STATE OF OHIO
DEPARTMENT OF HIGHWAYS

490 rolls
1-100

UI-UGI-316(2)

No.	Year	Project
2	OHIO	UI-UGI-316(2) 1946

MIAMI & ERIE CANAL ROAD-HAMILTON COUNTY

CINCINNATI (PT.), "B", ARLINGTON HEIGHTS AND LOCKLAND (PT.)

CARTHAGE ~ HAMILTON ROAD

SH 43 SEC. CINCINNATI (PT.)

SMITH-CARTHAGE ROAD (NORWOOD & CINCINNATI-HAMILTON COUNTY)

SH 781 SEC. CINCINNATI (PT.)

CINCINNATI, SPRINGFIELD TOWNSHIP, VILLAGE OF ARLINGTON HEIGHTS AND CITY OF LOCKLAND

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B" ARLINGTON HEIGHTS, LOCKLAND (PT.) AND APPROACHES.

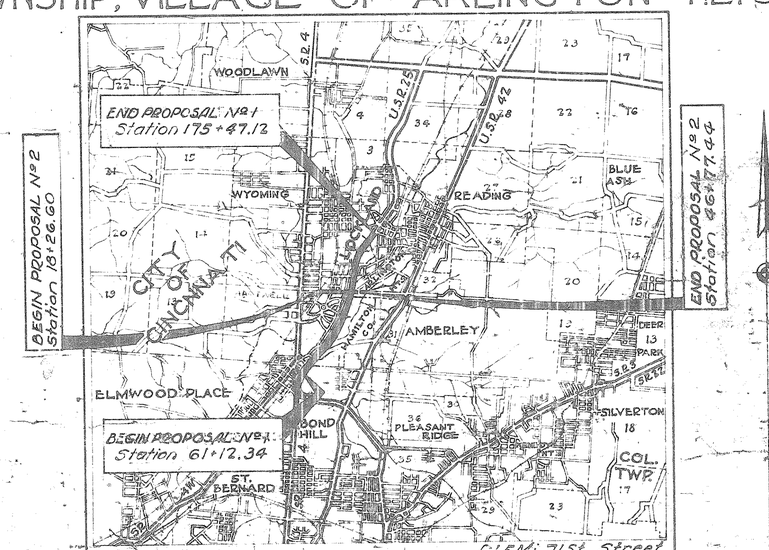
PROPOSAL No 1
UI-UGI-316(2)

CONVENTIONAL SIGNS ~

Section
Corporation
Fence (existing)
Fence (proposed)
Center Line
Railroad
Pole Line
Existing Underground Utilities
Trees (existing - to be removed)
Trees (existing - to remain)
Guard Rail (existing)
Guard Rail (new)

55-160 Chain Link

Telephone ☎ Telegraph Light ☼ Power ⊕
Size, Use & Type



Average Haul from Siding
Delivery Point (N.Y.C.R.R. Siding)

1.5 Mi. 71st. Street
0.6 Mi. Hartwell Ave.
71 St. Street.
Hartwell Ave.

LOCATION PLAN

Scale of Miles

PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS

INDEX OF SHEETS ~

	PADDOCK RD. & APPROACHES	S.H. 987	SUMMIT RD. & APPROACHES
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TYPICAL SECTIONS	—	3 - 15	—
GENERAL NOTES	—	16 - 19	—
SUMMARIES	—	20 - 27	—
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FENCE DETAILS		184	
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DRAINAGE DETAILS & QUANTITIES		253 - 278	
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Sheet removed from plans			
TOTAL SHEETS		154	158

LINE DATA ~

Length of proposed road = 0.6 (1,113 Feet or 0.142 Miles)
Length of Work.
For detail Calculation of Line Data, See Sheet No. 15

Note: The designation UI-UGI-316(2) is shown on the title sheet and markers only. The designation UI-UGI-316(1) shown elsewhere on the plan shall be considered as UI-UGI-316(2)

S.H. 987 SEC. CINCINNATI (PT.), SPRINGFIELD TWP. (PT.), LOCKLAND (PT.)

SCALES

Plan ..... 1" = 50 Ft.
Profile - Horizontal ..... 1" = 50 Ft.
Profile - Vertical ..... 1" = 5 Ft.
Cross Sections ..... 1" = 5 Ft.

Recommended for approval
D.P.R.A. 2-21-47

SUPPLEMENTAL SPECIFICATIONS

712	Rev'd 11-6-1946	T-110	2.1-8-8-9-1936
740	22nd " 7-1-1942		
720	" 7-1-1942	M-110.23	1-2-1947

SUPPLEMENTAL PRINTS OF STD. CONSTRUCTION DRAWINGS

M-1.7	10-1-1945	M-8 M.H. No. 2	5-1-1941	M-15 No. 2	2-1-1947
M-2	10-1-1945	M-8 M.H. No. 3	7-1-1941	M-16	2-1-1943
M-3, 3a, 3b, 4	2-20-1942	M-8	5-1-1941	M-16	2-10-1943
M-5 CB-1, 2, 10	12-15-1941	M-14 G	5-1-1941	M-17	2-1-1943
M-8 CB-13	7-1-1941	M-15 No. 1	5-1-1941	M-17	2-1-1943
M-8 CB-1	12-15-1941	M-15 No. 2	5-1-1941	M-5-47-F	4-18-1946
M-8 CB No. 2	12-15-1941	M-15 No. 3	5-1-1941	M-5-47-F	4-2-1943
M-8 CB No. 3	12-15-1941	M-15 No. 4	5-1-1941		
M-8 CB No. 4	12-15-1941	M-15 No. 5	5-1-1941		
M-8 CB No. 5	12-15-1941				

APPROVED FOR CITY OF CINCINNATI
By
Date ____ Director of Public Service
APPROVED FOR VILLAGE OF ARLINGTON HTS.
By C H Combe
Date 6-18-47 Mayor
APPROVED FOR CITY OF LOCKLAND
By
Date ____ Director of Public Service

The Standard Specifications of the State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the Proposal shall govern this Improvement.

The right of way for this Improvement will be provided by the State of Ohio.

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 in the General Notes. (see Sheet No. 16)

Approved: Roland E. Gray
Date 1-16-47 Assistant to Chief Engineer

Approved: _____
Date _____ Chief Engineer, Bureau of Maintenance

Approved: A.R. Sayre
Date 4-30-47 Chief Engineer, Bureau of Bridges & Grade Crossings

Approved: George J. Thompson
Date 7/28/47 Chief Engineer, Bureau of Location & Design

Approved: _____
Date _____ First Assistant Director & Chief Engineer

Approved: Murray D. Slusser
Date 7-22-47 Director of Highways

APPROVED FOR U.S.B.R.
By
Date ____ Chief Engineer

Recommended for approval:
District Engineer
Public Roads Administration
Federal Works Agency

Approved:
Division Engineer
Public Roads Administration
Federal Works Agency

FED. RD. DIVISION	STATE	F.A.P. NO. PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

2
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B" ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

P.I. = 78+70
Δ = 16°-04' Lt.
D = 1°-06'
T = 735.13'
R = 5208.71'
L = 1460.61'
E = 51.62'

VINE ST. — VINE ST. — S.H. 989 — PADDOCK RD. — S.H. 43 — ANTHONY WAYNE AVE. — 77th St. — 76th St. — 75th St. — 74th St. — 69th St.

C. W. & M. (C.C.C. & ST. LOUIS R.R.)

Sta. 40+81.93 – End of Work S.H. 43 – Sec. Cinti. (Pt.)

PINE ALLEY — MARKET ST. — LONGVIEW ST. — S.H. 781

2 ST. Br. | 1ST. Br. | 1ST. Fr. | 1 ST. Br. | 1ST. Fr. | 6 ST. Br. | 6 ST. Br. | 6 ST. Br. | 6 ST. Brick

Exist Driveway

Sta. 61+12.34 Begin Prop. N°1 of Fed. Proj. N°UI-UGI-316(1)
Begin Sec. Cinti. (Pt.)

STATE GARAGE

Cincinnati Corp. Line — Cincinnati

6 St. Brick | 6 St. Brick | 6 St. Brick

National Distillers — 2 St. Brick — 2 St. Brick

Sta. 71+39.87 P.C. — Sta. 81+95.47 P.T.

Tunnel — Prop. pedestrian overhead.

Cincinnati Hamilton Co.

℄ Prop. S.H. 987

Br. N° HA-25-93

Br. N° HA-25-91

MILL CREEK

Prop. Summit Rd. — Summit Rd. — SUMMIT RD.

Road to be vacated (Future) — Future Bridge — Future Fwy. — LONGVIEW HOSP. — SWIMMING POOL — LONGVIEW HOSPITAL 4 STY. BR.

Sta. 11+43 – Begin Work S.H. 781 Sec. Cinti. (Pt.)

Sta. 53+97 Begin Work (S.H. 987)

Sta. 68+32.81 End Sec. Cinti. (Pt.) Begin Sec. B

Sta. 15+16.11 – End Work S.H. 781 – Sec. Cinti. (Pt.)

PADDOCK RD. — ℄ 71st ST. — 2.4 Mi. to US 25 — S.R. 561 — 0.7 Mi. TO US 25

Sta. 18+33.80 – Begin Work S.H. 43 – Sec. Cinti. (Pt.)

Sta. 17+86.38 Begin Work S.H. 781 Sec. Cinti. (Pt.)

Sta. 19+50 – End Work S.H. 781 Sec. Cinti. (Pt.)

Stone Chapel

Pl. 26+00 El. 574.50 — Pl. 36+00 El. 564.20 — Pl. 52+40 El. 535.55 — Pl. 78+60 El. 548.00 — Pl. 90+00 El. 533.95

℄ Redick Road — ℄ Mill Creek Bridge — Edgemont Terrace — ABBIE PLACE — WOODLAND AVE. — SECTION AVE. — National Distillers

+30 % — -30% — 700' V.C. Non Passing S.D. 413' — 300' V.C. — 200 V.C. — +0.5% — -1.32% — 300' V.C. Non-Passing S.D. 550' — Non Passing S.D. 550' — -0.161% — +0.5% — H.W. 1945 — Non Passing S.D. 828'

Pl. 87+50 H.W. 1945.8

Datum 510

20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Profile along Prop. Freeway Scale – 250' = 1" Hor. 20' = 1" Vert.

SCHEMATIC PLAN

P.I. = 128+08.12
Δ = 18°-53'-54" Lt.
D = 1°-24'
R = 4082.56'
T = 607.92'
L = 1207.03'
E = 44.91'

Prop. Bridge — ANTHONY WAYNE AVE — ANTHONY WAYNE TURNOUT — Cincinnati Hamilton Co. — P.C. Sta. 122+00.20 — C.C.C. & St. L. R.R. — Cincinnati Arlington Heights — Sta. 150+36 – End Sec. Arlington Heights Begin Sec. Lockland (Pt.) — Lockland Corp. Line — ℄ Prop. S.H. 987 — Sta. 163+30 Existing Bridge N°HA-16-0.00 Reference Sta. 164+11.75

P.I. = 152+03.33
Δ = 28°-32'-30" Rt.
D = 2°-00'
R = 2864.73'
T = 729.59'
L = 1427.08'
E = 91.22'

P.C. Sta. 149+73.74 — P.T. Sta. 163+00.82

Sta. 179+86 – End Work (S.H. 987)

Sta. 127+39.2 End Sec. B Begin Sec. Arlington Heights — MILL CREEK — Arlington Heights — ℄ E. Hartwell — Hamilton Co. — HARTWELL AVE. — ELLIOTT AVE. — Fed. Project N° UI-UGI-316(1) Proposed N° 2 — ELLIOTT AVE. APPR. — MILL CREEK — ℄ C.C.C. & St. L. R.R. — EAST FORK — Sta. 175+41.12 – End Proposal N°2 of Fed. Proj. N°UI-UGI-316(1) End Sec. Lockland (Pt.) — PATTERSON ST. — LOCK ST. — WYOMING AVE.

Sta. 46+77.46 – End Part 2 of Fed. Proj. N° UI-UGI-316(1)(APPROACH) End Proposal N°2

Sta. 32+13.12 – End PART I UI-UGI-316(1)(APPROACH) Begin Part 2 of Fed. Proj. N°UI-UGI-316(1)(APPROACH)

P.I. 105+41 El. 541.76 — P.I. 125+00 El. 544.05 — P.I. 137+00 El. 538.05 — P.I. 143+00 El. 549.30 — P.I. 163+00 El. 539.10 — P.I. 180+00 El. 555.02

200' V.C. — -0.5% — +0.5% — H.W. 1945 — 0.161% — E1. 536.3 — 500' V.C. — A.W. 1945 – El. 540.1 — +2.20 % — +0.46 % — -0.24 % — +0.5

Non Passing S.D. 828' — Non Passing S.D. 828' — Non Passing S.D. 518' — Non Passing S.D. 1140'

105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180

Datum 510

Profile along Prop. Freeway Scale 250' = 1" Hor. 20' = 1" Vert.

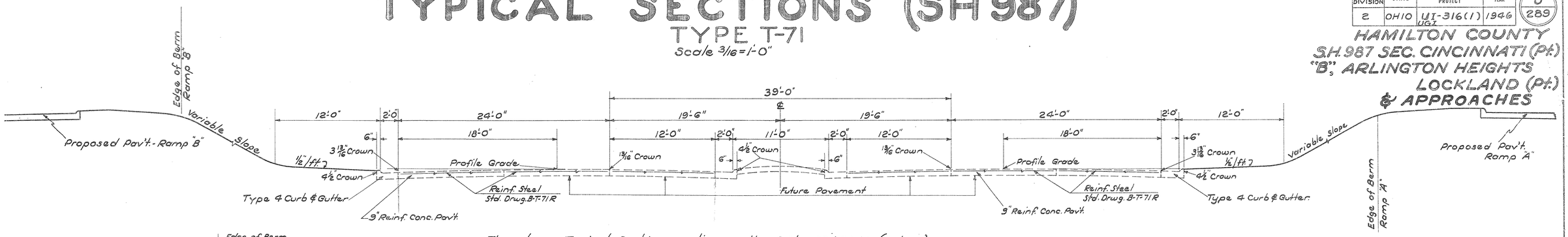
TYPICAL SECTIONS (SH 987)

TYPE T-71

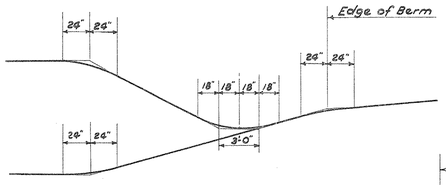
Scale 3/16=1'-0"

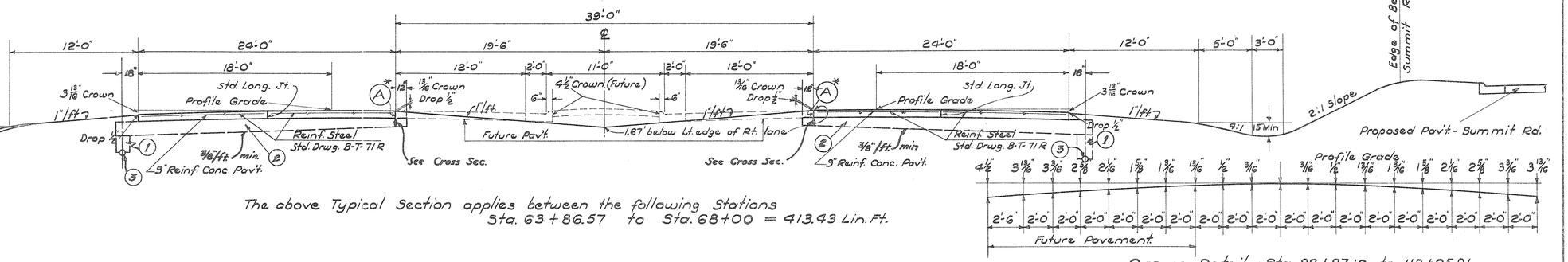
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR	3 / 289
2	OHIO	UI-316(1) UGI	1946	

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.)
"B", ARLINGTON HEIGHTS
LOCKLAND (Pt.)
& APPROACHES



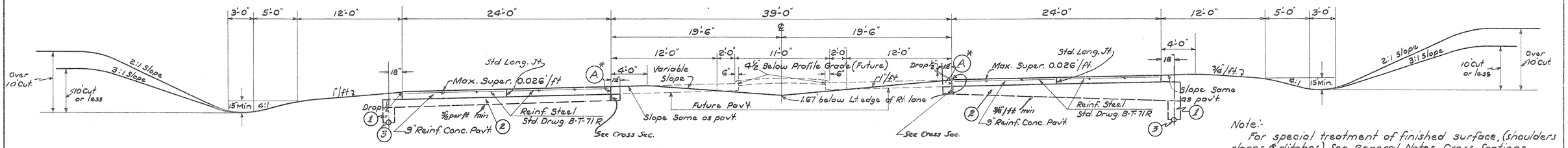
The above Typical Section applies south of Sta. 63+86.57 (Future)





The above Typical Section applies between the following Stations
Sta. 63+86.57 to Sta. 68+00 = 413.43 Lin. Ft.

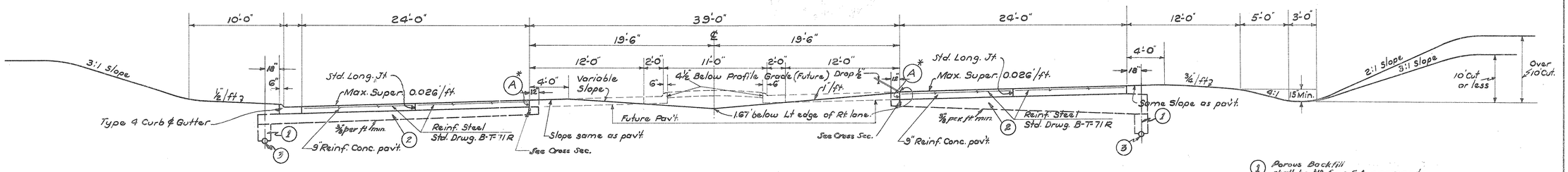
Crown Detail – Sta. 88+87.10 to 119+05.91



Note:-
For special treatment of finished surface, (shoulders slopes & ditches) See General Notes, Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch See Sheet Nº 14

The above Typical Section applies between the following Stations
Sta. 68+00 to Sta. 84+50 = 1650 Lin. Ft.



* See detail sheet Nº 9

The above Typical Section applies between the following Stations
Sta. 84+50 to Sta. 86+56.90 = 206.96 Lin. Ft.

Sta. 86+56.90 to Sta. 88+87.10 = Bridge

(1) Porous Backfill shall be Nº 6 or 6A aggregate.

(2) Classified Embankment Material Item 55-112 See Cross Sections

(3) Item 604 Pipe underdrain for location See Alignment Sheets & Cross Sections. For Details see Sheet Nº 15

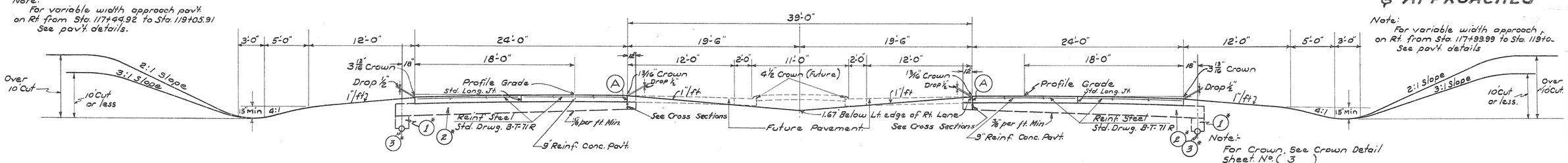
TYPICAL SECTIONS (SH 987)

TYPE T-71

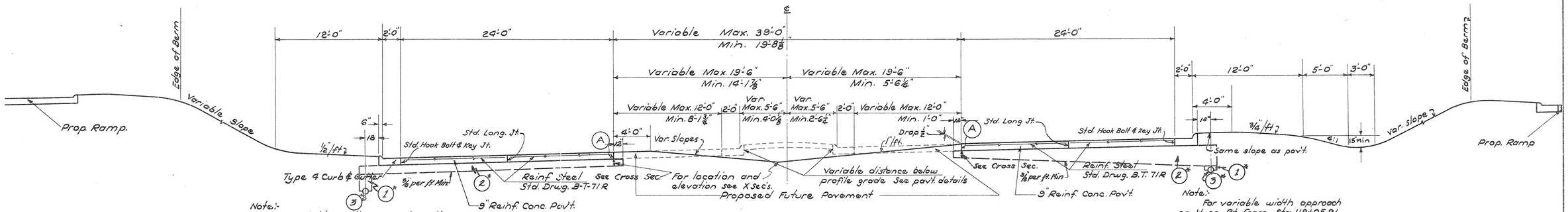
Scale 3/16"=1'-0"

FED. RD. DIVISION	STATE	FED.AID PROJECT	FISCAL YEAR	4 / 289
2	OHIO	UI-316(1) UGI	1946	

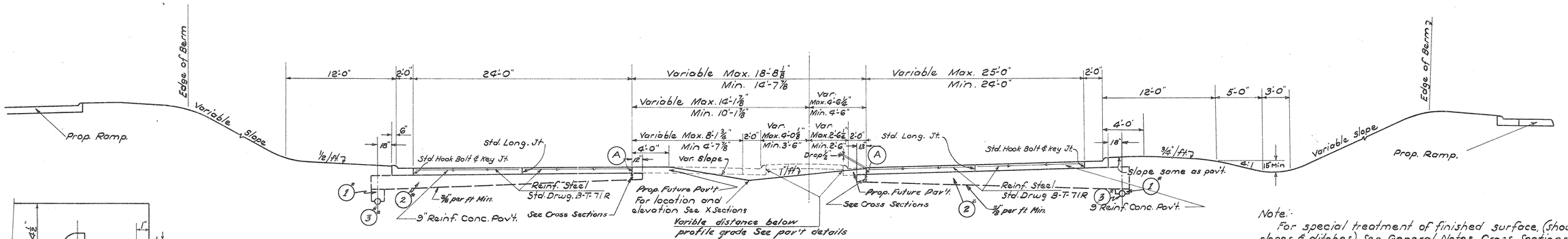
HAMILTON COUNTY
S.H.987 SEC. CINCINNATI (Pt.)
"B", ARLINGTON HEIGHTS
LOCKLAND (Pt.)
& APPROACHES



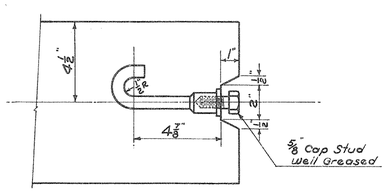
The above Typical Section applies between the following Stations
Sta. 88+87.10 to Sta. 119+05.91 = 3018.81 Lin. Ft.



The above Typical Section applies between the following Stations
Sta. 119+05.91 to Sta. 124+09.62 = 503.71 Lin. Ft.



The above Typical Section applies between the following Stations.
Sta. 124+09.62 to Sta. 124+94.80 = 85.18 Lin. Ft.



SPECIAL HOOK BOLT & KEY JOINT - DETAIL (A)
Scale 3"=1'-0"

Note:-
For special treatment of finished surface, (shoulders slopes & ditches) See General Notes, Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch See Sheet No 14

* See Notes on Sheet No 3

TYPICAL SECTIONS (SH 987)

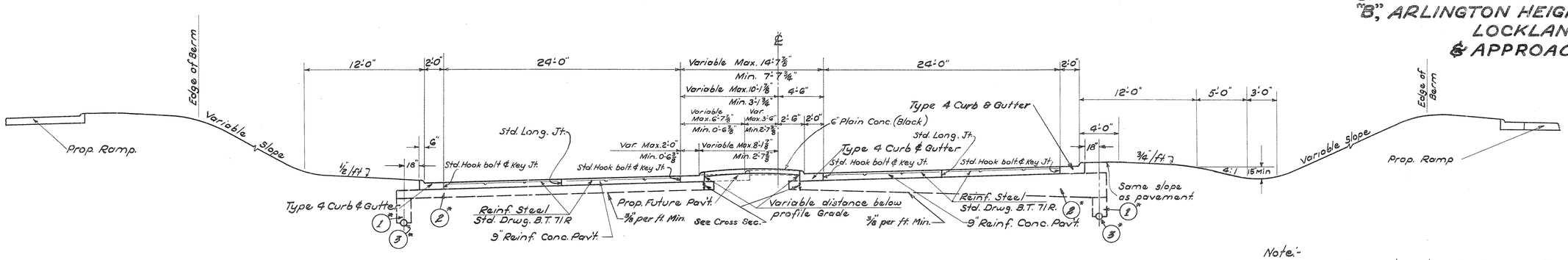
TYPE T-71

Scale 3/16=1'-0"

FED. RD. DIVISION	STATE	FED AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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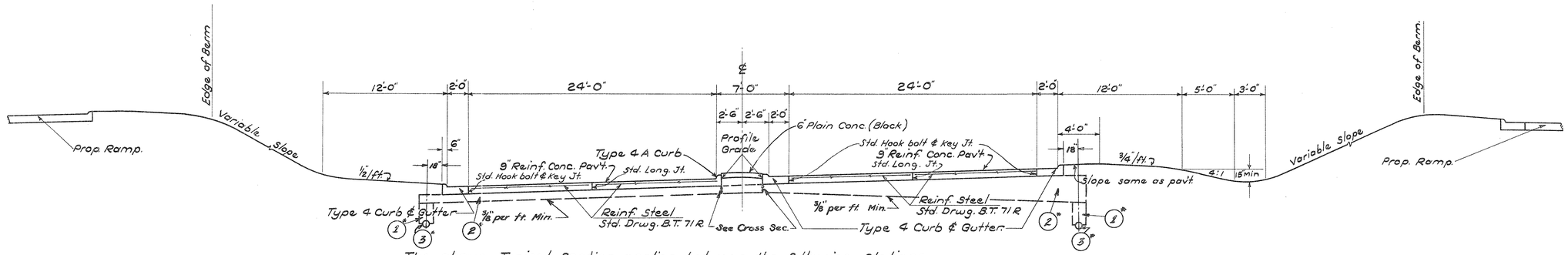
HAMILTON COUNTY
S.H.987 SEC. CINCINNATI (Pt.)
"B", ARLINGTON HEIGHTS
LOCKLAND (Pt.)
& APPROACHES



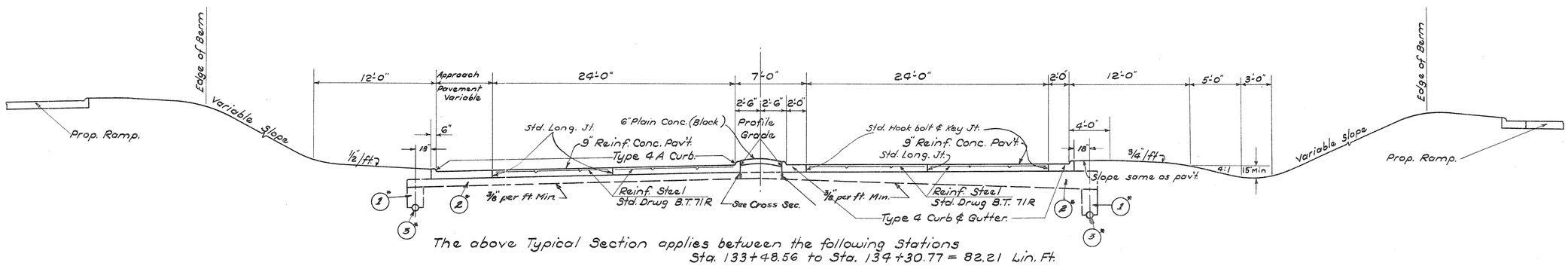
The above Typical Section applies between the following Stations
Sta. 124+94.80 to Sta. 127+50 = 255.20 Lin. Ft.

Note:-
For special treatment of finished surface, (Shoulders slopes & ditches) See General Notes, Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch See Sheet No 14.



The above Typical Section applies between the following Stations
Sta. 127+50 to Sta. 133+48.56 = 598.56 Lin. Ft.



The above Typical Section applies between the following Stations
Sta. 133+48.56 to Sta. 134+30.77 = 82.21 Lin. Ft.

* See Notes on Sheet No 3

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	U1-316(1) U61	1946

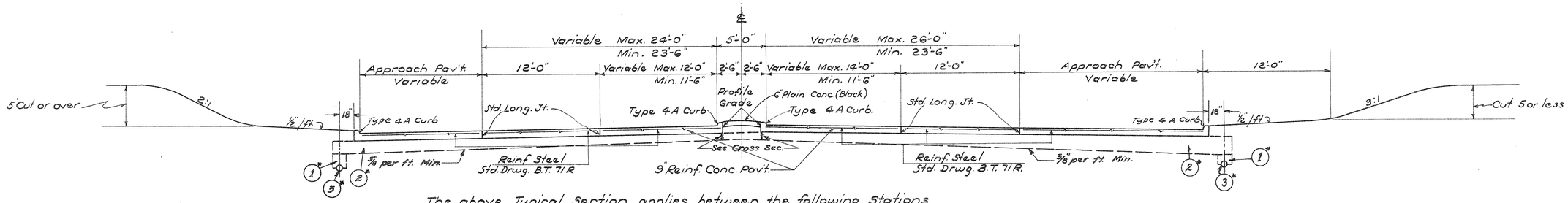
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TYPICAL SECTIONS (SH 987)

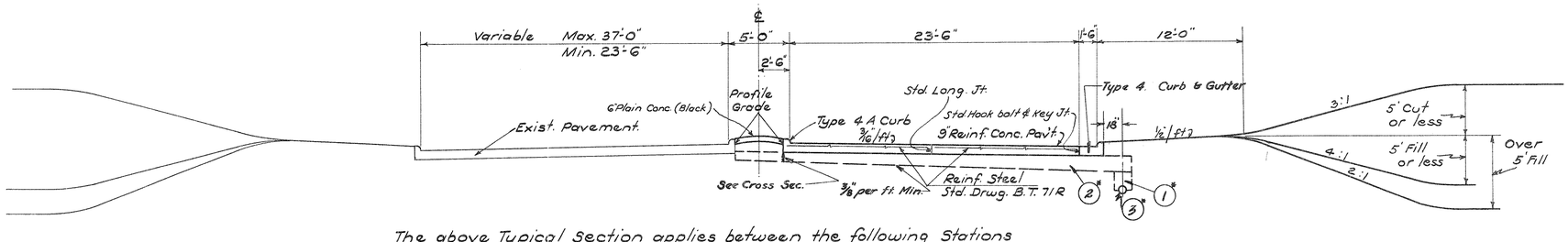
TYPE T-71

Scale 3/16"=1'-0"

HAMILTON COUNTY
S.H.987 SEC. CINCINNATI (Pt.)
"B," ARLINGTON HEIGHTS
LOCKLAND (Pt.)
& APPROACHES



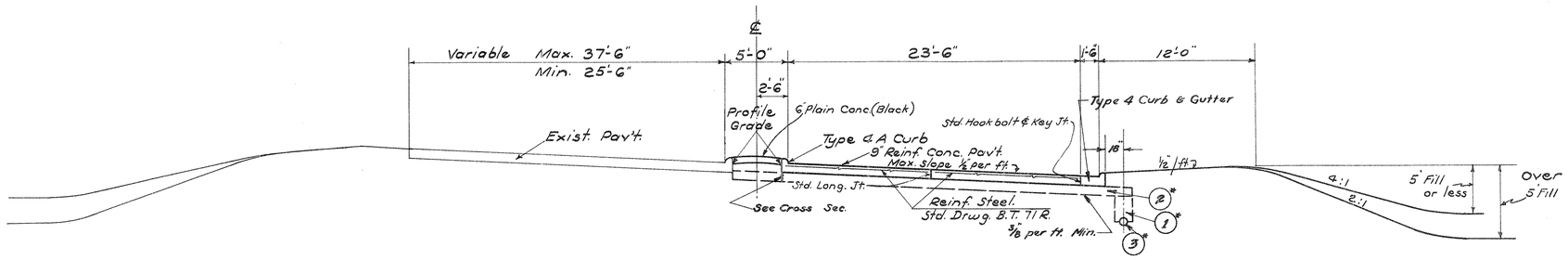
The above Typical Section applies between the following Stations
Sta. 134+30.77 to Sta. 136+50.70 = 219.93 Lin. Ft.



The above Typical Section applies between the following Stations

Sta. 136+50.70	to	Sta. 142+25	= 574.30	Lin Ft.
" 162+25	to	" 165+75	= 350.00	" "
" 167+26.75	to	" 172+03.33	= 476.58	" "
		Total	=1400.88	Lin. Ft.

Sta. 165+75 to Sta. 167+26.75 = Bridge.



The above Typical Section applies between the following Stations
Sta. 142+25 to Sta. 162+25 = 2000 Lin. Ft.

Note:-
For special treatment of finished surface (shoulders slopes & ditches) See General Notes. Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch See Sheet No 14

* See Notes on Sheet No 3

TYPICAL SECTIONS (SH 987)

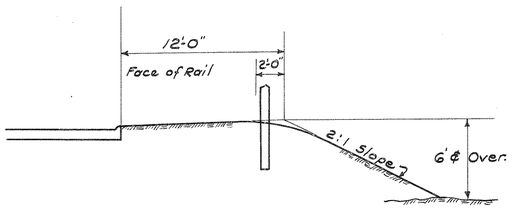
TYPE T-71

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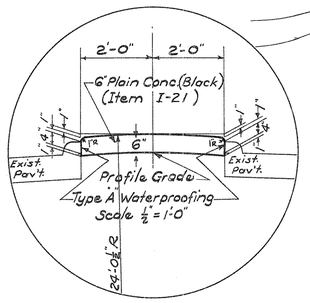
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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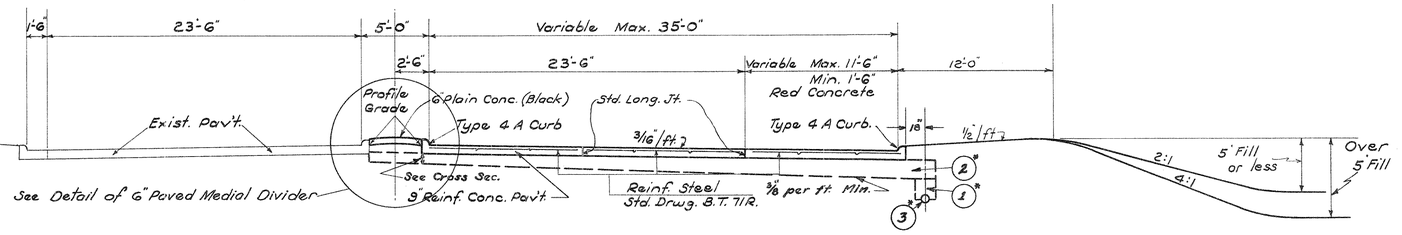
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.)
"B," ARLINGTON HEIGHTS
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& APPROACHES



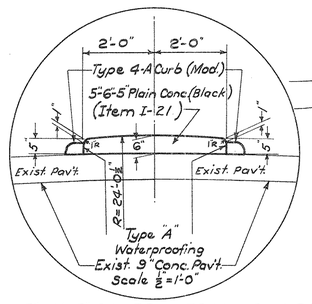
GUARD RAIL SECTION
(FILLS 6' ℄ OVER)
Scale 3/16" = 1'-0"



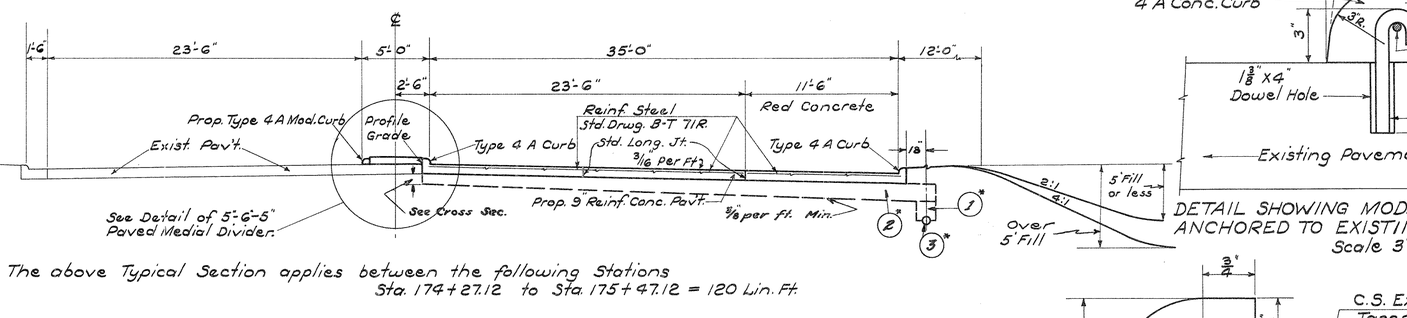
DETAIL OF 6" PAVED MEDIAL DIVIDER



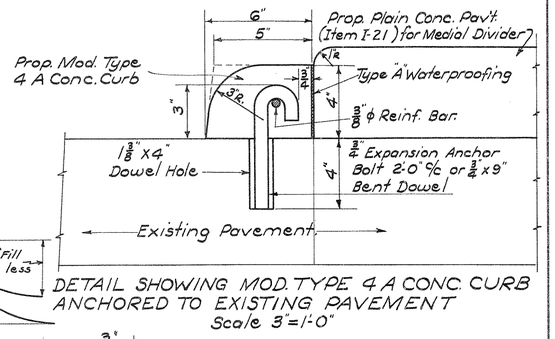
The above Typical Section applies between the following Stations
Sta. 172+03.33 to Sta. 174+27.12 = 223.79 Lin. Ft.



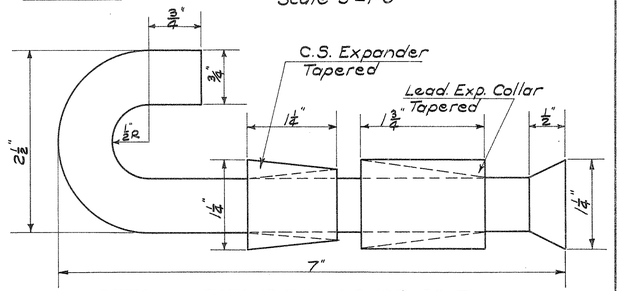
DETAIL OF 5'-6"-5" PAVED MEDIAL DIVIDER
This applies from Sta 175+47.12 to 179+00



The above Typical Section applies between the following Stations
Sta. 174+27.12 to Sta. 175+47.12 = 120 Lin. Ft.

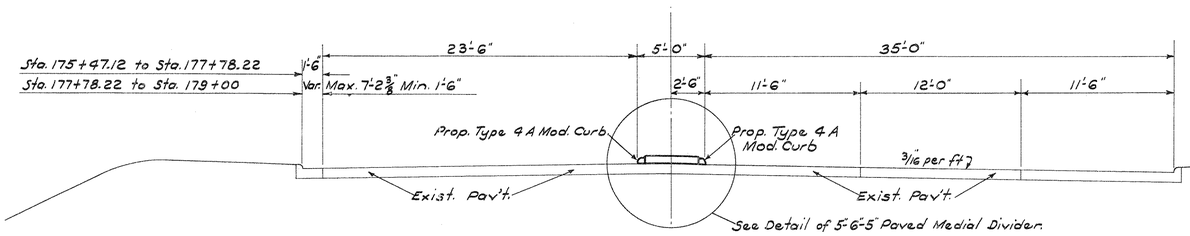


DETAIL SHOWING MOD. TYPE 4 A CONC. CURB
ANCHORED TO EXISTING PAVEMENT
Scale 3"=1'-0"

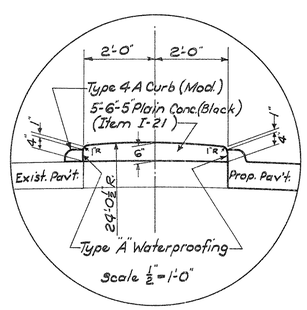


DETAIL OF EXPANSION ANCHOR BOLT
Scale = Full Size

Note: Price Bid per Lin. Ft. of Modified Type 4 A Concrete Curb includes all necessary Expansion Anchor Bolts, Dowel Holes & Reinf. Steel.



The above Typical Section applies between the following Stations
Sta. 175+47.12 to Sta. 179+00 = 352.88 Lin. Ft.



DETAIL OF 5'-6"-5" PAVED MEDIAL DIVIDER
This applies from Sta 174+27.12 to Sta. 175+47.12

Notes:-

For special treatment of finished surface, (shoulders slopes & ditches) See General Notes, Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch See Sheet Nº 14

* See Notes on Sheet Nº 3

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGT	1946

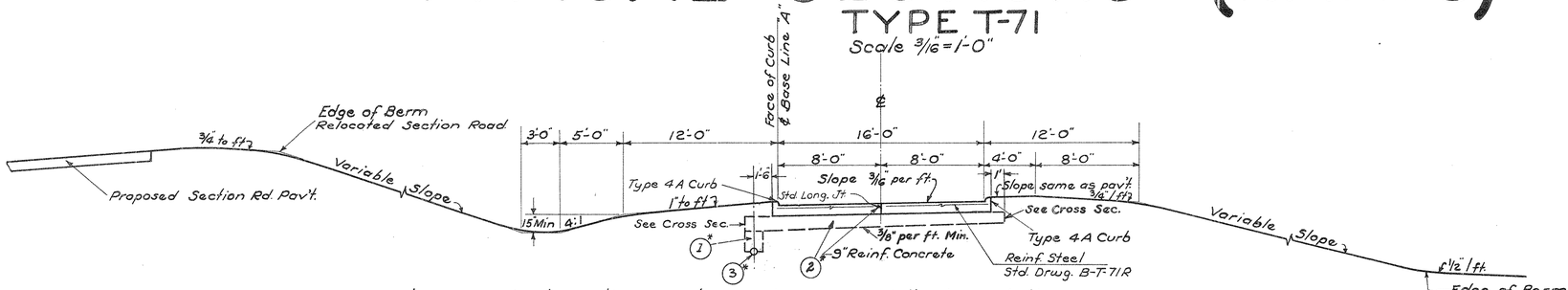
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.)
"B", ARLINGTON HEIGHTS
LOCKLAND (PT.)
& APPROACHES

TYPICAL SECTIONS (RAMPS)

TYPE T-71

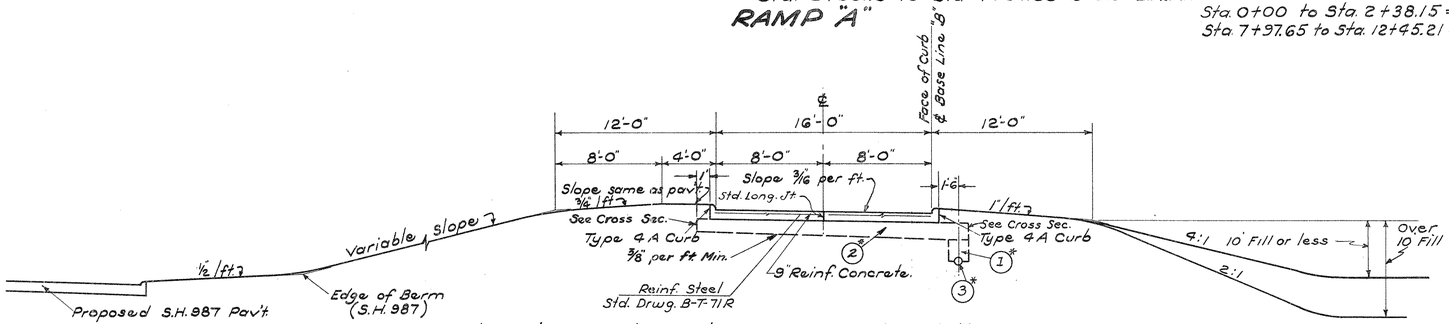
Scale 3/16"=1'-0"



The above Typical Section applies between the following stations
Sta. 2+38.15 to Sta. 7+97.65 = 559.50 Lin. Ft.

Sta. 0+00 to Sta. 2+38.15 = Approach
Sta. 7+97.65 to Sta. 12+45.21 = Approach

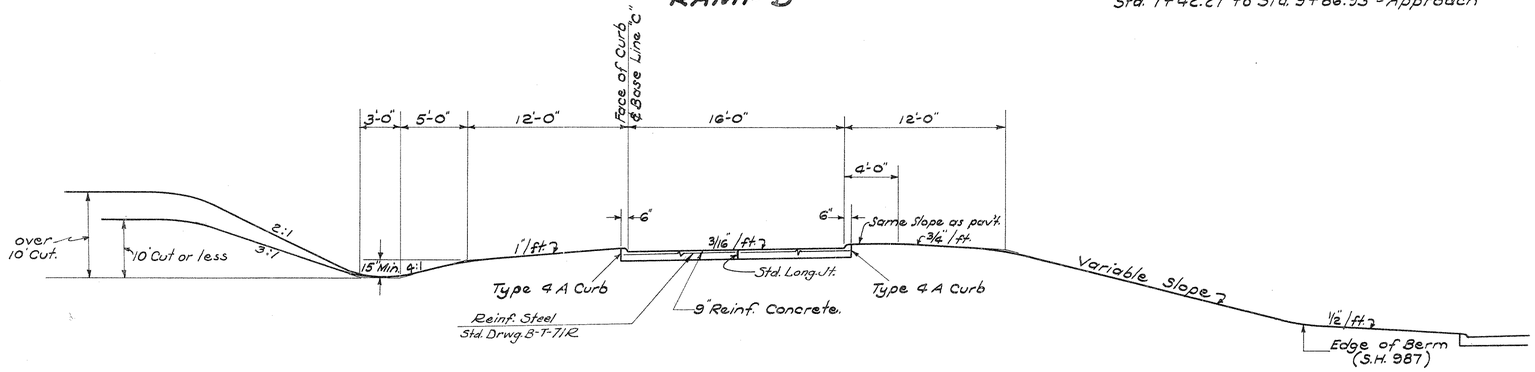
RAMP "A"



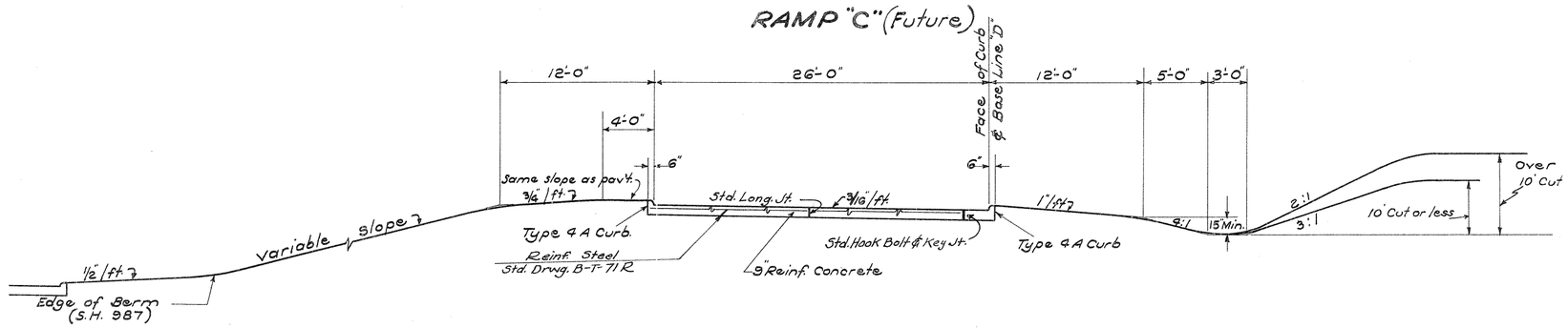
The above Typical Section applies between the following stations
Sta. 2+81.69 to Sta. 7+42.27 = 460.58 Lin. Ft.

Sta. 0+00 to Sta. 2+81.69 = Approach
Sta. 7+42.27 to Sta. 9+86.93 = Approach

RAMP "B"



RAMP "C" (Future)



RAMP "D" (Future)

Note:-
For special treatment of finished surface, (shoulders slopes & ditches) See General Notes, Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch See Sheet No 14

* See Notes on Sheet No 3

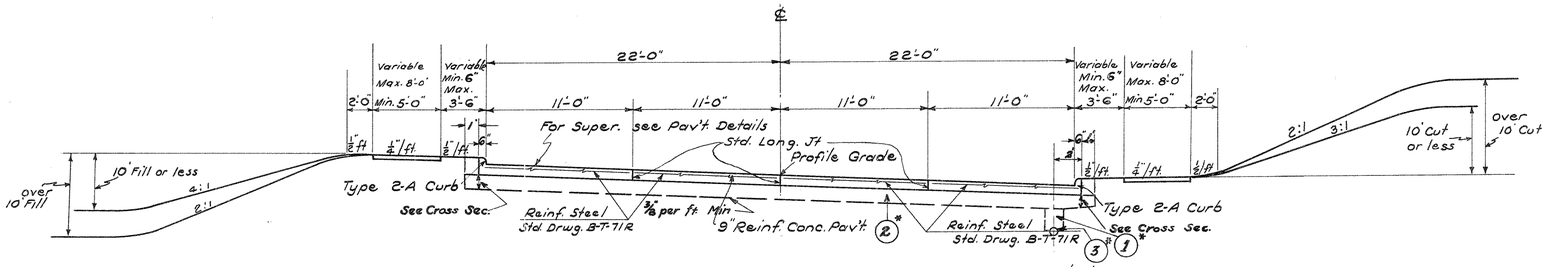
TYPICAL SECTIONS (PADDOCK RD.)

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR	9
2	OHIO	UI-316(1) UGI	1946	289

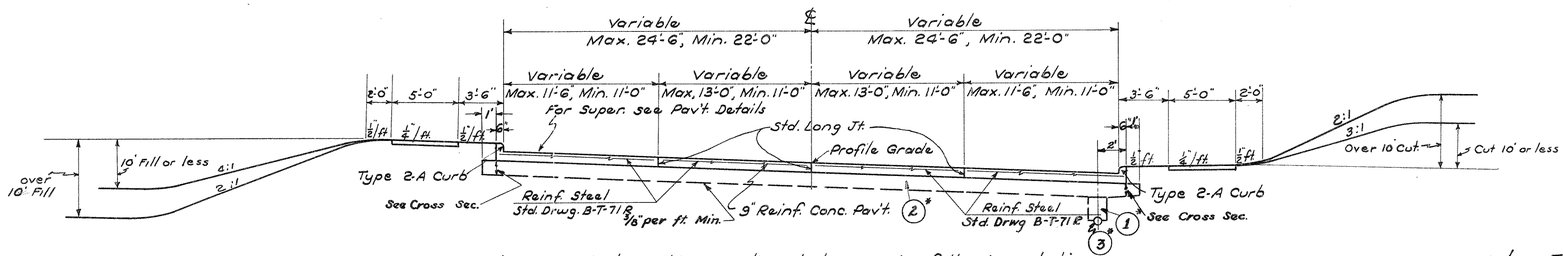
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

TYPE T-71

Scale 3/16"=1'-0"



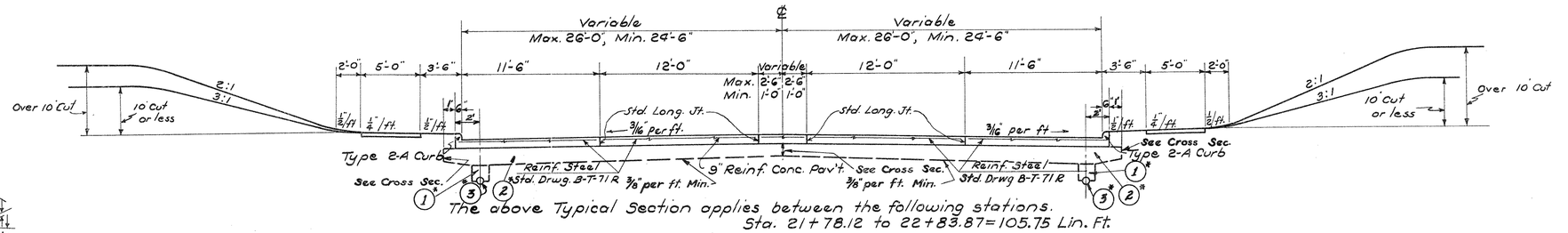
The above Typical Section applies between the following stations
Sta. 15+33.80 to 20+01.87 = 468.07 Lin. Ft.



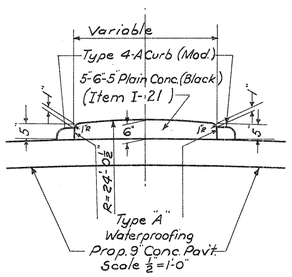
The above Typical Section applies between the following stations
Sta. 20+01.87 to 21+78.12 = 176.25 Lin. Ft.

Note: For special treatment of finished surface (shoulders, slopes and ditches) see General Notes, Cross Sections & Alignment Sheets

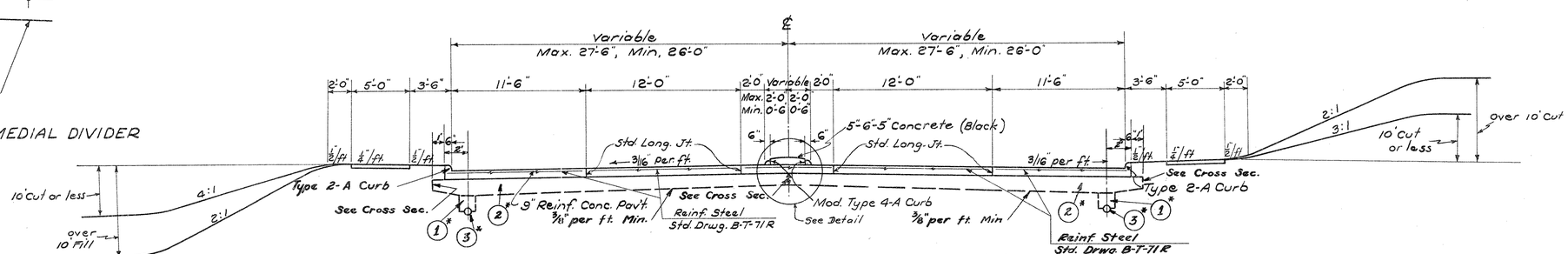
For Guard Rail Detail & Detail of Sodded Ditch
See Sheet No 14



The above Typical Section applies between the following stations.
Sta. 21+78.12 to 22+83.87 = 105.75 Lin. Ft.



DETAIL OF 5'-6"-5" PAVED MEDIAL DIVIDER



The above Typical Section applies between the following stations.
Sta. 22+83.87 to 23+89.62 = 105.75 Lin. Ft.

* See Notes on Sheet No 3

TYPICAL SECTIONS (PADDOCK RD. CONTD.)

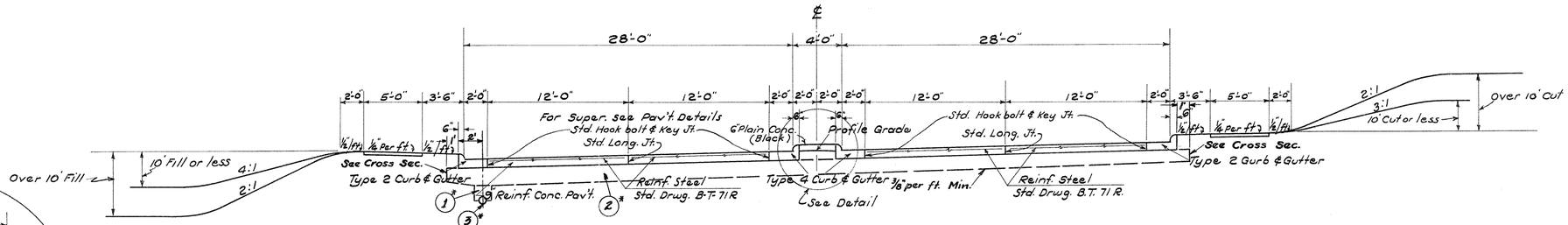
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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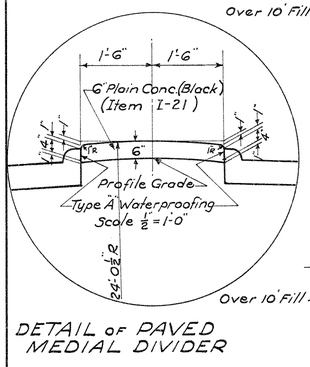
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS LOCKLAND (PT.) AND APPROACHES

TYPE T-70 & T-71

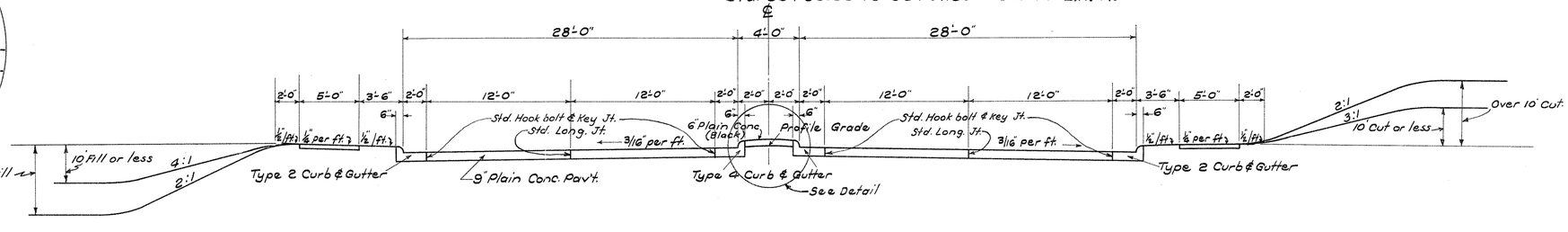
Scale 3/16" = 1'-0"



The above Typical Section applies between the following stations
Sta. 23+89.62 to 32+51.25 = 861.63 Lin. Ft.



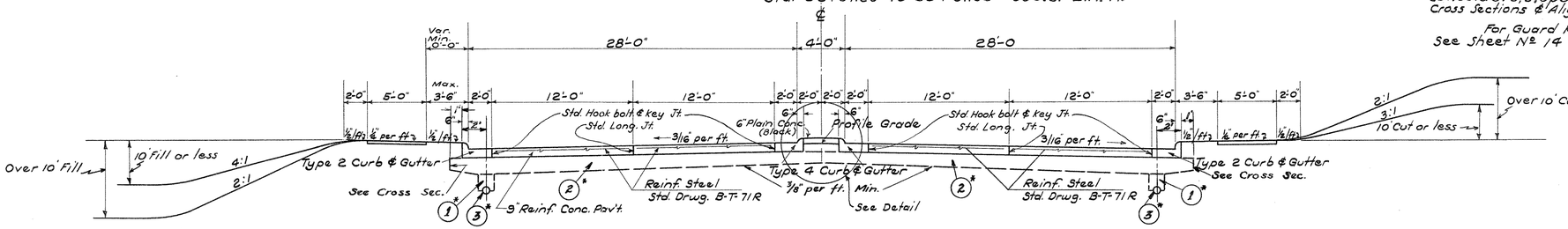
DETAIL of PAVED MEDIAL DIVIDER



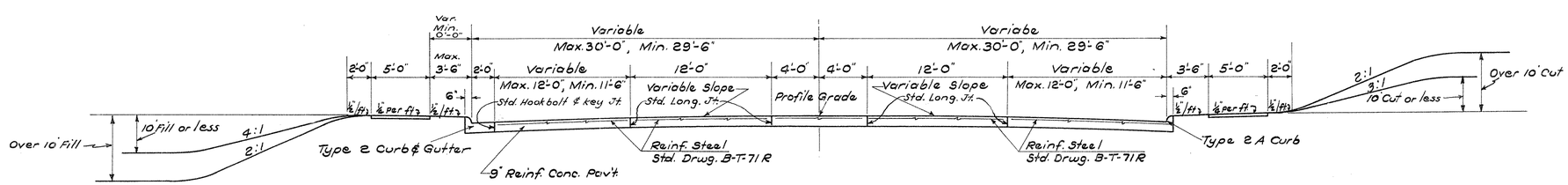
The above Typical Section applies between the following stations
Sta. 32+51.25 to 35+81.56 = 330.31 Lin. Ft.

Note: For Special Treatment of Finished Surface (Shoulders, Slopes and Ditches) see General Notes Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch See Sheet No. 14



The above Typical Section applies between the following stations
Sta. 35+81.56 to 38+86.23 = 304.67 Lin. Ft.



The above Typical Section applies between the following stations
Sta. 38+86.23 to 39+70.70 = 84.47 Lin. Ft.

* See Notes on Sheet No. 3

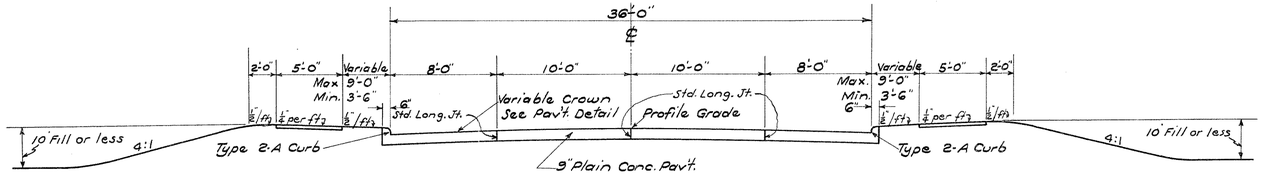
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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TYPICAL SECTIONS

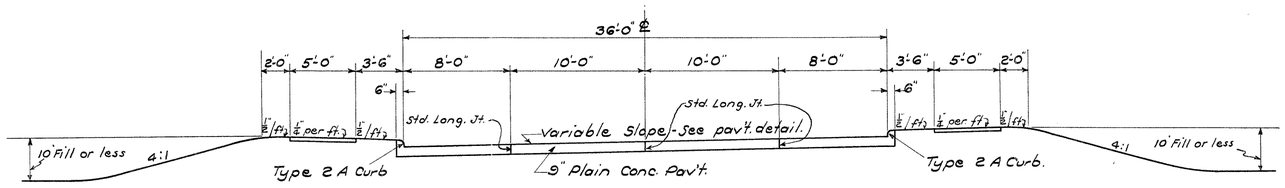
TYPE T-70 & T-71

Scale 3/16" = 1'-0"



The above Typical Section applies between the following stations
Sta. 11+49 to 13+06.13 = 157.13 Lin. Ft.

71st STREET

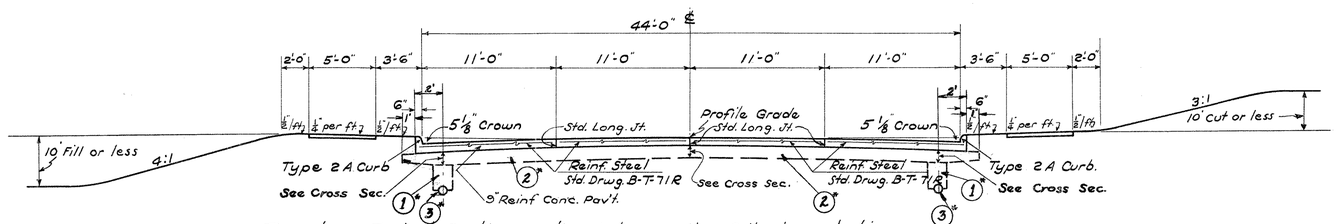


The above Typical Section applies between the following stations
Sta. 13+06.13 to 15+50 = 243.87 Lin. Ft.

71st STREET

Note: For Special Treatment of Finished Surface (Shoulders, Slopes and ditches) see General Notes, Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch see Sheet Nº 14



The above Typical Section applies between the following stations
Sta. 17+86.98 to 19+00 = 113.07 Lin. Ft.

SEYMOUR AVE.

* See Notes on Sheet Nº 3

TYPICAL SECTIONS (SUMMIT ROAD.)

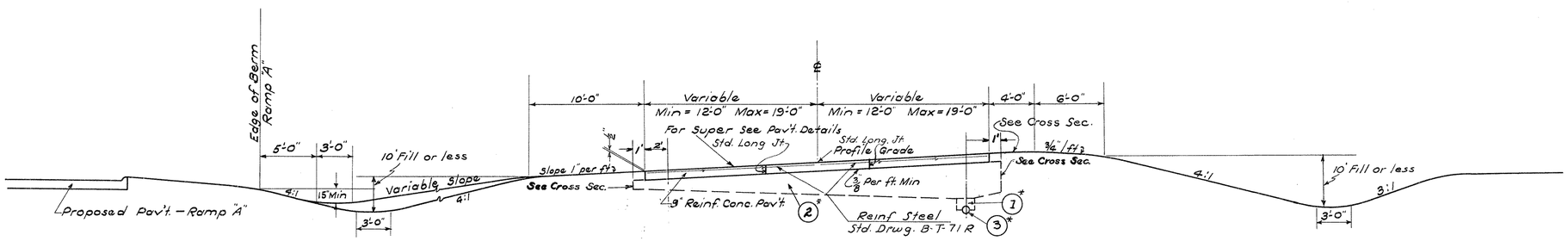
TYPE T-71

Scale 3/16 = 1'-0"

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGT	1946

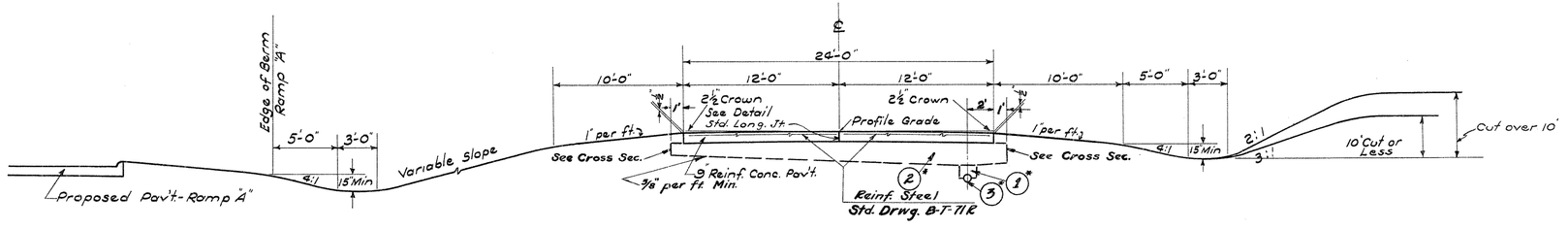
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

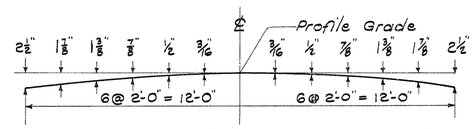


The above Typical Section applies between the following stations
Sta. 2+49.83 to 5+55 = 305.17 Lin Ft.

Sta. 0+00 to Sta. 2+49.83 = Approach.



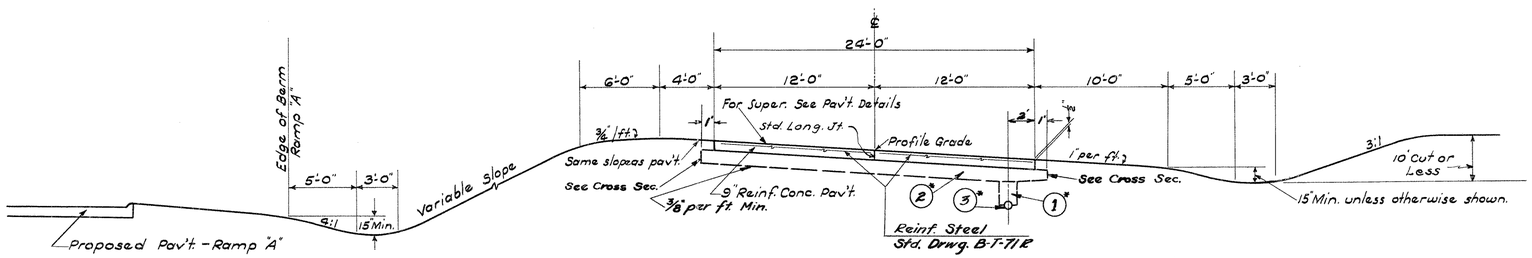
The above Typical Section applies between the following stations
Sta. 5+55 to 9+00 = 345.00 Lin. Ft.



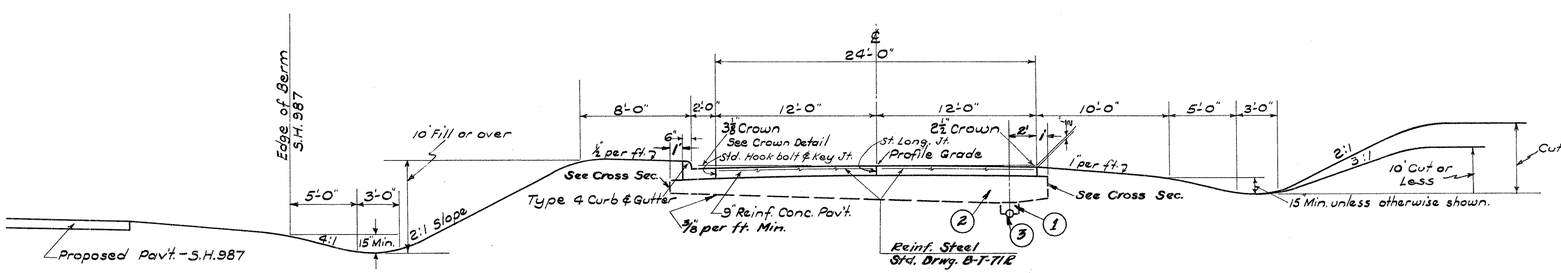
Crown Detail ~ Normal 24' Pav't.

Note: For special treatment of Finished Surface (Shoulders, Slopes and ditches) see General Notes, Cross Sections & Alignment Sheets.

For Guard Rail Detail & Detail of Sodded Ditch See Sheet Nº 14

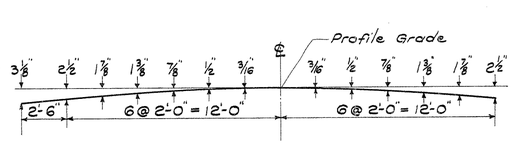


The above Typical Section applies between the following stations
Sta. 9+00 to 14+25 = 525.00 Lin. Ft.



The above Typical Section applies between the following stations
Sta. 14+25 to 25+12.36 = 1087.36 Lin. Ft.

Sta. 25+12.36 to Sta. 27+21.79 = Approach



Crown Detail - Normal 26' Pav't.

* See Notes on Sheet Nº 3

TYPICAL SECTIONS (SUMMIT RD.)

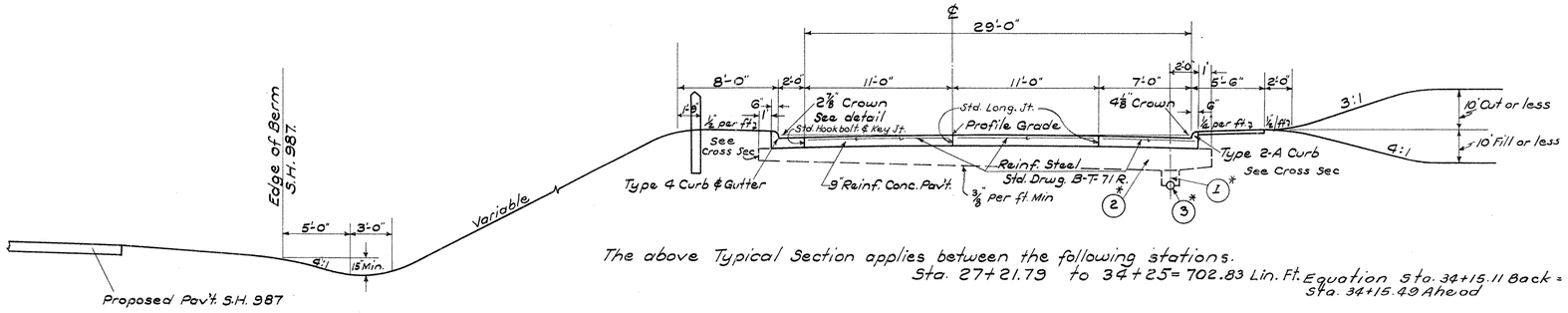
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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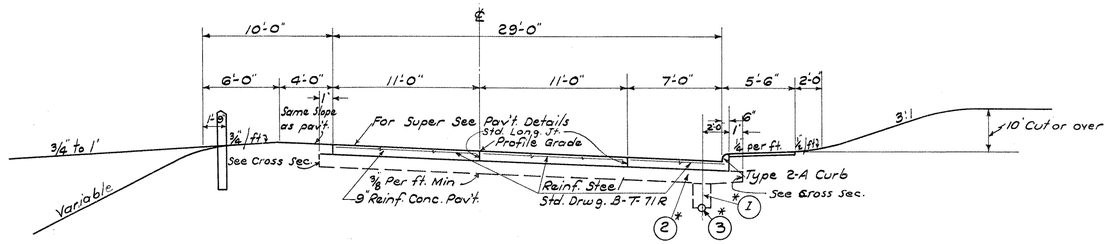
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

TYPE T-71

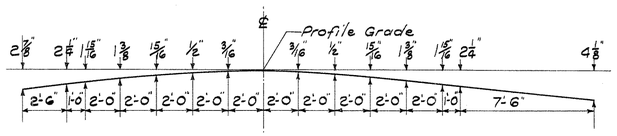
Scale 3/16" = 1'-0"



The above Typical Section applies between the following stations.
Sta. 27+21.79 to 34+25 = 702.83 Lin. Ft. Equation Sta. 34+15.11 Back = Sta. 34+15.49 Ahead



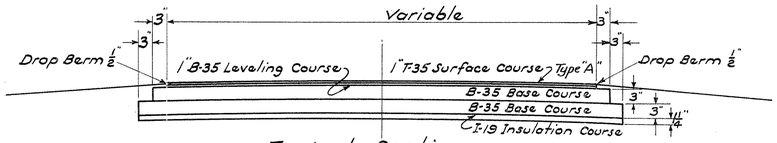
The above Typical Section applies between the following stations
Sta. 34+25 to Sta. 37+32.61 = 692.39 Lin. Ft.



Crown Detail – Normal 31' Pav't.

Note: For special treatment of Finished Surface (Shoulders, slopes and ditches) see General Notes, Cross Sections & Alignment Sheets.

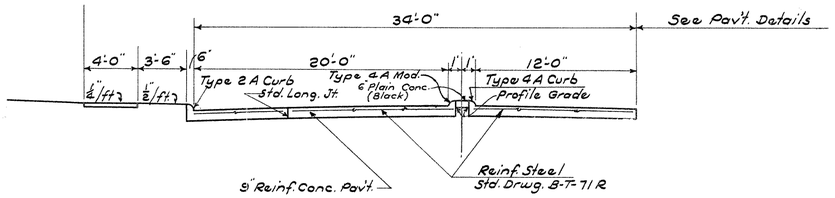
For Guard Rail Detail & Detail of Sodded Ditch See Sheet Nº 14



Typical Section

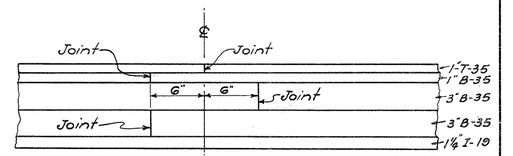
Woodland Ave. Sta. 0+30.39 to Sta. 1+22 = 91.61 Lin. Ft.

Approach Sta. 37+32.61 to Sta. 38+00 = 67.39 Lin. Ft.
Sta. 38+00 to Sta. 38+31 = Flare



Typical Section

Section Road Sta. 10+06.12 to Sta. 11+42.35 = 136.23 Lin. Ft.



METHOD OF LAPPING LONGITUDINAL JOINTS.

* See Notes on Sheet Nº 3

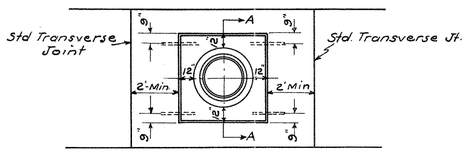
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGT	1946

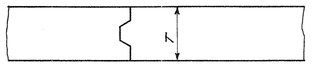
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

PAVEMENT SYMBOLS.

	9" Reinforced Conc. Pav't. (Red)	
	6" Plain Conc Pav't.	(Item T-70)
	6" Plain Conc. Median (Black)	(Item I-21)
	6" Plain Conc. Pav't. (Trowel Finish)	(Item T-70)
	5"-6"-5" Plain Conc. Median (Black)	(Item I-21)
	7"-8"-7" Plain Conc. Median (Black)	(Item I-21)
	10"-11"-10" Plain Conc. Median (Black)	(Item I-21)
	11" Plain Conc. Pav't.	(Item T-70)
	4" Conc. Sidewalk	(Item I-13)
	Bit. Base & Bit. Surface (Full Depth Const.)	(Item T-35, B-35, I-19)
	Bit. Surface & Leveling (Var. Thick)	(Item T-35, B-35, T-30)
Sod	Sod.	(Item L-10)
	Dumped Rock Fill (Toe Protection)	(Item I-10)
	Riprap	(Item I-10)
I-17	Side Approaches, Mail Box Turnouts and Berm Material.	(Item I-17)
	Bit. Surface (Var. Thick)	(Item T-35)

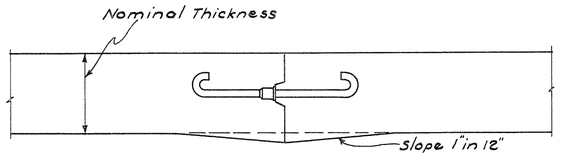




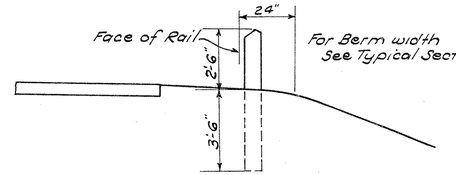
SECTION A-A

DETAIL PLAN OF CONSTRUCTION JOINTS FOR MANHOLES IN CONCRETE PAVEMENT.

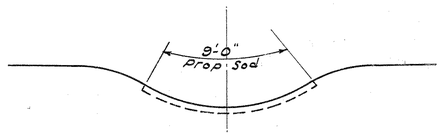
Note:- For details of pavement joints at Manholes in paved medians on Paddock Road See Sheet No 261



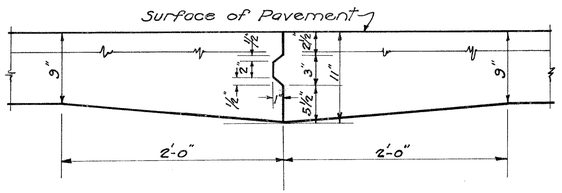
Acceptable method of using form of greater depth than nominal thickness of pavement.
Extra concrete included in price bid per sq. yd. of nominal thickness pavement.



GUARD RAIL SECTION
For location see Cross Sec & Alignment Sheets.



DETAIL OF SOD IN DITCHES
For location see Alignment Sheets.

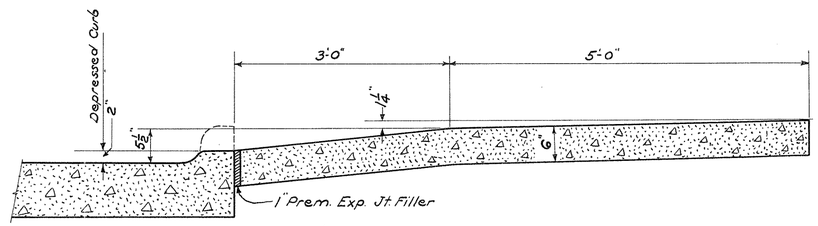


DETAIL OF KEY JOINT WITH THICKENED EDGES
(No Dowel Bars Thru Joint)

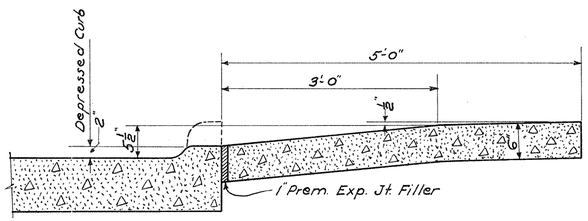
NOTE: Payment for extra concrete due to thickened edge included in price bid per Sq. Yd. of T-71 Pav't. (Nominal thickness)

JOINT LEGEND.

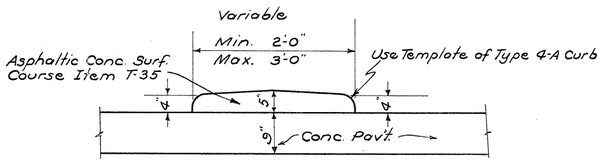
Standard Longitudinal Joint	L
Longitudinal Key & Hook Bolt Joint	LH
Longitudinal Constr. Joint with thickened edges & without dowels	LT
Longitudinal Const. Jt. with hook bolts & thickened edges.	LTH
Special Hook Bolt & Key Joint (See Detail on Sheet No.)	LS
Standard Contraction Joint.	C
Standard Expansion Joint.	E
Expansion Joint without dowels & with thickened edges.	ET



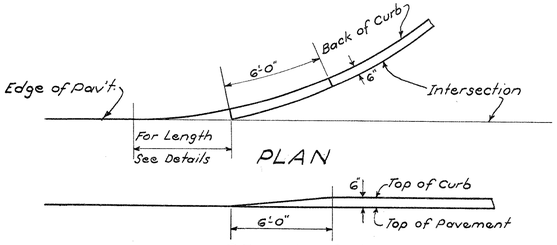
SECTION on ℄ DRIVE
Construction Details for all Drives with Sidewalk back from Curb



SECTION on ℄ DRIVE
Construction Details for all Drives with Sidewalk adjacent to Curb.



DETAIL of TEMPORARY MALL on S.H. 987
Sta. 61+46.54 to Sta. 63+51.50 Rt.
Sta. 61+12.34 to Sta. 63+44.50 Lt.



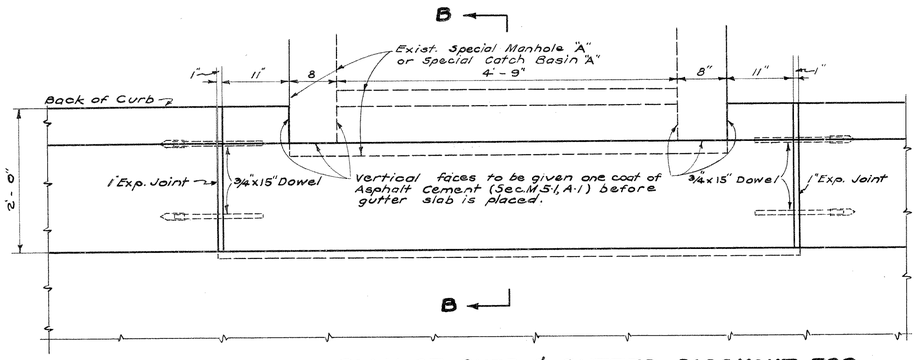
PROFILE ON FACE OF CURB

DETAIL SHOWING CONSTRUCTION OF TYPE 2-A CONCRETE CURB ON LONGVIEW INTERSECTIONS

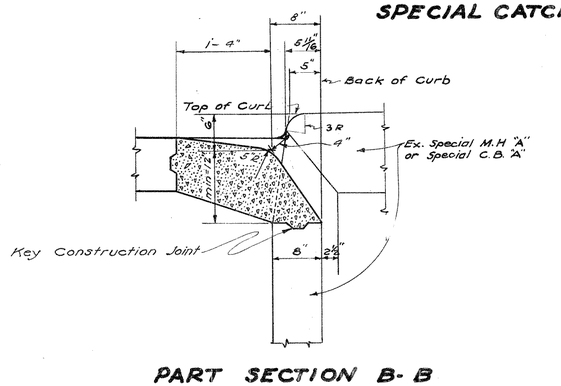
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) AND APPROACHES



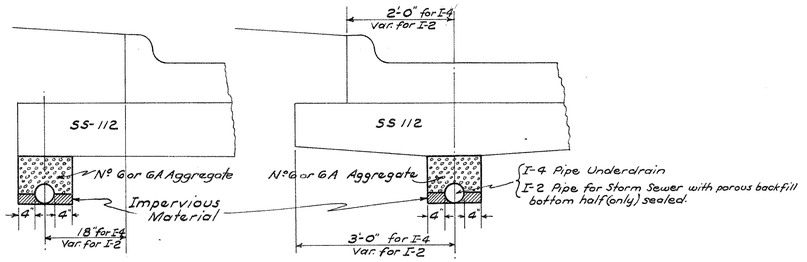
PLAN OF CURB & GUTTER BLOCKOUT FOR EXISTING SPECIAL MANHOLE "A" AND SPECIAL CATCH BASIN "A"



PART SECTION B-B

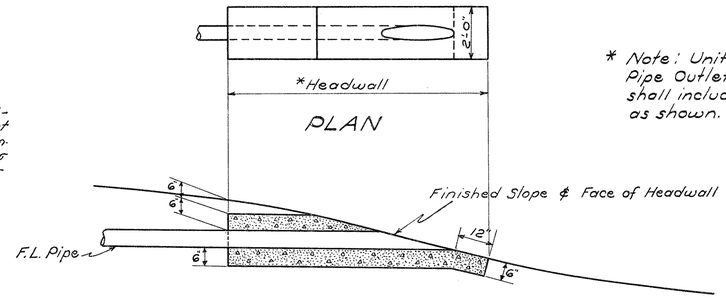
—NOTE—

Adjust front wall of existing SPECIAL MANHOLE "A" and SPECIAL CATCH BASIN "A" so that the distance from top of curb to Key Construction Joint, shall be a minimum of 1'-6". The adjustment of the front wall, the pavement for the Blockout, 1" Bituminous Premolded Expansion Joint Material & Dowels, shall be included in Price Bid for Item 1-12 TYPE 4 Concrete Curb and Gutter.



DETAILS OF POROUS BACKFILL

For location see Drain. Detail Sheets or Alignment Sheets



* Note: Unit price bid per lin ft. for Pipe Outlets for Underdrains shall include complete Headwall as shown.

SECTION OF HEADWALL

DETAIL OF 6" PIPE OUTLETS FOR UNDERDRAINS

Note: For location of Pipe Underdrains See Drain. Details & Alignment Sheets.

—LINE DATA.—

Begin Proposal N°1 Fed. Aid Project N° UI-UGI- 316 (1) & Begin Sec. Cincinnati (Pt.)	(Sta. 61+12.34)
End Sec. Cincinnati (Pt.)	(Sta. 68+32.81)
Length of Cincinnati (Pt.) (Municipal)	720.47 Lin. Ft.
Begin Sec. B	(Sta. 68+32.81)
End Sec. B	(Sta. 127+59.20)
Length of Sec. B (Rural)	5926.39 Lin. Ft.
Begin Sec. Arlington Heights	(Sta. 127+59.20)
End Sec. Arlington Heights	(Sta. 150+96.00)
Length of Arlington Heights (Municipal)	2336.80 Lin. Ft.
Begin Sec. Lockland (Pt.)	(Sta. 150+96.00)
End Proposal N°1 Fed. Aid Proj. N° UI-UGI - 316(1) & End Lockland (Pt.)	(Sta. 175+47.12)
Gross Length Sec. Lockland (Pt.)	2451.12 Lin. Ft.
Deduct for Bridge (No work required) Sta. 165+90 to Sta. 167+11.75 =	121.75 Lin. Ft.
Net Length of Sec. Lockland (Pt.) (Municipal)	2329.37 Lin. Ft.
Total Length of S.H. 987 (Municipal)	5386.64 Lin. Ft.
Total Length of S.H. 987 (Rural)	5926.39 Lin. Ft.
Total Length of Proposal N°1 (Fed. Proj. N° UI-UGI-316(1))	11313.03 Lin. Ft. or 2.142 Mi.
Add for work S.H. 987 Sta. 53+97 to Std. 61+12.34	715.34 Lin. Ft.
Add for work S.H. 987 Sta. 175+47.12 to Sta. 179+86	438.88 Lin. Ft.
Add for work S.H. 43 Sec. Cincinnati (Pt.) Sta. 15+33.80 to Sta. 40+81.93	2548.13 Lin. Ft.
Add for work S.H. 781 Sec. Cincinnati (Pt.) Sta. 11+49 to Sta. 15+16.11	367.11 Lin. Ft.
Add for work S.H. 781 Sec. Cincinnati (Pt.) Sta. 17+86 to Sta. 19+50	164.00 Lin. Ft.
Add for work Proposal N° 2	2882.04 Lin. Ft.
Total length of work.	18428.53 Lin. Ft. or 3.490 Mi.

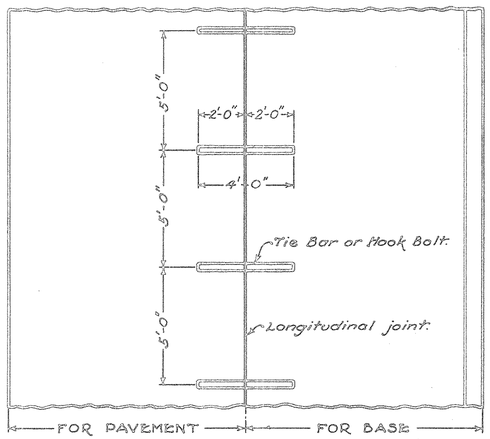
LONGITUDINAL JOINTS

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

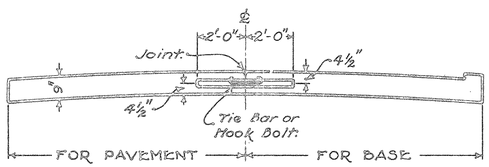
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS LOCKLAND (PT.) & APPROACHES

TIE BAR OR HOOK BOLT SPACING

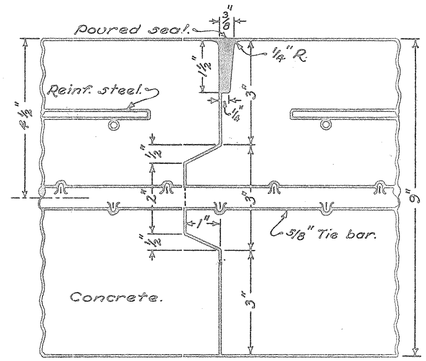


PLAN



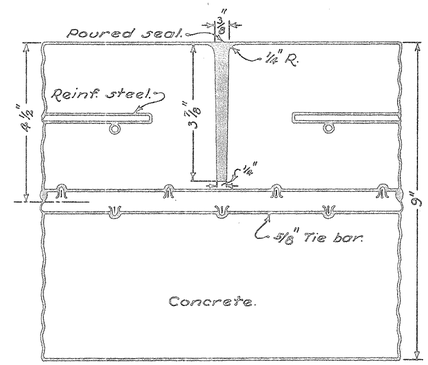
CROSS SECTION

KEY JOINT



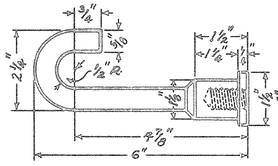
DETAIL OF JOINT

IMPRESSED JOINT

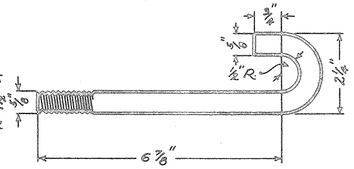


DETAIL OF JOINT

HOOK BOLT

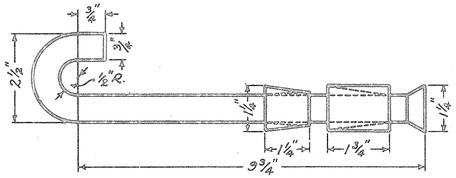


INSERT

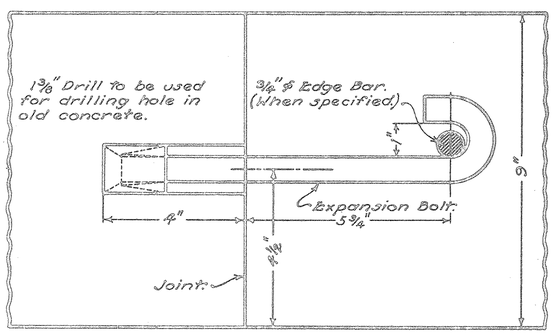


J BOLT

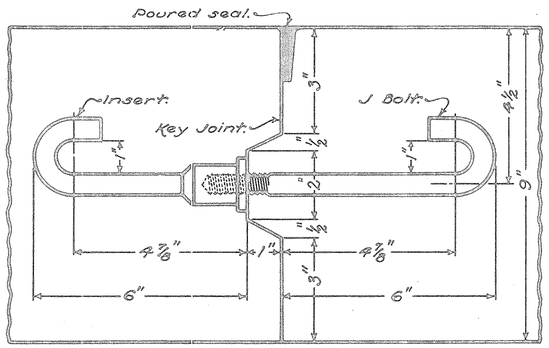
EXPANSION BOLT



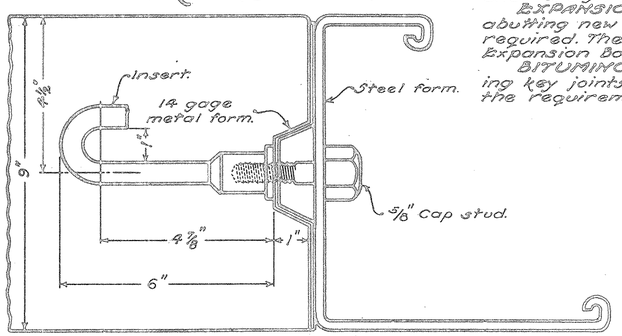
EXPANSION BOLT JOINT



HOOK BOLT AND KEY JOINT



ACCEPTABLE METHOD OF FORMING JOINT



NOTES

GENERAL:- Longitudinal joints shall be used when called for on the typical section, and shall be constructed as shown on this sheet.

Tie bars to be ⅝ inch round, deformed bars.

A satisfactory device shall be used to hold the tie bars in proper position.

The longitudinal joint between adjoining slabs poured in separate operations shall be a key joint with American hook bolts or equal, or billet steel (Sec. M-7.1) tie bars unless otherwise shown on the plans.

If tie bars are bent no portion of the bend shall extend into the first slab poured.

Immediately prior to placing the second slab, bent tie bars shall be straightened by means of a pipe slipped over the free end of the bar.

Key joints used in part width construction shall be painted with two coats of bituminous material as per Sec. M-5.5 MS-3 before adjoining slabs are poured.

The joints shall be on the center line unless otherwise shown on the plans.

Special care shall be exercised in edging impressed joints that the width of the opening does not exceed that shown.

IMPRESSED JOINT:- This joint shall be formed by impressing a device or bar into the newly deposited concrete before initial setting. The device or bar shall be removed as soon as the concrete is in such condition as to preclude distortion or injury to the concrete. The groove thus formed shall be of the dimensions as detailed. After the joint is formed it shall be protected from dirt and foreign matter until the filler is placed.

KEY JOINT:- This joint is designed for a 9 inch slab. When a greater or less thickness is used the joint shall be proportionally designed. Other deformations may be used if approved by the engineer.

A groove for sealing shall be formed by impressing a device or bar into the newly deposited concrete adjacent to the previously poured lane. The device or bar shall be removed as soon as the concrete is in such condition as to preclude distortion or injury to the concrete. The groove thus formed shall be of the dimensions detailed.

Adjoining slabs adjacent to the longitudinal key joint shall be edged with a thin metal edger having a fourth inch radius. The depth of the vertical lip shall not exceed one-half inch.

After the joint is formed it shall be protected from dirt and foreign matter until the seal is placed.

EXPANSION BOLT JOINT:- This joint is designed for abutting new concrete construction to old when a tie is required. The tie is effected by the use of American Expansion Bolts or equal.

BITUMINOUS SEAL AND FILLER:- Material for sealing key joints and for filling impressed joints shall meet the requirements of Supplemental Specification M-110.23 Rev. 1-3-47.

3-1-47

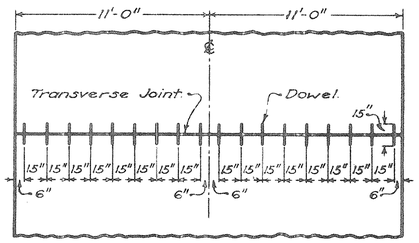
PAVEMENT JOINTS

FED. RD. DIV.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

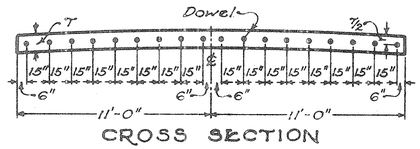
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.)
"B," ARLINGTON HEIGHTS,
LOCKLAND (PT.) &
APPROACHES

DOWEL SPACING

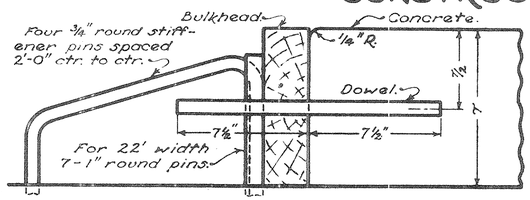


PLAN

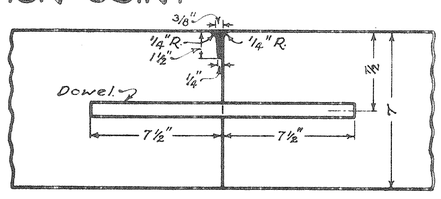


CROSS SECTION

CONSTRUCTION JOINT

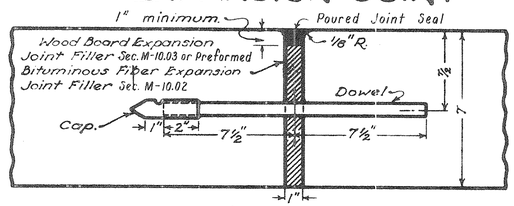


DETAIL OF BULKHEAD



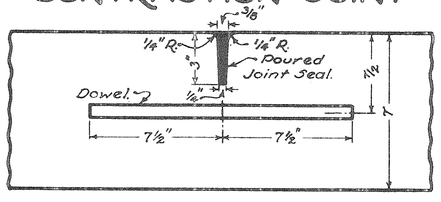
DETAIL OF JOINT

EXPANSION JOINT



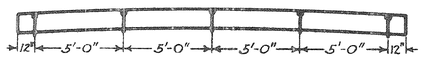
DETAIL OF JOINT

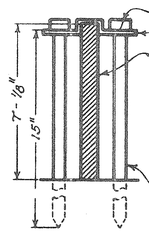
CONTRACTION JOINT



IMPRESSED JOINT

METHOD OF STAKING EXPANSION JOINT

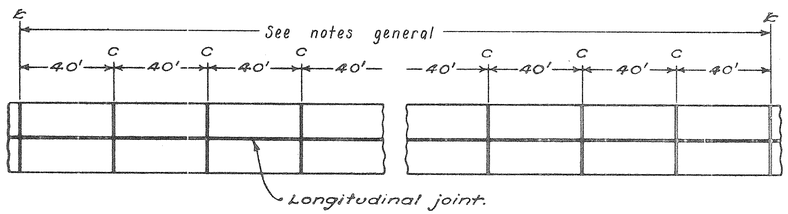




The above sketch shows the minimum number of staking units required for two lane construction, however the number of units required to hold the joint satisfactorily may be increased due to subgrade conditions. For other widths of pavement the number of staking units shall be in proportion.

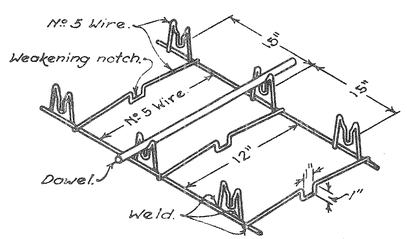
SUGGESTED STAKING UNIT

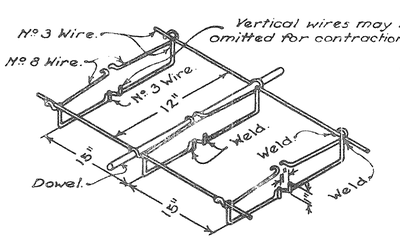
ARRANGEMENT OF TRANSVERSE JOINTS

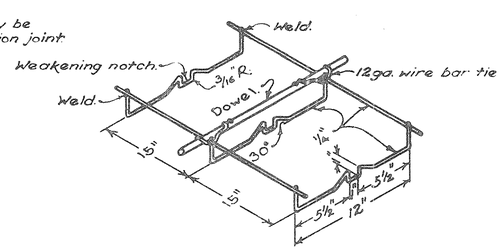


C = Contraction Joint.
E = Expansion Joint.

DOWEL SUPPORT UNITS







NOTES

GENERAL:- The types of expansion joint material shown are to be considered as alternates; the type used on any project being optional with the contractor.

The type of joint selected by the contractor and all operations and materials for installing the joints shall be approved by the engineer.

* See note below

Joint arrangements at intersections shall be as shown on the plans or in accordance with working drawings to be furnished by the State.

Special care shall be exercised in edging joints that the width of the opening does not exceed that shown.

A positive method to maintain required alignment shall be used in connecting the expansion joints at longitudinal joints. The expansion joint material shall meet in a vertical joint. Longitudinal keys and keyways, where used, shall be omitted for the thickness of the expansion joint.

EXPANSION JOINTS:-

Expansion joint material shall be accurately and rigidly held in place by means approved by the engineer. A steel plate for holding joint material during installation will not be required.

The expansion joint material shall be shaped to fit the section of the pavement.

Dowel holes shall be punched or bored in the filler material, and shall be 1 1/16 inch round holes to insure tight fitting dowels.

Each dowel bar shall be equipped with a neat fitting metal cap on one end.

Joints in monolithic curbs shall be constructed with the same type of filler material as used in the expansion joints.

DOWELS:- All dowels shall be 3/4 inch round, smooth, straight bars, free from burring and flattening at ends. The entire dowel shall be thoroughly coated before placing in the pavement using either Bituminous Material, Sec M-5.4 SC-2 or heavier or an oil such as 600 W or equal.

Prior to placing all dowels shall be assembled in a unit which is to remain in place for construction, contraction and expansion joints. The length of the unit shall be not less than the distance between longitudinal joints and sufficient support shall be provided to hold the dowels accurately perpendicular to the joint. Expansion joint material shall be forced over the lower cross wires so as to fit snugly on the subgrade. The design of the dowel support unit may be as shown herewith or may be an approved equal and it shall be shop assembled.

When the lane width varies from 11 feet, the spacing of the dowels shall be 15 inches and the 6 inch end spaces shall be equally increased or decreased and shall be less than 10½ inches but not less than 3 inches.

CONSTRUCTION JOINTS:- A bulkhead shall be constructed to permit dowels to extend through the joint. Care shall be taken in removing bulkhead and placing adjacent concrete to see that the dowels are embedded in the concrete without being bent.

A groove for sealing shall be formed by impressing a device or bar into the newly deposited concrete placed after the removal of the bulkhead. The device or bar shall be removed as soon as the concrete is in such condition as to preclude distortion or injury to the concrete. The groove thus formed shall be of the dimensions detailed. After the joint is formed it shall be protected from dirt or foreign matter until the filler is placed.

CONTRACTION JOINTS:- Impressed contraction joints shall be formed by impressing a device or bar into the newly deposited concrete before initial setting. The device or bar shall be removed as soon as the concrete is in such condition as to preclude distortion or injury to the concrete. The groove thus formed shall be of the dimensions detailed. After the joint is formed it must be protected from dirt or foreign matter until the filler is placed.

POURED JOINT SEAL:- The bituminous material for filling impressed joints and expansion joints shall meet the requirements of Supplemental Specification M-110.23, Rev. 1-3-47. The filler shall be handled in such a manner that it will be confined to the joint and in nowise mar the surface.

* Expansion joints shall be spaced from 500 to 600 feet on centers when the air temperature is 75° F. or above at the time of placing, and from 300 to 400 feet on centers when the air temperature is below 75° F. However, the actual spacing within these limitations shall be as directed by the Engineer.

NOTE:- If wire units are not available another approved method for holding the dowels in place may be used.

3-1-'47

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HAMILTON COUNTY
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"B", ARLINGTON HEIGHTS.
LOCKLAND (PT.)
& APPROACHES.

-NOTES-

GENERAL

FIELD OFFICE:

The contractor shall provide a suitable "Field Office" for the exclusive use of the engineer and inspectors assigned to this project. This office shall have a minimum of 300 sq.ft. of floor space and so arranged, equipped and lighted that the State employees will have a convenient place for making the necessary records, etc., and have a safe place for storage of equipment, plans and necessary supplies. The contractor shall have a telephone installed and maintained during construction of this project. When the work is in progress during cold weather, the office shall be heated to a temperature of at least seventy (70°) degrees Fahrenheit (See section S-0.01 (b) of the Construction and Material Specifications.)

UTILITY ADJUSTMENT:

Any and all work required for Public or Private Utilities will be done by and at the expense of their respective owners unless otherwise noted in these plans.

WORK BY R.R. CO.:

The C.C.C. & St. L. R.R. CO. will remove warning signs, flashers, and the pavements (within the limits of the ties) at the existing crossing of Hartwell Ave. and will remove all Rail Road material or equipment within the limits of construction of the proposed Structure over Anthony Wayne Ave. and the C.C.C. & St. L. R.R.

WORK BY CITY OF CINCINNATI:

Within the corporate limits of the City of Cincinnati (on the Hartwell Ave. Grade Separation Proposal) the City will perform any work (not incorporated in these plans) necessary to properly join the new and existing pavements and walks at the termini of the new pavements and walks. The City will perform any pavement repair beyond the limits of proposed pavement due to sewer construction and will seal and fill (by mud jack) the existing sewers that are to be abandoned.

The City will also wreck and remove all existing buildings and garages within the limits of the easement lines. The City will wreck the buildings to the top of the existing cellar foundations and remove all the resulting debris.

The City will remove the existing pavement on Hartwell Ave. from the east curb of Anthony Wayne Ave. to the tracks of the C.C.C. & St. L. R.R. and will do any necessary remodeling of this intersection.

Any Traffic lights or buttons within the Limits of construction (Proposal N°1 or Proposal N°2) will be removed by the City Maintenance Forces.

RIGHT OF WAY AND PROPERTY MONUMENTS:

Existing monuments that will interfere with construction shall be protected by the Contractor as per Specification, Section G-8.09 until they can be witnessed, referenced, or reset by the Construction Field Crews. These monuments shall finally be reset by the construction Field Crew.

GENERAL

TRAFFIC:

Portions of this project shall be constructed under traffic, and the Contractor to the satisfaction of the Engineer shall plan and conduct his operations so that traffic shall be maintained as described below.

PADDOCK ROAD.

Two way traffic will be maintained at all times.

71st STREET.

Two way traffic will be maintained until the proposed Paddock Road is opened to traffic. Then 71st St. may be closed and traffic will be rerouted over Paddock Road until the pavement on 71st Street can be opened to two way traffic

SEYMOUR AVE.

Two way traffic will be maintained until the proposed Summit Road connection from Section Road to proposed Paddock Road, and proposed Paddock Road from Summit Road connection to Pine Alley can be opened to traffic. Seymour Ave. traffic two way will then be re-routed over Section Road, Summit Rd. connection, thence north on the proposed Paddock Road.

Any labor or material necessary for the temporary maintenance of drainage along the proposed Summit Road, connection shall be done (subject to the approval of the Engineer) by the Contractor at no extra cost to the State.

SECTION RD. & 78th STREET.

Two way traffic will be maintained until two way traffic can be re-routed over the proposed Summit Road connection and Proposed Paddock Road from Summit Road connection to Pine Alley.

Section Road traffic will then be re-routed over the above mentioned route and 78th Street will be closed to thru traffic.

SUMMIT ROAD.

Summit Road north of Section Road will be closed to thru traffic. Traffic will be re-routed over Section Road.

PEDESTRIAN TRAFFIC.

Pedestrian traffic on Summit Road and on Section Road will be maintained at all times. Pedestrian traffic across the Proposed S.H. 987 will be maintained at all times until the Proposed Pedestrian Overhead has been completed and placed in use.

HARTWELL AVE.

The intersection of Hartwell Ave. and Woodbine Ave. may be closed to traffic until the proposed intersection can (in the opinion of the Engineer) be opened to traffic. During this period a detour will be provided from S.R. 4 to Anthony Wayne Ave.

Street car, Vehicular, and Pedestrian traffic will be maintained at all times on Anthony Wayne Ave.

Railroad traffic over the tracks of the C.C.C. & St. L. R.R. will be maintained at all times.

Hartwell Ave. between Anthony Wayne Ave. and the existing intersection of S.H. 987 will be closed to traffic. Traffic will then be rerouted over Anthony Wayne Turnout and S.H. 987 to Hartwell Ave.

Two-way traffic on Hartwell Ave between S.H. 987 and the existing bridge over West Fork will be maintained at all times until the proposed Hartwell Ave. can be opened to traffic.

After proposed Hartwell Ave. has been opened to traffic, the traffic from Anthony Wayne and from S.H. 987 will be re-routed to the intersection of Woodbine and Hartwell and thence over Prop. Hartwell Ave. Before the existing intersection of Elliott Ave. and Hartwell Ave. is closed to traffic the proposed approach to Elliott Ave. from Hartwell Ave. shall be built and shall be open to traffic.

S.H. 987.

Two-way traffic shall be maintained at all times from Anthony Wayne Turnout to Lock St.

Temporary roadways as deemed necessary by the Engineer shall be constructed, maintained and removed by the Contractor.

Traffic bound surface, Item T-10 traffic compacted surface course, Item T-110, and calcium chloride, Item M-10, estimated and paid for under separate items, shall be applied as directed and in the amount requested by the Engineer.

In addition to the requirements of Sec. G-8.07, Barricades, Danger, and Warning signs, the Contractor shall display one "PLEASE - MEN WORKING ON ROAD" sign furnished by the State at each end of each one-way zone and in such a position as to be visible to traffic approaching the one-way zone.

The Contractor shall be responsible for the preservation of these signs, shall advance the signs as work progresses, and shall return the signs to the State at the completion of the work.

GENERAL

In addition to the above, Sec G-4.05 (Maintenance of Local Traffic) will be in force during the entire life of the contract.

The item of "Maintaining Traffic" shall include furnishing lights, signs, (other than those mentioned above) barricades and watchmen, plus the displaying and advancing of the "PLEASE-MEN WORKING ON ROAD" signs to secure the flow of traffic twenty four (24) hours daily.

All of the above except Traffic Bound Surface Course, Item T-10, Traffic Compacted Surface Course, Item T-110, Calcium Chloride, Item M-10 are included in the lump sum bid for "Maintaining Traffic"

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PAVEMENT

TACK COAT INCLUDING SAND COVER:
Bituminous Tack Coat, Section M-5.5 MS-1 shall be applied by distributor or by brooms at the rate of 0.10 gal. per square yard. After the bituminous material has been applied, all material not required to give a uniform coating to the surface shall be swept into all cracks and open joints before the sand cover is placed. Sand cover shall be uniformly spread at a rate of from 2 to 5 pounds per square yard. The sand shall be spread at such time and shall be in such condition that it will adhere to the bituminous material. Cost of sand cover shall be included in the price bid per gallon for bituminous material.

FILLING MAJOR DEPRESSIONS:
Major depressions in existing pavement shall be filled and compacted with bituminous concrete leveling material in advance of placing the regular leveling course. These depressions shall be filled in layers not to exceed three (3) inches in depth when compacted.

SEALING EXISTING EDGES:
Vertical faces of existing work, such as castings, curbs, etc. against which the new bituminous concrete is to be placed, shall be painted or sealed with bituminous material in accordance with Section E-8.02. The cost of such operations and material shall be included in the price bid for bituminous concrete.

TREATMENT OF FEATHERED AREA:
Where directed the new surface course shall be feathered. The area upon which less than one (1) inch of surface course is to be placed shall be considered as the area to be feathered. A paint coat of the same bituminous material used in the mix shall be applied to this area, before placing the bituminous concrete surface course. The cost of such operation and material shall be included in the price bid for bituminous concrete.

BITUMINOUS CONCRETE BASE COURSE:
Base course may be constructed of Type "A" surface course composition.

PLACING AND FINISHING CONCRETE PAVEMENT:
Portland Cement Concrete Pavement Item T-71 shall be compacted and finished (except as noted below) by an approved mechanical self-propelled spreading and finishing machine, having a maximum width of 22 ft.
Hand Finishing as per Sec. T-71.211 of the General Specifications will be permitted at the following locations.
Intersections.
Ramps where sharp curvature prevents the use of a finishing machine.
Sections where the maintenance of traffic requires hand finishing.
Variable widths lanes which in the opinion of the Engineer, requires hand finishing.

CONCRETE PAVEMENT (SPECIAL FINISH):
Concrete pavement (special finish) after placing shall be struck off with a templet and finished with a wood float to produce a sandy texture. All edges and joints shall be rounded to a 1/4" radius, Special Finish and all joints and joint material shall be included in unit price per square yard bid for Item T-70 Concrete Pavement (Special Finish).

SUPERELEVATION:
Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in the area indicated on the pavement details.

TYPE "A" WATERPROOFING:
Type "A" Waterproofing as shown on the Typical Sections is included in the price bid per square yard for Portland Cement Concrete Pavement Item T-70.

PAVEMENT.

LOCATION OF TRANSVERSE JOINTS:
At approaches and intersections the joints shall be spaced as shown on the pavement details. Where transverse joints are not located on the pavement details the spacing shall be determined as follows:

Reinforced Concrete Pavement (for type see Std. Dwg.)		Max. Spacing 40 Feet.
Plain Concrete Pavement (for type see Std. Dwg.)		Max. Spacing 20 Feet.
Paved Median	(1/4" Premolded Expansion Joint)	Max. Spacing 20 Feet.
Conc. Curb and Gutter	(Same type as Main Pavement)	Max Spacing 20 Feet

The spacing of the expansion joints will be controlled by Supplemental specifications.
Alternate joints in the paved median or curb and gutter shall be placed transversely opposite to joints in the main pavement.
From Sta. 136+50.7 to Sta. 175+47.12 the joints in the main pavement right of the center line shall be placed transversely opposite to alternate joints in the existing pavement left of the center line.
From Sta. 136+50.7 to Sta. 179+00 the joints in the paved median shall be placed transversely opposite to joints in the existing pavement left of the center line. Where special catch basins are located in the paved median, expansion joints shall be placed in the paved median in line with the expansion joints in the main pavement at each end of the catch basin.

(FLEXIBLE) FORMS:
Approved flexible forms may be used for construction of circular pavement edges, circular concrete curb, circular concrete curb and gutter, concrete curb transitions, and concrete curb and gutter transitions

DRIVES:
The location and grade of pavement at drives, may be adjusted by the Engineer.

CONTRACTION JOINTS:
The contraction joints in the pavement shall extend through the curb. The contraction joints in the curb shall be of the premolded type, 3/8" thick in lieu of the kind that is in the pavement and shall be cut to conform to the contour of the curb before being placed. Extreme care shall be used in placing this material in proper alignment with the contraction joint in the pavement.

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ROADWAY

CHAIN LINK FENCE REMOVED and STORED:-

The Item of Chain Link Fence Removed and Stored shall include the careful removal, storage, and salvaging of all the component parts of the existing Chain Link Fence (including existing stone pillars). The concrete foundations and concrete curtain walls shall be removed and disposed of without injuring the posts.

The component parts of the fence and pillars shall be stored on the Right of Way at the disposal of the property owner. The footage to be paid for, shall be the actual footage removed and stored.

ERECTING (ONLY) OF CHAIN LINK FENCE:-

The Item of Erecting(only) of Chain Link Fence shall include excavation, materials, placing of concrete foundations for posts, and the erection of all the component parts (Furnished by Prop. Owner or from salvaged Fence) This item shall also include necessary cutting of posts and filling of holes (for fence to be erected on retaining wall) with either concrete Class "C" or 1-2½ mortar.

The general description of the chain link fence is as follows:-
End posts - 4" Steel Pipe.
Intermediate posts - 2⅜" Steel Pipe or Oval back I-Beams.
Spaced approximately 10 Ft. c/c
Rails - 1½" Steel Pipe.
Wire Mesh - 2" Mesh Fabric (№ 6 gauge wire) varying in height from 6'-6" to 8'-0", portions of which are surmounted with strands of barbed wire.
All posts shall be set three feet in the ground and shall be encased with 4" Concrete (Class "E")

For additional details, reference is made to Catalogue #79 of the Stewart Fence Co.

The footage to be paid for shall be the actual footage measured in place, completed and accepted.

REMOVAL OF EXISTING CRIB WALL:-

See note on Sheet 93A of Proposal No. 2

~~The footage to be paid for shall be the actual facial square footage removed.~~

~~The footage measured as provided above shall be paid for at the contract unit price per square foot bid for Item-Special Reinforced Concrete Crib Wall Removed for Re-use, which price shall constitute full compensation for removal, cleaning, excavation, backfill, disposal, all labor, equipment, tools and incidentals necessary to complete the particular pay Item specified.~~

~~REINFORCED CONCRETE CRIB WALL:-~~

~~The Item of Reinforced Concrete Crib Wall shall consist of furnishing reinforced concrete Tri-Crib Wall (closed face) to match existing Crib wall and installing such crib wall at such places as are designated on the plans. For a description of the existing Tri-Crib Wall see the Crib Wall details in these plans. When resetting of existing Crib Wall is called for, the contractor shall use the component parts of the Crib Wall that shall be removed for Re-use. All Crib Wall reset must be in good condition. The quantity of crib wall to be reset has been computed for estimating purposes on terms of an approximate salvageable percentage of Crib wall to be removed for Re-use. However, the contractor will be required to salvage and use as much of the existing Crib Wall as is suitable for resetting, and an adjustment will be made in the amount of new Crib Wall to correspond with the change in the reset Crib Wall quantities.~~

~~The footage to be paid for shall be the actual facial square footage measured in place, completed and accepted.~~

~~The footage measured as provided above shall be paid for at the contract unit price per square foot for Item-Special Reinforced Concrete Crib Wall or Item-Special Resetting Reinforced Concrete Crib Wall, which price shall constitute full compensation for furnishing and placing new Crib Wall or resetting existing Crib Wall, and for placing all material, labor, equipment, tools and incidentals necessary to complete the particular Item specified.~~

ROADWAY

GUARD RAIL:-

Wherever the radius (measured to the face of rail) of the Proposed Guard Rail is less than 130 Ft., the beam shall be formed to the correct curvature before erection.

No extra payment will be allowed and all cost of "Pre-forming" shall be included in price bid per Lin. Ft. of Guard Rail, Item 1-15.

It will be necessary to "Pre-form" approximately 425 Lin. Ft. (or 3 % of the total) of Proposed Guard Rail.

The necessary layout details will be furnished by the State during construction.

USE OF STONE RETAINING WALL:-

Stone from the existing retaining walls on PADDOCK ROAD (Station 16+75± to Station 20+00±) may be used by the contractor for the construction of Riprap, etc. Any portions of the existing stone wall not specifically shown in the plans to be removed, may be removed (at no additional cost to the State) by the contractor, providing the contractor replaces these stones (at his own expense) with an equal amount of embankment.

SEWAGE:-

The Contractor shall so conduct his operations that the flow of all existing sewage will be maintained at all times.

Any additional labor or cost involved in maintaining this flow, by pumping sewage or by any other approved method which is necessary for the construction of The Work, shall be included in the price bid per Lin. Foot of Storm Sewers Item 1-2.

SPECIAL METHOD OF PLACING PIPE IN EMBANKMENT:-

Wherever Pipes 1-2, 1-3 and 1-4 are to be placed within or beneath an embankment and the upper extremity of the pipe will be less than two (2) feet below the surface of the original ground, the embankment shall be constructed to an elevation of at least two (2) feet above the upper extremity of the pipes before laying the pipe. The trench shall then be excavated to the minimum width necessary for placing pipe and proper backfilling. The pipe shall be laid and the trench backfilled before more embankment is placed thereon.

EMBANKMENT:-

In lieu of the requirements for full width construction under E-1.05 the embankment, where traffic is maintained, may be placed in part width construction.

DISPOSAL OF WASTE MATERIAL:-

Any excavation which is unfit for incorporation in the improvement and which would appear unsightly, shall be covered with earth to a minimum of 18" and made to conform to the contour of the adjacent land if wasted within 300' of the right of way, without expense to the State, notwithstanding the written permission of the property owner to do otherwise.

DISPOSAL OF SURPLUS EXCAVATION:-

All surplus excavation suitable for embankment, resulting from any of the items of the contract shall be placed in the embankment to reduce borrow.

DISPOSAL OF PAVEMENT:-

Pavement removed under Item E-8 shall be placed in embankment in accordance with Section E-1.05 and will be considered random material except where used in the part of an embankment more than three (3) feet below the new pavement, in which case it may be considered rock. Any steel protruding from the removed pavement shall be cut or burned so that it will not project more than one (1) inch from any side. The quantity of pavement removal may be adjusted in the field.

DISPOSALS:-

Guard Rail, Castings, I-Beams or any other structural shapes that are removed under any of the Items of the contract shall be stored on the Right of Way at the disposal of the State Highway Department.

ROADWAY

REMOVAL OF TREES AND STUMPS:-

The removal of trees and stumps, the diameters of which are twelve (12) inches or more (measured four (4) foot above the ground) shall be in accordance with Item E-9.

All stumps within the limits of the Right of Way shall be disposed of as specified in Section E-1.02 of the Construction and Materials Specifications.

Trees shall not be removed, regardless of size, until specifically and conspicuously marked by the Engineer.

Trees in areas where the proposed contour of the ground differs from the existing contour shall be removed or preserved as indicated on the plans by the following symbols:

	PLAN SHEETS	CROSS SECTION SHEETS
Trees to be Removed	⊠ ⊠ ⊠	⋀ ⋀ ⋀
Trees to be Preserved	⊙ ⊙ ⊙	⋀ ⋀ ⋀

The number of trees to be removed as indicated by the above symbols is approximate and the State of Ohio reserves the right to order the removal of additional trees even though these trees are not indicated on the plans, or are indicated to be preserved.

Payment for the removal of these additional trees is included in the lump sum bid for removal of trees and stumps.

REMOVAL OF REFUSE AND DEBRIS:-

Any existing refuse, debris, or any other unsuitable material shall be removed and disposed of by the contractor, outside the limits of the Right of Way or easement lines.

The yardage of refuse or debris, or other unsuitable material removed and disposed of will be determined by final cross sections, and the yardage so determined will be paid for at the contract unit price bid for Roadway Excavation Item E-1.

REMOVAL (Miscellaneous)

The removal and disposal of any existing pavement, sidewalk, building foundations, steps, cellar floors, well covers, cistern covers, septic tanks, concrete bases, walls, curb, curb and gutter, rails, ties, pole stubs, headwalls, pipes, drive ways and garage floors, or other masonry lying within, or below, the limits of Roadway Excavation, Item E-1, Excavation for Structures, Item E-2, or Channel Excavation, Item E-3 (and not specifically paid for under a separate Item) are classified as excavation and paid for under the excavation item of which they are a part.

Pavements, sidewalks, steps, cellar floors, or other masonry shall be excavated to a depth of three (3) feet below the proposed pavement subgrade, if located within the proposed pavement area, and to a depth of three (3) feet below the proposed finished surface if located without the limits of the proposed pavement area.

Pavements, sidewalks, cellar floors or other masonry below the above limits shall be broken up into portions whose area does not exceed one (1) square foot, but need not be removed.

Backfilling shall be performed according to Section E-1.05 of the Construction and Material Specifications. Wells, cisterns, and septic tanks shall be filled with broken foundation masonry or rock placed as rock embankment according to Section E-1.05 of the Construction and Material Specifications.

Payment for all of the above operations shall be included in the Contract Unit Price bid for Roadway Excavation, Item E-1, Excavation for Structures, Item E-2, and Channel Excavation, Item E-3.

Additional excavation necessary to perform any of the above operations shall be paid for at the Contract Unit Price bid per cubic yard for Roadway Excavation, Item E-1, Excavation for Structures, Item E-2 and Channel Excavation, Item E-3.

BACKFILLING TRENCHES:-

The requirements of the Construction and Material Specifications relative to backfilling and compacting trenches in pavement or shoulder areas shall also apply to the backfilling and compacting of trenches not within the pavement or shoulder areas.

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CATCH BASINS, MANHOLES AND PIPES:
The proposed elevations and locations of catch basins, manholes and pipes and the estimated lengths of pipes may be adjusted by the Engineer during construction.

LENGTH OF PIPE SPECIALS:
The number of lineal feet of pipe to be paid for shall be the length of the pipe line less the assumed lengths (3 Feet) of specials, regardless of the actual length of pipe special used.
If actual length of the pipe special used is less than three (3) feet, the contractor will furnish enough extra pipe to make up the difference between the assumed and actual lengths, at the price bid for each Special. If the actual length of the pipe special used is greater than three (3) feet, the extra length of each pipe special, over and above the assumed length, shall be paid for as lineal feet of pipe.

SIDEWALK EXPANSION JOINTS:
In addition to the expansion joints specified in Sec. I-13.06 of the Construction and Material Specifications, ½" of premolded expansion joint material shall be provided wherever the sidewalk abuts longitudinal curb, manholes or catch basins.
One layer of ½" material may be used in lieu of the 2-¼" layers specified in Sec. I-13.06.
Payment for additional expansion joints material is included in the price bid per sq. ft. for Concrete Sidewalk, Item I-13.

CURING CEMENT MORTAR PLASTER:
In all brick work where plastering is required the following construction and curing methods shall apply. The plastering where called for on the Standard Construction Drawing, shall be continuous with the laying of the brick work. Immediately after the plastering is completed, it shall be covered with two (2) or more thicknesses of damp burlap which is to be maintained thoroughly saturated for a period of forty eight (48) hours, or curing may be accomplished as set forth under Item F-71.24(c).

LOCATION AND SIZE OF EXISTING PIPE:
The location, type, depth and size of all existing pipes are shown as near exact as the available information will permit. The State of Ohio will not be responsible for any variations found during construction.
Payment for pipe removed will be made according to the listing shown on these plans.

COMPACTION OF CLASSIFIED EMBANKMENT MATERIAL:
Special care shall be taken to properly compact Classified Embankment Material placed adjacent to an existing pavement edge.
In cut sections, if the material in subgrade is determined (by laboratory tests) as being suitable for use as classified Embankment Material, the material need not be removed and Classified Embankment Material, Item 33-1½ will be non performed.

RESETTING MANHOLES:
Resetting Manholes, Item I-8 represents the removal (when deemed necessary by the Engineer) of portions of the existing manhole and the rebuilding and adjusting to grade. The amount of the existing manhole to be removed shall be determined by the Engineer. If the existing casting is deemed unsatisfactory by the Engineer, the casting shall be replaced by a satisfactory casting obtained from the abandonement of Manholes on other portions of the project

FINISHED SURFACE OF SHOULDERS, SLOPES AND DITCHES:
The upper 3" of all shoulders, slopes, and ditches upon which Seeding, Item L-9 is to be placed, shall not contain any sand, gravel, stone, or shale or any other material which will prevent the formation of a suitable seed bed.
Material for this upper 3" of roadway sections shall meet with the approval of the Engineer without the use of samples or laboratory tests. It shall be obtained by using all the suitable material from scalping operations, and the balance needed from "Cut" sections and from borrow Pits. Any additional Cost due To

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stock piling, hauling, handling, placing in "Fill" sections, shall be included in the unit price bid for Item E-1, Roadway Excavation (Placing in "Cut" sections is paid for under a separate item as described below)
In "Fill" sections the Contractor shall so conduct his operations that a minimum depth of 3" of the approved material will result along the finished surface.
In "Cut" sections (where shown on the plans) the section shall be excavated to a depth of 3" below the proposed finished surface and the approved material placed thereon as directed by the Engineer. Excavation for this additional excavation has been estimated and incorporated in the final quantities of Roadway Excavation. The placing of the approved material is paid for under a seperate item (Item L-3 Placing Stockpiled Top Soil) only in "Cut sections. If during construction examination reveals that on portions of the project the "Cut" sections do not require (in the opinion of the Engineer) the placing of the approved surface material, the placing of the material shall be non-performed. The number of square yards of top soil to be paid for shall be the actual number of square yards completed and accepted (in cut sections) as shown by final measurements.

L-9 SEEDING & PROTECTING, TYPE "A"
Quantities for Seeding Item L-9 are calculated for the soil areas between R/W lines or to the work limits where the work limits are outside of the R/W (except between Sta 88+ and Sta. 124+ on Lt. where the seeding shall be carried to the R/W) as shown on the cross-sections.
All areas outside these limits where the vegatative growth has been injuriously disturbed or destroyed by the contractor shall be restored and seeded in accordance with the provisions of Item L-9, by the contractor at his own expense.
The mixture of seed and the rate of sowing as outlined under Item L-9 shall be deleted and the following mixture substituted.

40% Kentucky Blue Grass.
10% Meadow Fescue
20% Red Top
15% Alsike Clover
15% Domestic Rye Grass

The above mixture shall be sown at the rate of 4 lbs. per 1000 Sq. Ft.
All Legumes shall be inoculated.
Alta Fescue, Chewings Fescue or Meadow Fescue may be substituted for Kentucky Blue Grass.

FERTILIZING AREAS TO BE SEEDED OR SODDED:
All areas to be seeded or sodded in accordance with Item L-9 and Item L-10 respectively shall have commercial fertilizer (4-12-4 Mix) or any formula approved by the Director, applied at the rate of twenty (20) pounds per 1000 square feet.

INCORPORATING LIMESTONE AND FERTILIZER:
The limestone and fertilizer shall be incorporated into the soil to a depth of two (2) inches. This work may be performed in one operation.

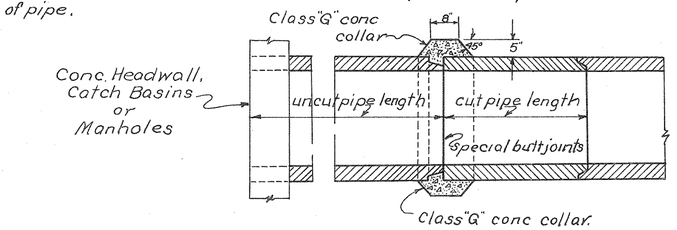
PLACING SOD:
Special care shall be taken in placing all sod so that the top of the sod coincides with the finished surface as shown on the cross sections. All earthwork necessary to accomplish the above is included in the unit price bid per sq. yd. of sod.

AGRICULTURAL GROUND LIMESTONE:
Agricultural ground limestone shall be applied at the rate of 100 lbs. per 1000 sq. ft. for all seeding and sodding areas.
Agricultural ground limestone shall be of a fineness that 95% will pass a 10 mesh sieve with 40% passing a 100 mesh sieve; and with a minimum total neutralizing power of 95%.

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MULCHING AREAS TO BE SEEDED:
Within 48 hours after any areas have been seeded, such areas shall be covered with a mulch as outlined under Item L-9 which shall be held in place throughout the life of the contract.

PIPE CULVERTS:
When bell and spigot pipe is used, any necessary cut-off pipe will be made at the spigot end of the length of pipe adjacent to the end length. When tongue and grove pipe is used, the length of pipe next to the end length shall be cut and the butt-joint formed with a collar as shown below to be included in the price bid per lineal foot of pipe.



CHAIN LINK FENCE REMOVED FOR RE-USE:
The Item of Removal for Re-Use of Chain Link Fence (For description see erection note) Shall include the careful removal, storage and salvaging of all the component parts of the existing chain link fence. The concrete foundations for posts shall be removed and disposed of without injuring the posts. This Item shall also include the replacement of any material damaged during removal or storage. The footage to be paid for shall be the actual footage removed for re-use.

ITEM E-1, ROADWAY EXCAVATION IN VICINITY OF WATER LINE:
The contractor shall exercise extreme caution during the excavation operations in the vicinity of the water main on existing Summit Road from sta. 78+50± (Freeway stationing) to sta. 37+40± (Summit Road relocation stationing). Between the intersection of Section road and sta. 37+50 (Freeway stationing) and between station 34+00± and sta. 37+40± (Summit Road relocation stationing) the contractor shall excavate to the top of the water line. He shall then notify the City of Cincinnati to remove the water pipe. After the pipe is removed the trench shall be backfilled to assure compaction in accordance with item E-1.05. This operation is specified to assure the State that proper density of the existing earth will be provided for the embankment to be placed in the area occupied by the water main. Excavation shall be performed as directed by the engineer. 700 cu. yds. of roadway excavation have been estimated for this purpose. Payment will be made on final measurement of E-1 roadway excavation.

COMBINED GENERAL SUMMARY

PROPOSAL Nº 1 & PROPOSAL Nº 2

ITEM Nº	MUNICIPAL PROPOSAL Nº 1	MUNICIPAL PROPOSAL Nº 2	MUNICIPAL TOTAL	RURAL PROPOSAL Nº 1	GRAND TOTAL	UNIT	DESCRIPTION
							ROADWAY
E-1	77,515	5249	82,764	333,500	416,264	Cu. Yd.	Roadway Excavation.
E-2	17	129	146	332	478	Cu. Yd.	Excavation for Structures.
E-3	28	220	248	86386	86634	Cu. Yd.	Channel Excavation.
E-4	59,997	209432	269429		269,429	Cu. Yd.	Borrow.
E-8	63	41	104		104	Lin. Ft.	Removal & Disposal of Existing Concrete Curb.
E-8	7345	23	7368	1234	8602	Sq. Yd.	Removal & Disposal of Existing Concrete Pavement.
E-8	138		138		138	Lin. Ft.	Removal & Disposal of Existing Asphaltic Concrete Temporary Mall
E-8		41	41		41	Lin. Ft.	Removal & Disposal of Existing Concrete Curb & Gutter.
E-9	Lump	Lump.	Lump	Lump	Lump	Lump Sum	Removal of Trees & Stumps.
E-8	44		44	79	123	Lin. Ft.	Sealing Only
E-11	1210	925	2135	1210	3345	M. Gal.	Water.
E-12	211	41	252	880	1132	Lin. Ft.	(3" to 18") Pipe Removed & Disposed of.
E-12				19	19	Lin. Ft.	6" Pipe Removed & Stored.
E-12				42	42	Lin. Ft.	12" Pipe Removed & Stored.
E-12	50		50		50	Lin. Ft.	48" Corrugated Metal Pipe Removed & Stored.
I-2		17	17		17	Lin. Ft.	6" Pipe for Storm Sewers.
I-2		443	443		443	Lin. Ft.	8" Pipe for Storm Sewers.
I-2	6	590	596	393	989	Lin. Ft.	12" Pipe for Storm Sewers.
I-2	96		96	50	146	Lin. Ft.	15" Pipe for Storm Sewers.
I-2	137	25	162		162	Lin. Ft.	18" Pipe for Storm Sewers.
I-2	128		128		128	Lin. Ft.	24" Pipe for Storm Sewers.
I-2	218		218		218	Lin. Ft.	27" Pipe for Storm Sewers.
I-2	155		155	150	305	Lin. Ft.	36" Pipe for Storm Sewers.
I-2				35	35	Lin. Ft.	6" Pipe for Storm Sewers. (Under Pavement.)
I-2	1565	1843	3408	2083	5491	Lin. Ft.	12" Pipe for Storm Sewers. (Under Pavement.)
I-2	486	259	745	475	1220	Lin. Ft.	15" Pipe for Storm Sewers. (Under Pavement.)
I-2	607	170	777	394	1171	Lin. Ft.	18" Pipe for Storm Sewers. (Under Pavement.)
I-2				265	265	Lin. Ft.	21" Pipe for Storm Sewers. (Under Pavement.)
I-2	59	506	565	246	811	Lin. Ft.	24" Pipe for Storm Sewers. (Under Pavement.)
I-2	156		156		156	Lin. Ft.	27" Pipe for Storm Sewers. (Under Pavement.)
I-2		202	202		202	Lin. Ft.	12" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(b)
I-2	141		141		141	Lin. Ft.	24" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(b)
I-2	594		594		594	Lin. Ft.	27" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(b)
I-2	291		291		291	Lin. Ft.	30" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(b)
I-2	88		88	85	173	Lin. Ft.	24" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2	196		196		196	Lin. Ft.	30" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2	572		572	57	629	Lin. Ft.	33" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2	134		134	1684	1818	Lin. Ft.	36" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2				561	561	Lin. Ft.	48" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2	5		5		5	Lin. Ft.	8" Vitrified Pipe for Storm Sewers.
I-2				3	3	Lin. Ft.	12" Vitrified Pipe for Storm Sewers.
I-2	245		245		245	Lin. Ft.	15" Vitrified Pipe for Storm Sewers.
I-2				87	87	Lin. Ft.	12" Vitrified Pipe for Storm Sewers. (Encosed as per plan.)
I-2		270	270	287	557	Lin. Ft.	6" Vitrified Pipe for Storm Sewers (Under Pavement.)
I-2		24	24		24	Lin. Ft.	8" Vitrified Pipe for Storm Sewers (Under Pavement.)
I-2	46		46		46	Lin. Ft.	15" Vitrified Pipe for Storm Sewers (Under Pavement.)
I-2	196	121	317	252	569	Lin. Ft.	12" Paved Bituminous Coated Corrugated Metal Pipe for Storm Sewers Sec. M-64(d) As per plan
I-2	45		45		45	Lin. Ft.	18" Paved Bituminous Coated Corrugated Metal Pipe for Storm Sewers Sec. M-64(d) As per plan
I-2	971		971		971	Lin. Ft.	12" Bell & Spigot Pipe for Storm Sewers (Under Pavement) with porous backfill, bottom half (only) sealed, as per plan.
I-2	323		323		323	Lin. Ft.	15" Bell & Spigot Pipe for Storm Sewers (Under Pavement) with porous backfill, bottom half (only) sealed, as per plan.
I-2	135		135		135	Lin. Ft.	18" Bell & Spigot Pipe for Storm Sewers (Under Pavement) with porous backfill, bottom half (only) sealed, as per plan.
I-3	49		49	3	52	Lin. Ft.	6" Pipe for Roadway Drainage
I-4	12697	7191	19888	14700	34588	Lin. Ft.	6" Pipe for Underdrains As per plan.
I-4	123		123	132	255	Lin. Ft.	6" Pipe Outlets for Underdrains. As per plan.
I-5				1	1	Each	Pipe Specials 6"X6" Tee (For Storm Sewers.)
I-5	2	1	3	4	7	Each	Pipe Specials 12"X6" Tee (For Storm Sewers.)
I-5				8	8	Each	Pipe Specials 15"X6" Tee (For Storm Sewers.)
I-5		13	13	1	14	Each	Pipe Specials 24"X6" Tee (For Storm Sewers.)
I-5				5	5	Each	Pipe Specials 12"X6" Y Branch (For Storm Sewers.)
I-5				1	1	Each	Pipe Specials 24"X12" Y Branch (For Storm Sewers.)
I-5		10	10		10	Each	Pipe Specials 8"X6" Y Branch (For Storm Sewers.)
I-5				1	1	Each	Pipe Specials 12"X30° Bend (For Storm Sewers.)
I-5		6	6		6	Each	Pipe Specials 8"X90° Bend (For Storm Sewers.)
I-5		4	4		4	Each	Pipe Specials 8"X60° Bend (For Storm Sewers.)
I-5		1	1		1	Each	Pipe Specials 8"X30° Bend (For Storm Sewers.)
I-5	1		1		1	Each	Pipe Specials 6"X90° Bend (For Roadway Drainage.)
I-5	4	1	5	3	8	Each	Pipe Specials 6"X6" Tee (For Underdrains.)
I-5	1	1	2		2	Each	Pipe Specials 6"X6" "Y" Branch (for Underdrains.)
I-5				4	4	Each	Pipe Specials 18"X6" Tee (For Storm Sewers.)
I-5				3	3	Each	Pipe Specials 21"X6" Tee (For Storm Sewers.)
I-8	5		5		5	Each	Resetting Manholes
I-8	24	13	37	9	46	Each	Std. Nº1 Manhole
I-8	4		4	9	13	Each	Std. Nº2 Manhole Drop Pipe Omitted
I-8	10	2	12	1	13	Each	Std. Nº3 Combination Inlet Manhole
I-8				1	1	Each	Special Manhole "A", As per plan.
I-8	5	3	8	7	15	Each	Std. Nº 1-2-A Catch Basin
I-8	2		2	2	4	Each	Std. Nº 1-3 Catch Basin
I-8	1		1		1	Each	Std. Nº 1-4 Catch Basin
I-8	1	1	2	6	8	Each	Std. Nº 2-2A Catch Basin
I-8	20	19	39	19	58	Each	Std. Nº 3 Catch Basin
I-8	7	9	16	1	17	Each	Std. Nº 3A Catch Basin
I-8	2		2	14	16	Each	Modified Std. Nº 1-2-A Catch Basin, As per plan.
I-8	1		1		1	Each	Modified Std. Nº 1-3 Catch Basin, As per plan.
I-8				1	1	Each	Modified Std. Nº 1-4 Catch Basin, As per plan.
I-8	4		4		4	Each	Modified Std. Nº 13-A Catch Basin, As per plan.
I-10	440		440	6	446	Cu. Yd.	Dumped Rock Fill.
I-10		44	44	23	67	Sq. Yd.	Stone Riprap Type A (Grouted.)
I-13	30632	17650	48282	6162	54444	Sq. Ft.	4" Concrete Sidewalk
I-13	36		36		36	Lin. Ft.	Concrete Steps (6" Riser 12" Tread.)
I-13		20	20		20	Lin. Ft.	Concrete Steps (6" Riser 18" Tread.)
I-13	54	54	108		108	Lin. Ft.	Concrete Steps (6" Riser 24" Tread.)
I-13				35	35	Lin. Ft.	Concrete Steps (8" Riser 12" Tread.)

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B"
ARLINGTON HEIGHTS
LOCKLAND (Pt.) & APPROACHES.

FED. RO. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UT-316-(1)	1946

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COMBINED GENERAL SUMMARY

PROPOSAL Nº 1 & PROPOSAL Nº 2 (CONT.)

ITEM Nº	MUNICIPAL PROPOSAL Nº 1	MUNICIPAL PROPOSAL Nº 2	MUNICIPAL TOTAL	RURAL PROPOSAL Nº 1	GRAND TOTAL	UNIT	DESCRIPTION
							ROADWAY (CONT.)
I-14				153	153	Lin. Ft.	Concrete Paved Gutter (Type 'A') As per plan.
I-14				110	110	Lin. Ft.	Concrete Paved Gutter (Type 'B') As per plan.
I-14				10	10	Lin. Ft.	Concrete Paved Gutter (Type 'D') As per Plan.
I-14				10	10	Lin. Ft.	Concrete Paved Gutter (Type 'E') As per plan.
I-15	7065	2221	9286	2728	12014	Lin. Ft.	Guard Rail Steel Beam Type (Deep)
I-15	88		88	84	172	Lin. Ft.	Guard Rail Removed & Stored
I-17		9	9	28	37	Cu. Yd.	Side Approaches, Mail Box Turnouts and Berm Material.
S-1		37	37		37	Cu.Y	Concrete for Structures (Footing) Class "E"
S-1	3	45	48		48	Cu. Yd.	Concrete for Structures (Wall) Class E"
S-1	6	9	15	36	51	Cu. Yd.	Concrete for Structures Class "C"
S-1				103	103	Cu. Yd.	Concrete for Structures (Encasement) Class 'E"
S-3		9	9		9	Sq. Yd.	Type "B" Waterproofing (36" Wide)
S-4	125	2706	2831	1034	3865	Lb.	Reinforcing Steel
S-9		63	63		63	Sq. Ft.	1" Premolded Expansion Joint Filler.
S-9		10	10		10	Lin. Ft.	Folded Sheet Lead (15" Wide)
S-22		Lump	Lump		Lump	Lump Sum	Removal of Portions of Existing Structures.
S-24	Lump	Lump	Lump		Lump	Lump Sum	Removal of Existing Structures.
S-25	344		344		344	Lin. Ft.	Electrical Equipment (3½ Fibre Conduit) As per plan.
S-29		36	36		36	Cy. Yd.	Porous Backfill.
SS-112	17439	5856	23295	18418	41713	Cu. Yd.	Classified Embankment Material.
I-16	27	12	39	9	48	Each	Manholes, Catch Basins & Inlets Abandoned.
SS-160	4299	1048	5347	8131	13478	Lin. Ft.	Fence As per plan.
Special		298	298		298	Lin. Ft.	Fence Removed and Stored.
Special	1508		1508	1102	2610	Lin. Ft.	Erecting (only) of Chain Link Fence.
Special	3590		3590		3590	Lin. Ft.	Chain Link Fence Removed and Stored.
Special	37		37		37	Each	Resetting Memorial Monuments As per plan.
Special	70		70	962	1032	Lin. Ft.	Chain Link Fence Removed for Re-use.
M-10	5	5	10		10	Ton.	Calcium Chloride for Temporary Roadways.
T-10	90	90	180		180	Cu. Yd.	Traffic Bound Surface Course for Temporary Roadway (Size 50% #1, 50% #2.)
T-110	100	100	200		200	Cu. Yd.	Traffic Compacted Surface Course for Temporary Roadway.
L-9	160443	21373	181,816	179563	361379	Sq. Yd.	Seeding and Protecting, Type "A" As per plan
L-3	16959		16959	54468	71427	Sq. Yd.	Placing Stockpiled Top Soil. As per plan
L-7				10	10	Sq. Yd.	Riprap for Tree Protection.
L-8				22	22	Cu. Yd.	Aggregate for Tree Aeration.
L-9	15.43	3.37	18.80	17.45	36.25	Tons	Commercial Fertilizer (4-12-4 Mix) As per plan
L-9	77.13	16.85	93.98	87.23	181.21	Tons	Agricultural Ground Limestone. As per plan
L-10	10963	16086	27049	14287	41336	Sq. Yd.	Sodding.
L-13				826	826	Each	Salix incana - Rosemary Willow 3'to 4'
L-13	411		411		411	Each	Berberis Mentorensis - Mentor Barberry. 2'to 3'.
							PAVEMENT
B-35	23		23	96	119	Cu. Yd.	Asphaltic Concrete Base Course.
B-35	2	8	10	16	26	Cu. Yd.	Asphaltic Concrete Leveling Course.
T-30	14	21	35	7	42	Gal.	Bituminous Tack Coat. Section M-5.5 M 9-1
T-35	28	31	59	19	78	Cu. Yd.	Asphaltic Concrete Surface Course Type "A"
I-21	2398	185	2583	204	2787	Sq. Yd.	6" Black Portland Cement Concrete Median Pavement.
T-70		1555	1555		1555	Sq. Yd.	6" Portland Cement Concrete Pavement. Special Finish As per plans.
T-70	3713	428	4141	608	4749	Sq. Yd.	9" Portland Cement Concrete Pavement.
T-70	16		16		16	Sq. Yd.	11 Portland Cement Concrete Pavement.
I-21	232	7	239		239	Sq. Yd.	5'-6'-5" Black Portland Cement Concrete Median Pavement.
I-21	11		11		11	Sq. Yd.	7'-8'-7" Black Portland Cement Concrete Median Pavement
I-21	13		13		13	Sq. Yd.	10'-11'-10" Black Portland Cement Concrete Median Pavement
T-71	43549	20915	64464	41992	106456	Sq. Yd.	9" Reinforced Portland Cement Concrete Pavement.
T-70	34	99	133	342	475	Sq. Yd.	6" Portland Cement Concrete Pavement.
I-12	3350		3350		3350	Lin. Ft.	Type 4 Combination Concrete Curb and Gutter (2'-0" wide.)
I-12	4617	68	4685	4165	8850	Lin. Ft.	Type 4 Combination Concrete Curb and Gutter (2'-6" wide.)
I-12	1089	1830	2919		2919	Lin. Ft.	Type 2 Combination Concrete Curb and Gutter (2'-6" wide.)
I-12	6672	5809	12481	2255	14736	Lin. Ft.	Type 2-A Concrete Curb.
I-12		1244	1244		1244	Lin. Ft.	Type 2-A Concrete Curb Modified as per plan.
I-12	8120	3655	11775	2571	14346	Lin. Ft.	Type 4-A Concrete Curb.
I-12	1066	37	1103	117	1220	Lin. Ft.	Type 4-A Concrete Curb. Modified as per plan.
I-12	125		125		125	Lin. Ft.	Type "A" Concrete Curb As per plan.
I-12	30		30		30	Lin. Ft.	Type "B" Concrete Curb As per plan.
I-12	344		344		344	Lin. Ft.	Type 4-A Concrete Curb Colored as per plan (Red)
I-19	67		67	581	648	Sq. Yd.	1¼" Insulation Course.
I-7		369	369	181	550	Sq. Yd.	9" Reinforced Concrete Approach Slabs.
SS-170	366		366		366	Sq. Yd.	Furnishing and Incorporating Red Coloring Material in Concrete Pavement.
							STRUCTURES 20 Ft. SPAN & UNDER.
S-27		114	114		114	Lin. Ft.	15" Pipe for Roadway Culverts.
Special		1	1		1	Each	15 Calco-Gate Model 100 or Equivalent.
Special	Lump	Lump	Lump	Lump	Lump	Lump Sum	Maintaining Traffic As per plan

STRUCTURES OVER 20 Ft. SPAN

For Estimated Quantities Bridge Nº HA-25-91 See Sheet Nº 280
For Estimated Quantities Bridge Nº HA-25-93 See Sheet Nº 284
For Estimated Quantities Bridge Nº HA-25-101 See Sheet Nº 104-Prop Nº2
For Estimated Quantities, Hartwell Bridge over CCC&St.L.RR&Anthony Wayne Ave. See Sheet Nº 95-7 Prop Nº2

For Estimated Quantities, Railroad Force Account Work, See Sheet Nº 94-A of Proposal Nº 2

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PK.) 'B'
ARLINGTON HT'S.
LOCKLAND (PK.) & APPROACHES.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	316-(1)	1966

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GENERAL SUMMARY
PROPOSAL Nº 1

ITEM Nº	MUNICIPAL	RURAL	TOTAL	UNIT	DESCRIPTION
					ROADWAY
E-1	77,515	333,500	411,015	Cu. Yd.	Roadway Excavation
E-2	17	332	349	Cu. Yd.	Excavation for Structures
E-3	28	86386	86414	Cu. Yd.	Channel Excavation
E-4	59,997		59,997	Cu. Yd.	Borrow
E-8	63		63	Lin. Ft.	Removal & Disposal of Existing Concrete Curb.
E-8	7345	1234	8579	Sq. Yd.	Removal & Disposal of Existing Concrete Pavement.
E-8	138		138	Sq. Yd.	Removal & Disposal of Existing Asphaltic Concrete Temporary Mall.
E-9	Lump	Lump	Lump	Lump Sum	Removal of Trees & Stumps as per plan
E-8	44	79	123	Lin. Ft.	Sealing Only
E-11	1210	1210	2420	M. Gal.	Water
E-12	211	880	1091	Lin. Ft.	(3" to 18") Pipe Removed & Disposed of.
E-12		19	19	Lin. Ft.	6" Pipe Removed & Stored.
E-12		42	42	Lin. Ft.	12" Pipe Removed & Stored.
E-12	50		50	Lin. Ft.	48" Corrugated Metal Pipe Removed & Stored.
I-2	6	393	399	Lin. Ft.	12" Pipe for Storm Sewers.
I-2	96	50	146	Lin. Ft.	15" Pipe for Storm Sewers.
I-2	137		137	Lin. Ft.	18" Pipe for Storm Sewers.
I-2	128		128	Lin. Ft.	24" Pipe for Storm Sewers.
I-2	218		218	Lin. Ft.	27" Pipe for Storm Sewers.
I-2	155	150	305	Lin. Ft.	36" Pipe for Storm Sewers.
I-2		35	35	Lin. Ft.	6" Pipe for Storm Sewers (Under Pavement.)
I-2	1565	2083	3648	Lin. Ft.	12" Pipe for Storm Sewers (Under Pavement.)
I-2	486	475	961	Lin. Ft.	15" Pipe for Storm Sewers (Under Pavement.)
I-2	607	394	1001	Lin. Ft.	18" Pipe for Storm Sewers (Under Pavement.)
I-2		265	265	Lin. Ft.	21" Pipe for Storm Sewers (Under Pavement.)
I-2	59	246	305	Lin. Ft.	24" Pipe for Storm Sewers (Under Pavement.)
I-2	156		156	Lin. Ft.	27" Pipe for Storm Sewers (Under Pavement.)
I-2	141		141	Lin. Ft.	24" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(b)
I-2	594		594	Lin. Ft.	27" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(b)
I-2	291		291	Lin. Ft.	30" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(b)
I-2	88	85	173	Lin. Ft.	24" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2	196		196	Lin. Ft.	30" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2	572	57	629	Lin. Ft.	33" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2	134	1684	1818	Lin. Ft.	36" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2		561	561	Lin. Ft.	48" Reinforced Concrete Pipe for Storm Sewers Sec. M-6.6(c)
I-2	5		5	Lin. Ft.	8" Vitrified Pipe for Storm Sewers.
I-2		3	3	Lin. Ft.	12" Vitrified Pipe for Storm Sewers.
I-2	245		245	Lin. Ft.	15" Vitrified Pipe for Storm Sewers.
I-2		87	87	Lin. Ft.	12" Vitrified Pipe for Storm Sewers Encased as per plan.
I-2		287	287	Lin. Ft.	6" Vitrified Pipe for Storm Sewers Under Pavement.
I-2	46		46	Lin. Ft.	15" Vitrified Pipe for Storm Sewers Under Pavement.
I-2	196	252	448	Lin. Ft.	12" Paved Bituminous Coated Corrugated Metal Pipe for Storm Sewers Sec. M-64(d) As per plan
I-2	45		45	Lin. Ft.	18" Paved Bituminous Coated Corrugated Metal Pipe for Storm Sewers Sec. M-64(d) As per plan
I-2	971		971	Lin. Ft.	12" Bell & Spigot Pipe for Storm Sewers (Under Pavement) with porous backfill bottom half (only) Sealed as per plan.
I-2	323		323	Lin. Ft.	15" Bell & Spigot Pipe for Storm Sewers (Under Pavement) with porous backfill bottom half (only) Sealed as per plan.
I-2	135		135	Lin. Ft.	18" Bell & Spigot Pipe for Storm Sewers (Under Pavement) with porous backfill bottom half (only) Sealed as per plan.
I-3	49	3	52	Lin. Ft.	6" Pipe for Roadway Drainage.
I-4	12697	14700	27397	Lin. Ft.	6" Pipe for Underdrains. As per plan.
I-4	123	132	255	Lin. Ft.	6" Pipe Outlets for Underdrains. As per plan
I-5		1	1	Each	Pipe Specials 6"X6" Tee (For Storm Sewers.)
I-5	2	4	6	Each	Pipe Specials 12"X6" Tee (For Storm Sewers.)
I-5		8	8	Each	Pipe Specials 15"X6" Tee (For Storm Sewers.)
I-5		1	1	Each	Pipe Specials 24"X6" Tee (For Storm Sewers.)
I-5		5	5	Each	Pipe Specials 12"x6" Y Branch. (For Storm Sewers.)
I-5		1	1	Each	Pipe Specials 24"x12" Y Branch. (For Storm Sewers.)
I-5		1	1	Each	Pipe Specials 12" x30° Bend (For Storm Sewers.)
I-5	1		1	Each	Pipe Specials 6" x90° Bend (For Roadway Drainage)
I-5	4	3	7	Each	Pipe Specials 6" X 6" Tee (For Underdrains.)
I-5	1		1	Each	Pipe Specials 6" X 6" Y Branch (For Underdrains.)
I-5		4	4	Each	Pipe Specials 18" X 6" Tee (For Storm Sewers)
I-5		3	3	Each	Pipe Specials 21" X 6" Tee (For Storm Sewers
I-8	5		5	Each	Resetting Manholes.
I-8	24	9	33	Each	Std. Nº 1 Manhole
I-8	4	9	13	Each	Std. Nº 2 Manhole Drop Pipe Omitted
I-8	10	1	11	Each	Std. Nº 3 Combination Inlet-Manhole
I-8		1	1	Each	Special Manhole "A" As per plan.
I-8	5	7	12	Each	Std. Nº 1-2-A Catch Basin
I-8	2	2	4	Each	Std. Nº 1-3 Catch Basin
I-8	1		1	Each	Std. Nº 1-4 Catch Basin
I-8	1	6	7	Each	Std. Nº 2-2-A Catch Basin
I-8	20	19	39	Each	Std. Nº 3 Catch Basin
I-8	7	1	8	Each	Std. Nº 3A Catch Basin
I-8	2	14	16	Each	Modified Std. Nº 1-2-A Catch Basin As per plan.
I-8	1		1	Each	Modified Std. Nº 1-3 Catch Basin As per plan.
I-8		1	1	Each	Modified Std. Nº 1-4 Catch Basin As per plan.
I-8	4		4	Each	Modified Std. Nº 13-A Catch Basin As per plan
I-10	440	6	446	Cu. Yd.	Dumped Rock Fill
I-10		23	23	Sq. Yd.	Stone Riprap Type "A" (Grouted)
I-13	30632	6162	36794	Sq. Ft.	4" Concrete Sidewalk.
I-13	36		36	Lin. Ft.	Concrete Steps (6" Riser 12" Tread.)
I-13	54		54	Lin. Ft.	Concrete Steps (6" Riser 24" Tread.)
I-13		35	35	Lin. Ft.	Concrete Steps (8" Riser 12" Tread.)
I-14		153	153	Lin. Ft.	Concrete Paved Gutter Type "A" As per plan.
I-14		110	110	Lin. Ft.	Concrete Paved Gutter Type "B" As per plan.
I-14		10	10	Lin. Ft.	Concrete Paved Gutter Type "D" As per plan.
I-14		10	10	Lin. Ft.	Concrete Paved Gutter Type "E" As per plan
I-15	7065	2728	9793	Lin. Ft.	Guard Rail Steel Beam Type (Deep)
I-15	88	84	172	Lin. Ft.	Guard Rail Removed & Stored.
I-17		28	28	Cu. Yd.	Side Approaches, Mail Box Turnouts, and Berm Material.

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B"
ARLINGTON HTS., LOCKLAND (Pt.)
& APPROACHES

FED. NO. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	U.I.-316 (1) LOCK	1946

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GENERAL SUMMARY

PROPOSAL Nº 1 — CONTINUED.

ITEM Nº	MUNICIPAL	RURAL	TOTAL	UNIT	DESCRIPTION
S-1	3		3	Cu. Yd.	Concrete for Structures (Wall) Class "E"
S-1	6	36	42	Cu. Yd.	Concrete for Structures Class "C"
S-1		103	103	C.U. Yd.	Concrete for Structures (Encasement.) Class "E"
S-4	125	1034	1159	Lb.	Reinforcing Steel.
S-24	Lump	Lump	Lump	Lump Sum	Removal of Existing Structures.
S-25	344		344	Lin. Ft.	Electrical Equipment (3½" Fibre Conduit) As per plan.
SS-112	17439	18418	35857	Cu. Yd.	Classified Embankment Material.
I-16	27	9	36	Each	Manholes, Catch Basins & Inlets Abandoned.
SS-160	4299	8131	12430	Lin. Ft.	Fence As per plan
Special	1508	1102	2610	Lin. Ft.	Erecting (only) of Chain Link Fence.
Special	3590		3590	Lin. Ft.	Chain Link Fence Removed and Stored.
Special	37		37	Each	Resetting Memorial Monuments As per plan.
Special	70	962	1032	Lin. Ft.	Chain Link Fence Removed for Re-use
M-10	5		5	Ton.	Calcium Chloride for Temporary Roadways.
T-10	90		90	Ton	Traffic Bound Surface Course for Temporary Roadway (Size 50% #1, 50% #2)
T-110	100		100	Cu. Yd.	Traffic Compacted Surface Course for Temporary Roadway.
L-9	160,443	179563	340,006	Sq. Yd.	Seeding and Protecting, Type "A" As per plan
L-3	16959	54468	71427	Sq. Yd.	Placing Stockpiled Top Soil. As per plan
L-7		10	10	Sq. Yd.	Riprap for Tree Protection.
L-8		22	22	Cu. Yd.	Aggregate for Tree Aeration.
L-9	15.43	17.45	32.88	Ton	Commercial Fertilizer (4-12-4 Mix.) As per plan
L-9	77.13	87.23	164.36	Ton	Agricultural Ground Limestone. As per plan.
L-10	10963	14287	25250	Sq. Yd	Sodding.
L-13		826	826	Each	Salix incana - Rosemary Willow 3' to 4'
L-13	411		411	Each	Berberis Mentorensis - Mentor Barberry. 2' to 3'

PAVEMENT

B-35	23	96	119	Cu. Yd.	Asphaltic Concrete Base Course.
B-35	2	16	18	Cu. Yd.	Asphaltic Concrete Leveling Course.
T-30	14	7	21	Gal.	Bituminous Tack Coat Section M-5.5 MS-1
T-35	28	19	47	Cu. Yd.	Asphaltic Concrete Surface Course Type A"
T-70	34	342	376	Sq. Yd.	6" Portland Cement Concrete Pavement.
T-70	3713	608	4321	Sq. Yd.	9" Portland Cement Concrete Pavement.
T-70	16		16	Sq. Yd.	11 Portland Cement Concrete Pavement.
I-21.	232		232	Sq. Yd.	5'-6'-5" Black Portland Cement Concrete Median Pavement
I-21	11		11	Sq. Yd.	7'-8'-7" Black Portland Cement Concrete Median Pavement
I-21	13		13	Sq. Yd.	10'-11-10 Black Portland Cement Concrete Median Pavement
I-21	2398	204	2602	Sq. Yd.	6" Black Portland Cement Concrete Median Pavement
T-71	43549	41992	85541	Sq. Yd.	9" Reinforced Portland Cement Concrete Pavement.
I-12	3350		3350	Lin. Ft.	Type 4 Combination Concrete Curb and Gutter (2'-0" wide)
I-12	4617	4165	8782	Lin. Ft.	Type 4 Combination Concrete Curb and Gutter (2'-6" wide)
I-12	1089		1089	Lin. Ft.	Type 2 Combination Concrete Curb and Gutter (2'-6" wide)
I-12	6672	2255	8927	Lin. Ft.	Type 2-A Concrete Curb.
I-12	8120	2571	10691	Lin. Ft.	Type 4A Concrete Curb.
I-12	1066	117	1183	Lin. Ft.	Type 4A Concrete Curb Modified as per plan.
I-12	125		125	Lin. Ft.	Type "A" Concrete Curb As per plan.
I-12	30		30	Lin. Ft.	Type "B" Concrete Curb As per plan.
I-12	344		344	Lin. Ft.	Type 4-A Concrete Curb Colored as per plan (Red)
I-19	67	581	648	Sq. Yd.	1¼" Insulation Course.
I-7		181	181	Sq. Yd.	9" Reinforced Concrete Approach Slabs.
SS-170	366		366	Sq. Yd.	Furnishing and Incorporating Red Coloring Material in Concrete Pavement.

STRUCTURES OVER 20 Ft. SPAN.

For Estimated Quantities Bridge Nº HA-25-91 See Sheet Nº 280
For Estimated Quantities Bridge Nº HA-25-93 See Sheet Nº 284

Special	Lump	Lump	Lump	Lump Sum	Maintaining Traffic As per plans

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B"
ARLINGTON Hts, LOCKLAND (Pt.)
& APPROACHES.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UF-316 (1)	1946

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FED. RD. DIVISION	STATE	FED.AID PROJECT	FISCAL YEAR	24
2	OHIO	UI-316(1) UGI	1946	289

HAMILTON COUNTY S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) AND APPROACHES.

RECAPITULATION – S.H. 987 AND APPROACHES

ITEM	DESCRIPTION	UNIT	MUNICIPAL: CINCINNATI (Part) PADDOCK ROAD, 71ST STREET AND SEYMOUR AVENUE (See Sheet No. 190-191)	MUNICIPAL: CINCINNATI (Part) SUMMIT ROAD (See Sheet No. 223)	MUNICIPAL: CINCINNATI (Part) S.H. 987 Sta. 53+97.00 TO Sta. 75+00.00 (See Sheet No. 30)	MUNICIPAL: CINCINNATI (Part) S.H. 987 Sta. 75+00.00 TO Sta. 105+00.00 (See Sheet No. 33)	MUNICIPAL: CINCINNATI (Part) TOTAL	MUNICIPAL: ARLINGTON HEIGHTS S.H. 987 Sta. 105+00.00 TO Sta. 136+88.04 (See Sheet No. 36)	MUNICIPAL: ARLINGTON HEIGHTS S.H. 987 Sta. 136+88.04 TO Sta. 175+47.12 (See Sheet No. 41)	MUNICIPAL: ARLINGTON HEIGHTS TOTAL	MUNICIPAL: LOCKLAND (Part) S.H. 987 Sta. 136+88.04 TO Sta. 175+47.12 (See Sheet No. 41)	MUNICIPAL: TOTAL MUNICIPAL	RURAL: SUMMIT ROAD (See Sheet No. 223)	RURAL: S.H. 987 Sta. 53+97.00 TO Sta. 75+00.00 (See Sheet No. 30)	RURAL: S.H. 987 Sta. 75+00.00 TO Sta. 105+00.00 (See Sheet No. 33)	RURAL: S.H. 987 Sta. 105+00.00 TO Sta. 136+88.04 (See Sheet No. 36)	RURAL: TOTAL RURAL	GRAND TOTAL
	PAVEMENT																	
B-35	3" Asphaltic Concrete Base Course	Cu.Yd.	22.9				22.9					22.9	95.9				95.9	118.8
B-35	1" Asphaltic Concrete Leveling Course	Cu.Yd.	1.7				1.7					1.7	15.6				15.6	17.3
E-8	Removal and Disposal of Existing Pavement	Sq.Yd.	7302.0				7302.0	17.6		17.6	25.3	7344.9	499.0		734.4		1233.4	8578.3
E-8	Removal and Disposal of Existing Asph. Conc. Temporary Mall	Sq.Yd.									137.2	137.2						137.2
E-8	Removal and Disposal of Existing Curb	Lin.Ft.	63.0				63.0					63.0						63.0
E-8	Sealing only	Lin.Ft.	44.0				44.0					44.0	79.0				79.0	123.0
I-12	Type 4 Concrete Curb and Gutter (2'-0" wide)	Lin.Ft.							1402.0	1402.0	1947.9	3349.9						3349.9
I-12	Type 2 Concrete Curb and Gutter (2'-6" wide)	Lin.Ft.	1088.4				1088.4					1088.4						1088.4
I-12	Type 4 Concrete Curb and Gutter (2'-6" wide)	Lin.Ft.	2181.2	504.1			2685.3	1931.1		1931.1		4616.4	1494.0		181.8	2489.2	4165.0	8781.4
I-12	Type 2-A Concrete Curb	Lin.Ft.	4367.4	1196.2	1107.6		6671.2					6671.2	1669.2		31.0	554.3	2254.5	8925.7
I-12	Type 4-A Concrete Curb	Lin.Ft.			3264.2		3264.2	1149.5	1407.4	2556.9	2298.7	8119.8	134.0			2436.2	2570.2	10690.0
I-12	Type 4-A Modified Concrete Curb	Lin.Ft.	240.1				240.1				825.8	1065.9	116.7				116.7	1182.6
I-12	Type 2-A Modified Concrete Curb	Lin.Ft.																
I-12	Type "A" Concrete Curb	Lin.Ft.	124.9				124.9					124.9						124.9
I-12	Type "B" Concrete Curb	Lin.Ft.	29.8				29.8					29.8						29.8
I-19	1½" Insulation Course	Sq.Yd.	66.7				66.7					66.7	580.4				580.4	647.1
I-17	Side Approaches, Mail Box Turnouts & Berm Material	Cu.Yd.											28.0				28.0	28.0
T-30	Bituminous Tack Coat Sec. M5.5-M5.1	Gallon	13.3				13.3					13.3	7.0				7.0	20.3
T-35	Asphaltic Concrete Surface Course, Type "A"	Cu.Yd.	9.7		18.2		27.9					27.9	18.5				18.5	46.4
I-12	Type 4-A Concrete Curb Colored as per plan (Red)	Lin.Ft.									343.8	343.8						343.8
I-21	6" Black Portland Cement Concrete Median Pavement	Sq.Yd.	375.0	15.8			390.8	413.2	625.8	1039.0	968.6	2398.4	12.9			191.5	204.4	2602.8
T-70	9" Plain Concrete Pavement	Sq.Yd.	3713.0				3713.0					3713.0	608.0				608.0	4321.0
T-70	11" Plain Concrete Pavement	Sq.Yd.						15.6		15.6		15.6						15.6
I-21	5'-6"-5" Black Portland Cement Concrete Median Pavement	Sq.Yd.	21.5				21.5				210.1	231.6						231.6
I-21	7"-8"-7" Black Portland Cement Concrete Median Pavement	Sq.Yd.	10.3				10.3					10.3						10.3
I-21	10"-11"-10" Black Portland Cement Concrete Median Pavement	Sq.Yd.	12.5				12.5					12.5						12.5
T-71	9" Reinforced Concrete Pavement	Sq.Yd.	13991.6	6203.1	8270.8		28465.5	4935.2	3746.5	8681.7	6401.2	43548.4	6656.5	3558.4	14794.2	16982.5	41991.6	85540.0
T-70	6" Plain Concrete Pavement	Sq.Yd.							33.6	33.6		33.6	341.4				341.4	375.0
SS-170	Furnishing & Incorporating Red Coloring Material in Concrete Pavement	Sq.Yd.									365.8	365.8						365.8
	CONCRETE APPROACH SLABS																	
I-7	Reinforced Concrete Approach Slab	Sq.Yd.													181.0		181.0	181.0
	GUARD RAIL																	
I-15	Guard Rail Steel Beam Type (Deep)	Lin.Ft.	62.5	989.72	1075.0		2127.22		2033.01	2093.01	2844.49	7064.72	1947.78		200.00	579.50	2727.28	9792.000
I-15	Guard Rail Removed and Stored	Lin.Ft.	88.0				88.0					88.0	84.00				84.0	172.0
	FENCE																	
SS-160	Fence	Lin.Ft.			30		30	1485.0	1752.0	3237.0	1032.0	4299.0			4080.0	4051.0	8131.0	12430.0
Special	Chain Link Fence Removed and Stored	Lin.Ft.	3590.0				3590.0					3590.0						3590.0
Special	Fence (Erecting Only) See Note Sheet No. 18	Lin.Ft.			69.31		69.31				1438.0	1507.31		667.19	434.0		1101.19	2608.5
Special	Chain Link Fence Removed for Re-use	Lin.Ft.			69.31		69.31					69.31		667.19	294.0		961.19	1030.5
	MEMORIAL MONUMENTS																	
Special	Memorial Monuments Removed and Reset	Each	37.0				37.0					37.0						37.0

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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HAMILTON COUNTY
S.H. 987-Sec. Cincinnati (Pt.) "B"
Arlington Hts. – Lockland (Pt.)
& Approaches

RECAPITULATION – S.H. 987 & APPROACHES (CONTINUED)

Item	Description	Unit	MUNICIPAL: Cincinnati (Pt.) Paddock Road, 71st St. & Seymour Ave. See Sheet Nº 190 & 191	Cincinnati (Pt.) Summit Rd. See Sheet Nº 223	Cincinnati (Pt.) S.H. 987 Sta. 53+67 to Sta. 75+00 See Sheet Nº 30	Cincinnati (Pt.) S.H. 987 Sta. 75+00 to Sta. 105+00 See Sheet Nº 33	Cincinnati (Pt.) Total	Arlington Heights S.H. 987 Sta. 105+00 to Sta. 136+88.04 See Sheet Nº 36	Arlington Heights S.H. 987 Sta. 136+88.04 to Sta. 175+47.12 See Sheet Nº 41	Arlington Heights Total	Lockland (Pt.) S.H. 987 Sta. 136+88.04 to Sta. 175+47.12 See Sheet Nº 41	Lockland (Pt.) Total	MUNICIPAL Total	RURAL Summit Rd. See Sheet Nº 223	RURAL S.H. 987 Sta. 53+67 to Sta. 75+00 See Sheet Nº 30	RURAL S.H. 987 Sta. 75+00 to Sta. 105+00 See Sheet Nº 33	RURAL S.H. 987 Sta. 105+00 to Sta. 136+88.04 See Sheet Nº 36	RURAL Total	Grand Total
	CLASSIFIED EMBANKMENT																		
SS-112	Classified Embankment Material	Cu. Yd.	5775	2531	3097		11403	3131	1066	4197	1839	17439	3343	1540	5755	7780	18418	35857
	ROCK FILL																		
I-10	Dumped Rock Fill	Cu. Yd.							440	440		440						440
	SIDEWALK AND STEPS																		
I-13	4" Concrete Sidewalk	Sq. Ft.	30417			214.3	30631.3					30631.3	5218		944		6162	36793.3
I-13	Concrete Steps 6" Riser 12" Tread	Lin. Ft.	36			36						36						36
I-13	Concrete Steps 6" Riser 24" Tread	Lin. Ft.	54			54						54						54
I-13	Concrete Steps 8" Riser 12" Tread	Lin. Ft.											35				35	35
	CONDUIT																		
S-25	Electrical Equipment (3½" Fibre Conduit)	Lin. Ft.	344			344						344						344
	EROSION CONTROL																		
L-3	Commercial Fertilizer (4-12-4 Mix) (Applied @ 20 lbs. per 1000 Sq. Ft.)	Ton				8.82				5.26	1.35	15.43					17.45	32.88
L-3	Agricultural Ground Limestone (Applied @ 100 lbs. per 1000 Sq. Ft.)	Ton				44.09				26.31	6.73	77.13					87.23	164.36
L-10	Sodding	Sq. Yd.	6815	1837	1924	10576	387			387		10963	3084	1334	5341	4528	14287	25250
L-9	Seeding & Protecting, Type "A" (See Cross Sections)	Sq. Yd.	34205	20518	32679	87402	19,163	38925		58,088	14953	160,443	15974	7372	86001	70216	179563	340,006
L-7	Riprap for Tree Protection	Sq. Yd.											10				10	10
L-8	Aggregate for Tree Root Aeration	Cu. Yd.											22				22	22
L-3	Placing Stockpile Top Soil (3" Thick)	Sq. Yd.		9805	7154	16959						16959	9339	1953	32779	10397	54468	71427
L-13	Salix Incana (Rosemary Willow) 3ft. to 4 ft.	Each													826		826	826
L-13	Berberis Mentorensis-Mentor Barberry 2 Ft. to 3 Ft.	Each		327	84	411						411						411
	CONCRETE RETAINING WALL																		
S-1	Concrete for Structures Wall (Class "E")	Cu. Yd.						2.2	2.2			2.2						2.2
E-2	Excavation for Structure	Cu. Yd.						7.0	7.0			7.0						7.0
	CHANNEL																		
E-3	Channel Excavation	Cu. Yd.													86361		86361	86361
S-1	Concrete or Structures - Pipe Encasement (Class "E")	Cu. Yd.													102.5		102.5	102.5
E-2	Excavation for Structures	Cu. Yd.													228		228	228
	PAVED GUTTER																		
I-14	Paved Gutter Type A	Lin. Ft.													153		153	153
I-14	Paved Gutter Type B	Lin. Ft.													110		110	110
E-2	Excavation for Structures	Cu. Yd.													6		6	6
I-10	Dumped Rock Fill	Cu. Yd.													6		6	6
I-14	Paved Gutter Type E	Lin. Ft.													10		10	10
	TREES & STUMPS																		
E-9	Removal of Trees and Stumps	Lump										Lump					Lump	Lump

RECAPITULATION

MUNICIPAL — CINCINNATI.

Item	Description	Unit	PADDOCK ROAD & APPROACHES Summit Road Sta. 0+00 to Sta. 13+71.18 See Sheet No. 256	S.H. 987 Sta. 61+34 to Sta. 68+32.81 Summit Road Sta. 13+71.18 to Sta. 19+29.13 See Sheet No. 264	TOTAL Cincinnati
UNDERDRAINS					
F-4	6" Pipe for Underdrains	Lin. Ft.	6019	1429	7448
I-4	6" Pipe Outlets for Underdrains	Lin. Ft.	73	50	123
I-5	6"x6" Tee Pipe Special for Underdrains	Each	4		4
I-5	6"x6" Y-branch Pipe Special for Underdrains	Each	1		1
PIPE REMOVAL & ADJUSTMENTS					
I-8	Resetting Existing Manholes	Each	5		5
E-12	6" Cast Iron Pipe Removed & Stored	Lin. Ft.			
E-12	12" Cast Iron Pipe Removed & Stored	Lin. Ft.			
E-12	48" Corrugated Metal Pipe Removed & Stored	Lin. Ft.	50		50
E-12	(3"-18") Pipe Removed & Disposed of	Lin. Ft.	42		42
S-1	Concrete for Plugging Openings Class "C"	Cu. Yd.	1		1
S-24	Removal of Existing Structures	Each			
I-16	Abandon Existing Manholes, Catch Basins & Inlets	Each	21		21

MUNICIPAL — ARLINGTON HEIGHTS

Item	Description	Unit	S.H. 987 Sta. 127+59.2 to Sta. 150+96 See Sheet No. 278
UNDERDRAINS			
F-4	6" Pipe for Underdrains	Lin. Ft.	3031
I-4	6" Pipe Outlets for Underdrains	Lin. Ft.	
I-5	6"x6" Tee Pipe Special for Underdrains	Each	
I-5	6"x6" Y-branch Pipe Special for Underdrains	Each	
PIPE REMOVAL & ADJUSTMENTS			
I-8	Resetting Existing Manholes	Each	
E-12	6" Cast Iron Pipe Removed & Stored	Lin. Ft.	
E-12	12" Cast Iron Pipe Removed & Stored	Lin. Ft.	
E-12	48" Corrugated Metal Pipe Removed & Stored	Lin. Ft.	
E-12	(3"-18") Pipe Removed & Disposed of	Lin. Ft.	169
S-1	Concrete for Plugging Openings Class "C"	Cu. Yd.	.5
S-24	Removal of Existing Structures	Each	Lump.
I-16	Abandon Existing Manholes, Catch Basins & Inlets	Each	6

MUNICIPAL — LOCKLAND

Item	Description	Unit	S.H. 987 Sta. 150+96 to Sta. 175+47.12 See Sheet No. 278
UNDERDRAINS			
F-4	6" Pipe for Underdrains	Lin. Ft.	2218
I-4	6" Pipe Outlets for Underdrains	Lin. Ft.	
I-5	6"x6" Tee Pipe Special for Underdrains	Each	
I-5	6"x6" Y-branch Pipe Special for Underdrains	Each	
PIPE REMOVAL & ADJUSTMENTS			
I-8	Resetting Existing Manholes	Each	
E-12	6" Cast Iron Pipe Removed & Stored	Lin. Ft.	
E-12	12" Cast Iron Pipe Removed & Stored	Lin. Ft.	
E-12	48" Corrugated Metal Pipe Removed & Stored	Lin. Ft.	
E-12	(3"-18") Pipe Removed & Disposed of	Lin. Ft.	
S-1	Concrete for Plugging Openings Class "C"	Cu. Yd.	
S-24	Removal of Existing Structures	Each	
I-16	Abandon Existing Manholes, Catch Basins & Inlets	Each	

MUNICIPAL — TOTAL

Item	Description	Unit	TOTAL Municipal
UNDERDRAINS			
F-4	6" Pipe for Underdrains	Lin. Ft.	12697
I-4	6" Pipe Outlets for Underdrains	Lin. Ft.	123
I-5	6"x6" Tee Pipe Special for Underdrains	Each	4
I-5	6"x6" Y-branch Pipe Special for Underdrains	Each	1
PIPE REMOVAL & ADJUSTMENTS			
I-8	Resetting Existing Manholes	Each	5
E-12	6" Cast Iron Pipe Removed & Stored	Lin. Ft.	
E-12	12" Cast Iron Pipe Removed & Stored	Lin. Ft.	
E-12	48" Corrugated Metal Pipe Removed & Stored	Lin. Ft.	50
E-12	(3"-18") Pipe Removed & Disposed of	Lin. Ft.	211
S-1	Concrete for Plugging Openings Class "C"	Cu. Yd.	1.5
S-24	Removal of Existing Structures	Each	Lump
I-16	Abandon Existing Manholes, Catch Basins & Inlets	Each	27

RURAL — SH 987 Sta. 68+32.81 to Sta. 87+75

Item	Description	Unit	SH 987 Sta. 68+32.81 to Sta. 87+75 Summit Road Sta. 19+29.13 to Sta. 38+57 See Sheet No. 264
UNDERDRAINS			
F-4	6" Pipe for Underdrains	Lin. Ft.	5786
I-4	6" Pipe Outlets for Underdrains	Lin. Ft.	85
I-5	6"x6" Tee Pipe Special for Underdrains	Each	1
I-5	6"x6" Y-branch Pipe Special for Underdrains	Each	
PIPE REMOVAL & ADJUSTMENTS			
I-8	Resetting Existing Manholes	Each	
E-12	6" Cast Iron Pipe Removed & Stored	Lin. Ft.	18.5
E-12	12" Cast Iron Pipe Removed & Stored	Lin. Ft.	42
E-12	48" Corrugated Metal Pipe Removed & Stored	Lin. Ft.	
E-12	(3"-18") Pipe Removed & Disposed of	Lin. Ft.	880
S-1	Concrete for Plugging Openings Class "C"	Cu. Yd.	4.1
S-24	Removal of Existing Structures	Each	Lump
I-16	Abandon Existing Manholes, Catch Basins & Inlets	Each	9

RURAL — SH 987 Sta. 87+75 to Sta. 127+59.2

Item	Description	Unit	SH 987 Sta. 87+75 to Sta. 127+59.2 See Sheet No. 278
UNDERDRAINS			
F-4	6" Pipe for Underdrains	Lin. Ft.	8914
I-4	6" Pipe Outlets for Underdrains	Lin. Ft.	47
I-5	6"x6" Tee Pipe Special for Underdrains	Each	2
I-5	6"x6" Y-branch Pipe Special for Underdrains	Each	
PIPE REMOVAL & ADJUSTMENTS			
I-8	Resetting Existing Manholes	Each	
E-12	6" Cast Iron Pipe Removed & Stored	Lin. Ft.	
E-12	12" Cast Iron Pipe Removed & Stored	Lin. Ft.	
E-12	48" Corrugated Metal Pipe Removed & Stored	Lin. Ft.	
E-12	(3"-18") Pipe Removed & Disposed of	Lin. Ft.	
S-1	Concrete for Plugging Openings Class "C"	Cu. Yd.	
S-24	Removal of Existing Structures	Each	
I-16	Abandon Existing Manholes, Catch Basins & Inlets	Each	

RURAL — TOTAL

Item	Description	Unit	TOTAL Rural
UNDERDRAINS			
F-4	6" Pipe for Underdrains	Lin. Ft.	14700
I-4	6" Pipe Outlets for Underdrains	Lin. Ft.	132
I-5	6"x6" Tee Pipe Special for Underdrains	Each	3
I-5	6"x6" Y-branch Pipe Special for Underdrains	Each	
PIPE REMOVAL & ADJUSTMENTS			
I-8	Resetting Existing Manholes	Each	
E-12	6" Cast Iron Pipe Removed & Stored	Lin. Ft.	18.5
E-12	12" Cast Iron Pipe Removed & Stored	Lin. Ft.	42
E-12	48" Corrugated Metal Pipe Removed & Stored	Lin. Ft.	
E-12	(3"-18") Pipe Removed & Disposed of	Lin. Ft.	880
S-1	Concrete for Plugging Openings Class "C"	Cu. Yd.	4.1
S-24	Removal of Existing Structures	Each	Lump
I-16	Abandon Existing Manholes, Catch Basins & Inlets	Each	9

RECAPITULATION of SIMILAR ITEMS

Title of Box Carried from.	Sheet No	Excavation Structure Item E-2 Cu. Yd	Concrete for Structure Removal of Existing Structure Class "C" Item S-1 Cu. Yd	Item S-24 Lump Sum	Excavation Structure Item E-2 Cu. Yd	Channel Item E-3 Cu. Yd.	Concrete for Structure Class "C" Item S-1 Cu. Yd.
MUNICIPAL							
Conc. Retaining Walls	25	7					
Channel	25				228	86361	
Paved Gutter	25				6		
Drainage	27	10	3.9		98	25	31.1
Adjustments	See Above		1.5	Lump			4.1
TOTALS		17	5.4	Lump	332	86386	35.2

RECAPITULATION - EXCAVATION & EMBANKMENT

Station to Station	Carried from Sheet No	Excavation	Embankment	Embankment +20%
MUNICIPAL				
Cincinnati				
15+33.80 to 40+81.93 (Paddock Rd.)	190	7968	27018	32422
11+49.00 to 15+50 (71st Street.)	190	161	7251	8701
17+00 to 19+50 (Seymore Ave)	190	274	2018	2422
1+00 to 19+29.13 (Summit Rd.)	223	26202	10720	12864
56+50 to 68+32.81 (S.H. 987)	63	30218	133947	160736
Arlington Heights				
127+59.20 to 150+96 (S.H. 987)	132	9184	41293	49552
Lockland				
150+96 to 175+47.12 (S.H. 987)	136	3351	1246	1495
Add for Est. Top Soil (16959 x 2/12 x 1/4)		157		
Total Municipal		77515	223493	268192
RURAL				
19+29.13 to 38+81 (Summit Rd)	223	22258	8436	10123
68+32.81 to 87+20 (S.H. 987)	82	78134	20339	24407
88+48 to 127+59.20 S.H. 987)	109	231903	185005	222006
Add for Est. Top Soil (54468 x 2/12 x 1/4)		505		
Total Rural		332800	213780	256536
See note on sheet 19		700		
Total excavation		333500		

BORROW CALCULATIONS

MUNICIPAL

Excavation	77,515	Cu. Yd.
Available for embankment from Rural Section	162,924	Cu. Yd.
Pavement Excavation available for Embankment. 734.5 x 8/36	1632	Cu. Yd.
Available for Embankment (Gross.)	242,071	Cu. Yd.
Deduct Material Unsuitable for Embankment (See tabulation below)	33876	Cu. Yd.
Total for Embankment.	208,195	Cu. Yd.
Embankment +20%	268,192	Cu. Yd.
Borrow	59,997	Cu. Yd.

RURAL

Excavation	332800	Cu. Yd.
Channel Excavation available for Embankment.	86386	Cu. Yd.
Pavement Removal available for Embankment. 1234 x 8/36	274	Cu. Yd.
Total available for Embankment.	419460	Cu. Yd.
Embankment +20%	256536	Cu. Yd.
Available to reduce borrow in Municipal Sections.	162924	Cu. Yd.

TABULATION OF MATERIAL UNSUITABLE FOR EMBANKMENT.

Summit Rd.	Sta. 8+00 to Sta. 15+66.18	13,777 Cu. Yd.
Ramp "B"	Sta. 7+00 to Sta. 8+63	2950 Cu. Yd.
S.H. 987	Sta. 56+50 to Sta. 60+50	17,149 Cu. Yd.
Total		33876 Cu. Yd.

Note:-
The location and amount of this material is approximate. Final location, determination of unsuitability and amount to be removed, will be determined by the Engineer during Construction.

HAMILTON COUNTY
S.H. 987, SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, & LOCKLAND (PT.) APPROACHES.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGL	1946

26
287

RECAPITULATION

Item	Description	Unit	MUNICIPAL — CINCINNATI — Paddock Road & Approaches, Summit Road Sta. 0+00 to Sta. 13+71.18 (See Sheet No. 255)	MUNICIPAL — CINCINNATI — S.H. 987 Sta. 61+12.34 to Sta. 68+32.81, Summit Road Sta. 13+71.18 to Sta. 19+29.13 (See Sheet No. 263)	MUNICIPAL — CINCINNATI — TOTAL Cincinnati	MUNICIPAL — ARLINGTON HEIGHTS — S.H. 987 Sta. 127+59.2 to Sta. 150+96 (See Sheet No. 277)	TOTAL Municipal	RURAL — S.H. 987 Sta. 68+32.81 to Sta. 87+75, Summit Road Sta. 19+29.13 to Sta. 38+31 (See Sheet No. 263)	RURAL — S.H. 987 Sta. 87+75 to Sta. 127+59.2 (See Sheet No. 277)	RURAL TOTAL Rural
	DRAINAGE									
I-2	12" Pipe for Storm Sewers	Lin.Ft.	6		6		6	192	201	393
I-2	15" Pipe for Storm Sewers	Lin.Ft.	96		96		96	50		50
I-2	18" Pipe for Storm Sewers	Lin.Ft.	137		137		137			
I-2	24" Pipe for Storm Sewers	Lin.Ft.	128		128		128			
I-2	27" Pipe for Storm Sewers	Lin.Ft.	218		218		218			
I-2	36" Pipe for Storm Sewers	Lin.Ft.	155		155		155		150	150
I-2	6" Pipe for Storm Sewers Under Pavement	Lin.Ft.						35		35
I-2	12" Pipe for Storm Sewers Under Pavement	Lin.Ft.	1202	90	1292	273	1565	957	1126	2083
I-2	15" Pipe for Storm Sewers Under Pavement	Lin.Ft.	340	120	460	26	486	475		475
I-2	18" Pipe for Storm Sewers Under Pavement	Lin.Ft.	504	103	607		607	394		394
I-2	21" Pipe for Storm Sewers Under Pavement	Lin.Ft.						265		265
I-2	24" Pipe for Storm Sewers Under Pavement	Lin.Ft.	59		59		59	246		246
I-2	27" Pipe for Storm Sewers Under Pavement	Lin.Ft.	156		156		156			
I-2	24" Reinf. Conc. Pipe for Storm Sewers M-6.04(b)	Lin.Ft.				141	141			
I-2	27" Reinf. Conc. Pipe for Storm Sewers M-6.04(b)	Lin.Ft.	287		287	307	594			
I-2	30" Reinf. Conc. Pipe for Storm Sewers M-6.04(b)	Lin.Ft.		291	291		291			
I 2	24" Ex. Str. Reinf. Conc. Pipe for Storm Sewers M-6.04(b)	Lin.Ft.	88		88		88	85		85
I-2	30" Ex. Str. Reinf. Conc. Pipe for Storm Sewers M-6.04(b)	Lin.Ft.				196	196			
I-2	33" Ex. Str. Reinf. Conc. Pipe for Storm Sewers M-6.04(b)	Lin.Ft.		291	291	281	572		57	57
I-2	36" Ex. Str. Reinf. Conc. Pipe for Storm Sewers M-6.04(b)	Lin.Ft.	134		134		134	1445	239	1684
I-2	48" Ex. Str. Reinf. Conc. Pipe for Storm Sewers M-6.04(b)	Lin.Ft.						561		561
I-2	8" Vitrified Sewer Pipe for Storm Sewers	Lin.Ft.	5		5		5			
I-2	12" Vitrified Sewer Pipe for Storm Sewers	Lin.Ft.						3		3
I-2	12" Vitrified Sewer Pipe for Storm Sewers (Encased)	Lin.Ft.						87		87
I-2	15" Vitrified Sewer Pipe for Storm Sewers.	Lin.Ft.	245		245		245			
I-2	6" V.i.t. Sewer Pipe for Storm Sewers Under Pavement	Lin.Ft.						287		287
I-2	15" Vit Sewer Pipe for Storm Sewers Under Pavement	Lin.Ft.	46		46		46			
I-2	12" Paved Bituminous Coated Corrugated Metal Pipe for Storm Sewers Sec. M-64(a)	Lin.Ft.		196	196		196	99	153	252
I-2	18" Paved Bituminous Coated Corrugated Metal Pipe for Storm Sewers Sec. M-6.4(a)	Lin.Ft.		45	45		45			
I-2	12" Bell and Spigot Pipe for Storm Sewers (Under Pavement) (with porous backfill) (bottom half (only) sealed.)	Lin.Ft.	971		971		971			
I-2	15" Bell and Spigot Pipe for Storm Sewers (Under Pavement) (with porous backfill) (bottom half (only) sealed)	Lin.Ft.	323		323		323			
I-2	18" Bell and Spigot Pipe for Storm Sewers (Under Pavement) (with porous backfill) (bottom half (only) sealed)	Lin.Ft.	135		135		135			
I-3	6" Pipe for Roadway Drainage	Lin.Ft.		49	49		49	3		3
I-5	6"x6" Tee Pipe Special for Storm Sewers	Ea.						1		1
I-5	12"x6" Tee Pipe Special for Storm Sewers	Ea.		1	1	1	2	1	3	4
I-5	15"x6" Tee Pipe Special for Storm Sewers	Ea.						8		8
I-5	18"x6" Tee Pipe Special for Storm Sewers	Ea.						4		4
I-5	21"x6" Tee Pipe Special for Storm Sewers.	Ea						3		3
I-5	24"x6" Tee Pipe Special for Storm Sewers	Ea						1		1
I-5	12"x6" Y-branch Pipe Special for Storm Sewer	Ea							5	5
I-5	24"x12" Y-branch Pipe Special for Storm Sewer	Ea						1		1
I-5	6"x90° Bend Pipe Special for Roadway Drainage	Ea		1	1		1			
I-5	12"x30° Bend Pipe Special for Storm Sewers	Ea						1		1
I-8	Std. No. 1 Manhole	Ea	16	3	19	5	24	8	1	9
I-8	Std. No. 2 Manhole (Drop Pipe Omitted)	Ea	2		2	2	4	8	1	9
I-8	Std. No. 3 Combination Inlet-Manhole	Ea.	7	1	8	2	10		1	1
I-8	Special Manhole "A" (as per plan)	Ea.						1		1
I-8	Std. No. 1-2 A Catch Basin	Ea.	4	1	5		5	5	2	7
I-8	Std. No. 1-3 Catch Basin	Ea.	1	1	2		2	2		2
I-8	Std. No. 1-4 Catch Basin	Ea.		1	1		1			
I-8	Std. No. 2-2 A Catch Basin	Ea.	1		1		1	6		6
I-8	Std. No. 3 Catch Basin	Ea.	14	1	15	5	20	11	8	19
I-8	Std. No. 3-A Catch Basin	Ea.	5		5	2	7		1	1
I-8	Mod. Std. No. 1-2-A Catch Basin (as per plan)	Ea.		1	1	1	2	5	9	14
I-8	Mod. Std. No. 1-3 Catch Basin (as per plan)	Ea.	1		1		1			
I-8	Mod. Std. No. 1-4 Catch Basin (as per plan)	Ea.						1		1
I-8	Mod. Std. No. 13-A Catch Basin (as per plan)	Ea.	4		4		4			
I-10	Riprap Type A Grouted	Sq.Yd.							23	23
I-14	Special Type "D" Paved Gutter (as per plan)	Lin.Ft.						10		10
E-2	Excavation for Structures	Cu.Yd.	5	5	10		10	21	77	98
E-3	Channel Excavation	Cu.Yd.		28	28		28		25	25
S-1	Concrete for Structures (Class "C")	Cu.Yd.	1.7	2.2	3.9		3.9	7.1	24.0	31.1
S-4	Reinforcing Steel	Lb.	55	70	125		125	219	815	1034

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, & LOCKLAND (Pt.) APPROACHES

FED. NO. DIVISION	STATE	FED.-AID PROJECT	SHEET TOTAL
2	OHIO	U.S. 3 S.I. (J) 946	27 289

DIVISION 2 OHIO | FED. AID UI-316(1) 1946 UGI | 28 289

HAMILTON COUNTY S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

CHECKED
Drainage
Boxes
Bal. Points

STA. 11+49 - BEGIN WORK S.H. 781-SEC. CINTI. (PT.)

STA. 53+37 - BEGIN WORK S.H. 987

Sta. 45+92.02 S.H. 987 = Sta. 9+14.97 E. 71st St.

Sta. 53+34.90 - S.H. 987 = Sta. 34+16.40 New E. of PADDOCK RD.

Sta. 54+00

Sta. 50+00 Future ℄ Prop. S.H. 987

B.M. Elev. 551.95
Arrow Top of Fire Hydrant
Sta. 37+61
26' Rt.

HAMILTON CO. BOARD OF COMMISSIONERS

ANNA F. KLOPP et. al.

Ohio Dept. of Hwys. Div. Garage

Future ℄ Prop. S.H. 987

N 42° 08' 35" E 57

Easement to STATE of OHIO from HAM. CO. Bd. of COMM.

Ex. Cinder Drive

RAMP "A"

RAMP "B"

Prop. Guard Rail

CANAL R/W

℄ LONGVIEW (Macadam) AVE.

℄ OKLAHOMA (Macadam)

EXIST. PADDOCK RD.

PROPOSED PADDOCK RD.

FUTURE

RAMP

Ex. Telephone Conduit (14" Cover)
Ex. 8" Water Main (9" Cover)
Ex. 16" Water Main (4½" Cover)

Ex. 12" Gas Main (2½" Cover)
Ex. 12" Water Main (3½" Cover)

Ex. 24" Storm Sewer

Ex. 15" Storm Sewer

Ex. 8" Water Main

Ex. 8" Gas Main (3' Cover)

Ex. 8" Water Main (4' Cover)

Ex. 8" Sanitary Sewer

Ex. 9" Gas Main (3' Cover)

Ex. 6" Gas Main (3' Cover)

Ex. 98" Corr. M. Pipe

Ex. 18" Storm Sewer

Ex. 33" Storm Sewer

Ex. 12" Storm Sewer

Ex. 12" Conc. Dr.

Ex. 7.3 Conc.

Ex. 10" Conc. Ret. Wall

Ex. Buildings

Ex. Cinder Drive

Ex. Loading Dock

Ex. Loading Dock for Cinders

Ex. Sod

Ex. Shed

Ex. Garage

Ex. Chicken Ho.

Ex. Fr. Gar.

Ex. Conc. Walk

Ex. Conc. Island

Ex. Gas Pumps & Tank

Ex. Conc. Filling Sta.

Ex. Gas Tanks

Ex. Stone Column

Ex. Sign Post

Ex. Hedge

Ex. Boxes

Ex. Fence

Ex. Poles

Ex. Hydrant

Ex. Manhole

Ex. Catch Basin

Ex. Inlet

Ex. Meter Box

Ex. Conc. Meter Box

Ex. Flower Bed

Ex. Paved Gutter

Ex. Paved Gutter Removed

Ex. Pavement Removed

Ex. Curb Removed

Ex. Conc. Curb

Ex. Conc. Drive

Ex. Conc. Walk

Ex. Conc. Steps

Ex. Conc. Retaining Wall

Ex. Wood Post

Ex. Tree

Ex. Bush

Ex. Hedge

Ex. Fence

Ex. Gate

Ex. Gas

Ex. Pavement

Ex. Curb

Ex. Shingle

Ex. Brick

Ex. Stone

Ex. Frame

Ex. Stucco

Ex. Asphalt

Ex. Concrete

Ex. Tile

Ex. Slate

Ex. Metal

Ex. Glass

Ex. Wood

Ex. Paint

Ex. Plaster

DIVISION 2 OHIO | FED. AID UI-316(1) UGI | 1946 | 29 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.)
"B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

CHECKED
Drainage
Boxes
Bal. Points

CANAL R/W

STA. 61+24.34 – BEGIN PROPOSAL NO. FED. PROJECT NO. UGI-316(1)
BEGIN SEC. CINTI. (PT.)

ANNA F. KLOPP et al.

Old Cross Notch
Ex. Canal Mon.

STA. 68+39.28 END SEC. CINTI. (PT.)

THE NATIONAL DISTILLERS PRODUCTS CORP.

P.I. = S 10° 78' = 69.99
Δ = 16°04'12"
D = 1°06'
T = 735.13'
R = 5208.71'
L = 1460.61'
E = 51.82'

Prop. ℄ SH 987
37.11 Cross cut in foundation | 48' Hub | 50' Hub | P.C. Sta 71+36.87

Warehouse | Warehouse | Warehouse

Prop. R/W | 61+50 135' | 66+25 115 | 67+50 85' | 74+50 85' | 75+65 75'

Prop. Guard Rail | Prop. Fence | End Post

EXISTING GATES NOT TO BE RESET (ABANDONED)
8"ø Water | 8"ø Water (6' cover)
Gate | Gate
100 10T Pkt. NH2A C.B.
6" Water | 8" Water

CAMP "B"
CAMP "A"
Temporary Mall | Temporary Mall
Sod

P.C. = 50+00 | 63+85.92
P.C. = 90+00 | 63+86.57
P.C. = 71+87.89
P.C. = 21+18.89

60 61 62 63 64 65 N 42° 08' 39" E 66 67 68 69 70 71 72 73 74 75

℄ Summit Road.

℄ Ex. Ditch | ℄ Ex. Ditch | ℄ Ex. Ditch | Ex. cinder Drive

HAMILTON COUNTY BOARD of COMMISSIONERS

B.M.
Elev. 541.50
Top of Iron Pipe S.E. Cor. National Distillery Co. property
Sta. 67+50± 100± Lt.

N 70° 47' 39" E
P.I. = Sta 11+95.35
Δ = 21° 21' Rt.
D = 6° 00'
R = 954.93'
T = 180.0'
L = 355.83'
E = 16.82'
P.C. = 10+15.35
P.T. = 13+71.18
50' R/W
63+87.22 175'
13+71.18 50'
10+15.35 50'
68+00 230'
70+28.29 217.23'
70+35 218.85'
70+06 218.53'
70+52.49 259.16'
70+62 252.47'
HAMILTON CO. CINCINNATI
Prop. R/W

539.70 539.95 540.20 540.45 540.70 540.95 541.20 541.45 541.70 541.95 542.20 542.45 542.70 542.95 543.20 543.45 543.70 543.95 544.20 544.45 544.70 544.95 545.20 545.45 545.70 545.95 546.20 546.45 546.70 546.95 547.20

UI-UGI-316(2)

Marker will be furnished and erected on the right by the State before acceptance of this improvement.

Grade Line shown is ½" above top of Future Prop. Mall Curb.

550 545 540 535 530 525 520 515

No 1 C.B. 64+86.28
No 1 M.H. 65+45.45
No 2 M.H. 68+40 Lt.
No 3 C.B. 68+40 Rt.
No 2 M.H. 71+60 Lt.
No 2 M.H. 74+80 Lt.

Sta. 63+85.92 = Sta. 0+00 Ramp "B"
+2.02%
R = 537.88 Lt.
+0.50% Prop. 6" Pipe Lt. @ 0.50%
+0.46%
Prop. 6" Pipe Rt. @ 0.50%
Sta. 63+86.57 = Sta. 0+00 Ramp "A"
F/L = 536.31
65+41 Lt. 538.58
65+27 Lt. 538.61
65+35 Rt. 537.05
65+25 Rt. 537.00
64+90.6 Rt. 536.25
0.50%
Sta. 68+00-45' Lt. F/L = 539.68
+0.30%
Prop. 6" Pipe Lt. @ 0.30%
68+42 Lt. 540.01
68+36 Lt. 539.93
Sta. 67+50-45' Rt. F/L = 538.13
68+85 Rt. 539.08
68+75 Rt. 539.01
68+42 Rt. 538.77
Prop. 6" Pipe Rt. @ 0.70%
+0.50%
Sta. 72+00-45' Rt. F/L 541.28
Prop. 6" Pipe Rt. @ 0.50%
71+56 Lt. 540.95
71+62 Lt. 540.97
+0.30% Lt.
Sta. 73+00-45' Lt. F/L = 541.38
Prop. 6" Pipe Lt. @ 0.50%
74+78 Rt. 542.67
74+80 Rt. 542.68 (12"ø CMP)
+0.50% Lt.
74+76 Lt. 542.26
74+82 Lt. 542.29

Note:- For Plan of 6" Underdrain - See Sheet No. 254 to 262
For Details of Proposed Drainage See Sheet No. 253 to 278

NOTE:
For Estimated Quantities – See Sheet No. 30

520.9 520.6 520.3 519.9 519.4 518.8 518.3 525.0 523.2 524.6 524.2 529.8 531.8 537.0 538.9 539.8 544.6 548.3 549.0 544.7 540.8 542.5 541.4 541.7 542.0 542.0 542.0 542.4 543.1 544.4 546.3 546.4

60 +50 61 +50 62 +50 63 +50 64 +50 65 +50 66 +50 67 +50 68 +50 69 +50 70 +50 71 +50 72 +50 73 +50 74 +50 75 +15

STA. 60+00 TO STA. 75+00

QUANTITIES (S.H.987)
STA. 53+97 TO STA. 75+00

HAMILTON COUNTY
S.H.987 SEC. CINCINNATI (PT.), "B",
ARLINGTON H'TS, - LOCKLAND (PT.).
& APPROACHES

FED. RD. DIVISION	STATE	F.E.D. AID PROJECT	FISCAL YEAR	SHEET
2	OHIO	UI-316(1) UGT	1946	30 / 283

PAVEMENT

Station to Station	Side	9" Reinforced Concrete Pavement Item T-71 Sq. Yd.	Concrete Curb Item I-12 Type 2-A Lin. Ft.	Concrete Curb Item I-12 Type 4-A Lin. Ft.	Variable Thickness Asphalt Conc. Surface Course Item T-35 Cu. Yd.	See Sheet No.
MUNICIPAL (Cincinnati Pt.)						
61+12.34 - 68+32.81	R&L	3751.3			15.2	141
Ramp A 63+86.57	Rt.	2493.2	535.5	1877.3	2.1	138
Ramp B 63+85.92	Lt.	2026.3	572.1	1386.9	0.9	139
Total		8270.8	1107.6	3264.2	18.2	
RURAL						
68+32.81 - 75+00	R&L	3558.4				142 & 142
TOTAL		3558.4				

GUARD RAIL

Station to Station	Side	Guard Rail Steel Beam Type (Deep) Item I-15 Lin. Ft.	See Sheet No.
MUNICIPAL (Cincinnati Pt)			
Sta. 6+95 Ramp "B" to 67+72.98	Lt.	1075.0	28 & 29
Total		1075.0	

EROSION CONTROL

Station to Station	Side	Sodding Item L-10 Sq. Yd.	Seeding & Protecting Type "A" Item L-9 Sq. Yd.	Placing Stock-piled Top Soil 3" Thick Item L-3 Sq. Yd.	Berberis Mentorensis (Mentor Barberry) 2 Ft. to 3 Ft. Item L-13 Each	See Sheet No.
MUNICIPAL (Cincinnati Pt.)						
Ramp "A" (5+95 - 9+60)	Rt.	365				28
Ramp "A" (0+00 - 11+00)	Lt.	1100				28-29
63+86.57 ~ 68+32.81	Rt.	446				29
68+20 ~ 68+32.81	Lt.	13				29
56+50 ~ 68+32.81	R&L		32679	7154		63
Ramp "B" Sta. 6+95 To 9+37	Rt.				84	28
Total		1924	32679	7154	84	
RURAL						
68+32.81 - 75+00	Rt.	667				29
68+32.81 ~ 75+00	Lt	667				29
68+32.81 ~ 75+00	R&L		7372	1953		66
Total		1334	7372	1953		

CLASSIFIED EMBANKMENT

Station to Station	Side	Classified Emb. Material (See X-Sections) Item SS-112 Cu. Yd.	SEE SHEET No.
MUNICIPAL (CINCINNATI)			
56+50 to 68+32.81	R&L	3097	63
Total		3097	
RURAL			
68+32.81 to 75+00	R&L	1540	66
Total		1540	

FENCE

Station to Station	Side	Fence Item SS-160 Lin. Ft.	Chain Link Fence Removed for Reuse Item Special Lin. Ft.	Erecting (Only) Chain Link Fence Item Special Lin. Ft.	See Sheet No.
MUNICIPAL (CINCINNATI PT.)					
67+72.98	Lt	30			29
67+63.5 ± to 68+32.81	Lt.		69.31	69.31	29
Total		30	69.31	69.31	
RURAL					
68 +32.81 to 75+00	Lt.		667.19	667.19	29
Total			667.19	667.19	

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B" ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

THE NATIONAL DISTILLERS PRODUCTS CORP.

CHECKED
Drainage
Boxes
Bal. Points

CORPORATION LINE CINCINNATI HAMILTON CO.

CHAS. STOFFREGAN

ROXANNA SIMMS

Prop. e/w 2½ Sod

Miami & E. Rlt. CANAL

Ex. Canal R/W

Ex. Canal Wall

Ex. Bit. Mac. Dr.

Ex. Sod

Ex. Sprinkler Line

Ex. 30" Sewer

Ex. 8" Water Main (4'cover)

Ex. 24" Conc. Pipe

Exist. Canal Man.

Ex. Guard Rail

Prop. Guard Rail

Ex. Metal P.L.

Ex. V.S.P.

Ex. Sprinkler C.I.P.

National Distillers Prod. Corporation

Ex. 12" Water M. (4'cover)

Ex. Tel. Conduit

Ex. 12" Water M.

Ex. 6" Gas Main (3'cover)

Ex. 12" Comb. Sewer

Sta. 6+55.41 Section Rd.

Sta. 0+00 Summit Rd.

77+78.99 218.14'

P.C. 1+46.56 P.T. 2+96.56 R=250.00

P.C. 1+46.56 P.T. 2+96.56 R=250.00

Ex. 8" V.S.P. (San.)

Ex. 8" San. Sewer

Ex. Gas Main

Ex. 12" Water M.

Ex. 6" Gas Main (3'cover)

P.C. 7+36.31

P.T. 6+80.39

Ex. 4" Gas Main (3'cover)

Guy Pole

E.C. 7+39.75

STA. 77+31.62 PEDESTRIAN OVERHEAD

Clearance 15'-6" Min. Ht. 14'-2" Max. Ht.

Ex. Conc. Curb & Gutter

Ex. Conc. Block Wall

Ex. 6" CIP Iron Pipe & Ex. Conc. Manhole

Ex. 18"x7" Conc. Pipe 12"x16" C.I.P. with 12" Conc. Hd. Wall

Ex. 12" W.M. (4'cover)

Ex. 12" San. S.

Ex. 6" Gas Main (3'cover)

Ex. 6" Water Main (4'cover)

Ex. 12" Comb. Sewer

Ex. 18"x7" Conc. Pipe 12"x16" C.I.P. with 12" Conc. Hd. Wall

Ex. 6" CIP Iron Pipe & Ex. Conc. Manhole

Ex. Cinder Drive

Ex. Cinder Drive 1

Ex. Board Fence

Ex. Chain Link Fence

Ex. Concrete Block Garage

Garage & Plumbing Shop

Garage

Garden

Chicken Yard

Road to Gas Co.

Prop. R/W

Prop. Fence

Ex. Guard Rail

Ex. Steel Encased Concrete Piers (Demolished)

Ex. Steel Encased Concrete Piers

Ex. Steel Encased Concrete Piers (Demolished)

Ex. Concrete Pier

Ex. Concrete Wall

Ex. Bit. Mac. Dr.

Ex. Conc. Pav't.

Ex. Conc. Man.

Ex. Canal Conc. Man.

Ex. Canal Conc. Wall

Ex. Canal Bank

Ex. Canal Bank Mac. Dr.

Ex. Conc. Pier

Ex. Conc. Pier Cap

Ex. Conc. Pier Footing

Ex. Conc. Pier Cap & Footing

Ex. Conc. Pier & Footing

Ex. Conc. Pier & Cap

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.T.) "B", ARLINGTON HEIGHTS, LOCKLAND (P.T.) & APPROACHES

CHECKED
Drainage
Boxes
Bal. Points

MIAMI & ERIE CANAL LAND

M. & E. Canal R/W Line

NOTE: Place one Intermediate Post Assembly between Sta. 88+858 & Sta. 95+00 on Lt. Location to be determined by the Engineer.

91+15.23 151.75'

Canal R/W

CORNER POST 95+00

95+55.40 181.25

95+55.40 130'

CORNER POST 95+00

NOTE: For Location of Trees outside of Prop. R/W and for Additional R/W Information See Sheets Nº 162 & 163

ROXANNA SIMMS

Prop. R/W

106+00 140'

Sod

90+00 STA. Nº 1-2A C.B.

+20.Rod Std. Nº 1-2A C.B.

+25 Rod Std. Nº 1-2A C.B.

+88 Rod Std. Nº 1-2A C.B.

+22 Rod Std. Nº 1-2A C.B.

Prop. 6" Pipe - 45' Lt.

90 91 92 93 94 95 96=N 26° 04' 38" E 97 98 99 100 101 102 103 104 105

Prop. 12" Pipe

Prop. 6" Pipe 45' Rt.

Prop. 12" Pipe

Prop. 12" Pipe

Prop. 12" Pipe

Prop. 12" Pipe

Prop. 6" Pipe - 45' Rt.

Sod

528.

Prop. Fence

Prop. R/W

90+00 95

90+00 105'

Prop. R/W

Prop. Fence

NOTE: Place ten Intermediate Post Assemblies between Sta. 89+38 & Sta. 43+00 Hartwell Rt. Location to be determined by the Engineer.

Exist. 48" Intercepter Sewer

ROXANNA SIMMS

Note: For location of remainder of Mill Creek channel See Sheet No. 162 & 163

534.70 534.95 535.20 535.45 535.70 535.95 536.20 536.45 536.70 536.95 537.20 537.45 537.70 537.95 538.20 538.45 538.70 538.95 539.20 539.45 539.70 539.95 540.20 540.45 540.70 540.95 541.20 541.25 541.32 541.41

Grade Line shown is ½" above Future Prop. Mall Curb.

534.41 534.33 534.31 534.35 534.45

P.I. 90+00 533.95 Std. Nº 1-2A C.B. +00 ℄ F/L Top=532.67

+200' V.C.

PT. 91+00

Mod. Std. Nº 1-2A C.B. +20 ℄ F/L Top=533.31

Mod. Std. Nº 1-2A C.B. +54 ℄ F/L Top=534.98

Mod. Std. Nº 1-2A C.B. +88 ℄ F/L Top 536.65

Mod. Std. Nº 1-2A C.B. +22 ℄ - F/L Top=538.32

+ 0.5 %

200' V.C.

PC 104+60

105+00-45' Rt. Ell. F/L 537.68

90+50-45' (Rt) F/L G= 530.38

90+00-45' Lt. F/L G=530.13

F/L 529.48

Spec. Headwall Sta. 91+80.32-6.76 (Rt) F/L 528.99

F/L 530.14

Spec. Headwall Sta. 97+30.32-6.76 (Rt) F/L = 530.32

F/L 531.90

Spec. Headwall Sta. 99+42.62-7.08 (Rt) F/L 531.66

99+00-45' Lt. & Rt. F/L G = 534.63

F/L 533.26

99+GE± 45' Rt. F/L G= 532.3±

Spec. Headwall Sta. 101+80.82-7.68 (Rt) F/L 532.99

F/L 534.63

Prop. 6"- 45' Lt. & Rt. @ 0.50 %

Note: For Details of Proposed Drainage - See Sheet No. 253 to 278

NOTE: For Estimated Quantities - See Sheet Nº 33

545 540 535 530 525 520

531.2 534.1 533.9 533.9 533.1 534.0 534.6 532.5 533.7 537.1 536.3 537.4 538.1 538.7 538.1 536.4 534.6

90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105

STA. 90+00 TO STA. 105+00

QUANTITIES (S.H.987)
STA. 75+00 TO STA. 105+00

HAMILTON CO.
S.H.987 SEC. CINCINNATI (PT.) "B."
ARLINGTON H'TS - LOCKLAND (PT.)
& Approaches

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGT	1946

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PAVEMENT

Station to Station	Side	9" Reinforced Concrete Pavement Item T-71 Sq.Yd.	Concrete Curb Item I-12 Type 2A Lin. Ft.	Removal & Disposal of Existing Pavement Item E-8 Sq.Yd.	Conc. Curb & Gutter (2'-6" wide) Item I-12 Type 4 Lin. Ft.		See Sheet No.
RURAL							
75+00 ~ 86+56.90	Rt&Lt	6170.1			181.8		142 & 143
77+05	Rt&Lt			734.4			31
88+62.56 ~ 89+31.37	Rt&Lt	22.0	31.0				143 & 161
88+87.10 ~ 105+00	Rt&Lt	8602.1					143 & 144
Totals		14794.2	31.0	734.4	181.8		

PAVED GUTTER

Station to Station	Side	Paved Gutter Type "A" Item I-14 Lin.Ft.	Paved Gutter Type "B" Item I-14 Lin.Ft.	Dumped Rock Fill Item I-10 Cu.Yd.	Excavation for Structures Item E-2 Cu.Yd.	Paved Gutter Type E Item I-14 Lin.ft.	See Sheet No.
RURAL							
86+55 ~ 87+20	Rt.	65.0					164
140± S. of (West Mill Creek) 88+80	Lt.	17.0	69.0	3	3	10	164
88+91± ~ 89+55.4	Rt.	71.0	41.0	3	3		164
Total		153.0	110.0	6	6	10	

SIDEWALK

Station to Station	Side	4" Conc Sidewalk Item I-13 Sq.Ft.	See Sheet No.
RURAL			
77+31.62	R&L	944.0	156
Total		944.0	
MUNICIPAL (Cincinnati Pt)			
77+31.62	Lt	214.3	156
Total		214.3	

EROSION CONTROL

Station to Station	Side	Sodding Item L-10 Sq.Yd.	Seeding & Protecting Type "A" Item L-9 Sq.Yd.	Salix Incana (Rosemary Willow) 3 to 4 Ft. Item L-13 Each	placing Stock-piled Top Soil 3" Thick Item L-3 Sq.Yd.	SEE SHEET No.
RURAL						
75+00 ~ 86+55	Rt.	1155				31
75+00 ~ 75+50	Lt.	50				31
75+80 ~ 84+50	Lt.	870				31
87+70 ~ 88+70	Lt.	101				31
88+80 ~ 90+00	Lt.	120				31
89+55 ~ 90+00	Rt.	45				31
90+00 ~ 105+00	Rt.	1500				32
90+00 ~ 105+00	Lt.	1500				32
Channel-4+06W-47+00E			2926	826		162
75+00 ~ 105+00	L&R		56740		32779	96
TOTAL		5341	86001	826	32779	

FENCE

Station To Station	Side	Fence Item SS-160 Lin.Ft.	Chain Link Fence Removed for Reuse Item Special Lin.Ft.	Chain Link Fence Erecting (Only) Item Special Lin.Ft.	See Sheet No.
RURAL					
75+00 to 75+60	Lt.		60		31
75+00 to 77+46	Lt			283	31 & 156
77+56 to 84+56±	Lt.	706			31 & 156
84+56± to 86+07	Lt.			151	31
84+56± to 85+95.5±	Lt.		234		31
88+85.8	Lt.	93			31
88+85.8 to 95+00	Lt.	615			31 & 32
95+00	Lt.	51			32
95+00 to 105+00	Lt.	1000			32
89+38	Rt.	53			31
89+38 to 105+00	Rt.	1562			31 & 32
Total		4080	294	434	

CONC. APPROACH SLABS

Station to Station	Side	Reinforced Conc. Approach Slabs Item I-7 Sq.Yd.	See Sheet No.
RURAL			
86+56.90 ~ 86+71.90	R&L	90.3	161
88+72.10 ~ 88+87.10	R&L	90.7	161
Total		181.0	

CHANNEL

Station to Station	Side	Channel Excavation Item E-3 Cu.Yd.	Conc. for Structure Pipe Enc. Class "E" Item S-1 Cu.Yd.	Excavation for Structure Item E-2 Cu.Yd.	See Sheet No.
RURAL					
5+64.91 ~ 47+00		86361	102.5	228	162
Total		86361	102.5	228	

GUARD RAIL

Station to Station	Side	Guard Rail Steel Beam Type (Deep) Item I-15 Lin.Ft.	See Sheet No.
RURAL			
86+58.5 to 86+96	Rt.	37.5	31
88+47.8 to 88+85.3	Lt.	37.5	31
89+00 to 89+37.5	Rt.	37.5	31
77+31.62	Lt.	37.5	156
86+07± to 86+18	Lt.	25.0	31
86+20± to 86+44	Lt.	25.0	31
Total		200.0	

STRUCTURES OVER 20 FT. SPAN

No.	Station	EXISTING STRUCTURE TYPE	SPAN	ROADWAY	PROPOSED STRUCTURE TYPE	SPAN	ROADWAY	See Sheet No.
RURAL								
	77+31.62	No existing Structure			Conc. Rigid Frame with Conc. Substruct.	42'-60'-60'-42'	7' Clear between Rails	
	87+72.00	Abandoned aqueduct on Miami & Erie Canal. Substructure only.			Continuous Steel Beam with Conc. Deck & Substruct.	60'-75'-60'	31' with two 1'-9" Safety Curbs.	278 to 282

CLASSIFIED EMBANKMENT

Station to Station	Side	Classified Emb. Material (See X-Sections) Item SS-112 C.Yd.	SEE SHEET No.
RURAL			
75+00 to 105+00	R&L	5755	96
Total		5755	

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.T.) "B," ARLINGTON HEIGHTS, LOCKLAND (P.T.)
& APPROACHES

CHECKED
Drainage
Boxes
Bal. Points

ROXANNA SIMMS

NOTE: Place four Intermediate Post Assemblies between Sta. 95+00 & Sta. 120+71 on Lt. Location to be determined by the Engineer.

NOTE: For Location of Trees outside of Prop. R/W and for Additional R/W Information - See Sheets Nos. 162 & 163

CITY OF CINCINNATI

105+00 140'

Prop. R/W

℄ S.H. 987

Sta 110+347 POT

90°

Sod

112+11.55 120.23'

114+00 115'

Sta 117+00 P.O.T.

Sta. 117+42.92 = Sta. 0+00 Ramp G

120+00 150'

Prop. G" Pipe 45° Lt

Prop G&G T.

Prop. G"

Ex. R/W

105 106 107 108 109 110 111 N 86° 04' 39" E 113 114 115 116 117 118 119 120

Prop. 12" Pipe

Prop. 12"G" T.

Prop. 12" Pipe

Prop. 12"G" Y.

Prop 12" Pipe

Prop. 12"G" Y.

Prop. G"

Prop. G" Pipe 45° Rt

Sod

534.1

Prop. Fence

Prop. R/W

535.0

109+50

107+00 100'

528.9

529.0

532.1

110+75

E 522.9

522.0

522.0

OLLETHA STEWART

ROXANNA SIMMS

Prop. R/W

Prop. Fence

Prop. R/W

Prop. Fence

Prop. R/W

111+36.68 229.98'

Exist. 54" Sewer

℄ Prop. Channel

Prop. Conc. Encasement SEE SHEET No. 163

31 32 33 34 35

NOTE: For location of Remainder of Mill Creek Channel SEE SHEET Nos. 162 & 163

541.41 541.47 541.48 541.50 541.50 541.49 541.46 541.39 541.30 541.25 541.19 541.05 540.93 540.80 540.68 540.48 540.35 540.43 540.30 540.18 540.05 539.93 539.80 539.68 539.55 539.43 539.37 539.30 539.18 539.05 538.93 538.80 538.68 538.55 538.44 538.36 538.32 538.30 538.32 538.36 538.44 538.55 538.68 538.80

538.93 539.05 539.18 539.30 539.43 539.55 539.68 539.80 539.93 540.05 540.18 540.30 540.43 540.55 540.68 540.80 540.93 541.05 541.18 541.30 541.43 541.55

Grade Line shown is ½" above top of Future Prop. Mall Curb.

545 540 535 530 525 520

P.I. 105+60 541.75

Prop. G" @ -0.5% Lt. & Rt.

105+60 - 45' Rt. & Lt. F/L G" = 537.88

200' V.C.

108+50 - 45' Lt. & Rt. F/L G" = 536.48

Spec. Headwall Sta 108+04.71 - 61.12 (Rt.) F/L 535.85

Mod. Std. No. 12-A C.B. +30 ℄ F/L Top = 538.16

F/L 536.20

109+07± 45' Lt. & (Rt.) F/L G" = 536.23

109+00± 52'± (Lt.) F/L G" = 536.0±

P.C. 112+00

112+00 - 45' Lt. & Rt. F/L G" = 534.13

113+00 - 67' Lt. Pipe Outlet - See Detail Sheet No. F/L = 534.01

Spec. Headwall Sta. 112+54 - 78.67 (Lt.) F/L 529.46

112+74 - 45' Rt. F/L G" = 531.0±

112+70± 51' Rt. F/L G" = 530.9

P.I. 113+00 538.05

Std. No. 12-A C.B. +00 ℄ F/L Top = 536.56

200' V.C.

P.T. 114+00

113+00 - 45' (Lt.) F/L G" = 534.23

113+50 - 45' (Rt.) F/L G" = 534.48

F/L 532.64

+0.5%

Prop G" @ +0.50% (Lt.) ℄ Rt. (Lt. & Rt.)

For Details of Remainder of Profile of 6" Underdrain - See Sh. No. 91 - Prop. No. 2

115+91 - 45' Rt. F/L G" = 535.70

117+00 - 45' Lt. & Rt. F/L G" = 536.23

Spec. Headwall Sta. 115+17.12 - 79.2' (Rt.) F/L 530.57

115+91 - 45' Rt. F/L G" = 533.4

Mod. Std. No. 1-2-A C.B. +17 ℄ F/L Top = 538.08 F/L 12" = 535.58

Note: For Details of Proposed Drainage, See Sheet No. 253 to 278

NOTE: For Estimated Quantities - See Sheet No. 36

534.6 535.8 536.0 536.3 536.7 536.8 537.0 537.1 537.1 521.0 522.9 524.0 531.0 533.7 519.4 519.8 529.9 532.4 532.7 534.7 534.4

105 135 106 107 108 109 110 +37 111 112 113 114 115 116 117 118 119 120

STA. 105+00 TO STA. 120+00

DIVISION 2 OHIO | FED. AID UI-316(1) 1946 UGI | 35 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B" ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

NOTE: Place one Intermediate Post Assembly between Sta. 132+35.11 & Sta. 138+65 on Lt. Location to be determined by the Engineer.

CHECKED
Drainage
Boxes
Bal. Points

ANTHONY WAYNE AVE.

C.C.C.&St.L.R.R.Co.

Sta. 29+85.54
Sta. 30+11.12

Concrete Log Platform
Retaining Wall
Plaster Sign

Ex. C.C.C.&St.L. Industrial Siding

Fr. Shed

Corporation Line

N37°-53'-15"E 185+40.44 3206.62'

CITY of CINCINNATI

HAMILTON COUNTY

ARLINGTON HEIGHTS

Canal R/W

P.I. 128+08.12

S.H. 987

Sta 122+00.20 P.C. 90°

E. S.H. 987

Corner post

Hub

Hall in Jt. Mac. & Conc.

Cross on Curb

Cross on Side Walk

Hubs and Guards

Prop. R/W

Ex. R/W

End post

Sod

STA. 32+19.12-END PART 1 UI-UG1-316(2)(APPROACH)
BEGIN PART 2 of UI-UG1-316(2)(APPROACH)

RAMP "G"

P.C. 128+00.20

Ex. C.C.C.&St.L. R.R. Co. R/W Line

Ex. 8" Gas Main

Ex. Old Station Conc. platform

Ex. Tel. Conduit

Guy Pole

Meter Box

Trolley Pole

Ex. Conc. Walk & Steps

Prop. End Post

2-Sty. Fr.

Corner Post

Ex. 6" Sewer

Prop. Fence

Ex. 12" Sewer

ANTHONY WAYNE TURNOUT

Ex. R/W

Ex. C.C.C.&St.L. R.R. Co. R/W Line

Battery Box

Ex. Utility Box

Ex. Elec. Manhole

Ex. Old Station Conc. platform

2-Sty Frame Valley Builder's Supply Co's Warehouse

Fr. Shed

Fr. Garage

Fr. Barn

Ex. Drive

Ex. Flag Pole

Ex. Conc. Walk

Ex. Conc. Gutter

1-Sty. Fr.

Ex. 12"

HARTWELL

The J. F. Mills Subdivision

C.C.C. & St. L. R.R. COMPANY

R/W Line

Ex. R/W

Sta. 32+68

Sta. 132+76.38
130.31'

To Cincinnati

To Dayton

Sta. 134+69.52
75.84'

RAMP "F"

Remove Exist. Pav't.

Sta. 134+79.10 45 E

P.I. Sta. 128+08.13
Δ = 16°-53'-54" Lt.
D = 1°-24'
R = 4093.56'
T = 607.93'
L = 1207.03'
E = 44.91'

N. 26°-04'-39" E.

Sta. 127+59.20

Sta. 128+90.66
Sta. 35+39.26

NOTE: For Estimated Quantities See Sheet No. 36

DAY INC.

BEGIN SEC. ARLINGTON HTS. STA. 127+59.20 - END SEC. B

Ex. 8" Proposed 3" Hartwell

Ex. 8" San. Sewer
Ex. 4" Water Main (4' Cover)
Ex. 6" Gas Main (3' Cover)
Ex. Tel. Conduit (3' Cover)

SAM D. HENKLE, TRUSTEE
WARREN CO. OHIO NATIONAL FARM LOAN ASSOCIATION

RAMP "E"

Prop. R/W

Intermediate Post Assembly

Ex. Conc. Blk. Found

Prop. Ditch

Prop. Fence

Ex. 8" Water Main (3' Cover)

Ex. 6" Gas Main (3' Cover)

Ex. Tel. Conduit (3' Cover)

Ex. 8" San. Sewer

Corner Post

End Post

2-Sty. Br.

Ex. 3-36" C.M.P.

Ex. 15" C.M.P.

LYDIA M. HARRIS BOOTH

OLLETHA STEWART

Prop. Fence

Prop. & Channel

Ex. R/W

Note: For Location of Trees on Mill Creek Channel, See Sheets No. 162 & 163

For Location of Remainder of Mill Creek Channel See Sheet No. 162 & 163

Δ = 33°-26'-00"
D.C. = 33°-34'-43"

P.I. 125+00
44.05

N89°-34'-23"E

Grade Line shown Varies from ½" below to 4" above top of Future Mall Curb

Grade Line shown is 4" below Top of Prop. Mall Curb.

+0.5%

-0.5%

P.C. 124+00

P.T. 126+00

200' V.C.

Ex. 12"

NOTE: For Br. Elevation See Sheet No. 103 - Prop. No. 2

PROPOSED STRUCTURE

TYPE: Continous steel beams with conc. deck and conc. substructure
SPANS: 48'-88.36'-48' c/c Bearings
RDWY: 54'-0" F/c curbs with 2 Median
SIDEWALKS: 2 @ 6'-0 wide
LOADING: S-20-44
SKEW: 21°-24'-14" L/F
SURFACE COURSE: Bituminous
APPROACH SLABS: 15' long Type II on both ends of Bridge (Dwg. AS-44-S Rev. 4-2-45)

Note: For details & Quantities of Proposed Drainage, Pipe Removal & Adjustments See Sheet No. 253-278 (Prop. No. 1) 550 & Sheet No. 79-92 (Prop. No. 1)

| | | |

QUANTITIES (S.H.987)
STA. 105+00 TO STA. 136+88.04

HAMILTON COUNTY
S.H.987. SEC. CINCINNATI (PT); "B," ARLINGTON HTS & LOCKLAND (PT).
& Approaches

FED. RD. DIVISION	STATE	FED. PROJECT
2	OHIO	UI-316(.. 027

PAVEMENT

Station to Station	Side	Concrete Pavement 9"Reinf. Black Item T-11 Sq.Yd.	6"Plain Item T-21 Sq.Yd.	11"Plain Item T-10 Sq.Yd.	Conc. Curb Item I-12 Type 2-A Lin.Ft.	Type 4-A Lin.Ft.	Conc.Curb&Gutter 2'-6" wide Item I-12 Type 4 Lin.Ft.	Removal & Disposal of Exist.Pav't. Item E-8 Sq.Yd.	See Sheet Nº
RURAL									
105+00 ~ 127+59.20	R&L	12057.6	167.1			8.5	1744.9		145 to 149
Ramp G		2268.1	24.4		554.3	1360.6			G1-Prop.Nº1
Ramp H		2656.8				1067.1	744.3		G2-Prop.Nº2
Total		16982.5	191.5		554.3	2436.2	2489.2		
MUNICIPAL (Arlington Ht's)									
127+59.20~136+88.04	R&L	4935.2	413.2			1149.5	1931.1		149 to 152
136+16.10 ~ 136+50.7	L			15.6				17.6	186
Total		4935.2	413.2	15.6		1149.5	1931.1	17.6	

GUARD RAIL

Station to Station	Side	Guard Rail Steel Beam Type (Deep) Item I-15 Lin.Ft.	SEE SHEET Nº
RURAL			
Ramp G 3+49.77~9+36.0	R	579.5	35
Total		579.5	

FENCE

Station to Station	Side	Fence Item SS-1160 Lin.Ft.	SEE SHEET Nº
RURAL			
105+00-120+71	Lt.	1575	34 & 35
120+71	Lt.	80	35
105+00-128+00	Rt.	2396	34 & 35
Total		4051	
MUNICIPAL (ARLINGTON HT'S)			
131+00±~136+95.31	Rt.	657	35 & 37
136+95.31~137+05±	Rt.	37	37
132+38.11~138+68	Lt.	791	35 & 37
Total.		1485	

EROSION CONTROL

Station to Station	Side	Sodding Item L-10 Sq.Yd.	Seeding & Protecting Type "A" Item L-9 Sq.Yd.	Placing Stockpile Top Soil (3" thick) Item 3 Sq.Yd.
RURAL				
105+00 ~ 120+00	Lt.	1500		
105+00 ~ 109+50	Rt.	450		
110+75 ~ 113+00	Rt.	243		
112+54	Rt.	24		
113+00 ~ 120+00	Rt.	700		
120+00 ~ 126+00	Lt.	610		
120+00 ~ 128+55	Rt.	930		
126+34-126+87 (Island)	Lt	71		
105+00 ~ 127+59.20	R&L		70216	10397
Total		4528	70216	10397
MUNICIPAL (Arlington Ht's)				
129+07 ~ 132+62	Lt.	387		
127+59.20-137+00	R&L		19,163	
Total		387	19,163	

CLASSIFIED EMBANKMENT

Station to Station	Classified Emb. Material Side (See X-Sections) Item SS-112 Cu.Yd.	SEE SHEET Nº
RURAL		
105+00-127+59.20	R-L 7780	113
Total.	7780	
MUNICIPAL ARLINGTON HTS.		
127+59.20-137+00	3131	124
Total.	3131	

CONCRETE RETAINING WALL

Station to Station	Side	Concrete for Structures Wall (Class E) Item S-1 Cu.Yd.	Removal of Exist.Structure Item S-24 Lump	Excavation for Structure Item E-2 Cu.Yd.	See Sheet No.
MUNICIPAL (ARLINGTON HT'S)					
136+12.8 ~ 136+24	Lt.	13.2	Lump	4	186
135+53.8	Lt.	1.0		2	186
Total		14.2	Lump	6	

REINF. CONC. CRIBWALL

Station to Station	Side	Reinf. Concrete Crib Wall Item Special Sq.Ft.	Reinf. Conc. Crib Wall (Closed Face) Removed for Re-use Item Special Sq.Ft.	Resetting of Reinf. Conc. Crib Wall [Tri Crib Wall (Closed Face)] Item Special Sq.Ft.	Excavation for Structure (Cribwall) Item E-2 Cu.Yd.	See Sheet Nº
MUNICIPAL (ARLINGTON HT'S)						
135+53.8-136+12.8	Lt.	112.5	493.5	436.5	76	185
Total		112.5	493.5	436.5	76	

DIVISION 2 | FED. AID | OHIO UI-316(1) | 1946 | UGI | 37 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS LOCKLAND (Pt.) & APPROACHES

J.F. MILLS SUB DIVISION (Maplewood) — THE HOME SAVINGS & LOAN COMPANY — FRED KAMM — ANTHONY WAYNE — GEORGE LUTZ Sr. — THOMAS J. OXLEY'S Sub Division — THE ENTERPRISE BLDG. & LOAN ASSN. CO. — ANNA J. WILCOOT — ESTELLE MILLER — ESTELLO MITCHELL — RICHARD GENTLY — HOLMES & SARAH DOUGHMAN — THE ENTERPRISE BUILDING & LOAN ASSN. CO. — GEORGE MILLER — WILLIAM STUART — GRANT DINNEY — ESTELLE MILLER — PRATT C. CONNECTICUT CORNELISON — WM. BLACK — MUSCOGEE ST. — Lot No. 54 — No. 55 — No. 56 — 2-Sty. Frm. Dwl. — 1-Sty. F. Dwl. — Frm. Shed — Frm. Hen Ho. — Frm. Garage — Ex. Ø Oxley St. (Extended) +61.53 — Ex. Ø Sheehan Ave. (extended)

Existing 15" Sewer — S 45° 28' 05" W — Prop. Fence — +95.59 — 211.26' — +30.42 — 195.20' — Ex. R/W — +31.32 — 112.71' — +31.28 — 83.09' — +31.17 — 78.35' — +68 — 60' — Corner Post — +56.19 — 60' — +45.31 — 73.55' — +33.5

NOTE: Place two Intermediate Post Assemblies between Sta. 138+98 & Sta. 150+05.25 on Lt. Location to be determined by the Engineer.

Existing 36" Sanitary Sewer — Corporation Line — CINCINNATI — HEIGHTS — ARLINGTON — Existing 12" — Ex. 60"x264'-0" Pipe

C.C.C. & St.L. R.R. — +91.38 — 166.63 — E. S. Bound — Ex. R/W — J.F. MILLS 5th Sub. Division — THE C.C.C. & St.L. R.R. CO. R/W Line — +58.19 — 100.01' — Construction Easement — Existing Reinforced Concrete Crib Wall — Canal R/W Line — Prop. Conc. Retaining Wall — Ex. 18" — 138+93.0 — Ex. 54" Overflow

Corporation Line — 135 — 136 — 137 — 138 — 139 — 140 — 141 — N 9°10'45" E — 142 — 143 — 144 — 145 — 146 — 147 — 148 — 149 — 150

Existing 36" Sanitary Sewer — Ex. 12" — Prop. 6" — Canal R/W Line — Ex. 12" Mon. Hole — Ex. 15" Sewer — Ex. 18" — Prop. End Post — Corner Post — 137+90 — 89° 47' Rt. — Ex. 18" — Prop. Rock Fill — See Sheet No. 130 — Ex. 12" — Station 144+00 — Begin Fed. Aid Proj.-DA-WI-7A — Ex. 12" — Ex. 12" — Ex. 12" — Ex. 12" — Ex. 12" — Ex. 12" — Ex. 12" — Ex. 12" — Ex. 12" — Ex. 12" — Ex. 12" — Prop. 6" — Ex. 12" — Ex. 12" — Flow — Ex. 18" — Ex. 12" — Prop. 6" — Ex. 18"

NOTE: Place one Intermediate Post Assembly between Sta. 145+58.24 Ex. 18" ℄ Sta. 151+13.96 on Rt. Location to be determined by the Engineer.

P.I. = Sta. 152+03.33
Δ = 28°32'30" Rt.
D = 2°00
R = 2864.79'
T = 728.67'
L = 1427.08'
E = 91.22'

Marathon Ave. — Prop. Fence — 134+73.22 — 75.19' — Ex. R/W — Prop. End Post — 135+93.41 — 77.29' — Corner Post — Ex. 18" — Ex. 18" — Sta. 136+50.7 End Prop. Pav't Left of ℄ — Sta. 136+88.06 S. 11.98' Rt. — P.C. 2+00 Ramp E Rt. — Sta. 136+88.06 S. 11.98' Rt.

Note: For special treatment of existing catch basins on Rt. See Sheet No. 15

P.C. = 144+74.66

Hub — 50' — Hub — 50' — Hub — 50' — Hub — 90° — 50 — Tang. — P.C. Sta. 144+74.66 — E.J.H. 987 — +00 — 188' — Ex. R/W — MILL CREEK — VALLEY GROVE (Sub Division) — +00 — 234' — Prop. End Post — +31.77 — 211.45' — +58.24 — 206.61' — Ex. R/W — ℄ Prop. Fence — THE PAPER SERVICE CO. — Ex. R/W — +64.06 — 122.56 — +10.61 — 154.59 — +87.50 — 192.07' — Hub — 60' — P.I. Sta. 152+03.33 Δ = 28°32'30" Rt. — Hub — 75' — Hub — 75' — Bisector Line — Hub — 75' — Hub

EXISTING STRUCTURE
C.C.C. & St.L. R.R. Bridge
Type - Thru Steel Girders (2 Tracks)
Span - 109'-t - 82'-t - 81'-t
Width - 30' Skew 48°36' Rt. Fwd.
Prop. Roadway Clearance
NO WORK REQUIRED.

See Cross Section Sheets, for Limits of Areas to be Seeded.

B.M. El. = 538.97
□ Cut in Face of Concrete Side Walk
Sta. 136+79 28' Lt.

BESSIE J. LACEY

Note: All Elevations Shown are to U.S.G.S. Datum.

CHECKED
Drainage Boxes Bal. Points

Grade Line Shown is 4" Below Top of Existing Mall Curb

Proposed Grade — +0.46% — +2.20% — +0.48% — +2.06% — +1.30% — +0.50% — +0.30% — +0.46%

P.C. 135+00 — P.T. 140+00 — P.C. 142+00 — P.T. 144+00 — 500' V.C. — 200' V.C.

Prop. 6" @ 0.48% — Prop. 6" @ 0.8% — Prop. 6" @ 2.06% — Prop. 6" @ 2.0% — Prop. 6" @ 1.30% — Prop. 6" @ 0.50% — Prop. 6" @ 0.30% — Prop. 6" @ 0.46%

Connect to Prop. C.B. — 150-23.5 Rt. F.L. 536.42 — Connect to Exist. C.B. — Connect to Exist. M.H. & Prop. 6" @ 0.46% — 150+00-29.5 Rt. F.L. 548.62 — 137+51.1 535.62 — 137+47.25 535.45 — +00-28.5 Rt. F.L. 535.22 — 140+06 539.54 — 140+12.4 539.67 — 140+00-29.5 Rt. F.L. 543.42 — 142+57.4 544.17 — 142+51 544.08 — +50-29.5 Rt. F.L. 545.37 — 144+81 546.03 — 144+87.4 546.06 — 147+11 547.13 — F.L. 547.77 — 147+17.4 547.77 — 149+41 548.44 — 149+47.4 548.38

Ex. 16" — Ex. 18" — Ex. 12" — Ex. 12" — Ex. 36" — Ex. 60" — Ex. 18" — Ex. 12" — Ex. 12" — Ex. 36"

Note:- For Details of Proposed Drainage - See Sheet No. 253 to 278

NOTE: For Estimated Quantities - See Sheet No. 41

539.05 539.94 538.87 538.83 538.82 538.85 538.91 539.00 539.13 539.29 539.49 539.72 539.98 540.28 540.61 540.97 541.37 541.80 542.27 542.77 543.30 544.40 545.50 546.60 547.70 548.22 548.69 549.11 549.47 549.77 550.02 550.22 550.36 550.59 550.82 551.05 551.28 551.51 551.74 551.97 552.20 552.43 552.66 552.89 553.12

P.I. 137+50 537.60 — P.I. 143+00 549.90

555 550 545 540 535 530

A.C. 539.3 — 539.2 — 539.0 — 535.2 — 539.3 — 539.9 — 540.3 — 540.8 — 541.6 — 542.5 — P.T. 543.6 — 544.6 — 545.8 — 546.9 — P.C. 548.0 — 549.0 — 549.7 — 550.3 — P.T. 550.6 — 550.7 — 551.1 — 551.3 — 551.6 — 551.7 — 551.9 — 552.1 — 552.4 — 552.6 — 552.7 — 553.0 — 553.3

135 — 136 — 137 — 138 — 139 — 140 — 141 — 142 — 143 — 144 — 145 — 146 — 147 — 148 — 149 — 150

STA. 135+00 TO STA. 150+C

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B": ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

CHECKED
Drainage
Boxes
Bar. Points

B.M. Elev. = 552.01
Δ Cut in concrete foundation beginning Cyclone Fence Sta. 150+80 45.5' Lt.

Ex. 10" V.S. Pipe
Ex. 33" Y
Existing 33" Intercepter Sewer
Ex. 18" V.S.P.
M.H.
Pump House
THE PHILIP CAREY MFG. CO.
The Philip Carey Manufacturing Company
1-Sty. Brick
3-Sty. Brick
1-Sty. Br.
S.S.
Steel Tank
Ex. Overhead Steam Line
1-Sty. Cor. Br. Bldg.
Brick Laundry Bldg.
Pump Ho.
Ex. 2" Elect. Conduit
Watchman's Shanty
Exist. Chain Link Fence
Ex. R/W
Ex. 30"
Ex. 12"
Ex. 15"
Ex. 18"
Prop. 6" S
Prop. Chain Link Fence
Prop. G. Rail
Edge of Ex. Pvmt.
Prop. End Post
Prop. Fence
Cincinnati Corporation Line Arlington Heights
Ex. Chain Link Fence
STA. 150+96 END SEC. ARLINGTON HTS.
BEGIN SEC. LOCKLAND (PT.)
Sta. 150+96 Arlington Heights Lockland
Note For Special treatment of existing catch basins on Rt. See Sheet No 15
City Incinerator
Ex. Conc. Ret. Wall
Conc. Ramp
2-S. Br.
Br. Chimy
Ex. Driveway
CITY OF LOCKLAND
THE PHILIP CAREY M'F'G. CO.
Hose Shed
Existing Driveway
Fr. Sh.
Fr. Shed
Brick Incinerator Bldg.
Hub
P.I. Sta. 152+03.33
Δ = 28° 32' 30" Rt.
Bisector Line
P.I. = Sta. 157+03.33
Δ = 28° 32' 30" Rt.
D = 2° 00'
R = 2864.79'
T = 728.67'
L = 1427.08'
E = 91.22'
1 St. Br. P. Carey Co.
Tang. P.T. Sta. 159+01.74
℄ E.J.H. 287
See Cross Section Sheets, for Limits of Areas to be Seeded.

Grade Line Shown is 4" Below Top of Mall Curb

Proposed Grade
+0.46%
-0.24%
Prop. 6" @ 0.46%
Prop. 6" @ 0.30%
Prop. 6" @ 0.60%
Connect to Exist C.B.
151+74 549.44
151+71 549.41
+00 — 23.5' Rt. F.L. 548.62
154+01 550.47
154+07.4 550.58
156+31 551.53
156+37.4 551.56
158+61 551.59
158+67.4 +00 — 23.5' Rt. F.L. 552.76
551.62
160+96 553.88
161+02.4 553.92
161+30 554.09
161+45 554.41
164+47.6 554.30
164+54 554.69
Prop. 6" @ 0.30%
P.C. 162+00
P.T. 164+00
200' V.C.
Note:- For Details of Proposed Drainage See Sheet No. 253 to 278
NOTE: For Estimated Quantities See Sheet No 41

STA. 150+00 TO STA. 165+00

DIVISION 2 OHIO | FED. AID UGI-316(1) 1946 | 39 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.T.), ARLINGTON HEIGHTS, LOCKLAND (P.T.) & APPROACHES

UI-UGI-316(2)

Typical Section Adjacent to End of Work.

~The Gardner Richardson Plant~

Marker Will be furnished and erected on the left by the State before acceptance of this Improvement.

END SEC. LOCKLAND (P.T.) STA. 175+47.12 = END PROPOSAL No 1 of FED. PROJECT No UI-UGI-316(2)

END WORK STA. 179+86

W. BR. MILL CRK.

PHILIP CAREY MFG. CO.

Philip Carey 2.2 Stillings

Face of Loading Platform-Gardner-Richardson Co.

Warehouse & Mill 1-Sty. Concrete

Concrete Loading Platfm.

Ex. Settling Basin

Ex. Service Drive

Ex. R/W

Exist Chain Link Fence

Prop. G.2.

Prop. G. Rail

Hose House

Ex. conc. Drive

Exist Chain Link Fence

Industrial Siding

Ex. 8 Ft. Loading Platform

Ex. Concrete Drive

Ex. Conc. Slab

Hose House

Exist. Bit. Mall (To be Removed)

FOX PAPER CO.

State of Ohio Leased to the Fox Paper Co.

Ex. 8" Spurs Platf.

Ex. End Conc. Pavt.

Ex. Loading Platform

Ex. Bldg.

Ex. Fence

Ex. R/W

Prop. Fence

Prop. End Post

Corner Post

Prop. Gd. Rail

End Post

Township line

Springfield Twp. Sycamore Twp.

16' Gate

THE FOX PAPER CO.

WILSON ST.

PATTERSON ST.

ROLET AVE.

LOCK ST.

N. Main

Ex. Gas House Co. Conduit

Sta. 165+75 Beg. Str. Slab

Sta. 167+26.75 End Str. Slab

Prop. End Post-167+22

Sta. 165+90

Sta. 167+11.75

EXISTING BRIDGE: NO WORK REQUIRED

PHILIP CAREY MFG. CO.

Ex. Service Road

Ex. Service Road Bridge

GARDNER RICHARDSON COMPANY

~EXISTING STRUCTURE~
TYPE:- Concrete Beams with Concrete Slab Approach Span and Concrete Substructure
SPANS:- 2 at 30.7 Ft. C to C of 12 Ft. (Clear)
ROADWAY:- 60 Ft.
LOADING:- S-20-40
SKEW:- None
WEARING SURFACE:- 3/4" Monolithic Concrete
APPROACH SLABS:- 15 Ft. Long x 56 Ft. Wide.
NO WORK REQUIRED

NOTE:- For special treatment of existing catch basins on Rt. See Sheet No. 15

See Cross Section Sheets for Limits of Areas to be Seeded.

Grade Line Shown is 4" Below Top of Mall Curb

B.M. El. Rev. 559.01
"O" Cut N.W. Corner Top Step - Wing Wall
Sta. 167+1.3 36' Lt.

B.M. El. = 556.60
"O" Cut in Block Concrete Mall INVERT E. of Beginning of Wall
Sta. 176+1.0 23' Lt.

NOTE: For Estimated Quantities ~ See Sheet No. 41

Drainage Boxes Bal. Points CHECKED

Connect to Exist. C.B. 0.30% Ex. 12" R.C.P. El. 556.35 165+68.5

Ex. 15" Ex. 18" Ex. 30" Ex. 36" Ex. 24" Ex. 12"

Normal Water Line = 537.60

167+27-29.5 Rt. El. 559.94

169+27.6 554.34

169+34 554.32 Prop. 6" @ 0.30%

171+52.6 553.66

171+59 553.47

173+77.6 552.98

173+84 552.96

+60.5-39.5 Rt. El. 552.50

-0.24%

Proposed Grade

EXIST. PATTERSON ST. STORM SEWER

Note:- For Details of Proposed Drainage, See Sheet No. 253 to 278

STA. 165+00 TO STA. 180+00

DIVISION 2 OHIO FED. AID UGI 316(1) 1946 40 289

Board of Education Lockland Village School District No 12

HAMILTON COUNTY SH. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

STA. 179+86 - END WORK - SH 987

THE FOX PAPER CO.

1-Sty. Brick Office

Springfield Sycamore

Conc. Drive

Priv. Dr. Ex. R/W

Ex. 12" Ex. 6" Ex. 12"

Ex. 6" W. Main St. Cover

QUANTITIES - (S.H. 987)

STA. 136+88.04 TO STA. 175+47.12

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) DGT	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) AND APPROACHES

PAVEMENT

STATION TO STATION	SIDE	REINFORCED CONCRETE PAVEMENT Item T-71 9" Sq. Yd.	9" RED Sq. Yd.	CONCRETE CURB Item I-12 Type 4-A RED Lin. Ft.	Type 4-A Type 4-A Lin. Ft.	Type 4-A Modified Lin. Ft.	PLAIN CONCRETE PAVEMENT Black 6" T-70 Sq. Yd.	6" I-21 Sq. Yd.	5"-6"-5" I-21 Sq. Yd.	TYPE 4 CONCRETE CURB AND GUTTER 2'-0" WIDE Item I-12 Lin. Ft.	REMOVAL AND DISPOSAL OF EXISTNG T-35 MALL PAVEMENT Item E-8 Sq. Yd.	REMOVAL AND DISPOSAL OF EXISTING PAVEMENT Item E-8 Sq. Yd.	RED & COLOR IN CONCRETE PAVEMENT Item SS-170 Sq. Yd.	SEE SHEET NO.
MUNICIPAL (ARLINGTON HEIGHTS)														
136+88.04 to 144+74.66	Lt. & Rt.	2097.7			786.6			349.6		786.6				152
144+74.66 to 150+96.00	Lt. & Rt.	1648.8			620.8			276.2		615.4				152 & 153
137+03.00 to 137+53.00	Rt.						33.6							152
TOTAL		3746.5			1407.4		33.6	625.8		1402.0				
		3746.5												
MUNICIPAL (LOCKLAND PART)														
150+96.00 to 159+01.74	Lt. & Rt.	2138.1			805.0			358.1		798.0				153 & 136
159+01.74 to 165+75.00	Lt. & Rt.	1795.4			673.3			299.2		673.3				154
167+26.75 to 172+03.33	Lt. & Rt.	1159.8			476.6			211.8		476.6				154 & 135
172+03.33 to 173+70.00	Lt. & Rt.	444.5	129.6	166.7	166.7			74.1					129.6	155
173+70.00 to 174+27.12	Lt. & Rt.	152.3	76.2	57.1	57.1			25.4					76.2	155
174+27.12 to 175+47.12	Lt. & Rt.	320.0	160.0	120.0	120.0	120.0			53.3				160.0	155
175+47.12 to 179+00.00	Lt. & Rt.					705.8			156.8		137.2			155
175+86.00 to 176+05.00	Rt.	25.3										25.3		155
TOTAL		6035.4	365.8	343.8	2298.7	825.8		968.6	210.1	1947.9	137.2	25.3	365.8	
		6401.2												

GUARD RAIL

STATION TO STATION	SIDE	STEEL BEAM GUARD RAIL TYPE (DEEP) Item I-15 Lin. Ft.	SEE SHEET Nº
MUNICIPAL (ARLINGTON HEIGHTS)			
137+60.0 to 150+96.0	Rt.	1327.76	376.38
143+37.5 to 150+96.0	Lt.	765.25	376.38
		2093.01	
MUNICIPAL (LOCKLAND PART)			
150+96.00 to 159+53.79	Rt.	847.24	38
150+96.00 to 158+58.14	Lt.	772.25	38
160+57.18 to 161+69.68	Lt.	112.50	38
161+13.32 to 161+50.82	Rt.	37.50	38
165+38.08 to 165+88.08	Lt.	50.00	39
165+38.08 to 165+88.08	Rt.	50.00	39
167+13.44 to 167+63.44	Lt.	50.00	39
167+13.44 to 175+47.12	Rt.	833.68	39
175+93.30 Approach	Rt.	66.32	39
179+86	Rt.	25.00	39
TOTAL		2844.43	

FENCE

STATION TO STATION	SIDE	FENCE Item SS-160 Lin. Ft.	CHAIN LINK FENCE Erection Only Item Special Lin. Ft.	SEE SHEET NO.
MUNICIPAL (ARLINGTON HEIGHTS)				
138+68.00 to 150+05.25	Lt.	1192		37 & 38
145+58.24 to 151+13.34	Rt.	560		37 & 38
TOTAL		1752		
MUNICIPAL (LOCKLAND PART)				
151+13.34 to 165+63.00	Rt.		1438	38 & 39
167+22.00 to 175+81.00	Rt.	894		39
178+48.00 to 179+86.00	Rt.	138		39
TOTAL		1032	1438	

CLASSIFIED EMBANKMENT

STATION TO STATION	CLASSIFIED EMBANKMENT MATERIAL Item SS-112 (See Cross Sections) Cu. Yd.
MUNICIPAL (ARLINGTON HEIGHTS)	
137+00 to 150+96	1066
TOTAL	1066
MUNICIPAL (LOCKLAND PART)	
150+96 to 175+47.12	1839
TOTAL	1839

EROSION CONTROL

Station to Station	Side	Seeding & Protecting Type "A" See Cross Sections Item L-9 Sq. Yd.	SEE SHEET Nº
MUNICIPAL (ARLINGTON H'TS.)			
137+00 - 150+96	R&L	38925	131
Total		38925	
MUNICIPAL (LOCKLAND PT.)			
150+96 - 175+47.12	R&L	14953	136
Total		14953	

CONCRETE RETAINING WALL

STATION TO STATION	SIDE	CONCRETE EXCAVATION STRUCTURES FOR Wall (Class "E") Item S-1 cu. yd.	CONCRETE STRUCTURES Item E-2 Cu. Yd.	SEE SHEET NO.
MUNICIPAL (ARLINGTON HEIGHTS)				
136+98.25	Lt.	2.2	7	186
TOTAL		2.2	7	

ROCK FILL

STATION TO STATION	SIDE	DUMPED ROCK FILL Item I-10 Cu. Yd.	SEE SHEET Nº
MUNICIPAL (ARLINGTON HEIGHTS)			
137+90 to 139+00	Rt.	440	130
TOTAL		440	

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 UGI | 42 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON HTS., LOCKLAND (PT.).

Plotted By	J.B.W.
Templates Plotted	J.B.W.
Templates Checked	
Drainage Checked	
Areas	T.S.
Volume	J.B.W.
Volumes Checked	D.W.
Balance Points	

Seeding — Placing Top Soil

Width Area Lin.ft. Sq.Yd.	Width Area Lin.ft. Sq.Yd.
100 90 80 70 60 50 40 30 20 10	℄ 10 20 30
129 118	
353 321	
125 113	
342 306	
121 107	
331 294	
117 105	
700 632	
108 98	
447 479	
75 98 7+00	

Quantities Included In Summit Road

Sta. 7+00 to Sta. 11+40
Seeding 6400 Sq. Yd.
Topsoil 3277 Sq. Yd.
Carried to Sheet No. 45

+23 14" Ash

+16 17" Tree

+90 14" Tree

+55 30" Syc.

+70 24" Walnut

+56 54" Syc.

15" Pipe

12" Pipe

Seeding — Sod — Seeding — Seeding — Sod — Seeding

12" — 3/8" I.P.

APPROACHES CLASS EMB.	END AREA	VOLUME		
MATERIAL	CUT	FILL	CUT	FILL
AREA VOL.				
24	595	3		
22	624	3		
23	752	3		
21	707	3		
23	774	3		
21	656	3		
23	643	3		
47	1932	6		
23	641	3		
19	522	2		
0	0	0		

550.52 ℄
8+75
553.0

550.05 ℄
8+50
556.0

549.58 ℄
8+25
553.9

549.11 ℄
8+00
553.3

547.98 ℄
7+44
552.8

Excavation 5218 Cu. Yd.
Embankment 458 Cu. Yd.
Class. Emb. 366 Cu. Yd.
Carried to Sheet No. 45

ZERO SECT. = 7+00
FOR QUANT. N. OF 7+00
SEE S.H. 987 SECTS.

STA. 7+00 TO STA. 8+75 Ramp "A"

DIVISION 2 | FED. AID PROJECT OHIO VI-316(1) | 1946 | SHEET 43 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON H'TS, LOCKLAND (PT.) & APPROACHES

CLASS. EMB. END AREA VOLUME

MATERIAL	CUT AREA	FILL AREA	CUT VOL.	FILL VOL.
	0	0	0	
	8		0	63
	11		0	85
	38		1	185
	30		1	115
	56		4	143
	53		207	40
	27		221	4
	55		661	7
	32		493	3
	26		504	3
	Sta. 8+75	24	595	3

Seeding Width Lin.Ft.	Seeding Area Sq.Yd.	Placing Top Soil Width Lin.Ft.	Placing Top Soil Area Sq.Yd.
80		11+40	
	378		
90			
	589		
122			
	783		
160		0	
	1067	10+00	303
224		109	
	1028		633
146		119	
	382		309
129		118	
		8+75	

Plotted By: J.B.W.
Templates Plotted: J.B.W.
Templates Checked:
Drainage Checked:
Areas: T.S.
Volume: J.B.W.
Volumes Checked: D.W.
Balance Points:

ZERO SECTION
= 11+40

554.75 ℄/c
11+00
551.2

553.81 ℄/c
10+50
551.2

552.87 ℄/c
10+00
551.2

551.93 ℄/c
9+50
551.93

550.99 ℄/c
9+00
552.8

Seeding
Include in Paddock Road Quantities.
Sod
Quantities Included in Summit Road
555
Ex. 15" Pipe
℄ Ex. 15" Pipe
15" Pipe-122' R.T.
℄ 15" Pipe
9"
12"
3/8" I ft.

STA. 9+00 TO STA. 11+00 RAMP "A"

DIVISION 2 | FED. AID | OHIO U.I. 316(1) 1946 UGI | 44 | 280

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

Plotted By	
Templates Plotted	
Templates Checked	
Areas	
Drainage Checked	
Volumes By	
Volumes Checked	
Balance Points	

Class. Emb.	End Area		Volume	
Material	Cut	Fill	Cut	Fill
Area				
Vol.				

Seeding
Width Area
Lin. Ft. Sq. Yd.

ZERO SECT. = 8+74

Sta. 7+00 to Sta. 8+74
Excavation 2971 Cu. Yd.
Embankment 3193 Cu. Yd.
Class. Emb. 152 Cu. Yd.
Carried to Sheet No. 45

Note:- Approx. 2950 Cu. Yds. of Excavation Between Sta. 7+00 & Sta. 8+63 Have Been Estimated To Be Unsuitable for Embankment.

Sta. 7+00 to Sta. 8+74
Seeding 900 Sq. Yd.
Carried to Sheet No. 45

Seeding — INCL. IN PADDOCK RD. QUANT. — 550?

8+63
551.0

8+74 — 0 — 0 0 0

15 — 4 — 10 0

24 — 18 — 45 1

35 — 14 — 144 133

24 — 8+50, 550.3 — Sod — 3:1 — 12" — INCL. IN PADDOCK RD. QUANT. — 40 — 552 553

283 — EXC. & BACKFILL — 67 — 1090 1186

78 — 8+00, 546.7 — Seeding — Prop. R/W'S — 32 — 625 728

392 — EXC. & BACKFILL — 48 — 1153 1274

63 — Seeding — 5/8 1 ft. 7 — Prop. R/W'S — EXC. & BACKFILL

175 — 7+50, 546.1 — 20 — 620 648

0 — Sta. 7+00 — ZERO SECT = 7+00 / FOR QUANT. N. OF 7+00 SEE S.H. 987 SECTS. — 19 — 574 600

Sta. 7+00 — 0 — 0 0 0

60 50 40 30 20 10 0 10 20 30 40 50 60

20 530.7

STA. 7+00 — STA. 8+74 RAMP "B"

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 45 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.). & APPROACHES

CLASS. EMB. MATERIAL AREA VOL. | End Area Volume Cut Fill Cut Fill

Plotted By M.B.S. REL.
Templates Plotted R.E.L.
Templates Checked A.J.H.
Drainage Checked U.H.H.
Areas T.S.
Volumes H.R.
Volume Checked
Balance Points

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding Placing Top Soil
Width Area Width Area
Lin Ft. Sq. Yd. Lin. Ft. Sq. Yd.

+90 9"St.

539.3

538.61 (FUTURE)
57+81
524.0

363 96

+77 9"Elm
+55 9" Elm
+68 9"Elm
+54 2-9"Elm
+58 14"St.

Seeding

Shed

54 1190 3746

1832 532

541.3

+47 9"Dec
+88 9"Elm

104 2384 5416

538.35 (FUTURE)
57+29
548.7

Closed Shed

Open Shed

271 88

54 1305 1878

728 287

538.20 (FUTURE)
57+00
551.9

181 90

54 1490 1039

503 250

10 1380 962

900 0 STA. 7+00 TO STA. 8+74 (RAMP "B") Carried from Sheet No. 44
6400 3277 STA. 7+00 TO STA. 11+40 (RAMP "A") Carried from Sheet No. 42

STA. 7+00 TO STA. 8+74 (RAMP "B") Carried from Sheet No. 44 152 2971 3193
STA. 7+00 TO STA. 11+40 (RAMP "A") Carried from Sheet No. 42 366 5218 458

0 0

56+50
ZERO SECT.

0 0 0 0

BEGIN WORK ON S.H. 987
STATION 53+97

80 70 60 50 40 30 20 10 0 10 20 30 40 50 65 70 80

STA. 56+50 TO STA. 57+81

240 230 220 210 200 190 180 170 160 150 140 130 120 110

DIVISION 2 FED. AID OHIO UI-31G(1) 1946 UGI 46 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS, LOCKLAND (PT.) & APPROACHES

Seeding

2:1

R/W

3/8" I/ft.

12"

90 90

525

EXC. & BACKFILL

57+81

Plotted By	R.E.L.	T.S.
Templates Plotted	R.E.L.	
Templates CHK'd	A.J.H.	
Drainage CHK'd		J.C.M.
Areas		T.S.
Volumes		H.R.
Volume CHK'd		
Balance Points		

+51
14" Locust.

+68
10" Locust

+23
9" LOCUST

R/W

2:1

540

57+29

EXC. & BACKFILL

Seeding

4:1

3/8" I/ft.

12"

Seeding

57+00
540

EXC. & BACKFILL

240 230 220 210 200 190 180 170 160 150 140 130

STA. 56+50 TO STA. 57+81 LT. EXTENSION

DIVISION 2 FED. AID OHIO UI-316(1) 1946 UGI

47
289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220

550

57+81

Seeding 2:1 Sod Seeding 4:1 12" 3/8"/FT. 12" pipe EXC. & BACKFILL Seeding Sod 6:1 Seeding

INCL. IN SUMMIT RD. QUANT.

+68 10" LOCUST

+51 14" LOCUST

550

57+29

12" EXC. & BACKFILL

INCL. IN SUMMIT RD. QUANT.

+23 8" LOCUST

550

57+00

Seeding 2:1 Sod Seeding 4:1 12" 3/8"/FT. 12" pipe EXC. & BACKFILL Seeding Sod 6:1 Seeding

INCL. IN SUMMIT RD. QUANT.

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240

STA. 56+50 TO STA. 57+81 FINAL

Plotted By	J.B.W.
Templates Plotted	M.J.H.
Templates Checked	W.L.E.
Drainage Checked	
Areas	T.S.
Volumes	T.S.
Volumes Checked	H.R.
Balance Points	

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 48 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.). & APPROACHES

Seeding		Placing Top Soil		Class. Emb. Material	End Area	Volume Cut	Volume Fill	Cut	Fill
Width	Area Lin. Ft.	Width	Area Lin. ft. Sq. Yd.						
								43	1517 4718
331	71								
								80	2957 8882
1883	442								
								43	1676 4874
347	88								
								80	3142 8696
1969	572								
								43	1717 4517
362	118								
								34	1016 2907
765	226								
								54	1170 3746
363	96								

Seeding — Seeding

+23 10" Syc. — +22 10" Syc. — 588.9 +04 10" Elm — +08 9" Maple — +09 9" Maple

EXC. & BACKFILL — Seeding — EXC. & BACKFILL

539.20 (FUTURE)
59+00
521.2

+68 9" Syc. — +67 9" Syc. — +98 9" Elm — +78 16" Poplar — +61 11" Willow — +71 10" Elm — +60 15" Syc. — +98 9" Elm — 539.0

EXC. & BACKFILL

538.95 (FUTURE)
58+50
520.3

Seeding — 539.2 — Seeding

+32 9" Elm

EXC. & BACKFILL

538.70 (FUTURE)
58+00
521.7

75' → +43 9" Syc.

Sta. 57+81

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

Plotted By M.B.S. R.E.L.
Templates Plotted R.E.L.
Templates Checked A.J.H.
Drainage Checked J.C.M.
Areas T.S.
Volumes
Volume Checked H.R.
Balance Points

STA. 58+00 TO STA. 59+00

DIVISION 2 | FED. AID OHIO UI-31G(1) 1946 UGI | 49 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON H'TS., LOCKLAND (PT.) & APPROACHES

Plotted By	R.E.L. T.S.
Templates Plotted	R.E.L.
Templates Ch'k'd	A.J.H.
Drainage Ch'k'd	J.C.M.
Areas	T.S.
Volumes	H.R.
Volume Ch'k'd	
Balance Points	

240 230 220 210 200 190 180 170 160 150 140 130 120 110 90 80

Seeding 2:1 ↗ — R/W → — 3/8" I.P. — 9" — 12" pipe — Seeding — 540 ↗

+45 9" Ash — +12 9" Locust — +16 9" Elm — +38 9" St

59+00

9"

540 ↗

2:1 ↗

R/W →

+55 9" Elm

+41 9" Elm

58+50

Seeding 2:1 ↗ — R/W → — 3/8" I.P. — 9" — 12" pipe — Seeding — 540 ↗

+24 9" Ash

58+00

240 230 220 210 200 190 180 170 160 150 140 130 120 80

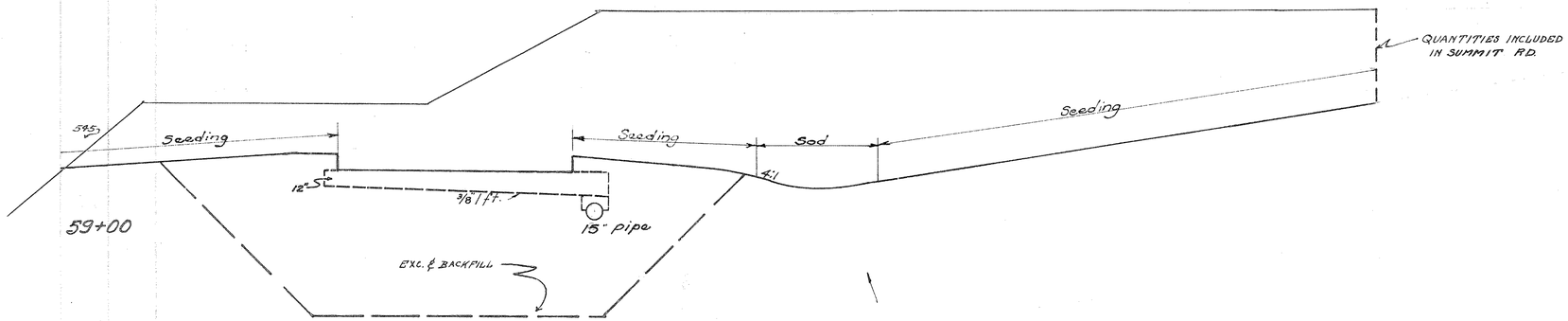
STA 58+00 TO STA 59+00 LT. EXT.

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220

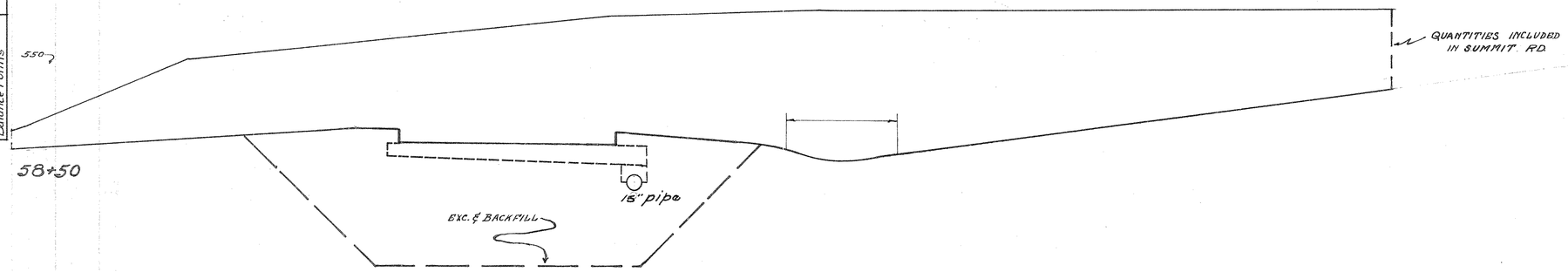
DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 50 289

HAMILTON COUNTY S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

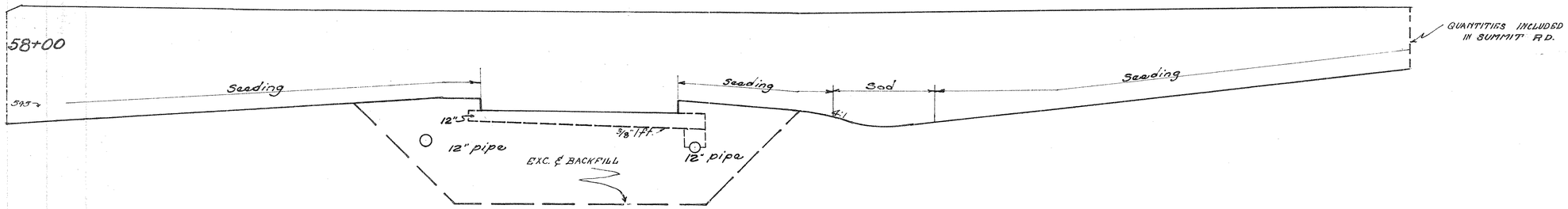
+16 19" ELM



Plotted By	J.B.W.
Templates Plotted	A.J.H
Templates Checked	W.E.
Drainage Checked	
Areas	M.L.H. - J.C.M.
Volumes	T.S.
Volumes Checked	H.R.
Balance Points	



Note:- Approx. 17,149 Cu. Yds. of Excavation between Sta. 56+50 & 60+50 have been Estimated to be unsuitable for Embankment



80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 245

STA. 58+00 TO STA. 59+00 EXTENSIC

DIVISION 2 OHIO UI-316(1) 1946 FED. AID UGI 51 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati(Pt)"B", Arlington Hts, Lockland(Pt). AND APPROACHES

Plotted By	M.B.S.	R.E.L.
Templates Plotted	R.E.L.	A.J.H.
Templates Chkd.		
Drainage Chkd.		T.S.
Areas		T.S.
Volumes		
Volume Chkd.		H.R.
Balance Points		

Seeding — Placing Top Soil

Width Area Lin.Ft. Sq.Yd. | Width Area Lin.Ft. Sq.Yd.

Class. Emb. End Material Area Volume
Area Vol. Cut Fill Cut Fill

538.3 15" pipe

539.95 (Future) 60+50 520.1

538.5

539.70 (Future) 60+00 520.9

538.7

539.45 (Future) 59+50 523.3

Exc. & Backfill

STA. 59+50 TO STA. 60+50

DIVISION 2 FED. AID OHIO UGI VI-316(1) 1946 52 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS., LOCKLAND (PT.). & APPROACHES

Plotted By	T.S.
Templates Plotted	R.E.L.
Templates CHKd	A.J.H.
Drainage CHKd	J.C.M.
Areas	T.S.
Volumes CHKd	H.R.
Volume CHKd	
Balance Points	

240 230 220 210 200 190 180 170 160 150 140 130 120 110

540'

3/8" Pipe

Seeding

2:1

+75 9" Stump

+62 9" Ash

R/W

+23 9" Locust

60+50

540'

+48 9" Ash

+51 9" Willow

+21 9" St

+08 12" Ash.

+05 9" Locust

R/W

+05 9" Peach

60+00

Seeding

3/8" Pipe

12" pipe

9"

540'

2:1

Seeding

+61 8" Ash.

59+50

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 59+50 TO STA. 60+50 LT. EXT.

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 53 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.T.) "B", ARLINGTON HEIGHTS, LOCKLAND (P.T.) & APPROACHES

Plotted By	J.B.W.
Templates Plotted	A.J.M.
Templates Checked	W.E.
Drainage Checked	J.C.M.
Areas	T.S.
Volumes Checked	H.R.
Balance Points	

+59 9" Elm

+87 12" Tree

QUANTITIES INCLUDED IN SUMMIT ROAD

Seeding

Sod

Seeding

3/8 Ft.

15" Pipe

530

60+50

QUANTITIES INCLUDED IN SUMMIT ROAD

+39 9" Elm

530

EXC. & BACKFILL

+39 16" Box Elder

60+00

+30 14" Elm

+39 9" Elm

+42 12" Elm

+41 9" Elm

+27 12" Elm

+21 9" Stump

QUANTITIES INCLUDED IN SUMMIT ROAD

Seeding

Seeding

Sod

Seeding

12"

3/8 Ft.

15" Pipe

59+50

535

EXC. & BACKFILL

+49 30" Tree

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 245

STA. 59+50 TO STA. 60+50 EXTENSION RT

DIVISION 2 | FED. AID OHIO UI-UGI-316(1) 1946 | 54 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT) "B", ARLINGTON HTS., LOCKLAND (PT).
& APPROACHES

F.L. 538.16

Seeding Width Area Lin.Ft. Sq.Yd.	Placing Top Soil Width Area Lin.Ft. Sq.Yd.

Class. Material	Emb. Area	End Area	Volume Vol. Cut	Volume Fill	Cut	Fill

Plotted By M.B.S. R.E.L.
Templates Plotted R.E.L. A.J.H.
Templates Checked A.J.H. J.G.M.
Drainage Checked J.G.M. T.S.
Areas T.S. H.R.
Volumes Checked H.R.
Volume Checked
Balance Points

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding 2:1 3/8" Fff. 18" pipe +23 10"Syc. +15 10"Syc. +27 9"St. 9" Seeding 3/8" Fff. 27" pipe +48 10"Syc. +20 15"Syc. +10 10"Elm Seeding 3/8" Fff. 4:1 Sod 2:1

147

540.70
67+00
516.7

+87 12"St +66 9"St +69 9"St

78 0 4042

+78 10"St. +69 10"St +69 10"Willow +97 12"Willow +70 9"St. +88 12"St +69 8"Sts. +59 20"Willow +81 12"Willow +56 12"B.E.

538.7 Ahead Back Ahead Back Back

870

+78 12"Elm +78 12"Syc. +67 9"Elm +67 10"St. +56 12"Syc. 27" pipe

207 0 7684

146 176 Ahead Back

540.45
61+96.54
519.9

Ahead 131 0 3720
Back 93 0 3761

+43 9"St.

Seeding Back Ahead Back Ahead +31 15"Syc +24 9"Elm +40 9"St. +37 9"Syc. +43 9"St. +28 16"Syc +38 9"Elm +38 9"Syc Seeding

538.5

3/8" Fff. 9" 3/8" Fff. Seeding

+78 12"Willow 18"pipe +34 12"St. +31 12"St +24 12"St. +48 10"Syc. +13 9"St. +13 10"Willow +46 10"Syc. +06 9"St. +00 9"St. +13 9"Willow +00 9"St. 15"pipe

690 115 0 4665

77' +58 12"B.E.

187 0 Ahead
222 0 Back

540.20
61+12.39
525.9

+38 12"B.E. +26 12"Elm

BEGIN FED. PROJECT No. UI-UGI-316(1)
STATION 61+12.34

Ahead 89 0 3604
Back 48 0 3643

105 112 8938

1645 25 87

253 60+50

60+50 43 97 4099

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 61+12.34 TO STA. 62+00

DIVISION 2 | FED AID | OHIO UI-316(1) 1946 | UGI | 55 | 289

HAMILTON COUNTY

S.H. 987 SEC. CINCINNATI (PT.); "B"; ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

240 230 220 210 200 190 180 170 160 150 140 130 120 110 90 80

274'
42.3

+44
9" Heaven.

+40
28" Box El.

R/W

+11
20" Box El.

+00
10" Elm

2:1

Seeding

535.7

62+00

2&1'
543.2

Plotted By	
Templates Plotted	
Templates Ch'k'd	
Drainage Ch'k'd	
Areas	
Volumes	
Volume Ch'k'd	
Balance Points	

R.E.L. T.S.
R.E.L.
A.V.H.
J.C.M.
T.S.
H.B.

+695
8" St.

+54
9" Box El.

+61
10" Box Elder

+51
12" Box E

+62
10" Willow

535.7

+02
10" Willow

+47
10" Box El.

+45
15" Willow

+37
10" Willow

+03
9" Box El.

+08
9" Box El.

+37.5
8" St

+31
12" Maple

+13
10" Apple

61+46.54

535.7

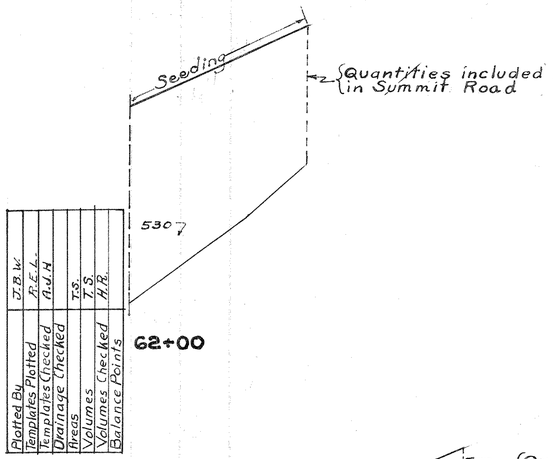
61+12.34

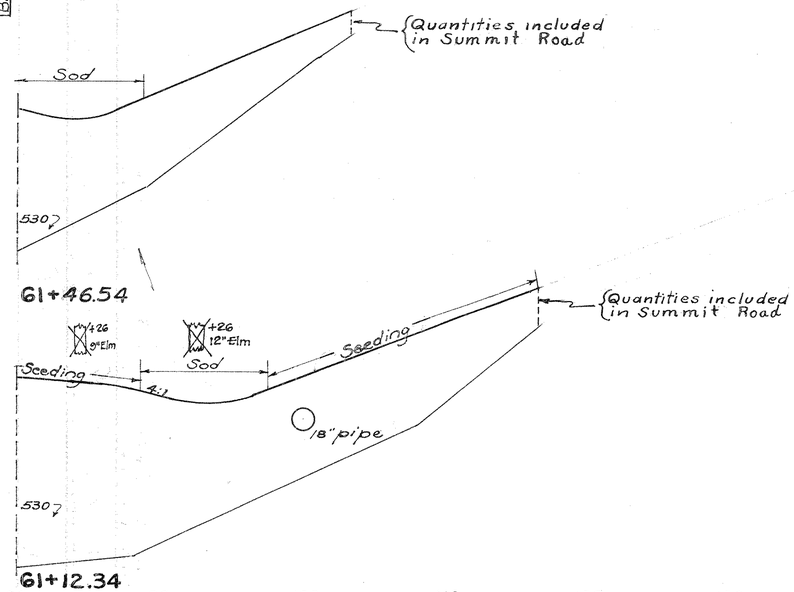
STA. 61+12.34 TO STA. 62+00 LT. EXT

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220

DIVISION FED AID 56
2 OHIO UI-316(1) 1946 289
UGI

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI(PT.)
"B", ARLINGTON HEIGHTS,
LOCKLAND (PT.)
& APPROACHES





80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240

STA. 61+12.34 TO STA. 62+00 EXTENSION RT.

DIVISION 2 | FED. AID OHIO UGI UI-316(1) 1966 | 57 289

HAMILTON COUNTY

SH. 987 SEC CINCINNATI (PT.), "B", ARLINGTON HTS, LOCKLAND (PT.)

& APPROACHES

Plotted By	M.B.S.	R.E.L.
Templates Plotted	R.E.L.	
Templates Checked	A.J.H.	
Drainage Checked		J.C.M.
Areas		T.B.
Volumes		H.R.
Volume Checked		
Balance Points		

Class. Emb. | End Material Area | Volume Area Vol. Cut | Volume Fill | Cut | Fill

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding

Width Area Lin. Ft. Sq. Yd.

2:1 Seeding

30" Pipe

3/8" / ft. 9" Seeding 9" 3/8" / ft.

+62 10" Elm

+52 9" Elm

+57 9" Elm

+57 15" Ash

19'-2½" 11'-2½" 1" / ft. Seeding Sod 2:1 F.L. 539.10

{Quant. Incl. in Sum't. Rd.}

151 836

541.45
63+50
515.8

19'-6" 11'-6" 1" / ft. 300' 2:1 F.L. 538.89

64 0 3869

{Quant. Incl. in Sum't. Rd.}

124 0 7134

150 828

541.20
63+00
519.4

Seeding 2:1 30" Pipe 3/8" / ft. 9" Seeding 9" 3/8" / ft. Seeding Sod 2:1 Seeding F.L. 538.55

70 0 3836

{Quantities Incl. in Summit Road}

148 819 62+50

135 0 7281

76 0 4027

143 0 7472

147 62+00

540.95
62+50
514.7

62+00 78 0 4042

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 62+50 TO STA. 63+50

DIVISION 2 | FED. RTD | OHIO | UGI-316(1) | 1946 | 58 | 289

HAMILTON COUNTY

S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

Top

240 230 220 210 200 190 180 170 160 150 140 130 120 110

2.51'
+13
12" Locus.

+11
10" Box El.

+46
9" Locust

Plotted By	T.S.
Templates Plotted	V.C.M.
Templates Ch'k'd	R.E.L.
Drainage Ch'k'd	A.J.H.
Areas	J.C.M.
Volumes	T.S.
Volume Ch'k'd	H.R.
Balance Points	

62.5'
49.6

+62
9" Locust

+62
9" Locust

+81
10" Locust.

+11
9" Locust

+96
9" Box El.

R/WB

Seeding

2:1

5307

63+50

63+00

62+50

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 62+50 TO STA 63+50 LT.

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 UGI | 50 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt) "B"; ARLINGTON HEIGHTS, LOCKLAND (Pt.)
& APPROACHES

Class. Emb. Material	End Area	Volume	
Area	Vol.	Cut	Fill

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding
Width Area
Lin. Ft. Sq. Yd.

2:1 Seeding
3/8"/ft. 9"
Seeding
9" 3/8"/ft.
Seeding 4:1 Sod 2:1 Seeding
15" Pipe
30" Pipe

143 542.35 65+30 523.2

Quantities Incl. in Summit Road

60 0 2666

+96 12" Ash.
65+00 9" Elm
20'-0" 12'-0" 1"/ft. 4:1 2:1
539.52

968 2:1

133 0 5969

147 542.05 64+70 525.0

+12 9" B.E.

60 0 2706

+46 12" Elm
+44 12" Elms
20'-9 5/8" 12'-9 5/8" Seeding Sod Seeding 2:1

1151 2:1 Seeding
3/8"/ft. 9" Seeding 9" 3/8"/ft.
539.28

Quantities Incl. in Summit Road

155 0 7906

30" Pipe

149 64+00

833

60 0 3393
115 0 6724
64 0 3869

541.70 64+00 518.3

151 63+50

Sta. 63+50

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 64+00 TO STA. 65+30

Plotted By	M.B.S.	R.E.L.
Templates Plotted		
Templates Checked	A.S.H.	
Drainage Checked	J.C.M.	
Areas	T.S.	
Volumes	H.R.	
Volumes Checked		
Balance Points		

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 | 60 | 289

HAMILTON COUNTY

S.H. 987 SEC. CINCINNATI (PT) "B", ARLINGTON H'TS LOCKLAND (PT). & APPROACHES

240 230 220 210 200 190 180 170 160 150 140 130 120 110

+60 12" Tree
+52 9" Tree
+52 9" Tree
+51 9" Tree
+52 9" Tree
+48 2-9" Tree
+50 9" Tree
+46 9" Tree
+50 12" Loc.
255'

Plotted	B4
Templates Plotted	
Templates Chkd	
Drainage Chkd	
Areas	
Volumes	
Volume Chkd	
Balance Points	

J.C.M.	T.S.
A.J.H.	
J.C.M.	
T.S.	
H.R.	

5307
2:1
Seeding
℄ INT
65+30

5307
2:1
℄ INT
64+70

5307
2:1
Seeding
℄ INT
64+00

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 64+00 TO STA. 65+30 LT. EXT

DIVISION FED AID 61

2 OHIO UI-316(1) 1946 289

UGI

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

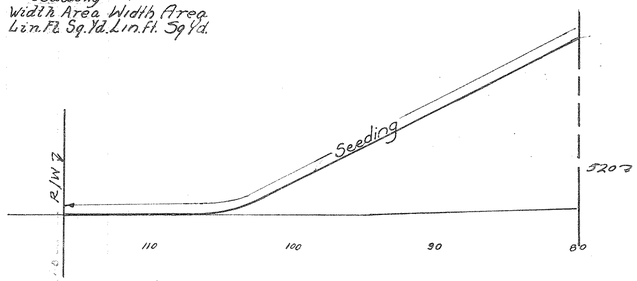
Class. Emb. End

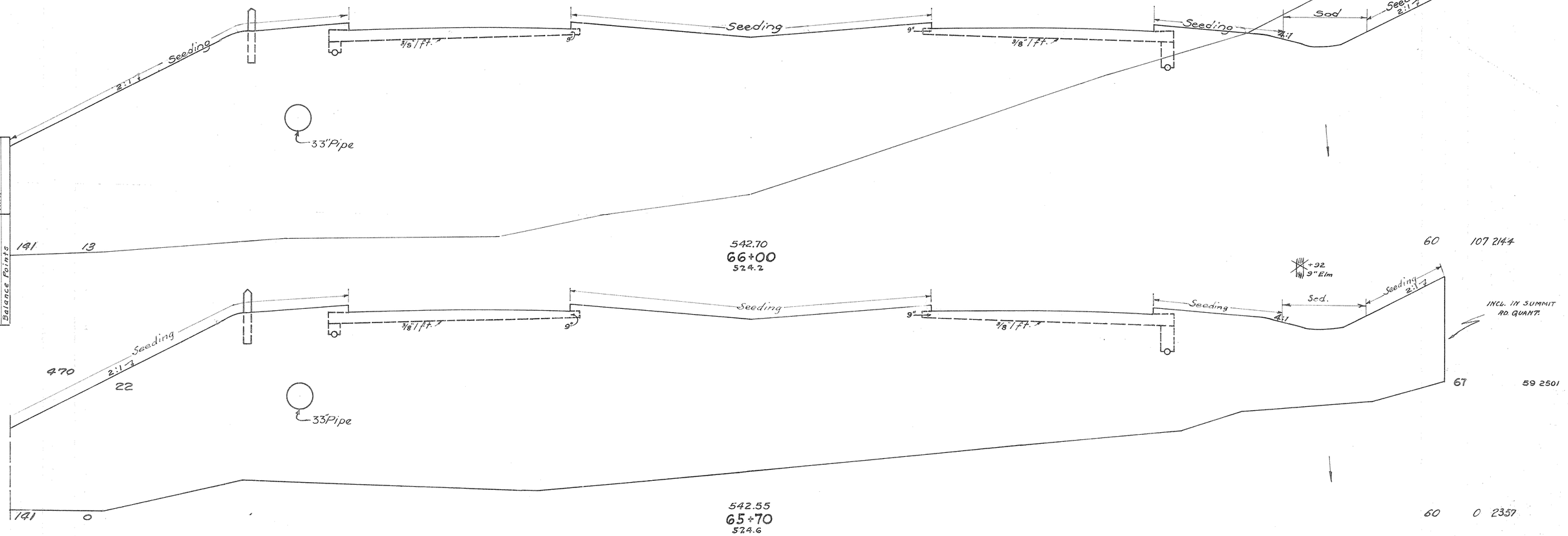
Material Area Volume

Area Vol. Cut Fill Cut Fill

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding Placing
Sodding Top Soil
Width Area Width Area
Lin. Ft. Sq. Yd. Lin. Ft. Sq. Yd.





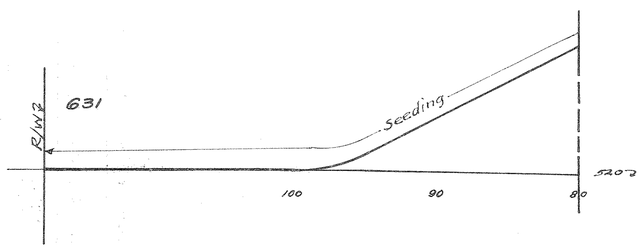
Plotted By	W.B.S. R.E.L.
Templates Plotted	A.J.H
Templates Checked	
Drainage Checked	J.C.M.
Areas	T. S.
Volumes	H.B.
Volume Checked	
Balance Points	

141 13 — 542.70 — 66+00 — 524.2 — 60 107 2144

470 22 — 67 59 2501

141 0 — 542.55 — 65+70 — 524.6 — 60 0 2357

89 0 3721



143 — 65+30 — Sta. 65+30 — 60 0 2666

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 65+70 TO STA. 66+00

DIVISION 2 | FED AID | OHIO UI-316(1) 1946 JGI | GZ | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

Seeding — Placing Top Soil

Width Area Width Area
Lin.Ft. Sq.Yd. Lin.Ft. Sq.Yd.

Class. Emb. End Volume
Material Area
Area Vol. Cut Fill Cut Fill

Plotted By | M.B.S. | REL.
Templates Plotted | A.J.H.
Drainage Checked
Areas | J.C.M.
Volumes | T.S.
Volumes Checked | R.E.
Balance Points

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

530.7
E.W.Z.
Seeding
100 90 80

121 24 2:1 Seeding
779 147 2:1
139 24
381 47
140 10
312 26
141 13

Seeding
3/8" I.P.F.
9"
12"
Sod
4:1
2:1

+22 12" Elm
+06 30" Elm

33" Pipe

543.20
67+00
537.0
730

542.93
66+45
531.8

542.80
66+20
529.8

525.2

INCL. IN SUMMIT RD. QUANT.

69 519 1041
141 859 2191
69 324 1110
60 168 1202
60 38 1487
44 54 1345
60 107 2144

Sta. 66+00 70 80

STA. 66+20 TO STA. 67+00

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 63 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.)
& APPROACHES

Seeding: Placing Top Soil
Width Area Lin.Ft. Sq.Yd. | Width Area Lin.Ft. Sq.Yd.

Plotted By | M.B.S. | REL.
Templates Plotted | A.J.H.
Templates Checked
Drainage Checked | J.C.N.
Areas | T.S.
Volumes | H.R.
Volume Checked
Balance Points

Class. Emb. End Material Area Volume
Area Vol. Cut Fill Cut Fill

+27 56"Syc.
+25 9"Elm.

Seeding | Sod | Seeding | Seeding | Seeding | Seeding | Sod | Seeding 2:1
3/8 ft. | 3/8 ft.
9" | 12"
2:1 | 4:1

97 57 540.0
543.83 68+25 544.6
69 1241 78

Quantities Incl. in Summit Rd.

Sta. 56+50 to Sta. 68+32.81
Excavation 32618 Cu.Yd.
Embankment 32646 Cu.Yd.
Embankment +20% 32776 Cu.Yd.
Classified Emb. Material 39097 Cu.Yd.

415 167
33" Pipe
543.64 67+88 539.8
69 485 361
105 24
+53 16" Tree
+79 10" Wild Cherry
+65 9" Elm
+82 9" St.
+58 12" Tree
+58 12" St.
+53 18" Elm

STA. 56+50 TO STA. 68+32.81
SEEDING & PROTECTING, TYPE "A"
PLACING STOCKPILED TOP SOIL
32679 Sq.Yd.
7154 Sq.Yd.

448 112
Seeding | 2:1 | Seeding | Seeding | Sod | Seeding 2:1
3/8 ft. | 3/8 ft.
9" | 12"
97 864 700

543.45 67+50 538.9
33" Pipe
107 29
69 743 634
633 147
128 1169 1551

121 24 67+00
Sta. 67+00 69 519 1041

STA. 67+50 TO STA. 68+25

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 UGI | 64 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Plotted By: N.I.B.S. R.E.L.
Templates Plotted: A.V.H.
Templates Checked
Drainage Checked: J.C.M.
Areas: T.S.
Volumes
Volumes Checked: H.R.
Balance Points

Seeding — Placing Top Soil

Width Lin.Ft.	Area Sq.Yd.	Width Lin.Ft.	Area Sq.Yd.
99	24		
550	133		
547	222		
98	56		
325	195		
97	61		
216	139		
97	185	62	116
84		52	
97	57		

Class. Emb. Material — End Area — Volume Vol. Cut — Fill Cut — Fill

Class. Emb. Material	End Area	Volume Vol. Cut	Volume Fill Cut	Volume Fill
69	250	102		
128	647	193		
69	448	106		
128	1095	133		
69	734	37		
77	743	74		
69	604	97		
51	587	64		
60	44	982	76	707 49
69	20	1241	78	322 22

Quantities Incl. in Summit Rd.

Quantities Incl. in Summit Rd.

544.70 — 70+00 — 547.5

544.45 — 69+50 — 540.8

544.20 — 69+00 — 544.7

544.05 — 68+70 — 549.0

543.95 — 68+50 — 548.3

68+32.81

Sta. 68+25

36" Pipe

36" Pipe

+06 9"Syc.

+37 18" St.

+98 30" St.

+97 15" Elm

+86 15" Elm

+53 12" Elm

STA. 68+50 TO STA. 70+00

Plotted By	M.B.S.	R.E.L.
Templates Plotted	A.J.H.	
Templates Checked	J.C.M.	
Drainage Checked	T.S.	
Areas		
Volumes		
Volumes Checked	H.R.	
Balance Points		

DIVISION 2 FED. AID OHIO UI-316(1) 1946 UGI 65 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Class. Emb. End Area Volume
Material Area Vol. Cut Fill Cut Fill

Seeding Placing Top Soil
Width Area Width Area
Lin. Ft. Sq. Yd. Lin. Ft. Sq. Yd.

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding Sod Seeding 4:1 3:1 540.3 9" 9" Seeding 9" 3/8" Fft. Seeding Sod
101 6
546.20
73+00
542.4
14'± 36" Pipe
Sod Seeding 2:1 Quantities Incl. in Summit Road.

564 36 540.1
102 7
545.95
72+50
542.0
14'±
59 16 289
4:1 Quantities Incl. in Summit Rd.
110 35 511

572 69 539.9
104 18
545.70
72+00
542.0
13'± 3/8" Fft.
59 22 263
110 62 452

569 119 540.3
101 25
545.45
71+50
542.0
13'± 12" Pipe
59 45 225
Quantities Incl. in Summit Rd.
110 167 381

561 133 540.7
101 23
545.20
71+00
541.7
12'±
59 135 186
110 248 332

558 131 Seeding Sod Seeding 4:1 3:1 541.1 9" Seeding 9" 3/8" Fft. Seeding 4:1 Sod Seeding 2:1
100 24
544.95
70+50
541.4
12'±
59 133 172
Quantities Incl. in Summit Rd.
59 157 180
110 269 326

553 133
99 24
70+00
36" Pipe
119 377 261

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

Sta. 70+00 69 250 102

STA. 70+50 TO STA. 73+00

DIVISION 2 | FED. AID | OHIO UI-31G(1) 1946 UGI | 66 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

Seeding — Placing Top Soil
Width Area — Width Area
Lin. Ft. Sq. Yd. — Lin. Ft. Sq. Yd.

Quantities Incl. in Summit Road

Class. Mat'l	End Area	Volume Cut	Volume Fill	Cut	Fill

Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas By
Volumes By
Volumes Checked
Balance Points

M.B.S. REL.
A.J.H.
J.C.M.
T.S.
H.R.

Sod, Seeding, 4:1, 3:1, 2:1, R/W, 541.0, 540.9, 540.7, 540.6, 540.4, 7'±, 11'±, 12'±, 14'±, 17'±, 18'±, 12" pipe, 36" Pipe, 9", 3/8"/Ft.

547.42 — 75+44 — 534.7
547.28 — 75+15 — 546.4
546.95 — 74+50 — 546.3
546.70 — 74+00 — 544.4
546.45 — 73+50 — 543.1

89 24 | 290 129 | 91 56 | 157 90 / 522 300 | 97 52 | 542 161 | 98 6 | 550 33 | 100 6 | 558 33 | 101 6

75+00 | 73+00

STA. 68+32.81 TO STA. 75+00
SEEDING & PROTECTING Type "A" 7372. Sq.Yd.
PLACING STOCKPILED TOPSOIL 1953. Sq.Yd.

Sta. 68+32.81 to Sta. 75+00
Classified Emb. Material 1540. Cu.Yd.

60 255 817 | 64 263 455 | 60 235 31 | 33 111 | 444 89 | 60 134 43 | 111 155 160 | 60 33 130 | 111 44 369 | 60 14 268 | 110 28 516 | 59 16 289

Quantities Incl. in Summit Rd.

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

Sta. 73+00

STA. 73+50 TO STA. 75+44

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 67 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) AND APPROACHES

Seeding	Placing Top Soil		
Width Ft.	Area Sq. Yd.	Width Ft.	Area Sq. Yd.
Lin. Ft.		Lin. Ft.	

Class Emb. Material	End Area	Volume Cut	Volume Fill	Cut	Fill
				INCL. IN SUMMIT RD. QUANT.	

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Prop. R/W

Seeding | Sod | Seeding | Seeding | Seeding | Sod | Seeding

4:1 | 6" | 3/8" FF. | 4:1 | 2:1

18"±

36" Pipe

548.12
76+84
561.6

126 126 48 2348 4

+76
24" Maple

34 1567 3

INCL. IN SUMMIT RD. QUANT.

268 268

544.4

548.03
76+65
561.6

128 128 48 2106 4

890 507

Seeding | Seeding | Seeding | Sod | Seeding

4:1 | 3/8" FF. | 4:1 | 2:1

541.0

18"±

36" Pipe

547.73
76+05
531.8

119 2843 1876

139 24 Ahead
196 24 Back

Ahead 59 453 1774
Back 59 453 1853

966 163

134 8003016

89 24 75+44

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

Sta. 75+44 60 255 817

STA. 76+05 TO STA. 76+84

	REL.
Plotted By	M.B.S.
Templates Plotted	R.J.H.
Templates Checked	H.K.
Drainage Checked	T.S.
Areas	H.R.
Volumes By	
Volumes Checked	
Balance Points	

DIVISION 2 | FED. AID OHIO UI-316(1)1946 UGI | 68 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

80

Plotted By	J.B.W.
Templates Plotted	A.J.H.
Templates Checked	
Drainage Checked	
Areas By	W.E.
Volumes By	T.S.
Volumes Checked	H.R.
Balance Points	

240 230 220 210 200 190 180 170 160 150 140 130 120 110

560
555
550
545
540
535
530

INCL. IN SIDEWALK QUANT.

Seeding

76+84

Include in S.W. quantity

76+65

Seeding

℄ BACK ONLY

℄ AHEAD

76+05

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 76+05 TO STA. 76+84 Extension Left

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 UGI | 69 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) AND APPROACHES

Seeding — Placing Top Soil

Width Area Lin.Ft. Sq.Yd. — Width Area Lin.Ft. Sq.Yd.

Class Emb. Material Area Vol. — End Area Cut — End Area Fill — Volume Cut — Volume Fill

Plotted By: M.B.S. REL.
Templates Plotted: A.J.H
Templates Checked:
Drainage Checked: J.C.M.
Areas: T.S.
Volumes:
Volumes Checked: H.R.
Balance Points:

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

House

Seeding 2:1 — Sod — 4:1 — Seeding — Seeding — Seeding — Sod — 4:1 — Seeding 2:1

6" — 3/8" / Ft. — 6"

105 105

548.45
78+00
562.2

20'±

36" Pipe

+97 24" Elm

+82 10" Maple

+86 22" Elm

614 586

3752 1729 Sta. 77+31.62 Pedestrian Overhead

48 2327 4

*Deduct 371 Cu.Yd from Cut Volume for House Cellars.

89 *3924 10

{Quantities Incl. in Summit Road.

House

2:1

116 106

548.40
77+50
562.4

19'±

+35 20" Elm

+30 16" Elm.

+47 12" Catalpa

+25 21" Elm.

48 2312 7

Sta. 77+31.62 Pedestrian Overhead 1252 1525

89 4081 18

+15 24" Elm

667 617

Exist. Conc. Pav't.

Ex. 12" Comb.

{Quantities Incl. in Summit Road

Seeding 5:1 — Sod — Seeding — Seeding — Seeding — Sod — 4:1 — Seeding 2:1

6" — 3/8" / Ft. — 6"

124 116

548.20
77+00
560.48

19'±

+98 22" Maple

+86 20" Maple

48 2095 12

222 215

76+76 25" Elm

28 1316 5

126 126 76+84

Sta. 76+84 48 2348 4

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 77+00 TO STA. 78+00

DIVISION 2 OHIO FED. AID VI-316(1) 1946 USI 70 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

240 230 220 210 200 190 180 170 160 150 140 130 120 110

+09 22" syc.

+38 9" Stump

+10 12" Stump

+12 9" Stump

Prish Canal R/W'd

265'±

+45 26 Maple

+19 14" Maple

+13 15" Maple

+27 14" Maple

Prop. R/W

Ex. Mac. Part'd

134'±

Included in Sidewalk Quantities

Seeding

560

555

78+00

+86 /- 19" syc \- 22" " +88

+51 25" Elm.

560

555

77+50

+05 32" Elm

+47 24" Elm

Include in Sidewalk Quantities

+00 26" Elm

560

Seeding

555

77+00

Plotted By	J.B.W.
Templates Plotted	A.J.H.
Templates Checked	W.E.
Drainage Checked	
Areas	W.E.
Volumes	T.S.
Volumes Checked	H.R.
Balance Points	

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 77+00 to STA. 78+00 Ext. LT.

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 71 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

Plotted By M.B.S. R.E.L.
Templates Plotted A.J.H.
Templates Checked
Drainage Checked T.S. J.C.M.
Areas T.S.
Volume H.R.
Volumes Checked
Balance Points

Seeding Placing Top Soil
Width Area Width Area
Lin.Ft. Sq.Yd. Lin.Ft. Sq.Yd.

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

+78 31" Hack.
House

+72 42" Syc. Ex. Mac. Pvt.

Prop. R/W

Seeding 3:1 Sod 4:1 Ex. 8" San. Seeding 4:1 6" 6" 6" 3/8" T.F. Seeding Sod 4:1 Seeding 2:1

20'±

36" Pipe

547.70
79+50
562.0

Class Emb. Material | End Area | Volume Cut | Volume Fill
48 | 2563 | 818

INCL. IN SUMMIT RD. QUANT.

218 116

* Deduct 113 Cu. Yd. from Cut Volume for House Cellar

+34 25" Syc.

1250 694

Prop. R/W

Seeding 3:1 4:1

20'±

548.11
79+00
561.6

89 | # 4652.1381

48 | 2583 673

232 134

+85 18" St.
+87 15" stump.

822

1316 +50 22" Stump

Seeding 2.5:1 Sod 4:1 Seeding 6" 6" 6" 3/8" T.F. Seeding 4:1 Sod Seeding 2:1

INCL. IN SUMMIT RD. QUANT.

88 | 4845.1048

292 93 | 162 93 | Ahead Back

20'±

36" Pipe

548.36
78+50
561.5

Ahead 48 | 2649.459
Back 48 | 2149 4

89 | 4144 8

550 550

105 105 78+00

Sta. 78+00 | 48 | 2327 4

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 78+50 TO STA. 79+50

DIVISION 2 OHIO | FED. AID UGI VI-316(1) 1946 | 72 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

PLOTTED	BY	J.B.W.
TEMP. AXES	PLOTTED	A.T.H.
TEMP. AXES	CHECKED	W.E.
DRAINAGE	CHECKED	
AREAS		W.E.
VOLUMES		T.S.
VOLUME	CHECKED	H.B.
BALANCE	POINTS	

240 230 220 210 200 190 180 170 160 150 140 130 120 110

560
555
Seeding
+54 9 Tree
+98 9" St.
+87 10" Hack.
+91 9" St.
+59 15" Elm
+90 15" Elm
+79 10" Elm
79+50

560
555
+43 9" St.
+16 9" St.
+41 9" St.
+42 9" St.
+11 15" St.
+44 9" St.
+07 10" Pop.
+09 16" Pop.
+25 14" Elm
+07 9" Elm
+07 9" Pop
+47 9" Pop
+48 18" Cot.
+03 12" Maple
+10 9" Tree
+30 10" St.
+43 9" St.
79+00

560
555
Prop. R/W
+90 16" Elm
+162 18" Elm
+85 12" Elm
+93 12" Elm
INCLUDE IN SIDEWALK QUANT. (BACK ONLY)
Seeding
78+50
+85 10" Elm
+67 15" Elm
+87 9" Maple
+66 18" Maple
+57 9" St.
Seeding
Include in Sidewalk Quant. (Back Only)
107+71

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 78+50 to STA. 79+50 Ext. LT.

Plotted By	M.B.S. REL J.C.M.
Templates Plotted	A.J.H.
Templates Checked	
Drainage Checked	J.C.M.
Areas	T.S.
Volumes	H.R.
Volumes Checked	
Balance Points	

Seeding — Placing Top Soil

Width Area Width Area
Lin. Ft. Sq. Yd. Lin. Ft. Sq. Yd.

DIVISION 2 — FED. AID OHIO UI-316(1) 1946 UGI — 73 — 2.89

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Class. Emb. End Volume
Material Area
Area Vol. Cut Fill Cut Fill

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Prop. 24" RCP — Seeding 3:1 — Sod 4:1 — Seeding — 6" — 6" — +27 10" Elm — +29 9" Elm — +07 16" Hack — +25 9" Locust — +47 26" Elm — +11 12" Elm. — Ex. Mac. Pav't. — Ex. 12" SAN. — 6" — 3/8" T/F — Seeding — Sod 4:1 — Seeding 2:1 — INCL. IN SUMMIT RD. QUAN'T.

161 49 — 545.83 — 81+00 — 548.7 — 48 1084 638

18" ± — Prop. 48" Pipe — +96 9" St — +77 9" Elm — +85 9" Elm — +98 12" Elm — +91 20" Pop — +61 9" Maple — +98 9" St. — +51 9" St. — +95 15" Elm — +73 14" Pop — INCL. IN SUMMIT RD. QUAN'T.

978 311 — 89 2374 1499

Prop. 24" RCP — Ex. 8" SAN. — Ex. 12" SAN.

191 63 — 546.49 — 80+50 — 559.9 — 10'± — 36" Pipe — 48 1480 981

+40 36" Twin Pop — +03 15" Catalpa — House

+23 9" Maple — +28 9" St — +41 14" Maple — Ex. Mac. Pav't. — INCL IN SUMMIT RD. QUAN'T.

1106 425 — 89 3485 1773

Prop. 24" RCP — Seeding 3:1 — Sod 4:1 — Seeding — 6" — 6" — Ex. 8" SAN. — Seeding — 6" — 3/8" T/F — Seeding — Sod 4:1 — Seeding 2:1

207 90 — 547.15 — 80+00 — 560.3 — 48 2283 934

10'± — 36" Pipe

*Deduct 285 Cu Yd. from Cut Volume for House Cellars 89 *4202 1623

1181 572

218 116 79+50 — Sta. 79+50 48 2563 818

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 80+00 TO STA. 81+00

DIVISION 2 OHIO FED. AID UI-316(1) 1946 UGI 74 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

PLOTTED BY	J.B.W.
TYPPLATES PLOTTED	A.J.H.
TYPPLATES CHECKED	W.L.E.
DRAINAGE CHECKED	
AREAS	W.L.E.
VOLUMES	T.S.
VOLUME CHECKED	H.R.
BALANCE PRINTS	

240 230 220 210 200 190 180 170 160 150 140 130 120 110

Seeding

+03 15 Willow

540

81+00

535

+58 12 St

+61 9 St

+65 10 St

+59 12 St

540

80+50

535

Seeding

550

+34 20 Locust

545

+27 9 St

+20 9 Elm

+12 10 Elm

+35 14 Elm

+20 14 Elm

80+00

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 80+00 to STA. 81+00 Ext. LT.

DIVISION 2 | FED. AID OHIO UI-3(6)(1) 1946 UGI | 75 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.T.), "B", ARLINGTON HEIGHTS, LOCKLAND (P.T.) AND APPROACHES

Seeding — Placing Top Soil

Width Area Width Area
Lin. Ft. Sq. Yd. Lin. Ft. Sq. Yd.

Class. Emb. Material Area Vol. | End Area Volume Cut Fill Cut Fill

Include in Summit Rd. quant.

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

+82 18" Elm
+79 9" St.
Ex. Mac. Pavt.
+84 9" Hack
+81 14" St.
+79 9" Elm
+68 10" Willow.
+99 9" Elm
Ex. 8" San.
Seeding
Sod
Seeding
Seeding
Seeding
Sod
Seeding
3:1
4:1
2:1
6"
6"
6"
3/8" / Ft.
543.85
82+50
545.6
Ex. 12" San.
123 99
48 1349 106

17'±
48" Pipe
733 514
+25 9" St.
+00 10" St.
+06 16" Elm
+33 16" Willow
+27 9" Elm
+33 32" Locust
+27 10" Elm
+09 10" Elm.
Ex 8" San.
89 2370 281

Prop. R/W
544.51
82+00
543.7
Ex. 12" San.
141 86
48 1210 197

17'±
836 578
Include in Summit Rd. quant.
Ex. Mac. Pavt.
+86 38" Hack
+67 15" Hack
+52 9" Elm
+94 22" Locust
+53 9" Elm
+82 15" St.
+57 9" Locust
Prop. R/W
Seeding
Sod
Seeding
Seeding
Seeding
Sod
Seeding
3:1
4:1
2:1
6"
6"
6"
3/8" / Ft.
Ex. 12" San.
545.17
81+50
546.0
160 122
48 1370 90
89 2389 266

18'±
892 475
48" Pipe
161 40 81+00
89 2273 674

Sta. 81+00 48 1084 638

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 81+50 TO STA. 82+50

	J.C.H.	DES.-REL.	AUTH.	H.F.	T.S.	H.R.
Plotted By						
Templates Plotted						
Templates Checked						
Drainage Checked						
Areas By						
Volumes By						
Volumes Checked						
Balance Points						

DIVISION FED. AID 76

2 OHIO UI-316(1) 1946 283
UGI

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Plotted By	J.B.W.
Templates Plotted	A.J.H.
Templates Checked	
Drainage Checked	W.E.
Areas By	T.S.
Volumes By	H.P.
Volumes Checked	
Balance Points	

240 230 220 210 200 190 180 170 160 150 140 130 120 110 80

545
Seeding
82+50
540

+25
16" St.
545
540
82+00

Seeding
545
81+50 540

+63
10" St.
+58
12" St.
+65
24" St.
+31
16" Elm
+63
15" Maple
+31
12" St.

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 81+50 TO STA. 82+50 Extension Left.

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 UGI | 77 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) AND APPROACHES

Class. Emb. Material Area Vol.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
Incl. in Summit Road Quant.				

Seeding Placing Top Soil
Width Area Width Area
Lin.Ft. Sq.Yd. Lin.Ft. Sq.Yd.

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

+99 10" Elm
+91 10" Ash
+85 12" Ash
+76 10" Tree
+95 18" Syc.
+92 5" Ash
+78 10" Elm
+78 10" Elm
+87 4" Elm
+87 30" Syc.
+57 12" Elm
+56 20" Elm

Seeding | Sod | Seeding | 3:1 | 4:1 | 2:1 | 538.86 | 541.49 | 6" | 6" | 3/8" I.F. | 16" | Ex. 12" San. | +93 8" Locust | +78 8" Locust | +40 14" Elm | +32 18" Cherry | +16 12" Elm. | +42 24" Elm | Ex. Mac. Pavt.

542.53
83+50
539.0

86 45 48 1069 89

Incl. in Summit Road Quant.

517 300 89 2174 263

+32 10" St.
+47 16" Locust.
+41 14" Elm
+17 12" Maple
+17 12" Maple
48" Pipe
48" Pipe
16'±
17'±
Seeding | Sod | Seeding | 3:1 | 4:1 | 2:1 | 539.52 | 542.15 | 6" | 6" | 3/8" I.F.

543.19
83+00
537.9

Ex. 12" San.

100 65 Seeding 90 80

48 1279 195

89 2434 279

123 99 82+50 Sta. 82+50 48 1349 106

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA 83+00 TO STA. 83+50

Plotted By	M.B.S.
Templates Plotted	A.J.H.
Templates Checked	W.E.
Drainage Checked	J.H.H.
Areas By	T.S.
Volumes By	H.R.
Volumes Checked	
Balance Points	

DIVISION 2 FED. AID OHIO UT. 316(1) 1946 JOI 78 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.). & APPROACHES

Seeding: Width Area Lin.ft. / Area Sq.Yd.

Placing Top Soil: Width Area Lin.ft. / Area Sq.Yd.

End Area: Cut / Fill

Volume: Cut / Fill

Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas By	
Volumes By	
Volumes Checked	
Balance Points	

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

+29 9" Ash
+46 10" Elm
+45 10" Elm
+12 10" Ash
+15 9" Stump
+02 10" Ash
+20 12" St.
+46 10" Locust
+02 10" Thorn
+00 10" Tree
+20 20" St.
Class. Emb. Material
+27 9" Stump
+48 9" St.
+84 10" Ash
+02 10" St.
+20 12" St.
+15 10" St
+15 10" St.
+01 12" St.
+31 9" Syc
+78 20" Syc.
+83 9" St.
+87 9" St.
+62 10" Tree
+75 10" Elm
+87 18" Elm
+54 15" Elm
+88 9" Elm
+92 9" Elm
+64 10" Tree
+91 12" St.
+51 10" St.
+66 10" Tree
+83 10" St.
+65 10" St.
+36 15" Elm
+110 12" Tree
+26 18" Tree
+38 10" St.
+00 10" Tree
+34 15" Elm
+31 10" Elm
+11 15" Tree
+48 10" St.
+41 10" Elm.
+29 12" St.
+15 12" St.
+10 10" St.
+29 20" St.

R/W — Seeding — 6" — Lg. — 6" — Ex. 12" San. — 3/8" Ff. — Sod — 4:1 — 2:1

540.55
85+00
543.4

541.21
84+50
546.5

541.87
84+00
541.5

Sta. 83+50

166 146 890 833 154 87 154 87 Ahead Back 542 522 120 110 100 90 80 540 108 101 539 206 86 45 93 91 48 89 50 2188 7 39/9 11 2044 5 1331 5 2059 10 892 6 1616 88 1069 89

Drive — R/W — Sod — AHEAD — BACK — 16'± — 48" Pipe

Note: Height "H" to vary from 2'-0" to 0' Feet from Sta. 84+00 to Sta. 84+32.

Note: This back slope is variable from Sta. 84+00 to Sta. 84+28 and has a 2:1 slope from Sta. 84+28 to Sta. 84+50

Seeding 6:1 — Sod — 3:1 — Seeding 2:1 — 15" Pipe

Back Incl. in Summit Rd. Quant.

Incl. in Summit Rd. Quant's.

STA. 84+00 TO STA. 85+00

DIVISION 2 FED. AID OHIO UI-316(1)1946 UGI 79 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS LOCKLAND (Pt.) & APPROACHES

85 90 100 110 120 130 140 150

+17 15" THORN
+20 30" Thorn
+26 9" Thorn
+31 9" Syc.
+00 18" thorn
570
Seeding
+90 9" Elm
+88 9" Elm
+71 10" Elm
550
85+00

	BY
PLOTTED	J.B.W.
TRIANGLES	A.J.H.
TEMPLATES	W.E.
DRAINAGE	DATE
AREAS	
VOLUMES	T.S.
VOLUMES	H.P.
BALANCE	POINTS

+68 10" Tree
+52 40" Locust
570
Seeding
555
84+50

85 90 100 110 120 130 140 150

STA. 84+50 to STA. 85+00 Exist.

DIVISION 2 | FED AID | OHIO UI-316(1)1946 | 80 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Class. Emb. | END AREA VOLUME CUT FILL CUT FILL
Material
Area Vol.

Plotted By L.H. T.S.
Templates Plotted J.B.W.
Templates Checked W.E.
Drainage Checked W.E.
Areas T.S.
Volumes Checked K.E.
Volumes Checked
Balance Points

Seeding Placing Top Soil
Width Area Width Area
Lin.Ft. Sq. Yd. Lin.Ft. Sq.Yd.

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

+40 10" Elm
+11 9" Elm
+21 9" Haw.
+03 9" Syc.
A A
2:1
Seeding
Sod
540
Seeding 6" Ex. 12" Overflow +05 8" St. 4" @ 1.98 per ft.
Seeding 2:1
Sod
53897 8G+20 542.0 +13 9" Ash
159 154
Rt. & Lt. 54 1940 5

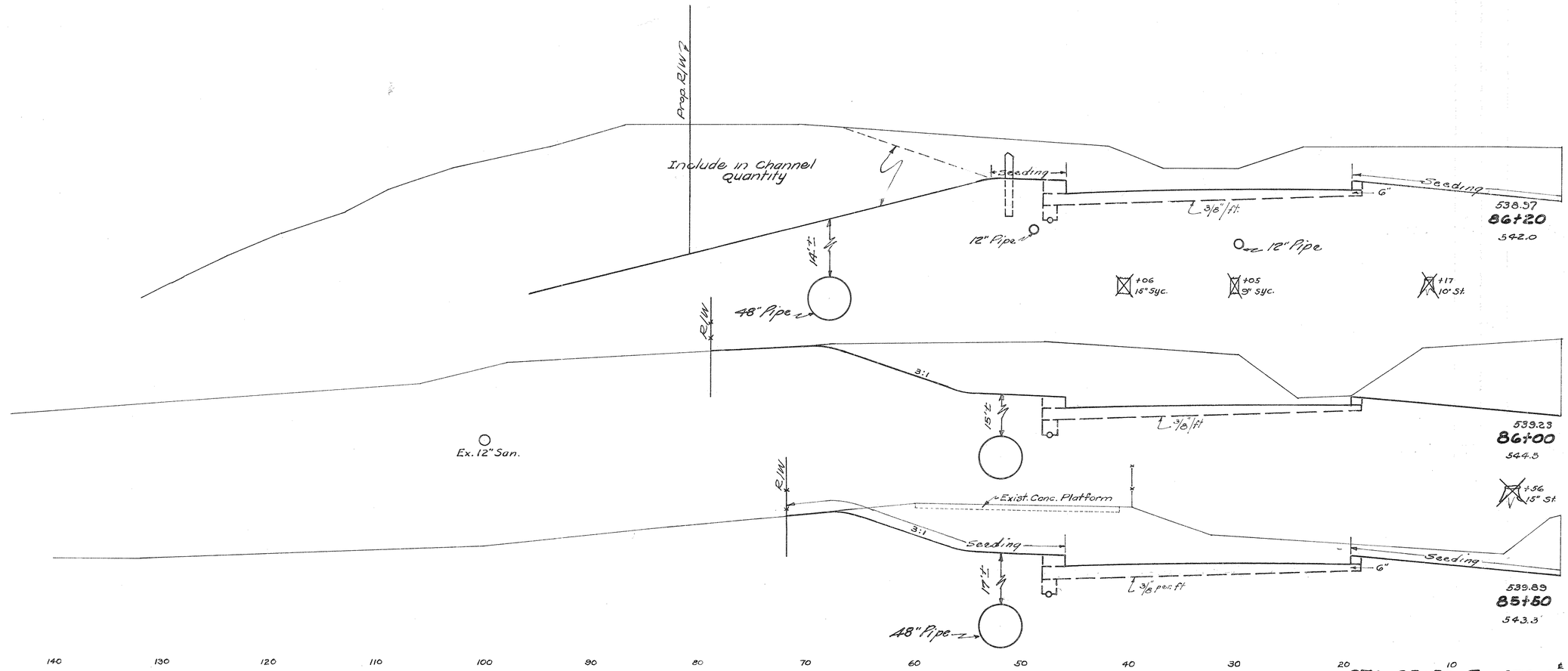
+59 30" Locust
+98 9" Elm
+55 9" Elm.
+79 9" Elm
+54 18" Syc.
40 1485 4
370 370
540
Ex. 12" San.
Rt. & Lt. 54 2069 5
179 179 539.23 86+00 544.5
100 3912 10
967 967 +63 15" St. +63 10" Ash.
2:1
Seeding
169 169
931 875
Seeding 6" 4" @ 1.98 per ft.
Seeding Sod 2:1
Rt. & Lt. 54 2156 5
97 4023 11
539.89 85+50 543.3 85+00 Ex. 12" San.
166 146
Sta. 85+00 50 2188 7
℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140

STA. 85+50 TO STA. 86+20 (RIGHT)

DIVISION 2 FED AID OHIO UI-316(1) 1946 UGI 81 289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

Plotted By	E.F.L.
Templates Plotted	A.J.H.
Templates Checked	W.E.
Drainage Checked	
Areas By	W.E.
Volumes By	H.R.
Volumes Checked	W.E.
Balance Points	



STA. 85+50 To STA. 86+20.0 (LEFT)

DIVISION 2 OHIO FED AID U.S.I. 71-3 16(1) 1946 87 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

CLASS. EMB. END AREA VOLUME
MATERIAL CUT FILL CUT FILL
AREA VOL.

SEEDING Placing Top Soil
WIDTH AREA Width Area
LIN. FT. SQ. YD. Lin. Ft. Sq. Yd.

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

+93 20" Tree
+72 9" St.
+72 12" Elm
+79 9" Elm
+70 9" Elm.
+52 9" Cherry
+68 10" St.
+54 9" St.
+54 10" St.
+54 10" Tree
+59 9" Ash
+50 9" St.
+64 10" St.
+64 9" Ash

Seeding
Quantities Incl. in Channel Cross Sections
1" per ft.
3:1
2:1
Sod
4:1
6"
3/8" per ft.
Ex. 12" Overflow

538.29
86+71.9
530.4

538.67
86+42.25
538.0

86+20

Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas
Volumes
Volumes Checked
Balance Points

131 111 484 451 163 163 392 392 154 154

Sta. 68+32.81 to Sta. 87+20
Excavation 78134 Cu. Yd.
Embankment 20339 Cu. Yd.
Embankment +20% 24407 Cu. Yd.

Lt. ℄ Rt. 25 1218 172
Lt. ℄ Rt. 48 1707 6
42 1503 4
Lt. ℄ Rt. Sta. 86+20 54 1940 5
40 1605 98

STA 86+42.25 To STA. 86+71.9 (RIGHT)

FED AID 83

OHIO UI-316(1) 1946 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

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

+99 14" Syc.
+91 9" Ash
+91 9" Ash
+82 9" Ash
+84 18" St.
+77 2-9" St.

Prop. Bridge

Include in channel Quantity

86+71.9
530.4

Prop. ℄ INT.

Include in channel Quantity

Include in channel Quantity

Include in channel Quantity

Seeding

6"

3/8" per ft.

538.67
86+42.25
538.0

12" Pipe

+63 12" Ash
+54 10" St.
+60 9" Tree

E.F.L.

Plotted by	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas By	
Volumes By	
Volumes Checked	
Balance Points	

Quantities Carried on Eight (Sheet No 82)

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

STA. 86+42.25 TO STA. 86+71.9 (Left)

DIVISION 2 FED. AID OHIO UI-316(1) 1966 UGI

84
289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.)
& APPROACHES

Plotted by
Templates Plotted
Templates Checked
Drainage Checked
Areas By:
Volumes By:
Volumes Checked
Balance Points

SEEDING & Placing Top Soil
WIDTH AREA Width Area
LIN.FT. SQ.YD. Lin.Ft. Sq.Yd.

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

Seeding
9"
L 3/8" per. ft.
Seeding
Seeding
Seeding
R/W
521.2

536.20
89+05
530.1

185 80

+21 5"St.
+92 12"St

896 472

+67 10"St.

+56 8"St.
+56 9"St.
Include in Channel Quantity.

88+48
522.5

98 69 Ahead
0 0 Back

88+04 9"Tree
88+39 2-10"Syc.
88+16 9"Ash
88+16 2-9"Ash.
88+19 9"Ash.
88+10 9"Ash
88+01 9"Ash
+18 12"Tree
+19 9"St.
88+19 9"Ash

87+91 12"St.
0 0

+31 9"St.
+33 12"Tree
Include in Channel Quantity
+26 12"Syc.
+10 32"Tree
Seeding
Seeding 2:1
Prop. Bridge
5335.

0 0 Sta. 87+20

51 51

87+00
522.8

46 46
270 245
131 111 86+71.9

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

Lt. & Rt. 59 2374 806

46

Sta. 88+63 Classified Emb. 0

4952 1102

Carried From Mill Creek Cross Sections - See Sheet Nº 167
Sta. 0+16.5 Rt. (West) To Sta. 2+25 (Rt.-West)

7711

Carried From Mill Creek Cross Sections - See Sheet Nº 162 & 183
Sta. 5+67.77 Back } To Sta. 47+00
Sta. 5+69.91 Ahead }

7862

Carried From Mill Creek Cross Sections - See Sheet Nº 162 & 170
Sta. 4+06 (West) To Sta. 5+67.77 Back } East
Sta. 4+06 (West) To Sta. 5+69.91 Ahead }

819

R/W

Lt. & Rt.

Sta. 88+48 Ahead 2318 238
Back 0 0

0 0 0

Sta. 87+20 0 0

76 0

Lt. & Rt. 204 0
Sta. 86+81.5 Classified Emb. 0

5 740 90

Sta. 86+71.9 Lt. & Rt. 25 1218 172

STA. 87+00 To STA. 89+05.0 (RIGHT)

DIVISION 2 | FED AID | OHIO UGI UI-316(1) 1946 | 85 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

	E.F.L.
Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas By	
Volumes By	
Volumes Checked	
Balance Points	

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

Seeding
4:1
Seeding
7/8 1 ft.
9"
Seeding
535.29
89+05
530.1
+87 10"St.
+84 14"St.
+80 12"St.
+72 24"Syc.
+69 9"St.
R/W
Proposed Fence
Seeding
Sod
Seeding
1%
518.27

+65 9"Ash
Ex. 48" Intercepter
+57 20"Syc.
+65 20"St.
+57 9"Syc.
4:1
Prop. Bridge
Included in channel quantity
Seeding
Sod
Seeding
1%
518.08
88+48
522.5

87+73 12" Elm
87+82 9" Jump
88+14 10"St.
+45 9" Poplar
+60 9" Willow
+20 9" Elm
+22 9" Elm
+12 30" Sycamore
88+12 9" Syc.
88+19 9" Ash
+10 9" Elm
+63 9" Ash
+55 9" Poplar
+48 9" Poplar
+60 2-9" Poplars
+80 10"St.
+11 9" Elm
+88 9" St.
+85 9" Ash
+85 9" Ash
+25 30"St.
+22 9" Elm
+03 16" Ash
+05 18"St.
Include in Channel Quantity
87+00
522.8

Quantities Carried on Right (Sheet No 84)

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

STA. 87+00 TO STA. 89+05.0 (LEFT)

DIVISON FED AID 86

2 OHIO UGI UT-316(1) 1946 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B"; ARLINGTON HEIGHTS LOCKLAND (PT.) & APPROACHES

310 300 290 280 270 260 250 240

Canal West P/L

89+07
12" Apple

1½:1

535 ℄

89+05

1% ℄ →

Canal West P/L

1½:1

530.00 ℄

88+48

+60
10" Willow

+58
14" Locust

+54
15" Locust

+53
9" Huckleberry

+50
9" Huckleberry

+44
10" Willow

+45
9" Huckleberry

+88
9" Elm

1% ℄ →

+41
9" Huckleberry

+41
9" Huckleberry

+30
9" Willow

+28
15" Sycamore

+21
9" Willow

+19
12" Elm

+16
16" Willow

+17
9" Elm

+16
14" Poplar

+11
9" Willow

515.00 ℄

87+00

310 300 290 280 270 260 250 240 230 220 210 200 190 180 170 160 150

STA. 87+00 TO STA. 89+05 (EXT. LEFT)

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 UGI | 87 | 289

HAMILTON COUNTY
S.H 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

CLASS. EMB END AREA VOLUME
MATERIAL CUT FILL CUT FILL
AREA VOL.

Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas By
Volumes By
Volumes Checked
Balance Points

E.F.L.

J.B.W.
P.W.

SEEDING ℄ Placing Top Soil
WIDTH AREA Width Area
LIN.FT. SQ.YD. LIN.FT. SQ.YD.

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

184 143 Seeding 9" 3/8" I.P.T. 534.45 91+00 534.1 2022 1289

180 89 534.41 90+00 531.2 1247 590

188 85 534.82 89+39 530.0 533 231

181 75 535.11 89+13 530.0 163 69

185 80 89+05

Seeding 9" 3/8" I.P.T. Ex. 48" Intercepter Sta. 90+00

4:1 Seeding Sod Seeding 3:1 ℄ 528.5 R/W Prop Fence

4:1 R/W Prop. Fence

R/W 523.7 +30 9" Hackberry

Ex. 48" Intercepter Sta. 91+00

+15 42" Stump

+15 36" Syc.

+29 52" Syc.

Seeding R/W 522.7

Lt. ℄ Rt. 60 3022 21
222 10522 424
Lt. ℄ Rt. 60 2660 208
135 5968 784
Lt. ℄ Rt. 60 2623 486
60 2492 547
Lt. ℄ Rt. 65 2553 650
18 729 216
Sta. 89+05 Lt. ℄ Rt. 59 2374 806

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

STA. 89+13 TO STA. 91+00 (RIGHT)

DIVISION FED AID 88

2 OHIO UI-31G(1) 1946 289
UGI

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT) "B", ARLINGTON HEIGHTS, LOCKLAND (PT) & APPROACHES

	E.F.L.
Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas By	
Volumes By	
Volumes Checked	
Balance Points	

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

Proposed Fence & R/W

Seeding 1"/ft →

Sod

518.85

Seeding

4:1

Seeding — 1" Per ft.

3/8" Tft.

9"

Seeding

534.45
91+00
534.1

529.90

1.00%

534.41
90+00
531.2

Proposed Fence & R/W

518.55

53482
89+39.
530.0

Proposed Fence & R/W

518.37

Seeding

4:1

Seeding

3/8" Tft.

9"

Seeding

535.11
89+13
530.0

Proposed Fence & R/W

Seeding 1% →

Sod

518.29

Seeding

Ex. 48" Intercepter Sta. 89+39

Ex. 48" Intercepter Sta. 89+13

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

STA. 89+13.0 To STA. 91+00 (℄ LEFT)

FED AID 89

Divison 2 OHIO UI-316(1) 1946 289
UGI

HAMILTON COUNTY
S.H.987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

310 300 290 280 270 260 250 240 230 220 210 200 190 180 170 160 150

+95 9" Elm
+94 9" Tree
+82 9" Tree
+80 10" Tree
+82 9" Tree
+81 9" Locust
+77 9" Locust
+75 9" Huckleberry
+67 10" Elm
+68 10" Elm
+62 9" Tree
+61 12" Tree
+67 8" Locust
+55 9" Tree
+57 9" Tree
+52 9" Tree
+50 9" Locust
+49 10" Locust
+53 9" Locust
+38 9" Stump
+35 9" Stump
+64 9" Locust
+16 2-9" Locust
+16 12" Locust
Const. West Pl.
+07 18" Walnut
+10 12" Sycamore
+99 9" Stump
+94 12" Locust
+89 9" Elm
+78 9" Locust
+55 9" Elm
+51 9" Elm
+49 12" Elm
+48 9" Elm
+46 15" Elm
+45 9" Elm
+30 24" Elm
+02 9" Elm
1½:1
530.00
91+00
1%
+01 9" Stump
530.00
90+00
+52 10" Apple
+53 9" Stump
+39 9" Stump
+35 6" Elm
530.00
89+39
Const. West Pl.
1½:1
530.00
89+13
1%

STA. 89+13 To STA. 91+00 (EXT. LEFT.)

DIVISION 2 | FED.AID | OHIO UI-316(I) UGI 1946 | 90 | 283

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Seeding	Placing Top Soil					Class. Emb. Material	End Area	Volume	
Width Lin. Ft.	Area Sq. Yd.	Width Lin. Ft.	Area Sq. Yd.			Area	Vol.	Cut	Fill
210	118			535.95	94+00	Lt. & Rt.	60	2690	172
				533.1					
2283	1322						222	9934	426
201	120			535.45	93+00	Lt. & Rt.	60	2674	58
				533.9					
2189	1461						222	10334	141
193	143			534.95	92+00	Lt. & Rt.	60	2906	18
				533.9					
2094	1589						222	10978	72
184	193				91+00	Sta. 91+00	Lt. & Rt.	60	3022	21

Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas By
Volumes By
Volumes Checked
Balance Points

STA. 92+00 TO STA. 94+00 (RIGHT)

DIVISION 2 | FED. AID. | OHIO UI-316(1) UGI | 1946 | 91 | 289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Plotted By	L.M.H.	T.S.
Templates Plotted	J.B.W.	
Templates Checked		
Drainage Checked		
Areas		
Volumes		
Volumes Checked		
Balance Points		



DIVISION 2 FED. AID PROJECT OHIO UI-316(1) 1946 UGI

92
289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HTS. LOCKLAND (PT.)
& APPROACHES

310 300 290 280 270 260 250 240 230 220 210 200 190 180

+70
2-9" Ash

+32
9" Ash

Canal West Fill

+35
3-9" Maple

+28
9"

+26

+22
14"

+21
9"

9" Stump

+18

+15
9"

+19
9"

+14
9" Maple

94+13
10"

94+10
9"

+04
9"

+09
9"

+13
9"

+37
9"

+02
2-9"

+11
9"

94+83
9" Stump

+95
9" Stump

+93
10"

+92
9"

+94
9"

+91
10"

+90
9"

+87
9"

+89
9"

+84
9"

+83
2-9"
2-10"

+84
9" Elm

+67
9"

1½:1

530.00

R/W

94+00

Seeding

1% ↓

+32
10"

+31
2-9"

93+13
12"

+11
9" Stump

93+01
10"

93+01
9"

+95
12"

+96
9"

+86
2-9"

+82
9"

+72
9"

Canal West Fill

+64
9"

+68
9"

+65
9"

+64
9"

+60
9"

+60
9"

+60
9"

+56
9"

+54
9"

+50
10"

+48
9" Huck

+49
9"

+46
16"

+43
9"

+38
12"

+34
9"

+32
10" Walnut

+33
9" Stump

+25
9"

+25
9"

+22
9" Stump

92+12
9"

92+09
9"

1½:1

530.00

R/W

93+00

Seeding

530.00

R/W

92+00

Seeding

1% ↓

310 300 290 280 270 260 250 240 230 220 210 200 190 180 170 160 150

STA. 92+00 TO STA. 94+00 LT. EXT.

Plotted By	R.E.L., M.B.S.
Templates Plotted	
Templates Checked	R.E.L.
Drainage Checked	J.C.M.
Areas	
Volumes	
Volumes Checked	
Balance Points	

DIVISION 2 FED. AID OHIO UI-316(1) UGI 1946 93 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) B, ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding Placing Top Soil

Width Area Width Area
Lin.Ft. Sq.Yd. Lin.Ft. Sq.Yd.

Class Emb. End Material Area Volume
Area Vol. Cut Fill Cut Fill

174 76 — 538.95 — 100+00 — 536.3 — 60 1575 162

1933 800 — 222 5137 548

174 68 — 538.45 — 99+00 — 537.1 — 60 1199 134

1922 756 — 222 4071 956

172 68 — 537.95 — 98+00 — 533.7 — 60 999 382

1917 833 — 222 3135 1324

173 82 — 537.45 — 97+00 — 532.5 — 60 694 333

1911 933 — 222 2824 924

171 86 — 536.95 — 96+00 — 534.6 — 60 831 166

171 847 Ahead 97+55.40 — 222 3081 563

228 1379 1261 Back — 833 Ahead / Back — 60 2625 138

220 141 — 536.45 — 95+00 — 534.0 — Sod — 60 — 9843 574

2389 1439 — Seeding — Prop. Fence — 222

210 118 94+00 — Sta. 94+00 — 60 2690 172

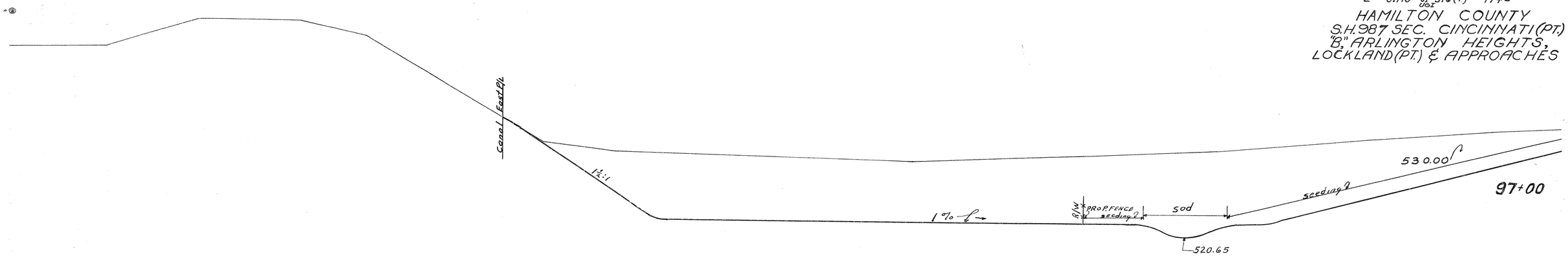
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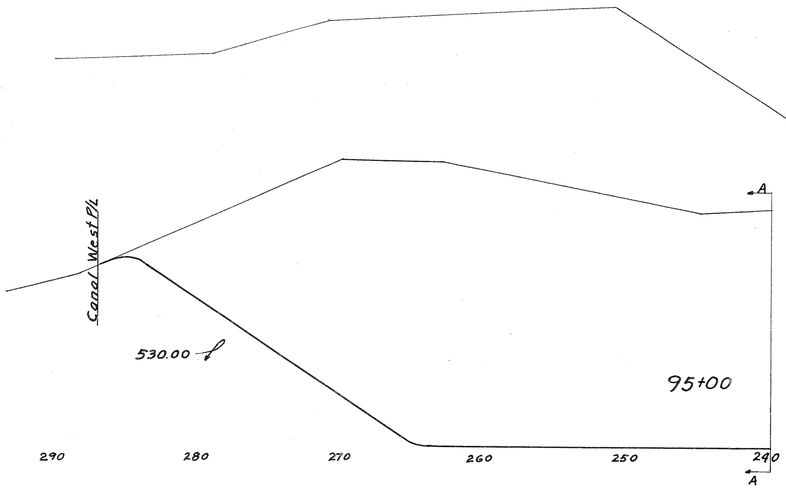
STA. 95+00 TO STA. 100+00

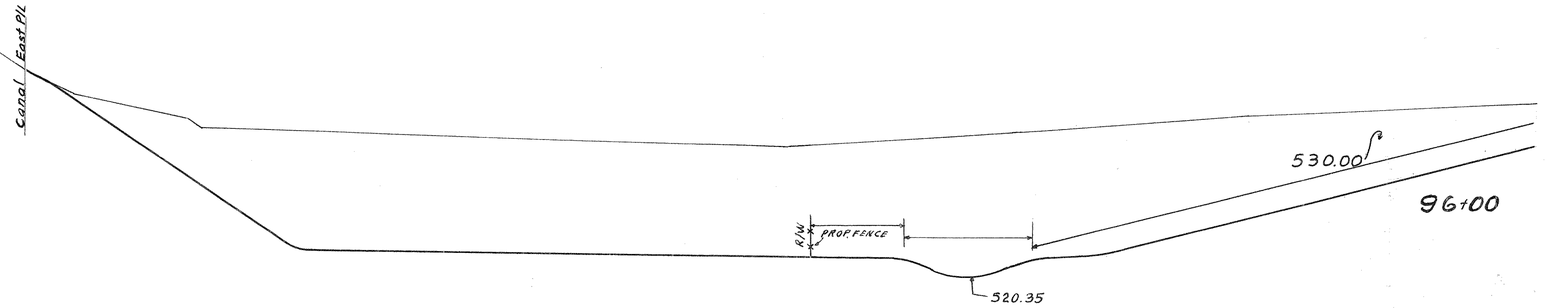
DIVISION 2 | FED AID | OHIO | VJ-316(1) | 1946 | 94 | 289

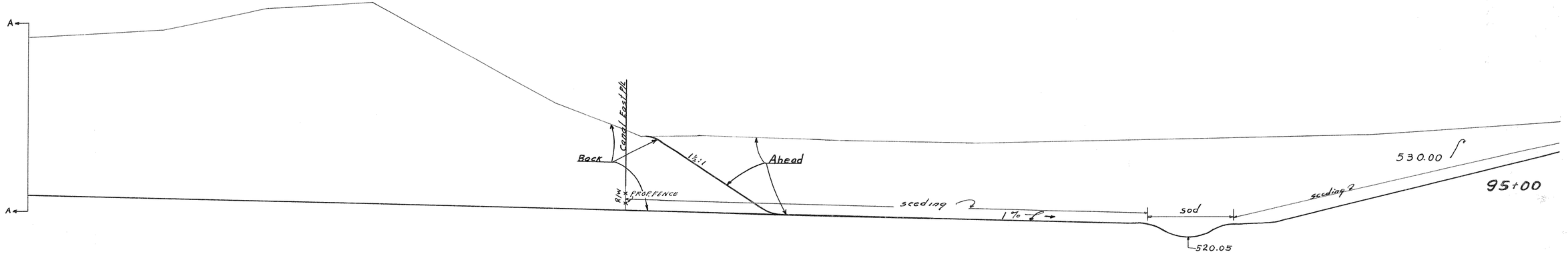
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

240 230 220 210 200 190 180 170 160 150 140 130 120 110









240 230 220 210 200 190 180 170 160 150 140 130 120

STA. 95+00 TO STA. 97+00

Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas	
Volumes	Checked
Volume	Points
Balance	

DIVISION 2 | FED. AID | OHIO VI-316 (1) 1946 UGI | 95 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.)
"B", ARLINGTON HEIGHTS
LOCKLAND (PT.) & APPROACHES

PLOTTED - BY	
TEMPLATES-PLOTTED	
TEMPLATES-CHECKED	
DRAINAGE - CHECKED	
AREAS	
VOLUMES	
VOLUME BALANCE	CHECKED POINTS

240 230 220 210 200 190 180 170 160 150 140 130 120 110

Canal East P/L

1½:1

1% →

R/W

Prop Fence

seeding 2

SOD

530.00

seeding 2

521.55

100+00

Canal East P/L

530.00

99+00

R/W

521.25

Canal East P/L

1½:1

1% →

R/W

Prop. Fence

seeding 2

SOD

530.00

seeding 2

520.95

98+00

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA 98+00 TO STA 100+00 LT.

DIVISION 2 OHIO FED. AID UI-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.). & APPROACHES

Seeding Placing Top Soil
Width Area Width Area
Lin. Ft. Sq. Yd. Lin Ft. Sq. Yd.

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Sod
Seeding
4:1
2:1
533.7
3/8" / Ft.
9"
Seeding
9"
3/8" / Ft.
Seeding
4:1 Seeding
Sod
Seeding
2:1
Prop. Fence
End Area Volume
Cut Fill Cut Fill
534.1

178 59
105+00
541.41
105+00
534.6

Class. Emb. 1726 680
Material
105+00
Area Vol.
60

1961 700

222 64132043
60 1737 423
533.7

175 67
540.95
104+00
536.4

111 3349.556

978 422

To Sta. 105+00 566740 Sq. Yd.
Type A 32779 Sq. Yd.
Top Soil

Sta. 75+00 To Sta. 105+00
Classified Emb. Material 51755 Cu. Yd.

60 1879 177
533.5

177 85
540.70
103+50
538.1

111 3537.236

Sta. 75+00
Seeding & Protecting
Placing Stockpiled

986 503

60 1941 78

178 96
540.45
103+00
538.7

533.3

222 7337261

1967 1087

60 2021 63

176 96
539.95
102+00
538.1

12" Pipe

532.9

222 7247272

1944 1017

Seeding
4:1
3/8" / Ft.
9"
Seeding
9"
3/8" / Ft.
Seeding
4:1
60 1892 84 Prop. Fence
Sod
Seeding
2:1

174 87
539.45
101+00
537.4

532.5

222 6421.456

1933 906

174 76 100+00

Sta. 100+00 60 1875 162

STA. 101+00 TO STA. 105+00

Templates Plotted	R.E.L.
Templates Checked	
Drainage Checked	H.F. J.C.M.
Areas	
Volumes	
Volumes Checked	
Balance Points	

DIVISION 2 | FED. AID | OHIO | UGI | U1-316(1) | 1946 | 97 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B." ARLINGTON HEIGHTS. LOCKLAND (PT.) & APPROACHES

240 230 220 210 200 190 180 170 160 150 140 130 120 110

Canal East Plt.

A
A

B
1½:1

1 %

R/W
Prop fence
seeding
sod
seeding

535.00

103+00

522.45

Canal East Plt.

535.00

102+00

R/W

522.15

Canal East Plt.

1½:1

1 %

R/W
Prop fence
seeding
sod
seeding

535.00

101+00

521.85

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90

STA. 101+00 TO STA. 103+00 EXT. LT.

PLOTTED BY
TEMPLATES-PLOTTED
TEMPLATES-CHECKED
DRAINAGE CHECKED
AREAS
VOLUMES
VOLUME CHECKED
BALANCE POINTS

DIVISION 2 | FED. AID OHIO UGI U1-316(1) 1946 | 98 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.)
"B." ARLINGTON HEIGHTS
LOCKLAND (PT.) & APPROACHES

PLOTTED	BY
TEMPLATES PLOTTED	
TEMPLATES CHECKED	
DRAINAGE CHECKED	
AREAS	
VOLUMES	CHECKED
VOLUME	CHECKED
BALANCE POINTS	

240 230 220 210 200 190 180 170 160 150 140 130 120 110

Canal East P/L

1½:1

C C 260 250 240

535.00

105+00

1% ↓

R/W Propfence seeding 2 sod seeding 2

523.05

B B 250 240

104+00

535.00

522.75

A A 250 240

103+50

535.00

1½:1

1% ↓

R/W Propfence seeding sod seeding 2

522.60

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA 103+50 TO STA 105+00 EXT. LT.

Plotted By	R.E.L.	M.B.S.
Templates Plotted	R.E.L.	
Templates Checked	R.E.L.	
Drainage Checked	H.F.	
Areas		
Volumes		
Volumes Checked		
Balance Points		

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

DIVISION FED. AID 33

2 OHIO UI-316(1) 1946 289

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) AND APPROACHES

Class Emb. End Material Area Volume

Area Vol. Cut Fill Cut Fill

Seeding Placing Top Soil

Width Area Width Area

Lin. Ft. Sq. Yd. Lin. Ft. Sq. Yd.

Seeding 4:1 — 3/8 I.F. — 9" — Seeding — 8" — 3/8 I.F. — Seeding 4:1

247 84

539.80
109+50
537.0

60 2436 184

1331 367

Seeding 4:1 — 3/8 I.F. — 9" — Seeding — 8" — 3/8 I.F. — Seeding 4:1

12" Pipe

535.7

111 4527 383

60 2453 229

232 68

540.05
109+00
536.8

222 8840 1019

2411 761

535.3

60 2321 321

202 69

540.55
108+00
536.7

222 8053 1352

2078 806

534.9

60 2020 409

172 76

541.05
107+00
536.3

222 7137 1665

1928 828

534.5

60 1826 490

175 73

541.46
106+00
536.0

144 4000 1321

Seeding 4:1 — 3/8 I.F. — 9" — Seeding — 8" — 3/8 I.F. — Seeding 4:1

Sod — Prop. Fence — Seeding

1268 516

534.2

60 1497 607

176 70

541.48
105+35
535.8

78 2089 834

688 251

Sta. 105+00 60 1726 680

178 59 105+00

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 105+35 TO STA. 109+50

PLOTTED BY
TEMPLATES PLOTTED
TEMPLATES CHECKED
DRAINAGE CHECKED
AREAS
VOLUMES
VOLUME CHECKED
BALANCE POINTS

S.H. "B" AA... HEIGHTS
LOCKLAND (PT.) & APPROACHES

240 230 220 210 200 190 180 170 160 150 140 130 120 110

535.00
109+50
1% ℄ →
R/W
Prop Fence
seeding ?
sod
seeding ?
524.40
535.00
109+00
R/W
524.25
535.00
108+00
R/W
523.95
535.00
R/W
523.65
535.00
R/W
523.35
535.00
R/W
prop fence
seeding ?
sod
seeding ?
1% ℄ →
523.16

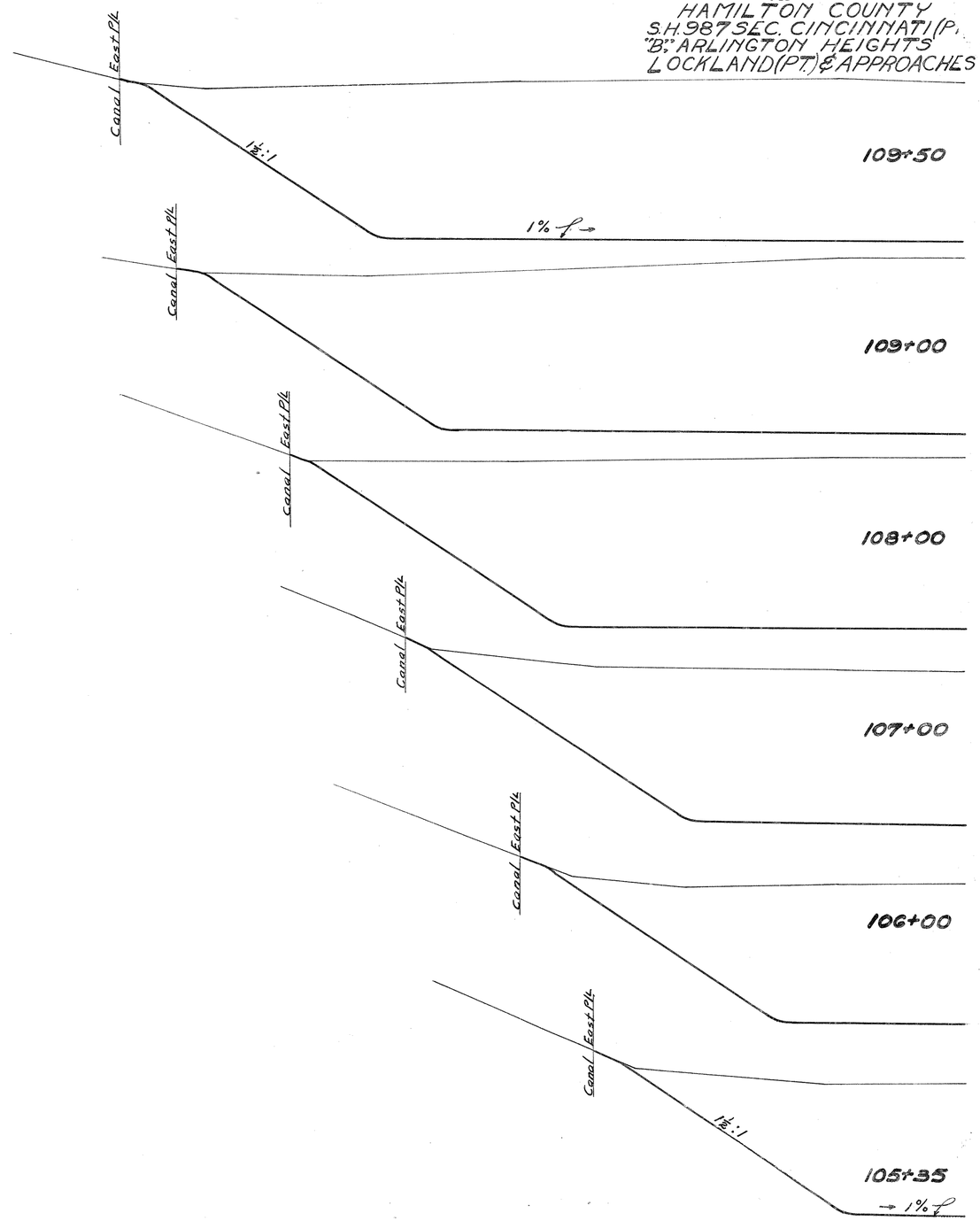
240 230 220 210 200 190 180 170 160 150 140 130 120 110 100

STA 105+35 TO STA 109+

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 | 101 | 289

UGI

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.
"B" ARLINGTON HEIGHTS
LOCKLAND (PT.) & APPROACHES



PLOTTED BY	
TEMPLATES PLOTTED	
TEMPLATES CHECKED	
DRAINAGE CHECKED	
AREAS	
VOLUMES	
VOLUMES CHECKED	
BALANCE POINTS	

STA. 105+35 TO STA. 109+50 EXT. LT.

Seeding Placing Top Soil
Width Area Width Area
Lin. Ft. Sq. Yd. Lin. Ft. Sq. Yd.

DIVISION 2 FED. AID OHIO UI-316-(1) 1946 UGI

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289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B" ARLINGTON HEIGHTS, LOCKLAND (PT.) AND APPROACHES

Class Emb. Material | End Area | Volume Area | Vol. Cut | Fill | Cut | Fill

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding
Seeding
Seeding
Seeding
+87 26"Sy.
+78.5 12" Ash
+71.5 20" Elm
+72.5 12" Elm
+40 12" Elm
3/8" Ft.
3/8" Ft.
9"
9"
4:1
4:1

Z97 60
538.55
112+00
524.0
60 1623 1915

+60 12" ASH
111 2989 3943

1672 344
E/W
60 1605 2136

305 64
538.80
111+50
522.9

111 3313 3024

1666 347
E/W
E/W
60 1973 2102

295 61
539.05
111+00
521.0

Seeding
Seeding
Seeding
3/8" Ft.
3/8" Ft.
9"
9"
4:1
4:1

140 4879 3657

2022 413
539.37
110+37
537.1
60 2209 1032

283 57
193 7484

2562 585
247 64 109+50
Sta. 109+50 60 2436 18

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 110+37 TO STA. 112+00

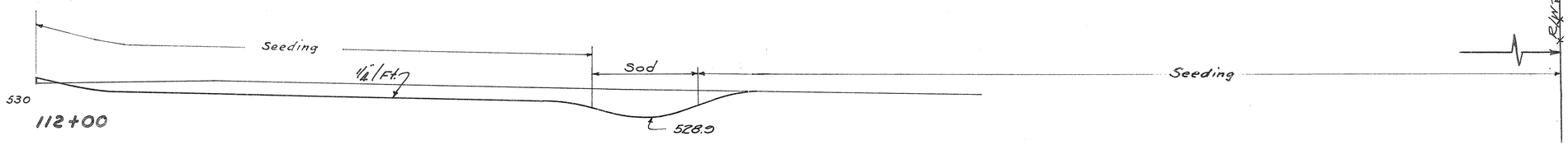
Plotted By	M.B.S.	J.C.m
Templates Plotted		
Templates Checked		R.E.L.
Drainage Checked		
Areas		
Volumes		
Volumes Checked		
Balance Points		

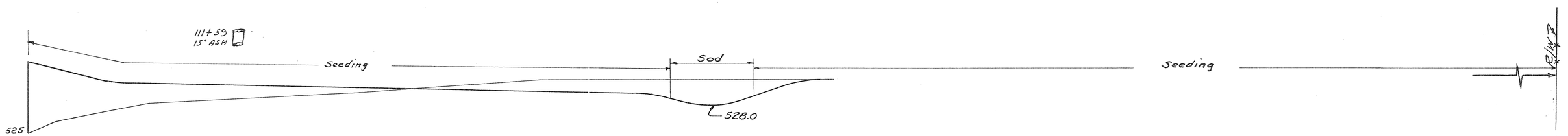
DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 | UGI | 103 | 289

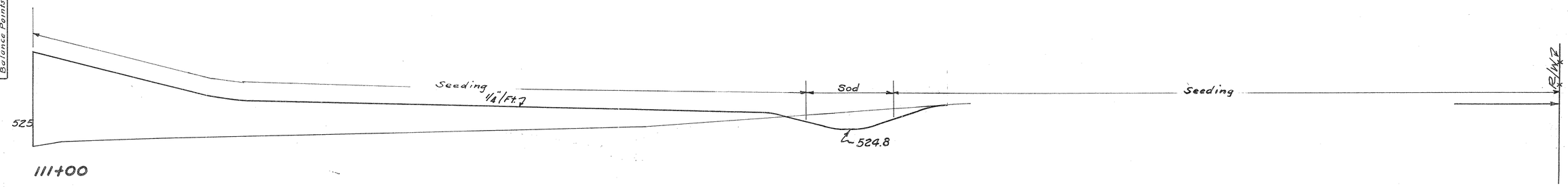
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS LOCKLAND (Pt.) AND APPROACHES

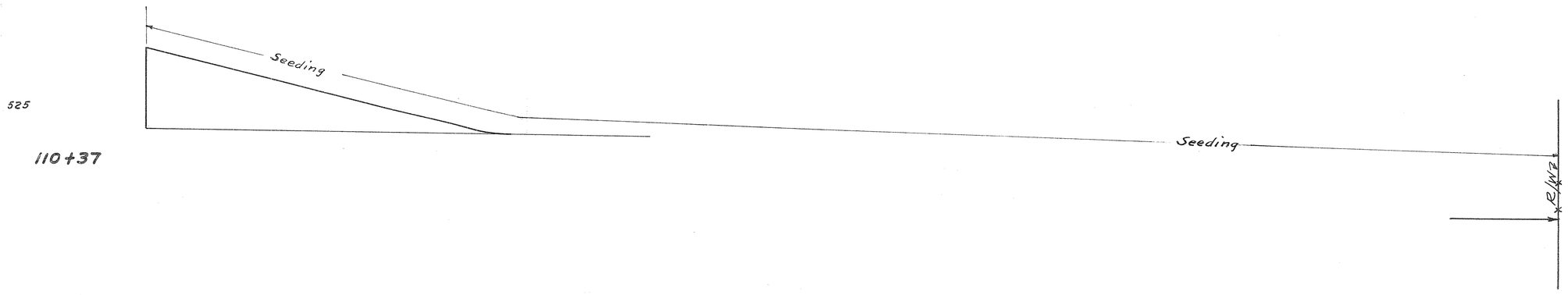
Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas	
Volumes	
Volumes Checked	
Balance Points	

75 80 90 100 110 120 130 140 150 160









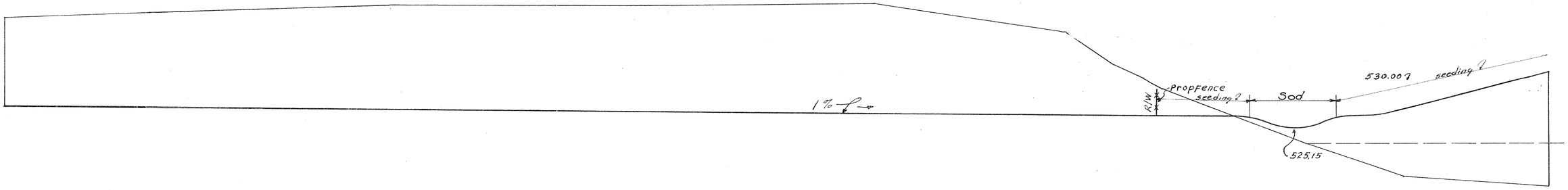
75 80 90 100 110 120 130 140 150 160

STA. 110+37 to STA. 112+00 Ext. Rt.

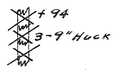
240 230 220 210 200 190 180 170 160 150 140 130 120 110

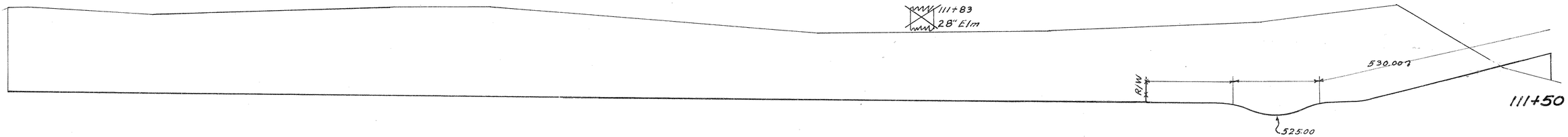
DIVISON 2 | FED. AID OHIO UI-316(1) UGI | 104 1946 289

HAMILTON COUNTY S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

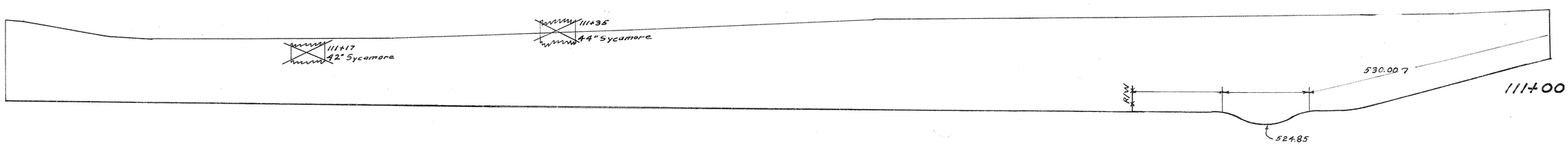


112+00

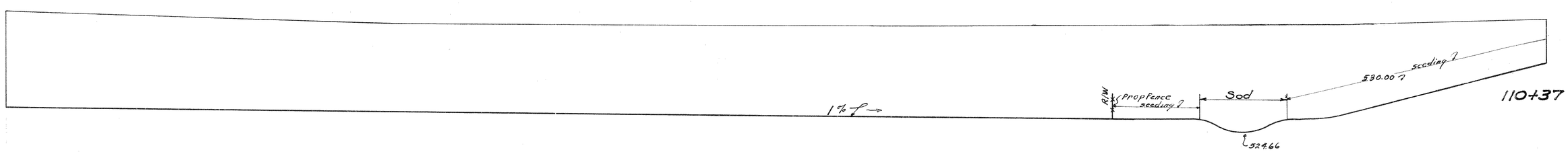




111+50



111+00



110+37

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

Sta. 110+37 to Sta. 112+00 Ext. Lt.

	JCM. MLH.
Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas By	
Volumes By	
Volumes Checked	
Balance Points	

DIVISION 2 OHIO UI-316 (1) 1946 UGI

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HAMILTON COUNTY
S.H. 987-SEC. CINCINNATI (PT.) "B" ARLINGTON HTS. - LOCKLAND (PT.) AND APPROACHES

400 390 380 370 360 350 340 330 320 310 300 290 280 270

+75 9" Elm
+94 9" Elm
+82 9" Elm
+66 9" Elm

535.00 ℄ P.I.
1½:1
112+00
1% ℄ →

+77 9" Locust
+71 9" Locust
+72 9" Locust
+63 9" Huck
+69 9" Huck
+62 12" Huck
+38 12" Huck
+52 10" Huck

535.00 ℄ P.I.
111+50

+46 12"
+45 12"
+47 9" Huck
+38 10" Huck
+37 9" Huck
+32 9" Huck
+19 9" Huck
+11 9" Huck
+25 12" Huck
+21 12" Huck

111+08 15"
111+04 9"
+96 10"
+83 15"
+74 9"
+77 10"
+74 9"
+84 9"

535.00 ℄ P.I.
+97 9" Stump
111+00
+84 9"
+82 15"
+80 14"
+85 40" Syc.
+67 2-9" Elm

Canal East P.I.
+39 15"
535.00 ℄
1½:1
110+37

+39 10"
+36 9"
+29 2-9"
+27 10"
+22 9"
+20 9"
+10 9"
+05 1-9"-1-10"
110+0 10"
+08 9"
+03 9"

1% ℄ →

400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240

STA. 110+37 TO STA. 112+00 EXT L.T.

DIVISION 2 | FED.AID | OHIO | UI-3/6(1) | 1946 | UGI | 106 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) B. ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Seeding Placing Top Soil
Width Area Width Area
Lin. Ft. Sq. Yd. Lin. Ft. Sq. Yd.

Class. Emb. End Material Area Volume
Area Vol. Cut Fill Cut Fill
60 1553 2063

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

+72 9" Ash
+75 14" Tree
+73 8" St.
+73 12" St.
+65 12" Willow
+91 8" St.
Seeding 4:1
3/8" / Ft.
9%
E/W
539.30
115+50
519.8
Seeding
Sod
Prop. Fence
530.3
+00 36" Locust.
+20 20" Elm
+06 15" Ash
2794 3905

257 41
+43 8" St.
+44 8" St.
+30 12" Willow
+33 9" Box El.
+20 8" St.
+39 16" St.
+40 9" Tree
+40 16" St.
+37 9" Willow
+27 8" Box Elder

1433 230
+27 9" Box Elder
E/W
539.05
115+00
519.4
+92 9" Ash
+77 16" Ash
+71 9" Ash
+54 26" St.
60 1464 2154
530.1

259 42
+28 20" Oak
+21 12" Oak
+37 9" Tree
+06 16" Twin Elm
+42 12" Elm.
+37 10" Ash
+28 9" Ash
+21 9" Ash
+12 8" St.
+48 9" Ash
+23 9" Ash
+76 12" Hackberry
+19 12" Ash.
+63 16" St.
222 4815 6997

2922 333
+41 9" Poplar
+88 9" Tree
+99 14" Tree
E/W
538.55
114+00
533.7
+80 10" Tree
+41 8" St.
+14 10" Elm
+43 10" Ash
+49 12" Hack
+42 13" Hack
+08 12" Tree
+78 9" Elm
+95 26" Oak
+66 12" Elm
+30 9" Hack
+38 9" Elm
+93 9" Tree
+39 9" Hack
+52 9" Elm
+78 10" Tree
+55 9" Elm
+86 16" Ash
5297
+99 9" Box Elder
60 1136 1624

267 18
3044 100
534.01
4:1
534.23
3/8" / Ft.
9%
Seeding
+37 12" Elm
+55 26" Elm
222 4371 6248

281 0
E/W
3211 333
538.30
113+00
531.0
60 1224 1750
Sod
Prop. Fence
Seeding
5293
222 5273 6787

297 60 112+00
Sta. 112+00 60 1623 1915

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 113+00 TO STA. 115+50

Plotted By	M.B.S.
Templates Plotted	R.E.L.
Templates Checked	J.H.H.
Drainage Checked	
Areas	
Volumes	
Volumes Checked	
Drainage Points	

DIVISION | FED. AID | 107
2 | OHIO UGI UI-316(1) | 1946 | 283

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt), "B," Arlington Hts., Lockland (Pt). & Approaches

Plotted By	J.C.M. M.L.H.
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas By	
Volumes By	
Volumes Checked	
Balance Points	

240 230 220 210 200 190 180 170 160 150 140 130 120 110

+80 3" Thorn
+84 16" Ash
+69 10" Elm
+83 9" ELM
535
+77-18" Thorn
seeding
+53 16" Stump
R/W
Prop Fence
seeding
Sod
1% ↓
526.20
115+50

+40 8" Stump
+06 8" Stump
+09 12" WILLOW
525
326.05

115+02 10"
+93 14" Ash
115+00

114+88 14" Tree
+41 9" Poplar
+23 10" Maple
+31 9" Elm
114+10 9" Elm
113+97 9" Elm
525.75
520
525.45
1% ↓
114+00
113+00

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 113+00 TO STA. 115+50 EXTENSION LT.

DIVISION 2 | FED. AID | OHIO VI-316(1) | 1946 | 289 | 108

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.T.) "B." ARLINGTON HEIGHTS LOCKLAND (P.T.) & APPROACHES

	P.L.E.
PLOTTED BY	
TEMPLATES-PLOTTED	
TEMPLATES-CHECKED	
DRAINAGE-CHECKED	
AREAS	
VOLUMES	
VOLUME CHECKED	
BALANCE POINTS	

400 390 380 370 360 350 340 330 320 310 300 290 280 270

P.L.

1½:1

535.00 ℓ

1½% ℓ →

115+50

+23
9" Maple

535.00 ℓ

115+00

+17
9" Elm

535.00 ℓ

114+00

+75
9" Elm

P.L.

535.00 ℓ

113+00

1½:1

1% ℓ →

400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240

STA. 113+00 TO STA. 115+50 EXT. LT.

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 UGI | 109 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES.

Seeding Placing Top Soil

Width	Area	Width	Area
Lin. Ft.	Sq. Yd.	Lin. ft.	Sq. Yd.

Plotted By	M.B.S.-J.C.M.
Templates Plotted	
Templates Checked	
Drainage Checked	J.H.H.
Areas	
Volumes	
Volume Checked	
Balance Points	

Class Emb.	End Material Area	Area	Volume Cut	Volume Fill	Cut	Fill
		113	1187	801		
		354			43393424	
		78	1156	1048		
		270			5287	5780
		68	1699	2073		
		237			64637802	
		60	1791	2140		
		222			63768023	
		60	1652	2192		
		111			29653940	
		60	1550	2063		

STA. 87+59.20 TO STA. 88+48
Excavation 231 903 Cu. Yd.
Embankment 185005 Cu. Yd.
Embankment +20% 222 006 Cu. Yd.

STA. 116+00 TO STA. 120+00

240 230 220 210 200 190 180 170 160 150 140 130 120 110

DIVISION 2 | FED. AID | OHIO UI-316(1) UGI | 1946 | 110 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.); "B"; ARLINGION H'TS., LOCKLAND (PT.). & APPROACHES.

+96 9" Ash
+98 9" Ash
+95 12" Ash
+90 9" Ash
+80 9" Ash
+76 12" Ash
+52 3~9" Ash
+30 9" Ash
+01 10" Cherry
+85 12" Cherry
+59 10" Wild Cherry
+56 14" Mock Orange
+31 10" Ash
+33 9" Ash
+32 9" Ash
+28 10" Locust
+18 9" Ash
+95 9" Ash
+85 9" Ash
+68 9" Ash
+47 9" Ash
+97 9" Elm

1% ←

R/W Prop Fence seeding Sod seeding

5335 527.55 120+00

R/W

5330 527.25 119+00

R/W

5330 526.95 118+00

R/W

5330 526.65 117+00

1% ←

R/W Prop Fence seeding Sod seeding

5330 526.35 116+00

Plotted By	J.C.M. M.L.H.
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas By	
Volumes By	
Volumes Checked	
Balance Points	

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90

STA. 116+00 To STA. 120+00 EXTENSIO

FED AID

Divison 2 OHIO U1-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON H'TS., LOCKLAND (PT.), & APPROACHES

400 390 380 370 360 350 340 330 320 310 300 290 280 270

+80 9" Elm
+90 9" Wild Cherry
+84 2-9" Wild Cherry
+84 9" Pear
+58 2-9" Elm
+53 15" Elm
+58 14" Elm
+30 9" Ash
+25 12" Ash
+18 9" Ash
+15 9" Ash
+00 9" Ash
+13 9" Ash
+10 12" Ash
+95 9" Ash
+98 9" Ash
+95 9" Ash
+80 9" Ash
+74 9" Ash
+70 9" Ash
+39 9" Ash
+38 9" Ash
+47 9" Sycomore
+56 9" Ash
+27 9" Ash
+17 10" Ash
+08 9" Ash
+93 9" Wild Cherry
+82 10" Ash
+91 9" Ash
+83 9" Wild Cherry
+92 9" Ash
+40 9" Ash
+32 10" Ash
+04 9" Elm
+78 10" Ash
+95 10" Ash
+80 9" Elm
+70 9" Elm
+08 2-9" Ash
+06 9" Elm
+52 9" Ash
+66 12" Ash
+51 9" Ash
+51 10" Ash
+37 12" Ash
+12 9" Ash
+21 9" Ash
+05 10" Wild Cherry
+05 14" Ash
+09 9" Ash
+30 9" Ash
+78 9" Wild Cherry
+29 9" Ash
+19 9" Ash
+16 9" Elm
+73 16" Maple
+87 9" Ash
+14 9" Elm
+03 16" Ash
+88 9" Ash
+88 10" Ash
+80 9" Ash
+72 9" Ash
+50 12" Elm
+23 9" Ash
+29 15" Elm
+92 9" Ash
+98 9" Ash
+03 9" Ash
+02 9" Ash

1% ℄ 530.00 ℄

120+00

119+00

118+00

117+00

530.00 ℄

530.00 ℄

1% ℄ 530.00 ℄

116+00

P.L.

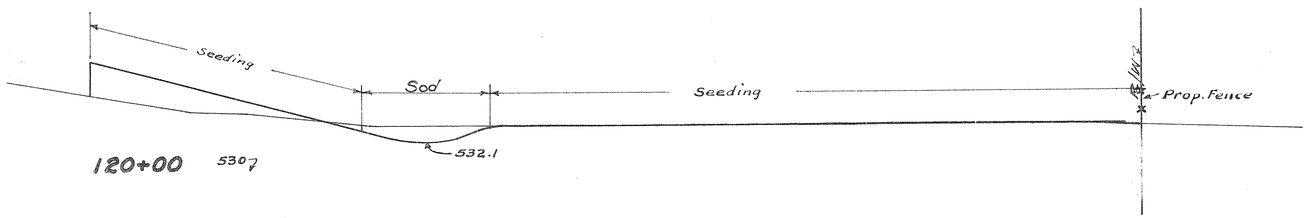
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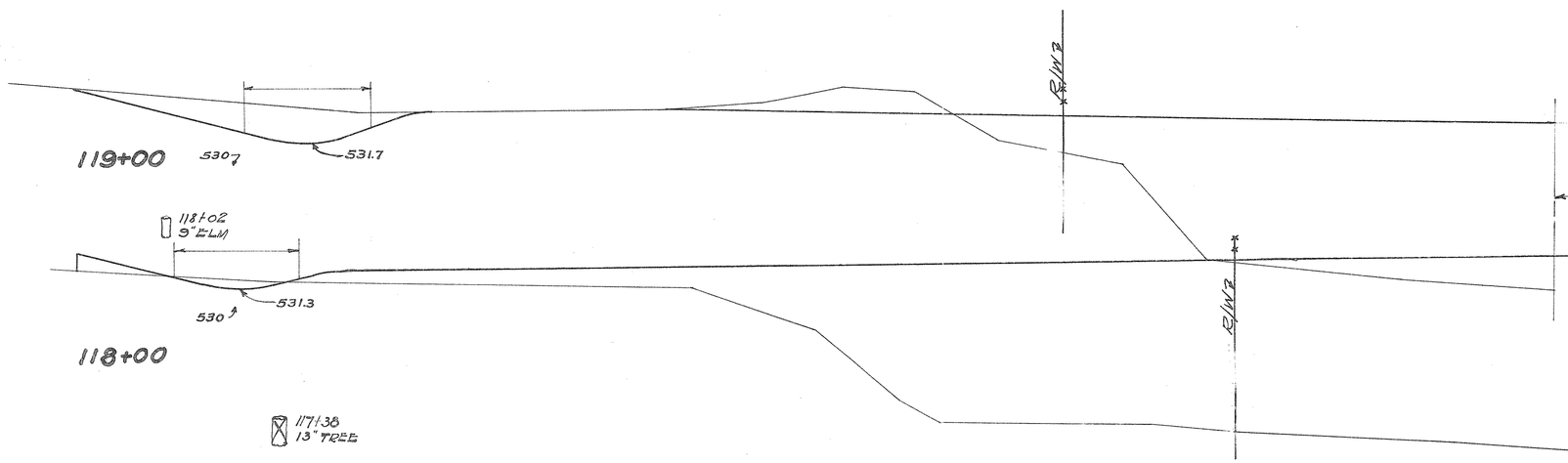
STA 116+00 To STA. 120+00 (EXT. LEFT)

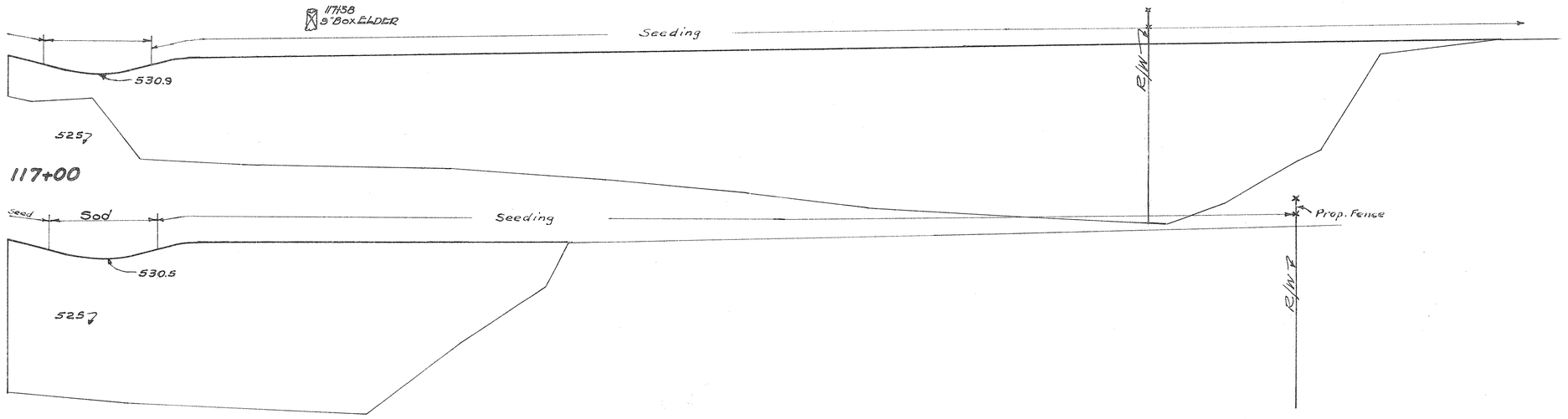
80 90 100 110 120 130 140 150 160 170 180 190 200 210 220

DIVISION 2 FED. AID OHIO UGI UI-316(1) 1946 117 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B."
ARLINGTON HTS, LOCKLAND (PT.)
& APPROACHES.







80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240

STA. 116+00 TO STA. 120+00 EXTENSION RT.

DIVISION 2 | FED. AID | OHIO U[-316(1) 1946 UGI | 113 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.

Plotted By M.B.S. | Templates Plotted | Templates Checked | Drainage Checked H.F. | Areas | Volumes | Volumes Checked | Balance Points

STA. 105+00 TO STA. 127+59.20
SEEDING & PROTECTING TYPE "A" 70216 Sq.Yd.
PLACING STOCKPILED TOP SOIL 10397 Sq.Yd.

Seeding Placing Top Soil
Width Area Width Area
Lin.Ft. Sq.Yd. Lin.Ft. Sq.Yd.

Class. Emb. Material	End Area	Volume Cut	Volume Fill
Area Vol.	155	130	6218
	154	21	5125
	559		56 17388
Sta. 105+00 To Sta. 127+59.20 Classified Emb. Material	148	9	4264
	537		348 13131
	142	179	2826
	641		1402 8577
	204	578	1805
	667		2963 5434
	156		1022 1129
	498		409 3574
Sta. 120+00	113		1187 801

478 0
4972 0
417 0 AHEAD
426 0 BACK
4489 0
382 0
4000 267
338 48
3450 517
283 45
2967 494
251 44
2561 467
210 40 120+00

543.55 126+00 542.9
543.80 125+00 541.9
543.55 124+00 540.4
543.05 123+00 540.00
542.55 122+00 538.9
542.05 121+00 538.00

Seeding
3/8" Per Ft.
9"
12" Pipe
+62 10" Elm
+05 10" Elm
+84 9" Elm
+25 9" Elm 9" Elm
+10 10" Elm
+12 9" Elm
+69 9" Elm
+19 9" Elm
+14 12" Elm
+49 9" Elm
+09 3, 9" Elm
1" Per Ft.

348
273
62

STA. 121+00 TO STA. 126+00

DIVISION 2 | FED. AID OHIO UR-316(1) UGI 1946 | 114 283

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES.

	T.S.
Plotted By	J.B.W.
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas	
Volumes	
Volumes Checked	
Balance Points	

230 220 210 200 190 180 170 160 150 140 130 120 110 100

seeding 2
2:1
3/8" I.P.
5"
seeding 2
535
124+00
+56 13" Elm

+90 10" Elm
+07 15" Elm
+73 15" Maple
2:1
seeding 2
1%
Sod
532.55
535
123+00

+65 15" Elm
+07 11" Elm
+17 11" Elm
+25 9" Elm
+94 11" Elm
seeding 2
+91 12" Maple
+40 14" Elm
3:1
5"
535
122+00

+80 9" Ash
+80 9" Ash
+89 9" Ash
+88 9" Ash
R/W
Prop Fence
+64 9" Ash
seeding 2
Sod
+80 9" Ash
+60 9" Ash
539.20
+27 9" Ash
+11 9" Ash
+12 9" Ash
+05 9" Ash
+03 9" Ash
121+00 9" Stump
3/8" I.P.
seeding 2
4:1
535
121+00

1%
R/W
Prop Fence
seeding 2
1%
Sod
527.85

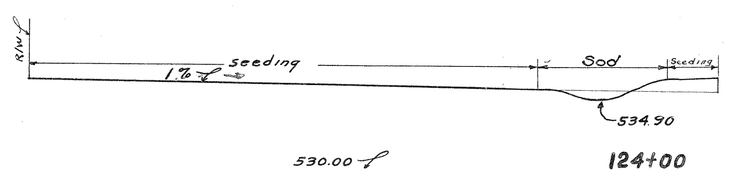
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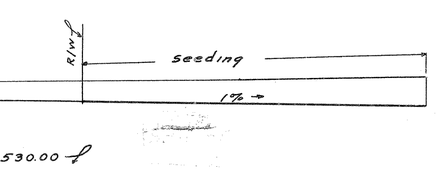
STA. 121+00 TO STA. 124+00 EXTENSIONS LT.

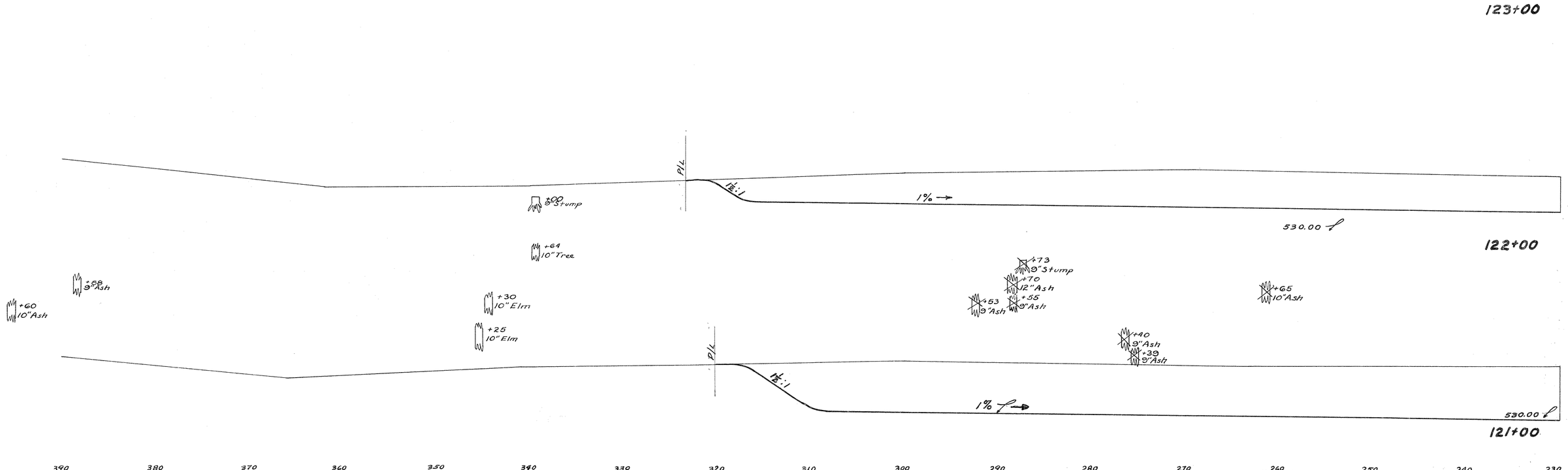
DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 115 | 289

HAMILTON COUNTY
S.H. 987 SEC.- CINCINNATI (PT) "B" ARLINGTON-HTS.-LOCKLAND (PT) & APPROACHES

370 380 370 360 350 340 330 320 310 300 290 280 270 260







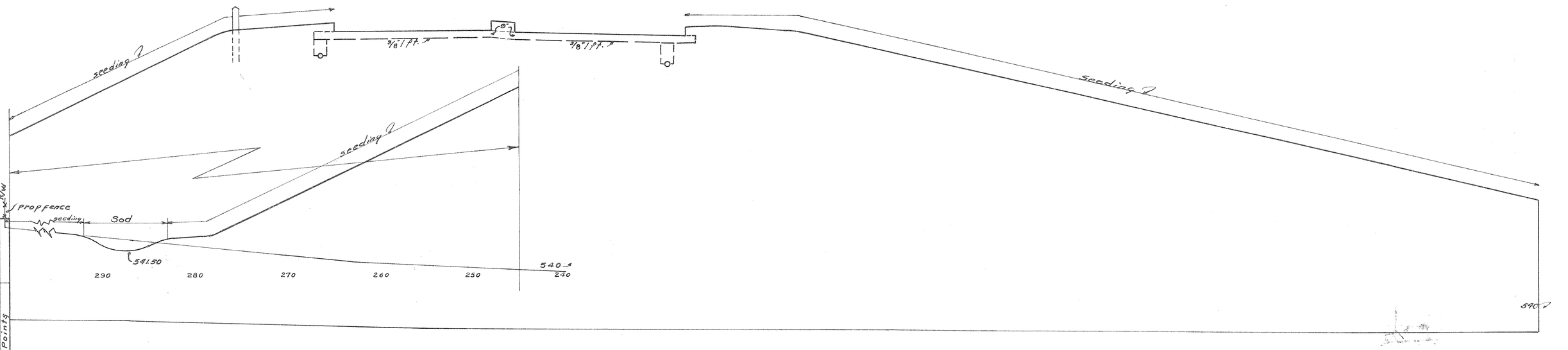
390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

STA. 121+00 TO STA. 124+00 EXT. LT.

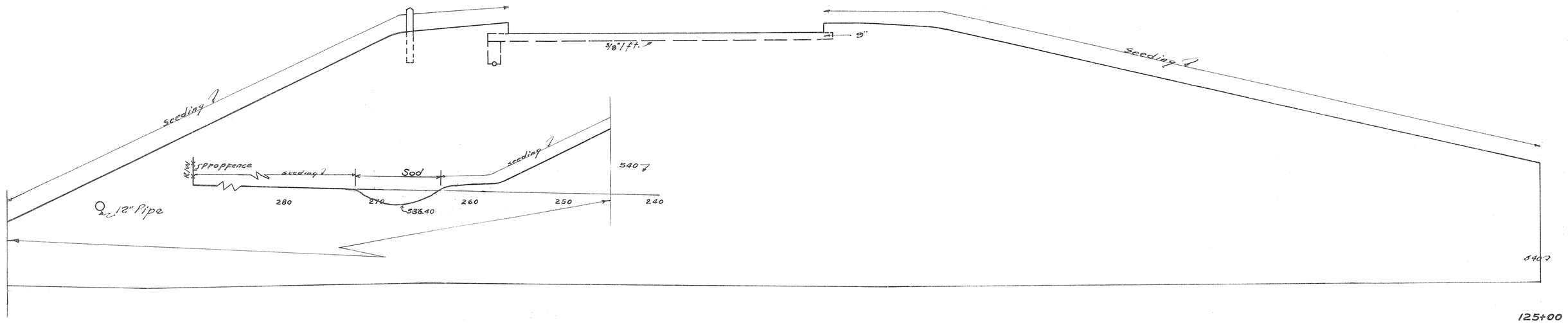
DIVISION 2 FED. AID OHIO UI-3/6(1) UGI 1946 116 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES.

240 230 220 210 200 190 180 170 160 150 100 130 120 110



126+00



125+00

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 125+00 To STA. 126+00 EXTENSIONS LT.

L.M.H. T.S.	
J.B.W.	
Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas	
Volumes	
Volumes Checked	
Balance Points	

DIVISION 2 FED. AID OHIO UI-316(1) 1946 UGI 117 289

HAMILTON COUNTY
S.H.987. SEC. CINCINNATI (PT.) "B" ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES.

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220

Seeding
545
9"
3/8" I.P.
18'±
36" Pipe
126+00
Seeding
12" Pipe
535.2
Sod
Seeding
Prop. Fence
℄ NB

540
125+00
534.1
℄ NB

9"
3/8" I.P.
540
124+00
533.7
℄ NB

540
3/8" I.P.
533.3
123+00
℄ NB

540
532.9
122+00
℄ NB

Seeding
Sod
535
Seeding
532.5
℄ NB
Prop. Fence
121+00

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240

STA. 121+00 TO STA. 126+00 EXTENSION RT.

Plotted By	J.B.W.
Templates Plotted	J.B.W.
Templates Checked	T.S.
Drainage Checked	
Areas	
Volumes	
Volumes Checked	
Balance Points	

DIVISION 2 | FED. AID | OHIO | UI-316(1) | 1946 | UGI | 118 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B"; ARLINGTON HTS., LOCKLAND (PT.), & APPROACHES.

Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas
Volumes
Vol. Line Checked
Balance Points

Seeding Placing Top Soil

Width	Area	Width	Area
Lin. Ft.	Sq. Yd.	Lin. Ft.	Sq. Yd.

See Extension

Seeding

+35 17" Elm

+43 9" Elm

+42 14" Elm

+30 16" Elm

+17 9" Elm

+22 10" Stump

129+13 10" Elm

+48 10" Cherry

+49 13" Elm

+52 15" Maple

+41 12" Pear

+55 18" Elm

+67 16" Elm

3/8" / ft.

6"

9"

541.78
129+55
542.76

33" Pipe

542.09
128+93
541.26

542.15
128+81
541.36

+74 21" Poplar

542.53
128+03
542.52

542.05
127+00
543.3

Sta. 126+00

INCL. IN HARTWELL AVE. QUANT.

See Cross Sections - Prop. No. 2

See Cross-Sections-Prop. No. 2

6" Slope Paving Under Struct.

Class. Emb.	End Area		Volume	
Material	Cut	Fill	Cut	Fill
Area			Vol.	
90			2854	069

309	0			
1064	0			
200			420	5232
84			81	488
0	0			
8	0			
12	0			
37			46	221
84			79	508
1196	0			
312			251	3613
128			95	1993
264	0			
1436	0			
1940	0			
201			190	3852
212			256	5206
326	0			
4467	0			
478	0			
120			139	2756
509			498	16619
155			130	6218

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

STA. 127+00 to STA. 129+55

DIVISION 2 | FED. AID | OHIO UI-316(1) UGI 1946 | 119 | 289

HAMILTON COUNTY
S.H. 987 Sec. CINCINNATI (Pt.); "B," ARLINGTON HTS., LOCKLAND (Pt.), & APPROACHES.

240 230 220 210 200 190 180 170 160 150 140 130 120 110

3/16 Ft. 9"

Seeding

595

129+55

Seeding

Sod

Seeding

545.0

R/W

550

310 300 290 280 270 260 250 240

PLOTTED BY
TEMPLATES PLOTTED
TEMPLATES CHECKED
DRAINAGE CHECKED
AREAS
VOLUMES
VOLUMES CHECKED
BALANCE POINTS
Easement Line 2

INCL. IN HARTWELL AVE. QUANT.

Seeding

540

127+00

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

STA. 127+00 – STA. 129+55 Lt.

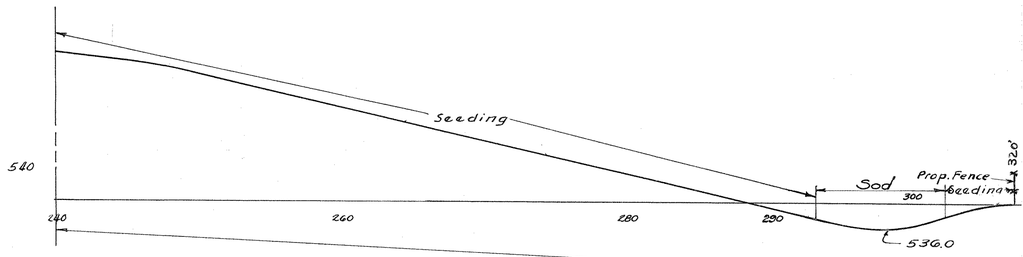
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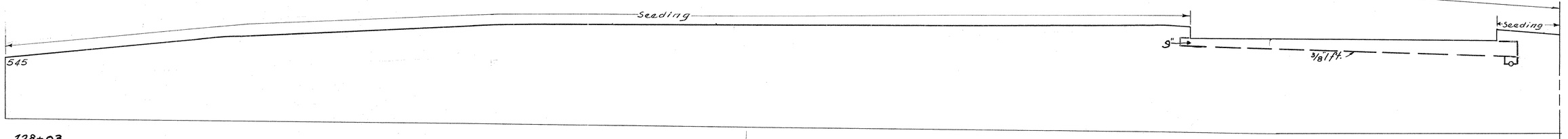
DIVISION 2 FED. AID OHIO UI-316(1) 1946 UGI

120
289

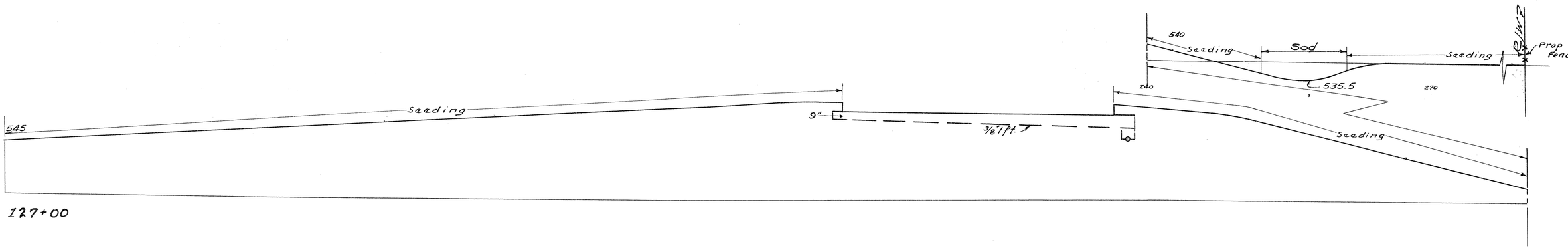
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.); "B," ARLINGTON H'TS, LOCKLAND (PT.), & APPROACHES.

Plotted By
Computed By
Templates Plotted
Templates Checked
Drainage Checked
Areas
Volumes
Volume Checked
Balance Points





128+03



127+00

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240

Sta. 127+00 to Sta. 128+03 Ext. P-1

Plotted By	
Templates Plotted	
Templates Checked	
Drawings Checked	
Areas	
Volumes	
Volumes Checked	
Balance Points	

DIVISION 2 | FED. AID OHIO UI-316(1) UGI 1946 | 121 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.), & Approaches.

80 70 60 50 40 30 20 10 0 10 20 30 40 50

Seeding

Width Area
Lin. Ft. Sq. Yd.

Class. Emb. End Area Volume
Material Cut Fill Cut Fill
Area Vol.

119 218 2243

381

Seeding — Ex. Conc. Pavt. — Seeding

6" — 3/8" / Ft. — 3/8" / Ft.

541.05
131+00
542.7

194 452 4859

℄ 30" Pipe

Sta. 130+50 Lt. Fill for Basement 165

2097

90 270 3005

Ex. Conc. Pavt.

℄ Ex. 12" Storm

541.30
130+50
543.1

374

167 537 6059

℄ 30" Pipe

1919

Seeding — Ex. Conc. Pavt. — Existing Macadam Pavt. — Seeding

Incl. in Hartwell Ave Quant. - See Cross-Sections - Typ. 1 & 2.

℄ Ex. 12" Storm

6" — 3/8" / Ft. — 3/8" / Ft.

541.55
130+00
543.7

90 310 3538

317

150 4966339

1564

℄ 33" Pipe

309 Sta. 129+55

Sta. 129+55 90 2854069

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

Sta. 130+00 to Sta. 131+00

DIVISION | FED. AID | 122
2 | OHIO | UI-316(1) | 1946 | 289
UGI

HAMILTON COUNTY
S.H. 987 Sec. CINCINNATI (Pt.) "B," ARLINGTON H'TS., LOCKLAND (Pt.) & APPROACHES.

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100

R/W Line — Seeding — Sod — 268± — 541.5 — R.R. & Canal — R/W — Seeding — 3/8" / 1 ft. — 9" — Seeding — 545 — 131+00

Seeding — Seeding — Seeding — 290 — 270 — 542.0 — 250 — 240 — Seeding — House — 545 — 130+50

234± — R/W Line — 297± — R.R. & Canal — Seeding — Seeding — 3/8" / 1 ft. — 9" — Seeding — 550 — 130+00

330± — R/W Line — Seeding — Sod — 542.5 — Seeding — R.R. & Canal R/W

320 310 300 280 270 260 250 240

260 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

Sta. 130+00 to Sta. 131+00 Ext. L

LOCATED	BY
REMARKS	PROPOSED
REMARKS	CHECKED
DRAINAGE	CHECKED
AREAS	
VOLUMES	CHECKED
VOLUME	PROPOSED
SALVAGE	PROPOSED

80 90 100 110 120 130 140 150 160 170 180 190 200 210

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 123 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON H'TS., LOCKLAND (PT.). & APPROACHES

30" Poplar 131+44

26" Maple 131+37

22" 131+15

21" Maple 131+30

Seeding

9"

5/8" I.P.

R/W

Ex. 8" San.

5407

131+00

18" Maple 130+59

11" Stump 130+95

Seeding

Include in Hartwell Ave. Quantities See Cross Sections - Prop. No 2.

5407

130+50

Plotted By	
Templates Plotted	
Templates Checked	
Quantities Checked	
Areas	
Volumes	
Volume Checked	
Balance Points	

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240

STA. 130+50 TO STA. 131+00 EXTENSION RT

DIVISION 2 | FED. AID UGI OHIO UI-316(1) 1946 | 124 289

HAMILTON COUNTY
SH. 987. SEC. CINCINNATI (PT) "B", ARLINGTON Hts. LOCKLAND (PT.) AND APPROACHES

MATERIAL	CLASS. EMB. END AREA VOLUME AREA	VOL. CUT	FILL CUT	FILL
Ahead Rt.	48	138	22	
Ahead Lt.	41	293	25	
Back	89	431	47	

SEEDING

WIDTH AREA
LIN. FT. SQ. YDS.

70 60 50 40 30 20 10 0 10 20 30 40 50 60

Ahead Lt. Ahead Rt.

Seeding | Seeding | Ex. Conc. Pavt. | Seeding | Seeding

3/8" I ft. | 6" | 3/8" I ft. | 3/8" I ft. | 6" | 3/8" I ft.

539.51
134+07.23
540.1

105 Back

27" Pipe

199 719 172

817

Seeding | Seeding | Seeding | Seeding

3/8" I ft. | 6" | 9" | 3/8" I ft.

539.80
133+50
540.5

152 99 248 115

27" Pipe

188 362 481

953

Seeding | Seeding | Seeding | 9"

3/8" I ft.

540.05
133+00
541.0

191 104 143 404

27" Pipe

Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas
Volumes
Volumes Checked
Balance Points

1081

Sta. 127+59.20 To Sta. 137+00 19,163 Sq. Yd.
Seeding & Protecting Rdwy Areas

Sta. 127+59.20 To Sta. 137+00
Classified Emb. Material 3131 Cu. Yd.

Seeding | Ex. Conc. Pavt. | Seeding

198 193 278 1128

1233

540.30
132+50
541.3

104 157 814

27" Pipe | 12" Pipe

Seeding | Ex. Conc. Pavt. | Seeding

246 195 301 1769

540.55
132+00
541.8

106 168 1096

1536

Seeding | Ex. Conc. Pavt. | Seeding

6" | 3/8" I ft. | 3/8" I ft.

197 338 2580

307

540.80
131+50
542.2

106 197 1690

1911

209 385 3642

381 Sta. 131+00

30" Pipe

Sta. 131+00 119 218 6243

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

STA. 131+50 TO STA. 134+07.23

DIVISION 2 FED. AID OHIO UI-316(1) UGZ 1946 125 289

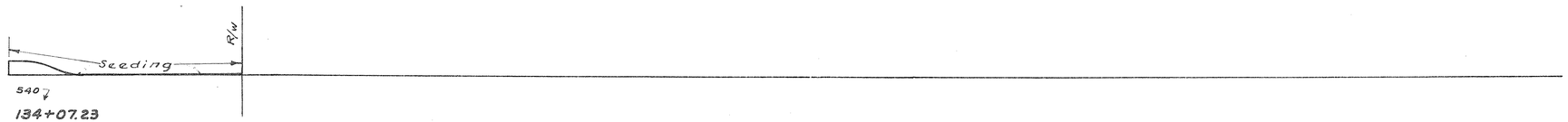
HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & Approaches

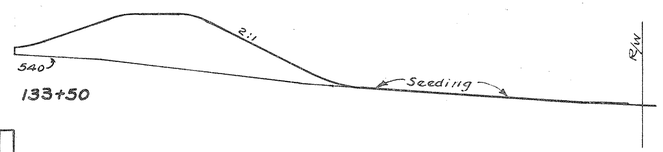
| Plotted By | | |

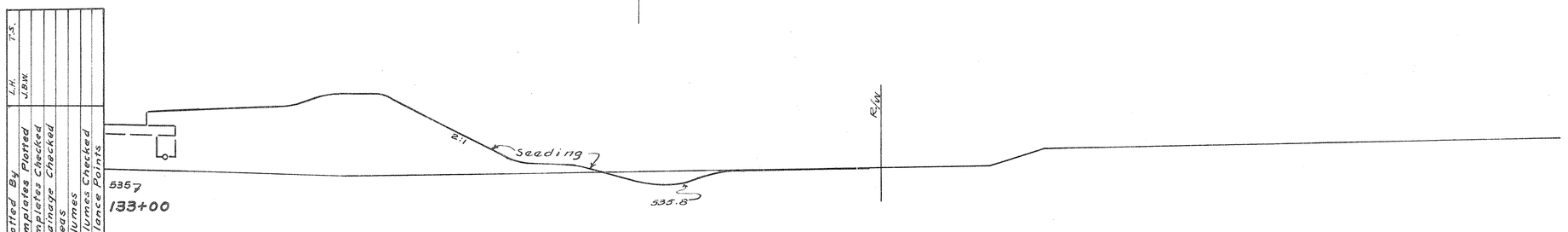
DIVISION 2 | FED. AID OHIO UI-316(1) UGI 1946 | 126 289

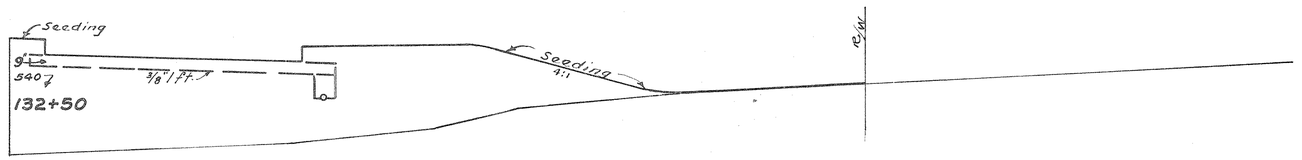
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

80 90 100 110 120 130 140 150 160 170 180 190 200 210 220

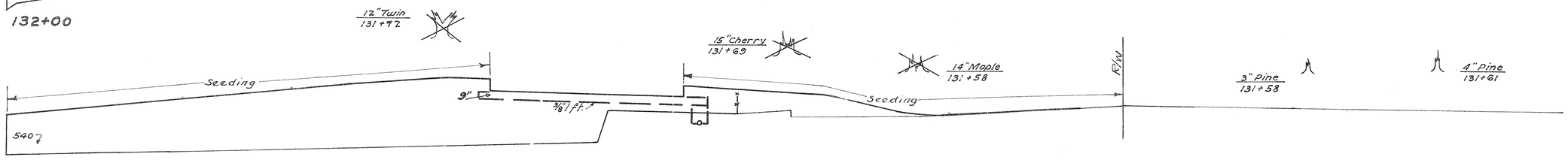












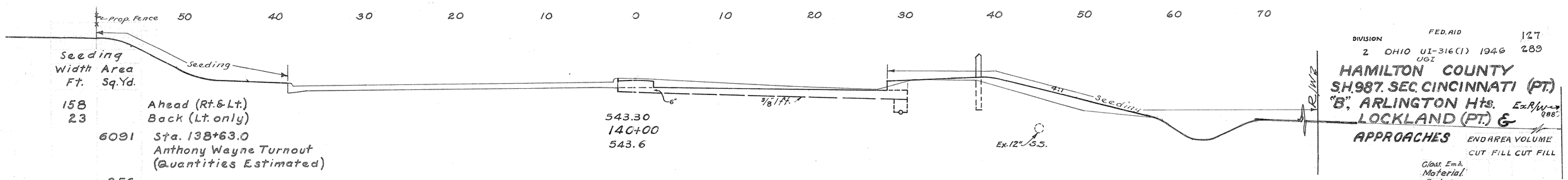
80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240

STA. 131+50 TO STA. 134+07.23 EXTENSIONS RT.

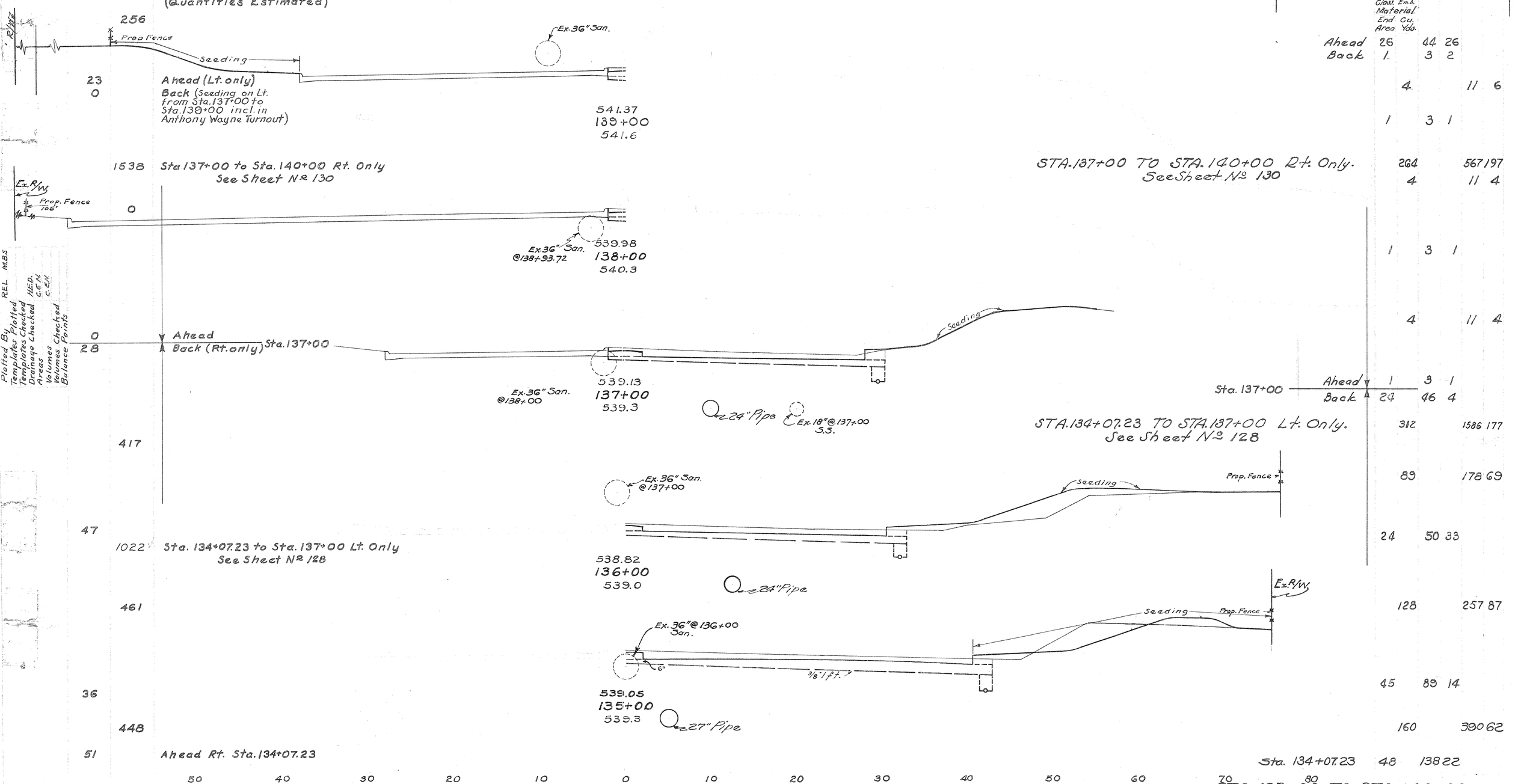
DIVISION 2 | FED. AID UGI | OHIO UI-316(1) 1946 | 127 289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT.) "B", ARLINGTON Hts. & LOCKLAND (PT.)
APPROACHES

Ex. R/W → (188')



Seeding Width Ft.	Seeding Area Sq. Yd.		Sta.	Cl. Emb. Material End Area	Cut Yds.	Fill Yds.	Cut	Fill
158		Ahead (Rt. & Lt.)						
23		Back (Lt. only)						
	6091	Sta. 138+63.0 Anthony Wayne Turnout (Quantities Estimated)						
			543.30 140+00 543.6	Ahead	26	44	26	
				Back	1	3	2	
						4		11 6
					1	3	1	
	256							
23		Ahead (Lt. only)						
0		Back (Seeding on Lt. from Sta. 137+00 to Sta. 139+00 incl. in Anthony Wayne Turnout)	541.37 139+00 541.6					
	1538	Sta 137+00 to Sta. 140+00 Rt. Only See Sheet No 130						
				STA. 137+00 TO STA. 140+00 Rt. Only. See Sheet No 130		264		567 197
						4		11 4
			539.98 138+00 540.3		1	3	1	
						4		11 4
0		Ahead						
28		Back (Rt. only) Sta. 137+00	539.13 137+00 539.3	Sta. 137+00 Ahead	1	3	1	
				Back	24	46	4	
	417			STA. 134+07.23 TO STA. 137+00 Lt. Only. See Sheet No 128		312		1586 177
						89		178 69
47			538.82 136+00 539.0					
	1022	Sta. 134+07.23 to Sta. 137+00 Lt. Only See Sheet No 128				24	50	38
	461					128		257 87
36			539.05 135+00 539.3			45	89	14
	448					160		390 62
51		Ahead Rt. Sta. 134+07.23		Sta. 134+07.23		48	138	22



Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas
Volumes
Volumes Checked
Balance Points

REL. MBS
M.E.D.
C.E.H.
C.E.H.

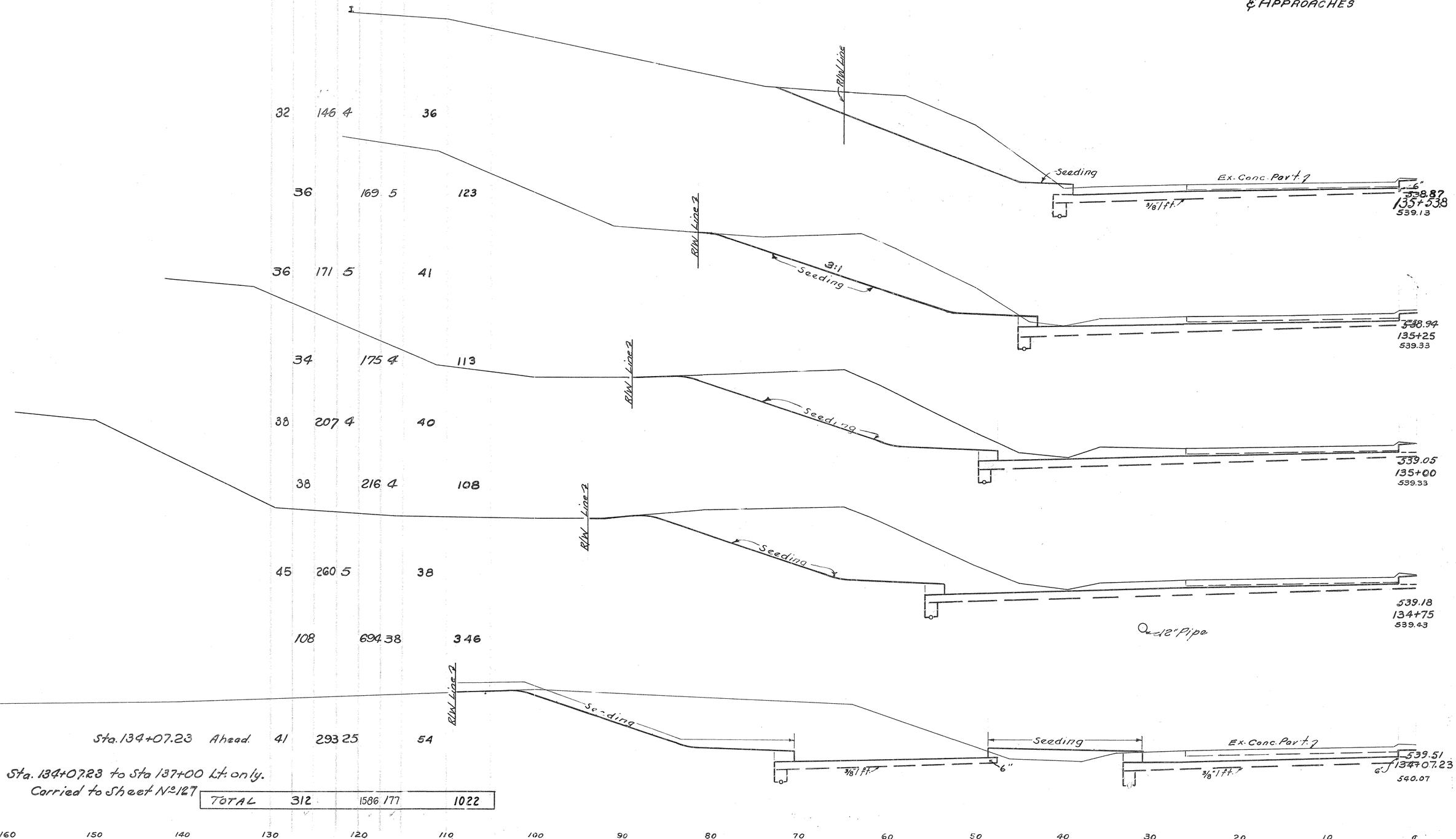
DIVISION 2 | FED. AID | OHIO UI-316(1) UGI | 1946 | 128 | 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.) "B" to Arlington Hts., Lockland (Pt.) & Approaches

Plotted By	
Templates Plotted	T.S.
Templates Checked	
Drainage Checked	
Areas	C.E.N.
Volumes	C.E.N.
Volumes Checked	
Balance Points	

Gloss. Emb. Material End Area	Cu. Yd.		Seeding Width Area	
End Area	Cu. Yd. CUT	FILL CUT	FILL Ft.	Sq. Yd.
32	146	4	36	
36	169	5	123	
36	171	5	41	
34	175	4	113	
38	207	4	40	
38	216	4	108	
45	260	5	38	
108	694	38	346	
Sta. 134+07.23 Ahead.	41	293	25	54
TOTAL	312	1586	177	1022

Sta. 134+07.23 to Sta 137+00 Lt. only.
Carried to Sheet No. 127



S.H. 987 – STA. 134+07.23 TO STA. 135+53.8 Lt

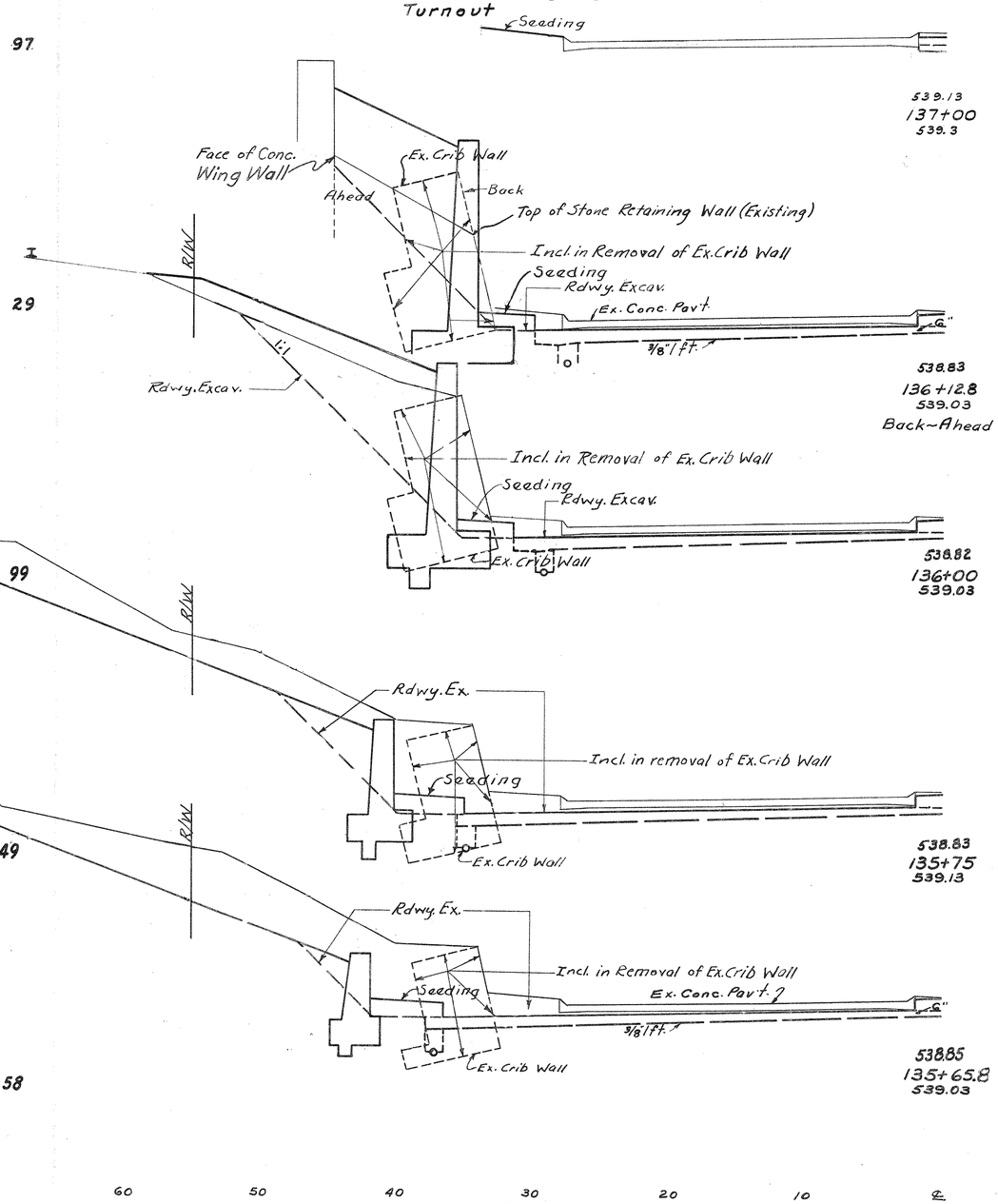
Plotted By	
Templates Plotted	
Templates Checked	C.F.W.
Areas	
Drainage Checked	C.F.W.
Volumes	
Volume Checked	
Balance Points	

DIVISION 2 | FED.AID OHIO UI-316(1) UGI 1946 | 129 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B," Arlington Hts., Lockland (Pt.) to & Approaches

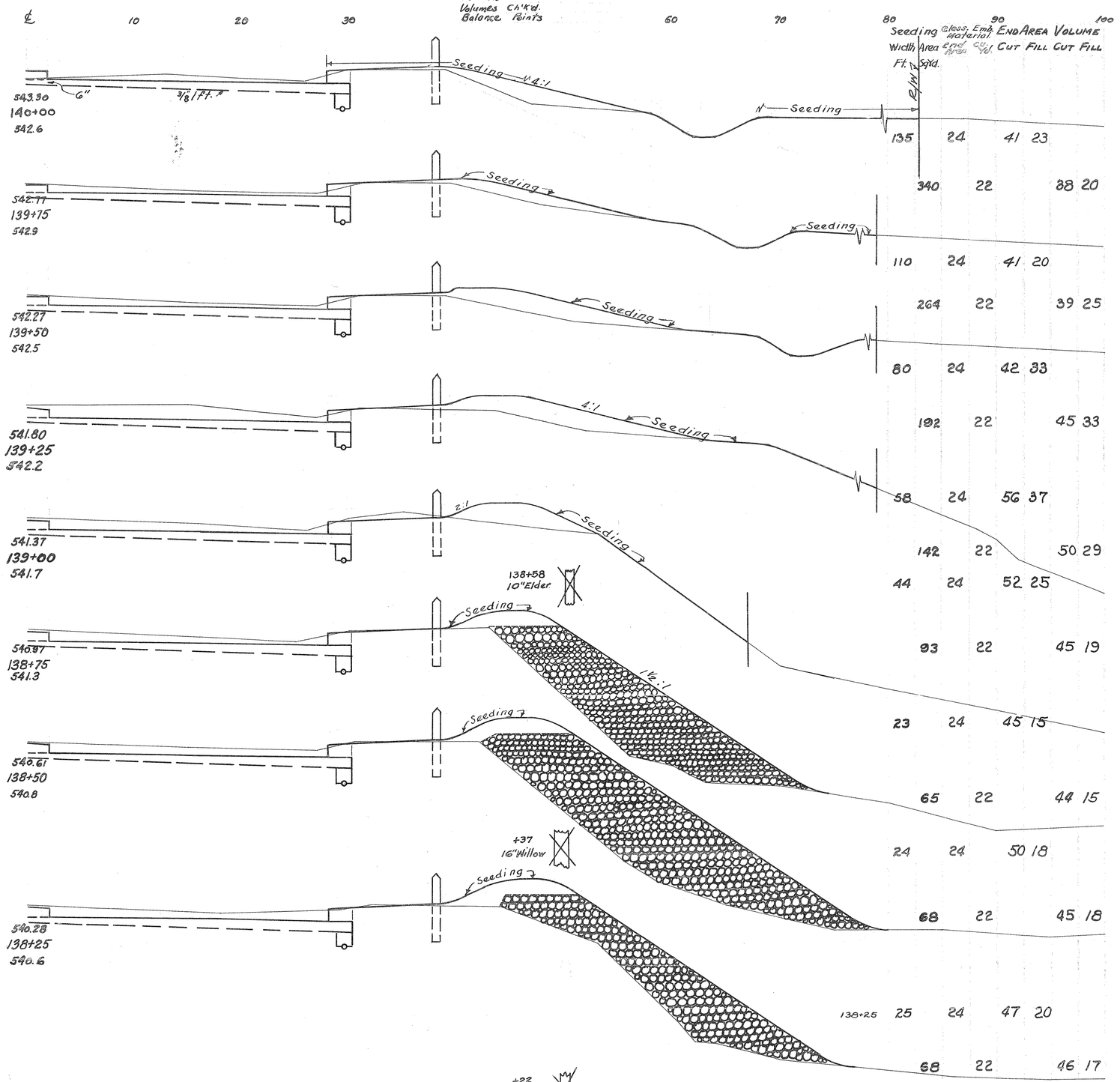
		Class. Emb. Material End Cu. Area Yd.	End Area Cut	End Area Fill	Volume Cut	Volume Fill	Seeding Width Ft.	Seeding Area Sq. Yd.	
Sta 137+00		1	2	1			6		Back
		2			4	3			
Sta. 136+50.7	Ahead	1		3	2			97	
	Back	26		36	2				
		28			36	2			
Sta. 136+22		26		36	2				
		9			19	13			
Sta 136+12.8	Ahead	26		73	74		14		
	Back	26		45	74		14		
			12			30	40		29
		24		82	98		27		
		23		108	57			99	
		25		151	29			44	
		9		59	7			49	
		25		195	12			51	
		13		76	4			58	
135+53.8		32		146	4			36	

Seeding on Lt. from Sta. 137+00 to Sta. 139+00 incl. in Anthony Wayne Turnout



SH 987 ~ Sta 135+65.8 To Sta 137+00

Plotted By J.B.W.
Templates Plotted J.B.W.
Templates Ch'k'd.
Drainage Areas Ch'k'd.
Volumes C.E.N.
Volumes Ch'k'd. C.E.N.
Balance Points



Seeding @ less Emb. material

Width Ft.	Area Sq.Ft.	End Area	Cu. Yd. Cut	Cu. Yd. Fill	Cut	Fill
135	24			41	23	
340	22			88	20	
110	24			41	20	
264	22			39	25	
80	24			42	33	
102	22			45	33	
58	24			56	37	
142	22			50	29	
44	24			52	25	
93	22			45	19	
23	24			45	15	
65	22			44	15	
24	24			50	18	
68	22			45	18	
138+25 25	24			47	20	
68	22			46	17	
24	24			52	17	
72	22			55	10	
137+75 28	24			66	4	
44	12			34	2	
137+61 28	24			65	4	
190	54			126	9	
137+00 28	24			46	4	
Total 1538	264			567	197	

Note:
Place (As Directed By The Engineer) 440 Cu. Yds. of Dumped Rock Fill Item I-10. Between Sta. 137+90 & 139+00 Rt.

Pier

Pier

Sta. 137+00 to Sta. 140+00 Rt only
Carried to Sheet No. 127

24" Pipe

Ex. 18" San.

STA. 137+00 TO STA. 140+00 RT. ONLY

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B" ARLINGTON Hts. LOCKLAND (Pt.) & APPROACHES

2 OHIO U.I. 316(1) 1946 FED. AID

130
289

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 131 289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT.) "B", ARLINGTON Hts. LOCKLAND (PT.) & APPROACHES

Plotted By
Templates Plotted REL. MBS
Templates Checked NED
Drainage Checked CEN
Areas CEN
Volumes
Volume Checked
Balance Points

50 40 30 20 10 0 10 20 30 40 50 60 70

SEEDING WIDTH AREA FT. SQ.YD.

Prop Fence — Ex. R/W — Seeding

284 — 3056 — Seeding — Ex. R/W — End Seeding

551.28
146+00
551.6

6" — 3/8" / Ft.

Seeding

265 — 2856 — Seeding

550.82
145+00
551.1

Seeding

249 — 2600 — Seeding

Sta. 137+00 to Sta. 150+96 Seeding & Prep. Type "A" 38925.5 Sq. Yd.

550.36
144+00
550.6

Seeding

210 — 2306 — Prep Fence — Ex. 36" San. @ 144+00 — Seeding

549.47
143+00
549.7

196 — Seeding

Ex. 36" San. @ 143+00

547.70
142+00
548.0

Ex. R/W — Prep. Fence — 2067 — Seeding

176 — 1856 — 158

℄ Ex. 36" San. @ 142+00

545.50
141+00
545.8

3/8" / Ft.

Seeding

Sta. 140+00

Prop. Fence — R/W — Seeding

Sta. 137+00 to Sta. 150+96 Classified Emb. Material 1066 Cu. Yd.

	Class. Emb. Material End Cu. Area Yds.	CUT	FILL
Prop. Fence R/W	16	36	12
		59	119 41
R/W	16	28	10
		59	106 35
R/W	16	29	9
		63	120 33
R/W	18	36	9
		80	144 44
R/W	25	42	15
		93	178 54
R/W	25	54	14
		94	181 74
R/W	26	44	26

STA. 141+00 TO STA. 146+00

DIVISION 2 | FED.AID UGI | OHIO UI-316(1) 1946 | 132 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON Hts. LOCKLAND (PT.) & APPROACHES

Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas
Volumes Checked
Volumes Checked
Balance Points

M.B.S. REL.
H.E.D.
C.E.N.
C.E.N.

SEEDING WIDTH FT.	SEEDING AREA SQ. YD.
53	894
120	2538
368	4044
360	3528
275	3061
276	3128
284	

50 40 30 20 10 0 10 20 30 40 50 60 70

Ex. R/W
Ex. Fence
Seeding
6"
3/8" / ft.
554.04
152+00
554.3
Ex. 18" S.S.
Prop. Fence
106
2538
Sta. 150+96
Ex. R/W
Ex. Fence
553.58
151+00
553.9
553.12
150+00
553.3
Ex. 60" S.S. @ 149+00
552.66
149+00
552.7
552.20
148+00
552.4
551.74
147+00
551.9
Ex. 60" S.S. @ 148+00
Prop. Fence
Sta. 146+00

	END AREA CUT	VOLUME CUT	VOLUME FILL
Class. Emb. Material End cu. Area Yd.			
	18	36	21
	67		124 57
Ex. R/W	18	31	10
Sta 150+96	3	5	2
	64	110	42
Ex. R/W2	18	31	14
	67		100 50
Ex. R/W2	18	23	13
	70		102 67
Ex. R/W2	20	32	23
	74		120 78
	20	33	19
Ex. R/W2	67		128 57
Sta. 146+00	16	36	12

Sta. 127+59.20 To Sta. 150+96
Excavation = 9184 Cu. Yds.
Embankment = 41293 Cu. Yds.
Embankment +20% = 49552 Cu. Yds.

STA. 147+00 TO STA. 152+00

DIVISION 2 | FED.AID OHIO UI-316(1) 1946 UGI | 133 289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT.) "B", ARLINGTON Hts. LOCKLAND (PT.) & APPROACHES

SEEDING WIDTH AREA		END AREA VOLUME		
Ft.	Sq. Yd.	CUT	FILL	CUT FILL
		Class. Emb. Material		
		End Cu. Area Yd.		
61	572	18	33	14
42	528	67		115 46
53	522	18	29	11
41	467	67		124 76
43	461	18	38	30
40	517	67		144 91
53		18	40	19
		67		139 61
		18	35	14
		67		119 41
		18	29	8
		67		120 54
		18	36	21

Plotted By REL. M.B.S.
Templates Plotted
Templates Checked
Drainage Checked C.E.N.
Areas C.E.N.
Volumes Checked
Balance Points

50 40 30 20 10 ℄ 10 20 30 40 50 70

℄ Ex. R/W
Ex. Fence
Seeding
6"
3/8" T.F.
Prop. Fence
Ex. 15" S.S.
Ex. 30" San. @158+00
Ex. 18" S.S.

556.80 158+00 556.9
556.34 157+00 556.6
555.88 156+00 556.2
555.42 155+00 555.7
554.96 154+00 555.3
554.50 153+00 554.7

Sta. 152+00

50 40 30 20 10 ℄ 10 20 30 40 50 60 70 152+00

DIVISION 2 | FED. AID OHIO UI-316(1) UGI | 1946 | 134 289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT) "B", ARLINGTON Hts. LOCKLAND (PT.) & APPROACHES

SEEDING
WIDTH AREA
FT. SQ. YD.

50 40 30 20 10 0 10 20 30 40 50 60 70

Ex. R/W
Exist. Fence
Seeding
34
378
558.86
164+00
559.1
6"
3/8" / Ft.
Prop. Fence
558.93
163+00
559.2
Ex. 15" S.S. @164+00
Ex. 30" @164+00 San.
Exist. Fence
34
378
Seeding
558.64
162+00
558.8
S.S. Ex. 15" @163+00
34
389
Exist. 30" San. @163+00
Ex. R/W Ahead (To Sta. 161+70)
Ex. R/W Back
36
444
558.18
161+00
558.4
Ex. 12" S.S. @162+00
Ex. 30" San. @162+00
Ex. R/W
44
556
557.72
160+00
557.9
Ex. 12" S.S. @161+00
Ex. 30" San. @161+00
Exist. Fence
56
650
557.26
159+00
557.4
Prop. Fence
Ex. R/W
Ex. 12" S.S. @160+00
Ex. 30" San. @160+00
61
Sta. 158+00

Plotted By M.B.S. REL.
Templates Plotted
Templates Checked H.E.D.
Drainage Checked C.E.N.
Areas C.E.N.
Volumes Checked
Balance Points

Class. Emb. Material	End. Cu. Area Yd.	CUT	FILL	CUT	FILL
24	39	9			
89		137	44		
24	35	15			
89		139	43		
24	40	8			
89		159	35		
24	46	11			
74		135	35		
16	27	8			
59		106	78		
16	30	34			
63		117	89		
158+00	18	33	14		

STA. 159 TO STA. 164+00

DIVISION 2 | FED. AID UGI OHIO UI-316(1) 1946 | 135 289

HAMILTON COUNTY
SH. 987. SEC. "CINCINNATI (PT.)" "B", ARLINGTON Hts. LOCKLAND (PT.) & APPROACHES

Sta.	Ahead/Back	END AREA VOLUME CUT	FILL	CUT	FILL
		Class. Emb. Material End Cu. Area Yd.			
167+26.75	Ahead	21	40	18	
	Back	0	0	0	
167+50	Ahead	21	44	4	
	Back	0	0	0	
168+00			78		143 104
169+00			78		135 87
170+00		21	37	38	
		21	36	9	
			57		108 18
			0		0 0
165+75	Ahead	0	0	0	
	Back	24	47	4	
			67		124 17
		24	42	8	
			89		150 31
164+00		24	39	9	

STA. 165+00 TO STA. 170+00

Plotted By
Templates Plotted — W.B.S. REL.
Templates Checked — H.E.D.
Drainage Checked — C.E.N.
Areas — C.E.N.
Volumes Checked
Volumes Checked
Balances Points

DIVISION 2 | FED.AID UGI | OHIO UI-316(1) 1946 | 136 289

HAMILTON COUNTY
SH 987. SEC. CINCINNATI (PT.) "B", ARLINGTON Hts. LOCKLAND (PT.) & APPROACHES

END WORK ON S.H. 987
STATION 179+86

END FED. PROJECT No. UI-UGI-316(1)
STATION 175+47.12

Sta. 175+47.12 to Sta. 179+86 Lt. & Rt.
(TO BE PLACED AS DIRECTED BY THE ENGR. ON EX. R/W)

Sta. 150+96 to Sta. 175+47.12
Seeding & Pretecting, Type "A" 14953 Sq. Yd.

Plotted By REL MBS.
Templates Plotted
Templates Checked H.E.D.
Drainage Checked G.E.N.
Areas C.E.N.
Volumes
Volumes Checked
Balance Points

SEEDING WIDTH FT.	AREA SQ. YD.
83	1350
	445
87	
	1000
93	
	1089
103	
	850
50	
	506
41	
	472
44	

Ex. R/W
Exist. Fence
Seeding
Sta. 175+47.12
Exist. Pav't. Ahead
6" 3/8" / ft.
Prop. Fence
Ex. R/W
Class. Emb. Material End Cut Area Yd.

556.11
175+47.12
556.1

Ex. 24" @ 175+47.12 San.
Ex. 36" @ 175+47.12 S.S.
Ex. 18" S.S.

556.22
175+00
556.4

Ex. 24" @ 175+00 San.
Ex. 36" @ 175+00 S.S.

556.46
174+00
556.8

Ex. 24" @ 174+00 San.
Ex. 36" @ 174+00 S.S.

556.70
173+00
557.1

Ex. 24" @ 173+00 San.
Ex. 36" @ 173+00 S.S.

556.94
172+00
557.3

Exist. Fence
Ex. 24" @ 172+00 San.
Ex. 36" @ 172+00 S.S.
6" 3/8" / ft.

557.18
171+00
557.5

Ex. R/W
Ex. 24" @ 171+00 San.
Ex. 36" @ 171+00 S.S.
Prop. Fence
Ex. R/W

Sta. 175+47.12

30	57	2
52		103 7
30	61	6
115		220 31
32	58	11
113		207 43
29	54	12
94		174 41
22	40	10
81		152 50
22	42	17
80		152 65
Sta. 170+00	21	40 18

Ex. Sluice

Sta. 150+96 to Sta. 175+47.12	
Excavation	= 3351 Cu. Yd.
Embankment	= 1246 Cu. Yd.
Embankment +20%	= 1495 Cu. Yd.
Classified Emb. Material	1839 Cu. Yd.

STA. 171+00 TO STA. 175+47.12

FED. RD. DIVISION	STATE	FED. AID PROJECT
2	OHIO	UI-316(1) UGT

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI "B" ARLINGTON HEIGHTS LOCKLAND (PT.) & APPROACHES

STA. 39+70.70
END PROP. CONC. PAVT.

E.W. Bound C.C.C.& St. L. R.R. Overhead

For remainder of details see insert below

Base Line "C" (Face of Curb)

Ramp "C"

Base Line "D" (Face of Curb)

Ramp "D"

ROAD

PADDOCK

Temporary Pavt.

Base Line for Cross Sections

Base Line "A" (Face Curb)

Ramp "A"

Base Line "B" (Face of Curb)

Ramp "B"

& S.H. 987

PROPOSED SUMMIT ROAD For details see Sheet Nos 243 to 246

74th STREET

PINE ALLEY

Sta. 28+15 = Sta. 0+00 Summit Rd.

STA. 6+07.10 SUMMIT ROAD = STA. 0+00 LONGVIEW DRIVE

Base Line "C"

Curve Data (Line B)
PI = 1+41.30
D = 4°00'
R = 1432.39
T = 141.30
L = 281.69
E = 6.95
Δ = 11°16'04"

Curve Data (Line B)
Δ = 107°49'56"
R = 130'
T = 178.38
L = 244.66
E = 93.43

PI = 1+51.81
Δ = 90°
D = 9°-32'-30"
R = 180'
T = 180.00
L = 282.74
E = 89.95

Scale - 1" = 50'

GENERAL LAYOUT PADDOCK ROAD INTERCHANGE

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OH10	UI-316-(1) UGI	1946

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HAMILTON COUNTY

S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington H'ts Lockland (Pt.) & Approaches

ESTIMATED QUANTITIES

RAMP "A" Sta. 63+86.57
(Municipal - Cincinnati Pt.)

9" Reinf. Conc. Pav't.	Item T-71	2493.2 Sq. Yd.
Type 2-A Conc. Curb.	Item I-12	535.5 Lin. Ft.
Type 4-A Conc. Curb	Item I-12	1877.3 Lin Ft.
Var. Thick. Asph. Conc. Surface Course	Item T-35	2.1 Cu. Yd.

Note:-
For Pavement Symbols & Joint Legend See Sheet No 14

PROP. PADDOCK ROAD

P.T. 31+35.58

Prop. 5' Conc. Sidewalk.

Prop. Type 2A Curb & Gutter (2'-6" wide)

Δ = 30°-05'-21"
R = 150' F/C
T = 40.32' F/C
L = 78.77' F/C

Δ = 95°-20'-57"
R = 25' F/C
T = 27.45' F/C
L = 41.60' F/C

Prop. Type 2A Curb

10' Transition Listed as Type 2A Curb

Prop. Type 4A Curb

Δ = 5°-45'-52"
D = 2°-30'
R = 2291.83 F/C
T = 115.33 F/C
L = 230.47

RAMP "A"

Base Line "A" (Face of Curb)

10' Transition Listed as Type 2A Curb.

Prop. Type 2A Curb

Prop. 5' Conc. Sidewalk

P.I. = 11+78.92
Δ = 44°-36'-16" Rt.
R = 150.13' F/C
L = 116.86'
E = 16.00'
T = 73.84

S.H. 987 ℄

For Details of Temp. Mall See Sh. No. 14

P.I. = 62+34.76
Δ = 12°-06'
R = 1432.39' F/C
D = 4°-00'
T = 151.81
L = 302.50' F/C
E = 8.02'

P.C. = 0+00 A

P.T. = 3+02.50

RAMP "A"

PAV'T. DETAILS RAMP "A"

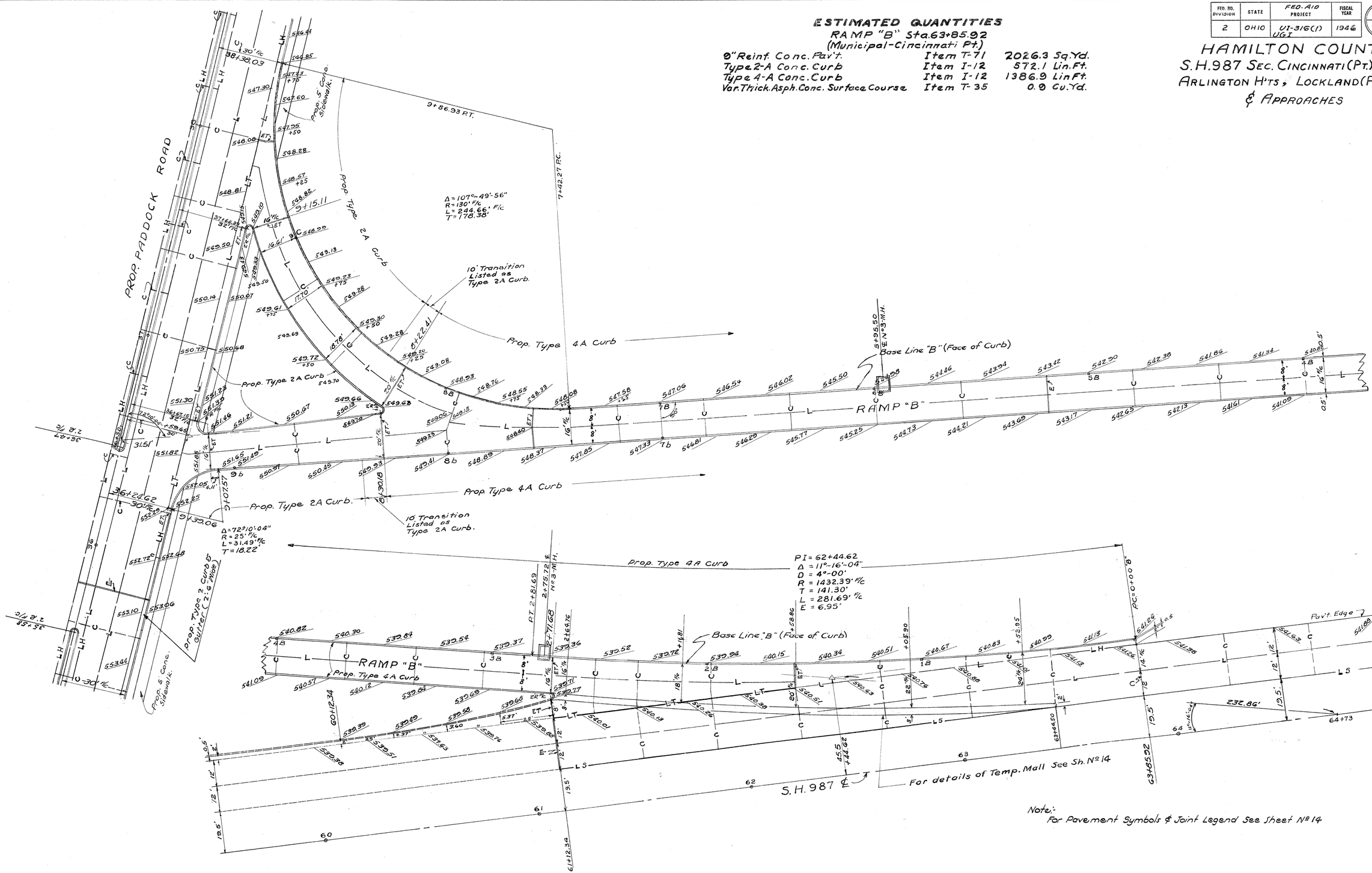
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS, LOCKLAND (PT.). & APPROACHES

ESTIMATED QUANTITIES
RAMP "B" Sta. 63+85.92
(Municipal-Cincinnati Pt.)

9" Reinf. Conc. Pav't.	Item T-71	2026.3 Sq. Yd.
Type 2-A Conc. Curb	Item I-12	572.1 Lin. Ft.
Type 4-A Conc. Curb	Item I-12	1386.9 Lin Ft.
Var. Thick. Asph. Conc. Surface Course	Item T-35	0.0 Cu. Yd.

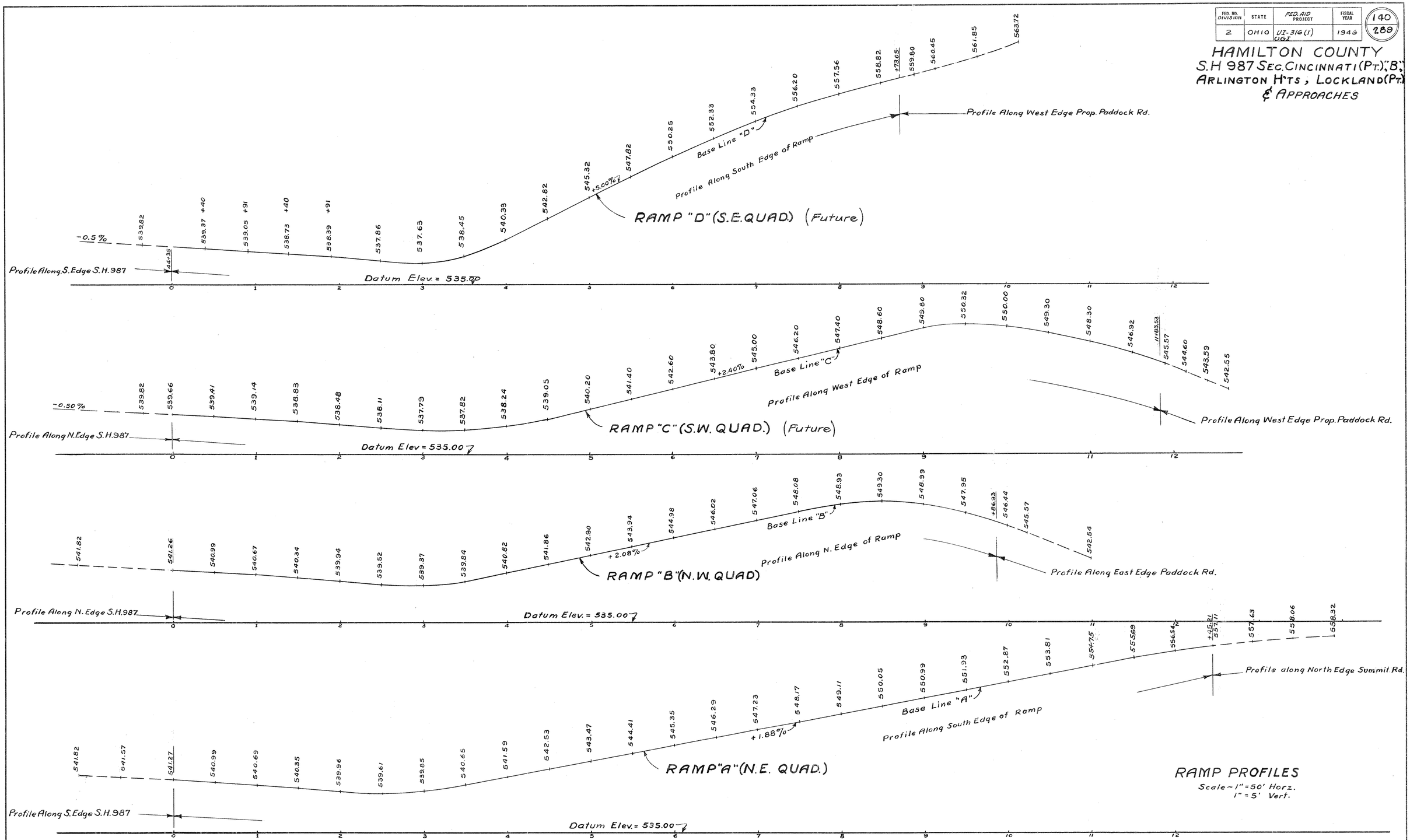


PAV'T. DETAILS ~ RAMP "B"

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) OGI	1946

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HAMILTON COUNTY
S.H 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS, LOCKLAND (PT.) & APPROACHES



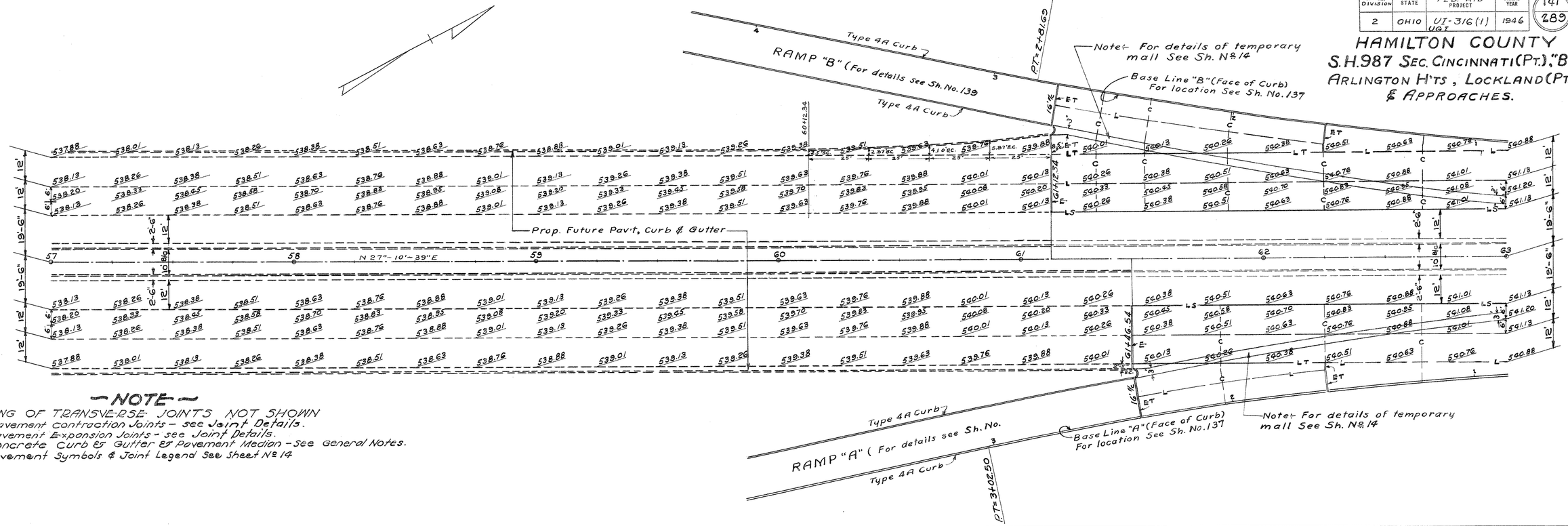
RAMP PROFILES
Scale - 1" = 50' Horz.
1" = 5' Vert.

RAMP PROFILE "A", "B", "C", & "D"

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGT	1946

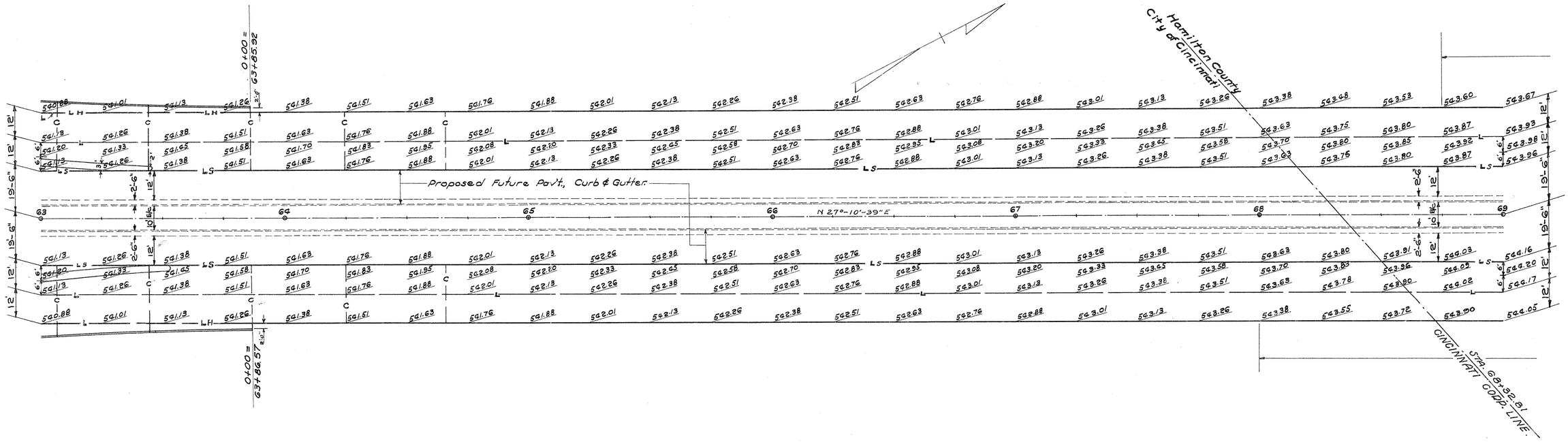
141
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS, LOCKLAND (PT.) & APPROACHES.



— NOTE —

SPACING OF TRANSVERSE JOINTS NOT SHOWN
For Pavement contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details.
For Concrete Curb & Gutter & Pavement Median - See General Notes.
For Pavement Symbols & Joint Legend See Sheet No. 14



Drawn by		Date	
Checked by		Date	
Checked by		Date	

PAV'T. DETAILS - S.H. 987 - STA. 57+00 - STA. 69+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGT	1946

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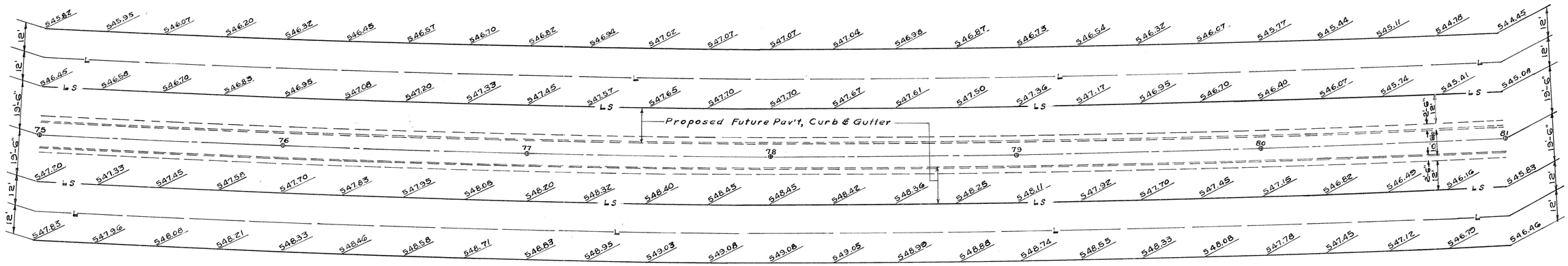
HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (P.T.), "B"; Arlington Hts, Lockland (P.T.) & Approaches.



—NOTE—

SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contraction Joints - See Joint Details
For Pavement Expansion Joints - See Joint Details
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14



P.I. = 78+69.99
Δ = 16°-04' Lt.
D = 1°-06'
T = 735.13'
R = 5208.71'
L = 1460.61'
E = 51.62'

Drawn by		Date	
Checked by		Date	
Checked by		Date	

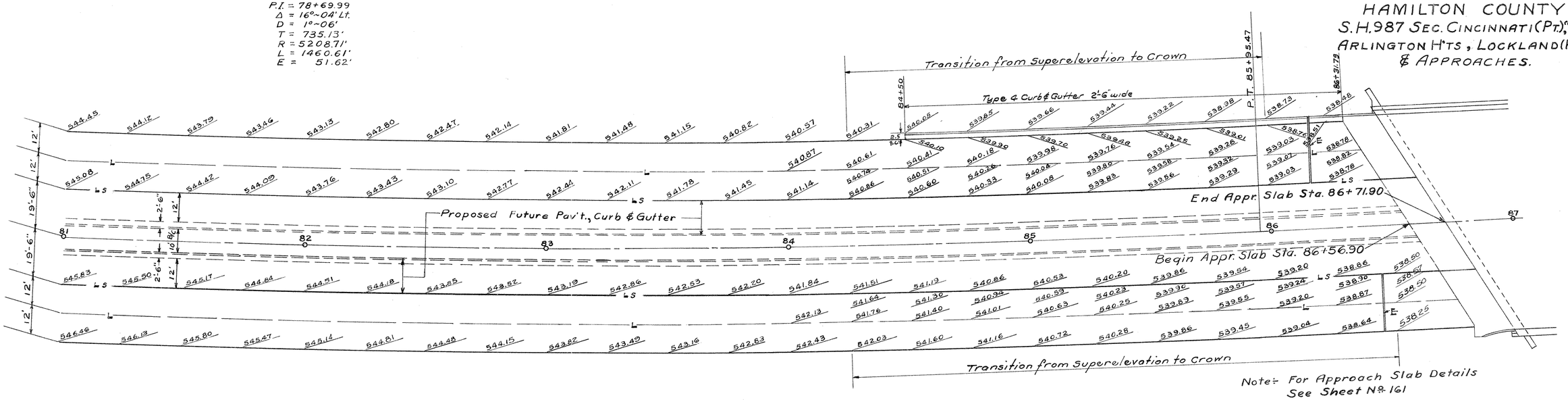
PAV'T. DETAILS S.H. 987 - STA. 69+00 TO STA. 81+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OH10	UT-316(1) JGI	1946

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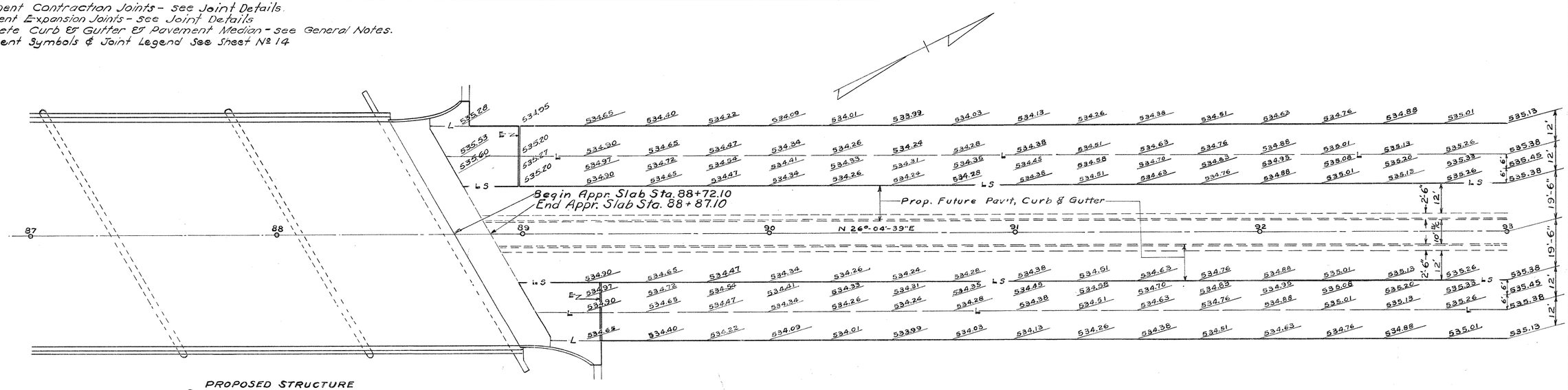
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON H'TS, LOCKLAND (PT.) & APPROACHES.

P.I. = 78+69.99
Δ = 16°-04' Lt.
D = 1°-06'
T = 735.13'
R = 5208.71'
L = 1460.61'
E = 51.62'



~NOTE~
SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No. 14



PROPOSED STRUCTURE
℄ = 87+72.00
TYPE - Continuous steel beam with conc. deck & sub. structure.
SPAN - 60'-75'-60' c/c bearings.
ROADWAY - 91' with two 1'-9" safety curbs
LOADING - S-20-46
SKEW - 30° R.F.
WEARING SURFACE - ¾" monolithic conc.
APPRO. SLABS - 15' long AS-44-S type II. AS-44-F, type IV & V.
ALIGNMENT - Tangent.

Note: For Approach Slab Details See Sheet No. 161

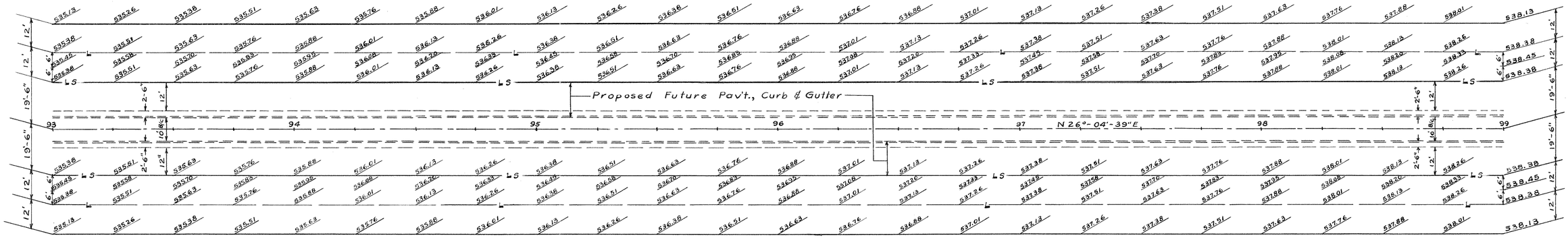
Drawn by		Date	
Checked by		Date	
Checked by		Date	

PAV'T. DETAILS S.H. 987 - STA. 81+00 TO STA. 93+00

FED. RD. DIVISION	STATE	FED AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGL	1946

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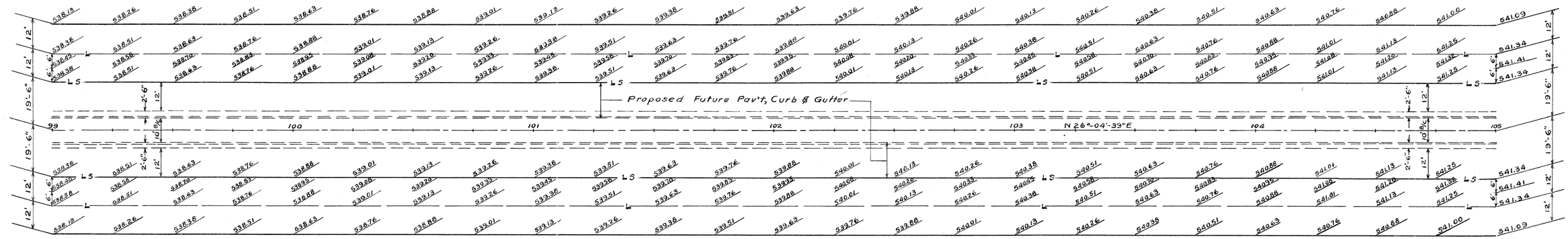
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.T.), "B", ARLINGTON H'TS, LOCKLAND (P.T.) & APPROACHES.



NOTE

SPACING OF TRANSVERSE JOINTS NOT SHOWN.

For Pavement Contraction Joints - see Joint Details
For Pavement Expansion Joints - see Joint Details
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14



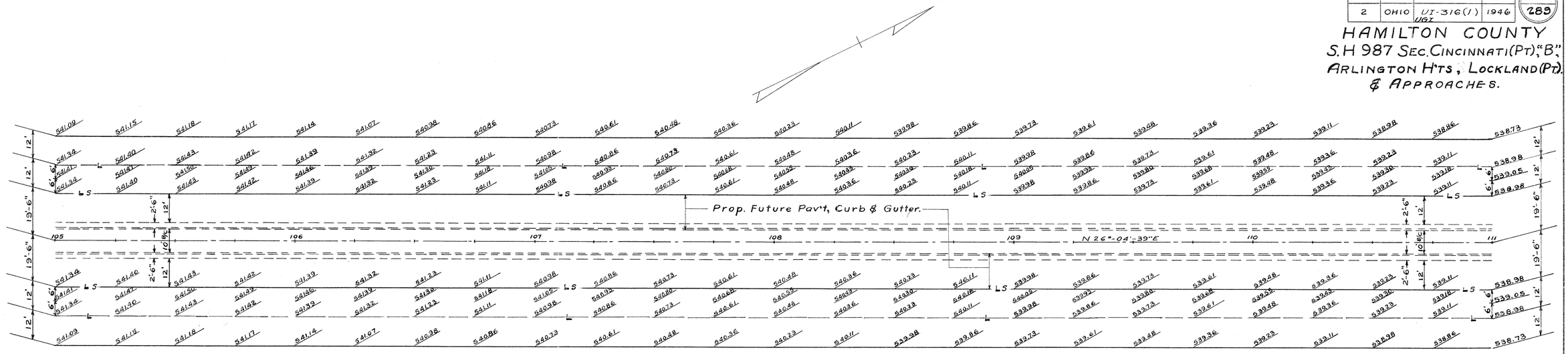
Drawn by		Date	
Checked by		Date	
Checked by		Date	

PAV'T. DETAILS S.H. 987 - STA. 93+00 TO STA. 105+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGZ	1946

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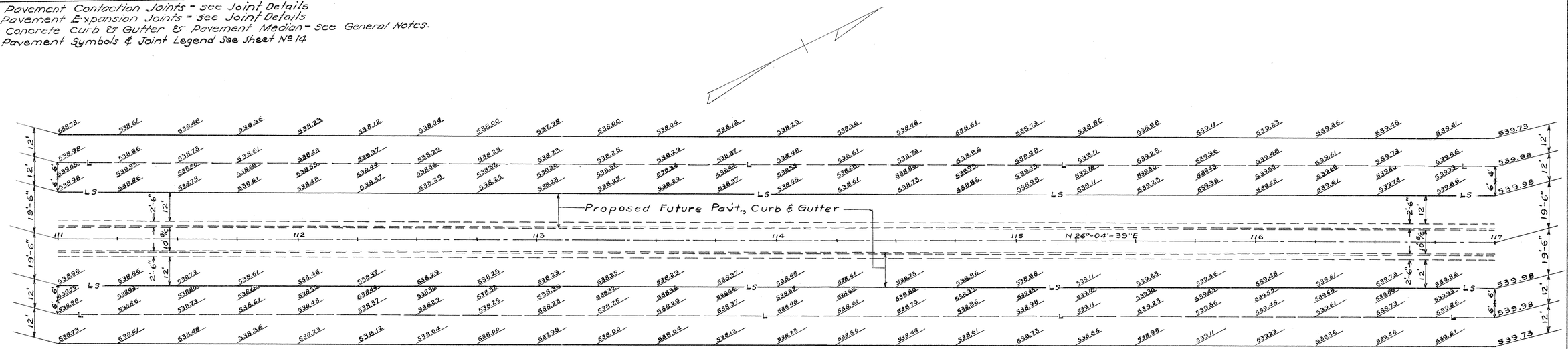
HAMILTON COUNTY
S.H 987 SEC. CINCINNATI (PT), "B", ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES.



— NOTE —

SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contaction Joints - see Joint Details
For Pavement Expansion Joints - see Joint Details
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14



Drawn by		Date	
Checked by		Date	
Checked by		Date	

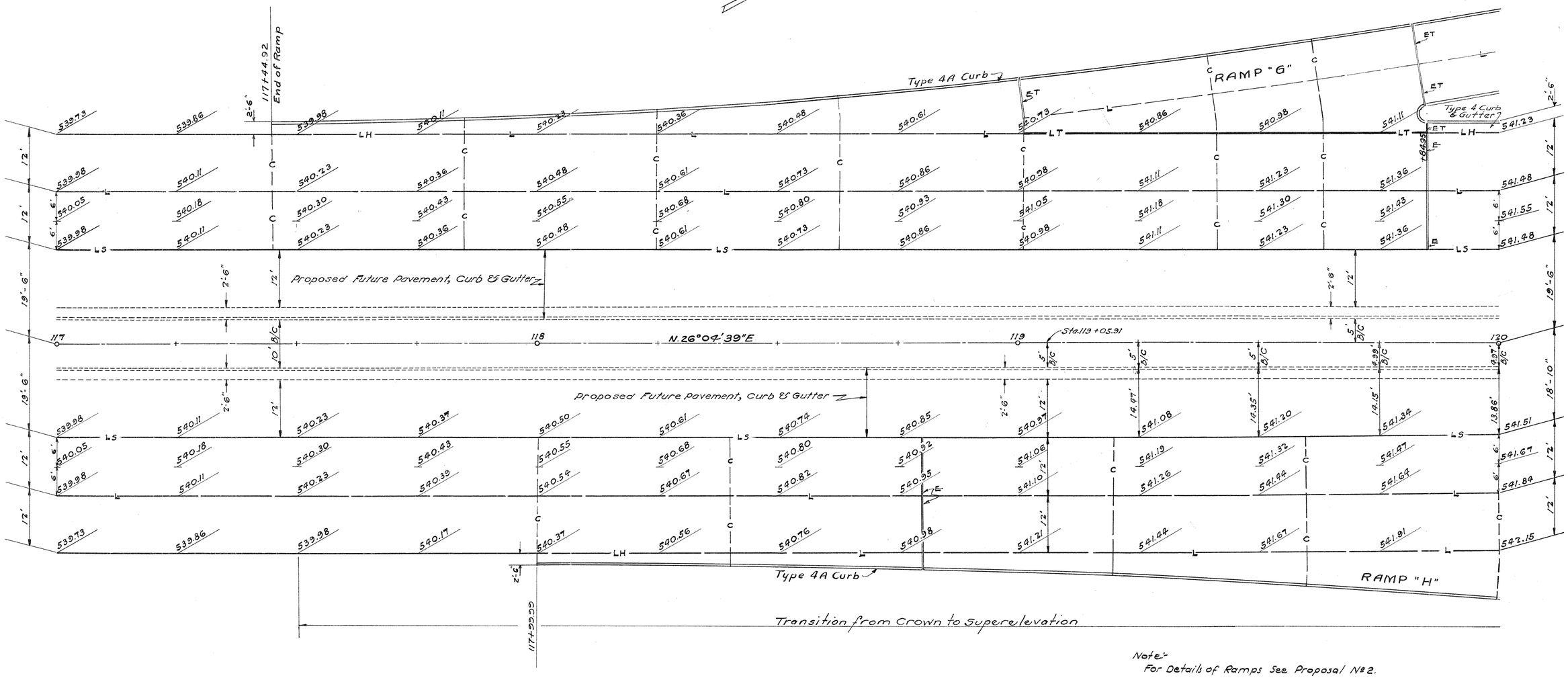
PAV'T. DETAILS S.H. 987 ~ STA. 105+00 TO STA. 117+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 S.E. CINCINNATI (PT.), "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Note:-
For Details of Ramps See Proposal No 2



Note:-
For Details of Ramps See Proposal No 2.

NOTE

SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contraction Joints - see Joint Details
For Pavement Expansion Joints - see Joint Details
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14

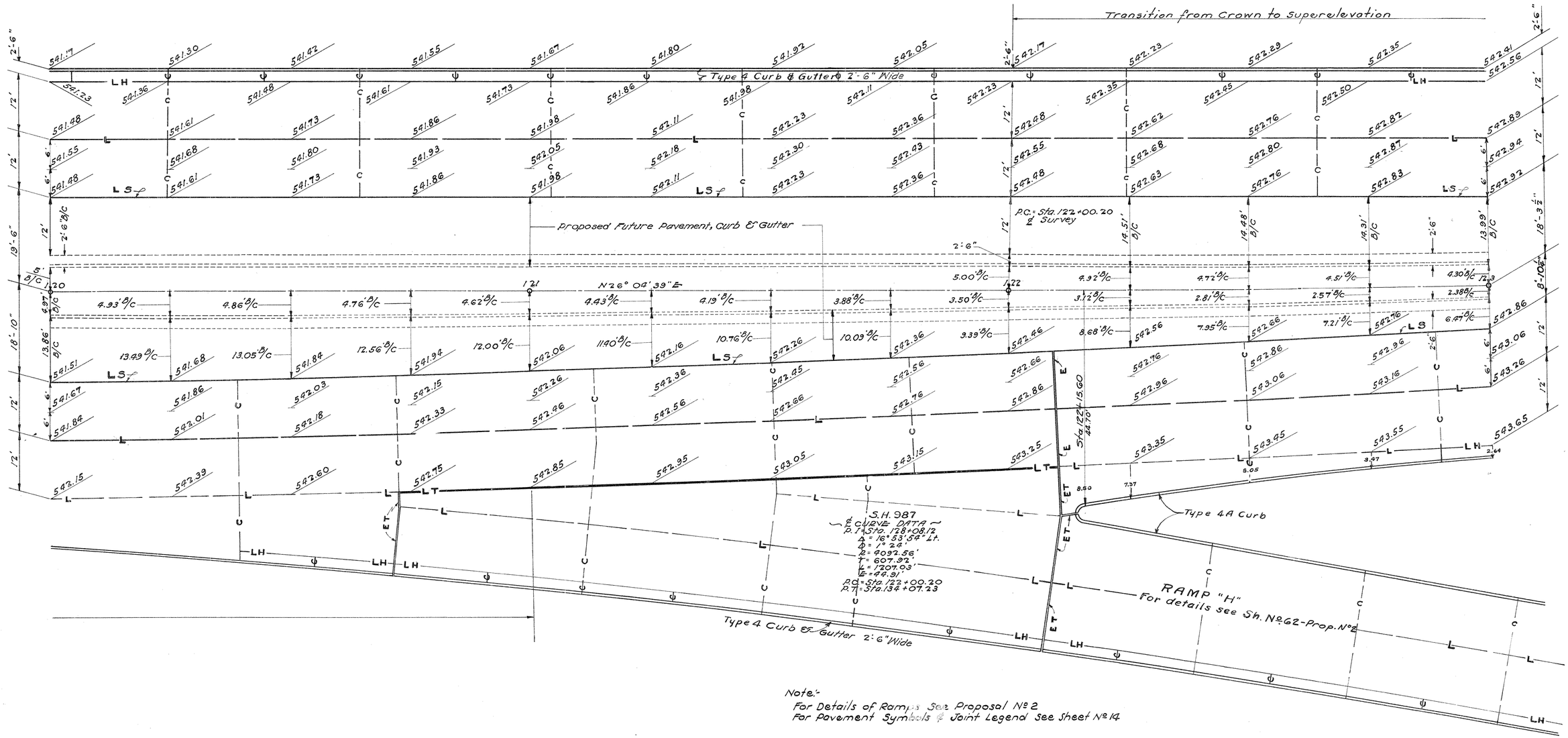
Drawn by		Date	
Checked by		Date	
Checked by		Date	

PAV'T. DETAILS S.H. 987 - STA. 117+00 TO STA. 120+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES



Note:-
For Details of Ramps See Proposal No. 2
For Pavement Symbols & Joint Legend See Sheet No. 14

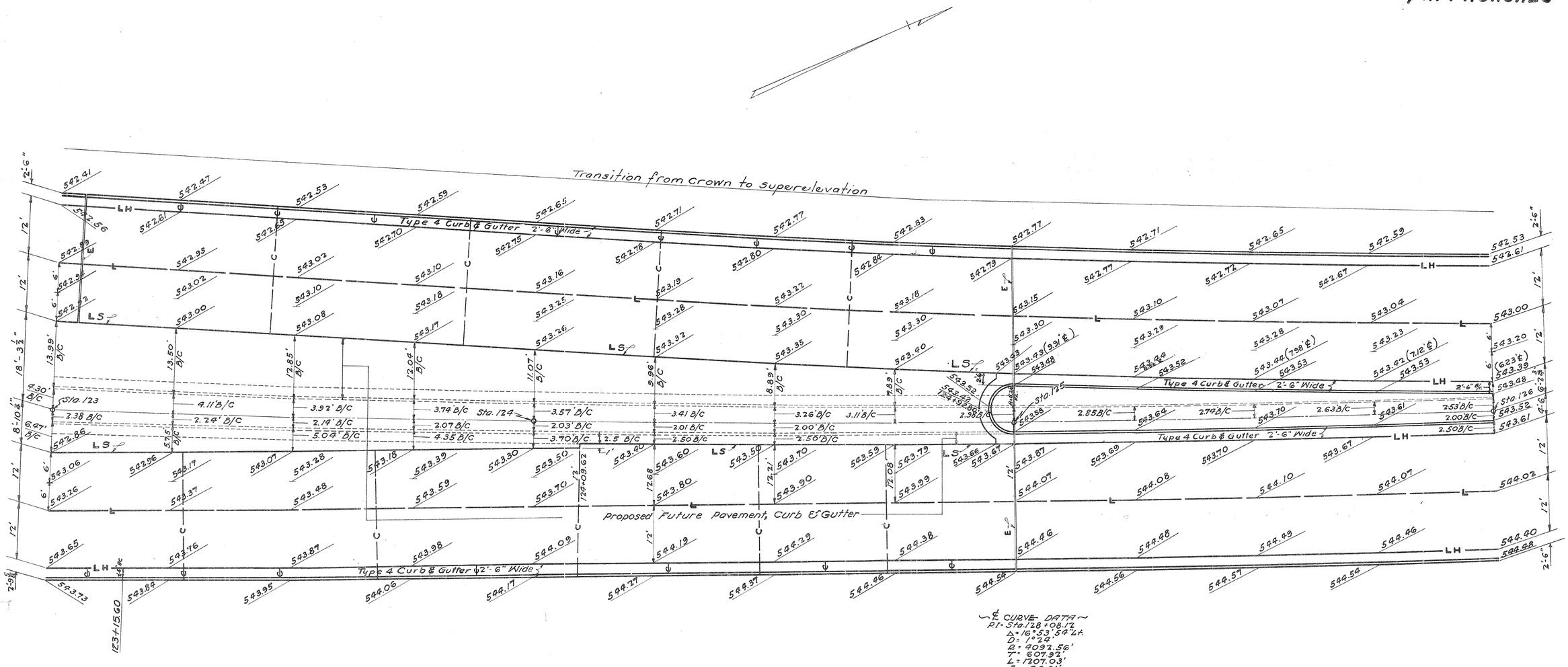
Drawn by		Date	
Checked by		Date	
Checked by		Date	

PAV'T. DETAILS S.H. 987 - STA. 120+00 TO STA. 123+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGZ	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES



NOTE

SPACING OF TRANSVERSE JOINTS NOT SHOWN

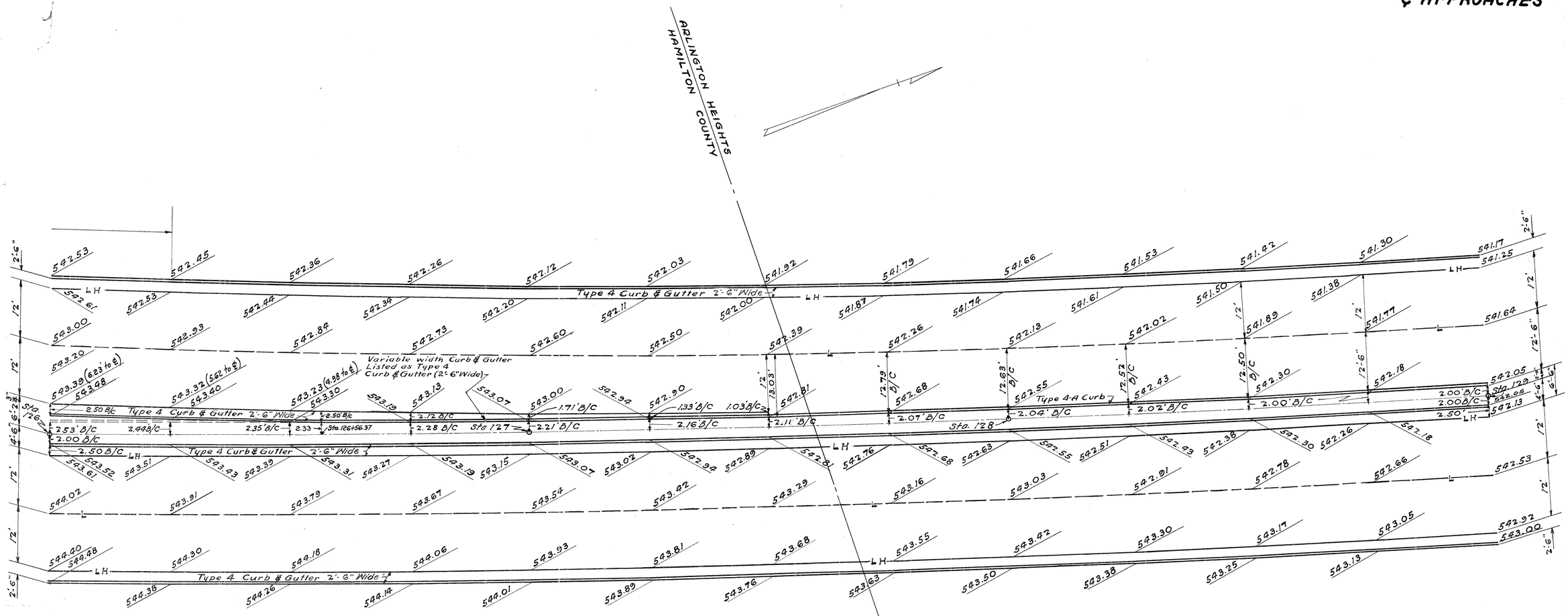
For Pavement Contraction Joints - see Joint Details
For Pavement Expansion Joints - see Joint Details
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No. 14

STA. 123+00 TO STA. 126+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES



NOTE

SPACING OF TRANSVERSE JOINTS NOT SHOWN

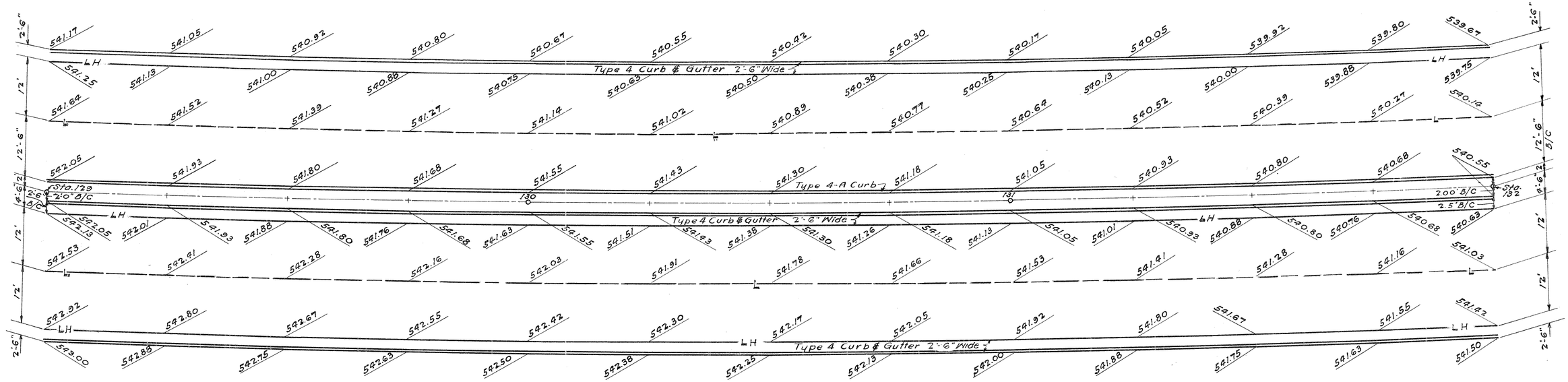
For Pavement Contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details.
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14

STA. 126+00 TO STA. 129+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1.)	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT) "B", ARLINGTON HEIGHTS. LOCKLAND (PT.) & APPROACHES



℄ CURVE DATA
P.I. = Sta. 128+08.12
Δ = 16°53'54" Lt.
D = 1°24'
R = 4092.56'
T = 607.92'
L = 1207.03'
E = 44.91'
P.C. = Sta. 122+00.20
P.T. = Sta. 134+07.23

NOTE

SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details.
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14

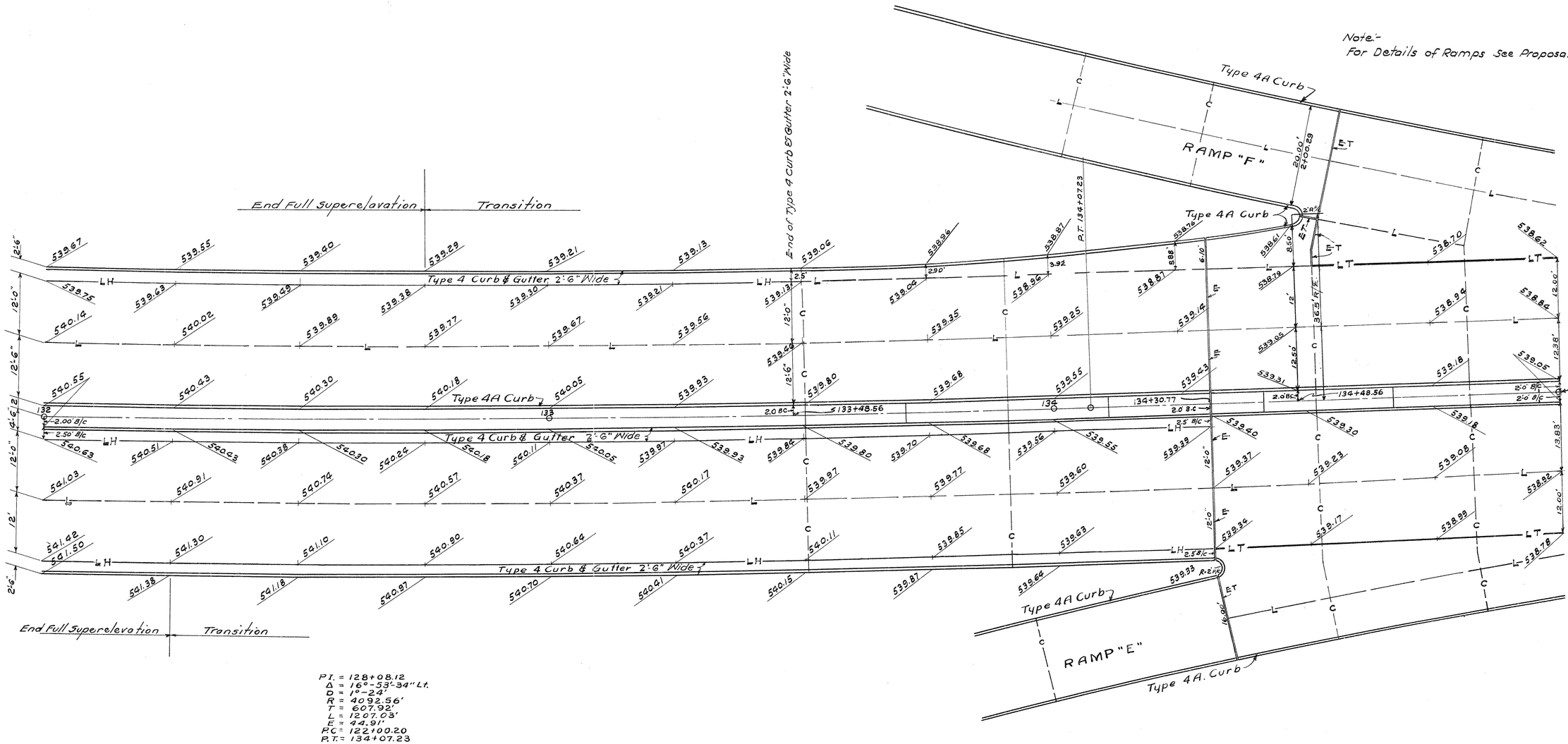
STA. 129+00 TO STA. 132+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 987-SEC." Cincinnati-(Pt.), "B", Arlington Heights, Lockland-(Pt.)"
& Approaches

Note:-
For Details of Ramps See Proposal No 2



P.I. = 128+08.12
Δ = 16°-53'-34" Lt.
D = 1°-24'
R = 4092.56'
T = 607.92'
L = 1207.03'
E = 44.91'
P.C. = 122+00.20
P.T. = 134+07.23

Note:-
For Details of Ramps See Proposal No 2.

~NOTE~

SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details.
For Concrete Curb & Gutter & Pavement Median see General Notes.
For Pavement Symbols & Joint Legend, see Sheet No 14.

STA. 132+00 To STA. 135+00

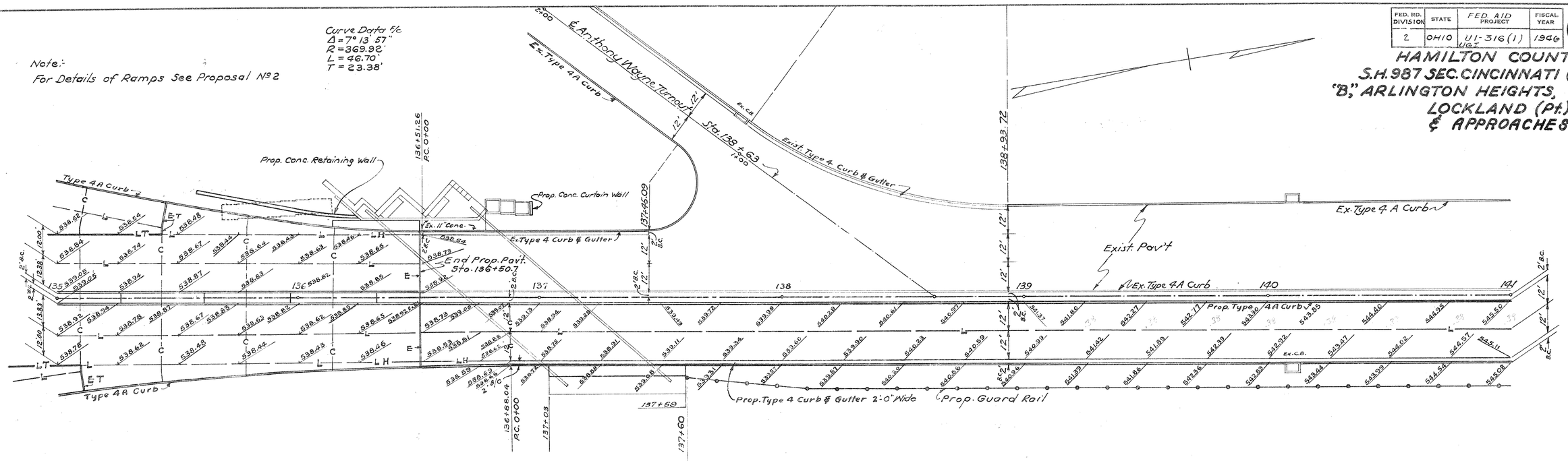
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OH10	UI-316(1)	1966

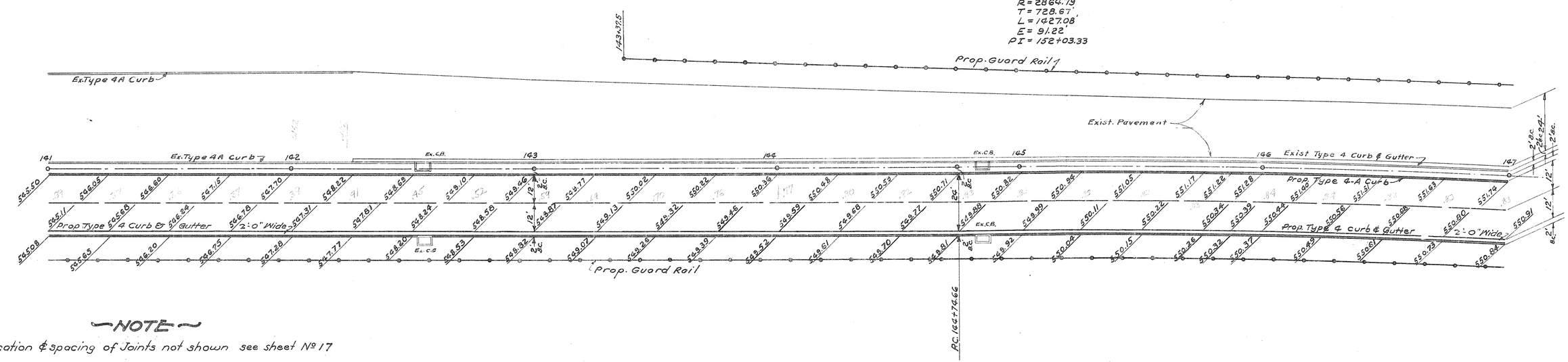
152
289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.)
"B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

Note:-
For Details of Ramps See Proposal No 2

Curve Data f/c
Δ = 7° 13' 57"
R = 369.92'
L = 46.70'
T = 23.38'





NOTE

For location & spacing of Joints not shown see sheet No 17

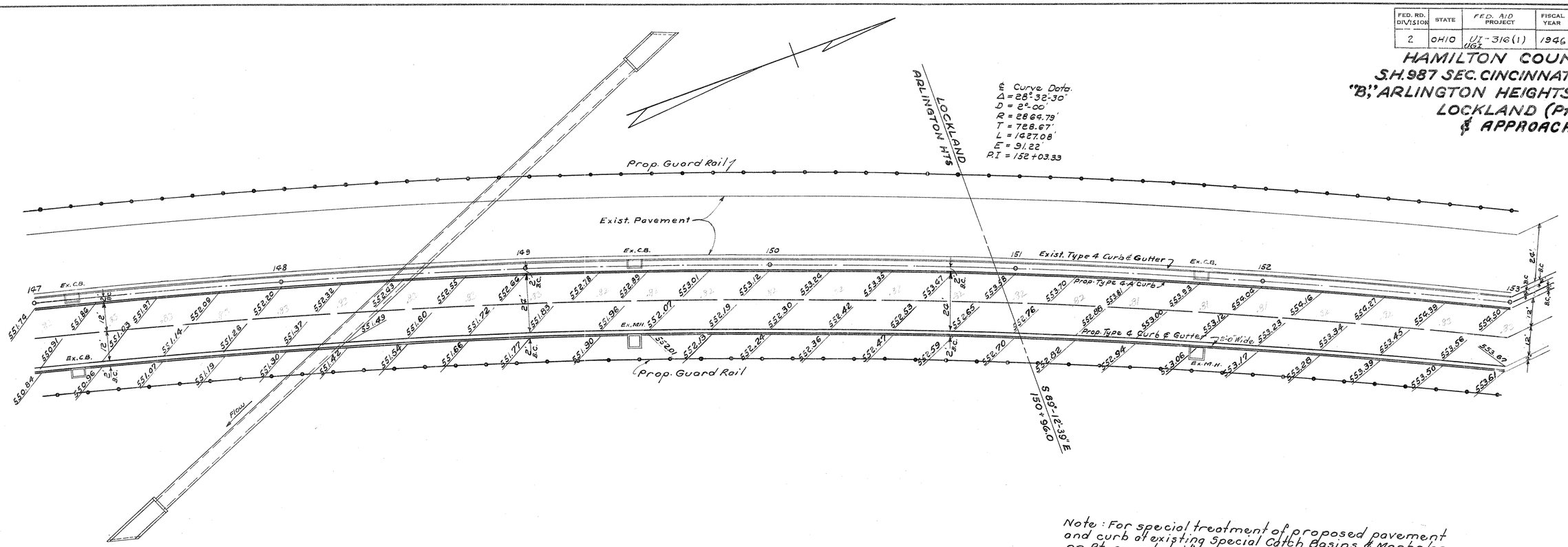
For Pavement Contraction Joints - see Joint Details
For Pavement Expansion Joints - see " "
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14

STA. 135+00 to STA. 147+00

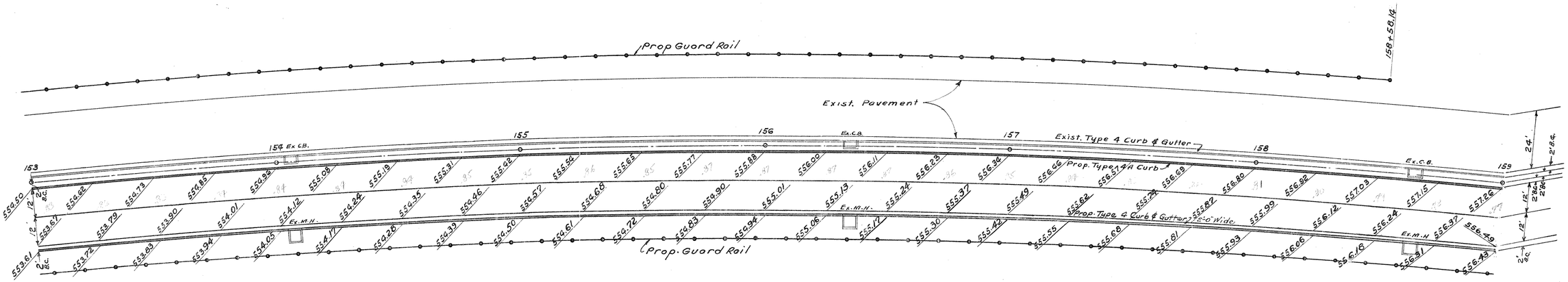
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
SH. 987 SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES



Note: For special treatment of proposed pavement and curb at existing Special Catch Basins & Manholes on Rt., see details on Sh. No. 15



NOTE

SPACING OF TRANSVERSE JOINTS NOT SHOWN

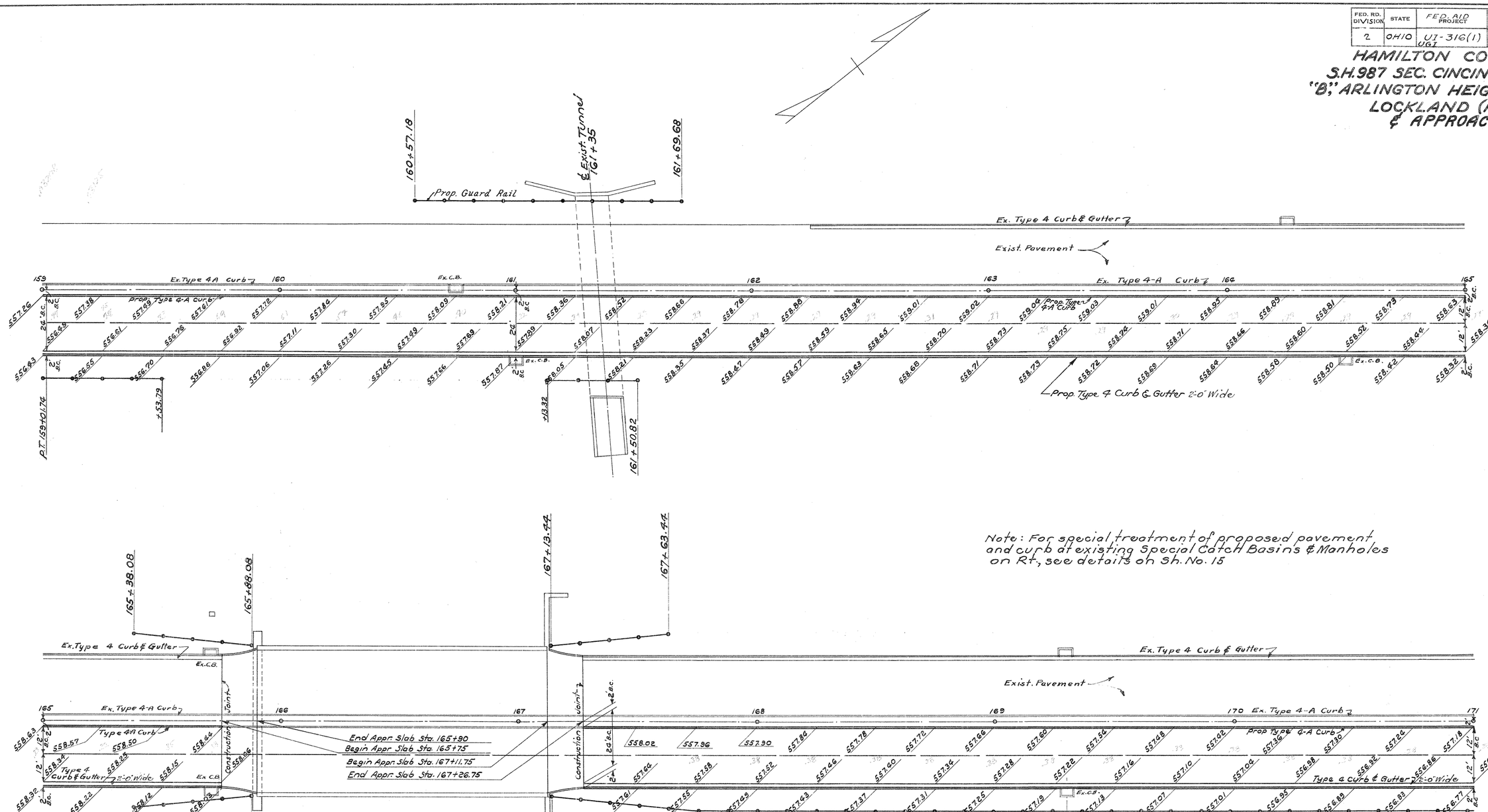
For Pavement Contraction Joints - see Joint Details
For Pavement Expansion Joints - see " "
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No. 14

STA. 147+00 to STA. 159+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES



Note: For special treatment of proposed pavement and curb at existing Special Catch Basins & Manholes on Rt., see details on Sh. No. 15

NOTE

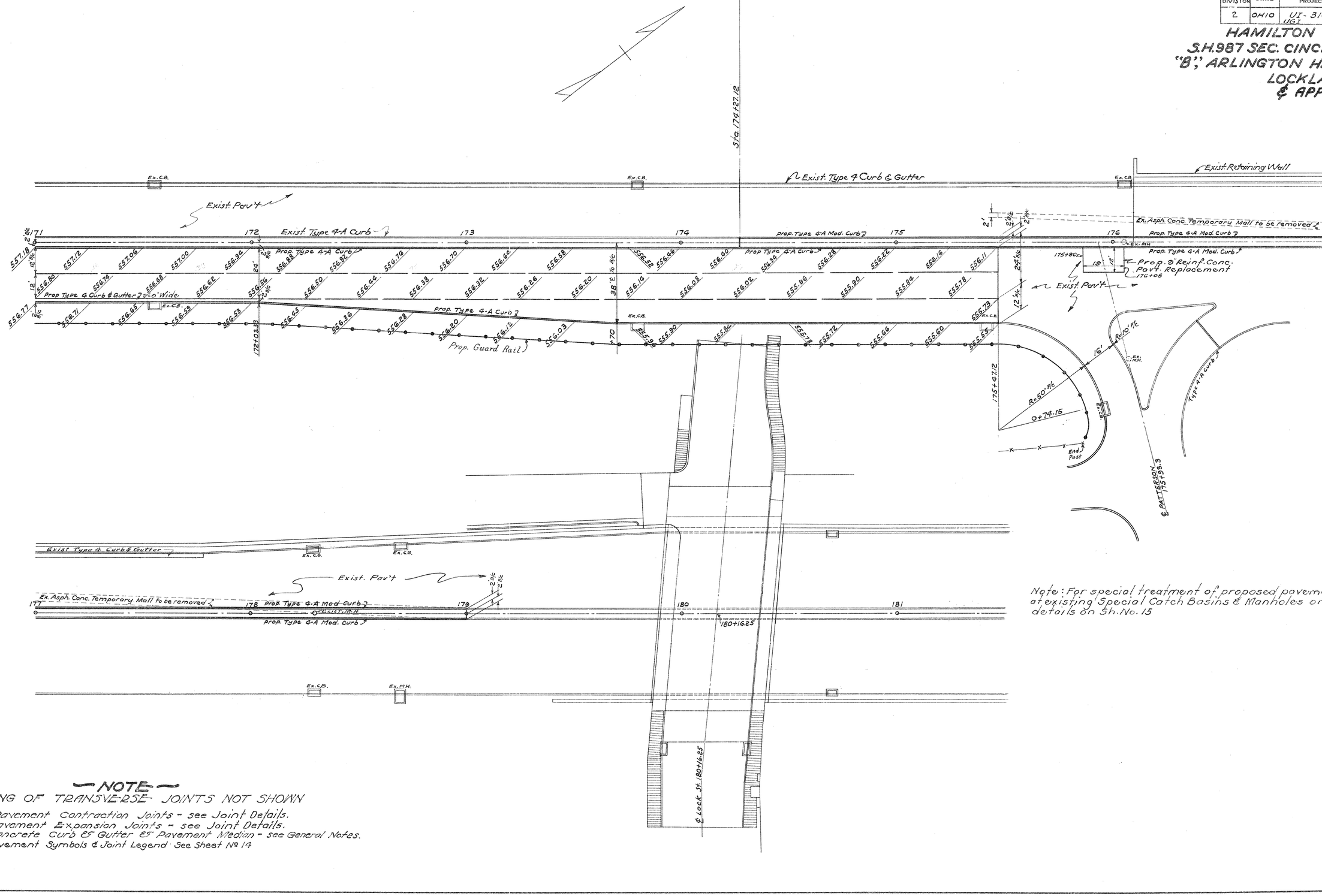
SPACING OF TRANSVERSE JOINTS NOT SHOWN
For Pavement Contraction Joints - see Joint Details
For Pavement Expansion Joints - see " "
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14

STA. 159+00 to STA. 171+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGJ	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES



Note: For special treatment of proposed pavement & curb at existing Special Catch Basins & Manholes on Rt. see details on Sh. No. 15

NOTE

SPACING OF TRANSVERSE JOINTS NOT SHOWN

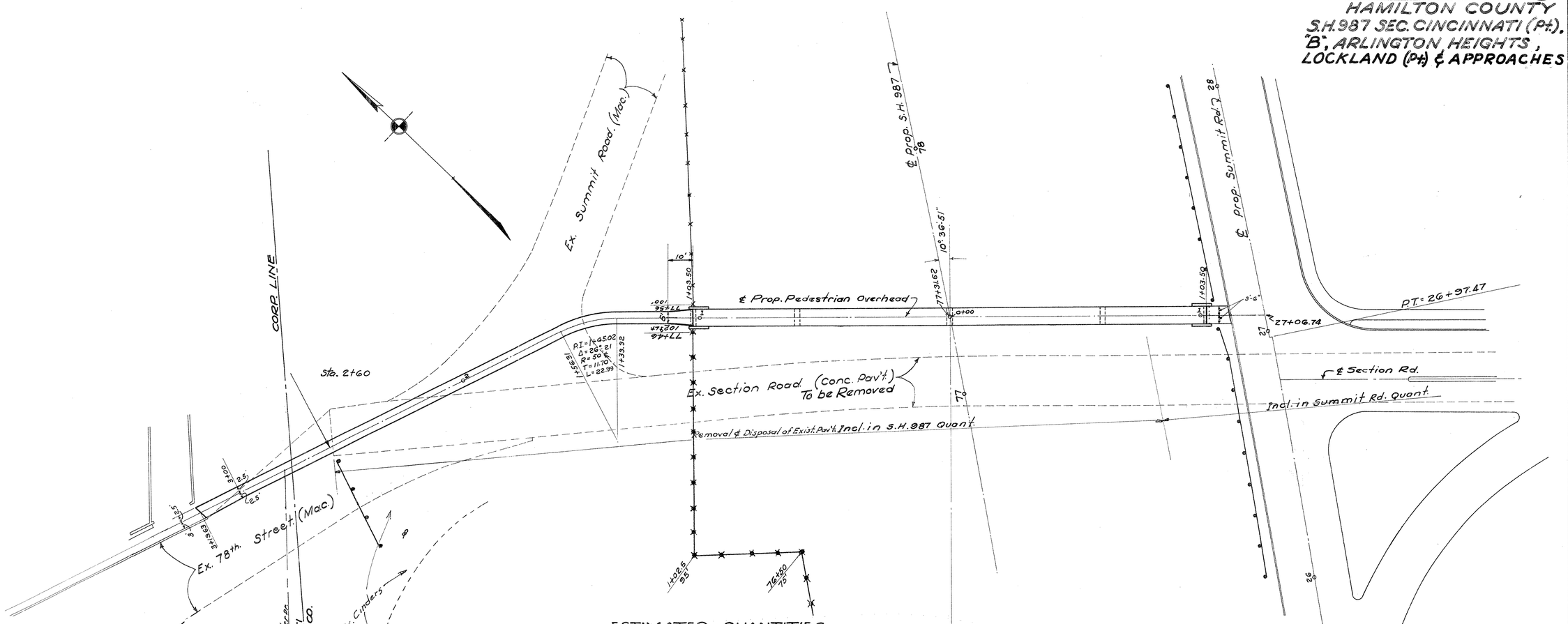
For Pavement Contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details.
For Concrete Curb & Gutter & Pavement Median - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14

STA. 171+00 To STA. 181+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UT-316(1) UGT	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES



ESTIMATED QUANTITIES

Sec. "B" (Rural)

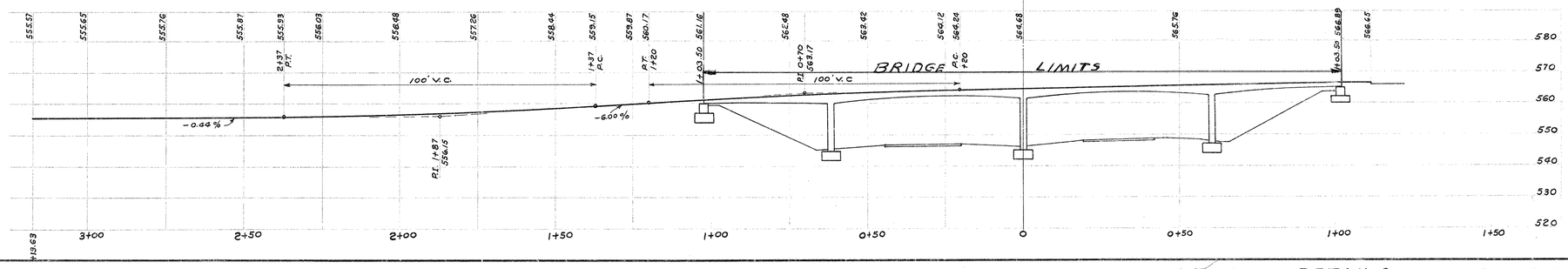
* Excavation (Incl. in Rdwy. Quant.)	Item E-1	1252	Cu. Yd.
* Embankment (Incl. in Rdwy. Quant.)		1525	Cu. Yd.
* Seeding & Protecting, Type "A"	Item L-9	3752	Sq. Yd.
* Placing Stockpiled Topsoil	Item L-3	1729	Sq. Yd.
4" Concrete Sidewalk	Item I-13	944	Sq. Ft.

Sec. Cinti. (Pt.) (Municipal.)

4" Concrete Sidewalk,	Item I-13	214.3	Sq. Ft.
Guard Rail, Steel Beam Type (Deep)	Item I-15	37.5	Lin. Ft.

NOTE: For Cross Sections, See Sheets No. 157 to 160

* Carried to Roadway X-Sections



SIDEWALK DETAILS — STA. 77+31.62 RT. & LT.

DIVISION 2 FED AID OHIO UI-3/6 (1) 1946 UGI

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HAMILTON COUNTY
S.H 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

Plotted By	J.B.W. C.L.
Templates Plotted	J.B.W.
Templates Checked	
Drainage Checked	
Areas	T.S.
Volumes	
Volumes Checked	
Balance Points	

Quantities included in S.H. 987

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

Seeding
½" Per Ft.
Exist. Conc. Pav't.
556.47
2+00
556.90
Ex. 18" Storm

Seeding
½" Per Ft.
Exc. & Backfill
557.26
1+75
557.54
Ex. 18" Storm
Ex. 12" Overflow

Seeding
Exc. & Backfill
Ex. 18" Storm
558.43
1+50
557.80
Ex. 12" Overflow
Ex. 8" San.

Seeding
559.87
1+25
558.0
Ex. 12" Comb.

Seeding
½" Per Ft.
Exist. Conc. Pav't.
561.16
1+02.5
558.2
Ex. 12" Comb.

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

PEDESTRIAN OVERHEAD - STA. 1+02.50 TO STA. 2+00 LEFT.

Plotted By	J.B.W.	C.L.
Templates Plotted	J.B.W.	
Templates Checked		
Drainage Checked		
Areas		
Volumes		
Volume Checked		
Balance Points		

DIVISION 2 FED AID OHIO UI-3(6(1) UGI 1946 158 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON HTS. LOCKLAND (PT.) & APPROACHES

Seeding Width Lin. Ft.	Seeding Area Sq. Yds.	Top Soil Width Lin. Ft.	Top Soil Area Sq. Yds.	END AREA VOLUME CUT	END AREA VOLUME FILL	CUT	FILL

DIVISION 2 | FED AID OHIO US-316 (1) 1946 UGI | 159 | 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.) "B", Arlington Hts, Lockland (Pt.) & Approaches

Plotted By	
Templates Plotted	
Templates Checked	
Drainage Check	
Areas	
Volumes	
Volumes Checked	
Balance Points	

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

555.65
3+00
555.60

Ex. 24" Storm

555.75
2+75
555.75

Ex. Conc. Pav't.
Seeding
½" Per ft.
555.87
2+50
556.70

Ex. 21" Storm

Ex. Conc. Pav't.
Seeding
½" Per ft.
Exc. & Backfill
556.02
2+25
556.54

Ex. 21" Storm

Quant. Incl. in S.H. 987 Sects.
½" Per ft.
Seeding

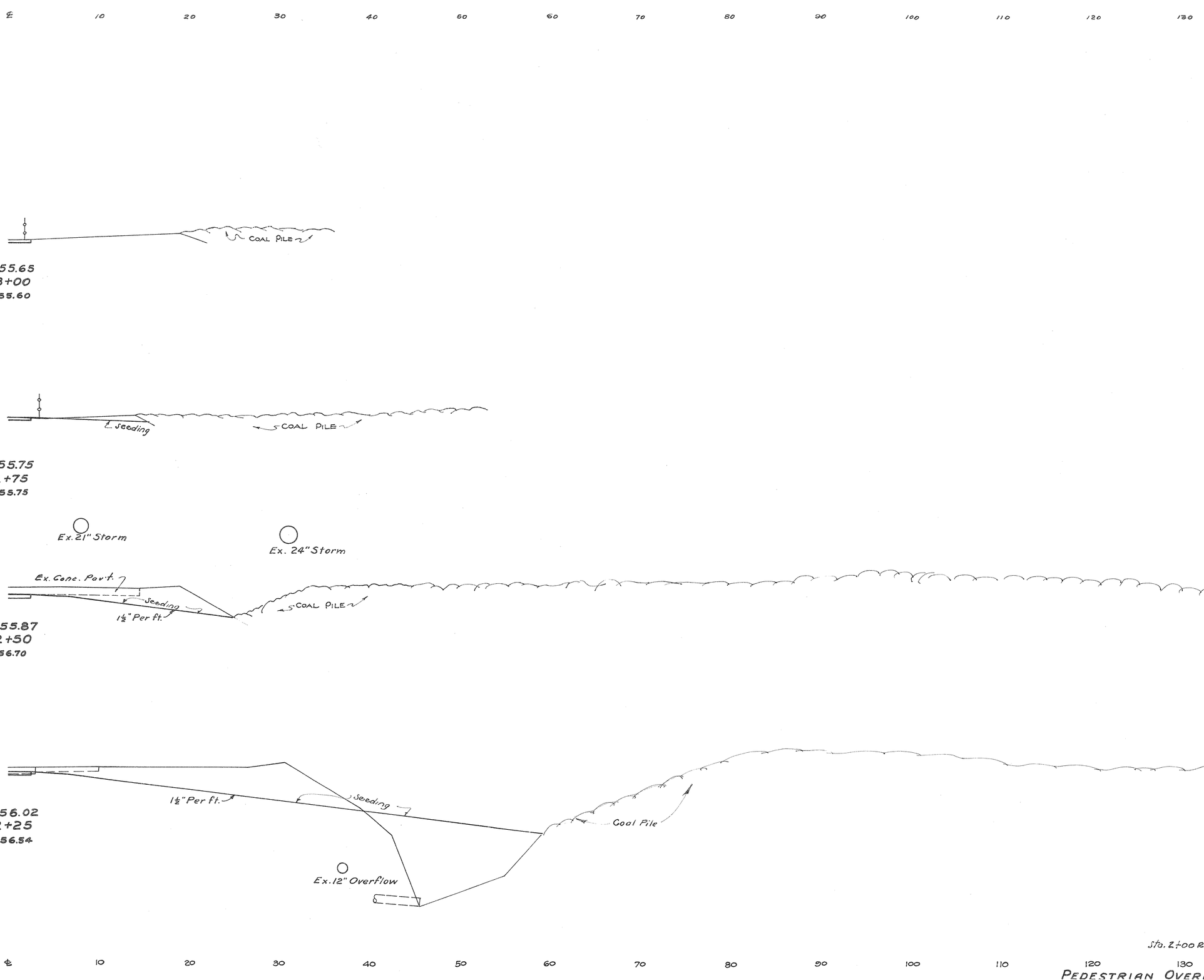
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

Pedestrian Overhead - Sta. 2+25 To Sta. 3+00 Lt.

DIVISION 2 | FED AID OHIO UI-316 C(1) UGI | 1946 | 160 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HTS, LOCKLAND (PT.) & APPROACHES

Plotted By	T.S.
Templates Plotted	J.B.W.
Templates Checked	
Drainage Checked	
Areas	
Volumes	
Volumes Checked	
Balance Points	



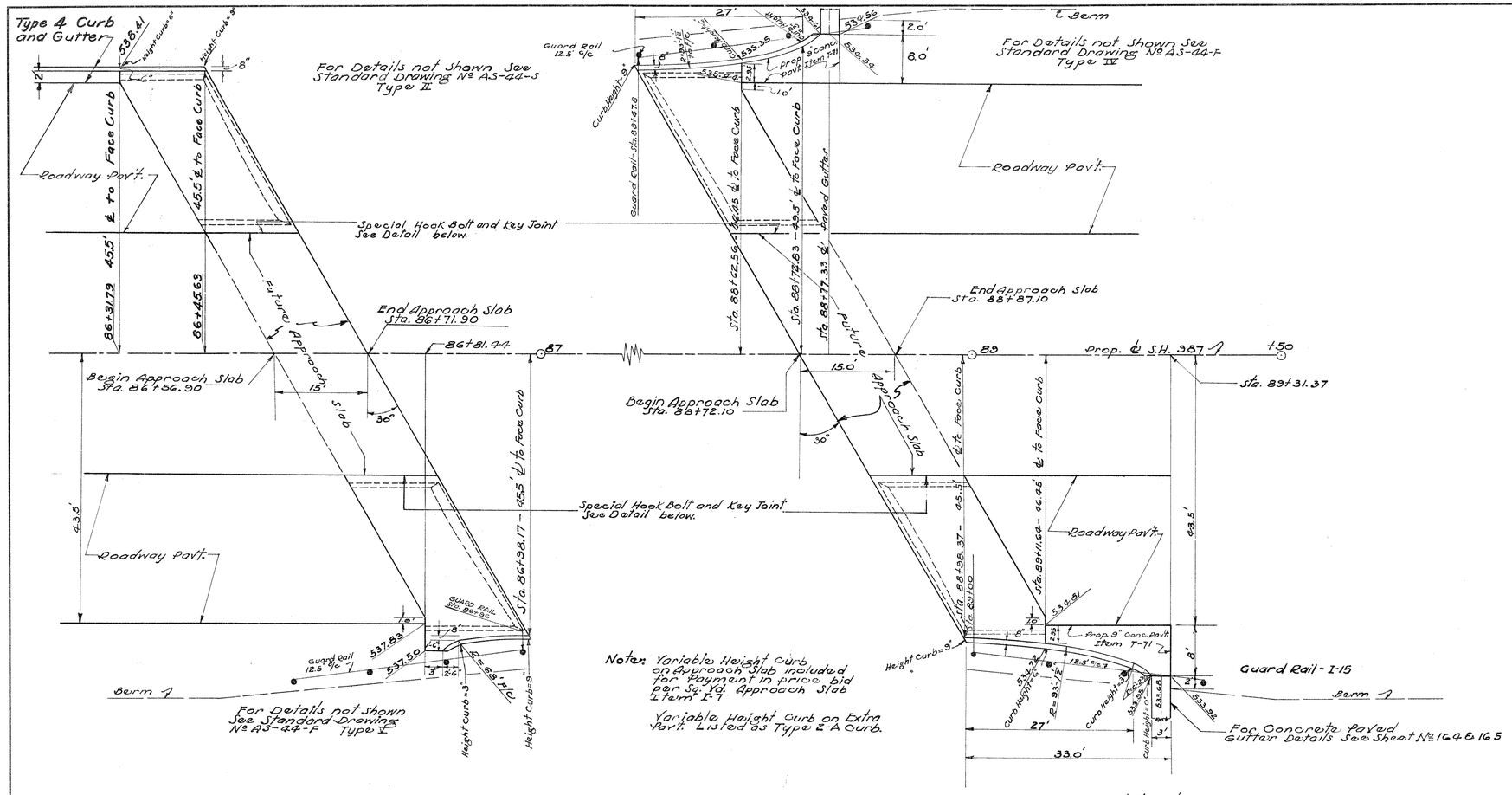
Seeding Width Lin. Ft.	Seeding Area Sq. Yds.	Top Soil Width Lin. Ft.	Top Soil Area Sq. Yds.	END AREA CU. YD. CUT	END AREA CU. YD. FILL	CUT	FILL
0	0			Rt. & Lt.		0	0
18	18					2	0
13	13			Rt. & Lt.		3	0
138	138					62	0
86	86			Rt. & Lt.		130	0
390	251					148	55
195	95			Rt. & Lt.		190	118
615	276					167	126
Sta. 2+00 Rt. & Lt.		248	104	Sta. 2+00		171	155

PEDESTRIAN OVERHEAD - STA. 2+25 TO STA. 3+00 RT.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 387 Sec. Cincinnati (Pt) "B" Arlington Hts. Lockland (Pt.) & APPROACHES.

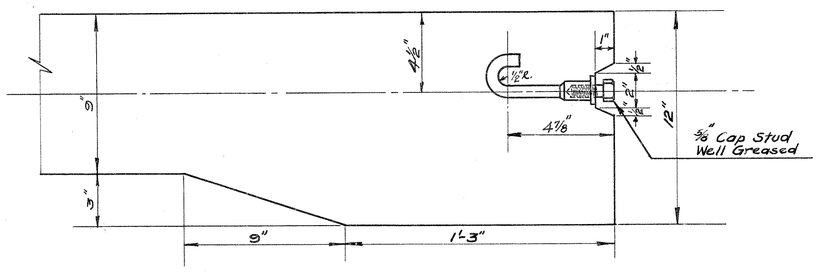


Note: Variable Height Curb on Approach Slab included for Payment in price bid per Sq. Yd. Approach Slab Item I-7

Variable Height Curb on Extra Pavt. Listed as Type 2-A Curb.

SOUTH APPROACH SLAB DETAIL
Scale: 1" = 10'

NORTH APPROACH SLAB DETAIL
Scale: 1" = 10'



DETAIL OF SPECIAL HOOK BOLT & KEY JOINT
Scale 3" = 1'-0"

ESTIMATED QUANTITIES

Sta. 86+56.90 To Sta. 86+71.90
Item I-7 -Reinforced Concrete Approach Slabs ——— 90.3 Sq. Yds.

Sta. 88+72.10 To Sta. 88+87.10
Item I-7 -Reinforced Concrete Approach Slabs ——— 90.7 Sq. Yds.

Sta. 88+62.56 to Sta. 89+31.37

Item T-71	9" Reinforced Concrete Pavement	22	Sq. Yds.
Item I-12	Type 2A Curb	31	Lin. Ft.

APPROACH SLAB DETAILS

Sta. 86+56.90 to Sta. 86+71.90
Sta. 88+72.10 to Sta. 88+87.10

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGT	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.)
"B" ARLINGTON HEIGHTS
LOCKLAND (Pt.) & APPROACHES

P.I. = 3+00.37
Δ = 12°-00'
D = 6°-00' LT.
T = 100.37
L = 954.93'
R = 200.00
P.C. = 2+00
P.T. = 4+00

Note: For Location of Trees on S.H. 987, See Sheets Nº 31 & 32

End Prop Channel Sta 4+06

5# Salix Incana (3 to 4') (Rosemary Willow) Spaced 6' on Center at Toe of Channel Slope

P.C. 2+00

Sta. 0+00 ℄ Channel = Sta. 87+75 on S.H. 987

M. & E. CANAL LAND

P.I. = 3°50'41"-00
D = 11°-30'
T = 236.01
L = 440.82
E = 53.07
R = 498.22

M. & E. Canal R/W

ROXANNA SIMMS
PROP R/W

Prop. ℄ S.H. 987

N 26°-04'-39" E

Prop R/W

Channel Excavation Included in Structures Over 20' Span.

Channel Excavation Included in Roadway Quantities.

10# Salix Incana (3 to 4') (Rosemary Willow) Spaced 6' on Center at Toe of Channel Slope.

48" INTERCEPTER SEWER

Prop 70' R/W

ROXANNA SIMMS

P.I. 8+50.01
Δ = 19°-24'
D = 6°-00'
T = 163.23
L = 323.33
R = 954.93
E = 13.65

P.C. 6+86.78
P.T. 10+10.11

Construction Limits

P.I. 13+91.25
Δ = 18°-00'
D = 7°-06'
R = 806.98
T = 1/3.91
L = 253.51
E = 7.35

P.C. 12+27.84
P.T. 14+53.19

P.I. 17+36.49
Δ = 18°12'30"
D = 10°08'
R = 567.28
T = 91.67
L = 181.77
E = 7.35

P.C. 16+44.82
P.T. 18+26.59

P.C. 20+72.15

EARL & MARGUERITE McINTOSH

EROSION CONTROL ESTIMATED QUANTITIES

MILL CREEK CHANNEL — Sta. 4+06 (West) to Sta. 47+00 (East)

Item L-9 Seeding & Protecting, Type "A" ..... 29,261 Sq. Yds.
Item L-13 Salix Incana (Rosemary Willow) ..... 826 Each

ESTIMATED QUANTITIES
Mill Creek Channel
Sta. 4+06 (West) to Sta. (5+57.77 (Back) = 5+64.91 (Ahead)) East

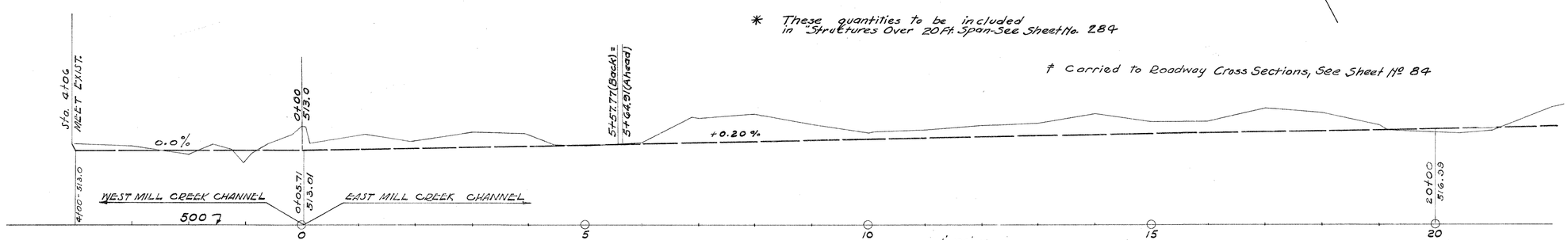
* Item E-3 Channel Excav. — 9782 Cu. Yds.
† Embankment — 819 Cu. Yds.

ESTIMATED QUANTITIES
Mill Creek Channel
Sta. (5+57.77 Back = 5+64.91 Ahead) To Sta. 47+00

Item E-3 Channel Excav. — 86361 Cu. Yds.
† Embankment — 7862 Cu. Yds.
Item S-1 Class "E" Concrete — 102.5 Cu. Yds.
Item E-2 Excavation For Structures — 228 Cu. Yds.

* These quantities to be included in "Structures Over 20 Ft. Span - See Sheet No. 284

† Carried to Roadway Cross Sections, See Sheet Nº 84



Profile of Mill Creek Scale:- 1"=100' Hor. 1"=10' Vert.

MILL CREEK CHANNEL CHANGE

FED. RD. DIVISION	STATE	FED AID. PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UIGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.)
"B" ARLINGTON HEIGHTS
LOCKLAND (Pt.) & APPROACHES

Note: For Location of Trees on S.H. 987, see Sheets No. 34 & 35

MIAMI & ERIE CANAL LAND

M.&E. Canal R/W Line Z

THE C.C.C. & ST.L. RAILROAD Co.

CITY OF CINCINNATI

ROXANNA SIMMS

Prop. ℄ S.H. 987

Prop. R/W Z

Ex. R/W Z

NOTE: For location of Trees within Prop. R/W See Alignment Sheets.

N 26°06'39" E

Ex. R/W

Paved Gutter Type "A"

Construction Limits

Prop Channel R/W Z

Existing Mill Creek Channel

54" INTERCEPTER SEWER

Sta. 31+70

Sta. 34+57

NOTE: Existing 54" Sewer to be Encased from Sta. 31+70 to Sta. 34+57 as shown.

PROP ℄ MILL CREEK CHANNEL

ROXANNA SIMMS

OLLETHA V. STEWART

ELSIE B. STEWART

EARL & MARGUERITE McINTOSH

P.I. 22+32.51
Δ = 34°-28'-30"
D = 11°-12'
R = 511.51'
T = 160.36'
L = 310.79'
E = 24.54

P.I. 23+88.72 Ahead
P.I. 23+88.39 Back

P.C. 20+72.15

P.I. = 27+10.26
Δ = 34°-47'-30"
D = 6°-00'
R = 954.93'
T = 299.16'
L = 579.86'
E = 45.77

P.C. 24+11.08

P.T. 29+90.92

P.I. = 37+43.84
Δ = 26°-03'-30"
D = 7°-00'
R = 818.51'
T = 189.91'
L = 372.26'
E = 21.63

P.C. 35+54.43

P.T. 39+26.69

P.C. 39+34.63

P.I. = 42+20.14
Δ = 26°-03'-30"
D = 7°-00'
R = 818.51'
T = 189.91'
L = 372.26'
E = 21.63

P.T. 44+95.89 BACK
44+96.40 AHEAD

454 Volt Ingano (Std.) Temporary Wilson Tower Proposed Center Line of Channel See Sta. 21+00 to Sta. 27+60

DAY INCORPORATED

HAMILTON-MASON ROAD

Prop. R/W Z

Construction Limits

End Prop. Channel Sta. 47+00

Existing Ground Line

Proposed Grade Line

+0.2%

+0.22%

+0.174%

54" Intercepter Sewer

F/L = 513.04

F/L = 513.26

F/L = 513.67

F/L 514.58

F/L 514.78

23+82.94 (Back)
23+83.72 (Ahead)

24+61.34
517.30

30+61.34
519.23

44+95.82 (Back)
44+96.40 (Ahead)
521.73

532.06

532.37

532.97

531.28

534.07

20+00
516.99

47+00

20

25

30

35

40

45

Profile of Mill Creek Scale:- 1"=100' Hor. 1"=10' Vert.

54" Intercepter Sewer

6"

CLASS "E" CONCRETE ENCASEMENT

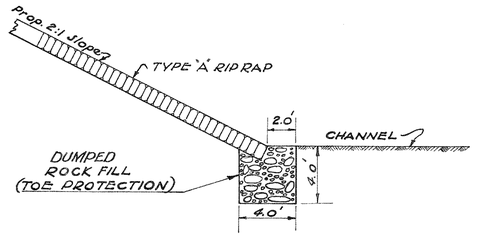
SECTION "A-A"

MILL CREEK CHANNEL CHANGE

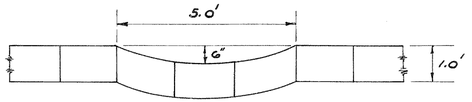
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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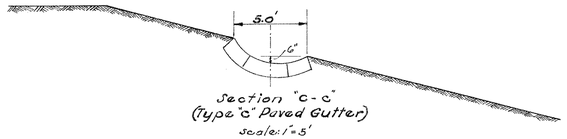
HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B" Arlington Hts. Lockland (Pt.) & Approaches.



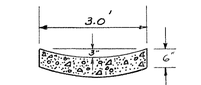
DETAIL RIP RAP & DUMPED ROCK FILL
Scale: 1" = 5'



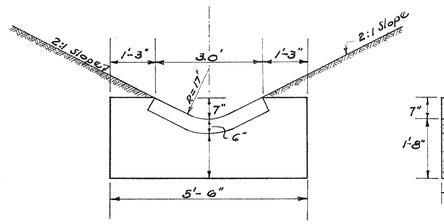
Section "B-B"
PAVED GUTTER DETAIL (TYPE "C")
Scale: ½" = 1'



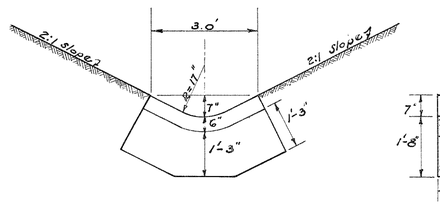
Section "C-C"
(Type "C" Paved Gutter)
Scale: 1" = 5'



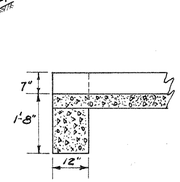
SECTION "A-A"
PAVED GUTTER DETAIL
TYPE "B"
Scale: ½" = 1'

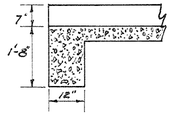


DETAIL CUT OFF WALL OUTLET END

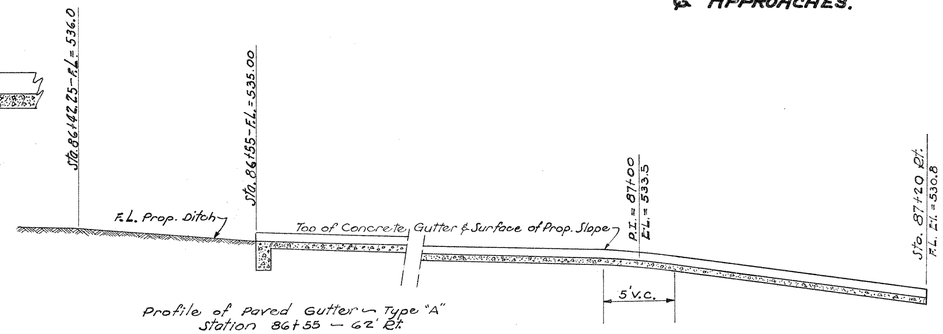


DETAIL CUT OFF WALL INLET END





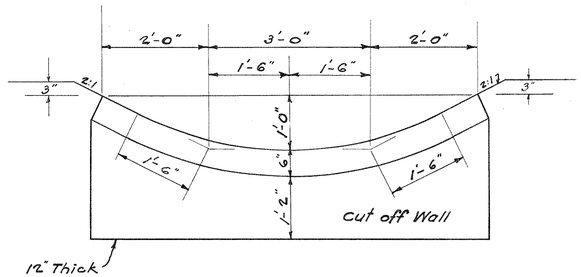
PAVED GUTTER DETAIL
(TYPE "A")
Scale: ½" = 1'



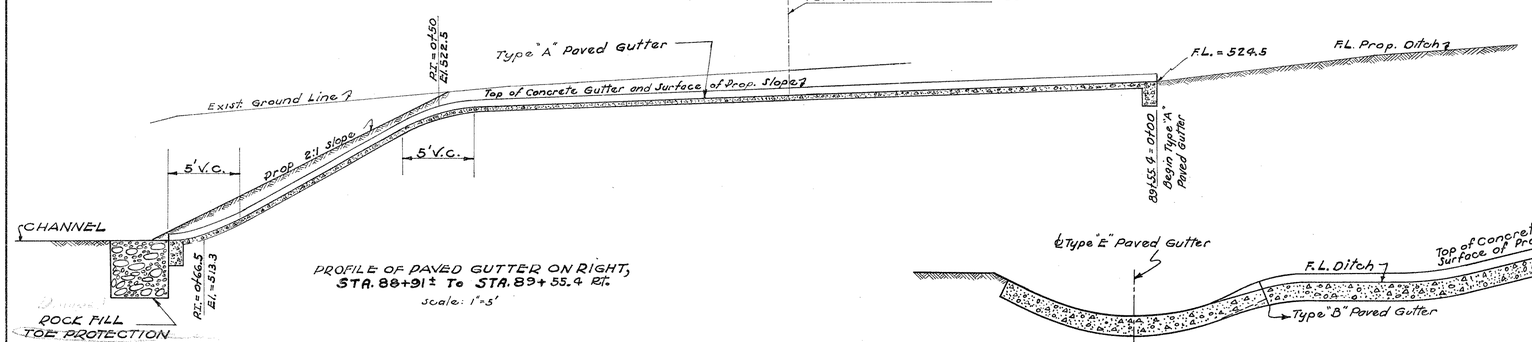
Profile of Paved Gutter — Type "A"
Station 86+55 — 42' Pt.

ESTIMATED QUANTITIES
Sta. 86+55 Pt. To Sta. 87+20 Pt.

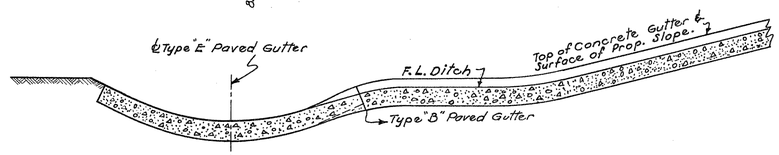
Item I-14 Type "A" Paved Gutter 65 Lin. Ft.



DETAIL OF PAVED GUTTER — TYPE "B"
Scale 3/4" = 1'-0"

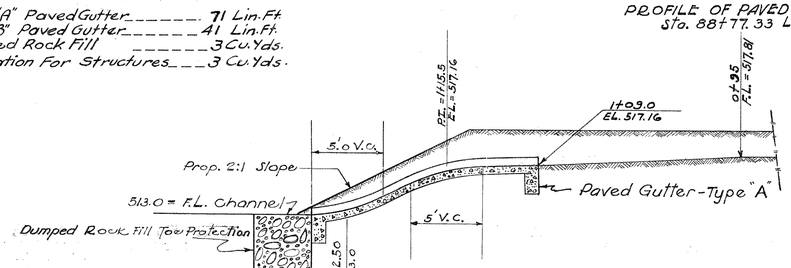


PROFILE OF PAVED GUTTER ON RIGHT,
STA. 88+91± To STA. 89+55.4 Pt.
Scale: 1" = 5'



ESTIMATED QUANTITIES
Sta. 88+91± To Sta. 89+55.4 Pt.

Item I-14	Type "A" Paved Gutter	71 Lin. Ft.
Item I-14	Type "B" Paved Gutter	41 Lin. Ft.
Item I-10	Dumped Rock Fill	3 Cu. Yds.
Item E-2	Excavation For Structures	3 Cu. Yds.

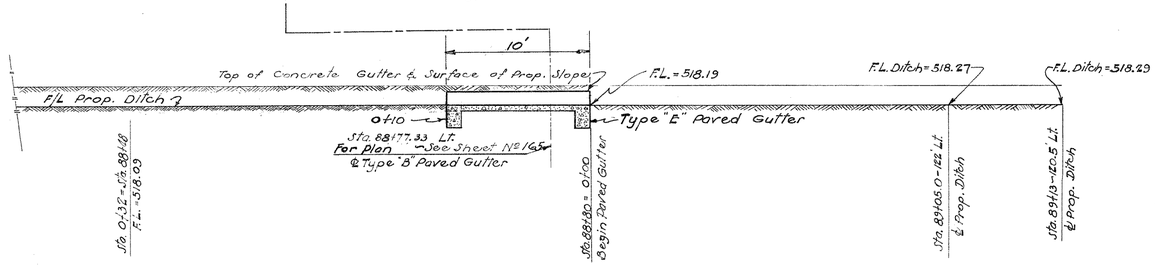


PROFILE OF PAVED GUTTER
Sta. 1+09.5 Rt. (West Mill Creek)

PROFILE OF PAVED GUTTER
Sta. 88+77.33 Lt.

ESTIMATED QUANTITIES
Sta. 1+09.5 (West Mill Creek) To Sta. 88+80 Lt.

Item I-14	Type "A" Paved Gutter	17.0 Lin. Ft.
Item I-14	Type "B" Paved Gutter	69.0 Lin. Ft.
Item I-10	Dumped Rock Fill	3.0 Cu. Yds.
Item E-2	Excavation for Structures	3.0 Cu. Yds.
Item I-14	Type "E" Paved Gutter	10.0 Lin. Ft.



RIP RAP & PAVED GUTTER DETAILS — STA. 87+75

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HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), 8th Arlington Hts. Lockland (Pt.)
& APPROACHES.

Ex. M.H. Top. El. = 532.03 Fl. 48" = 506.82 Fl. 18" = 509.33

48" R.C.P. County Intercepter Sewer

Ex. M.H. Top. El. 532.50 Fl. 48" = 507.92

Roadway pavt.

Roadway pavt.

Prop. Ditch

4:1

4:1

Paved Gutter (Type "B")

Begin Type "B" Paved Gutter Sta. 88+80 - 12±5.5' Rt. & Lt.

89+00 - 12±5.5' Rt. & Lt. Ditch

88+77.23±5.5

Prop. ℄ S.H. 987

For details not shown see Bridge Plan

89+29.37 - 31.5' 93° from ℄ S.H. & ℄ Gutter

89+45 - 32.5' to ℄ of Turn

Paved Gutter Type "B"

4:1 prop. Ditch

Sta. 0+00 (89+55.2) Begin Paved Gutter (Type "A")

R = 109.5' ℄ Gutter

Transition from 2:1 to 4:1 Slope

R = 109.5' ℄ Gutter

Begin Type "A" Paved Gutter

R = 23'

Stone from old abutments (5'x3'x1½') to be removed with Channel Excavation

18"

4'

Prop. ℄ Mill Creek Channel

STA. 4+06 = ZERO SECTION

℄ Pl. = STA. 4+00

+50 3+00 +50 2+00 +50 1+00 +50 1+00 +50 1+00

℄ C. = STA. 2+00

Existing Steel Encased Concrete Piers - (Demolished) To be Removed with Channel Excavation

WEST MILL CREEK CHANNEL

EAST MILL CREEK CHANNEL

87+75 ℄ S.H. 987 = 0+00 ℄ Channel

60°

Dumped Rock Fill (Toe Protection)

Ex. Steel Encased Concrete Piers

Cut off Existing Sheet Piling 3' below Surface of finished Slope

Rip Rap Cut Slopes as Shown

El. Bench = 528.7

El. Bench = 531.3

Paved Gutter (Type "C")

Type "C" Paved Gutter

Fill in front of South Abutment to be Dumped Rock

Prop. Std. 1-63 C.B. Sta. 86+21.78

86+07 End Fence

Prop. Std. 1-24 C.B.

For details not shown see Bridge Plan

Type "A" Curb & Gutter 2'-0" Wide

P.T. = 85+95.97

86

Prop. 18" to 42" ℄ Gutter

Begin Paved (Type "C") Gutter

Begin Paved (Type "A") Gutter

Prop. 42" to 48" ℄ Gutter

Transition from 2:1 to 4:1 Slope

Note: For tree location see Mill Creek Channel Change Alignment Sheet Nº 162 & 163

Note: For Details of Riprap and Paved Gutters See Sheet Nº 164

CURVE DATA MILL CREEK

P.I. = 3+00.37
Δ = 12°-00'
D = 6°-00' Lt.
T = 100.37
R = 954.93'
L = 200.00
E = 5.26'
P.C. = 2+00
P.T. = 4+00

MILL CREEK CURVE DATA

P.I. = 3+52.96
Δ = 50°-41'-40"
D = 11°-30' Lt.
T = 236.01
L = 440.82
E = 53.07
R = 498.22
P.C. = 1+16.95
P.T. = 5+57.77 Back
= 5+64.31 Ahead

Scale: 1" = 20'

ESTIMATED QUANTITIES
BANK PROTECTION - STA. 87+75 Rt. & Lt.

* Item I-10 - Stone Riprap, Type "A" ——— 514 Sq Yds.
* Item I-10 - Dumped Rock Fill ——— 297 Cu Yds.
* Item I-14 - Paved Gutter, Type "C" ——— 251.0 Lin Ft
* Item E-2 Excavation for Structures (wet) 137.0 Cu. Yds.
* Item E-2 Excavation for Structures (dry) 158.0 Cu. Yds.

* These quantities to be included in "Structures over 20 ft. Span" - See Sh. Nº 284

RIP RAP & PAVED GUTTER DETAILS STA. 87+75

DIVISION 2 | FED AID | OHIO UI-316(1) UGI | 1946 | 289 | IGG

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt) "B" Arlington Hts., Lockland (Pt) & Approaches.

℄	END AREA VOLUME CUT	FILL	CUT	FILL
	Seeding Width Area Lin.ft. Sq.Yds.			
1+03.0 Lt. 511.2		64	291	69
		79	153	28
0+88.0 Lt. 512.5		31	260	32
		72	222	18
0+60.0 Lt. 514.1		15	169	2
		143	217	10
0+16.5 Lt. 516.0		44	100	10

PROPOSED BRIDGE
EXIST'T W. WALL
531.3
2:1
EXIST'T ABUT.
PRIOR BRIDGE
531.3
PROP. BRIDGE
531.3
DUMPED ROCK FILL
EXIST'T W. WALL
EX. SHEET PILING
PROP. BRIDGE
531.3
DUMPED ROCK FILL
RIP RAP
EX. SHEET PILING
2:1
DUMPED ROCK FILL TOE PROTECTION ITEM I-10

PLOTTED BY	E.F.L.
TEMPLATES PLOTTED	E.F.L.
TEMPLATES CHECKED	J.B.W.
DRAINAGE CHECKED	E.F.L.
AREAS	E.S.U.
VOLUMES	E.S.U.
VOLUME CHECKED	E.F.L.
BALANCE POINTS	A.U.H.

WEST MILL CREEK CHANNEL — STA. 0+16.5 To STA. 1+03.0 (LEFT)

DIVISION 2 | FED AID | OHIO UI-316(1) UGI | 1946 | 167 | 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.) "B" Arlington Hts., Lockland (Pt.) & Approaches.

| | | |

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

DIVISION 2 | FED. AID OHIO UI-316(1) UGI | 1946 | 168 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.) "B" Arlington Hts., Lockland (Pt.) & Approaches.

Plotted By	E.F.L.
Templates Plotted	E.F.L.
Templates Checked	J.B.W.
Drainage Checked	E.F.L.
Areas	E.S.U.
Volume	E.S.U.
Volumes Checked	E.F.L.
Balance Points	R.J.H.

For Location and Slope - See Plan

2:1

513.0
1+74.8 Lt
514.0

2:1

Exist. Wing Wall

513.0
1+58 Lt.
514.1

2:1

EXIST. WING-WALL

513.0
1+34 Lt
514.1

2:1

513.0
1+23 Lt
513.4

Sta 1+03

	Seeding Width Area Lin.Ft. Sq.Yds.	END AREA VOLUME CUT	FILL	CUT	FILL
	81		217	19	
	164				204 12
	95		439	21	
	263				426 17
	102		519	16	
	125				201 6
	103		470	14	
	186				282 31
℄	64		291	69	

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

WEST MILL CREEK CHANNEL — STA. 1+23 ℄ TO STA. 1+74.8 (Left)

DIVISION 2 | FED. AID | DHIO UI-316(1) UGI | 1946 | 169 | 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.) & Arlington Hts., Lockland (Pt.) & Approaches.

END AREA VOLUME
CUT FILL CUT FILL

Seeding
Width Area
Lin. ft. Sq. Yds

Platted By E.F.L.
Templates Platted E.F.L.
Templates Checked J.B.W.
Drainage Checked E.F.
Areas E.S.U.
Volumes E.S.U.
Volume Checked E.F.L.
Balance Points A.C.H.

1+92-80' Rt. 9" Huckleberry
1+95-93' Rt. 9" Huckleberry
1+95-103' Rt. 14" Locust
1+85-66' Rt. 2-9" Huckleberries
1+80-50' Rt. 15" Sycamore
1+70-40' Rt. 9" Willow
1+55 9" Elm
1+23 9" Poplar
1+22 12" Elm

Exist. Wingwall
Roadway Excavation
Roadway Excavation End Area Volume cut Fill Cut Fill
Channel Excavation
Exist. Abutment
Exist. Abutment
Exist. Abutment
Roadway Excavation
Channel Excavation
Seeding
Quantities Carried on Left Sheet No. 168

530.00?
3:1
2:1
3:1
2:1
3:1

513.0 1+74.8 Rt. 514.0 1878 0
1405 0
513.0 1+58.0 Rt. 514.1 2638 0
2123 0
513.0 1+34.0 Rt. 514.1 2139 0
842 0
513.0 1+23.0 Rt. 513.3 1994 0
1077 0
Sta. 1+03 Rt. 913 0

72 0
54 0
103 0
90 0
100 0
39 0
30 0
64.2
Sta. 1+03 Rt. 83 6

WEST MILL CREEK CHANNEL — STA. 1+23.0 To STA. 1+74.8 (RIGHT)

DIVISION 2 | FED AID | OHIO UI-316(1) UGI | 1946 | 170 | 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt), B
Arlington Hts., Lockland (Pt.) & Approaches.

Plotted by	E.F.L.
Templates Platted	E.F.L.
Templates Ck'd.	J.B.W.
Drainage Ck'd	E.F.L.
Areas	E.S.U.
Volumes	E.S.U.
Volumes Ck'd.	E.F.L.
Balance Points	R.L.H.

4+060
ZERO SECTION

513.0
4+00
514.2

513.0
3+50
514.1

513.0
3+00
514.0

513.0
2+50
514.0

513.0
2+00
512.5

1½:1

2:1

Roadway Excavation

End Area Cut	End Area Fill	Volume Cut	Volume Fill
0	0		
		120	0
257	0		
		996	0
1878	0		

Sta. 2+25 = ZERO SECTION

Sta. 1+74.8 Rt.

Sta. 1+74.8 (Lt. & Rt.)

Seeding Width Lin.ft	Seeding Area Sq.Yds		END AREA VOLUME CUT	END AREA VOLUME FILL
		4+06 = ZERO SECTION	0	0
0				
10		3+68-62' Rt. 9" Elm	17	2
		3+31-71' Rt. 10" Elm		
		3+61-58' Rt. 9" Sycamore		
		3+25-70' Rt. 10" Walnut		
29			149	19
		3+47-63' Rt. 9" Elm		
		3+40-80' Rt. 9" Locust		
208			292	33
		3+06-70' Rt. 9" Stump		
46		3+08-65' Rt. 9" Stump	167	17
		3+42 54' Rt. 32" Poplar		
		3+00 9" Poplar		
250			332	16
		2+80-60' Rt. 9" Elm		
		2+72-74' Rt. 9" Locust		
44		2+90 9" Poplar	192	0
		2+60 9" Poplar		
		2+50 9" Poplar		
239			358	0
		2+12-50' Rt. 9" Willow		
42		2+12-60' Rt. 12" Elm	195	0
		2+35-21' Rt. 9" Poplar		
		2+46-49' Rt. 9" Poplar		
		2+08-52' Rt. 16" Willow		
		2+29-18' Rt. 9" Poplar		
		2+29-26' Rt. 9" Poplar		
		2+28-118' Rt. 10" Willow		
		2+10-85' Rt. 10" Willow		
214			297	61
		2+00-95' Rt. 15" Locust		
35			126	66
		1+97-85' Rt. 9" Huckleberry		
148		1+97-46' Rt. 9" Elm	186	40
		1+97-53' Rt. 14" Poplar		
81			289	19

CHANNEL EXCAVATION
ESTIMATED QUANTITIES
Sta. 4+06 (West) to Sta. 1+74.8 (East)
(3+31.2 ft.)

Excavation	9782 Cu.Yds.	
Embankment		A
Embankment + 20%	813 Cu.Yds.	
	983 Cu.Yds.	

WEST MILL CREEK CHANNEL — STA. 2+00 TO 4+06

E.FL.		
E.FL.		
J.B.W.		
E.FL.		
E.S.U.		
E.S.U.		
E.F.L.		
A.L.H.		
PLOTTED	BY	
TRIPLATED	PLOTTED	
TRIPLATED	CHECKED	
DRAWAGE	CHECKED	
AREAS		
VOLUMES	CHECKED	
VOLUMES		
BALANCE	POINTS	

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

DIVISION 2 FED AID OHIO UI-316(J) UGI 1946 171 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B" Arlington Hts. & Lockland (Pt.) & Approaches.

NOTE:
For Trees not shown, see S.H. 987 Cross Sections.

PROP. BRIDGE 528.7

DUMPED Rock Fill (Toe Protection)

2:1

513.21
1+05.71
516.1

PROP. BRIDGE 528.7

2:1

12"Syc. (TWIN) 0+78

313.17
0+83.0
516.1

PROP. BRIDGE 528.72

2:1

513.09
0+47.0
513.7

PROP. BRIDGE 528.7

2:1

513.04
0+19.0
515.4

PROP BRIDGE 528.7

2:1

513.02
0+10.0
513.3

2:1

513.01
0+05.7
514.5

Seeding

Width	Area Lin.Ft.	Sq.Yds.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
47					351	74
135						283 59
60					322	66
230						413 92
55					297	72
152						359 95
43					395	112
43						131 33
43					389	86
20						58 14
43					337	84
107						268 84
3/4					120	

Include in Bridge Quantity

B B

A A

PROP BRIDGE

RIP RAP

DUMPED ROCK FILL (TOE PROTECTION) ITEM I-10

Sta. 0+16.5 44
(WEST MILL CREEK

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

EAST MILL CREEK CHANNEL - STA. 0+16.5 WEST To STA. 1+05.71 EAST.

DIVISION 2 | FED AID OHIO UI 316(1) UGI | 1946 | 172 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B" Arlington Hts., Lockland (Pt.) & Approaches.

PLOTTED BY	EFL
TEMPLATES PLOTTED	EFL
TEMPLATES CHECKED	JBW
DRAINAGE CHECKED	EFL
AREAS	ESJ
VOLUMES	ESJ
VOLUME CHECKED	EFL
EXCAVATE POINTS	A.J.H.

3+16
30" POPLAR

Prop R/W 140'± ℄

1½:1

513.60
2+97.1
516.5

Prop 68'± ℄ R/W

1½:1

513.37
1+842
514.8

Prop Bridge

2:1

513.29
1+46
514.4

2:1

513.23
1+15
515.8

2:1

2:1

2:1

1+05.71

	Seeding Width Area Lin.Ft. Sq.Yds.	END AREA VOLUME CUT	FILL	CUT	FILL
Prop 70' R/W	29	315	0		
	433	1205	0		
	40	261	0		
	203	381	0		
	56	278	0		
	184	346	43		
Prop 70' R/W	51	325	85		
	51	116	27		
	47	351	74		

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

EAST MILL CREEK CHANNEL — STA. 1+15.0 TO STA. 2+97.1

DIVISION FED AID 173

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UGI

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & Approaches.

	DATE	BY
Plotted By		DEES
Templates Plotted		E.F.L.
Templates Checked		J.B.W.
Drainage Checked		E.F.L.
Areas		J.C.M.
Volumes		J.C.M.
Volume Checked		T.S.
Balance Points		A.J.H.

Prop RIW 2

Prop 137'± ℄ RIW

5+45.2
26" POPLAR

5+27.5
16" Syc.

Equation { Station 5+57.77 Back
Station 5+64.91 Ahead

5+63
10" WILLOW

Prop 70' R/W

1½:1

40.5'

513.99
4+92.2
514.1

513.89
4+39.8
514.1

513.78
3+87.9
515.8

513.69
3+42.0
516.1

Seeding Width Area Lin. Ft. Sq. Yds.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
66	206	0		
291			343	0
34	147	0		
202			403	0
36	272	0		
194			507	0
40	324	0		
172			531	0
29	315	0		

Sta 2+97.1

EAST MILL CREEK CHANNEL ~ STA. 3+42.0 TO STA. 4+92.2

DIVISION 2 | FED AID | OHIO UI-316(1) UGI | 1946 | 174 | 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & Approaches.

	W.B.S.
Plotted By	E.F.L. J.C.M.
Templates Plotted	
Templates Checked	E.F.L. J.C.M.
Drainage Checked	
Areas	J.C.M. T.S.
Volumes	
Volume Checked	R.H.
Balance Points	

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

Prop 70' R/W

514.79
9+00
517.6

514.59
8+00
519.4

514.39
7+00
518.6

514.36
6+86.78
518.8

514.19
6+00
514.3

1½:1

8+82 42" E-Im

7+54 9-12" Syc.
7+48 16" Syc.
7+46.5 10" Syc.
7+36 8" Syc.
7+28.5 18" Syc.
7+14 12" Syc.
7+11.5 8" Syc.

6+92 11" Syc.
6+87 10" Syc.
6+83 10" Syc.
6+77.5 9" Syc.
6+75.5 8" Syc.
6+49 12" Syc.
6+36 12" Syc.

6+20 10" Syc.
6+13 10" Syc.
6+02.4 7"-9" Syc. (TWIN)
5+94.5 8" Syc.
5+84.5 10" POPLAR
5+84.5 16" WILLOW
5+72 8"-15"-18" Syc.

Seeding

Width Area Lin.Ft.	Sq.Yds.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
40		316	0		
	428			1233	0
37		382	0		
	344			1254	0
25		295	0		
	37			125	0
25		298	0		
	299			849	0
37		230	0		
Pt. - Sta. 5+64.31 (Ahead) = Sta. 5+57.77 (Back)				283	0
	516			529	0
66	Sta. 4+92.2	206	0		

EAST MILL CREEK CHANNEL ~ STA. 6+00 TO STA. 9+00

DIVISION FED. AID 175

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UGI

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & Approaches.

Plotted By	M.B.S.
Templates Plotted	E.P.L.
Templates Checked	J.B.W.
Drainage Checked	E.F....
Areas	J.C.M.
Volumes	J.C.M. T.S.
Volume Checked	A.U.H.
Balance Points	

Prop 70' R/W

1½:1

13+08
3" Syc.

13+00
3-7" Syc.

12+85
10" Syc.

12+72
10" Syc.

12+40
3" Syc.

12+35
3" Syc.

515.59
13+00
517.9

515.45
12+27.84
517.4

11+80
3-10" POPLARS

11+41
8" WILLOW

11+28
8" Syc.

515.39
12+00
517.3

515.19
11+00
516.6

515.01
10+10.11
516.3

514.89
10+00
516.1

Prop 70' R/W

	END AREA VOLUME	
	CUT FILL	CUT FILL
Seeding Width Area Lin.ft. Sq.Yds.	303	0
		725 0
42	239	0
		248 0
147		
	53 241	0
		913 0
594		
	54 252	0
		779 0
439		
	34 216	0
		85 0
49		
	53 236	0
		1022 0
517		
Sta 9+00	40 316	0

EAST MILL CREEK CHANNEL ~ STA. 10+00 TO STA. 13+00

DIVISION 2 | FED AID OHIO UI-316(1) UGI | 1946 | 176 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & Approaches.

Plotted By	M.B.S.
Templates Plotted	E.F.L.
Templates Checked	J.B.W.
Drainage Checked	E.F.L.
Areas	J.C.M.
Volume	
Volumes Checked	J.C.M.
Balance Points	T.S.
	A.J.H.

Prop 70' R/W

1½:1

℄

516.79
19+00
518.2

Prop 70' R/W-2

516.59
18+00
519.6

Prop 70' R/W

16+60
10" Syc.

516.39
17+00
520.2

Prop 70' R/W

15+27
18" Syc.

15+13
12" Syc.

516.19
16+00
518.3

Prop 70' R/W

515.99
15+00
518.6

Prop 70' R/W

515.79
14+00
519.4

13+88
14" Syc.

Prop 83' R/W

Prop 75' R/W

Prop 68' R/W

Prop 70' R/W-2

Prop 70' R/W-2

Prop 70' R/W-2

	END AREA VOLUME	
	CUT	FILL
	CUT	FILL
	286	0
Seeding Width Area Lin. Ft. Sq. Yds.		
444	1081	0
39	298	0
430	1087	0
39	289	0
417	1022	0
36	263	0
422	1078	0
40	319	0
422	1159	0
36	307	0
411	1130	0
Sta 13+00 38	303	0

EAST MILL CREEK CHANNEL ~ STA. 14+00 TO STA. 19+00

DIVISION 2 | FED AID OHIO UI-316(1) UGI | 1946 | 177 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt), "B", Arlington Hts., Lockland (Pt.) & Approaches

Plotted By	M.B.S.
Templates Plotted	E.F.L.
Templates Checked	J.B.K.
Drainage Checked	E.E.L.
Areas	J.C.M.
Volumes	J.C.M.
Volume Checked	T.S.
Balance Points	A.L.H.

Seeding Width Area Lin. Ft.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	589	280		
128			1956	981
102	467	250		
717			1270	663
27	219	0		
214			444	0
38	193	0		
174			327	0
39	241	0		
382			757	0
42	240	0		
69			146	0
Sta 19+00 41	286	0		

EAST MILL CREEK CHANNEL ~ STA. 19+15.01 TO STA. 23+00

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 UGI | 178 285

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & Approaches.

Plotted By	M.B.E.
Templates Plotted	E.A.L.
Templates Checked	J.B.W.
Drainage Checked	E.F.I.
Areas	J.L.M.
Volumes	J.C.M.
Volume Checked	T.S.
Balance Points	A.J.H.

Prop 132'± ℄ R/W

1½:1

518.4-3
27+00
533.1

27+14 18" ELM
26+84 2-3'+1-10" ELM
26+78 10" ELM
26+59 8" Syc.
26+70 3-9" ELM
26+40 2-8" Syc.
26+32 2-6"+1-10" ELM
26+28 8" ELM
26+15 2-10" ELM
26+00 7-5" ELM
26+97 10" ELM
26+54 8" ELM
26+35 8" ELM

Prop 98'± R/W

518.21
26+00
527.9

25+61 15" POPLAR
25+19 6" POPLAR
25+17 9" POPLAR
25+12 8" Locust
25+11 8" Locust
25+15 12" POPLAR
25+82 8" ELM
25+23 9" Locust

Prop 90' R/W

517.99
25+00
523.9

Prop 70' R/W

517.80
24+11.28
520.7

1¼:1

2.3+57 2-8" STUMPS
517.76
23+88.72
521.6

Equation Station = { 23+82.94 Back / 23+88.72 Ahead

1/4" per ft.

Prop 80' R/W

Sta 23+00

	Seeding Width Area Lin. ft	Sq. Yds.	END AREA VOLUME CUT	FILL	CUT	FIL
	67		1447	0		
	622		4385	0		
	55		921	0		
	517		2733	0		
	38		555	0		
	587		1410	270		
	81		303	164		
	219		296	152		
	94		405	200		
	1022		1527	737		
	128		589	280		

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

EAST MILL CREEK CHANNEL ~ STA. 23+88.72 TO STA. 27+00

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

DIVISION 2 | FED. AID | OHIO UI-316(1) UGI | 1946 | 179 | 288

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt), "B", Arlington (Pt.), Lockland (Pt.) & Approaches

Plotted By	M.B.S.
Templates Plotted	E.F.L.
Templates Checked	J.B.W.
Drainage Checked	E.R.L.
Areas	J.C.M.
Volumes	J.C.M.
Volume Checked	T.S.
Balance Points	R.J.H.

Prop. R/W 119 ± ℄

1½:1

Prop. Conc. Encasement

Ex. 54" Pipe

For Details of Conc. Encasement See Sheet No. 163

519.47
32+00
534.5

Prop. R/W 117 ± ℄

519.30
31+00
533.2

Prop. R/W 115 ± ℄

519.07
29+91.14
532.3

Prop. R/W 119 ± ℄

518.87
29+00
531.8

Prop. R/W 132 ± ℄

518.65
28+00
531.9

Ex. 54" Pipe

END AREA VOLUME

Station	Seeding Width Lin. Ft.	CUT Area Sq. Ft.	CUT Vol.	FILL Area Sq. Ft.	FILL Vol.
	Prop. 90' R/W				
77		1583	0		
		939		5945	0
	Prop. 90' R/W				
92		1627	0		
		1083		5989	0
87		1344	0		
	Prop. 90' R/W	775		4468	0
66		1293	0		
		750		4882	0
69		1343	0		
		756		5167	0
Sta 27+00					
67		1447	0		

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

EAST MILL CREEK CHANNEL ~ STA. 28+00 TO STA. 32+00

DIVISION 2 | FED. AID OHIO UI-316(1) 1946 | 180 289 U61

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & Approaches.

Sections plotted by	MBS	JCM.
Templates plotted by	E.R.L.	
Templates checked by	J.B.W.	
Drainage checked by	E.R.L.	JCM.
Areas by		JCM. T.S.
Volumes by		
Volumes checked by		T.S.
Balance points by		R.J.H.

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

Prop. R/W 115'±

A A A A

1½:1

B B B B

Prop. R/W ?

35+86 1-6"+1-8" CHERRY

35+70 15" WILLOW

35+80 18" ELM

35+37 8" ELM

35+15 15" ELM

520.03
35+54.43
530.0

34+84 8" ELM

34+71 8" ELM

34+93 12" WILLOW

34+75 12" WILLOW

34+80 8" ELM

34+54 18" WILLOW

34+18 9" ELM

34+47 18" ELM

34+25 9" Syc.

34+19 20" STUMP

519.39
35+00
530.1

Incl. in 987 Quantity

Seeding

Width	Area Lin. ft	Sq. Yds.
Prop. R/W ?	74'	

END AREA VOLUME

CUT	FILL	CUT	FILL
106		696	573
686		1528	1343
121		820	759
1022		4060	1483
63		1372	42
739		5556	78
70		1629	0
817		5349	0
77	STA 32+00	1583	

Prop. R/W

Prop. R/W

Prop. R/W

Prop. 80' R/W

E-X. 54" PIPE

Prop. Conc. Encasement
For Details of Conc. Encasement
See Sheet No. 163
E-X. 54" PIPE

519.82
34+00
534.7

33+90 9" ELM

33+74 12" Syc.

Incl. in 987 Quantity

1½:1

1½:1

E-X. 54" PIPE

Prop. Conc. Encasement

10.65
33+00
535.7

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

EAST MILL CREEK CHANNEL - STA. 33+00 TO STA. 35+50

Sections plotted by	M.B.S. J.C.M.
Templates plotted by	E.F.L.
Templates checked by	J.B.W.
Drainage checked by	E.F.L. J.C.M.
Areas by	J.C.M. T.S.
Volumes by	A.L.K.
Volumes checked by	
Balance points by	

DIVISION 2 FED AID OHIO UI-316(1). 1946 UGI

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HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt), "B", Arlington Hts., Lockland (Pt) & Approaches.

Seeding Width Lin. ft.	Area Sq. Yds.	END AREA VOLUME CUT	FILL	CUT	FILL
		340	0		
61					
		339	0		
183					
		331	0		
60					
		1241	0		
650					
		339	0		
57					
		1244	339		
683					
		1183			
66	441				
		1159			
883					
		443			
93	627				
		857			
504					
		573			
Sta 35+54.43	106	636			

Prop ℄ 110'± — Prop R/W — 14:1 — 1½:1 — 520.74 — 39+27.27 — 521.6

Prop ℄ 102'± — Prop R/W — 39+01 11" ASH — 38+99 14" WILLOW — 38+76 8" ELM — 38+55 12" ELM — 38+54 14" WILLOW — 38+16 1-8"+1-9" ELM — 38+48 18" WILLOW — 38+08 1-10"+1-8" ELM

Prop R/W 2 — Prop 90 — 520.69 — 39+00 — 521.2

Prop ℄ 97'± — Prop R/W — 37+40 8" ELM — 37+25 8" ELM — 37+82 10" ELM — 37+87 1-14"+1-12" WILLOW — 37+73 10" ELM — 37+64 8" ELM — 37+63 15" WILLOW — 37+29 8" ELM — 37+36 12" WILLOW — 37+12 12" WILLOW — 37+23 10" ELM — 37+08 8" ELM — 520.52 — 38+00 — 520.1

Prop R/W 2 — Prop ℄ 105'± — A — A — 36+38 12" ELM — 36+35 12" WILLOW — 520.39 — 37+00 — 521.2 — 36+84 8" ELM — 36+14 8" ELM — 36+75 1-8"+2-6" ELM — 36+06 12" WILLOW — 36+65 24" POPLAR — 36+00 12" ELM — 1½:1 — 520.17 — 36+00 — 531.1

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

EAST MILL CREEK CHANNEL - STA. 36+00 TO STA. 39+27.3

Sections plotted by	W.B.S. J.C.M.
Templates plotted by	E.F.L.
Templates checked by	J.B.W.
Drainage checked by	E.F.L.
Areas by	J.C.M.
Volumes by	J.C.M. T.S.
Volumes checked by	A.J.H.
Balance points by	

DIVISION 2 FED. AID OHIO UI-316(1) 1946 182 289 U.S.I.

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & Approaches.

END AREA VOLUME

	CUT	FILL	CUT	FILL
Seeding				
Width Area Lin. ft. Sq. Yds.				
Prop. R/W 80	248	0		
	596		882	0
	60		249	0
	639		896	0
	55		235	0
	461		1037	0
	28		325	0
	306		1287	0
	27		370	0
	461		1296	0
	56		330	0
	473		303	0
Sta 39+27.27	61		340	0

Prop. R/W 70 ± ℄ — 1½:1

Prop. R/W 85 ± ℄ — 1½:1

521.73
44+96.40
520.2

Equation - { 44+96.40 Ahead
{ 44+95.82 Back.

43+98 10" MAPLE

Prop. R/W 109 ± ℄

521.56
44+00
520.4

43+33.5 20" POPLAR

Prop. R/W 95 ± ℄

Prop. R/W 140 ± ℄

521.39
43+00
520.5

42+27.5 14" MAPLE

Prop. R/W 136 ± ℄

521.21
42+00
521.8

Prop. R/W 130 ± ℄

521.04
41+00
524.2

40+27.5 21" POPLAR

40+03.5 12" ASH

1½:1

1½:1

520.86
40+00
521.6

Prop. R/W 80 ± ℄

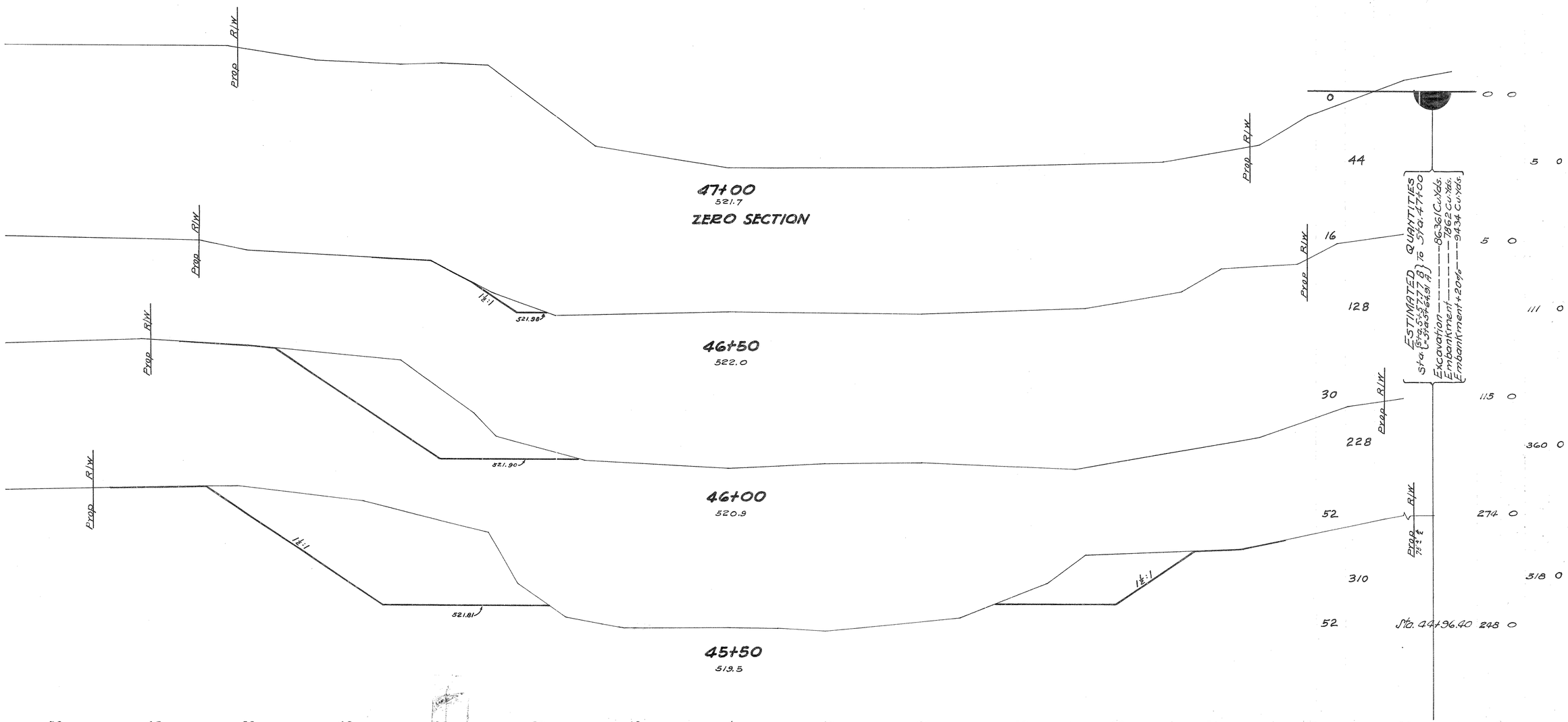
Prop. R/W 82 ± ℄

EAST MILL CREEK CHANNEL ~ STA 40+00 TO STA 44+96.4

DIVISION 2 | FED AID | OHIO UI-316(1) 1946 UGI | 183 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B" Arlington Hts., Lockland (Pt.) & Approaches.

Plotted By	J.C.M.
Templates Plotted	E.F.L.
Templates Checked	J.B.W.
Drainage Checked	E.F.L.
Areas	E.S.U.
Volumes	E.S.U.
Volume Checked	E.F.L.
Balance Points	H.J.H.



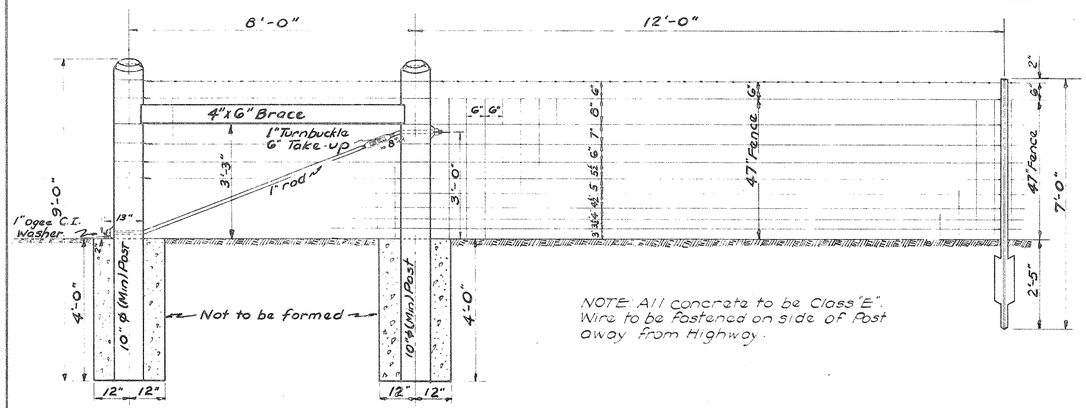
EAST MILL CREEK CHANNEL — STA. 45+50 TO STA. 47+00

FENCE DETAIL

FED RD DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) U167	1946

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HAMILTON COUNTY
S.H.987-SEC.CINCINNATI(PT.)
"B" ARLINGTON HTS.
LOCKLAND(PT) & APPROACHES



NOTE: All concrete to be Class "E". Wire to be fastened on side of Post away from Highway.

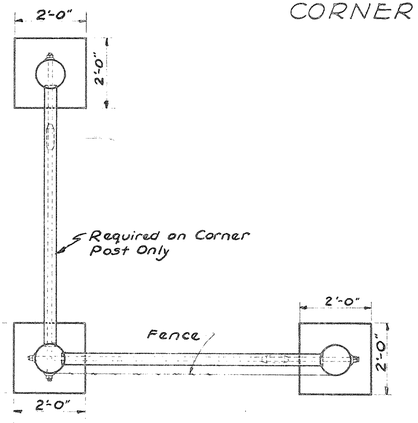
CORNER OR END POST ASSEMBLY

ERECTION NOTES.

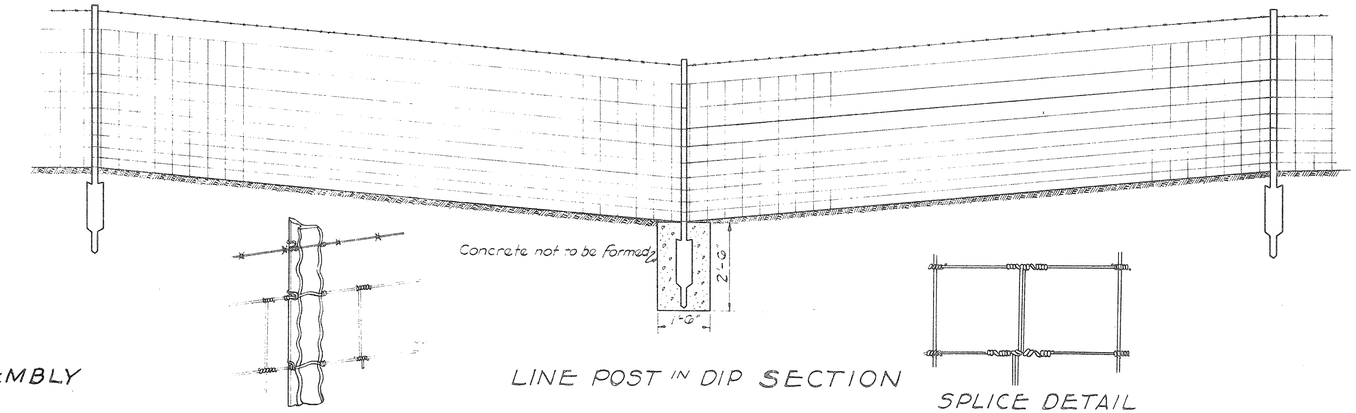
Location of Line Posts in Dip Sections shall be determined by the Engineer during construction.

For location of Corner or End Post Assembly see Alignment sheets.

The number of Intermediate Anchor Post Assemblies to be placed between End or Corner Posts has been shown on the alignment sheets. The actual location however will be determined by the Engineer during construction.



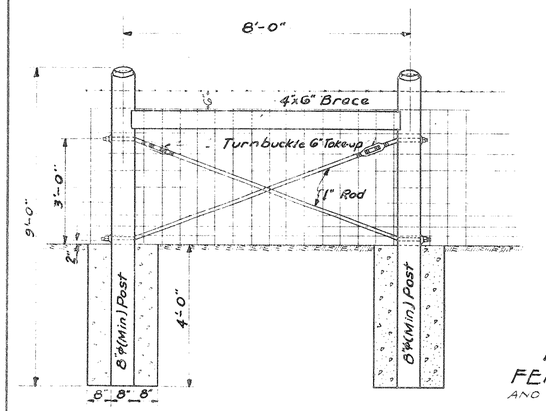
PLAN OF CORNER OR END POST ASSEMBLY



LINE POST IN DIP SECTION

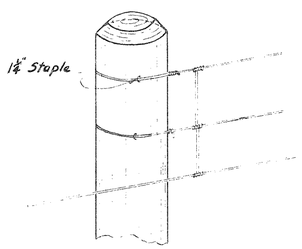
METHOD OF FASTENING FENCE AT LINE POST.

SPLICE DETAIL

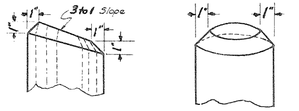


To be placed at locations shown on Plans, or shifted if directed by the Engineer.

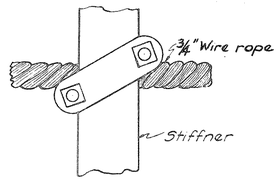
INTERMEDIATE ANCHOR POST ASSEMBLY

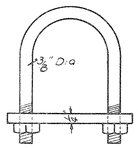


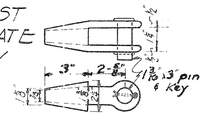
METHOD OF FASTENING FENCE AT END, CORNER POST AND ONE POST OF INTERMEDIATE ANCHOR POST ASSEMBLY



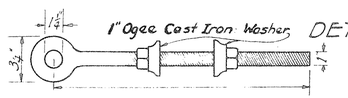
TOP OF POSTS





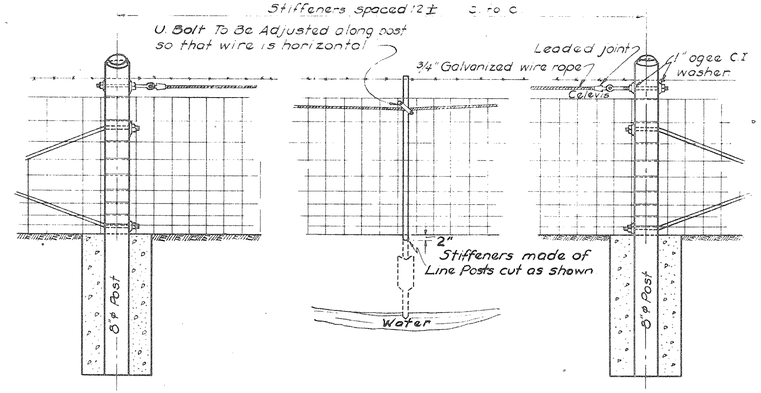


DETAIL OF CLEVIS



DETAIL OF EYE BOLT

DETAIL OF U-BOLT



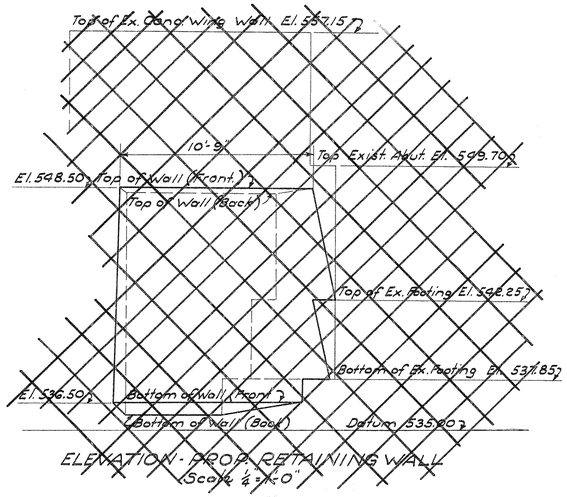
Note: Cost of Special Cable Support to be included in price bid per lin. Ft. for 12'W. Fence.

DETAIL OF SPECIAL CABLE SUPPORT

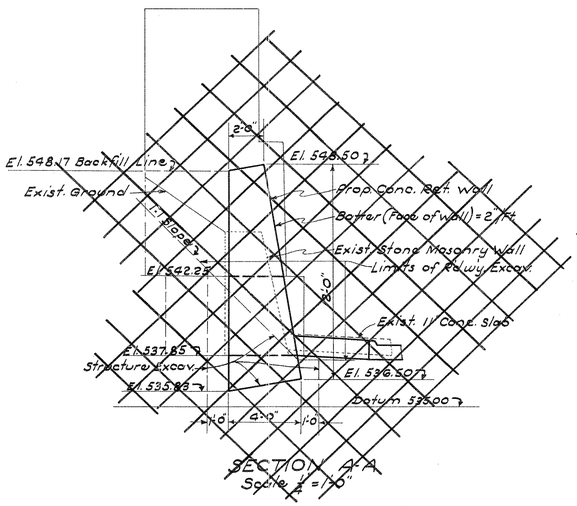
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGZ	1946

186
289

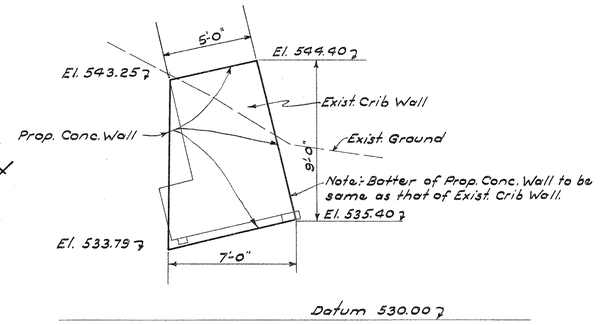
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B"
ARLINGTON HEIGHTS
LOCKLAND (Pt.) & APPROACHES



ELEVATION - PROP. RETAINING WALL
Scale 1/4" = 1'-0"



SECTION A-A
Scale 1/4" = 1'-0"



SECTION B-B
Scale 1/4" = 1'-0"

ESTIMATED QUANTITIES

CONCRETE RETAINING WALL STA. 136+12.8 to 136+24 Lt.

Excavation for Structures	Item E-2	4.0 Cu. Yd.
Concrete for Structures, Wall (Class "E")	Item S-1	13.2 Cu. Yd.
Removal of Existing Structures	Item S-24	Lump

CONCRETE CURTAIN WALL STA. 135+53.8 Lt.

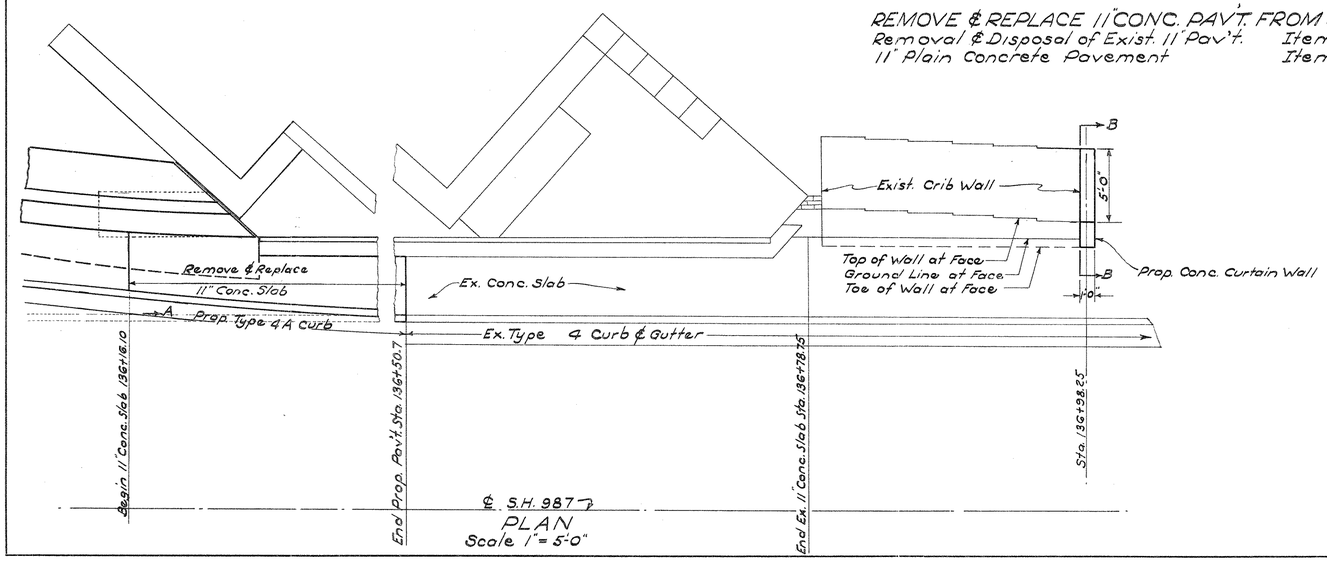
Excavation for Structures	Item E-2	8.0 Cu. Yd.
Concrete for Structures, Wall (Class E)	Item S-1	7.0 Cu. Yd.

CONCRETE CURTAIN WALL STA. 136+98.25 Lt.

Excavation for Structures	Item E-2	7.0 Cu. Yd.
Concrete for Structures, Wall (Class "E")	Item S-1	2.2 Cu. Yd.

REMOVE & REPLACE 11" CONC. PAV'T. FROM STA. 136+16.10 to STA. 136+50.7 LT.

Removal & Disposal of Exist. 11" Pav't.	Item E-8	17.6 Sq. Yd.
11" Plain Concrete Pavement	Item T-70	15.6 Sq. Yd.



PLAN
Scale 1" = 5'-0"

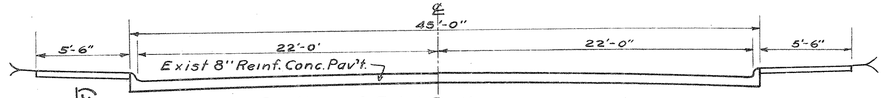
CONC. CURTAIN WALL

STA 136+98.25 LT.

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B"
ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES.

Typical Section of Exist. Pav't. Adjacent to Beg. of Paddock Road Improvement.



STA. 15+33.80 BEGIN WORK J.H. 43 SEC. CIN'TI. (PT.)

End Fed. Aid Proj. 539-H(1) Old Station = 24+16.94

Hamilton County Commissioners

Ex. Memorial Monuments

Ex. Chain Link Fence

Ex. 12" Sewer-Storm

Ex. 12" Gas Main (4' Cover)

Sod Ditch

Ex. 18" Gas Main (4' Cover)

Ex. 24" W. Main — Remove

Exist. Pav't.

Ex. 8" Water Main (4' Cover)

Ex. 12" Comb. Sewer

Euonymus radicans

Existing Rubble Stone wall to Ex. R/W

Ex. 18" Gas Main (4' Cover)

PADDOCK RD.

Remove Exist. Pav't.

Sidewalk

Curb

Gutter

Bushes

Sod

Sod between Sidewalk & Curb and 2' back of Walk

Ex. R/W

Stone Pillar

8" Pipe

Storm Tunnel (10')

Ex. 15" Sewer

Ex. 8" Gas Main

Ex. 6" Water Main

Ex. 12" Gas Main

Ex. 2" Water Main

Ex. 2" G.M.

Ex. 2" W.M.

Ex. 24" Sewer (Comb.)

Ex. 8" W. Main

Ex. 12" Gas M.

Ex. 12" Water Main

Stop Sign

Ex. Post

Prop. Guard Rail

Fred & Frieda Frey

Shed

Stone Columns

Ex. Chain Link Fence

Abandoned 12" Sewer

Future Ramp

Prop. ℄ S.H. 43

Prop. Summit Rd.

Prop. Ditch

Hubs

Fwd. Tangent

Back Tangent

P.I. Sta 27+82.80

P.I. = Sta. 27+82.80
Δ = 44°45' 27"Lt.
D = 6°00'
R = 954.93'
T = 393.18'
L = 745.96'
E = 77.78'

P.I. = Sta. 14+86.13
Δ = 2°00'
D = 88°00'
R = 65.00'
T = 65.83'
L = 126.92'

P.T. 18+52.87
Δ = 22°39'
D = 6°00'
T = 184.55'
R = 954.9'
L = 369.61'
E = 17.67'

Sta. 24+38.42 ℄ Prop. Paddock Rd. = Sta. 16+10.38 Seymour Ave.

S.H. 437 N 26°00'06" E 22

℄ Prop. PADDOCK RD.

Prop. R/W 724.26'

P.C. = 16+37.27

P.T. = 20+01.87

Existing Hospital Sign to be removed by the contractor and placed on the R/W at the disposal of the owner

Hamilton County Commissioners

Reference P.C. 16+37.27

Paddock Rd. Sta 16+37.27

Cross in Conc. Walk

Sta 18+21.82 P.I.

Hubs

B.M. Elev. 581.03
S.E. Cor. E. Hdwl., Pedest. Tunnel
Sta. 15+30 28' Rt.

B.M. Elev. 560.08
Arrow on Top of Fire Hydrant
S.E. Cor., Paddock Rd. & Seymour Ave.

Stone Chapel

PC. 23+89.62

Prop. R/W 155.43'

24+110

Ex. 15" Sewer

Ex. 8" Water Main & Tower

Ex. 6" G.M. (Cap'd)

Ex. 12" G.M. (Cap'd)

Ex. 16" Water Main & Tower

Prop. R/W 355.36'

24+88.24
152.32'

STA. 17+86.98 - BEGIN WORK
S.H. 781 SEC. CIN'TI. (PT.)

PT 16+61.96

Sod

Ex. R/W

Seymour Ave.

Oklahoma St.

All elevations are to USGS datum

Grade Line shown is Crown of Finished Pavement
(Begin. to S. 23+00 ±)

PC = 15+50

P.I. 19+00
586.70

P.T. 22+50

700 V.C.

+1.92 %

Grade Line shown is 6" below ℄ of Finished Mall
(Sta. 23 ± to Sta. 30+00)

P.C. 25+80

P.T. 28+80

300' V.C.

P.I. 27+30
558.40

-3.91 %

-0.50 %

For location and details of Prop. Drainage See Sheet No. 243 to 261
For Estimated Quantities see Sheet No. 190 & 191
For Details of Pipe Removal & Adjustments See Sheet Nº 253 to 261

PADDOCK ROAD — STA. 15+00 TO STA. 30+00

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B"
ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES.

STA. 40+81.93 END OF WORK
S.H. 43 SEC. CINTI. (PT.)

Ref. Pt.
P.O.T. on Paddock Rd.
Painted Target, E. End of Pier at R.R. Bridge Sta 40+87 ℄

END PROP. CONC. PAV'T. STA. 39+70.70

Hamilton County Commissioners

℄ PROPOSED PADDOCK ROAD

Prop. ℄ S.H. 43

Sta. 33+32.90 S.H. 987 = Sta. 34+16.40 New ℄ PADDOCK ROAD

N 18°45'21" W 33

P.T. = 31+35.58

Sod between sidewalk & Curb and 2' back of sidewalk

Remove Ex. Pavt.

Future R.R. Xing (2' Sod back of Walk)

C.C.C. & St.L. RR

J.E. & M. PRICE

Ex. 5' Conc. Walk

Ex. 5' Conc. Walk

Ex. 12" St'm Sewer

Ex. 8" Water Main

Ex. 6" Gas Main

Ex. 8" Water Main

Ex. 8" Gas Main

Ex. 24" W. Main

Ex. 12" W. Main

Ex. 6" W. Main

Ex. 12" G. Main

Ex. 8" Gas Main

Ex. 24" W. Main (Cover)

Ex. 12" W. Main (3'-0" Cover)

Ex. 12" G. Main (3'-0" Cover)

Ex. 12" Storm Sewer (3'-0" Cover)

Ex. 30" Storm Sewer

Ex. 72" V.S.P.

Ex. 8" San. Sur.

Ex. 8" Conc. Wall

Ex. Chain Link Fence

Ex. Iron Fence on 8" Conc. Wall

Ex. Iron Fence

Ex. Conc. Steps

Ex. Wood Steps

Ex. R/W

Ex. Gar.

Ex. Shed

Ex. Sign

Ex. Guy Pole

Ex. Flood Light

Ex. Conc. Bound

Ex. Mail Box

Ex. Flag Pole

Ex. Sign Board

Ex. G. Ball

Ex. Loading Dock

Ex. Existing Brick Wall

Ex. Existing Drive

Ex. Existing Pavmt.

Ex. Macadam Pavement

Ex. Concrete Pavement

Ex. Brick Warehouse

Ex. 2-Sty. Brick Warehouse

Ex. Frame Shed

Ex. Frame Garage

Ex. Frame Dwelling

Ex. 1-Sty. Fr.

Ex. 2-Sty. Fr.

Ex. 2½-Sty. Fr.

Ex. 2½-Sty. Brick

Ex. 1-Sty. Brick

Ex. 2-Sty. Brick

Ex. 2½-Sty. Brick

Ex. 1-Sty. Fr. Garage

Ex. 2-Sty. Fr. Dwelling

Ex. 2½-Sty. Fr. Dwelling

Ex. 1-Sty. Brick Garage

Ex. 2-Sty. Brick Dwelling

Ex. 2½-Sty. Brick Dwelling

Ex. 1-Sty. Brick Dwelling

Ex. 1-Sty. Brick Store

Ex. 2-Sty. Brick Store

Ex. 2½-Sty. Brick Store

Ex. 1-Sty. Brick Garage

Ex. 2-Sty. Brick Garage

Ex. 2½-Sty. Brick Garage

Ex. 1-Sty. Brick Dwelling

Ex. 2-Sty. Brick Dwelling

Ex. 2½

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HAMILTON COUNTY
S.H. 987, SEC. "Cincinnati - Pt. 2, Arlington Hts. - Lockland, Pt. 1" & Approaches

Typical Section of Exist. Pav't. adjacent to end of Seymour Ave. Improvement.

23'±
2" Surf Treated
9" W.B. Macadam

Typical Section of Exist. Pav't. Adjacent to Beg. of 71st St. Improvement

5' | 6'-5" | 18'-0" | 37'-2" | 18'-0" | 6'-5" | 5"
Exist. 9" Reinf. Conc. Pav't.

Bench Mark ~ Elev. 543.11
S.E. Cor. of step to main entrance of Longview Hospital power plant.

Power House
Longview State Hospital

Δ Pt. Reference Sta. 6+72.56

Sta. 6+72.56 Δ 0°-03-30" Rt.

℄ 71st St.

Conc. W.K.
Stake
Stake
50'±

℄ S.H. 781

C.C. & St. L. R.R.
Future Proposed Tracks
℄ West Bound Main
℄ East Bound Main
R.R. Sidings
Cyclone Fence
Drive
Light
Ex. Service Tunnel
Ex. 29" V.it. Sewer
Ex. 16" G.M. (2½ Cover)
Ex. 6" G.M. (3½ Cover)
Ex. 16" W.M. (5'-7" Cover)
Ex. 15½" Tel. Conduit (4½'-7" Cover)
Ex. 16" W.M. (5'-3" Cover)
Ex. 8" W.M.
Ex. 6" W.M.
Ex. 8" Gas
Ex. 8" San.
Ex. 8" Storm
Ex. 18" V.it.
Ex. 6" Conduit
Ex. Conduit
Ex. Manhole
Ex. Guy
Ex. 25" Conc.
Ex. Water Box
Ex. Water Meter Box
Ex. Gas Valve
Ex. Gas Box
Ex. Water Valve
Ex. Water Box
Ex. Gas Meter
Ex. Gas Line
Ex. Water & Gas
Ex. Water
Ex. Gas
Ex. Curb Inlet
Ex. Catch Basin
Ex. Fire Hydrant
Ex. Telephone Pole
Ex. Light Pole
Ex. Power Pole
Ex. Sign
Ex. Tree
Ex. Shrubs
Ex. Hedge
Ex. Fence
Ex. Wall
Ex. Steps
Ex. Curb
Ex. Walk
Ex. Drive
Ex. Pavement
Ex. Macadam Pav't.
Ex. Conc. Pav't.
Ex. Conc. Walk
Ex. Conc. Curb
Ex. Conc. Gutter
Ex. Conc. Base & Slab
Ex. Conc. Wall
Ex. Conc. Steps
Ex. Conc. Box
Ex. Conc. Pier
Ex. Conc. Footing
Ex. Conc. Retaining Wall
Ex. Conc. Bridge
Ex. Conc. Culvert
Ex. Conc. Manhole
Ex. Conc. Inlet
Ex. Conc. Pipe
Ex. Conc. Sewer
Ex. Conc. Drain
Ex. Conc. Ditch
Ex. Conc. Channel
Ex. Conc. Dam
Ex. Conc. Bridge
Ex. Conc. Culvert
Ex. Conc. Manhole
Ex. Conc. Inlet
Ex. Conc. Pipe
Ex. Conc. Sewer
Ex. Conc. Drain
Ex. Conc. Ditch
Ex. Conc. Channel
Ex. Conc. Dam

Prop. Future Ramp
Prop. Future Ramp
Prop. Future ℄ S.H. 987
℄ Alley (Macadam)
℄ Alley
℄ Longview Ave. (Macadam)
℄ Oklahoma St. (Macadam)
℄ 71st Street
S. 50°52'51" E.
Ex. Conc. Pav't.
Ex. 15½" Tel. Cond. (4½ Cover)
Ex. 16" W.M. (3 Cover)
Ex. 6" G.M. (3½ Cover)
Ex. 8" Gas
Ex. 8" San.
Ex. 8" W.M.
Ex. 6" W.M.
Ex. 16" G.M. (2½ Cover)
Ex. 16" G.M. (3½ Cover)
Ex. 29" V.it. Sewer
Ex. 24" Pipe Sewer
Ex. 21" Pipe Sewer
Ex. 15" Pipe Sewer
Ex. 12" Pipe Sewer
Ex. 8" Pipe Sewer
Ex. 6" Pipe Sewer
Ex. 4" Pipe Sewer
Ex. 2" Pipe Sewer
Ex. 1" Pipe Sewer
Ex. ½" Pipe Sewer
Ex. ¼" Pipe Sewer
Ex. ⅛" Pipe Sewer
Ex. 1/16" Pipe Sewer
Ex. 1/32" Pipe Sewer
Ex. 1/64" Pipe Sewer
Ex. 1/128" Pipe Sewer
Ex. 1/256" Pipe Sewer
Ex. 1/512" Pipe Sewer
Ex. 1/1024" Pipe Sewer
Ex. 1/2048" Pipe Sewer
Ex. 1/4096" Pipe Sewer
Ex. 1/8192" Pipe Sewer
Ex. 1/16384" Pipe Sewer
Ex. 1/32768" Pipe Sewer
Ex. 1/65536" Pipe Sewer
Ex. 1/131072" Pipe Sewer
Ex. 1/262144" Pipe Sewer
Ex. 1/524288" Pipe Sewer
Ex. 1/1048576" Pipe Sewer
Ex. 1/2097152" Pipe Sewer
Ex. 1/4194304" Pipe Sewer
Ex. 1/8388608" Pipe Sewer
Ex. 1/16777216" Pipe Sewer
Ex. 1/33554432" Pipe Sewer
Ex. 1/67108864" Pipe Sewer
Ex. 1/134217728" Pipe Sewer
Ex. 1/268435456" Pipe Sewer
Ex. 1/536870912" Pipe Sewer
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Ex. 1/2147483648" Pipe Sewer
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Ex. 1/8589934592" Pipe Sewer
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Ex. 1/9903520314283042199192993792" Pipe Sewer
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Ex. 1/316912650057057350374175801344" Pipe Sewer
Ex. 1/633825300114114700748351602688" Pipe Sewer
Ex. 1/1267650600228229401496703205376" Pipe Sewer
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Ex. 1/8543948143683640329580086824678208458410818089426611079788166431288878903122562200091848347746304" Pipe Sewer
Ex. 1/17087896287367280659160173649356416916821636178853222159576332862577757806245124400183696695492608" Pipe Sewer
Ex. 1/34175792574734561318320347298712833833643272357706444319152665725155515612490248800367393390985216" Pipe Sewer
Ex. 1/68351585149469122636640694597425667667286544715412888638305331450311031224980497600734786781970432" Pipe Sewer
Ex. 1/136703170298938245273281389194851335334573089430825777276610662900622062449960995201469573563940864" Pipe Sewer
Ex. 1/273406340597876490546562778389702670669146178861651554553221325801244124899921990402939147127881728" Pipe Sewer
Ex. 1/546812681195752981093125556779405341338292357723303109106442651602488249799843980805878294255763456" Pipe Sewer
Ex. 1/1093625362391505962186251113558810682676584715446606218212885303204976499599687961611756588511526912" Pipe Sewer
Ex. 1/2187250724783011924372502227117621365353169430893212436425770606409952999199375923223513177023053824" Pipe Sewer
Ex. 1/4374501449566023848745004454235242730706338861786424872851541212819905998398751846447026354046107648" Pipe Sewer
Ex. 1/8749002899132047697490008908470485461412677723572849745703082425639811996797503692894052708092215296" Pipe Sewer
Ex. 1/17498005798264095394980017816940970922825355447145699491406164851279623993595007385788105416184430592" Pipe Sewer
Ex. 1/34996011596528190789960035633881941845650710894291398982812329702559247987190014771576210832368861184" Pipe Sewer
Ex. 1/69992023193056381579920071267763883691301421788582797965624659405118495974380029543152421664737722368" Pipe Sewer
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Ex. 1/279968092772225526319680285071055534765205687154331191862498637620473983897520118172609686658950889472" Pipe Sewer
Ex. 1/559936185544451052639360570142111069530411374308662383724997275240947967795040236345219373317901778944" Pipe Sewer
Ex. 1/1119872371088902105278721140284222139060822748617324767449994550481895935590080472690438746635803557888" Pipe Sewer
Ex. 1/2239744742177804210557442280568444278121645497234649534899989100963791871180160945380877493271607115776" Pipe Sewer
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Ex. 1/4697085165547666455778961193578674054751365097816639741414581943064418050229216886927397996769537406063869952" Pipe Sewer
Ex. 1/9394170331095332911557922387157348109502730195633279482829163886128836100458433773854795993539074812127739904" Pipe Sewer
Ex. 1/18788340662190665823115844774314696219005460391266558965658327772257672200916867547709591987078149624255479808" Pipe Sewer
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Ex. 1/150306725297525326584926758194517569752043683130132471725266622178061377607334940381676735896625196994043838464" Pipe Sewer
Ex. 1/300613450595050653169853516389035139504087366260264943450533244356122755214669880763353471793250393988087676928" Pipe Sewer
Ex. 1/601226901190101306339707032778070279008174732520529886901066488712245510429339761526706943586500787976175353856" Pipe Sewer
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Ex. 1/2404907604760405225358828131112281116032698930082119547604265954848982041717359046106827774346003151904701415424" Pipe Sewer
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Ex. 1/9619630419041620901435312524449124464130795720328478190417063819395928166869436184427311097384012607618805661696" Pipe Sewer
Ex. 1/19239260838083241802870625048898248928261591440656956380834127638791856333738872368854622194768025215237611323392" Pipe Sewer
Ex. 1/38478521676166483605741250097796497856523182881313912761668255277583712667477744737709244389536050430475222646784" Pipe Sewer
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Ex. 1/615656346818663737691860001564743965704370926101022604186692084441339402679643915803347910232576806887603562348544" Pipe Sewer
Ex. 1/1231312693637327475383720003129487931408741852202045208373384168882678805359287831606695820465153613775207124697088" Pipe Sewer
Ex. 1/2462625387274654950767440006258975862817483704404090416746768337765357610718575663213391640930307227550414249394176" Pipe Sewer
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Ex. 1/19701003098197239606139520050071806902539869635232723333974146702122860885748605305707133127442457820403313995153408" Pipe Sewer
Ex. 1/39402006196394479212279040100143613805079739270465446667948293404245721771497

QUANTITIES MUNICIPAL (CINCINNATI)
PADDOCK ROAD — 71ST ST. & SEYMOUR AVE.

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B,"
Arlington Hts & Lockland (Pt.)
& Approaches

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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PAVEMENT

Station to Station	Side	9" Reinforced Concrete Pavement Item T-71 Sq.Yd.	Plain Concrete Pavement. Item T-70 9" Sq.Yd.	Item I-21 Black 5"-6"-5" Sq.Yd.	Item I-21 Black 6" Sq.Yd.	Item I-21 Black 7"-8"-7" Sq.Yd.	Item I-21 Black 10"-11"-10" Sq.Yd.	Concrete Curb Item I-12 Type 2-A Lin.Ft.	Concrete Curb Item I-12 Type 4-A Lin.Ft.	Concrete Curb Item I-12 Type-A Lin.Ft.	Concrete Curb Item I-12 Type-B Lin.Ft.	Concrete Curb & Gutter 2'-6" Wide Item I-12 Type 2 Lin.Ft.	Concrete Curb & Gutter 2'-6" Wide Item I-12 Type 4 Lin.Ft.	Removal & Disposal of Exist. Conc. Curb. Item E-8 Lin.Ft.	Removal & Disposal of Existing Pavement Item E-8 Sq.Yd.	Asphaltic Conc. Variable Thick. Surface Course Item T-35 Cu.Yd.	1" Asphaltic Concrete Surface Course Item T-35 Sq.Yd.	1" Asphaltic Concrete Leveling Course Item B-35 Sq.Yd.	3" Asphaltic Concrete Base Course Item B-35 Sq.Yd.	1¼" Insulation Course Item I-19 Sq.Yd.	Bituminous Tack Coat Sec. M-55-M3-1 @ .10 Gal. per Sq.Yd. Item T-30 Sq.Yd.	Sealing Only Item E-8 Lin.Ft.	See Sheet Nº
PADDOCK ROAD																							
15+33.80 ~ 20+01.87	R&L	2340.4						936.2															212
15+33.80 ~ 18+60	R&L														1650.0								187
20+01.87 ~ 21+07.62	R&L	546.4						211.5															212
21+07.62 ~ 21+78.12	R&L	383.9						141.0															212
21+78.12 ~ 23+89.62	R&L	1244.0		21.5				372.4	240.1														212
22+50 ~ 24+03	Lt														837.0								187
23+89.62 ~ 32+51.25	R&L	4910.1			216.9			280.0				421.7	1317.1										212 & 213
25+38.5 ~ 28+75	Lt														1248.0								187 & 188
32+51.25 ~ 35+81.56	R&L		1844.3		60.9							472.7	381.1										213
34+41.5 ~ 39+70.70	R&L														2824.0								188
34+78.78 (Approach)	Rt		207.7					133.6															213
35+81.56 ~ 39+70.70	R&L	2328.2			79.2			288.1				194.0	483.0										213 & 214
39+00.92 (Pine Alley)	Rt	131.3						50.8			29.8				117.0								214
39+70.70 ~ 40+81.93	R&L				18.0	10.3	12.5			124.9													214
40+05.41 ~ 40+36.81	R&L													63.0									188 & 214
* 35+15	Lt																		24.0				188
*35+90 ~ 36+18	Lt																		120.0				188
71ST STREET																							
24+38.42 (Paddock) Lt.	R&L	257.7	1661.0					941.9							626.0								215
SEYMOUR AVE.																							
24+38.42 (Paddock) Rt.	R&L	1849.6						1011.9								8.0	61.1	61.1	130.6	66.7	133.3	44	216
SUB TOTALS																	61.1	61.1	274.6		133.3		
Conversion into Cu.Yd.-Gal. etc.																8.0	1.7 C.Y.	1.7 C.Y.	22.9 C.Y.		13.3 Gal.		
TOTALS		13991.6	3713.0	21.5	375.0	10.3	12.5	4367.4	240.1	124.9	29.8	1088.4	2181.2	63.0	7302	9.7 Cu.Yds		1.7 C.Y.	22.9 C.Y.	66.7	13.3 Gal.	44	

* To be placed as directed. For repair of sewer trench.

FENCE

Station to Station	Side	Chain Link Fence Removed & Stored Item Special Lin.Ft.	See Sheet Nº
PADDOCK ROAD			
18+51.27 ~ 24+31	Lt.	620	187
16+37.27 ~ 23+78 (Rt. Ex. Pad)	L&R	775	187
25+85 ~ 34+70	Lt	800	187 & 188
35+10 ~ 36+65	L&R	165	188
71ST STREET & SEYMOUR AVE.			
11+49 ~ 13+43	Rt.	194	189
14+33 ~ 19+00	Rt.	476	189
13+57 ~ 19+00	Lt.	560	189
TOTAL		3590	

EXCAVATION & EMBANKMENT ITEM E-1 CU. YDS.

Station to Station	Excavation (See Cross-Sec)	Embankment	Embankment +20%
PADDOCK ROAD			
15+33.80 ~ 40+81.93	7968	27018	32422
71ST STREET			
11+49 ~ 15+50	161	7251	8701
SEYMOUR AVE			
17+00 ~ 19+50	274	2018	2422

CLASSIFIED EMBANKMENT

Station to Station	Side	Classified Embankment (See Cross Sec.) Item SS-112 Cu.Yd.	See Sheet Nº
PADDOCK ROAD			
15+41.36 ~ 38+69	R&L	5488	196
SEYMOUR AVE			
17+00 ~ 19+00	R&L	287	211
TOTAL		5775	

MEMORIAL MONUMENTS

Station to Station	Side	Remove and Reset Existing Memorial Monuments Item Special Each	See Sheet Nº
PADDOCK ROAD			
16+44 ~ 24+00 (Lt. Ex. Paddock Rd.)	Lt.	19	218
16+60 ~ 23+55 (Rt. Ex. Paddock Rd.)	Rt.	15	218
71ST STREET			
11+52 ~ 12+92	Rt.	3	218
TOTAL		37	

QUANTITIES MUNICIPAL (CINCINNATI) – CONT.
PADDOCK ROAD — 71ST ST. & SEYMOUR AVE.

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B,"
ARLINGTON HTS, – LOCKLAND (PT).
& APPROACHES

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UT-316(1) 062	1946

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EROSION CONTROL.

Station to Station	Side	Sodding Item L-10 Sq. Yd.	Seeding & Protecting Type "A" Item L-9 Sq. Yd.			See Sheet Nº
PADDOCK ROAD						
15+33.80 ~ 39+70.70	R&L		29173			196
15+33.80 ~ 23+59.33	Lt.	428				187
15+33.80 ~ 23+67.24	Rt.	1583				187
22+25 ~ 23+88	Lt.	175				187
25+21.40 ~ 37+50	Lt.	675				187 & 188
25+50 ~ 29+00	Rt.	350				187
27+31.23 ~ 30+65.65	Rt.	743				197 & 188
30+65.65 ~ 32+55.08	Rt.	427				188
32+55.08 ~ 34+07.10	Rt.	84				
34+07.10 ~ 34+98.38	Rt.	32				
34+98.38 ~ 36+24.62	Rt.	70				
36+24.62 ~ 37+74.0	Rt.	391				
37+50 ~ 39+70.7	Lt.	52				
37+74 ~ 39+70.7	Rt.	186				
71st STREET						
24+38.42 (Paddock)	R&L	782	3826			209 & 215
SEYMOUR AVE.						
24+38.42 (Paddock)	R&L	837	1206			211 & 216
TOTALS		6815	34205			

CONCRETE SIDEWALK AND STEPS.

Station to Station	Side	4" Conc. Sidewalk (6"R & 24"Tr.) Item I-13 Sq. Ft.	Conc. Steps (6"R & 24"Tr.) Item I-13 Lin. Ft.	Conc. Steps (6"R & 12"Tr.) Item I-13 Lin. Ft.	See Sheet Nº.
PADDOCK ROAD					
15+33.80 ~ 23+59.33	Lt.	4313			212
15+33.80 ~ 23+67.24	Rt.	4289			212
25+21.40 ~ 39+70.70	Lt.	7131			212 to 214
27+31.23 ~ 38+86.23	Rt.	4968			213
34+00	Lt.	90	54		219
38+72.5	Rt.	4		36	214
39+00.92 (Pine Alley)	Rt.	265			214
71st STREET					
24+38.42 (Paddock)	R&L	4855			215
SEYMOUR AVE.					
24+38.42 (Paddock)	R&L	4502			216
TOTALS		30417	54	36	

GUARD RAIL

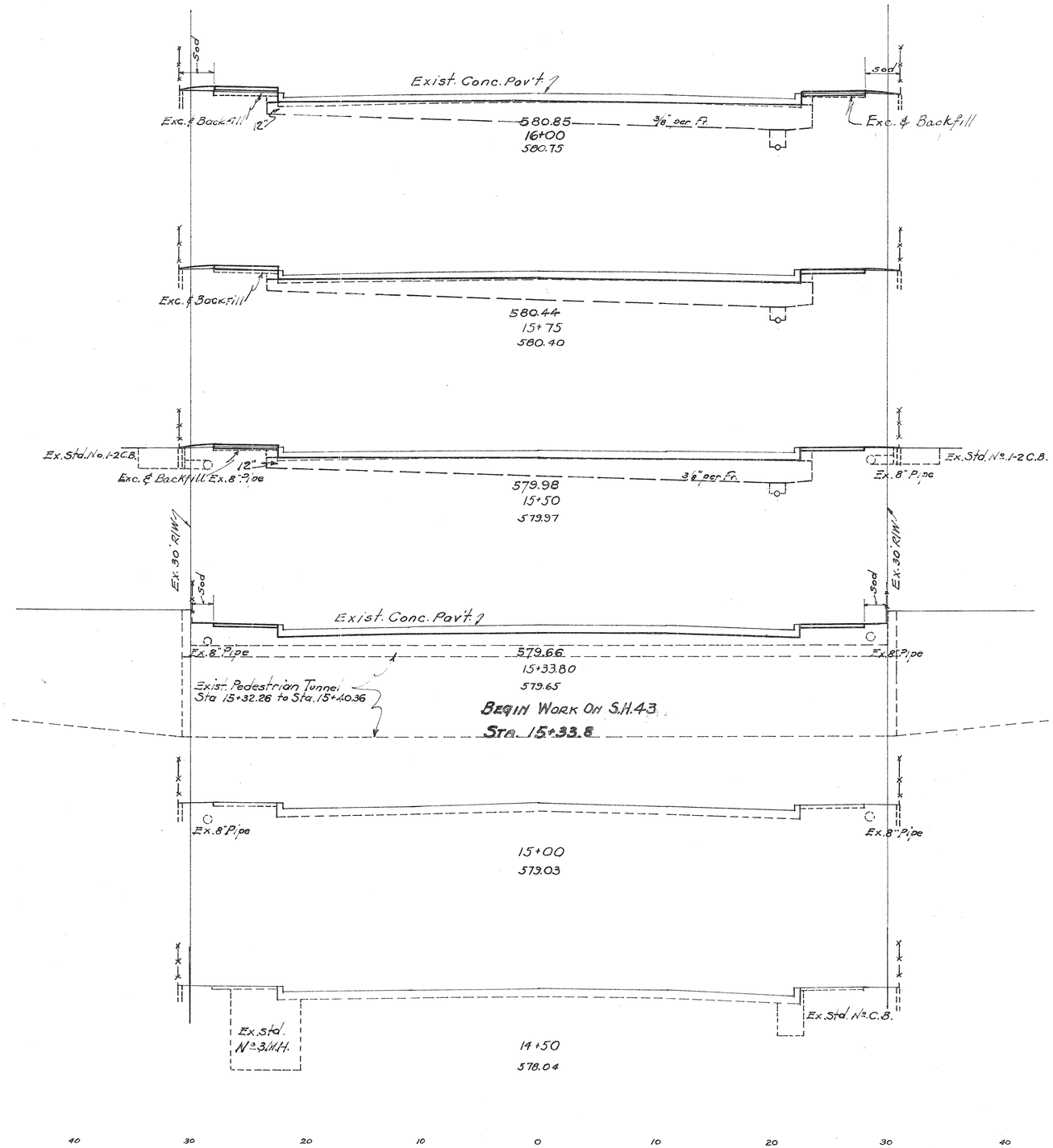
Station to Station	Side	Guard Rail Steel Beam Type (Deep) Item I-15 Lin. Ft.	Guard Rail Removed & Stored. Item I-15 Lin. Ft.		See Sheet Nº
PADDOCK ROAD					
28+75	Lt.	62.5			187
34+50 ~ 34+87	Rt.		88		188
TOTALS		62.5	88		

CONDUIT

Station	Side	Electrical Equipment (3½" Fiber Conduit) Item S-25 Lin. Ft.	See Sheet Nº
24+38.42 (Paddock Rd.)	R&L	344	217

Seeding

Width	Area Lin. Ft.	Area Sq. Yd.



Plotted By	M.L.H.
Templates Plotted	
Templates Checked	
Drainage Checked	M.B.S.
Areas By	M.B.S.
Volumes By	
Volumes Checked	
Balance Points	

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B," ARLINGTON H'TS, LOCKLAND (PT) & APPROACHES.

Class. Emb. Material	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
Area Vol. 83	84	7		
77			78	6
83	84	6		
71			72	5
70	72	5		
22			22	2
Sta. 15+41.36 70				
STA. 15+33.80	0	0		

RELOCATION of PADDOCK ROAD STA. 14+50 TO STA. 16+00

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UGZ

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B," ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES

Seeding

Width Area Lin Ft Sq Yd.

Plotted By J.C.M. T.S.
Templates Plotted
Templates Chkd
Drainage Chkd M.B.S.
Areas M.B.S.
Volumes
Volume Chkd
Balance Points

+27.4 20" Pop 80' DIVISION
+27.5 10" Poplar
+20.6 18 Poplar 82'
+37.5 10" Elm
+21.5 24" Poplar
+10 16" Willow
Edge of Bushes.
+23 8" Cat.
Fence
Top Conc Wall
Top Stone Wall
Prop. R/W
Seeding
Sod
12"
3/8" per ft.
3:1
Ex. Paddock Rd. (Conc)
Ex. Conc. S. Wlk.
582.04
19+00
582.30
Ex. 6" Pipe
+89 10" Ash
Exist. Pav't. to be removed
Ex. 12" San on 19+00
582.31
18+50
579.37 Ex. 6" Pipe
Exc. & Backfill
+39 10" Ash
+63 28" Ash.
+00 12" Ash
Ex. Water Meter M.H.
Ex. 10" Water Main
Ex. 12" San. on 18+50
582.40
18+00
580.50
Ex. 6" Pipe
+96 14" Elm
+88 36" Barb.
582.30
17+50
580.84
Ex. 12" San. on 18+00
+22.5 9" Plum
+27 9" Plum
+37 12" Plum
Top Stone Wall
582.00
17+00
581.25
Ex. 12" San. on 17+50
581.52
16+50
581.11
Fence
Top Conc Wall
Exc. & Backfill
Ex. Conc. S. Wlk. 12"
Ex. Paddock Rd (Conc)
Exist. Pav't. to be removed
581.37
16+37.27
581.06
Ex. 12" San. on 17+00
Ex. 12" San. on 16+50
Sta. 16+00
17+00

Class. Emb. 77 Material 2 Em

	END AREA		CU. YD.	
	CUT	FILL	CUT	FILL
Area	53			
Vol.			136	222
	53			
			120	222
	53			
	98		85	133
	53			
	98		124	185
	53			
	49	67		
	105		96	82
	65			
	54	22		
	132		111	30
	77			
	66	10		
	36		32	5
	77			
	68	12		
	110		105	13
	83			
	84	7		

RELOCATION of PADDOCK ROAD STA. 16+37 TO STA. 19+00

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B", ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES

Seeding
Width Area
Lin. Ft. Sq. Yd.
Top Conc. Wall
Top Stone Wall
Seeding
Prop. R/W
EXTENSION ON STA. 19+50 Lt.
Seeding
Sod
Sod
Sod
3:1
3/8" per ft.
12"
3/8" per ft.
12" Pipe
576.38
22+00
579.2
117
650
10" Elm +78.5
12" Poplar +52.5
17" Poplar +72
12"
577.79
21+50
581.4
4" Elm +22
667
9" Poplar +35.5
10" Poplar +31.5
Seeding
+55 9" Poplar
10" Elm +41.5
12"
3/8" per ft.
579.02
21+00
582.4
12" Pipe
seeding
123
664
+53 13" Elm
14" Elm +99.5
Fence
Top Conc. Wall
Ex. 12" San.
116
Ex. Paddock Rd. Conc.
Ex. Conc. S. Walk
Ex. 6" Pipe
564
+30.5 9" Elm
95
Ex. 12" San
580.06
20+50
582.9
6" Pipe
580.88
20+01.87
582.9
519
Ex. 6" Pipe
Prop. R/W
+80 9" Elm
+59.5 10" Maple
Fence
+90 End of Bushes
Edge of Bushes
+59.5 10" Willow
Sod
Sod
Sod
Sod
3:1
Seeding
Top Conc. Wall
Top Stone Wall 12"
3/4" per ft.
85
Ex. 12" San. 38'-7", 20 or 17
342
Ex. Paddock Rd. (Conc.)
Ex. Conc. S. Walk
Ex. 6" Pipe
581.57
19+50
582.7
6" Pipe
+73.6 9" Mulberry
For Extension see insert top of sheet.
Ex. 12" Storm
19+00

Class Fmt. Material Area Vol.	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
67	341	228		
65			686	428
63	400	234		
145			769	469
93	431	272		
165			759	471
85	389	237		
148			611	439
81	292	254		
148			463	511
73	190	278		
117			302	463
53	136	222		

Sta. 19+00

Plotted By
Templates Plotted
Templates Ck'd
Drainage Ck'd
Areas
Volumes
Volume Ck'd
Balance Points
U.C.M. T.S.
M.B.S.
M.B.S.

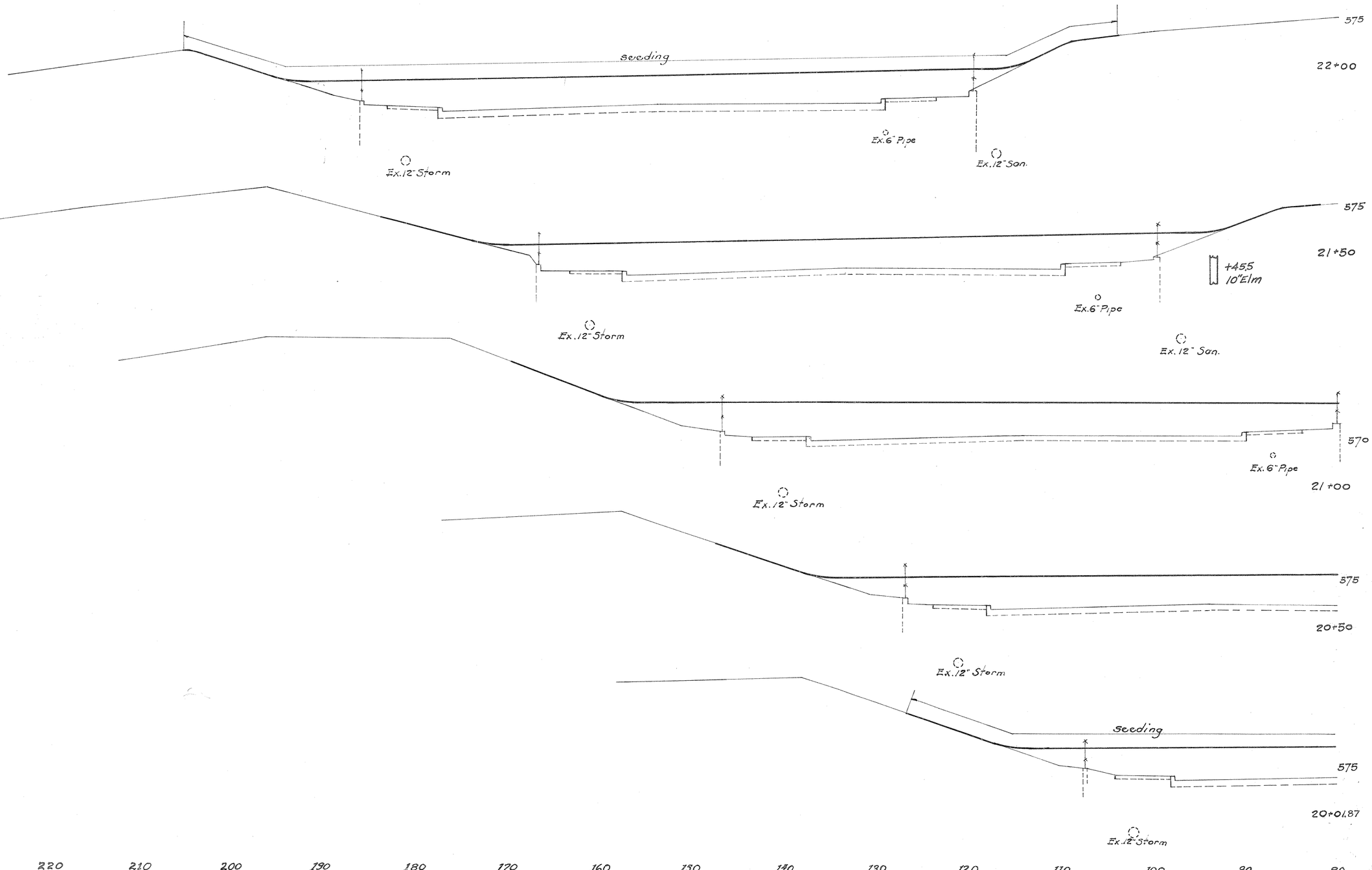
RELOCATION of PADDOCK ROAD STA. 19+50 TO STA. 22+00

DIVISION 2 | FED. AID | OHIO | UGI | UI-316(1) | 1946 | 195 | 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (pt) "B" Arlington Hts., Lockland (pt) & Approaches.

230		220		210		200		190		180		170		160		150		140		130		120

PLOTTED BY	M.B.S.
TEMPLATES PUTTO	M.B.S.
TEMPLATES CHECKED	
DRAINAGE CHECKED	
AREAS	M.B.S.
VOLUMES	
VOLUMES CHECKED	
BALANCE POINTS	



230		220		210		200		190		180		170		160		150		140		130		120

RELOCATION OF PADDOCK ROAD STA 20+01.87 TO STA. 22+00 EXTENSIONS LT.

DIVISION 2 | FED. AID | OHIO | UI-316(1) | 1946 | 196 | 289

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HAMILTON COUNTY

S.H. 987 SEC. CINCINNATI (PT), "B"; ARLINGTON HTS. & LOCKLAND (PT). APPROACHES

Plotted By	
Templates Plotted	
Templates Ck'd	
Drainage Ck'd	
Areas	M.B.S.
Volumes	M.B.S.
Volume Ck'd	
Balance Points	

Seeding	Width	Area Lin. ft.	Sq. Yd.

Incl. in 71st St. X-Sects.

9" — 3/8" per ft. — 9"

Incl. in Seymour Ave. X-Sects.

Aban. 15" Storm

Seeding — Sod

567.67
24+58
562.7

12" Pipe

Ex. 15" Storm

569.48
24+05
564.7

24+00
10" Ash

Sod

+99
16" Maple

570.00
23+89.62 (P.C.)
568.9

Ex. 15" Storm

Prop. R/W

+72
20" Maple

+68
9" Elm

3:1

12" Pipe

571.36
23+50
571.9

Aban. 15" Pipe

+04
18" Maple

+38
9" Maple

573.05
23+00
574.6

+85
12" Oak

+59
24" Oak

+86
18" Oak

12"

574.77
22+50
577.3

12" Pipe

Sta. 15+33.80 To Sta. 4098.93
Excavation 7,960.8 Cu. Yd.
Embankment 7,960.8 Cu. Yd.
Embankment + 20% 32422 Cu. Yd.
Sta. 15+41.36 To Sta. 38+69 5488 Cu. Yd.
Total Classified Emb. Material 70
Sta. 15+33.80 To Sta. 39+70 29,173 Sq. Yd.
Total Seeding

	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
Class. Emb. Material	0	403		
Area Vol.	165			
	262		38	649
	102	39	258	
	53		30	96
	85	65	78	
	116		178	123
	74	178	90	
	136		399	162
	73	253	85	
	134		532	303
Ahead	71	321	242	
Back	71	317	202	
	128		610	398
Sta. 22+00 67	341	228		

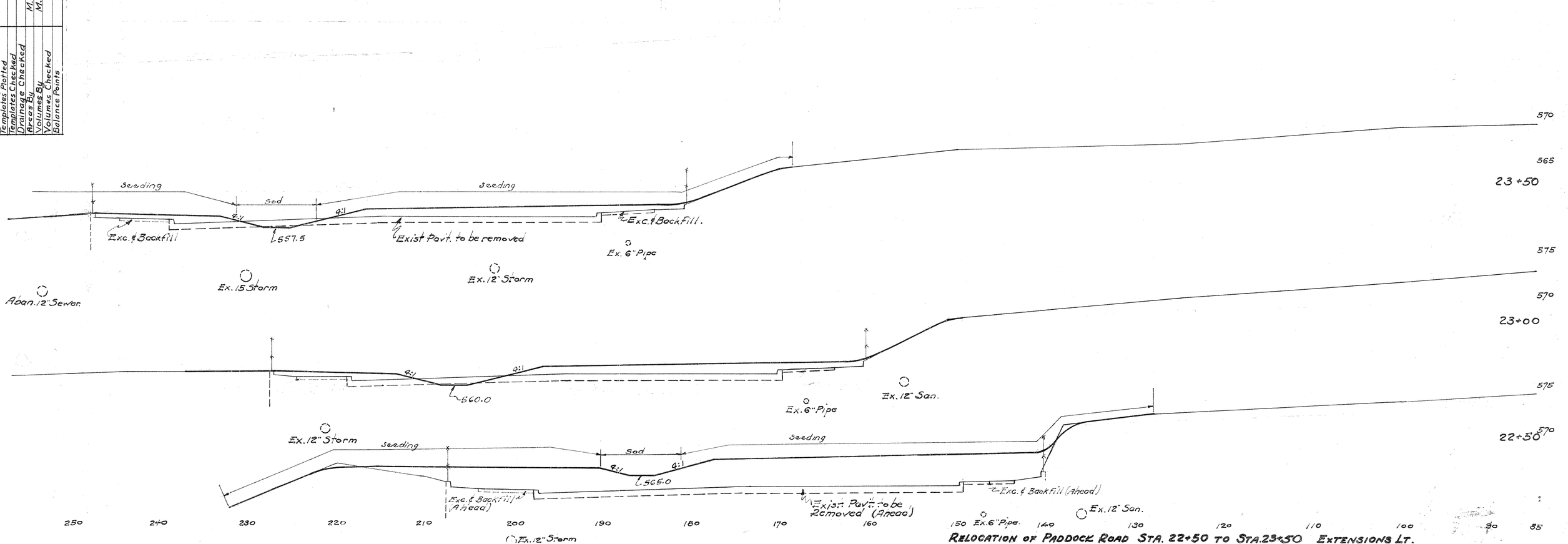
RELOCATION of PADDOCK ROAD STA. 22+50 TO STA. 24+58

DIVISION | FED. AID | 197
2 | OHIO | UI 31C(1) UGI | 1946 | 283

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B" ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

30 | 85

Plotted By	M.B.S.
Templates Plotted	M.B.S.
Templates Checked	
Drainage Checked	
Areas By	
Volumes By	
Volumes Checked	
Balance Points	



RELOCATION OF PADDOCK ROAD STA. 22+50 TO STA. 23+50 EXTENSIONS LT.

DIVISION 2 | FED. AID | OHIO | UI-316(1) 1946 | UGI

198
289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B", ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES

Class. Embankment Material Free Voo.	END AREA CU. YD. CUT	FILL	CU. YD. CUT	FILL
53	12	468		
111			18	965
67	7	574		
129			17	1218
72	11	741		
147			31	1474
87	12	851		
185			11	1935
112	0	1238		
148			0	1401
117	0	923		
37			0	172
Sta. 24+58 165.70	0	403		

Seeding
Width Area Lin Ft. Sq Yd.

312 — 560.12 — 27+00 — 555.4 — 12" Pipe — Abon. 12" Pipe — 3/8" per ft. — 4.9" — Sod — Seeding 4:1 — 556.5

1744 — 316 — 561.36 — 26+50 — 556.5 — 12" Pipe — 557.0

1789 — 328 — 562.85 — 26+00 — 557.1 — 12" Pipe — 557.5

1850 — 338 — 564.54 — 25+50 — 557.6 — Seeding — Sod — 558.0

983 — 16 — 566.24 — 25+00 — 558.1. — Incl. in 71st St. X-Sect's — 4"Ash — 6"Elm — 3/8" per ft. — 9"

31 — 0 — 567.43 — 24+65 — 559.3 — Incl. in 71st St. X-Sects. — Incl. in Seymour Ave. X-Sects. — Abon. 15" Pipe — Abon. 12" Pipe

Prop. R/W'S: 90'± — 98'± — 118'± — 128'±

Platted By	J.C.M. T.S.
Templates Plotted	J.B.W.
Templates CHKd.	A.J.H.
Drainage CHKd	M.B.S.
Areas	M.B.S.
Volumes	
Volume CHKd	
Balance Points	

RELOCATION of PADDOCK ROAD STA. 24+65 TO STA. 27+00

FED. AID

199

2 OHIO UI-3/6(1) 1946 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B"
ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

Plotted By	R.J.K.-T.J.		
Templates Plotted			
Templates Checked		M.B.S.	
Drainage Checked		M.B.S.	
Areas By			
Volumes By			
Volumes Checked			
Balance Points			

330 320 310 300 290 280 270 260 250 240 230 220 210

Seeding

+10 6" Elm

555

27+00

Exc. & Backfill

Exist. Pavt. to be removed

Exc. & Backfill

Exist. 24" Storm

555

26+50

Exist. 24" Storm

+99 9" Elm

555

26+00

Exist. 24" Storm

Seeding

555

25+50

Exc. & Backfill

Exist. Pavt. to be removed

Exc. & Backfill

Exist. 24" Storm

330 320 310 300 290 280 270 260 250 240 230 220 210 200 100 90 85

RELOCATION OF PADDOCK RD. STA. 25+50 TO 27+00 EXTENSIONS LT.

DIVISION 2 OHIO FED AID UI-316(1) 1946 UGI

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B", ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES

Plotted By J.C.M. T.S.
Templates Plotted J.B.W.
Templates Chkd A.J.H.
Drainage Chkd. M.B.S.
Areas M.B.S.
Volumes
Volumes Chkd.
Balance Points

70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding
Width Area
Lin Ft. Sq. Yd.

Sod Sod Seeding 4:1 3/8" per ft. 9" Sod

12" Pipe 556.80 30+50 551.7

199 1072

END AREA VOLUME

Class Emb Material	CUT Area	CUT Vol.	FILL Area	FILL Vol.
	81	17 576		
	168	32 1048		
	100	17 556		

12" Pipe 557.05 30+00 552.0

187 1058

	186	32 1069		
	101	18 598		

+19 9" Maple

12" Pipe 557.30 29+50 552.3

194 1264

	165	45 916		
	77	31 391		

Sod Sod 9" 9" 3/8" per ft. 12" Pipe 8'±

12" Pipe 557.55 29+00 554.0 12" Pipe

261 1442

36" Pipe

	131	66 540		
	64	40 192		

Sod Sod Seeding 9" 9"

557.84 28+50 555.3

18" Pipe

258 1531

	112	51 531		
	57	15 381		

Sod 9" 9" 555.5 80' Prop. C/L W2

Aban. 12" Pipe

558.36 28+00 554.4

293 1647

	104	27 [illegible]		
	55	14 391		

Sod Sod Seeding 4:1 Sod Sod Seeding 4:1 9" 3/8" per ft. 5559

18" Pipe 559.12 27+50 555.4 Aban. 12" Pipe

300 1700

	100			
	53	12		

312 27+00 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

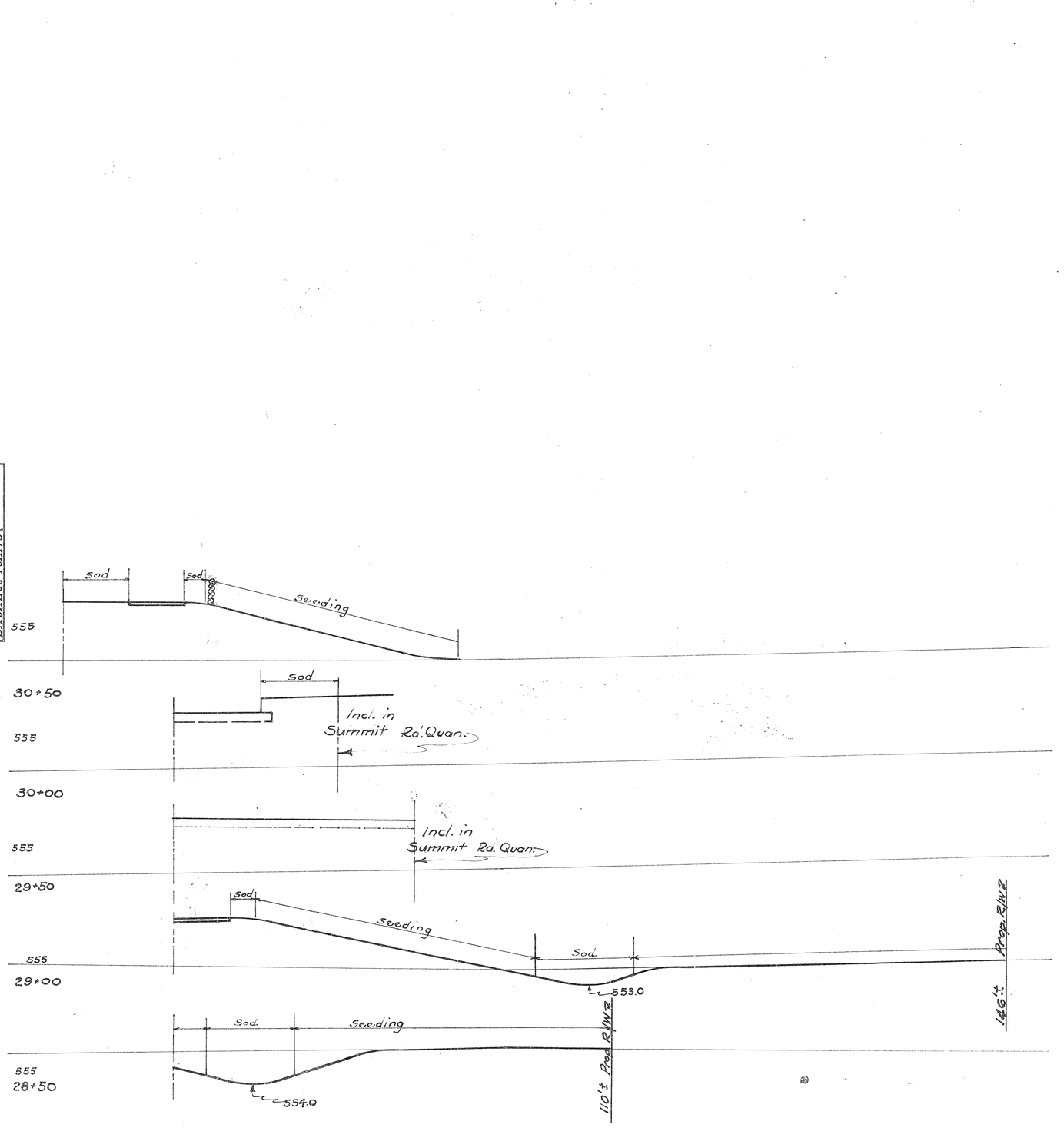
Sta. 27+00

RELOCATION of PADDOCK ROAD STA 27+50 TO

DIVISION 2 OHIO FED AID UT 316(1) 1946 JGZ 201 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B"
ARLINGTON HTS LOCKLAND (PT.)
& APPROACHES

PLOTTED BY		
TEMPLATES PLOTTED		
TEMPLATES CHECKED		
DRAINAGE CHECKED		M.B.S.
AREAS		M.B.S.
VOLUMES		
VOLUME CHECKED		
BALANCE POINTS		



RELOCATION PADDOCK RD. STA. 28+50 TO STA. 30+50 RT. EXTENSIONS.

DIVISION FED. AID 202
2 OHIO UGI 316(1) 1946 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON H'TS, LOCKLAND (PT.). & APPROACHES

240 230 220 210 200 190 180 170 160 150 140 130 120 110

+72
6" Elm
Seeding
Exc. & Backfill
548.64
550.7
550
30+50

+22
10" Elm
548.76
550.7
550
30+00

548.88
550.7
550
29+50

+50
6" Elm
555
549.0
550.7
29+00

+88
6" Elm
555.7
555
Exc. & Backfill
28+50

+38
7" Elm
555.7
555
28+00
Exc. & Backfill

+76
6" Elm
Seeding
555
27+50

Platted By	A.J.H.-T.S.
Templates Platted	
Templates Checked	M.B.S.
Drainage Checked	M.B.S.
Areas By	
Volumes By	
Volumes Checked	
Balance Points	

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

RELOCATION PADDOCK RD.- STA 27+50 TO STA 30+50 - LT. EXTENSIONS

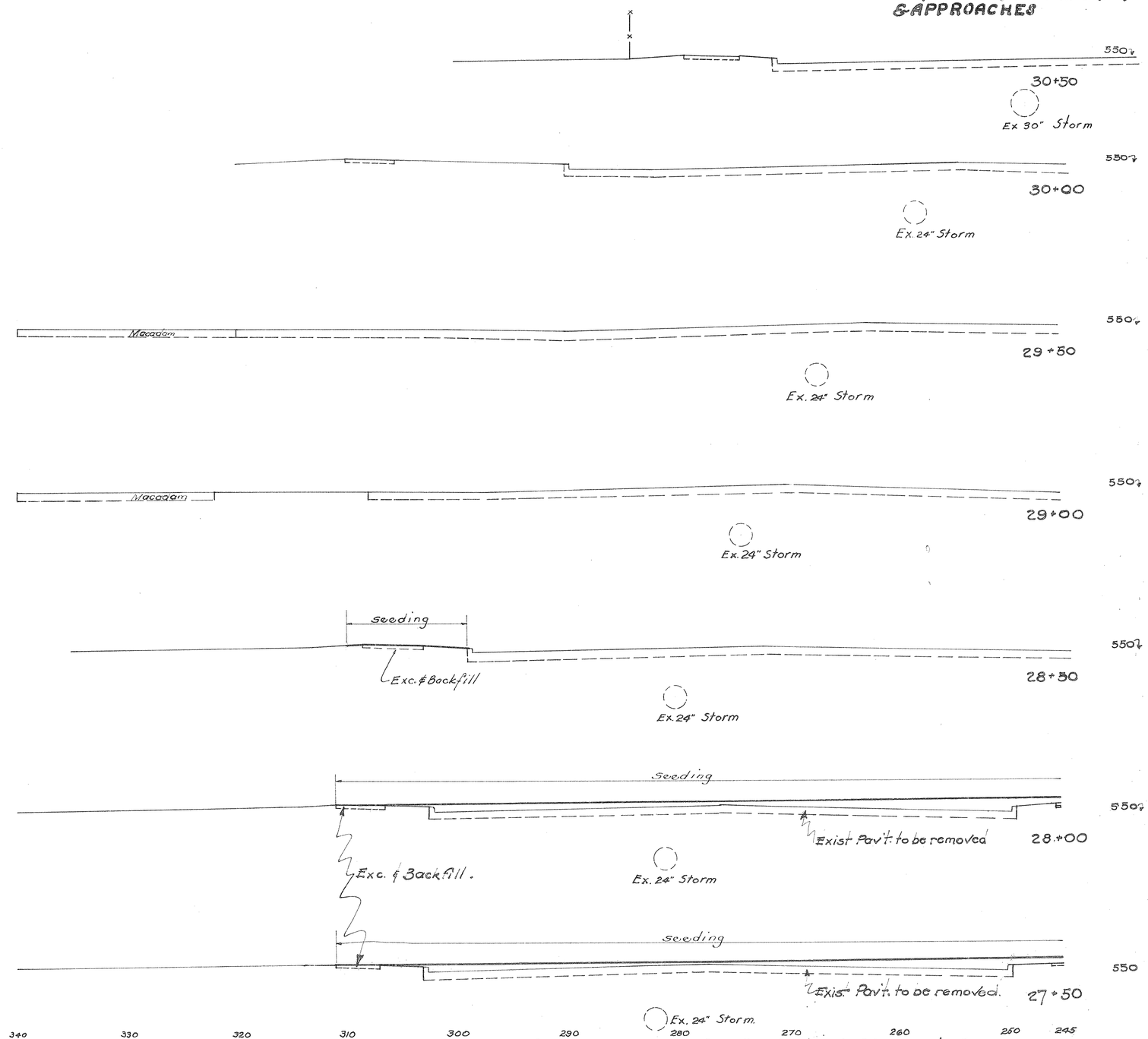
PLOTTED BY	M.B.S.
TEAM PLATES-PLOTTED	M.B.S.
TEAM PLATES-CHECKED	
DRAWING-DRAWN	
AREAS	
VOLUMES	
BALANCE-CHECKED	
BALANCE POINTS	

340 330 320 310 300 290 280 270

DIVISION 2 OHIO FED. AID UI-316(1) UGI 1946

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HAMILTON COUNTY
S.H 987 SEC. CINCINNATI (PT.) "B"
ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES



340 330 320 310 300 290 280 270 260 250 245

RELOCATION PADDOCK RD. STA 27+50 TO 30+50 LT. EXTENSIONS

Plotted By	J.C.M.	T.S.
Templates Plotted	J.B.W.	A.J.H.
Templates Ch'kd.	A.J.H.	
Drainage Ch'kd.	W.	M.B.S.
Areas		M.B.S.
Volumes		
Volumes Ch'kd.		
Balance Points		

DIVISION 2 | FED. AID | 204 | 289
OHIO UJ-316(1) 1946 UGI

HAMILTON COUNTY

S.H. 987 SEC. CINCINNATI (PT), "B", ARLINGTON H'TS., & LOCKLAND (PT) APPROACHES

Class Emb. Material

		END AREA VOLUME CUT	FILL	CUT	FILL
Sta. 34+00	Ahead	Area	Vol.		2356
	Back	0			2443
				24820	
		24443			2705'
		0			
		0		45833	
		0			
		25457			2100'
		0			
		0		49899	
	Ahead	0		29539	
	Back	65		29474	
				Incl. in Ramp "A" Quan.	
		130		50955	
				12"	
		Seeding 72		24532	
		147			
		Seeding		41894	
		87		20433	
		164		34797	
		Seeding			
		90		17428	
		159		32930	
Sta. 30+50		81		17576	

Seeding
Width Area
Lin Ft. Sq. Yds.
Exc. & Backfill
Seeding 4:1
+17 4" Elm
Sod
+87 5" Elm
24" Pipe
547.74
+50 6" Elm
+36 15" Catalpa
Incl. in Appr. Quan. - Ahead Only
4:1 Seeding
555.05 34+00 550.2
555.30 33+50 550.4
555.55 33+00 550.4
555.80 32+51.25 550.5
556.05 32+00 551.6
556.30 31+50 551.8
556.55 31+00 551.8
3/8" per Ft.
29"
12" Pipe
9"
109 653
126 745
142 780
146 766
123 833
177 1003
184 1064

RELOCATION of PADDOCK ROAD STA. 31+00 TO STA. 34+00

Plotted By	A.J.H.-T.S.
Templates Plotted	
Templates Checked	
Drainage Checked	M.B.S.
Areas By	M.B.S.
Volumes By	
Volumes Checked	
Balance Points	

DIVISION 2 FED. AID OHIO UI-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B"; ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

190 180 170 160 150 140 130 120 110

Seeding

℄ Exc. & Backfill

33+50

Ex. 8" San.

Ex. 33" Storm

+09
4" Elm

33+00

547.88

Ex. 12" Storm

Ex. 30" Storm

Ex. 12" Storm

+71
5" Elm

32+51.25

548.04

Ex. 30" Storm

+24
4" Elm

32+00

548.20

Ex. 30" Storm

+82
9" Elm

31+50

548.37

Ex. 30" Storm

Seeding

℄ Exc. & Backfill

31+00

548.51

Ex. 30" Storm

240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

RELOCATION of PADDOCK ROAD STA. 31+00 TO STA. 33+50 L.T. Extension

Plotted By	JCM.
Templates Plotted	J.B.W.
Templates Chkd.	A.J.H.
Drainage Chkd.	
Areas	M.B.S.
Volumes	M.B.S.
Volumes Chkd.	
Balance Points	

70 60 50 40 30 20 10 0 10 20 30 40 50 60

Seeding

Width Area
Lin Ft. Sq. Yd.

DIVISION 2 FED. AID UGI OHIO UI-316(1) 1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B"; ARLINGTON H'TS., LOCKLAND (PT.) & APPROACHES

END AREA VOLUME

	Class. Emb. Material CUT	FILL	CUT	FILL
		89	110	97
Incl. in S.H. 987 Quan.		143	164	216
		55	67	136
Ex. 15" Storm Incl. in S.H. 987 Quan.		123	123	176
		78	66	54
		122	67	132
		53	6	88
		36	8	260
Ahead		53		
Beg. of Classified Emb. Material, Sta. 35+81.56 Back		0		
		0	2	192
		0		
			2	422
		0		
Sta. 35+00 Ahead		0269		
Back		0221		
		0		
		17	145	
Appr. Sta. 34+78.78			2	466
		0		
			2	282
		0		4591
		0		
Sta. 34+00		0		2356

Sod
Ex. Conc. S. Wlk.
6"
Ex. Paddock Rd. (Conc.)
3/8" per ft.
12" Pipe
549.94
37+50
550.10
Ex. Conc. S. Wlk.
12"
Seeding
Class. Emb. Material

Seeding
Sod
Ex. Conc. S. Wlk. Exc. & Backfill
Ex. Pavt. to be removed
Ex. Conc. S. Wlk.
12" Pipe
551.18
37+00
551.10

Ex. Conc. Wk. Exc. & Backfill
Exist. Pavt. to be removed.
Fence
Ex. Conc. S. Wlk.
12"
552.26
36+50
551.15
12" Pipe
12" Pipe
Ex. 48" Storm

4:1
Ex. Paddock Rd. & 73rd. St. (Conc.)
Exist. Pavt. to be removed.
12" Pipe
3/8" per ft.
6"
Fence
Ex. Conc. S. Wlk. Exc. & Backfill
553.15
36+00
551.7
Seeding

Ex. 48" Storm
Aban. 33"
Ex. Conc. S. Wlk.
Ex. Paddock Rd. (Conc.)
Exist. Pavt. to be removed
Fence
Ex. Conc. S. Wlk. Exc. & Backfill
553.88
35+50
551.30
+44
3" Mulberry

Aban. 33"
Ex. 30" Storm
Exist. Pavt. to be removed.
Ex. Paddock Rd. (Concrete)
Ex. Concrete Drive to Division Garage
11"
Ex. 12" Storm
554.42
35+00
551.57
+00
10" Cedar
Incl. in Appr. Quan. - Back Only
Sod
Seeding
Ex. 3' Conc. Wlk.

24" Pipe
Ex. 33" Storm
Ex. 15" San
Seeding
Sod
Incl. in Approach Quantities
Appr. Sta. 34+78.78
Exist. Pavt. to be removed.
Ex. Paddock Rd.
Ex. Conc. Wk. Exc. & Backfill
554.80
34+50
549.9
Ex. 15" San.
24" Pipe

RELOCATION of PADDOCK ROAD STA. 34+50 TO STA. 37+50

DIVISION 2 | FED. AID | OHIO UI-316(1) 1946 UGI | 207 | 283

HAMILTON COUNTY

S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON H'TS., LOCKLAND (PT.) & APPROACHES

END WORK ON S.H. 43
STATION 40+81.93

Seeding

Width	Area Lin. Ft.	Sq. Yd.

Ex. Conc. Pier

Ex. Paddock Rd. (Conc.)

40+81.93
539.5

Ex. Conc. S. Wlk.

Ex. Paddock Rd. (Conc.)

Ex. Paddock Rd. (Conc.)

Ex. Conc. S. Wlk.

40+50
540.20

Sod

Ex. Paddock Rd. (Conc.) – End Prop. Conc. Pav't.
542.32

39+70.70
542.32

Sod

Sod

Ex. Conc. S. Wlk.

542.76
39+60
542.76

Incl. in Pine Alley Quan.

543.17
39+50
543.12

Appr. 39+00.92 Rt.

Prop. R/W

Back Only

Sod

+78
6" Elder

+82
6" Willow

Ahead
Back

545.14
39+00
545.12

End Classified Emb. Material, Sta. 38+69 49

Ex. 12" Storm

Sod

Prop. R/W

Sod

6"

3/8" per ft.

3/8" per ft.

546.92
38+50
547.10

+96
3" Maple

Fence

Sod

12" Pipe

Ex. Conc. S. Wlk.

Sod

6"

Ex. Conc. S. Wlk.

3/8" per ft.

Ex. Paddock Rd. (Conc.)

3/8" per ft.

Prop. R/W

548.51
38+00
548.87

12" Pipe

Sta. 37+50

RELOCATION of PADDOCK ROAD STA. 38+00 TO STA. 40+50

Sta. 40+81.93

Class. Emb. Material Area Vol.	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
	2	0		
			2	0
	2	0		
			3	0
	0	0		
			0	1
	1	5		
			1	2
	4	5		
			8	0
			7	9
	3	4		
	27	4		
			93	8
	34			
	49		73	4
	103		180	8
	62		121	4
	140		214	94
	89		110	97

Plotted By	J.C.M. T.S.
Templates Plotted	J.B.W.
Templates Chkd.	A.J.W.
Drainage Chkd.	
Areas	M.B.S.
Volumes	M.B.S.
Volume Chkd	
Balance Points	

0 38+00

58

21 37+50

DIVISION 2 | FED. AID OHIO UI-316 (1) 1946 UGI | 208 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B"; ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
Sta. 12+00 Lt. Fill for basement				228
	4	69		
			8	66
Sta. 11+49 Ahead	4	1		

Seeding

Width Area
Lin Ft. Sq. Yd.

+44 12" Maple

172
964 11+59 to 13+00 Lt. - where Houses are Removed

+28 12" Syc.

2 Sty. Br. Dwg.

Seeding

Sod

Sod

℄ Prop. Pav't.

Sod

Sod

Existing Ornamental Hedge

Seeding

Prop. R/W

Seeding To 125' Lt

Excav. & backfill

Remove Exist. Conc. Pav't

Excav. & backfill

121

Ex. 8" San. 551.87
12+00
551.13

96

+69 32" Syc.

Seeding

Seeding

Sod

Sod

℄ Prop. Pav't.

Sod

Sod | Seeding

Existing 3 Rows Lilac Bushes

Prop. R/W

6" Conc. wall

Seeding to 125' Lt

Remove Exist. Conc. Pav't Ahead

133

Ex. 8" San. 550.64
11+49
550.64

BEGIN. WORK ON S.H. 781
STATION 11+49

℄ Exist. Pav't.

Ex. R/W

550.33
Ex. 8" San. 11+00
550.33

Plotted By	N.B.S. J.C.S.
Templates Plotted	C.M.E.
Templates Chkd	R.E.L.
Drainage Chkd	
Areas	R.E.L.
Volumes	R.E.L.
Volume Chkd	
Balance Points	

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

71 ST STREET ~ STA. 11+00 TO STA. 12+0

DIVISION 2 | FED. AID | OHIO UI-316 (1) | 1946 | UGI

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HAMILTON COUNTY

S.H. 987 SEC. CINCINNATI (PT), "B", ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES

END AREA VOLUME

CUT	FILL	CUT	FILL

Plotted By	MBS
Templates Plotted	C.N.L.
Templates Chkd	R.E.L.
Drainage Chkd	
Areas	T.S.
Volumes	R.E.L.
Volume Chkd	
Balance Points	

DIVISION 2 — FED. AID OHIO UGI-316 (1) 1946 — 210 — 283

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT.), "B"; ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

END AREA VOLUME
CUT FILL CUT FILL

Seeding
Width Area
Lin Ft. Sq. Yd.

70 60 50 40 30 20 10 0 10 20 30 40 50 60

Ex. 15" Sewer

Sod Sod Seeding Sod Seeding

℄ 566.3

Prop. ℄ W.Z.

℄ Intel. in Paddock & Quant.

Seeding

65

567.59
12" Pipe (Abandoned)
15+50
560.49

Ex. 21" Storm

+35 6" Elm

+33 10" Ash

+17 9" Maple

Sta. 15+50
*Ahead 0 0
Back 2 784
*Quantities ahead of this Sta. included in Paddock Rd X-Sect's.

22 1486

℄ 562.2

Prop. ℄ W.Z.

22 821

483

100

12" Pipe (Abandoned)

+86 9" Elm

566.76
15+00
558.46

Ex. 21" Storm

Sod Sod Sod Sod Seeding Sod Seeding

62 1530

569

Seeding 4:1 4:1

℄ 559.0

Prop. ℄ W.Z.

105

12" Pipe (Abandoned)

565.17
14+50
556.70

Ex. 21" Storm

45 832

44 1398

14+00 2. 677

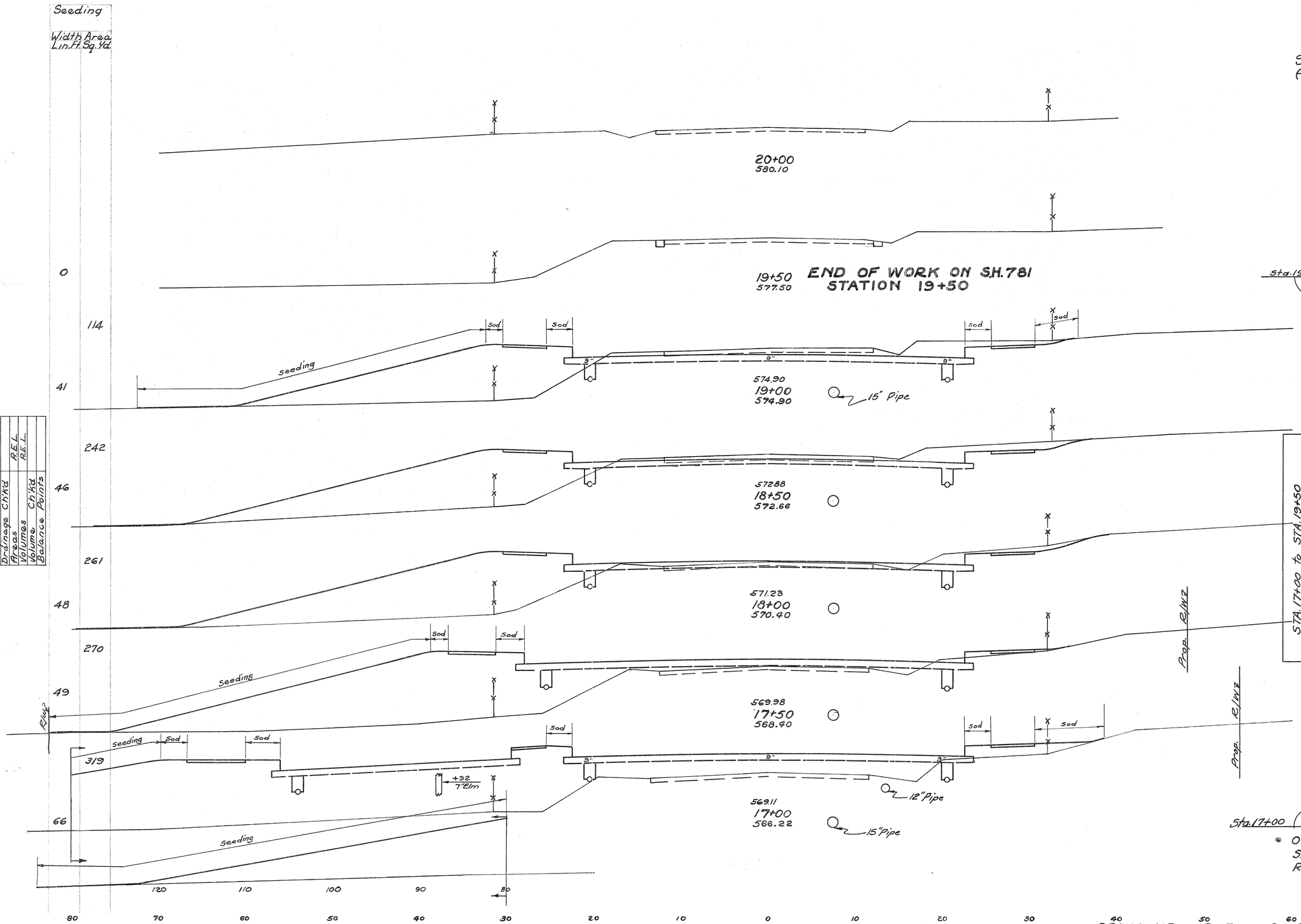
70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

71 ST STREET ~ STA. 14+50 TO STA. 15+50

DIVISION 2 | FED. AID OHIO UI-316 (1) UGI | YEAR 1946 | 211 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B"
Arlington H'ts, Lockland (Pt.)
& Approaches

Plotted By	M.B.S.-J.C.M.
Templates Plotted	C.W.L.
Templates Ch'kd	R.E.L.
Drainage Ch'kd	
Areas	R.E.L.
Volumes	R.E.L.
Volume Ch'kd	
Balance Points	



Class. Emb. Material	END AREA Area	Vol.	VOLUME CUT	FILL	CUT	FILL
Sta. 19+50						
		2	2			
					22	142
Ahead	0		22	151		
Back	35		73	151		
		65			123	299
		35	60	172		
		65			86	336
		35	33	191		
		69			36	437
		39	6	281		
		88			7	804
Ahead	56		2	587		
Sta. 17+00 * Back	0					

STA. 17+00 to STA. 19+50
Excavation ——— 274 Cu. Yds.
Embankment ——— 2018 Cu. Yds.
Embankment +20% ——— 2422 Cu. Yds.
STA. 17+00 to STA. 19+00
Classified Emb. Material ——— 287 Cu. Yds.
STA. 17+00 to STA. 19+50
Seeding ——— 1206 Sq. Yds.

* Quantities back of this Sta. Included in Paddock Rd. X-Sec's.

SEYMOUR AVE. STA. 17+00 TO STA. 20+00

FED. DIV.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 Sec. CINCINNATI (PT.), "B" ARLINGTON H'TS LOCKLAND (PT.). & APPROACHES

P.I. = 18+21.82
Δ = 21°-52'-33"
D = 6°-00'
T = 184.55'
R = 954.93'
L = 364.60'
E = 17.64'

Prop. 5' Conc. Sidewalk
Prop. Type 2 A Curb
Prop. Type 2-A Curb
Prop. Type 4 Curb & Gutter (2'-6" Wide)
Prop. 5' Conc. Sidewalk
Prop. Type 2 A Curb
Prop. Type 2 Curb & Gutter (2'-6" Wide)
Prop. 5' Conc. Sidewalk
Prop. Type 4 Curb & Gutter (2'-6" Wide)
Prop. Type 2 A Curb
Prop. Type 2-A Curb
Prop. 5' Conc. Sidewalk
Prop. 5' Conc. Sidewalk
Prop. Type 2-A Curb
Prop. Type 2 A Curb
Prop. Type 2-A Curb
Prop. Type 2 A Curb
Prop. Type 2-A Curb
Prop. Type 4-A Curb
Mod. Type 4-A Curb
Existing Concrete
L Type 2 A Curb
L Type 2 A Curb
℄ Prop. Paddock Road
℄ Seymour Ave.
℄ Tang. at 27+31.23 - 30' Rt. of ℄ Paddock Rd.

P.C. 16+37.27
P.C. 23+89.62
P.C. 23+67.24
P.C. 23+53.33
P.C. 23+19.62
P.T. 20+01.87
P.T. 16+61.96
P.T. 25+81.40
P.T. 17+86.98
P.I. 15+43.0
P.I. 15+50
P.I. 16+10.38
P.I. 16+88.62
P.I. 16+70.68
P.I. 16+86.98
P.I. 16+45.92
P.I. 17+05.00
P.I. 15+26.73
P.I. 15+16.11
P.I. 25+01.03
15+33.80
21+07.62
21+78.12
22+83.07
+18.5 No. 3 M.H.
+55.3 No. 3 C.B.
+04.1 No. 3 C.B.
+99.0 No. 3 C.B.
+63.5 No. 4 M.H.

Δ = 12°-40'-49"
R = 120' ℉/c
L = 26.56' ℉/c
T = 13.33'

Δ = 12°-11'-59"
R = 120' ℉/c
L = 25.55' ℉/c
T = 12.82'

Δ = 13°-17'-49"
R = 120' ℉/c
L = 27.85' ℉/c
T = 13.99'

Δ = 13°-18'-21"
R = 120' ℉/c
L = 27.87 ℉/c
T = 14.00'

Δ = 11°49'-20"
R = 38' ℉/c
L = 47.63' ℉/c
T = 27.52'

Δ = 77°-44'-05"
R = 130' ℉/c
L = 176.59' ℉/c
T = 104.78'

Δ = 12°-40'-49"
R = 120' ℉/c
L = 26.56' ℉/c
T = 13.33'

58' ℄ to Rad.
58' ℄ to Rad.
70' ℄ to Rad.

P.I. = 27+82.80
Δ = 44°-45'-27" Lt.
D = 6°-00'
T = 393.18'
R = 954.93'
L = 745.56'
E = 77.78'
P.C. = 23+89.62
P.T. = 31+35.58

Note:- From Sta. 21+78.12 to Sta. 27+00 No Joint along ℄ of Paddock Road.

Note:- For location & details of proposed fibre conduits See Sheet № 217

Note:- For Pavement Symbols & Joint Legend See Sheet № 14

PAVEMENT DETAILS
(Sta 20 to Sta 24)

Sta 20+01.87
Sta 21+78.12
Sta 22+83.07
Sta 23+67.24
Sta 23+53.33 (P.C.)
Sta 23+19.62

Scale - 1" = 20'

Drawn by		Date	
Checked by		Date	
Checked by		Date	

PAY'T DETAILS - PADDOCK RD. - STA. 15+33.80 TO STA. 27+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-3/6C(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON HTS., LOCKLAND (PT.)
& APPROACHES

P.I. = 27+82.80
Δ = 44°-45'-27"
D = 6°-00'
T = 393.18'
R = 954.93'
L = 745.96'
E = 77.78'

P.T. 31+35.58

Type 2A Curb

Prop. Type 2-A Curb

Type 2 Curb & Gutter (2'-6" Wide)

Prop. 5' Conc. Sidewalk

Prop. Type 2-A Curb

Prop. 5' Conc. Sidewalk

Curve Data f/c
PI = 0+84.66
Δ = 31°-31'-05" Rt.
D = 19°05'-55"
R = 300' f/c.
T = 84.66'
L = 165.03'
E = 11.72"
P.C. = 0+00
P.T. = 1+65.03

P.C. Sta. 0+00

℄ SUMMIT RD.
P.I. = 2+55.32
Δ = 32°-08'-30" Lt.
D = 6°-35'
R = 870.32'
T = 250.73'
L = 488.23'
E = 35.40'
P.C. = 0+04.59
P.T. = 4+92.82

Prop. Type 2-A Curb

Prop. Type 2-A Curb

Prop. Type 2-A Curb

Prop. 5' Conc. Sidewalk

Prop. Type 2-A Curb

Prop. 5' Conc. Sidewalk

Prop. Type 2-A Curb

Prop. 5' Conc. Sidewalk

Prop. Type 2 Curb & Gutter (2'-6" Wide)

Face Abut. Sta. 33+00.55 (Future)

End Appro. Slab Sta. 32+96.83 (Future)

Begin Appro. Slab Sta. 32+81.83 (Future)

For Prop. Sidewalk & steps Lt. sta. 34+00 See Sheet No. 219

℄ Pier Sta. 34+81.40 (Future)

℄ Pier Sta. 33+51.40 (Future)

End of Appro. Slab Sta. 35+50.98 (Future)

Begin Appro. Slab Sta. 35+35.98 (Future)

Face Abut. Sta. 35+32.26 (Future)

Prop. Type 2 Curb & Gutter (2'-6" Wide)

Prop. Type 2-A Curb

Prop. 5' Conc. Sidewalk
Type 2 curb & Gutter (2'-6" wide)

Type 2A Curb

Type 2A Curb

Δ 11°44'
R 30.00 f/c.
T. 46.83 f/c.
L. 60.07 f/c.

Prop. Type 2A Curb

℄ Approach

R. ℄ S.H. 987

Δ = 65°16'
R = 35.00 f/c.
T = 22.61 f/c.
L. 39.87 f/c.

Prop. 5' Conc. Sidewalk

Δ = 72°-10'-04"
R = 25' f/c
L = 31.49' f/c
T = 18.22'

Prop. 5' Conc. Sidewalk

Prop. Type 2-A Curb

Prop. 5' Conc. Sidewalk

Prop. Type 2 Curb & Gutter (2'-6" wide)

Prop. Type 2-A Curb

Prop. Type 2 Curb & Gutter (2'-6" Wide)

Prop. Type 2-A Curb

Δ = 107°-49'-56"
R = 130' f/c
L = 244.66 f/c
T = 178.38'

P.T. 36+38.03 = 34+86.85 Ramp "B"

36+86.23

ESTIMATED QUANTITIES
APPROACH STA. 34+78.78 RT.

9" Concrete Pavement	Item T-70	207.759 Yd.
Type 2-A Concrete Curb	Item I-12	133.6 Lin. Ft.
Excavation (Incl. in Rdwy. Quant.)	Item E-1	17 Cu. Yd.
Embankment (Incl. in Rdwy. Quant.)		145 Cu. Yd.

~NOTE~
From Sta. 27+00 to Sta. 38+86.23
No Joint along ℄ of Paddock Road.

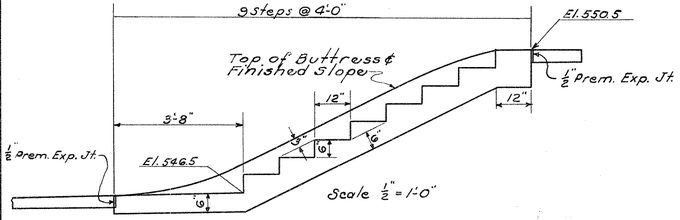
Note:-
For Pavement Symbols & Joint Legend's See Sheet No. 214

PADDOCK RD. PAV'T. DETAIL - STA. 27+00 TO STA. 38+86.23

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	U.S. 127 UI-316(1)	1946

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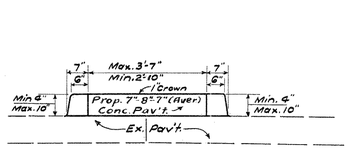
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON H'TS, LOCKLAND (PT.). & APPROACHES



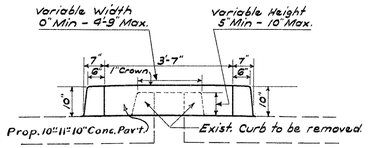
SIDEWALK & STEPS PROFILE STA. 38+72.5

ESTIMATED QUANTITIES.

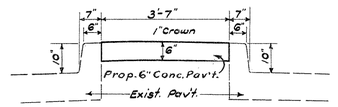
Concrete Steps (6" Riser 12" Tread)	Item I-13	36 Lin. Ft.
4" Concrete Sidewalk	Item I-13	4 Sq. Ft.



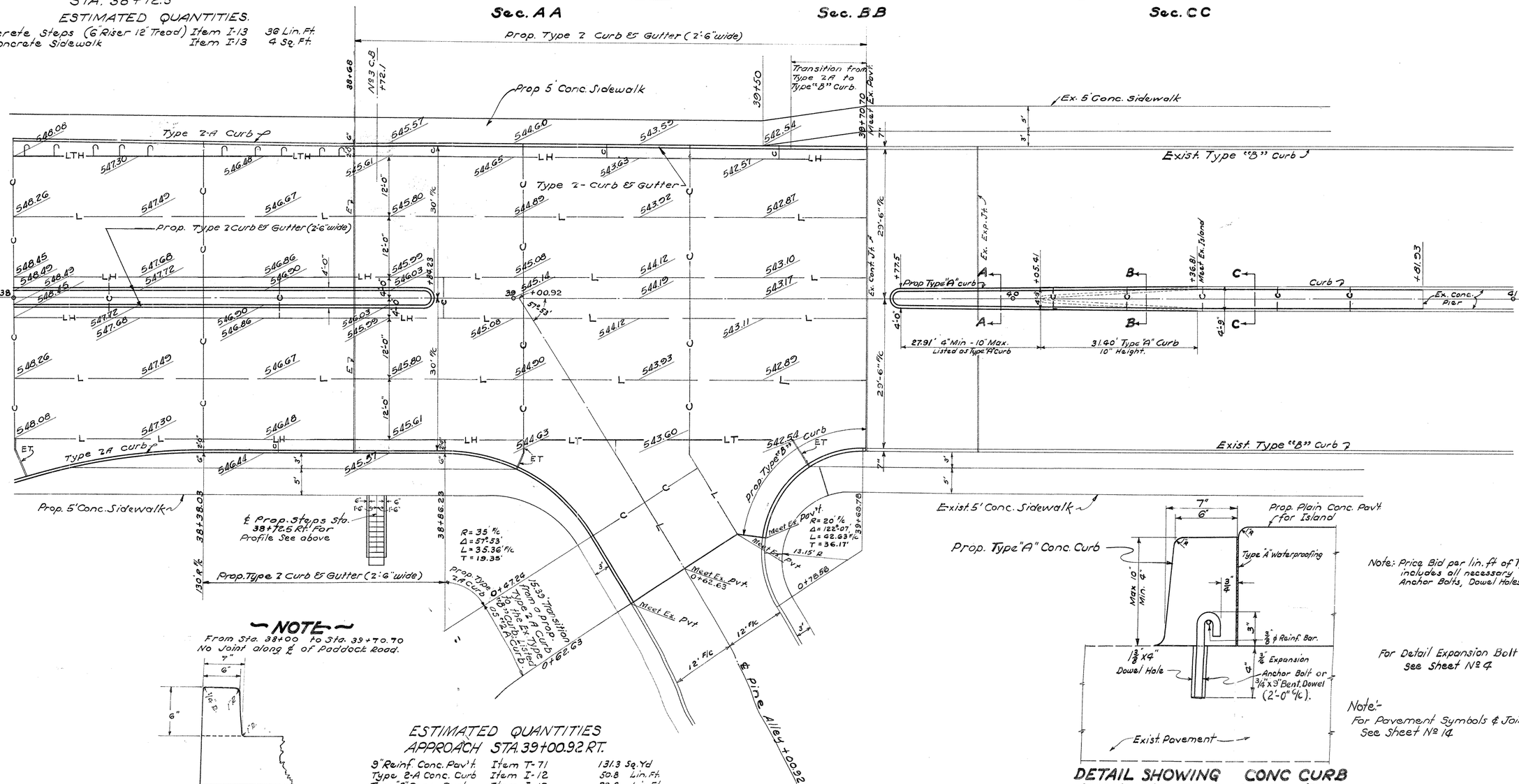
Sec. A A



Sec. B B



Sec. C C



— NOTE —

From Sta. 38+00 to Sta. 39+70.70 No Joint along ℄ of Paddock Road.

DETAIL OF TYPE "B" CURB

Scale - 1/2" = 1 Ft.

ESTIMATED QUANTITIES APPROACH STA. 39+00.92 RT.

9" Reinf. Conc. Pav't.	Item T-71	131.3	Sq. Yd.
Type 2-A Conc. Curb	Item I-12	50.8	Lin. Ft.
Type "B" Conc. Curb	Item I-12	29.8	Lin. Ft.
Removal & Disposal of Exist. Conc. Pavt.	Item E-8	117.0	Sq. Yd.
Excavation (Incl. in Rdwy. Quant)	Item E-1	8	Cu. Yd.
4" Concrete Sidewalk	Item I-13	265	Sq. Ft.

Note: Price Bid per lin. ft. of Type "A" Conc. Curb includes all necessary Expansion Anchor Bolts, Dowel Holes & Reinf. Steel.

For Detail Expansion Bolt See Sheet No 7

Note:- For Pavement Symbols & Joint Legend See Sheet No 14.

DETAIL SHOWING CONC CURB ANCHORED TO EXIST. PAV'T.

Scale; 4" = 1'-0"

Drawn by		Date	

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316-(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington H'ts, Lockland (Pt.) & Approaches

ESTIMATED QUANTITIES
71st ST. STA. 24+38.42 Lt.

9" Reinforced Concrete Pavement	Item T-71	257.7	Sq. Yd.
9" Plain Concrete Pavement	Item T-70	1661.0	Sq. Yd.
Type 2A Concrete Curb	Item I-12	941.9	Lin. Ft.
Existing Pavement Removed & Disposed of	Item E-8	626.0	Sq. Yd.
4" Concrete Sidewalk	Item I-13	4855	Sq. Ft.
Sodding	Item L-10	782	Sq. Yd.
Seeding	Item L-9	3826	Sq. Yd.
Excavation	Item E-1	161	Cu. Yd.
Embankment		7251	Cu. Yd.

℄ Data 71st St.
P.I. = 14+86.13
Δ = 21°-21' Lt.
D = 6°-00'
T = 180.00'
R = 954.93'
L = 355.83'

℄ Data Paddock Rd.
P.I = 27+82.80
Δ = 44°-45'-27" Lt.
D = 6°-00'
T = 393.18'
R = 954.93'
L = 745.96'

Note:
For location & details of proposed fibre conduits See Sheet No 217

Note:-
For Pavement Symbols & Joint Legend See Sheet No 14

Scale - 1"=20'

Drawn by		Date	
Checked by		Date	
Checked by		Date	

PAV'T DETAILS 71st ST.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGT	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.

℄ Data Paddock Road
P.I. = 27+82.80
Δ = 44° 25' 27" Lt.
D = 6° 00'
T = 393.18'
R = 954.93'
L = 745.96'
E = 77.78
P.C. = 23+89.62
P.T. = 31+35.58

Note:-
For location & details of proposed fibre conduit See Sheet No 217

Note
F/c Tang @ 27+31.23 and 30' Rt. of ℄ of Paddock Rd.

Note
For Pav't. elevations not shown See Paddock Rd Details (Sheet No 212)

PROP. ℄ PADDOCK RD.

Type 4 Curb & Gutter 2'6" wide

Main Cincinnati Rd.

R = 130' F/c

Δ 77°44'09"
R 130' F/c
T 104.78
L 176.38 F/c

Prop Type 2A Curb

R = 130' F/c

Prop Type 2A Curb

Sta 24+38.42 Paddock
Sta 16+10.38 Seymour

SEYMOUR AVE.

Existing Macadam Pav't

℄ +50

P.C. 23+89.62

23+85.24

23+67.24

R = 120' F/c

12°40'49" 120 F/c 13.33 26.56 F/c

DRT

Prop Type 2A Curb

END PROP. PAVEMENT STA. 19+00

Note:-
For Pavement Symbols & Joint Legend See Sheet No 14

ESTIMATED QUANTITIES
SEYMOUR AVE. STA. 24+38.42 RT.

Asphaltic Conc. Variable Thickness Surface Course	Item T-35	8.0	Cu. Yd.
1" Asphaltic Conc. Surface Course	Item T-35	61.1	Sq. Yd.
1" Asphaltic Conc. Leveling Course	Item B-35	61.1	Sq. Yd.
3" Asphaltic Conc. Base Course	Item B-35	130.6	Sq. Yd.
1½" Insulation Course	Item I-19	66.7	Sq. Yd.
Bituminous Tack Coat	Item T-30	133.3	Sq. Yd.
Sealing Only	Item E-8	44	Lin. Ft.
9" Reinforced Concrete Pavement	Item T-71	1849.6	Sq. Yd.
Type 2A Concrete Curb	Item I-12	1011.9	Lin. Ft.
4" Concrete Sidewalk	Item I-13	4502	Sq. Ft.
Sodding	Item L-10	837	Sq. Yd.
Seeding	Item L-9	1206	Sq. Yd.
Excavation	Item E-1	274	Cu. Yd.
Embankment		2018	Cu. Yd.

Drawn by		Date
Checked by		Date
Checked by		Date

PAVEMENT DETAILS SEYMOUR AVE.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1)	1946

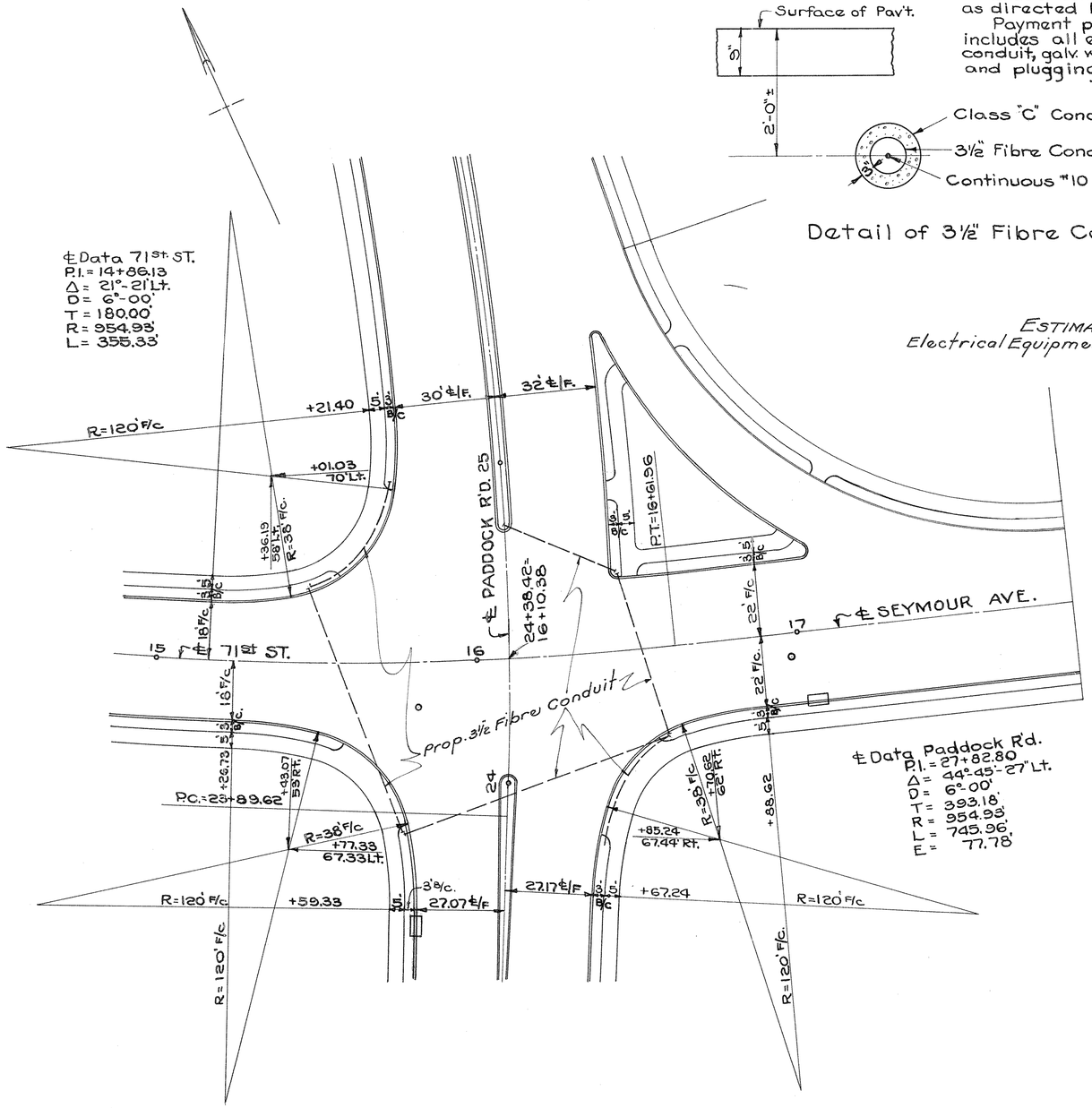
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI(Pt.), "B" ARLINGTON HTS., LOCKLAND(Pt.) & APPROACHES

Detail of 3½" Fibre Conduit.

Note:
Ends of conduit to be plugged as directed by the Engineer.
Payment per lin.ft. of conduit includes all excavation, backfill, conduit, galv. wire, conc. encasement and plugging.

ESTIMATED QUANTITIES
Electrical Equipment (3½" Fibre Conduit) Item S-25 344 Lin. Ft.



LOCATION
OF
FIBRE CONDUIT
STA. 24+38.42 PADDOCK ROAD

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	U1-316(1) UG1	1946

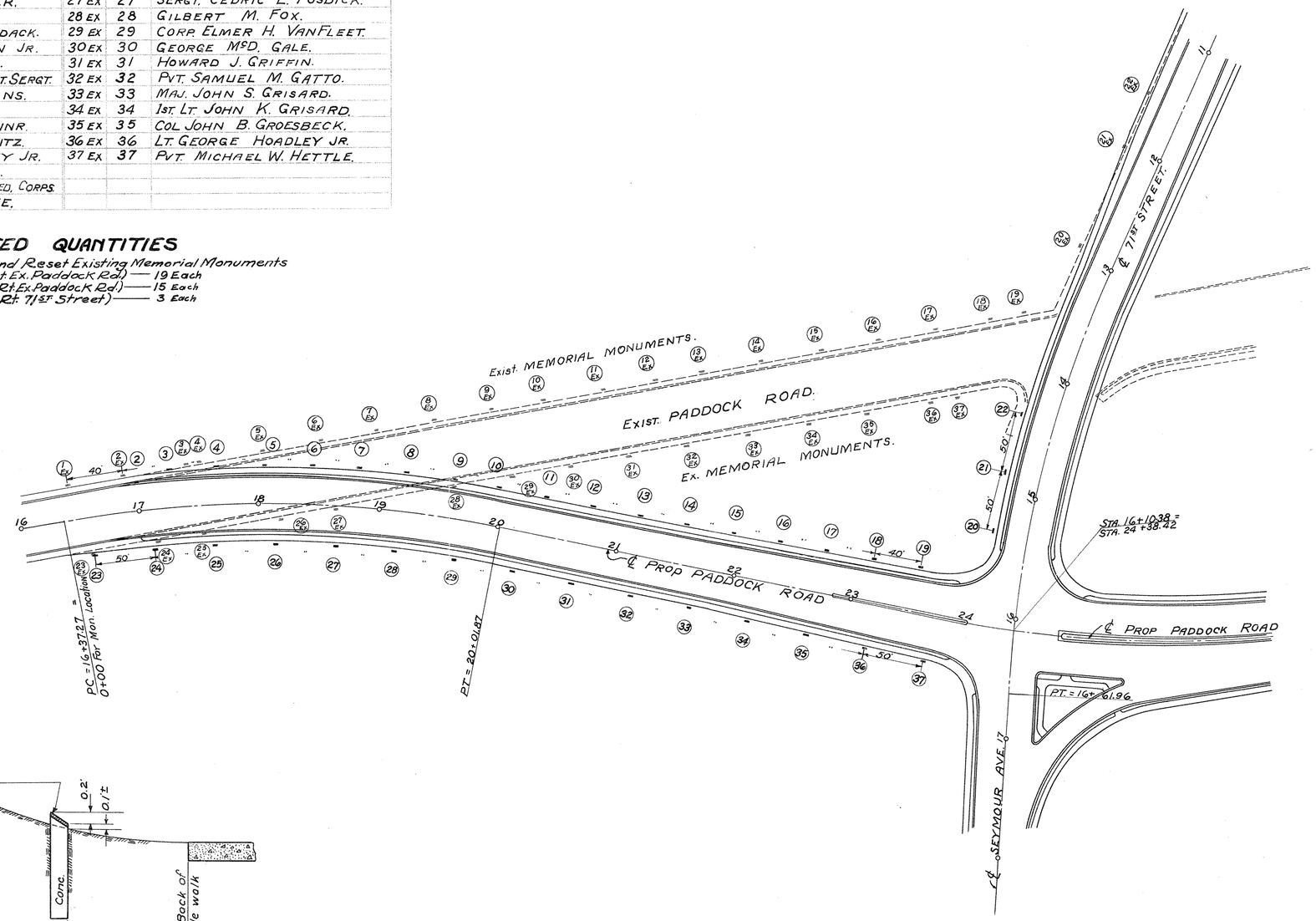
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HAMILTON COUNTY
S.H. 987, SEC. CINCINNATI (PT.) "B" ARLINGTON HEIGHTS. LOCKLAND (PT.) & APPROACHES.

LOCATION OF MEMORIAL MONUMENTS.			LOCATION CONT		
Location			Location		
Exist.	Prop	NAME	Exist.	Prop	NAME
1 EX		SERGT. STANLEY McKINLEY.	21 EX	21	1ST. LT. ALBERT E. LEEN.
2 EX	2	2ND. LT. JOHN MORRISON.	22 EX	22	CAPT. CLEMENT E. LAWS MED. CORPS.
3 EX	3	PVT. LLOYD R. MORRISON.	23 EX	23	ARTHUR FISHER.
4 EX	4	PVT. CLIFFORD J. NELSON.	24 EX	24	PVT. FRED DUDLEY.
5 EX	5	FRANCIS E. KUSNICK.	25 EX	25	NO NAME
6 EX	6	JUSTUS L. KRUCKEMEYER.	26 EX	26	JAMES F. DUNCAN.
7 EX	7	CORP. CLIFFORD E. OKER.	27 EX	27	SERGT. CEDRIC E. FOSDICK.
8 EX	8	JAMES A. O'BRIEN.	28 EX	28	GILBERT M. FOX.
9 EX	9	SERGT. CLIFFORD D PADDACK.	29 EX	29	CORP. ELMER H. VANFLEET.
10 EX	10	PVT. HARRY E. HELMAN JR.	30 EX	30	GEORGE McD. GALE.
11 EX	11	PVT. ELDREDGE C. HOOD.	31 EX	31	HOWARD J. GRIFFIN.
12 EX	12	JOHN R. HOBBARD PFC. SERGT.	32 EX	32	PVT. SAMUEL M. GATTO.
13 EX	13	SERGT. LYLE C. HOUCHINS.	33 EX	33	MAJ. JOHN S. GRISARD.
14 EX	14	PAUL J. HARRIS.	34 EX	34	1ST. LT. JOHN K. GRISARD.
15 EX	15	PVT. FRED KALKBRENNR.	35 EX	35	COL. JOHN B. GROESBECK.
16 EX	16	PVT. DEMARIOUS W KAUTZ.	36 EX	36	LT. GEORGE HOADLEY JR.
17 EX	17	SERGT. MAHLON KINNEY JR.	37 EX	37	PVT. MICHAEL W. HETTLE.
18 EX	18	SERGT. CARL B. KRUSE.			
19 EX	19	JOHN P. LADRIGAN MED. CORPS.			
20 EX	20	SERGT. STEPHEN D. LAKE.			

ESTIMATED QUANTITIES

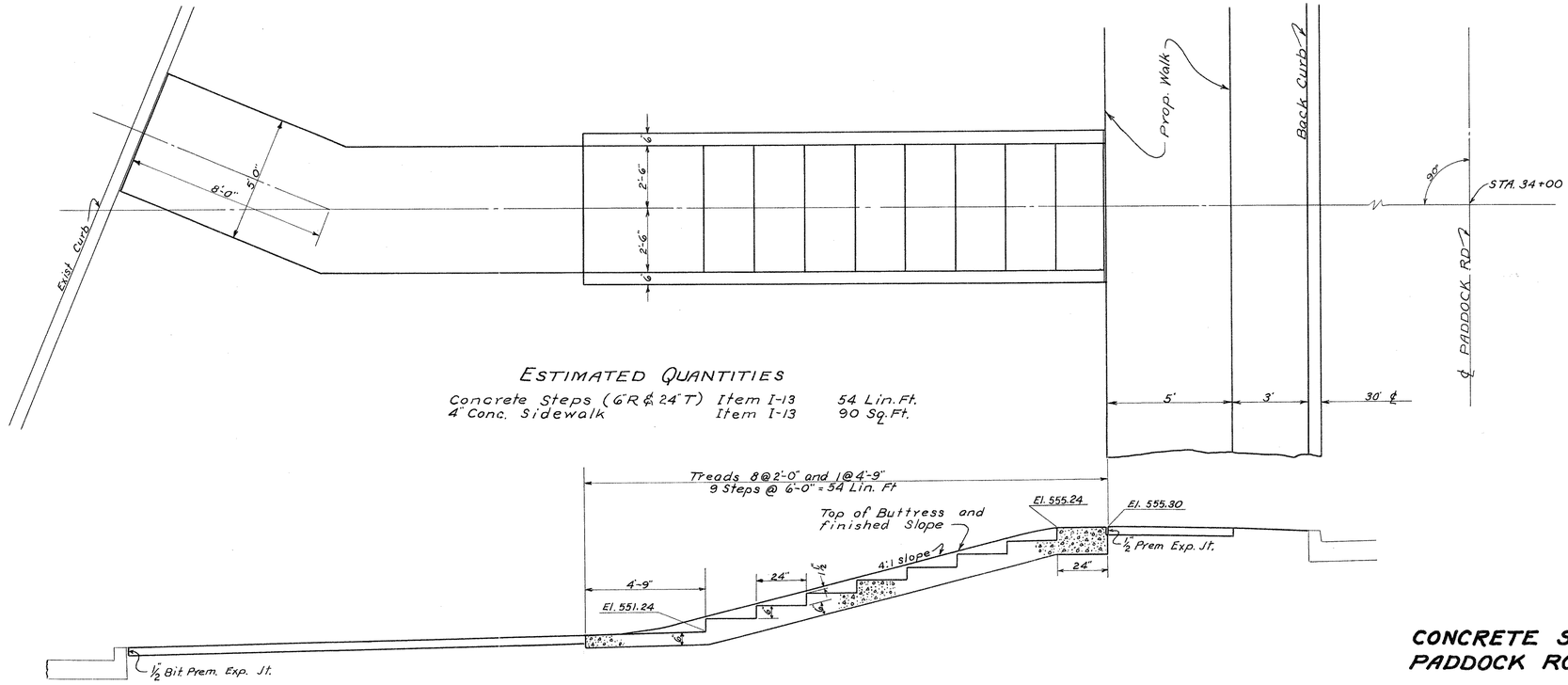
Item Special - Remove and Reset Existing Memorial Monuments
16+44 to 24+00 (Lt. Ex. Paddock Rd.) — 19 Each
16+60 to 23+55 (Rt. Ex. Paddock Rd.) — 15 Each
11+52 to 12+92 (Rt. 71ST Street) — 3 Each


Exist. MEMORIAL MONUMENTS.
Exist. PADDOCK ROAD.
Ex. MEMORIAL MONUMENTS.
℄ PROP PADDOCK ROAD
℄ 71ST STREET.
℄ SEYMOUR AVE.
PC = 16+37.27 = 0+00 for Mon. Location
PT = 20+01.87
STA. 16+10.38 = STA. 24+38.42
PT = 16+61.96
40'
50'
50'
40'
50'
50'
50

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	U1-316(1) U61	1946

213
289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT.) "B" ARLINGTON HEIGHTS. LOCKLAND (PT.) & APPROACHES.



ESTIMATED QUANTITIES

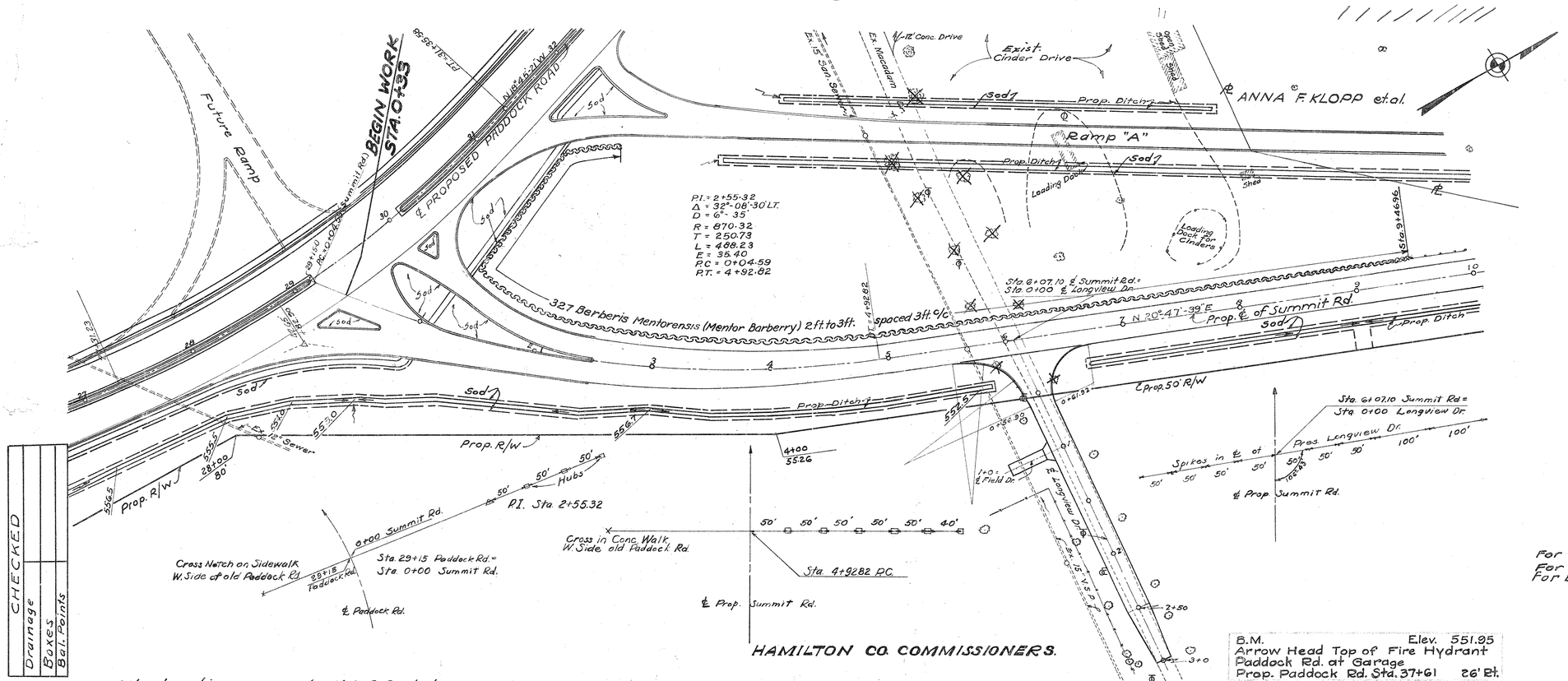
Concrete Steps (6"R & 24"T)	Item I-13	54 Lin. Ft.
4" Conc. Sidewalk	Item I-13	90 Sq. Ft.

CONCRETE SIDEWALK & STEPS PADDOCK ROAD. STA. 34+00 LT.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	U.I- 316(1) U.G.	1946

220
289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B" ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES



CHECKED
Drainage
Boxes
Bal. Points

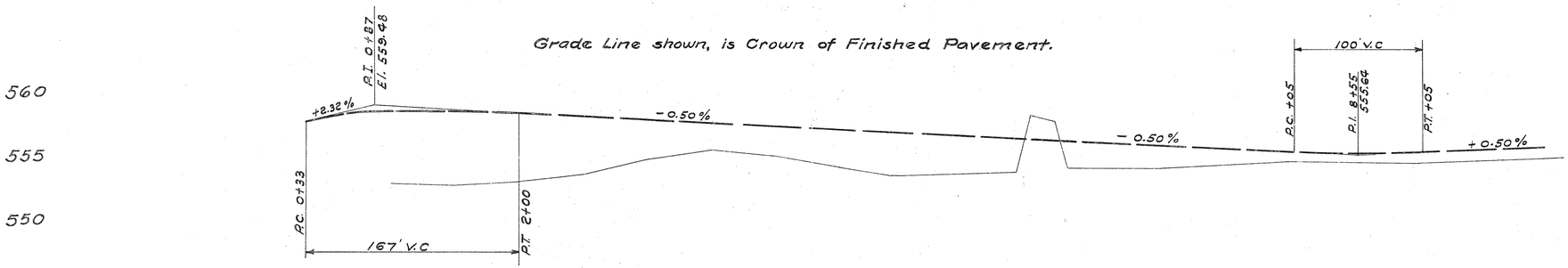
B.M. Elev. 551.95
Arrow Head Top of Fire Hydrant
Paddock Rd. at Garage
Prop. Paddock Rd. Sta. 37+61 26' Rt.

For location and details of Prop. Drainage see Sheet No. 253 to 278
For Estimated Quantities see Sheet No. 223
For Details of Pipe Removal & Adjustment See Sheet No. 253 to 278

All elevations are to U.S.G.S. datum

558.23	558.57	558.89	558.96	559.01	559.07	559.07	559.02	558.92	558.67	558.42	558.17	557.92	557.67	557.42	557.17	556.92	556.67	556.42	556.17	555.83 555.98	555.82	555.78 555.71	555.79	555.87 555.89	556.12	556.37
553.3	553.2	553.5	554.1	555.2	556.0	555.5	554.7	554.0 554.1	554.3 558.8	558.3 554.7	554.6	556.2	555.1	555.4
0	+50	1	+50	2	+50	3	+50	4	+50	+32.81 5	+ 87 6	+ 19 +28.5	7	8	9	10

Grade Line shown, is Crown of Finished Pavement.



STA. 0+33 TO STA. 10+00 SUMMIT ROAD

CHECKED
Drainage
Boxes
Bol. Points

ANNA F. KLOPP et. al.

NATIONAL DISTILLERS

DIVISION 2 | FED. AID | OHIO UI-316 (1) | 1946 | UGI | 221 | 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

Prop. Underdrain ℄

Temporary Mall

RAMP "A"

℄ Prop. S.H. 987 — Ex. Wood Foot Bridge

CORPORATION LINE CINCINNATI

Ex. Wood Steps

Prop. Ditch

℄ Summit Road

Sod

Ex. Cinder Walk

Prop. 50' R/W

Prop. R/W

Prop. ℄ Summit Rd.

Foresite Tip Lightning Rod

Brick Smoke Stack National Distillers

8" C.I. Pipe under drive

Existing Cinder Drive

2-Sty. Fr.

1-Sty. Fr.

Metal Shed

P.I.- Sta. 24+08.43
Δ = 6° 12' 57" Lt.
D = 1° 09' 27.2"
R = 5333.71'
T = 289.60'
L = 578.64'
E = 7.84

P.I.- Sta. 11+35.35
Δ = 21° 21' Rt.
D = 6° 00'
R = 954.93'
T = 180.00'
L = 355.83'
E = 16.82'

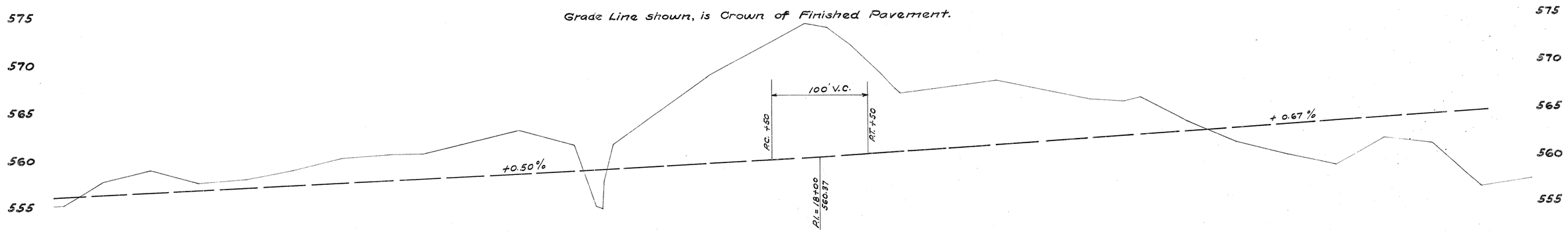
HAMILTON CO. COMMISSIONERS

NATIONAL DISTILLERS.

B.M. Elev. 546.43
2" □ Cut on S.E. Cor. Conc. Base of Steel Fan Blower Tower
Sta. 61+25 ± Lt.

For Location and Details of Prop. Drainage see Sheet No. 253 to 278
For Estimated Quantities see Sheet No. 223
For Details of Pipe Removal & Adjustments See Sheet No. 253 to 278

556.37 556.62 556.87 557.12 557.37 557.62 557.87 558.12 558.37 558.62 558.87 559.12 559.37 559.62 559.87 560.12 560.25 560.39 560.54 560.71 561.04 561.38 561.71 562.05 562.38 562.72 563.05 563.39 563.72 564.06 564.39 564.73 565.06 565.40



555.4 555.5 557.9 559.3 557.9 558.3 559.2 560.5 560.9 561.0 561.0 563.4 561.8 559.0 574.8 574.0 572.2 569.1 568.4 566.3 566.1 566.5 563.9 561.7 560.4 559.3 562.1 561.5 556.9 557.7

10 +15.35 | +50 | 11 | +50 | 12 | +50 | 13 | +50 | +71.18 +84.18 | 14 | +86.18 | 15 | +93.18 | +96.18 +99.18 +99.18 +84.18 | 16 | +84.18 | 17 | +84.18 | 18 +09 | +32 | +65 | +78 +84.18 | 19 | +84.18 | 20 | +84.18 | 21 | +18.83 | +34.33 | 22 | +85.53 | +36.73 | 23 | +87.93 | +33.13 | 24 | +90.33 | +41.53 | 25 | +92.73 | +93.93

STA. 10+00 TO STA. 25+00 - SUMMIT ROAD

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	U1-31G (1) U67	1946

222
289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B" ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

STA. 77+31.62 PEDESTRIAN OVERHEAD

MIAMI & ERIE CANAL Corporation

Miami & Erie Canal

Prop. R/W

Prop. S.H. 987

Woodland Ave.

Prop. 6" Underdrain

Sta. 8+40.83 = Sta. 77+05.35 ℄ Prop. 6" Underdrain

Ex. Canal Monument to be reset by State Survey Crew

Ex. 6" Gas Main (3' cover)

Ex. 8" San. Sewer

Ex. 12" Over Flow

Ex. 8" Sewer

Ex. 8" Water Main

Ex. 6" Gas Main

Ex. 12" W.M.

Ex. 8" W.M.

Ex. 4" W.M.

Ex. 6" W.M.

Ex. 6" Gas Main (3' cover)

Ex. 8" San. Sewer

Ex. 8" Water Main (4

QUANTITIES (SUMMIT ROAD)

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON H'TS LOCKLAND (PT.) & APPROACHES

FED. DIV.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OH10	UG- 316(1)	1946

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PAVEMENT

Station to Station	Side	9" Reinforced Concrete Pavement Item T-71 Sq. Yd.	Plain Concrete Pavement Item T-70 9" Sq. Yd.	Plain Concrete Pavement Item T-70 6" Sq. Yd.	Item I-21 Black 6" Sq. Yd.	Concrete Curb Item I-12 Type 2-A Lin. Ft.	Concrete Curb Item I-12 Type 4-A Mod. Type 4-A Lin. Ft.	Concrete Curb & Gutter Item I-12 (2'-6" Wide) Type 4 Lin. Ft.	Ver. Thick. Asph. Conc. Surface Course Item T-35 Cu. Yd.	1" Asphaltic Concrete Surf. Course Item T-35 Sq. Yd.	1" Asphaltic Conc. Leveling Course Item B-35 Sq. Yd.	3" Asphaltic Concrete Base Course Item B-35 Sq. Yd.	½" Insulation Course Item I-19 Sq. Yd.	Side Apprs. Mail Boxes Turnouts Item L-17 Each	Bituminous Tack Coat @ 0.10 Gal. Item T-50 Sq. Yd.	Removal & Disposal of Ex. Pavement Item E-8 Sq. Yd.	Sealing Only Item E-8 Lin. Ft.	See Sh. No.
MUNICIPAL (CINCINNATI)																		
0+33 – 2+49.83	R&L	1537.0			15.80	1196.2												243
2+49.83 – 4+92.82	"	836.0																243
4+92.82 – 14+25	"	2485.8																244
14+25 – 19+29.13	"	1344.3						504.1										244
Total		6203.1			15.8	1196.2		504.1										
RURAL																		
19+29.13 – 25+12.36	R&L	1555.3						582.2										244 & 245
25+12.36 – 27+21.79	"	547.8						203.0								499.0		245
27+21.79 – 34+25	"	2303.8				508.3		702.8										245 & 246
34+25 – 37+32.61	"	1000.4				295.5												246
37+32.61 – 38+31	"								2.9	277.7	277.7	567.3	285.6		68.9		30	252
Long View Dr – 6+07.10	Rt.		608.0			116.4								4				247
Sec. Rd. – 26+80.25	Rt.	1084.0		143.4	12.9	637.8	116.7	116.7										248
Woodland Ave. – 30+21.33	Rt.	82.6		124.8		55.6				283.6	283.6	584.0	294.8				49	250
Edgemont Terrace – 33+55.77	Rt.	82.6				55.6								24				251
Dr. 34+37.13	Rt.			42.7														252
Dr. 34+58.63	Rt.			30.5			17.3											252
Sub-total										561.3	561.3	1151.3			68.9			
Conversions to Cu. Yd., Gal. etc.									2.9	15.6	15.6	95.9			6.89			
Totals		6656.5	608.0	341.4	12.9	1663.2	134.0	116.7	1494.0	18.5 Cu. Yd.	15.6 C.Y.	95.9 C.Y.	580.4	28	7 Gal.	499	79	

CONC. SIDEWALK & STEPS

Station to Station	Side	4" Concrete Sidewalk Item I-13 Sq. Ft.	Concrete Steps (8"R & 12"T) Item I-13 Lin. Ft.	See Sheet No.
RURAL				
26+80.25 Section Rd.	Rt.	644		248
27+21.79 to 29+64.89	"	1216		245
27+83.4	"	36		245
30+21.33 Woodland Ave.	"	310		250
30+62.15 to 32+99.25	"	1186		245 & 246
30+64.5	"	48	15	245
31+25	"	11	20	246
33+55.77 Edgemont Terr.	"	250		251
33+96.54 to 37+32.61	"	1421		246
34+58.63	"	29		252
35+69.41	"	10		252
36+22.26	"	27		252
36+78	"	30		252
Total		5218	35	

GUARD RAIL

Station to Station	Side	Guard Rail Steel Beam Type (Deep) Item I-15 Lin. Ft.	Guard Rail Removed & Stored Item I-15 Lin. Ft.	See Sheet No.
MUNICIPAL (CINCINNATI)				
9+46.96 – 19+29.13	Lt	989.72		220 & 221
Total		989.72		
RURAL				
19+29.13 – 27+04.08	Lt.	772.78		221 & 222
27+16.28 – 38+78.51	Lt.	1175.00		222
37+94 – 38+78	Lt.		84.00	222
Total		1947.78	84.0	

EXCAVATION & EMBANKMENT

Station to Station	Excavation Item E-1 Cu. Yd.	Embankment Cu. Yd.	Embankment +20% Cu. Yd.
MUNICIPAL (CINCINNATI)			
1+00 to 19+29.13	26202	10720	12864
RURAL			
19+29.13 to 38+81	22258	8436	10123

EROSION CONTROL

Station to Station	Side	Seeding & Protecting Type "A" Item L-9 Sq. Yd.	Sodding Item L-10 Sq. Yd.	Riprap for Tree Protection Item L-7 Sq. Yd.	Aggregate for Tree Root Aeration Item L-8 Cu. Yd.	Placing Stockpile Top Soil (3" Thick) Item L-3 Sq. Yd.	Berberis Mentorensis (Mentor Barberry) 2 ft. to 3 ft. Item L-13 Each	See Sh. No.
MUNICIPAL (CINCINNATI)								
1+00 to 19+29.13	R&L	20518				9805		231
1+00 to 5+87	Rt.		520					220
6+65 to 19+29.13	Rt.		1317					220 & 221
1+35 ± to 2+45.83	Lt.						93	220
2+45.83 – 9+46.96	Lt.						234	220
Total		20518	1837			9805	327	
RURAL								
19+29.13 to 38+81	R&L	15974				9339		242
19+29.13 to 25+12.36	Rt.		652					221 & 222
26+80.25 Section Road	Rt.		784					248
27+21.59 to 29+64.89	Rt.		414					222
30+21.33 Woodland Ave.	Rt.		275					250
30+62.15 to 32+99.25	Rt.		169					222
33+55.77 Edgemont Terr.	Rt.		335					251
33+96.54 to 37+32.61	Rt.		405					222
37+32.61 to 38+31	Rt.		50					222
27+72	26.5' R.			3	*9			222 & 236
28+86	28.5' R.			4	*13			222 & 236
33+97	30.0' R.			3				222 & 239
Total		15974	3084	10	*22	9339		

*Tree Wells to be filled with Aggregate

CLASSIFIED EMBANKMENT

Station to Station	Side	Classified Embankment (See X-Sections) Item SS-112 Cu. Yd.	See Sheet No.
MUNICIPAL (CINCINNATI)			
1+00 to 19+29.13	R&L	2531	231
RURAL			
19+29.13 to 37+32.61	R&L	3343	242

Seeding

Width Area
Lin. Ft. Sq. Yd.

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

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HAMILTON COUNTY
S.H. 987 Sec CINCINNATI (Pt.) "B"
ARLINGTON Hts, LOCKLAND (Pt.)
& APPROACHES

CLASS. EMB. MATERIAL AREA	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
59	8	106		
92			14	310
40	7	228		
68			11	518
33	5	331		
65			11	722
37	7	449		
58			18	609
25	13	208		

104 — Seeding 100' to ℄ — 9" — 1/2 lift Z — Seeding — Sod — Seeding — 556.7 — Prop. R/W

558.42
3+00
555.2

2-27" Pipe

589 — Seeding 100' to ℄ — 9" — 9" — 1/2 lift Z — 555.3 — Prop. R/W

558.67
2+50
554.1

700 — Seeding 135' to ℄ — Sod — 9" — 9" — 9" — 554.5 — Prop. R/W

144

2+00
553.5

628 — Seeding — Sod — 9" — 9" — 9" — 553.75 — R/W — Prop. 84' ℄

Quant. Included in Paddock Road

82

1+50
553.2

394 — 9" — 9" — Seeding — Sod — Seeding — 553.0 — Prop. 100' ℄

Quantities included in Paddock Road

60

1+00
553.3

Note:-
Quantities South of Sta. 1+00 included in Paddock Road X-Sec's.

27" Pipe

BEGIN WORK ON SUMMIT ROAD
STATION 1+00

Plotted By	J.A.H.	H.B.S.		
Templates Plotted				
Templates Chkd				
Drainage Chkd				
Areas				
Volume Chkd				
Balance Points				

H.F.
T.S.

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

SUMMIT RD. ~ STA. 1+00 TO STA. 3+00

DIVISION 2 | FED AID | OHIO UI-31G(1) | 1946 | UGI

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HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Hts., Lockland (Pt.) & APPROACHES

Seeding — Placing Top Soil
Width Area Lin.Ft. Sq.Yd. — Width Area Lin.Ft. Sq.Yd.

Plotted By
Templates Plotted
Templates Chkd
Drainage Chkd
Areas
Volumes
Volume Chkd
Balance Points

M.L.H.
T.S.

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 80

+92 14" Catalpa

Seeding
9" 3/8" /Ft. /
Ahead
Back
Quantities included in Longview Drive
Seeding
Prop. R/W 50'

81 / 101 — 65 / 65 — Ahead / Back
962
445
557.08
5+87
554.3

+78 17" Trea

98
Quantities beyond the 80' Line included in RAMP "A"
78 — 27
26
Seeding
Sod
Seeding
553.6
557.42
5+00
554.1
27" Pipe
Prop. R/W 50'

98 — 39
466 — 186
554.0
557.47
4+92.82 (PT.)
554.0

554.2
98 — 39
557.67
4+50
554.7

603 — 108
100' to ℄
555.0
119 — 0 — 4+00
557.92
4+00
555.5

653
100' to ℄
116
Seeding
9" 3/8" /Ft. /
Seeding
Sod
seeding
555.7
Prop. R/W 2'
558.17
3+50
556.0
611
2-27" Pipe
104
Sta. 3+00

	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
CLASS EMB. MATERIAL AREA VOL.				
Ahead 33	238	37		
Back 33	238	43		
106			437	276
33	33	128		
9			11	31
36	50	108		
60			68	163
39	36	97		
79			39	148
46	6	63		
35			25	116
57	21	63		
108			27	157
Sta. 3+00 59	8	106		

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

SUMMIT RD-STA 3+50 TO STA 5+87

DIVISION | FED. AID | 226
2 | OHIO U1-316(1) UGI | 1946 | 289

HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.) "B", Arlington Hts., Lockland (Pt.) & Approaches

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

Seeding — Placing Top Soil

Width Area Lin.Ft. Sq.Yd. | Width Area Lin.Ft. Sq.Yd.

Seeding

92 70

QUANTITIES INCLUDED IN S.H. 987

1061 617

99 41

503 214

+57 6" Trees

82 36

180 97

69 45

QUANTITIES INCLUDED IN RAMP "A"

73 39

69 28

+18 18" Catalpa

148 101

1129

Longview Dr. Sta. 6+07.10

QUANTITIES INCLUDED IN RAMP "A"

71 68

110 96

81 65

Sta. 5+87

Seeding — Sod — Seeding

553.63

Prop. 50' R/W

555.92
8+00
555.2

Seeding — Sod — Seeding

554.13

556.42
7+00
554.6

Seeding

QUANTITIES INCL. IN LONGVIEW DR.

9" — 3/8 Lft.²

556.67
6+50
554.14

QUANTITIES INCL. IN LONGVIEW DR.

556.78
6+28.5
554.7

QUANTITIES INCL. IN LONGVIEW DR.

556.82
6+19
558.3

Seeding

QUANTITIES INCL. IN LONGVIEW DR.

9" — 3/8 Lft.²

556.92
6+00
558.8

Longview Dr. Appr. Sta. 6+07.10

Sta. 5+87

Plotted By	U.H.H. M.B.S.
Templates Plotted	E.F.L.
Templates Chkd	A.J.H.
Drainage Chkd	N.L.H.
Areas	T.S.
Volumes	
Volume Chkd	
Balance Points	

CLASS. EMB. MATERIAL AREA	VOL	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
40		236	8		
	154			596	91
43		86	41		
	73			120	113
36		43	81		
	28			44	55
35		68	58		
	12			41	13
31		165	17		
	20			185	7
				358	152
26		361	2		
	14			144	9
Sta. 5+87	33	238	37		

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

SUMMIT RD.-STA. 6+00 TO STA 8+00

Seeding Width Lin. Ft.	Seeding Area Sq. Yd.	Placing Top Soil Width Lin. Ft.	Placing Top Soil Area Sq. Yd.
70		65	
	400		386
74		74	
	469		406
95		72	
	356		281
90		74	
	156		126
93		74	
	961		733
80		58	
	956		711
92		70	

Plotted By
Templates Plotted
Templates Checked
Drainage Checked
Areas
Volumes
Volumes Checked
Balance Points

J.H.H. M.B.S.
E.F.L.
A.J.H.
M.L.H.
T.S.

DIVISION 2 — FED AID 227 — OHIO U1-316(1) 1946 — UGI 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt), ARLINGTON H'TS, LOCKLAND (Pt) & APPROACHES

+95 2-10" Box Elders

Seeding

12" 557.12 11+50 557.9 12"

+21 9" Sycamore

Seeding | Sod | Seeding

3:1

3/16" Per. Ft.

554.56

Prop. 50' R/W

QUANTITIES INCLUDED IN S.H. 987

554.31

EX. & BACKFILL

556.87 11+00 559.3

QUANTITIES INCLUDED IN S.H. 987

+90 12" Tree

554.06

556.62 10+50 557.9 EX. & BACKFILL

11.4'

+48 14" Stump

18" Pipe

QUANTITIES INCLUDED IN S.H. 987

553.88

556.45 10+15.35 (P.C.) 555.5 EX. & BACKFILL

13.4'

18" Pipe

3/16" Per. Ft.

553.61

556.37 10+00 555.4 EX. & BACKFILL

10.2'

18" Pipe

QUANTITIES INCLUDED IN S.H. 987

Seeding | Sod | Seeding

553.3

555.80 9+00 555.1 EX. & BACKFILL

18" Pipe

Incl in Ditch Quant.

Sod 6'-0" 3:1 3:1

Typ. Sec. of Spec. Ditch Sta. 9+00 (Rt)

8+00

CLASS. EMB. MATERIAL AREA	END AREA VOL.	CU. YD. CUT	CU. YD. FILL
25	184	9	
48		582	86
27	445	84	
53		770	317
30	386	258	
41		477	295
33	358	202	
18		196	119
32	332	218	
141		1369	798
Sta. 9+00 Rt Spec. Ditch		4	0
44	407	213	
56		1191	409
Sta. 8+00	40	236	8

SUMMIT RD.-STA. 9+00 TO STA. 11+50

DIVISION 2 OHIO | FED AID UI-316(1) 1946 UGI | 228 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT) "B," ARLINGTON HEIGHTS, LOCKLAND (PT) & APPROACHES

Seeding Width Lin. Ft.	Seeding Area Sq. Yd.	Placing Top Soil Width Lin. Ft.	Placing Top Soil Area Sq. Yd.
73		22	
	105		32
73		22	
	172		52
73		22	
	406		131
73		25	
	403		144
72		27	
	397		199
71		44	
	392		303
70		65	

Plotted By: J.H.H. MBS.
Templates Plotted: E.F.L.
Templates Chkd: H.L.H.
Drainage Chkd: T.S.
Areas: Chkd
Volumes: Chkd
Volume Chkd: Points
Balance Points:

Quantities included in S.H. 987

Sta. 11+50

(See Top of Sheet)

Seeding

12+00
545.0

Seeding | Sod | Seeding

12" 3/8" Ft. ℄

Exc. & Backfill

558.29
13+84.18
561.0

555.99

3:1

+72
9" Tree

558.23
13+71.18 (P.T.)
561.0

555.90

Prop. 50' R/W ℄

558.12
13+50
560.9

555.69

Exc. & Backfill

557.87
13+00
560.5

555.31

557.62
12+50
559.2

555.06

557.37
12+00
558.3

554.81

Class. Embankment Material Area Vol.	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
35	305	476		
16			133	265
32	247	626		
24			206	497
53	279	641		
28			502	945
52	263	379		
28			399	540
52	168	204		
28			310	273
49	167	91		
25	184	9	325	93

Sta. 11+50

SUMMIT RD.-STA. 12+00 TO STA. 13+84.18

Seeding Width	Seeding Area Lin.Ft.	Seeding Area Sq.Yd.	Placing Top Soil Width	Placing Top Soil Area Lin.Ft.	Placing Top Soil Area Sq.Yd.
97			31		
	22			7	
97			29		
	65			22	
97			37		
	242			115	
92			53		
	580			292	
85			36		
	878			322	
73			22		

Plotted By	J.H.H. M.B.S.
Templates Plotted	E.F.L.
Templates Chk'd	
Drainage Chk'd	J.C.M.
Areas	T.S.
Volumes	
Volume Chk'd	
Balance Points	

Quantities included in S.H. 987

DIVISION 2 OHIO FED AID U1-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

Class Emb. Material	END AREA CUT	END AREA FILL	CU.YD. CUT	CU.YD. FILL
Area Vol.				
45	184	93		
3			12	8
45	131	124		
10			33	52
45	165	341		
38			229	399
45	372	595		
96			822	841
43	381	175		
144			1270	1206
35	305	476		

Seeding
12"
3/8"/Ft.
559.25
15+74.18
558.0
556.96
Seeding
Sod
Seeding
2:1
559.24
15+72.18
555.0
556.95
3/16" Per Ft.
559.21
15+66.18
555.2
556.92
+61.18
9" Elm
3/16" Per Ft.
+6
20" Byd.
Exc. & Backfill
559.09
15+43.18
561.8
556.80
2:1
+42
9" Tree
+13
10" Tree
+22
9" Tree
+25
10" Tree
+97
9" Box Elder
15+02
10" Box Elder
Seeding
Sod
Seeding
R/W
12"
3/8"/Ft.
Exc. & Backfill
558.79
14+84.18
563.4
556.50
3:1
+83
2-9" Trees
+78
10" Tree

NOTE:-
Approx. 13,717 Cu. Yds. of Excavation between Sta. 8+00 & Sta. 15+66.18 have been Estimated to be unsuitable for Embankment.

Sta. 13+84.18

Sta. 13+84.18

SUMMIT RD. ~ STA. 14+84.18 TO STA. 15+74.18

DIVISION 2 | FED. AID OHIO U1-316(1) 1946 UGI | 230 289

HAMILTON COUNTY

S.H. 987 SEC. CINCINNATI (PT.); "B"; ARLINGTON H'TS, LOCKLAND (PT.) & APPROACHES

Seeding Width Area Lin.Ft. Sq.Yd.	Placing Top Soil Width Area Lin.Ft. Sq.Yd.
130	117
360	324
131	118
1361	1139
114	87
1183	833
99	63
109	52
97	31

Quantities included in S.H. 987

Quantities included in S.H. 987

Quantities included in S.H. 987

Sta. 15+74.18

18+11.18 24" Syc.

560.44
18+09
574.0

Seeding

12" 3/8 Lft. ℄

Seeding

Sod

Seeding 2:1

558.15

560.28
17+84.18
574.4

557.99

17+77.18 20" Elm

17+06.18 9" Tree

17+70.18 15" Elm

17+16.18 16" Elm.

559.79
16+84.18
569.0

557.50

+09 18" Stump

17+75.18 20" Elm

16+00.18 10" Elm.

+84.18 2-15" Syc.

16+18.18 16" St.

Seeding

12" 3/8 Lft. ℄

559.30
15+84.18
561.8

Sod 10' Wide

16+47.18 18" Elm.

16+97 17" Elm

Seeding

557.01

Incl in Spec. Ditch Quant.: Sta. 15+84.18 Rt.

Spec. Ditch (Rt.) Sta. 15+84.18

6" - See Typical Sec.

10'-Sod

6"

3:1 Slope

5'-0"

TYPICAL SEC. OF SPEC. DITCH - STA. 15+84.18 (RT.)

Class. Emb. Material Area	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
45	1675	2		
41			1586	10
45	1776	2		
167			5411	7
45	1146	2		
167			2833	7
45	384	2		
			8	0
17			105	18
45	184	93		

Plotted By: J.H.H. N.B.S.
Templates Plotted: E.F.L. J
Templates Chk'd: A.J.H. J
Drainage Chk'd: J.C.M. J
Areas: T.S.
Volumes
Volume Chk'd
Balance Points

SUMMIT RD. - STA. 15+84.18 TO STA. 18+09

DIVISION 2 OHIO FED. AID UI-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B"
ARLINGTON H'TS., LOCKLAND (PT.) & APPROACHES

Class. End Material Area Vol.	END AREA CUT	END AREA FILL	C.U.Y.D. CUT	C.U.Y.D. FILL
45	1147	2		
24			560	10
45	984	36		
8			177	6
45	930	31		
55			1427	20
45	1404	2		
38			1311	2
45	1675	2		

STA. 1+00 to STA. 19+29.13 Cinti. (Municipal)

Ex cavation	26,202 CU. YDS.
Embankment	10,720 CU. YDS.
Embankment +120%	12,864 CU. YDS.
Classified Embankment	2,531 CU. YDS.
Seeding	20,518 SQ. YDS.
Top Soil	9,805 SQ. YDS.

Seeding Width Lin. Ft.	Seeding Area Sq. Yd.	Placing Top Soil Width Lin. Ft.	Placing Top Soil Area Sq. Yd.
123		94	
	Quantities included in S.H. 987		
194		138	
123		81	
	Quantities included in S.H. 987		
69		44	
125		76	
462		326	
	Quantities included in S.H. 987		
127		102	
328		280	
	Quantities included in S.H. 987		
130		117	

Sta. 18+09

Plotted By	J.H.H.	M.B.S.
Templates Plotted	E.F.L.	
Templates Ch'k'd	A.J.H.	
Drainage Ch'k'd		J.C.M.
Areas		T.S.
Volumes	C.H.W.	
Volume Ch'k'd		
Balance Points		

19+07.18 6" Trec
18+91.18 12" Elm
19+03.18 10" Elm
560.94 18+84.18 567.1
Seeding
Sod
Seeding
2:1
12"
3/8 lft.
558.65
18" Pipe
18+74 10 Elm
18+73.18 10" Elm
19+70.18 9" Elm
560.84 18+70 568.6
558.55
2-18" Pipe
560.81 18+65 569.1
558.52
2-18" Pipe
18+44.18 5" Elm
18+44.18 10" Elm
18+42.18 10" Elm
560.59 18+32 572.2
Seeding
Sod
Seeding
2:1
12"
3/8 lft.
558.30
2-18" Pipe

SUMMIT RD. ~ STA. 18+32 TO STA. 18+84.18

DIVISION 2 OHIO FED. AID UI-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON H'TS., LOCKLAND (PT.) & APPROACHES

Seeding Width Lin.Ft.	Seeding Area Sq.Yd.	Placing Top Soil Width Lin.Ft.	Placing Top Soil Area Sq.Yd.
106		52	
	617		387
111		84	
	190		143
110		82	
	431		327
114		88	
	1294		1033
119		98	
	740		587
	604		480
123		94	

19+29.13 Sta. 18+84.18

Plotted By	J.H.H.	M.B.S.
Templates Plotted	E.F.L.	
Templates Ck'd	A.U.H.	
Drainage Ck'd		J.C.M.
Areas		T.S.
Volumes		
Volume Ck'd		
Balance Points		

QUANT. INCL. IN S.H. 987

QUANT. INCL. IN S.H. 987

Seeding
2:1
12"
3/8 lb/ft.²
562.95
21+85.53
563.9
Seeding
Sod
2:1
560.66

562.61
21+34.33
566.5
560.32

562.51
21+18.83 (P.C.)
566.1
560.22

562.27
20+84.18
566.3
559.98
12" Pipe

Seeding
2:1
12"
3/8 lb/ft.²
561.60
19+84.18
568.4
Seeding
Sod
2:1
559.31

Class. Emb. Material	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
Area Vol.				
45	337	69		
87			975	80
47	691	15		
44			660	12
47	707	10		
60			510	15
47	766	14		
180			3321	30
50	1027	2		
19+29.13	97		2216	4
	79		1810	3
Special Ditch Rt. Sta. 19+20				12
Sta. 18+84.18	45		1147	2

SUMMIT RD. ~ STA. 19+84.18 TO STA. 21+85.53

Plotted By	J.H.H.	M.B.S.
Templates Plotted	E.P.L.	
Templates Ch'k'd	R.J.H.	
Drainage Ch'k'd		J.C.M.
Areas		T.S.
Volumes		
Volume Ch'k'd		
Balance Point		

Seeding Width Lin.ft.	Seeding Area Sq. Yd.	Placing Top Soil Width Lin.ft.	Placing Top Soil Area Sq. Yd.
99		41	
	572		245
102		45	
	580		205
102		27	
	583		148
103		25	
	592		171
105		35	
	600		247
106		52	

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 70 80

Seeding
5"
3/8 lft.-1
564.67
24+41.53
561.5
562.38
Seeding
Sod
2:1
QUANTITIES INCL. IN S.H. 987
564.33
23+90.33
562.1
562.04
561.69
563.98
23+39.13
559.3
561.35
563.64
22+87.93
560.4
Seeding
5"
3/8 lft.-2
563.30
22+36.73
561.7
561.00
QUANTITIES INCL. IN S.H. 987
Sta. 21+85.53
Sta. 23+04 Ditch Rt.
Sta. 21+85.53
SUMMIT RD-STA. 22+36.73 TO STA. 24+41.53

DIVISION

FED. AID 233
2 OHIO UI-316(1) 1946 289
UGI

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

Class. Emb. Material Area	Vol.	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
	45	285	336		
	86			522	580
	45	266	276		
	86			323	578
	45	75	333		
				0	11
	86			148	584
	45	81	283		
	86			142	226
	45	174	159		
	86			261	216
	45	337	69		

DIVISION 2 | FED. AID OHIO UI-316 (1) 1946 UGI | 234 289

HAMILTON COUNTY

S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington Ht's., Lockland (Pt.) & Approaches.

Seeding Width	Seeding Area Lin.Ft.	Seeding Area Sq.Yd.	Placing Top Soil Width	Placing Top Soil Area Lin.Ft.	Placing Top Soil Area Sq.Yd.
39			25		
			17		
			11		
39			25		
			59		
			36		
39			22		
			384		
			205		
			50		
96					
			543		
			219		
95			27		
			560		
			171		
102			33		
			572		
			210		
99			41		

QUANTITIES INCL. IN S.H. 987

QUANTITIES INCL. IN S.H. 987

Sta. 24+41.53

Seeding

2:1

9"

3/8 I Pt-2

9"

Incl. in Section Rd. Quantities

2-12" Pipe

Ex. 12" Storm

56.3.16
26+64
56.4.7

Sod

Incl in Section Road Quantities.

56.6.13
26+60
56.6.9

2-12" Pipe

Ex. 12" Storm

+56
24" Maple

Sod

Incl. in Section Rd. Quant. Ahead Only

56.6.04
26+46.33
56.5.4

2-12" Pipe

Sod

Seeding

Sod

Seeding

2-12" Pipe

56.5.70
25+95.13
55.9.9

2-12" Pipe

2-12" Pipe

2:1

56.5.35
25+43.93
55.7.7

Seeding

Sod

Seeding

2:1

Seeding

2:1

9"

3/8 I Pt-2

56.5.01
24+92.73
55.6.9

Class. Emb. Material	Area	Vol.	END AREA CUT	END AREA FILL	CU. YD. CUT	CU. YD. FILL
		63	170	25		
	9				27	4
	57		189	23		
	26					
					86	16
			+46			
			3.9" Maple			
Ahead	45		150	41		
Back	45		218	41		
		103				
					378	286
	64		181	261		
	100				227	600
	42		59	372		
	82				160	789
	45		110	460		
	86				374	755
Sta. 24+41.53	45		285	336		

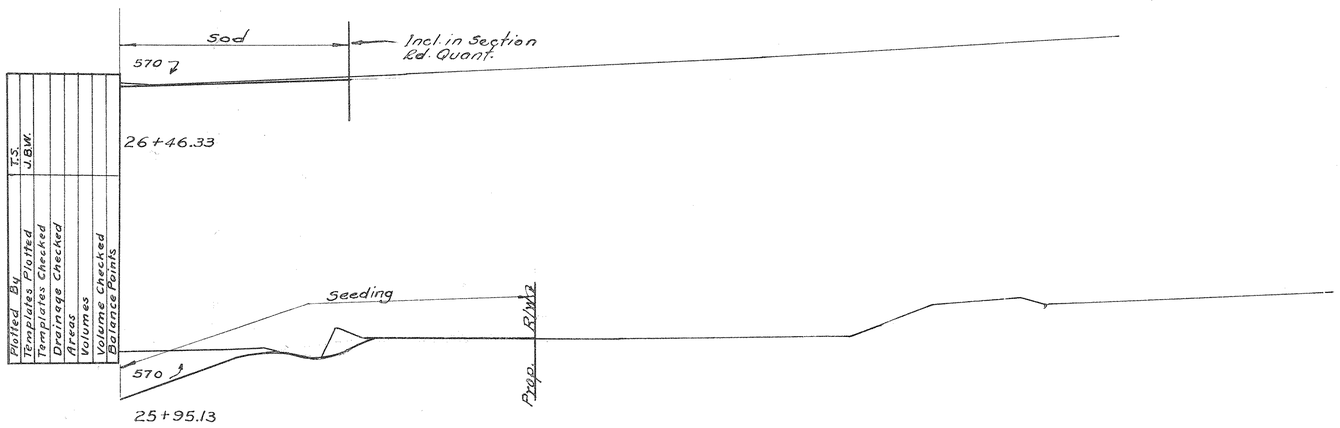
Plotted By	V.H.H. M.B.S.
Templates Plotted	E.F.L.
Templates Ck'd	
Drainage Ck'd	J.C.H.
Areas	T.S.
Volumes	
Volume Ck'd	
Balance Points	

SUMMIT RD.-STA. 24+92.73 TO STA. 26+64

DIVISION FED. AID 235
2 OHIO U1-316(1) 1946 289
UGI

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON HTS., LOCKLAND (PT.) & APPROACHES

80 90 100 110 120 130 140 150 160 170

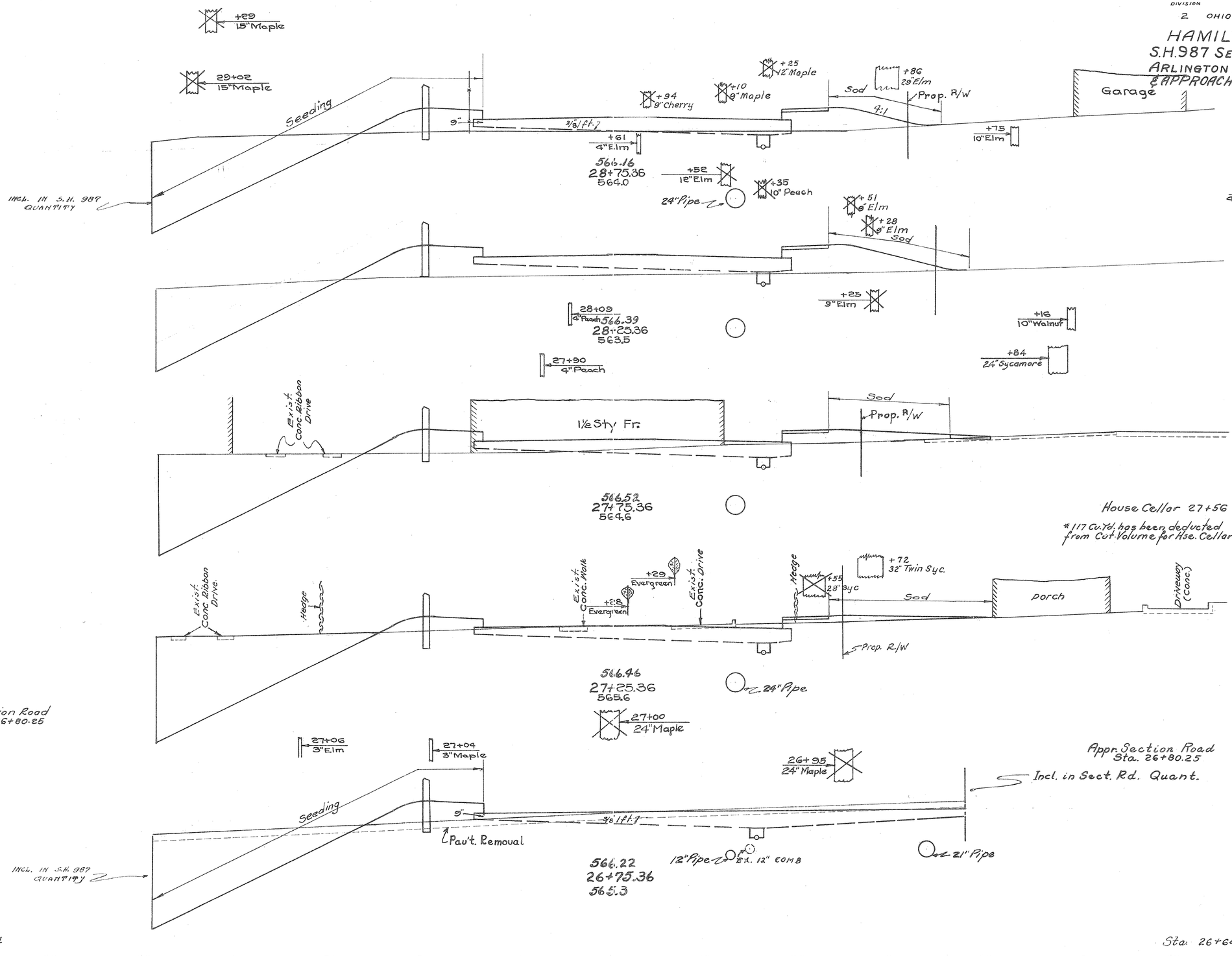


80 90 100 110 120 130 140 150 160 170

RT. EXTENSION SUMMIT RD.-STA. 25+95.13 TO STA. 26+46.33

Seeding Width	Seeding Area Lin. Ft.	Seeding Area Sq. Yd.	Placing Top Soil Width	Placing Top Soil Area Lin. Ft.	Placing Top Soil Area Sq. Yd.
39			25		
214			133		
38			23		
			133		
211					
38			25		
			144		
211					
38			27		
127					
214			147		
39			26		
			32		
50					
39			25		

Plotted By	J.B.W.
Templates Plotted	A.J.H.
Templates Checked	R.E.L.
Drainage Checked	J.G.M.
Areas	T.S.
Volume	
Volumes Checked	T.S.
Balance Points	



DIVISION FED. AID 23G
2 OHIO U1-31G(1) 1946 289
UGI
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B" ARLINGTON HT'S., LOCKLAND (PT.). & APPROACHES

Class. Emb. Material	End Area Cut	End Area Fill	Volume Cut	Volume Fill
	Area	Vol.		
	48	121	60	
	89	195	150	
+49 40" Elm				
	48	89	102	
	89	216	135	
	48	144	43	
			24	147
	89	*193	61	
			304	51
	109			
	154	535	33	
	69	137	32	
	28	65	12	
	48	191	23	
	Sta. 26+64	63	170	25

STA. 26+75.36 TO STA. 28+75.36 ON SUMMIT ROAD

Seeding Width Lin.Ft.	Seeding Area Sq.Yd.	Placing Top Soil Width Lin.Ft.	Placing Top Soil Area Sq.Yd.
46		25	
	58		31
45		24	
	131		71
44		24	
	236		147
41		29	
	225		158
40		28	
	219		147
39		25	

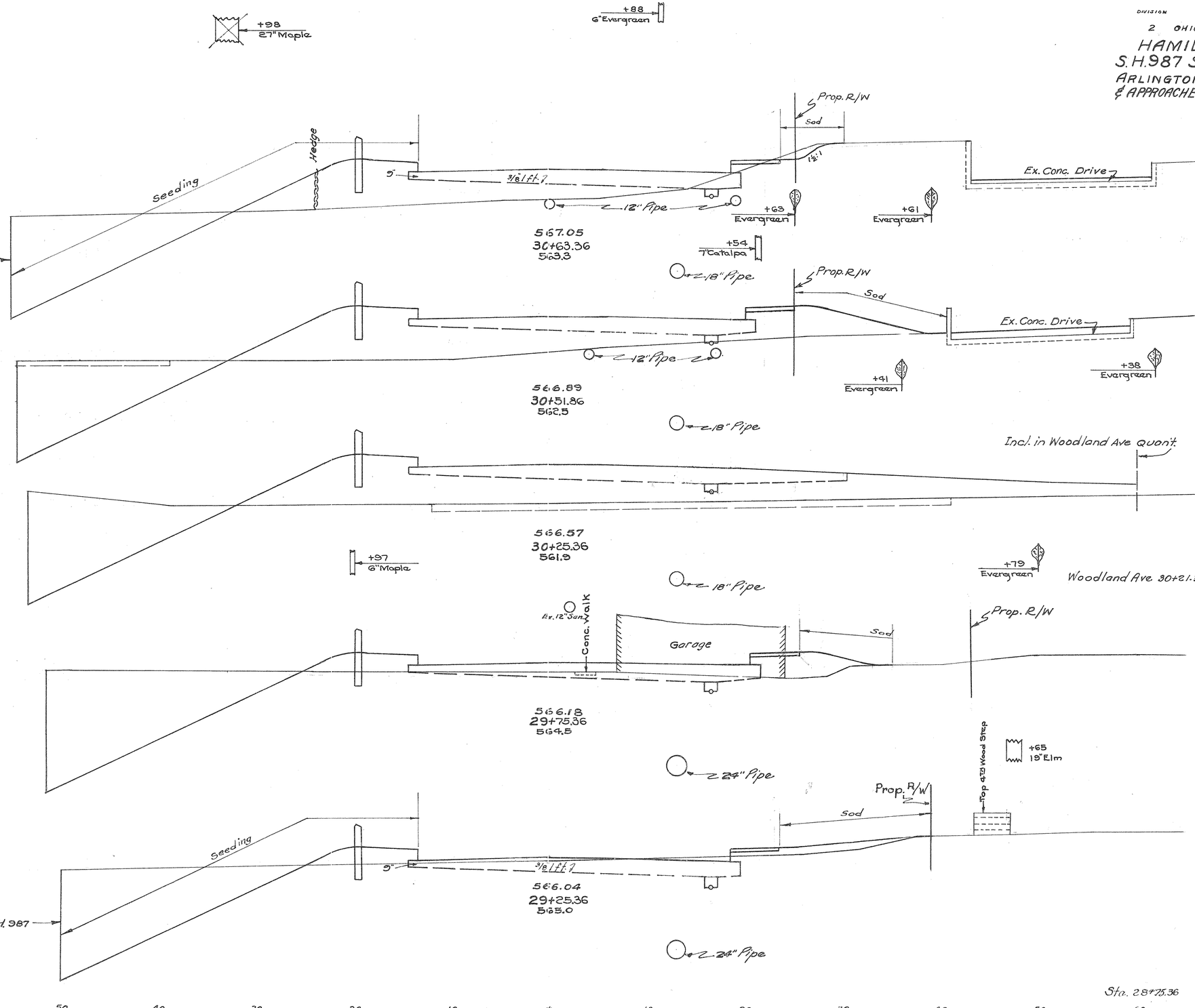
Quantities included in S.H. 987

Quantities included in S.H. 987

Plotted By	J.H.H. J.B.W.
Templates Plotted	A.L.H.
Templates Checked	R.E.L.
Drainage Checked	J.C.N.
Areas	T.S.
Volumes Computed	
Volumes Checked	
Balance Points	

DIVISION 2 OHIO UGI | FED. AID U1-316(1) 1946 | 237 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B", ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES



Class. Material	Emb. Area	END AREA VOLUME CUT	FILL	CUT	FILL
Vol.					
	50	129	113		
	21			52	63
	47	114	182		
	51			115	200
	57	120	226		
	41			96	
	91	285	265		
	41	187	42		
	83			349	67
	48	190	30		
	89			288	84
Sta. 28+75.36	48	121	60		

STA. 29+25.36 TO STA. 30+63.36 ON SUMMIT ROAD

DIVISION FED. AID 238
2 OHIO UGI UI-316(1) 1946 289

HAMILTON COUNTY
S.H 987 Sec. CINCINNATI (PT), "B"; ARLINGTON H'TS., LOCKLAND (PT). & APPROACHES

Class. Emb. End Area Volume
Material CUT FILL CUT FILL
Area Vol.

58 810 2
30 399 2
58 728 7
20 140
110 1243 9
58 588 2
10 65
100 *702 2.7
58 294 29
10 50
44 *150 15
58 260 23
88 317 111
Sta. 30+63.36 50 129 113

Seeding		Placing Top Soil	
Width Lin. Ft.	Area Sq. Yd.	Width Lin. Ft.	Area Sq. Yd.
132	98		
202	144		
128	87		
672	516		
114	95		
424	336		
50	35		
110	79		
57.2	34	seeding	
227	144	45	
25			

Quantities included in S.H. 987

Quantities included in S.H. 987

Plotted By	J.H.H. J.B.W.
Templates Plotted	A.J.H.
Templates Checked	R.E.L.
Drainage Checked	J.C.M.
Areas	T.S.
Volume	
Volumes Checked	
Balance Points	

Hedge
Seeding
12" 3/8"/Ft.
571.19
32+39.36
575.2
+36 4"Cherry
+34 4"Cherry
+37 4"Cherry
+32 4"Cherry
18" Pipes
+33 9" Mulb.
+61 12" Apple
+43 4" Peach
+42 4" Elm
+40 4" Apple
+25 9" Apple
Sod
3:1
Prop. R/W
570.74
32+25.36
573.8
+89 Evergreen
+86 3" Peach
+88 5" Elm
+84 6" Tree
Fence
+23 2" Elm
Porch #1271
569.28
31+74.36
571.1
+93 3" Elm
+39 3" Tree
House
#1267 Porch
568.19
31+27.86
567.0
8" Conc. Blk. Wall
+67 Clump-Evergreens
8" Conc. Block Wall
Prop. R/W
House Cellar 31+98
House Cellar 31+61 Lt.
House Cellar 31+16
*57 Cu. Yd. has been deducted from Cut Vol. for House Cellar
*60 Cu. Yd. has been deducted from Cut Vol. for House Cellar.
+26 15" Elm
+17 6" Pear
2½ Sty. Fr. (Shingle) #1290
Exist. Conc. Walk
Exist. Conc. Drive
Exist. Conc. Walk
1½:1
567.78
31+07.36
566.3
2-18" Pipe

STA. 31+07.36 TO STA. 32+39.36 ON SUMMIT ROAD

Plotted By	J.H.H.	J.B.W.
Templates Plotted	A.J.H.	
Templates Checked	R.E.L.	
Drainage Checked	J.C.M.	
Areas	T.S.	
Volume		
Volumes Checked		
Balance Points		

DIVISION 2 OHIO FED AID U1-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B"; ARLINGTON H'TS., LOCKLAND (PT.). & APPROACHES

Class. Emb. END AREA VOLUME

Material.	CUT	FILL	CUT	FILL
Area Vol.				
	43	601	112	
		39		536 81
				0 8
	50	683	81	
		88		992 102
	70	673	59	
	130		1259	77
			534	0
	70	686	24	
	119		*273	24
	58	796	2	
	77		*924	3
	Sta. 32+39.36	58	810	2

Seeding — Placing Top Soil

Width Area Width Area
Lin.Ft. Sq.Yd. Lin.Ft. Sq.Yd.

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

84 62 204 150 — Seeding

+30 3-10" Ash

INCL. IN S.H. 987 QUANTITY

Ex. SUMMIT RD.

Ex. 8" SAN.

+39 Evergreen

12" 3/4" I.F.

581.08
34+37.43
577.4

15" Pipe

25' Prop. R/W

Sod

Top Stone Wall

Dr. 34+37.13 Rt.

Top Wall

34+10 6" Willow

12" Pipe

15" Pipe

+97 10" Maple

79 58 248 — Ex. Summit Rd.

579.54
34+14.88
578.0

+99 30" Elm

+78 18" Poplar

Incl. in Edgemont Terrace Quantities.

Ex. 8" SAN.

600 600 Edgemont Terrace Sta. 33+55.77 Rt.

338 75 55 — Ex. Summit Rd.

577.10
33+75.36
575.2

15" Pipe

Edgemont Terrace 33+55.77

Ex. 8" SAN.

308 397 68 56 — Ex. Summit Rd.

Hedge

Hedge

Top Wall

Ex. 3" Walk

Sod

Incl. in Edgemont Terrace Quantities.

+92 4" Beech

574.50
33+25.36
576.0

18" Pipe

33+03 Evergreen

33+18 Clump Evergreens

33+24 9" Oak

+85 Evergreen

*100 cu. Yd. has been deducted from Cut Vol. for House Cellar

Fence

+88 5" Elm

575 433 — INCL. IN S.H. 987 QUANTITY

Ex. 8" SAN.

Seeding

House

Hedge

Sod

Seeding

Prop. R/W 102'±

*146 cu. Yd. has been deducted from Cut Vol. for House Cellar

139 100 542 396 132 98 32+39.36 — Seeding

12" 3/8" I.F.

572.43
32+75.36
576.2

18" Pipe

Ex. 8" SAN.

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

STA. 32+75.36 TO STA. 34+37.43 ON SUMMIT ROAD

Seeding Width	Seeding Area Lin.ft.	Seeding Area Sq.Yd.	Placing Top Soil Width	Placing Top Soil Area Lin.ft.	Placing Top Soil Area Sq.Yd.
28	0				
194	0				
42	0				
194	0				
28	0				
28	0				
27	0				
164	0				
23	0	34+58.43			
57	0				
90	0 Ahead 68 Back	87			
116					
84	62	34+37.43			

Plotted By	J.H.H.	J.B.W.
Templates Plotted	R.H.H.	
Templates Checked	R.E.L.	
Drainage Checked		J.C.M.
Areas		T.S.
Volume		
Volumes Checked		
Balance Points		

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

+51 30" Thorn

+68 9" Locust

+27 15" Willow

Exist. R/W

Seeding

Sod

9"

Ex. Summit Rd.

12"

595.14
36+26.51
590.3

15" Pipe

+26 9" Elm

Exist. R/W

Seeding

Sod

Ex. 8" San.

3:1

+62 24" Locust

13"

+27 4" Hackb.

House

591.85
35+76.51
586.5

15" Pipe

Ex. 8" San.

+54 9" Elm

Seeding

Sod

INCL. IN S.H. 987 QUANT.

+29 30" Thorn

25' Prop. R/W

588.01
35+26.51
582.0

15" Pipe

Sod

+23 15" Thorn

Seeding

Ex. 8" San.

9"

9"

+90 Evergreen

INCL. IN S.H. 987 QUANTITY

9"

587.28
35+17.43
581.8

+72 9" Catalpa

Dr. 34+58.63 Rt.

+70 Evergreen

Sod

Seeding

Ex. 8" San.

12"

3/8" Ift. ℄

3:1

INCL. IN S.H. 987 QUANTITY

582.61
34+58.43
580.2

25' Prop. R/W

Sod

Ex. Conc. Drive

Ex. 8" San.

Seeding

12"

3/8" Ift. ℄

3:1

Ex. Summit Rd.

15" Pipe

AHEAD — INCL. IN S.H. 987 QUANT.
BACK — INCL. IN SUMMIT RD. QUANT.

Ex. 8" San.

581.39
34+49.43
580.6

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

STA. 34+49.43 TO STA 36+26.51 ON SUMMIT ROAD

DIVISION 2 OHIO FED. AID. U1-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT) "B"
ARLINGTON H'TS, LOCKLAND (PT).
& APPROACHES

Class. Emb. Material	END AREA VOLUME CUT Area	CUT Vol.	FILL Area	FILL Vol.
	25	0	164	
	47		15	328
	25	16	190	
	47		36	366
	25	23	205	
	8		4	68
	25	2	197	
			10	0
	71		83	327
	40	74	102	
	14		26	31
	Ahead 43		80	81
	Back 43		667	81
	19		326	43
	Sta. 34+37.43	43	601	112

DIVISION 2 | FED. AID OHIO U1-316(1) 1946 UGI | 241 289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON H'TS., LOCKLAND (PT.) & APPROACHES

Class. Emb. Material | END AREA VOLUME CUT FILL CUT FILL

Area Vol.

Seeding		Placing Top Soil	
Width	Area	Width	Area
Lin. Ft.	Sq. Yd.	Lin. Ft.	Sq. Yd.

Seeding

1" P

Stone Wall

601.82
37+82.28
601.5

Ex. 8" San.

ABBEY PLACE

1" Per. Ft.

Ex. Summit Rd.

Brick Gutter

Sod

600.88
37+50
599.6

Note: End of Classified Material Sta. 37+32.61 Ahead 0 Back 37

+31
6" Pine

Exist. R/W

3/4" Per. Ft.

9"

3/8" Ift. 7

Ex. Summit Rd

20" Brick Gutter

Sod

+16
6" Pine

37+00
6" Mulb.

+88
3" Mulb.

+80
32" Elm

600.09
37+27.23
598.1

15" Pipe

Sod

Ex. R/W

3/4" Per. Ft.

Ex. Summit Road

12'-1"

597.87
36+76.43
594.2

Seeding

Ex. R/W.

Sod

6 1/2" Per. Ft.

3/4" Per. Ft.

9"

3/8" Ift. 7

20" Brick Gutter

Ex. Summit Rd

597.62
36+71.43
593.8

Ex. 8" San.

15" Pipe

36+26.51

Plotted By	J.H.H.	J.B.W.
Templates Plotted	A.L.H.	
Templates Checked	R.E.L.	
Drainage Checked		
Areas	J.C.M.	
Volume	T.S.	
Volumes Checked		
Balance Points		

Sta. 36+26.51 25 0 164

STA. 36+71.43 TO STA 37+82.28 ON SUMMIT ROAD

Seeding		Placing Top Soil	
Width	Area Lin. Ft. Sq. Yd.	Width	Area Lin. Ft. Sq. Yd.

DIVISION 2 OHIO FED AID UI-316(1) 1946 UGI

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI(PT), "B", ARLINGTON H'TS., LOCKLAND(PT). & APPROACHES

Class. Emb. Material

END AREA VOLUME			
CUT	FILL	CUT	FILL
Area		Vol	

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

39+31
604.1

Ex. 8" San.

END WORK ON SUMMIT ROAD
STATION 38+81

38+81
603.5

Seeding
1" Per. Ft.

38+31 END PROP. PAVT.
603.8

Seeding
Sod
1" Per. Ft.

602.25
38+00
602.1

Ex. 8" San.

Sta. 37+82.28

Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas	
Volume	
Volumes Checked	
Balance Points	

T.S.

0 0 38+81

58 58

21 21

72 91

21 20

40 38

20 19

Sta. 38+81

0 0

42 0

45 0

57 1

Ahead 54 2
Back 63 2

47 1

Sta. 37+82.28 81 1

STA. 19+29.13 to STA. 38+81.0 (RURAL)

Excavation	22,258 Cu. Yds.
Embankment	8,436 Cu. Yds.
Embankment +20%	10,123 Cu. Yds.
Classified Embankment	3,343 Sq. Yds.
Seeding	15,974 Sq. Yds.
Top Soil	9,339 Sq. Yds.

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

STA 38+00 TO STA 39+31 ON SUMMIT ROAD

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	U1-316(1) U61	1946

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HAMILTON COUNTY
S.H. 987, SEC. CINCINNATI (PT.), "B," ARLINGTON HEIGHTS, LOCKLAND (PT.), & APPROACHES

P.I. = 27+82.80
Δ = 44°45'-27" Lt.
D = 6°-00'
T = 393.18
R = 954.93
L = 745.96
E = 77.78
P.C. = 23+89.62
P.T. = 31+35.58

P.I. = 2+55.32 Summit Road
Δ = 32°-08'-30" Lt.
D = 6°-35'
R = 870.32'
T = 256.73'
L = 488.23'
E = 35.40'
P.C. = 0+04.59
P.T. = 4+92.82

P.I. = 0+84.66
Δ = 31°-31'-05" Rt.
D = 19°-05'-55"
R = 300.0' F/c.
T = 84.66
L = 165.03
E = 11.72
P.C. = 0+00
P.T. = 1+65.03

Note:-
For Pavement Symbols & Joint Legend See Sheet No 14

Scale-1"=20'

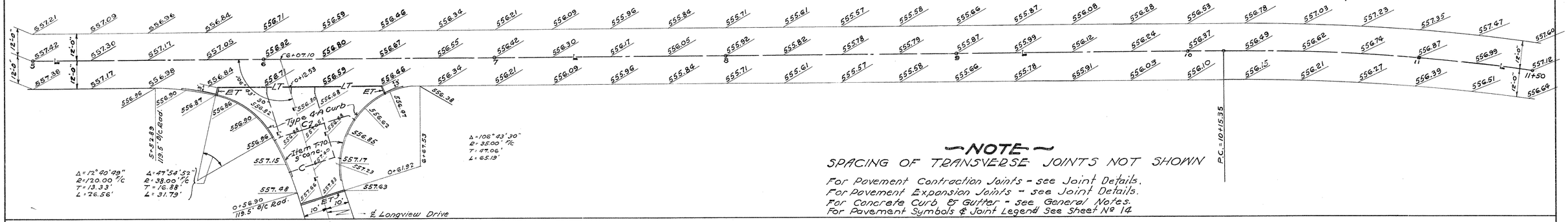
Drawn by		Date	
Checked by		Date	
Checked by		Date	

PAV'T. DETAILS SUMMIT ROAD - STA. 0+00 TO STA. 5+00

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UGI-316 (1)	1946

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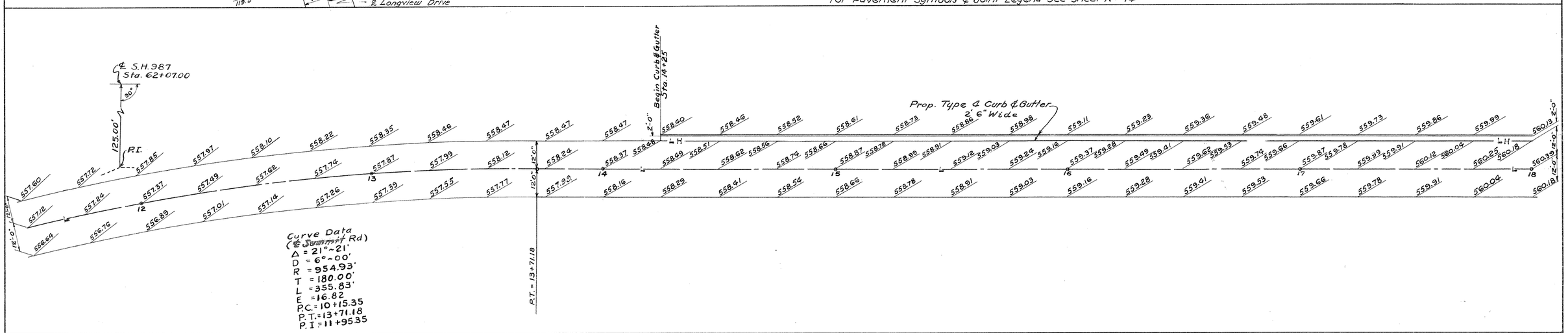
HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B", Arlington H'ts, Lockland (Pt.), & Approaches

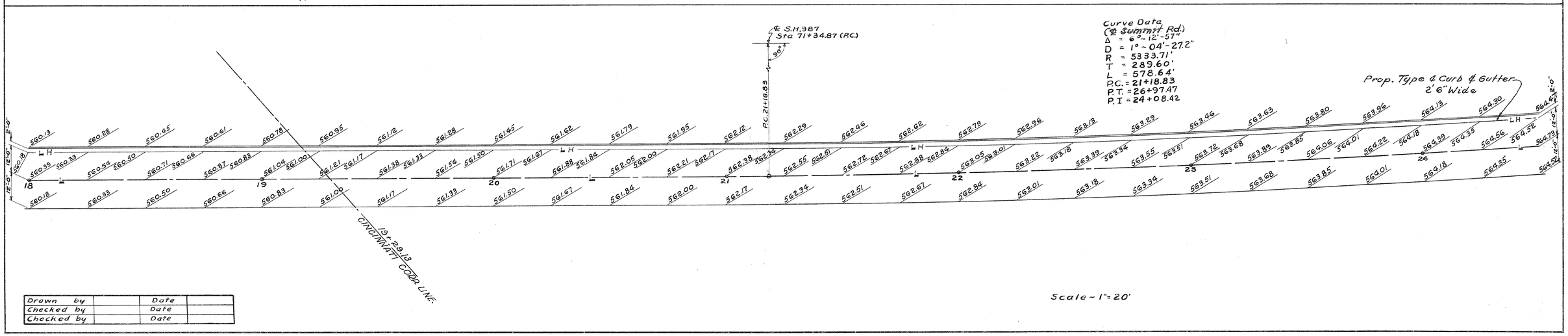


—NOTE—

SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details.
For Concrete Curb & Gutter - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14





Drawn by		Date	
Checked by		Date	
Checked by		Date	

Scale - 1" = 20'

PAV'T. DETAILS SUMMIT ROAD STA. 5+00 TO STA. 24+50

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON HTS., LOCKLAND (PT.), & APPROACHES

Δ = 6°12'-57"
D = 1°-04'-27.2"
R = 5333.71'
T = 289.60'
L = 578.64'
P.C. = 21+18.83
P.T. = 26+97.47
P.I. = 24+08.42

S.H. 987 Sta. 77+00 Radial Line

125'
P.T. Sta 26+97.47
124'

STA. 26+80.25 (SUMMIT ROAD) = STA. 9+67.80 (SECTION ROAD)

90°-0'

NOTE - - Longitudinal Joint.

— NOTE —

SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details.
For Concrete Curb & Gutter - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14

Prop. Type 4 Curb & Gutter. 2'6" Wide

Prop. Type 2-A Curb

Prop. 5' Conc. Sidewalk

Prop. Type 2-A Curb

℄ Sidewalk 27+83.4

Exist. Conc. Steps

3'-6"

Ex. Conc. Wall (To be removed)

½" Bit. premolded Ex. Jt. Material

6'-2¼"

3'-1¾"

Ex. St. conc. walk to be removed & replaced

Exist. Conc. Walk & Steps.

Prop. Conc. Pavement

Prop. 5' Conc. Sidewalk

Sta. 30+64.5 ℄ SUMMIT AVE.

6"
4'-0"
6"
4'-0"

— PLAN —

3 Steps @ 5'-0"
1 Tread @ 2'-8" ℄
2 Treads @ 12"
2 Risers @ 8"

13" Con. Walk
2'-8"
2'-0"
First Step

El. = 568.92
El. = 567.70
El. = 567.25
El. = 567.35

— SECTION —
Scale - ⅜" = 1 Ft.

PC 23+04.89

℄ WOODLAND AVE.

Sta. 30+64.5 ℄ Prop. Conc. Steps ℄ Walk

30+21.33

30 | 31 | N. 34°-55'-24" E.

℄ SUMMIT RD. ℄

Prop. Pavement

Prop. 5' Conc. Sidewalk

Exist. Conc. Walks to be removed

Steps ℄ removed

Exist. Sidewalk

Ex. Conc. Sidewalk

Concrete Porch with Basement

2½ Sty. Fr. Shingle No. 1290

Conc. Driveway

℄ WOODLAND AVE. ℄

PLAN SHOWING LOCATION OF PROPOSED CONCRETE STEPS & WALKS
Scale - 1" = 20 Ft.

STA 25+12.36

STA 11+37.08

Δ 98°-16'-43"
R 130.0' ℄
L 222.99

3/8°00'-45"

98°-16'-43"

27°08'-36"

130' ℄

Prop. Type 2-A Curb

Prop. Type 2A Curb

Prop. 4' Conc. Walk

Section Road ℄

Scale - 1" = 20 Ft.

ESTIMATED QUANTITIES

Conc. Steps - 8" risers, 12" treads (Item I-13) 15 Lin. Ft.
4" Conc. Sidewalk (Item I-13) 48 Sq. Ft.

Drawn by		Date	
Checked by		Date	
Checked by		Date	

CONC. SIDEWALK & STEPS - STA. 30+64.5 SUMMIT RD.

PAV'T. DETAILS SUMMIT ROAD STA. 24+50 To STA. 31+00

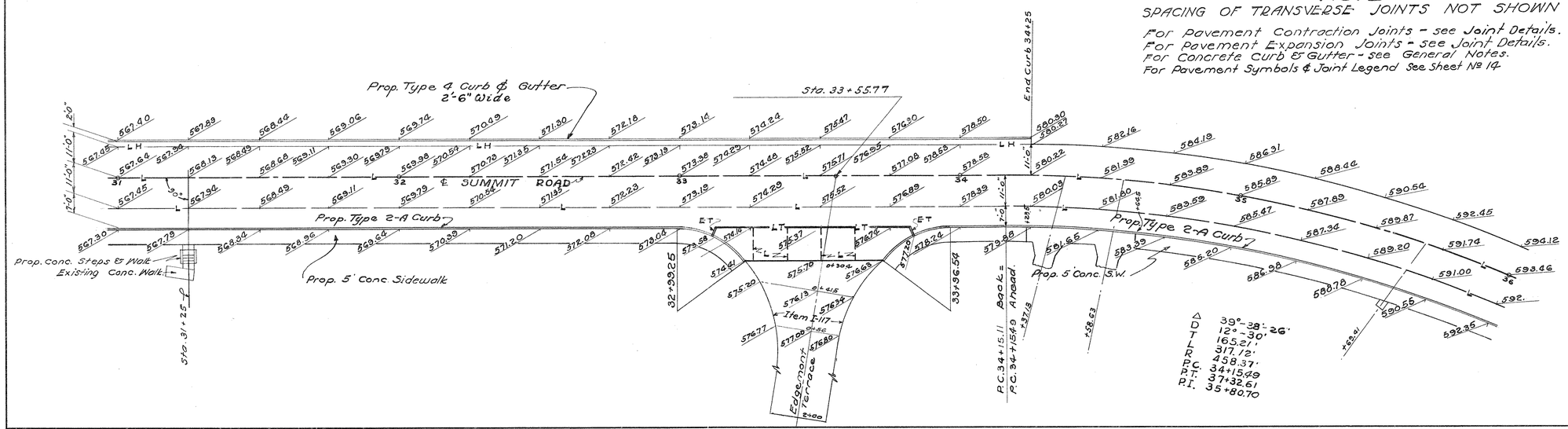
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR	246
2	OHIO	U1-316(1) UGT	1946	289

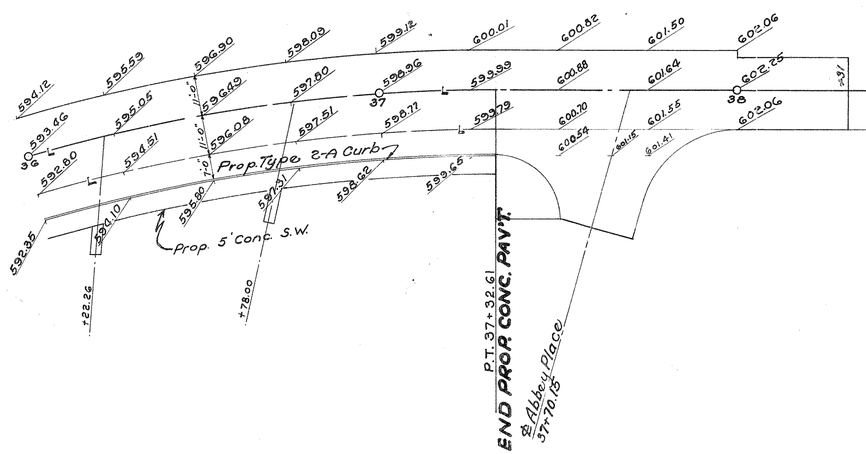
HAMILTON COUNTY
S.H. 987 Sec. Cincinnati (Pt.), "B," Arlington Hts., Lockland (Pt.), & Approaches

— NOTE —

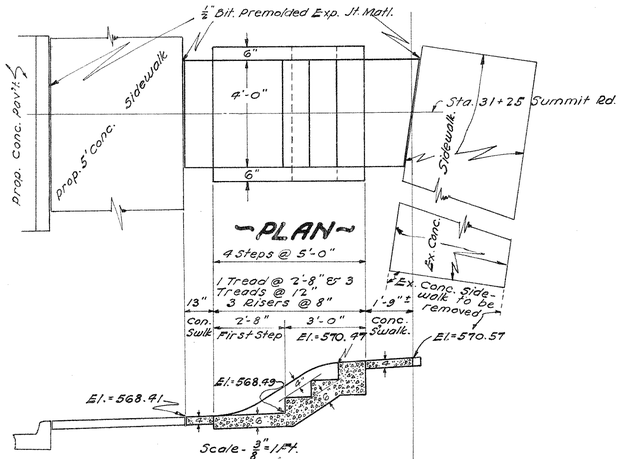
SPACING OF TRANSVERSE JOINTS NOT SHOWN

For Pavement Contraction Joints - see Joint Details.
For Pavement Expansion Joints - see Joint Details.
For Concrete Curb & Gutter - see General Notes.
For Pavement Symbols & Joint Legend See Sheet No 14.





END W.P. WORK
STA. 38+81



ESTIMATED QUANTITIES

Concrete Steps 8" Risers & 12" Treads	Item I-13	20	Lin. Ft.
4" Concrete Sidewalk	Item I-13	11	Sq. Ft.

Drawn by		Date	
Checked by		Date	
Checked by		Date	

CONC. SIDE-WALK & STEPS - STA. 31+25 SUMMIT RD.

PAV'T. DETAILS - SUMMIT ROAD - STA. 31+00 TO STA. 38+31

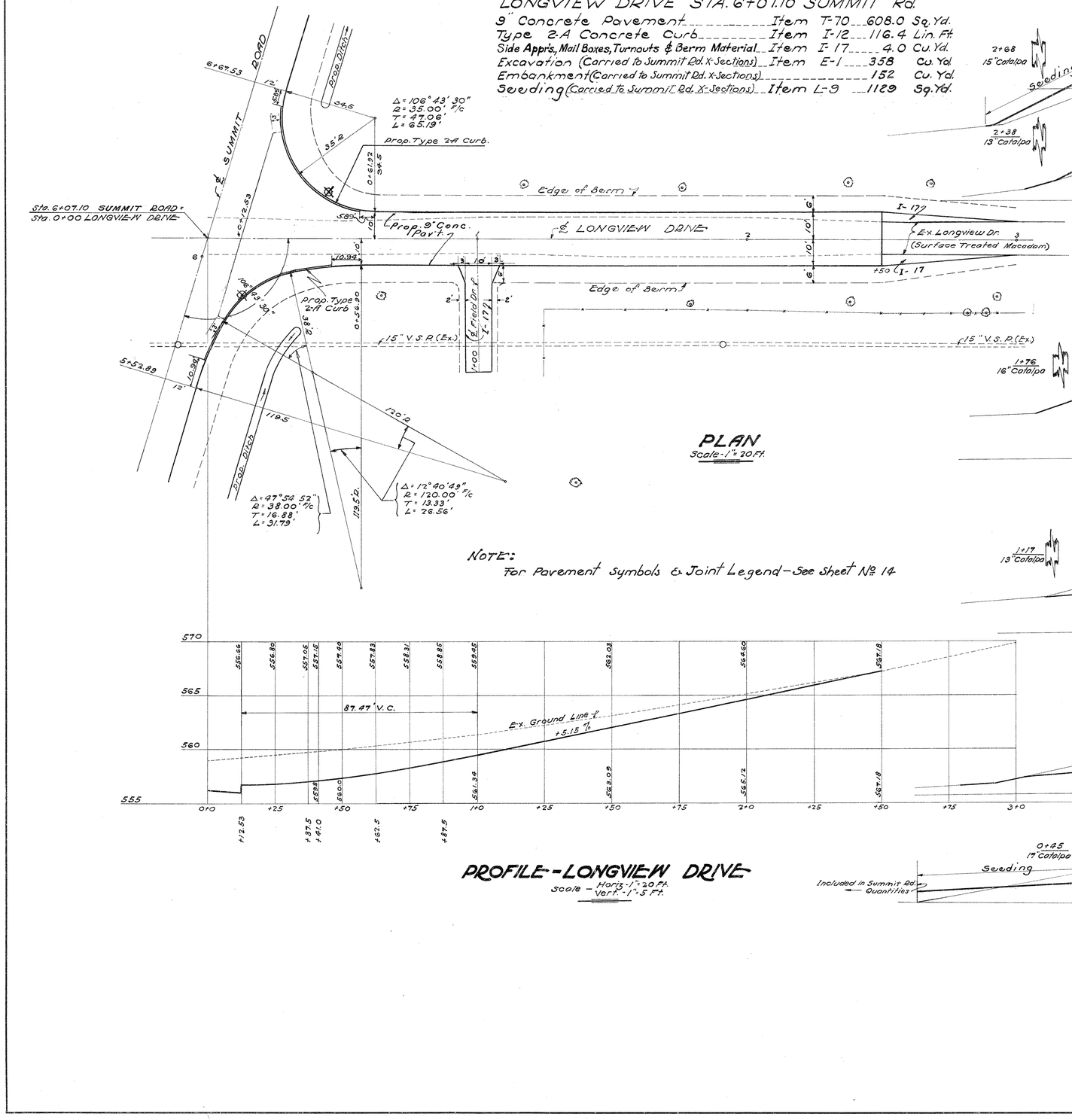
ESTIMATED QUANTITIES
LONGVIEW DRIVE STA. 6+07.10 SUMMIT Rd.

9" Concrete Pavement	Item	T-70	608.0	Sq. Yd.
Type 2-A Concrete Curb	Item	I-12	116.4	Lin. Ft.
Side Appr's, Mail Boxes, Turnouts & Berm Material	Item	I-17	4.0	Cu. Yd.
Excavation (Carried To Summit Rd. X-Sections)	Item	E-1	358	Cu. Yd.
Embankment (Carried to Summit Rd. X-Sections)			152	Cu. Yd.
Seeding (Carried To Summit Rd. X-Sections)	Item	L-9	1129	Sq. Yd.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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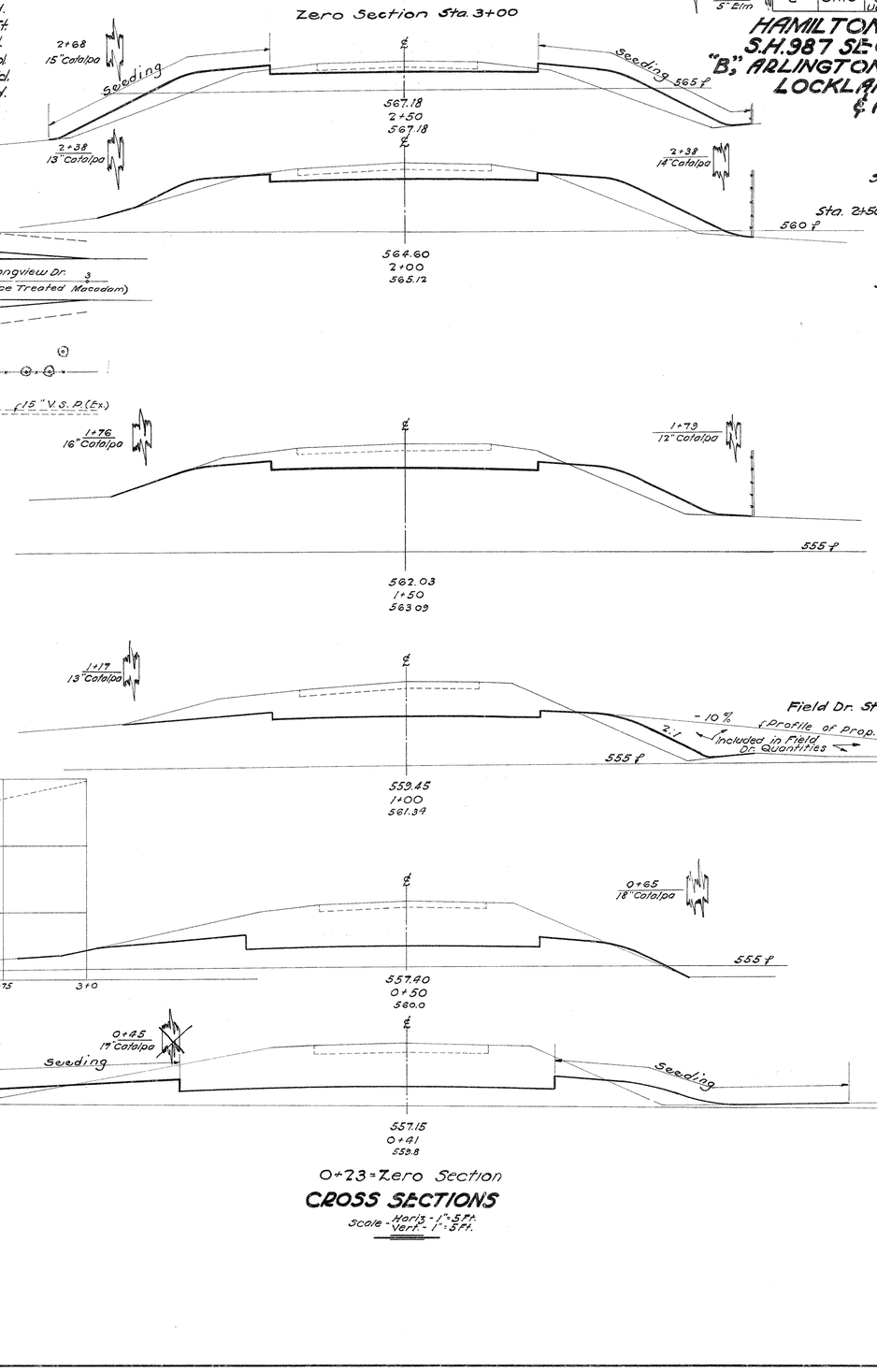
HAMILTON COUNTY
S.H. 987 S.E. C. CINCINNATI (P.T.) "B", ARLINGTON HEIGHTS, LOCKLAND (P.T.) & APPROACHES



PLAN
Scale - 1" = 20 Ft.

NOTE:
For Pavement Symbols & Joint Legend - See Sheet No. 14

PROFILE - LONGVIEW DRIVE
Scale - Horiz. - 1" = 20 Ft.
Vert. - 1" = 5 Ft.



0+23 = Zero Section

CROSS SECTIONS
Scale - Horiz. - 1" = 5 Ft.
Vert. - 1" = 5 Ft.

	End Area Cut	End Area Fill	Volume Cut	Volume Fill
Sta. 3+00	0	0		
			0	26
Sta. 2+50 Ahead	0	28		
Back	14	28		
			32	42
Sta. 2+00	20	17		
			52	24
			36	9
			87	17
Field Dr. Sta. 1+00			0	29
			58	9
			128	9
			80	1
			29	2
			91	10
			30	3
			0	0
TOTAL			358	152

LONGVIEW DR. APPROACH STA. 6+07.10

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGT	1946

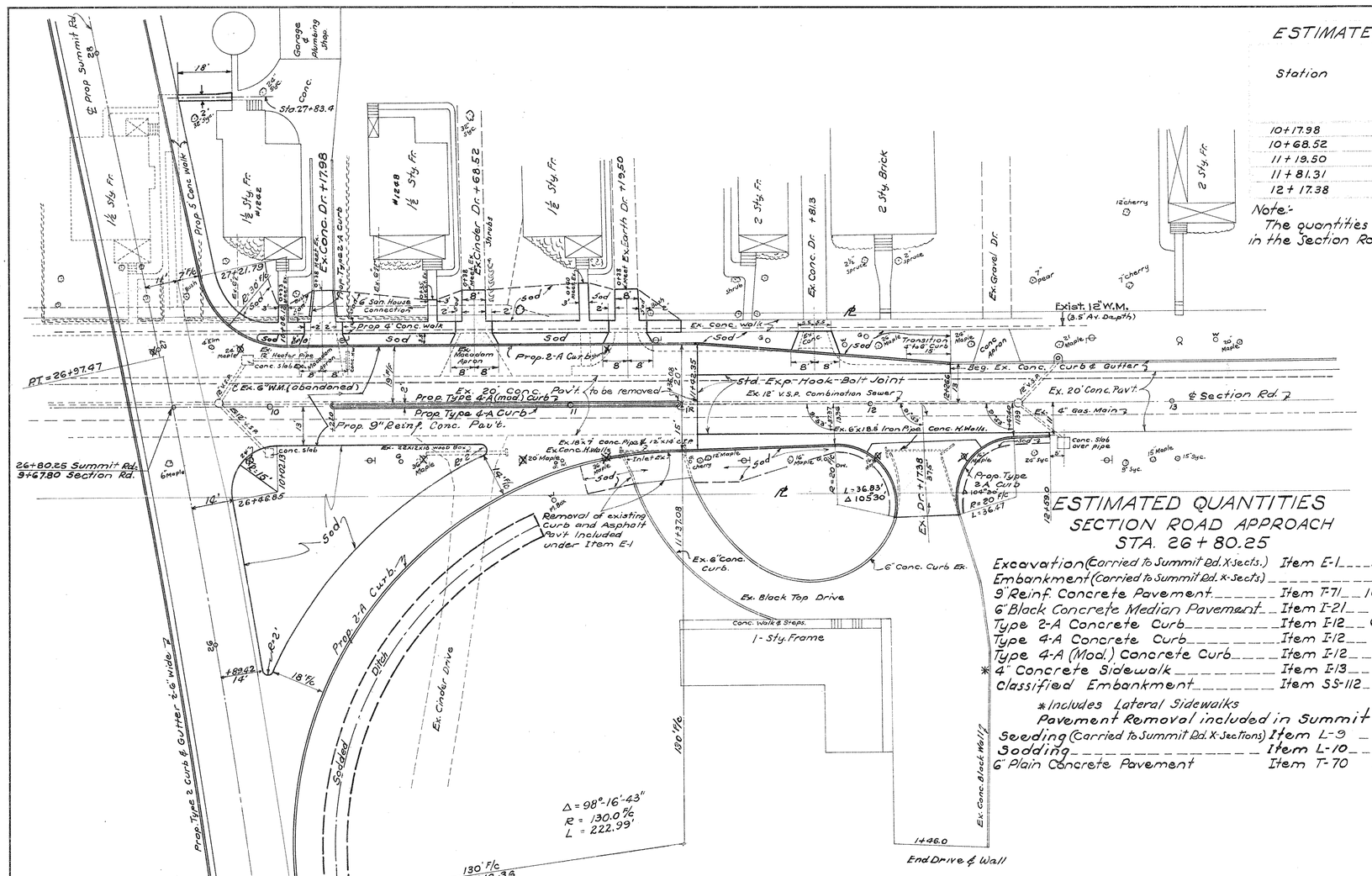
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

ESTIMATED QUANTITIES PRIVATE DRIVES

Station	Side	6" Concrete Pav't Item T-70 Sq. Yd.	6" Concrete Curb Type 2-A Item I-12 Lin. Ft.	Excavation Incl. in Rdwy Quant. Item E-1 Cu. Yd.
10+17.98	Lt.	20.0	170	4
10+68.52	Lt.	19.8		4
11+19.50	Lt.	19.8		3
11+81.31	Lt.	10.5		3
12+17.38	Rt.	73.3	53.3	16

Note:- The quantities listed above have been included in the Section Road Approach quantities.



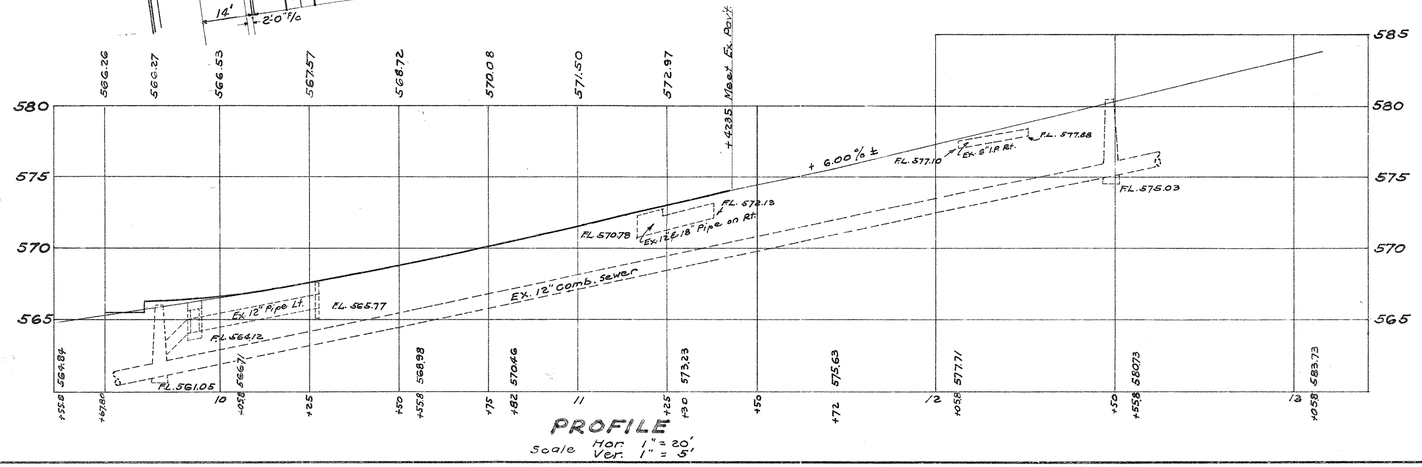
ESTIMATED QUANTITIES SECTION ROAD APPROACH STA. 26+80.25

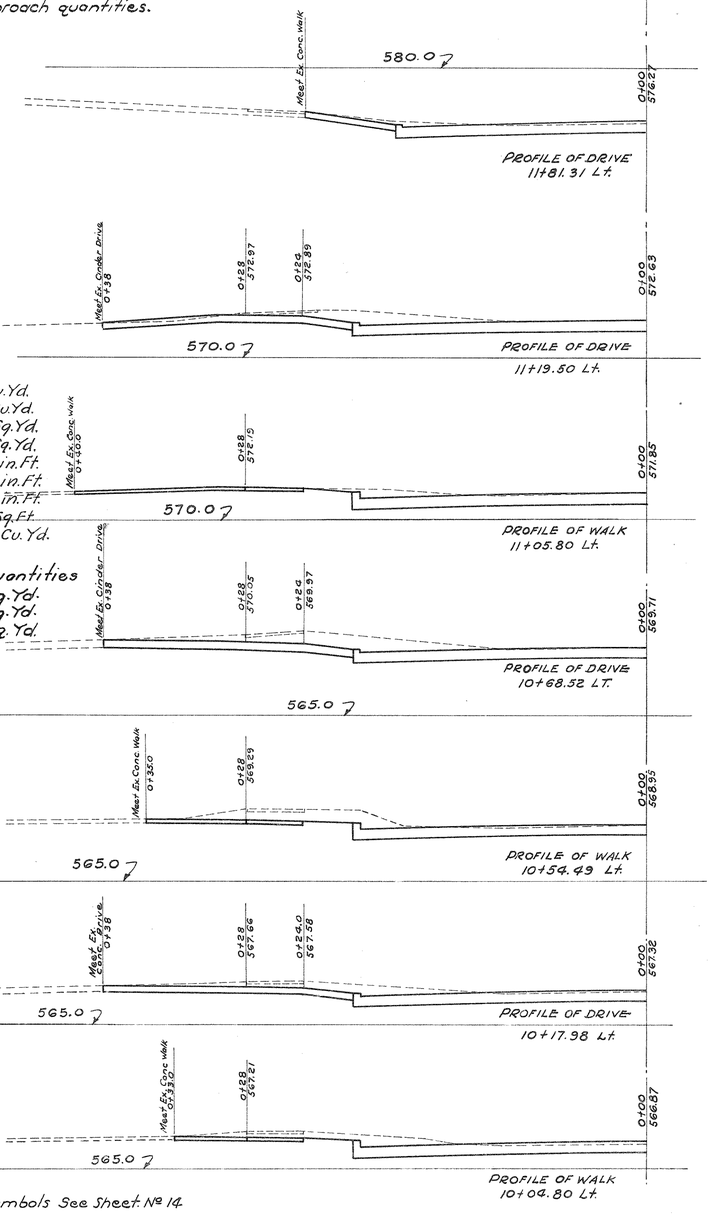
Excavation (Carried to Summit Rd. X-Sects.)	Item E-1	535 Cu. Yd.
Embankment (Carried to Summit Rd. X-Sects.)		33 Cu. Yd.
9" Reinf. Concrete Pavement	Item T-71	1084.0 Sq. Yd.
6" Black Concrete Median Pavement	Item I-21	12.9 Sq. Yd.
Type 2-A Concrete Curb	Item I-12	637.8 Lin. Ft.
Type 4-A Concrete Curb	Item I-12	116.7 Lin. Ft.
Type 4-A (Mod.) Concrete Curb	Item I-12	116.7 Lin. Ft.
* 4" Concrete Sidewalk	Item I-13	644.0 Sq. Ft.
Classified Embankment	Item SS-112	154.0 Cu. Yd.

*Includes Lateral Sidewalks

Pavement Removal included in Summit Rd. Quantities

Seeding (Carried to Summit Rd. X-Sections)	Item L-9	127 Sq. Yd.
Sodding	Item L-10	784 Sq. Yd.
6" Plain Concrete Pavement	Item T-70	143.4 Sq. Yd.





Note:- For Pavement Symbols See Sheet No. 14.

SECTION ROAD APPROACH STA. 26+80.25

60 50 40 30 20 10 0 10 20 30 40 50 60 70

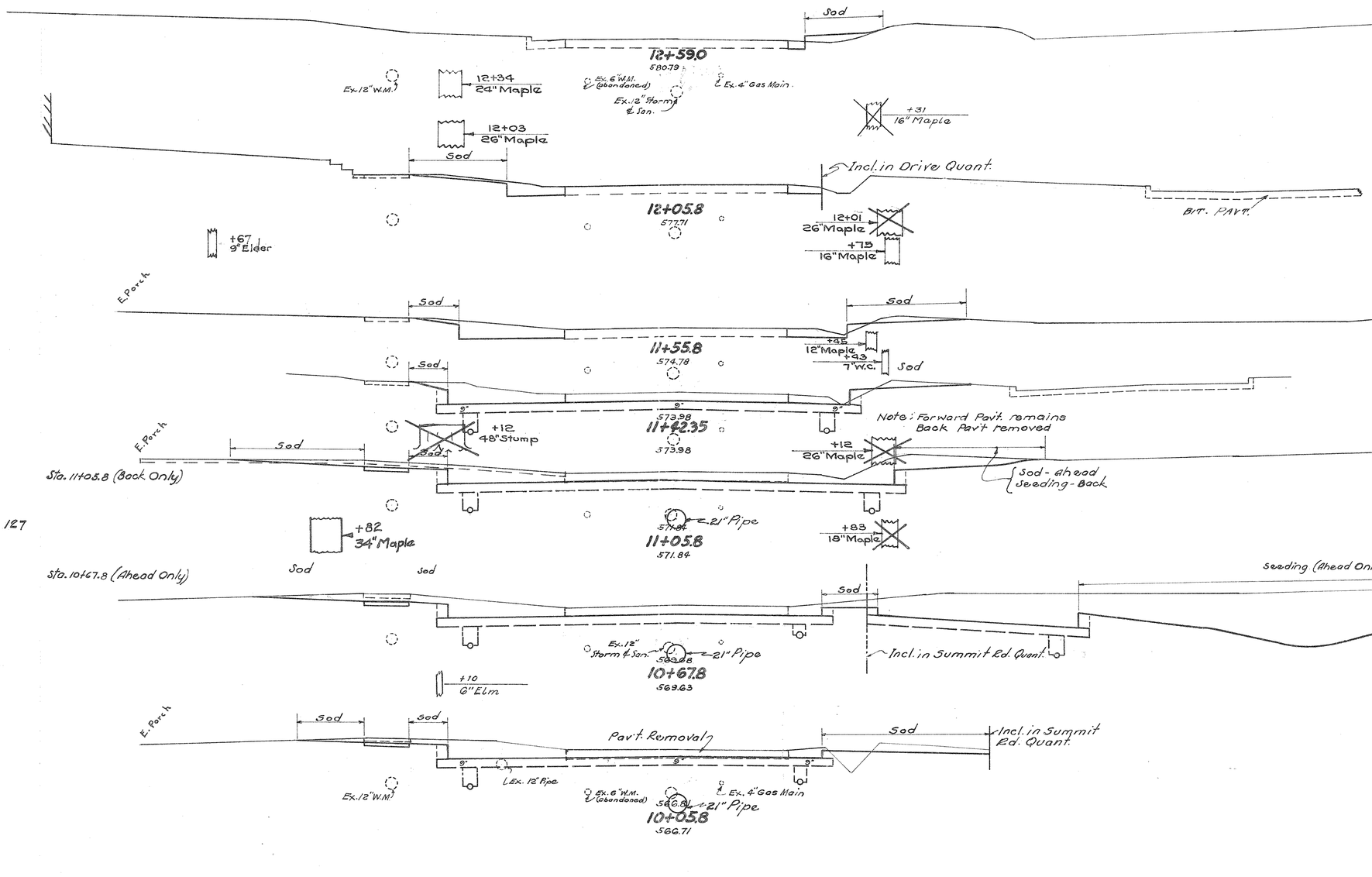
Seeding
Wid. Ih. Area
Lin. Ft. Sq. Yd.

DIVISION FED. AID 249
2 OHIO UI-316(1) 1946 289
UGI

HAMILTON COUNTY
S.H 987 SEC. CINCINNATI (PT). "B"
ARLINGTON H'TS, LOCKLAND (PT). & APPROACHES

Class. Exc. Material / Area — END AREA CU. YD.
Vol. CUT FILL CUT FILL

Plotted By	
Templates Plotted	
Templates Checked	
Drainage Checked	
Areas	
Volumes	
Volumes Checked	
Balance Points	



		2	4
		11	4
Drive Sta. 12+17.38		16	0
		10	0
Drive Sta. 11+81.31		3	0
		28	1
		20	1
		11	1
Ahead	0	23	1
Back	29	52	4
Drive Sta. 11+19.50		3	0
	41	91	6
	32	82	4
Drive Sta. 10+68.52		4	0
	52	236	7
Ahead	42	254	6
Back	27	61	3
Drive Sta. 10+17.98		4	0
	61	128	14
	26	50	9
Total	154	535	33

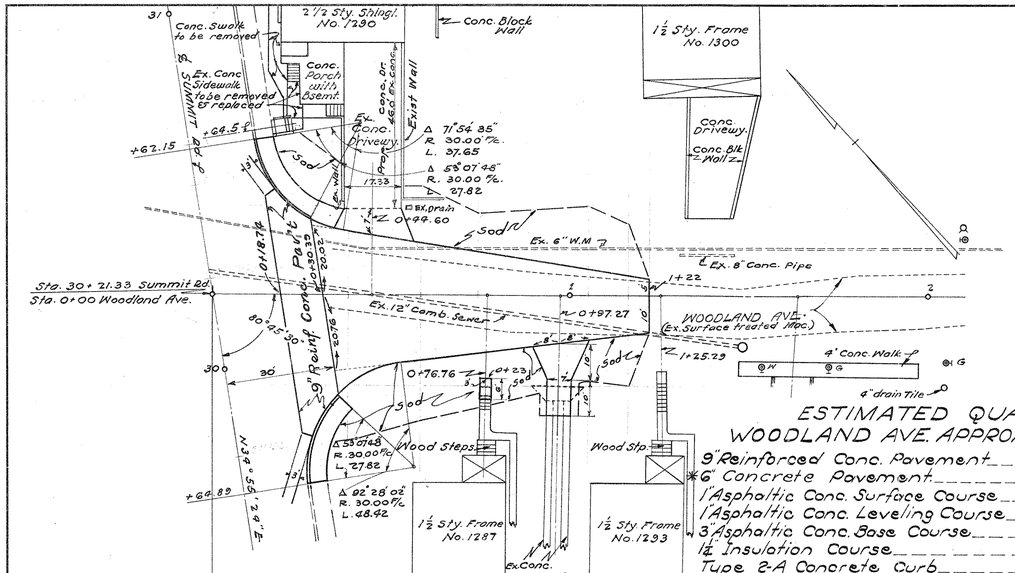
60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

SEAL RD. STA 10+05.8 TO STA 12+59.0

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGT	1946

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289

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

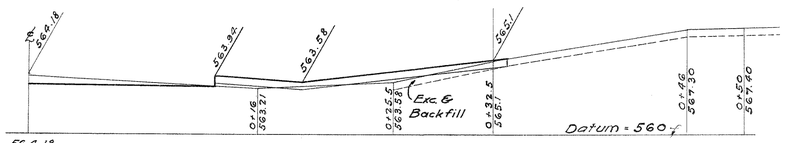


ESTIMATED QUANTITIES
WOODLAND AVE. APPROACH STA. 30+21.33

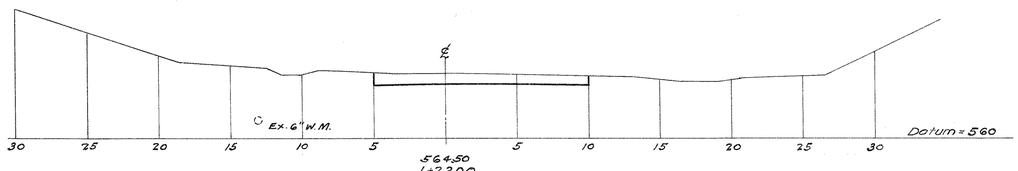
9" Reinforced Conc. Pavement	Item T-71	82.6 Sq. Yd.
*6" Concrete Pavement	Item T-70	129.8 Sq. Yd.
1" Asphaltic Conc. Surface Course	Item T-35	283.6 Sq. Yd.
1" Asphaltic Conc. Leveling Course	Item B-35	283.6 Sq. Yd.
3" Asphaltic Conc. Base Course	Item B-35	684.0 Sq. Yd.
1½" Insulation Course	Item I-19	294.8 Sq. Yd.
Type 2-A Concrete Curb	Item I-12	55.6 Lin. Ft.
⊗4" Concrete Sidewalk	Item I-13	310.0 Sq. Ft.
Sealing (only) of Existing Pavement	Item E-8	49.0 Lin. Ft.
*Excavation (Carried to Summit Rd. X-Sections)	Item E-1	41 Cu. Yd.
*Embankment (Carried to Summit Rd. X-Sections)		96 Cu. Yd.
Sodding	Item L-10	275 Sq. Yd.

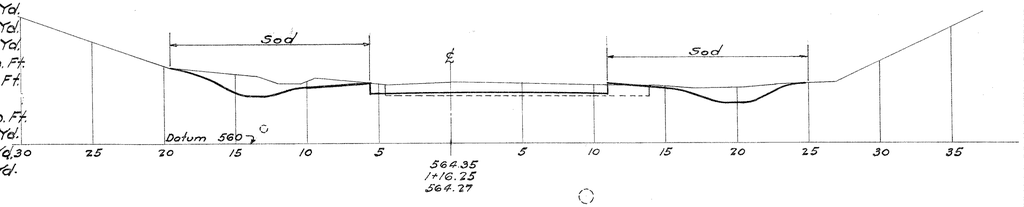
* Includes Private Drives
⊕ Includes Lateral Sidewalk.

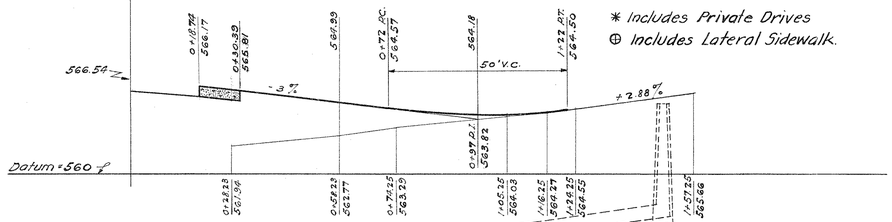
~PLAN~
Scale - 1" = 20 Ft.



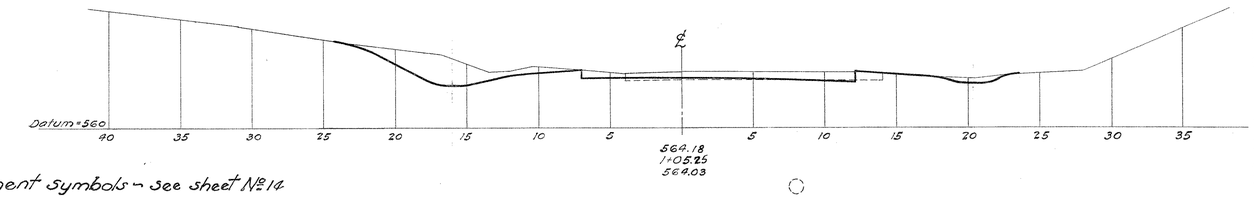
PROFILE - STA. 0+97.27 - RT.
Scale Horiz. - 1" = 5 Ft.
Vert. - 1" = 5 Ft.



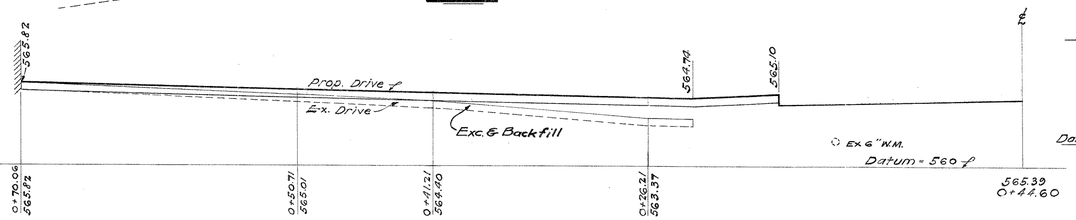




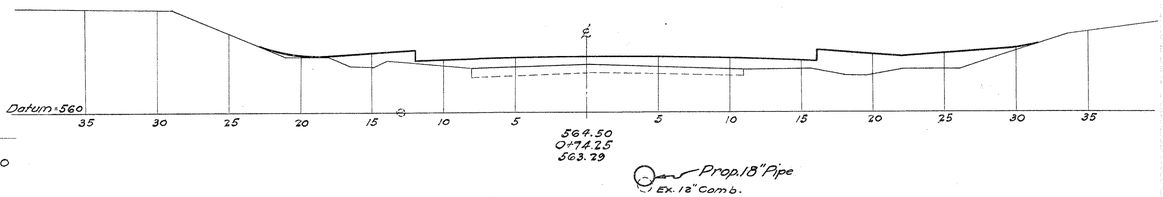
~PROFILE~
Scale - Horiz. - 1" = 20 Ft.
Vert. - 1" = 5 Ft.

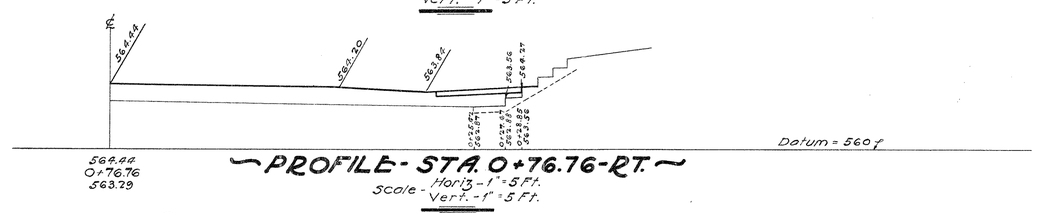


NOTE: for Pavement Symbols - See sheet No. 14



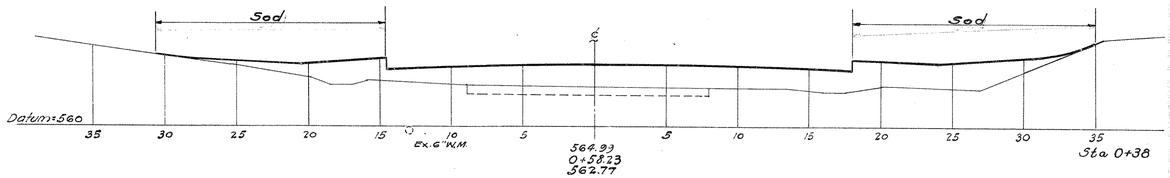
~PROFILE - STA. 0+44.60 - LT.~
Scale - Horiz. - 1" = 5 Ft.
Vert. - 1" = 5 Ft.





~PROFILE - STA. 0+76.76 - RT.~
Scale - Horiz. - 1" = 5 Ft.
Vert. - 1" = 5 Ft.

Ex. 12" Comb.



0+38 Zero Section

~CROSS SECTIONS WOODLAND AVE.~
Scale - Horiz. - 1" = 5 Ft.
Vert. - 1" = 5 Ft.

STA. 30+21.33 WOODLAND AVE. APPR.

	End Area Volume	
	Cut	Fill
Dr. 0+97.27 Rt.	11	0
	4	0
	24	0
	10	0
	25	0
	1	1
	14	22
	0	38
Dr. 0+44.60 Lt.	12	8
	0	35
	0	81
	0	30
	0	0
TOTAL	41	96

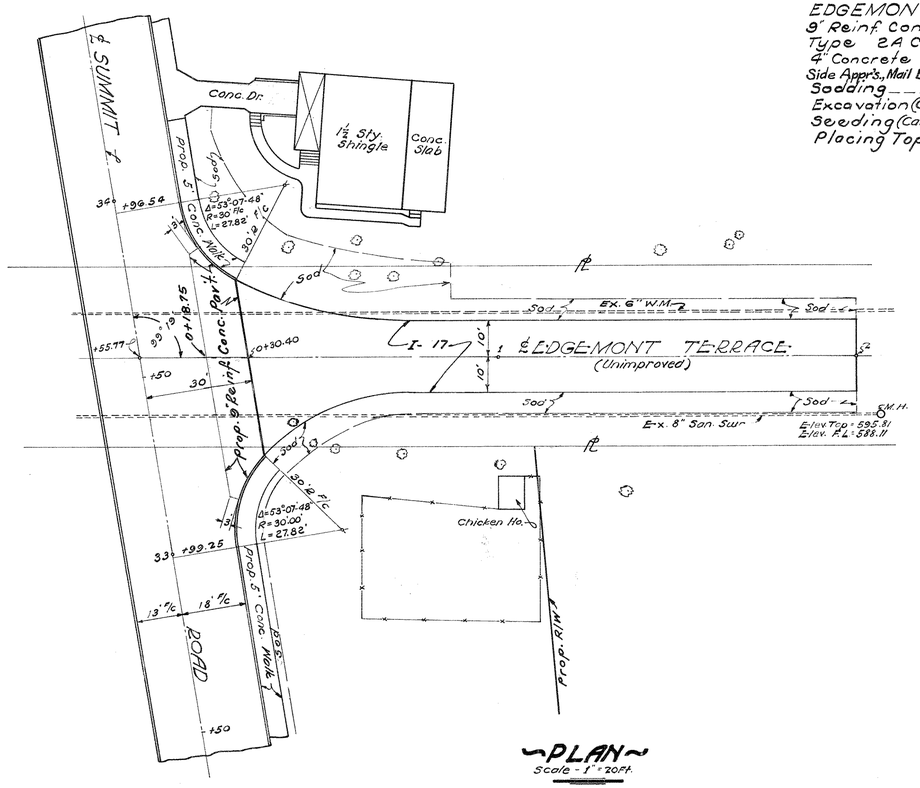
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (P.T.), "B", ARLINGTON HEIGHTS, LOCKLAND (P.T.) & APPROACHES

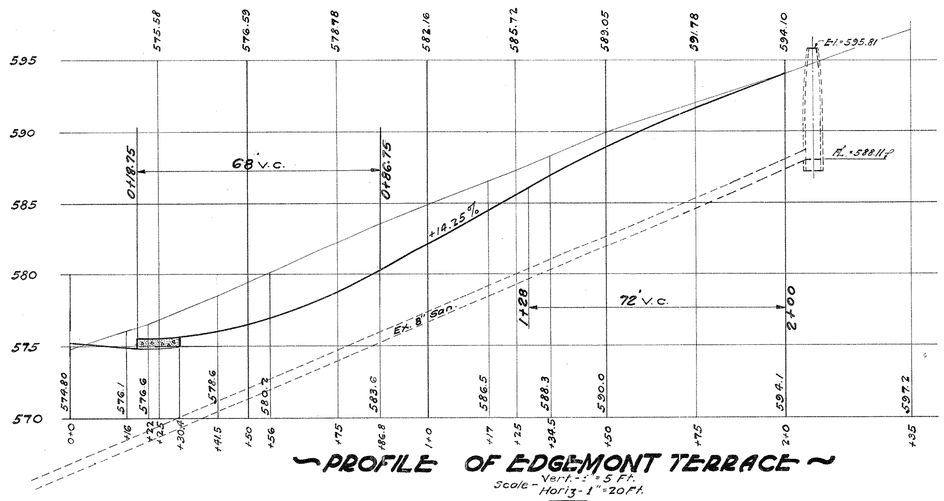
ESTIMATED QUANTITIES
EDGEMONT TERRACE APPROACH STA 33+55.77

9" Reinf. Conc. Pav't.	Item T-71	82.6 Sq. Yd.
Type 2A Conc. Curb	Item I-12	55.6 Sq. Yd.
4" Concrete Sidewalk	Item I-13	250.0 Sq. Ft.
Side Appr's., Mail Boxes, Turnouts & Berm Material	Item E-17	24.0 Cu. Yd.
Sodding	Item L-10	335 Sq. Yd.
Excavation (Carried to Summit Rd. X-Sects.)	Item E-1	534 Cu. Yd.
Seeding (Carried to Summit Rd. X-Sects.)	Item L-3	600 Sq. Yd.
Placing Topsoil (Carried to Summit Rd. X-Sects.)	Item L-3	600 Sq. Yd.

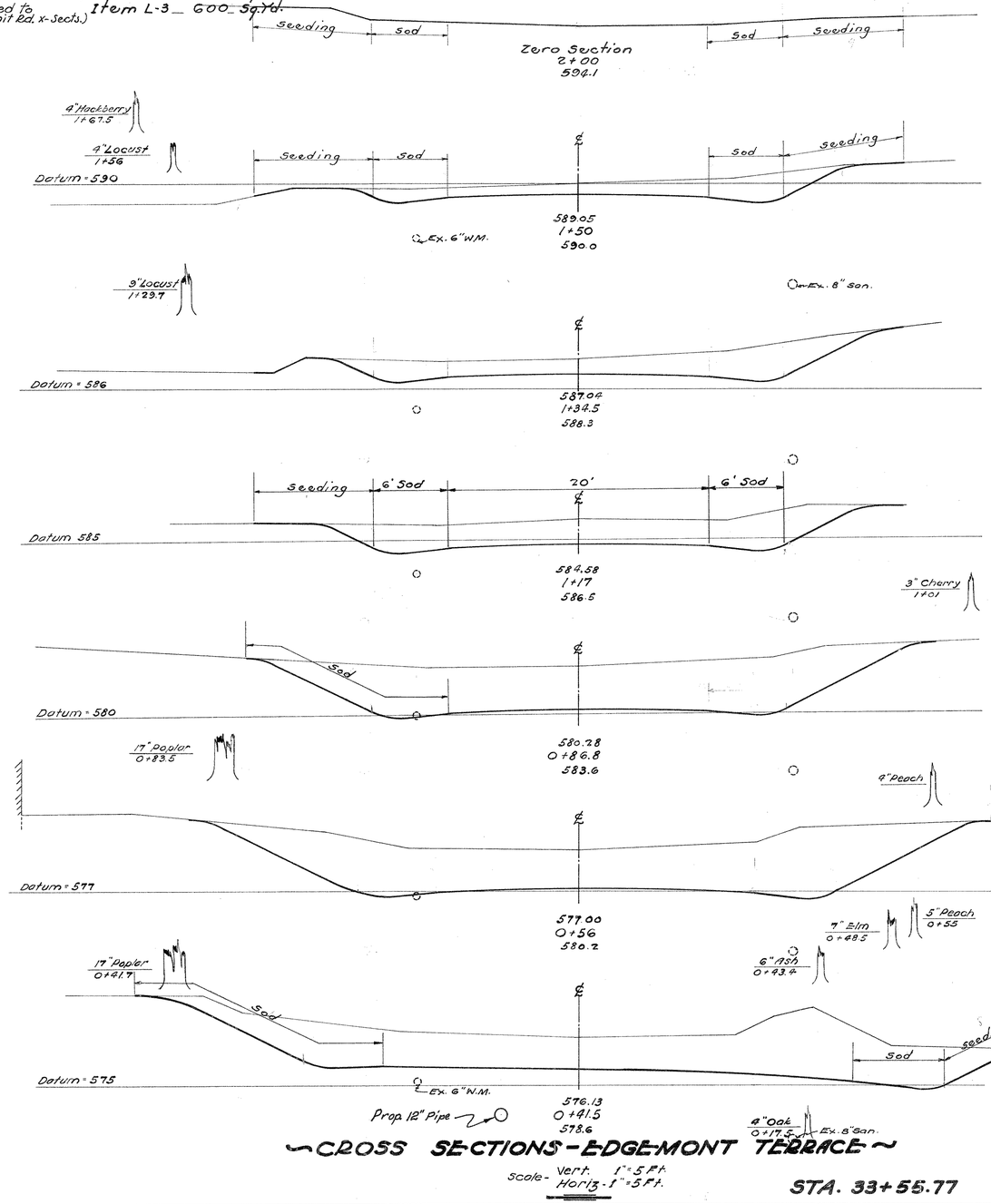


PLAN
Scale - 1" = 20 Ft.

NOTE: For pavement symbols see Sheet No. 14



PROFILE OF EDGEMONT TERRACE
Scale - Vert. - 1" = 5 Ft.
Horiz - 1" = 20 Ft.



End Area Cut	End Area Fill	Volume Cut	Volume Fill
0	0		
		37	0
40	0		
		29	0
		62	0
		45	0
77	0		
		130	0
156	0		
		195	0
186	0		
		98	0
180	0		
TOTAL	534	0	

CROSS SECTIONS - EDGEMONT TERRACE
Scale - Vert. 1" = 5 Ft.
Horiz - 1" = 5 Ft.

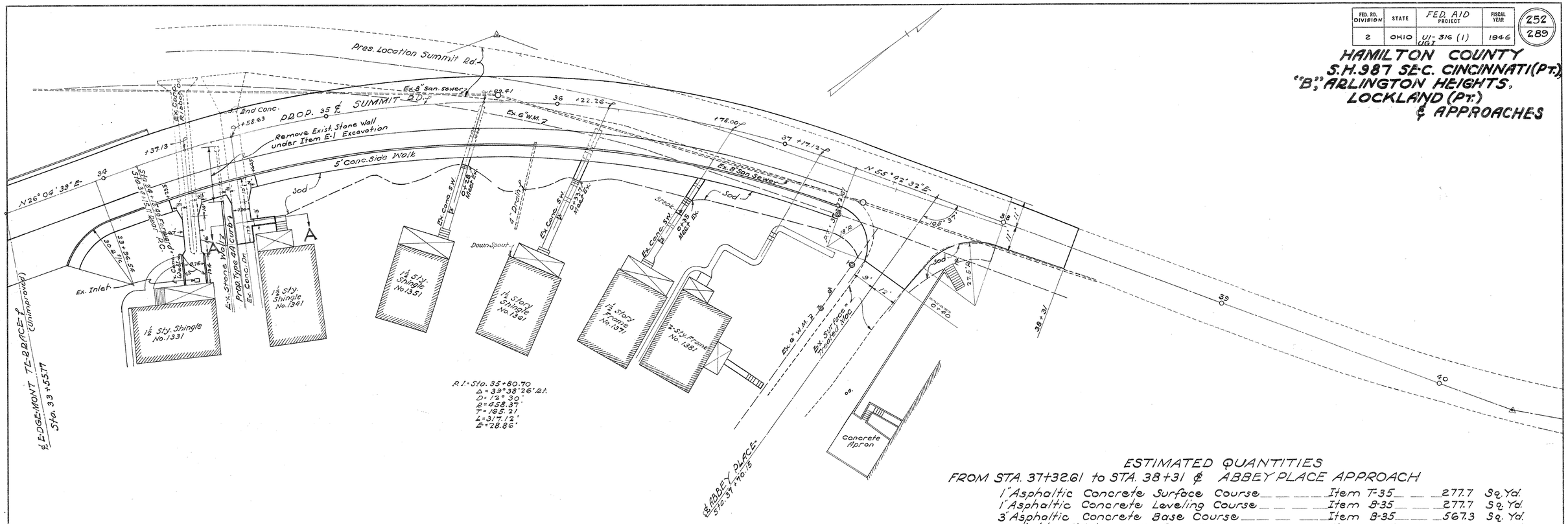
STA. 33+55.77

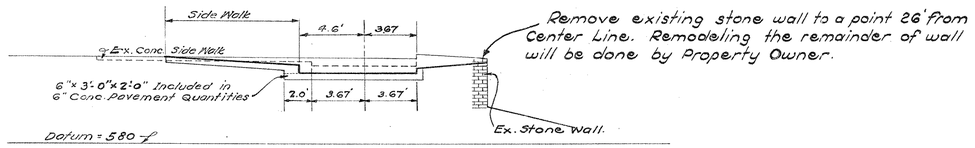
EDGEMONT TERRACE

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

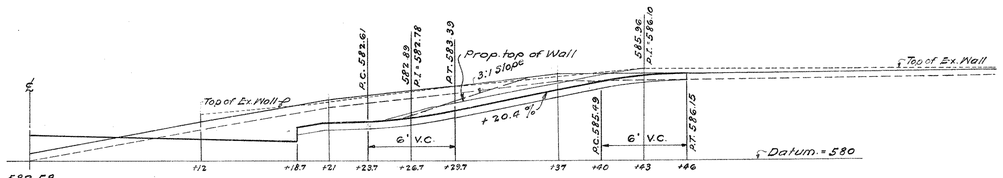
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES



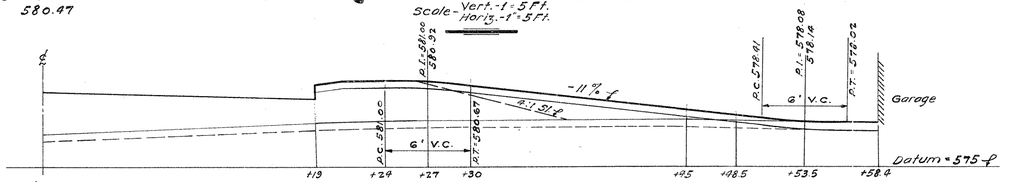


SECTION A-A
DRIVE AT STA. 34+58.63
Scale - Horiz. - 1" = 5 Ft.
Vert. - 1" = 5 Ft.



582.58
34+58.63
580.47

PROFILE - STA. 34+58.63
Scale - Vert. - 1" = 5 Ft.
Horiz. - 1" = 5 Ft.



581.08
34+37.13
577.30

PROFILE - STA. 34+37.13
Scale - Vert. 1" = 5 Ft.
Horiz. - 1" = 5 Ft.

ESTIMATED QUANTITIES
FROM STA. 37+32.61 to STA. 38+31 ℄ ABBEY PLACE APPROACH

1" Asphaltic Concrete Surface Course	Item T-35	277.7	Sq. Yd.
1" Asphaltic Concrete Leveling Course	Item B-35	277.7	Sq. Yd.
3" Asphaltic Concrete Base Course	Item B-35	567.3	Sq. Yd.
Variable Thickness Surface Course	Item T-35	2.9	Cu. Yd.
Bituminous Tack Coat	Item T-30	68.9	Sq. Yd.
Sealing (Only)	Item E-8	30	Lin. Ft.
1½" Insulation Course	Item I-19	285.6	Sq. Yd.
Sodding	Item L-35	50.0	Sq. Yd.

PRIVATE DRIVE STA. 34+37.13 RT.

6" Concrete Pavement	Item T-70	42.7	Sq. Yd.
Embankment (Carried to Summit Rd. x-Sections)		8	Cu. Yd.

PRIVATE DRIVE STA. 34+58.63 RT.

6" Concrete Pavement	Item T-70	30.5	Sq. Yd.
Type 4-A Concrete Curb	Item I-12	17.3	Lin. Ft.
4" Concrete Sidewalk	Item I-13	29.0	Sq. Ft.
Excavation (Carried to Summit Rd X-Sections)	Item E-1	10	Cu. Yd.

SIDEWALK STA. 35+69.41 Rt.

4" Concrete Sidewalk	Item I-13	10.0	Sq. Ft.

SIDEWALK STA. 36+22.26 RT.

4" Concrete Sidewalk	Item I-13	27.0	Sq. Ft.

SIDEWALK STA. 36+78.00 RT.

4" Concrete Sidewalk	Item I-13	30.0	Sq. Ft.

Note:-
For Pavement Symbols & Joint Legend See Sheet No 19

WALKS, DRIVES & APPROACHES SUMMIT RD. STA. 34+00 to STA. 38+31

FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) B, ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

* Note: Special care shall be taken to properly connect (as directed by the Engineer) all pipes through the existing Manholes or Catch Basins to be abandoned. See Item I-16.

BEGIN IMPROVEMENT STA. 11+49.0

℄ OAKLAHOMA ST. (Macadam)

Sta. 13+80 – 59.64 Rt. ℄ No 2-2-4 C.B. F.L. 15" = 553.00

Abandon Ex. C.B.

Ex. 18"

Ex. M.H. To be removed.

℄ 7th St.

It to be adjusted by the City of Cincinnati.

P.C. = 13+06.13

Ex. 24"

Abandon Ex. C.B.

Ex. 12"

Ex. 12"

Abandon Ex. C.B.

Sta. 13+68 – 16' Rt. ℄ No 2 M.H. Pipe Stack Omitted F.L. 15" = 550.00

Abandon Ex. M.H.

Abandon Ex. M.H.

Ex. 15" (Not in use)

Ex. 15" Cap (Use)

Abandon Ex. M.H.*

Abandon Ex. M.H.*

Ex. 12"

Ex. 12" Comb. Sewer

Abandon Ex. C.B.*

Ex. 6"

Abandon Ex. C.B.*

Ex. 6"

Ex. 8"

Ex. C.B.

Ex. 6"

Ex. M.H

Sta. 21+07.4 Lt. Begin 6" Underdrain

Ex. 6"

FL 6" = 575.20

Sta. 23+83 ℄ No 1 M.H. F.L. 15" = 559.64 F.L. 12" = 559.89

Sta. 23+55.3 Lt. ℄ No 3 C.B. F.L. 6" = 567.22 F.L. 12" = 566.62

Ex. 8"

Ex. C.B.

Prop. 6" Underdrain

Ex. 12" Comb. Sewer

Sta. 15+41.36 Rt. Begin 6" Underdrain

Ex. C.B.

R.C. = 16+37.27

℄ Paddock Rd.

Prop. 12" x 246' @ 2.80% ↘

Prop. 6" Underdrain

Prop. 12" x 63' @ 5.10%

P.T. = 20+01.87

Sta. 20+67.5 Rt. ℄ No 3 M.H. F.L. 6" = 574.35 F.L. 12" = 574.21

Sta. 23+18.5 Rt. ℄ No 3 M.H. F.L. 12" = 567.21

Prop. 12" x 66' @ 10.72 %

Prop 15" x 43' @ 10.58%

Ex. 15"

Ex. 12"

Sta. 17+04.1 Rt. ℄ No 3 C.B. F.L. 12" = 564.85 F.L. 6" = 565.35

Remove & Dispose of

Sta. 16+97.5 – 7.5' Rt. ℄ No 1 M.H. F.L. 18" = 559.61 F.L. 15" = 559.86 F.L. 12" = 562.00

Ex. 12"

Ex. 12"

Ex. C.B.

Ex. 12"

Prop. 12" x 203' @ 4.6 %

Prop. 18" x 114' @ 4.6 %

Prop. 6" Underdrain

℄ Seymour Ave.

Prop. 6" Underdrain

END PROP. PAVEMENT STA. 19+00

Sta. 23+89.92 ℄ Paddock Rd. = Sta. 0+00 ℄ Seymour Ave.

Ex. C.B.

Ex. M.H. to be removed

F.L. 6" = 564.81

Sta. 24+23.5 – 28.5 Lt. ℄ No 2 M.H. (Pipe Stack Omitted) F.L. 12" = 563.41 F.L. 18" = 554.23 F.L. Ex. 21" = 553.98 F.L. 15" = 554.48

Prop. 6" Underdrain

Prop 12" x 25'

Prop. 12" x 102' @ 5.47%

Sta. 24+38.42 ℄ Prop. Paddock Rd. = Sta. 10+40.38 ℄ Prop. Seymour Ave.

P.T. 16+61.96

Prop. 6" x 6" Tee

Sta. 25+93.0 Rt. ℄ No 3 C.B. F.L. 12" = 559.44 F.L. 6" = 560.02

Sta. 26+88.0 Lt. ℄ No 3 C.B. F.L. 12" = 555.66 F.L. 6" = 556.16

Abandon Ex. M.H.

FL 6" = 556.01

Prop. 18" 3.00% ↘

Prop. 12" x 8'

Sta. 26+94.5 ℄ No 1 M.H. F.L. 18" = 553.09 F.L. 12" = 553.59 (N) F.L. 12" = 553.59 (W) F.L. 12" = 554.59 (E)

Sta. 27+06.1 Rt. ℄ No 3 C.B. F.L. 12" = 556.54

DRAINAGE LAYOUT

FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) B, ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

STA. 39+69.78
END IMPROVEMENT

Ramp "C"

Ramp "D"

PADDOCK ROAD

PINE ALLEY

74th STREET

Base Line "b" (face of Curb)

Base Line "a" (face of Curb)

Base Line "A" (face of Curb)

RAMP A

RAMP B

PROP. SUMMIT ROAD

S.H. 987

C.N.O. C.C.C.& St.L. R.R. Overhead

Ex. 8" San.

Ex. 6" San.

Ex. 15" Storm

Abandon Exist. C.B.

Abandon Ex. M.H.

Abandon Ex. C.B.

Plug Pipe

Sec. Sheet No. 4 C.I. 33+50 - 72.5' Lt. End of Hdwll. I.E. = 547.74

28+74.6 - 22.5' Lt. ℄ No. 13-A C.B. Mod. Top El. = 549.06 F.L. = 544.86

28+99.0 - 65' Lt. ℄ # 1 M.H. I.E. = 545.30

29+07.7 Lt. ℄ # 3 C.B. I.E. = 552.55 I.E.6" = 553.05

28+94.5 ℄ No 1 M.H. I.E. 12" = 547.59 I.E. 18" = 547.09 I.E. 36" = 545.59 I.E. 12" (W) = 551.50 F.L. = (E) = 553.50

27+06.1 Rt. ℄ No 3 C.B. I.E. 556.54

0+55.20 - 53.0' Rt. ℄ No 1 M.H. I.E. 24" = 546.92 I.E. 27" = 546.67 I.E. 36" = 545.92 I.E. Lateral = 553.20

0+92.1 - 72.5' Rt. ℄ No 13A C.B. Mod. Top El. = 553.00 I.E. = 549.5

0+56 ℄ No 3A C.B. I.E. = 554.27 I.E.6" = 554.77

3+35 23.5' Rt. ℄ No 1 M.H. I.E. = 547.99

5+72 37.5' Rt. ℄ No 13-A C.B. Mod. I.E. = 549.80 Top El. = 553.30

9+00 29.6' Rt. ℄ No 13 A - C.B. (Mod.) I.E. 18" = 550.10 El. - Top = 553.30 F/L 6" = 551.62

2+68.5 18.5' Lt. ℄ No 1-3 C.B. I.E. 18" = 535.10 I.E. 24" = 534.38 El. Top = 537.87

2+75.72 Rt. ℄ No 3 M.H. I.E. - 18" = 534.88 I.E. - 15" = 535.15 I.E. - 12" = 535.40

2+42.2 Lt. ℄ No 3 M.H. I.E. - 15" = 535.15 I.E. - 24" = 534.15 I.E. - 27" = 533.90

2+02 ℄ No 3 C.B. (Mod.) I.E. - 12" = 537.46 I.E. - 24" = 534.96 I.E. 6" = 538.96

62+50 - 57½ Lt. No 1-M.H. I.E. - 30" = 532.85 I.E. - 27" = 533.10 I.E. - 18" = 533.85 I.E. - 6" = 534.85

5+95.56 Rt. ℄ No 3 M.H. F/L 12" = 540.79 F/L 6" U.D = 541.44

Note: For I.E. Elev's. & % Grade (not shown) of 6" Underdrains See Sheet No's 259, 260, 276

DRAINAGE LAYOUT

DRAINAGE

PADDOCK ROAD & APPROACHES ~ SUMMIT ROAD STA 0+00 to STA 13+71.18

MUNICIPAL (CINCINNATI)

Station	Side	Pipe Item I-2 Lin. Ft. Under Pavement * Porous backfill bottom built (only) sealed 12"	15"	18"	24"	27"	36"	Vitrified pipe for Storm Sewer Item I-2 Lineal Feet 12"	15"	18"	24"	27"	Under Pavement 12"	15"	18"	Catch Basins Item I-8 Std. 1-2-A Ea.	Std. 1-3 3 Ea.	Std. 3-A Ea.	Manholes Item I-8 Std. 2-2-A Ea.	Std. 1-3 (Mod.) Ea.	Std. 13-A (Mod.) Ea.	Std. 1 Ea.	Headwalls Std. 3 Ea.	Std. 2 Omit Pipe Stock Ea.	EXC. Item E-2 Cu. Yd.	Reinf. Steel Item S-4 Lb.	Conc. Class "C" Item S-1 Cu. Yd.	Extra Strength Reinf. Pipe Item I-2 Sec. M. 6.6(c) 24"	36"	Reinf. Conc. Pipe Item I-2 Sec. M. 6.6(b) 27"	See Sheet No.
7TH STREET																																
13+68	Rt.		42																			1			1							
SEYMOUR AVE																																
15+81 - 16+97.5	Rt.						114																									
16+97.5	RT.						10										1				1											
16+97.5 - 19+00	Rt.						203																									
PADDOCK RD.																																
20+67.5	Rt.																						1									
20+67.5 - 23+18.5	Rt.											246																				
23+18.5	Rt.																						1									
23+18.5 - 23+83.0	Rt.						66																									
23+55.3 - 24+23.5	Lt.											63					1															
23+83.0																					1											
23+83.0 - 24+23.5	Lt.						45																									
24+23.5	Lt.																						1									
25+99 - 26+94.5	RT.						102										1															
26+94.5	LT. & RT.						33										2				1											
26+94.5 - 28+94.5							196																									253 & 254
28+94.5	LT. & RT.						39										2				1											254
28+94.5	LT.		54			155															1	1							61			
28+94.5 - 30+80.5							182																									
30+80.5	RT.						8											1			1											
30+80.5 - 32+15							131																									
32+15	LT. & RT.						119										1	1			1											
33+50 - 34+92	LT.			63					32																5	55	1.7					
34+04.4±	RT.	6					28				5		1					1			1											
34+04.4± - 34+42				20					68																							
34+42	LT.																				1											
34+42 - 35+25±	LT.																												88			254
35+77.5 - 36+98.5	LT.						82										1															
35+86.0 - 36+58.5	Lt.						117																									
36+18 - 36+58.5	Rt.						47										1															
36+58.5																					1											
36+58.5 - 37+38.7							76																									
37+38.7	Lt. & Rt.						61										2				1											
38+79.5	LT. & RT.						22										2															
SUMMIT RD.																																
0+00± - 0+55.20	RT.																												73			
0+55.20	RT.			41			6											1			1	1										
0+55.20 - 3+35	RT.																													287		254
3+35	RT.																					1										
3+35 - 5+54	RT.				218																											
5+54	RT.			24																	1	1										
9+00 RAMP "A" 2+68.5			117						126												1											254
RAMP "A"																																
2+42.2 S.H. 987 62+50	RT.									156										1			1									
2+42.2	LT.								27						1																	
2+42.2 - 5+70.7	LT.											323																				
5+70.7	LT. & RT.						56							2									1									254
5+70.7 - 9+22.8	LT.											347																				
9+22.8	LT. & RT.						17											1					1									
8+52 (Lt) Paddock Rd. 34+04.4 (Rt)											245	46									2											254
RAMP "B"																																
S.H. 987 62+50 ~ 2+75.72	RT.												135																			
2+75.72	LT. & RT.						92							1									1									
2+75.72 - 5+95.96	RT.											315																				
5+95.96	RT.																						1									
TOTALS		6	96	137	128	218	155	1202	340	504	59	156	971	323	135	5	245	46	4	1	14	5	~	1	1	4	16	~	7	2	5	55	1.7	88	134	~	287	~

* For Details of Porous Backfill See Sheet No. 15

HAMILTON COUNTY
S.H. 987, SEC. CINCINNATI (Pt.) & ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UT-316 ( )	1946

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289

QUANTITIES ~ MUNICIPAL (CINCINNATI).

PADDOCK ROAD & APPROACHES ~ SUMMIT ROAD STA. 0+00 to STA. 13+71.18

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UG-1	1946

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289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (Pt.).
"B", ARLINGTON HEIGHTS,
LOCKLAND (Pt.)
& APPROACHES.

UNDERDRAINS

Stations	Side	Pipe Underdrains Item I-4 Lin. Ft. 6"	Pipe Specials for Underdrains Item I-5 Tee 6"x6" Ea.	Pipe Specials for Underdrains Item I-5 Y-branch 6"x6" Ea	Pipe Outlets for Underdrains Item I-4 Lin. Ft. 6"	See Sheet No.
PADDOCK ROAD						
15+41.36 – 20+64.96	Rt.	524				
23+22.58 (Lt.) Paddock Rd to 7+01.63 (Seymour Ave)	Rt.	146				
17+06.37 (Seymour Ave)–19+00 (Seymour Ave)	Rt.	194				
25+96.63 Rt. Paddock Rd 19+00 (Seymour Ave		325	1			
16+44 Seymour Ave)–17+18.5 (Seymour Ave)	Lt.	86				
21+07.62 – 23+52.93	Lt.	246				
24+23.5 – 26+85.63	Lt.	262				
26+91.38 – 29+05.33	Lt.	214				
29+11.85 – 32+52.63	Lt.	341				
31+50 – 32+09.22	Rt.	60				
35+81.56 – 37+34.83	Lt.	154				
37+41.25 – 38+69.73	Lt.	129				
35+81.56 – 36+15.63	Rt.	34				
36+22.05 – 37+53.93	Rt.	132				
38+79.83 – 5+98.09 (Ramp "B")	Rt.	430	1			
RAMP "B"						
0+00 – 1+34.5	Rt.	134				
8+13 – 9+20 (Tang.)	Rt.	115				
RAMP "A"						
0+00 – 2+38	Lt.	235	1			
1+75	L & R				55	
9+23.88 Rt – 32+51.25 Rt (Paddock)		221				
9+25.33 Lt – 2+50 (Summit Rt.)		525				
SUMMIT ROAD						
28+00 Rt (Paddock Rd) – 0+54.92 Rt (Summit Rd)	Rt.	126				
0+58 – 13+71.18	Rt.	1308	1	1		
0+47 Lt – 1+15 Rt		78				
9+00	Rt.				18	
TOTALS		6019	4	1	73	

See Sheet No. 253 & 254

PIPE REMOVAL & ADJUSTMENT

Stations	Side	Manholes Catch Basins and Inlet Abandoned Item I-16 Ea.	Concrete for Plugging Opening Class "C" Item S-1 Cu. Yd.	Pipe Removed and Disposed Of Item E-12 Lin. Ft. 6"	8"	10"	12"	Pipe Removed and Stored Item E-12 Lin. Ft. 48"	Resetting Existing Manholes Item I-8 Ea.	See Sheet No.
PADDOCK RD.										
18+80	Rt.								1	
19+15	Lt.	2								
21+40	Lt.	2								
23+18	Lt.								1	
23+63	Lt.	2							1	
24+10	Lt.						10			
24+15	Lt.	1								
26+87	Lt.	1								
28+70	Lt.	2								
34+02.5	Rt.	1								
34+36.28	Lt.	1								
34+70	Lt.		0.1							
35+47	Lt.	1								
35+90 – 36+14	Lt.							50		
36+14	Lt.		0.6							
37+10	Rt.		0.1							
38+69	Lt.	1								
38+79.5	Lt.								1	
38+81	Rt.	1								
9+01 (Ramp "A")	Rt.	1								
5+68 (Summit Rd)	Rt.								1	
71st STREET										
12+00	Lt.		*0.1							
12+50	Lt.		*0.1							
13+60	Rt.	1								
13+85	Lt.	1								
14+20	Lt.	1								
14+35	Rt.	1								
14+40	Lt.	1								
SEYMOUR AVE										
16+70	Rt.						12			
17+15	Rt.			8						
17+87	Rt				12					
TOTALS		21	1.0	8	12	12	10	50	5	

See Sheet No. 253 & 254

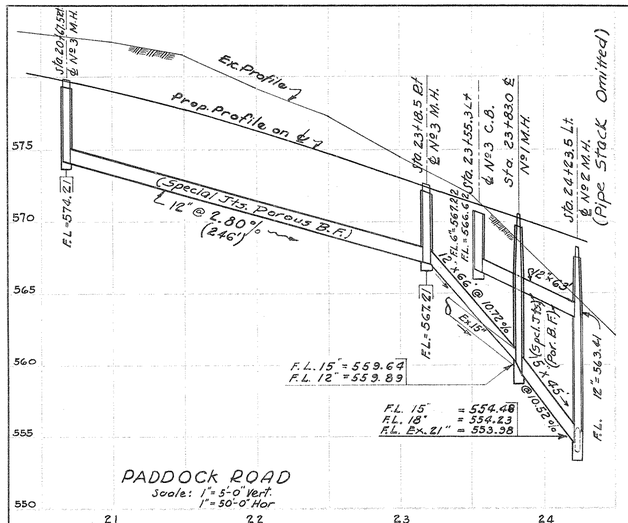
Total lin. ft. of pipe removed and disposed of 42

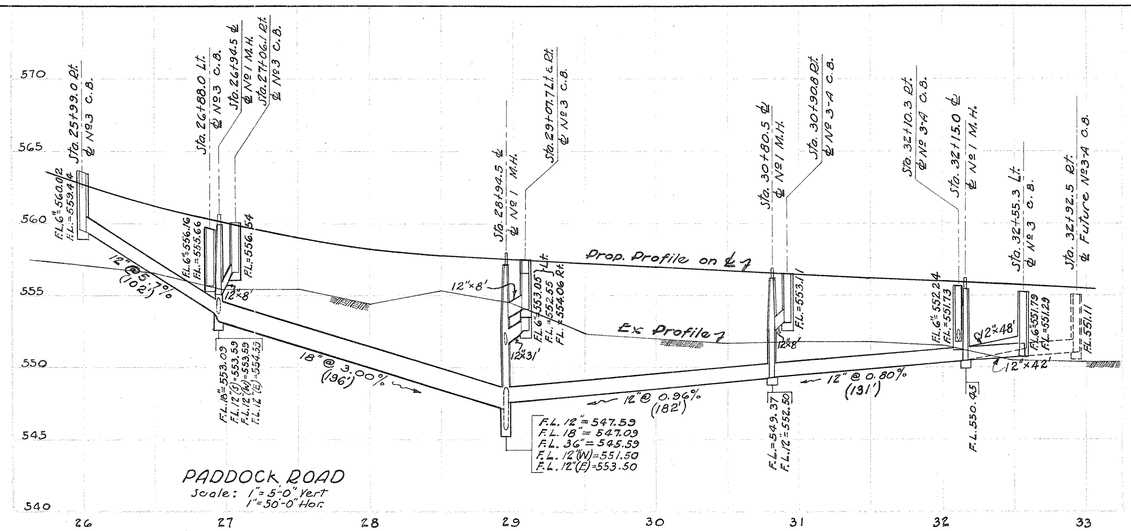
* For plugging cellar drains.

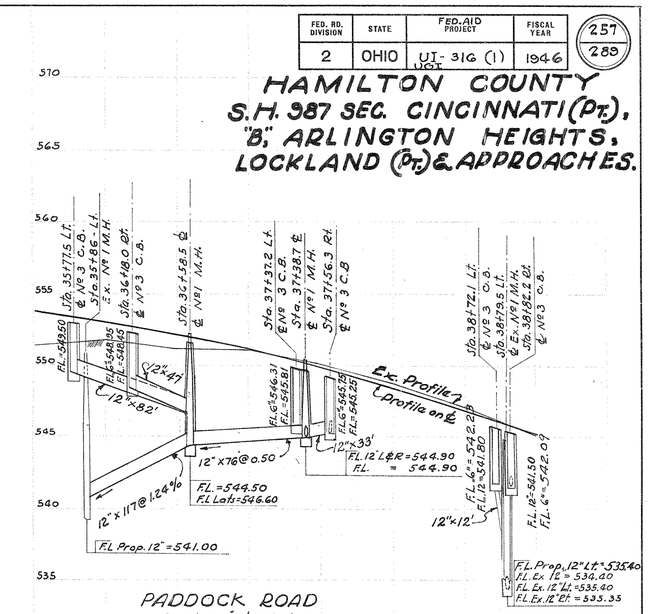
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UOT	1946

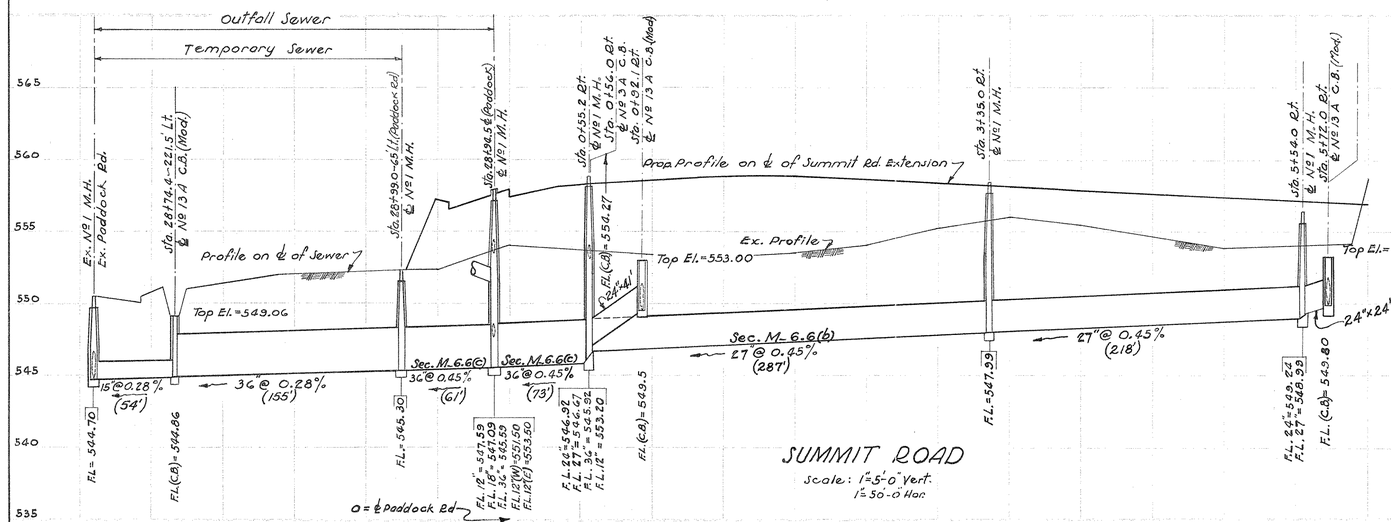
257
259

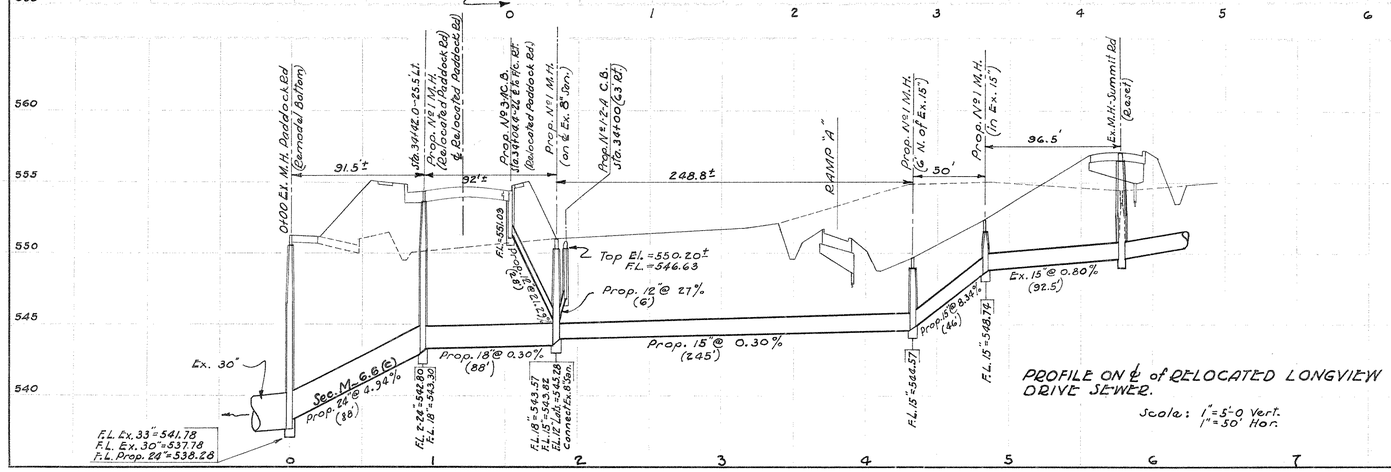
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.

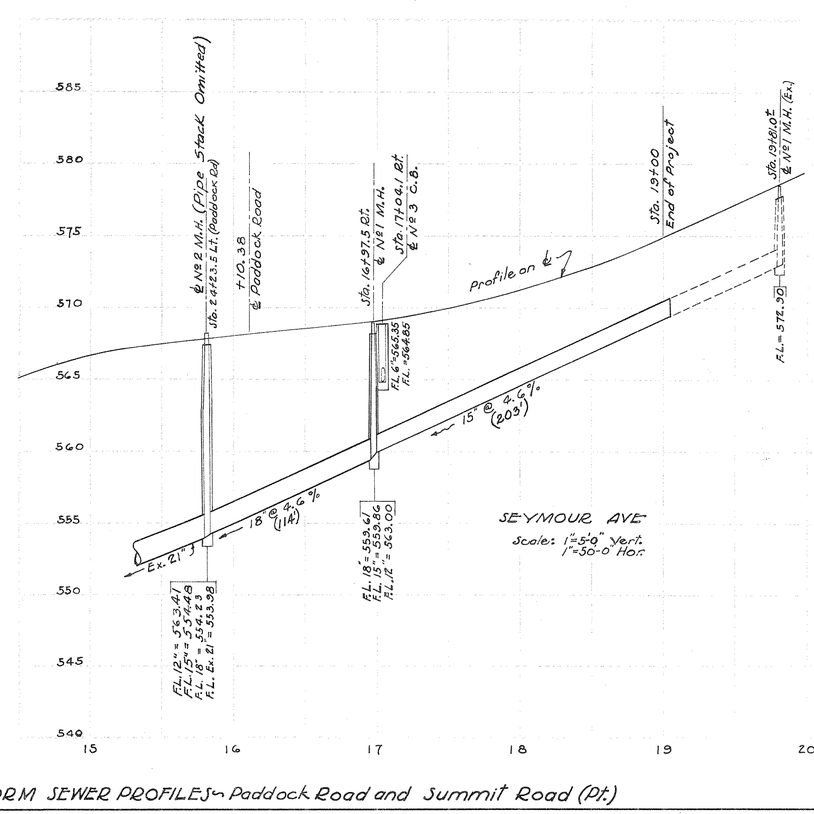










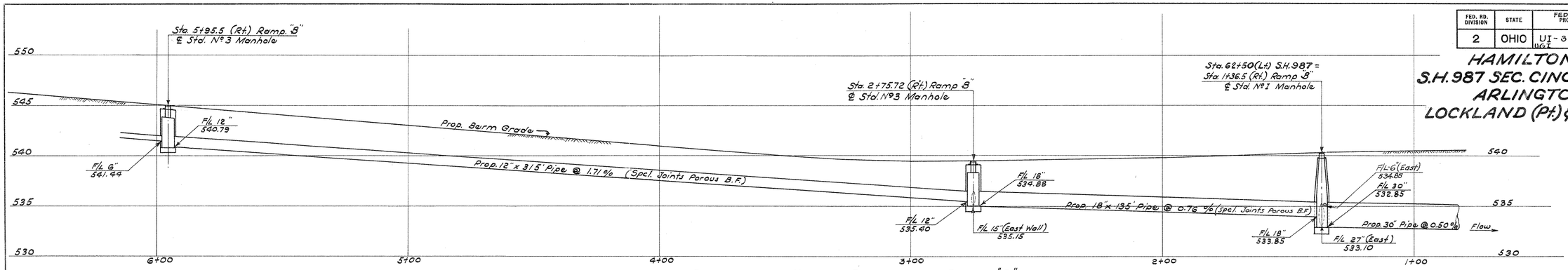


STORM SEWER PROFILES on Paddock Road and Summit Road (Pt.)

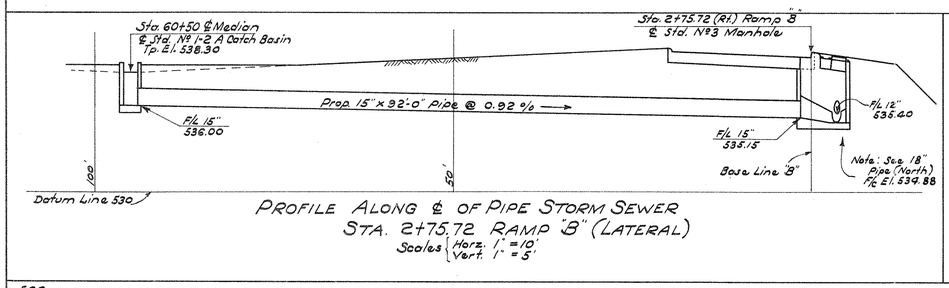
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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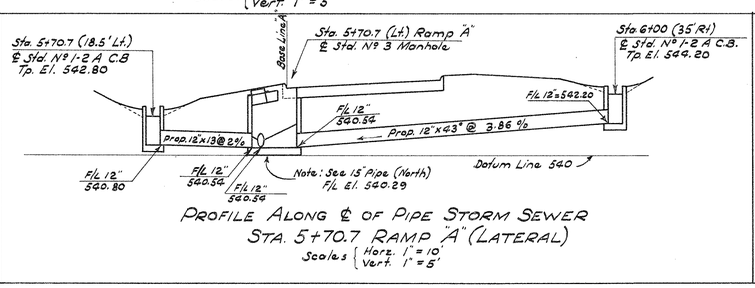
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.) "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.



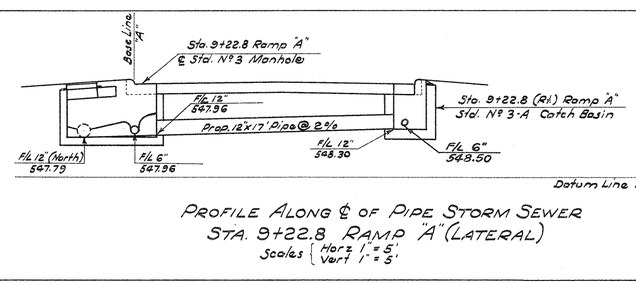
PROFILE OF STORM SEWER ON RAMP "B"
STA. 1+36.5 TO STA. 5+95.5 (Rt.)
Scales { Horz 1" = 20'
Vert 1" = 5'



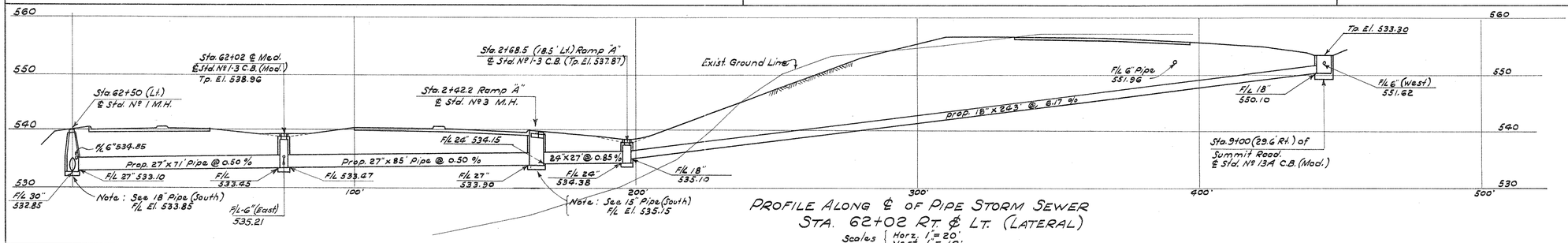
PROFILE ALONG ℄ OF PIPE STORM SEWER
STA. 2+75.72 RAMP "B" (LATERAL)
Scales { Horz. 1" = 10'
Vert. 1" = 5'



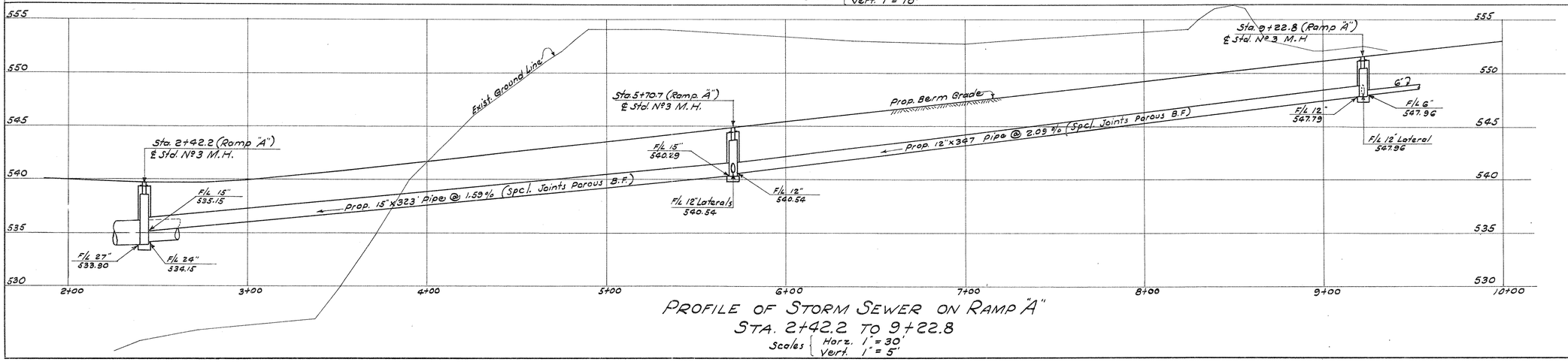
PROFILE ALONG ℄ OF PIPE STORM SEWER
STA. 5+70.7 RAMP "A" (LATERAL)
Scales { Horz. 1" = 10'
Vert. 1" = 5'



PROFILE ALONG ℄ OF PIPE STORM SEWER
STA. 9+22.8 RAMP "A" (LATERAL)
Scales { Horz. 1" = 5'
Vert 1" = 5'



PROFILE ALONG ℄ OF PIPE STORM SEWER
STA. 62+02 RT & LT. (LATERAL)
Scales { Horz. 1" = 20'
Vert. 1" = 10'

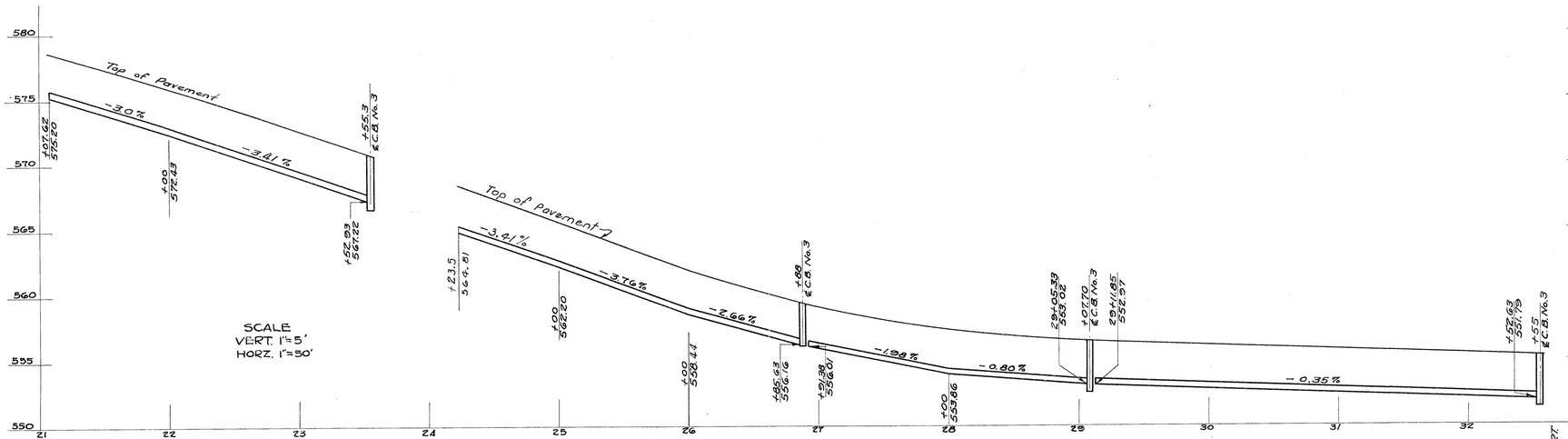


PROFILE OF STORM SEWER ON RAMP "A"
STA. 2+42.2 TO 9+22.8
Scales { Horz. 1" = 30'
Vert. 1" = 5"

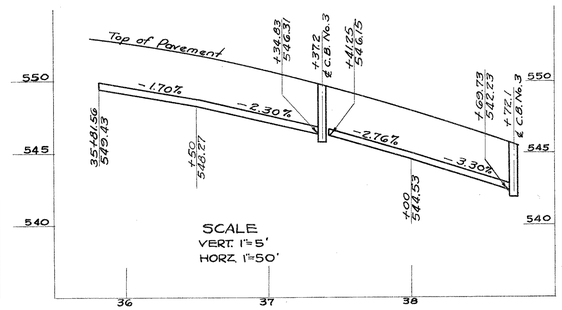
FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-31G(1) DGT	1946

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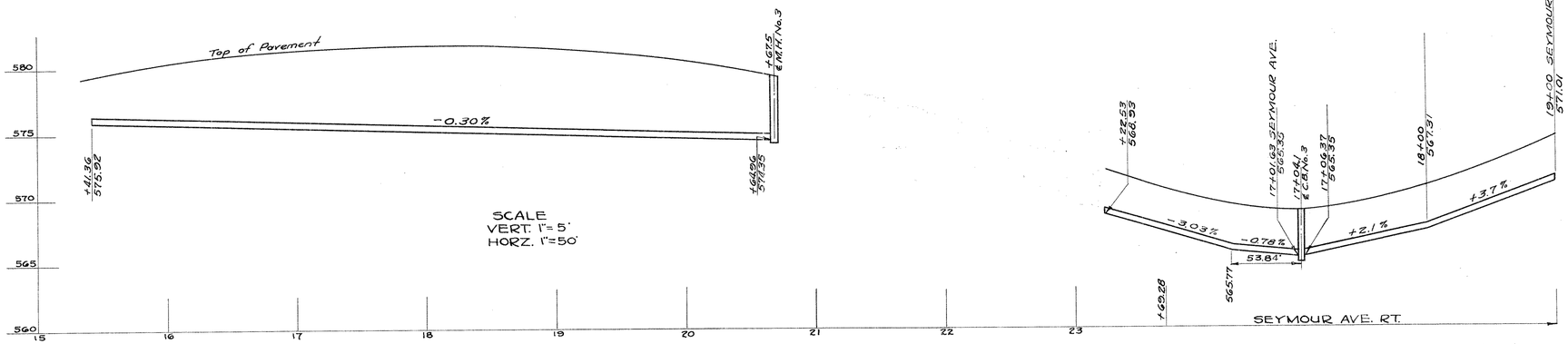
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI(PT.), "B", ARLINGTON H'TS., LOCKLAND(PT.) & APPROACHES



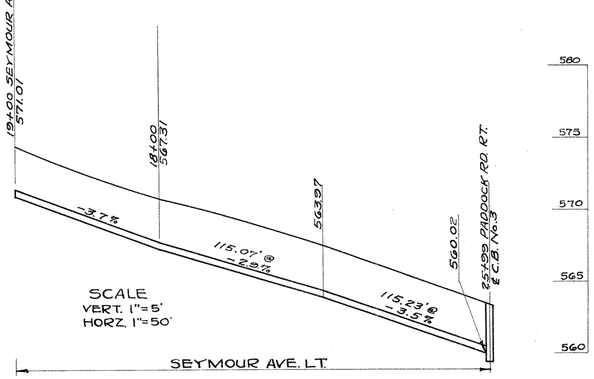
PROFILE OF 6" UNDERDRAIN ON PADDOCK RD.
STA. 21+07.62 TO STA. 32+55 LT.



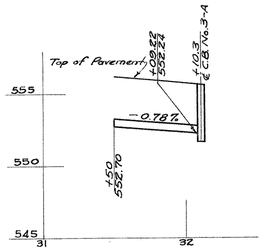
PROFILE OF 6" UNDERDRAIN ON PADDOCK RD.
STA. 35+81.56 TO STA. 38+67.0 LT.



PROFILE OF 6" UNDERDRAIN
STA. 15+41.36 RT. PADDOCK RD. TO STA. 19+00 RT. SEYMOUR AVE.

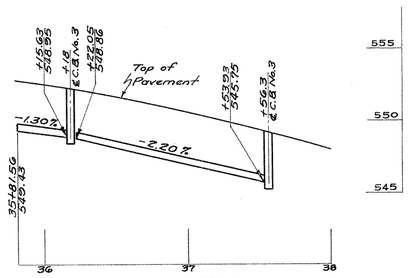


PROFILE OF 6" UNDERDRAIN
STA. 19+00 LT. SEYMOUR AVE. TO STA. 25+99 RT. PADDOCK RD.



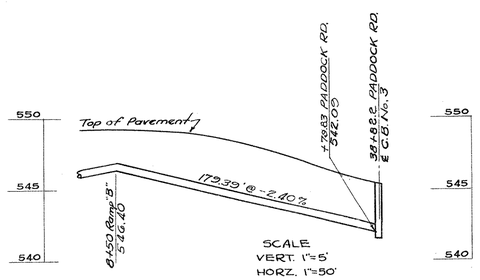
SCALE
VERT. 1"=5'
HORZ. 1"=50'

PROFILE OF 6" UNDERDRAIN PADDOCK RD.
STA. 31+50 TO STA. 32+10.3 RT.



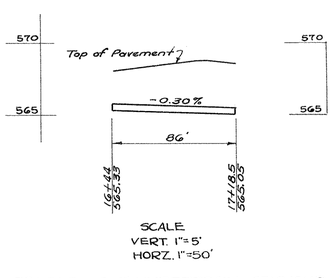
SCALE
VERT. 1"=5'
HORZ. 1"=50'

PROFILE OF 6" UNDERDRAIN PADDOCK RD.
STA. 35+81.56 TO STA. 37+56.3 RT.



SCALE
VERT. 1"=5'
HORZ. 1"=50'

PROFILE OF 6" UNDERDRAIN
STA. 8+25 RAMP "B" TO STA. 38+80.5 RT. PADDOCK RD.



SCALE
VERT. 1"=5'
HORZ. 1"=50'

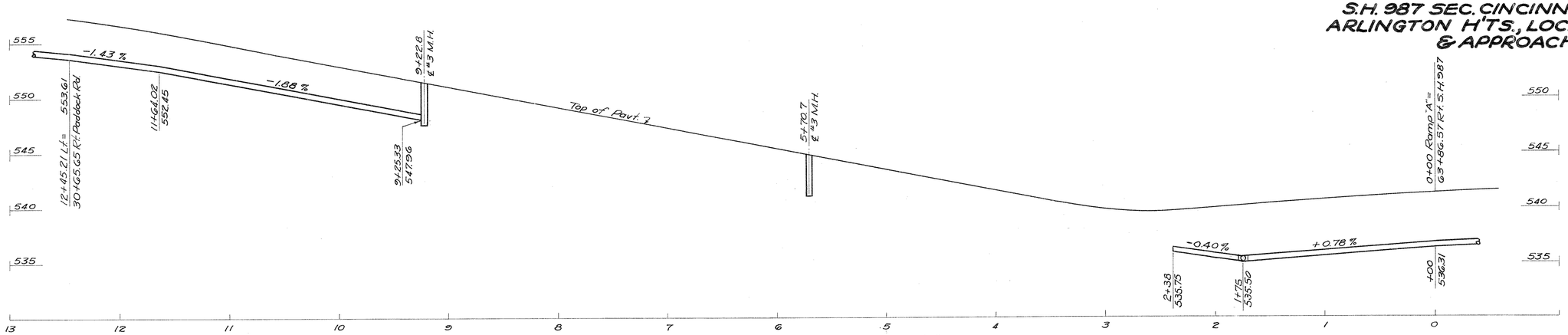
PROFILE OF 6" UNDERDRAIN SEYMOUR AVE.
STA. 16+44 18.5' LT. TO STA. 17+18.5 38.0' LT.

6" UNDERDRAIN PROFILES ~ PADDOCK RD.

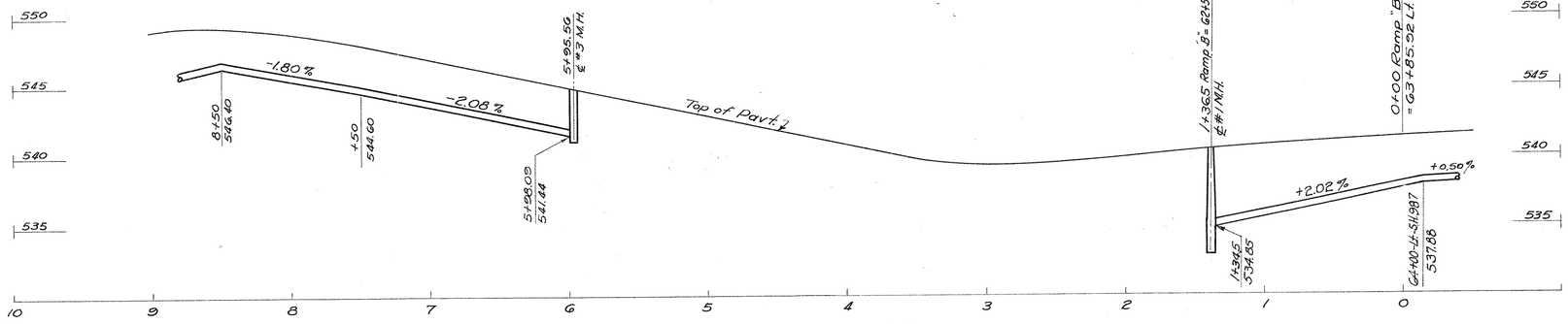
FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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289

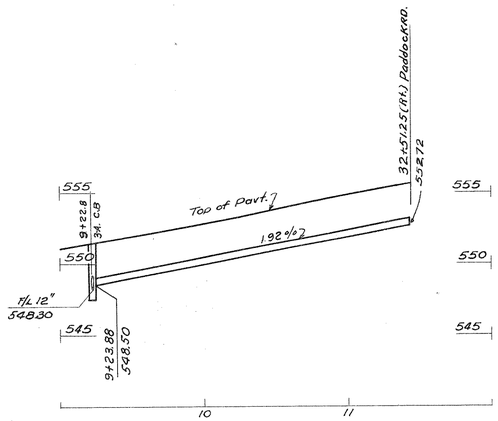
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B", ARLINGTON H'TS., LOCKLAND (PT.), & APPROACHES



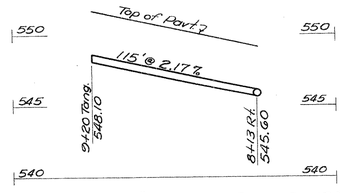
PROFILE OF 6" UNDERDRAIN ~ RAMP "A"
Sta. 0+00 to Sta. 12+45.21 Lt.
Scale: 1"= 50' Horz.: 1"= 5' Vert.



PROFILE OF 6" UNDERDRAIN ~ RAMP "B"
Sta. 0+00 to Sta. 8+50 Rt.
Scale: 1"= 50' Horz.; 1"= 5' Vert.



PROFILE OF 6" UNDERDRAIN ~ RAMP "A"
Sta. 9+23.88 Rt. to Sta. 32+51.25 Rt. (PADDOCK RD.)
Scale: 1"= 50' Horz.; 1"= 5' Vert.



PROFILE OF 6" UNDERDRAIN ~ RAMP "B"
Sta. 9+20 on Tang. to Sta. 8+13 Rt.
Scale: 1"= 50' Horz.; 1"= 5' Vert.

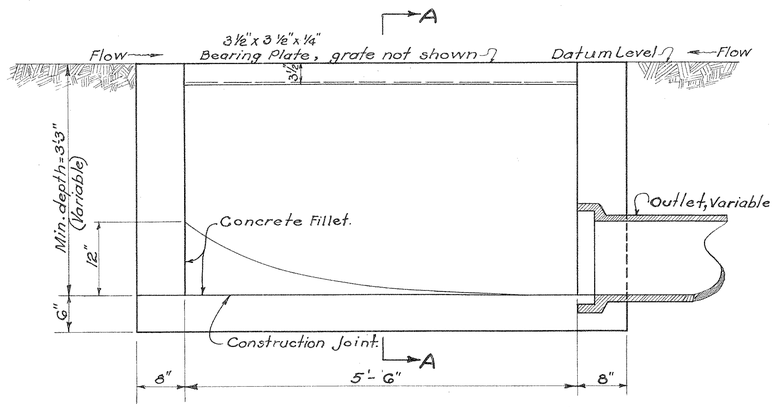
6" UNDERDRAIN PROFILES ~ RAMPS "A" & "B"

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UT- 316 (1) UGX	1946

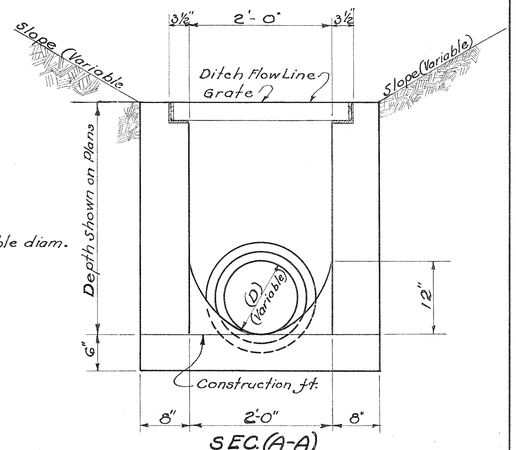
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289

HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.

DETAILS of MODIFIED STANDARD №13A CATCH BASIN

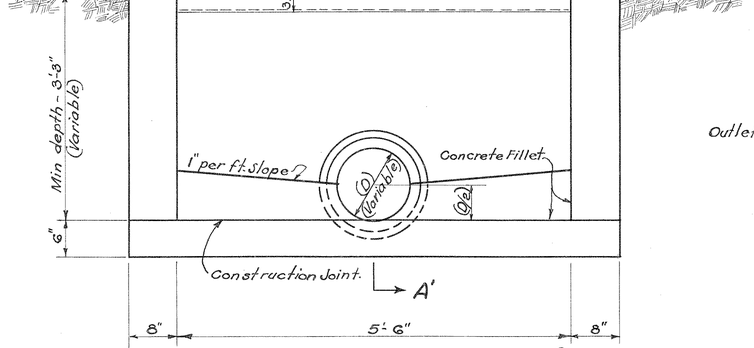


LONGITUDINAL SECTION (PIPE-END WALL)

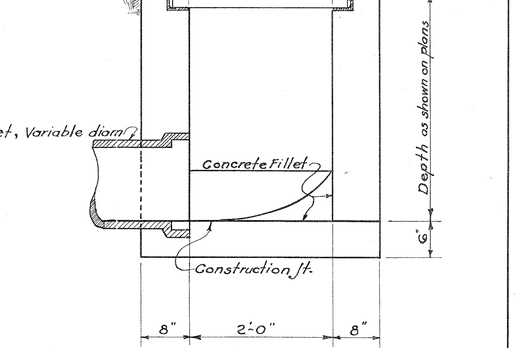


SEC. (A-A)

TRANSVERSE SECTION



LONGITUDINAL SECTION (PIPE-SIDE WALL)



TRANSVERSE SECTION SEC. (A'-A')

Each Modified Std. №13A Catch Basin to be composed of the following :—

(a) Steel Grate & Bearing Plates:

One (1) grate with two (2) bearing plates to be fabricated of structural steel in accordance with the "Material Details." The design and construction shall be essentially the same and equally as strong as the one shown on the Std. Constr. Drwg (I-8 C.B. №13-A) and shall be given one coat of asphaltum paint as per specifications. The weight of Grate and bearing plates to be approximately 480 Lbs.

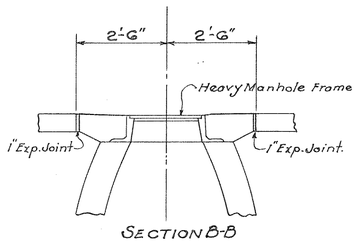
(b) Concrete

Concrete for Walls Bottom Slab & Fillets as shown on this sheet to be of Class "C" concrete.

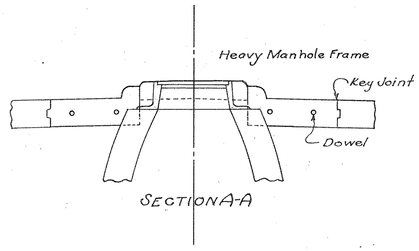
Drawn by: C.B.T. Date Aug. 1946
Checked by: E.P. Date 10-8-'46

DETAIL of MANHOLE BLOCKOUT PADDOCK ROAD MEDIAN

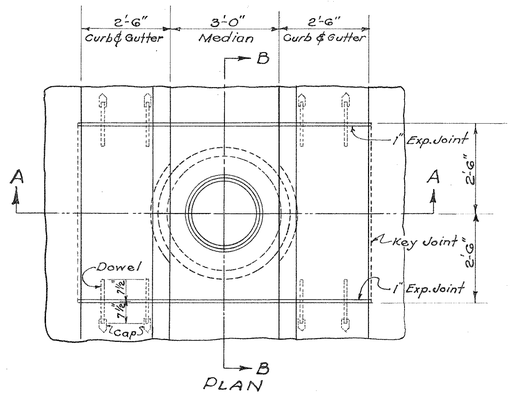
Scale 1"=2'-0"



SECTION B-B



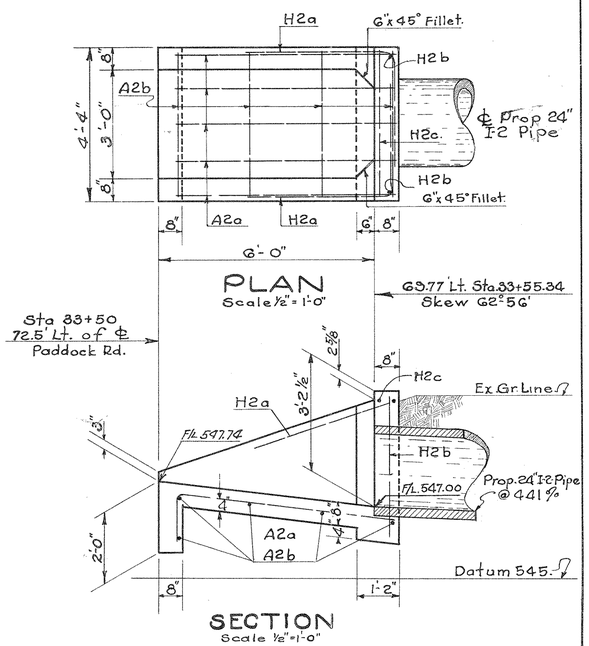
SECTION A-A



PLAN

Drawn By: H.J.R. Date 10-21-46
Ch'k'd By: C.E.N. " 11-5-46
Approved:

DETAILS OF SPECIAL HEADWALL STA. 33+55.34 LT. PADDOCK RD.



STEEL LIST

Mark	Size	Shape	Spacing	№	Length	Weight
A2a	½" ℄	Field Bend	12"	5	7'-6"	25
A2b	½" ℄	Strt.	2'-0"	5	4'-0"	13
H2a	½" ℄	Field Bend	As Shown	2	7'-0"	9
H2b	½" ℄	Strt.	As Shown	2	3'-10"	5
H2c	½" ℄	Strt.	As Shown	1	4'-0"	3
					TOTAL	55

ESTIMATED QUANTITIES

Excavation for Structures	Item E-2	5	Cu. Yd.
Concrete for Structures (Class C)	Item S-1	1.7	Cu. Yd.
Reinforcing Steel	Item S-4	55	Lbs.

Drawn By: C.E.N Date 10-4-46
Check'd By: E.P. " 10-8-46
Approved

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES

P.T. 2+81.69

62+50 (57.5' Lt.) ℄ Std. N° 1 M.H.
F/L 18" = 533.85
F/L 27" = 533.10
F/L 30" = 532.85
F/L 6" = 534.85

18" @ 0.76%

P.C. 0+00 = 63+85.32

Prop 30"x 291' Pipe @ 0.50%

6"

65+45 (68.5' Lt. ℄) Std. N° 1 M. H.
F/L 12" = 534.60
F/L 15" = 532.84
F/L 30" = 531.39
F/L 33" = 531.14
F/L 6" = 538.61

68+40 (51.5' Lt. ℄) (Std. N° 2 M.H. (Pipe Stock omitted)
F/L 12" = 534.50 F/L 33" = 529.68
F/L 21" = 531.05 F/L 36" = 529.43
F/L 6" = 540.01

Prop 33"x 291' @ 0.50%

68+25 (66.5' Lt ℄) ℄ Std N° 1-2A C.B.
F/L 12" = 538.00

12"x19' Pipe @ 18.4%

71+60 (51.5' Lt ℄) (Std. N° 2 M.H. Pipe Stock Omitted)
F/L 12 (North) = 533.00 F/L 36" North = 527.83
F/L 12 (East) = 539.15 F/L 36" South = 527.85
F/L 15" (E) = 529.58 F/L 6" (N) 540.97

72+00 (70.7' Lt ℄) Std. N° 1-2-A C.B.
F/L 12" = 537.90

12"x61' Pipe @ 11.96%

Prop. 36"x 313' Pipe @ 0.56%

Prop 36"x 316' Pipe @ 0.50%

6"

Prop 6"

℄ Prop. S.H. 987

+88.6 (62' Rt.) ℄ Std N° 1-A C.B.
F/L 12"(E) = 535.75
F/L 15"(W) = 535.00
F/L 6"(N) = 536.25

12"x 46' @ 8.31%

15"x 120' @ 8.00%

+50 ℄ Median Std. N° 1-2 A C.B. Mod.
F/L 12" Pipe 538.70

68+40 (62' Rt.) Std. N° 1-3 C.B.
F/L 18" = 537.75
F/L 21" = 537.00
F/L 6" = 538.77

68+60 ℄ Median Std. N° 1-2 A C.B. Mod.
F/L 12" = 540.25

15"x 110' Pipe @ 5.49%

7+40 ℄ Med. Std. N° 1-2 A C.B. Mod.
F/L 12" = 541.65

P.C. = 71+84.83

Prop 15"x 110' Pipe @ 4.63%

Prop 6"

+25 +35 +75 +85

Gutter

Gutter

12"x 52' CMP @ 32.7%

12"x 52' CMP @ 33.0%

14+50 Lt. Summit Rd. ℄ Std. N° 3 Manhole
F/L 12 (East) = 553.19
F/L 12 (West) = 553.00

19+13 (14 ℄) Std N° 3 C.B.
F/L 12" = 556.54

18+24 (17' Lt ℄) Summit Rd. Std. N° 1 M.H.
F/L 18" (N.E.) = 551.77
F/L 18" (W.) = 551.57
F/L 12" (S) = 555.54

71+60 (62' Rt ℄) Std. N° 1-3 C.B.
F/L 12" (E) = 540.50
F/L 15" (W) = 539.75

21+70 Lt (Summit Rd.) Std. N° 3 C.B.
F/L 12" = 558.50

For details of sewer "back" see sheet no. 254

P.C. 0+00 = 63+86.57

P.T. 13+71.18

℄ Summit Road

18"x 193' @ 4.00%

15"x 7' Pipe @ 14.3%

Prop. 6" Underdrain

Prop 12"x 37' Pipe ℄ 12"x6" Tee @ 3.00%

14+50 28.5' Rt. Std. N° 1-2 A C.B.
F/L 12" = 554.38

19+20 (28' Rt.) Std. N° 1-3 C.B.
F/L 12" = 556.39
F/L 18" = 555.89

19+20 (71.72' Rt.) Conc. Hdwall
F/L 12" = 574.40
See Sheet No. 274

Prop 12"x 89' @ 26.74%

6"x6" CMP @ 4.55%

19+96 (87.5' Rt.) Conc. Hdwall
F/L 12" = 582.00
See Sheet No. 274

23+04 (30. Rt.) Paved Gutter ℄ Spec. Headwall See Sheet N° 275
F/L 12" = 561.50

23+28 70' Rt. Conc. Hdwall, F/L 12" 572.50 See Sheet N° 275

Prop. 6"x 48' Item 7-3

Ex. 18" San.

MILL

2.00

8G+64.5 (Lt.) Prop. Conc. Hdwall F/L 48" = 513.09 See Sheet N° 272

Ex. 24" Storm Sewer

Abandon Ex. M.H.

Plug

Ex. 15"

Ex. 12"

Ex. 8"

Ex. 8" Overflow

Abandon Ex. M.H.

Remove Ex. Manholes.

Plug

Prop. Pedestrian Overhead

Remove ℄ Ex. 8" Vit. San. Sewer

74+80 51.5' Lt. ℄ Std N° 2 M.H. (Pipe Stock Omitted)
F/L 36" (S) = 526.08
F/L 36" (N) = 526.05
F/L 12" (E) = 527.67
F/L 12" (N) = 530.00
F/L 6" (N) = 542.29

75+85 73' (Lt.) Std N° 1-2 A C.B.
F/L 12" = 538.00

77+75 - 25.5' Lt. ℄ Prop. Std N° 2 M.H. Pipe Stock Omitted
F/L 36" (S) = 524.32
F/L 36" (N) = 524.29

81+00 51.5' Lt. ℄ Std N° 2 M.H. (Pipe Stock Omitted)
F/L 36" (S) = 522.38
F/L 48" (N) = 521.38
F/L 36" (E) = 522.38
F/L 12" (E) = 539.00
F/L 6" (S) = 540.94

81+00 ℄ Median Std. N° 1-2 A C.B (Mod.)
F/L 12" = 542.16

83+50 - (51.5' Lt. ℄) Std N° 2 M.H. Pipe Stock Omitted
F/L 48" (S) = 520.16
F/L 48" (N) = 520.14
F/L 15" (N) = 525.14
F/L 12" (E) = 536.00
F/L 6" (S) = 537.74

84+00 62' Lt. N° 1-2 A C.B.
F/L 15" = 535.53

Sta. 85+98.6 (32' Lt.) Special Manhole "A"
F/L 12" (N) = 532.00
F/L 12" (E) = 531.00
F/L 48" (S) = 518.93
F/L 48" (N) = 518.91
F/L 42" Interceptor 517.16
F/L 6" (N & S.) = 535.24

Remove & Store Ex. 12"x 28' Pipe

Proposed 12"x 87' V.S.P. Encased

Ex. M.H. to be removed

Plug

P.T. 85+95.47

Prop. 15"x 50' @ 21.26%

48"x 242' @ 0.50

48"x 243' Pipe @ 0.50%

6"

Prop. 6"

Ex. 48" Intercepter Sewer

1+00

90

89

88

87

86

85

84

83

82

81

80

79

78

77

76

75

74

℄ Prop. S.H. 987

74+80 ℄ Median ℄ Std. N° 1-A C.B. (Mod.)
F/L 12" (W) = 540.38
F/L 12" (E) 542.09

74+80 63 Rt. ℄ ℄ Std. N° 1-2 A C.B.
F/L 12" = 542.57

12"x 47' Pipe @ 2.66%

12"x 47' Pipe @ 0.80%

Prop. 6"

Prop 36"x 289' Pipe @ 0.60%

36"x 319' Pipe @ 0.60%

Ex. Flush Tank

Ex. 12" Combined Sewer

Ex. 12" Combined Sewer

Ex. 8"

Ex. 6"

Ex. 8" San.

Ex. 12" San.

Remove Ex. 12" San.

Abandon Ex. M.H.

Abandon Ex. M.H.

83+50 ℄ Median N° 1-2 A C.B. (Mod.) F/L 12" = 538.86

86+48 ℄ Med. Std N° 1-2 A C.B. Mod. F/L 12" = 534.86

Ex. 12" Overflow

Abandon Ex. M.H.

Ex. 12" San.

Ex. 8" San.

Ex. 8" San.

Ex. 8

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316(1)	1946

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DRAINAGE

S.H 987~STA. 61+12.34 TO STA. 87+75

SUMMIT RD. STA. 13+71.18 TO STA. 38+31

HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B";
ARLINGTON H'TS. & LOCKLAND (PT).
& APPROACHES

Stations	Paved Bituminous Corrugated Metal Side Pipe for Storm Sewer Item I-2 Sec. M-6.4(d) Lin. Ft. 12"	18"	12"	15"	Pipe Item I-2 Lin. Ft. Under Pavt. 6"	12"	15"	18"	21"	24"	6"	Reinf. Conc. Pipe V.S.P. Sec. M-6.6(b)	Extra Strength Reinf. Pipe Sec. M-6.6(c) 30"	24"	33"	36"	48"	V.S.P. 12"	V.S.P. Enc. 12"	Pipe Special For Storm Sewers Item I-5 Tee 6"x6" Ea.	12"x6" Ea.	15"x6" Ea.	18"x6" Ea.	21"x6" Ea.	24"x6" Ea.	"Y" 24"x12" Ea.	Bend 12"-30° Ea.	Catch Basin Item I-8 Std. N°1-2A Ea.	Std. N°1-3 Ea.	Std. N°1-4 Ea.	Std. N°3 Ea.	Std. N°2-2A Ea.	Std. N°1-2-A Mod. Ea.	Manholes Item I-8 Std. N°1-4 Mod. Ea.	Std. N°1 Ea.	Std. N°3 Ea.	Std. N°2 Drop Pipe Omitted Ea.	Spec. "A" Ea.	Headwalls Excavation Item E-2 Cu.Yd.	Conc. Class "C" Item S-1 Cu.Yd.	Reinf. Steel Item S-4 Lb.	Special Paved Gutter "D" (as per plan) Item I-14 Lin.Ft.	Channel Exc. Item E-3 Cu.Yd.	6" Pipe Item I-3 Lin.Ft.	Pipe Special for R'd'wy Drainage Item I-5 Bends 6"x90° Ea.	See Sheet No.
MUNICIPAL (CINCINNATI)																																												
S.H. 987																																													
62+50 Lt.																																		1											
62+50-65+45 Lt.												291																																
65+45 Lt&R						46	120																						1				1		1									
65+45-68+40 Lt.													291																																
SUMMIT RD.																																													
14+50 Lt&R	51					37													1				1											1										
18+24 Lt.		45				7																						1					1										
18+24-19+20 Lt&R							103																																					
19+20 Rt.	46																											1										2	1.1	35		6			
19+20-19+96 Rt.	99																																					3	1.1	35		22	*49	1	
TOTAL-MUNICIPAL	#196	#45				90	120	103				291	291						1				1	1	1	1		1				3	1					5	2.2	70		28	*49	1	
RURAL (Hamilton County)																																												
S.H. 987																																												
68+40 Lt&R			19			52		110																				1	1			1				1								
68+40-71+60 Lt.													316																																
71+60 Lt&R			41			52	110																					1	1			1			1								
71+60-74+80 Lt.													313																																
74+80 Lt&R			102			106													1				2								1			1									
74+80-77+75 Lt.													289																																
77+75 Lt.																																				1								
77+75-81+00 Lt.													319																																
81+00 Lt.						48																												1										
81+00-83+50 Lt.														243																																
83+50 Lt.			50			48																	1											1									
83+50-85+98.6 Lt.														242																																
85+98.6 Lt&R						95									3	87																			1										
85+98.6-86+64.5 Lt.														76																																
SUMMIT RD.																																													
21+70 Lt.	57																																												
23+04~23+28 Rt.	42																																												
23+28 Rt.																																													
25+28-25+62 Lt&R						70																																							
25+62 Rt.																																													
25+62-26+79.1 Rt.						113																																							
26+79.1 Rt.			18			73		155		*60													*3					1	1				2										
26+79.1-29+35 Rt.			12			9			246	45														1	1	1		1															
29+35 Lt&R						33																						2				1											
29+35-30+23.5 Rt.																	85																												
30+23.5 Rt.						33		84		*80												*4						2				1										
30+23.5 Lt&R						115							208															2					1										
30+23.5-33+37.8 Rt.								310																																				
33+37.8 Rt.						78																							2			1											
33+37.8-34+28							88																																					
34+28 Rt.						24				16																		1				1										
34+28-35+74.5							134			35											2																						
35+74.5 Lt.																																				1								
35+74.5-37+40.2					35		143			51									1		6																						
37+40.2 Rt.						8																						1				1										
TOTAL-RURAL	#99		192	50	35	957	475	394	265	246	287		85	1445	561	3	87	1	1	8	*4	*3	1	1	1	5	2	11	6	5		1	8	8	1		21	7.1	219	10		3		

* To be placed as directed by the Engineer.

For Details of Heavy Duty Two Piece Connecting Bands, See Sheet No. 83 of Proposal No. 2

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FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
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HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT.).
"B", ARLINGTON HEIGHTS.
LOCKLAND (PT.)
& APPROACHES.

QUANTITIES

S.H. 987 - STA. 61+12.34 TO STA. 87+75 ~ SUMMIT ROAD STA. 13+71.18 TO STA 38+31

UNDERDRAINS

Station	Side	Pipe Underdrains Item I-4 Lin. Ft. 6"	Pipe Specials for Underdrains Item I-5 Tee 6"x6" Each.	Pipe Outlets for Underdrains Item I-4 Lin. Ft. 6"	See Sheet No.
MUNICIPAL ~ CINCINNATI.					
SUMMIT-ROAD.					
13+71.18 – 14+48	Rt.	77			262 & 276
14+50.5 – 19+29.13	Rt.	479			262 & 276
S.H. 987.					
63+85.92 – 65+41	Lt.	155			29 & 262
65+47 – 68+32.81	Lt.	286			29 & 262
63+86.57 – 65+25	Rt.	139			29 & 262
64+90.6 – 68+32.81	Rt.	293		50	29 & 262
TOTALS		1429		50	
RURAL (HAMILTON COUNTY)					
SUMMIT-ROAD					
19+29.13 – 25+58	Rt.	629			262 & 276
25+64 – 26+75	Rt.	108	1		
26+81.1 – 27+00	Rt.	19			
27+29 – 29+22.63	Rt.	194			
29+37 – 30+19.5	Rt.	83			
30+25.5 – 33+34	Rt.	309			
33+39.8 – 34+24	Rt.	85			
34+30 – 37+32.61	Rt.	292			
25+30.37 Rt. (Summit RD.) – 11+42.35 Rt. (Section Rd.)		211			
26+65 Rt. (Summit RD.) – 10+72 Rt. (Section Rd.)		90			
27+23.43 Rt. (Summit RD.) – 11+42.35 Lt. (Section Rd.)		180			
S.H. 987.					
68+32.81 – 68+36	Lt.	3			29-31 & 262
68+32.81 – 68+75	Rt.	42			
68+42. – 71+56	Lt.	314			
71+62 – 74+76	Lt.	314			
74+82 – 80+98	Lt.	616			
81+04 – 83+48	Lt.	244			
83+54 – 85+96.6	Lt.	244			
86+00.6 – 86+23	Lt.	23			
68+42 – 74+78	Rt.	586		50	
74+80 – 87+03	Rt.	1200		* 35	
TOTALS		5786	1	85	

* NOTE:- For Details of Outlet for Pipe Underdrains, See Sheet No. 15

PIPE REMOVAL & ADJUSTMENTS.

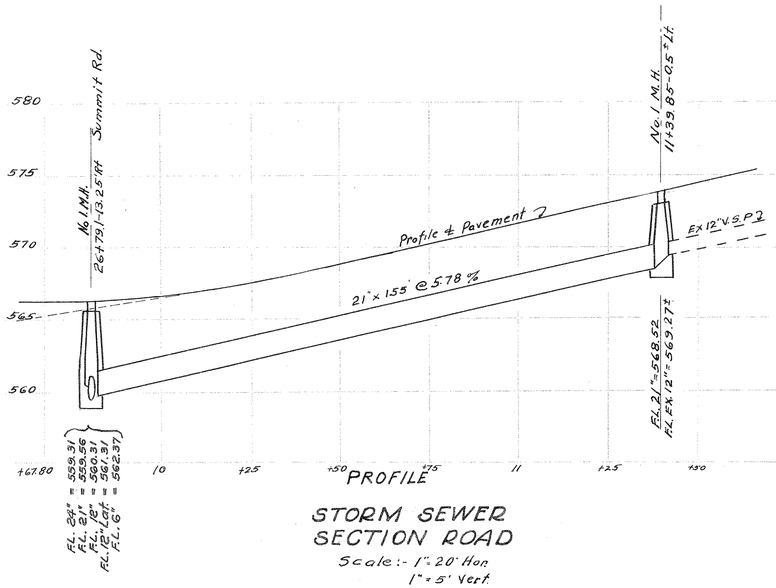
Stations (Approximate)	Side	Manholes Catch Basins and Inlets Abandoned Item I-16 Each	Concrete for Plugging Openings Class "C" Item S-1 Cu. Yd.	Pipe Removed and Disposed Of Item E-12 Lin. Ft. 6"	8"	12"	18"	Pipe Removed and Stored Item E-12 Lin. Ft. 6"	12"	Removal of Existing Structures Item S-24 Lump Sum	See Sheet No.
RURAL ~ HAMILTON COUNTY.											
S.H. 987											
77+07	Lt.		0.1							Lump	
77+21	Lt.	1	0.2								
77+24	Lt.		0.1	10		10					
77+28.5	Lt.	1									
77+40.8	Lt.		0.1							Lump	
77+73	Lt.	1					10			Lump	
78+26 – 79+20.2	Lt.		0.1		110						
82+00	Rt.	1									
82+00 – 83+61.5	Rt.					159					
82+13	Rt.		0.1	12							
82+57.8	Rt.		0.1	12							
82+87	Rt.		0.1	12							
83+61.5	Rt.	1									
83+61.5 – 86+20.8	Rt.					259					
85+98.6	Lt.							28			
86+20.8	L&R	1	0.2			80					
86+20.8 – 86+70	Rt.					48				Lump	
77+00 – 83+50	L&R		* 0.9								
SUMMIT ROAD											
9+83 – 9+92 (Section Rd.)	Lt.					14					
9+92 (Section Rd.)	Lt.	1									
9+92 – 10+26.5 (Section Rd.)	Lt.					31					
10+26.5 (Section Rd.)	Lt.									Lump	
9+83 – 9+99.5 (Section Rd.)	Rt.					21					
9+99.5 (Section Rd.)	Rt.	1									
11+16 – 11+39 (Section Rd.)	Rt.	1					7		14	Lump	
12+05 – 12+25 (Section Rd.)	Rt.							18.5		Lump	
26+79.1	L&R		0.2			10					
27+09	L&R			35							
30+29.5	Lt.		0.1								
30+40	Lt.		0.1			8					
33+39.5	Rt.		0.1								
33+49	Lt.		0.1			9					
33+74 – 33+95	Lt.		0.1		23						
34+24	Rt.		0.1								
35+09	Rt.		0.1								
35+29	Rt.		0.1								
35+73.5	Lt.		0.1								
30+31	Rt.		0.1								
27+00 – 33+50	L&R		* 0.9								
TOTALS ~ RURAL		9	4.1	81	133	649	17	18.5	42	Lump	
Total Pipe Removed & Disposed of						880					

* For plugging cellar drains, as directed by the Engineer.

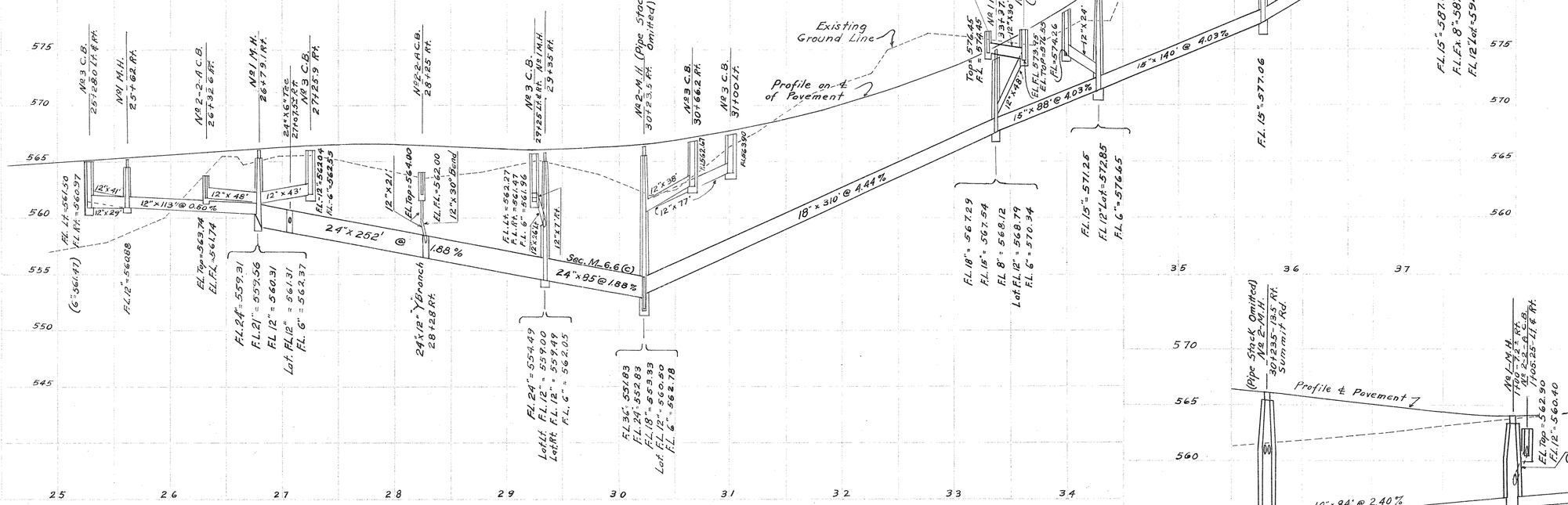
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1)	1946

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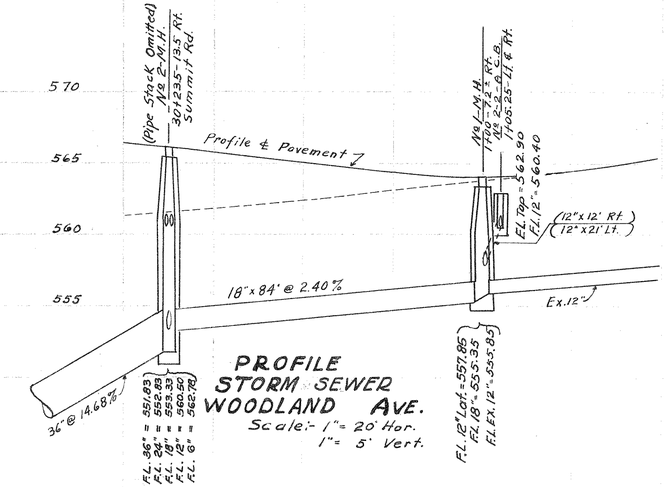
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B," ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.



STORM SEWER
SECTION ROAD
Scale:- 1"=20' Hor.
1"=5' Vert.



PROFILE
STORM SEWER
SUMMIT ROAD
Scale: 1"=5' Ver.
1"=50' Hor.

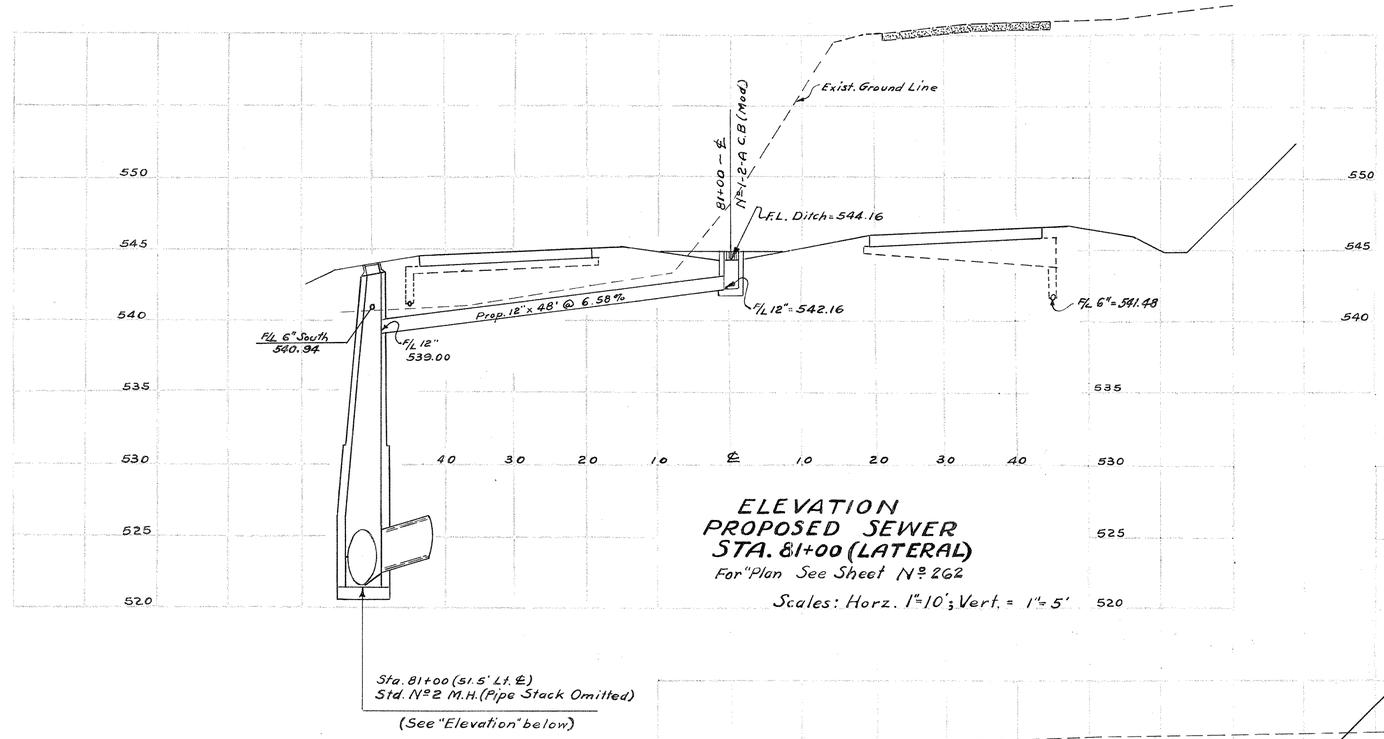


PROFILE
STORM SEWER
WOODLAND AVE.
Scale:- 1"=20' Hor.
1"=5' Vert.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGT	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.

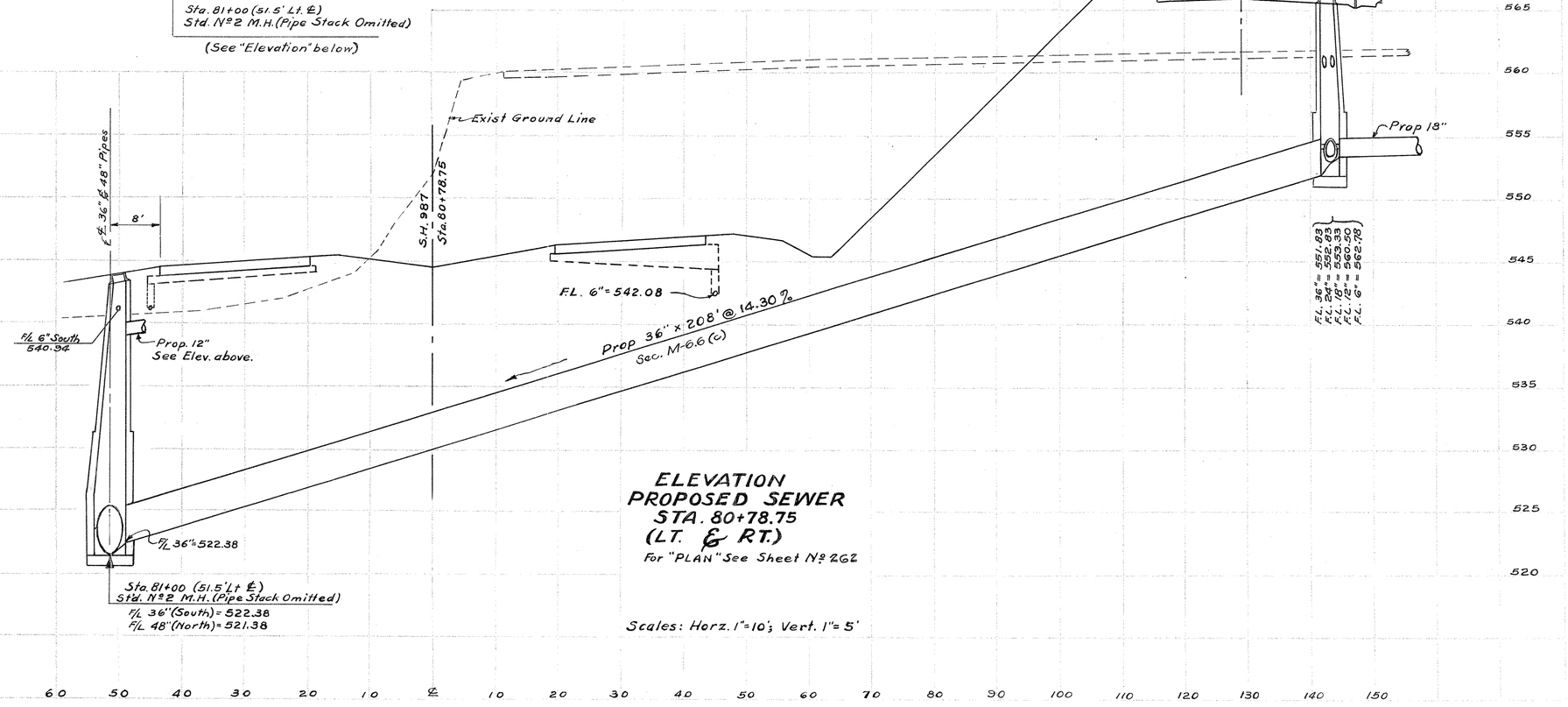


ELEVATION PROPOSED SEWER STA. 81+00 (LATERAL)

For "Plan See Sheet N° 262

Scales: Horz. 1"=10'; Vert. = 1"=5'

Sta. 81+00 (51.5' Lt. ℄)
Std. N°2 M.H. (Pipe Stack Omitted)
(See "Elevation" below)



ELEVATION PROPOSED SEWER STA. 80+78.75 (LT. & RT.)

For "PLAN" See Sheet N° 262

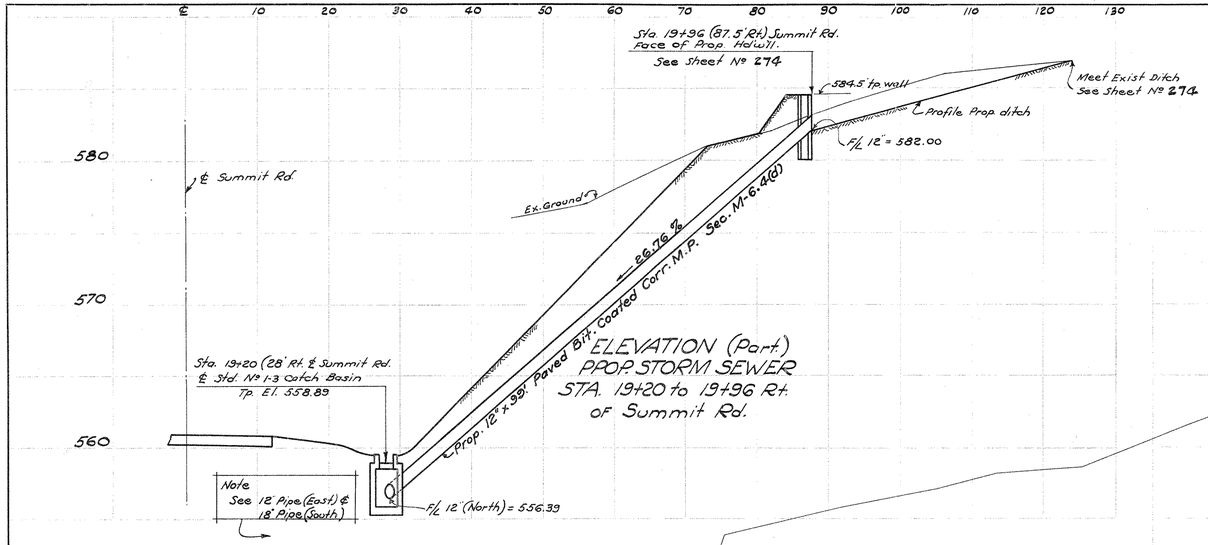
Scales: Horz. 1"=10'; Vert. 1"=5'

Sta. 81+00 (51.5' Lt ℄)
Std. N°2 M.H. (Pipe Stack Omitted)
F/L 36" (South) = 522.38
F/L 48" (North) = 521.38

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-31G (1) UG1	1946

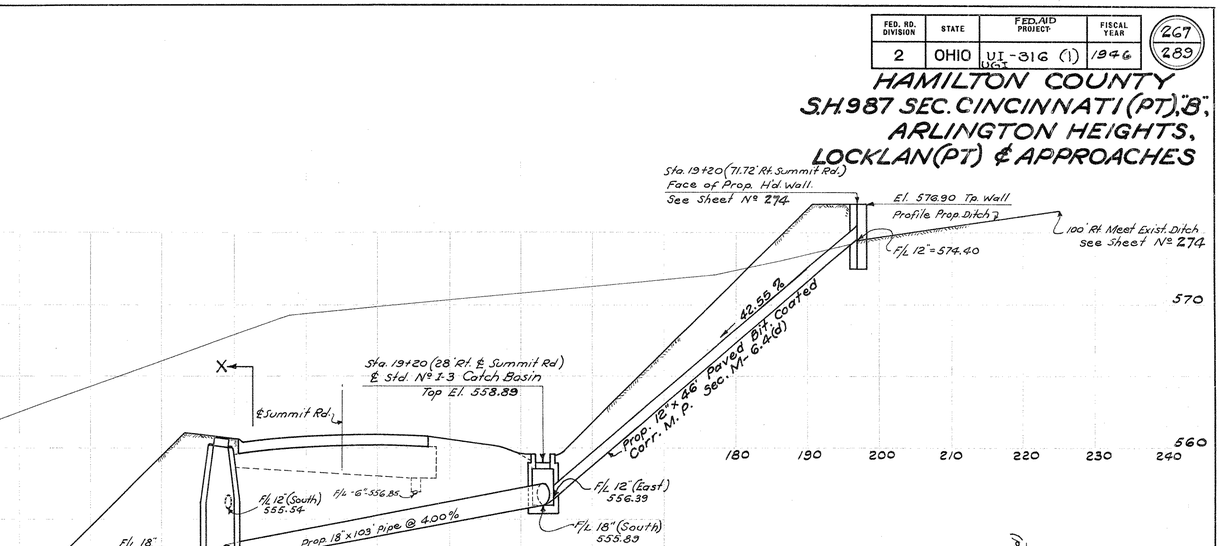
267
289

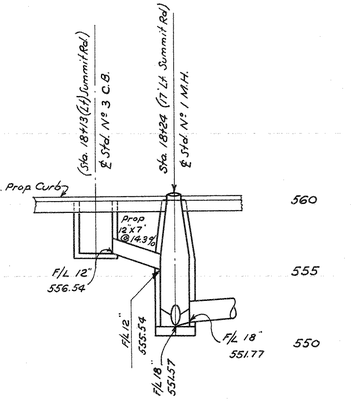
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT). "B", ARLINGTON HEIGHTS, LOCKLAN (PT) & APPROACHES



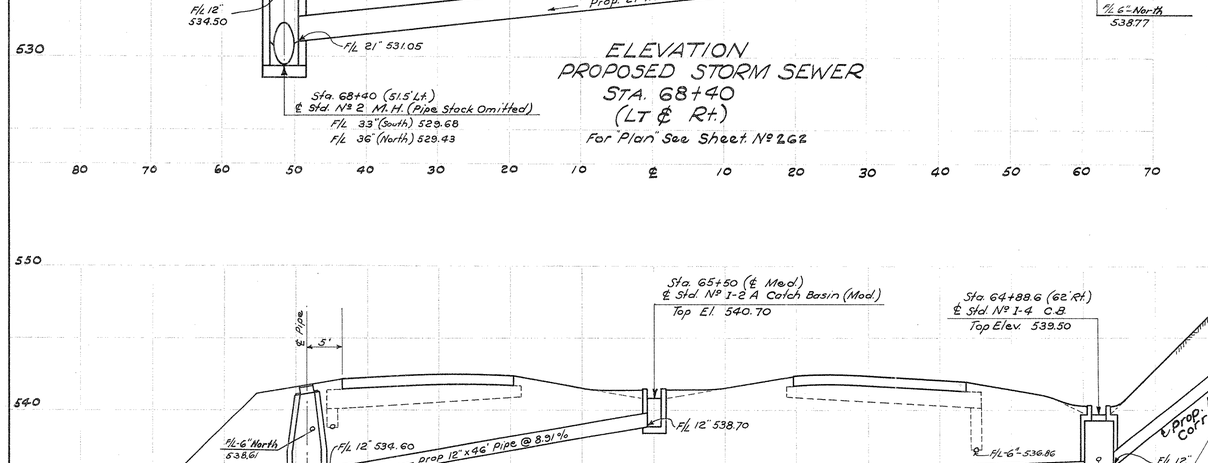
ELEVATION (Part.)
PROP. STORM SEWER
STA. 19+20 to 19+96 Rt.
of Summit Rd.

ELEVATION
PROPOSED STORM SEWER
STA. 68+40
(LT & Rt.)
For Plan See Sheet No 262





(ELEV. X-X)



ELEVATION
PROPOSED STORM SEWER
STA. 65+20.25
(LT. & RT.)
For Plan See sheet No 262

FED. RD. DIVISION	STATE	FED.AID PROJECT	FISCAL YEAR
2	OHIO	UI-316-(1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.

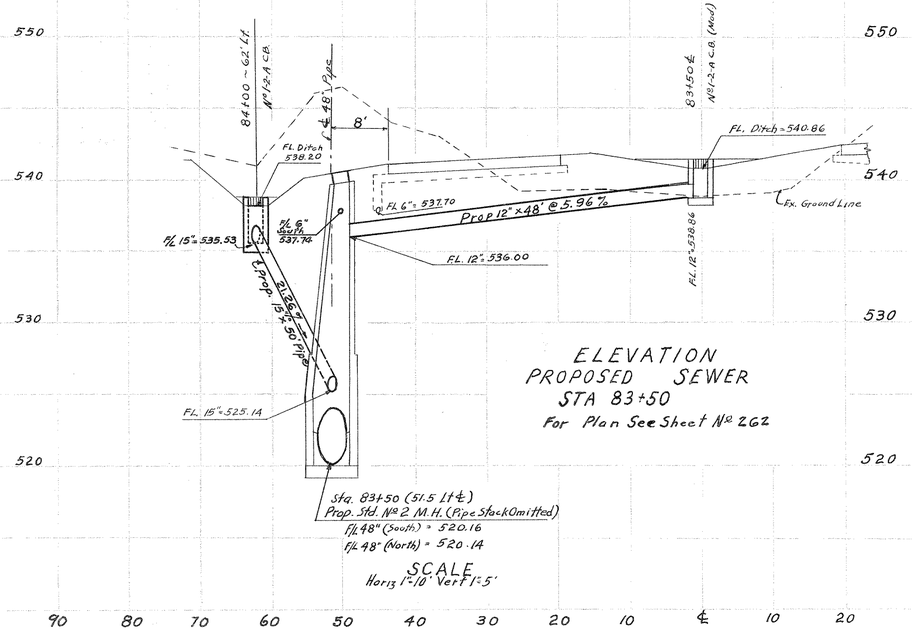


PROPOSED STORM SEWER – STA. 62+50 to 86+57.7 Lt.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UG1	1946

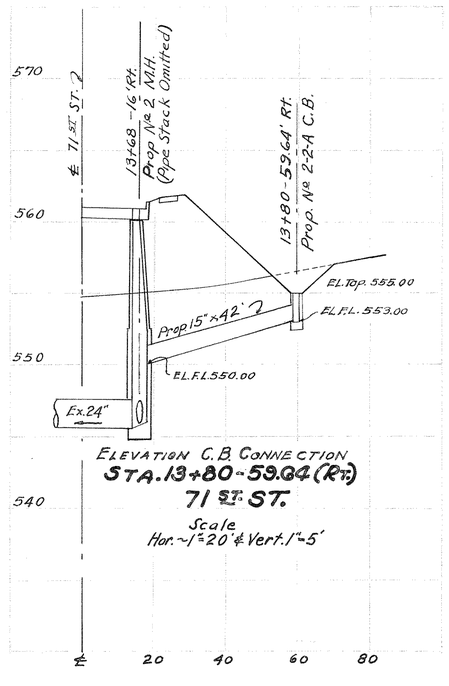
269
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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.) "B," ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACHES.



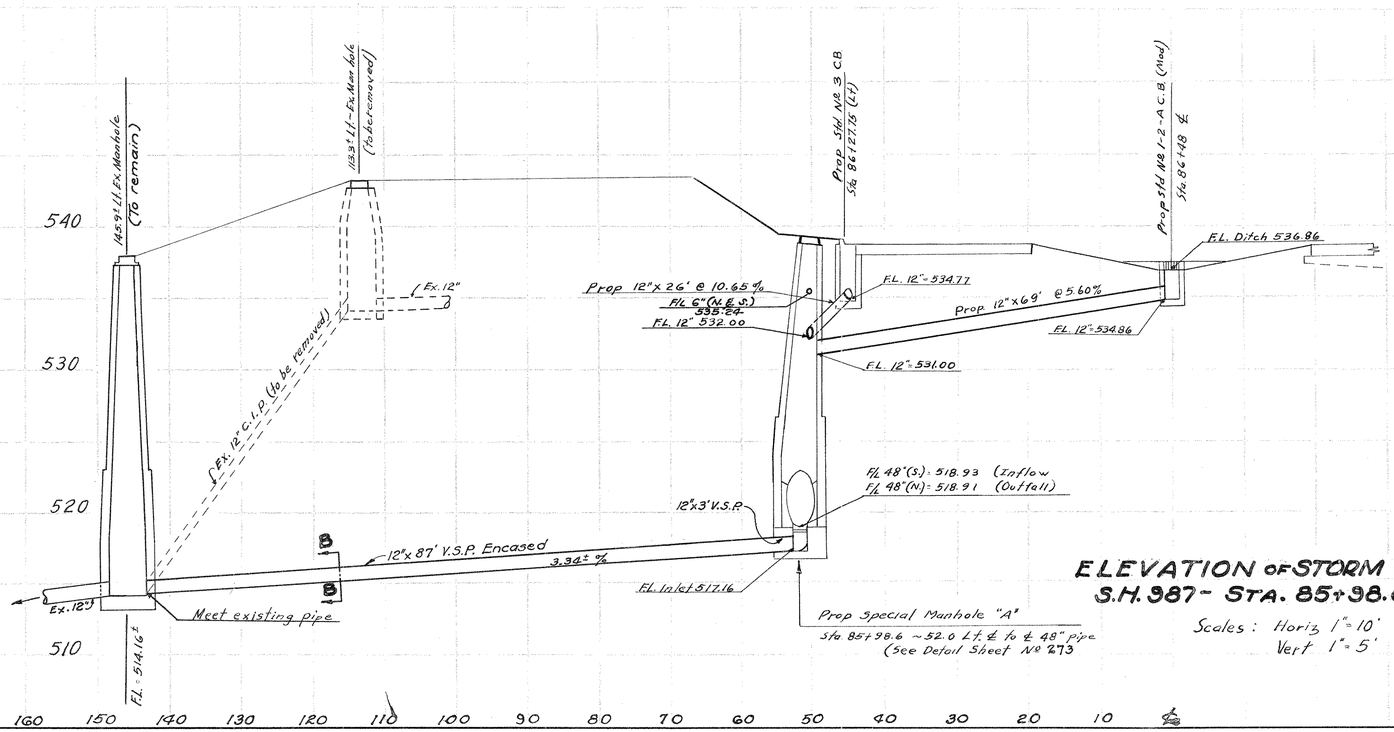
ELEVATION
PROPOSED SEWER
STA 83+50
For Plan See Sheet No 262

SCALE
Horiz 1"=10' Vert 1"=5'



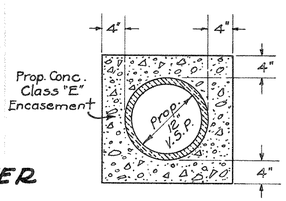
ELEVATION C.B. CONNECTION
STA. 13+80 - 59.64 (Rt.)
71 ST. ST.

Scale
Hor. ~/"=20' & Vert. 1"=5'



ELEVATION OF STORM SEWER
S.H. 987 - STA. 85+98.6

Scales: Horiz 1"=10'
Vert 1"=5'

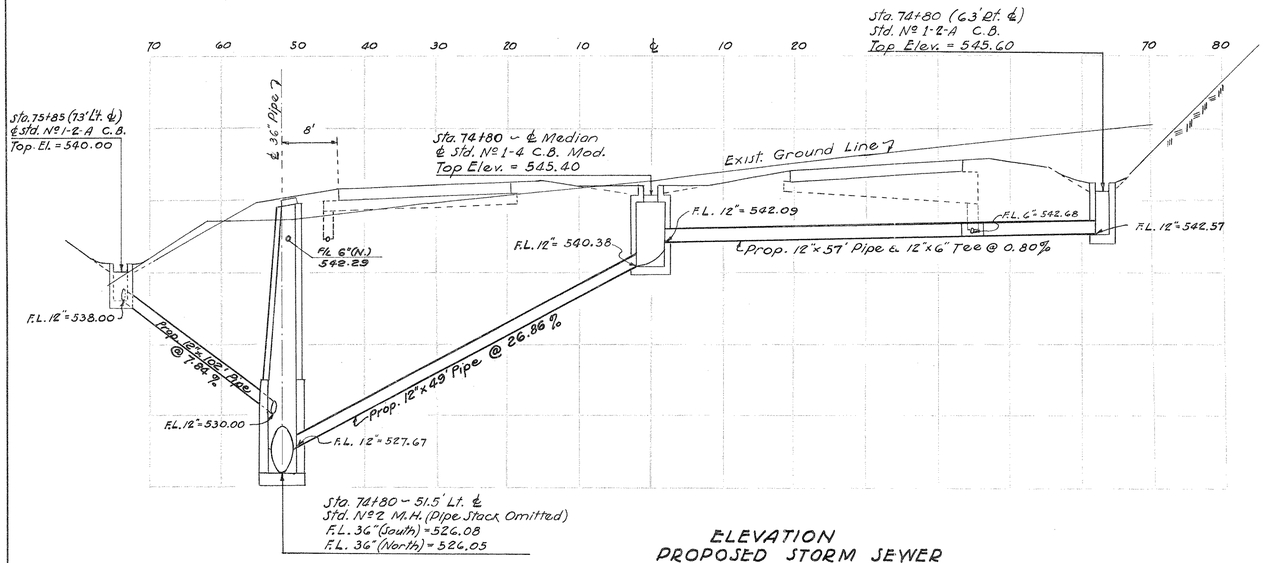


SEC. B-B

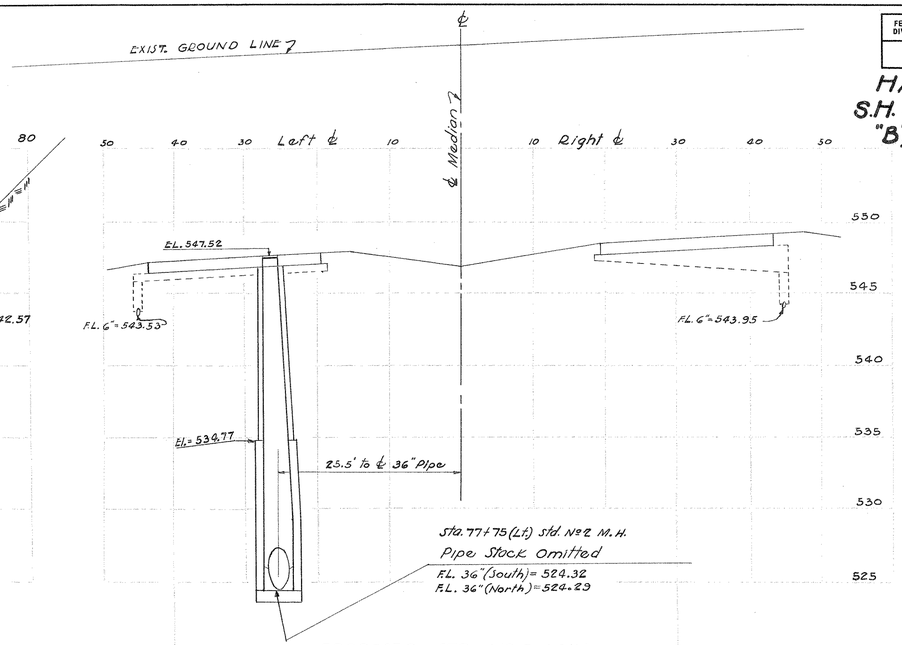
FED. RD. DIVISION	STATE	FED.AID PROJECT	FISCAL YEAR
2	OHIO	UT- 316 (1) UGX	1946

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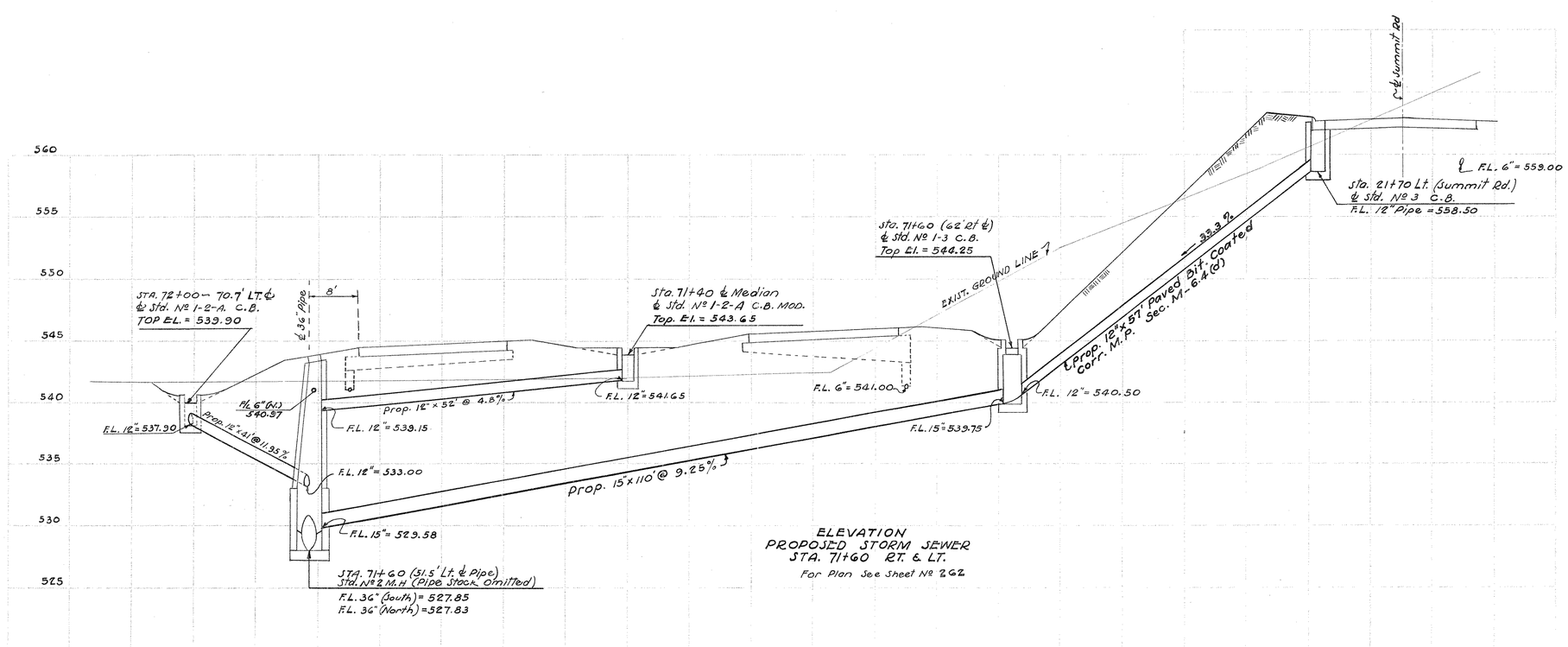
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT) "B", ARLINGTON HEIGHTS, LOCKLAND (PT) & APPROACHES.



ELEVATION
PROPOSED STORM SEWER
STA. 74+80 RT. & LT.
For Plan See Sheet No 2G2



PROPOSED STD. No 2 M.H.
PIPE STACK OMITTED
Sta. 77+75 ~ 25.5' Left ℄
For Plan See Sheet No 2G2



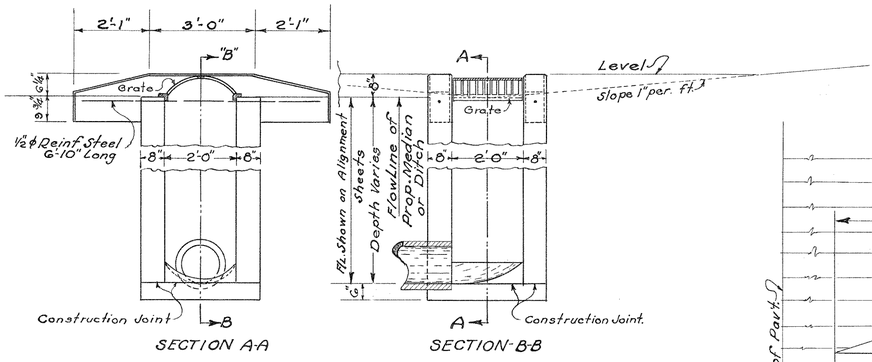
ELEVATION
PROPOSED STORM SEWER
STA. 71+60 RT. & LT.
For Plan See Sheet No 2G2

FED. RD. DIVISION	STATE	FED. AID. PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGS	1946

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HAMILTON COUNTY
S.H.987. SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.

DETAILS OF MODIFIED ST'D. NO 1-2-A CATCH BASIN

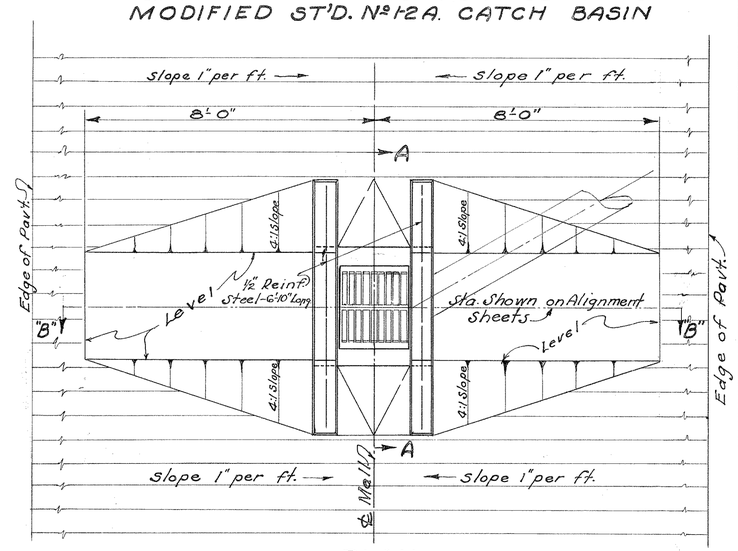


SECTION A-A SECTION-B-B

Scale 1/2" = 1'-0"

Note:- Each Modified Std. No 1-2-A Catch Basin to be essentially the same in all details as the Std. No 1-2-A Catch Basin shown in Standard drawing I-8 C.B 1-2A & B, EXCEPT the top part of the side walls are to be extended and reinforced as shown in this drawing.

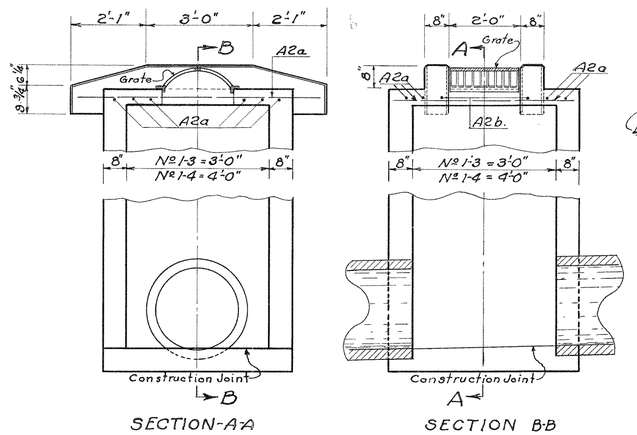
EARTHWORK SLOPES ADJACENT TO MODIFIED ST'D. No 1-2A. CATCH BASIN



PLAN

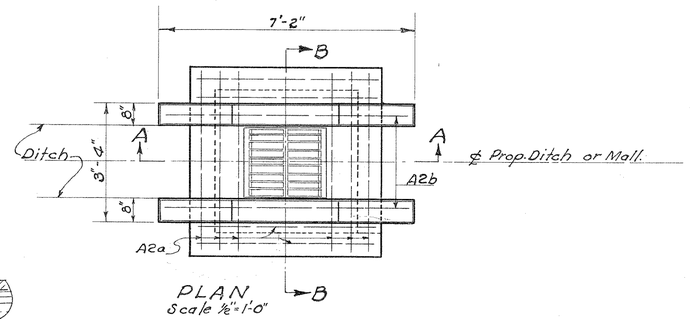
Drawn By C.E.N.	7-17-46
Ch'kd. By: E.P.	10-7-46

DETAILS OF MODIFIED ST'D. NO 1-3 & No 1-4 CATCH BASIN



SECTION-A-A SECTION B-B

Scale: 1/2" = 1'-0"



PLAN
Scale 1/2" = 1'-0"

STEEL LIST

	Mark	Size	Shape	Spacing	No	Length	Weight
Reqd. for (1) No 1-3 C.B. (Mod)	A2a	1/2 ϕ	Str't.	6"	6	4'-0"	16
	A2b	1/2" ϕ	Str't.	As Shown	2	6'-10"	9
				Total for (1) Catch Basin =			25
Reqd. for (1) No 1-4 C.B. (Mod)	A2a	1/2" ϕ	Str't.	6"	10	5'-0"	33
	A2b	1/2" ϕ	Str't.	As Shown	2	6'-10"	9
				Total for (1) Catch Basin =			42

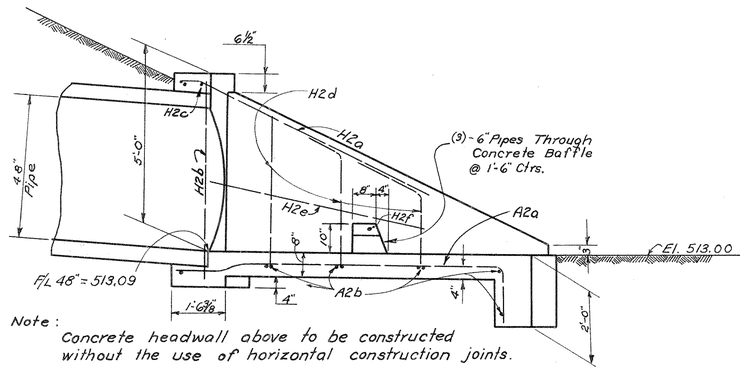
Note: Each Modified Std. No 1-3 & No 1-4 Catch Basin to be essentially the same in all details as the Standard No 1-3 & No 1-4 Catch Basin shown in standard drawing I-8 C.B. 1-3 & 1-4 EXCEPT the top sidewalls are to be extended & reinforced as shown in this drawing.

Drawn By C.E.N.	Date 10-9-46
Ch'k'd. By E.P.	" 10-7-46
Approved	

FED. RD. DIVISION	STATE	FED-AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.), "B" ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES

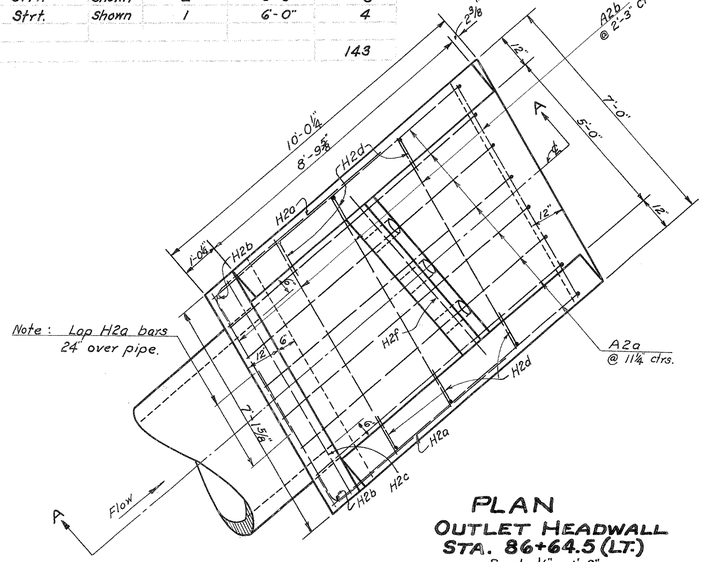


Note:
Concrete headwall above to be constructed without the use of horizontal construction joints.

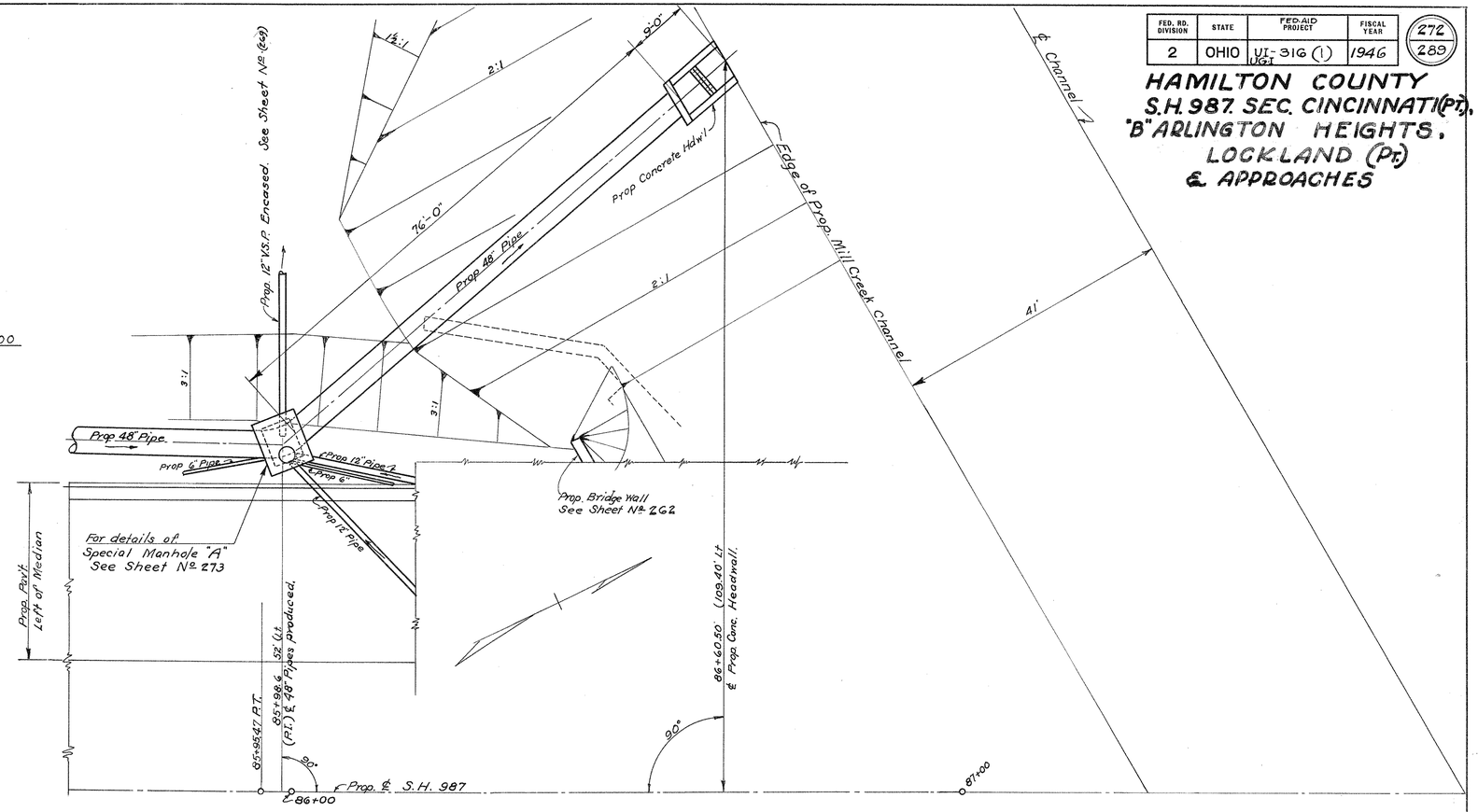
SEC. (A-A)
Scale ½" = 1'-0

STEEL LIST ~ HDWLL (STA 86+64.5 LT)

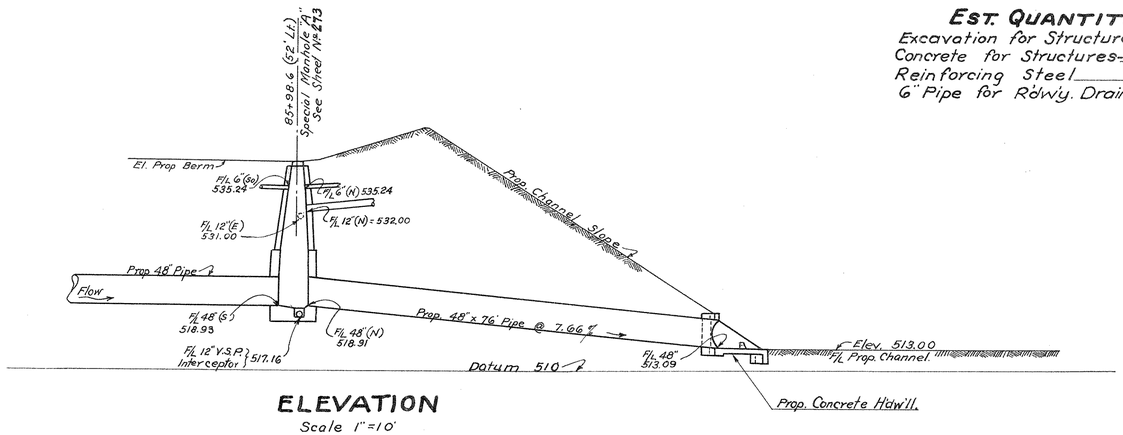
Mark	Size	Shape	Sp.cg.	No. Req.	Length	Weight
A2a	½" ø	Bend in field	11¼"	8	10'-6"	56
A2b	½" ø	Strt.	2'-3"	6	6'-9"	27
H2a	½" ø	Bend in field	Shown	2	11'-6"	15
H2b	½" ø	Strt.	Shown	2	5'-8"	8
H2c	½" ø	Strt.	Shown	1	6'-9"	5
H2d	½" ø	Bend in field	2'-3"	6	5'-0"	20
H2e	½" ø	Strt.	Shown	2	6'-0"	8
H2f	½" ø	Strt.	Shown	1	6'-0"	4
TOTAL.						143



PLAN
OUTLET HEADWALL
STA. 86+64.5 (LT.)
Scale ½" = 1'-0"



PLAN
PROPOSED CONCRETE HEADWALL
STA. 86+64.5 LT.
Scale 1" = 10'



ELEVATION
Scale 1" = 10'

EST. QUANTITIES ~ (HDWLL STA. 86+64.5 LT.)

Excavation for Structures	Item E-2	15.	Cu. Yd.
Concrete for Structures-(Class "C")	Item S-1	4.7	Cu. Yd.
Reinforcing Steel	Item S-4	143.	Lbs.
6" Pipe for Rdwy. Drainage	Item I-3	3.	Lin. Ft.

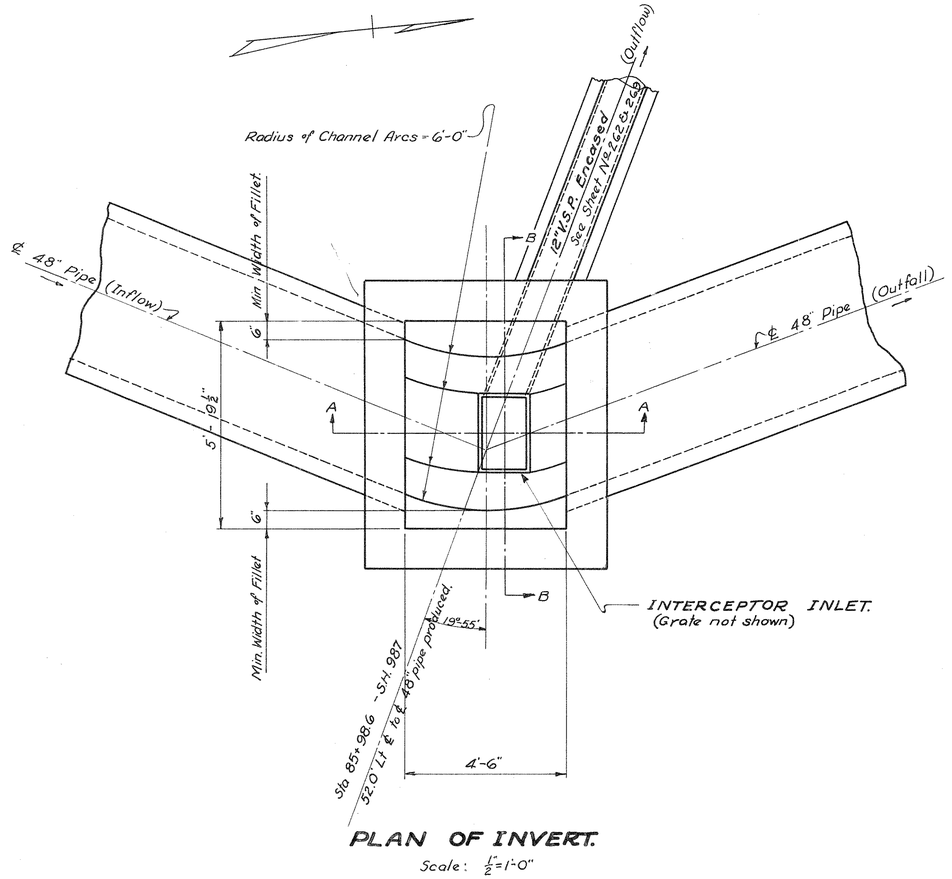
Drawn by: W.L.A.	Date: 10-4-46
Checked by: C.E.N	Date: 10-7-46
Approved by:	Date:

PROPOSED CONCRETE HDWLL STA. 86+64.5 LT.

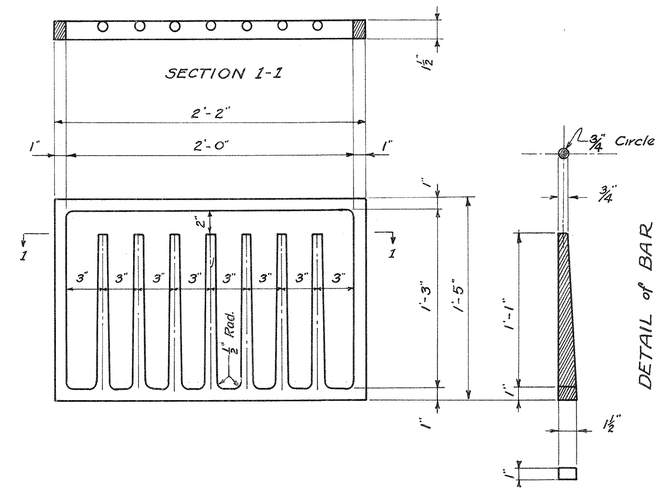
FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGI	1946

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HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (Pt.), B, ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES.



PLAN OF INVERT.
Scale: ½"=1'-0"



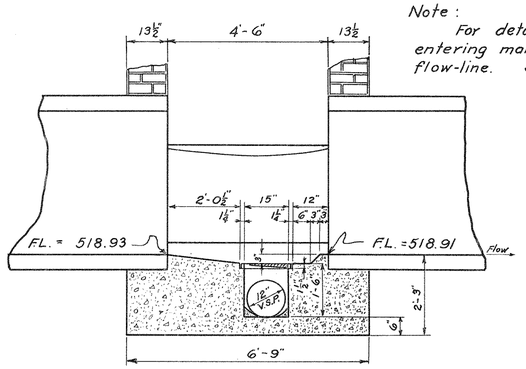
INTERCEPTOR INLET GRATING

NOTES

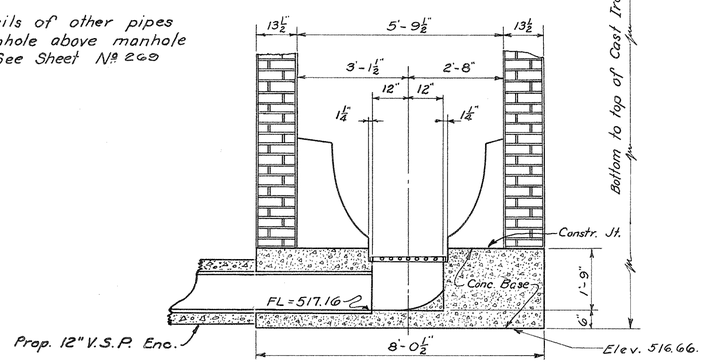
CONSTRUCTION: Manhole above base shall be built as shown on Std. Dwg. I-8, M.H. Nº 2 (Pipe stack omitted) Interceptor inlet and base of manhole shall be constructed of Class "C" concrete.

GRATING: shall be of cast iron in accordance with Material Specifications. The design shall be essentially the same and equally as strong as shown hereon and shall be given one coat of asphaltum paint as per specifications. Weight of grating is approximately 58 lbs. Bearing area of grate shall be so fitted and finished as to provide a firm and even seat for all portions of the grate. No projections shall exist on bearing area of grate and grate shall seat in inlet opening without rocking.

Note: For details of other pipes entering manhole above manhole flow-line. See Sheet Nº 226



SECTION A-A.



SECTION B-B

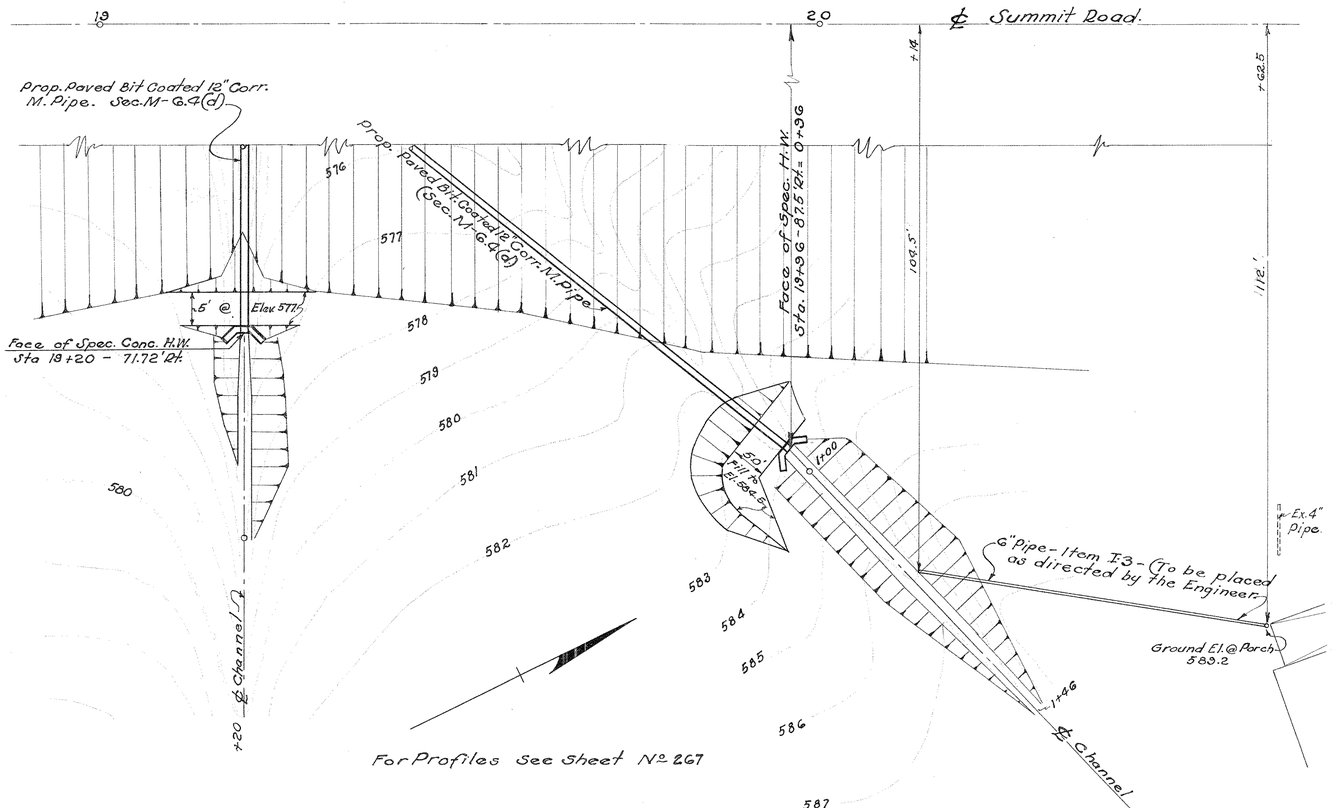
Drawn by: W.L.A.	Date: 10-4-46
Checked by: C.B.T.	Date: 10-7-46
Approved by:	Date:

SPECIAL MANHOLE "A" – Sta 85+98.6 Lt.

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UGT-316 (1)	1946

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HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (Pt.), "B", ARLINGTON HEIGHTS, LOCKLAND (Pt.) & APPROACHES



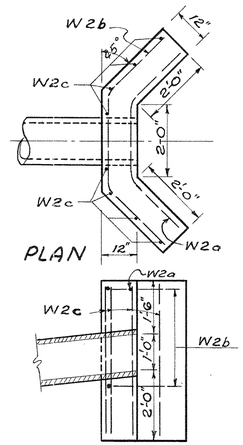
PLAN
PROPOSED HEADWALLS
STA. 19+20 RT. & STA. 19+96 - RT.
SUMMIT RD.
Scale 1"=10'

STEEL LIST

Mark	Size	Shape	Spacing	No. Reqd.	Length	Weight
W2a	½" ϕ	Bend in Field	As Shown	1	5'-8"	4
W2b	½" ϕ	Bend in Field	As Shown	2	7'-5"	10
W2c	½" ϕ	Str't.	12"	8	4'-0"	21
Total For 1 Headwall						35

ESTIMATED QUANTITIES

For H.W. Sta 19+20 71.72'(Rt.)	Excavation for Structures	Item E-2	2. Cu.Yd.
	Concrete for Struct. Class "C"	Item S-1	1.1 Cu.Yd.
	Reinforcing Steel	Item S-4	35. Lbs.
	Channel Excavation	Item E-3	6. Cu.Yd.
	Embankment required for Levee (Incld. in Rdwy. Quants.)		6. Cu.Yd.
For H.W. Sta. 19+96 87.50(Rt.)	Excavation for Structures	Item E-2	3. Cu.Yd.
	Concrete for Structures Class "C"	Item S-1	1.1 Cu.Yd.
	Reinforcing Steel	Item S-4	35. Lbs.
	Channel Excavation	Item E-3	22. Cu.Yd.
	Embankment for Levee (Incld. in Rdwy. Quants.)		6. Cu.Yd.
Sta. 20+14 104.5' Rt. to 20+62.5-112 Rt.	6" Pipe	Item I-3	49 Lin. Ft.
	6" x 90° Bend	Item I-5	1 Each

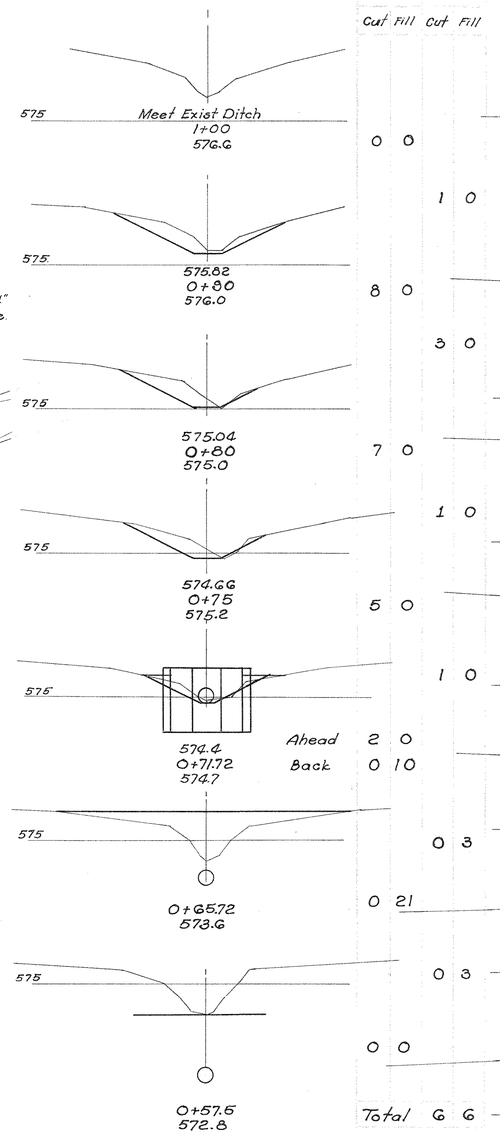


SECTION
Scale ½"=1'-0"

Drawn By C.E.N. Date 10-2-46
Ch'k'd By W.L.A. Date 10.9-46
Approved By:

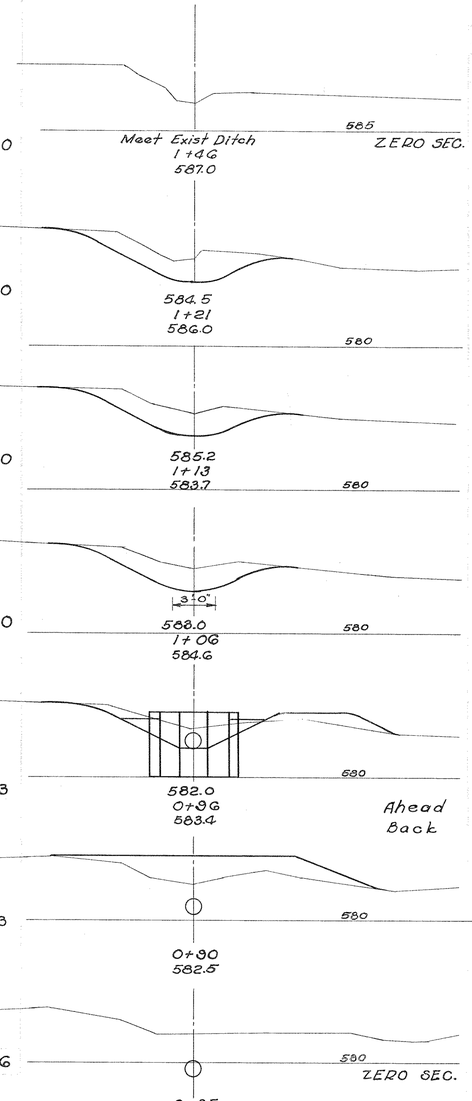
DETAILS OF SPECIAL HEADWALL
Sta. 19+20 - 71.72 Rt. & Sta. 19+96-87.5' Rt.

CROSS SECTIONS OPEN DITCH
STA. 19+20 - 71.72' Rt. (SUMMIT RD.)



	End Area Cu.Yd. Cut	Fill	Cut	Fill
			0	0
	1	0		
			8	0
	3	0		
			18	0
	7	0		
	1	0		
			18	0
	5	0		
			4	0
	1	0	16	0
Ahead	2	0		
Back	0	10		
	0	3		
	0	21		
	0	3		
			0	22
	0	0		
			0	2
Total	6	6		

CROSS SECTIONS OPEN DITCH
STA. 19+96 - 87.5' Rt. (SUMMIT RD.)



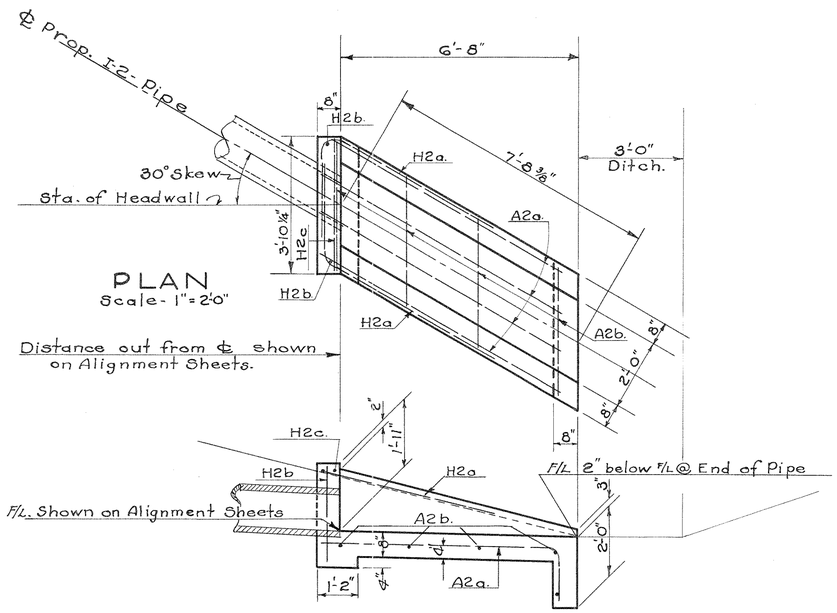
	End Area Cu.Yd. Cut	Fill	Cut	Fill
ZERO SEC.	0	0		
			8	0
			18	0
			5	0
			18	0
			4	0
			16	0
Ahead	11	6		
Back	0	6		
			5	1
			0	3
			0	22
			0	2
ZERO SEC.	0	0		
Total	22	6		

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HAMILTON COUNTY
S.H.987. SEC. CINCINNATI (Pt.)
"B" ARLINGTON HEIGHTS,
LOCKLAND (Pt.) & APPROACHES.

DETAILS FOR SPECIAL HEADWALLS FOR 12" I-2 PIPE - (OUTLETS AT 30° SKEW.)



This type Headwall to be built at the following Stations:

89+53.00		81.0	Rt. ℄
91+80.92	-	67.68	Rt. ℄
95+19.16	-	69.00	Rt. ℄
98+47.42	-	70.28	Rt. ℄
101+80.62	-	71.68	Rt. ℄
108+94.71	-	61.12	Rt. ℄
112+54.	-	79.67	Rt. ℄
115+71.2	-	79.2	Rt. ℄
118+77.	-	87.0	Rt. ℄
121+57.7	-	110.0	Rt. ℄
Ramp "H" 2+51.	-	41.0	Rt. ℄
Ramp "H" 5+65	-	41.0	Rt. ℄
Ramp "H" 8+34.3	-	47.1	Rt. ℄
Ramp "H" 10+77	-	53.0	Rt. ℄

STEEL LIST

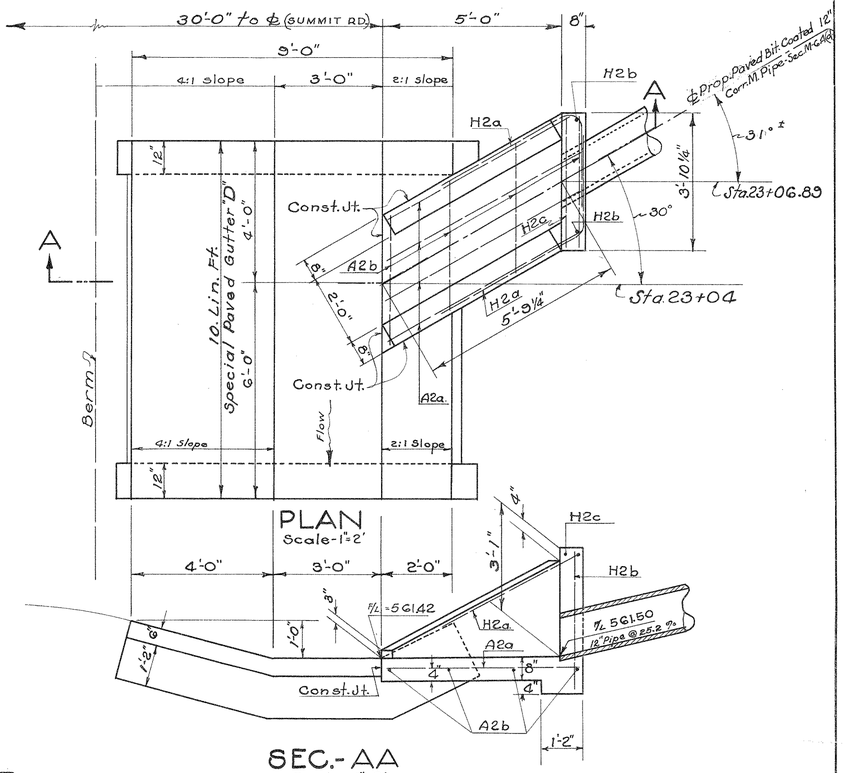
Mark	Size	Shape	Spacing	No	Length	Weight
A2 a.	½" ϕ	Field Bend	12"	4	9'-2"	25
A2 b.	½" ϕ	Str't.	2'-0"	5	3'-6"	12
H2 a.	½" ϕ	Field Bend	As Shown	2	7'-6"	10
H2 b.	½" ϕ	Str't.	As Shown	2	2'-7"	3
H2 c.	½" ϕ	Str't.	As Shown	1	3'-6"	2
			Total			52

ESTIMATED QUANTITIES FOR ONE HEADWALL

Excavation For Structures	Item E-2	See Sheet № 277	
Concrete For Structures (Class 'C')	Item S-1	1.4	Cu. Yd.
Reinforcing Steel	Item S-4	52.	Lbs.

Drawn By: C.E.N. Date: 7-3-46
Ch'k'd By: E.P. " 9-20-46
Approved:

DETAILS OF PAVED GUTTER "D" & SPECIAL HEADWALL AT STA. 23+04 RT. OF SUMMIT RD.

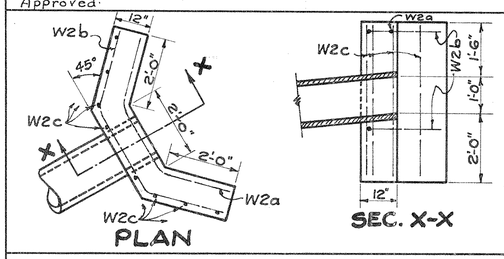


STEEL LIST

Mark	Size	Shape	Spacing	№ Reqd.	Length	Weight
A2a	½" ϕ	Straight	12	4	6'-0"	16
A2b	½" ϕ	Straight	1'-9"	4	3'-6"	9
H2a	½" ϕ	Bend in Field	As Shown	2	6'-9"	9
H2b	½" ϕ	Straight	As Shown	2	3'-9"	5
H2c	½" ϕ	Straight	As Shown	1	3'-6	2
			TOTAL			41

ESTIMATED QUANTITIES

Excavation for Structures	Item E-2	4	Cu.Yd.
Concrete for Structures (Class 'C')	Item S1	1.3	Cu.Yd.
Special Paved Gutter "D" as per Plans	Item I-14	10.	Lin.Ft.
Reinforcing Steel	Item S-4	41.	Lbs.



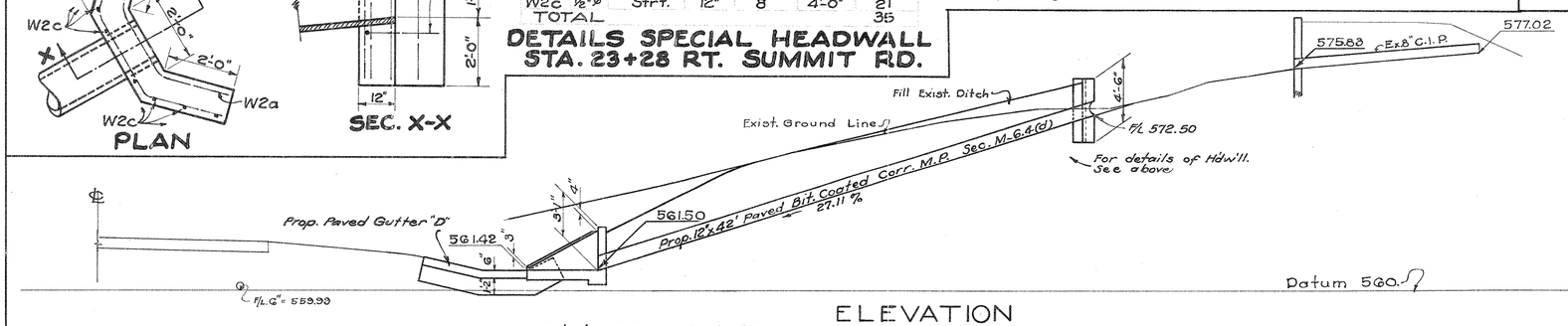
STEEL LIST

Mark	Size	Shape	Spc'g.	No. Req.	Length	Weight
W2a	½" ϕ	Field Bend	Shown	1	5'-8"	4
W2b	½" ϕ	Field Bend	Shown	2	7'-5"	10
W2c	½" ϕ	Str't.	12"	8	4'-0"	21
TOTAL						35

ESTIMATED QUANTITIES

Excavation for Structures	Item E-2	2	Cu.Yd.
Concrete for Structures Class "C"	Item S-1	1.1	Cu.Yd.
Reinforcing Steel	Item S-4	35	Lbs.

DETAILS SPECIAL HEADWALL STA. 23+28 RT. SUMMIT RD.



Details of Paved Gutter "D" & Special Headwall Shown on Right of this sheet.

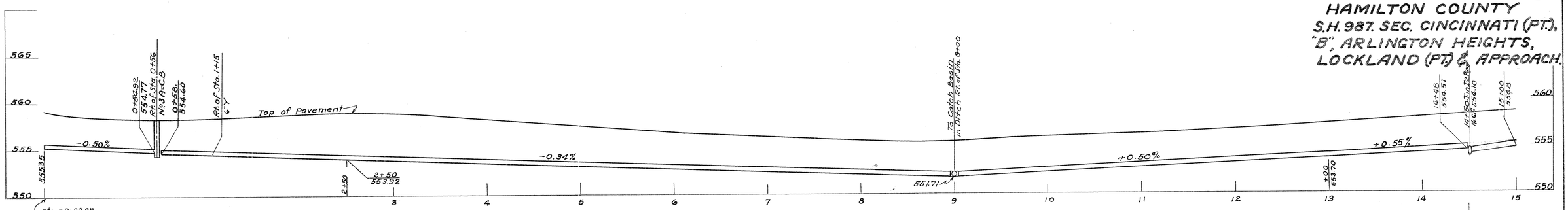
ELEVATION
STORM SEWER
STA. 23+04 to 23+28 RT.
SUMMIT ROAD
Scale 1"= 5'-0"

Drawn By: C.E.N. Date: 9-24-46
Ch'k'd. By: E.P. " 10-7-46
Approved:

FED. RD. DIVISION	STATE	FED AID PROJECT	FISCAL YEAR
2	OHIO	UI-316 (1) UGL	1946

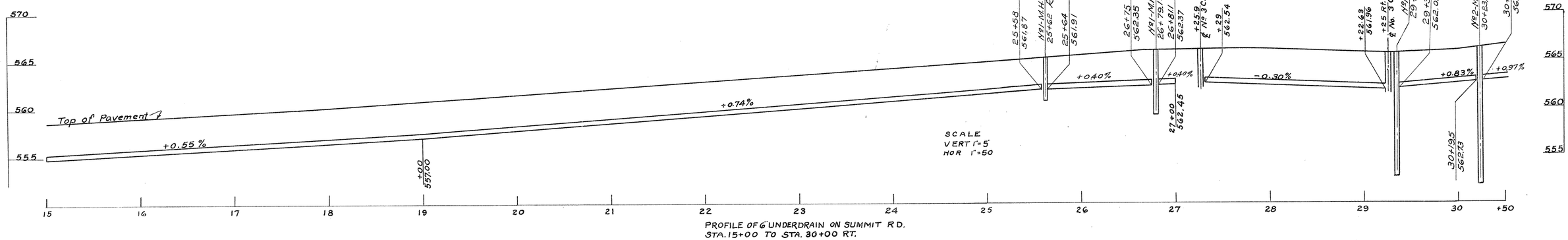
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HAMILTON COUNTY
S.H. 987. SEC. CINCINNATI (PT.), "B", ARLINGTON HEIGHTS, LOCKLAND (PT.) & APPROACH.



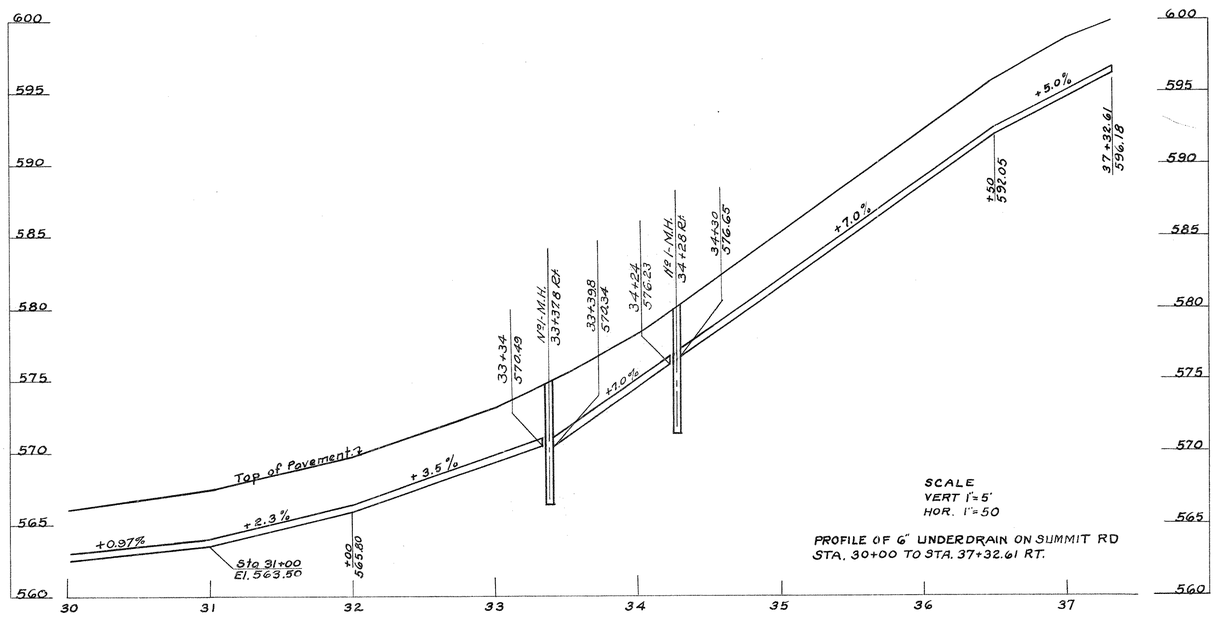
SCALE
VERT. 1"=5'
HOR 1"=50'

PROFILE OF 6" UNDERDRAIN ON SUMMIT RD.
STA. 28+00 (PADDOCK RD) TO STA. 15+00 SUMMIT RD. - (PT.)



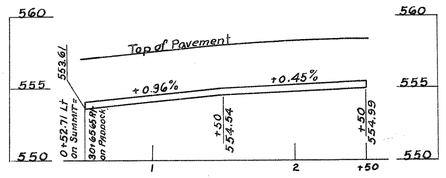
SCALE
VERT 1"=5'
HOR 1"=50

PROFILE OF 6" UNDERDRAIN ON SUMMIT RD.
STA. 15+00 TO STA. 30+00 RT.

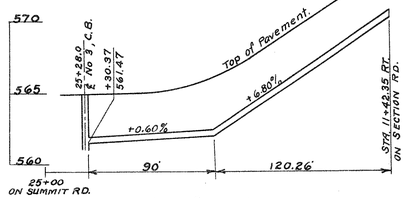


SCALE
VERT 1"=5'
HOR. 1"=50

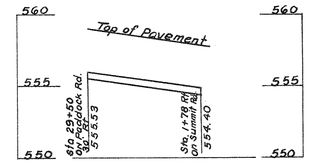
PROFILE OF 6" UNDERDRAIN ON SUMMIT RD
STA. 30+00 TO STA. 37+32.61 RT.



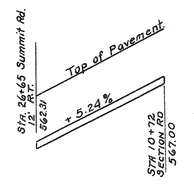
PROFILE OF 6" UNDERDRAIN ON SUMMIT RD.
STA. 30+65.65 RT. ON PADDOCK RD. TO
STA. 2+50 LT. ON SUMMIT RD.



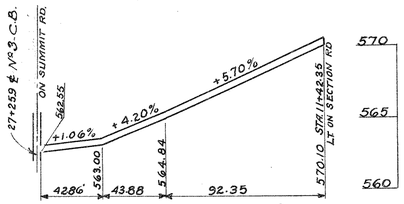
PROFILE OF 6" UNDERDRAIN ON
SUMMIT ROAD TURNOUT
STA. 25+30.37 SUMMIT ROAD TO
STA. 11+42.35 ON SECTION ROAD



PROFILE OF 6" UNDERDRAIN ON SUMMIT RD.
STA. 29+50 ON PADDOCK RD. 30' RT. TO
RT. OF STA. 1+15 SUMMIT RD.



PROFILE OF 6" UNDERDRAIN ON RT. SIDE
OF SECTION ROAD 12' RIGHT OF
STA. 26+65 SUMMIT ROAD TO
STA. 10+72 ON SECTION RD.



PROFILE OF 6" UNDERDRAIN ON LEFT
OF SECTION ROAD
STA. 27+23.43 ON SUMMIT ROAD TO
STA. 11+42.35 ON SECTION ROAD.

SCALE
VERT 1"=5'
HOR 1"=50'

PPOFILE 6" UNDERDRAIN (SUMMIT ROAD)

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT.), "B", ARLINGTON H'TS & LOCKLAND (PT.). & APPROACHES

DRAINAGE

S.H. 987 STA. 87+75 to STA. 175+47.12

Stations (All stations on S.H.987 except as noted)	Side	Pipe ~ Item I-2 ~ Lin. Ft. Reinf. Conc. Under Pavement 12"	36"	Extra Strength Reinf. Conc. Pipe 12"	15"	24"	27"	30"	33"	36"	Paved Bitumin. Corr. M.P. Item I-2 Sec. M.6.6(b) Lin. Ft. 12"	Pipe Special Item I-5 Tee 12"x6" Ea.	Y branch 12"x6" Ea.	Catch Basins Item I-8 Std. No 12A Ea.	Std. No 3 Ea.	Std. No 3A Ea.	Std. No 1-2A (Mod.) Ea.	Manholes Item I-8 Std. No 1 Ea.	Std. No 2 (Drop Pipe Omitted) Ea.	Std. No 3 Ea.	Headwalls Excavation Item E-2 Cu. Yd.	Reinf. Steel Item S-4 Lb.	Conc. Class "C" Item S-1 Cu. Yd.	Riprap Channel Type "A" Grouted Item 110 Sq. Yd.	Excav. Item E-3 Cu. Yd.	See Sheet No.
RURAL ~ (HAMILTON COUNTY)																										
89+53 ~ 90+00	Rt.			87									1	1	1							4	52	1.4			31 & 275
91+80.9 ~ 92+20	Rt.			77												1						4	52	1.4			32 " "
95+142 ~ 95+54	Rt.			79												1						4	52	1.4			32 " "
98+47.4 ~ 98+88	Rt.			77										1		1						4	52	1.4			32 " "
101+80.6 ~ 102+22	Rt.			82												1						4	52	1.4			32 " "
108+94.7 ~ 109+30	Rt.			67									1			1						4	52	1.4			34 " "
112+54 ~ 113+00	Rt.			85									1	1	1							4	52	1.4			34 " "
115+71.2 ~ 116+17	Rt.			88										1			1					4	52	1.4			34 & 275
118+77 ~ 119+34	Rt.	41		63												1						4	52	1.4			275-80-89 Prop 2
119+34 ~ 2+42.2 (Ramp "G")	Lt.			89											2												80-89 Prop 2
122+50	Lt. & Rt.	33		150										1		1			1			3	52	1.4			275-80-88 Prop 2
124+78± ~ 127+00	Rt.		150					239														19	67	4.0	23	25	86 & 87 Prop 2
127+00 ~ 127+29.5	Lt.			71											1				1	1							86-Prop 2
127+00 ~ 127+59.2									57																		86-Prop 2
2+51 ~ 2+72.5 (Ramp "H")	Rt.	33		12											1							3	52	1.4			275 & 89 Prop 2
5+86.7 (Ramp "H")	Lt. & Rt.	51		50													1				1	3	52	1.4			" " " " " "
8+34.3 ~ 8+63.8 (Ramp "H")	Rt.	43		12														1				4	52	1.4			275 & 89 Prop 2
4+83.9 ~ 5+19.7 (Ramp "G")	Lt.										74				1							6	38	1.0			84-Prop 2
7+57.5 ~ 8+14.1 (Ramp "G")	Lt. & Rt.			37							79				2							3	34	0.8			84-Prop 2
TOTALS		201	150	1126					57	239	#153	3	5	2	8	1	9	1	1	1	77	815	24.0	23	25		
MUNICIPAL ~ (ARLINGTON HTS.)																											
127+29.5 ~ 128+00	Lt. & Rt.			78											1												86-Prop 2
127+59.2 ~ 128+78.8									118																		86 " "
128+78.8	L			25											1				1								86 " "
128+78.8 ~ 130+45									163																		86 " "
130+45	Lt. & Rt.			4	26										1				1	1							86 " "
130+45 ~ 132+45								196																			86 " "
132+45	Lt. & Rt.			68									1				1	1		1							80 " "
132+45 ~ 133+43							94																				86 " "
133+43	Lt. & Rt.			4											1				1								86 " "
133+43 ~ 134+58							111																				86 " "
134+58	Lt. & Rt.			34												1			1								86 " "
134+58 ~ 135+62.5	Rt.						102																				86 " "
135+62.5	Rt.			17											1				1								80 " "
135+62.5 ~ 137+07.5	Rt.					141																					86 " "
135+07.5	Rt.			43													1		1								86-Prop 2
TOTALS (MUNICIPAL)				273	26	141	307	196	281			1			5	2	1	5	2	2							

NOTE:- For Plan of all items carried from Prop No 2 See Sheet No 80 of Prop No 2

For Details of Heavy Duty Two Piece Connecting Bands, See Sheet No 83 - Prop No 2

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt.)
"B." ARLINGTON HEIGHTS,
LOCKLAND (Pt.)
& APPROACHES

~ QUANTITIES ~

S.H. 987 ~ STA. 87+75 TO STA. 175+47.12

UNDERDRAINS

Stations (Approximate)	Side	Pipe Item I-4 Lin. Ft.	Pipe Special for Underdrain Item I-5 Tee 6"x6" Ea.	Pipe Outlet for Underdrain Item I-4 Lin. Ft.	See Sheet No.
(All stations on S.H. 987 except as noted.)		6"		6"	
RURAL ~ SEC. "B" (PT)					
88+80 ~ 90+00	Lt.	117	1	* 24	31
89+15 ~ 89+71.5	Rt.	57			31
89+74 ~ 98+58	Rt.	884			31 & 32
90+00 ~ 112+98.5	Lt.	2300			32 & 34
98+62 ~ 109+00	Rt.	1040			32 & 34
109+07 ~ 112+70	Rt.	365			34
113+00	Lt.		1	* 23	34
112+74 ~ 115+91	Rt.	317			34
115+91 ~ 2+68.5 (Ramp "H")	Rt.	477			34 & 91/Prop 2
113+01.5 ~ 2+39.5 (Ramp "G")	Lt.	683			34 & 91/Prop 2
119+91.4 ~ 122+46	Lt.	255			34 & 91/Prop 2
122+12 ~ 127+59.2	Rt.	547			
122+52.4 ~ 126+97.63	Lt.	446			
127+04 ~ 127+59.2	Lt.	55			
2+74.9 (Ramp "F") ~ 5+82.7 (Ramp F)	Rt.	308			91-Prop No 2
5+89.2 (Ramp F) ~ 8+61 (Ramp "H")	Rt.	272			
8+64.9 (Ramp "H") ~ 11+13.6 (Ramp "F")		249			
2+44.6 (Ramp F) ~ 5+15.7 (Ramp F)	Lt.	272			
5+22.1 (Ramp F) ~ 7+91.7 (Ramp F)	Lt.	270			
TOTALS ~ SEC. "B" (PT.)		8914	2	47	
MUNICIPAL ~ SEC. ARLINGTON HTS. (PT.)					
127+59.2 ~ 132+46	Rt.	487			91/Prop No 2
132+48 ~ 2+30 (Ramp F)	Rt.	215			
127+59.2 ~ 128+76.4	Lt.	118			
128+82.8 ~ 130+47.5	Lt.	165			
130+54 ~ 132+42.5	Lt.	189			
132+49 ~ 134+41.0	Lt	192			
1+67.6 (Ramp F) ~ 136+51.3	Lt	168			92-Prop 2
1+22.63 (Ramp F) ~ 137+47.3	Rt.	182			92-Prop 2
137+51.1 ~ 140+06	Rt.	255			37
140+12.4 ~ 142+51	Rt.	239			37
142+57.4 ~ 144+81	Rt.	224			37
144+87.4 ~ 147+11	Rt.	224			37
147+17.4 ~ 149+41	Rt.	224			37
149+47.4 ~ 150+96	Rt.	149			38
TOTALS ~ SEC. ARLINGTON HTS (PT)		3031			
MUNICIPAL ~ SEC. LOCKLAND (PT.)					
150+96 ~ 151+71	Rt.	75			38
151+77.4 ~ 154+01	Rt.	224			
154+07.4 ~ 156+31	Rt.	224			
156+37.4 ~ 158+61	Rt.	224			
158+67.4 ~ 160+96	Rt.	229			
161+02.4 ~ 161+30	Rt	28			
161+45 ~ 164+47.6	Rt.	303			
164+54 ~ 165+68.5	Rt.	115			38 & 39
167+27 ~ 169+27.6	Rt.	201			39
169+34 ~ 171+52.6	Rt.	219			39
171+59 ~ 173+77.6	Rt.	219			39
173+84 ~ 175+40.5	Rt.	157			39
TOTALS ~ SEC. LOCKLAND (PT.)		2218			

* NOTE:- For Details of Outlet For Pipe Underdrains, See Sheet No. 15

Note:- For Plan of Items carried from Prop. No 2 See Sheet No 80 of Prop No 2

PIPE REMOVAL & ADJUSTMENTS

Stations (Approximate)	Side	Manholes Catch Basins and Inlets Abandoned Item I-16 Ea.	Concrete for Plugging Openings Class "C" Item S-1 Cu. Yd.	Pipe Removed and Disposed of Item E-12 Lin. Ft. 8"	12"	18"	Removal of Existing Structures Item S-24 Lump	See Sheet No
MUNICIPAL ~ ARLINGTON HEIGHTS								
129+93	L&R		0.2	73				80 - Prop No 2
129+85 ~ 130+70	Lt.	1			86			
130+00	Lt.		*0.1					
135+43	Lt.	1						
135+86	Lt	1						
135+88	Rt.	1						
136+00	Rt.	1						
136+93.5	Rt.	1						
137+00	Rt.		0.1			10	Lump	
137+05	Rt.		0.1					
TOTALS-ARLINGTON H'TS.		6	0.5	73	86	10	Lump	

Total lin. ft. of Pipe removed & disposed of 169

* For plugging cellar drains as directed by Engineer.

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt)
ARLINGTON HEIGHTS "B"
LOCKLAND (Pt) AND APPROACHES

SOUNDING NOTE
Calibrated rod soundings indicate that foundation material is suitable for footings without piling.

Curve Data - S.H. 987
P.I. = 78+69.99
Δ = 16°04' Lt.
D = 1°-06'
T = 735.13'
R = 5208.71'
L = 1460.61'
E = 51.62'

PROPOSED STRUCTURE
Type: Concrete rigid frame

Spans: 42'-60'-60'-42' ℄ brgs.
Width: 7' Clear between rails
Loading: 85 lbs/sq. ft. (uniform)
Skew: None

℄ Piers Sta. 0+60.00
Face Abuts 1+01.50
Bridge Limits (207')
Sta. 1+03.50
100' V.C.
P.I. 1+70
El. 563.17
Sta. 1+03.50
Edge of Berm
Ex. Ground El. 551.0
Bench El. 558.4
El. 542.0
El. 542.0
El. 540.0
Bench El. 564.1
El. 553.0
℄ Summit Rd.
+6%
+2.16%
2:1
42' min.
Future Pavt.
2:1 (Normal)
Pvt. El. 547.09 0+44.26
Pvt. El. 542.69 0+19.64
Pvt. El. 539.96 0+05.59
Future Pavt.
Pvt. El. 538.31 0+18.64
Pvt. El. 548.92 0+49.26

PROFILE
℄ Prop. Summit Rd.
100' V.C.
-0.46%
P.I. 27+80 566.74
+80.25
℄ Ex. Conc. Walk
℄ SECTION RD.
℄ Ex. Ground
+0.67%
℄ Prop. Section Rd. Extension

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN
BRIDGE No. HA-25-91
PEDESTRIAN OVERHEAD AT SECTION ROAD
HAMILTON CO. SH 987 SEC. B
SCALE (1"=20') STA. 77+31.62

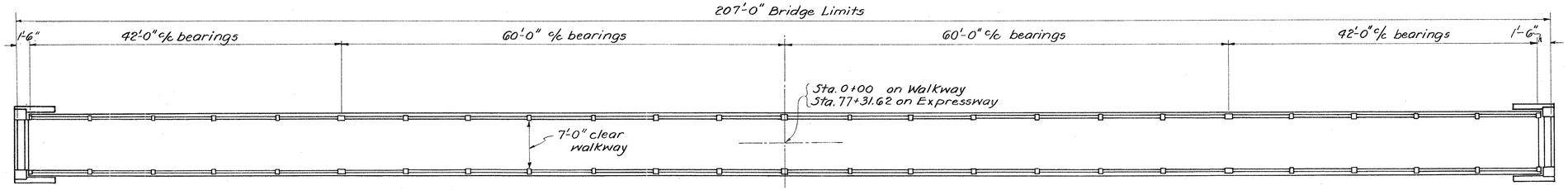
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
C.W.K.	H.N.	C.W.A.	C.W.A.	P.E.S.	[illegible]

Rev. 1-14-47 Rev. 4-25-47

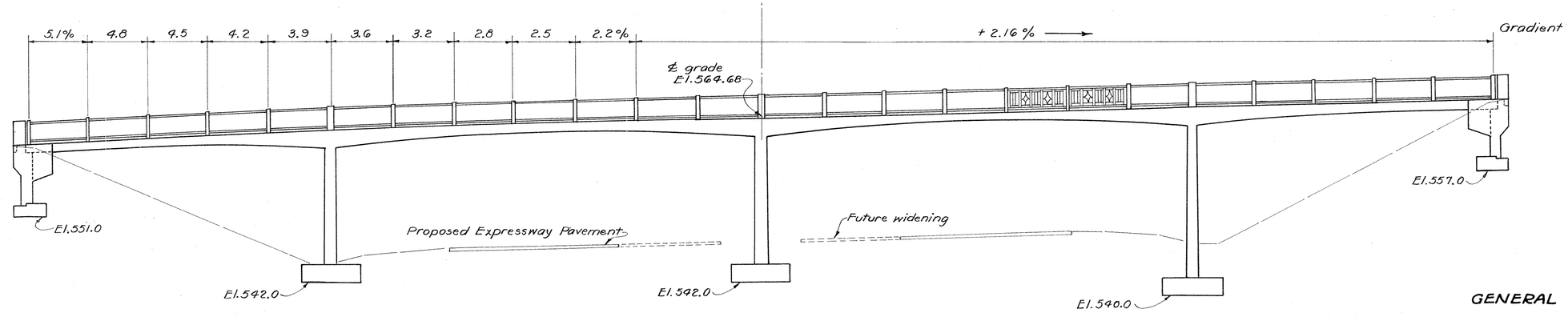
FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UGI 316(1)	1946

280
289

HAMILTON COUNTY
S.H. **987** SEC. CINCINNATI (Pt), "B", ARLINGTON HTS., LOCKLAND (Pt) AND APPROACHES



PLAN



ELEVATION

ESTIMATED QUANTITIES

AS BUILT

Item	Total	Unit	Description	W.Abut.	W.Pier	Center Pier	E.Pier	E.Abut.	Superstr.	Gen'l.	Change Order	Final Quantity
E-2	125	Cu.Yd.	Excavation for structures, unclassified	25	15	25	35	25				N
S-1	104	Cu.Yd.	Class "C" concrete, superstructure						104			O
S-1	40	Cu.Yd.	Class "C" concrete, walls	7	8	8	10	7				
S-1	30	Cu.Yd.	Class "E" concrete, footings	4	7	7	8	4				C
S-4	20330	Lb.	Reinforcing steel	619	1671	1511	1958	619	13,854	98		H
S-9	550	Lb.	Structural steel end finish						550			A
S-9	122	Lb.	1/2" cast leaded bronze bearing plates						122			N
S-9	10	Sq.Ft.	1/2" Prem. Exp. Joint filler	5				5				G
S-14	409.2	Lin.Ft.	Railing (steel)						409.2			E
												S

GENERAL NOTES

FALSEWORK plans in triplicate shall be submitted by the Contractor, not less than fifteen days prior to beginning construction of the falsework, to the Director for approval by the Bureau of Bridges. Falsework shall be supported on piling designed to carry the superimposed loads and driven in accordance with an approved pile-driving formula. Superstructure concrete shall not be placed on any one span until the falsework and forms are complete for adjacent spans. The falsework shall not be released or removed from any span until the concrete in all spans has been placed a sufficient length of time to meet all requirements for the removal of falsework as set forth in Sec. S-0.01.

SHOP PAINT for steel railing shall meet the requirements of Sections M-9.9, M-9.20, or M-9.21.

REINFORCING STEEL shall meet the requirements of Sec. M-7.1 Intermediate or Hard Grade, or M-7.2 Rail Steel.

RDH 2-8-51

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

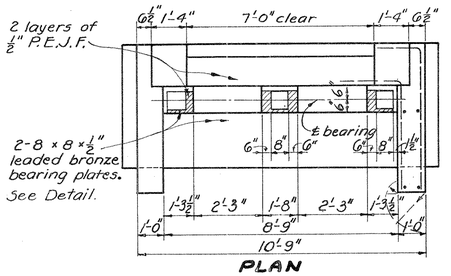
GENERAL PLAN & ELEVATION NOTES & ESTIMATED QUANTITIES
BRIDGE NO. HA-25-91
PEDESTRIAN BRIDGE OVER MILL CREEK EXPRESSWAY AT SECTION RD. (78th. ST.)
HAMILTON CO. S.H. 987
SEC. B STA. 77+31.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
[illegible]	[illegible]	KET	[illegible]	[illegible] DSHO	9-4-46	1-14-47 4-24-47

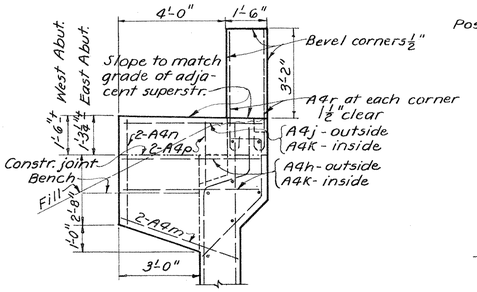
FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
7	OHIO	UI-UGI 316(1)	1946

281
289

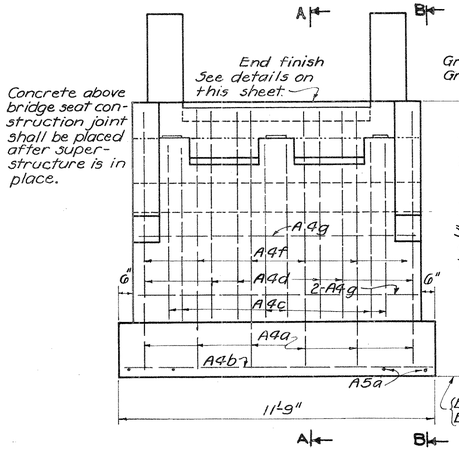
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pk), "B", ARLINGTON HTS., LOCKLAND (Pk), AND APPROACHES



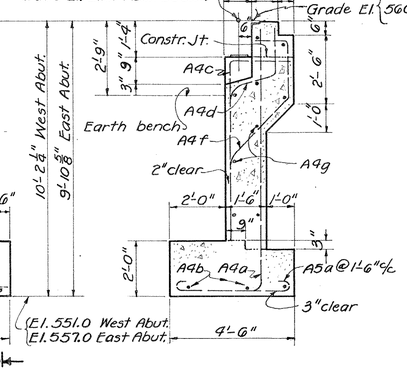
PLAN



PART ELEVATION B-B

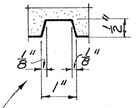


FRONT ELEVATION

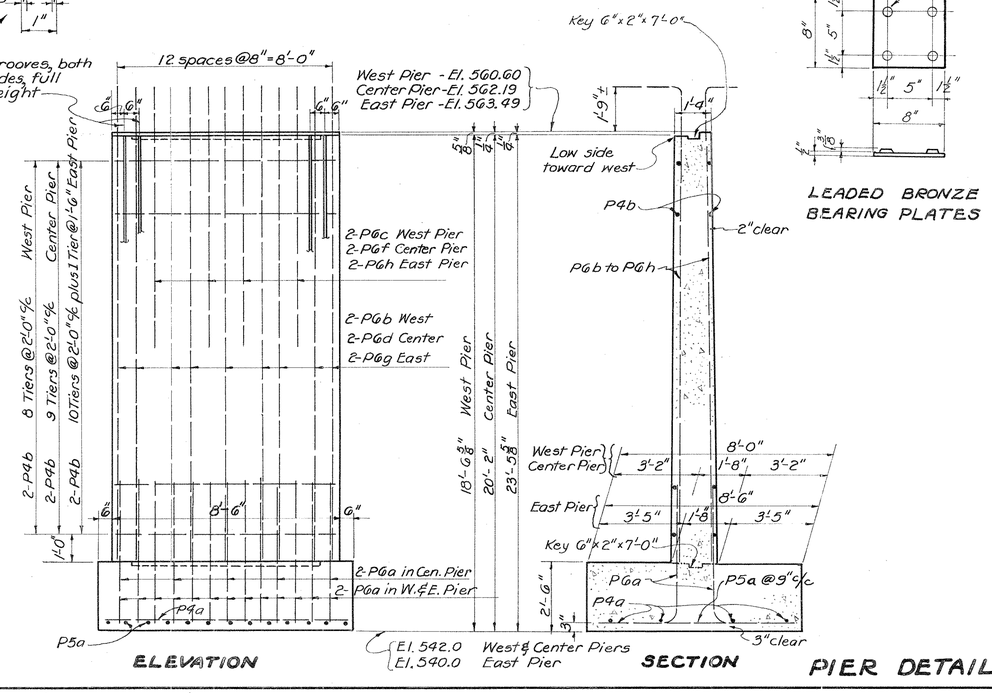


SECTION A-A

ABUTMENT DETAILS

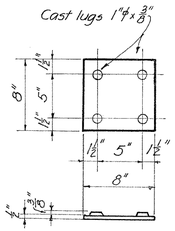


Grooves, both sides, full height



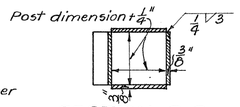
ELEVATION SECTION

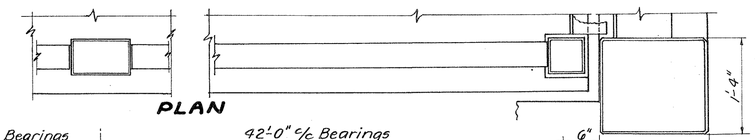
Cast lugs 1"ϕ x ⅜"

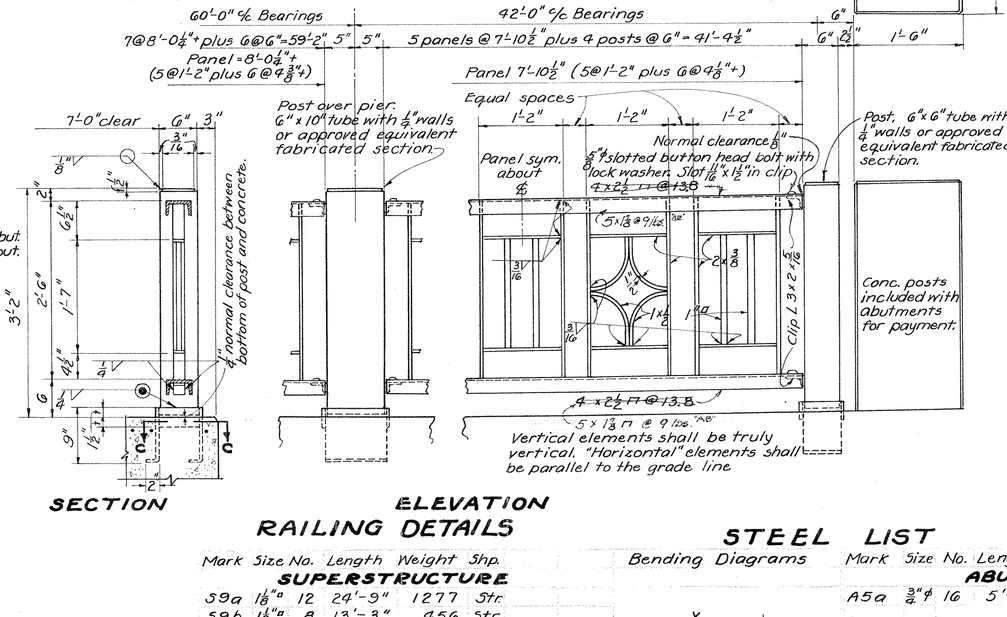


LEADED BRONZE BEARING PLATES

PIER DETAILS

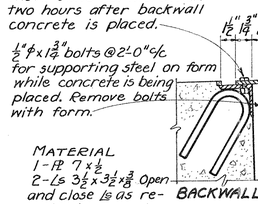






SECTION ELEVATION

RAILING DETAILS



MATERIAL
1-PL 7 x ½
2-Ls 3½ x 3½ x ⅝ Open and close Ls as required by grade.
2-½"□ bars. Weld underside to Ls with ⅛" beads 2" long at 12" ℄, and topside to Ls with ⅛" beads continuous.
¾"□ anchors at 12" ℄. Weld to both legs of Ls with ⅜ beads. The foregoing material shall be copper-bearing steel. After completion, seal end finish with bituminous joint filler.

Detail as shown is for use at West Abutment. At East Abutment the grade slopes the opposite direction.

END FINISH

STEEL LIST

SUPERSTRUCTURE

Mark	Size	No.	Length	Weight	Shp.
S9a	1⅛"□	12	24'-9"	1277	Str.
S9b	1⅛"□	8	13'-3"	456	Str.
S9c	1⅛"□	5	35'-6"	763	Str.
S9d	1⅛"□	6	24'-6"	632	Str.
S9f	1⅛"□	4	16'-0"	275	Str.
S8a	1"□	12	40'-0"	1632	Str.
S8b	1"□	10	32'-6"	1105	Str.
S8c	1"□	12	23'-8"	966	Str.

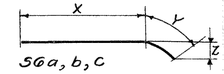
Mark	Size	No.	Length	Weight	Shp.	X	Y	Z
S6a	⅞"ϕ	12	30'-0"	734	Bt.	21'-0"	9'-0"	3"
S6b	⅞"ϕ	10	27'-9"	566	Bt.	20'-9"	7'-0"	2"
S6c	⅞"ϕ	12	25'-0"	612	Bt.	21'-0"	4'-0"	½"
S6d	⅞"ϕ	12	34'-6"	845	Bt.			5"
S6f	⅞"ϕ	10	30'-0"	612	Bt.			4"
S6g	⅞"ϕ	12	24'-3"	594	Bt.			22½"
S6h	⅞"ϕ	8	17'-0"	277	Bt.			1"

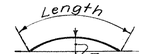
Mark	Size	No.	Length	Weight	Shp.	A
S5a	¾"ϕ	8	15'-0"	180	Str.	
S5b	¾"ϕ	4	9'-10"	60	Bt.	11"
S4a	⅝"ϕ	12	29'-3"	303	Str.	
S4b	⅝"ϕ	12	22'-0"	275	Str.	
S4c	⅝"ϕ	18	30'-0"	561	Bt.	
S1a	⅜"ϕ	184	9'-11"	694	Bt.	11"
S1b	⅜"ϕ	52	10'-5"	206	Bt.	1'-2"
S1c	⅜"ϕ	52	11'-5"	226	Bt.	1'-8"

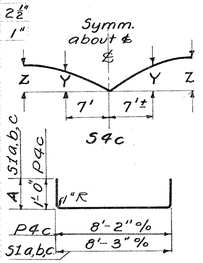
PIERS

Mark	Size	No.	Length	Weight	Shp.	X	Y
P6a	⅞"ϕ	62	8'-0"	1012	Bt.	3'-0"	5'-3"
P6b	⅞"ϕ	18	18'-9"	689	Bt.	1'-3"	17'-9"
P6c	⅞"ϕ	8	12'-9"	208	Bt.	1'-3"	11'-9"
P6d	⅞"ϕ	18	20'-6"	753	Bt.	1'-3"	19'-6"
P6f	⅞"ϕ	8	18'-9"	224	Bt.	1'-3"	12'-9"
P6g	⅞"ϕ	18	23'-9"	872	Bt.	1'-3"	22'-9"
P6h	⅞"ϕ	8	15'-3"	249	Bt.	1'-3"	14'-3"
P5a	¾"ϕ	39	7'-6"	439	Str.		
P4a	⅝"ϕ	12	9'-0"	112	Str.		
P4b	⅝"ϕ	56	10'-0"	582	Bt.		

Bending Diagrams







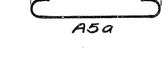
ABUTMENTS

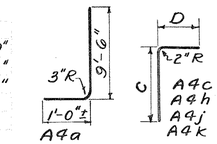
Mark	Size	No.	Length	Weight	Shp.	C	D
A5a	¾"ϕ	16	5'-6"	132	Bt.		
A4a	⅝"ϕ	12	10'-3"	129	Bt.		
A4b	⅝"ϕ	6	11'-3"	70	Str.		
A4c	⅝"ϕ	12	8'-5"	107	Bt.	6'-9"	2'-2"
A4d	⅝"ϕ	12	8'-10"	110	Bt.		
A4f	⅝"ϕ	12	9'-0"	113	Bt.		
A4g	⅝"ϕ	18	10'-3"	191	Str.		
A4h	⅝"ϕ	8	8'-1"	67	Bt.	5'-2"	3'-0"
A4j	⅝"ϕ	4	6'-7"	28	Bt.	5'-2"	1'-6"
A4k	⅝"ϕ	12	6'-11"	86	Bt.	4'-0"	3'-0"
A4m	⅝"ϕ	8	4'-3"	35	Str.		
A4n	⅝"ϕ	8	3'-9"	31	Str.		
A4p	⅝"ϕ	8	7'-0"	58	Str.		
A4r	⅝"ϕ	16	9'-10"	81	Bt.		

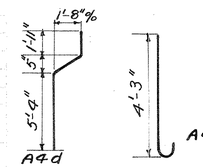
REPLACEMENT BARS

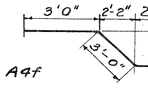
Re 9	1⅛"□	1	8'-6"	37	Str.
Re 8	1"□	1	8'-0"	27	Str.
Re 6	⅞"ϕ	1	7'-6"	15	Str.
Re 5	¾"ϕ	1	7'-0"	10	Str.
Re 4	⅝"ϕ	1	6'-6"	7	Str.
Re 1	⅜"ϕ	1	5'-6"	2	Str.

Bending Diagrams









STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SUBSTRUCTURE, STEEL LIST, MISCELLANEOUS DETAILS
BRIDGE NO. HA-25-91
PEDESTRIAN BRIDGE OVER MILL CREEK EXPRESSWAY AT SECTION ROAD (78th ST.)
HAMILTON CO. S.H. 987
SEC. B STA. 77+31.62

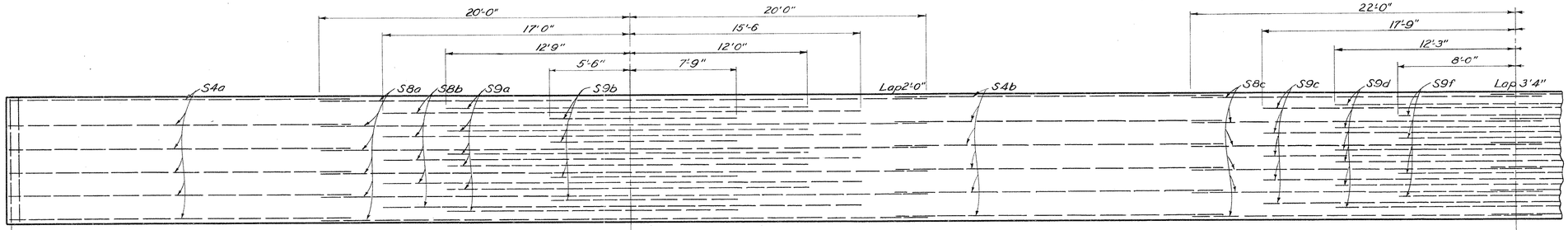
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GHP	CMB	RET	GHP	GHP	9-4-46	1-14-47

RH 2-8-51

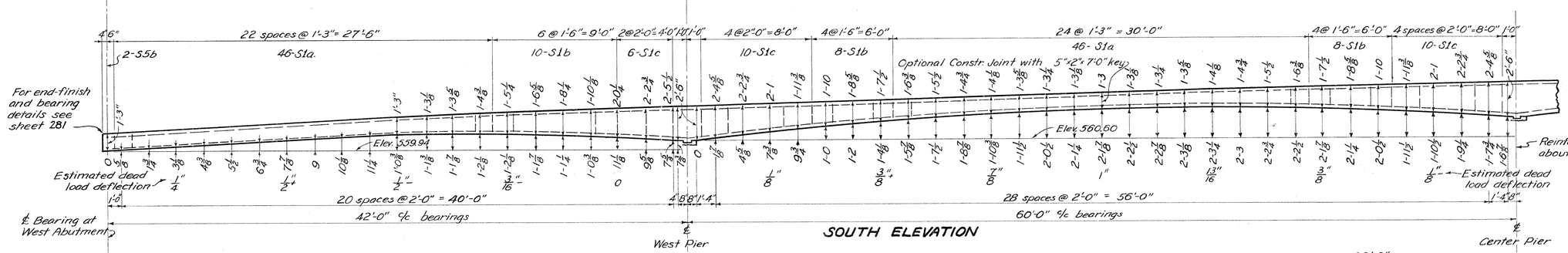
FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UGI 316(1)	1946

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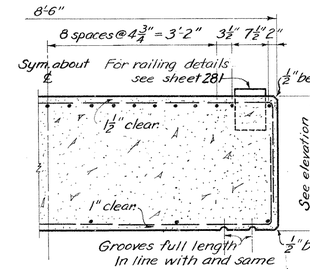
HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (Pt), "B", ARLINGTON HTS., LOCKLAND (Pt), AND APPROACHES



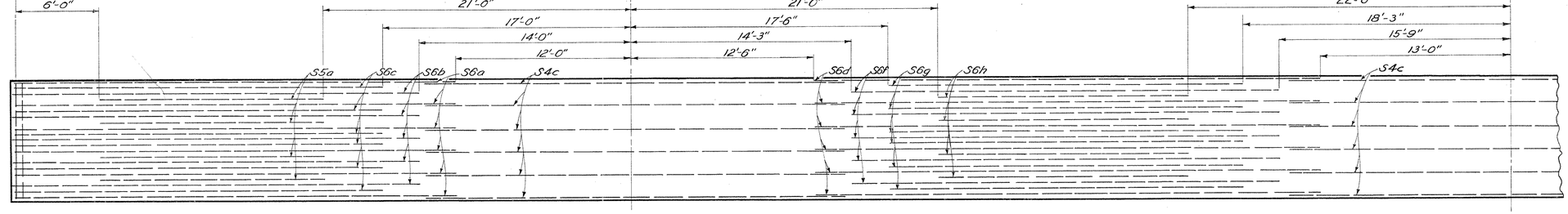
REINFORCING IN TOP OF SLAB



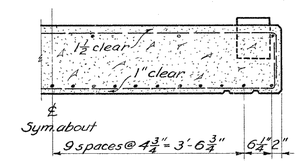
SOUTH ELEVATION



HALF SECTION AT PIERS

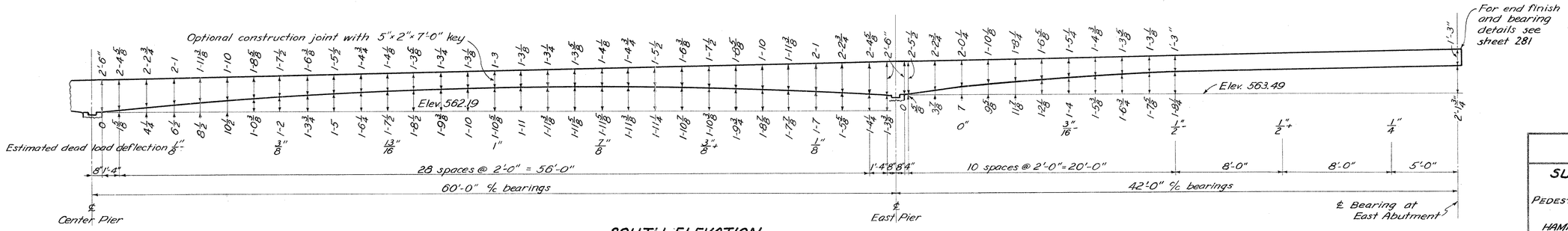


REINFORCING IN BOTTOM OF SLAB



HALF SECTION AT MID-SPAN
For details not shown see Half Section at Piers.

Provide ¼" crown on each side of ℄ walkway.



SOUTH ELEVATION

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS
BRIDGE NO. HA-25-91

PEDESTRIAN BRIDGE OVER MILL CREEK EXPRESSWAY AT SECTION RD. (78TH ST)

HAMILTON CO. S.H. 987
SEC. B STA 77+31.62

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
					9-4-46	

PR-80-64

FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UGI-316(1)	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (pt.)
ARLINGTON HEIGHTS, "B",
LOCKLAND (pt.), AND APPROACHES
At N. Corporation Line of Cincinnati

PROPOSED STRUCTURE

TYPE - Continuous steel beam with conc. deck and substructure.
SPAN - 60'-75'-60' c. bearings.
ROADWAY - 91' with two 1'-9" safety curbs.

LOADING - S-20-44
SKEW - 30° R.F.
WEAR. SURF. - 3/4" Monolithic Conc.
APPR. SLABS - 15' long, AS-44-S type II. AS-44-F, types IV & V.
ALIGNMENT - Tangent

CURVE DATA

P.I. = 78+69.99
Δ = 16°-04'
D = 1°-06'
R = 5208.71
T = 735.13
L = 1460.61
E = 51.62
P.C. = 71+34.86
P.T. = 85+95.47

Bench Mark — Elev. 539.59
□ Cut in Corner of South Wing Wall
Sta. 86+69 — 7' Lt.

EXISTING BRIDGE

Abandoned aqueduct on Miami & Erie Canal. Substructure only. Stone abutments. Steel encased cylindrical concrete piers.
~ To be removed ~

The estimated average piling lengths shown on these plans and used as a basis for the approximate estimate have been chosen as the result of a few test soundings. This foundation investigation report is available to bidders, but the contractor shall assume responsibility for lengths of piling selected for driving.

Drainage Area = 121 Sq. Miles

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN
BRIDGE No. HA-25-93
OVER MILL CREEK
HAMILTON CO.

Sec. - B — S.H. 987
SCALE (1"=20') — STA. 87+72.00

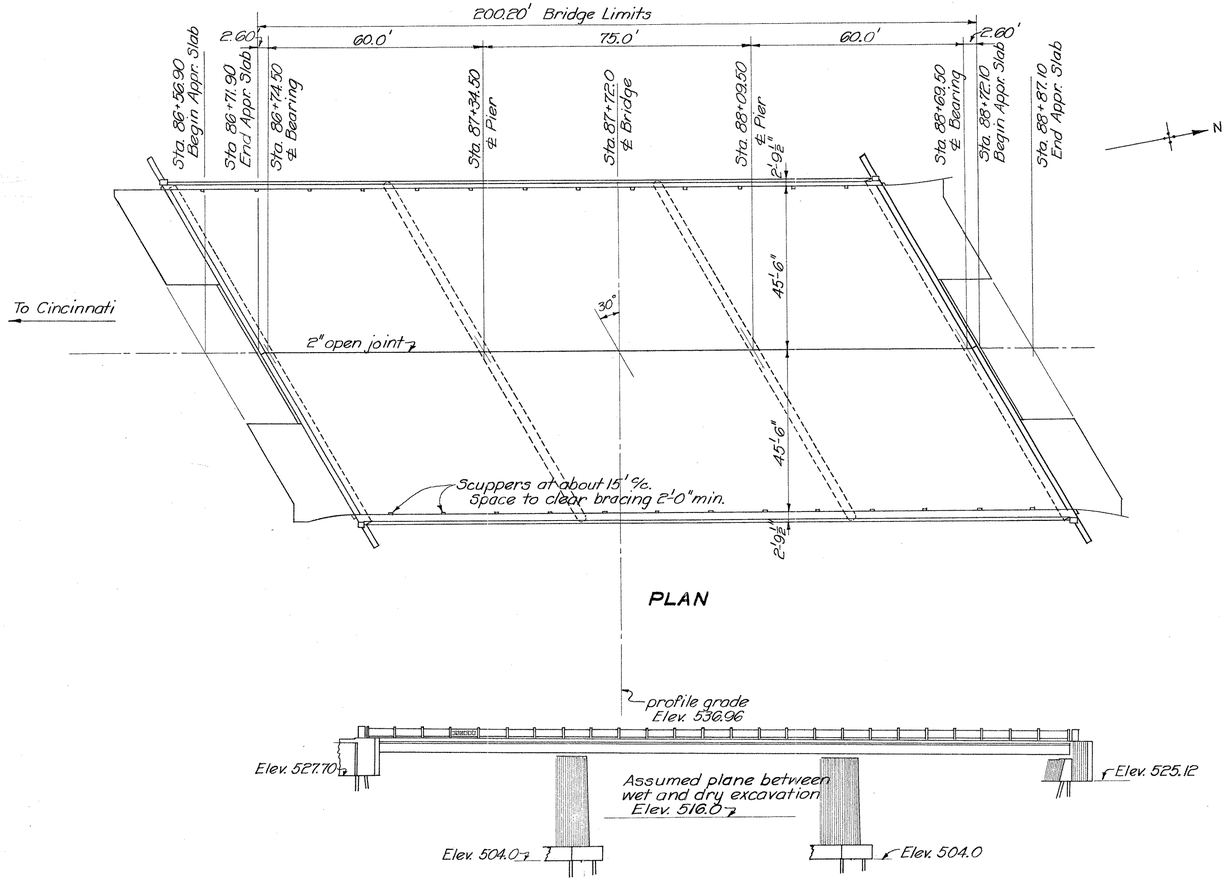
PRESENT TOPOGRAPHY		PROPOSED WORK				
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED	
					D.H.G.	7-6-46

Rev. 9-12-46

FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UGI 316(1)	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PT), "B", ARLINGTON HTS., LOCKLAND (PT), AND APPROACHES.



ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SOUTH ABUT.	SOUTH PIER	NORTH ABUT.	NORTH PIER	SUPERST.	GEN.	AS BUILT Change Order	AS BUILT Final Quantity
E-2	Lump Sum	—	Cofferdams and Pumping						Lump		Lump Sum
E-2	398	Cu. yd.	Excavation for structure, dry	120		120			★158	#6, +55	453
E-2	1037	Cu. yd.	Excavation for structure, wet		450		450		★137	#6, -12	1025
S-1	453	Cu. yd.	Class "C" Concrete, superstructure					453			453
S-1	298	Cu. yd.	Class "E" Concrete, abutments	148		150					298
S-1	540	Cu. yd.	Class "E" Concrete, pier walls		275		264				540
S-1	330	Cu. yd.	Class "E" Concrete, pier footings		165		165			#6, +4.5	334.5
S-4	163,990	lbs.	Reinforcing Steel	6055	9362	6085	9248	133,163	77	#11, -2000	161,990
S-7	631,000	lbs.	Structural Steel					631,000			631,000
S-8	631,000	lbs.	Field painting of structural steel					631,000			631,000
S-9	68	Sq. ft.	1" Premolded expansion joint filler	34		34					68
S-14	392.5	Lin. ft.	Railing (steel)					392.5			392.5
S-16	Lump Sum	—	First test pile, concrete								Lump Sum
S-18	5200	Lin. ft.	Reinforced concrete piling (12")	700	1900	700	1900				
			(cast in place)							#11, -179.59	3401.41
S-24	Lump Sum	—	Removal of existing structure								
E-3	9782	Cu yd	Channel Excavation						9782	#11, -489	9293
I-10	297	Cu. yd.	Rockfill Toe Protection						297	#6, -48	249
I-10	514	Sq. yd.	Type "A" Stone Riprap						514	#6, +274	788
I-14	251	Lin. ft.	Type "C" Paved Gutter						251		251

★ These quantities are excavation for Riprap and Rockfill.

GENERAL NOTES

REFERENCE shall be made to Standard Drawing CSB-1-46, sheet 2 (9-4-46)

TEMPORARY RUN-AROUND BRIDGE is not required. Traffic will be carried by other roads.

EXISTING SUBSTRUCTURE shall be removed to one foot below proposed ground lines. Suitable material may be used as rip-rap and rockfill where shown on the plans. Cutting of steel sheet piling 3" below proposed slopes shall be included with removal of existing structure for payment.

EXCAVATION quantity includes the removal of the material between top of earth bench and bottom of abutment.

PILING shall be driven to a minimum bearing capacity of 35 tons

PAVED GUTTER:- See Sheet No. 165

WELDING shall be Class "A."

SHOP PAINT for structural steel and steel railings shall meet the requirements of Sections M-9.9, M-9.20 or M-9.21.

REINFORCING STEEL shall meet the requirements of Sec. M-7.1 intermediate or hard grade, or Sec. M-7.2 rail steel.

RDK 2-8-51

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

GENERAL PLAN AND ELEVATION NOTES AND ESTIMATED QUANTITIES

BRIDGE NO. HA-25-93
OVER MILL CREEK

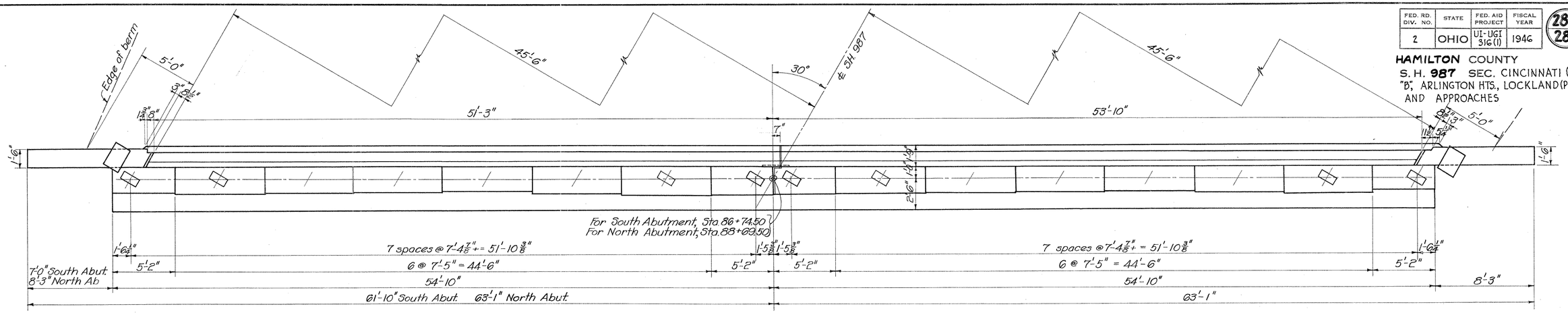
HAMILTON CO. SEC. B — S.H. 987 STA. 87+72.0

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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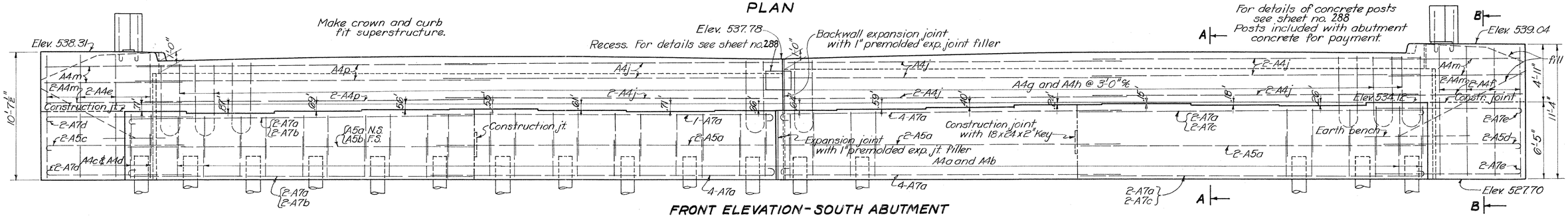
FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UGI 316(1)	1946

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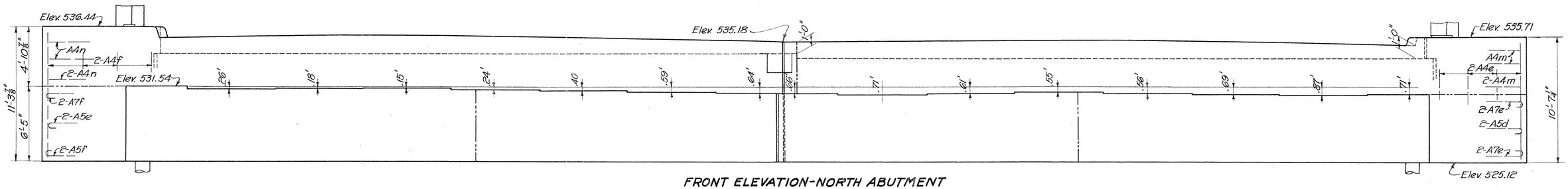
HAMILTON COUNTY
S. H. **987** SEC. CINCINNATI (PH), "B", ARLINGTON HTS., LOCKLAND (PH), AND APPROACHES



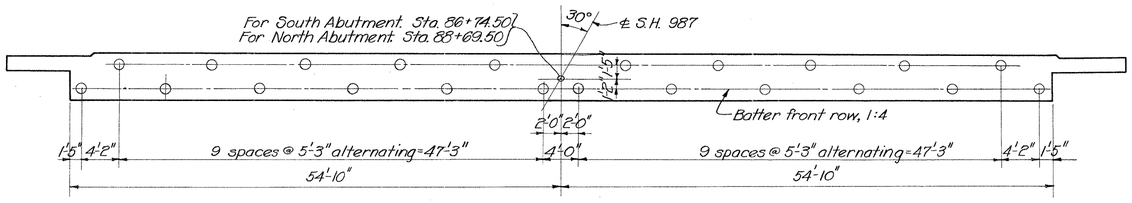
PLAN



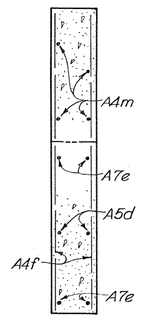
FRONT ELEVATION - SOUTH ABUTMENT



FRONT ELEVATION - NORTH ABUTMENT
For details not shown see South Abutment

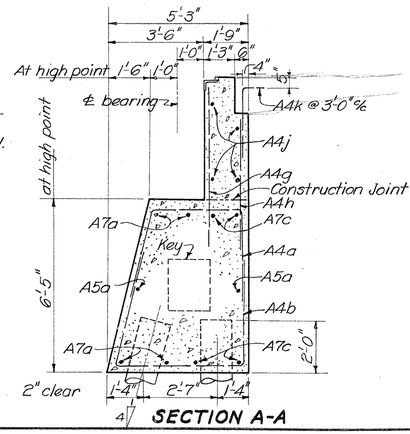


ABUTMENT PILING PLAN



SECTION B-B

Provide ½" wash on bridge seat except at bearings which shall be level.



SECTION A-A

Earth fill or cut around abutments shall be made to finished bench elevation. Excavation shall then be made for abutment cap, after which piling shall be driven. If bottom forms for abutment cap are used, they shall be left in place.

Minimum clearance between reinforcing and surface 2" Concrete above bridge seat construction joint shall be placed after concrete deck is placed.

Contractor shall exercise care to have a firm bearing between upper and lower elements of the end finish while concrete is being placed and to completely fill the space under the end finish angle with concrete.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

ABUTMENT DETAILS
BRIDGE NO. HA-25-93
OVER MILL CREEK

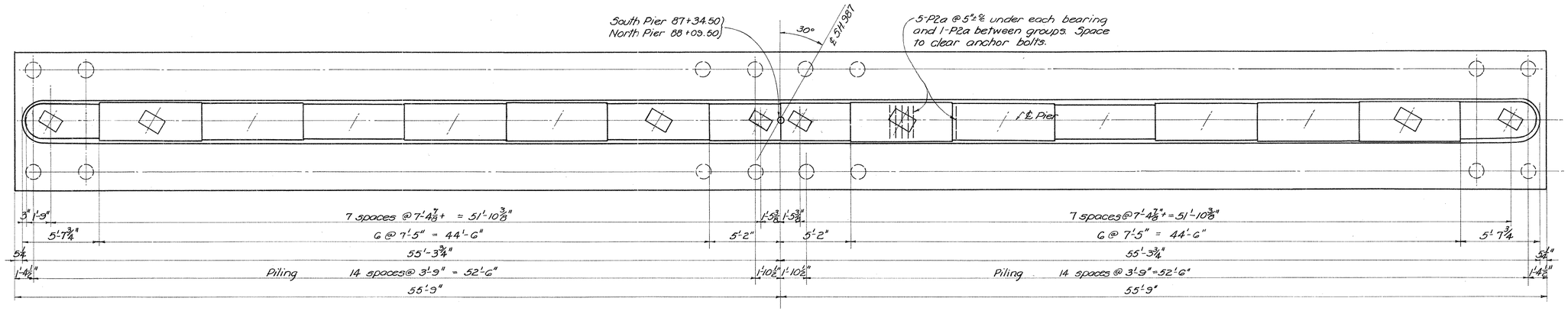
HAMILTON CO. SEC. B — S.H. 987 STA. 87+72.0

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FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UG1 316(1)	1946

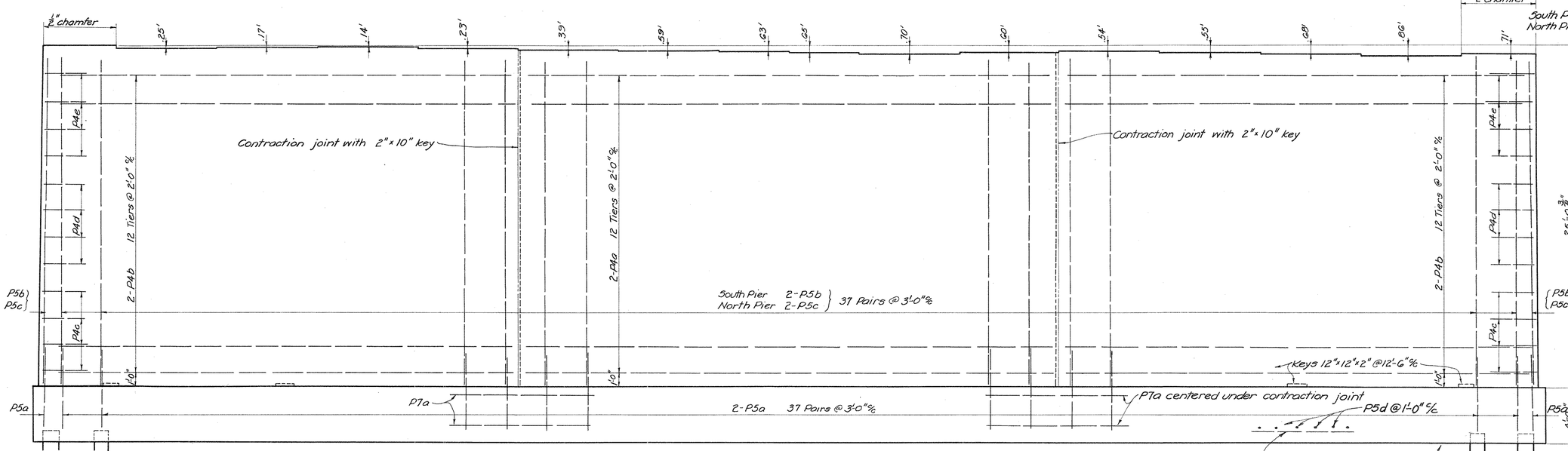
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HAMILTON COUNTY
S. H. 987 SEC. CINCINNATI (PI), "B," ARLINGTON HTS., LOCKLAND (PI), AND APPROACHES



PLAN

Provide ¼" wash from ℄ pier to edge, except at bearings which shall be level.



SOUTH ELEVATION

SECTION

Reinforcing bars shall clear surface of concrete 2" minimum.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

PIER DETAILS

BRIDGE No. HA-25-93 over MILL CREEK

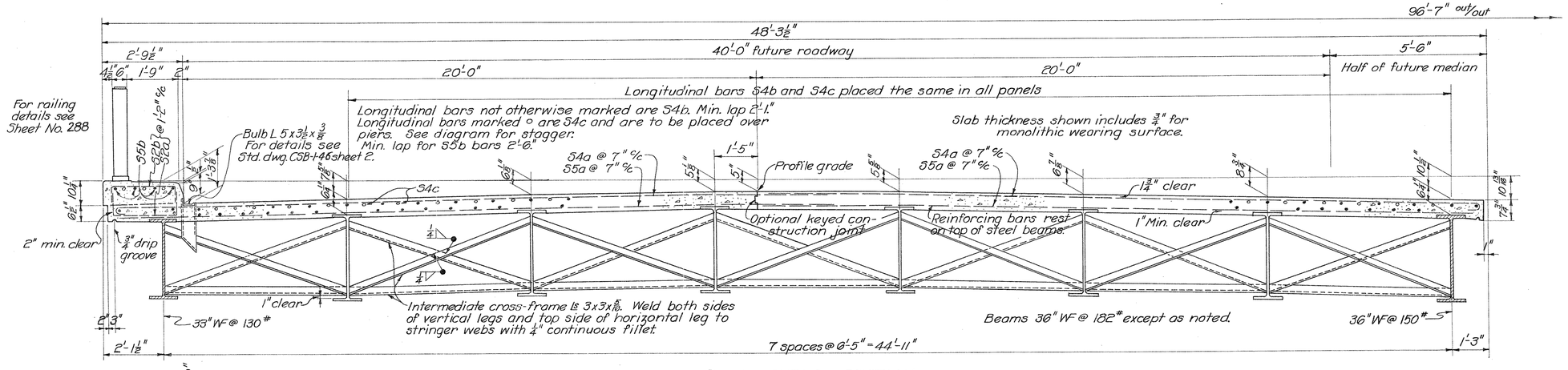
HAMILTON CO. SH 987
SEC. B STA. 87+72.0

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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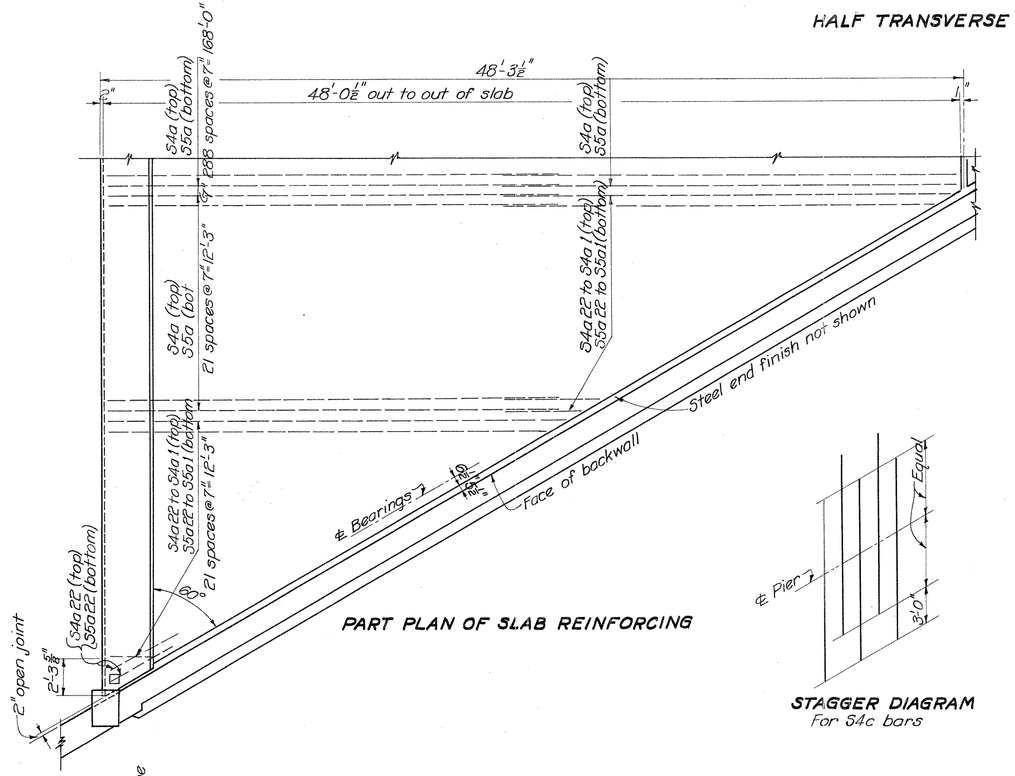
FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UGI 316(1)	1946

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HAMILTON COUNTY
S.H. 987 SEC. CINCINNATI (PI), "B", ARLINGTON HTS., LOCKLAND (PI), AND APPROACHES

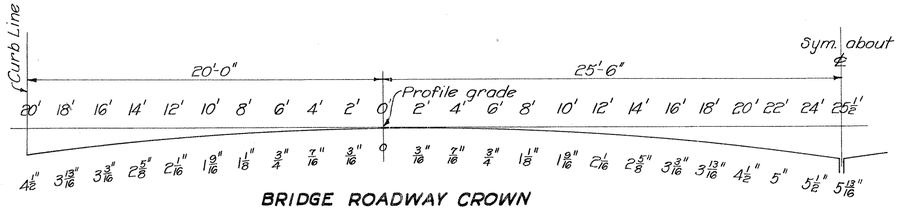


HALF TRANSVERSE SECTION

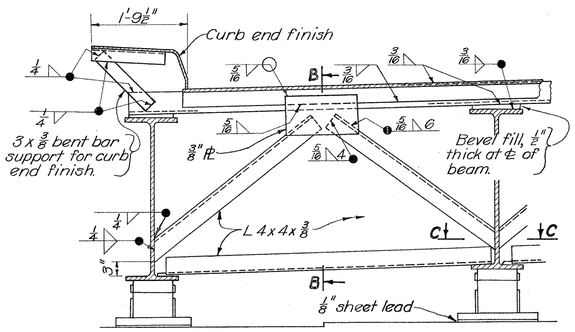


PART PLAN OF SLAB REINFORCING

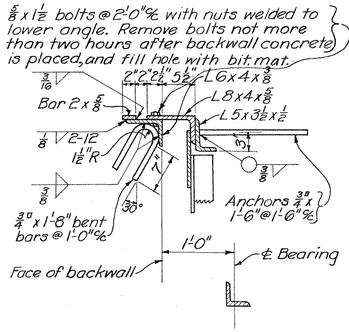
STAGGER DIAGRAM
For S4c bars



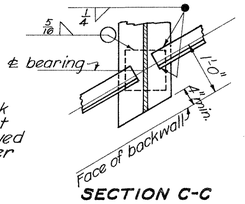
BRIDGE ROADWAY CROWN



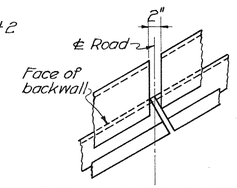
END CROSS FRAMES AND END FINISH
For End Finish details not shown see Std. Dwg. CSB-1-46 Sheet 2.



SECTION B-B

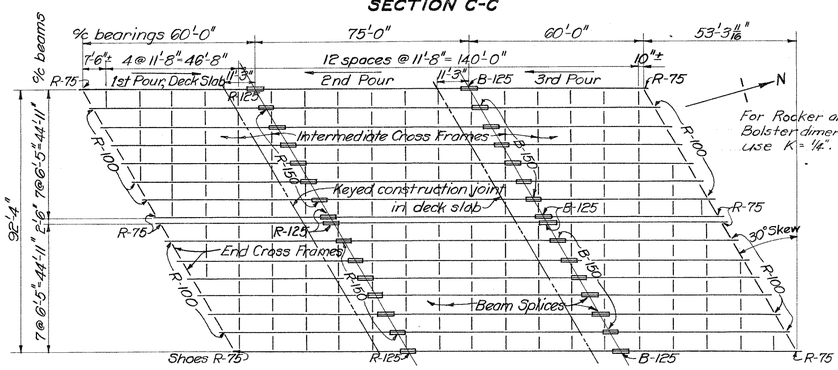


SECTION C-C

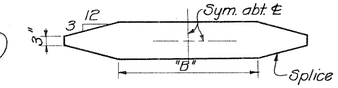


BREAK IN END FINISH AT ℄ OF ABUTMENTS

If it is desired to start placing the deck slab concrete at the end opposite to that shown below then the location of the keyed construction joints and the entire order of placing shall be reversed.



STRUCTURAL PLAN



Beam	Top Splice Plate		Bottom Splice Plate	
	Size	"B"	Size	"B"
36 WF 182	11 x 15/16 x 13'-6"	10'-10"	13 x 7/16 x 13'-2"	9'-10"
36 WF 150	11 x ⅜ x 8'-6"	5'-10"	13 x ⅜ x 9'-0"	5'-8"
33 WF 130	10 x ⅝ x 14'-7"	12'-3"	13 x ½ x 14'-9"	11'-5"

BEAM SPLICES

DEFLECTION AND CAMBER			
	Deflection		Required Shop Camber
	Due to Structur. Steel	Due to Remaining Dead load	
Curb Beam, End Span	1/8"	5/16"	3/8"
Middle Span	1/8"	3/16"	5/16"
Inside Beam, End Span	1/16"	5/16"	1/2"
Middle Span	1/16"	3/16"	1/2"
Median Beam, End Span	1/16"	1/4"	1/2"
Middle Span	1/16"	5/16"	1/2"

BEAM SPLICE PROCEDURE

1. Raise the ends of beams at first abutment above their normal positions, the following amounts: curb beam 1⅛", inside beams 1½", median beam 1⅜".
2. At first pier, weld bottom flange splice plate to beam on middle span side of joint only. (This may be a shop operation if desired.)
3. Make the butt weld in beam flanges and webs at first pier.
4. Weld top flange splice plate at first pier; both sides of joint.
5. Complete the welding of bottom flange plate at first pier.
6. Repeat steps 1 to 5 inclusive at second abutment and pier.
7. Lower ends of beams at both abutments.

For details of gutters, scuppers and shoes see Standard Drawing CSB-1-46, Sheet 2.

End finish, gutters and scuppers shall be copper bearing steel.

For additional notes see GENERAL PLAN.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS

BRIDGE NO. HA-25-93
OVER MILL CREEK

HAMILTON CO. **S.H. 987**
SEC. B **STA. 87+72.0**

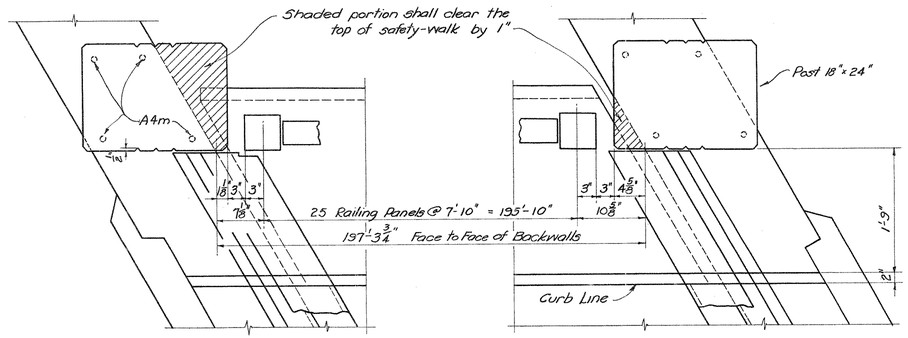
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C.A.F.	D	N.E.	C.A.F.	R.P.J.	7-8-46	

Rec'd 2-8-51

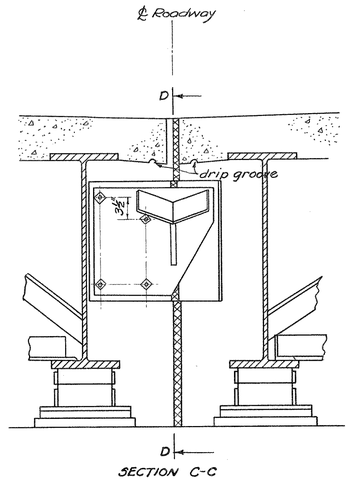
FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UGI 316(1)	1946

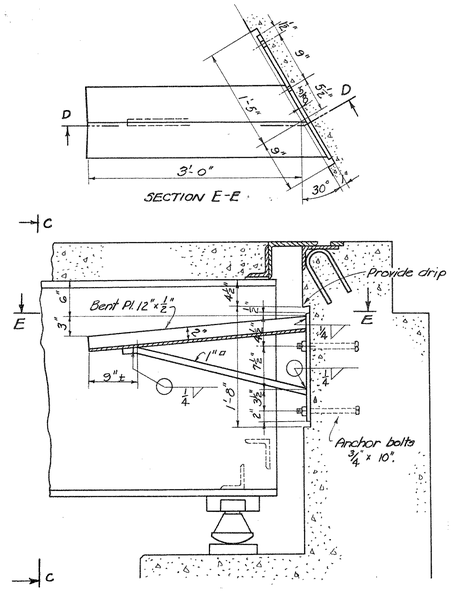
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HAMILTON COUNTY
S. H. 987 SEC. CINCINNATI (Pt), "B", ARLINGTON HTS., LOCKLAND (Pt), AND APPROACHES

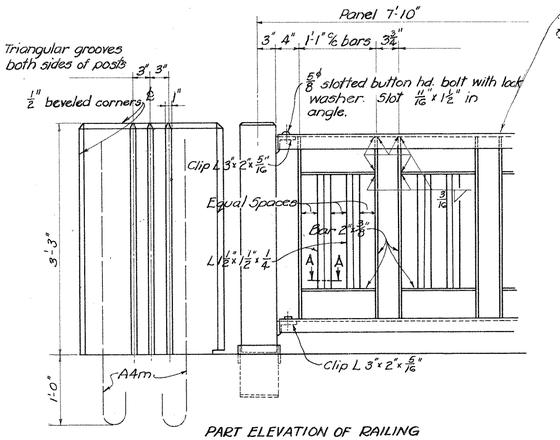


PLAN OF RAILING AT ABUTMENTS

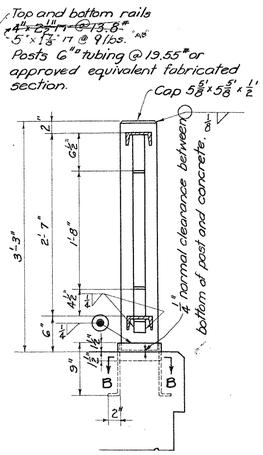




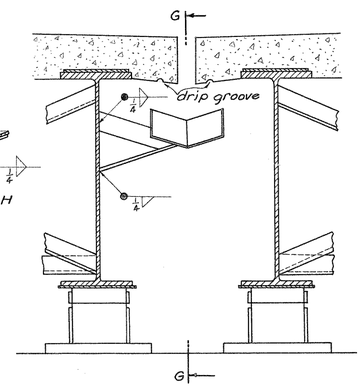
DRAINAGE DETAIL under OPEN JOINT in SLAB at ABUTMENTS
Include with Structural Steel for payment

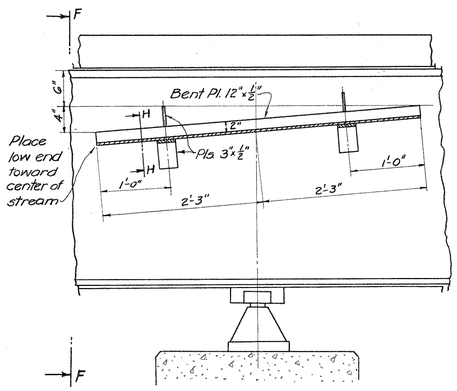


PART ELEVATION OF RAILING



TYPICAL SECTION





DRAINAGE DETAIL under OPEN JOINT IN SLAB AT PIERS.
Include with Structural Steel for payment

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS

BRIDGE No. HA-25-93 OVER MILL CREEK

HAMILTON Co. SH 987
SEC. B STA. 87+72

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.A.B.	E	B.M.	[illegible]	J.P.L. [illegible]	7-8-46	

RBM 2-8-51

FED. RD. DIV. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
2	OHIO	UI-UGI 316(1)	1946

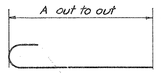
HAMILTON COUNTY
S.H. 287 SEC. CINCI
"B", ARLINGTON HTS., LOCK
AND APPROACHES

Mark	Size	No.	Length	Weight	Ship
SUPERSTRUCTURE					
S5a	3/4" ϕ	1244	25'-3"	47,118	S
S5a1	3/4" ϕ	8	24'-7"	295	S
S5a2	3/4" ϕ	8	23'-7"	283	S
S5a3	3/4" ϕ	8	22'-7"	270	S
S5a4	3/4" ϕ	8	21'-7"	259	S
S5a5	3/4" ϕ	8	20'-7"	247	S
S5a6	3/4" ϕ	8	19'-6"	234	S
S5a7	3/4" ϕ	8	18'-6"	222	S
S5a8	3/4" ϕ	8	17'-6"	210	S
S5a9	3/4" ϕ	8	16'-6"	198	S
S5a10	3/4" ϕ	8	15'-6"	186	S
S5a11	3/4" ϕ	8	14'-6"	174	S
S5a12	3/4" ϕ	8	13'-6"	162	S
S5a13	3/4" ϕ	8	12'-6"	150	S
S5a14	3/4" ϕ	8	11'-5"	137	S
S5a15	3/4" ϕ	8	10'-5"	125	S
S5a16	3/4" ϕ	8	9'-5"	113	S
S5a17	3/4" ϕ	8	8'-5"	101	S
S5a18	3/4" ϕ	8	7'-5"	89	S
S5a19	3/4" ϕ	8	6'-5"	77	S
S5a20	3/4" ϕ	8	5'-5"	65	S
S5a21	3/4" ϕ	8	4'-5"	53	S
S5a22	3/4" ϕ	16	3'-5"	82	S
S5b	3/4" ϕ	56	30'-0"	2520	S

Bending Diagrams

Mark	Size	No.	Length	Weight	Ship	A
SUPERSTRUCTURE						
S4a	5/8" ϕ	1244	25'-10"	33418	B	25'3"
S4a1	5/8" ϕ	8	25'-2"	209	B	24'7"
S4a2	5/8" ϕ	8	24'-2"	201	B	23'7"
S4a3	5/8" ϕ	8	23'-2"	192	B	22'7"
S4a4	5/8" ϕ	8	22'-2"	184	B	21'7"
S4a5	5/8" ϕ	8	21'-2"	175	B	20'7"
S4a6	5/8" ϕ	8	20'-1"	167	B	19'6"
S4a7	5/8" ϕ	8	19'-1"	159	B	18'6"
S4a8	5/8" ϕ	8	18'-1"	150	B	17'6"
S4a9	5/8" ϕ	8	17'-1"	142	B	16'6"
S4a10	5/8" ϕ	8	16'-1"	134	B	15'6"
S4a11	5/8" ϕ	8	15'-1"	126	B	14'6"
S4a12	5/8" ϕ	8	14'-1"	117	B	13'6"
S4a13	5/8" ϕ	8	13'-1"	108	B	12'6"
S4a14	5/8" ϕ	8	12'-0"	100	B	11'5"
S4a15	5/8" ϕ	8	11'-0"	92	B	10'5"
S4a16	5/8" ϕ	8	10'-0"	83	B	9'5"
S4a17	5/8" ϕ	8	9'-0"	75	B	8'5"
S4a18	5/8" ϕ	8	8'-0"	67	B	7'5"
S4a19	5/8" ϕ	8	7'-0"	58	B	6'5"
S4a20	5/8" ϕ	8	6'-0"	50	B	5'5"
S4a21	5/8" ϕ	8	5'-0"	42	B	4'5"
S4a22	5/8" ϕ	16	4'-0"	67	B	3'5"
S4b	5/8" ϕ	1134	30'-0"	35381	S	
S4c	5/8" ϕ	148	30'-0"	4618	S	
S2a	1/2" ϕ	334	4'-3"	951	B	
S2b	1/2" ϕ	334	3'-3"	727	B	

Bending Diagrams

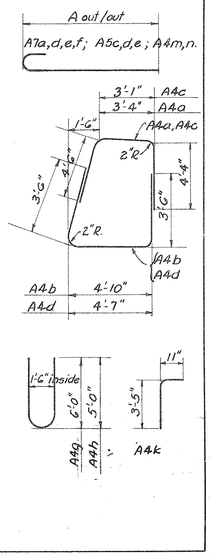


S4a, S4a1 to S4a22



Mark	Size	No.	Length	Weight	Ship	A
ABUTMENTS						
A7a	1" ϕ	48	30'-0"	3645	B	28'11"
A7b	1" ϕ	8	27'-0"	577	S	
A7c	1" ϕ	8	29'-0"	619	S	
A7d	1" ϕ	4	13'-8"	146	B	12'9"
A7e	1" ϕ	8	11'-9"	251	B	10'10"
A7f	1" ϕ	4	14'-11"	159	B	14'0"
A5a	3/4" ϕ	14	28'-9"	604	S	
A5b	3/4" ϕ	2	26'-8"	80	S	
A5c	3/4" ϕ	2	10'-3"	31	B	9'7"
A5d	3/4" ϕ	4	10'-8"	64	B	10'0"
A5e	3/4" ϕ	2	11'-6"	35	B	10'10"
A4a	5/8" ϕ	84	12'-0"	1048	B	
A4b	5/8" ϕ	84	11'-8"	1019	B	
A4c	5/8" ϕ	4	11'-8"	49	B	
A4d	5/8" ϕ	4	11'-5"	48	B	
A4e	5/8" ϕ	16	10'-3"	170	S	
A4f	5/8" ϕ	16	11'-0"	183	S	
A4g	5/8" ϕ	72	12'-10"	961	B	
A4h	5/8" ϕ	72	10'-10"	811	B	
A4j	5/8" ϕ	24	28'-3"	707	S	
A4k	5/8" ϕ	74	4'-3"	327	B	
A4m	5/8" ϕ	12	10'-4"	130	B	9'-9"
A4n	5/8" ϕ	4	13'-7"	57	B	13'0"
A4p	5/8" ϕ	8	26'-3"	219	S	

Bending Diagrams



Mark	Size	No.	Length	Weight	Ship
PIERS					
P7a	1" ϕ	48	10'-0"	1282	S
P5a	3/4" ϕ	152	7'-0"	1597	B
P5b	3/4" ϕ	76	24'-0"	2736	S
P5c	3/4" ϕ	76	23'-0"	2623	S
P5d	3/4" ϕ	222	10'-9"	3580	B
P4a	5/8" ϕ	48	39'-6"	1972	S
P4b	5/8" ϕ	96	33'-9"	3370	S
P4c	5/8" ϕ	16	8'-3"	137	B
P4d	5/8" ϕ	16	8'-3"	137	B
P4e	5/8" ϕ	16	8'-0"	133	B
P4f	5/8" ϕ	16	30'-0"	500	S
P2a	1/2" ϕ	130	4'-3"	541	B
REPLACEMENT BARS					
R7	1" ϕ	1	8'-0"	21	S
R5	3/4" ϕ	3	7'-0"	32	S
R4	5/8" ϕ	3	6'-6"	20	S
R2	1/2" ϕ	1	6'-0"	4	S

Bending Diagrams

