25 |
| 2AS506 | 1 | 26'-0" | ST | | | 27 |
| 2AS507 | 1 | 25'-0" | ST | | | 26 |
| 2AS508 | 16 | 24'-6" | ST | | | 409 |
| 2AS509 | 17 | 5'-2" | 1 | | | 91 |
| 2AS510 | 17 | 3'-3" | 2 | | | 58 |
| 2AS511 | 17 | 2'-11" | 3 | | | 52 |
| | | | | | | |
| 2AS901 | 3 | 23'-11" | 4 | 22'-8" | 1'-3" | 244 |
| SERIES OF 2AS902 | 1-SET OF 3 = 3 BARS | 24'-9" TO 25'-5" | 4 | 23'-6" TO 24'-2" | 1'-3" | 256 |
| SERIES OF 2AS903 | 1-SET OF 5 = 5 BARS | 25'-9" TO 27'-3" | 4 | 24'-6 TO 26'-0" | 1'-3" | 450 |
| 2AS904 | 41 | 25'-9" | 4 | 24'-6" | 1'-3" | 3589 |
| 30-1" ø x 18" DOWEL BARS | | | | | | 120 |
| TOTAL APPROACH SLAB AS-2 | | | | | | 7678 |
| GRAND TOTAL | | | | | | 15601 |

140.0 SQ. YDS. CLASS 'C' CONCRETE (TOTAL FOR 2 APPROACH SLABS)

DALTON · DALTON · NEWPORT

CLEVELAND, OHIO · AKRON, OHIO

11/11

# APPROACH SLAB DETAILS

RELOCATED RHODES AVENUE
OVER THE OHIO CANAL

AKRON OHIO — SUMMIT COUNTY
STA. 36 + 43.72 TO STA. 37 + 03.35

| DESIGNED | DRAWN | TRACED | CHECKED | REVISED | DATE | REVISED |
|---|---|---|---|---|---|---|
| BKL | JWW | | JAP | JAP | 12-19-82 | |

| FHWA REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-1T62(2) | |

AKRON INNERBELT
SUM-59-0.00
RIGHT OF WAY PLAN

# STATE OF OHIO
# DEPARTMENT OF HIGHWAYS

# AKRON INNERBELT
## SUM - 59 - 0.00
## CITY OF AKRON
## SUMMIT COUNTY

FUNDS : FED. NO. M-1T62(2)

### DESIGN DESIGNATION

| | |
|---|---|
| Current A.D.T. (1980) | = 10,575 |
| Design Year A.D.T. (2000) | = 100,200 |
| D.H.V. | = 10,020 |
| D | = 50% |
| T | = 5.0% |
| V | = 60 m.p.h. |

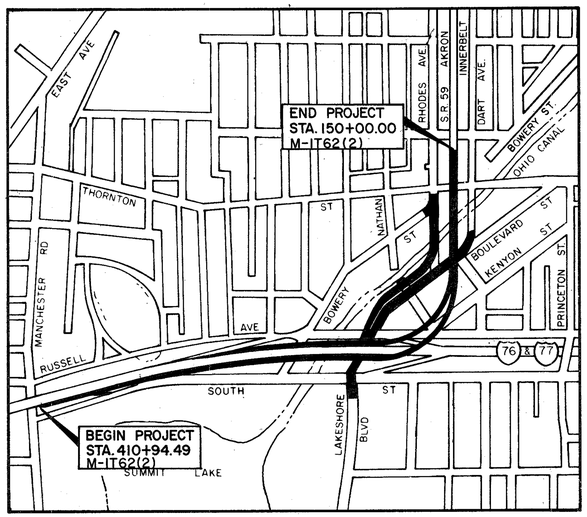
### CONVENTIONAL SIGNS

Township Line
Section Line
Corporation Line
Fence Line (existing) (proposed)
Center Line 234 235
Trees , Stumps , (to be removed)
Utility Poles: Telephone , Power , Light

Limited Access (only) LA
Right of Way (only) RW
Limited Access & Right of Way LA & RW
Existing Right of Way RW
Property Line (in existing fence)
Railroad or
Guardrail (existing) (proposed)

### INDEX OF SHEETS


CENTERLINE SURVEY PLAT 1
PROPERTY MAP 2-4
INDEX MAP 5
SUMMARY SHEETS 6-7
DETAIL SHEETS 8-13


### LOCATION MAP

SCALE IN FEET
0 600 1200

### SCALES

Plan 0 20'
Property Map 0 40
Centerline Survey Plat 0 100

### LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director of Highways in accordance with the provisions of Section 5511.02 of the Revised Code of Ohio.

### 1981 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

Approved _____
Date _____ District Deputy Director of Transportation

Approved _____
Date _____ Engineer, Bureau of Bridges and Structures

Approved _____
Date _____ Chief Engineer, Planning and Design

Approved _____
Date _____ Director, Department of Transportation

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

_____ _____
DIVISION ADMINISTRATOR DATE


PLANS PREPARED BY

DALTON · DALTON · NEWPORT

ARCHITECTS ENGINEERS PLANNERS
AKRON OHIO CLEVELAND

F. J. RICHARDSON REG. ENGINEER No.19531


Project : SUM-59-0.00
Date of Letting _____ 19___, Contract No. _____

THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STATION 127+06.92 TO STATION 148+00.00 BY ACTION OF THE DIRECTOR OF TRANSPORTATION AND RECORDED IN VOLUME 50 PAGE 18 OF THE DIRECTORS JOURNAL PURSUANT TO LAW.

T.N.N. 11-24-82

93304

INDEXED INDEXED

# CENTERLINE SURVEY PLAT

## SUM-59-0.00
## CITY OF AKRON, SUMMIT COUNTY
## COVENTRY TWP., T2N, R11W, TRACT 8, LOT 6 & TRACT 9, LOT 20

GRAPHIC SCALE
0 100 200 300 400

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

1 / 13

VOL 119 PAGE 57 (119 PAGE 57)

TRACT 8 / TRACT 9

175.25' N 30°24'09" E
278.91' N 30°24'09" E
664.72' N 30°24'09" E
℄ BOWERY STREET
825.68' N 54°08'27" E
℄ BOWERY STREET
470.20'
℄ RUSSELL
OHIO CANAL
435+03.69
435+79.81
ASC 0°46'00"
T.S. 121+45.44
S 88°39'51" W 665.42'
Z 15°04'12" E
P.C. 226+66.49
225+14.54
CURVE NO. 1 RELOC. ℄ DART
P.T. 229+36.56
SEE DETAIL "C"
38.00'
30' RHODES AVENUE 129.16'
℄ RHODES
℄ BOULEVARD
283.77' N 37°17'49" E
℄ AVENUE 129.09'
P.T. 227+84.76
228+12.91
S.T. STREET
CURVE NO. 2
P.C. 37+91.71
123.81' N 0°12'54" E
P.T. 35+83.89
SEE DETAIL "B"
39+18.68
AVENUE 151.72' N 0°12'54" E
209.19' N 54°08'27" E
41+10.40
DETAIL "B"
STA. 141+28.46
S.R. 59
145
N 0° 13' 25" E
N 84°07'31" E 110.03'
53°55'02"
83°54'06"
140.04' N 84°07'31" E
29.50' N 84°08'02" E
AVENUE
N 0° 13' 25" E
℄ THORNTON
237.00' N 85°40'20" E
℄ PRINCETON STREET
374.22' S 0°03'41" E
100.32' N 89°47'41" E
STREET
922.66' S 52°36'10" W
℄ BOULEVARD
1043.10' N 52°35'57" E
STREET
℄ RHODES AVENUE
S 37°11'32" E 358.12'
℄ KENYON
335.05' S 52°36'10" W
25.32' S 52°36'10" W
S 57°22'45"
41.63' N 37°23'06" W 130
124.54'
℄ RAMP "EN" EXPRESSWAY
S 72°05'42" W
S 88°07'43" W
STA. 125+70.78 ℄ "EN"
STA. 441+50.32 W. EXWAY
445
S 88°39'51" W 266.67'
STA. 128+91.68
℄ RHODES AVENUE
S 0°0'28" E 341.69'
S 88°39'51" W 734.18'
STA. 127+06.92 S.R. 59
STA. 444+74.04 W. EXWAY
I-76 & I-77
LOT 6
LOT 20
S 88°39'51" W
1624.70'
S.C. 124+34.39
℄ RAMP "SW"
S 88°39'51" W
S 57°34' 52°36'10" ℄ RUSSELL
358.08'
S 52°36'10" W 189.25'
C.S. 130+83.20
N 0° 13' 25" E
SEE DETAIL "A"
℄ SOUTH
℄ LAKESHORE BLVD.
N 1°55'47" W
℄ WEST
℄ AVENUE
℄ DART
℄ SURVEY
℄ THORNTON
℄ PRINCETON
℄ BOULEVARD
℄ DART
℄ SURVEY
℄ RHODES AVENUE
℄ KENYON
℄ BOULEVARD
℄ PRINCETON

BEGIN PROJECT SUM-59-0.00 STA. 127+06.92 M-IT62(2)

END PROJECT SUM-59-0.00 STA. 148+00.00 M-IT62(2)

150 CENTERLINE SURVEY PLAT FOR SUM-59-0.27 RECORDED IN PLAT BOOK 74, PAGES 53 THRU 58

VOL 119 PAGE 56 (119 PAGE 56)

CERTIFICATE OF APPROVAL
SIGNED BY : William M Goldsmith
DATE 1-5-83 DIVISION DEPUTY DIRECTOR

RECORDERS OFFICE

O.K. T.N.N. 10-1-79
T.N.N. 1-30-80

TRANSFER NOT NECESSARY SEC. 319.202 REV. CODE COMPLIED WITH EXEMPT John Poda JR. County Auditor BY C. Kent Deputy Auditor 01605

18323

TRANSFER NOT NECESSARY SEC. 319.202 REV. CODE COMPLIED WITH EXEMPT JOHN PODA JR. County Auditor BY M. Strickert Deputy Auditor

TRANSFER NOT NECESSARY FEB 26 1980 John Poda Jr., County Auditor

TRANSFER NOT NECESSARY OCT - 4 1979 John Poda Jr., County Auditor

TRANSFER NOT NECESSARY SEC. 319.202 REV. CODE COMPLIED WITH EXEMPT A TIM DAVIS County Auditor BY Deputy

Tim Davis, County Auditor

■ DENOTES MONUMENT ASSEMBLY TO BE SET
□ DENOTES EXISTING MONUMENT ASSEMBLY

DISTANCES SHOWN ARE OBSERVED FIELD DISTANCES

NOTE: THIS PLAT SUPERSEDES CENTERLINE PLAT RECORDED IN PLAT VOLUME 119, PAGE 56, SUMMIT COUNTY RECORD OF PLATS AND IS RE-RECORDED FOR THE PURPOSE OF ADDING DETAIL "C", INTERSECTING STATIONS OF RAMP "EN" ℄ WITH THE WEST EXPRESSWAY ℄ AND INTERSECTING STATIONS OF RAMP "SW" ℄ WITH THE RUSSELL AVENUE ℄.

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF TRANSPORTATION. Richard E. Kochiel
DATE 9-19-79 REGISTERED SURVEYOR

SURVEYORS SEAL
STATE OF OHIO RICHARD E. ROCKICH 5680 REGISTERED SURVEYOR

97523
RECEIVED FOR RECORD OCT 4 1979 At 12:15 P Recorded Oct 25, 1979 Vol. 116 Page 46-47 Ralph J. James B. Osborn Deputy Recorder

17.80

CURVE DATA

RELOCATED RHODES AVENUE

| CURVE NO. 1 | CURVE NO. 2 |
|---|---|
| △ = 37°31'45" RT. | △ = 55°30'49" LT. |
| D = 14° | D = 19° |
| R = 409.26' | R = 301.56' |
| L = 268.07' | L = 292.18' |
| T = 139.04' | T = 158.70' |
| E = 22.97' | E = 39.21' |
| P.I. STA. 28+07.53 | P.I. STA. 34+50.41 |

DART AVENUE

| CURVE NO. 1 | CURVE NO. 2 |
|---|---|
| △ = 54°31'44" RT. | △ = 52°22'32" LT. |
| Dc = 14° | Dc = 16° |
| R = 409.26' | R = 358.10' |
| L = 389.49' | L = 327.35' |
| T = 210.91' | T = 176.11' |
| E = 51.15' | E = 40.96' |
| P.I. STA. 226+06.18 | P.I. STA. 236+42.57 |

| PROPOSED ASSEMBLY | MONUMENT LOCATIONS |
|---|---|
| DESCRIPTION | STATION |
| ℄ DART AVENUE | |
| P.O.C. | 225+14.54 |
| P.T. | 227+84.76 |
| P.C. | 234+66.44 |
| P.T. | 237+93.80 |
| ℄ RELOC. RHODES AVENUE | |
| P.C. | 26+68 49 |
| P.T. | 29+36 56 |
| P.C. | 32+91.71 |
| P.T. | 35+83.89 |

VOL 130 PAGE 28

NOTE:
MONUMENT ASSEMBLIES TO BE SET AS DIRECTED BY THE ENGINEER.

THE PURPOSE OF THIS RE-RECORDING IS TO CORRECT THE ARC LENGTH OF DART AVENUE - CURVE NO. 1.

228+15.60
1.00' LT.
20°18'08"
2.87'
℄ BLVD.
℄ BLVD. ST.
℄ DART AVE. 1.00'
P.T. 227+84.76
228+12.91
DETAIL "C"

1.00'
℄ BLVD.
℄ DART
57°22'32"
℄ SURVEY
134+86.65
S.R. 59
57°22'32"
ST.
AVE. 1.00'
P.C. 234+66.45
234+93.22
134+87.43
DETAIL "A"

RECEIVED FOR RECORD FEB - 8 1980 At 8:05 A.M. Re-Recorded Vol. 119 Page 56-57 Ralph J. James B. Osborn Deputy 17.80

RECEIVED FOR RECORD NOV 26 1982 At 2:43 P Recorded Dec 3 1982 Vol. 130 Page 27-28 B. Osborn Deputy 18.30

119/56 116/46

VOL 130 PAGE 27

SHEET 1 OF 1
CENTERLINE SURVEY PLAT

FORM D D A-8

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

258

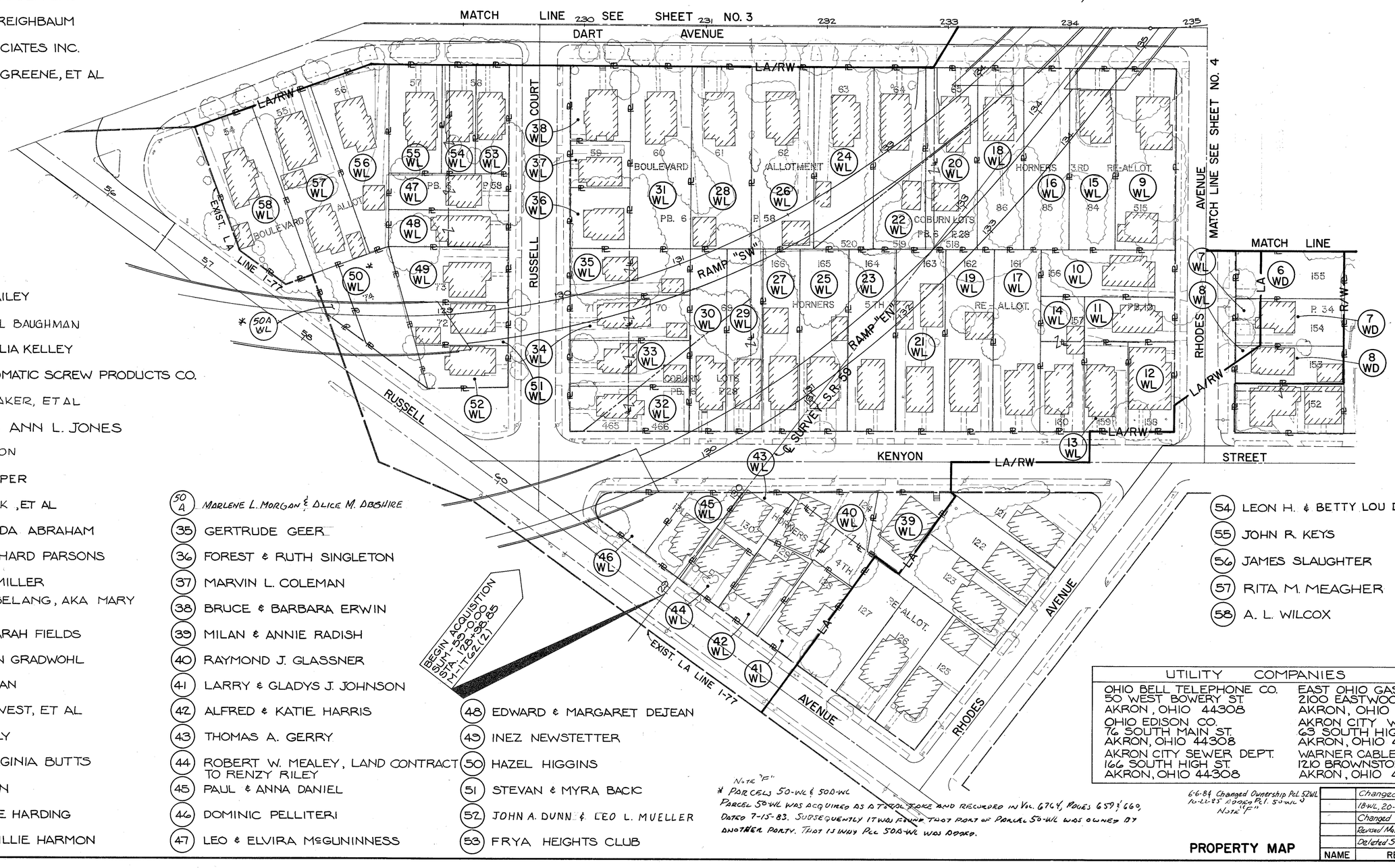
2/13

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

# PROPERTY MAP

**SUM-59-0.00**

GRAPHIC SCALE
0 40 80 120




(4) IDA M. KIRBY
(5) FRANCIS & PATRICIA KUHN
(6) CHARLES E. & E. LOUISE BENNETT
(7) A. L. WILCOX
(8) CHARLES E. & E. LOUISE BENNETT
(9) HENRIETTA A. JEFFERS
(10) BRUCE L. KREIGHBAUM
(11) B. & B. ASSOCIATES INC.
(12) DAVID J. W. GREENE, ET AL
(13) LEO J. McGAILEY
(14) HEIRS OF PAUL BAUGHMAN
(15) LOUIE & AMELIA KELLEY
(16) AKRON AUTOMATIC SCREW PRODUCTS CO.
(17) MONDELL BAKER, ET AL
(18) WILLIE E. & ANN L. JONES
(19) CITY OF AKRON
(20) JAMES COOPER
(21) ROSE A. SHOOK, ET AL
(22) LOUIS & WILDA ABRAHAM
(23) JAMES & RICHARD PARSONS
(24) MORACE McMILLER
(25) MARY E. AMBELANG, AKA MARY E. CONLON
(26) ROBERT & SARAH FIELDS
(27) WM. & MARIAN GRADWOHL
(28) MARY M. HAGAN
(29) HELLEN L. WEST, ET AL
(30) MARY A. KULLY
(31) DANIEL & VIRGINIA BUTTS
(32) SADIE BARON
(33) LEON & LEONE HARDING
(34) CHARLES & BILLIE HARMON
(35) GERTRUDE GEER
(36) FOREST & RUTH SINGLETON
(37) MARVIN L. COLEMAN
(38) BRUCE & BARBARA ERWIN
(39) MILAN & ANNIE RADISH
(40) RAYMOND J. GLASSNER
(41) LARRY & GLADYS J. JOHNSON
(42) ALFRED & KATIE HARRIS
(43) THOMAS A. GERRY
(44) ROBERT W. MEALEY, LAND CONTRACT TO RENZY RILEY
(45) PAUL & ANNA DANIEL
(46) DOMINIC PELLITERI
(47) LEO & ELVIRA McGUNINNESS
(48) EDWARD & MARGARET DEJEAN
(49) INEZ NEWSTETTER
(50) HAZEL HIGGINS
(50A) MARLENE L. MORGAN & ALICE M. ABSHIRE
(51) STEVAN & MYRA BACIC
(52) JOHN A. DUNN & LEO L. MUELLER
(53) FRYA HEIGHTS CLUB
(54) LEON H. & BETTY LOU DIXON
(55) JOHN R. KEYS
(56) JAMES SLAUGHTER
(57) RITA M. MEAGHER
(58) A. L. WILCOX

Note "F"
* PARCELS 50-WL & 50A-WL
PARCEL 50-WL WAS ACQUIRED AS A TOTAL TAKE AND RECORDED IN VOL. 6764, PAGES 659 & 669, DATED 7-15-83. SUBSEQUENTLY IT WAS FOUND THAT PART OF PARCEL 50-WL WAS OWNED BY ANOTHER PARTY. THAT IS WHY PCL 50A-WL WAS ADDED.

| UTILITY COMPANIES | |
|---|---|
| OHIO BELL TELEPHONE CO.<br>50 WEST BOWERY ST.<br>AKRON, OHIO 44308 | EAST OHIO GAS CO.<br>2100 EASTWOOD AVE.<br>AKRON, OHIO 44305 |
| OHIO EDISON CO.<br>76 SOUTH MAIN ST.<br>AKRON, OHIO 44308 | AKRON CITY WATER DEPT.<br>63 SOUTH HIGH ST.<br>AKRON, OHIO 44308 |
| AKRON CITY SEWER DEPT.<br>166 SOUTH HIGH ST.<br>AKRON, OHIO 44308 | WARNER CABLE TV OF AKRON<br>1210 BROWNSTONE AVE.<br>AKRON, OHIO 44310 |

6-6-84 Changed Ownership Pcl. 52WL
10-22-85 Added Pcl. 50-WL & Note "F"

PROPERTY MAP

| NAME | REVISION | DATE |
|---|---|---|
| | Changed Ownership Pcls. | 6-22-82 |
| | 18-WL, 20-WL, 31-WL & 57-WL | |
| | Changed Ownership Pcl. 19 | 3-23-83 |
| | Revised Name Pcl. 14 & 21 | 7-14-83 |
| | Deleted Structures Pcl. 16 | 10-25-83 |

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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3/13

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

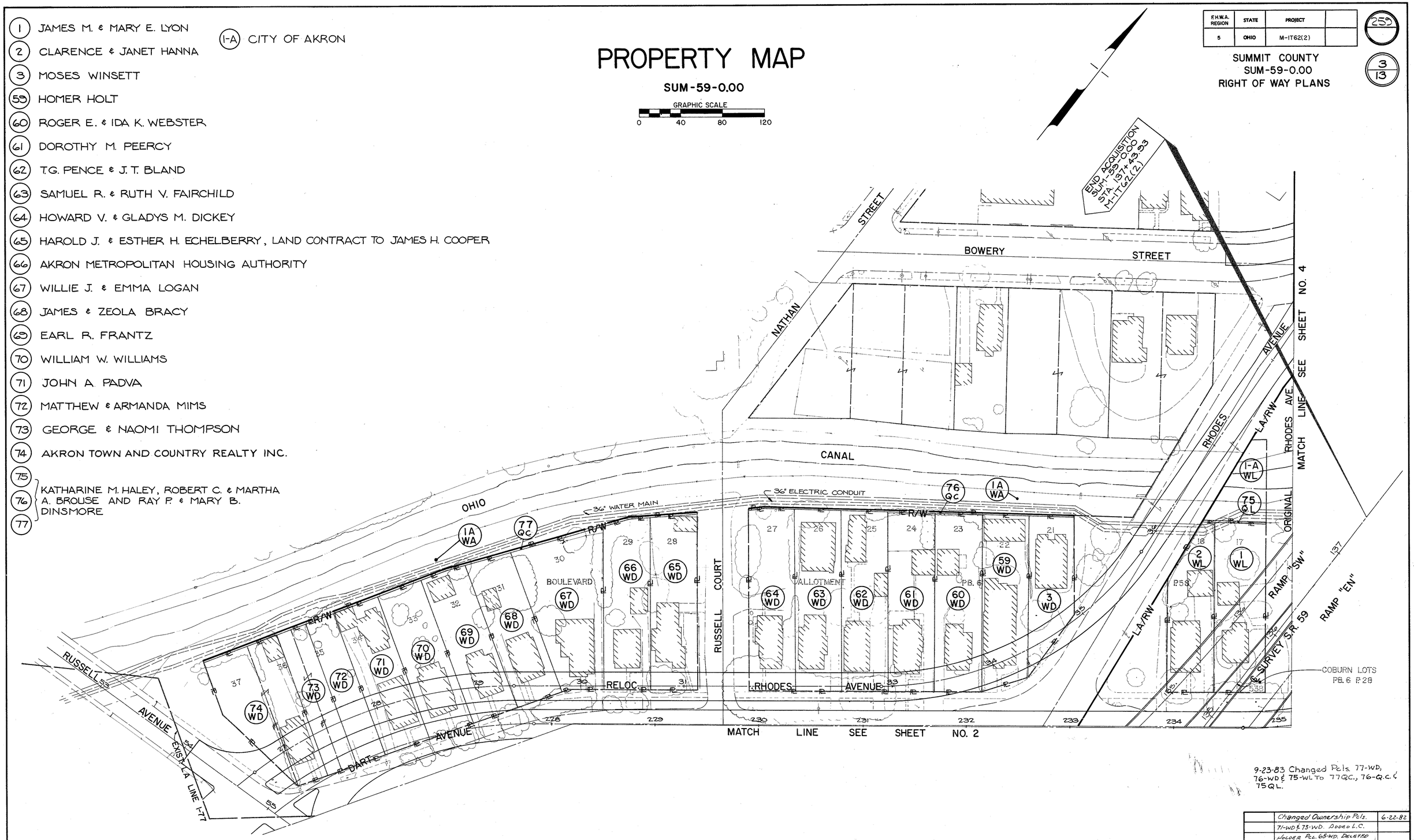
# PROPERTY MAP

**SUM-59-0.00**

GRAPHIC SCALE
0 40 80 120

(1) JAMES M. & MARY E. LYON
(2) CLARENCE & JANET HANNA
(3) MOSES WINSETT
(59) HOMER HOLT
(60) ROGER E. & IDA K. WEBSTER
(61) DOROTHY M. PEERCY
(62) T.G. PENCE & J. T. BLAND
(63) SAMUEL R. & RUTH V. FAIRCHILD
(64) HOWARD V. & GLADYS M. DICKEY
(65) HAROLD J. & ESTHER H. ECHELBERRY, LAND CONTRACT TO JAMES H. COOPER
(66) AKRON METROPOLITAN HOUSING AUTHORITY
(67) WILLIE J. & EMMA LOGAN
(68) JAMES & ZEOLA BRACY
(69) EARL R. FRANTZ
(70) WILLIAM W. WILLIAMS
(71) JOHN A. PADVA
(72) MATTHEW & ARMANDA MIMS
(73) GEORGE & NAOMI THOMPSON
(74) AKRON TOWN AND COUNTRY REALTY INC.
(75)
(76) KATHARINE M. HALEY, ROBERT C. & MARTHA A. BROUSE AND RAY P. & MARY B. DINSMORE
(77)

(1-A) CITY OF AKRON




9-23-83 Changed Pcls. 77-WD, 76-WD & 75-WL To 77QC., 76-QC & 75QL.

| NAME | REVISION | DATE |
|---|---|---|
| | Changed Ownership Pcls. | 6-22-82 |
| | 71-WD & 73-WD. Added L.C. | |
| | Holder Pcl. 65-WD. Deleted | |
| | House on Pcl. 73-WD | |
| | | |

**PROPERTY MAP**

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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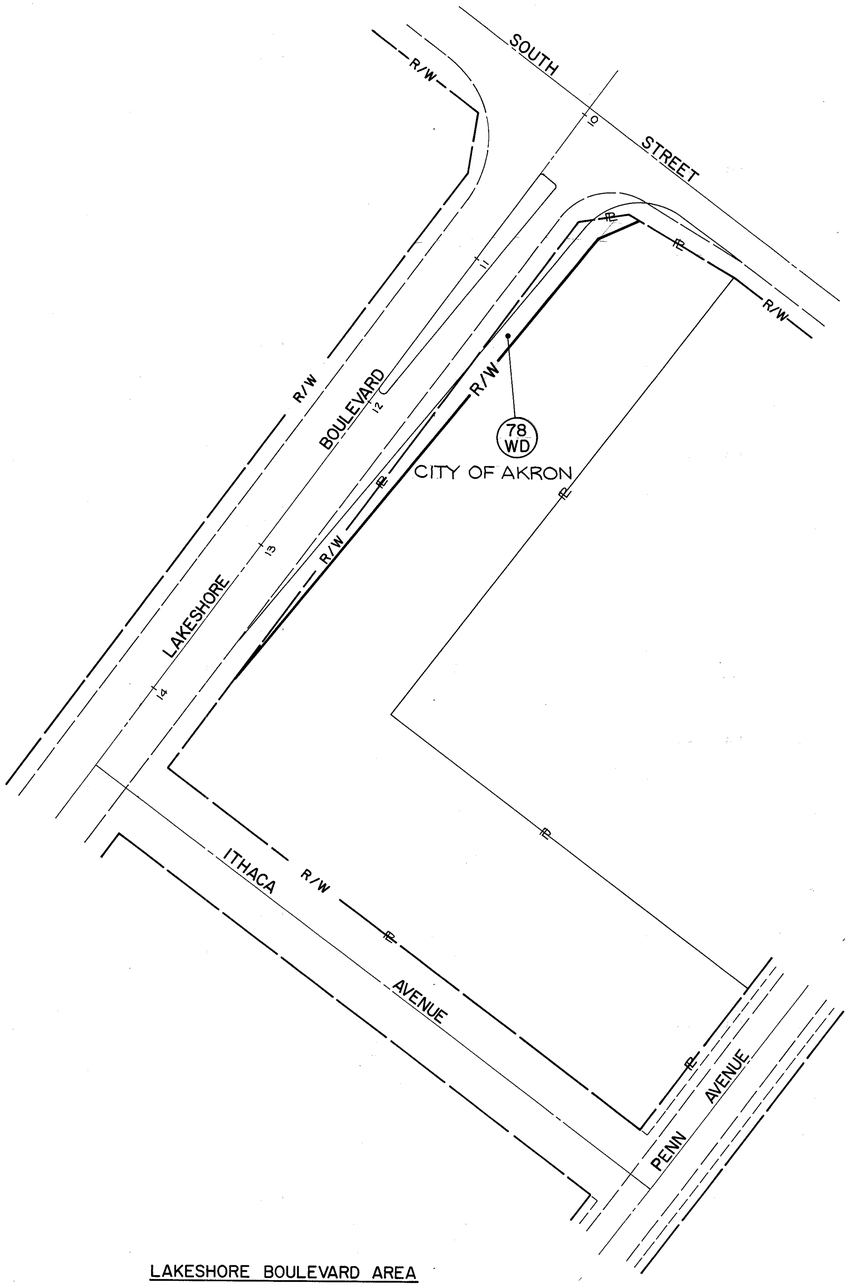
4/13

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

# PROPERTY MAP

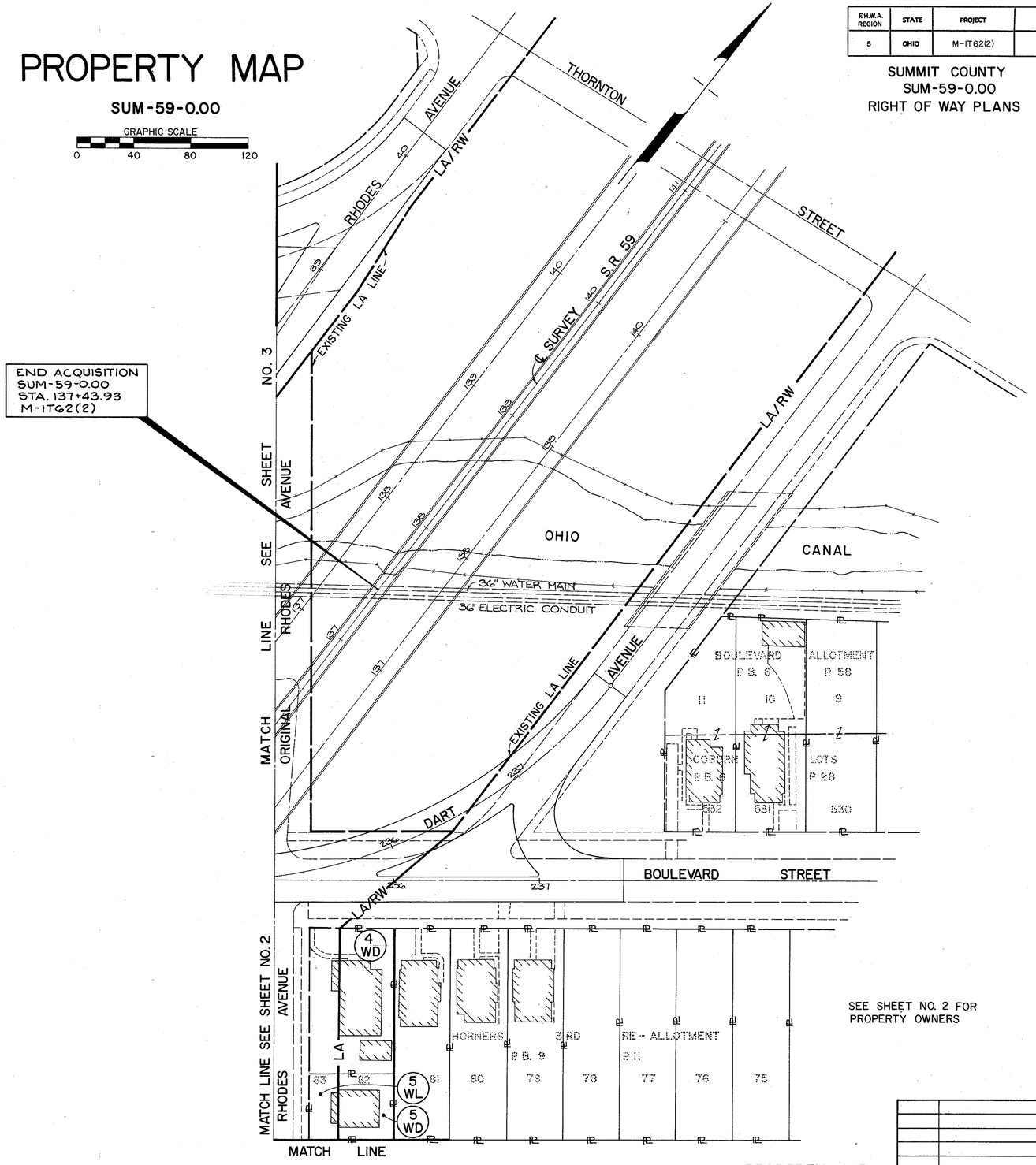
**SUM-59-0.00**

GRAPHIC SCALE
0 40 80 120




LAKESHORE BOULEVARD AREA

END ACQUISITION
SUM-59-0.00
STA. 137+43.93
M-IT62(2)




SEE SHEET NO. 2 FOR
PROPERTY OWNERS

PROPERTY MAP

| NAME | REVISION | DATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

FORM D D A-8

# INDEX MAP

**SUM-59-0.00**

GRAPHIC SCALE

0 100 200 300

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

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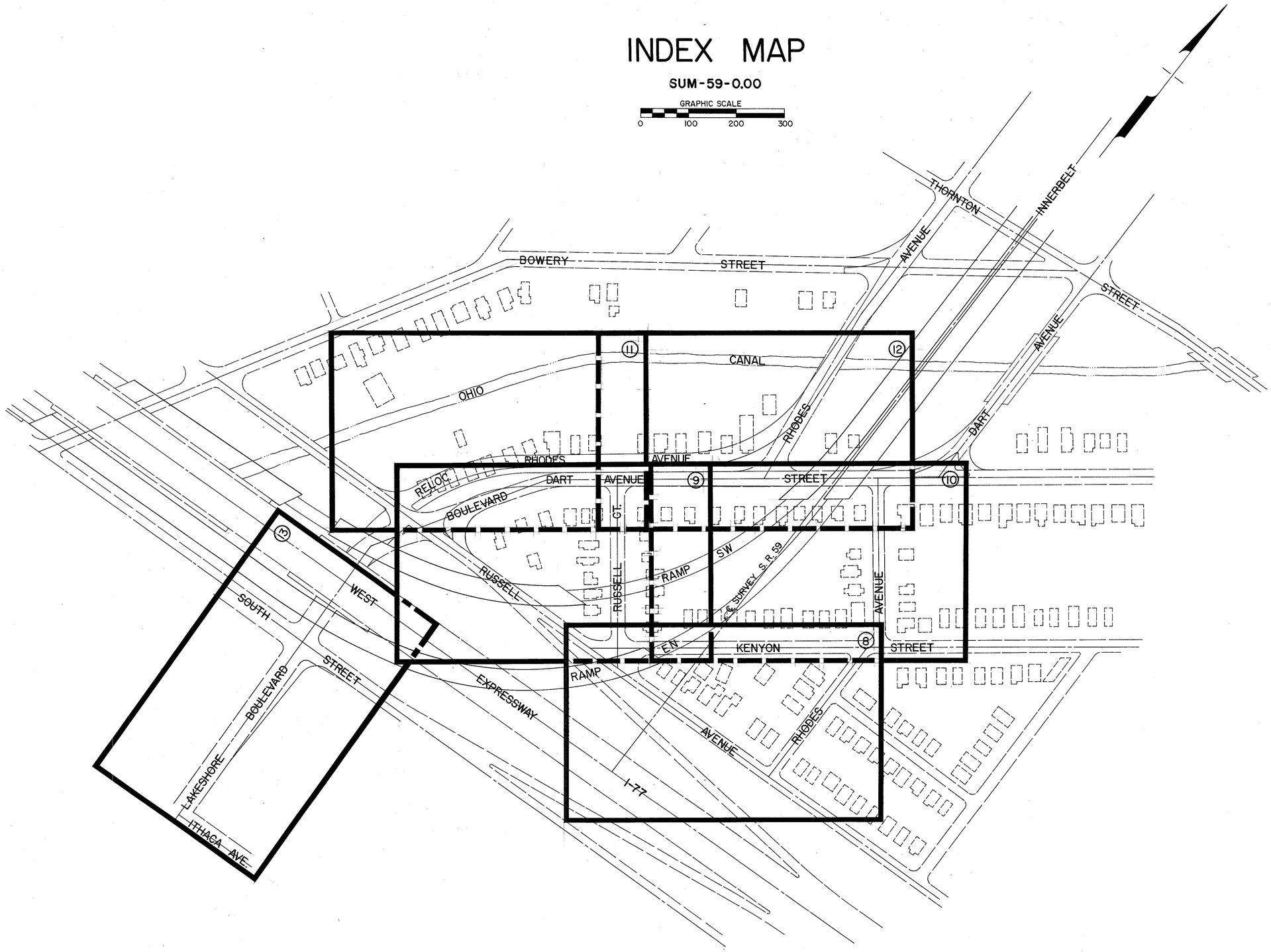
5/13




INDEX MAP

| NAME | REVISION | DATE |
|---|---|---|
| | | |

FORM D D A-8

# SUMMARY OF ADDITIONAL RIGHT OF WAY

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

6/13

TOTAL NUMBER OF OWNERS 79 TOTAL NUMBER OF OWNERS WITH STRUCTURES 70 NUMBER OF TOTAL TAKES 77 NUMBER OF TOTAL TAKES WITH STRUCTURES 70

| PARCEL Nº | OWNER | DEED RECORD BOOK | DEED RECORD PAGE | DEED AREA | TOTAL P.R.O. | TO BE ACQUIRED GROSS TAKE | TO BE ACQUIRED P.R.O. IN TAKE | TO BE ACQUIRED NET TAKE LAND | TO BE ACQUIRED NET TAKE BLDG. | NET RESIDUE LEFT | NET RESIDUE RIGHT | SHEET Nº | TYPE FUNDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 WL | JAMES M. LYON & MARY E. LYON | 4750 | 215 | 8214 | 0 | 8214 | 0 | 8214 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| 2 WL | CLARENCE R. HANNA & JANET L. HANNA | 3897 | 385 | 6452 | 0 | 6452 | 0 | 6452 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| 3 WD | MOSES WINSETT | 4867 | 681 | 5777 | 0 | 5777 | 0 | 5777 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| 4 WD | IDA M. KIRBY | 4665 | 143 | 6180 | 0 | 6180 | 0 | 6180 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 5 WL<br>5 WD | FRANCIS C. KUHN & PATRICIA JOAN KUHN | 2904 | 603 | 2820 | 0 | 940<br>1880 | 0<br>0 | 940<br>1880 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 6 WL<br>6 WD | CHARLES E. BENNETT & E. LOUISE BENNETT | 5170 | 13 | 3510 | 0 | 780<br>2730 | 0<br>0 | 780<br>2730 | | 0 | 0 | 10 | | TOTAL TAKE |
| 7 WL<br>7 WD | A. L. WILCOX | 5764 | 655 | 3420 | 0 | 760<br>2660 | 0<br>0 | 760<br>2660 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 8 WL<br>8 WD | CHARLES E. BENNETT & E. LOUISE BENNETT | 4425 | 673 | 2970 | 0 | 146<br>2824 | 0<br>0 | 146<br>2824 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 9 WL | HENRIETTA AGNES JEFFERS | 4018 | 604 | 7500 | 0 | 7500 | 0 | 7500 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 10 WL | BRUCE L. KREIGHBAUM | 5028 | 597 | 4218 | 0 | 4218 | 0 | 4218 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 11 WL | B. & B. ASSOCIATES, INC. | 5985 | 281 | 2735 | 0 | 2735 | 0 | 2735 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 12 WL | DAVID J. W. GREENE, (SEE NOTE 'A') | 6445 | 814 | 2775 | 0 | 2775 | 0 | 2775 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 13 WL | LEO JOHN McGAILEY | 5803 | 50 | 2775 | 0 | 2775 | 0 | 2775 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 14 WL | HEIRS OF PAUL BAUGHMAN | 3104 | 343 | 4145 | 0 | 4145 | 0 | 4145 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 15 WL | LOUIE M. KELLEY & AMELIA KELLEY | 2447 | 447 | 5700 | 0 | 5700 | 0 | 5700 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 16 WL | AKRON AUTOMATIC SCREW PRODUCTS, INCORPORATED | 4548 | 582 | 5700 | 0 | 5700 | 0 | 5700 | | 0 | 0 | 10 | | TOTAL TAKE |
| 17 WL | MONDELL BAKER, (SEE NOTE I) | 6188 | 771 | 5850 | 0 | 5850 | 0 | 5850 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 18 WL | WILLIE E. JONES & ANN L. JONES | 6372 | 160 | 5700 | 0 | 5700 | 0 | 5700 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 19 WL | CITY OF AKRON | 6199 | 412 | 6000 | 0 | 6000 | 0 | 6000 | | 0 | 0 | 10 | | TOTAL TAKE |
| 20 WL | JAMES COOPER | 6451 | 887 | 6158 | 0 | 6158 | 0 | 6158 | YES | 0 | 0 | 10 | | TOTAL TAKE, AFFIDAVIT #75160 |
| 21 WL | ROSE A. SHOOK, DONALD G. WARNER, HARVEY T. WARNER & RALPH H. WARNER | 5310 | 5,6 | 6000 | 0 | 6000 | 0 | 6000 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 22 WL | LOUIS ABRAHAM & WILDA ABRAHAM | 6043 | 77 | 6758 | 0 | 6758 | 0 | 6758 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 23 WL | JAMES PARSONS & RICHARD PARSONS | 5890 | 282 | 6000 | 0 | 6000 | 0 | 6000 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 24 WL | MORACE McMILLER | 4634 | 312 | 7500 | 0 | 7500 | 0 | 7500 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 25 WL | MARY E. AMBELANG, (SEE NOTE 'B') | 5682 | 621 | 6000 | 0 | 6000 | 0 | 6000 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 26 WL | ROBERT L. FIELDS & SARAH N. FIELDS | 4879 | 244 | 7500 | 0 | 7500 | 0 | 7500 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 27 WL | WILLIAM HERBERT GRADWOHL & MARIAN E. GRADWOHL | 3166 | 364 | 4500 | 0 | 4500 | 0 | 4500 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 28 WL | MARY M. HAGAN | 1776 | 543 | 7500 | 0 | 7500 | 0 | 7500 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 29 WL | HELLEN L. WEST, (SEE NOTE 'H') | 6592 | 32 | 4500 | 0 | 4500 | 0 | 4500 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 30 WL | MARY ALICE KULLY | 5267 | 697 | 4500 | 0 | 4500 | 0 | 4500 | YES | 0 | 0 | 10 | | TOTAL TAKE |
| 31 WL | DANIEL BUTTS & VIRGINIA BUTTS | 6301 | 654 | 7500 | 0 | 7500 | 0 | 7500 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 32 WL | SADIE BARON | 6193 | 450 | 3748 | 0 | 3748 | 0 | 3748 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 33 WL | LEON B. HARDING & LEONE G. HARDING | 5867 | 189 | 3745 | 0 | 3745 | 0 | 3745 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 34 WL | CHARLES L. HARMON & BILLIE J. HARMON | 2897 | 498 | 3751 | 0 | 3751 | 0 | 3751 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 35 WL | GERTRUDE GEER | 5025 | 611 | 3752 | 0 | 3752 | 0 | 3752 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 36 WL | FOREST L. SINGLETON & RUTH SINGLETON | 5116 | 239 | 2502 | 0 | 2502 | 0 | 2502 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 37 WL | MARVIN LEE COLEMAN | 4338 | 340 | 1902 | 0 | 1902 | 0 | 1902 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 38 WL | BRUCE R. ERWIN JR. & BARBARA ERWIN | 4008 | 767 | 3105 | 0 | 3105 | 0 | 3105 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 39 WL | MILAN RADISH & ANNIE RADISH | 4169 | 450 | 2929 | 0 | 2929 | 0 | 2929 | YES | 0 | 0 | 8 | | TOTAL TAKE |
| 40 WL | RAYMOND J. GLASSNER | 4787 | 225 | 4320 | 0 | 4320 | 0 | 4320 | YES | 0 | 0 | 8 | | TOTAL TAKE |
| 41 WL | LARRY JOHNSON & (SEE NOTE 'D') | 5810 | 179 | 3200 | 0 | 3200 | 0 | 3200 | YES | 0 | 0 | 8 | | TOTAL TAKE |
| 42 WL | ALFRED E. HARRIS & KATIE HARRIS | 5410 | 366 | 2980 | 0 | 2980 | 0 | 2980 | YES | 0 | 0 | 8 | | TOTAL TAKE |
| 43 WL | THOMAS A. GERRY | 5347 | 442 | 1766 | 0 | 1766 | 0 | 1766 | YES | 0 | 0 | 8 | | TOTAL TAKE |
| 44 WL | ROBERT WILLIAM MEALEY | 5653 | 717 | 2320 | 0 | 2320 | 0 | 2320 | YES | 0 | 0 | 8 | | TOTAL TAKE, SEE NOTE 'C' |
| 45 WL | PAUL DANIEL & ANNA R. DANIEL | 2991 | 455 | 2659 | 0 | 2659 | 0 | 2659 | YES | 0 | 0 | 8 | | TOTAL TAKE |
| 46 WL | DOMINIC PELLITERI | 6012 | 310 | 2457 | 0 | 2457 | 0 | 2457 | | 0 | 0 | 8 | | TOTAL TAKE |
| 47 WL | LEO E. McGUNINNES & ELVIRA B. McGUNINNES | 5661 | 334 | 3000 | 0 | 3000 | 0 | 3000 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 48 WL | EDWARD DEJEAN & MARGARET REGINA DEJEAN | 5858 | 583 | 3000 | 0 | 3000 | 0 | 3000 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 49 WL | INEZ F. NEWSTETTER | 5422 | 42 | 4212 | 0 | 4212 | 0 | 4212 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| SEE NOTE F → 50 WL | HAZEL G. HIGGINS | 2044 | 472 | 4933 | 0 | 4933 | 0 | 4933 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 51 WL | STEVAN BACIC & MYRA BACIC | 2900 | 386 | 2877 | 0 | 2877 | 0 | 2877 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 52 WL | JOHN A. DUNN & LEO L. MUELLER | 5067 | 105 | 2526 | 0 | 2526 | 0 | 2526 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 53 WL | FRYA HEIGHTS CLUB | 5662 | 892 | 2520 | 0 | 2520 | 0 | 2520 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 54 WL | LEON H. DIXON & BETTY LOU DIXON | 5179 | 581 | 2700 | 0 | 2700 | 0 | 2700 | YES | 0 | 0 | 9 | | TOTAL TAKE, DRIVE AGREEMENT |
| 55 WL | JOHN R. KEYS | 6187 | 845 | 3780 | 0 | 3780 | 0 | 3780 | YES | 0 | 0 | 9 | | TOTAL TAKE, DRIVE AGREEMENT |
| 56 WL | JAMES SLAUGHTER | 4479 | 592 | 6214 | 0 | 6214 | 0 | 6214 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 57 WL | RITA M. MEAGHER | SEE NOTE 'E' | | 7290 | 0 | 7290 | 0 | 7290 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 58 WL | A. L. WILCOX | 5764 | 657 | 6769 | 0 | 6769 | 0 | 6769 | YES | 0 | 0 | 9 | | TOTAL TAKE |
| 59 WD | HOMER HOLT | 3622 | 64,68 | 7441 | 0 | 7441 | 0 | 7441 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| 60 WD | ROGER E. WEBSTER & IDA KATHRYN WEBSTER | 3789 | 321 | 7700 | 0 | 7700 | 0 | 7700 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| SEE NOTE F → 500-WL | MARLENE L. MORGAN & ALICE M. ABSHIRE | | | 1,125 | 0 | 1,125 | 0 | 1,125 | NO | 0 | 0 | 9 | | TOTAL TAKE |

M-IT62(2)

NOTE 'F': PARCELS 50-WL & 500-WL. PARCEL 50-WL WAS ACQUIRED AS A TOTAL TAKE AND RECORDED IN VOL. 6764, PAGES 659 & 660, DATED 7-15-83. SUBSEQUENTLY, IT WAS FOUND THAT A PART OF PCL. 50-WL WAS OWNED BY ANOTHER PARTY. THIS IS WHY PCL. 500-WL WAS ADDED

NOTE 'A'
BERNICE McHALE, CHARLES L. GREENE, MARY BURNETT, ROBERT GREENE & EDGAR GREENE

NOTE 'I'
MARILYN DUTTON, JEAN MONTECALVO & MARY DOLORES REHOR

NOTE 'B'
AKA MARY ELIZABETH AMBELANG, AKA MARY E. CONLON

NOTE 'H'
SHIRLEY AVERIETTE, LILLY HOLTZCLAW, ROBERT KNOX & WILLIE KNOX JR.

NOTE 'D'
GLADYS J. JOHNSON AKA GLADYS G. JOHNSON. RECORDED IN VOLUME 5810 PAGE 131 & CERTIFICATE OF TRANSFER NO. 71881.

NOTE 'C'
LAND CONTRACT TO RENZY RILEY RECORDED IN VOLUME 5873, PAGE 721 DEED RECORDED IN VOLUME 5653, PAGE 713 & VOLUME 3165, PAGE 237.

NOTE 'E'
TITLE RECORDED IN VOL. 2549 P. 250, VOL. 2867 P. 393, VOL. 2865 P. 582, VOL. 3817 P. 29 & VOL. 6311 P. 816.

10-22-81 Added Pcl. 500-WL & Note F
6-6-84 Changed Ownership Pcl. 52-WL
8-18-83 Deleted "Yes" From Bldg. Col. Pcl. 19-WL
10-25-83 Deleted "Yes" From Bldg. Col. Pcl. 16-WL

| NAME | REVISION | DATE |
|---|---|---|
| | Changed Ownership Pcls. | 6-22-84 |
| | 18-WL, 20-WL, 31-WL & 57-WL | |
| | Changed Ownership Pcl. 19-WL | 3-23-83 |
| | Changed Ownership Pcl. 17-WL | 6-8-83 |
| | Revised Names Pcls 14-WL & 21-WL | 7-11-83 |

# SUMMARY OF ADDITIONAL RIGHT OF WAY

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

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SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

7/13

| PARCEL Nº | OWNER | DEED RECORD BOOK | DEED RECORD PAGE | DEED AREA | TOTAL P.R.O. | TO BE ACQUIRED GROSS TAKE | P.R.O. IN TAKE | NET TAKE LAND | NET TAKE BLDG. | NET RESIDUE LEFT | NET RESIDUE RIGHT | SHEET Nº | TYPE FUNDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61 WD | DOROTHY M. PEERCY | 4667 | 553,559 | 7758 | 0 | 7758 | 0 | 7758 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| 62 WD | T.G. PENCE & J.T. BLAND | 5940 | 478 | 7816 | 0 | 7816 | 0 | 7816 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| 63 WD | SAMUEL R. FAIRCHILD & RUTH V. FAIRCHILD | 4548 | 483 | 7873 | 0 | 7873 | 0 | 7873 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| 64 WD | HOWARD V. DICKEY & GLADYS M. DICKEY | 4624<br>2058 | 285<br>472 | 7908 | 0 | 7908 | 0 | 7908 | YES | 0 | 0 | 12 | | TOTAL TAKE |
| 65 WD | HAROLD J. ECHELBERRY & ESTHER H. ECHELBERRY (SEE NOTE 'F') | 5456 | 513 | 7568 | 0 | 7568 | 0 | 7568 | YES | 0 | 0 | 11 | | TOTAL TAKE, EASEMENT TO OHIO EDISON CO. VOL. 4670 P. 14 |
| 66 WD | AKRON METROPOLITAN HOUSING AUTHORITY | 4831 | 541 | 7314 | 0 | 7314 | 0 | 7314 | YES | 0 | 0 | 11 | | TOTAL TAKE |
| 67 WD | WILLIE J. LOGAN & EMMA LOGAN | 5615 | 503 | 9676 | 0 | 9676 | 0 | 9676 | YES | 0 | 0 | 11 | | TOTAL TAKE SEE NOTE 'G' |
| 68 WD | JAMES BRACY & ZEOLA BRACY | 4398 | 315 | 6500 | 0 | 6500 | 0 | 6500 | YES | 0 | 0 | 11 | | TOTAL TAKE |
| 69 WD | EARL R. FRANTZ | 5744 | 457 | 6628 | 0 | 6628 | 0 | 6628 | YES | 0 | 0 | 11 | | TOTAL TAKE |
| 70 WD | WILLIAM W. WILLIAMS | 5618 | 38,109 | 6615 | 0 | 6615 | 0 | 6615 | YES | 0 | 0 | 11 | | TOTAL TAKE |
| 71 WD | JOHN A. PADVA | 6573 | 165 | 6596 | 0 | 6596 | 0 | 6596 | YES | 0 | 0 | 11 | | TOTAL TAKE |
| 72 WD | MATTHEW MIMS & ARMANDA MIMS | 4469 | 315 | 4387 | 0 | 4387 | 0 | 4387 | | 0 | 0 | 11 | | TOTAL TAKE |
| 73 WD | GEORGE THOMPSON & NAOMI THOMPSON | 6417 | 573 | 4378 | 0 | 4378 | 0 | 4378 | | 0 | 0 | 11 | | TOTAL TAKE |
| 74 WD | AKRON TOWN AND COUNTRY REALTY INC. | 5338 | 722,724 | 8884 | 0 | 8884 | 0 | 8884 | YES | 0 | 0 | 11 | | TOTAL TAKE |
| 75 QL | KATHARINE M. HALEY, ROBERT C. BROUSE, MARTHA A. BROUSE, RAY P. DINSMORE & MARY B. DINSMORE | | | 123 | 0 | 123 | 0 | 123 | | 0 | 0 | 12 | | TOTAL TAKE SEE NOTE 'I' |
| 76 QC | KATHARINE M. HALEY, ROBERT C. BROUSE, MARTHA A. BROUSE, RAY P. DINSMORE & MARY B. DINSMORE | | | 630 | 0 | 630 | 0 | 630 | | 0 | 0 | 12 | | TOTAL TAKE SEE NOTE 'I' |
| 77 QC | KATHARINE M. HALEY, ROBERT C. BROUSE, MARTHA A. BROUSE, RAY P. DINSMORE & MARY B. DINSMORE | | | 998 | 0 | 998 | 0 | 998 | | 0 | 0 | 11 | | TOTAL TAKE SEE NOTE 'I' |
| 78 WD | CITY OF AKRON | 4263 | 613 | 59,942 | 0 | 2465 | 0 | 2465 | | 0 | 57,477 | 13 | | |
| 1A WL<br>1A WA | CITY OF AKRON | | | — | 0 | 2815 | 0 | 2815 | | 0 | 0 | 12<br>11 | | CANAL LANDS<br>SLOPE GRADING |

NOTE 'F'
LAND CONTRACT TO JAMES H. COOPER, RECORDED IN VOLUME 5714 PAGE 573.

NOTE 'G'
WILLIE J. LOGAN DIED INTESTATE ON FEB. 17, 1982, ESTATE PENDING (#R-82-5-59).

NOTE 'I'
PARCEL IS 2' SET ASIDE STRIP OF LAND HELD BY ALLOTMENT OWNER BROUSE BOULEVARD ALLOTMENT. P.B. 6 P. 58

9-23-83 Changed Pcls. 76-WD, 77-WD & 75-WL To 76-Q.C., 77-Q.C. & 75-QL

| NAME | REVISION | DATE |
|---|---|---|
| | Added L.C. Holder Pcl 65-WD | 6-22-82 |
| | Changed Ownership Pcl 71-WD | |
| | 673-WD. Deleted Yes From Structure Column Pcl 73-WD | |
| | | |

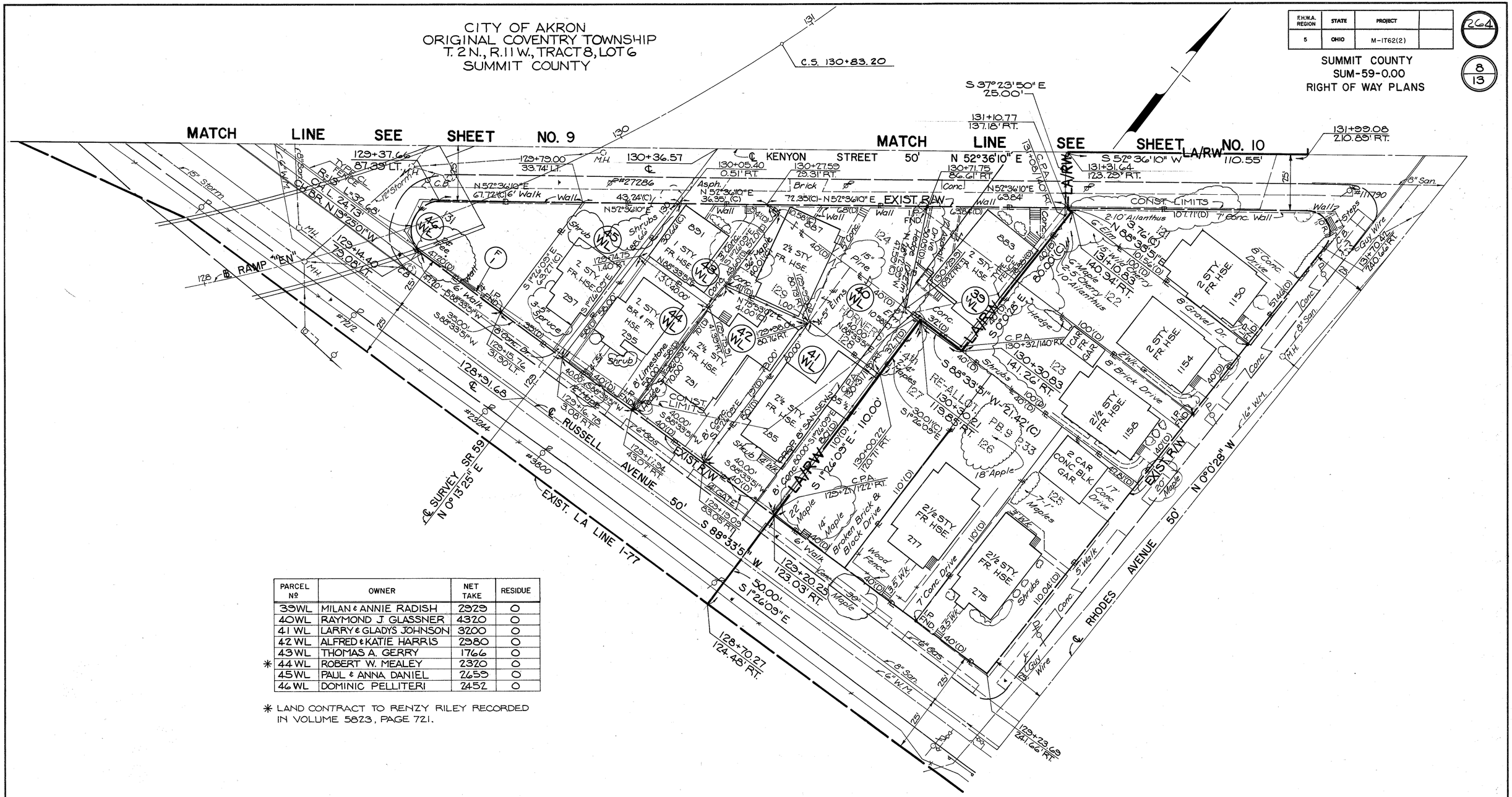
CITY OF AKRON
ORIGINAL COVENTRY TOWNSHIP
T. 2 N., R. 11 W., TRACT 8, LOT 6
SUMMIT COUNTY

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

264

8/13

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS


MATCH LINE SEE SHEET NO. 9
MATCH LINE SEE SHEET NO. 10
C.S. 130+83.20
S 37°23'50" E 25.00'
131+10.77 137.18' RT.
131+99.08 210.85' RT.
129+37.66 87.39' LT.
CHORD BR. N 19°25'01" W
CHORD L 24.13'
R 18.00'
DELTA 37°46'
TANGENT 12.58'
CURVE C
129+14.40 75.06' LT.
129+79.00 33.74' LT.
130+36.57
130+05.40 0.51' RT.
130+27.59 29.31' RT.
130+71.75 86.61' RT.
131+31.64 123.25' RT.
KENYON STREET 50'
N 52°36'10" E
S 52°36'10" W
LA/RW 110.55'
EXIST. R/W
CONST. LIMITS
N 57°36'10" E 67.72'(C)
43.24'(C)
36.35'(C)
72.35'(C)
6' Walk
Wall
Asph.
Brick
Conc.
Steps
Guy Wire
15" Storm
12" Storm
8" San.
16" W.M.
RAMP "EN"
RUSSELL AVENUE 50'
RHODES AVENUE 50'
EXIST. LA LINE I-77
℄ SURVEY SR 59 N 0° 13' 25" E
#27286
#27284
#3800
#27172
#111790
128+91.68
129+15.76 31.90' LT.
129+16.76 30.68' RT.
129+17.94 43.07' RT.
129+19.03 83.05' RT.
129+20.25 123.03' RT.
128+70.27 124.48' RT.
129+23.69 241.46' RT.
130+30.83 141.24' RT.
130+32.14 140.94' RT.
130+30.92 119.85' RT.
129+24.72 122' RT.
129+70.44 240.64' RT.
S 1°26'09" E 63.27'(C)
S 1°26'09" E 50.00'
S 1°26'09" E 110.00'
S 1°26'09" E 300.11'(C)
S 88°33'51" W 35.00'
S 88°33'51" W 40.00'
S 88°33'51" W 21.42'(C)
N 0°0'28" W
N 0°0'28" E 80.00'(C)(W)
N 57°36'10" E 40.00'
N 57°36'10" E 36.84'
N 57°36'10" E 10.58'(C)
N 57°36'10" E 10.84'(D)
N 57°36'10" E 10.71'(D)
N 57°36'10" E 10.04'(D)
N 57°36'10" E 10.00'(D)
S 57°36'10" W 10.00'(D)
S 57°36'10" W 10.15'(D)
S 57°36'10" W 10.00'(D)
S 57°36'10" W 10.00'(D)
S 57°36'10" W 10.00

CITY OF AKRON
ORIGINAL COVENTRY TOWNSHIP
T. 2 N., R. 11 W., TRACT 8, LOT 6
SUMMIT COUNTY

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

265

9/13

SEE SHEET NO. 11

MATCH LINE

℄ BOULEVARD

℄ 14' GATE

TYPE CL FENCE

EXIST. R/W

EXIST LA LINE I-77 #3726

℄ DART AVENUE

EXIST. R/W

EXIST. LA/R/W

N 32°17'49" E

N 52°35'57" E

N 37°23'06" W

S 52°35'57" W

S 88°33'51" W

S 88°29'43" W

S 53°08'36" W

N 33°56'49" E

S 33°56'49" W

RUSSELL AVENUE "SW"

RAMP "50"

RUSSELL COURT

KENYON STREET 50'

℄ RAILROAD

EXIST. R/W

EXIST. LA LINE I-77

MATCH LINE SEE SHEET NO. 10

MATCH LINE SEE SHEET NO. 8

COBURN LOTS PB. 6 P. 28

ALLOTMENT 57

Gravel Drive

Limestone Drive

Cinder & Gravel Drive

11' Asphalt Drive

8' Asphalt Drive

Conc. Drive

Gravel Dr.

Slag Dr.

Conc. Paved

Cinders

Yield Sign

Stop Sign

Street Marker

Guy Wires

Utility Pole

Fence Post

Conc. Pad

Conc. Walk

Conc. Curb

Brick

Shrubs

Hedge

Shrub

Dirt

Slag

Asph.

Conc.

Gravel

Cinders

Fdn. Walls

Block

Brick

Frame

Stone

Fdn.

Bldg.

Fld.

Lot

Allot.

Sta.

Ave.

Rd.

Ct.

Pl.

Blvd.

Dr.

Ln.

Cir.

Hwy.

Pkwy.

Sq.

Ter.

Trl.

Way

Mkr.

Pole

Light

Sign

Post

Wire

Fence

Curb

Walk

Drive

Path

Road

Street

Avenue

Court

Place

Boulevard

Terrace

Trail

Highway

Parkway

Square

Marker

# CITY OF AKRON
## ORIGINAL COVENTRY TOWNSHIP
## T. 2 N., R. 11 W., TRACT 8, LOT 6
## SUMMIT COUNTY

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

266

10/13

**SUMMIT COUNTY**
**SUM-59-0.00**
**RIGHT OF WAY PLANS**

NOTE:
MARY E. AMBELANG, AKA MARY ELIZABETH AMBELANG, AKA MARY E. CONLON

MATCH LINE SEE SHEET NO. 12

SEE SHEET NO. 9

MATCH LINE SEE SHEET NO. 8

| PARCEL Nº | OWNER | NET TAKE | RESIDUE |
|---|---|---|---|
| 15 WL | LOUIE & AMELIA KELLEY | .5700 | 0 |
| 16 WL | AKRON AUTO SCREW PROD.CO | 5700 | 0 |
| 17 WL | MONDELL BAKER, ET AL | 5850 | 0 |
| 18 WL | WILLIE & ANN JONES | 5700 | 0 |
| 19 WL | CITY OF AKRON | 6000 | 0 |
| 20 WL | JAMES COOPER | 6158 | 0 |
| 21 WL | ROSE A. SHOOK, ET AL | 6000 | 0 |
| 22 WL | LOUIS & WILDA ABRAHAM | 6758 | 0 |
| 23 WL | JAMES & RICHARD PARSONS | 6000 | 0 |
| 24 WL | MORAE McMILLER | 7500 | 0 |
| 25 WL | SEE NOTE ABOVE | 6000 | 0 |
| 26 WL | ROBERT & SARAH FIELDS | 7500 | 0 |
| 27 WL | WM. & MARIAN GRADWOHL | 4500 | 0 |
| 28 WL | MARY M. HAGAN | 7500 | 0 |
| 29 WL | HELLEN L. WEST, ET AL | 4500 | 0 |
| 30 WL | MARY A. KULLY | 4500 | 0 |

| PARCEL Nº | OWNER | NET TAKE | RESIDUE |
|---|---|---|---|
| 4 WD | IDA. M. KIRBY | 6180 | 0 |
| 5 WL | FRANCIS & PATRICIA | 340 | 0 |
| 5 WD | KUHN | 1880 | |
| 6 WL | CHARLES E. & E. LOUISE | 780 | 0 |
| 6 WD | BENNETT | 2730 | |
| 7 WL | A. L. WILCOX | 760 | 0 |
| 7 WD | | 2660 | |
| 8 WL | CHARLES E. & E. LOUISE | 1460 | 0 |
| 8 WD | BENNETT | 2824 | |
| 9 WL | HENRIETTA A. JEFFERS | 7500 | 0 |
| 10 WL | BRUCE L. KREIGHBAUM | 4718 | 0 |
| 11 WL | B. & B. ASSOCIATES INC. | 2739 | 0 |
| 12 WL | DAVID J. W. GREENE, ET AL | 2775 | 0 |
| 13 WL | LEO J. & ISGAILEY | 2775 | 0 |
| 14 WL | HEIRS OF PAUL BAUGHMAN | 4145 | 0 |

| FUNDS | M-IT62(2) |
|---|---|

| NAME | REVISION | DATE |
|---|---|---|
| | Changed Ownership Pcls | 6-22-82 |
| | 19-WL & 20-WL | |
| | Changed Ownership Pcl. 19-WL | 3-23-83 |
| | Changed Ownership Pcl. 17-WL | 6-8-83 |
| | Revised Name of Pcls. 14-WL & 21-WL | 7-14-83 |

8-18-83 Deleted House & Garage Pcl. 19-WL
10-24-83 Deleted House & Garage Pcl. 16-WL

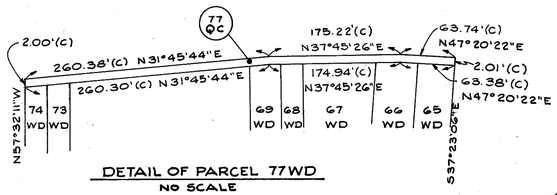
**STA. 130+36.57 TO STA. 134+88.69**

DENOTES MONUMENT ASSEMBLY TO BE SET

GRAPHIC SCALE
0 20 40 60

| PARCEL Nº | OWNER | NET TAKE | RESIDUE | |
|---|---|---|---|---|
| 65WD | H. J & E. H ECHELBERRY | 7567 | 0 | * |
| 66WD | AKRON METRO HOUS. AUTHOR. | 7314 | 0 | |
| 67WD | W. J & E. LOGAN | 9676 | 0 | |
| 68WD | JAMES & ZEOLA BRACY | 6500 | 0 | |
| 69WD | EARL P. FRANTZ | 6628 | 0 | |
| 70WD | WM W. WILLIAMS | 6615 | 0 | |
| 71WD | JOHN A. PADVA | 6596 | 0 | |
| 72WD | M. & A. NIMS | 4387 | 0 | |
| 73WD | G. & N. THOMPSON | 4378 | 0 | |
| 74WD | AKRON TOWN & CTY. RLTY. | 8884 | 0 | |
| 77QC | KATHARINE M. HALEY ET AL | 998 | 0 | |

* LAND CONTRACT TO JAMES H. COOPER RECORDED IN VOLUME 5714, PAGE 573.




DETAIL OF PARCEL 77WD
NO SCALE

CITY OF AKRON
ORIGINAL COVENTRY TOWNSHIP
T. 2 N., R. 11 W., TRACT 8, LOT 6
SUMMIT COUNTY

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

267

11/13

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

CANAL
OHIO
RUSSELL AVENUE
RELOC. RHODES AVENUE
DART AVENUE
BOULEVARD
THE
ALLOTMENT
EXIST. R/W
EXIST. C/L
EXIST. LA LINE
CONST. LIMITS
R/W
Limestone
Brick
Gravel Drive
Hedge
Lilacs
Shrubs
Ailanthus
Mulberry
Maple
Cherry
Elm
Oak
Pine
Apple
Locust
Linden
Ash
Twin
Cinders
Conc.
Brush
Wall
Curb
Fence
Sign
Pole
Guy
Tree
Line
Limits
Storm
Gas
W.M.
Elec. Cond.
Tile
Blk.
Gar.
Fr. Gar.
Fr. Hse.
Sty.
Car
Tile Blk. Gar.
2 Car Fr. Gar.
1 Car Fr. Gar.
2 Sty. Fr. Hse.
2½ Sty. Fr. Hse.
1 Sty. Fr. Hse.
Vac.
Pk.
Pt.
Pb.
Sec.
Alley
Court
Street
Sheet
No. 9
No. 12
See Match Line
Match Line See
Exist. R/W
Exist. C/L
Exist. La Line
Const. Limits
Reloc. Rhodes Avenue
Dart Avenue
Russell Court
Russell Avenue
Boulevard
The Allotment
Canal
Ohio
67 WD
68 WD
69 WD
70 WD
71 WD
72 WD
73 WD
74 WD
65 WD
66 WD
77 QC
1A WA
PB. 6
PB. 58
29
30
31
32
33
35
36
37
28
N 52°35'57" E
S 88°33'51" W
N 82°17'49" E
S 37°23'06" E
N 37°23'06" W
N 31°45'44" E
N 37°45'26" E
N 47°20'22" E
S 57°32'11" E
N 57°32'11" W
S 32°17'49" W
N 32°17'49" E
S 52°35'51" W
N 84°08'05" W
133+51.95
513.45' Lt.
133+50.36
512.23' Lt.
133+08.58
560.16' Lt.
133+07.22
558.67' Lt.
131+63.64
666.50' Lt.
131+36.17
511.41' Lt.
137+15.57
408.39' Lt.
129+47.72
603.10' Lt.
130+36.15
146.48' Lt.
130+46.72
730.78' Lt.
129+17.26
754.80' Lt.
175+46.65
801.40' Lt.
175+10.38
654.18' Lt.
129+58.22
772.52' Lt.
129+32.68
638.88' Lt.
127+89.64
606.99' Lt.
P.C. 264+68.49
P.T. 227+84.76
P.T. 229+36.56
#7854
#103670
#103669
#103671
#103672
#103673
#103674
#103675
#103676
#103677
#103678
#103679
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#103708
#103709
#103710

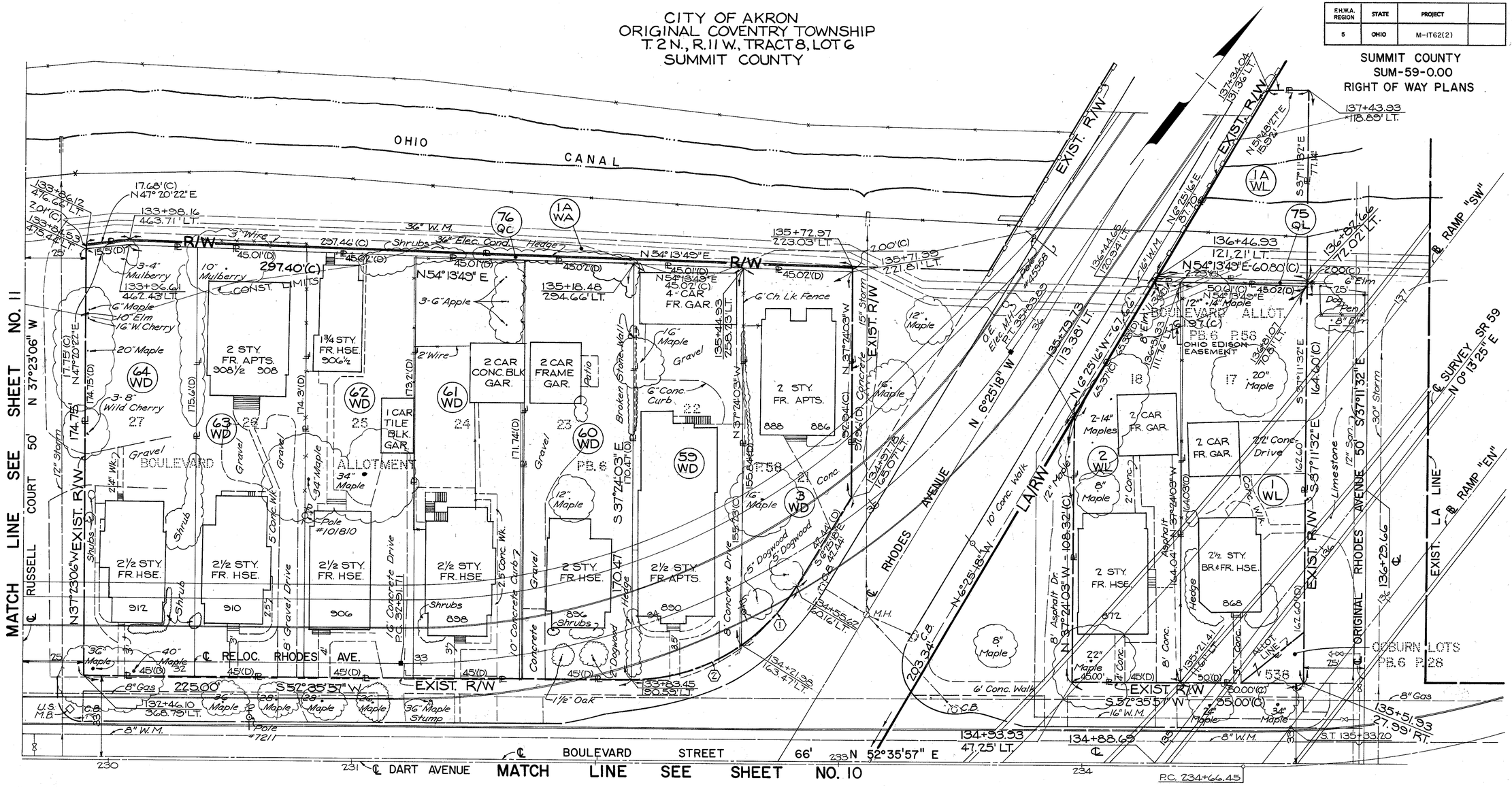
# CITY OF AKRON
# ORIGINAL COVENTRY TOWNSHIP
# T. 2 N., R. 11 W., TRACT 8, LOT 6
# SUMMIT COUNTY

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

268

12/13

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS


OHIO CANAL
MATCH LINE SEE SHEET NO. 11
MATCH LINE SEE SHEET NO. 10
EXIST. R/W
RUSSELL COURT
BOULEVARD
DART AVENUE
RHODES AVENUE
RELOC. RHODES AVE.
ORIGINAL RHODES AVENUE
BOULEVARD ALLOT.
ALLOTMENT
CRAIBURN LOTS FB.6 P.28
OHIO EDISON EASEMENT
PB.6 P.58
PB.6 P.28
PT.58
N 37°23'06" W
N 37°24'03" E
N 54° 13'49" E
N 6°25'18" W
S 37°24'03" E
S 52°35'57" W
N 52°35'57" E
S 37°11'32" E
N 0°13'25" E
2 STY. FR. APTS. 908½ 908
1¾ STY. FR. HSE. 906½
2 CAR CONC. BLK GAR.
2 CAR FRAME GAR.
1 CAR TILE BLK. GAR.
2 STY. FR. APTS. 888 886
4-CAR FR. GAR.
2½ STY. FR. HSE. 912
2½ STY. FR. HSE. 910
2½ STY. FR. HSE. 906
2½ STY. FR. HSE. 898
2 STY. FR. HSE. 896
2½ STY. FR. APTS. 890
2 STY. FR. HSE. 872
2½ STY. BR. & FR. HSE. 868
2 CAR FR. GAR.
2 CAR FR. GAR.
Pole #101810
Pole #7211
Broken Stone Wall
Gravel
Concrete
Asphalt
Hedge
Shrubs
Dog Pen
Limestone
Patio
Drive
Walk
Curb
Fence
Manhole
Catch Basin
Utility Pole
Guy Wire
Elec. M.H.
Elec. Mtr.
Gas Valve
Water Valve
Water Meter
Sign
Flood Light
Tree
Stump
Mailbox
Steps
Retaining Wall
Concrete Drive
Asphalt Drive
Gravel Drive
Gravel Boulevard
Gravel Wk.
Concrete Wk.
Asphalt Wk.
Concrete Curb
Asphalt Curb
Concrete Gutter
Asphalt Gutter
Concrete Walk
Asphalt Walk
Concrete Curb & Gutter
Asphalt Curb & Gutter
Concrete Drive
Asphalt Drive
Gravel Drive
Concrete Wk.
Asphalt Wk.
Gravel

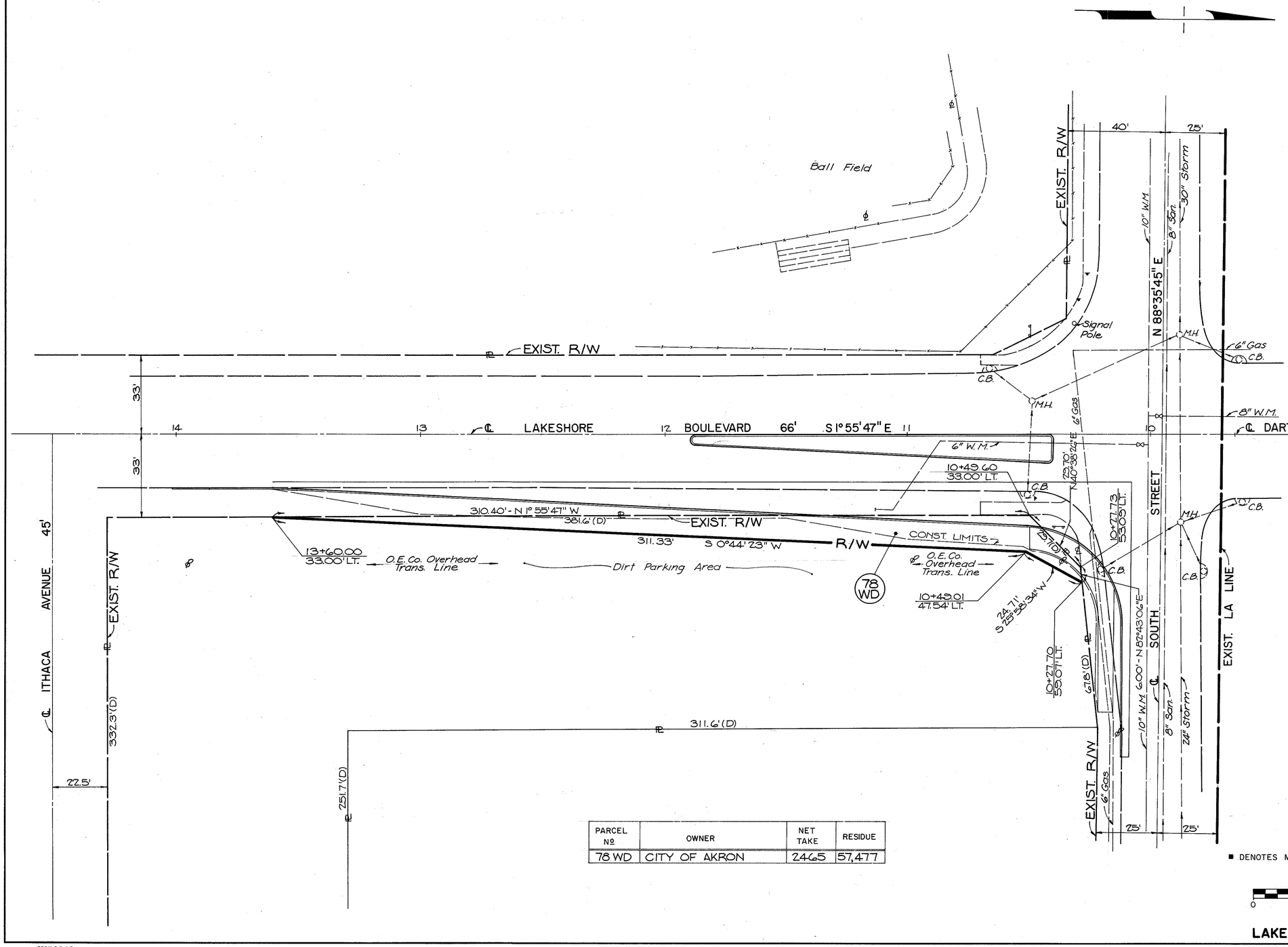
# CITY OF AKRON
ORIGINAL COVENTRY TOWNSHIP
T. 2 N., R. 11 W., TRACT 9, LOT 20
SUMMIT COUNTY

| F.H.W.A. REGION | STATE | PROJECT | |
|---|---|---|---|
| 5 | OHIO | M-IT62(2) | |

263

SUMMIT COUNTY
SUM-59-0.00
RIGHT OF WAY PLANS

13/13




| PARCEL Nº | OWNER | NET TAKE | RESIDUE |
|---|---|---|---|
| 78 WD | CITY OF AKRON | 2465 | 57,477 |

■ DENOTES MONUMENT ASSEMBLY TO BE SET

GRAPHIC SCALE
0 20 40 60

| FUNDS | M-IT62(2) |
|---|---|

| NAME | REVISION | DATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

FORM D D A-8

MICROFILMED
OCT 19 1989

# SOIL PROFILE
# SUMMIT COUNTY
# SUM-59-0.00

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
CINCINNATI, OHIO 45226

1/40
1/3

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE CITY OF AKRON, OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA, AND IT IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

## GENERAL INFORMATION

THE PROJECT INVOLVES EMBANKMENT AND NEW ROAD CONSTRUCTION WITHIN THE LIMITS OF ABOUT 1/2-MILE OF THE NEW AKRON INNERBELT CONNECTOR TO THE EXISTING WEST EXPRESSWAY (I-77) IN AKRON, OHIO. PROPOSED CUTS AND FILLS ARE SHOWN ON SHEET 3 OF 3 IN THIS SET OF PROJECT DRAWINGS.

THE PROPOSED EMBANKMENTS ARE ASSOCIATED WITH BOTH RAMPS EN AND SW AND THE ROAD REHABILITATION AND NEW ROAD CONSTRUCTION IS PROPOSED FOR TH RELOCATED DART, AND RHODES AVENUES.

## GEOLOGY AND SITE OBSERVATIONS

THE SITE IS LOCATED IN A GLACIATED AREA WHERE DRIFT CONSISTS OF GRANULAR OUTWASH AND FINER TEXTURED LAKE DEPOSITS. SOME RECENT ALLUVIUM ALSO EXISTS NEAR THE SURFACE.

UNDERLYING BEDROCK CONSISTS OF SHALE AND SANDSTONE OF PENNSYLVANIAN AGE WHICH WAS ENCOUNTERED IN THE MOST SOUTHEASTERN BORING, AT A DEPTH OF 20 FT. OR ELEVATION 960.4.

## EXPLORATION

FIVE STANDARD PENETRATION TEST BORINGS AND TWO AUGER BORINGS WERE DRILLED WITH TRUCK-MOUNTED EQUIPMENT BETWEEN THE DATES OF NOVEMBER 5 AND NOVEMBER 8, 1979. MATERIALS BENEATH EXISTING GRADE WERE SAMPLED TO DEPTHS VARYING FROM 15 TO 31.5 FT. FOR STANDARD PENETRATION TEST BORINGS AND TO A DEPTH OF 10 FT. BENEATH EXISTING GRADE FOR AUGER BORINGS.

## INVESTIGATIONAL FINDINGS

NEAR SURFACE DEPOSITS ALONG DART AND RHODES AVENUES, WHERE GRADE CHANGES WILL BE SMALL, WILL MOST LIKELY REVEAL TOPSOIL AND SHALLOW FILL UNDERLAIN BY SILTY FINE SAND WITH SOME CLAY AND CLAYEY SAND (A-3, A-3a AND A-4a) IN THE UPPERMOST FIVE TO TEN FEET OF THE PROFILE. AN EXCEPTION IS SOME SANDY SILTY CLAY AT R-6 BETWEEN 5 AND 7.5 FEET BELOW GRADE. A MAXIMUM OF 2.5 FT. OF FILL WAS ENCOUNTERED ALONG THIS ROUTE. LABORATORY TESTS ON TWO SAMPLES FROM BORINGS R-3 AND R-4 INDICATED A MAXIMUM DRY DENSITY OF ABOUT 123 LBS. PER CU. FT. AND AN OPTIMUM MOISTURE CONTENT OF ABOUT 11 TO 11.5%, OR ABOUT 1 TO 2% ABOVE THE IN-SITU MOISTURE CONTENT.

THE PROPOSED EMBANKMENT AREAS INVESTIGATED BY R-1, R-2 AND R-7 GENERALLY REVEALED LOOSE TO MEDIUM DENSE GRANULAR MATERIALS CONSISTING OF SILTY AND CLAYEY SANDS IN THE UPPERMOST ZONE. R-1 AND R-2 ENCOUNTERED LAKE DEPOSITS ABOUT 15 FT. TO 20 FT. BENEATH GRADE, WHEREAS R-7 DID NOT ENCOUNTER ANY LAKE DEPOSITS WITHIN ITS 21.5 FT. LIMIT, AND INSTEAD PENETRATED 10 FT. OF GRANULAR EMBANKMENT FILL AND THEN FINE TO COARSE SAND WITH GRAVEL. R-1 WAS THE ONLY BORING TO ENCOUNTER BEDROCK WHICH CONSISTED OF GRAY SHALE AND OCCURRED AT A DEPTH OF 20 FT. OTHER BORING DATA IN THE AREA INDICATES THAT BEDROCK SLOPES DOWNWARD TO THE NORTH AND WEST.

GROUNDWATER WAS ENCOUNTERED ABOUT ELEVATION 970 AT BORING R-1 AND LOWERED GRADUALLY TOWARD THE CANAL TO ABOUT 960 AT BORING R-6. R-7 DID NOT ENCOUNTER GROUNDWATER, ALTHOUGH IT BECAME VERY MOIST AT A DEPTH OF 20 FT. BENEATH GRADE, OR ELEVATION 951.6.

## LEGEND FOR PROJECT - AVERAGE RESULTS OF TESTS — 25 SAMPLES TESTED

| DESCRIPTION | AASHTO CLASS | OHIO CLASS | % AGG. | % C. SAND | % F. SAND | % SILT | % CLAY | LIQUID LIMIT | PLASTICITY INDEX | WATER CONTENT | SAMPLES TESTED |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GRAVEL | A-1-a(0) | A-1-a | 39 | 37 | 12 | 5 | 7 | 11 | 3 | 11 | 2 |
| SAND WITH GRAVEL & ROCK FRAGMENTS | A-1-b(0) | A-1-b | 28 | 35 | 26 | 4 | 7 | 20 | 4 | 10 | 1 |
| FINE SAND | A-3 (0) | A-3 | 10 | 20 | 63 | 2 | 5 | N.P. | N.P. | 10 | 3 |
| COARSE AND FINE SAND | | A-3a | 15 | 22 | 39 | 12 | 12 | 7 | 2 | 13 | 6 |
| SAND WITH GRAVEL SILT AND CLAY | A-2-4(0) | A-2-4 | 28 | 19 | 28 | 14 | 11 | 12 | 2 | 13 | 2 |
| GRAVEL WITH SAND AND CLAY | A-2-7(0) | A-2-7 | 70 | 18 | 4 | 1 | 7 | 48 | 20 | 35 | 1 |
| SANDY SILT | A-4 (0-3) | A-4a | 5 | 14 | 35 | 29 | 17 | 17 | 3 | 13 | 5 |
| SILT | A-4 (0) | A-4b | 1 | 3 | 17 | 57 | 22 | N.P. | N.P. | 18 | 2 |
| SILT AND CLAY | A-6 (6) | A-6a | 3 | 14 | 26 | 30 | 27 | 29 | 14 | 16 | 1 |
| SILTY CLAY | A-6(10) | A-6b | 0 | 8 | 25 | 35 | 32 | 36 | 19 | 28 | 1 |
| SHALE | | | | | | | | | | | |

AUGER BORING — PLAN VIEW

DRIVE SAMPLE BORING — PLAN VIEW

AUGER BORING PLOTTED TO VERTICAL SCALE ONLY — PROFILE

DRIVE SAMPLE PLOTTED TO VERTICAL SCALE ONLY — PROFILE

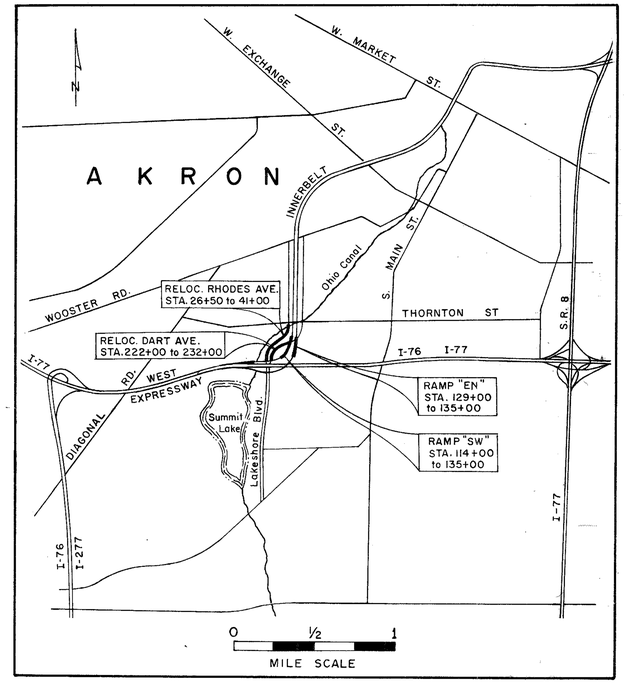
W — FREE WATER

INDICATES FILL

(X/Y) NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
X=NUMBER OF BLOWS FOR FIRST 6 INCHES.
Y=NUMBER OF BLOWS FOR SECOND 6 INCHES.

16 INDICATES WATER CONTENT IN PERCENT

35 ⊖ INDICATES MOISTURE CONTENT GREATER THAN 25 PERCENT FOR A NON - PLASTIC SOIL.




LOCATION MAP

DRILLED NOVEMBER, 1979

## PROJECT INDEX

| STATION FROM - TO | PLAN VIEW SHEET | PROFILE SHEET | CUT (MAX.) | FILL EMB. (MAX.) |
|---|---|---|---|---|
| RELOC. RHODES AVENUE 26+50 - 41+00 | 3 | 3 | 2' | 4' |
| RELOC. DART AVENUE 222+00 - 232+00 | 3 | 3 | 3' | 3' |
| RAMP " EN " 129+00 - 135+00 | 3 | 3 | 0' | 36' |
| RAMP " SW " 114+00 - 135+00 | 3 | 3 | 2' | 25' |

MICROFILMED
OCT 19 1989

SOIL PROFILE
SUMMIT COUNTY
SUM-59-0.00
THE H.C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
CINCINNATI, OHIO 45226

2/40

2/3

## SUMMARY OF SOIL TEST DATA

| BORING NO. | SURVEY LINE | STATION | OFFSET | SAMPLE DEPTH IN FEET FROM | TO | PHYSICAL CHARACTERISTICS % AGG | % C.S. | % F.S. | % SILT | % CLAY | % L.L. | % P.I. | % W.C. | SHTL CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R-1 | RAMP " EN " | 133+03 BL | 4° RT. | 1.0 | 1.5 | 0 | 21 | 54 | 11 | 14 | – | N.P. | 15 | A-3 a (0) |
| | | | | 5.0 | 6.5 | 21 | 24 | 46 | 4 | 5 | – | – | 7 | A-3 (0) |
| | | | | 10.0 | 11.5 | 70 | 18 | 4 | 1 | 7 | 48 | 28 | 35 | A-2-7 (0) |
| | | | | 15.0 | 16.5 | 0 | 0 | 19 | 61 | 20 | – | N.P. | 20 | A-4b (0) |
| R-2 | RAMP " SW " | 131+05 BL | 25° LT. | 5.0 | 6.5 | 20 | 35 | 26 | 4 | 7 | 20 | 4 | 10 | A-1-b (0) |
| | | | | 10.0 | 11.5 | 36 | 11 | 37 | 11 | 5 | – | N.P. | 19 | A-3 a (0) |
| | | | | 17.5 | 19.0 | 0 | 0 | 53 | 36 | 11 | – | N.P. | 17 | A-4 a (0) |
| | | | | 25.0 | 26.5 | 2 | 5 | 15 | 54 | 24 | – | N.P. | 17 | A-4 b (0) |
| R-7 | | 117+50 BL | 25° LT. | 0 | 1.5 | 29 | 20 | 26 | 13 | 12 | 24 | 5 | 15 | A-2-4 (0) |
| | | | | 2.5 | 4.0 | 7 | 28 | 18 | 28 | 19 | 24 | 5 | 10 | A-4 a (2) |
| | | | | 5.0 | 6.5 | 49 | 27 | 11 | 4 | 9 | 22 | 5 | 16 | A-1-a (0) |
| | | | | 10.0 | 11.5 | 30 | 48 | 13 | – | 9 – | – | – | 7 | A-1 a (0) |
| | | | | 20.0 | 21.5 | 10 | 24 | 60 | 2 | 4 | – | – | 13 | A-3 (0) |
| R-3 | DART AVENUE | 226+00 CL | 5°LT. | 0.0 | 1.5 | | | | | | 24 | 5 | 16 | |
| | | | | 0.0 | 2.5 | 8 | 12 | 31 | 30 | 19 | | | | A-4 a (0) |
| | | | | 2.5 | 4.0 | 18 | 25 | 31 | 12 | 14 | 22 | 6 | 9 | A-3 a (0) |
| | | | | 5.0 | 6.5 | 0 | 13 | 82 | 0 | 5 | | | 11 | A-3 (0) |
| R-4 | | 230+00 CL | 25° LT. | 1.5 | 2.5 | 10 | 19 | 34 | 19 | 18 | 18 | 4 | 12 | A-4a (0) ( CBR TEST ) |
| | | | | 3.5 | 5.0 | 0 | 11 | 38 | 32 | 19 | 17 | 2 | 12 | A-4 a (3) |
| | | | | 5.0 | 6.0 | 5 | 23 | 39 | 17 | 16 | 21 | 6 | 11 | A-3 a (0) |
| R-5 | RELOC. RHODES | 36+00 CL | 40° RT. | 2.0 | 3.0 | 5 | 21 | 41 | 17 | 16 | – | N.P. | 14 | A-3 a (0) |
| R-6 | | 38+00 CL | 38° RT. | 0.0 | 1.5 | 28 | 18 | 30 | 15 | 9 | – | N.P. | 11 | A-2-4 (0) |
| | | | | 2.5 | 4.0 | 28 | 33 | 31 | 3 | 5 | – | – | 9 | A-3 a (0) |
| | | | | 5.0 | 6.0 | 0 | 8 | 25 | 35 | 32 | 36 | 19 | 28 | A-6 b (10) ( PERCENT LOSS ON IGNITION = 9.05 ) |
| | | | | 6.0 | 6.5 | 3 | 14 | 26 | 30 | 27 | 29 | 14 | 16 | A-6 a (6) |

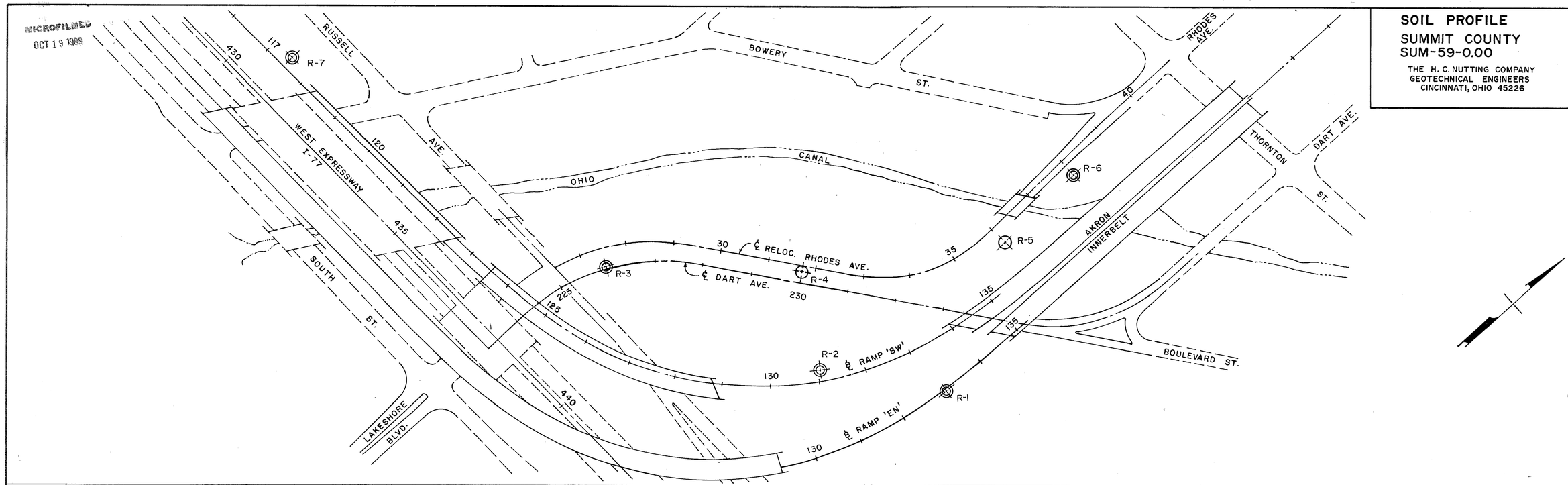
MICROFILMED
OCT 19 1989

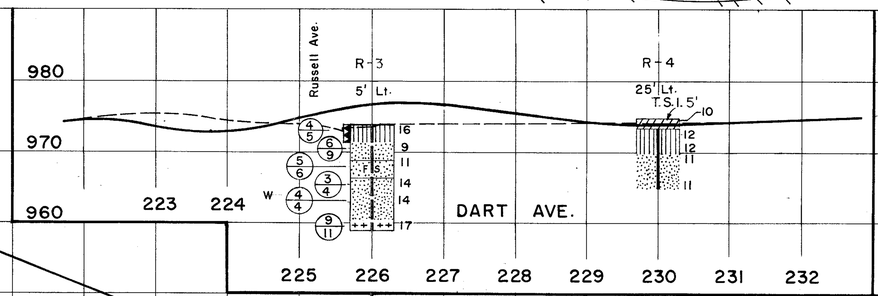
# SOIL PROFILE

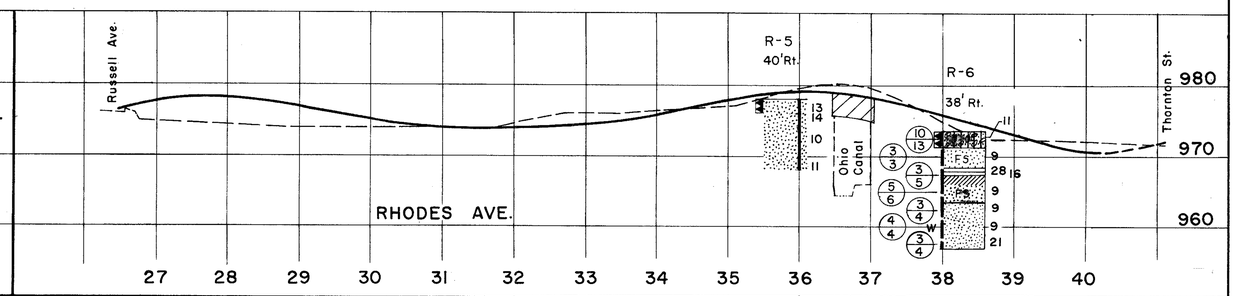
SUMMIT COUNTY
SUM-59-0.00

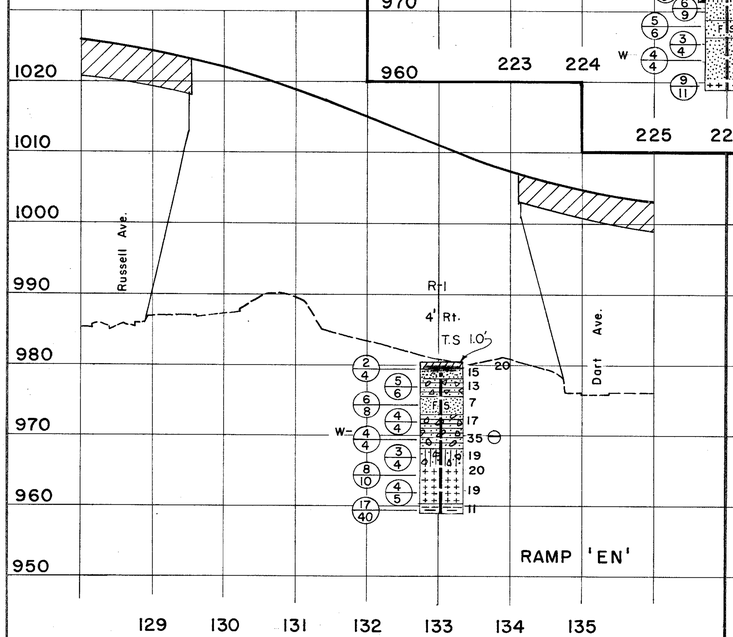
THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
CINCINNATI, OHIO 45226

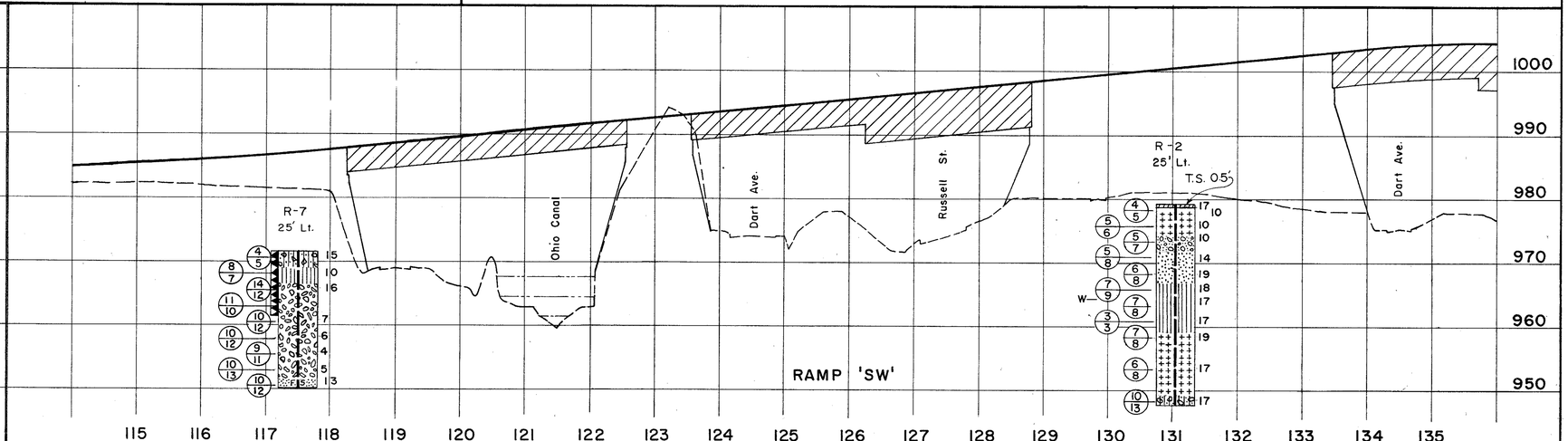
3/40
3/3



MICROFILMED
OCT 19 1989



## GEOLOGY OF THE SITE

THE SITE IS LOCATED IN A GLACIATED AREA WHERE DRIFT CONSISTS OF GRANULAR OUTWASH AND FINER TEXTURED LAKEBED DEPOSITS. THIS AREA ALSO CONTAINS MANY UNDRAINED DEPRESSIONS WITHIN WHICH PEAT AND ORGANIC SILTS HAVE ACCUMULATED. ALTHOUGH NOT ENCOUNTERED IN THESE FIVE TEST BORINGS, UNDERLYING BEDROCK CONSISTS OF SANDSTONE AND SHALE OF PENNSYLVANIAN AGE.

## EXPLORATION

FIVE STANDARD PENETRATION TEST BORINGS WERE MADE AT THE SITE ON OCTOBER 10, 11 AND NOVEMBER 4 AND 6 OF 1979. THESE BORINGS WERE LOCATED NEAR THE TOE OF THE EXISTING INTERSTATE EMBANKMENT BETWEEN ABOUT ELEVATIONS 966 AND 970.

TRUCK MOUNTED EQUIPMENT WAS USED AND BORINGS WERE EXTENDED BENEATH EXISTING GRADE TO 51.5 FEET IN FOUR BORINGS AND 61.5 FEET IN ONE BORING.

## INVESTIGATIONAL FINDINGS

SURFACE FILL CONSISTING MOSTLY OF LOOSE TO MEDIUM DENSE SILTY FINE SAND WITH GRAVEL IN BORINGS 1 AND 2 AND STIFF COHESIVE FILL IN BORINGS 3 AND 5 WAS FOUND TO VARY BETWEEN 5 AND 21 FEET IN THICKNESS. AT LEAST SOME OF THIS FILL IS EXPECTED TO BE PART OF BACKFILL PLACED AFTER UNDERCUTTING ORGANIC SOILS DURING CONSTRUCTION OF THE INTERSTATE.

PEAT AND MARLY ORGANIC CLAYEY SILTS WERE ENCOUNTERED IN HOLES 1 AND 2 BETWEEN DEPTHS OF 7.5 AND 20 FEET AND 21 AND 45 FEET, RESPECTIVELY. BENEATH THIS IN HOLES 1 AND 2 AND BELOW FILL IN THE REMAINING BORINGS WAS AN OUTWASH SAND AND GRAVEL WHICH WAS MEDIUM DENSE TO VERY DENSE. THIS LAYER WAS 20 FEET THICK IN HOLES 1 AND 3, 25 FEET THICK IN HOLE 5 AND ONLY 7.5 FEET THICK IN HOLE 4. BORING 2 DID NOT REACH THE BOTTOM OF THE LAYER AFTER PENETRATING 16.5 FEET OF THIS MATERIAL BEFORE BEING TERMINATED.

THE FINAL STRATUM ENCOUNTERED IN THE BORINGS WAS A COMPACT TO VERY COMPACT MATERIAL CONSISTING MOSTLY OF SANDY AND CLAYEY SILTS IN BORINGS 1 AND 2 AND MOSTLY SILTY FINE SANDS IN BORINGS 3 THROUGH 5.

THE GROUND WATER LEVEL GENERALLY OCCURED BETWEEN ABOUT ELEVATIONS 948 AND 954 WITH AN AVERAGE BEING ABOUT 950.

## SUPPLEMENTARY INVESTIGATION

A SUPPLEMENTARY INVESTIGATION WAS MADE ON APRIL 30 THRU MAY 1, 1981 WHEN 7 (SEVEN) ADDITIONAL STANDARD PENETRATION TEST BORINGS WERE DRILLED. FIVE OF THESE BORINGS (A THRU E) WERE DRILLED BETWEEN THE INITIAL BORINGS, NEAR THE TOE OF THE EXISTING SLOPE, ABOUT 20' SOUTH OF THE FACE OF THE PROPOSED RETAINING WALL. BORINGS F AND G WERE DRILLED IMMEDIATELY SOUTH OF THE EASTBOUND LANE OF THE WEST EXPRESSWAY, NEAR THE TOP OF THE SLOPE. THE PURPOSE OF THESE ADDITIONAL BORINGS IS TO BETTER DELINEATE THE EXTENT OF ORGANIC DEPOSITS ALONG THE RETAINING WALL ALIGNMENT.

THE SUBSURFACE DATA INDICATES ORGANIC SILT, MARL AND PEAT ORIGINALLY EXISTED ALONG THE ENTIRE RETAINING WALL ALIGMENT. PEAT AND RELATED ORGANIC SOILS WERE DEPOSITED IN A CHANNEL WHERE THE MAXIMUM 45' THICKNESS IS LOCATED AT STATION 111+00. ORGANIC SOIL EXTENDED TO ABOUT ELEV. 921 AT STATION 111+00. EAST AND WEST OF THIS STATION, THE THICKNESS OF THE ORGANIC DEPOSIT BECOMES LESS. WEST OF STATION 111+00, THE FLOOR OF THE ORGANIC SOIL GRADUALLY RISES TO ABOUT ELEV. 952 AT STATION 9+50. EAST OF STATION 111+00, THE ORGANIC FLOOR SHARPLY RISES TO ABOUT ELEVATION 960 AT STATION 112+00. THE ORGANIC FLOOR REMAINS AT ABOUT ELEV. 960 EAST OF STATION 112. THE BORINGS SHOW THE ORGANIC SOIL WAS REMOVED AND REPLACED WITH GRANULAR FILL EAST OF STATION 112+00. BASED ON BORINGS 3S & 4S, WE EXPECT THE PEAT WAS UNDERCUT AND REPLACED WITH GRANULAR FILL BELOW THE FACE OF THE RETAINING WALL EAST OF STATION 112+00.

BORINGS F & G, DRILLED NEAR THE CROWN OF THE SLOPE AT STATION 110 & 111, SHOW ALL PEAT AND ORGANIC SOIL WAS UNDERCUT AND REPLACED WITH GRANULAR BACKFILL. SAND FILL EXTENDS TO NATURAL MEDIUM DENSE TO DENSE SILTY SAND DEPOSITS.

GROUNDWATER LEVEL WAS CONSISTENT WITH THE INITIAL BORINGS, VARYING FROM ELEVATION 952 TO 956, AVERAGING ELEVATION 953.

## LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- H HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST. X=NUMBER OF BLOWS FOR FIRST 6-INCHES. Y=NUMBER OF BLOWS FOR SECOND 6-INCHES.
- ⊠ INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- ▼— INDICATES STATIC WATER ELEVATION.

## SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

## GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procur ed for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

| Boulders | Cobbles | Gravel | Coarse Sand | Fine Sand | Silt | Clay |
|---|---|---|---|---|---|---|
| 8" | 3" | 2.0mm (No. 10 sieve) | 0.42mm (No. 40 sieve) | 0.074mm (No. 200 sieve) | 0.005mm | |

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM 59-00.00
RETAINING WALL BETWEEN SOUTH STREET & RAMP "EN".
SEC. AKRON INNERBELT SUM-59-00.00

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 4/8/80 |

AKRON INNERBELT
SUM -59-00.00

5/40/26

425 426 427 428 429 430

C.L. WEST EXPRESSWAY

NEW MANHOLE

109 110 111 112 113 114 115

B. L. RAMP "EN"

BOWERY ST.

F G

1-S 2-S 3-S 4-S 5-S

A B C D E

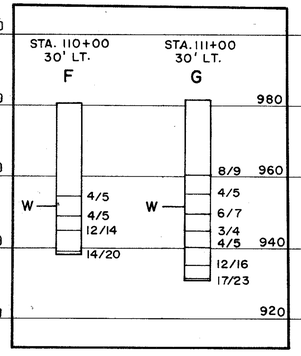
PROPOSED RETAINING WALL

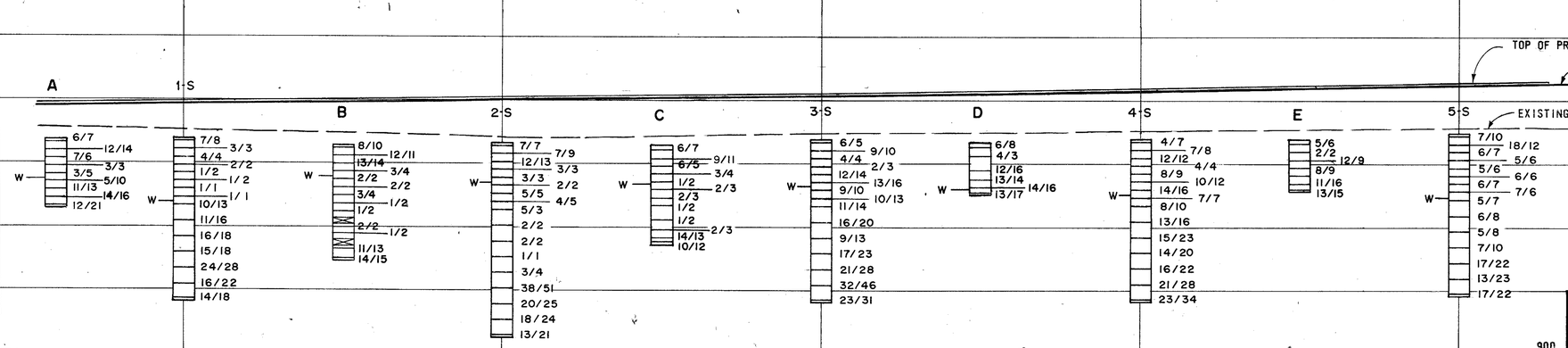
PROPOSED JUNCTION CHAMBER

SOUTH STREET

EXISTING 60" SEWER

PROPOSED 60" SEWER RELOCATION




SCALE; 1"=20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
RETAINING WALL BETWEEN SOUTH
STREET & RAMP "EN"
STATION 109+55 TO 114+20
SEC. AKRON INNERBELT SUM-59-00.00

PLAN AND PROFILE

| DRAWN BY, | CHECKED BY | REVIEWED BY | DATE: |
|---|---|---|---|
| | JAS | CRL | 4/8/[illegible] |

DATE STARTED 11-6-79 SAMPLER: TYPE S.S DIA. 2' O.D WATER ELEVATION
DATE COMPLETED 11-6-79 CASING: LENGTH H.S.A. DIA. 3.5' O.D. IMMEDIATE 947.8
BORING NUMBER 1- S CORE BARRELL: TYPE SIZE AFTER HOURS:BACKFILLED
STATION & OFFSET 110+00, 18' RIGHT, BL RAMP "EN" SURFACE ELEVATION 967.8

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA NO | % AGG | % CS | % FS | % SILT | % CLAY | L L | P I | W C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 967.8 | 0 | | | | | | | | | | | |
| | 2 | 7-7-8 | BROWN SILTY FINE SAND WITH SOME GRAVEL (FILL), MOIST - MEDIUM DENSE | 1 | -- | | | VISUAL | | | | 4.8 |
| | 4 | 2-3-3 | BROWN SILTY FINE SAND WITH SOME GRAVEL (FILL), MOIST - LOOSE | 2 | | | | VISUAL | | | | 7.5 |
| 960.3 | 6 | 3-4-4 | DO DO DO | 3 | | | | VISUAL | | | | 7.6 |
| | 8 | 2-2-2 | BLACK FINE TEXTURED PEAT, VERY MOIST - VERY LOOSE | 4 | | | | VISUAL | (UNIT WEIGHT TEST) | | | 362.6 |
| | 10 | | | | | | | | | | | |
| | 12 | 1-1-2 | DO DO DO | 5 | | | | VISUAL | | | | |
| 952.8 | 14 | 1-1-2 | DO DO DO | 6 | | | | VISUAL | | | | 330.6 |
| | 16 | 1-1-1 | GRAY MARLY ORGANIC SILT, VERY MOIST - SOFT | 7 | | | | VISUAL | | | | 63.5 |
| | 18 | 1-1-1 | DO DO DO | 8 | | | | VISUAL | | | | |
| 947.8 | 20 | | | | | | | | | | | |
| | 22 | 7-10-13 | BROWN AND GRAY SILTY FINE TO COARSE SAND WITH SOME GRAVEL, TRACE ORGANICS, WET MEDIUM DENSE | 9 | | | | VISUAL | | | | 8.6 |
| 942.8 | 24 | | | | | | | | | | | |
| | 26 | 8-11-16 | GRAY FINE SAND WITH LITTLE GRAVEL WET - MEDIUM DENSE | 10 | | | | VISUAL | | | | |
| 937.8 | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 11-16-18 | GRAY FINE TO COARSE SAND WITH SOME GRAVEL WET - DENSE | 11 | | | | VISUAL | | | | |
| | 34 | | | | | | | | | | | |
| | 36 | 12-15-18 | DO DO DO | 12 | | | | VISUAL | | | | 15.8 |
| 927.8 | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 16-24-28 | GRAY SANDY SILT, WET- VERY DENSE | 13 | | | | VISUAL | | | | |
| 922.8 | 44 | | | | | | | | | | | |
| | 46 | 10-16-22 | GRAY CLAYEY SILT, WET - VERY STIFF | 14 | | | | VISUAL | | | | |
| | 48 | | | | | | | | | | | |
| | 50 | 8-14-18 | | 15 | | | | VISUAL | | | | 20.5 |
| 916.3 | 52 | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 11-6-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-6-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 953.8
BORING NUMBER 2-S CORE BARRELL: TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 111+ 00, 15' RIGHT, BL RAMP "EN" SURFACE ELEVATION 966.3

| ELEV. | DEPTH | STN. PEN (N) | DESCRIPTION | SA NO | % AGG | % CS | % FS | % SILT | % CLAY | L L | P I | W C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 966.3 | 0 | | | | | | | | | | | |
| | 2 | 5-7-7 | BROWN SILTY FINE SAND WITH SOME GRAVEL AND ROCK FRAGMENTS (FILL) MOIST - MEDIUM DENSE | 1 | | | | VISUAL | | | | 5.1 |
| 963.8 | 4 | 5-7-9 | BROWN FINE SAND WITH SOME GRAVEL (FILL) MOIST - MEDIUM DENSE | 2 | | | | VISUAL | | | | 6.5 |
| 961.3 | 6 | 9-12-13 | BROWN SILTY FINE SAND WITH SOME GRAVEL (FILL) MOIST - MEDIUM DENSE | 3 | | | | VISUAL | | | | 8.9 |
| 958.8 | 8 | 2-3-3 | BROWN SILTY FINE SAND AND GRAVEL (FILL) WET - LOOSE | 4 | | | | VISUAL | | | | 8.5 |
| | 10 | | | | | | | | | | | |
| | 12 | 2-3-3 | DO DO DO | 5 | 36 | 16 | 30 | 13 | 5 | | NP | 11.5 |
| | 14 | 1-2-2 | DO DO DO | 6 | 36 | 12 | 33 | 14 | 5 | | NP | 15.4 |
| 951.3 | 16 | 5-5-5 | BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL (FILL), VERY MOIST - LOOSE | 7 | | | | VISUAL | | | | 12.1 |
| | 18 | | | | | | | | | | | |
| | 20 | 3-4-5 | DO DO DO | 8 | | | | VISUAL | | | | 11.9 |
| 945.3 | 22 | 5-5 3 | DO DO DO | 9 | | | | VISUAL | | | | 13.3 |
| | 24 | | BLACK FINE TEXTURED PEAT, MOIST - LOOSE | 10 | | | | VISUAL | | | | 281.7 |
| 941.3 | 26 | 1-2-2 | GRAY MARLY ORGANIC SILT, MOIST - SOFT | 11 | | | | VISUAL | | | | 87.2 |
| | 28 | | | | | | | | | | | |
| | 30 | | DO DO DO | 12 | 0 | 2 | 4 | 74 | 20 | | NP | 75.5 |
| | 32 | 1-2-2 | | | | | | (UNIT WEIGHT TEST) | | | | |
| | 34 | | | | | | | | | | | |
| 931.3 | 36 | 1-1-1 | BLACK AND GRAY CLAYEY ORGANIC SILT, MOIST -SOFT | 13 | | | | VISUAL | | | | 62.6 |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 2-3-4 | BLACK AND GRAY CLAYEY ORGANIC SILT, MOIST - MEDIUM STIFF | 14 | | | | VISUAL | | | | 59.3 |
| 921.3 | 44 | | | | | | | (TRIAXIAL TEST) | | | | |
| | 46 | 21-38-51 | GRAY SILTY FINE TO COARSE SAND AND GRAVEL, WET - VERY DENSE | | | | | PERCENT LOSS ON IGNITION =13.67% | | | | |
| | 48 | | | 15 | | | | VISUAL | | | | 5.9 |
| 916.3 | 50 | | | | | | | | | | | |
| | 52 | 13-20-25 | GRAY SILTY FINE TO COARSE SAND AND GRAVEL WITH SOME ROCK FRAGMENTS, WET - DENSE | 16 | | | | VISUAL | | | | 8.2 |
| | 54 | | | | | | | | | | | |
| | 56 | 14-18-24 | DO DO DO | 17 | | | | VISUAL | | | | 6.9 |
| | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| 904.8 | 62 | 10-13-21 | DO DO DO | 18 | 46 | 34 | 15 | - | 5 | - | | 16.8 |

BORING COMPLETED

DATE STARTED 11-4-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-4-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 952.7
BORING NUMBER 3-S CORE BARRELL: TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 112 +00, 13' RIGHT, BL RAMP "EN" SURFACE ELEVATION 967.7

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA NO | % AGG | % CS | % FS | % SILT | % CLAY | L L | P I | W C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 967.7 | 0 | | | | | | | | | | | |
| | 2 | 5-6-5 | BROWN SANDY SILTY CLAY WITH LITTLE ROCK FRAGMENTS (FILL), MOIST - STIFF | 1 | | | | VISUAL | | | | 15.9 |
| 965.2 | 4 | 7-9-10 | BROWN SANDY SILTY CLAY WITH SOME GRAVEL, TRACE BRICK FRAGMENTS (FILL), MOIST - VERY STIFF | 2 | | | | VISUAL | | | | 12.5 |
| 962.7 | 6 | 4-4-4 | BROWN FINE TO COARSE SAND WITH LITTLE GRAVEL, MOIST - LOOSE | 3 | | | | VISUAL | | | | 5.6 |
| | 8 | 2-2-3 | DO DO DO | 4 | 13 | 50 | 30 | 0 | 16 | | | 6.3 |
| 957.7 | 10 | | | 5 | | | | VISUAL | | | | |
| | 12 | 8-12-14 | BROWN SILTY FINE TO COARSE SAND AND GRAVEL, VERY MOIST - MEDIUM DENSE | | | | | | | | | |
| | 14 | 7-13-16 | DO DO DO | 6 | 62 | 17 | 9 | 4 | 8 | | | 12.0 |
| 952.7 | 16 | 8-9-10 | BROWN FINE TO COARSESAND AND GRAVEL, WET - MEDIUM DENSE | 7 | | | | VISUAL | | | | |
| 950.2 | 18 | 8-10-13 | GRAY FINE TO COARSE SAND WITH TRACE GRAVEL, WET, MEDIUM DENSE | 8 | 6 | 39 | 52 | - | 3 | - | | 18.2 |
| | 20 | | DO DO DO | 9 | | | | VISUAL | | | | |
| | 22 | 7-11-14 | | | | | | | | | | |
| | 24 | | | | | | | | | | | |
| 942.7 | 26 | 10-16-20 | GRAY SILTY FINE SAND, WET - DENSE | 10 | | | | VISUAL | | | | 20.8 |
| | 28 | | | | | | | | | | | |
| 937.7 | 30 | | | | | | | | | | | |
| | 32 | 7-9-13 | GRAY SANDY SILT, WET - MEDIUM DENSE | 11 | 0 | 0 | 55 | 38 | 7 | | | 20.6 |
| | 34 | | | | | | | | | | | |
| 932.7 | 36 | 12-17-23 | GRAY FINE SAND, TRACE FINE GRAVEL WET - DENSE | 12 | | | | VISUAL | | | | 18.8 |
| | 38 | | | | | | | | | | | |
| 927.7 | 40 | | | | | | | | | | | |
| | 42 | 16-21-28 | GRAY SANDY SILT WITH FINE SAND SEAMS, WET - DENSE | 13 | | | | VISUAL | | | | 19.8 |
| 922.7 | 44 | | | | | | | | | | | |
| | 46 | 21-32-46 | GRAY SANDY SILT, WET - VERY DENSE | 14 | | | | VISUAL | | | | |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| 916.2 | 52 | 17-23-31 | DO DO DO | 15 | | | | VISUAL | | | | 16.6 |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
RETAINING WALL BETWEEN SOUTH
STREET & RAMP "EN"
STATION 109+55 TO 114+20
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| DRAWN BY | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 4/8/80 |

DATE STARTED 11-4-79 SAMPLER; TYPE S.S. DIA. 2.0" O. D. WATER ELEVATION
DATE COMPLETED 11-4-79 CASING; LENGTH H.S.A. DIA. 3.5" I. D. IMMEDIATE 950.5
BORING NUMBER 4-S CORE BARREL; TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 113+00, 14, RT. B.L. RAMP "EN" SURFACE ELEVATION 968.0

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 968.0 | 0 | | | | | | | | | | | |
| | 2 | 3-4-7 | BROWN SANDY SILTY CLAY WITH SOME GRAVEL, SAND, AND ROCK FRAGMENTS, ( FILL ), MOIST-STIFF | 1 | | V I S U A L | | | | | | 17.4 |
| 963.0 | 4 | 6-7-8 | | | | | | | | | | |
| | 6 | 5-12-12 | BROWN SANDY SILTY CLAY WITH SOME GRAVEL, CINDERS AND CONCRETE FRAGMENTS (FILL), MOIST-STIFF | 2 | | V I S U A L | | | | | | 5.0 |
| 958.0 | 8 | 5-4-4 | | | | | | | | | | |
| | 10 | 7-8-9 | BROWN FINE TO COARSE SAND WITH A LITTLE GRAVEL, MOIST-MEDIUM DENSE | 3 | | V I S U A L | | | | | | 5.6 |
| | 12 | 9-10-12 | DO DO DO | 4 | | V I S U A L | | | | | | 6.5 |
| | 14 | 12-14-16 | DO DO DO | 5 | | V I S U A L | | | | | | |
| 950.5 | 16 | | | | | | | | | | | |
| 948.0 | 18 | 7-7-7 | GRAY SANDY SILT, WET - MEDIUM DENSE | 6 | 0 | 0 | 21 | 70 | 9 | - NP - | | 21.9 |
| | 20 | 6-8-10 | GRAY SILTY FINE SAND, WET - MEDIUM DENSE | 7 | | V I S U A L | | | | 70 | 8 | |
| 943.0 | 22 | | | | | | | | | | | |
| | 24 | 8-13-16 | GRAY FINE SAND, WET-MEDIUM DENSE | 8 | | V I S U A L | | | | | | |
| | 26 | | | | | | | | | | | |
| | 28 | 9-15-23 | GRAY FINE SAND, WET-DENSE | 9 | | V I S U A L | | | | | | |
| 933.0 | 30 | | | | | | | | | | | |
| | 32 | 10-14-20 | GRAY FINE SAND WITH A LITTLE FINE GRAVEL, WET - DENSE | 10 | | V I S U A L | | | | | | 17.6 |
| | 34 | | | | | | | | | | | |
| | 36 | 10-16-22 | DO DO DO | 11 | | V I S U A L | | | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | 14-21-28 | DO DO DO | 12 | | V I S U A L | | | | | | |
| 918.0 | 42 | | | | | | | | | | | |
| 916.5 | 44 | 16-23-34 | GRAY FINE SAND, WET- VERY DENSE | 13 | | V I S U A L | | | | | | 21.5 |

BORING COMPLETED

DATE STARTED 10-10-79 SAMPLER: TYPE S.S. DIA. 2.0"O.D. WATER ELEVATION
DATE COMPLETED 10-11-79 CASING: LENGTH H.S.A. DIA. 3.5"I.D. IMMEDIATE 949.6
BORING NUMBER 5-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 19.7'
STATION & OFFSET 114+00 10' RT. BL RAMP "EN" SURFACE ELEVATION 969.6

| ELEV. | DEPTH | STN.PEN. (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 969.6 | 0 | | | | | | | | | | | |
| | 2 | 4-7-10 | BROWN SANDY SILTY CLAY WITH SOME SANDSTONE FRAGMENTS (FILL), MOIST - VERY STIFF | 1 | | | | VISUAL | | | | 14.5 |
| 967.1 | 4 | 9-18-12 | DARK BROWN SANDY SILTY CLAY WITH SOME SANDSTONE FRAGMENTS, TRACE ORGANICS (FILL), MOIST - VERY STIFF | 2 | | | | VISUAL | | | | 12.2 |
| 964.6 | 6 | 6-6-7 | BROWN SILTY FINE TO COARSE SAND AND GRAVEL, MOIST - MEDIUM DENSE | 3 | | | | VISUAL | | | | 9.7 |
| | 8 | 4-5-6 | DO DO DO | 4 | 47 | 23 | 15 | 9 | 6 | N.P. | | 10.7 |
| | 10 | 5-5-6 | DO DO DO | 5 | | | | VISUAL | | | | |
| 957.1 | 12 | 3-6-6 | BROWN FINE TO COARSE SAND WITH LITTLE GRAVEL, MOIST - MEDIUM DENSE | 6 | | | | VISUAL | | | | 3.9 |
| 954.6 | 14 | 5-6-7 | BROWN FINE TO COARSE SAND WITH SOME GRAVEL, MOIST - MEDIUM DENSE | 7 | | | | VISUAL | | | | |
| 952.1 | 16 | 5-7-6 | BROWN FINE TO COARSE SAND AND GRAVEL, VERY MOIST - MEDIUM DENSE | 8 | 43 | 45 | 8 | 2 | 2 | | | 7.1 |
| 949.6 | 18 | 3-5-7 | BROWN FINE TO COARSE SAND WITH A LITTLE GRAVEL, WET - MEDIUM DENSE | 9 | | | | VISUAL | | | | |
| | 20 | 4-6-8 | DO DO DO | 10 | | | | VISUAL | | | | |
| | 22 | 4-5-8 | GRAY SILTY FINE SAND, WET - MEDIUM DENSE | 11 | 0 | 2 | 69 | 24 | 5 | | | 19.3 |
| 939.6 | 24 | 7-7-10 | DO DO DO | 12 | | | | VISUAL | | | | |
| | 26 | 11-17-22 | GRAY FINE SAND WITH SILT SEAMS, WET - DENSE | 13 | | | | VISUAL | | | | 19.0 |
| 929.6 | 28 | 8-13-23 | GRAY SILTY FINE SAND, WET - DENSE | 14 | | | | VISUAL | | | | |
| 924.6 | 30 | 11-17-22 | GRAY FINE SAND, WET - DENSE | 15 | | | | VISUAL | | | | 19.0 |
| 919.6 | 32 | | | | | | | | | | | |
| 918.1 | 34 | | | | | | | | | | | |
| | 36 | | | | | | | | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | | | | | | | | | | | |
| | 44 | | | | | | | | | | | |
| | 46 | | | | | | | | | | | |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | | | | | | | | | | | |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
RETAINING WALL BETWEEN SOUTH
STREET & RAMP "EN".
STATION 109+55 TO 114+20
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| DRAWN BY | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 4/8/80 |

DATE STARTED 4-30-81 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 4-30-81 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 954.9
BORING NUMBER A CORE BARREL: TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 109+60 33' RT. SURFACE ELEVATION 967.4'
DALTON-DALTON-NEWPORT SUM 59-0000 INTERCHANGE OF AKRON INNERBELT WITH WEST EXPRESSWAY

| ELEV. | DEPTH | STN. PEN (N) | DESCRIPTION | SA NO | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 967.4 | 0 | | | | | | | | | | | |
| | 2 | 5-6-7 | BROWN SILTY FINE TO COARSE SAND WITH FINE GRAVEL, TRACE OF CLAY (FILL) MOIST-MED. DENSE TO LOOSE | 1 | | | VISUAL | | | | | |
| | 4 | 10-12-14 | DO DO DO | 2 | | | VISUAL | | | | | |
| | 6 | 7-7-6 | DO DO DO | 3 | | | VISUAL | | | | | |
| | 8 | 2-3-3 | DO DO DO | 4 | | | VISUAL | | | | | 16.0 |
| 957.4 | 10 | | GRAY AND BROWN FINE TO COARSE SAND WITH SOME FINE GRAVEL AND ORGANIC MATERIAL, VERY MOIST-LOOSE | 5 | | | VISUAL | | | | | 19.4 |
| 954.9 | 12 | 3-3-5 | | | | | | | | | | |
| | 14 | 2-5-10 | DARK GRAY MARLY ORGANIC SILT, TRACE OF ORGANIC MATERIAL AND ROCK FRAGMENTS, VERY MOIST-SOFT | 6 | | | VISUAL | | | | | 39.5 |
| 952.4 | 16 | 8-11-13 | | | | | | | | | | |
| | 18 | | GRAY SILTY FINE TO COARSE SAND WITH FINE GRAVEL, TRACE OF ORGANICS, WET-MED DENSE TO DENSE | 7 | | | VISUAL | | | | | |
| | 20 | 12-14-16 | DO DO DO | 8 | | | VISUAL | | | | | |
| 945.9 | 22 | 8-12-21 | DO DO DO | 9 | | | VISUAL | | | | | |

BORING COMPLETED

DATE STARTED 4-30-81 SAMPLER TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 4-30-81 CASING LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 955.8
BORING NUMBER B CORE BARREL TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 110+50 29' RT. SURFACE ELEVATION 965.8'
DALTON-DALTON-NEWPORT SUM 59-0000 INNERCHANGE OF AKRON INNERBELT WITH WEST EXPRESSWAY

| ELEV. | DEPTH | STN. PEN. | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 965.8 | 0 | | | | | | | | | | | |
| | 2 | 7-8-10 | BROWN SILTY FINE TO COARSE SAND WITH FINE GRAVEL, TRACE OF ROCK FRAGMENTS (FILL)MOIST-MEDIUM DENSE TO LOOSE | 1 | | | VISUAL | | | | | |
| | 4 | 10-12-11 | DO DO DO | 2 | | | VISUAL | | | | | |
| | 6 | 11-13-14 | DO DO DO | 3 | | | VISUAL | | | | | |
| | 8 | 3-3-4 | DO DO DO | 4 | | | VISUAL | | | | | |
| 955.8 | 10 | | | | | | | | | | | |
| | 12 | 2-2-2 | BROWN SILTY FINE TO COARSE SAND WITH FINE GRAVEL (FILL) VERY MOIST TO WET-LOOSE | 5 | | | VISUAL | | | | | 11.5 |
| | 14 | 1-2-2 | DO DO DO | 6 | | | VISUAL | | | | | 17.2 |
| | 16 | 3-3-4 | DO DO DO | 7 | | | VISUAL | | | | | 14.1 |
| | 18 | 1-1-2 | DO DO DO | 8 | | | VISUAL | | | | | 14.0 |
| 945.8 | 20 | | | | | | | | | | | |
| | 22 | 1-1-2 | GRAY MARL, MOIST - LOOSE | 9 | | | VISUAL | | | | | 74.8 |
| 940.8 | 24 | S.T. | DO DO DO | S-1 | 0 | 10 | 38 | 43 | 9 | 64.7 | 6.5 | 92.6 |
| | 26 | 2-2-2 | GRAY MARLY ORGANIC CLAYEY SILT, MOIST - SOFT | 10 | | | VISUAL | | | | | 72.9 |
| | 28 | 1-1-2 | DO DO DO | 11 | | | VISUAL | | | | | 62.7 |
| | 30 | | | | | | | | | | | |
| 933.8 | 32 | S.T. | DO DO DO | S-2 | 0 | 5 | 10 | 71 | 14 | 43.3 | 15.5 | 64.4 |
| | 34 | 8-11-13 | GRAY FINE TO COARSE SAND WITH GRAVEL AND ROCK FRAGMENTS, TRACE OF ORGANICS, WET - MEDIUM DENSE | 12 | | | VISUAL | | | | | |
| 929.3 | 36 | 12-14-15 | DO DO DO | 13 | | | VISUAL | | | | | |
| | 38 | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 5-1-81 SAMPLER TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 5-1-81 CASING LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 12.5' (ELEV. 953.3')
BORING NUMBER C CORE BARREL TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 111+50 25' RT. SURFACE ELEVATION 965.8'
DALTON-DALTON-NEWPORT SUM 59-0000 INTERCHANGE OF AKRON INNERBELT WITH WEST EXPRESSWAY

| ELEV. | DEPTH | STN. PEN. | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 965.8 | 0 | | | | | | | | | | | |
| | 2 | 4-6-7 | BROWN SILTY FINE TO COARSE SAND WITH FINE GRAVEL, TRACE OF ROCK FRAGMENTS (FILL) MOIST - MEDIUM DENSE TO LOOSE | 1 | | | VISUAL | | | | | |
| | 4 | 7-9-11 | DO DO DO | 2 | | | VISUAL | | | | | |
| | 6 | 7-6-5 | DO DO DO | 3 | | | VISUAL | | | | | |
| | 8 | 3-3-4 | DO DO DO | 4 | | | VISUAL | | | | | |
| | 10 | 1-1-2 | DO DO DO | 5 | | | VISUAL | | | | | 11.8 |
| 953.3 | 12 | | | | | | | | | | | |
| | 14 | 1-2-3 | BROWN SILTY FINE TO COARSE SAND WITH FINE GRAVEL, (FILL) WET - LOOSE | 6 | | | VISUAL | | | | | 20.4 |
| | 16 | 2-2-3 | DO DO DO | 7 | | | VISUAL | | | | | 16.4 |
| 948.3 | 18 | 1-1-2 | GRAY MARL, MOIST - LOOSE | 8 | | | VISUAL | | | | | 72.6 |
| 945.8 | 20 | | | | | | | | | | | |
| 943.8 | 22 | S.T. | GRAY MARLY CLAY, MOIST - LOOSE | S-1 | 0 | 34 | 20 | 34 | 12 | 72.9 | 12.8 | 46.6 |
| | 24 | 1-1-2 | GRAY MARLY ORGANIC SANDY CLAYEY SILT, WET-VERY SOFT | 9 | | | VISUAL | | | | | 23.6 |
| 940.8 | 26 | 2-2-3 | GRAY MARLY ORGANIC CLAYEY SILT, MOIST-SOFT | 10 | | | VISUAL | | | | | 56.7 |
| 937.8 | 28 | | | | | | | | | | | |
| | 30 | 9-14-13 | GRAY FINE TO COARSE SAND WITH GRAVEL, TRACE OF ORGANICS, WET-MEDIUM DENSE | 11 | | | VISUAL | | | | | |
| 934.3 | 32 | 8-10-12 | DO DO DO | 12 | | | VISUAL | | | | | |

BORING COMPLETED

DATE STARTED 5-1-81 SAMPLER TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 5-1-81 CASING LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 15.0' (ELEV. 951.8)
BORING NUMBER D CORE BARREL TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 112+50 27' RT. SURFACE ELEVATION 966.8'
DALTON-DALTON-NEWPORT SUM 59-0000 INTERCHANGE OF AKRON INNERBELT WITH WEST EXPRESSWAY

| ELEV. | DEPTH | STN. PEN. | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 966.8 | 0 | | | | | | | | | | | |
| | 2 | 4-6-8 | BROWN SILTY FINE TO COARSE SAND WITH SOME FINE GRAVEL AND ROCK FRAGMENTS (FILL) MOIST-MEDIUM DENSE | 1 | | | VISUAL | | | | | |
| 964.8 | 4 | 3-4 | BLACK ORGANIC CLAYEY SILT WITH FINE GRAVEL, TRACE OF * | 2 | | | VISUAL | | | | | |
| 963.3 | 6 | 3 | DARK BROWN FINE TEXTURED PEAT WITH SAND, MOIST-LOOSE | 3 | | | VISUAL | | | | | |
| 961.8 | 8 | S.T. | DARK BROWN SILTY FINE TO MEDIUM SAND AND PEAT, TRACE OF FINE GRAVEL, MOIST-LOOSE | S-1 | 2 | 23 | 53 | 17 | 5 | -NP- | | 80.1 |
| 959.8 | 10 | 9-12-16 | BROWN FINE TO COARSE SAND WITH SOME FINE GRAVEL TRACE OF ROCK FRAGMENTS, MOIST-MEDIUM DENSE | 4 | | | VISUAL | | | | | |
| | 12 | 9-13-14 | DO DO DO | 5 | | | VISUAL | | | | | |
| | 14 | 9-14-16 | DO DO DO | 6 | | | VISUAL | | | | | |
| 951.8 | 16 | 10-13-17 | BROWN FINE TO COARSE SAND WITH FINE GRAVEL, WET-MEDIUM DENSE | 7 | | | VISUAL | | | | | |
| 950.3 | 18 | | | | | | | | | | | |

* CINDERS (FILL) MOIST-LOOSE

BORING COMPLETED

THE H.C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
RETAINING WALL BETWEEN SOUTH
STREET & RAMP "EN".
STATION 109+55 TO 114+20
SEC. AKRON INTERCHANGE W/WEST EXPRESSWAY

BORING DATA

| DRAWN BY | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | G.C.W. | C.R.L. | 6/23/81 |

DATE STARTED 5-1-81 SAMPLER TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 5-1-81 CASING LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE NONE
BORING NUMBER E CORE BARREL TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 113+50 26'RT. SURFACE ELEVATION 967.9'

DALTON-DALTON-NEWPORT SUM 59-0000 INTERCHANGE OF AKRON INNERBELT WITH WEST EXPRESSWAY

| ELEV. | DEPTH | STN.PEN. | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 967.9 | 0 | | | | | | | | | | | |
| 965.4 | 2 | 5-5-6 | DARK BROWN FINE TEXTURED PEAT WITH SOME FINE GRAVEL (FILL) MOIST-MEDIUM DENSE | 1 | | | VISUAL | | | | | 13.9 |
| 963.9 | 4 | 2-2-2 | DARK BROWN PEAT, MOIST-LOOSE | 2 | | | VISUAL | | | | | 106.5 |
| 960.4 | 6 | 7-12-9 | GRAY MARL WITH GRAVEL AND ROCK FRAGMENTS, MOIST-MEDIUM DENSE | 3 | | | VISUAL | | | | | |
| | 8 | | | | | | | | | | | |
| | 10 | 5-8-9 | BROWN SILTY FINE TO COARSE SAND WITH SOME FINE GRAVEL AND ROCK FRAGMENTS, MOIST-MEDIUM DENSE | 4 | | | VISUAL | | | | | |
| 955.4 | 12 | 9-11-16 | DO DO DO | 5 | | | VISUAL | | | | | |
| | 14 | 7-10-12 | BROWN FINE TO COARSE SAND TRACE OF FINE GRAVEL, MOIST-MEDIUM DENSE | 6 | | | VISUAL | | | | | |
| 951.4 | 16 | 11-13-15 | DO DO DO | 7 | | | VISUAL | | | | | |
| | 18 | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 5-2-81 SAMPLER TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 5-2-81 CASING LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 951.8
BORING NUMBER F CORE BARREL TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 110+00 30' LT. SURFACE ELEVATION 980.8'

DALTON-DALTON-NEWPORT SUM 59-0000 INTERCHANGE OF AKRON INNERBELT WITH WEST EXPRESSWAY

| ELEV. | DEPTH | STN. PEN. | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 980.8 | 0 | | | | | | | | | | | |
| 977.8 | 2 | | CLAY, SAND AND GRAVEL (FILL) MOIST | | | | | | | | | |
| | 4 | | | | | | | | | | | |
| | 6 | | BROWN AND GRAY SANDY SILTY CLAY (FILL) MOIST - STIFF TO VERY STIFF | | | | | | | | | |
| | 8 | | | | | | | | | | | |
| | 10 | | | | | | | | | | | |
| | 12 | | | | | | | | | | | |
| | 14 | | | | | | | | | | | |
| 962.8 | 16 | | | | | | | | | | | |
| | 18 | | BROWN FINE TO COARSE SAND WITH FINE GRAVEL (FILL) MOIST - LOOSE | | | | | | | | | |
| | 20 | | | | | | | | | | | |
| | 22 | | | | | | | | | | | |
| 955.8 | 24 | | | | | | | | | | | |
| | 26 | 4-4-5 | BROWN FINE TO MEDIUM SAND WITH SOME FINE GRAVEL (FILL) MOIST TO WET - LOOSE | 1 | | | | | VISUAL | | | |
| | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 2-4-5 | DO DO DO | 2 | | | | | VISUAL | | | |
| | 34 | | | | | | | | | | | |
| 945.8 | 36 | 12-14-15 | GRAY SILTY FINE TO COARSE SAND WITH GRAVEL AND SOME ROCK FRAGMENTS, TRACE OF ORGANICS, WET-MEDIUM DENSE TO DENSE | 3 | | | | | VISUAL | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| 939.3 | 42 | 14-20-26 | DO DO DO | 4 | | | | | VISUAL | | | |

BORING COMPLETED

DATE STARTED 5-2-81 SAMPLER TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 5-2-81 CASING LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 951.7'
BORING NUMBER G CORE BARREL TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 111+00 30' LT. SURFACE ELEVATION 981.7'

DALTON-DALTON-NEWPORT SUM 59-0000 INTERCHANGE OF AKRON INNERBELT WITH WEST EXPRESSWAY

| ELEV. | DEPTH | STN. PEN. | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 981.7 | 0 | | | | | | | | | | | |
| 979.7 | 2 | | SAND AND GRAVEL (FILL) MOIST | | | | | | | | | |
| | 4 | | | | | | | | | | | |
| | 6 | | BROWN AND GRAY SANDY SILTY CLAY (FILL) MOIST-STIFF TO VERY STIFF | | | | | | | | | |
| | 8 | | | | | | | | | | | |
| | 10 | | | | | | | | | | | |
| | 12 | | | | | | | | | | | |
| | 14 | | | | | | | | | | | |
| | 16 | | | | | | | | | | | |
| 962.7 | 18 | | | | | | | | | | | |
| | 20 | | | | | | | | | | | |
| | 22 | 7-8-9 | BROWN SILTY CLAYEY FINE TO COARSE SAND WITH SOME FINE GRAVEL AND ROCK FRAGMENTS (FILL) MOIST-MEDIUM DENSE | 1 | | | | | VISUAL | | | |
| 956.7 | 24 | | | | | | | | | | | |
| | 26 | 3-4-5 | BROWN FINE TO MEDIUM SAND WITH SOME FINE GRAVEL, (FILL) MOIST - LOOSE | 2 | | | | | VISUAL | | | |
| 951.7 | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 4-6-7 | BROWN FINE TO COARSE SAND (FILL) WET - MEDIUM DENSE TO LOOSE | 3 | | | | | VISUAL | | | |
| | 34 | | | | | | | | | | | |
| | 36 | 2-3-4 | DO DO DO | 4 | | | | | VISUAL | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 3-4-5 | DO DO DO | 5 | | | | | VISUAL | | | |
| 938.7 | 44 | | | | | | | | | | | |
| | 46 | 10-12-16 | GRAY CLAYEY FINE TO MEDIUM SAND, MOIST - MEDIUM DENSE | 6 | | | | | VISUAL | | | |
| 934.2 | 48 | | | | | | | | | | | |
| | 50 | | GRAY FINE TO COARSE SAND WITH FINE GRAVEL, WET - DENSE | 7 | | | | | VISUAL | | | |
| 930.2 | 52 | 12-17-23 | | | | | | | | | | |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION IVESTIGATION
RETAINING WALL BETWEEN SOUTH
STREET & RAMP " EN ".
STATION 109+55 TO 114+20
SEC. AKRON INTERCHANGE W/WEST EXPRESSWAY

BORING DATA

| DRAWN BY | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | G.C.W. | C.R.L. | 6/23/81 |

MICROFILMED
OCT 19 1999

AKRON INNERBELT
SUM-59-0.00

10
40
11

## GEOLOGY OF THE SITE

THIS AREA CONTAINS DEPOSITS OF GLACIAL ORIGIN CONSISTING MOSTLY OF SAND AND GRAVEL. FINE SANDS, SILT AND CLAYEY SILT. FOLLOWING THIS DEPOSITION SOME LOW DEPRESSIONS WERE FORMED IN WHICH PEAT AND ORGANIC SILTS ACCUMULATED. THESE MATERIALS OCCUR SPORADICALLY THROUGHOUT THE AKRON AREA AND WERE ONLY ENCOUNTERED IN ONE OF THE ELEVEN TEST BORINGS DRILLED FOR THIS BRIDGE STRUCTURE.

UNDERLYING BEDROCK CONSISTS OF SHALE AND SANDSTONE OF PENNSYLVANIA AGE.

## EXPLORATION

ELEVEN STANDARD PENETRATION TEST BORINGS (HOLES 6-S THRU 16-S) WERE MADE AT THE SITE BETWEEN SEPTEMBER 13 AND NOVEMBER 8, 1979. SAMPLING OF SUBSURFACE MATERIALS WAS ACCOMPLISHED WITH TRUCK MOUNTED EQUIPMENT UTILIZING A DRIVEN SPLIT SPOON SAMPLER. THIN WALLED SHELBY TUBES AND AN NXM DOUBLE TUBE CORE BARREL. THE PROFILE WAS SAMPLED TO DEPTHS VARYING FROM 27 TO 106.5 FEET BELOW EXISTING GRADE.

## INVESTIGATIONAL FINDINGS

FILL WAS ENCOUNTERED IN EACH BORING. DEPTHS OF FILL TYPICALLY AVERAGED BETWEEN 2.5' AND 5' WITH THE EXCEPTION OF BORINGS 10-S AND 11-S WHICH FOUND 10' OF FILL AND HOLE 13-S WHICH FOUND 20' OF FILL FROM ITS LOCATION ON TOP OF THE EXISTING WEST EXPRESSWAY EMBANKMENT.

SIX INCHES OF TOPSOIL WAS FOUND BENEATH FILL AT BORING 13-S AND 2.5' OF PEAT WAS FOUND JUST UNDER FILL AT HOLE 10-S, OTHERWISE THE TYPICAL DEPOSIT BENEATH FILL WAS A LOOSE TO MEDIUM DENSE FINE AND COARSE TEXTURED SAND WITH SOME GRAVEL. THIS DEPOSIT RANGED FROM 5 FEET TO 27.5 FEET IN THICKNESS BEFORE ENCOUNTERING FINER TEXTURED DEPOSITS OF FINE AND SILTY FINE SANDS, SANDY SILT AND CLAYEY SILT. THIS WAS GENERALLY MEDIUM COMPACT TO COMPACT AND IN SEVERAL CASES TRANSPOSED INTO A VERY COMPACT STRATUM.

BEDROCK WAS ENCOUNTERED IN BORINGS 14-S THRU 16-S BETWEEN 20 AND 30 FEET BELOW GRADE. THIS CONSISTED OF INTERBEDDED GRAY SHALE AND SILICEOUS SHALE AND SLOPED OFF FROM ABOUT ELEVATION 966 TO THE SOUTH AND WEST WITHIN THE LIMITS OF THIS STRUCTURE.

GROUNDWATER WAS ENCOUNTERED DURING DRILLING AT AN AVERAGE ELEVATION OF ABOUT 950 FOR BORINGS 6-S THRU 9-S. 954 FOR BORINGS 10-S THRU 13-S AND 974 FOR HOLES 14-S THRU 16-S.

## LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- H HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X=NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y=NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- ▼— INDICATES STATIC WATER ELEVATION.

## SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

## GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procur ed for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

| Boulders | Cobbles | Gravel | Coarse Sand | Fine Sand | Silt | Clay |
|---|---|---|---|---|---|---|
| | 8" | 3" | 2.0mm | 0.42mm | 0.074mm | 0.005mm |
| | | No. 10 sieve | | No. 40 sieve | No. 200 sieve | |

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

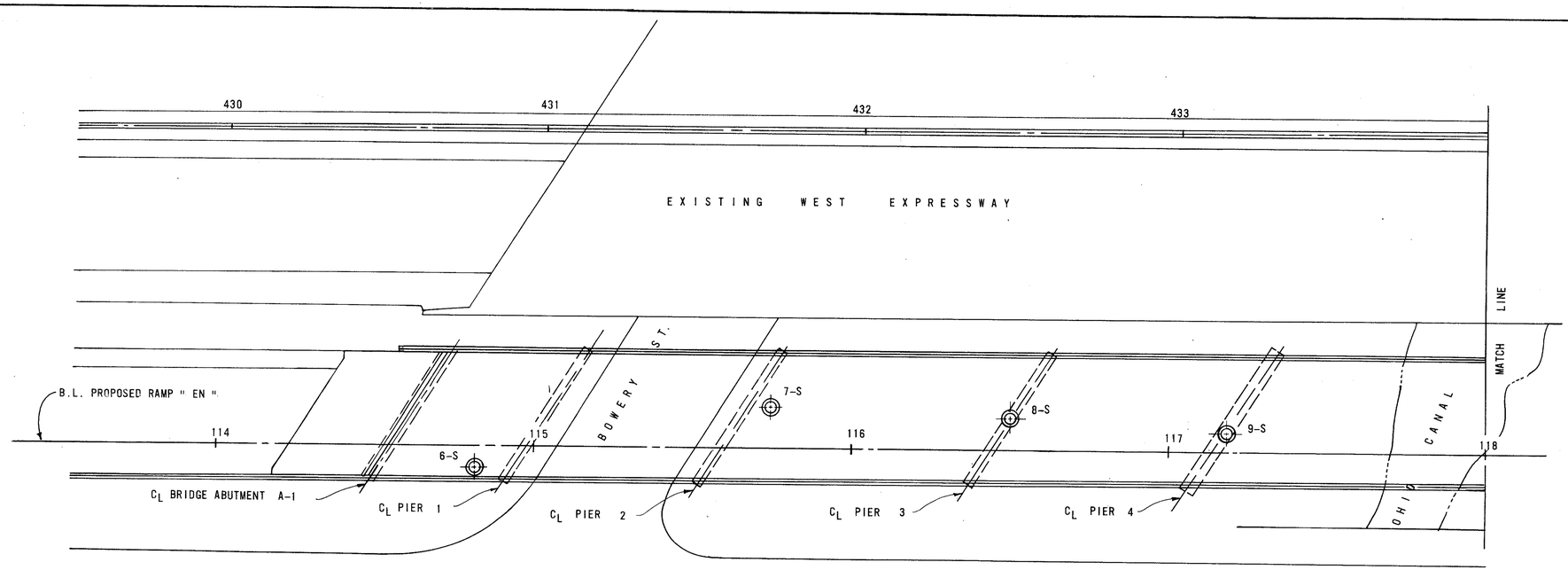
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-00.00 AKRON INNERBELT
RAMP 'A' EN OVER BOWERY STREET OHIO CANAL
EXISTING WEST EXPRESSWAY AND RUSSELL AVENUE
SEC. AKRON INNERBELT SUM 59-00.00

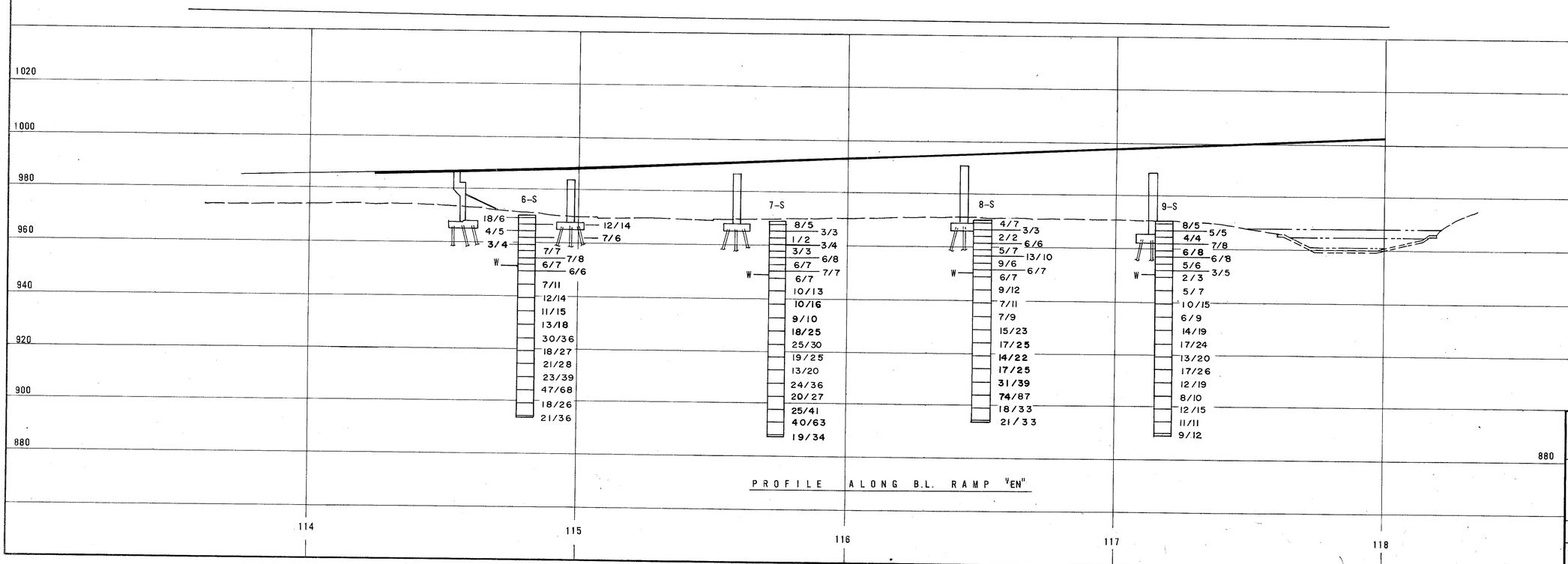
| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7/25/80 |

MICROFILMED
OCT 19 1988

AKRON INNERBELT
SUM. 59-00.00

11/40
2/11




PROFILE ALONG B.L. RAMP "EN"

SCALE: 1"=20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD
CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM.-59-00.00 AKRON INNERBELT
RAMP "EN" OVER BOWERY STREET, OHIO CANAL,
EXISTING WEST EXPRESSWAY & RUSSELL AVENUE.
SEC. AKRON INNERBELT SUM.-59-00.00

PLAN AND PROFILE

| CHECKED BY | REVIEWED BY, | DATE |
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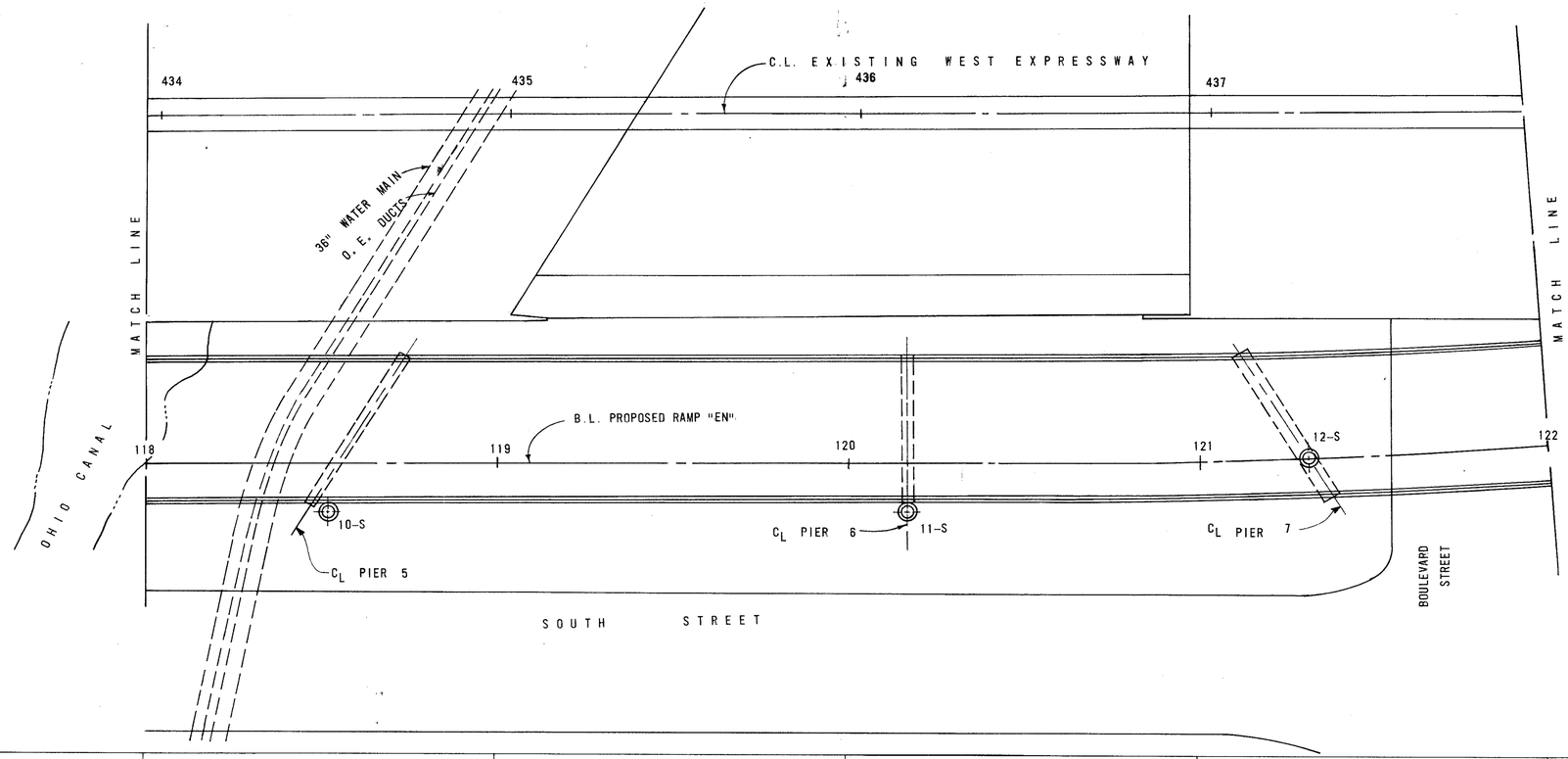
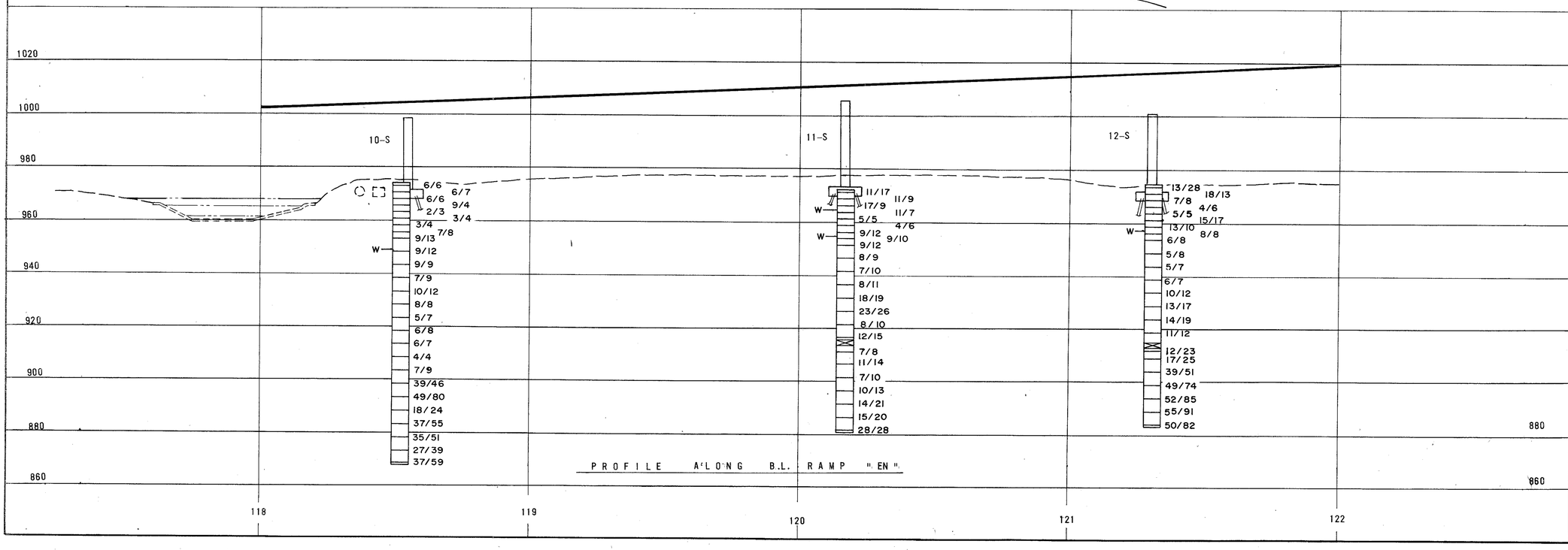
| JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1989






PROFILE ALONG B.L. RAMP "EN"

SCALE: 1" = 20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD
CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT
RAMP "EN" OVER BOWERY STREET, OHIO CANAL, EXISTING WEST EXPRESSWAY & RUSSELL AVENUE
SEC. AKRON INNERBELT SUM.-59-00.00

PLAN AND PROFILE

| | CHECKED BY | REVIEWED BY, | DATE, |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1999

AKRON INNERBELT
SUM – 59-00.00

13
40
4
11

438
439
440
441
442
443
122
123
124
125
126
127
C.L. EXISTING WEST EXPRESSWAY
MATCH LINE
MATCH LINE
MI
13-S
B.L. PROPOSED
RAMP "EN"
$C_L$ PIER 8
$C_L$ PIER 9
SOUTH STREET
B.L. RAMP "EN" STATION 125+70.78
C.L. WEST EXPRESSWAY STATION 441+50.32

13-S

10/11 7/7
12/16 14/15
9/10 15/20
6/10 15/19
4/5
5/8
6/8
21/13
W 6/8
7/10
10/12
10/11
8/10
8/11
42/63
34/56
50/78
77/135
90/238
298/150
75/125
64/89

1040
1020
1000
980
960
940
920
900
880

PROFILE ALONG BL RAMP "EN"

SCALE: 1"= 20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT
RAMP "EN" OVER BOWERY ST., OHIO CANAL,
EXISTING WEST EXPRESSWAY & RUSSELL AVE.
SEC. AKRON INNERBELT SUM-59-00.00

PLAN AND PROFILE

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7-25-80 |

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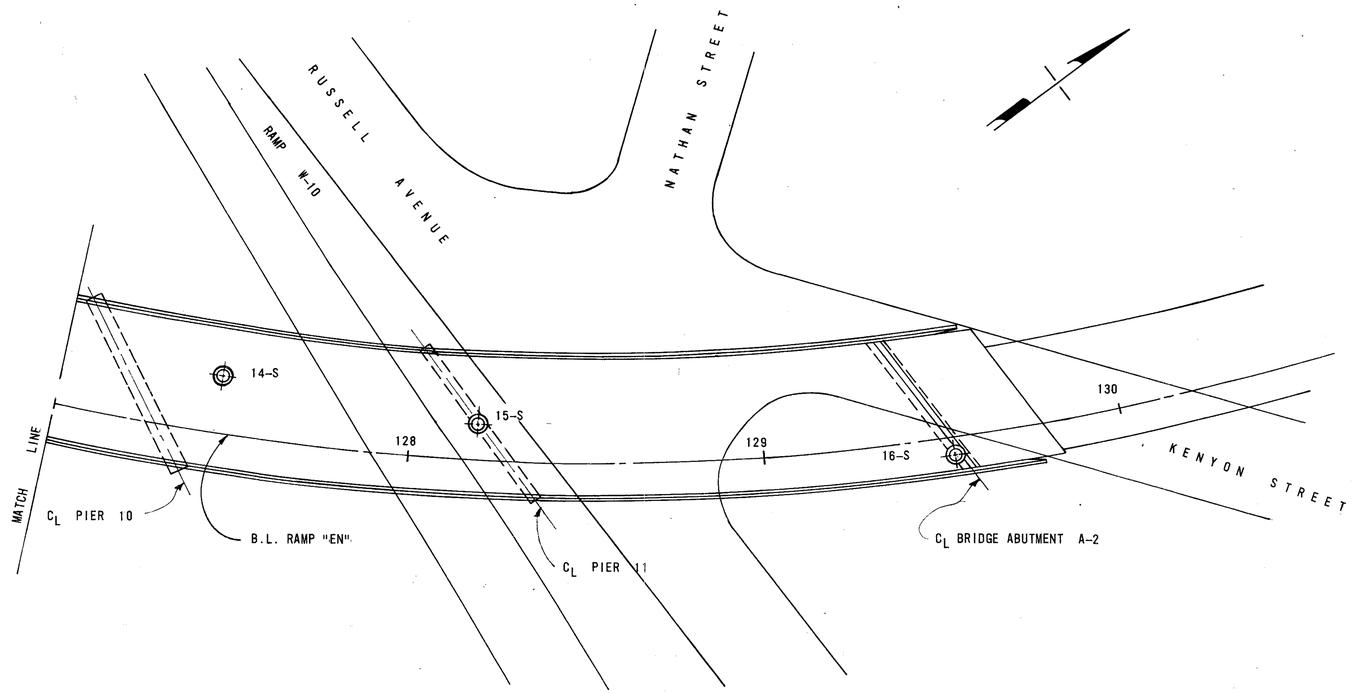
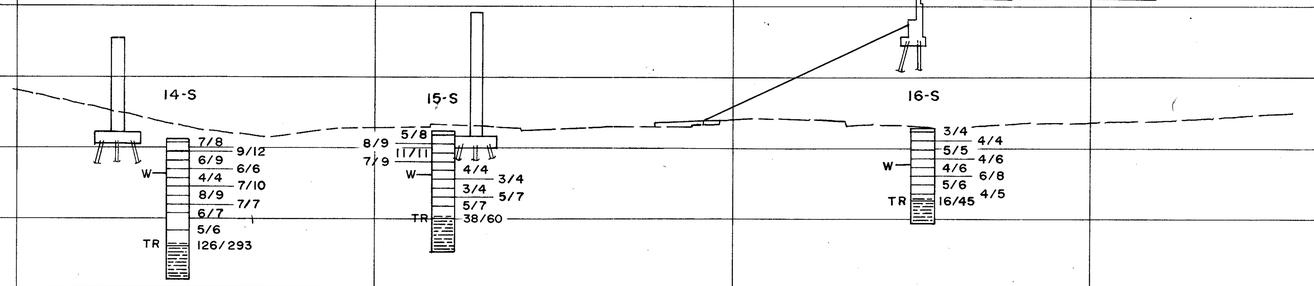
OCT 19 1982






PROFILE ALONG B.L. RAMP "EN"

1040
1020
1000
980
960
940

127 128 129 130 131

SCALE: 1"=20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT,
RAMP "EN" OVER BOWERY STREET, OHIO CANAL
EXISTING WEST EXPRESSWAY & RUSSELL AVENUE
SEC. AKRON INNERBELT SUM-59-00.00

PLAN AND PROFILE

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1989



DATE STARTED 10-10-79 SAMPLER: TYPE S.S. DIA. 2.0'' O.D. WATER ELEVATION
DATE COMPLETED 10-10-79 CASING: LENGTH H.S.A. DIA. 3.5'' I.D. IMMEDIATE 19.0'
BORING NUMBER 6-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 18.2'
STATION & OFFSET 114+81 7' RT. BL RAMP EN SURFACE ELEVATION 970.1

| ELEV. | DEPTH | STN. PEN (N) | DESCRIPTION | SA NO | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 970.1 | 0 | | DARK BROWN SANDY SILTY CLAY W/SOME GRAVEL, CINDERS, AND ROCK FRAGMENTS (FILL), MOIST – VERY STIFF | | | | | | | | | |
| 967.6 | 2 | 4-18-6 | | 1 | | | | VISUAL | | | | |
| 965.1 | 4 | 11-12-14 | BROWN SANDY SILTY CLAY W/SOME GRAVEL (FILL), MOIST – VERY STIFF | 2 | | | | VISUAL | | | | 11.4 |
| 962.6 | 6 | 4-4-5 | GRAY AND BROWN SANDY SILT W/SOME CLAY AND SANDSTONE FRAGMENTS, (FILL) MOIST – STIFF | 3 | | | | VISUAL | | | | 12.0 |
| 960.1 | 8 | 6-7-6 | BROWN SILTY FINE SAND W/A LITTLE GRAVEL, MOIST – MEDIUM DENSE | 4 | | | | VISUAL | | | | |
| 957.6 | 10 | 3-3-4 | GRAY SILTY FINE SAND, TRACE GRAVEL, MOIST – LOOSE | 5 | | | | VISUAL | | | | |
| | 12 | 7-7-7 | GRAY FINE TO COARSE SAND W/SOME GRAVEL, MOIST – MEDIUM DENSE | 6 | | | | VISUAL | | | | |
| 952.6 | 14 | 7-7-8 | DO DO DO | 7 | | | | VISUAL | | | | |
| 951.1 | 16 | 5-6-7 | GRAY SILTY FINE SAND, MOIST – MEDIUM DENSE | 8 | | | | VISUAL | | | | |
| | 18 | 6-6-6 | DARK BROWN FINE TO COARSE SAND W/SOME GRAVEL, WET – MEDIUM DENSE | 9 | 33 | 36 | 26 | – 5 – | | | | 17.8 |
| 945.1 | 20 | 4-7-11 | GRAY FINE SAND, WET – MEDIUM DENSE | 10 | | | | VISUAL | | | | 17.7 |
| | 22 | 12-12-14 | DO DO DO | 11 | | | | VISUAL | | | | |
| 935.1 | 24 | 6-11-15 | GRAY FINE SAND, WET – MEDIUM DENSE | 12 | | | | VISUAL | | | | |
| 930.1 | 26 | 7-13-18 | GRAY FINE SAND, WET – DENSE | 13 | | | | VISUAL | | | | 17.4 |
| 925.1 | 28 | 20-30-36 | GRAY FINE SAND, WET – VERY DENSE | 14 | | | | VISUAL | | | | |
| 920.1 | 30 | 10-18-27 | GRAY FINE SAND, WET – DENSE | 15 | | | | VISUAL | | | | 20.2 |
| | 32 | 12-12-28 | DO DO DO | 16 | | | | VISUAL | | | | |
| 910.1 | 34 | 12-23-39 | GRAY SILTY FINE SAND, WET – VERY DENSE | 17 | | | | VISUAL | | | | |
| | 36 | 18-47-68 | DO DO DO | 18 | | | | VISUAL | | | | |
| 900.1 | 38 | 11-18-26 | GRAY SILTY FINE SAND, WET – DENSE | 19 | | | | VISUAL | | | | 20.8 |
| 895.1 | 40 | | | | | | | | | | | |
| 893.6 | 42 | 12-21-36 | GRAY SILTY FINE SAND, WET – VERY DENSE | 20 | | | | VISUAL | | | | |

BORING COMPLETED

DATE STARTED 9-15-79 SAMPLER: TYPE S.S. DIA. 2.0'' O.D. WATER ELEVATION
DATE COMPLETED 9-16-79 CASING: LENGTH H.S.A. DIA. 3.5'' I.D. IMMEDIATE 20.0'
BORING NUMBER 7-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 18.0'
STATION & OFFSET 115+74 13' LT. BL RAMP EN SURFACE ELEVATION 969.9

| ELEV. | DEPTH | STN. PEN (N) | DESCRIPTION | SA NO | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 969.9 | 0 | | BLACKTOP AND SAND W/SOME GRAVEL (FILL), MOIST – MEDIUM DENSE | | | | | | | | | |
| 967.4 | 2 | 7-8-5 | | 1 | | | | VISUAL | | | | |
| 964.9 | 4 | 3-3-3 | BROWN SANDY SILTY CLAY W/SOME GRAVEL AND SAND (FILL), MOIST – MEDIUM STIFF | 2 | | | | VISUAL | | | | 13.8 |
| 962.4 | 6 | 1-1-2 | BROWN SILTY FINE SAND W/SOME ORGANICS, MOIST – VERY LOOSE | 3 | | | | VISUAL | | | | 13.6 |
| 959.9 | 8 | 2-3-4 | BROWN SILTY FINE TO COARSE SAND AND GRAVEL, MOIST – LOOSE | 4 | | | | VISUAL | | | | 13.4 |
| 957.4 | 10 | 3-3-3 | BROWN FINE TO COARSE SAND AND GRAVEL, MOIST – LOOSE | 5 | 47 | 32 | 11 | 6 | 4 | N.P. | | 9.4 |
| | 12 | 6-6-8 | BROWN FINE TO COARSE SAND AND GRAVEL, MOIST – MEDIUM DENSE | 6 | | | | VISUAL | | | | 4.5 |
| 952.4 | 14 | 6-6-7 | DO DO DO | 7 | 51 | 32 | 12 | 2 | 3 | | | 4.4 |
| 949.9 | 16 | 5-7-7 | BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL, WET – MEDIUM DENSE | 8 | | | | VISUAL | | | | 4.4 |
| | 18 | 5-6-7 | BROWN FINE TO COARSE SAND AND GRAVEL WET – MEDIUM DENSE | 9 | 52 | 28 | 17 | – 3 – | | | | 11.8 |
| 944.9 | 20 | 9-10-13 | GRAY SANDY SILT W/FINE SAND SEAMS, WET – MEDIUM DENSE | 10 | | | | VISUAL | | | | 14.8 |
| | 22 | 6-10-16 | DO DO DO | 11 | | | | VISUAL | | | | 18.6 |
| 934.9 | 24 | 9-9-10 | GRAY SANDY SILT, WET – MEDIUM DENSE | 12 | 0 | 1 | 35 | 56 | 8 | N.P. | | 19.8 |
| 929.9 | 26 | 11-18-25 | GRAY SILTY FINE SAND, WET – DENSE | 13 | | | | VISUAL | | | | 22.4 |
| 924.9 | 28 | 19-25-30 | GRAY SANDY SILT, WET – VERY DENSE | 14 | | | | VISUAL | | | | 18.8 |
| 919.9 | 30 | 11-19-25 | GRAY SILTY FINE SAND, WET – DENSE | 15 | | | | VISUAL | | | | 17.9 |
| | 32 | 9-13-20 | DO DO DO | 16 | 5 | 4 | 58 | 25 | 8 | | | 6.7 |
| 909.9 | 34 | 15-24-36 | GRAY SILTY FINE SAND, WET – VERY DENSE | 17 | | | | VISUAL | | | | 13.3 |
| 904.9 | 36 | 13-20-27 | GRAY SILTY FINE SAND, WET – DENSE | 18 | | | | VISUAL | | | | 15.3 |
| 899.9 | 38 | 11-25-41 | GRAY SILTY FINE SAND, WET – VERY DENSE | 19 | | | | VISUAL | | | | 19.5 |
| | 40 | 19-40-63 | DO DO DO | 20 | | | | VISUAL | | | | 18.3 |
| 889.9 | 42 | 9-19-34 | GRAY FINE SAND, WET – VERY DENSE | 21 | 0 | 1 | 89 | – 10 – | | | | 20.5 |
| 888.4 | | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 9-14-79 SAMPLER: TYPE S.S. DIA. 2.0'' O.D. WATER ELEVATION
DATE COMPLETED 9-15-79 CASING: LENGTH H.S.A. DIA. 3.5'' I.D. IMMEDIATE 20.0'
BORING NUMBER 8-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 19.0'
STATION & OFFSET 116+50 10' LT BL RAMP EN SURFACE ELEVATION 970.1

| ELEV. | DEPTH | STN. PEN (N) | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 970.1 | 0 | | BROWN FINE TO COARSE SAND W/SOME GRAVEL, CINDERS, AND CLAY LENSES (FILL), MOIST – MEDIUM DENSE | | | | | | | | | |
| 967.6 | 2 | 3-4-7 | | 1 | | | | VISUAL | | | | |
| 965.1 | 4 | 3-3-3 | BROWN SILTY FINE SAND, VERY MOIST – LOOSE | 2 | | | | VISUAL | | | | 15.5 |
| 962.6 | 6 | 4-2-2 | BROWN CLAYEY FINE TO COARSE SAND AND GRAVEL, MOIST – LOOSE | 3 | | | | VISUAL | | | | 15.8 |
| | 8 | 6-6-6 | BROWN FINE TO COARSE SAND W/SOME GRAVEL, MOIST – MEDIUM DENSE | 4 | | | | VISUAL | | | | |
| | 10 | 3-5-7 | DO DO DO | 5 | | | | VISUAL | | | | |
| 955.1 | 12 | 13-13-10 | DO DO DO | 6 | | | | VISUAL | | | | |
| 952.6 | 14 | 24-9-6 | BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL, MOIST – MEDIUM DENSE | 7 | | | | VISUAL | | | | |
| 950.1 | 16 | 4-6-7 | BROWN FINE SAND, MOIST – MEDIUM DENSE | 8 | 2 | 24 | 69 | 0 | 5 | | | 3.7 |
| | 18 | 5-6-7 | BROWN FINE SAND, WET – MEDIUM DENSE | 9 | 2 | 28 | 66 | 0 | 4 | | | 19.4 |
| 945.1 | 20 | 7-9-12 | BROWN FINE SAND, TRACE GRAVEL, WET – MEDIUM DENSE | 10 | | | | VISUAL | | | | |
| 940.1 | 22 | 9-7-11 | BROWN AND GRAY FINE SAND, WET – MEDIUM DENSE | 11 | | | | VISUAL | | | | |
| 938.6 | 24 | 6-7-9 | GRAY FINE SAND, WET – MEDIUM DENSE | 12 | | | | VISUAL | | | | 16.0 |
| 930.1 | 26 | 9-15-23 | GRAY FINE SAND, WET – DENSE | 13 | | | | VISUAL | | | | |
| | 28 | 11-17-25 | DO DO DO | 14 | | | | VISUAL | | | | |
| 915.1 | 30 | 10-14-22 | DO DO DO | 15 | | | | VISUAL | | | | |
| 910.1 | 32 | 11-17-25 | GRAY SILTY FINE SAND, WET – DENSE | 16 | | | | VISUAL | | | | |
| 905.1 | 34 | 14-31-39 | GRAY FINE SAND, TRACE ORGANICS, WET – VERY DENSE | 17 | | | | VISUAL | | | | |
| 900.1 | 36 | 31-74-87 | GRAY FINE SAND, WET – VERY DENSE | 18 | | | | VISUAL | | | | |
| | 38 | 9-18-33 | GRAY SANDY SILT WITH A LITTLE CLAY, VERY DENSE | 19 | | | | VISUAL | | | | |
| 895.1 | 40 | 12-21-33 | DO DO DO | 20 | | | | VISUAL | | | | |

BORING COMPLETED

THE H.C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD
CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT
RAMP "EN" OVER BOWERY ST., OHIO CANAL
EXISTING WEST EXPRESSWAY & RUSSELL AVE..

SEC.. AKRON INNERBELT SUM-59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1980



DATE STARTED 9-13-79 SAMPLER: TYPE S.S. DIA. 2.0'' O.D. WATER ELEVATION
DATE COMPLETED 9-13-79 CASING: LENGTH H.S.A. DIA. 3.5'' I.D. IMMEDIATE 20.0'
BORING NUMBER 9-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 19.2'
STATION & OFFSET 117+18 6'LT., BL RAMP EN SURFACE ELEVATION 970.5

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG. | % CS. | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 970.5 | | | | | | | | | | | | |
| 968.0 | 2 | 7-8-5 | BROWN FINE TO COARSE SAND W/SOME GRAVEL (FILL), MOIST - MEDIUM DENSE | 1 | | | VISUAL | | | | | |
| | 4 | 4-5-5 | GRAY CLAYEY FINE SAND, MOIST - LOOSE | 2 | | | VISUAL | | | | | 15.1 |
| | 6 | | | | | | | | | | | |
| 973.0 | 8 | 3-4-4 | DO DO DO | 3 | | | VISUAL | | | | | 14.7 |
| 960.5 | 10 | 4-7-8 | BROWN CLAYEY FINE TO COARSE SAND W/SOME SANDSTONE FRAGMENTS AND FINE SAND LENSES, MOIST - MEDIUM DENSE | 4 | | | VISUAL | | | | | 15.6 |
| 958.0 | 12 | 5-6-8 | GRAY FINE SAND W/SOME GRAVEL, MOIST - MEDIUM DENSE | 5 | | | VISUAL | | | | | |
| 955.5 | 14 | 4-6-8 | GRAY SILTY FINE SAND, MOIST - MEDIUM DENSE | 6 | | | VISUAL | | | | | |
| | 16 | 4-5-6 | GRAY FINE SAND, MOIST - MEDIUM DENSE | 7 | | | VISUAL | | | | | |
| 953.0 | 18 | | | | | | | | | | | |
| 950.5 | 20 | 2-3-5 | GRAY FINE SAND, MOIST - LOOSE | 8 | | | VISUAL | | | | | |
| | 22 | 2-2-3 | BROWN SILTY FINE SAND, WET - LOOSE | 9 | | | VISUAL | | | | | 18.2 |
| | 24 | | | | | | | | | | | |
| | 26 | 3-5-7 | BROWN SILTY FINE SAND, WET - MEDIUM DENSE | 10 | | | VISUAL | | | | | |
| | 28 | | | | | | | | | | | |
| 940.5 | 30 | | | | | | | | | | | |
| | 32 | 8-10-15 | GRAY FINE TO MEDIUM SAND, WET - MEDIUM DENSE | 11 | | | VISUAL | | | | | |
| | 34 | | | | | | | | | | | |
| | 36 | 5-6-9 | DO DO DO | 12 | | | VISUAL | | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 8-14-19 | DO DO DO | 13 | | | VISUAL | | | | | |
| 925.5 | 44 | | | | | | | | | | | |
| | 46 | 11-17-24 | GRAY FINE SAND, WET - DENSE | 14 | | | VISUAL | | | | | |
| | 48 | | | | | | | | | | | |
| 920.5 | 50 | | | | | | | | | | | |
| | 52 | 9-13-20 | GRAY SANDY SILT, WET - DENSE | 15 | | | VISUAL | | | | | 21.7 |
| | 54 | | | | | | | | | | | |
| 915.5 | 56 | 9-17-26 | GRAY SILTY FINE SAND WET - DENSE | 16 | | | VISUAL | | | | | |
| | 58 | | | | | | | | | | | |
| 910.5 | 60 | | | | | | | | | | | |
| | 62 | 7-12-19 | GRAY CLAYEY SILT, WET - VERY STIFF | 17 | | | VISUAL | | | | | |
| | 64 | | | | | | | | | | | |
| | 66 | 5-8-10 | DO DO DO | 18 | | | VISUAL | | | | | 23.5 |
| | 68 | | | | | | | | | | | |
| | 70 | | | | | | | | | | | |
| | 72 | 6-12-15 | DO DO DO | 19 | | | VISUAL | | | | | |
| | 74 | | | | | | | | | | | |
| | 76 | 5-11-11 | DO DO DO | 20 | | | VISUAL | | | | | |
| | 78 | | | | | | | | | | | |
| | 80 | | | | | | | | | | | |
| 889.0 | 82 | 5-9-12 | | 21 | | | VISUAL | | | | | 16.4 |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GOETECHNICAL ENGINEERS
AIRPORT ROAD
CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT
RAMP ''EN'' OVER BOWERY ST. OHIO CANAL
EXISTING WEST EXPRESSWAY & RUSSELL AVE.

SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1989



DATE STARTED 9-21-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-1-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 25.0'
BORING NUMBER 10-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 24.7'

STATION & OFFSET 118+52 14' RT. BL RAMP "EN" SURFACE ELEVATION 974.2

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG. | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 974.2 | 0 | | DARK BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL AND CLAY LENSES, TRACE SLAG (FILL), MOIST – MEDIUM DENSE | | | | | | | | | |
| | 2 | 3-6-6 | | 1 | | | | | VISUAL | | | |
| | 4 | 7-6-7 | DO DO DO | 2 | | | | | VISUAL | | | |
| | 6 | 6-6-6 | DO DO DO | 3 | | | | | VISUAL | | | 11.6 |
| 966.7 | 8 | 6-9-4 | BROWN FINE TO COARSE SAND W/SOME GRAVEL, ORGANICS, AND ROCK FRAGMENTS, TRACE BRICK (FILL), MOIST – MEDIUM DENSE | 4 | | | | | VISUAL | | | 15.6 |
| 964.2 | 10 | | | | | | | | | | | |
| 961.7 | 12 | 2-2-3 | BLACK FINE TEXTURED PEAT, VERY MOIST – LOOSE | 5 | | | | | VISUAL | | | 155.6 |
| | 14 | 2-3-4 | BROWN SILTY FINE SAND W/CLAY LENSES, MOIST – LOOSE | 6 | | | | | VISUAL | | | 11.8 |
| 959.2 | 16 | 2-3-4 | BROWN AND GRAY FINE TO COARSE SAND W/SOME GRAVEL, MOIST – LOOSE | 7 | 23 | 34 | 28 | 5 | 5 | | | 14.0 |
| | 18 | 9-7-18 | BROWN AND GRAY FINE TO COARSE SAND W/SOME GRAVEL, MOIST – MEDIUM DENSE | 8 | | | | | VISUAL | | | |
| 954.2 | 20 | | | | | | | | | | | |
| | 22 | 5-9-13 | BROWN AND GRAY FINE TO COARSE SAND AND GRAVEL, MOIST – MEDIUM DENSE | 9 | | | | | VISUAL | | | |
| 949.2 | 24 | | | | | | | | | | | |
| | 26 | 7-9-12 | GRAY FINE SAND, TRACE GRAVEL, WET – MEDIUM DENSE | 10 | | | | | VISUAL | | | 17.3 |
| 944.2 | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 7-9-9 | GRAY CLAYEY SILT, WET – STIFF | 11 | | | | | VISUAL | | | |
| | 34 | | | | | | | | | | | |
| | 36 | 6-7-9 | DO DO DO | 12 | | | | | VISUAL | | | 18.1 |
| 934.2 | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 8-10-12 | GRAY CLAYEY SILT, TRACE GRAVEL WET – VERY STIFF | 13 | | | | | VISUAL | | | |
| 929.2 | 44 | | | | | | | | | | | |
| | 46 | 5-8-8 | GRAY CLAYEY SILT, WET – STIFF | 14 | | | | | VISUAL | | | |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 4-5-7 | DO DO DO | 15 | | | | | VISUAL | | | 12.3 |
| | 54 | | | | | | | | | | | |
| | 56 | 4-6-8 | DO DO DO | 16 | | | | | VISUAL | | | |
| | 58 | | | | | | | | | | | |
| 914.2 | 60 | | | | | | | | | | | |
| | 62 | 5-6-7 | GRAY CLAYEY SILT, TRACE GRAVEL, WET – STIFF | 17 | | | | | VISUAL | | | |
| | 64 | | | | | | | | | | | |
| | 66 | 4-4-4 | DO DO DO | 18 | | | | | VISUAL | | | 13.5 |
| | 68 | | | | | | | | | | | |
| 904.2 | 70 | | | | | | | | | | | |

10-S CONTINUED

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 904.2 | 70 | | | | | | | | | | | | | |
| | 72 | 5-7-9 | DO DO DO | 19 | | | | | VISUAL | | | | | |
| 899.2 | 74 | | | | | | | | | | | | | |
| | 76 | 34-39-46 | GRAY SILTY FINE SAND WITH SILT LENSES, WET–VERY DENSE | 20 | | | | | VISUAL | | | | | 14.9 |
| | 78 | | | | | | | | | | | | | |
| | 80 | | | | | | | | | | | | | |
| | 82 | 27-49-80 | DO DO DO | 21 | | | | | VISUAL | | | | | |
| 889.2 | 84 | | | | | | | | | | | | | |
| | 86 | 12-18-24 | GRAY CLAYEY SILT, WET – VERY STIFF | 22 | | | | | VISUAL | | | | | 16.7 |
| | 88 | | | | | | | | | | | | | |
| | 90 | | | | | | | | | | | | | |
| | 92 | 20-37-55 | DO DO DO | 23 | | | | | VISUAL | | | | | |
| 879.2 | 94 | | | | | | | | | | | | | |
| | 96 | 23-35-51 | GRAY CLAYEY SILT WITH FINE SAND SEAMS, WET–VERY STIFF | 24 | | | | | VISUAL | | | | | |
| | 98 | | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | | | |
| | 102 | 17-27-39 | DO DO DO | 25 | | | | | VISUAL | | | | | |
| 869.2 | 104 | | | | | | | | | | | | | |
| 867.7 | 106 | 20-37-59 | GRAY CLAYEY SILT, WET– VERY STIFF | 26 | | | | | VISUAL | | | | | |
| | 108 | | | | | | | | | | | | | |

BORING COMPLETED

11– S CONTINUED

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 32 | 5-7-10 | GRAY SILT, WET– MEDIUM DENSE | 11 | 0 | 1 | 28 | 58 | 13 | N. | P. | | | 19.9 |
| 937.3 | 34 | | | | | | | | | | | | | |
| | 36 | 6-8-11 | GRAY SILT WITH SOME CLAY, WET – MEDIUM DENSE | 12 | 0 | 0 | 2 | 78 | 29 | N. | P. | | | 25.1 |
| 932.3 | 38 | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | | | |
| | 42 | 17-18-19 | GRAY FINE SAND, WET–DENSE | 13 | 1 | 12 | 73 | 10 | 4 | | | | | 13.4 |
| | 44 | | | | | | | | | | | | | |
| | 46 | 17-23-26 | DO DO DO | 14 | | | | | VISUAL | | | | | 10.2 |
| | 48 | | | | | | | | | | | | | |
| 922.3 | 50 | | | | | | | | | | | | | |
| | 52 | 6-8-10 | GRAY CLAYEY SILT, MOIST–STIFF | 15 | | | | | VISUAL | | | | | 15.7 |
| | 54 | | | | | | | | | | | | | |
| 917.3 | 56 | | | | | | | | | | | | | |
| | 58 | 9-12-15 | GRAY SILT WITH A LITTLE CLAY AND GRAVEL – WET – MEDIUM DENSE | 16 | | | | | VISUAL | | | | | 15.4 |
| | S-T | | | S-1 | 17 | 5 | 12 | 47 | 19 | N. | P. | | | 15.3 |
| 911.8 | 60 | 5-7-8 | | 17 | | | | | VISUAL | | | | | 15.8 |
| | 62 | 4-7-10 | GRAY CLAYEY SILT WITH SAND LENSES, WET– VERY STIFF | 18 | | | | | VISUAL | | | | | 12.2 |
| | 64 | | | | | | | | | | | | | |
| | 66 | 32-11-14 | DO DO DO | 19 | | | | | VISUAL | | | | | 15.4 |
| | 68 | | | | | | | | | | | | | |
| | 70 | | | | | | | | | | | | | |
| | 72 | 5-7-10 | DO DO DO | 20 | | | | | VISUAL | | | | | 15.7 |
| | 74 | | | | | | | | | | | | | |
| | 76 | 12-10-13 | DO DO DO | 21 | | | | | VISUAL | | | | | 16.4 |
| | 78 | | | | | | | | | | | | | |
| 892.3 | 80 | | | | | | | | | | | | | |
| | 82 | 12-14-21 | GRAY CLAYEY SILT, VERY MOIST– VERY STIFF | 22 | | | | | VISUAL | | | | | 16.5 |
| | 84 | | | | | | | | | | | | | |
| | 86 | 12-15-20 | DO DO DO | 23 | | | | | VISUAL | | | | | |
| | 88 | | | | | | | | | | | | | |
| 882.3 | 90 | | | | | | | | | | | | | |
| 880.8 | 92 | 18-28-28 | GRAY SILTY FINE SAND, WET – VERY DENSE | 24 | | | | | VISUAL | | | | | 15.2 |
| | 94 | | | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 10-1-79 SAMPLER; TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-2-79 CASING; LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 7.5 & 17.5'
BORING NUMBER 11-S CORE BARREL; TYPE SIZE AFTER 24 HRS. 17.0'
STATION & OFFSET 120+17, 14' RT. B.L. RAMP "EN". SURFACE ELEVATION 972.3

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 972.3 | 0 | | BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL | | | | | | | | | |
| | 2 | 4-11-17 | TRACE SLAG AND CLAY LENSES (FILL), MOIST – MEDIUM DENSE | 1 | | | | | VISUAL | | | |
| | 4 | 2-11-9 | DO DO DO | 2 | | | | | VISUAL | | | 10.9 |
| 967.3 | 6 | 17-17-9 | SLAG AND BRICK FRAGMENTS WITH SOME SAND AND GRAVEL (FILL), MOIST – MEDIUM DENSE | 3 | | | | | VISUAL | | | |
| 964.8 | 8 | 21-11-7 | BROWN AND GRAY FINE SAND WITH LITTLE CONCRETE FRAGMENTS (FILL) WET – MEDIUM DENSE | 4 | | | | | VISUAL | | | 15.0 |
| 962.3 | 10 | | | | | | | | | | | |
| | 12 | 4-5-5 | BROWN SILTY FINE SAND WITH A LITTLE GRAVEL, MOIST – MEDIUM DENSE | 5 | 15 | 18 | 56 | 6 | 5 | | | 11.8 |
| 959.8 | 14 | 3-4-6 | BROWN FINE SAND, MOIST – MEDIUM DENSE | 6 | | | | | VISUAL | | | 6.0 |
| 957.3 | 16 | 5-9-12 | BROWN FINE TO COARSE SAND, TRACE GRAVEL, MOIST–MEDIUM DENSE | 7 | | | | | VISUAL | | | 4.8 |
| 954.8 | 18 | 7-9-10 | GRAY SANDY SILT, WET – MEDIUM DENSE | 8 | 0 | 0 | 45 | 43 | 12 | N. | P. | 16.3 |
| | 20 | | | | | | | | | | | |
| | 22 | 5-9-12 | DO DO DO | 9 | | | | | VISUAL | | | 15.6 |
| | 24 | | | | | | | | | | | |
| | 26 | 5-8-9 | DO DO DO | 10 | | | | | VISUAL | | | 16.0 |
| | 28 | | | | | | | | | | | |
| 942.3 | 30 | | | | | | | | | | | |
| | 32 | | | | | | | | | | | |

THE H.C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT
RAMP "EN" OVER OHIO CANAL, EXISTING
WEST EXPRESSWAY AND RUSSEL AVENUE

SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7·25·80 |

MICROFILMED
OCT 19 1989

AKRON INNERBELT
SUM-59-00,00

18
40
9
11

DATE STARTED 10-3-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-4-79 CASING LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 17.5'
BORING COMPLETED 12-S CORE BARREL: TYPE SIZE AFTER 24 HRS. 17.4'
STATION & OFFSET 121 + 31 BL RAMP "EN" SURFACE ELEVATION 974.7

| ELEV. | DEPTH | STN. PEN (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 974.7 | 0 | | BROWN SANDY SILTY CLAY WITH SOME GRAVEL, ROCK AND BRICK FRAGMENTS, TRACE CINDERS(FILL), MOIST-VERY STIFF | | | | | | | | | |
| | 2 | 7-13-28 | | 1 | | | VISUAL | | | | | |
| | 4 | 12-18-13 | DO DO DO | 2 | | | VISUAL | | | | | |
| 969.7 | 6 | 6-7-8 | GRAY AND BROWN CLAYEY SAND, MOIST - MEDIUM DENSE | 3 | | | VISUAL | | | | | 12.1 |
| 967.2 | 8 | 4-4-6 | BROWN FINE SAND, TRACE GRAVEL, MOIST - MEDIUM DENSE | 4 | | | VISUAL | | | | | 5.3 |
| 964.7 | 10 | 5-5-5 | BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL MOIST-MEDIUM DENSE | 5 | | | VISUAL | | | | | |
| | 12 | 10-15-17 | BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL MOIST-DENSE | 6 | | | VISUAL | | | | | |
| 959.7 | 14 | 5-13-10 | GRAY SILTY FINE SAND, MOIST-MEDIUM DENSE | 7 | | | VISUAL | | | | | |
| 957.2 | 16 | 8-8-8 | GRAY SANDY SILT WITH SOME CLAY, WET - MEDIUM DENSE | 8 | | | VISUAL | | | | | |
| | 18 | 7-6-8 | DO DO DO | 9 | | | VISUAL | | | | | 14.7 |
| | 20 | | | | | | | | | | | |
| | 22 | | | | | | | | | | | |
| | 24 | | | | | | | | | | | |
| | 26 | 3-5-8 | DO DO DO | 10 | | | VISUAL | | | | | |
| | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 4-5-7 | DO DO DO | 11 | | | VISUAL | | | | | |
| | 34 | | | | | | | | | | | |
| 939.7 | 36 | 5-6-7 | GRAY SILTY FINE SAND, WET-MEDIUM DENSE | 12 | | | VISUAL | | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 6-10-12 | DO DO DO | 13 | | | VISUAL | | | | | |
| | 44 | | | | | | | | | | | |
| | 46 | 9-13-17 | DO DO DO | 14 | | | VISUAL | | | | | 13.5 |
| | 48 | | | | | | | | | | | |
| 924.7 | 50 | | | | | | | | | | | |
| | 52 | 11-14-19 | GRAY CLAYEY SILT WITH SOME SAND, WET - VERY STIFF | 15 | | | VISUAL | | | | | |
| | 54 | | | | | | | | | | | |
| 919.7 | 56 | 8-11-12 | GRAY CLAYEY SILT WITH FINE SAND LENSES, WET-VERY STIFF | 16 | | | VISUAL | | | | | |
| | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| 912.7 | 62 | ST | | S-1 | | | VISUAL | | | | | |
| | 64 | 6-12-23 | GRAY FINE SAND, DENSE | 17 | | | VISUAL | | | | | |
| | 66 | 10-17-25 | DO DO DO | 18 | | | VISUAL | | | | | |
| | 68 | | | | | | | | | | | |
| | 70 | | | | | | | | | | | |
| | 72 | 12-39-51 | GRAY FINE SAND, WET - VERY DENSE | 19 | | | VISUAL | | | | | |
| | 74 | | | | | | | | | | | |
| | 76 | 21-49-74 | DO DO DO | 20 | | | VISUAL | | | | | |
| | 78 | | | | | | | | | | | |
| | 80 | | | | | | | | | | | |
| | 82 | 20-52-85 | DO DO DO | 21 | | | VISUAL | | | | | |
| | 84 | | | | | | | | | | | |
| 889.7 | 86 | 24-55-91 | GRAY FINE SAND, TRACE GRAVEL, WET-VERY DENSE | 22 | | | VISUAL | | | | | |
| | 88 | | | | | | | | | | | |
| | 90 | | | | | | | | | | | |
| 883.2 | 92 | 21-50-82 | DO DO DO | 23 | | | VISUAL | | | | | |

BORING COMPLETED

THE H.C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT
RAMP "EN" OVER BOWERY ST. OHIO CANAL
EXISTING WEST EXPRESSWAY AND RUSSELL AVE.
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1999



DATE STARTED 10-8-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-8-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 40.0'
BORING NUMBER 13-S CORE BARRELL: TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 123+14 20' LEFT, BL RAMP "EN" SURFACE ELEVATION 995.1

| ELEV. | DEPTH | STN. PEN (N) | DESCRIPTION | SA NO | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 995.1 | 0 | | BLACKTOP | | | | | | | | | |
| | 2 | 25 7-7 | BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL (FILL) MOIST - MEDIUM DENSE | 1 2 | | | | VISUAL VISUAL | | | | |
| 992.6 | 4 | 12-10-11 | BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL, CLAY LENSES, AND FINE SAND LENSES (FILL), MOIST - MEDIUM DENSE | 3 | | | | VISUAL | | | | |
| 990.1 | 6 | 11-14-15 | BROWN SILTY FINE SAND W/SOME GRAVEL AND A LITTLE SANDSTONE FRAGMENTS (FILL), MOIST - MEDIUM DENSE | 4 | | | | VISUAL | | | | |
| | 8 | 10-12-16 | DO DO DO | 5 | | | | VISUAL | | | | 9.2 |
| 985.1 | 10 | 11-15-20 | BROWN SILTY FINE SAND, SOME GRAVEL A LITTLE SANDSTONE FRAGMENTS (FILL), MOIST - DENSE | 6 | | | | VISUAL | | | | |
| 982.6 | 12 | 8-9-10 | BROWN AND GRAY SANDY SILT W/SOME CLAY AND A LITTLE GRAVEL (FILL) MOIST - DENSE | 7 | 13 | 10 | 18 | 38 | 21 | 23 | 4 | 14.9 |
| | 14 | 8-15-19 | BROWN AND GRAY SANDY SILT W/SOME CLAY AND A LITTLE GRAVEL (FILL) MOIST - DENSE | 8 | 12 | 10 | 20 | 35 | 23 | 26 | 7 | 16.4 |
| 977.6 | 16 | 4-6-10 | DARK BROWN AND GRAY SANDY SILTY CLAY W/SOME GRAVEL AND BLACKTOP (FILL), MOIST - STIFF | 9 | | | | VISUAL | | | | |
| 975.1 | 18 | 5 | TOPSOIL | 10 | | | | VISUAL | | | | 15.7 |
| 974.6 | 20 | 4-5 | BROWN SILTY FINE SAND, TRACE GRAVEL, MOIST - LOOSE | 11 | | | | VISUAL | | | | 12.9 |
| | 22 | | | | | | | | | | | |
| 970.1 | 24 | | | | | | | | | | | |
| | 26 | 4-5-8 | BROWN SILTY FINE SAND, TRACE GRAVEL, MOIST - MEDIUM DENSE | 12 | | | | VISUAL | | | | 5.5 |
| | 28 | | | | | | | | | | | |
| 965.1 | 30 | | | | | | | | | | | |
| | 32 | 4-6-8 | BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL, MOIST - MEDIUM DENSE | 13 | | | | VISUAL | | | | |
| 960.1 | 34 | | | | | | | | | | | |
| | 36 | 14-21-13 | BROWN SILTY FINE TO COARSE SAND, SOME GRAVEL AND SANDSTONE FRAGMENTS, MOIST - DENSE | 14 | | | | VISUAL | | | | 12.3 |
| | 38 | | | | | | | | | | | |
| 955.1 | 40 | | | | | | | | | | | |
| | 42 | 4-6-8 | GRAY SILTY FINE SAND, WET - MEDIUM DENSE | 15 | | | | VISUAL | | | | |
| 950.1 | 44 | | | | | | | | | | | |
| | 46 | 5-7-10 | GRAY SILTY FINE SAND, TRACE GRAVEL, WET - MEDIUM DENSE | 16 | | | | VISUAL | | | | |
| | 48 | | | | | | | | | | | |
| 945.1 | 50 | | | | | | | | | | | |
| | 52 | 8-10-12 | GRAY SANDY SILT W/FINE SAND SEAMS, WET - MEDIUM DENSE | 17 | | | | VISUAL | | | | |
| | 54 | | | | | | | | | | | |
| 940.1 | 56 | | | | | | | | | | | |
| | 58 | 8-10-11 | GRAY SANDY SILT, WET - MEDIUM DENSE | 18 | | | | VISUAL | | | | |
| 935.1 | 60 | | | | | | | | | | | |
| | 62 | 6-8-10 | GRAY CLAYEY SILT, WET - STIFF | 19 | | | | VISUAL | | | | |
| | 64 | | | | | | | | | | | |
| | 66 | 6-8-11 | DO DO DO | 20 | | | | VISUAL | | | | |
| | 68 | | | | | | | | | | | |
| 925.1 | 70 | | | | | | | | | | | |
| | 72 | 21-42-63 | GRAY SANDY SILT W/FINE SAND SEAMS AND A LITTLE GRAVEL, WET - VERY DENSE | 21 | | | | VISUAL | | | | |
| 920.1 | 74 | | | | | | | | | | | |
| | 76 | 17-34-56 | GRAY FINE SAND, WET - VERY DENSE | 22 | | | | VISUAL | | | | 18.6 |
| | 78 | | | | | | | | | | | |
| 915.1 | 80 | | | | | | | | | | | |

13-S CONTINUED

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 82 | 20-50-78 | GRAY FINE SAND W/SILT LENSES, WET - VERY DENSE | 23 | | | | VISUAL | | | | |
| 910.1 | 84 | | | | | | | | | | | |
| | 86 | 28-77-135 | GRAY SAND, WET - VERY DENSE | 24 | | | | VISUAL | | | | |
| | 88 | | | | | | | | | | | |
| | 90 | | | 25 | | | | VISUAL | | | | |
| | 92 | 38-90-238 | DO DO DO | | | | | | | | | |
| | 94 | | | | | | | | | | | |
| | 96 | | | 26 | | | | VISUAL | | | | |
| | 98 | 52-98-150 | DO DO DO | | | | | | | | | |
| | 100 | | | | | | | | | | | |
| | 102 | | | 27 | | | | VISUAL | | | | |
| | 104 | 36-75-125 | DO DO DO | | | | | | | | | |
| 888.6 | 106 | 29-64-89 | | | | | | | | | | |
| | 108 | | | | | | | | | | | |

BORING COMPLETED

THE H.C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT
RAMP "EN" OVER OHIO CANAL, EXISTING
WEST EXPRESSWAY AND RUSSELL AVENUE
SEC. AKRON INNERBELT SUM - 59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1979



DATE STARTED 10-16-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-17-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 10.0'
BORING NUMBER 14-S CORE BARREL: TYPE NXM SIZE AFTER 24 HOURS 9.5'
STATION & OFFSET 127+45 16' LT. BL RAMP "EN". SURFACE ELEVATION 982.5

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 982.5 | 0 | | DARK BROWN SANDY SILTY CLAY W/SOME CINDERS AND SANDSTONE FRAGMENTS, TRACE ORGANICS (FILL), MOIST – STIFF | 1 | | | | VISUAL | | | | 13.6 |
| 980.0 | 2 | 2-7-8 | | | | | | | | | | |
| 977.5 | 4 | 6-9-12 | BROWN CLAYEY FINE SAND W/LITTLE GRAVEL, MOIST – MEDIUM DENSE | 2 | | | | VISUAL | | | | 12.3 |
| | 6 | 6-6-9 | BROWN SILTY FINE SAND, TRACE GRAVEL, MOIST – MEDIUM DENSE | 3 | | | | VISUAL | | | | 13.8 |
| 972.5 | 8 | 6-6-6 | DO DO DO | 4 | | | | VISUAL | | | | 11.8 |
| | 10 | | | | | | | | | | | |
| 970.0 | 12 | 4-4-4 | BROWN SILTY FINE SAND, TRACE GRAVEL, VERY MOIST – LOOSE | 5 | 10 | 20 | 49 | 12 | 9 | | | 20.0 |
| 967.5 | 14 | 7-7-10 | GRAY SILTY FINE SANDY W/A LITTLE GRAVEL, VERY MOIST – MEDIUM DENSE | 6 | | | | VISUAL | | | | 18.7 |
| | 16 | 8-8-9 | GRAY CLAYEY SILT WITH SOME SAND , WET – STIFF | 7 | | | | VISUAL | | | | 18.2 |
| | 18 | 5-7-7 | DO DO, DO | 8 | | | | VISUAL | | | | 17.0 |
| | 20 | 5-6-7 | DO DO DO | 9 | | | | VISUAL | | | | 16.3 |
| | 22 | | | | | | | | | | | |
| 957.5 | 24 | | | | | | | | | | | |
| | 26 | 4-5-6 | GRAY SILT WITH SOME CLAY, LITTLE SAND, TRACE GRAVEL, WET – MEDIUM DENSE | 10 | 2 | 4 | 13 | 57 | 24 | N.P. | | 16.7 |
| 952.5 | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | | 126-293 | GRAY VERY SOFT SHALE | 11 | | | | VISUAL | | | | |
| 947.5 | 32 | | | | | | | | | | | |
| | 34 | | | | | | | | | | | |
| | 36 | CORE RECOVERY | INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SHALE, SHALE, 80%, SILICEOUS SHALE, 20% OCCURRING IN 1/2" TO 3" LAYERS, AVERAGE 1". | 12 | | | | NXM | | | | |
| 942.5 | 40 | 97% | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 11-6-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-6-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 12.5'
BORING NUMBER 15-S CORE BARREL: TYPE NXM SIZE AFTER 24 HOURS 9.8'
STATION & OFFSET 128+19 10' LT BL RAMP "EN". SURFACE ELEVATION 984.7

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 984.7 | 0 | | BROWN SILTY FINE SAND W/SANDSTONE FRAGMENTS (FILL) MOIST – MEDIUM DENSE | 1 | | | | VISUAL | | | | 14.8 |
| 982.2 | 2 | 4-5-8 | | | | | | | | | | |
| 979.7 | 4 | 5-8-9 | BROWN SANDY SILTY CLAY W/TOPSOIL AND GRAVEL (FILL), MOIST – STIFF | 2 | | | | VISUAL | | | | 11.5 |
| | 6 | 6-11-11 | BROWN CLAYEY FINE SAND, TRACE FINE GRAVEL, VERY MOIST – MEDIUM DENSE | 3 | 4 | 22 | 56 | 5 | 13 | N.P. | | 11.9 |
| 977.2 | 8 | 6-7-9 | BROWN SILTY FINE SAND, VERY MOIST – MEDIUM DENSE | 4 | 0 | 13 | 62 | 13 | 12 | | | 15.4 |
| 974.7 | 10 | | | | | | | | | | | |
| | 12 | 3-4-4 | BROWN SANDY SILT WITH LITTLE CLAY, MOIST – LOOSE | 5 | 0 | 2 | 38 | 47 | 13 | N.P. | | 23.8 |
| 972.2 | 14 | 3-3-4 | GRAY CLAYEY SILT, WET – MEDIUM STIFF | 6 | | | | VISUAL | | | | 21.8 |
| 969.7 | 16 | 2-3-4 | GRAY SANDY SILT, MOIST – LOOSE | 7 | 0 | 0 | 22 | 69 | 9 | N.P. | | 19.6 |
| 967.2 | 18 | 3-5-7 | GRAY SANDY SILT WITH LITTLE CLAY VERY MOIST – MEDIUM DENSE | 8 | | | | VISUAL | | | | 13.7 |
| | 20 | 4-5-7 | DO DO DO | 9 | | | | VISUAL | | | | 17.1 |
| 960.7 | 22 | | | | | | | | | | | |
| | 24 | 38-60 | GRAY VERY SOFT SHALE | 10 | | | | VISUAL | | | | 6.9 |
| 955.7 | 26 | | | | | | | | | | | |
| | 28 | | | | | | | | | | | |
| | 30 | CORE RECOVERY | INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SHALE. SHALE, 65%, SILICEOUS SHALE, 35% OCCURRING IN 1/2" TO 4" LAYERS., AVERAGE 2", HIGH ANGLE JOINTING EVIDENCED. | | | | | NXM | | | | |
| 950.7 | 32 | 100% | | | | | | | | | | |
| | 34 | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 11-8-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-8-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 10.0'
BORING NUMBER 16-S CORE BARREL: TYPE NXM SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 129+53. 5' RT. BL RAMP "EN". SURFACE ELEVATION 985.9

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 985.9 | 0 | | CONCRETE | | | | | | | | | |
| | 2 | 3-3-4 | CINDERS, FINE TO COARSE SAND AND GRAVEL (FILL), MOIST – LOOSE | 1 | | | | VISUAL | | | | 11.4 |
| 983.4 | 4 | 3-4-4 | BROWN SANDY CLAY, MOIST – MEDIUM STIFF | 2 | | | | VISUAL | | | | 15.7 |
| 980.9 | 6 | 4-5-5 | BROWN FINE GRAVEL AND FINE TO COARSE SAND, VERY MOIST – LOOSE | 3 | 49 | 34 | 9 | 3 | 5 | | | 9.2 |
| 978.4 | 8 | 2-4-6 | BROWN CLAYEY SILT, W/SOME SAND, VERY MOIST – STIFF | 4 | | | | VISUAL | | | | 21.7 |
| 975.9 | 10 | 3-4-6 | GRAY CLAYEY SILT W/SOME SAND, VERY MOIST – STIFF | 5 | | | | VISUAL | | | | 14.7 |
| | 12 | 4-6-8 | DO DO DO | 6 | | | | VISUAL | | | | |
| 970.9 | 14 | | | | | | | | | | | |
| | 16 | 4-5-6 | GRAY CLAYEY SILT W/SOME SAND, WET – STIFF | 7 | | | | VISUAL | | | | |
| | 18 | 3-4-5 | DO DO DO | 8 | | | | VISUAL | | | | 13.6 |
| 965.9 | 20 | | | | | | | | | | | |
| 963.9 | 22 | 16-45 | GRAY VERY SOFT SHALE | 9 | | | | VISUAL | | | | 12.0 |
| | 24 | CORE RECOVERY | INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SHALE, SHALE, 80%, SILICEOUS SHALE, 20% OCCURS IN 1/2"TO 3" LAYERS, AVERAGE 1". | | | | | NXM | | | | |
| | 26 | 93% | | | | | | | | | | |
| 958.9 | 28 | | | | | | | | | | | |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0000 AKRON INNERBELT
RAMP "EN" OVER BOWERY ST., OHIO CANAL, EXISTING WEST EXPRESSWAY & RUSSELL AVE.

SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1989



## GEOLOGY OF THE SITE

THE PROJECT SITE CONTAINS DEPOSITS OF GLACIAL ORGIN WHICH CONSISTS OF SAND AND GRAVEL, FINE SANDS, SILT AND CLAYEY SILT FOLLOWING THEIR DEPOSITION SOME LOW LYING AREAS ACCUMULATED PEAT AND ORGANIC SILTS. THESE OCCUR SPORADICALLY THROUGHOUT THE AREA AND WERE NOT ENCOUNTERED IN ANY BORING WITHIN THE LIMITS OF THIS STRUCTURE.

UNDERLYING BEDROCK CONSISTS OF SHALE AND SANDSTONE OF PENNSYLVANIA AGE.

## EXPLORATION

SIX STANDARD PENETRATION TEST BORINGS (19-S THRU 24-S) WERE MADE AT THE SITE BETWEEN THE DATES OF OCTOBER 13 AND OCTOBER 24, 1979. TRUCK MOUNTED DRILLING EQUIPMENT WAS UTILIZED AND SAMPLING WAS ACCOMPLISHED WITH STANDARD SPLIT SPOON SAMPLING AND BY PUSHING 3 INCH DIAMETER THIN WALLED SHELBY TUBES.

## INVESTIGATION FINDINGS

UP TO A MAXIMUM OF 5 FEET OF FILL WAS ENCOUNTERED WHICH WAS UNDERLAIN BY ABOUT 20 FEET TO 40 FEET OF SAND CONSISTING MOSTLY OF FINE AND SILTY FINE SANDS. SOME FINE TO COARSE LAYERS OCCURED WITHIN THIS STRATUM AS WELL AS SOME THIN COHESIVE LAYERS NEAR THE SURFACE OF THE DEPOSIT. THIS STRATUM IS TYPICALLY LOOSE TO MEDIUM DENSE, HOWEVER SOME AREAS SUCH AS BORINGS 21-S AND 22-S SHOWED THE RELATIVE DENSITY IMPROVED WITH INCREASING DEPTH.

THE SECOND STRATUM CONSISTED MOSTLY OF SANDY AND CLAYEY SILTS WITH SOME SAND SEAMS. THESE MATERIALS WERE USUALLY MEDIUM COMPACT TO COMPACT. ONE SOFT ZONE WAS ENCOUNTERED IN BORING 23-S FROM 55 FEET TO 60 FEET. THIS STRATUM EXTENDED ABOUT 30 FEET IN BORINGS 19-S AND 20-S AND 15 FEET IN 21-S BEFORE REACHING FINE SANDS. HOLES 22-S THRU 24-S INDICATED THAT THE SILT AND CLAYEY SILT EXTENDED TO A SLOPING BEDROCK SURFACE.

THE DEEP SAND STRATUM ENCOUNTERED IN HOLES 19-S THRU 21-S WAS VERY DENSE EXCEPT FOR THE UPPERMOST 5 FEET IN HOLE 21-S WHICH WAS LOOSE (55 FEET TO 60 FEET). THESE BORINGS WERE TERMINATED WITHIN THIS STRATUM.

BEDROCK WAS REACHED IN HOLES 22-S THRU 24-S AT ELEVATION 876.5, 906.0 AND 922.5, RESPECTIVELY. THIS APPEARS TO SLOPE DOWNWARD TO THE SOUTH AND WEST AT ABOUT A 4 (H); 1 (V), SLOPE BENEATH THE NEW STRUCTURE ALIGNMENT. BEDROCK CONSISTED OF SHALE AND SILICEOUS SHALE OF PENNSYLVANIA AGE AND BECAME FIRM TO HARD ABOUT 2 FEET TO 5 FEET BELOW ITS SURFACE. CORE DRILLING IN BORINGS 23-S AND 24-S EACH INDICATED 100 PERCENT RECOVERY FROM THE FIVE FOOT CORES TAKEN.

GROUNDWATER WAS ENCOUNTERED AT AN AVERAGE ELEVATION OF ABOUT 957.5.

## LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X=NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y=NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W—— INDICATES FREE WATER ELEVATION.
- ▼—— INDICATES STATIC WATER ELEVATION.

## SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

## GENERAL INFORMATION

Drive Sample Borings — Drive-Press Sample Borings — Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2"O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2"O.D., 1-3/8" I.D. drive sampler and 3"O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procured for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

| Boulders | Cobbles | Gravel | Coarse Sand | Fine Sand | Silt | Clay |
|---|---|---|---|---|---|---|
| 8" | 3" | 2.0mm | 0.42mm | | 0.074mm | 0.005mm |
| | | No. 10 sieve | No. 40 sieve | | No. 200 sieve | |

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

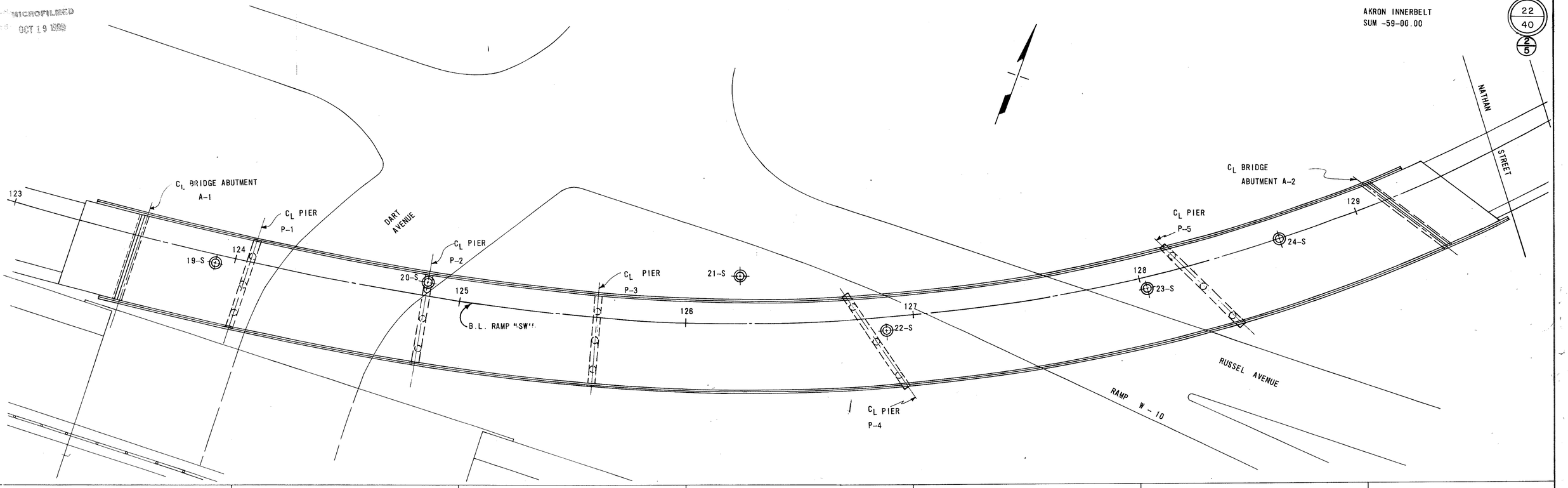
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM. 59-0002
AKRON INNERBELT, RAMP "SW" OVER RELOCATED DART AND RUSSELL AVENUES.
SEC. AKRON INNERBELT SUM 59-00.00

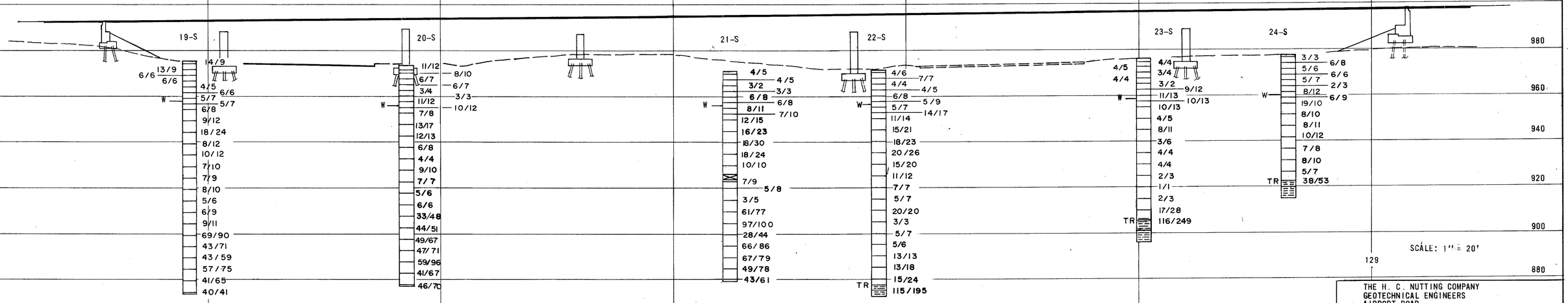
| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7/25/80 |

MICROFILMED
OCT 19 1979

AKRON INNERBELT
SUM -59-00.00

22
40
25




SCALE: 1" = 20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD
CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0002 AKRON
INNERBELT RAMP "SW" OVER
RELOCATED DART AVE. & RUSSEL AVE.
SEC. AKRON INNERBELT SUM-59-00.00

PLAN AND PROFILE

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 82

AKRON INNERBELT
SUM-59-00.00

23 / 40 / 3 / 5

DATE STARTED 10-13-79
DATE COMPLETED 10-14-79
BORING NUMBER 19-S
STATION & OFFSET 123+92 4' RT. BL RAMP SW

SAMPLER: TYPE S.S. DIA. 2.0'' O.D.
CASING: LENGTH H.S.A. DIA. 3.5'' I.D.
CORE BARREL: TYPE SIZE

WATER ELEVATION
IMMEDIATE 17.5'
AFTER 24 HOURS 17.2'
SURFACE ELEVATION 975.2

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 975.2 | 0 | | BROWN CLAYEY FINE SAND W/SOME SANDSTONE FRAGMENTS, TRACE GRAVEL (FILL), MOIST – MEDIUM DENSE | | | | | | | | | |
| | 2 | 4-14-9 | | 1 | | | | VISUAL | | | | |
| | 4 | 12-13-9 | DO DO DO | 2 | | | | VISUAL | | | | |
| 970.2 | | | | | | | | | | | | |
| | 6 | 5-6-6 | BROWN SILTY FINE SAND W/A LITTLE GRAVEL, MOIST – MEDIUM DENSE | 3 | | | | VISUAL | | | | 8.3 |
| | 8 | 6-6-6 | DO DO DO | 4 | | | | VISUAL | | | | 11.2 |
| 965.2 | 10 | | | | | | | | | | | |
| | | 3-4-5 | BROWN FINE SAND, TRACE GRAVEL, MOIST – LOOSE | 5 | 4 | 15 | 74 | 0 | 7 | | | 9.5 |
| 962.7 | 12 | | | | | | | | | | | |
| | 14 | 5-6-6 | GRAY SILTY FINE SAND, MOIST – MEDIUM DENSE | 6 | | | | VISUAL | | | | 10.8 |
| | 16 | 4-5-7 | DO DO DO | 7 | | | | VISUAL | | | | 16.2 |
| 957.7 | 18 | | | | | | | | | | | |
| | | 5-5-7 | GRAY SILTY FINE SAND, WET – MEDIUM DENSE | 8 | | | | VISUAL | | | | 25.8 |
| | 20 | | | | | | | | | | | |
| | 22 | 5-6-8 | DO DO DO | 9 | | | | VISUAL | | | | 17.7 |
| | 24 | | | | | | | | | | | |
| | 26 | 7-9-12 | DO DO DO | 10 | | | | VISUAL | | | | 15.9 |
| | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 11-18-24 | GRAY SILTY FINE SAND, WET – DENSE | 11 | | | | VISUAL | | | | 17.9 |
| | 34 | | | | | | | | | | | |
| | 36 | 5-8-12 | GRAY SILTY FINE SAND, WET – MEDIUM DENSE | 12 | | | | VISUAL | | | | 18.7 |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 8-10-12 | DO DO DO | 13 | | | | VISUAL | | | | 17.3 |
| | 44 | | | | | | | | | | | |
| 930.2 | 46 | | | | | | | | | | | |
| | | 5-7-10 | GRAY CLAYEY SILT, VERY MOIST – STIFF | 14 | | | | VISUAL | | | | 19.0 |
| | 48 | | | | | | | | | | | |
| 925.2 | 50 | | | | | | | | | | | |
| | 52 | 6-7-9 | GRAY SILT WITH SOME CLAY AND LITTLE SAND, VERY MOIST – MEDIUM DENSE | 15 | C | O | 14 | 57 | 29 | N.P. | | 19.4 |
| | 54 | | | | | | | | | | | |
| 920.2 | 56 | | | | | | | | | | | |
| | | 7-8-10 | GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST – STIFF | 16 | | | | VISUAL | | | | 19.9 |
| | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| | 62 | 4-5-6 | GRAY SILT SOME CLAY AND SAND, TRACE GRAVEL VERY MOIST – MEDIUM DENSE | 17 | 4 | 6 | 16 | 50 | 24 | N.P. | | 17.7 |
| | 64 | | | | | | | | | | | |
| | 66 | 3-6-9 | GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL VERY MOIST – STIFF | 18 | | | | VISUAL | | | | 10.4 |
| | 68 | | | | | | | | | | | |
| | 70 | | | | | | | | | | | |
| | 72 | 7-9-11 | DO DO DO | 19 | | | | VISUAL | | | | 16.9 |
| | 74 | | | | | | | | | | | |
| 900.2 | 76 | | | | | | | | | | | |
| | | 31-69-90 | GRAY FINE SAND W/SILT SEAMS, TRACE GRAVEL, WET – VERY DENSE | 20 | 1 | 4 | 81 | 9 | 5 | | | 20.8 |
| | 78 | | | | | | | | | | | |
| | 80 | | | | | | | | | | | |
| | 82 | 24-43-71 | DO DO DO | 21 | | | | VISUAL | | | | 14.8 |
| | 84 | | | | | | | | | | | |
| 890.2 | | | | | | | | | | | | |

19-S CONTINUED

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 890.2 | 86 | 28-93-59 | GRAY FINE SAND, WET – VERY DENSE | 22 | | | | VISUAL | | | | 16.1 |
| | 88 | | | | | | | | | | | |
| 885.2 | 90 | | | | | | | | | | | |
| | 92 | 37-57-75 | GRAY FINE SAND, WET – VERY DENSE | 23 | | | | VISUAL | | | | 19.7 |
| | 94 | | | | | | | | | | | |
| | 96 | 18-41-65 | DO DO DO | 24 | | | | VISUAL | | | | 17.5 |
| | 98 | | | | | | | | | | | |
| 875.2 | 100 | | | | | | | | | | | |
| 873.7 | 102 | 21-40-41 | GRAY SILTY FINE SAND, WET – VERY DENSE | 25 | | | | VISUAL | | | | 18.3 |

BORING COMPLETED

DATE STARTED 10-24-79
DATE COMPLETED 10-24-79
BORING NUMBER 20-S
STATION & OFFSET 124+85 6' LT. BL RAMP SW

SAMPLER: TYPE S.S.
CASING: LENGTH H.S.A.
CORE BARREL: TYPE

DIA. 2.0'' O.D.
DIA. 3.5'' I.D.
SIZE

WATER ELEVATION
IMMEDIATE 17.5'
AFTER HOURS BACKFILLED

SURFACE ELEVATION 973.7

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 973.7 | 0 | | BLACKTOP AND CONCRETE | | | | | | | | | |
| 972.7 | | | | | | | | | | | | |
| 971.2 | 2 | 8-11-12 | BROWN SILTY FINE SAND W/SOME GRAVEL, MOIST – MEDIUM DENSE | 1 | | | | VISUAL | | | | 10.3 |
| | 4 | 6-8-10 | BROWN FINE SAND W/SANDY SILT LENSES AND A LITTLE GRAVEL, MOIST – MEDIUM DENSE | 2 | | | | VISUAL | | | | 7.3 |
| 968.7 | | | | | | | | | | | | |
| | 6 | 5-6-7 | BROWN SILTY FINE SAND W/A LITTLE GRAVEL, MOIST – MEDIUM DENSE | 3 | 16 | 32 | 40 | 4 | 8 | N.P. | | 8.8 |
| | 8 | 5-6-7 | DO DO DO | 4 | | | | VISUAL | | | | 12.5 |
| | 10 | | | | | | | | | | | |
| | 12 | 3-3-4 | BROWN SILTY FINE SAND W/A LITTLE GRAVEL, MOIST – LOOSE | 5 | | | | VISUAL | | | | 6.9 |
| 961.2 | 14 | 3-3-3 | BROWN FINE TO COARSE SAND, TRACE GRAVEL, MOIST – LOOSE | 6 | 5 | 57 | 32 | 0 | 6 | | | 7.6 |
| 958.7 | 16 | | | | | | | | | | | |
| | | 12-11-12 | BROWN SILTY FINE SAND WITH SOME GRAVEL, MOIST – MEDIUM DENSE | 7 | | | | VISUAL | | | | |
| 956.2 | 18 | | | | | | | | | | | |
| | 20 | 7-10-12 | GRAY SILTY FINE SAND, WET – MEDIUM DENSE | 8 | | | | VISUAL | | | | |
| | 22 | 7-7-8 | DO DO DO | 9 | | | | VISUAL | | | | 20.0 |
| | 24 | | | | | | | | | | | |
| | 26 | 9-13-17 | DO DO DO | 10 | | | | VISUAL | | | | |
| | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 12-12-13 | DO DO, DO | 11 | | | | VISUAL | | | | |
| | 34 | | | | | | | | | | | |
| 938.7 | 36 | | | | | | | | | | | |
| | | 5-6-8 | GRAY CLAYEY SILT W/FINE SAND LENSES, WET – STIFF | 12 | | | | VISUAL | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 4-4-4 | GRAY CLAYEY SILT W/FINE SAND LENSES, WET – MEDIUM STIFF | 13 | | | | VISUAL | | | | 22.7 |
| | 44 | | | | | | | | | | | |
| 928.7 | 46 | | | | | | | | | | | |
| | | 7-9-10 | GRAY SANDY SILT W/FINE SAND LENSES, WET – MEDIUM DENSE | 14 | | | | VISUAL | | | | |
| | 48 | | | | | | | | | | | |
| 923.7 | 50 | | | | | | | | | | | |
| | 52 | 5-7-7 | GRAY SILTY FINE SAND, WET – MEDIUM DENSE | 15 | | | | VISUAL | | | | |
| | 54 | | | | | | | | | | | |
| 918.7 | 56 | | | | | | | | | | | |
| | | 5-5-6 | GRAY CLAYEY SILT, TRACE GRAVEL, WET – MEDIUM DENSE | 16 | | | | VISUAL | | | | |
| | 58 | | | | | | | | | | | |
| 913.7 | 60 | | | | | | | | | | | |

20-S CONTINUED

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 62 | 5-6-6 | GRAY SANDY SILT W/SAND LENSES AND SOME CLAY WET – MEDIUM DENSE | 17 | | | | VISUAL | | | | 13.6 |
| | 64 | | | | | | | | | | | |
| 908.7 | 66 | | | | | | | | | | | |
| | | 15-33-48 | GRAY FINE SAND W/SILT LENSES, WET – VERY DENSE | 18 | | | | VISUAL | | | | |
| | 68 | | | | | | | | | | | |
| 903.7 | 70 | | | | | | | | | | | |
| | 72 | 30-44-51 | GRAY SILTY FINE SAND, WET – VERY DENSE | 19 | | | | VISUAL | | | | |
| | 74 | | | | | | | | | | | |
| 898.7 | 76 | | | | | | | | | | | |
| | | 32-49-67 | GRAY FINE SAND, WET – VERY DENSE | 20 | | | | VISUAL | | | | |
| | 78 | | | | | | | | | | | |
| 893.7 | 80 | | | | | | | | | | | |
| | 82 | 23-47-71 | GRAY FINE SAND, W/SILT LENSES, WET – VERY DENSE | 21 | | | | VISUAL | | | | 14.2 |
| | 84 | | | | | | | | | | | |
| 888.7 | 86 | | | | | | | | | | | |
| | | 20-59-96 | GRAY FINE SAND W/SILT LENSES, WET – VERY DENSE | 22 | | | | VISUAL | | | | |
| | 88 | | | | | | | | | | | |
| 883.7 | 90 | | | | | | | | | | | |
| | 92 | 19-41-67 | GRAY FINE SAND, WET – VERY DENSE | 23 | | | | VISUAL | | | | |
| | 94 | | | | | | | | | | | |
| 877.2 | 96 | | | | | | | | | | | |
| | | 25-46-70 | DO DO DO | 24 | | | | VISUAL | | | | |
| | 98 | | | | | | | | | | | |
| | 100 | | BORING COMPLETED | | | | | | | | | |

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0002 AKRON INNERBELT
RAMP "SW" OVER RELOCATED DART AVENUE AND
RUSSEL AVENUE.
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
DOT

DATE STARTED 10-14-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-15-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 15.0'
BORING NUMBER 21-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 13.2'
STATION & OFFSET 126+24 21' LEFT, BL RAMP SW SURFACE ELEVATION 971.0

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 971.0 | 0 | | BROWN AND GRAY SILTY FINE TO COARSE SAND, MOIST | | | | | | | | | |
| | 2 | 3-4-5 | LOOSE | 1 | | | VISUAL | | | | | |
| | 4 | 4-4-5 | DO DO DO | 2 | | | VISUAL | | | | | 14.7 |
| 966.0 | 6 | 2-3-2 | BROWN SILTY FINE TO COARSE SAND WITH SOME FINE GRAVEL, WET - LOOSE | 3 | | | VISUAL | | | | | 17.8 |
| | 8 | 3-3-3 | DO DO DO | 4 | | | VISUAL | | | | | |
| 961.0 | 10 | | | | | | | | | | | |
| | 12 | 4-6-8 | BROWN FINE SAND, MOIST - MEDIUM DENSE | 5 | | | VISUAL | | | | | 9.8 |
| 958.5 | 14 | 5-6-8 | BROWN SILTY FINE SAND, TRACE GRAVEL, VERY MOIST-MEDIUM DENSE | 6 | | | VISUAL | | | | | |
| 956.0 | 16 | 6-8-11 | BROWN AND GRAY SILTY FINE SAND, VERY MOIST-MEDIUM DENSE | 7 | | | VISUAL | | | | | |
| | 18 | 7-7-10 | DO DO DO | 8 | | | VISUAL | | | | | |
| 951.0 | 20 | | | | | | | | | | | |
| | 22 | 9-12-15 | BROWN AND GRAY SILTY FINE SAND, WET - MEDIUM DENSE | 9 | | | VISUAL | | | | | |
| 946.0 | 24 | | | | | | | | | | | |
| | 26 | 13-16-23 | BROWN AND GRAY SILTY FINE SAND, VERY MOIST - DENSE | 10 | | | VISUAL | | | | | |
| 941.0 | 28 | | | | | | | | | | | |
| | 30 | 9-18-30 | BROWN AND GRAY SILTY FINE SAND, TRACE GRAVEL, MOIST - DENSE | 11 | | | VISUAL | | | | | |
| 936.0 | 32 | | | | | | | | | | | |
| | 34 | 12-18-24 | GRAY SILTY FINE SAND, VERY MOIST - DENSE | 12 | | | VISUAL | | | | | |
| 931.0 | 36 | | | | | | | | | | | |
| | 38 | 9-10-10 | GRAY SILT WITH SOME CLAY AND SAND, WET - MEDIUM DENSE | 13 | | | VISUAL | | | | | |
| | 40 | | | | | | | | | | | |
| 924.0 | 42 | S-T | | S-1 | 0 | 0 | 13 | 66 | 20 | N. | P. | |
| | 44 | | | | | | (TRIAXIAL TEST) | | | | | |
| 921.0 | 46 | 5-7-9 | GRAY CLAYEY SILT, WET-STIFF | 14 | | | VISUAL | | | | | |
| | 48 | 3-5-8 | GRAY CLAYEY SILT, W/SOME SAND, WET - MEDIUM STIFF | 15 | | | VISUAL | | | | | |
| 916.0 | 50 | | | | | | | | | | | |
| | 52 | 3-3-5 | GRAY SILTY FINE SAND, VERY MOIST-LOOSE | 16 | 1 | | 17 | 64 | 12 | 6 | | 13.3 |
| 911.0 | 54 | | | | | | | | | | | |
| | 56 | 39-61-77 | GRAY FINE SAND, TRACE GRAVEL, VERY MOIST - VERY DENSE | 17 | | | VISUAL | | | | | |
| 906.0 | 58 | | | | | | | | | | | |
| | 60 | 45-47-100 | GRAY FINE SAND, WET - VERY DENSE | 18 | | | VISUAL | | | | | |
| | 62 | 13-28-44 | DO DO DO | 19 | | | VISUAL | | | | | |
| 896.0 | 64 | | | | | | | | | | | |
| | 66 | 26-66-86 | GRAY SILTY FINE SAND, MOIST-VERY DENSE | 20 | | | VISUAL | | | | | |
| 891.0 | 68 | | | | | | | | | | | |
| | 70 | 40-67-79 | GRAY FINE SAND, VERY MOIST - VERY DENSE | 21 | | | VISUAL | | | | | |
| | 72 | 25-49-78 | DO DO DO | 22 | | | VISUAL | | | | | |
| 881.0 | 74 | | | | | | | | | | | |
| 879.5 | 76 | 23-43-61 | GRAY SILTY FINE SAND, VERY MOIST - VERY DENSE | 23 | | | VISUAL | | | | | |
| | 78 | | BORING COMPLETED | | | | | | | | | |

DATE STARTED 10-15-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-16-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 15.0'
BORING NUMBER 22-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 13.8'
STATION & OFFSET 126+88' 6' RT. BL RAMP SW SURFACE ELEVATION 971.5

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 971.5 | 0 | | | | | | | | | | | |
| | 2 | 2-4-6 | BROWN AND GRAY CLAYEY SAND, LITTLE GRAVEL, MOIST - LOOSE | 1 | 14 | 26 | 29 | 15 | 16 | 20 | 5 | 11.7 |
| 969.0 | 4 | 7-7-7 | BROWN AND GRAY SANDY SILTY CLAY, MOIST - STIFF | 2 | | | VISUAL | | | | | 22.8 |
| 966.5 | 6 | 3-4-4 | BROWN FINE TO COARSE SAND, TRACE GRAVEL, VERY MOIST - LOOSE | 3 | 5 | 41 | 46 | 2 | 6 | | | 16.8 |
| 964.0 | 8 | 3-4-5 | BROWN CLAYEY FINE TO COARSE SAND, VERY MOIST-LOOSE | 4 | | | VISUAL | | | | | 13.2 |
| 961.5 | 10 | 4-6-8 | BROWN SILTY FINE TO COARSE SAND TRACE FINE GRAVEL, VERY MOIST - MEDIUM DENSE | 5 | | | VISUAL | | | | | 19.3 |
| 959.0 | 12 | 3-5-9 | BROWN SILTY FINE TO COARSE SAND WITH SOME FINE GRAVEL, WET- MEDIUM DENSE | 6 | | | VISUAL | | | | | 14.4 |
| 956.5 | 14 | 3-5-7 | BROWN AND GRAY SILTY FINE SAND, WET - MEDIUM DENSE | 7 | | | VISUAL | | | | | 22.6 |
| 954.0 | 16 | 11-14-17 | BROWN FINE SAND, TRACE GRAVEL, VERY MOIST - DENSE | 8 | | | VISUAL | | | | | 18.6 |
| 951.5 | 18 | 7-11-14 | BROWN FINE SAND, WET - MEDIUM DENSE | 9 | 0 | 0 | 91 | 4 | 5 | | | 23.9 |
| 946.5 | 20 | | | | | | | | | | | |
| | 22 | 12-15-21 | BROWN SILTY FINE SAND, WET - DENSE | 10 | | | VISUAL | | | | | 16.3 |
| | 24 | 15-18-23 | DO DO DO | 11 | | | VISUAL | | | | | 17.4 |
| | 26 | 14-20-26 | DO DO DO | 12 | | | VISUAL | | | | | 18.9 |
| 931.5 | 28 | 10-15-20 | GRAY SANDY SILT WITH SOME CLAY, WET - MEDIUM DENSE | 13 | | | VISUAL | | | | | 19.6 |
| | 30 | 10-11-12 | DO DO DO | 14 | | | VISUAL | | | | | 18.1 |
| | 32 | 6-7-7 | DO DO DO | 15 | | | VISUAL | | | | | 16.9 |
| | 34 | 3-5-7 | DO DO DO | 16 | | | VISUAL | | | | | 15.9 |
| 911.5 | 36 | 17-20-20 | GRAY CLAYEY SILT W/SOME SAND, TRACE FINE GRAVEL, WET - VERY STIFF | 17 | | | VISUAL | | | | | 14.0 |
| 906.5 | 38 | 3-3-3 | GRAY SILT W/SOME CLAY, LITTLE SAND AND SILT TRACE FINE GRAVEL, WET - LOOSE | 18 | 4 | 4 | 10 | 53 | 29 | N.P. | | 16.2 |
| 901.5 | 40 | | | | | | | | | | | |

AKRON INNERBELT
SUM-59-00.00

24
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22-S CONTINUED

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 72 | 4-5-7 | GRAY SILTY FINE SAND, WET - MEDIUM DENSE | 19 | | | VISUAL | | | | | 20.5 |
| 896.5 | 74 | | | | | | | | | | | |
| | 76 | 4-5-6 | GRAY CLAYEY SILT W/SOME SAND TRACE GRAVEL, MOIST - STIFF | 20 | | | VISUAL | | | | | 13.3 |
| | 78 | | | | | | | | | | | |
| | 80 | 7-13-13 | GRAY CLAYEY SILT W/SOME SAND TRACE GRAVEL, MOIST - VERY STIFF | 21 | | | VISUAL | | | | | 17.8 |
| 886.5 | 82 | | | | | | | | | | | |
| | 84 | 7-13-18 | GRAY CLAYEY SILT, WET - VERY STIFF | 22 | | | VISUAL | | | | | 19.2 |
| | 86 | | | | | | | | | | | |
| | 88 | | | | | | | | | | | |
| | 90 | 10-15-24 | DO DO DO | 23 | | | VISUAL | | | | | 18.3 |
| 876.5 | 92 | | | | | | | | | | | |
| | 94 | | | | | | | | | | | |
| | 96 | 70-115-196 | GRAY VERY SOFT SHALE | 24 | | | VISUAL | | | | | |
| 872.5 | 98 | | | | | | | | | | | |
| | 100 | | | | | | | | | | | |

AUGER REFUSAL AT 99.0'

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0002 AKRON INNERBELT
RAMP "SW" OVER RELOCATED DART AVENUE AND RUSSEL AVENUE
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1979



DATE STARTED 10-22-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-22-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 17.5'
BORING NUMBER 23-S CORE BARREL: TYPE NXM SIZE AFTER 24 HOURS 16.8'
STATION & OFFSET 128+02 5' RT. BL RAMP SW SURFACE ELEVATION 976.0

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 976.0 | 0 | | CONCRETE | | | | | | | | | |
| 975.7 | 2 | 4-4-4 | BROWN SILTY FINE TO COARSE SAND W/LITTLE GRAVEL, MOIST - LOOSE | 1 | | | VISUAL | | | | | 14.3 |
| | 4 | 4-4-5 | DO DO DO | 2 | | | VISUAL | | | | | |
| 971.0 | 6 | 3-3-4 | BROWN SILTY FINE SAND, TRACE FINE GRAVEL, MOIST - LOOSE | 3 | | | VISUAL | | | | | 7.4 |
| | 8 | 3-4-4 | DO DO DO | 4 | | | VISUAL | | | | | |
| 966.0 | 10 | | | | | | | | | | | |
| 963.5 | 12 | 4-3-2 | BROWN SILTY FINE TO COARSE SAND W/A LITTLE FINE GRAVEL, VERY MOIST - LOOSE | 5 | 18 | 25 | 20 | 27 | 10 | N.P. | | 19.8 |
| | 14 | 7-9-12 | BROWN FINE TO COARSE SAND AND FINE GRAVEL, MOIST - MEDIUM DENSE | 6 | | | VISUAL | | | | | |
| | 16 | 8-11-13 | DO DO DO | 7 | | | VISUAL | | | | | 5.8 |
| 958.5 | 18 | 7-10-13 | GRAY SANDY SILT W/LITTLE CLAY, WET - MEDIUM DENSE | 8 | | | VISUAL | | | | | |
| | 20 | 8-10-13 | DO DO DO | 9 | | | VISUAL | | | | | |
| | 22 | | | | | | | | | | | |
| 951.0 | 24 | | | | | | | | | | | |
| | 26 | 4-4-5 | GRAY CLAYEY SILT,W/SOME SAND, WET - MEDIUM STIFF | 10 | | | VISUAL | | | | | |
| 946.0 | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 3-8-11 | GRAY CLAYEY SILT W/SOME SAND, TRACE SANDSTONE FRAGMENTS, VERY MOIST - STIFF | 11 | | | VISUAL | | | | | |
| 941.0 | 34 | | | | | | | | | | | |
| | 36 | 3-3-6 | GRAY SANDY SILT W/SOME CLAY, TRACE FINE GRAVEL, WET - MEDIUM DENSE | 12 | | | VISUAL | | | | | 14.0 |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 3-4-4 | DO DO DO | 13 | | | VISUAL | | | | | |
| 931.0 | 44 | | | | | | | | | | | |
| | 46 | 2-4-4 | GRAY CLAYEY SILT W/A LITTLE FINE GRAVEL, WET - MEDIUM STIFF | 14 | | | VISUAL | | | | | |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 2-2-3 | DO DO DO | 15 | | | VISUAL | | | | | |
| | 54 | | | | | | | | | | | |
| | 56 | 1-1-1 | GRAY CLAYEY SILT W/A LITTLE FINE GRAVEL, WET - SOFT | 16 | | | VISUAL | | | | | 19.2 |
| 916.0 | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| | 62 | 2-2-3 | GRAY CLAYEY SILT W/FINE SAND LENSES, WET - MEDIUM STIFF | 17 | | | VISUAL | | | | | |
| 911.0 | 64 | | | | | | | | | | | |
| | 66 | | | | | | | | | | | |
| | 68 | 10-17-28 | GRAY SILTY FINE TO COARSE SAND, TRACE FINE GRAVEL, WET - DENSE | 18 | | | VISUAL | | | | | |
| 906.0 | 70 | | | | | | | | | | | |
| | 72 | 116-249 | GRAY VERY SOFT SHALE | 19 | | | VISUAL | | | | | |
| | 74 | | | | | | | | | | | |
| 901.0 | 76 | | | | | | | | | | | |
| | 78 | CORE RECOVERY | INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SHALE. SHALE 80% IS BROKEN AND SOFTER AT 78.5'. SILICEOUS SHALE 20% OCCURS IN ½" TO 3" LAYERS, AVERAGE 1". HIGH ANGLE JOINTING EVIDENCED. | 20 | | | NXM | | | | | |
| 896.0 | 80 | 100% | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 10-17-80 SAMPLER; TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-18-80 CASING; LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 17.5'
BORING NUMBER 24-S CORE BARREL; TYPE NXM SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 128+64 BL RAMP "SW" SURFACE ELEVATION 977.5

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 977.5 | 0 | | TOPSOIL AND COAL, (FILL), MOIST - LOOSE | | | | | | | | | |
| 976.5 | 2 | 2-3 | | 1 | | | VISUAL | | | | | 22.8 |
| 975.0 | 4 | 3 | BROWN SILTY FINE TO MEDIUM SAND, MOIST-LOOSE | 2 | | | VISUAL | | | | | 17.6 |
| 972.5 | 6 | 3-6-8 | BROWN SANDY CLAY WITH SOME GRAVEL, MOIST - STIFF | 3 | | | VISUAL | | | | | 14.5 |
| 970.0 | 8 | 4-5-6 | BROWN FINE SAND, TRACE FINE GRAVEL, MOIST - MEDIUM DENSE | 4 | | | VISUAL | | | | | 4.6 |
| 967.5 | 10 | 5-6-6 | BROWN FINE SAND, TRACE FINE GRAVEL, MOIST - MEDIUM DENSE | 5 | | | VISUAL | | | | | 7.8 |
| 965.0 | 12 | 3-5-7 | BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL, WET-MEDIUM DENSE | 6 | | | VISUAL | | | | | 19.1 |
| | 14 | 5-2-3 | BROWN AND GRAY SILTY FINE TO COARSE SAND AND GRAVEL, VERY MOIST-LOOSE | 7 | | | VISUAL | | | | | |
| 960.0 | 16 | 5-8-12 | BROWN AND GRAY SILTY FINE TO COARSE SAND AND GRAVEL, VERY MOIST-MEDIUM DENSE | 8 | | | VISUAL | | | | | |
| 957.5 | 18 | 3-6-9 | DARK BROWN SILTY FINE TO COARSE SAND AND GRAVEL WET-MEDIUM DENSE | 9 | 60 | 25 | 7 | 5 | 3 | | | 16.7 |
| | 20 | 8-17-10 | GRAY CLAYEY SILT, TRACE FINE GRAVEL VERY MOIST-VERY STIFF | 10 | | | VISUAL | | | | | |
| | 22 | | | | | | | | | | | |
| 952.5 | 24 | | | | | | | | | | | |
| | 26 | 8-8-10 | GRAY SANDY SILT WITH SOME CLAY, TRACE GRAVEL VERY MOIST - MEDIUM DENSE | 11 | | | VISUAL | | | | | |
| | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 6-8-11 | DO DO DO | 12 | | | VISUAL | | | | | 15.7 |
| 942.5 | 34 | | | | | | | | | | | |
| | 36 | 7-10-12 | GRAY CLAYEY SILT,TRACE FINE GRAVEL AND SAND, VERY MOIST-VERY STIFF | 13 | | | VISUAL | | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 5-7-8 | GRAY CLAYEY SILT,TRACE FINE GRAVEL AND SAND VERY MOIST-STIFF | 14 | | | VISUAL | | | | | 14.6 |
| 932.5 | 44 | | | | | | | | | | | |
| | 46 | 11-8-10 | GRAY CLAYEY SILT WITH FINE SAND LENSES AND SOME SANDSTONE FRAGMENTS, MOIST-STIFF | 15 | | | VISUAL | | | | | |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 5-5-7 | DO DO DO | 16 | | | VISUAL | | | | | 14.3 |
| 922.5 | 54 | | | | | | | | | | | |
| | 56 | 25-38-53 | GRAY VERY SOFT SHALE | 17 | | | VISUAL | | | | | |
| 920.0 | 58 | | | | | | | | | | | |
| | 60 | CORE RECOVERY | INTERBEDDED DARK GRAY FIRM SHALE AND GRAY HARD SILICEOUS SANDY SHALE 85% BROKEN AND SOFTER AT 61.1' AND 57.9'. SILICEOUS SANDY SHALE 15% OCCURS IN 1" TO 4" LAYERS, AVERAGE 1". | 18 | | | NXM | | | | | |
| | 62 | 100% | | | | | | | | | | |
| 915.0 | 64 | | | | | | | | | | | |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0002 AKRON INNERBELT
RAMP "SW" OVER RELOCATED DART AVENUE AND RUSSEL AVENUE
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY, | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1989



## GEOLOGY OF THE SITE

THE AREA OF THE REFERENCE PROJECT CONTAINS DEPOSITS OF GLACIAL ORIGIN WHICH CONSIST MOSTLY OF SAND AND GRAVEL, FINE SANDS, SILT AND CLAYEY SILT. FOLLOWING THEIR DEPOSITION, SOME LOW LYING AREAS ACCUMULATED PEAT AND ORGANIC SILTS. THESE OCCUR SPORADICALLY THROUGHOUT THE AREA AND A THIN SEAM WAS ENCOUNTERED IN ONE OF THE TEST BORINGS (34-S) DRILLED FOR THIS BRIDGE STRUCTURE.

UNDERLYING BEDROCK CONSISTS OF SHALE AND SANDSTONE OF PENNSYLVANIA AGE.

## EXPLORATION

SIX STANDARD PENETRATION TEST BORINGS (29-S THRU 32-S, 34-S AND 35-S) WERE COMPLETED AT THE SITE BETWEEN THE DATES OF OCTOBER 29 AND NOVEMBER 9, 1979. TRUCK MOUNTED EQUIPMENT WAS UTILIZED TO EXTEND THE BORINGS TO DEPTHS VARYING BETWEEN 47 AND 106.5 FEET BELOW EXISTING GRADE. SAMPLING WAS ACCOMPLISHED WITH STANDARD SPLIT SPOON SAMPLING.

## INVESTIGATIONAL FINDINGS

WITH THE EXCEPTION OF BORINGS 35-S, THE AVERAGE GRADE AT THE TEST BORINGS WAS ABOUT 974.6. BORING 35-S WAS DRILLED AT ABOUT ELEVATION 991 AT THE TOP OF AN APPROACH EMBANKMENT AT THE NORTHERNMOST EXTREME OF THIS PROJECT.

BETWEEN 1' (TOPSOIL) AND 7.5' OF FILL WAS ENCOUNTERED EXCEPT FOR 29 FEET AT BORING 35-S. THIS WAS UNDERLAIN BY 6" OF PEAT (7.5' TO 8') AND THEN 2 FOOT OF SOFT SILTY CLAY WITH ORGANICS IN BORING 34-S. OTHERWISE, THE TYPICAL MATERIAL BENEATH FILL CONSISTED OF VARIOUS LAYERS OF LOOSE TO MEDIUM DENSE SILTY FINE SAND, FINE TO COARSE SAND AND GRAVEL, CLAYEY SAND AND IN ONE CASE, AT BORING 32-S, FINE GRAVEL WITH FINE TO COARSE SAND. THE THICKNESS OF THIS LAYER RANGED FROM 5 FEET TO 14 FEET AND HAD AN AVERAGE OF ABOUT 11 FEET.

BELOW THE SAND STRATUM AND BEGINING AT AN AVERAGE ELEVATION OF ABOUT 958 WAS A STRATUM OF CLAYEY AND SANDY SILTS. SOME LAYERS OF FINE AND FINE TO COARSE SANDS WERE FOUND WITHIN THIS ZONE. THE MOST SUBSTANTIAL LAYERS OCCURED IN BORING 32-S WHICH ENCOUNTERED SILTY FINE SAND FROM 60 FEET TO 81.5 FEET AND AT BORING 35-S WHICH PENETRATED FINE AND FINE TO COARSE SAND FROM 50 TO 80 FEET JUST BENEATH SILT AND ABOVE CLAYEY SILT. THIS FINE TEXTURED STRATUM WAS FOUND TO EXTEND TO BEDROCK IN BORINGS 29-S THRU 31-S. IT WAS USUALLY MEDIUM COMPACT TO COMPACT IN HOLES 29-S AND 30-S BUT BECAME COMPACT TO VERY COMPACT AT A DEPTH OF ABOUT 40 FEET IN BORING 31-S. BORINGS 32-S, 34-S AND 35-S WERE TERMINATED WITHIN THIS STRATUM AND A SIMILAR CONDITION WAS OFTEN FOUND WHERE THE MATERIALS BECAME COMPACT TO VERY COMPACT AT SOME FINITE DEPTH (AVERAGE ELEVATION OF ABOUT 920 TO 925 IN BORINGS 32-S AND 35-S).

BEDROCK CONSISTED OF GRAY SHALE AND SILICEOUS SHALE AND WAS ENCOUNTERED IN BORINGS 29-S THRU 31-S AT ELEVATIONS 936, 931.4 AND 905.1, RESPECTIVELY.

IMMEDIATE WATER WAS ENCOUNTERED DURING DRILLING BETWEEN ABOUT ELEVATIONS 951 AND 963.9 AND INDICATED THE AVERAGE GROUNDWATER LEVEL TO BE ABOUT ELEVATION 960 TO 962.

## LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- H HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X=NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y=NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- ▼— INDICATES STATIC WATER ELEVATION.

## SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

## GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procur ed for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

| Boulders | Cobbles | Gravel | Coarse Sand | Fine Sand | Silt | Clay |
|---|---|---|---|---|---|---|
| | 8" | 3" | 2.0mm | 0.42mm | 0.074mm | 0.005mm |
| | | | No. 10 sieve | No. 40 sieve | No. 200 sieve | |

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM -59-0016 AKRON INNERBELT
RAMP "SW" OVER RELOCATED DART AVENUE, OHIO CANAL AND THORNTON STREET
SEC: AKRON INNERBELT SUM-59-00.00

| CHECKED BY | REVIEWED BY | DATE |
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| JAS | CRL | 7/25/80 |

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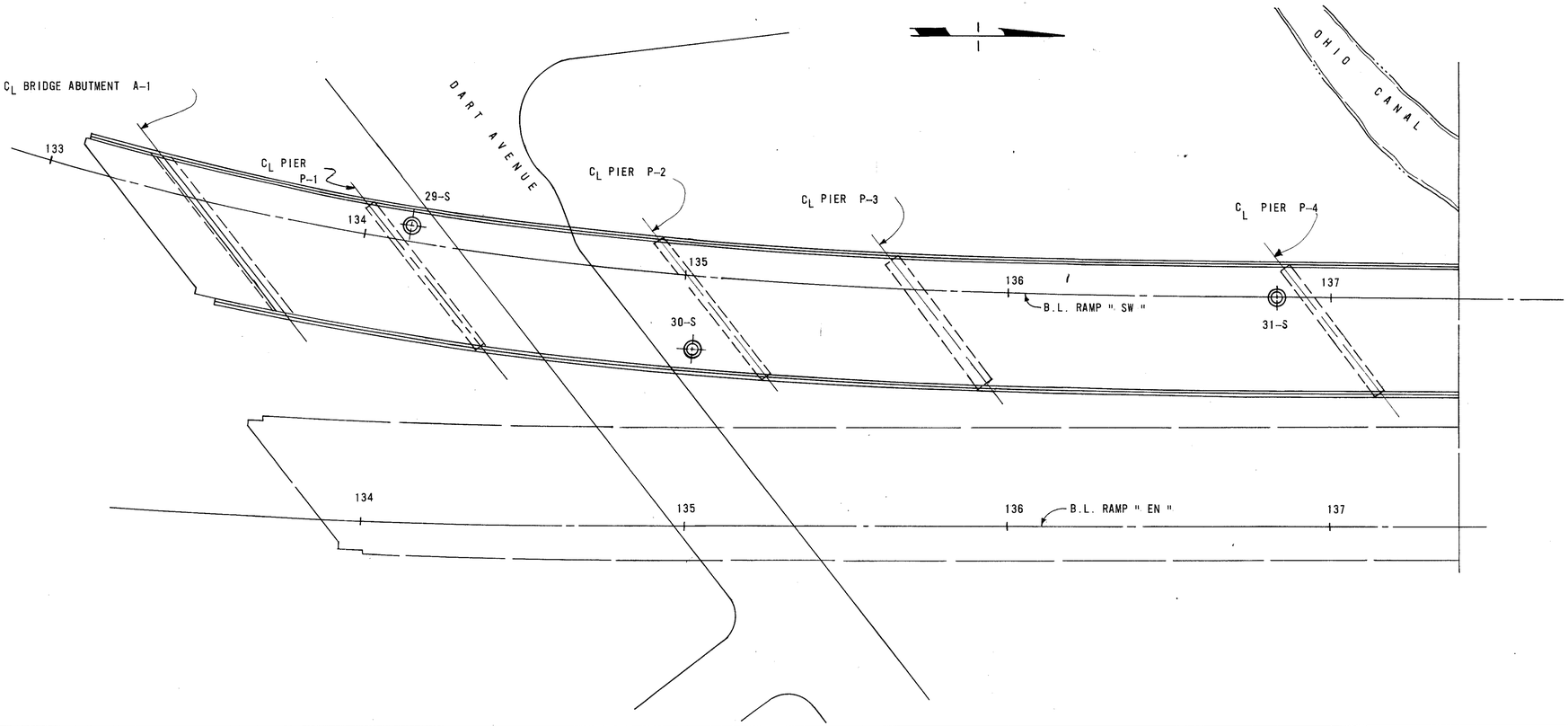


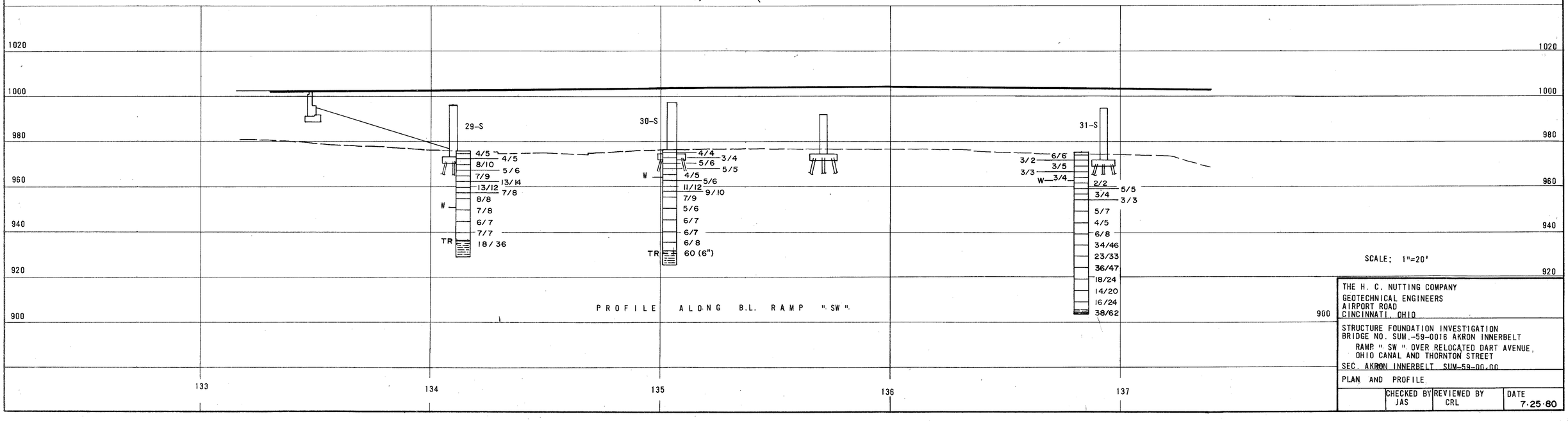


PROFILE ALONG B.L. RAMP " SW "

SCALE; 1"=20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD
CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM.-59-0016 AKRON INNERBELT
RAMP " SW " OVER RELOCATED DART AVENUE, OHIO CANAL AND THORNTON STREET
SEC. AKRON INNERBELT SUM-59-00.00

PLAN AND PROFILE

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1979

AKRON INNERBELT
SUM-59-00.00

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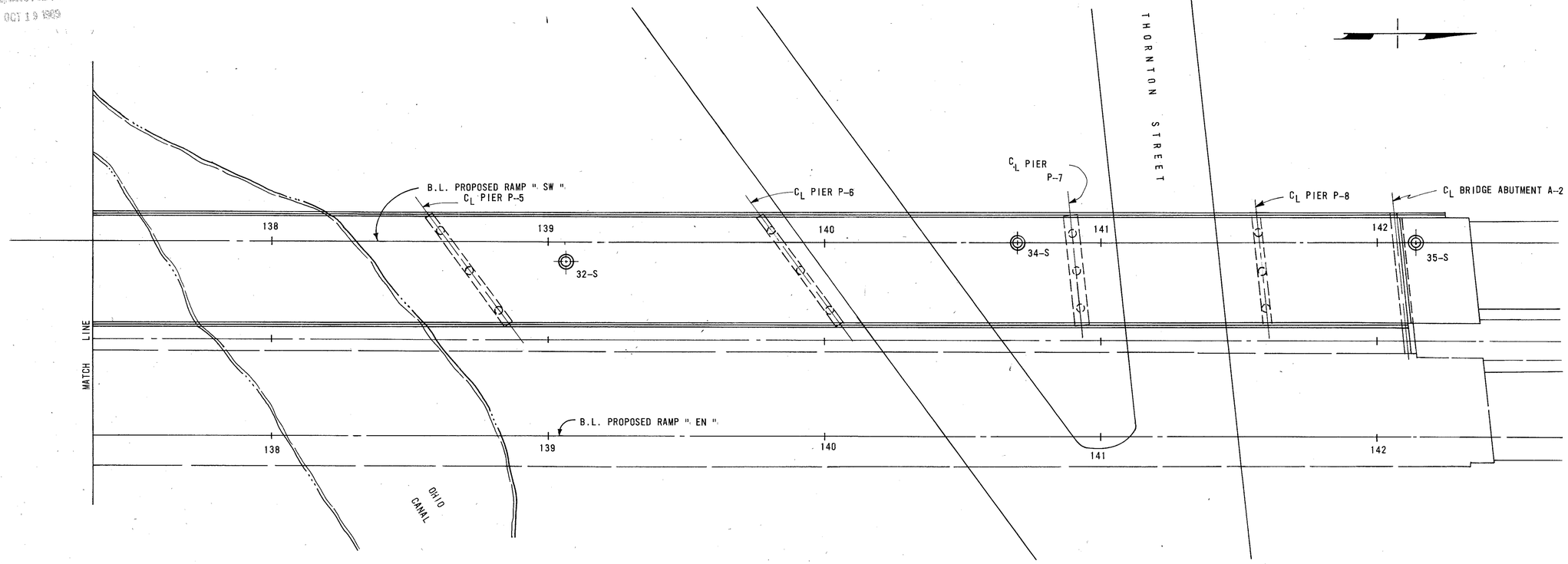
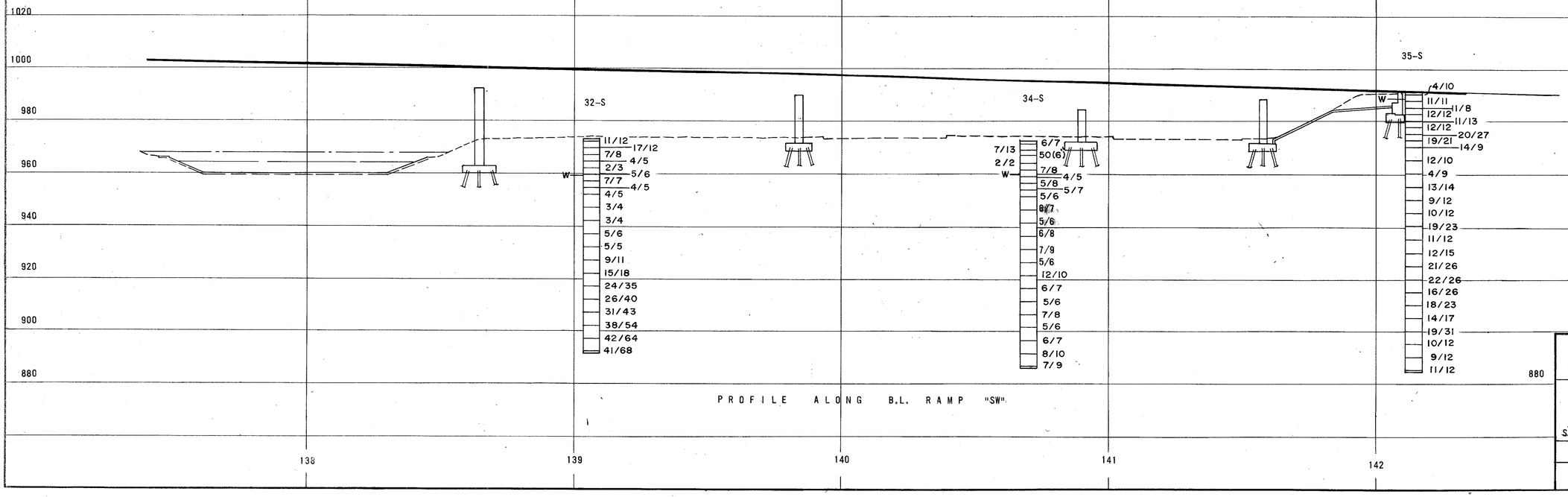



PROFILE ALONG B.L. RAMP "SW"

SCALE: 1" = 20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0016 AKRON INNERBELT
RAMP "SW" OVER RELOCATED DART AVENUE,
OHIO CANAL AND THORNTON STREET
SEC AKRON INNERBELT SUM-59-00.00

PLAN AND PROFILE

| | CHECKED BY | REVIEWED BY, | DATE, |
|---|---|---|---|
| | JAS | CRL | 7-25-80 |

MICROFILMED
OCT 13 1980



DATE STARTED 11-9-79 SAMPLER:TYPE S.S. DIA 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-9-79 CASING:LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 25'
BORING NUMBER 29-S CORE BARREL:TYPE N.X.M. SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 134+14, 5' LT. BL RAMP "SW". SURFACE ELEVATION 976.0

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 976.0 | 0 | | TOPSOIL (FILL) | | | | | | | | | |
| 975.0 | 2 | 3-4 | | 1 | | | VISUAL | | | | | |
| 973.5 | | 5 | BROWN SILTY FINE SAND, MOIST-LOOSE | 2 | | | VISUAL | | | | | 13.0 |
| 971.0 | 4 | 3-4-5 | BROWN FINE SAND, TRACE FINE GRAVEL, MOIST-LOOSE | 3 | | | VISUAL | | | | | 6.4 |
| | 6 | 6-8-10 | BROWN CLAYEY FINE SAND, TRACE GRAVEL VERY MOIST - MEDIUM DENSE | 4 | | | VISUAL | | | | | 10.8 |
| | 8 | 5-5-6 | DO DO DO | 5 | | | VISUAL | | | | | 9.6 |
| 966.0 | 10 | | | | | | | | | | | |
| | 12 | 5-7-9 | BROWN FINE TO COARSE SAND WITH SOME GRAVEL VERY MOIST-MEDIUM DENSE | 6 | 34 | 30 | 27 | 4 | 5 | | | 13.9 |
| 961.0 | 14 | 11-13-14 | DO DO DO | - | | | VISUAL | | | | | |
| | 16 | 12-13-12 | GRAY CLAYEY SILT, SOME SAND, TRACE GRAVEL AND ROCK FRAGMENTS, MOIST - VERY STIFF | 7 | | | VISUAL | | | | | |
| | 18 | 6-7-8 | GRAY CLAYEY SILT, SOME SAND, TRACE GRAVEL AND ROCK FRAGMENTS VERY MOIST - STIFF | 8 | | | VISUAL | | | | | 13.5 |
| | 20 | 7-8-8 | GRAY CLAYEY SILT SOME SAND. TRACE GRAVEL AND ROCK FRAGMENTS, MOIST - VERY STIFF | 9 | | | VISUAL | | | | | |
| 951.0 | 22 | | | | | | | | | | | |
| | 24 | | | | | | | | | | | |
| | 26 | 6-7-8 | GRAY FINE SAND, WET - MEDIUM DENSE | 10 | 0 | 17 | 73 | 4 | 6 | | | 18.1 |
| 946.0 | 28 | | | | | | | | | | | |
| | 30 | 5-6-7 | GRAY SANDY SILT, WET-MEDIUM DENSE | 11 | | | VISUAL | | | | | 20.7 |
| 941.0 | 32 | | | | | | | | | | | |
| | 34 | | | | | | | | | | | |
| | 36 | 9-7-7 | GRAY SANDY SILT, WITH FINE SAND SEAMS WET-MEDIUM DENSE | 12 | | | VISUAL | | | | | 16.8 |
| 936.0 | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| 934.0 | 42 | 12-18-36 | GRAY VERY SOFT SHALE | 13 | | | VISUAL | | | | | 11.4 |
| | 44 | CORE RECOVERY | INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SANDY SHALE. SHALE 60% AND SILICEOUS SANDY SHALE 40% OCCURS IN 1" TO 5" LAYERS | | | | | | | | | |
| | 46 | 97% | AVERAGE 2" HIGH ANGLE JOINTING EVIDENCED | | | | N.X.M. | | | | | |
| 929.0 | 48 | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 10-29-79 SAMPLER:TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-29-79 CASING:LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 12.5'
BORING NUMBER 30-S CORE BARREL:TYPE NXM SIZE AFTER HRS BACKFILLED
STATION & OFFSET 135+04, 23' RT. BL RAMP "SW". SURFACE ELEVATION 976.4

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 976.4 | 0 | | BROWN FINE SAND WITH SANDY CLAY LAYERS (FILL) MOIST-LOOSE | | | | | | | | | |
| 973.9 | 2 | 3-4-4 | | 1 | | | VISUAL | | | | | 10.5 |
| 971.4 | 4 | 2-3-4 | BROWN SILTY FINE SAND, MOIST - LOOSE | 2 | | | VISUAL | | | | | 9.3 |
| | 6 | 3-5-6 | BROWN FINE SAND, MOIST - MEDIUM DENSE | 3 | 0 | 31 | 63 | 0 | 6 | | | 8.3 |
| 968.9 | 8 | 5-5-5 | BROWN SILTY FINE TO COARSE SAND, TRACE FINE GRAVEL, WET-MEDIUM DENSE | 4 | | | VISUAL | | | | | 14.0 |
| 966.4 | 10 | | | | | | | | | | | |
| | 12 | 4-4-5 | BROWN FINE TO COARSE SAND W/A LITTLE FINE GRAVEL, MOIST - LOOSE | 5 | 13 | 38 | 43 | 3 | 3 | | | 7.7 |
| 963.9 | 14 | 3-5-6 | BROWN CLAYEY SILT W/FINE SAND LAYERS, WET - STIFF | 6 | 0 | 3 | 34 | 48 | 15 | 20 | 2 | 27.0 |
| 961.4 | 16 | 12-11-12 | BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL, TRACE ROCK FRAGMENTS, WET - MEDIUM DENSE | 7 | | | VISUAL | | | | | 10.7 |
| 958.9 | 18 | 5-9-10 | GRAY CLAYEY SILT W/SOME SAND, TRACE GRAVEL, WET - VERY STIFF | 8 | | | VISUAL | | | | | 12.5 |
| | 20 | 5-7-9 | DO DO DO | 9 | | | VISUAL | | | | | 13.2 |
| 951.4 | 22 | | | | | | | | | | | |
| | 24 | | | | | | | | | | | |
| | 26 | 4-5-6 | GRAY SANDY SILT W/SOME CLAY, WET - MEDIUM DENSE | 10 | 0 | 5 | 17 | 56 | 22 | 18 | 1 | 13.5 |
| 946.4 | 28 | | | | | | | | | | | |
| | 30 | 4-6-7 | GRAY CLAYEY SILT W/SOME SAND, TRACE FINE GRAVEL WET - STIFF | 11 | | | VISUAL | | | | | 14.1 |
| 941.4 | 32 | | | | | | | | | | | |
| | 34 | 3-6-7 | GRAY CLAYEY SILT, W/SOME SAND, TRACE SHALE FRAGMENTS, WET - STIFF | 12 | | | VISUAL | | | | | 13.9 |
| | 36 | 4-6-8 | DO DO DO | 13 | | | VISUAL | | | | | 11.3 |
| 931.4 | 38 | | | | | | | | | | | |
| 930.4 | 40 | 60/ | GRAY VERY SOFT SHALE | 14 | | | VISUAL | | | | | 8.9 |
| | 42 | CORE RECOVERY | INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SHALE. SHALE, 67%, SILICEOUS SHALE 33% OCCURS IN 1" to 5" LAYERS, AVERAGE 3" | | | | NXM | | | | | |
| 925.4 | 44 | 95% | | | | | | | | | | |
| | 46 | | | | | | | | | | | |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | | | | | | | | | | | |
| | 54 | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 10-29-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-29-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 12.5'
BORING NUMBER 31-S CORE BARREL: TYPE SIZE AFTER HOURS BACKFILLED
STATION & OFFSET 136+83, BL RAMP SW SURFACE ELEVATION 975.1

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 975.1 | 0 | | | | | | | | | | | |
| | 2 | 4-6-6 | BROWN SILTY FINE SAND AND CINDERS W/CLAY LAYERS (FILL) MOIST - MEDIUM DENSE | 1 | | | | VISUAL | | | | |
| 972.6 | 4 | 3-3-2 | GRAY AND BROWN SILTY FINE SAND, CLAY LAYERS, AND GRAVEL (FILL) , MOIST - LOOSE | 2 | | | | VISUAL | | | | 11.8 |
| 970.1 | 6 | 2-3-5 | BROWN FINE SAND, TRACE GRAVEL, MOIST - LOOSE | 3 | 1 | 17 | 71 | 4 | 7 | N.P. | | 14.9 |
| 967.6 | 8 | 3-3-3 | BROWN FINE TO COARSE SAND W/A LITTLE GRAVEL, MOIST - LOOSE | 4 | | | | VISUAL | | | | 9.1 |
| | 10 | 2-3-4 | DO DO DO | 5 | | | | VISUAL | | | | 6.8 |
| 962.6 | 12 | 2-2-2 | DARK GRAY SILTY CLAY W/FINE SAND LAYERS, WET - SOFT | 6 | | | | VISUAL | | | | 27.4 |
| 960.1 | 14 | 4-5-5 | GRAY CLAYEY SILT W/FINE SAND LAYERS, WET - STIFF | 7 | | | | VISUAL | | | | |
| 957.6 | 16 | 3-3-4 | GRAY SANDY SILT, WET - LOOSE | 8 | | | | VISUAL | | | | 19.6 |
| | 18 | 3-3-3 | DO DO DO | 9 | | | | VISUAL | | | | |
| 950.1 | 20 | | | | | | | | | | | |
| | 22 | | | | | | | | | | | |
| | 24 | | | | | | | | | | | |
| | 26 | 3-5-7 | GRAY CLAYEY SILT W/SOME SAND, WET - STIFF | 10 | | | | VISUAL | | | | |
| | 28 | | | | | | | | | | | |
| | 30 | 3-4-5 | DO DO DO | 11 | | | | VISUAL | | | | 14.0 |
| | 32 | | | | | | | | | | | |
| | 34 | | | | | | | | | | | |
| | 36 | 4-6-8 | DO DO DO | 12 | | | | VISUAL | | | | |
| 935.1 | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 21-34-46 | GRAY SANDY SILT, WET - VERY DENSE | 13 | 0 | 0 | 36 | 53 | 11 | | | 15.3 |
| | 44 | | | | | | | | | | | |
| | 46 | 11-23-33 | DO DO DO | 14 | | | | VISUAL | | | | |
| 925.1 | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 24-36-47 | GRAY SILTY FINE SAND, WET - VERY DENSE | 15 | 0 | 0 | 52 | 40 | 8 | | | 20.4 |
| | 54 | | | | | | | | | | | |
| | 56 | 11-18-24 | GRAY SILTY FINE SAND, WET - DENSE | 16 | | | | VISUAL | | | | |
| 915.1 | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| | 62 | 8-14-20 | GRAY CLAYEY SILT, W/SOME SAND, TRACE FINE GRAVEL WET - HARD | 17 | 3 | 6 | 16 | 50 | 25 | 19 | 2 | 14.7 |
| | 64 | | | | | | | | | | | |
| | 66 | 10-16-24 | DO DO DO | 18 | | | | VISUAL | | | | |
| 905.1 | 68 | | | | | | | | | | | |
| | 70 | | | | | | | | | | | |
| | 72 | | | | | | | | | | | |
| 903.6 | 74 | 24-38-62 | GRAY VERY SOFT SHALE | 19 | | | | VISUAL | | | | 9.1 |
| | 76 | | | | | | | | | | | |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD
CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0016 AKRON INNERBELT
RAMP "SW" OVER RELOCATED DART AVENUE
OHIO CANAL AND THORNTON STREET

SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7·25·80 |

DATE STARTED 11-2-79 SAMPLER:TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-3-79 CASING:LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 14.0'
BORING NUMBER 32-S CORE BARREL:TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 139+06, 7' RT. $B_L$ SW SURFACE ELEVATION 973.1

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 973.1 | 0 | | DARK BROWN SILTY SAND, CINDERS, GRAVEL, AND CLAY LAYERS | | | | | | | | | |
| 970.6 | 2 | 9-11-12 | (FILL) MOIST-MEDIUM DENSE | 1 | | VISUAL | | | | | | |
| 968.1 | 4 | 7-17-12 | DARK BROWN SILTY SAND WITH SOME SANDSTONE FRAGMENTS AND CLAY LAYERS (FILL) MOIST-MEDIUM DENSE | 2 | | VISUAL | | | | | | 13.3 |
| 965.6 | 6 | 6-7-8 | BROWN AND GRAY SILTY FINE SAND, MOIST-MEDIUM DENSE | 3 | | VISUAL | | | | | | |
| 963.1 | 8 | 3-4-5 | BROWN FINE SAND, MOIST-LOOSE | 4 | | VISUAL | | | | | | 6.1 |
| 960.6 | 10 | 2-2-3 | GRAY CLAYEY SILT, VERY MOIST-MEDIUM STIFF | 5 | | VISUAL | | | | | | 24.2 |
| 958.1 | 12 | 2-5-6 | GRAY CLAYEY SILT WITH FINE SAND LAYERS, VERY-MOIST-STIFF | 6 | | VISUAL | | | | | | |
| 955.6 | 14 | 5-7-7 | GRAY FINE GRAVEL AND FINE TO COARSE SAND, WET-MEDIUM DENSE | 7 | 51 | 32 | 14 | – | 3 | – | | 15.2 |
| 953.1 | 16 | 4-4-5 | GRAY SILTY FINE SAND, WET-LOOSE | 8 | | VISUAL | | | | | | |
| | 18 | 2-4-5 | GRAY SANDY SILT, WET-LOOSE | 9 | | VISUAL | | | | | | |
| | 20 | | | | | | | | | | | |
| | 22 | | DO DO – DO | 10 | | VISUAL | | | | | | |
| | 24 | 2-3-4 | | | | | | | | | | |
| | 26 | | | | | | | | | | | |
| | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 2-3-4 | DO DO DO | 11 | | VISUAL | | | | | | 21.9 |
| 938.1 | 34 | | | | | | | | | | | |
| | 36 | 3-5-6 | GRAY CLAYEY SILT W/SOME SAND, TRACE ROCK FRAGMENTS AND GRAVEL, WET – STIFF | 12 | | VISUAL | | | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 3-5-5 | DO DO DO | 13 | | VISUAL | | | | | | 19.7 |
| | 44 | | | | | | | | | | | |
| | 46 | 6-9-11 | GRAY CLAYEY SILT,WITH SOME SAND, TRACE ROCK FRAGMENTS AND GRAVEL, WET-VERY STIFF | 14 | | VISUAL | | | | | | |
| 923.1 | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 11-15-18 | GRAY CLAYEY SILT, VERY MOIST-HARD | 15 | | VISUAL | | | | | | |
| 918.1 | 54 | | | | | | | | | | | |
| | 56 | 15-24-35 | GRAY SANDY SILT W/SOME CLAY WET – VERY DENSE | 16 | | VISUAL | | | | | | 18.0 |
| 913.1 | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| | 62 | 16-26-40 | GRAY SILTY FINE SAND, WET-VERY DENSE | 17 | | VISUAL | | | | | | |
| | 64 | | | | | | | | | | | |
| | 66 | 21-31-43 | DO DO DO | 18 | | VISUAL | | | | | | 14.3 |
| | 68 | | | | | | | | | | | |
| | 70 | | | | | | | | | | | |
| | 72 | 23-38-54 | DO DO DO | 19 | | VISUAL | | | | | | |
| | 74 | | | | | | | | | | | |
| | 76 | 27-42-64 | DO DO DO | 20 | | VISUAL | | | | | | 22.9 |
| | 78 | | | | | | | | | | | |
| | 80 | | | | | | | | | | | |
| 891.6 | 82 | 26-41-68 | DO DO DO | 21 | | VISUAL | | | | | | |
| | 84 | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 10-31-79 SAMPLER:TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-1-79 CASING:LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 12.5'
BORING NUMBER 34-S CORE BARREL:TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 140+70 $B_L$ RAMP SW SURFACE ELEVATION 972.3

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 972.3 | 0 | | | | | | | | | | | |
| 969.8 | 2 | 6-7-6 | BROWN CLAYEY FINE TO COARSE SAND WITH SOME GRAVEL (FILL) MOIST-MEDIUM DENSE | 1 | | VISUAL | | | | | | 24.8 |
| | 4 | 6-7-13 | BROWN FINE TO COARSE SAND WITH SOME GRAVEL, CONCRETE AND ROCK FRAGMENTS (FILL) MOIST-MEDIUM DENSE | 2 | | VISUAL | | | | | | 16.6 |
| | 6 | 50 | BROWN FINE TO COARSE SAND WITH SOME GRAVEL, CONCRETE & ROCK FRAGMENTS (FILL) MOIST-VERY DENSE | 3 | | VISUAL | | | | | | 10.5 |
| 964.8 | 8 | 1 | | | | | | | | | | |
| 964.3 | | 2-2 | BLACK FINE TEXTURED PEAT VERY MOIST-VERY LOOSE | 4 | | VISUAL | | | | | 1 | 148.2 |
| 962.3 | 10 | | GRAY SILTY CLAY,LITTLE ORGANICS, MOIST-SOFT | 5 | 0 | 1 | 2 | 76 | 21 | 62 | 29 | 60.8 |
| 959.8 | 12 | 6-7-8 | GRAY SILTY FINE SAND, MOIST-MEDIUM DENSE | 6 | | VISUAL | | | | | | 10.1 |
| 957.3 | 14 | 3-4-5 | GRAY SILTY FINE TO COARSE SAND WITH SOME GRAVEL, WET-LOOSE | 7 | | VISUAL | | | | | | 11.0 |
| 954.8 | 16 | 3-5-8 | GRAY SANDY SILT, WET-MEDIUM DENSE | 8 | | VISUAL | | | | | | 13.5 |
| | 18 | 4-5-7 | GRAY CLAYEY SILT, W/SOME SAND, WET – STIFF | 9 | | VISUAL | | | | | | 18.6 |
| | 20 | | | | | | | | | | | |
| | 22 | 4-5-6 | DO DO DO | 10 | | VISUAL | | | | | | |
| | 24 | | | | | | | | | | | |
| | 26 | 4-6-7 | DO DO DO | 11 | | VISUAL | | | | | | |
| | 28 | | | | | | | | | | | |
| 942.3 | 30 | | | | | | | | | | | |
| | 32 | 4-5-6 | GRAY FINE TO COARSE SAND, TRACE FINE GRAVEL, WET-MEDIUM DENSE | 12 | 2 | 65 | 25 | – | 8 | – | | 15.7 |
| 937.3 | 34 | | | | | | | | | | | |
| | 36 | 4-6-8 | GRAY CLAYEY SILT, SOME SAND, TRACE GRAVEL-VERY MOIST – STIFF | 13 | | VISUAL | | | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 5-7-9 | GRAY CLAYEY SILT SOME SAND, TRACE GRAVEL VERY MOIST – VERY STIFF | 14 | | VISUAL | | | | | | |
| | 44 | | | | | | | | | | | |
| | 46 | 5-5-6 | GRAY CLAYEY SILT SOME SAND, TRACE GRAVEL, VERY MOIST – STIFF | 15 | | VISUAL | | | | | | 19.3 |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 7-12-10 | GRAY CLAYEY SILT SOME SAND, TRACE GRAVEL, VERY MOIST – STIFF | 16 | | VISUAL | | | | | | |
| | 54 | | | | | | | | | | | |
| | 56 | 5-6-7 | GRAY CLAYEY SILT, SOME SAND, TRACE GRAVEL, WET – STIFF | 17 | | VISUAL | | | | | | |
| | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| | 62 | 4-5-6 | DO DO DO | 18 | | VISUAL | | | | | | 19.6 |
| | 64 | | | | | | | | | | | |
| | 66 | 4-7-8 | DO DO DO | 19 | | VISUAL | | | | | | |
| | 68 | | | | | | | | | | | |
| 902.3 | 70 | | | | | | | | | | | |
| | 72 | 4-5-6 | GRAY CLAYEY SILT, WET – STIFF | 20 | | VISUAL | | | | | | 18.8 |
| | 74 | | | | | | | | | | | |
| | 76 | 4-6-7 | DO DO DO | 21 | | VISUAL | | | | | | |
| | 78 | | | | | | | | | | | |
| | 80 | | | | | | | | | | | |
| | 82 | 6-8-10 | GRAY CLAYEY SILT, WET – VERY STIFF | 22 | | VISUAL | | | | | | |
| 887.3 | 84 | | | | | | | | | | | |
| 885.8 | 86 | 5-7-9 | GRAY CLAYEY SILT W/SOME SAND, WET – VERY STIFF | 23 | | VISUAL | | | | | | 25.8 |
| | 88 | | | | | | | | | | | |

BORING COMPLETED

THE H.C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0016 AKRON INNERBELT
RAMP "SW" OVER RELOCATED DART AVENUE,
OHIO CANAL AND THORNTON STREET
SEC. AKRON INNERBELT SUM-59-00.00

PLAN AND PROFILE

| | CHECKED BY | REVIEWED BY, | DATE, |
|---|---|---|---|
| | JAS | CRL | 7·25·80 |

MICROFILMED
OCT 19 1989



DATE STARTED 11-6-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-7-79 CASING: LENGTH H.S.A. DIA 3.5"I.D. IMMEDIATE 30.0'
BORING NUMBER 35-S CORE BARRELL: TYPE SIZE AFTER 24 HRS. DRY 27'
STATION & OFFSET 142 + 14 BL RAMP SW SURFACE ELEVATION 991.0

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | % AGG. | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 991.0 | 0 | | BROWN SANDY SILTY CLAY WITH A LITTLE GRAVEL (FILL), MOIST- STIFF | | | | | | | | | |
| 988.5 | 2 | 3-4-10 | | 1 | | VISUAL | | | | | | 12.1 |
| | 4 | 10-11-11 | BROWN SILTY FINE SAND WITH A LITTLE GRAVEL (FILL), MOIST - MEDIUM DENSE | 2 | | VISUAL | | | | | | 7.3 |
| 983.5 | 6 | 11-11-8 | DARK BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL AND CLAY LAYERS, TRACE CONCRETE AND ROCK FRAGMENTS (FILL), MOIST - MEDIUM DENSE | 3 | | VISUAL | | | | | | 15.4 |
| | 8 | 8-12-12 | | 4 | | VISUAL | | | | | | |
| | 10 | | | | | | | | | | | |
| | 12 | 9-11-13 | DO DO DO | 5 | | VISUAL | | | | | | 11.1 |
| | 14 | 9-12-12 | DO DO DO | 6 | | VISUAL | | | | | | 9.3 |
| | 16 | 15-20-27 | DO DO DO | 7 | 34 | 25 | 21 | 10 | 10 | 21 | 4 | 11.1 |
| | 18 | 17-19-21 | | | | | | | | | | |
| 971.0 | 20 | | DO DO DO | 8 | | VISUAL | | | | | | 10.0 |
| | 22 | 20-14-9 | BROWN SILTY FINE SAND WITH SOME GRAVEL, MOIST - MEDIUM DENSE | 9 | 30 | 33 | 21 | 9 | 7 | | | 6.4 |
| 966.0 | 24 | | | | | | | | | | | |
| | 26 | 7-12-11 | GRAY SILTY FINE TO COARSE SAND, W/SOME GRAVEL, MOIST - MEDIUM DENSE | 10 | 26 | 21 | 38 | 8 | 7 | N.P. | | 8.2 |
| 961.0 | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 5-4-9 | GRAY FINE TO COARSE SAND W/SOME GRAVEL, WET - MEDIUM DENSE | 11 | 32 | 31 | 26 | 4 | 7 | | | 13.4 |
| 956.0 | 34 | | | | | | | | | | | |
| | 36 | 12-13-14 | GRAY SILT, W/SOME CLAY AND LITTLE SAND, MOIST - MEDIUM DENSE | 12 | 0 | 2 | 13 | 61 | 24 | N.P. | | 21.5 |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 7-9-12 | DO DO DO | 13 | | VISUAL | | | | | | 16.0 |
| | 44 | | | | | | | | | | | |
| | 46 | 8-10-12 | DO DO DO | 14 | | VISUAL | | | | | | |
| | 48 | | | | | | | | | | | |
| 941.0 | 50 | | | | | | | | | | | |
| | 52 | 14-19-23 | GRAY SILTY FINE SAND, WET - DENSE | 15 | | VISUAL | | | | | | 12.3 |
| | 54 | | | | | | | | | | | |
| | 56 | 10-11-12 | GRAY SILTY FINE SAND, WET - MEDIUM DENSE | 16 | 0 | 14 | 47 | 25 | 14 | | | 18.6 |
| | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| | 62 | 10-12-15 | DO DO DO | 17 | | VISUAL | | | | | | 13.1 |
| | 64 | | | | | | | | | | | |
| 926.0 | 66 | | | | | | | | | | | |
| | 68 | 14-21-26 | GRAY SILTY FINE SAND, WET - DENSE | 18 | 0 | 2 | 55 | 29 | 14 | | | 14.8 |
| 921.0 | 70 | | | | | | | | | | | |

35-S CONTINUED

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 921.0 | 70 | | | | | | | | | | | | |
| | 72 | 14-22-28 | GRAY SILTY FINE TO COARSE SAND W/SOME GRAVEL, WET - DENSE | 19 | | VISUAL | | | | | | | 8.7 |
| 916.0 | 74 | | | | | | | | | | | | |
| | 76 | 11-16-26 | GRAY SILTY FINE SAND, WET - DENSE | 20 | 0 | 10 | 36 | 40 | 14 | | | | 18.9 |
| | 78 | | | | | | | | | | | | |
| 911.0 | 80 | | | | | | | | | | | | |
| | 82 | 12-18-23 | GRAY CLAYEY SILT W/SOME SAND WET - HARD | 21 | | VISUAL | | | | | | | 13.5 |
| 906.0 | 84 | | | | | | | | | | | | |
| | 86 | 12-14-17 | GRAY CLAYEY SILT W/SOME SAND, TRACE GRAVEL, VERY MOIST - HARD | 22 | | VISUAL | | | | | | | 13.6 |
| | 88 | | | | | | | | | | | | |
| 901.0 | 90 | | | | | | | | | | | | |
| | 92 | 10-19-31 | GRAY SILTY CLAY W/SHALE FRAGMENTS, MOIST - HARD | 23 | | VISUAL | | | | | | | 11.3 |
| 896.0 | 94 | | | | | | | | | | | | |
| | 96 | 10-10-12 | GRAY SILT W/SOME CLAY, LITTLE SAND, WET - MEDIUM DENSE | 24 | 0 | 6 | 13 | 54 | 27 | N.P. | | | 16.6 |
| | 98 | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | | |
| | 102 | 7-9-12 | DO DO DO | 25 | | VISUAL | | | | | | | 20.1 |
| | 104 | | | | | | | | | | | | |
| 884.5 | 106 | 9-11-12 | DO DO DO | 26 | | VISUAL | | | | | | | 19.6 |
| | 108 | | | | | | | | | | | | |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0018 AKRON INNERBELT
RAMP "EN" OVER RELOCATED DART AVENUE
OHIO CANAL AND THORNTON STREET
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1981



## GEOLOGY OF THE SITE

THIS AREA CONTAINS DEPOSITS OF GLACIAL ORIGIN CONSISTING MOSTLY OF SAND AND GRAVEL, FINE SANDS, SILT AND CLAYEY SILT. FOLLOWING THEIR DEPOSITION, SOME LOW LYING AREAS ACCUMULATED PEAT AND ORGANIC SILTS. SUCH AREAS OCCUR SPORADICALLY THROUGHOUT THE AKRON AREA AND NONE WERE FOUND IN THE TEST BORINGS DRILLED WITHIN THE CONFINES OF THIS STRUCTURE.

BEDROCK CONSISTS OF SHALE AND SANDSTONE OF PENNSYLVANIAN AGE.

## EXPLORATION

FIVE STANDARD PENETRATION TEST BORINGS (25-S THRU 28-S AND 33-S) WERE MADE AT THE SITE OF THIS STRUCTURE BETWEEN THE DATES OF OCTOBER 28 AND NOVEMBER 9, 1979. THESE BORINGS PENETRATED TO DEPTHS VARYING BETWEEN 40 AND 106.5 FEET BENEATH EXISTING GRADE. SAMPLING OF SUBSURFACE MATERIALS WAS ACCOMPLISHED WITH TRUCK-MOUNTED EQUIPMENT UTILIZING DRIVEN SPLIT SPOON SAMPLERS. CORE DRILLING IN BEDROCK WAS ACCOMPLISHED IN THREE BORINGS UTILIZING AN NXM DOUBLE TUBE CORE BARREL.

## INVESTIGATIONAL FINDINGS

THE AVERAGE GRADE AT THESE TEST BORINGS WAS ABOUT 975.5 AND VARIED FROM ABOUT 976.3 TO 973.7.

FILL WAS ENCOUNTERED IN ALL BORINGS EXCEPT HOLE 25-S AND WAS FOUND TO HAVE A MAXIMUM THICKNESS OF 5 FEET AND CONSIST MOSTLY OF LOOSE TO MEDIUM DENSE GRANULAR SOIL.

UNDERLYING FILL (OR 6 INCHES OF TOPSOIL IN BORING 25-S) WAS A ZONE HAVING AN AVERAGE THICKNESS OF 14 FT. AND EXTENDING TO AN AVERAGE ELEVATION OF ABOUT 958. OCCASSIONAL SILTY CLAY OR SANDY SILTY CLAY LAYERS WERE ENCOUNTERED NEAR ITS SURFACE. HOWEVER, MOST OF THESE MATERIALS WERE GRANULAR CONTAINING VARIOUS LAYERS OF FINE SANDS AND FINE TO COARSE SANDS WITH GRAVEL. THESE WERE GENERALLY MEDIUM DENSE BUT WERE ON OCCASSION, LOOSE AND DENSE. EXCEPTIONS TO THESE TYPICAL MATERIALS WERE SOME LAYERS OF SANDY AND CLAYEY SILTS AND ALSO CLAYEY SAND. VERY LOOSE SILT WAS ENCOUNTERED FROM 15 TO 17.5 FT. IN BORING 27-S.

BEGINNING AT AN AVERAGE ELEVATION OF ABOUT 958 A STRATUM OF SANDY AN CLAYEY SILTS WAS ENCOUNTERED. THESE MATERIALS WERE LOOSE FROM 20 TO 25 FT. IN BORING 25-S AND 45 TO 50 FT. IN BORING 33-S, BUT WERE OTHERWISE AT LEAST MEDIUM COMPACT. THIS STRATUM OFTEN BECAME VERY COMPACT WITH N-VALUES GENERALLY GREATER THAN 50 BLOWS PER FOOT. FOR EXAMPLE BORING 26-S AT ABOUT ELEVATION 925. ABOUT ELEVATION 920 AT 27-S, 883 AT 28-S AND 900 AT 33-S. THIS VERY COMPACT ZONE WAS GENERALLY OVERLAIN BY COMPACT MATERIALS.

BEDROCK WAS ENCOUNTERED IN BORINGS 25-S, 26-S AND 27-S AT ELEVATIONS 942.3, 924.3 AND 911.7, RESPECTIVELY. THIS APPARENTLY HAS A DOWNWARD SLOPE TO THE NORTH OF ABOUT A 8(H): 1 (V) WITHIN THIS AREA. NEARBY BORINGS INDICATE A POSSIBLE SLOPE DOWNWARD TO THE WEST AS WELL. THIS CONSISTED OF GRAY SHALE AND SILICEOUS SHALE OF PENNSYLVANIAN AGE.

GROUNDWATER WAS ENCOUNTERED DURING DRILLING AT AN AVERAGE ELEVATION OF 963.4 AND RANGED FROM 961.0 TO 966.3. ONE 24 HOUR READING WAS TAKEN AT BORING 28-S AND INDICATED THE LEVEL LOWERING FROM 961.0 TO 960.5.

## LEGEND

- ○ AUGER BORING LOCATION-PLAN VIEW.
- ◎ PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR TOP OF ROCK
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X= NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y= NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- ▼— INDICATES STATIC WATER ELEVATION.

## SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

## GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procur ed for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

| 8" | 3" | 2.0mm | | 0.42mm | | 0.074mm | 0.005mm |
|---|---|---|---|---|---|---|---|
| Boulders | Cobbles | Gravel | Coarse | Sand | Fine | Sand | Silt | Clay |
| | | No. 10 sieve | | No. 40 sieve | | No. 200 sieve | | |

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

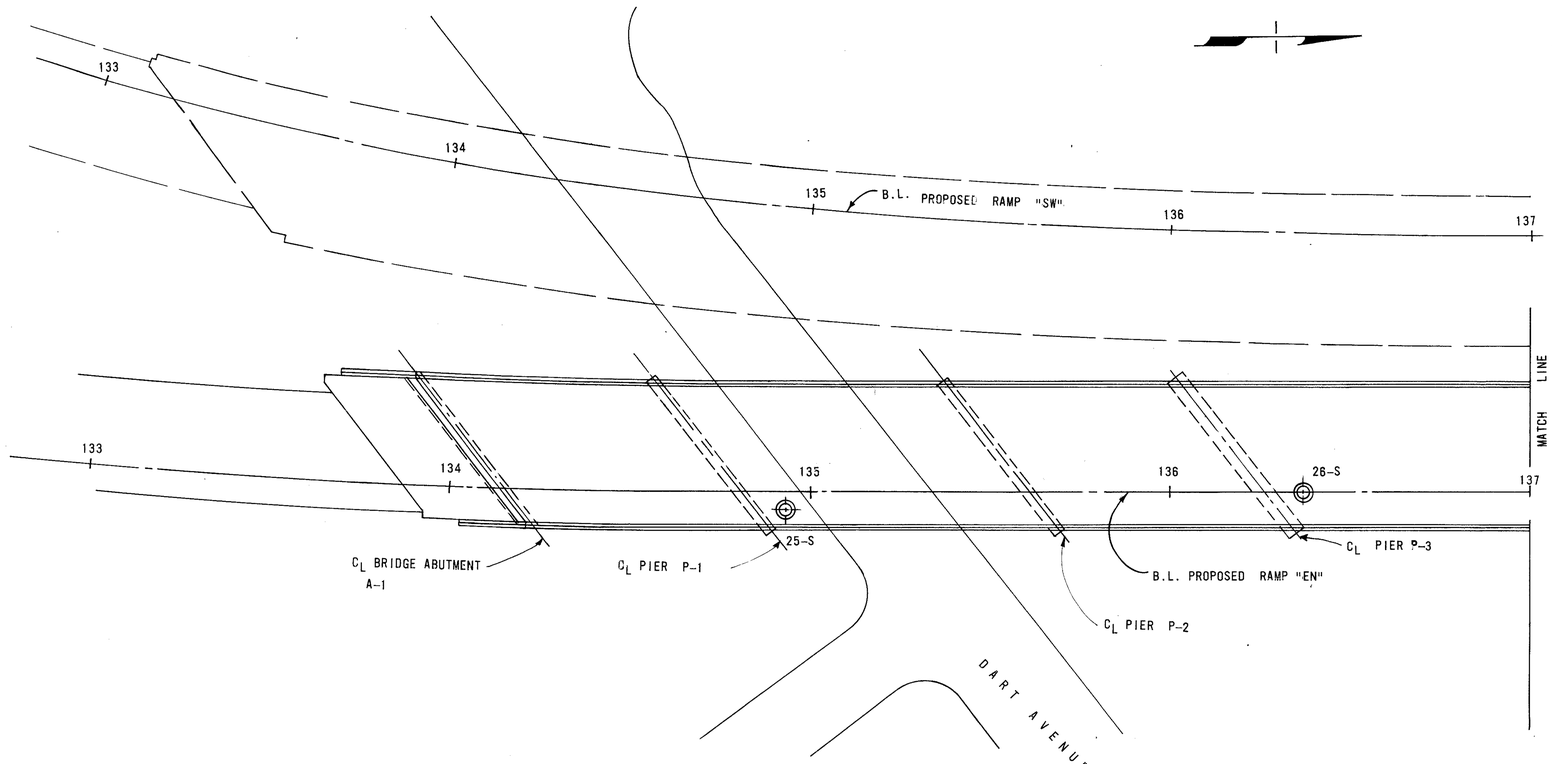
THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

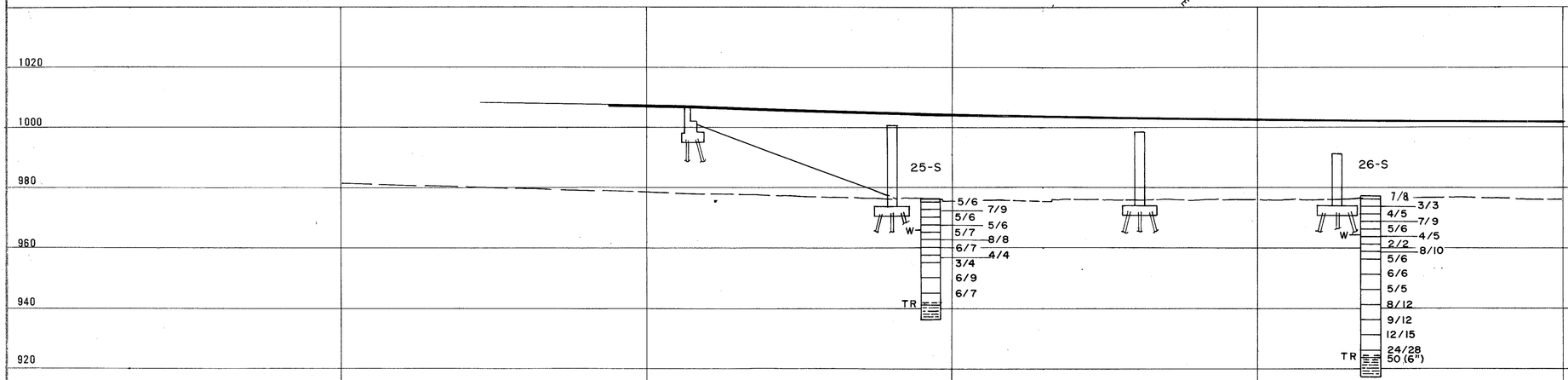
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0017 AKRON INNERBELT
RAMP "EN" OVER RELOCATED DART AVENUE
OHIO CANAL AND THORNTON STREET
SEC. AKRON INNERBELT SUM-59-00.00

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7/25/80 |

MICROFILMED
OCT 19 1980






PROFILE ALONG B.L. RAMP "EN"

SCALE: 1" = 20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0017 AKRON INNERBELT
RAMP "EN" OVER RELOCATED DART AVENUE
OHIO CANAL AND THORNTON STREET
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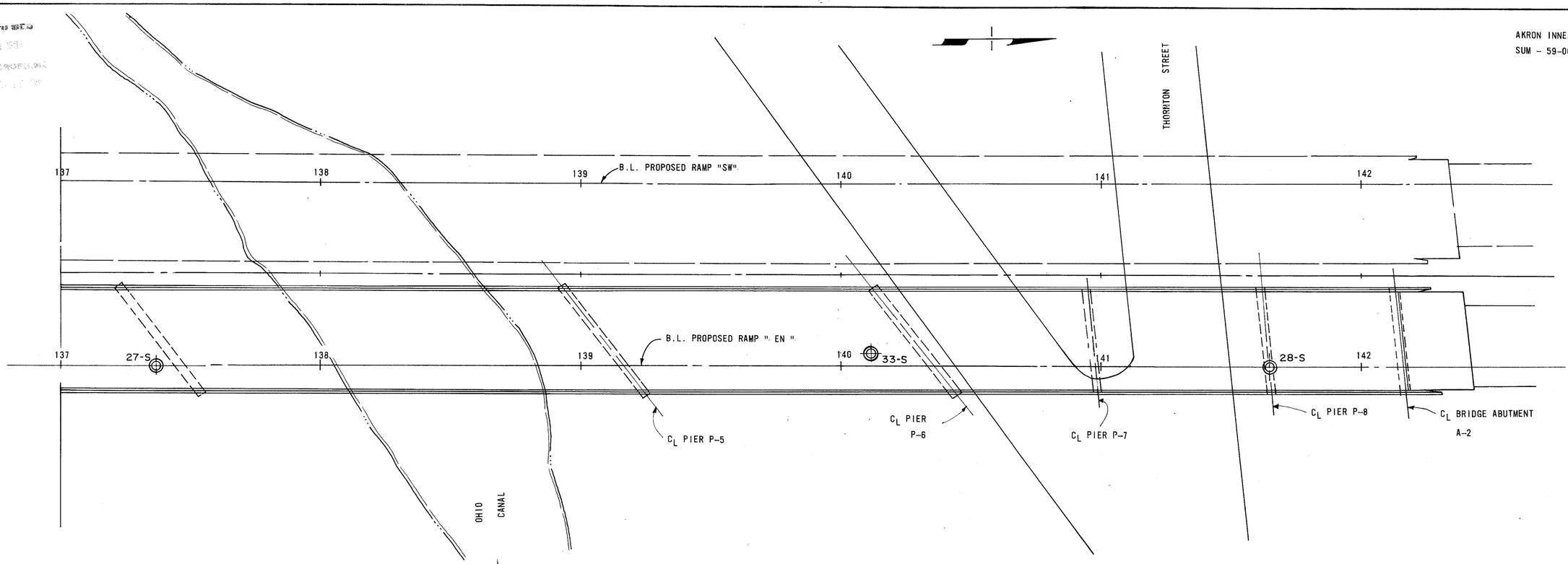
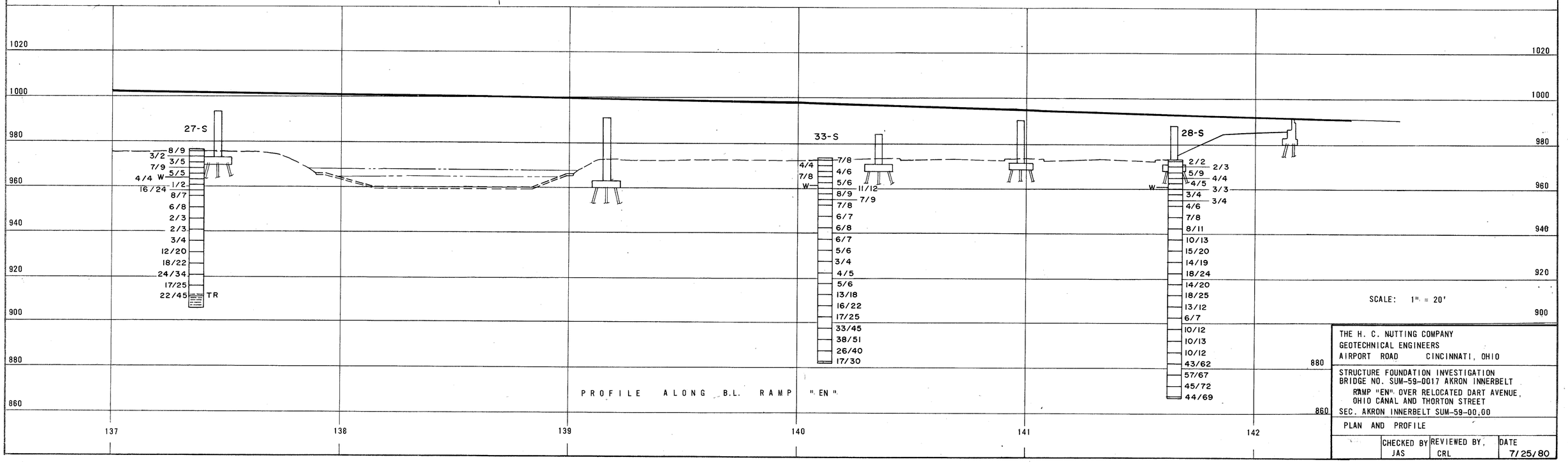
PLAN AND PROFILE

| | CHECKED BY | REVIEWED BY, | DATE, |
|---|---|---|---|
| | JAS | CRL | 7/25/80 |

MICROFILMED






PROFILE ALONG B.L. RAMP "EN"

SCALE: 1" = 20'

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0017 AKRON INNERBELT
RAMP "EN" OVER RELOCATED DART AVENUE, OHIO CANAL AND THORTON STREET
SEC. AKRON INNERBELT SUM-59-00,00

PLAN AND PROFILE

| | CHECKED BY | REVIEWED BY, | DATE |
|---|---|---|---|
| | JAS | CRL | 7/25/80 |

MICROFILMED
OCT 19 1979



DATE STARTED 11-3-79 SAMPLER;TYPE S.S DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-3-79 CASING;LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 10'
BORING NUMBER 25-S CORE BARREL;TYPE NXM SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 134+93 5' RT. BL RAMP "EN" SURFACE ELEVATION 976.3

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA. NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 976.3 | 0 | | TOPSOIL, MOIST-VERY LOOSE | 1 | | | | VISUAL | | | | |
| 975.8 | 2 | 2<br>5-6 | BROWN SILTY FINE TO COARSE SAND, TRACE FINE GRAVEL, MOIST-MEDIUM DENSE | 2 | | | | VISUAL | | | | |
| 971.3 | 4 | 5-7-9 | DO DO DO | 3 | | | | VISUAL | | | | 7.0 |
| | 6 | 4-5-6 | BROWN SILTY FINE TO COARSE SAND, LITTLE FINE GRAVEL, WET, MEDIUM DENSE | 4 | 17 | 39 | 37 | 0 | 7 | | | 17.3 |
| | 8 | 4-5-6 | DO DO DO | 5 | | | | VISUAL | | | | 10.5 |
| 966.3 | 10 | | | | | | | | | | | |
| 963.8 | 12 | 4-5-7 | BROWN SILTY FINE SAND, WET - MEDIUM DENSE | 6 | | | | VISUAL | | | | |
| | 14 | 7-8-8 | GRAY CLAYEY SILT, WITH SOME SAND, TRACE ROCK FRAGMENTS, WET - STIFF | 7 | | | | VISUAL | | | | 13.4 |
| | 16 | 5-6-7 | DO DO DO | 8 | | | | VISUAL | | | | |
| | 18 | 4-4-4 | DO DO DO | 9 | | | | VISUAL | | | | |
| 956.3 | 20 | | | | | | | | | | | |
| | 22 | 3-3-4 | GRAY SILT WITH SOME CLAY AND SAND, WET - LOOSE | 10 | 0 | 4 | 19 | 55 | 22 | - | NP | - 16.9 |
| 951.3 | 24 | | | | | | | | | | | |
| | 26 | 4-6-9 | GRAY FINE TO COARSE SAND, WET-MEDIUM DENSE | 11 | | | | VISUAL | | | | |
| 946.3 | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 4-6-7 | GRAY SANDY SILT, TRACE ROCK FRAGMENTS, WET-MEDIUM DENSE | 12 | | | | VISUAL | | | | 15.1 |
| 942.3 | 34 | | | | | | | | | | | |
| 941.3 | 36 | | GRAY SOFT SHALE | | | | | | | | | |
| | 38 | CORE RECOVERY 95% | INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SHALE SHALE 80%, WITH OCCASIONAL SOFT SEAMS & SILICEOUS SHALE 20%, OCCURS IN 1/2" TO 3" LAYERS, AVERAGE 1" | | | | | N X M | | | | |
| 936.3 | 40 | | | | | | | | | | | |
| | 42 | | BORING COMPLETED | | | | | | | | | |

DATE STARTED 10-28-79 SAMPLER:TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-28-79 CASING:LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 13.0'
BORING NUMBER 26-S CORE BARREL: TYPE NXM SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 136+37, BL RAMP "EN" SURFACE ELEVATION 977.3

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO. | PHYSICAL CHARACTERISTICS % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 977.3 | 0 | | BROWN SILTY FINE SAND WITH SANDY CLAY LENSES(FILL) | | | | | | | | | |
| | 2 | 6-7-8 | MOIST-MEDIUM DENSE | 1 | | | | VISUAL | | | | 11.9 |
| 974.8 | | | | | | | | | | | | |
| 972.3 | 4 | 3-3-3 | BROWN SANDY SILT, WITH SOME CLAY, TRACE GRAVEL, MOIST - MEDIUM STIFF | 2 | 6 | 2 | 33 | 38 | 21 | 20 | 4 | 15.1 |
| | 6 | 3-4-5 | BROWN SILTY FINE SAND,MOIST - LOOSE | 3 | | | | VISUAL | | | | 8.0 |
| 969.8 | 8 | | | | | | | | | | | |
| | 10 | 6-7-9 | BROWN SILTY FINE SAND, TRACE FINE GRAVEL, MOIST - MEDIUM DENSE | 4 | | | | VISUAL | | | | 11.8 |
| | 12 | 4-5-6 | DO DO DO | 5 | | | | VISUAL | | | | 9.7 |
| 964.8 | | | | | | | | | | | | |
| 962.3 | 14 | 3-4-5 | BROWN FINE TO COARSE SAND, TRACE GRAVEL, WET-LOOSE | 6 | 7 | 49 | 38 | - | 6 | - | | 17.4 |
| | 16 | 1-2-2 | GRAY CLAYEY SILT, WET-SOFT | 7 | 0 | 0 | 5 | 68 | 27 | 24 | 4 | 28.0 |
| 959.8 | 18 | 6-8-10 | GRAY CLAYEY SILT WITH SOME SAND, WET - STIFF | 8 | | | | VISUAL | | | | 18.8 |
| | 20 | | | 9 | | | | VISUAL | | | | 17.2 |
| | 22 | 4-5-6 | GRAY CLAYEY SILT WITH SOME SAND, WET - MEDIUM STIFF | | | | | | | | | |
| | 24 | | | | | | | | | | | |
| | 26 | 5-6-6 | DO DO DO | 10 | | | | VISUAL | | | | 15.6 |
| | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 4-5-5 | DO DO DO | 11 | | | | VISUAL | | | | 19.5 |
| 942.3 | 34 | | | | | | | | | | | |
| | 36 | 6-8-12 | GRAY SILTY FINE SAND, WET-MEDIUM DENSE | 12 | 0 | 2 | 85 | 7 | 6 | | | 20.3 |
| | 38 | | | | | | | | | | | |
| | 40 | 8-9-12 | DO DO DO | 13 | | | | VISUAL | | | | 18.6 |
| | 42 | | | | | | | | | | | |
| 932.3 | 44 | | | | | | | | | | | |
| | 46 | 8-12-15 | GRAY SILT W/SOME CLAY, VERY MOIST - MEDIUM DENSE | 14 | 0 | 2 | 6 | 60 | 32 | -NP | - | 22.8 |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 21-24-28 | GRAY SILT W/SOME CLAY, VERY MOIST - VERY DENSE | 15 | | | | VISUAL | | | | 15.3 |
| 924.3 | 54 | 50 | GRAY SOFT SHALE | 16 | | | | | | 30 | 10 | 11.9 |
| | 56 | CORE RECOVERY 93% | GRAY FIRM SHALE WITH OCCASIONAL GRAY HARD SILICEOUS SHALE,SHALE 92% IS BROKEN AND SOFTER AT 59.4', SILICEOUS SHALE 8%, OCCURS IN 1" LAYERS | | | | | | | | | |
| | 58 | | | | | | | | | | | |
| 917.3 | 60 | | | | | | | N X M | | | | |
| | 62 | | BORING COMPLETED | | | | | | | | | |

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0017 AKRON INNERBELT
RAMP "EN" OVER RELOCATED DART AVENUE
OHIO CANAL AND THORNTON STREET
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| | CHECKED BY | REVIEWED BY | DATE |
|---|---|---|---|
| | JAS | CRL | 7·25·80 |

MICROFILM
MICROFILMED
OCT 19 1979



DATE STARTED 10-30-79 SAMPLER:TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-30-79 CASING:LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 12.5'
BORING NUMBER 27-S CORE BARREL:TYPE NXM SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 137+37, B.L. RAMP "EN" SURFACE ELEVATION 976.7

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 976.7 | 0 | | CINDERS, SAND, AND BRICK FRAGMENTS, WITH SOME CLAY (FILL), MOIST-MEDIUM DENSE | 1 | | | | VISUAL | | | | |
| 974.2 | 2 | 6-8-9 | | | | | | | | | | |
| 971.7 | 4 | 2-3-2 | BROWN SILTY FINE SAND WITH SOME CLAY LENSES TRACE BRICK FRAGMENTS, (FILL), MOIST - LOOSE | 2 | | | | VISUAL | | | | 14.7 |
| 969.2 | 6 | 2-3-5 | DARK BROWN AND GRAY SANDY SILTY CLAY, MOIST-MEDIUM STIFF | 3 | | | | VISUAL | | | | 17.6 |
| | 8 | 6-7-9 | BROWN SILTY FINE SAND, MOIST-MEDIUM DENSE | 4 | | | (UNIT WEIGHT) | VISUAL | | | | 13.5 |
| | 10 | | DO DO DO | 5 | | | | VISUAL | | | | 12.6 |
| | 12 | 4-5-5 | | | | | | | | | | |
| | 14 | 3-4-4 | | | | | | | | | | |
| 961.7 | | | BROWN SILTY FINE SAND, WET-LOOSE | 6 | | | | VISUAL | | | | |
| | 16 | 1-1-2 | GRAY SILT W/SOME CLAY, VERY LOOSE | 7 | 0 | 0 | 6 | 67 | 27 | | NP | 27.8 |
| 959.2 | 18 | | | | | | | | | | | |
| | | 10-16-24 | GRAY FINE TO COARSE SAND, TRACE GRAVEL, WET-DENSE | 8 | | | | VISUAL | | | | |
| 956.7 | 20 | | | | | | | | | | | |
| | 22 | 13-8-7 | GRAY FINE TO COARSE SAND WITH SOME GRAVEL WET-MEDIUM DENSE | 9 | | | | VISUAL | | | | 18.4 |
| | 24 | | | | | | | | | | | |
| 951.7 | | | | | | | | | | | | |
| | 26 | 4-6-8 | GRAY SANDY SILT, WET-MEDIUM DENSE | 10 | | | | VISUAL | | | | |
| | 28 | | | | | | | | | | | |
| 946.7 | 30 | | | | | | | | | | | |
| | 32 | 2-2-3 | GRAY CLAYEY SILT W/SOME SAND, WET - SOFT | 11 | | | | VISUAL | | | | 15.1 |
| | 34 | | | | | | | | | | | |
| | 36 | 2-2-3 | DO DO DO | 12 | | | | VISUAL | | | | |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 2-3-4 | DO DO DO | 13 | | | | VISUAL | | | | |
| | 44 | | | | | | | | | | | |
| 931.7 | | | | | | | | | | | | |
| | 46 | 6-12-20 | GRAY SILTY FINE SAND, WET - DENSE | 14 | | | | VISUAL | | | | 20.7 |
| | 48 | | | | | | | | | | | |
| 926.7 | 50 | | | | | | | | | | | |
| | 52 | 14-18-22 | GRAY SILTY FINE SAND, WET-DENSE | 15 | | | | VISUAL | | | | |
| | 54 | | | | | | | | | | | |
| | 56 | 17-24-34 | | | | | | | | | | |
| | 58 | | GRAY SILTY FINE SAND, WET-VERY DENSE | 16 | | | | VISUAL | | | | |
| 916.7 | 60 | | | | | | | | | | | |
| | 62 | 2-17-25 | GRAY CLAYEY SILT, WITH SOME SAND AND ROCK FRAGMENTS, WET - VERY STIFF | 17 | | | | VISUAL | | | | 15.1 |
| | 64 | | | | | | | | | | | |
| 911.7 | | | | | | | | | | | | |
| 910.7 | 66 | 22-45 | GRAY VERY SOFT SHALE | 18 | | | | VISUAL | | | | 12.1 |
| | 68 | CORE RECOVERY 72% | GRAY FIRM SHALE WITH OCCASIONAL GRAY HARD SILICEOUS SHALE LAYERS. SHALE 92% IS BROKEN AND SOFTER AT 66.9' & 67.4', SILICEOUS SHALE 8%, OCCURS IN 1" LAYERS | | | | | | | | | |
| 905.7 | 70 | | | | | | | | | | | |
| | 72 | | | | | | | | | | | |

BORING COMPLETED

DATE STARTED 11-8-79 SAMPLER:TYPE S.S. DIA 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-9-79 CASING:LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 12.5'
BORING NUMBER 28-S CORE BARREL:TYPE SIZE AFTER 24 HRS. 13.0'
STATION & OFFSET 141+65 BL RAMP "EN" SURFACE ELEVATION 973.5

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 973.5 | 0 | | DARK BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL (FILL), MOIST-LOOSE | 1 | | | | VISUAL | | | | |
| | 2 | 2-2-2 | | | | | | | | | | |
| | 4 | 2-2-3 | DO DO DO | 2 | | | | VISUAL | | | | 14.0 |
| 968.5 | | | | | | | | | | | | |
| | 6 | 3-5-9 | BROWN AND GRAY SILTY CLAY WITH SOME SAND LENSES, MOIST-STIFF | 3 | 0 | 4 | 12 | 30 | 54 | 53 | 33 | 33.2 |
| 966.0 | 8 | 3-4-4 | GRAY CLAYEY SILT WITH FINE SAND LENSES, WET - MEDIUM STIFF | 4 | | | | VISUAL | | | | 19.1 |
| 963.5 | 10 | | | | | | | | | | | |
| | 12 | 3-4-5 | GRAY SILTY FINE SAND, WET-LOOSE | 5 | | | | VISUAL | | | | 16.0 |
| | 14 | 3-3-3 | DO DO DO | 6 | | | | VISUAL | | | | 22.7 |
| | 16 | 2-3-4 | DO DO DO | 7 | | | | VISUAL | | | | |
| | 18 | 3-3-4 | DO DO DO | 8 | | | | VISUAL | | | | |
| 953.5 | 20 | | | | | | | | | | | |
| | 22 | 2-4-6 | GRAY CLAYEY SILT W/SOME SAND, TRACE ORGANICS WET - MEDIUM STIFF | 9 | | | | VISUAL | | | | |
| | 24 | | | | | | | | | | | |
| 948.5 | | | | | | | | | | | | |
| | 26 | 6-7-8 | GRAY SANDY SILT, W/SOME CLAY MEDIUM DENSE | 10 | 0 | 4 | 25 | 51 | 20 | - | NP | 20.1 |
| | 28 | | | | | | | | | | | |
| 943.5 | 30 | | | | | | | | | | | |
| | 32 | 4-8-11 | GRAY SILTY FINE SAND, WET-MEDIUM DENSE | 11 | | | | VISUAL | | | | |
| | 34 | | | | | | | | | | | |
| | 36 | 8-10-13 | DO DO DO | 12 | | | | VISUAL | | | | 15.5 |
| | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 9-15-20 | GRAY SILTY FINE SAND, WET DENSE | 13 | | | | VISUAL | | | | |
| | 44 | | | | | | | | | | | |
| 928.5 | | | | | | | | | | | | |
| | 46 | 11-14-19 | GRAY FINE SAND WITH SILT SEAMS, WET - DENSE | 14 | | | | VISUAL | | | | |
| | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 15-18-24 | DO DO DO | 15 | | | | VISUAL | | | | |
| | 54 | | | | | | | | | | | |
| 918.5 | | | | | | | | | | | | |
| | 56 | 9-14-20 | GRAY SILTY FINE SAND, WET-DENSE | 16 | | | | VISUAL | | | | 12.3 |
| | 58 | | | | | | | | | | | |
| | 60 | | | | | | | | | | | |
| | 62 | 12-18-25 | DO DO DO | 17 | | | | VISUAL | | | | |
| | 64 | | | | | | | | | | | |
| 908.5 | | | | | | | | | | | | |
| | 66 | 72-13-12 | GRAY CLAYEY SILT, WET-VERY STIFF | 18 | | | | VISUAL | | | | |
| | 68 | | | | | | | | | | | |

28-S CONTINUED

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 70 | | GRAY CLAYEY SILT, WET-MEDIUM STIFF | 19 | 1 | 2 | 9 | 63 | 25 | | | 17.7 |
| | 72 | 6-6-7 | | | | | | | | | | |
| | 74 | | | | | | | | | | | |
| | 76 | 7-10-12 | GRAY CLAYEY SILT, WET-VERY STIFF | 20 | | | | VISUAL | | | | |
| | 78 | | | | | | | | | | | |
| 893.5 | 80 | | | | | | | | | | | |
| | 82 | 7-10-13 | GRAY CLAYEY SILT WITH LITTLE SAND, WET - VERY STIFF | 21 | | | | VISUAL | | | | |
| | 84 | | | | | | | | | | | |
| 888.5 | 86 | 9-10-12 | GRAY CLAYEY SILT, WET-VERY STIFF | 22 | | | | VISUAL | | | | 24.2 |
| | 88 | | | | | | | | | | | |
| 883.5 | 90 | | | | | | | | | | | |
| | 92 | 19-43-62 | GRAY SANDY SILT WITH SOME CLAY, WET - VERY DENSE | 23 | | | | VISUAL | | | | 20.3 |
| | 94 | | | | | | | | | | | |
| | 96 | 29-57-67 | DO DO DO | 24 | | | | VISUAL | | | | |
| | 98 | | | | | | | | | | | |
| 873.5 | 100 | | | | | | | | | | | |
| | 102 | 28-45-72 | GRAY SILTY FINE SAND, WET-VERY DENSE | 25 | | | | VISUAL | | | | 18.5 |
| | 104 | | | | | | | | | | | |
| 867.0 | 106 | 33-44-69 | DO DO DO | 26 | | | | VISUAL | | | | |
| | 108 | | | | | | | | | | | |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0017 AKRON INNERBELT
RAMP "EN" OVER RELOC. DART AVENUE
OHIO CANAL AND THORNTON STREET
SEC: AKRON INNERBELT SUM-59-00.00

| CHECKED BY | REVIEWED BY, | DATE |
|---|---|---|
| JAS | CRL | 7-25-80 |

MICROFILMED
OCT 19 1979
OCT 19 1980

DATE STARTED 11-1-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 11-2-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 12.5'
BORING NUMBER 33-S CORE BARREL: TYPE SIZE AFTER HRS. BACKFILLED
STATION & OFFSET 140+12, 5' LT. BL RAMP "EN". SURFACE ELEVATION 973.7

| ELEV. | DEPTH | STN PEN (N) | DESCRIPTION | SA NO | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 973.7 | 0 | | BROWN FINE TO MEDIUM SAND WITH SOME GRAVEL AND CLAY LAYERS (FILL) MOIST-MEDIUM DENSE | 1 | | VISUAL | | | | | | 11.9 |
| 971.2 | 2 | 5-7-8 | | | | | | | | | | |
| | 4 | 4-4-4 | BROWN FINE TO MEDIUM SAND WITH SOME GRAVEL & CLAY LAYERS, WITH TRACE OF ORGANICS (FILL) MOIST-MEDIUM DENSE | 2 | | VISUAL (PERCENT LOSS ON IGNITION) | | | | | | 18.2 |
| 968.7 | 6 | 2-4-6 | BROWN CLAYEY TO COARSE SAND TRACE GRAVEL, | 3 | 7 | 30 | 44 | 9 | 11 | | | 11.2 |
| 966.2 | 8 | 5-7-8 | MOIST-MEDIUM DENSE<br>BROWN AND GRAY FINE SAND MOIST-MEDIUM DENSE | 4 | | VISUAL | | | | | | 7.0 |
| 963.7 | 10 | | | | | | | | | | | |
| | 12 | 4-5-6 | BROWN AND GRAY FINE SAND WITH A LITTLE GRAVEL MOIST-MEDIUM DENSE | 5 | | VISUAL | | | | | | 8.4 |
| 961.2 | 14 | 6-11-12 | GRAY SILTY FINE GRAVEL AND FINE TO COARSE SAND WET-MEDIUM DENSE | 6 | 38 | 17 | 29 | 10 | 7 | | | 16.3 |
| 958.7 | 16 | 11-8-9 | GRAY SANDY SILT W/LITTLE CLAY, WET - MEDIUM DENSE | 7 | 0 | 2 | 38 | 44 | 16 | N.P. | | 3.9 |
| 956.2 | 18 | 5-7-9 | GRAY SILTY FINE SAND, WET-MEDIUM DENSE | 8 | 0 | 2 | 81 | 8 | 9 | | | 18.8 |
| 953.7 | 20 | | | | | | | | | | | |
| | 22 | 5-7-8 | GRAY SANDY SILT, WET-MEDIUM DENSE | 9 | | VISUAL | | | | | | 16.5 |
| | 24 | | | | | | | | | | | |
| | 26 | 5-6-7 | DO DO DO | 10 | | VISUAL | | | | | | 18.7 |
| | 28 | | | | | | | | | | | |
| | 30 | | | | | | | | | | | |
| | 32 | 4-6-8 | DO DO DO | 11 | | VISUAL | | | | | | 17.3 |
| | 34 | | | | | | | | | | | |
| 938.7 | | | | | | | | | | | | |
| | 36 | 5-6-7 | GRAY CLAYEY SILT WITH SOME SAND, WET - STIFF | 12 | | VISUAL | | | | | | 13.8 |
| | 38 | | | | | | | | | | | |
| 933.7 | 40 | | | | | | | | | | | |
| | 42 | 4-5-6 | GRAY SILTY FINE SAND, WET-MEDIUM DENSE | 13 | | VISUAL | | | | | | 14.6 |
| | 44 | | | | | | | | | | | |
| | 46 | 2-3-4 | GRAY SILTY FINE SAND, WET-LOOSE | 14 | 0 | 0 | 47 | 42 | 11 | | | 18.9 |
| | 48 | | | | | | | | | | | |
| 923.7 | 50 | | | | | | | | | | | |
| | 52 | 4-4-5 | GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, WET - STIFF | 15 | | VISUAL | | | | | | 15.0 |
| | 54 | | | | | | | | | | | |
| 918.7 | 56 | | | | | | | | | | | |
| | 58 | 4-5-6 | GRAY CLAYEY SILT, WET-STIFF | 16 | | VISUAL | | | | | | 21.3 |
| | 60 | | | | | | | | | | | |
| | 62 | 8-13-18 | GRAY CLAYEY SILT, WET-HARD | 17 | 0 | 0 | 0 | 80 | 20 | | | 22.7 |
| | 64 | | | | | | | | | | | |
| | 66 | 9-16-22 | DO DO DO | 18 | | VISUAL | | | | | | 22.1 |
| | 68 | | | | | | | | | | | |
| 903.7 | 70 | | | | | | | | | | | |
| | 72 | 10-17-25 | GRAY SANDY SILT, WET- DENSE | 19 | | VISUAL | | | | | | 17.4 |
| | 74 | | | | | | | | | | | |
| | 76 | 16-33-45 | GRAY SANDY SILT, WET-VERY DENSE | 20 | | VISUAL | | | | | | 16.9 |
| | 78 | | | | | | | | | | | |
| 893.7 | 80 | | | | | | | | | | | |
| | 82 | 24-38-51 | GRAY FINE SAND, WET-VERY DENSE | 21 | 0 | 2 | 93 | 0 | 5 | | | 18.9 |
| 888.7 | 84 | | | | | | | | | | | |
| | 86 | 16-26-40 | GRAY CLAYEY SILT WITH SOME SAND, WET - HARD | 22 | | VISUAL | | | | | | 20.8 |
| | 88 | | | | | | | | | | | |
| 883.7 | 90 | | | | | | | | | | | |
| 882.2 | 92 | 12-17-30 | GRAY CLAYEY SILT, WET-HARD. | 23 | 0 | 0 | 2 | 81 | 17 | N.P. | | 22.0 |
| | 94 | | BORING COMPLETED | | | | | | | | | |

AKRON INNERBELT
SUM-59-00.00

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THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-59-0017
RAMP "EN" OVER RELOCATED DART AVENUE
OHIO CANAL AND THORNTON STREET
SEC. AKRON INNERBELT SUM. - 59-00.00

PLAN AND PROFILE

| | CHECKED BY | REVIEWED BY | DATE |
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| | JAS | CRL | 7·25·80 |

MICROFILMED
OCT 19 1979



## GEOLOGY OF THE SITE

THE AREA OF THE REFERENCE PROJECT CONTAINS DEPOSITS OF GLACIAL ORIGIN WHICH CONSIST MOSTLY OF SAND AND GRAVEL, FINE SANDS, SILT AND CLAYEY SILT. FOLLOWING THEIR DEPOSITION, SOME LOW LYING AREAS ACCUMULATED PEAT AND ORGANIC SILTS. THESE OCCUR SPORADICALLY THROUGHOUT THE AREA AND WERE ENCOUNTERED IN ONE OF THE TWO TEST BORINGS DRILLED FOR THIS BRIDGE STRUCTURE.

UNDERLYING BEDROCK CONSISTS OF SHALE AND SANDSTONE OF PENNSYLVANIA AGE.

## EXPLORATION

TWO STANDARD PENETRATION TEST BORINGS,(HOLES 17-S AND 18-S) WERE MADE AT THE SITE BETWEEN OCTOBER 11 AND 13, 1979. TRUCK MOUNTED EQUIPMENT WAS UTILIZED AND SAMPLING WAS ACCOMPLISHED WITH STANDARD DRIVE SAMPLES AND BY PUSHING 3-INCH DIAMETER THIN WALLED SHELBY TUBES.

## INVESTIGATIONAL FINDINGS

BORING 17-S ENCOUNTERED 5 FEET OF FILL OVERLYING 20 FEET OF LOOSE TO MEDIUM DENSE FINE TO COARSE SAND. THIS WAS UNDERLAIN, TO THE BORINGS FINAL DEPTH OF 76.5 FEET, WITH FINE AND SILTY FINE SANDS WHICH WERE DENSE TO VERY DENSE.

BORING 18-S REVEALED SOMEWHAT DIFFERENT CONDITIONS. BENEATH 2.5 FEET OF SANDY SILT, 5 FEET OF PEAT WAS ENCOUNTERED. FINE SANDS WERE THEN ENCOUNTERED TO A DEPTH OF 40 FEET EXCEPT FOR A THIN LAYER OF VERY SOFT CLAYEY SILT FOUND 10 FEET BELOW GRADE. DENSE FINE TO COARSE SAND WAS ENCOUNTERED FROM 40 TO 45 FEET BEFORE BECOMING SILT WITH SOME CLAY AND SAND FOR THE NEXT 30 FEET. THIS MATERIAL WAS GENERALLY MEDIUM COMPACT. BEGINING AT A DEPTH OF 75 FEET THE UNDERLYING LAYERS OF FINE TO COARSE SAND, SILTY FINE SAND AND CLAYEY SILT BECAME VERY COMPACT AND CONTINUED TO THE EXTENT OF THE BORING AT 101.5 FEET BELOW GRADE.

GROUNDWATER WAS ENCOUNTERED DURING DRILLING AT ABOUT ELEVATION 951 AT BORING 17-S AND 955 AT 18-S. NOTE THAT AFTER 24 HOURS THE WATER LEVEL IN 18-S WAS 961.1, POSSIBLY INFLUENCED BY THE NEARBY CANAL. THESE AND NEARBY BORINGS INDICATE THAT THE GROUNDWATER TABLE IS TYPICALLY BETWEEN ABOUT ELEVATIONS 950 AND 955 IN THIS AREA.

## LEGEND

- AUGER BORING LOCATION-PLAN VIEW.
- PRESS AND/OR DRIVE SAMPLE AND/OR CORE BORING LOCATION-PLAN VIEW.
- CAPPED PILE
- FOOTING
- FOOTING ON PILE
- TR — TOP OF ROCK
- HORIZONTAL BAR ON BORING LOG INDICATES THE DEPTH (MEDIAN) AT WHICH THE SAMPLE WAS TAKEN.
- X/Y — FIGURES BESIDE THE BORING LOG IN PROFILE INDICATES THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
  X= NUMBER OF BLOWS FOR FIRST 6-INCHES.
  Y= NUMBER OF BLOWS FOR SECOND 6-INCHES.
- INDICATES PRESS (SHELBY-TUBE) SAMPLE.
- W— INDICATES FREE WATER ELEVATION.
- INDICATES STATIC WATER ELEVATION.

## SYMBOLS OF ROCK TYPES

- COAL
- WEATHERED INDURATED CLAY
- INDURATED CLAY
- WEATHERED SHALE
- SHALE
- WEATHERED SANDSTONE
- SANDSTONE
- LEACHED DOLOMITE
- DOLOMITE
- LEACHED LIMESTONE
- LIMESTONE

## GENERAL INFORMATION

Drive Sample Borings – Drive-Press Sample Borings – Core Borings

Drive sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. sampler at 2.5 and/or 5-ft. depth intervals driven by means of a 140-lb. drop hammer with a free fall of 30-inches. For each sample obtained the sampler is driven a total of 18-inches except where a condition of refusal (less than 6-inches penetration under 50-blows) is met before obtaining a penetration of 18-inches. The first 6-inches of drive is considered setting the sampler while the number of blows required to drive the sampler the final 12-inches is considered the Standard Penetration Test.

Drive-press sample borings are made by means of a rotary-type drill rig employing a 2" O.D., 1-3/8" I.D. drive sampler and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure applied by the drill rig.

Core borings in rock are made by means of a rotary-type drill rig employing an NXM-series type, double tube core barrel and diamond bit, obtaining a continuous core having a nominal diameter of 2-1/8". The core barrel is removed from the test hole at maximum intervals of 5-ft. and the entire core recovered retained.

When necessary to stabilize the bore hole in caving material or simply as a means of advancing the boring, hollow stem augers or flush joint casing is used, each having an inside diameter of 3-1/2". Water under pressure is employed to advance the test hole in non-caving materials or to wash out the casing when hollow stem augers are not used. When hollow stem augers are used, water is introduced into the hole as necessary to maintain the water level inside the hollow stem auger at or above the level first encountered in the ground. The methods employed in advancing the boring are shown on the boring logs. All of the sampling above described is accomplished in undisturbed material below the bottom of the casing or hollow stem augers.

The boring log sheets show a graphic plot of the information obtained including depth and elevation of the sample, the number of blows for the Standard Penetration Test for each 6-inch drive, the depth of press samples, field sample number, sample description-based on laboratory tests and the Casagrande A.C. Classification System, gradation, plasticity and moisture content determinations. The results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler cannot be driven a wash sample is procur ed for visual classification in order to determine the general character of the material. These are not considered sufficiently representative to warrant laboratory testing.

Particle Size Definitions

| Boulders | Cobbles | Gravel | Coarse Sand | Fine Sand | Silt | Clay |
|---|---|---|---|---|---|---|
| 8" | 3" | 2.0mm | 0.42mm | | 0.074mm | 0.005mm |
| | | No. 10 sieve | No. 40 sieve | | No. 200 sieve | |

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

THE H. C. NUTTING COMPANY
SOIL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO 45226

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-18-1014 AKRON INNERBELT RAMP "SW" OVER BOWERY STREET AND OHIO CANAL
SEC. AKRON INNERBELT SUM-59-00.00

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7/25/80 |

MICROFILMED
OCT 19 1960

AKRON INNERBELT
SUM- 59-00,00

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STATION 119+00.90 B.L. RAMP "SW" =
STATION 7+70.70 C.L. BOWERY STREET

C_L BRG.. ABUTMENT A-1
C_L PIER P-1
BOWERY STREET
C_L PIER P-2
C_L PIER P-3
C_L PIER P-4
OHIO CANAL
C_L BRG. ABUTMENT A-2
C_L PIER 5

118 119 120 121 122 123

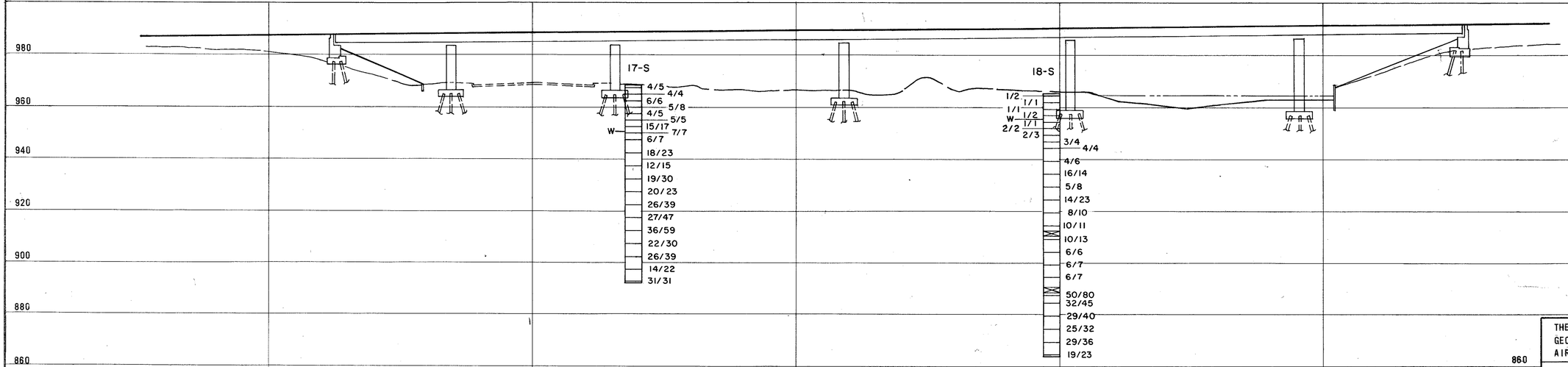
17-S
B.L. RAMP "SW" (PROPOSED)
18-S

8 7 6

431 431 432 433 434 435

C.L. WEST EXPRESSWAY (EXISTING)

OHIO CANAL




PROFILE ALONG B.L. RAMP "SW"

SCALE: 1"= 20'

THE H.C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-18-1014 AKRON
INNERBELT RAMP "SW" OVER
BOWERY STREET AND OHIO CANAL
SEC. AKRON INNERBELT SUM-59-00.00

PLAN AND PROFILE

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7-25-60 |

AKRON INNERBELT
SUM-77-15.77

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DATE STARTED 10-11-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-12-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 17.5'
BORING NUMBER 17-S CORE BARREL: TYPE SIZE AFTER 24 HRS. 17.3'
STATION & OFFSET 119+38' 4' RT. BL RAMP SW SURFACE ELEVATION 968.4

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 968.4 | 0 | | | | | | | | | | | |
| | | 4-4-5 | GRAY AND BROWN SANDY SILT WITH SOME ORGANICS, TRACE GRAVEL (FILL), MOIST - LOOSE | 1 | | | VISUAL | | | | | |
| | 2 | | | | | | | | | | | |
| 965.9 | | | GRAY AND BROWN SANDY SILTY CLAY WITH BLACK ORGANIC CLAYEY SILT SEAMS AND SOME GRAVEL, TRACE SANDSTONE FRAGMENTS (FILL), MOIST - MEDIUM STIFF | | | | | | | | | |
| | 4 | 6-4-4 | | 2 | | | VISUAL | | | | | |
| 963.4 | 6 | | | | | | | | | | | |
| | | 5-6-6 | BROWN SILTY FINE TO COARSE SAND AND GRAVEL, MOIST - MEDIUM DENSE | 3 | | | VISUAL | | | | | 9.1 |
| | 8 | | | | | | | | | | | |
| | | 6-5-8 | DO DO DO | 4 | 60 | 14 | 8 | 10 | 8 | 29 | 7 | 12.0 |
| 958.4 | 10 | | | | | | | | | | | |
| | | 4-4-5 | BROWN FINE TO COARSE SAND, TRACE GRAVEL, MOIST - LOOSE | 5 | | | VISUAL | | | | | 4.9 |
| | 12 | | | | | | | | | | | |
| | | 4-5-5 | DO DO DO | 6 | 2 | 45 | 44 | 2 | 7 | | | 5.8 |
| 953.4 | 14 | | | | | | | | | | | |
| | | 12-15-17 | BROWN FINE TO COARSE SAND WITH SOME GRAVEL, MOIST - DENSE | 7 | | | VISUAL | | | | | 4.0 |
| | 16 | | | | | | | | | | | |
| 950.9 | | 4-7-7 | BROWN FINE TO COARSE SAND AND GRAVEL, WET - MEDIUM DENSE | 8 | | | VISUAL | | | | | 10.0 |
| 948.4 | 18 | | | | | | | | | | | |
| | 20 | 5-6-7 | BROWN AND GRAY FINE TO COARSE SAND AND TRACE GRAVEL, WET - MEDIUM DENSE | 9 | 47 | 29 | 15 | - | 9 | - | - | 12.7 |
| | 22 | | | | | | | | | | | |
| | 24 | | | | | | | | | | | |
| 943.4 | 26 | 11-18-23 | GRAY FINE SAND, WET - DENSE | 10 | | | VISUAL | | | | | 17.7 |
| | 28 | | | | | | | | | | | |
| 938.4 | 30 | | | | | | | | | | | |
| | 32 | 9-12-15 | GRAY FINE SAND, WET - MEDIUM DENSE | 11 | | | VISUAL | | | | | 19.9 |
| | 34 | | | | | | | | | | | |
| 933.4 | 36 | 10-19-30 | GRAY FINE SAND, WET - LOOSE | 12 | | | VISUAL | | | | | 21.4 |
| | 38 | | | | | | | | | | | |
| 928.4 | 40 | | | | | | | | | | | |
| | 42 | 15-20-23 | GRAY FINE SAND WITH GRAVEL, WET - DENSE | 13 | 2 | 32 | 63 | 0 | 3 | | | 23.7 |
| 923.4 | 44 | | | | | | | | | | | |
| | 46 | 17-26-39 | GRAY SILTY FINE SAND, TRACE ORGANICS, WET - VERY DENSE | 14 | | | VISUAL | | | | | 17.1 |
| | 48 | | | | | | | | | | | |
| 918.4 | 50 | | | | | | | | | | | |
| | 52 | 13-27-47 | GRAY FINE SAND, TRACE ORGANICS, WET - VERY DENSE | 15 | | | VISUAL | | | | | 16.5 |
| 913.4 | 54 | | | | | | | | | | | |
| | 56 | 17-36-59 | BROWNISH GRAY SILTY FINE SAND, WET - VERY DENSE | 16 | | | VISUAL | | | | | 21.4 |
| | 58 | | | | | | | | | | | |
| 908.4 | 60 | | | | | | | | | | | |
| | 62 | 12-22-30 | GRAY SILTY FINE SAND, WET - VERY DENSE | 17 | | | VISUAL | | | | | 21.1 |
| | 64 | | | | | | | | | | | |
| | 66 | 14-26-39 | DO DO DO | 18 | | | VISUAL | | | | | |
| | 68 | | | | | | | | | | | |
| 898.4 | 70 | | | | | | | | | | | |
| | 72 | 6-14-22 | GRAY FINE SAND, WET - DENSE | 19 | | | VISUAL | | | | | 23.3 |
| | 74 | | | | | | | | | | | |
| 893.4 | 76 | | | | | | | | | | | |
| 891.9 | 78 | 19-31-31 | GRAY SILTY FINE SAND W/SOME GRAVEL, WET - VERY DENSE | 20 | | | VISUAL | | | | | 14.1 |

BORING COMPLETED

DATE STARTED 10-12-79 SAMPLER: TYPE S.S DIA. 2.0" O.D. WATER ELEVATION
DATE COMPLETED 10-13-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 10.0'
BORING NUMBER 18-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 4.3'
STATION & OFFSET 120+97 6' RT. BL RAMP SW SURFACE ELEVATION 965.4

| ELEV. | DEPTH | STN. PEN. (N) | DESCRIPTION | SA. NO. | % AGG | % CS | % FS | % SILT | % CLAY | LL | PI | WC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 965.4 | 0 | | | | | | | | | | | |
| | 2 | 1-1-2 | BROWN SANDY SILT W/SOME ORGANICS AND A LITTLE GRAVEL, MOIST - VERY LOOSE | 1 | | | VISUAL | | | | | |
| 962.9 | 4 | 1-1-1 | BLACK FINE TEXTURED PEAT, MOIST - VERY LOOSE | 2 | | | VISUAL | | | | | |
| | 6 | 1-1-1 | DO DO DO | 3 | | | VISUAL | | | | | |
| 957.9 | 8 | | | | | | | | | | | |
| | 10 | 1-1-2 | DARK BROWN FINE SAND W/LITTLE ORGANICS AND TRACE GRAVEL, VERY MOIST - VERY LOOSE | 4 | 1 | 19 | 71 | 7 | 2 | N.P. | | 32.7 |
| 955.4 | 12 | 1-1-1 | GRAY CLAYEY SILT, WET - VERY SOFT | 5 | | | VISUAL | | | | | 42.0 |
| 952.9 | 14 | 2-2-2 | GRAY FINE SAND W/CLAYEY SILT LENSES, WET - LOOSE | 6 | | | VISUAL | | | | | |
| 950.4 | 16 | 1-2-3 | GRAY SILTY FINE SAND, WET - LOOSE | 7 | | | VISUAL | | | | | |
| 947.9 | 18 | 3-3-4 | GRAY FINE SAND, WET - LOOSE | 8 | | | VISUAL | | | | | |
| 945.4 | 20 | | | | | | | | | | | |
| | 22 | 3-4-4 | BROWNISH GRAY SILTY FINE SAND, WET - LOOSE | 9 | | | VISUAL | | | | | 16.1 |
| | 24 | | | | | | | | | | | |
| | 26 | 3-4-6 | DO DO DO | 10 | | | VISUAL | | | | | |
| | 28 | | | | | | | | | | | |
| 935.4 | 30 | | | | | | | | | | | |
| | 32 | 14-16-14 | GRAY SILTY FINE SAND, WET - DENSE | 11 | | | VISUAL | | | | | |
| 930.4 | 34 | | | | | | | | | | | |
| | 36 | 3-5-8 | GRAY FINE SAND, WET - MEDIUM DENSE | 12 | | | VISUAL | | | | | |
| 925.4 | 38 | | | | | | | | | | | |
| | 40 | | | | | | | | | | | |
| | 42 | 5-14-23 | GRAY FINE TO COARSE SAND AND GRAVEL, WET - DENSE | 13 | | | VISUAL | | | | | |
| 920.4 | 44 | | | | | | | | | | | |
| | 46 | 7-8-10 | GRAY SILT, TRACE GRAVEL AND SAND LENSES, WET - MEDIUM DENSE | 14 | | | VISUAL | | | | | |
| 915.4 | 48 | | | | | | | | | | | |
| | 50 | | | | | | | | | | | |
| | 52 | 8-10-11 | GRAY SILT, TRACE GRAVEL, WET - MEDIUM DENSE | 15 | | | VISUAL | | | | | |
| | 54 | | | | | | | | | | | |
| 910.4 | 56 | ST | | S-1 | 3 | 4 | 9 | 64 | 20 | N.P. (TRIAXIAL TESTS) | | |
| | 58 | 8-10-13 | GRAY CLAYEY SANDY SILT, TRACE GRAVEL, WET - MEDIUM STIFF | 16 | | | VISUAL | | | | | |
| | 60 | | | | | | | | | | | |
| | 62 | 5-8-6 | DO DO DO | 17 | | | VISUAL | | | | | |
| | 64 | | | | | | | | | | | |
| | 66 | 6-8-7 | DO DO DO | 18 | | | VISUAL | | | | | |
| | 68 | | | | | | | | | | | |
| | 70 | | | | | | | | | | | |

14-S CONTINUED

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 70 | | | | | | | | | | | | |
| | 72 | 5-7-7 | DO DO DO | 19 | | | VISUAL | | | | | | |
| | 74 | | | | | | | | | | | | |
| 890.4 | 76 | | | | | | | | | | | | |
| 888.4 | | ST | GRAY FINE TO COARSE SAND, TRACE GRAVEL, VERY DENSE | S-2 | 5 | 42 | 45 | 0 | 5 | N.P. | | | |
| | 78 | 30-50-80 | LIGHT GRAY SILTY FINE SAND, TRACE GRAVEL, WET - VERY DENSE | 20 | | | (TRIAXIAL TESTS) VISUAL | | | | | | |
| 885.4 | 80 | | | | | | | | | | | | |
| | 82 | 20-32-45 | BROWNISH GRAY SILTY FINE SAND, TRACE GRAVEL, WET - VERY DENSE | 21 | | | VISUAL | | | | | 8.0 | |
| | 84 | | | | | | | | | | | | |
| | 86 | 22-29-40 | DO DO DO | 22 | | | VISUAL | | | | | | |
| | 88 | | | | | | | | | | | | |
| 875.4 | 90 | | | | | | | | | | | | |
| | 92 | 15-25-32 | GRAY CLAYEY SILT, MOIST - VERY STIFF | 23 | | | VISUAL | | | | | 14.2 | |
| | 94 | | | | | | | | | | | | |
| | 96 | 19-28-38 | DO DO DO | 24 | | | VISUAL | | | | | | |
| | 98 | | | | | | | | | | | | |
| 865.4 | 100 | | | | | | | | | | | | |
| 863.9 | 102 | 13-19-25 | GRAY CLAYEY SILT W/FINE SAND SEAMS, MOIST - DENSE | 25 | | | VISUAL | | | | | 14.2 | |

BORING COMPLETED

THE H. C. NUTTING COMPANY
GEOTECHNICAL ENGINEERS
AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-18-15.71 AKRON INNERBELT RAMP "S" SB OVER BOWERY STREET AND OHIO CANAL
SEC. AKRON INNERBELT SUM-59-00.00

BORING DATA

| CHECKED BY | REVIEWED BY | DATE |
|---|---|---|
| JAS | CRL | 7-25-80 |