

MICROFILMED

JUN 5 1986

MICROFILMED

MAY 1 1986

I-271-6(13)221

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13)221

1
259

MEDINA COUNTY
MED-271-0.00

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
MED-271-0.00
MEDINA COUNTY
MEDINA AND GRANGER TOWNSHIPS

LIMITED ACCESS

THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02, REVISED CODE OF OHIO, AND IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC.

1965 SPECIFICATIONS

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 NECESSARY 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 PROVISION FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THESE PLANS AND ESTIMATES.

APPROVED: [Signature]
DATE 6-3-65 DIVISION DEPUTY DIRECTOR

APPROVED: [Signature]
DATE 8-26-65 ENGINEER OF BRIDGES

APPROVED: [Signature]
DATE 8-26-65 ENGINEER OF LOCATION & DESIGN

APPROVED: [Signature]
DATE 8-26-65 DEPUTY DIRECTOR, DESIGN & CONSTRUCTION

APPROVED: [Signature]
DATE 8-30-65 DEPUTY DIRECTOR, RIGHT OF WAY

APPROVED: [Signature]
DATE 8-30-65 DEPUTY DIRECTOR, PLANNING & PROGRAMMING

APPROVED: _____
DATE _____ FIRST ASSISTANT DIRECTOR

APPROVED: [Signature]
DATE 8-30-65 DIRECTOR OF HIGHWAYS

PLANS PREPARED BY
J. E. GREINER COMPANY
CONSULTING ENGINEERS - BALTIMORE, MARYLAND

CONVENTIONAL SIGNS

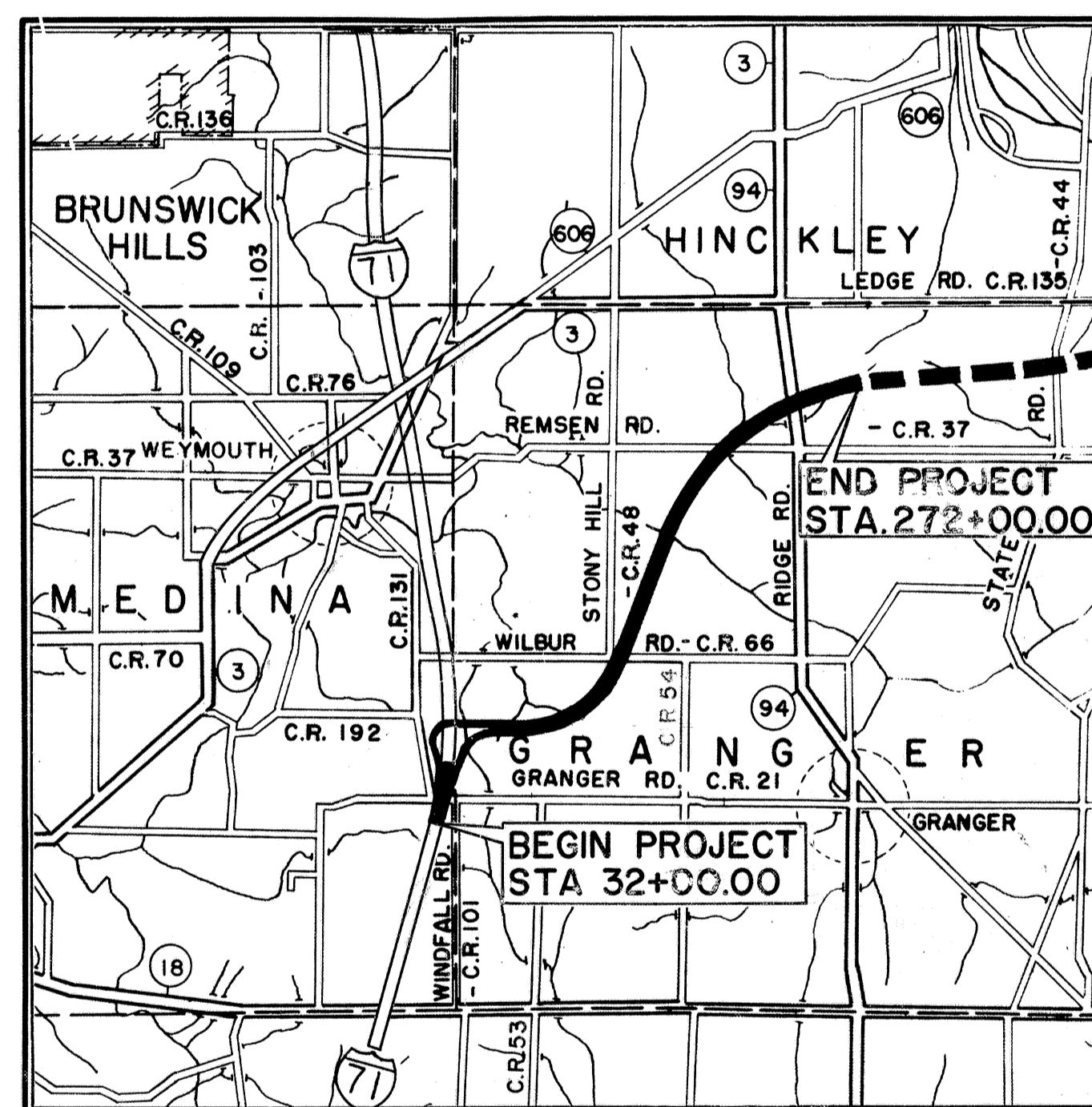
COUNTY LINE	---
TOWNSHIP LINE	---
SECTION LINE	---
CORPORATION LINE	---
CENTER LINE	---
FENCE LINE	---
POWER POLES	---
TELEPHONE POLES	---
GUARD RAIL-EXISTING	---
GUARD RAIL-PROPOSED	---
SOD DITCHES	---
PAVED DITCHES	---
SEED & MULCH DITCHES	---
DUMPED ROCK	---
JUTE MATTING	---
RIGHT OF WAY WITH LIMITED ACCESS	LA
RIGHT OF WAY WITHOUT LIMITED ACCESS	R/W
EXISTING RIGHT OF WAY	---
CONSTRUCTION LIMIT LINE	---

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LINE DATA

Begin Project	Sta 32+00
End Project	Sta. 272+00
No deductions	
Net Length of Project	24,000.00 Lin. Ft. or 4.545 Mi.
Add for Approaches: Sta. 272+00 to 274+55	255.00 Lin. Ft.
C.P. 66 Sta. 43+46.60 to 60+08	1,661.32 Lin. Ft.
C.R. 48 Sta. 19+81.50 to 30+06.79	1,025.29 Lin. Ft.
S.R. 94 Sta. 38+22.4 to 64+26.77	2,604.63 Lin. Ft.
Length of Work	5,546.24 Lin. Ft. or 1.050 Mi.
TOTAL WORK	29,546.24 Lin. Ft. or 5.595 Mi.



DELIVERY POINT - MEDINA, B&O R.R. or A.C.B.Y. R.R.

LOCATION MAP

AVERAGE HAUL = 6.9 MILES



PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS
OTHER PROJECTS

SCALES

PLAN	1" = 50'
PROFILE - HORIZONTAL	1" = 50'
PROFILE - VERTICAL	1" = 5'
CROSS SECTIONS	1" = 10'

Revised sheet No. 10
11-1-65 C.E.H.
Sheet No. 217 revised 3-30-66

STANDARD CONSTRUCTION DRAWINGS							
DRAWING NO.	DATE	DRAWING NO.	DATE	DRAWING NO.	DATE	DRAWING NO.	DATE
BP-1	6-1-65	MC-4	6-1-65	GR-2A	9-1-65	SP-53	6-30-61
BP-2	6-1-65	HW-2	6-1-65	GR-5B	6-1-65	F-3	6-1-65
BP-6	6-1-65	CB 2-3 & 2-4	6-1-65	GR-6	6-1-65	FSB-1-62	1-15-63
FACT-1	6-1-65	CB-4	6-1-65	BP-3	6-1-65	AS-1-54	7-5-62
FACT-2	6-1-65	CB-5	6-1-65	MC-1	6-1-65	SD-1-63 Sh. 1, 2, 3, 4	11-12-63
MC-3	6-1-65	CB-6	6-1-65	BP-5	6-1-65	BR-1-65 Sh. 1	2-1-65
HW-1	6-1-65	MC-6	6-1-65	BP-4	6-1-65	SD-2-64	11-25-64
HW-3	6-1-65	BP-7	6-1-65	L-1	6-1-65	CSB-3-63 Sh. 1	12-9-63
HW-E	6-1-65	GR-1	6-1-65	F-2	6-1-65	P-1-54	2-2-59

SUPPLEMENTAL SPECIFICATIONS			
NUMBER	DATE	NUMBER	DATE
801	See Proposal		
806	See Proposal		
808	7-14-65		
811	3-29-65		
816	8-6-65		

FILE NO.	MED-271-0.00
DATE OF LETTING	_____ 19__
CONTRACT NO.	_____

DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
APPROVED: _____	DATE _____
DIVISION ENGINEER	

MICROFILMED

JUN 5 1966

± I-71 CURVE DATA
 P.I. Sta. 62+08.17
 $\Delta = 26^\circ-45'-53''$
 $D = 0^\circ-22'$
 $R = 15,626.12'$
 $L = 7,299.47'$
 $T = 3,717.58'$
 $E = 436.14'$

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 MED-271-0.00

LEGEND

— Proposed Work
 - - - Existing Road

UTILITIES

Ⓐ Ohio Edison Co., 47 N. Main St., Akron 8, Ohio.

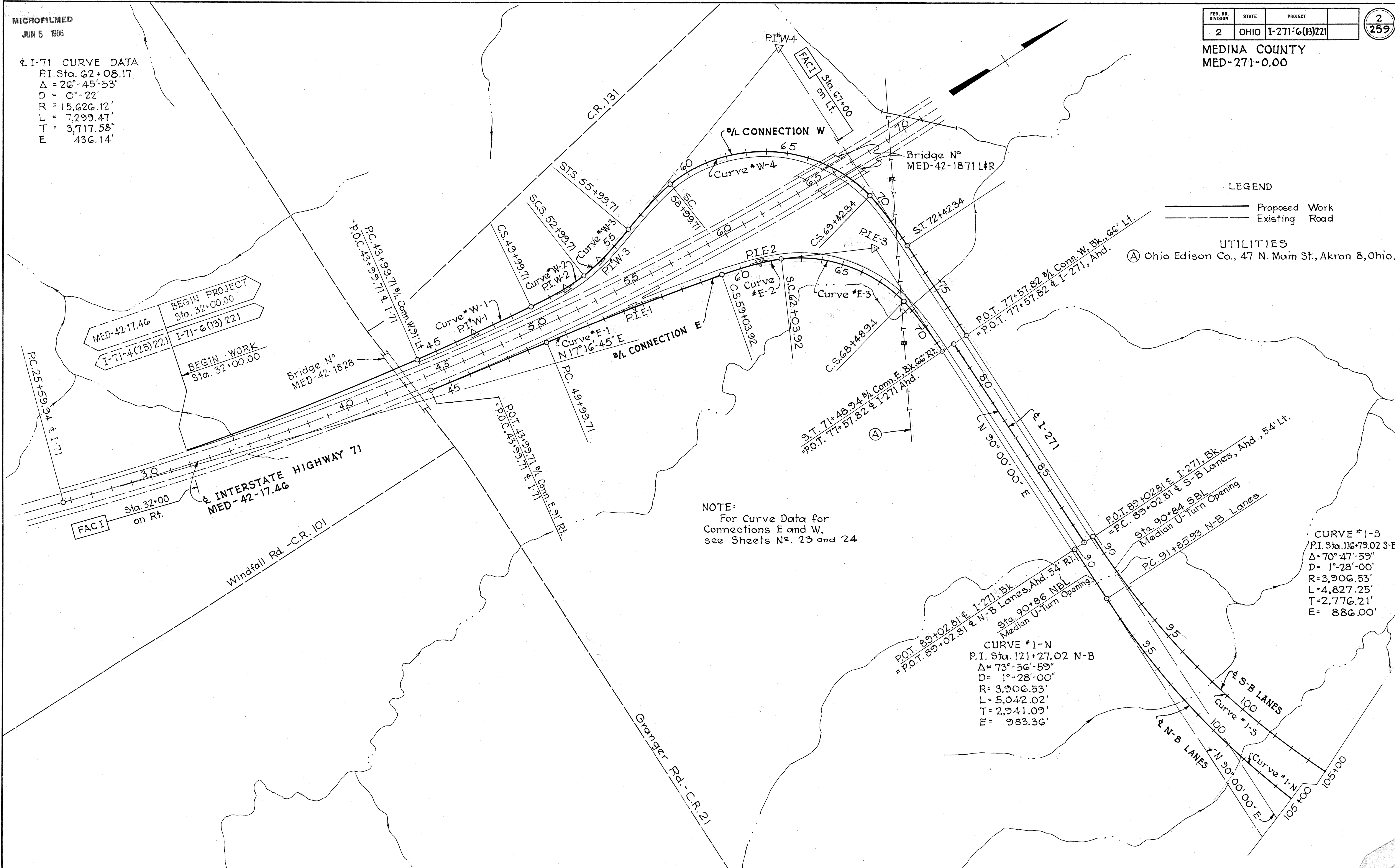
NOTE:
 For Curve Data for
 Connections E and W,
 see Sheets No. 23 and 24

CURVE #1-S
 P.I. Sta. 116+79.02 S-B
 $\Delta = 70^\circ-47'-59''$
 $D = 1^\circ-28'-00''$
 $R = 3,906.53'$
 $L = 4,827.25'$
 $T = 2,776.21'$
 $E = 886.00'$

CURVE #1-N
 P.I. Sta. 121+27.02 N-B
 $\Delta = 73^\circ-56'-59''$
 $D = 1^\circ-28'-00''$
 $R = 3,906.53'$
 $L = 5,042.02'$
 $T = 2,941.09'$
 $E = 983.36'$

Scale: 1"=200'

SCHMATIC LAYOUT PLA





CURVE #1-S
 P.I. Sta. 116+79.02 S-B
 $\Delta = 70^{\circ}-47'-59''$
 $D = 1^{\circ}-28'-00''$
 $R = 3,906.53'$
 $L = 4,827.25'$
 $T = 2,776.21'$
 $E = 886.00'$

CURVE #1-N
 P.I. Sta. 121+27.02 N-B
 $\Delta = 73^{\circ}-56'-59''$
 $D = 1^{\circ}-28'-00''$
 $R = 3,906.53'$
 $L = 5,042.02'$
 $T = 2,941.09'$
 $E = 983.36'$

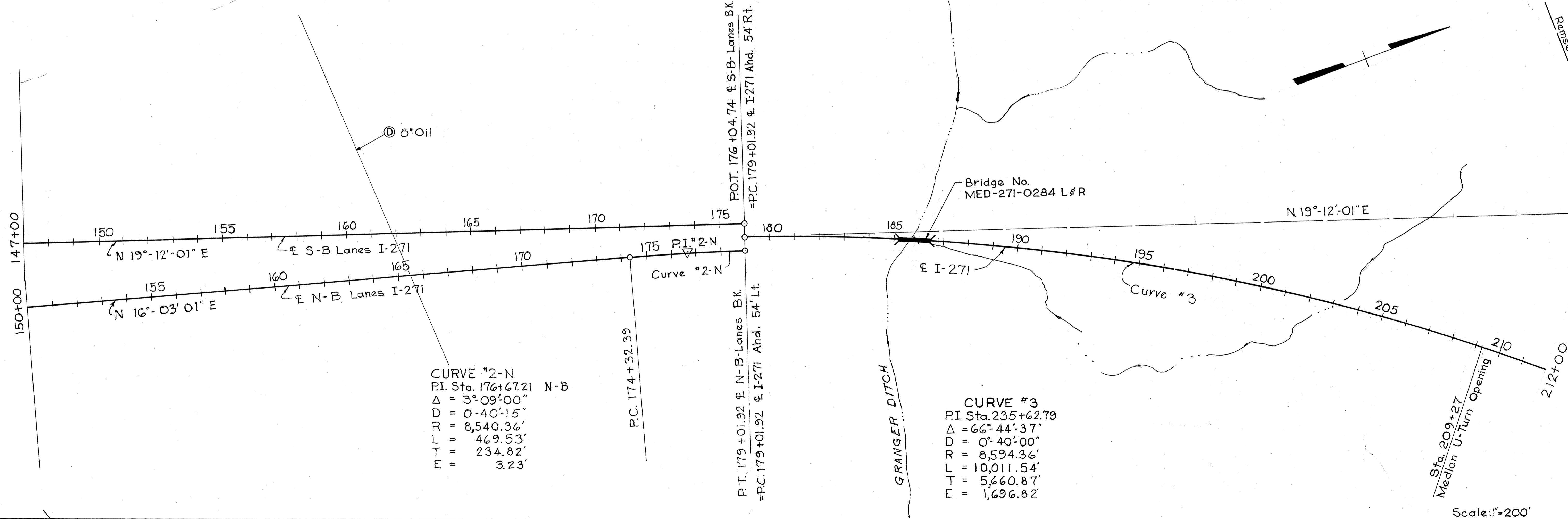
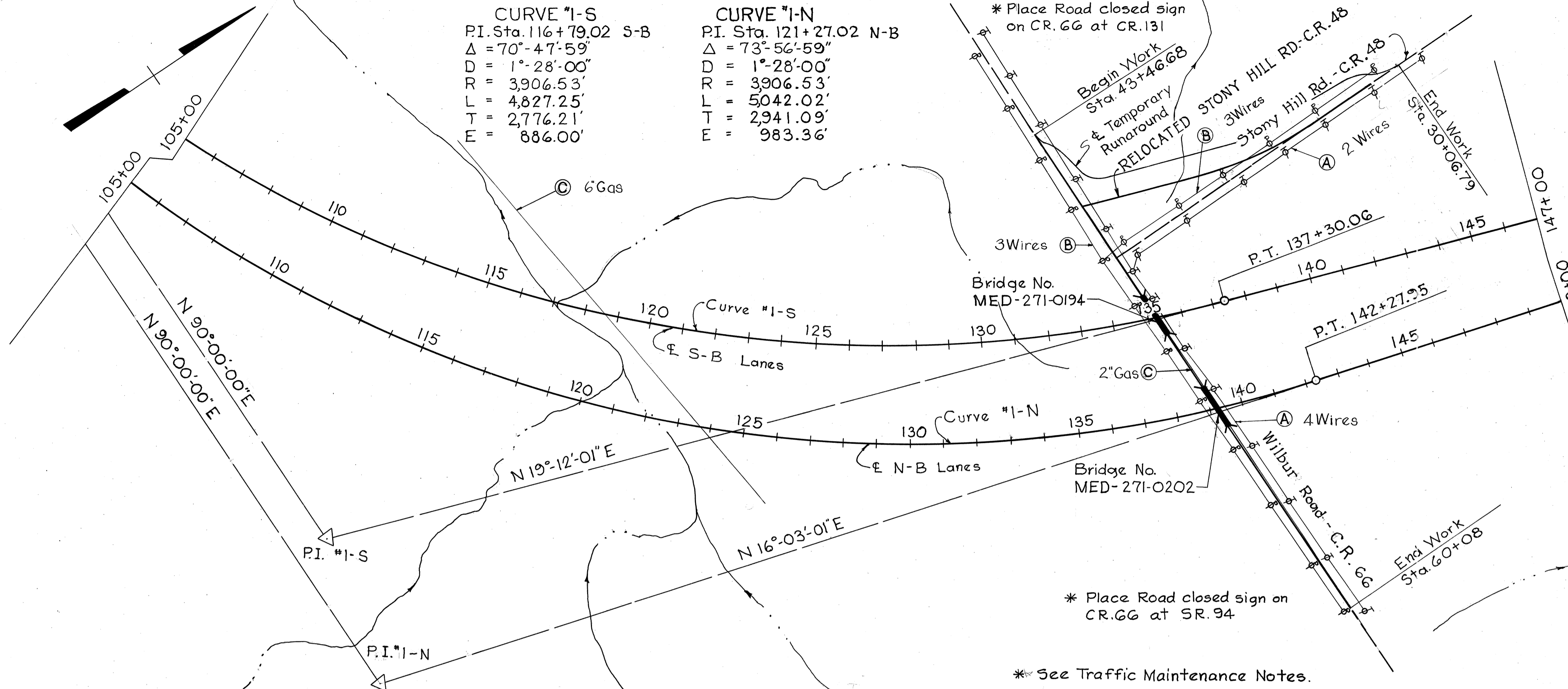
* Place Road closed sign on CR.66 at CR.131

* Place Road closed sign on CR.66 at SR.94

* See Traffic Maintenance Notes.

LEGEND
 Proposed Work
 Existing Road

- UTILITIES**
- (A) Northern Ohio Telephone Co. Bellevue, Ohio
 - (B) Ohio Edison Company 47 North Main St. Akron 8, Ohio
 - (C) Ohio Fuel Gas Company 99 N. Front St. Columbus 15, Ohio
 - (D) Sun Pipe Line Company 1608 Walnut St. Philadelphia, Pa. 19103



CURVE #2-N
 P.I. Sta. 176+67.21 N-B
 $\Delta = 3^{\circ}-09'-00''$
 $D = 0^{\circ}-40'-15''$
 $R = 8,540.36'$
 $L = 469.53'$
 $T = 234.82'$
 $E = 3.23'$

CURVE #3
 P.I. Sta. 235+62.79
 $\Delta = 66^{\circ}-44'-37''$
 $D = 0^{\circ}-40'-00''$
 $R = 8,594.36'$
 $L = 10,011.54'$
 $T = 5,660.87'$
 $E = 1,696.82'$

Scale: 1"=200'

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CURVE #3
 P.I. Sta. 235+62.79
 $\Delta = 66^{\circ}44'37''$
 $D = 0^{\circ}40'00''$
 $R = 8,594.36'$
 $L = 10011.54'$
 $T = 5,660.87'$
 $E = 1,696.82'$

212+00

N 19°-12'-01" E
 Begin Work
 Sta. 41+00

215
 Curve #3

Turnaround- See Sh. 147

4 Wires (B)

Box Culvert No.
 MED-271-0356A

Reloc. Channel Reloc.
 Remsen Rd.-C.R.37

Ramp A

225

Ramp D

Box Culvert No.
 MED-271-0356

Remsen Rd.-C.R.37

Sta. 64+30 [FACT]
 on Lt.
 End Work
 Sta. 67+26.77

N 85°-56'-38" E

[FACT] Sta. 38+20
 on Rt.

Temporary Runaround

5 Wires (B)

Bridge No.
 MED-271-0406

Ramp B

Ramp C

END PROJECT
 STA. 272+00
 I-271-6(13)221
 MED-271-4.53
 SUM-271-0.00
 I-271-6(14)224
 END WORK
 STA. 274+55

P.I. 279+13.46

285+00

LEGEND
 Proposed Work
 Existing Road

UTILITIES
 (A) Northern Ohio Telephone Company
 Bellevue, Ohio
 (B) Ohio Edison Company
 47 North Main St.
 Akron 8, Ohio

Scale: 1"=200'

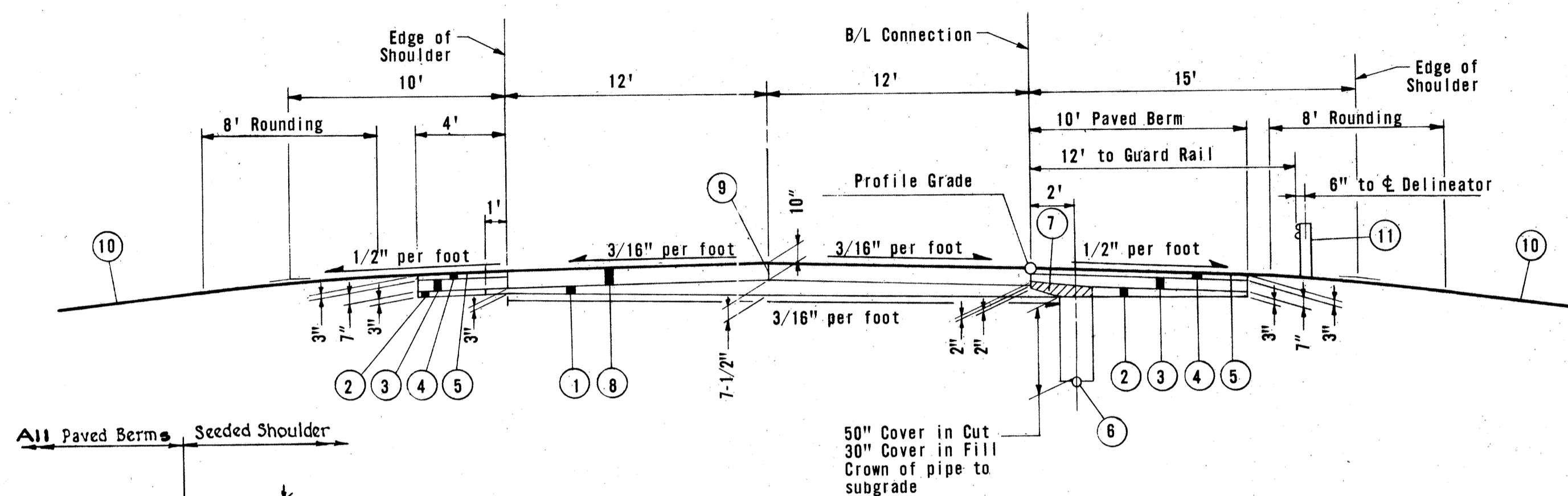
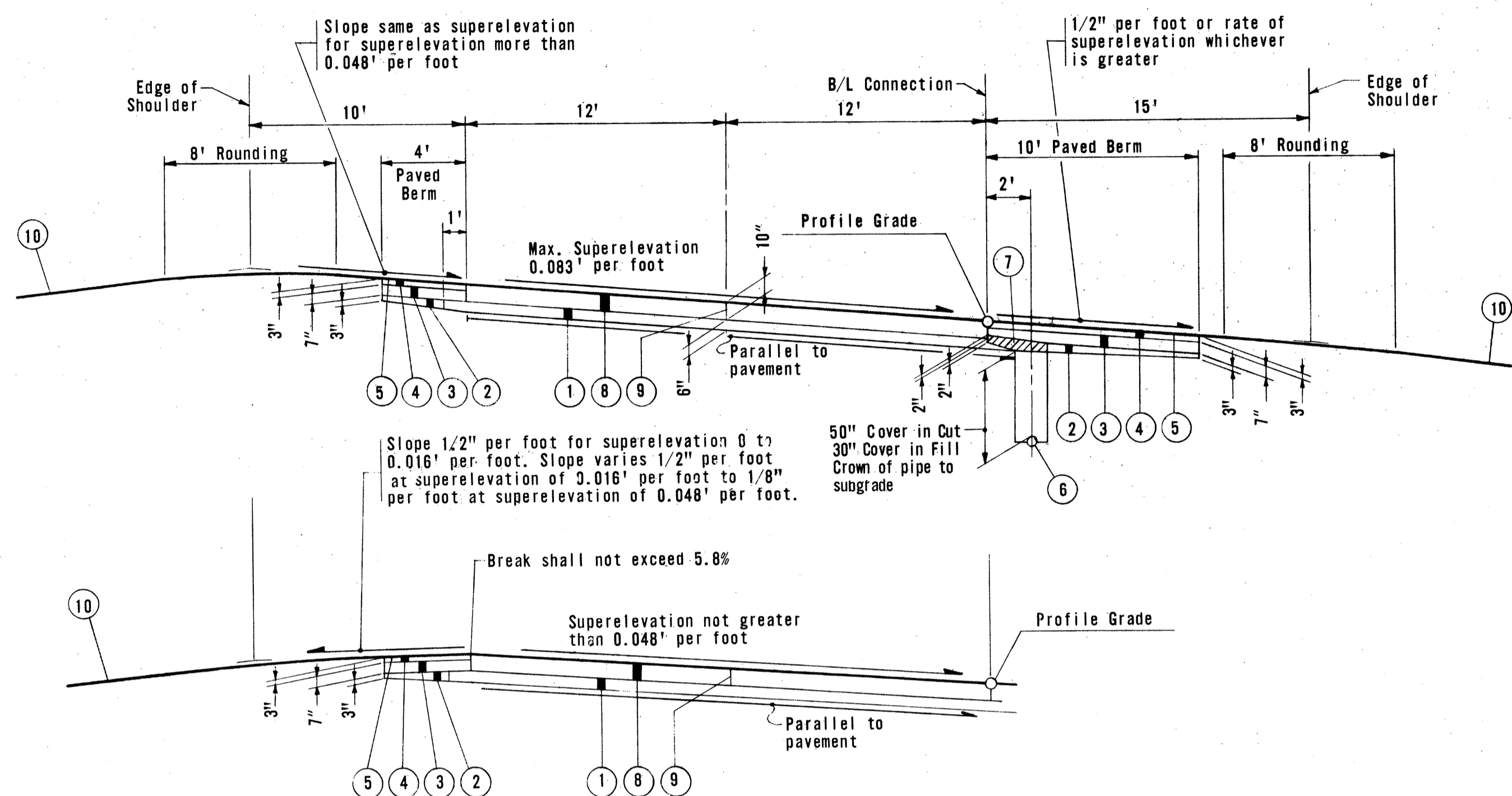
SCHEMATIC LAYOUT PLAN

TYPICAL SECTIONS

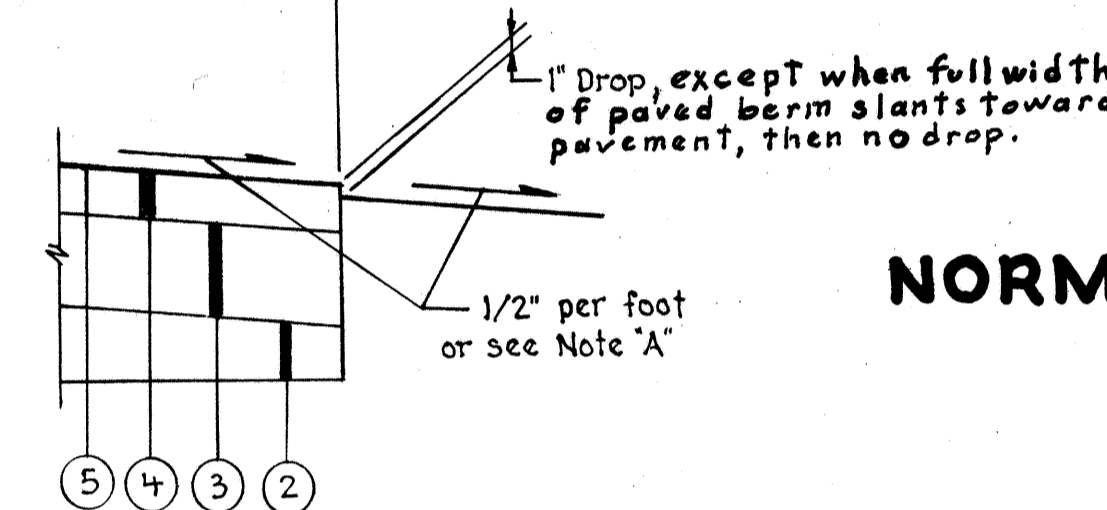
CONNECTIONS TO I-71

TYPE T-71

Scale: 1" = 5'-0"



All Paved Berms Seeded Shoulder



TYPICAL DETAIL
1" DROP IN SHOULDER
(Not to Scale)

NORMAL SECTION

LEGEND

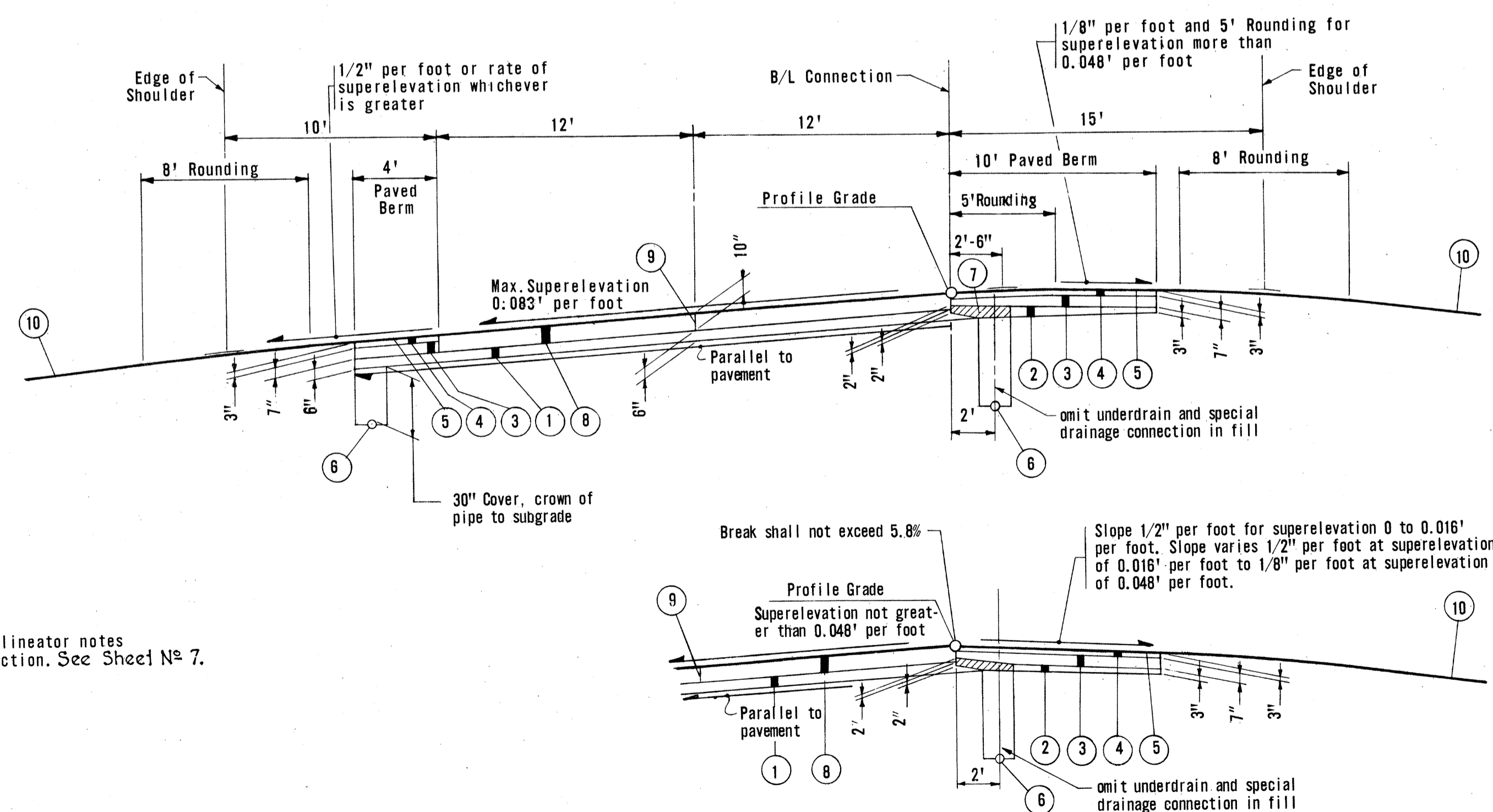
- ① Item I-22 Subbase, Grading "A" or "B", as per plan. (See General Note)
- ② Item I-22 Subbase, Regular Grading.
- ③ Item B-19 7" (unless otherwise shown) Aggregate Base Course, as per plan.
- ④ Item B-21 3" Waterproofed Aggregate Base Course.
- ⑤ Item T-31 Bituminous Surface Treatment using 0.008 cu. yd. No. 6 aggregate per sq. yd. and 0.25 gal bituminous material per sq. yd. (See note in Proposal). Thickness is design thickness as described in Sec. B-21.01.
- ⑥ Item I-1 6" Pipe, Class I-3.
- ⑦ Item special drainage connection, using No. 6 aggregate (See note in Proposal).
- ⑧ Item T-71 10" Reinforced Portland Cement Concrete Pavement, Standard Longitudinal Joint.
- ⑨ Item L-9 Seeding and Protecting as per plan.
- ⑩ Item I-15 Guard Rail, Steel Beam, Standard Type (Deep).

NOTES:

Typical sections are shown looking in the direction of traffic.
All slopes shown are typical unless otherwise shown on cross sections.
For slope treatment of side slopes, see sheet No. 9

Sequence of operations: (1) install pipe underdrain on outside shoulder. Installation of shallow underdrain in median may be deferred until T-71 is placed. (2) place subbase out to outside edge of underdrain or to one foot beyond edge of pavement where no underdrain is present, (3) construct T-71, (4) remove subbase and any contaminated backfill over drain and replace with No. 6 aggregate as shown by ⑦. (5) complete shoulder construction.

Where the graded section has been seeded by others, a 3' wide strip adjacent to the paved shoulder shall be allowed as a pay item for "Seeding and Protecting" New grading shall be seeded as per general note.



NOTE:
Guard Rail and delineator notes same as Normal Section. See Sheet No. 7.

SUPERELEVATED SECTIONS

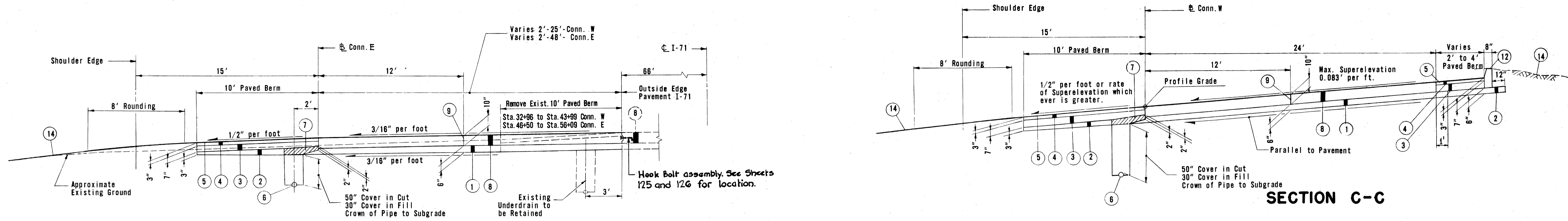
TYPICAL SECTIONS

Scale: 1" = 4'-0"

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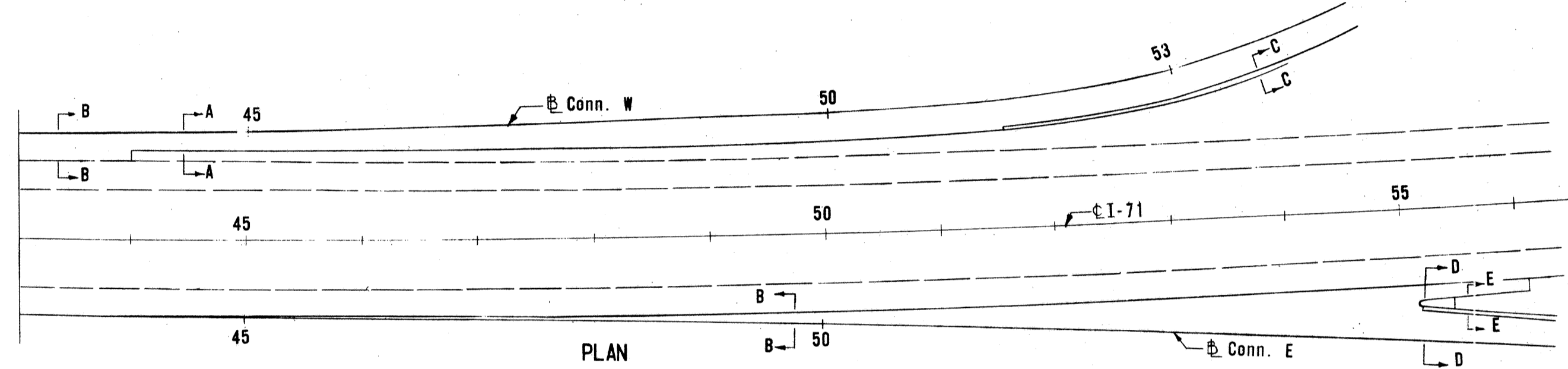
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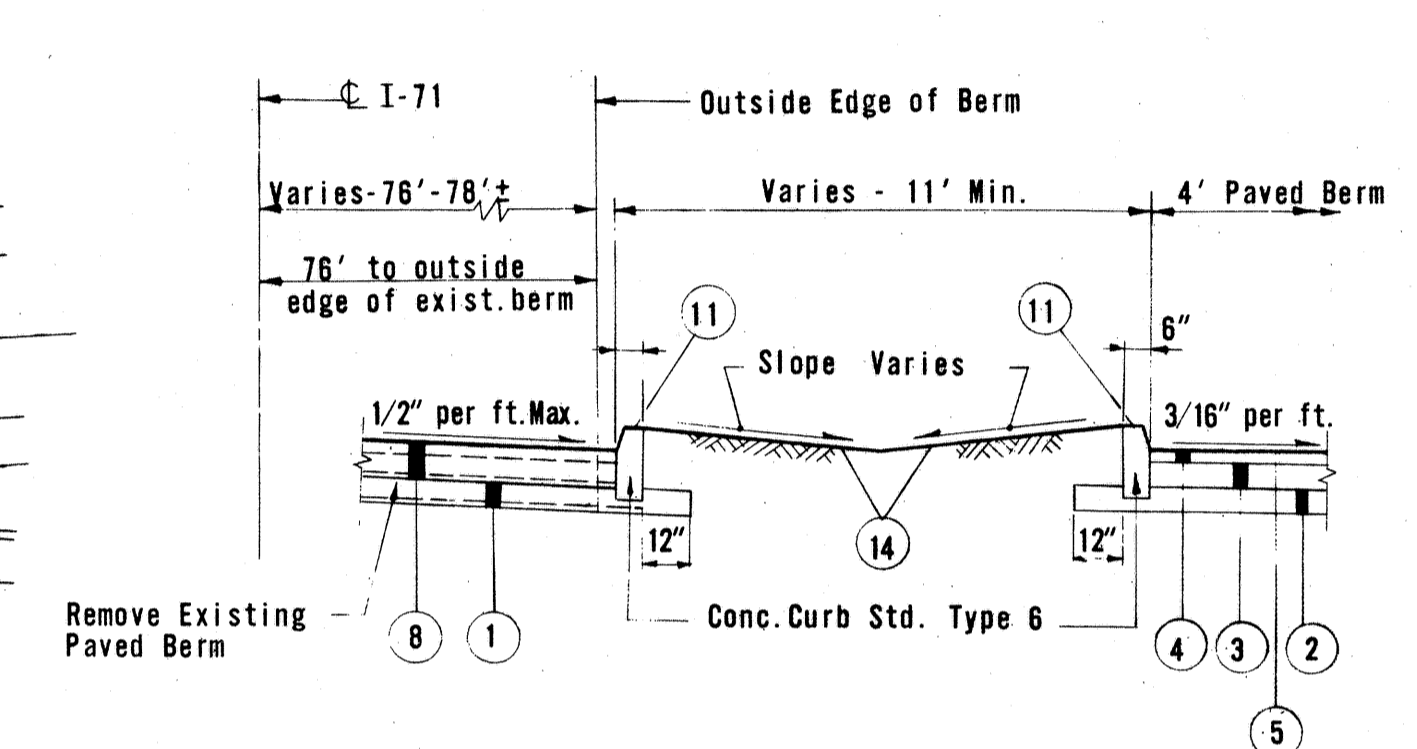


SECTION B-B

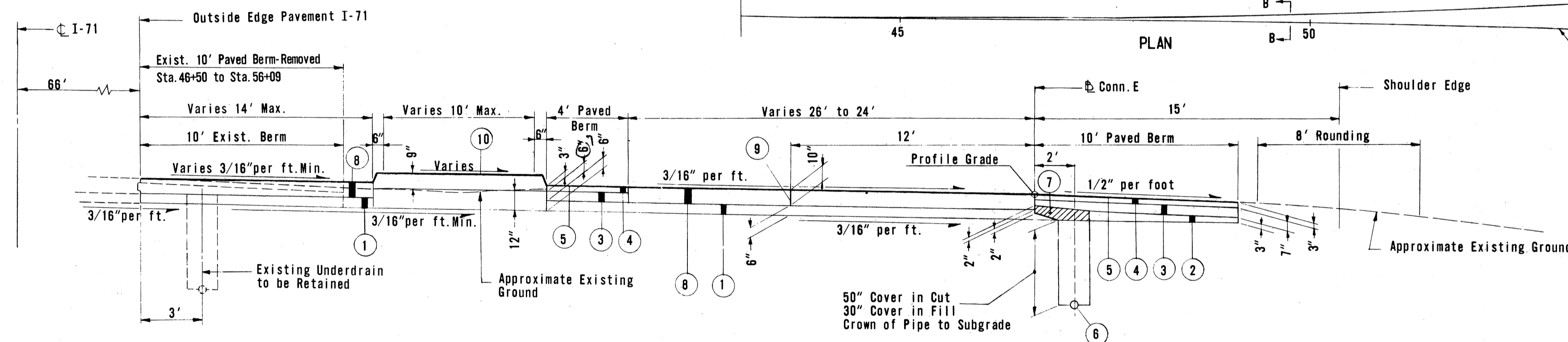
SECTION C-C



PLAN



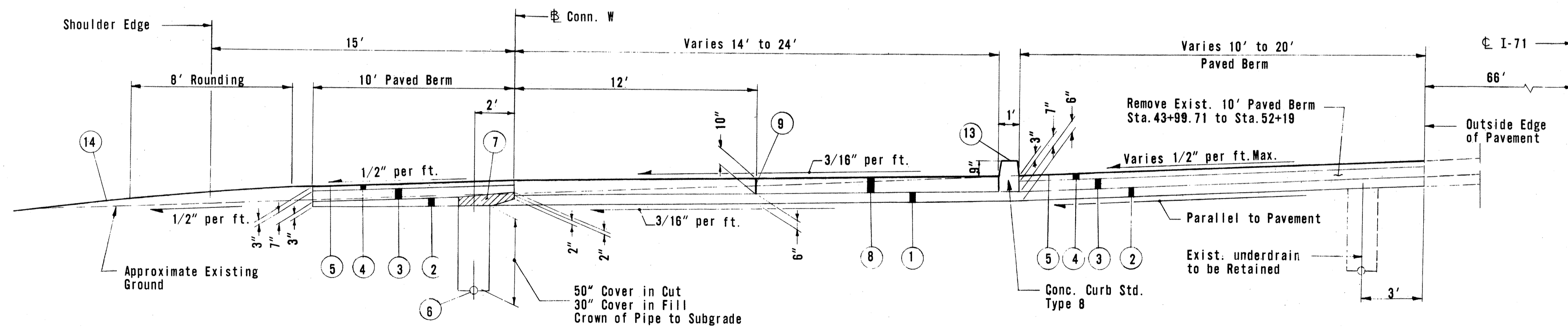
SECTION E-E



SECTION D-D

LEGEND

- ① Item I-22 Subbase, Grading "A" or "B", as per plan. (See General Note.)
 - ② Item I-22 Subbase, Regular Grading.
 - ③ Item B-19 7" (unless otherwise shown) Aggregate Base Course, as per plan.
 - ④ Item B-21 3" Waterproofed Aggregate Base Course.
- See note in Proposal.
- ⑤ Item T-31 Bituminous Surface treatment using 0.008 cu.yd. No. 6 aggregate per sq.yd. and 0.25 gal. bituminous material per sq.yd. (See note in Proposal).
 - ⑥ Item I-1 6" Pipe, Class I-3.
 - ⑦ Item special drainage connection, using No. 6 aggregate (See note in Proposal).
 - ⑧ Item I-71 10" Reinforced Portland Cement Concrete Pavement, Standard Longitudinal Joint.
 - ⑨ Item I-21 Concrete Median Pavement.
 - ⑩ Item I-12 Concrete Curb, Std. Type 6.
 - ⑪ Item I-12 Concrete Curb, Std. Type 7.
 - ⑫ Item I-12 Concrete Curb, Std. Type 8.
 - ⑬ Item I-12 Concrete Curb, Std. Type 8.
 - ⑭ Item L-9 Seeding and Protecting as per plan.



SECTION A-A

TYPICAL SECTIONS

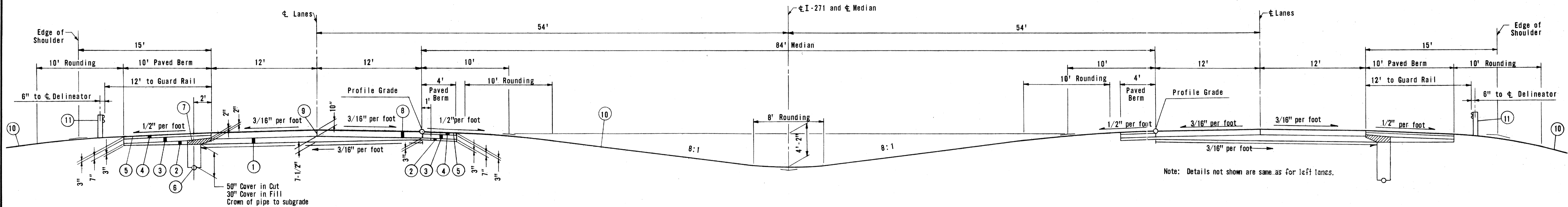
84' DEPRESSED MEDIAN

TYPE T-71

Scale: $\frac{3}{16}'' = 1'-0''$

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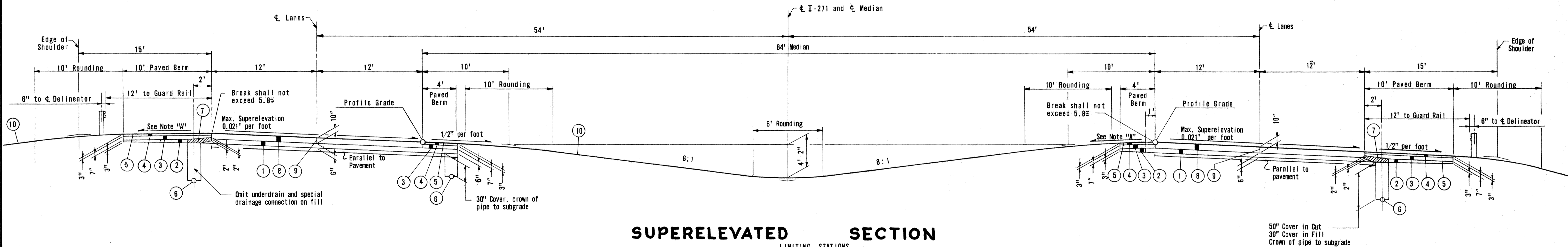
MEDINA COUNTY
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NORMAL SECTION

LIMITING STATIONS
Sta. 77+57.88 To Sta. 87+02.81

Note "A":
Slope 1/2" per foot for superelevation 0 to 0.016' per foot.
Slope varies from 1/2" per foot at superelevation of 0.016' per foot to 0.037' per foot at superelevation of 0.021' per foot.



SUPERELEVATED SECTION

LIMITING STATIONS
Sta. 87+02.81 To Sta. 89+02.81 (NBL Normal)
Sta. 190+00 To Sta. 272+00

NOTES:
All slopes shown are typical unless otherwise shown on cross sections.
For slope treatment of side slopes, see sheet No. 9.

Sequence of operations: (1) install pipe underdrain on outside shoulder. Installation of shallow underdrain in median may be deferred until T-71 is placed, (2) place subbase out to outside edge of underdrain or to one foot beyond edge of pavement where no underdrain is present, (3) construct T-71, (4) remove subbase and any contaminated backfill over drain and replace with No. 6 aggregate as shown by (7), (5) complete shoulder construction.

LEGEND

- (1) Item I-22 Subbase, Grading "A" or "B", as per plan, (See general note).
- (2) Item I-22 Subbase, Regular grading
- (3) Item B-19 7" (unless otherwise shown) Aggregate Base Course, as per plan.
- (4) Item B-21 3" Waterproofed Aggregate Base Course.
- (5) Item T-31 Bituminous Surface Treatment using 0.008 cu.yd. No. 6 aggregate per sq.yd. and 0.25 gal. bituminous material per sq.yd. (See note in Proposal). Thickness is design as described in Sec. B-21.01.
- (6) Item I-1 6" Pipe, Class I-3.
- (7) Item special drainage connection, using No. 6 aggregate (See note in Proposal).
- (8) Item T-71 10" Reinforced Portland Cement Pavement.
- (9) Standard Longitudinal Joint.
- (10) Item L-9 Seeding and Protecting as per plan.
- (11) Item I-15 Guard Rail, Steel Beam, Standard Type (Deep).

TYPICAL SECTIONS

SEPARATED ROADWAYS

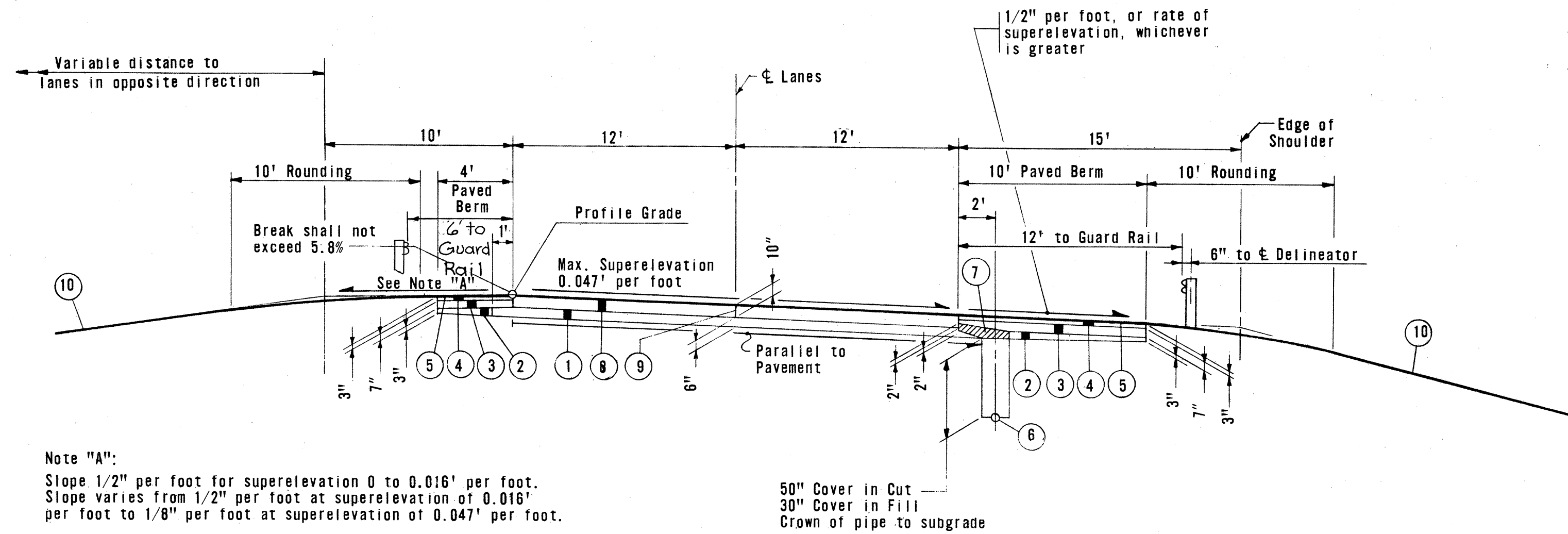
TYPE T-71

Scale: $\frac{3}{16}'' = 1'-0''$

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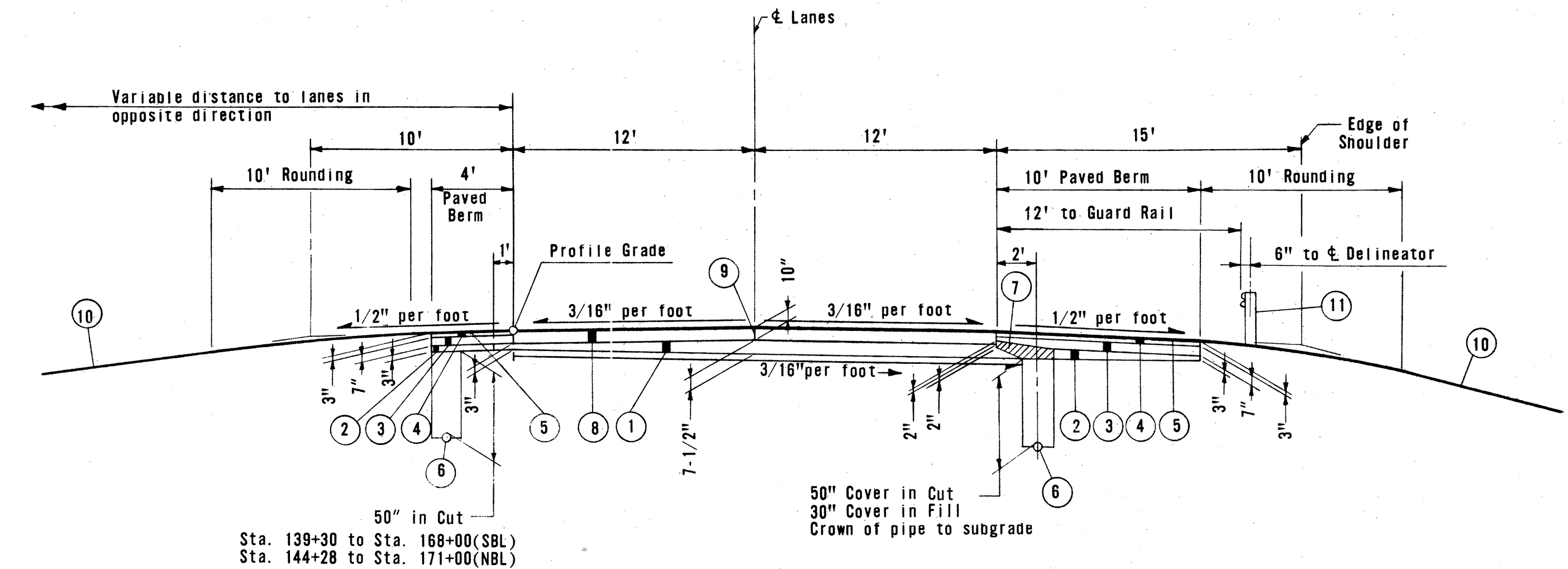
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Note "A":
Slope 1/2" per foot for superelevation 0 to 0.016' per foot.
Slope varies from 1/2" per foot at superelevation of 0.016' per foot to 1/8" per foot at superelevation of 0.047' per foot.

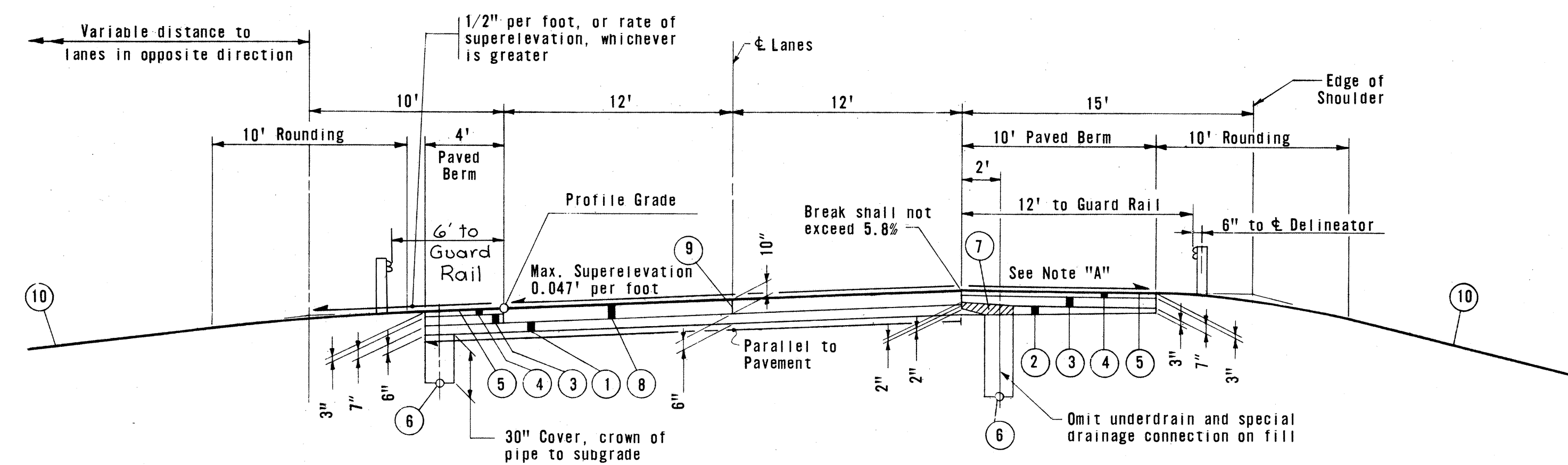
50" Cover in Cut
30" Cover in Fill
Crown of pipe to subgrade



NORMAL SECTION

LIMITING STATIONS

STA. 89+02.81	to	STA. 89+85.93(NBL)
STA. 136+30.06	to	STA. 174+79.74(SBL)
STA. 144+27.95	to	STA. 173+07.39(NBL)



SUPERELEVATED SECTIONS

LIMITING STATIONS

STA. 89+02.81	to	STA. 139+30.06 (SBL)
STA. 89+85.93	to	STA. 144+27.95 (NBL)
STA. 173+07.39	to	STA. 179+01.92 (NBL)
STA. 174+79.74	to	STA. 176+04.74 (SBL)

NOTES:

Typical sections are shown looking in the direction of traffic.
All slopes shown are typical unless otherwise shown on cross sections.
For slope treatment of side slopes, see Sheet No. 9.

Sequence of operations: (1) install pipe underdrain on outside shoulder. Installation of shallow underdrain in median may be deferred until T-71 is placed, (2) place subbase out to outside edge of underdrain or to one foot beyond edge of pavement where no underdrain is present, (3) construct T-71, (4) remove subbase and any contaminated backfill over drain and replace with No. 6 aggregate as shown by (5) complete shoulder construction.

LEGEND

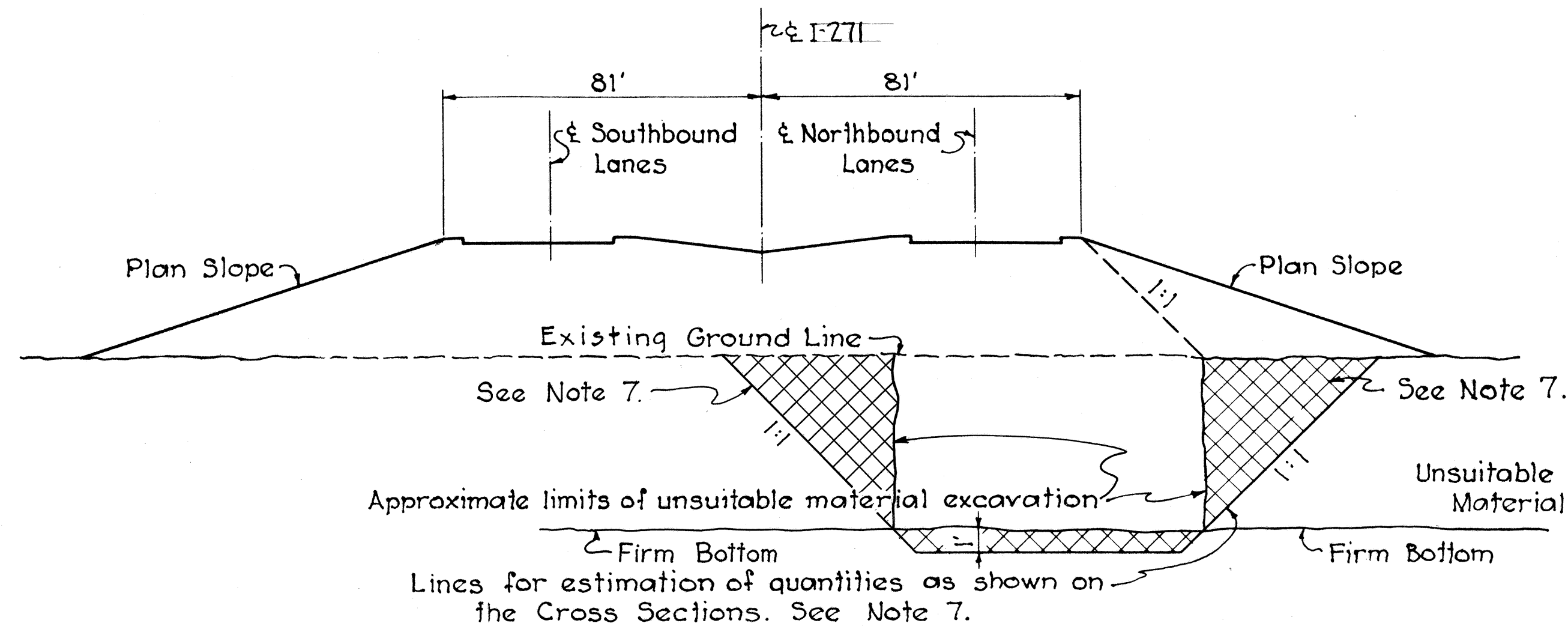
- (1) Item I-22 Subbase, Grading "A" or "B", as per plan. (See General Note.)
- (2) Item I-22 Subbase, Regular Grading
- (3) Item B-19 7" (unless otherwise shown) Aggregate Base Course, as per plan.
- (4) Item B-21 3" Waterproofed Aggregate Base Course.
See note in Proposal.
- (5) Item T-31 Bituminous Surface treatment using 0.008 cu. yd. No. 6 aggregate per sq. yd. and 0.25 gal. bituminous material per sq. yd. (See note in Proposal)
- (6) Item I-1 6" Pipe, Class I-3.
- (7) Item special drainage connection, using No. 6 aggregate (See note in Proposal).
- (8) Item T-71 10" Reinforced portland Cement Concrete Pavement, Standard Longitudinal Joint.
- (9) Item L-9 Seeding and Protecting as per plan.
- (10) Item I-15 Guard Rail, Steel Beam, Standard Type (Deep).

SWAMP TREATMENT

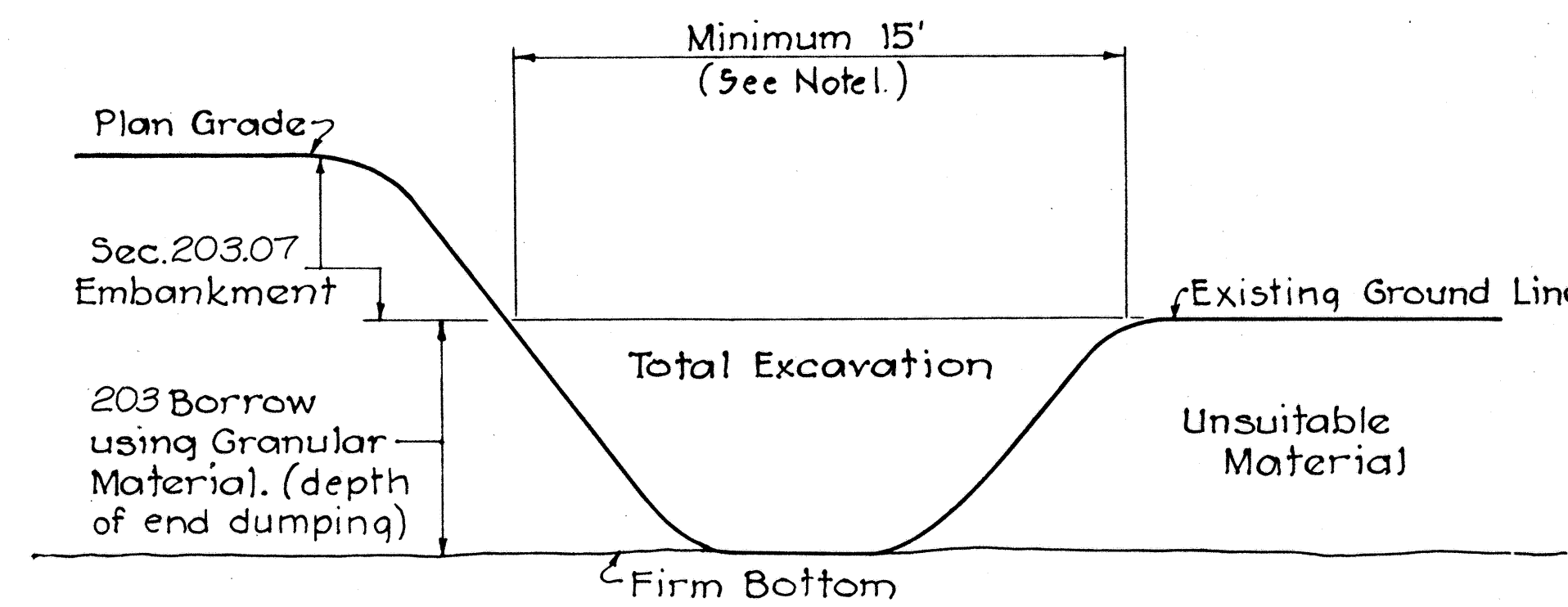
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TRANSVERSE SECTION



LONGITUDINAL SECTION

METHOD 1
TOTAL EXCAVATION
APPROX. LIMITING STATIONS
Sta. 176+50 to Sta. 191+50

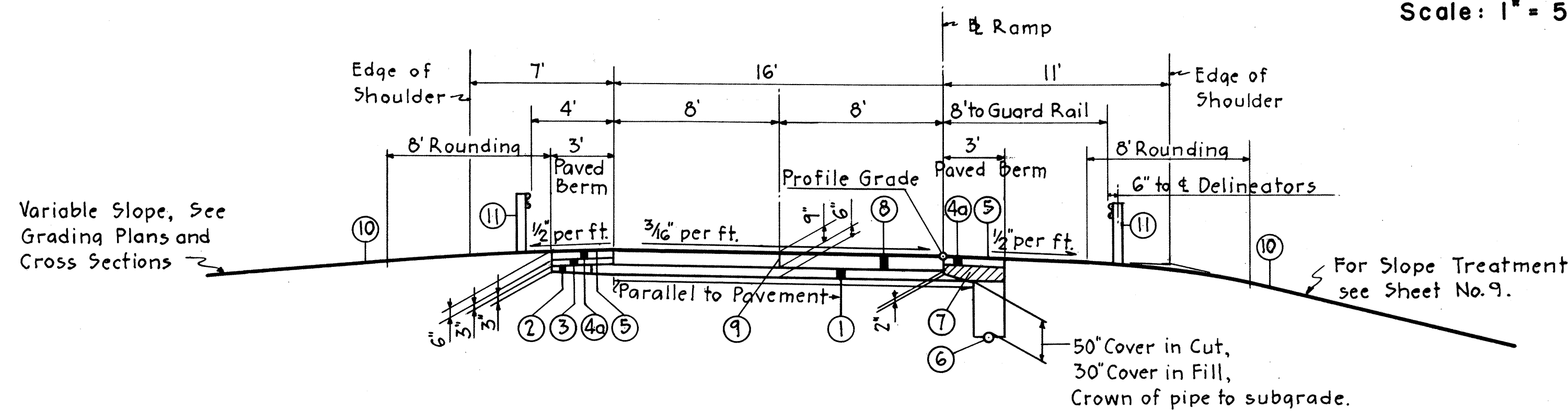
NOTES

- TRENCHING AND BACKFILLING** shall be carried progressively across the swamp and so coordinated as to leave an open trench not to exceed in length at any time the working reach of the equipment used for swamp excavation.
- FILL** shall be constructed by the method of end dumping, using granular material, up to the elevation of the existing ground. Embankment required above this elevation, if any, shall be constructed in accordance with Sec. 203.07 of the Construction and Material Specifications.
- EXCAVATION** of unsuitable material ahead of the fill and end dumping of granular material across the bog area shall be advanced in a straight line for the full embankment width to avoid entrapment of unsuitable material beneath any portion of the fill.
- GRANULAR MATERIAL** required for swamp treatment shall be specified as "203 Borrow using Granular Matl including cost of Exc. of unsuitable Matl." The granular material shall meet the requirements of Sec. 203.02 of the Construction and Material Specifications modified to require at least 75 per cent by weight of the grains or particles to be retained on the No. 200 sieve.
- EXCAVATED UNSUITABLE MATERIAL** which is to be used adjacent to fills for slope flattening or which is piled adjacent to the fill to be disposed of later in accordance with Sec. 203.05, shall be shaped to its final position or removed from the area at least two weeks prior to paving operations on the fill.
- EQUIPMENT** used for excavation of unsuitable materials shall be located ahead of the excavation unless otherwise authorized by the Director.
- CROSS-HATCHED** sections are included in quantities to allow for possible sloughing and undercutting. ~~This section is to be used as a basis for pay quantities. See note in proposal.~~
- PAYMENT** for excavation of unsuitable material shall be included in the unit price bid for "Item 203 borrow using granular material as per plan including the cost of excavation of unsuitable material."
- PAVEMENT** between Stations 176+50 and 191+00 shall not be placed until the embankments have been completed for a period of six (6) months.
- BRIDGE** No. MED-271-0284 shall not be started until the embankment and channel work has been completed.

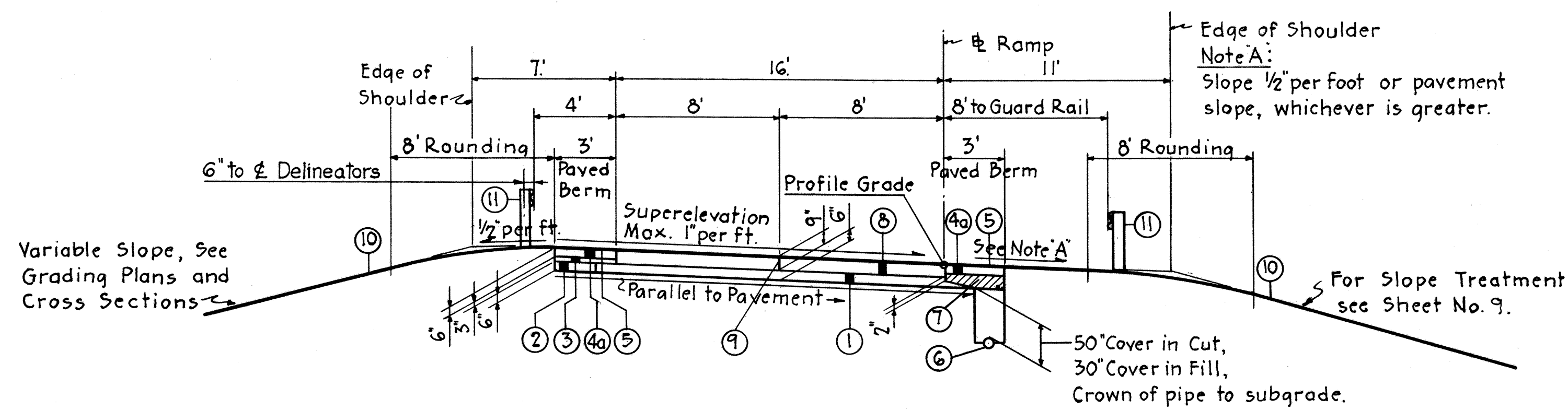
TYPICAL SECTIONS

TYPE T-71

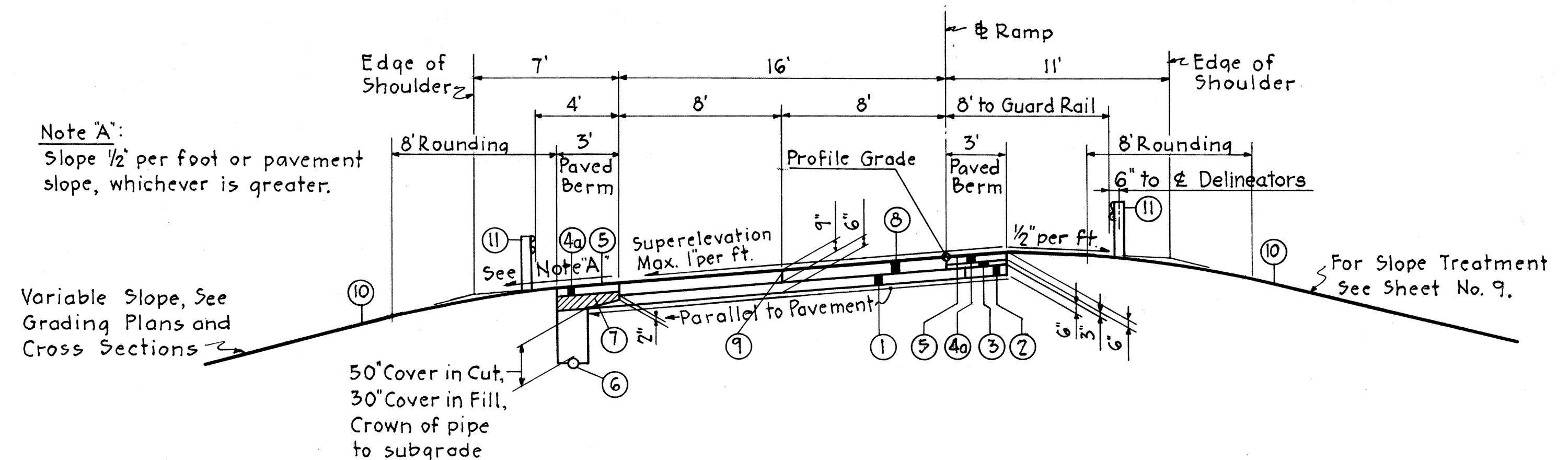
Scale: 1" = 5'



NORMAL RAMP SECTION



SUPERELEVATED RIGHT RAMP SECTION



SUPERELEVATED LEFT RAMP SECTION

LEGEND

- ① Item I-22 Subbase, Grading 'A' or 'B' as per plan, (see general note).
- ② Item I-22 Subbase, Regular Grading.
- ③ Item B-19 3" Aggregate Base Course, as per plan.
- ④ Item B-21 6" Waterproofed Aggregate Base Course. Place in two 3" courses. See note in Proposal.
- ⑤ Item T-31 Bituminous Surface Treatment using 0.008 cu.yd. No. 6 aggregate per sq.yd. and 0.25 gal. bituminous material per sq.yd. (See note in proposal)
- ⑥ Item I-1 6" Pipe, Class I-3.
- ⑦ Item special drainage connection, using No. 6 aggregate (See note in proposal).
- ⑧ Item T-71 9" Reinforced Portland Cement Concrete Pavement.
- ⑨ Standard Longitudinal Joint.
- ⑩ Item L-9 Seeding and Protecting as per plan.
- ⑪ Item I-15 Guard Rail, Steel Beam, Standard Type (Deep).

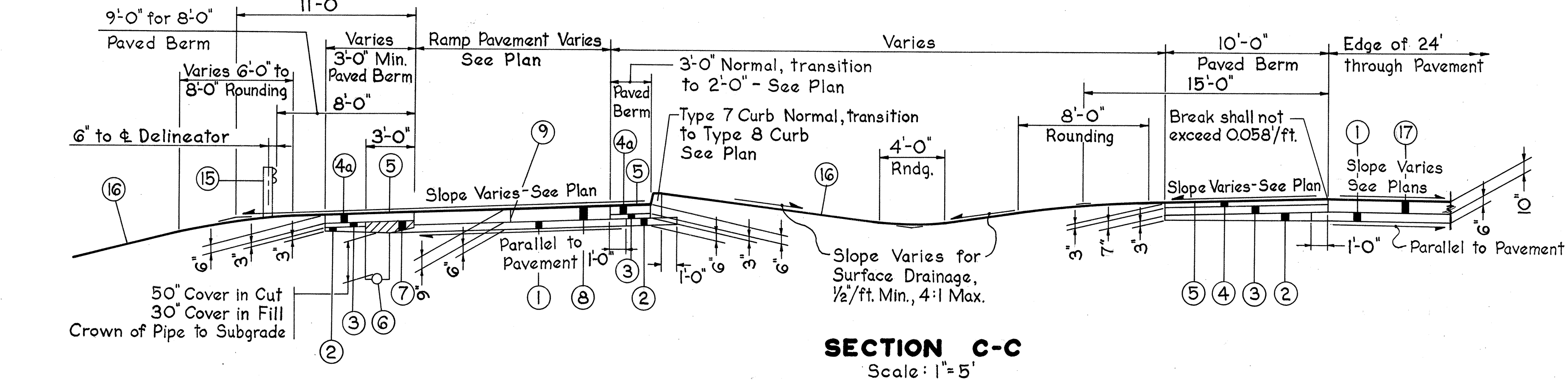
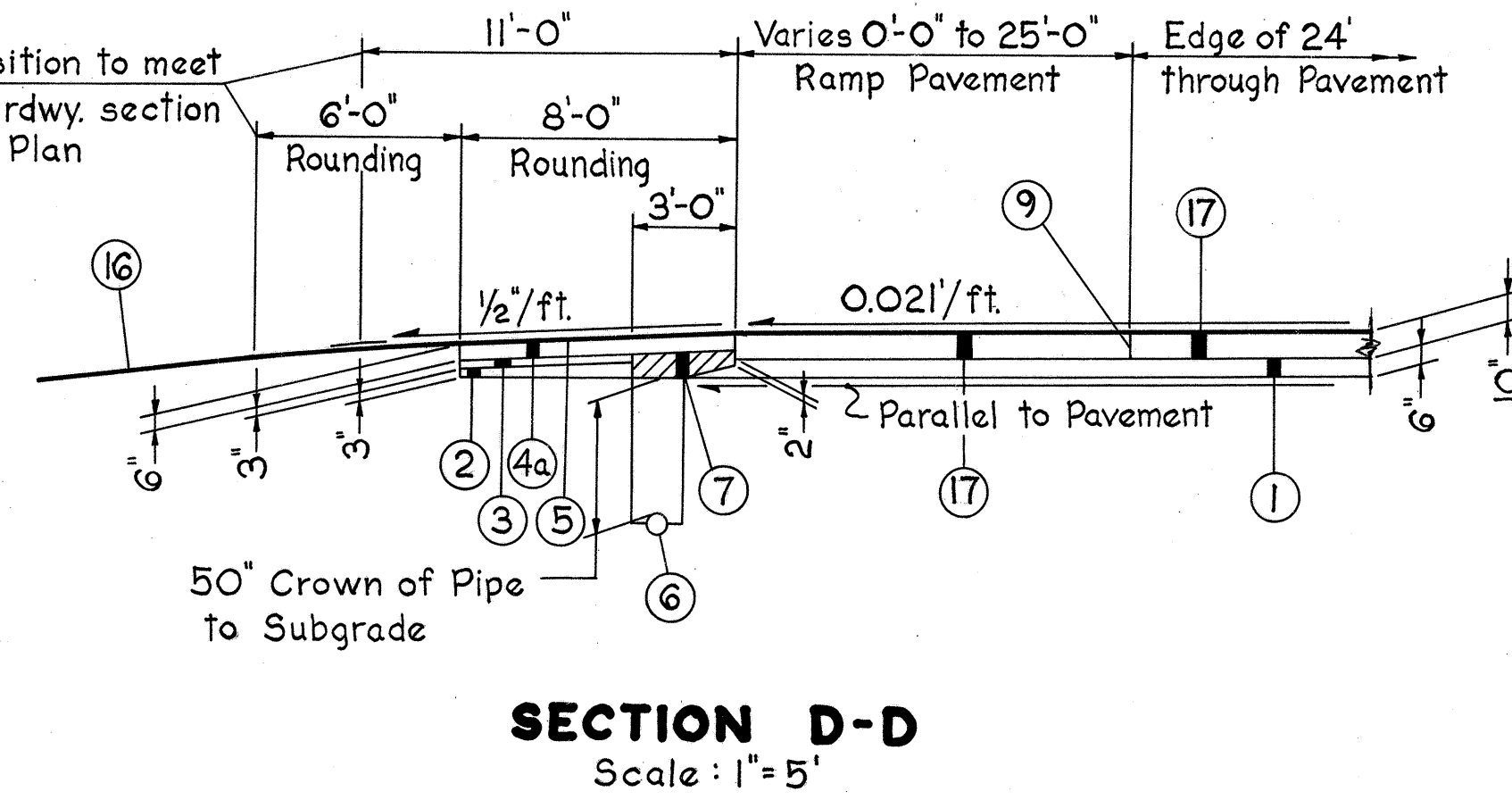
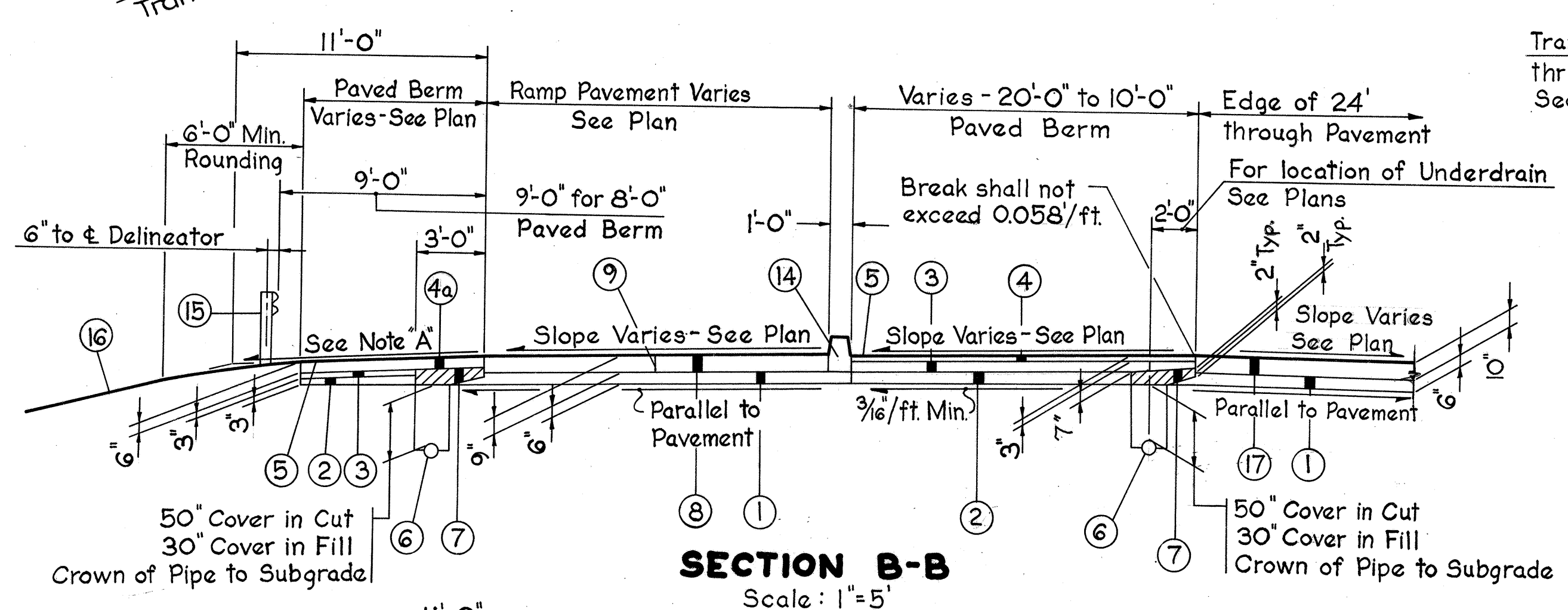
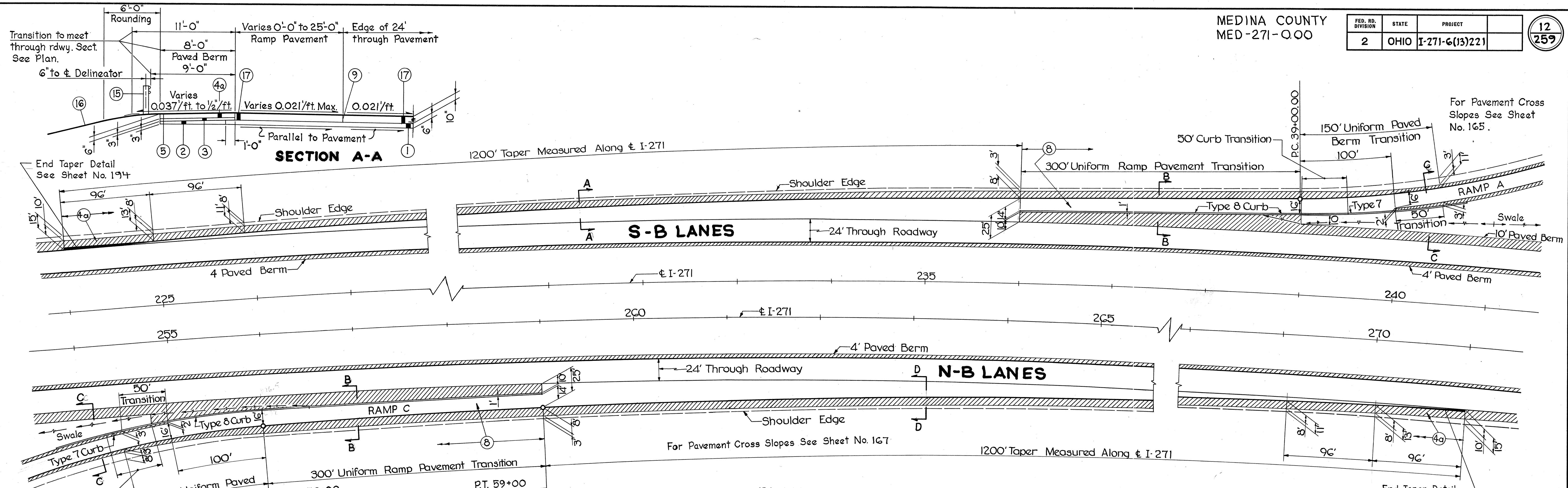
Sequence of Operations

1. Install pipe underdrain. Installation of shallow underdrain in embankment areas may be deferred until T-71 is placed.
2. Place subbase out to outside edge of underdrain or to one foot beyond edge of pavement where no underdrain is present.
3. Construct T-71.
4. Remove subbase and any contaminated backfill over underdrain and replace with No. 6 aggregate as shown by ⑦.
5. Complete shoulder construction.

Notes.

Sections are shown looking in the direction of traffic.
All slopes shown are typical unless shown otherwise on cross section.

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- LEGEND**
- ① Item I-22 Subbase, Grading "A" or "B", as per plan, (See General Note).
 - ② Item I-22 Subbase, Regular grading.
 - ③ Item B-19 6" (unless otherwise shown) Aggregate Base Course, as per plan.
 - ④ Item B-21 * 3" Waterproofed Aggregate Base Course. See note in Proposal.
 - ④a Item B-21 * 6" Waterproofed Aggregate Base Course. See note in Proposal.
 - ⑤ Item T-31 Place in two 3" courses. Bituminous Surface Treatment using 0.008 Cu. Yd. No. 6 aggregate per Sq. Yd. and 0.25 gal. bituminous material per Sq. Yd. (See note in Proposal).
 - ⑥ Item I-1 6" Pipe, Class I-3.
 - ⑦ Item special drainage connection, using No. 6 aggregate (See note in Proposal).
 - ⑧ Item T-71 9" Reinforced Portland Cement Concrete Pavement.
 - ⑨ Standard Longitudinal Joint.
 - ⑫ Item I-12 Concrete Curb Type 6 Standard.
 - ⑬ Item I-12 Concrete Curb Type 7 Standard.
 - ⑭ Item I-12 Concrete Curb Type 8 Standard.
 - ⑮ Item I-15 Guard Rail, Steel Beam, Standard Type (Deep).
 - ⑯ Item L-9 Seeding and Protecting as per plan.
 - ⑰ Item T-71 10" Reinforced Portland Cement Concrete Pavement.

*Thickness shown is design thickness as described in Section B-21.01
For slope treatment of side slopes see Sheet No. 9.

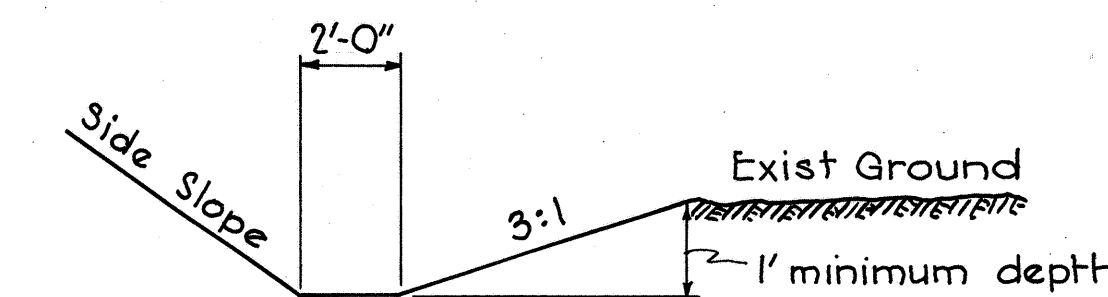
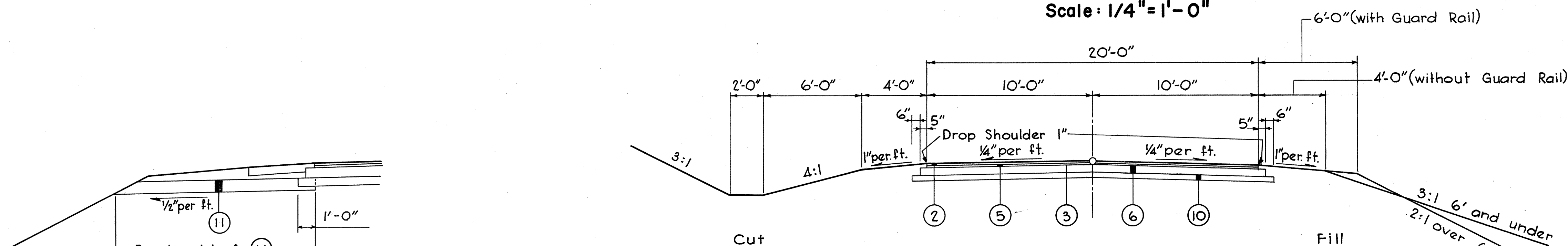
Note "A"
Slope 1/2" per foot or pavement slope whichever is greater.

Notes:
See S.R.94 Interchange Detail Plans for typical sections of - Off Ramp Terminals.

TYPICAL SECTIONS

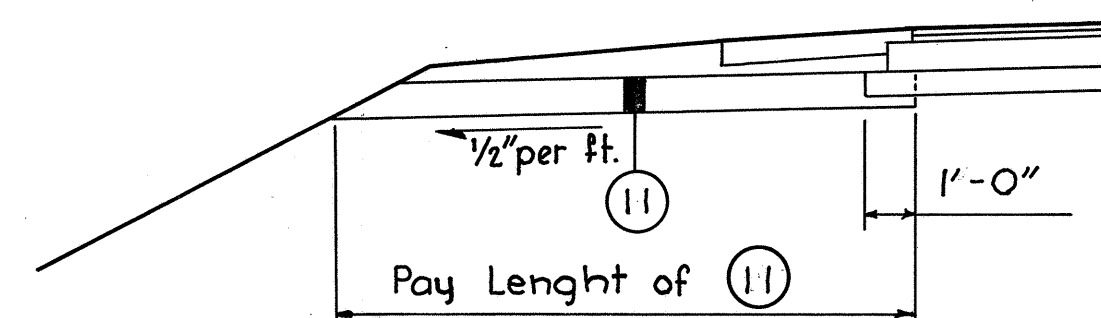
TYPES T-35 ON B-19 AND T-35 ON B-21

Scale: 1/4" = 1'-0"



DETAIL
TOE OF FILL DITCH
FOR ALL COUNTY HIGHWAYS

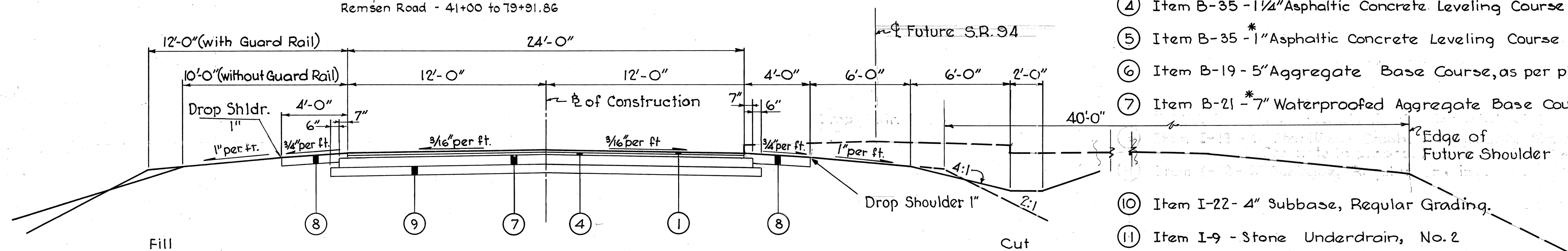
SUBGRADE DRAINAGE
AT PAVEMENT EDGES
S.R. 94



WILBUR ROAD CR.66 STONY HILL ROAD CR.48 REMSEN ROAD CR.37

Limiting Stations

Wilbur Road - 43+50 to 49+04.88 (Begin Appr. Slab)
50+89.72 (End Appr. Slab) to 52+59.23 (Begin Appr. Slab)
54+19.01 (End Appr. Slab) to 60+00
Stony Hill Road - 19+80.86 to 29+00
Remsen Road - 41+00 to 49+91.86



RIDGE ROAD S.R. 94

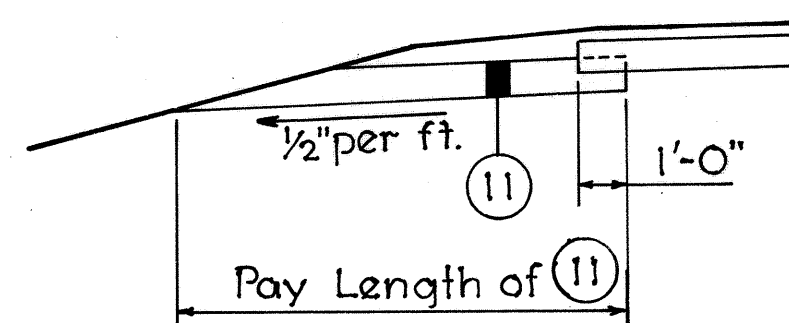
Limiting Stations

40+00 to 48+29.17 (Begin Appr. Slab)
51+70.83 (End Appr. Slab) to 63+00

LEGEND

- ① Item T-35 - * 1 1/4" Asphaltic Concrete Surface Course Type C(70-85)
 - ② Item T-35 - * 1" Asphaltic Concrete Surface Course Type C(85-100)
 - ③ Item T-30 - Bituminous Prime Coat, Sec. M-57, RT-2 or RT-3 applied at the rate of 0.40 gal. per sq. yds.
 - ④ Item B-35 - * 1 1/2" Asphaltic Concrete Leveling Course (70-85)
 - ⑤ Item B-35 - * 1" Asphaltic Concrete Leveling Course (85-100)
 - ⑥ Item B-19 - 5" Aggregate Base Course, as per plan.
 - ⑦ Item B-21 - * 7" Waterproofed Aggregate Base Course (Two 3 1/2" Courses)
 - ⑩ Item I-22 - 4" Subbase, Regular Grading.
 - ⑪ Item I-9 - Stone Underdrain, No. 2
- * Thickness shown is design thickness as described in Sec. B-21.01, Sec. T-35.01 or B-35.01, respectively.
- ⑧ Item I-18 - 6" Stabilized Crushed Aggregate Shoulders See note in proposal for additional stabilization with Ca.Cl.
 - ⑨ Item I-22 - 6" Subbase, Regular Grading.

SUBGRADE DRAINAGE
AT PAVEMENT EDGES
C.R. 66
C.R. 48
C.R. 37



Note Details of shoulder slopes and ditches not shown are to conform with Standard Drawing R1-1 unless otherwise shown on Cross Sections.

GENERAL NOTES

DESIGN SPEED: The geometrics for this project have been planned for a design speed of 70 miles per hour.

ELEVATION DATUM: All elevations are based on U.S.G.S. datum.

FIELD OFFICE: The Contractor shall, in addition to the requirements of 105.152 provide a suitable field office having a minimum of 500 sq. ft. of floor space. The Contractor shall have a telephone installed and maintained in this field office during the construction of this project.

The Contractor shall also provide and install wiring and outlets suitable for connecting electric lights and office equipment in the field office and provide 110-volt alternating current to the office during the entire period of construction of this project. The Contractor shall also provide and maintain sanitary provisions as per 107.06. All of the above is included in the lump sum price bid for field office.

Field office shall be situated so that it can remain during the life of the Contract unless otherwise authorized by the Engineer.

SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS: This plan makes no provision for connecting, nor shall the Engineer or Contractor connect, any existing or new drainage into the highway drainage system when such drains carry flow from any plumbing fixtures including floor drains and sink drains or drains from livestock lots or barns or polluted water of any kind. Existing pipe carrying flow which comes within the category outlined above shall be plugged with class E concrete at the right-of-way line. Payment for said plugging shall be included in the unit price bid for "Item 208 Excavation".

GUARD RAIL ADJACENT TO BRIDGE: One (1) additional guard rail post shall be provided in the center of each panel of guard rail adjacent to the bridge, payment for which shall be included in the unit price bid for Item 606 Guard Rail. Terminal Ends shall be provided at ends of all Guard Rail.

CONSTRUCTION LAYOUT STAKES: See note in Proposal describing the work included in this lump sum item.

TEMPORARY CONSTRUCTION: The Contractor's attention is directed to the fact that at the end of this contract it may be necessary to provide temporary drainage ditches, underdrain outlets and other temporary construction until such items on adjacent contracts are constructed. Payment for the above will be made under the respective bid items.

SPRING DRAINS: For Detail of Springs, see Sheet No. 193. The following quantities have been provided for Constructing Spring Drains:
Item 605 6" Unclassified Pipe Underdrain, 707.06, 707.12, as per plan = 50 Lin. Ft.
Item 605 Aggregate for Spring Drains, as per plan = 12 Lin. Ft.

SPECIFICATIONS: All items appearing throughout the plans that are indicative of the 1963 State of Ohio Department of Highways Construction and Material Specifications are to be used for reference purposes only. The project shall be constructed in accordance with the requirements of the 1965 State of Ohio Department of Highways Construction and Material Specifications. The cross references to the 1965 specifications are shown on the General Summary Sheets No. 19A and 19B.

EXISTING WATER WELLS: Dug wells encountered within the work limits shall be filled with rock or granular material. Drilled well casing shall be removed to an elevation approximately three feet below finished grade and covered with a pre-cast concrete slab or a large rock. Prior to construction of embankment, the Contractor shall remove any masonry surrounding a well, within three feet of finished grade. Pumps and other appurtenances shall become the property of the Contractor and shall be disposed of by him. The cost of filling or capping of wells shall be included in the unit price bid per cubic yard of Item 203 Excavation.

REMOVAL OF EXISTING PIPE: The removal of all existing pipe drains which would normally be removed in various excavation items shall be included for payment in the unit prices bid for the respective excavation items, unless otherwise itemized in the plans.

LOCATION AND SIZE OF PIPES: The location, type, depth and size of all existing pipes are shown as near exact as the available information will permit. The State will not be responsible for any variations found during construction.

CONNECTIONS TO EXISTING PIPE: At places where the plans provide for proposed drainage pipe to be connected to existing pipes, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before he starts to lay the proposed pipe. The cost of this operation shall be included in the unit price bid for the pertinent 603 conduit item.

UNDERGROUND UTILITIES: The locations of the underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. It is believed that they are essentially correct, but the State of Ohio does not guarantee their accuracy or completeness.

EXPANSION AND CONTRACTION JOINTS: Although specific locations of certain expansion and contraction joints have been detailed on this plan, no waiver of the specifications is intended and the maximum distance between contraction joints and the location of expansion joints in all cases shall be in accordance with Standard Drawing BP-4.

ITEM 605 AGGREGATE DRAINS: Aggregate drains shall be placed at fifty-foot intervals on each side of normal crowned sections and at twenty-five foot intervals on the low side only of superelevated sections, except where Item 605 Pipe Underdrains have been provided.

PART WIDTH CONSTRUCTION: Because of the possibility of building portions of this project under traffic and constructing the pavement part of a time, extreme care shall be taken, to prevent the construction of a butt joint on centerline in the 304 and 310 courses. This shall be accomplished by building the 304 and 310 courses, placed with the first portion of the pavement built, at least eighteen (18) inches beyond the centerline and by surfacing no closer than eighteen (18) inches to this edge of the above courses. When the second portion of the pavement is built, at least twelve inches of these projecting courses shall be broken down and thoroughly keyed in with the newly placed corresponding courses in the second portion of the pavement built. Payment for this operation shall be included in the unit prices bid for the pertinent pavement items.

REMOVAL OF TREES AND STUMPS: All trees and stumps specifically marked for removal within the construction limits of this project shall be removed under the lump sum price bid for Item 201, Clearing & Grubbing, except that those trees for which protection and preservation work is indicated elsewhere in these plans shall not be removed.

The following is an approximate estimate of the number of trees and stumps to be removed.

SIZES	No. TREES	No. STUMPS
12" - 18"	1352	25
18" - 24"	234	25
24" - 30"	123	7
30" - 36"	7	1
36" - 42"	12	3
42" - 48"	0	0
Over 48"	4	0

The above estimate is approximate and the State of Ohio reserves the right to order the removal of additional trees or stumps outside of the limits of construction but within the right-of-way and/or easement lines. Payment for the removal of these additional trees or stumps shall be included in the lump sum price bid for Item 201, Clearing & Grubbing. All Elm trees, regardless of size and location shall be removed.

UNDERDRAIN: Transitioning underdrain from shallow to deep underdrain is classified as deep underdrain.

APPROACH SLAB LONGITUDINAL JOINTS: Longitudinal impressed or sawed joints shall be provided between lane elements on all approach slabs, in accordance with "Standard Construction Drawing BP-3.

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203 BORROW, USING GRANULAR MATERIAL : An estimated quantity of 203 Borrow, Using Granular Material, has been included in the Plans to be used as directed by the Engineer. This material should be placed in lifts not to exceed 2 feet in thickness and should be carried to an elevation of 1 foot above water level, if water is present. Granular material furnished for this item should be as specified under Sec. 203.02 of the Construction and Material Specifications, except that not less than 85%, by weight, of the grains or particles should be retained on a No. 200 sieve. Specification requirements relating to scalping are to be waived in areas where this treatment is employed. The 18" granular layer from Sta. 182+50 to 185+50 shall be composed of this material.

SPECIAL DITCHES : Elevations for all special ditches are shown on cross sections.

EROSION CONTROL AT HEADWALLS : An eighteen (18) inch wide strip of sod shall be placed along the back and both ends of each headwall to prevent erosion.

ESTIMATED QUANTITIES : Specific locations and usage of estimated quantities set up on this plan to be used "as directed by the Engineer" shall be made a matter of record by incorporation into the final change order governing completion of this project. Material shall not be ordered until approval of the Engineer has been obtained.

CENTERLINE REFERENCE MONUMENTS : Monuments shall be constructed of Class "C" concrete poured in a circular hole eight (8) inches in diameter and forty-four (44) inches in depth. Top of concrete shall be finished at a depth of two (2) inches below ground level and the upper six (6) inch portion of the concrete shall be formed. A one-half (1/2) inch Brass Rod six (6) inches long shall be embedded in the wet concrete as directed by the Engineer to mark the centerline and station.

FLARING GUARD RAIL AT BRIDGES : Guard Rail on cross roads shall be flared to meet the bridge railing in such a manner that the change in alignment of guard rail shall not exceed 1:20.

ITEM 310 SUBBASE, GRADING "A" OR "B" AS PER PLAN : Material for this item shall meet the requirements of grading "A" or "B" of Sec. 310.02 except that for either grading, no more than 10% of the material shall pass a No. 200 sieve after all operations of placing and compacting have been completed. The I-22 subbase shall be carried under all bridge approach slabs.

ITEM S.S. 801 COMPACTION USING HEAVY PNEUMATIC-TIRED ROLLER : An estimated quantity for this item has been provided in the General Summary for use in 203 proof rolling of subgrade under the mainline and ramp pavements as directed by the Engineer. Proof rolling will not be required where rock or shale occurs in subgrade and in areas where subbase has been thickened to replace frost susceptible silts. In lieu of the requirements of S.S. 801, a minimum of one coverage will be required to check the subgrade. Moisture content of the top 12" of subgrade shall not exceed optimum at the time of proof rolling. Tire pressure and total load shall be varied as directed by the Engineer within the limits provided in S.S. 801.

ITEM 304 AGGREGATE BASE COURSE : In lieu of the requirements of Sec. 304.02 material for this item shall be either crushed stone, slag or slacker aggregate. All other provisions of 304 shall remain in effect.

FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS : The Contractor shall furnish, erect, maintain and subsequently remove Federal Aid construction identification signs at each of the following locations:

1. I-71 - Sta. 32+00 on Rt.
2. I-71 - Sta. 67+00 on Lt.
3. Ridge Rd. - Sta. 64+30 on Lt.
4. Ridge Rd. - Sta. 38+20 on Rt.

Sign details shall be as specified on Standard Drawing FACI-1, "Code N-55(1)-120(2)", and the signs shall be erected in accordance with Standard Drawing FACI-2. Additional requirements shall be in accordance with notes in the proposal.

FARM DRAINS : All farm drains which are encountered during construction shall be provided with unobstructed outlets under the direction of the Engineer. Existing collectors which are located below the roadway ditch elevations and which cross the roadway shall be replaced within the construction limits by Item 603 conduit, Type B with Class B Bedding.

Existing collectors and isolated farm drains which are encountered above the elevation of the roadway ditches shall be outletted into the roadway ditches by 603 Type F conduit. The optimum outlet elevation shall be, if possible, one foot above the flowline elevation of the ditch. Lateral-tile fields which cross the roadway shall be intercepted by 603 Type E conduit and carried in a longitudinal direction to an adequate outlet or roadway crossing.

The location, type, size and grade of required replacements shall be determined by the Engineer during construction and payment shall be made on final measurements.

The following estimated quantities have been included in the general summary for the work noted above:

Item I-1 6" Pipe, Class J-1 Sec. 6.6(b) or 6.8(b)	100 Lin. Ft.
Item I-1 8" Pipe, Class J-1 Sec. 6.6(b) or 6.8(b)	300 Lin. Ft.
Item I-1 10" Pipe, Class J-1 Sec. 6.6(b) or 6.8(b)	300 Lin. Ft.
Item I-1 6" Pipe, Class H-2	400 Lin. Ft.
Item I-1 8" Pipe, Class H-2	400 Lin. Ft.
Item I-1 10" Pipe, Class H-2	400 Lin. Ft.
Item I-1 6" Pipe, Class F-4	50 Lin. Ft.
Item I-1 8" Pipe, Class F-4	50 Lin. Ft.
Item I-1 10" Pipe, Class F-4	50 Lin. Ft.

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SEEDING AND PROTECTING: QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS DEFINED AS FOLLOWS:

INTERSTATE HIGHWAY, INCLUDING INTERCHANGE BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE WORK LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT.

RIDGE ROAD - S.R. 94 BETWEEN LINES TEN (10) FEET OUTSIDE THE WORK LIMITS, OR TO THE RIGHT-OF-WAY LINE IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS.

OTHER HIGHWAYS BETWEEN THE WORK LIMITS.

SEED SHALL BE SOWN AT RATE OF 3 POUNDS PER 1000 SQ. FEET EXCEPT AS OTHERWISE NOTED IN THE PLANS.

THE EXISTING POND NEAR RIDGE ROAD (S.R. 94) SHALL BE DRAINED BY A CONTROLLED METHOD ACCEPTABLE TO THE ENGINEER AT A RATE NOT TO EXCEED APPROXIMATELY 80 C.F.S. STANDBY MEN AND EQUIPMENT SHALL BE PREPARED CONTINUOUSLY DURING THE DRAINING OPERATION TO REDUCE OR STOP THE OUTFLOW, AS DIRECTED BY THE ENGINEER, TO PREVENT DOWNSTREAM PROPERTY DAMAGE. ANY UNSUITABLE MATERIAL ENCOUNTERED AFTER THE POND HAS BEEN DRAINED SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

PAVEMENT REMOVED OUTSIDE NORMAL CONSTRUCTION LIMITS

AFTER THE EXISTING PAVEMENT AS INDICATED ON THE PLANS HAS BEEN REMOVED, THE OLD ROADWAY SHALL BE PLOWED, HARROWED, AND DRAGGED TO A SMOOTH GRADE, THE OLD DITCHES FILLED, AND THE ENTIRE AREA SLOPED TO DRAIN AND LEFT IN A NEAT CONDITION READY FOR SEEDING. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PAVEMENT REMOVED. ITEM 202 SEEDING SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 659 SEEDING & MULCHING.

COOPERATION - TRAFFIC CONTROL DEVICES

A SEPARATE TRAFFIC CONTROL DEVICE CONTRACTOR WILL BE REQUIRED TO INSTALL OR ERECT TRAFFIC CONTROL DEVICES WITHIN CONTRACT WORK LIMITS PRIOR TO COMPLETION OF WORK BY THE CONTRACTOR.

THE CONTRACTOR SHALL COOPERATE WITH THE SEPARATE CONTRACTOR TO ARRANGE A SUITABLE WORK SCHEDULE, SUBJECT TO THE APPROVAL OF THE ENGINEER, TO PERMIT THE SEPARATE CONTRACTOR TO WORK AND OPERATE NECESSARY EQUIPMENT WITHIN WORK LIMITS TO CARRY OUT THE PROVISIONS OF HIS CONTRACT. THE ENGINEER SHALL NOTIFY THE CONTRACTOR A MINIMUM OF THIRTY (30) DAYS PRIOR TO ANY SCHEDULED WORK BY THE SEPARATE CONTRACTOR.

EACH CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE BY HIM, OR HIS AGENTS, TO THE WORK PERFORMED BY THE OTHER CONTRACTOR.

COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS CONSTRUCTION PROJECT.

TRAFFIC MAINTENANCE

1. MINIMUM PROVISIONS FOR THE MAINTENANCE OF TRAFFIC ON PUBLIC HIGHWAYS AFFECTED BY THIS PROJECT SHALL BE AS FOLLOWS:

- C.R. 66 (WILBUR ROAD): THE CONTRACTOR MAY CLOSE THIS ROAD TO THROUGH TRAFFIC DURING CONSTRUCTION, FOR A PERIOD NOT TO EXCEED 100 CONSECUTIVE CALENDAR DAYS.
- C.R. 48 (STONY HILL ROAD): TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES FOR THIS ROAD BY USE OF EITHER THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, OR THE TEMPORARY RUNAROUND.
- S.R. 94 (RIDGE ROAD): TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF EITHER THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, OR THE TEMPORARY RUNAROUND.
- C.R. 37 (REMSEN ROAD): TWO-WAY TRAFFIC SHALL BE MAINTAINED ON THE EXISTING C.R. 37 UNTIL THE NEW SECTION OF S.R. 94 IS CONSTRUCTED AND OPEN TO TRAFFIC AND UNTIL RELOCATED C.R. 37 IS CONSTRUCTED AND OPEN TO TRAFFIC. THE CUL-DE-SAC EAST OF I-271 SHALL BE CONSTRUCTED IMMEDIATELY FOLLOWING THE CLOSING OF C.R. 37.

2. LOCAL TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE PROVISIONS OF ITEM 614 AND SHALL INCLUDE THE MAINTENANCE OF ACCESS TO ALL PROPERTIES AFFECTED BY ANY OF THE CONSTRUCTION OPERATIONS. TRAFFIC COMPACTED SURFACE COURSE, ITEM 410 AND WATER OR CALCIUM CHLORIDE FOR DUST CONTROL, ITEM 616 SHALL BE APPLIED ON TEMPORARY ROADWAYS, LANES AND/OR DRIVEWAYS FOR THE MAINTENANCE OF LOCAL TRAFFIC AS DIRECTED, AND IN AMOUNTS REQUESTED BY THE ENGINEER.

ESTIMATED QUANTITIES ARE AS FOLLOWS:

ITEM 616 WATER FOR DUST CONTROL - 10 M. GAL.

ITEM 410 TRAFFIC COMPACTED SURFACE COURSE - 400 CU. YDS.

ITEM 616 CALCIUM CHLORIDE FOR DUST CONTROL - 8 TONS

3. THE CONTRACTOR SHALL, IN ADDITION TO THE GENERAL PROVISIONS OF SECTION C-7.07 ON THIS PROJECT, PERFORM THE FOLLOWING:

- PROVIDE, ERECT AND MAINTAIN STANDARD 48" x 30" SIZE "ROAD CLOSED" SIGNS, SIGN SUPPORTS AND LIGHTS AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROAD IS CLOSED TO TRAFFIC:
 - C.R. 66 (WILBUR RD.): AT THE INTERSECTIONS WITH C.R. 131 AND S.R. 94 (RIDGE ROAD)
 - PROVIDE LIGHTS, BARRICADES AND DANGER AND ADVANCE WARNING SIGNS AT THE LOCATIONS SHOWN ABOVE IN ACCORDANCE WITH SECTION 107.10
4. BARRICADES AND GATES SHALL BE AS DESCRIBED ON STANDARD CONSTRUCTION DRAWING NO. MC-3
5. SIGN SUPPORTS AND LIGHTS FOR "ROAD CLOSED" SIGNS SHALL BE AS DETAILED IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
6. PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND REMOVING BARRICADES, GATES, LIGHTS, SIGNS AND SIGN SUPPORTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR "ITEM 614 MAINTAINING TRAFFIC".

MAINTAINING TRAFFIC (IR-71)

NO INTERRUPTION TO TRAFFIC ON INTERSTATE 71 WILL BE PERMITTED BY THE CONTRACTOR'S CONSTRUCTION OPERATION, EXCEPT AS SPECIFICALLY PROVIDED HEREIN. THE CONTRACTOR MAY CLOSE THE OUTSIDE LANES ON THE NORTH AND SOUTHBOUND LANES OF INTERSTATE 71, ADJACENT TO THE EAST AND WEST CONNECTOR ON INTERSTATE 271, WHILE CONSTRUCTING THE PORTIONS OF SAID CONNECTORS ADJACENT TO INTERSTATE 71 PAVEMENT.

ALL TRAFFIC CONTROL DEVICES USED AND THE PLACEMENT THEREOF SHALL BE IN ACCORDANCE WITH CHAPTER 7, CONSTRUCTION AND MAINTENANCE OPERATIONS, OF THE OHIO MANUAL AND UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, 1963 EDITION. NIGHT ILLUMINATION SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.

THE COST OF MAINTAINING TRAFFIC AS OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC

GENERAL SUMMARY (1965 SPECIFICATIONS)

FED. RD. DIVISION	STATE	PROJECT	198 259
2	OHIO	T-271-6(13)221	

MEDINA COUNTY
MED - 271 - 0.00

FROM SH. 17, 18, 19 LINE NO.	ITEM	QUANT	UNIT	DESCRIPTION Construction Type Code 7221
125				PAVEMENT
126	301	1,123	Cu. Yds.	Bituminous Aggregate Base: 702.01, (85-100); or 702.09, RT-12
127	304	15,893	Cu. Yds.	Aggregate Base
10	304	80	M. Gals.	Water
128	301	6753	Cu. Yds.	Bituminous Aggregate Base: 702.01, (85-100); 702.09, RT-12, as per plan
146	310	25,000	Cu. Yds.	Subbase, Grading "A" or "B" as per plan
147	310	10,186	Cu. Yds.	Subbase
129	402	415	Cu. Yds.	Asphalt Concrete (85-100)
130	402	182	Cu. Yds.	Asphalt Concrete (70-85)
135	404	440	Cu. Yds.	Asphalt Concrete (85-100)
136	404	182	Cu. Yds.	Asphalt Concrete (70-85)
132	408	6,210	Gals.	Bituminous Prime Coat, 702.09 RT-2 or RT-3
133	409	18,535	Gals.	Seal Coat Bituminous Material as per plan
134	409	593	Cu. Yds.	Seal Coat Cover Aggregate No. 8
137	451	8,820	Sq. Yds.	9" Reinforced Portland Cement Concrete Pavement
138	451	125,711	Sq. Yds.	10" Reinforced Portland Cement Concrete Pavement
141	609	375	Lin. Ft.	Standard Type 6 Concrete Curb
142	609	414	Lin. Ft.	Standard Type 7 Concrete Curb
143	609	1,606	Lin. Ft.	Standard Type 8 Concrete Curb
140	611	745	Sq. Yds.	Reinforced Concrete Approach Slabs (T=13")
144	612	89	Sq. Yds.	Standard Concrete Median
149	Special	3,065	Cu. Yds.	Drainage Connection Using No. 8 Aggregate
152				BUILDING REMOVAL
154	202	Lump	Lump	Removal of Two Frame Sheds, Parcel 14-WL
155, 156, 157	202	Lump	Lump	Removal of One 1 Story Frame House, One Frame Bank Barn, Four Frame Corn Cribbs, Four Sheds, One Frame Chicken House, One Frame Garage, Parcel 23-WL
158	202	Lump	Lump	Removal of One 1 Story Frame Residence and One Concrete Block Garage, Parcel 26-WL
159	202	Lump	Lump	Removal of One 1 Story Frame and Stone Residence, Parcel 27-WL
160	202	Lump	Lump	Removal of One 1 1/2 Story Frame Residence One Frame Garage, Parcel 24-WL
161	202	Lump	Lump	Removal of One 1 1/2 Story Frame Residence, Parcel 28-WL
162	202	Lump	Lump	Removal of One 1 1/2 Story Frame Residence, Concrete Block Service Station, Parcel 30-WL
163	202	Lump	Lump	Removal of One 1 1/2 Story Frame Residence, Parcel 31-WL
177				STRUCTURES OVER 20 FT. SPAN
179				For Estimated Quantities
181				MED - 271 - 0194 See Sheet No. 212
182				MED - 271 - 0202 See Sheet No. 213
183				MED - 271 - 0284 L&R See Sheet No. 220
184				MED - 271 - 0356 See Sheet No. 225
185				MED - 271 - 0356 A See Sheet No. 227
186				MED 271 - 0406 See Sheet No. 230
193				SIGN QUANTITIES - See Sheet No. 206 LIGHTING QUANTITIES - See Sheet No. 210C
189		Lump	Lump	Construction Layout Stakes
190	614	Lump	Lump	Maintaining Traffic
191		Lump	Lump	Field Office

LINE SHEET		EARTHWORK CU. YDS.				SEEDING	
FROM	TO	EXCAVATION	EMBANKMENT	EMBANKMENT + 18%	E-4 BORROW USING GRAN. MATL. INCL. COST OF EXCAV. OF UNSUITABLE MATL.	E-4 BORROW USING GRANULAR MATL.	SQ. YDS.
32+00	33+00	10					17
33+00	43+75	951	159	188			1,443
43+75	60+00	75,068	353	417			20,895
60+00	77+57.82 Conn. W						
60+00	71+48.94 Conn. E	90,847	116	137			18,818
77+57.82	88+00	126,004					28,132
88+00 N.B.L.	104+00 N.B.L.	4,172	22,070	26,043			26,359
88+00 S.B.L.	104+00 S.B.L.	5,325	39,383	46,472			24,426
104+00 N.B.L.	119+00 N.B.L.	5,806	48,883	57,682			43,709
104+00 S.B.L.	118+00 S.B.L.	4,887	85,601	98,649			29,006
119+00 N.B.L.	134+00 N.B.L.	12,426	46,315	54,652			53,737
118+00 S.B.L.	132+00 S.B.L.	16,904	17,592	20,759			20,487
134+00 N.B.L.	149+00 N.B.L.	10,883	5,302	6,256			43,417
132+00 S.B.L.	146+00 S.B.L.	3,337	5,366	6,332			15,222
149+00 N.B.L.	164+00 N.B.L.	38,922	15	18			36,334
146+00 S.B.L.	161+00 S.B.L.	34,047	515	608			20,000
164+00 N.B.L.	179+01.92 N.B.L.	36,653	55,032	64,938	17,775		24,376
161+00 S.B.L.	176+04.74 S.B.L.	23,213	78,233	92,315			28,505
179+01.92	189+00	3,303	112,226	132,427	58,136	1,380	30,962
189+00	200+00	86,952	17,829	21,038	3,849	1,609	31,328
200+00	211+00	173,959					32,911
211+00	222+00	105,991	2,929	3,456			31,399
222+00	232+00	4,777	105,852	124,905			27,778
232+00	242+00	13,273	60,798	71,742			18,476
242+00	252+00	39,638	13,603	16,052			20,321
252+00	262+00	91,835	2,945	3,475			24,477
262+00	272+00	119,487	843	995			30,820
272+00	274+55	3,657	1,704	2,013			7,500
C.R. 48		1,343	7,763	9,160			6,278
C.R. 66		911	41,778	49,298			14,629
C.R. 37		10,772	22,764	26,862			34,019
S.R. 94		3,492	116,742	137,756			28,559
C.R. 37 Turnaround			3,264	3,852			3,744
Interchange S.R. 94		66,353	149,458	176,360			79,998
Entrance Lt. S.R. 94 (42+20)		43	286	338			
Dike 42+25 Ramp A S.R. 94 Intchg.			434	512			
5% Compaction				3,988	150		
TOTALS		1,215,241	1,064,153	1,255,707	83,748	3,139	858,088

EARTHWORK BALANCE

Roadway Excavation = 1,215,241 Cu. Yds.
 E-3 Channel Excavation = 12,278 (50% Available)
 1,227,519 Cu. Yds.
 1,255,707 (Embankment) - 1,227,519 = 28,188 Cu. Yds. (Borrow Required).

B-19 AGGREGATE BASE COURSE, as per plan

Connection W Terminal = 11,944 Cu. Ft.
 Connection E Terminal = 6,490
 Connection W = 24,840
 Connection E = 13,354
 From T-71; 38,232 * 4 * 0.583 = 89,157
 N.B.L. 226+26.83 to 235+67.83 = 941 Lin. Ft.
 N.B.L. 259+00 to 271+00 = 1,200
 S.B.L. 224+00 to 236+00 = 1,200
 S.B.L. 254+75 to 263+75 = 900
 = 4,241 Lin. Ft.
 38,232 - 4,241 = 33,991 Lin. Ft. * 10 * 0.583 = 198,167
 343,952 Cu. Ft. ÷ 27 = 12,739 Cu. Yds.
 Wilbur Rd. - C.R. 66 = 412
 Remsen Rd. - C.R. 37 = 1,273
 Turnaround for C.R. 37 = 156
 Stony Hill Rd. - C.R. 48 = 318
 S.R. 94 Interchange = 647
 Standard U-Turn Median Openings = 207
 Total = 15,752 Cu. Yds.

B-21 6" WATERPROOFED AGGREGATE BASE COURSE, AS PER PLAN

S.R. 94 Interchange 1,172 Cu. Yds.

B-21 3" WATERPROOFED AGGREGATE BASE COURSE, AS PER PLAN

Connection W Terminal 190 Cu. Yds.
 Connection W 394
 Connection E Terminal 103
 Connection E 212
 From Item B-19 - 38,232 * 4 * 0.25 ÷ 27 = 1,416
 From Item B-19 - 33,991 * 10 * 0.25 ÷ 27 = 3,147
 S.R. 94 Interchange 33
 Standard U-Turn Median Openings 87
 Total = 5,581 Cu. Yds.

B-21 7" WATERPROOFED AGGREGATE BASE COURSE

S.R. 94 - 1,960.34 Lin. Ft. * 25 * 0.583 ÷ 27 = 1,123 Cu. Yds.

CALCULATIONS

B-35 1" ASPHALTIC CONCRETE LEVELING COURSE (85-100)

Remsen Rd. - C.R. 37 79,620.02 Sq. Ft. * 0.083 ÷ 27 = 244 Cu. Yds.
 Turnaround for C.R. 37 10,075.00 Sq. Ft. * 0.083 ÷ 27 = 31
 Stony Hill Rd. - C.R. 48 20,559.59 Sq. Ft. * 0.083 ÷ 27 = 61
 Wilbur Rd. - C.R. 66 26,674.16 Sq. Ft. * 0.083 ÷ 27 = 79
 Total = 415 Cu. Yds.

B-35 1 1/4" ASPHALTIC CONCRETE LEVELING COURSE (70-85)

S.R. 94 1,960.34 Lin. Ft. * 24 * 0.1042 ÷ 27 = 182 Cu. Yds.

E-1 COMPACTED SUBGRADE

Connection W (inc. terminal) = 17,225 Sq. Yds.
 Connection E (inc. terminal) = 10,152
 Main Line = 157,372
 S.R. 94 Interchange = 22,374
 Remsen Rd. - C.R. 37 = 9,707
 Stony Hill Rd. - C.R. 48 = 1,818
 Wilbur Rd. - C.R. 66 = 3,157
 Ridge Rd. - S.R. 94 = 7,022
 Standard U-Turn Median Openings = 356
 Total = 229,183 Sq. Yds.

E-11 WATER

Embankment = 1,064,153 Cu. Yds.
 I-22 = 35,050
 B-19 = 15,752
 Total = 1,115,150 Cu. Yds. * 0.005 = 5,575 M. Gal.

SHEET N ^o	I-8 CENTERLINE REFERENCE MONUMENTS		I-9 STONE UNDERDRAIN N ^o 2	
	CENTERLINE REFERENCE MONUMENTS	MONUMENT ASSEMBLIES	LOCATION	LIN. FT.
235	37	6	C.R. 37	1,248
236	15	10	C.R. 48	240
			C.R. 66	408
			S.R. 94	606
TOTAL	52	16	TOTAL	2,502

SPECIAL DRAINAGE CONNECTION N^o 6 AGGREGATE

Connection W = 268.2 Cu. Yds.
 Connection E = 117.4
 Mainline = 2,070.3
 S.R. 94 Interchange = 609.1
 Total = 3,065.0 Cu. Yds.

I-18 STABILIZED CRUSHED AGGREGATE SHOULDERS

Ridge Rd. - S.R. 94 = 1,316.34 Lin. Ft. * 4 * 2 * 0.5 ÷ 27 = 195 Cu. Yds.

L-9 COMMERCIAL FERTILIZER 12-12-12

858,088 + 8,434 * 9 * 0.01 ÷ 1,000 = 78 Tons

T-30 BITUMINOUS PRIME COAT, applied at rate of 0.40 Gal./Sq. Yd.

Remsen Rd. - C.R. 37 79,620.02 Sq. Ft. * 0.40 = 3,184.8 Gals.
 Turnaround for C.R. 37 10,075.00 * 0.40 = 403.0
 Stony Hill Rd. - C.R. 48 20,559.59 * 0.40 = 822.4
 Wilbur Rd. - C.R. 66 26,674.16 Sq. Ft. * 0.40 = 1,066.9
 Total = 6,210 Gals.

T-31 BITUMINOUS SURFACE TREATMENT - N^o 6 AGGREGATE

From Item B-21-3"; 5,581 * 12 * 0.008 Cu. Yd./Sq. Yd. = 536 Cu. Yds.
 S.R. 94 Interchange 57
 Total = 593 Cu. Yds.

T-31 BITUMINOUS SURFACE TREATMENT - BITUMINOUS MATERIAL

From Item B-21-3"; 5,581 * 12 * 0.25 Gal./Sq. Yd. = 16,743 Gals.
 S.R. 94 Interchange = 1,792
 Total = 18,535 Gals.

T-35 ASPHALTIC CONCRETE SURFACE COURSE - TYPE C (85-100), 1-1" Courses

Remsen Rd. - C.R. 37 79,620.02 Sq. Ft. * 0.083 ÷ 27 = 244 Cu. Yds.
 Turnaround for C.R. 37 = 31
 Stony Hill Rd. - C.R. 48 20,559.59 Sq. Ft. * 0.083 ÷ 27 = 61
 Wilbur Rd. - C.R. 66 26,674.16 Sq. Ft. * 0.083 ÷ 27 = 79 Cu. Yds.
 Total = 415 Cu. Yds.

T-35 1 1/4" ASPHALTIC CONCRETE SURFACE COURSE - TYPE C (70-85).

Ridge Rd. - S.R. 94 1,960.34 Lin. Ft. * 24 * 0.1042 ÷ 27 = 182 Cu. Yds.

T-71 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

S.R. 94 Interchange = 8,820 Sq. Yds.

T-71 10" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

Connection W Terminal = 2,960 Sq. Yds.
 Connection E Terminal = 2,007 Sq. Yds.
 Connection W 49+99.71 to 77+57.82 = 7,355
 Connection E 55+12.85 to 71+48.94 = 4,363
 N.B.L. # S.B.L. 77+57.82 to 89+02.81 * 2 = 2,290 Lin. Ft.
 N.B.L. 89+02.81 to 179+01.92 = 8,999
 S.B.L. 89+02.81 to 176+04.74 = 8,702
 N.B.L. 179+01.92 to 185+03.70 = 592
 S.B.L. 179+01.92 to 184+87.50 = 576
 N.B.L. 186+56.30 to 272+00 = 8,544
 S.B.L. 186+72.50 to 272+00 = 8,529
 Total = 38,232 Lin. Ft.
 38,232 Lin. Ft. * 24 * 9 = 102,377 Sq. Yds.
 S.R. 94 Interchange = 6,649
 Total = 125,711 Sq. Yds.

ITEM SPECIAL - FURNISHING & MIXING CALCIUM CHLORIDE WITH AGGREGATE

S.R. 94 - 1,316.34 * 4 * 2 ÷ 9 = 1,170 Sq. Yds. 1170 * 1.1 ÷ 2,000 = 0.59 Tons

SSCE - 101.04 COMPACTION USING PNEUMATIC - TIRED ROLLER

Connection W (inc. terminal) = 17,225 Sq. Yds.
 Connection E (inc. terminal) = 10,152
 Main Line = 157,372
 S.R. 94 Interchange = 22,374
 Standard U-Turn Median Openings = 356
 Total = 207,479 Sq. Yds.
 207,479 ÷ 2,000 Sq. Yds./Hr. = 103.74; Use 104 Hrs.

I-22 SUBBASE, GRADING "A" or "B" AS PER PLAN.

Connection "W" Terminal = 13,321 Cu. Ft.
 Connection "E" Terminal = 9,033
 Connection "W" = 33,097
 Connection "E" = 19,633
 N.B.L. # S.B.L. 77+57.82 to 89+02.81 = 16,328
 N.B.L. 89+02.81 to 179+01.92 = 126,574
 S.B.L. 89+02.81 to 176+04.74 = 129,496
 N.B.L. 179+01.92 to 185+03.70 = 7,693
 S.B.L. 179+01.92 to 184+87.50 = 8,491
 N.B.L. 186+56.30 to 272+00 = 111,068
 S.B.L. 186+72.50 to 272+00 = 123,649
 S.R. 94 Interchange = 75,810
 Approach Slabs (I-271) = 800
 Total = 674,993 Cu. Ft. ÷ 27 = 25,000 Cu. Yds.

I-22 SUBBASE, REGULAR GRADING.

Connection "W" Terminal = 7,038 Cu. Ft.
 Connection "E" Terminal = 4,651
 Connection "W" = 11,062
 Connection "E" = 6,912
 N.B.L. # S.B.L. 77+57.82 to 89+02.81 = 10,740
 N.B.L. 89+02.81 to 179+01.92 = 35,021
 S.B.L. 89+02.81 to 176+04.74 = 39,256
 N.B.L. 179+01.92 to 185+03.70 = 2,669
 S.B.L. 179+01.92 to 184+87.50 = 1,979
 N.B.L. 186+56.30 to 272+00 = 31,296
 S.B.L. 186+72.50 to 272+00 = 24,098
 S.R. 94 Ridge Rd. = 25,484
 S.R. 94 (Ridge Rd) Approach Slabs = 425
 S.R. 94 Interchange = 22,875
 Standard U-Turn Median Openings (3") = 2,403
 Total = 275,909 Cu. Ft. ÷ 27 = 8,367 Cu. Yds.

C.R. 66 Wilbur Rd. = 377
 C.R. 37 Remsen Rd. = 1,056
 C.R. 37 Turnaround = 123
 C.R. 48 Stony Hill Rd. = 263
 Total = 10,186 Cu. Yds.

CALCULATIONS

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

20A
259

MEDINA COUNTY
MED-271-0.00

PAVEMENT MARKING									
REF. No	SIDE	STATION		4" EDGE LINE	4" LANE LINE	6" LANE LINE	8" CHANNEL LINE	DIAGONAL STRIPES	CURB ISLAND MARKING
		FROM	TO	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
Conn.E	Rt.	43+99	55+13	1,114			581	Lump	Lump
	Lt.	55+13	71+49	1,636					
	Center	50+60	71+49			783			
Conn.IV	Lt.	32+96	51+46	1,850			581	Lump	Lump
	Rt.	51+46	77+48	2,612					
	Center	48+99	77+58			1,073			
I-271	Rt.&Lt.	77+58(NBL)	104+00(NBL)	5,284					
	Rt.&Lt.	77+58(SBL)	104+00(SBL)	5,284					
	Center	77+58(NBL)	104+00(NBL)			991			
	Center	77+58(SBL)	104+00(SBL)			991			
	Rt.&Lt.	104+00(NBL)	179+02(NBL)	15,004					
	Rt.&Lt.	104+00(SBL)	176+04(SBL)	14,008					
	Center	104+00(NBL)	179+02(NBL)			2,813			
	Center	104+00(SBL)	176+02(SBL)			2,701			
	Rt.&Lt.	179+02(NBL)	226+00(NBL)	9,396					
	Lt.	226+00(NBL)	272+00(NBL)	4,600					
	Rt.&Lt.	179+02(SBL)	224+00(SBL)	8,976					
	Rt.	224+00(SBL)	272+00(SBL)	4,800					
	Center	179+02(NBL)	272+00(NBL)			3,487			
	Center	179+02(SBL)	272+00(SBL)			3,487			
	Rt.	236+00(NBL)	259+00(NBL)	2,300					
	Rt.	271+00(NBL)	272+00(NBL)	100					
	Lt.	236+00(SBL)	254+75(SBL)	1,875					
Lt.	264+00(SBL)	272+00(SBL)	800						
Ramp A		30+29	36+00		214				
	Lt.	24+00	36+00	1,200					
	Rt.&Lt.	36+00	49+00	2,600			581	Lump	
Ramp B	Rt.&Lt.	48+00	55+72	1,544			581		
	Lt.	55+72	63+75	803	131				
	Lt.	54+72	55+72					Lump	Lump
Ramp C	Lt.	259+00	264+28		198				
	Rt.&Lt.	47+00	55+00	1,600					
	Rt.	55+00	71+00	1,790			581	Lump	
Ramp D	Rt.	30+50	34+00		131		581	Lump	Lump
	Rt.	226+68	234+68	800				Lump	
	Rt.&Lt.	36+60	45+50	1,778					
Total - Lin. Ft.				96,402	6,74	16,346	3,486	Lump	Lump
Total - Miles				18.30	0.13	3.10	0.66	Lump	Lump

I-127 DELINEATORS																			
MAIN LINE					RAMPS					RAMPS cont.									
STATION		SIDE	INTERVAL (FT)	TYPE A-1		STATION		SIDE	INTERVAL (FT)	TYPE C-2		TYPE C-3							
FROM	TO			POST MOUNTED	BRACKET MOUNTED	FROM	TO			POST MOUNTED	BRACKET MOUNTED	POST MOUNTED	BRACKET MOUNTED						
78+00	88+00	R	200	6		Connection W													
78+00	88+00	L	200	6		32+00		L			1								
88+00(NBL)	176+00(NBL)	R	200	45		32+00	44+00	L	100	12									
88+00(NBL)	174+00(NBL)	L	200	44		44+00	56+00	R	100	13									
88+00(SBL)	170+00(SBL)	R	200	42		56+00	59+00	L	100	4									
88+00(SBL)	176+00(SBL)	L	200	44		59+00	72+50	L	50	28									
176+00(NBL)	179+00(NBL)	R	150	2		72+50	77+50	L	100	11									
179+00	225+00	R	200	23	1														
179+00	223+00	L	200	23		Connection E													
236+00	254+00	R	200	10		43+99		R		1									
240+00	254+00	L	200	8		45+00	56+00	R	100	12									
272+00		R		1		56+00	71+50	L	50	30									
264+00	272+00	L	200	5		S.R. 94 Interchange - Ramp A													
						224+00		L			1								
						224+00	236+00	L	100	12									
						36+00	39+00	R	100	4									
						39+00	42+00	R	50	6									
						42+00	47+00	L	50	11									
						47+00	48+74	R	30	6									
						47+00	48+64	L	30	7									
Sub - Total					I	259	1	II					157	2		III		99	1

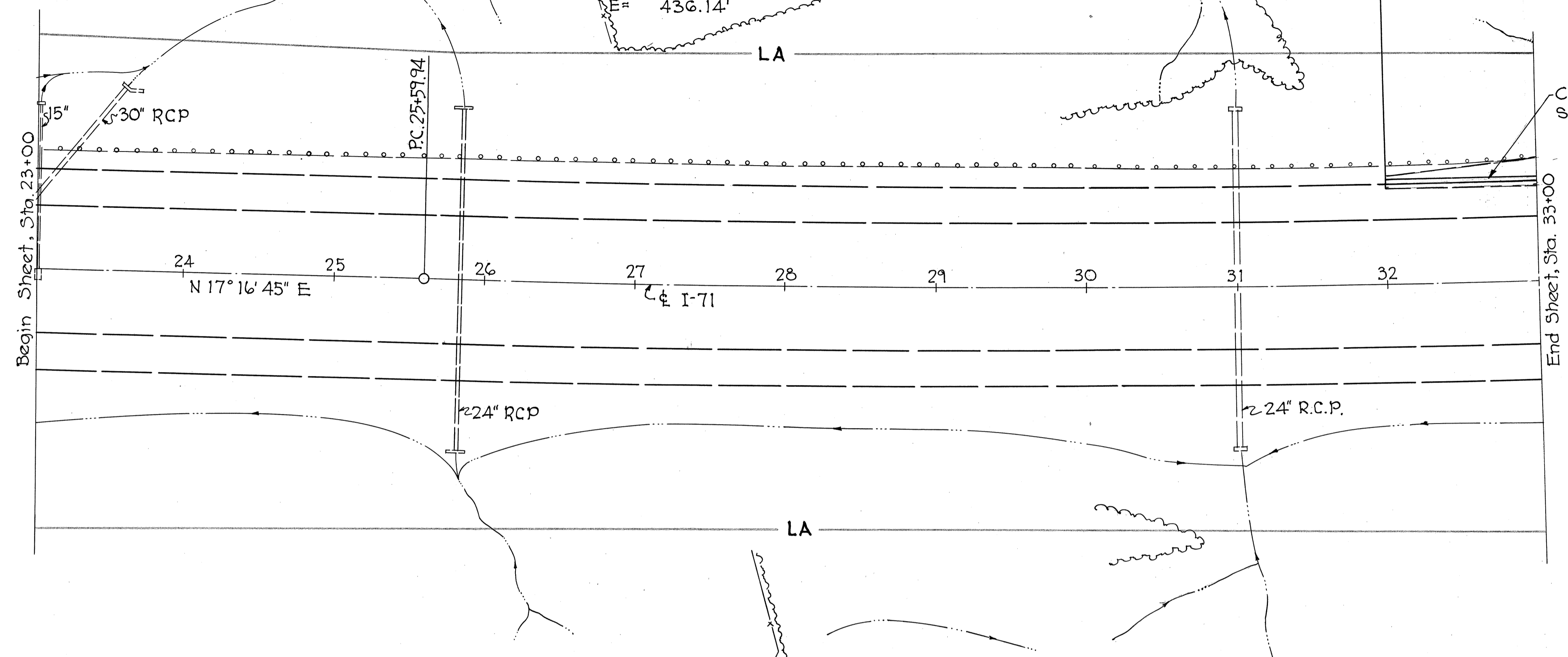
I-127 DELINEATORS						
TOTALS						
SUB TOTALS	TYPE A-1		TYPE C-2		TYPE C-3	
	POST MOUNTED	BRACKET MOUNTED	POST MOUNTED	BRACKET MOUNTED	POST MOUNTED	BRACKET MOUNTED
I	259	1				
II			157		2	
III			99		1	
TOTALS	259	1	256		3	

SUMMARY - FENCE QUANTITIES		
I-25 Woven Wire Fence, Type 47		
Shot No.	Station to Station	Lin. Ft.
4	77+57.82 to 81+00	666
5	81+00 to 96+00	3027
6	96+00 to 110+00	2,900
7	110+00 to 125+00	3,015
8	125+00 to 140+00	2,907
9	140+00 to 155+00	2,931
10	155+00 to 169+00	2,782
11	169+00 to 184+00	3,000
12	184+00 to 199+00	3,311
13	199+00 to 214+00	3,000
14	214+00 to 229+00	3,000
15	229+00 to 243+00	2,850
16	243+00 to 258+00	2,622
17	258+00 to 269+64.25	2,326
TOTALS		38,357

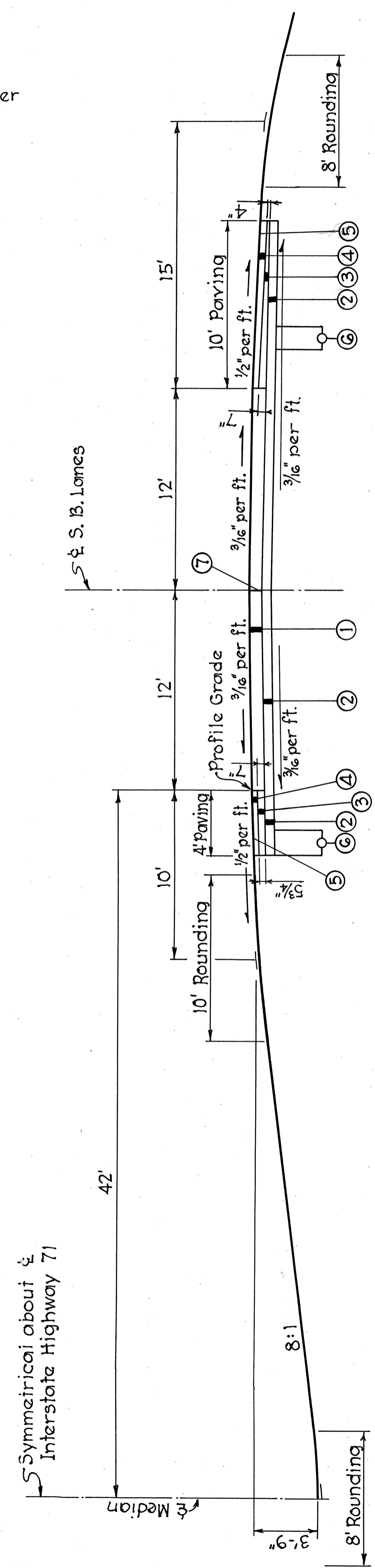
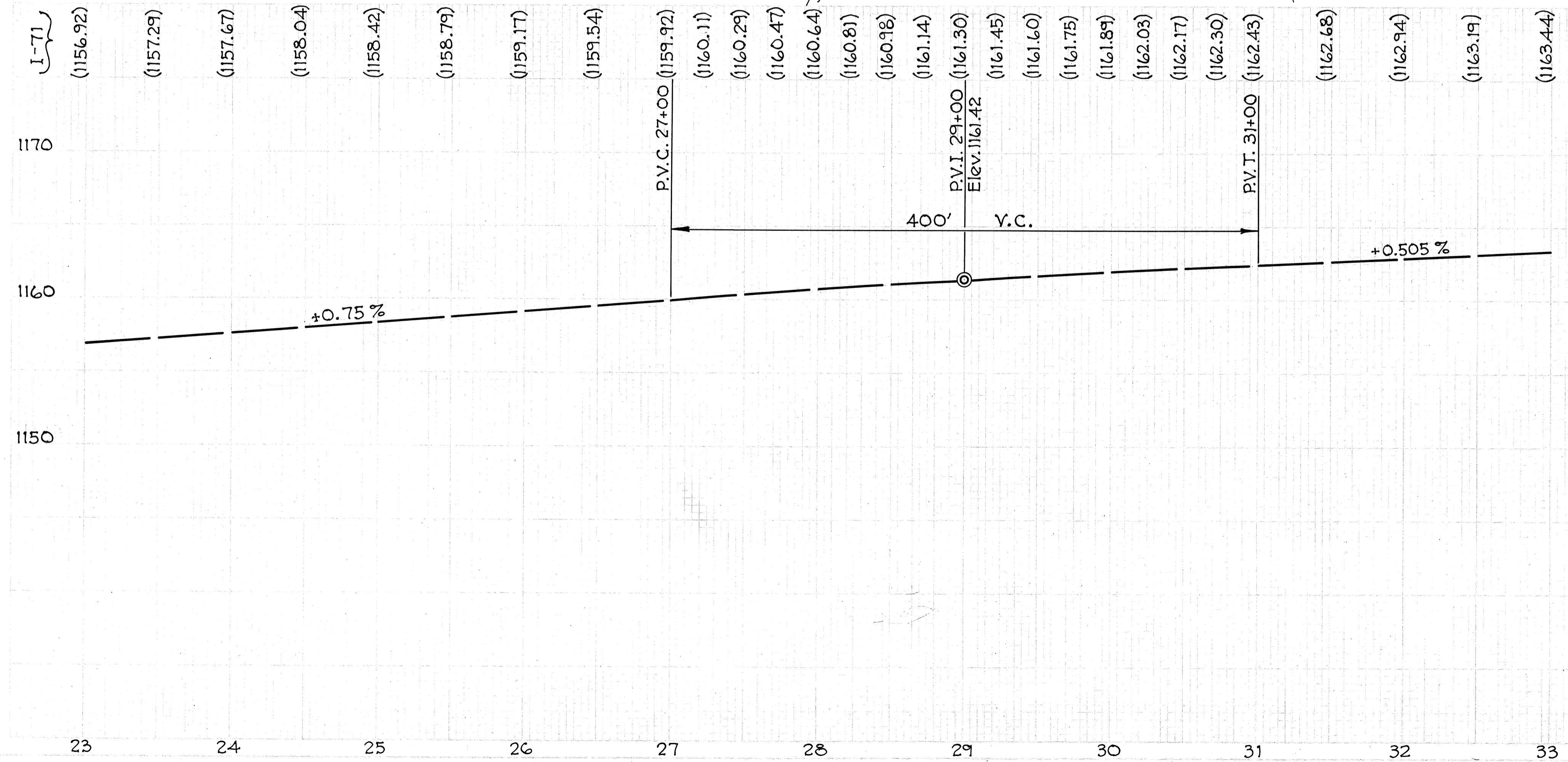
± I-71
P.I. Sta. 62+08.17
Δ = 26° 45' 53"
D = 0° 22'
R = 15,626.12'
L = 7,299.47'
T = 3,717.58'
E = 436.14'

MED-42-17.46
BEGIN PROJECT
Sta. 32+00.00

I-71-4(25)221 I-271-6(13)221



Connection W Taper
See Sheet No. 6

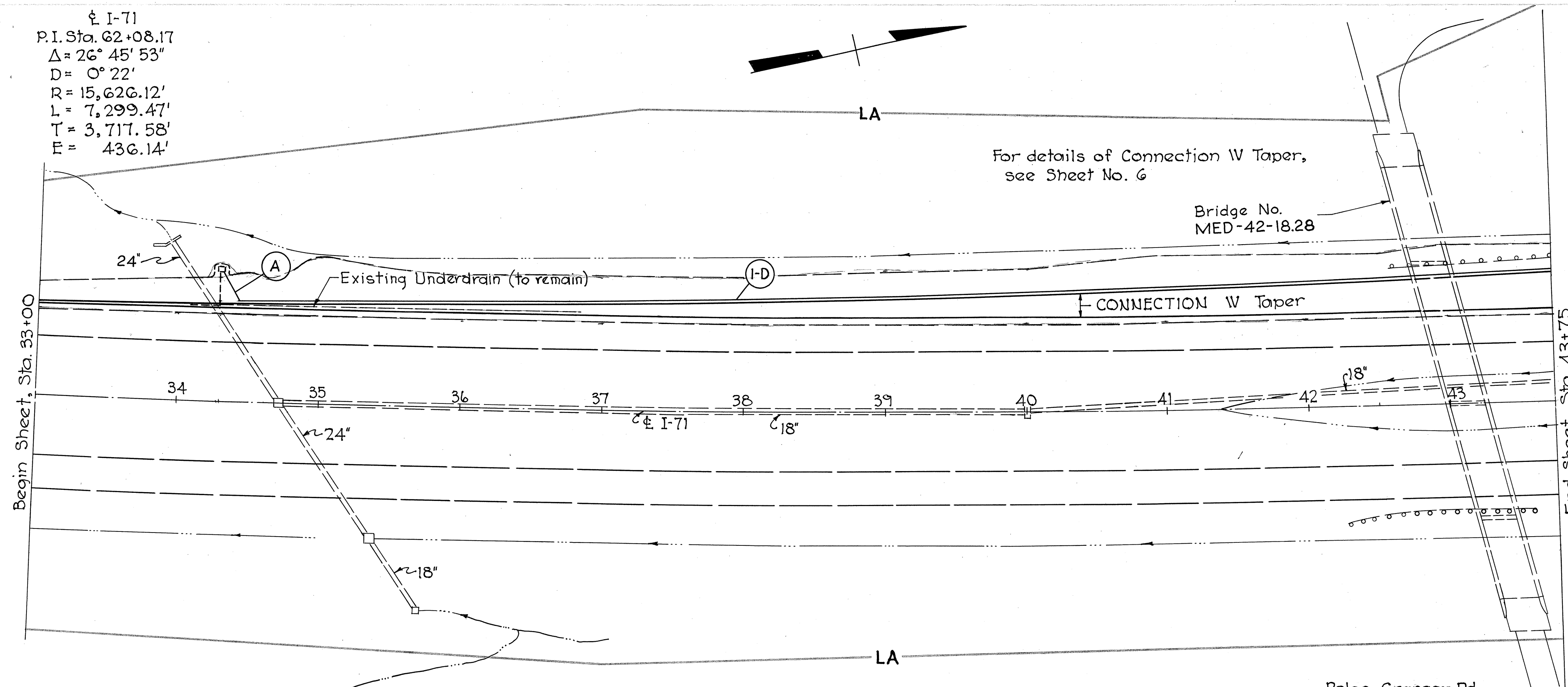


Note:
Southbound Lanes shown.
Northbound Lanes Symmetrical
about centerline Median.

**TYPICAL SECTION
ADJOINING PAVEMENT**
Scale: 1" = 5'

- LEGEND**
- ① 10" Reinforced Portland Cement Concrete Pavement.
 - ② 6" Subbase.
 - ③ Porous Base Course.
 - ④ 3" Waterproofed Aggregate Base Course.
 - ⑤ Bituminous Surface Treatment.
 - ⑥ Underdrain.
 - ⑦ Standard Longitudinal Joint.

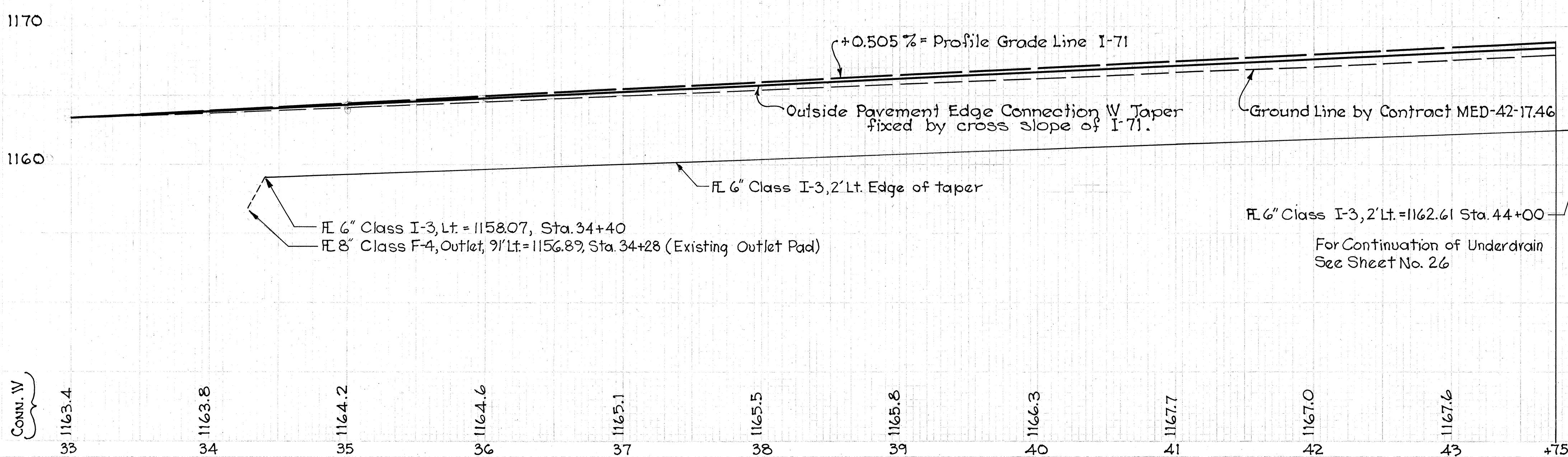
± I-71
P.I. Sta. 62+08.17
Δ = 26° 45' 53"
D = 0° 22'
R = 15,626.12'
L = 7,299.47'
T = 3,717.58'
E = 436.14'



B.M. #45 Elev 1170.69
R.R. Spike in 20" tree 15' Rt.
of ± Sta. 34+75 (I-71)

(A) For Details See Sheet No. 194

I-71	(1163.44)	(1163.69)	(1163.95)	(1164.20)	(1164.45)	(1164.70)	(1164.96)	(1165.21)	(1165.46)	(1165.71)	(1165.97)	(1166.22)	(1166.47)	(1166.72)	(1166.98)	(1167.23)	(1167.48)	(1167.73)	(1167.99)	(1168.24)	(1168.49)	(1168.74)
------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	CL. I-3 6" Deep	CL. F-4 8" Deep	I-5 Pipe Specials	Lin Ft	Lin Ft	Each	%	TOTALS
I-D	34+28 to 43+75	Lt.				10	10	1		10
										1
										TOTALS

ESTIMATED QUANTITIES

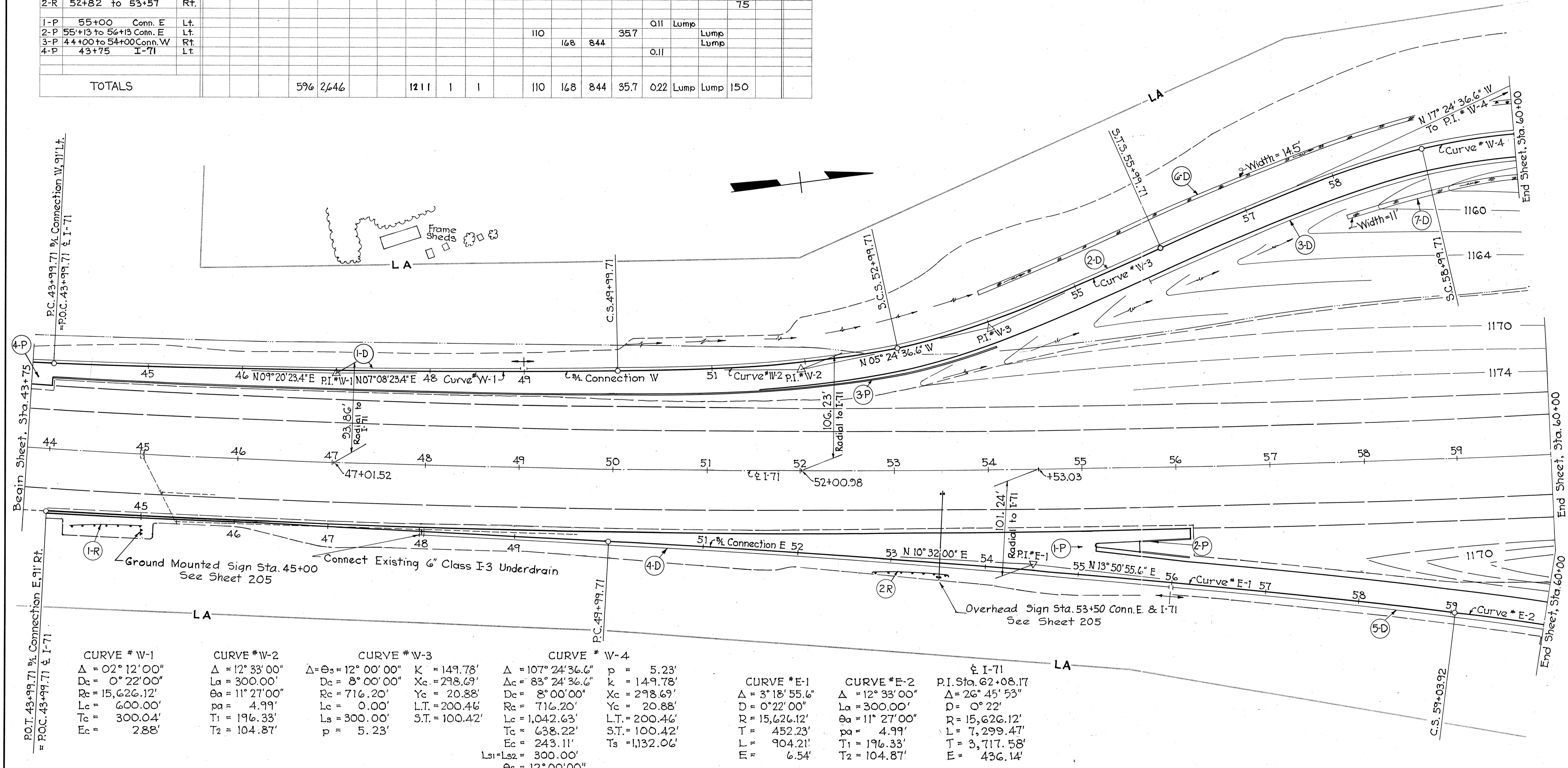
B.M. #43 Elev. 1165.96
R.R. Spike in 8" Maple 220'
Rt of & Sta. 53+75 (I-71)

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(β)-221

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MEDINA COUNTY
MED-271-000

REF. NO.	STATION TO STATION	SIDE	I-1		L-120	I-5		I-12		I-21	I-125	I-15	SEE SHEET NO.					
			Class I-3 Pipe			Jute Matting	Pipe Specials		Concrete Curb					Conc. Channel Med. Pav. Stripes	Diagonal Striping	Curb & Island Marking	Guard Rail	
			6" Shallow	6" Deep			CI 13 1/2 90° ELL	CI 13 1/2 Tee	Type 6 Std.									Type 7 Std.
Lin. Ft.	Lin. Ft.	Sq. Yd.	Each	Each	Lin. Ft.	Lin. Ft.	Lin. Ft.	Sq. Yd.	Miles	Lump	Lump	Lin. Ft.						
1-D	43+75 to 48+98	Lt.		523														
2-D	47+02 to 60+00	Lt.		1098														
3-D	55+75 to 60+00	Rt.		425														
4-D	48+00 to 55+96	Rt.		196		1	1											
5-D	56+00 to 60+00	Rt.		400														
6-D	54+00 to 60+00	Lt.				967												
7-D	58+00 to 60+00	Rt.				244												
1-R	44+28 to 45+03	Rt.										75						
2-R	52+82 to 53+57	Rt.										75						
1-P	55+00 Conn. E	Lt.								0.11	Lump							
2-P	55+13 to 56+13 Conn. E	Lt.						110	168	844	357	Lump						
3-P	44+00 to 54+00 Conn. W	Rt.								0.11	Lump							
4-P	43+75 I-71	Lt.																
TOTALS				596 2,646		1211	1	1	110	168	844	35.7	0.22 Lump Lump 150					



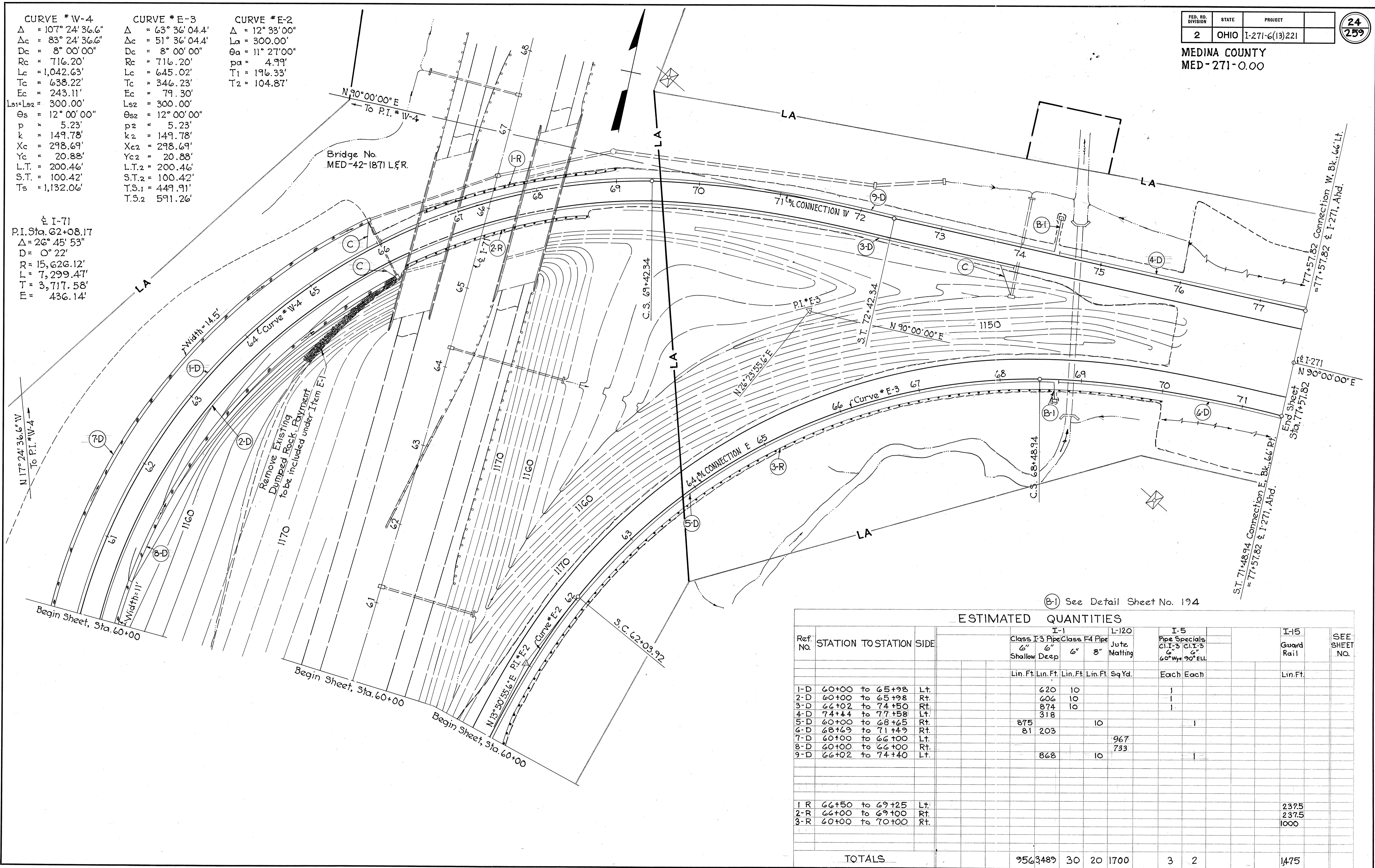
MEDINA COUNTY
MED-271-0.00

CURVE #W-4
 $\Delta = 107^\circ 24' 36.6''$
 $\Delta c = 83^\circ 24' 36.6''$
 $Dc = 8^\circ 00' 00''$
 $Rc = 716.20'$
 $Lc = 1,042.63'$
 $Tc = 638.22'$
 $Ec = 243.11'$
 $Ls_1=Ls_2 = 300.00'$
 $\Theta_s = 12^\circ 00' 00''$
 $p = 5.23'$
 $k = 149.78'$
 $Xc = 298.69'$
 $Yc = 20.88'$
 $L.T. = 200.46'$
 $S.T. = 100.42'$
 $Ts = 1,132.06'$

CURVE #E-3
 $\Delta = 63^\circ 36' 04.4''$
 $\Delta c = 51^\circ 36' 04.4''$
 $Dc = 8^\circ 00' 00''$
 $Rc = 716.20'$
 $Lc = 645.02'$
 $Tc = 346.23'$
 $Ec = 79.30'$
 $Ls_2 = 300.00'$
 $\Theta_{s2} = 12^\circ 00' 00''$
 $p_2 = 5.23'$
 $k_2 = 149.78'$
 $X_{c2} = 298.69'$
 $Y_{c2} = 20.88'$
 $L.T._2 = 200.46'$
 $S.T._2 = 100.42'$
 $T.S._1 = 449.91'$
 $T.S._2 = 591.26'$

CURVE #E-2
 $\Delta = 12^\circ 33' 00''$
 $L_a = 300.00'$
 $\Theta_a = 11^\circ 27' 00''$
 $pa = 4.99'$
 $T_1 = 196.33'$
 $T_2 = 104.87'$

ξ I-71
P.I. Sta. 62+08.17
 $\Delta = 26^\circ 45' 53''$
 $D = 0^\circ 22'$
 $R = 15,626.12'$
 $L = 7,299.47'$
 $T = 3,717.58'$
 $E = 436.14'$



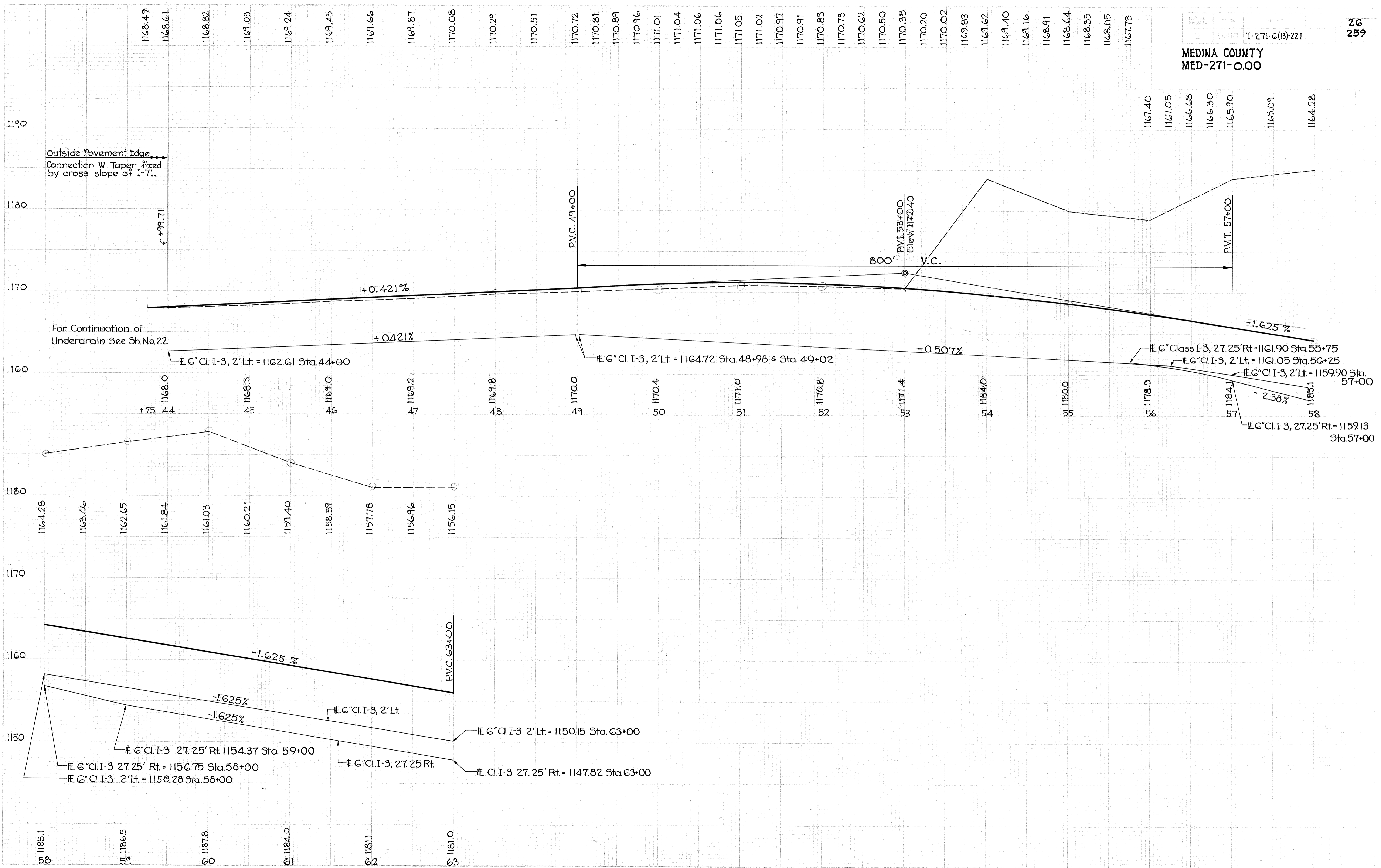
Remove Existing
Dumped Rock Payment
to be included under Item E1

(B-1) See Detail Sheet No. 194

ESTIMATED QUANTITIES

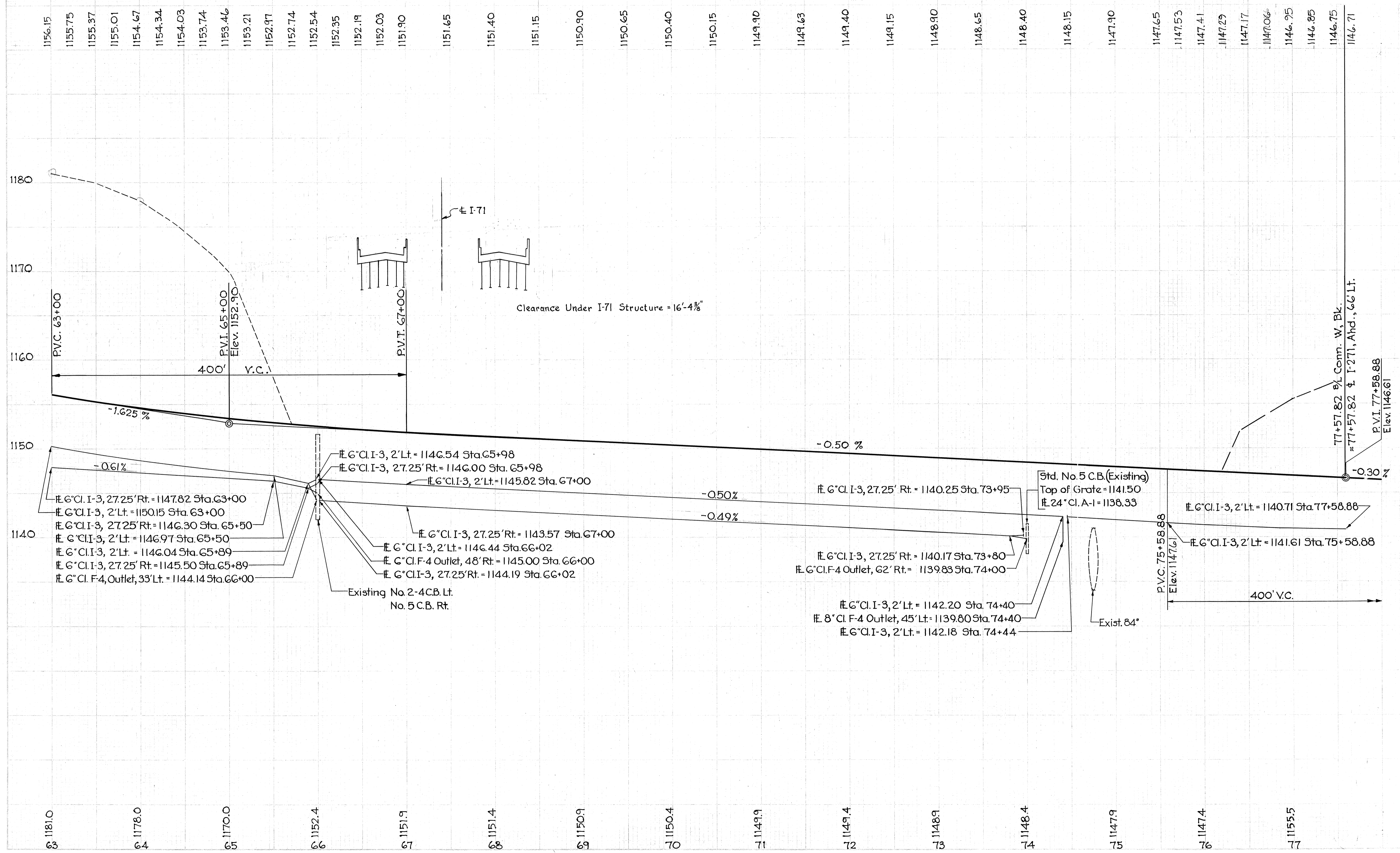
Ref. No.	STATION TO STATION	SIDE	I-1		I-120		I-5		I-15	SEE SHEET NO.	
			Class F3 Pipe		Class F4 Pipe		Pipe Specials				
			6" Shallow	6" Deep	6" Jute	8" Matting	6" CI 3'	6" CI 3'			60" Wye 90° ELL
Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Sq. Yd.	Each	Each	Lin. Ft.				
1-D	60+00 to 65+98	Lt.		620	10			1			
2-D	60+00 to 65+98	Rt.		606	10			1			
3-D	66+02 to 74+50	Rt.		874	10			1			
4-D	74+44 to 77+58	Lt.		318							
5-D	60+00 to 68+65	Rt.	875			10		1			
6-D	68+69 to 71+49	Rt.	81	203							
7-D	60+00 to 66+00	Lt.				967					
8-D	60+00 to 66+00	Rt.				733					
9-D	66+02 to 74+40	Lt.		868		10		1			
1-R	66+50 to 69+25	Lt.							237.5		
2-R	66+00 to 69+00	Rt.							237.5		
3-R	60+00 to 70+00	Rt.							1000		
TOTALS				9563489	30	20	1700	3	2	1475	

MEDINA COUNTY
MED-271-0.00

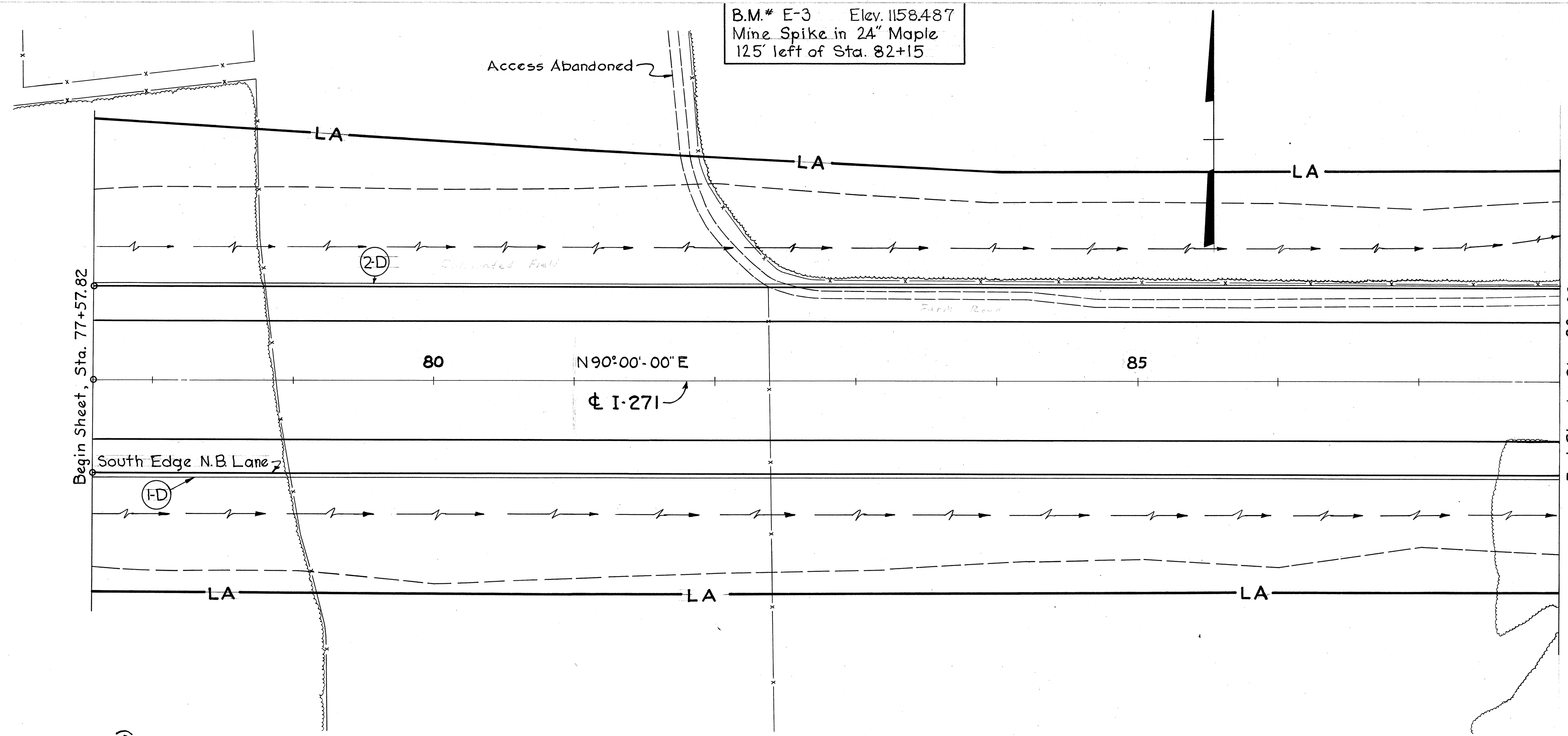


PROFILE - CONNECTION W Sta. 43+99.71 to 63+00

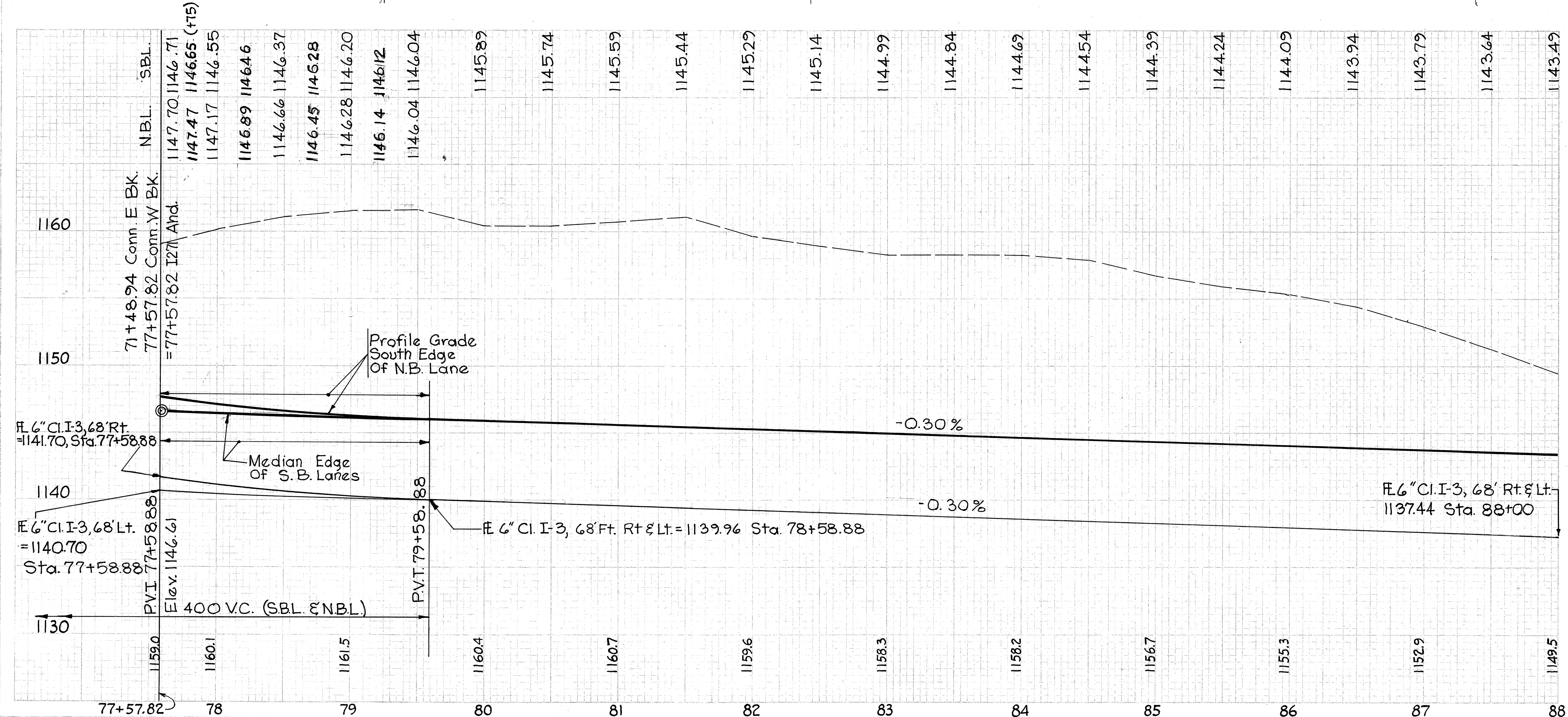
MEDINA COUNTY
MED-271-0.00



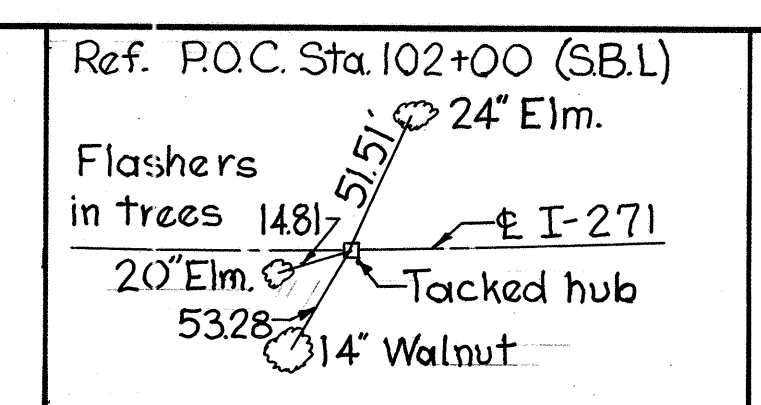
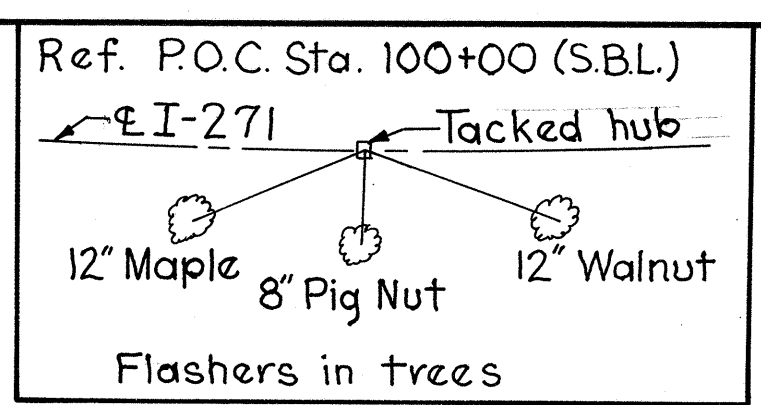
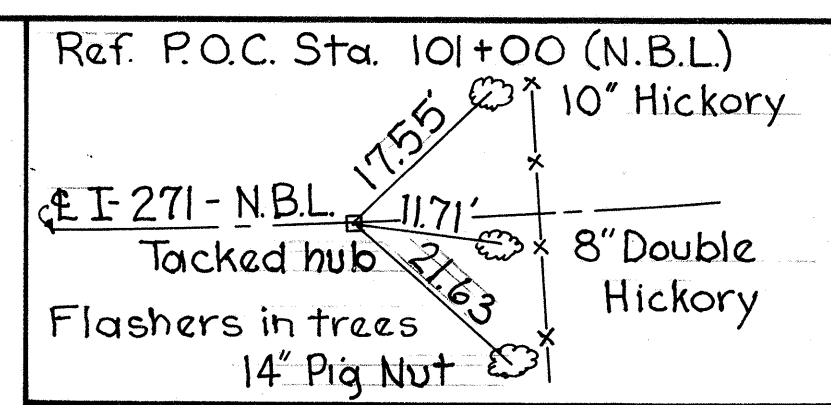
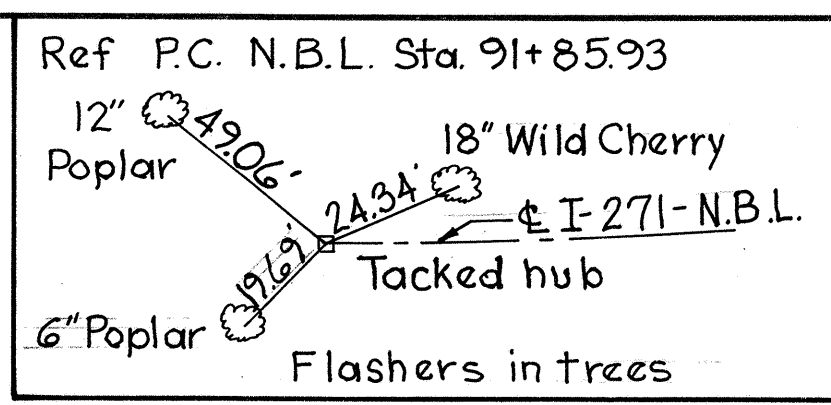
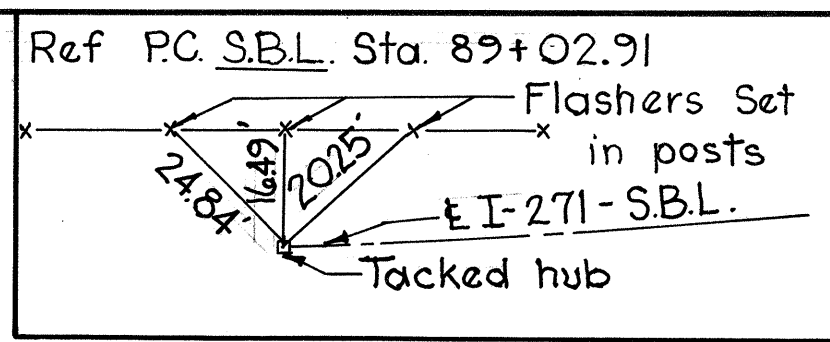
PROFILE - CONNECTION W Sta. 63+00 to 77+57.82



B.M.# E-3 Elev. 1158.487
Mine Spike in 24" Maple
125' left of Sta. 82+15



REF. NO.	STATION TO STATION	SIDE	Class Type Depth	Lim. Ft.	ESTIMATED QUANTITIES	SEE SHEET NO.
I-D	77+58 to 88+00	Rt.	1042			
2-D	77+58 to 88+00	Lt.	1042			
TOTALS					2084	



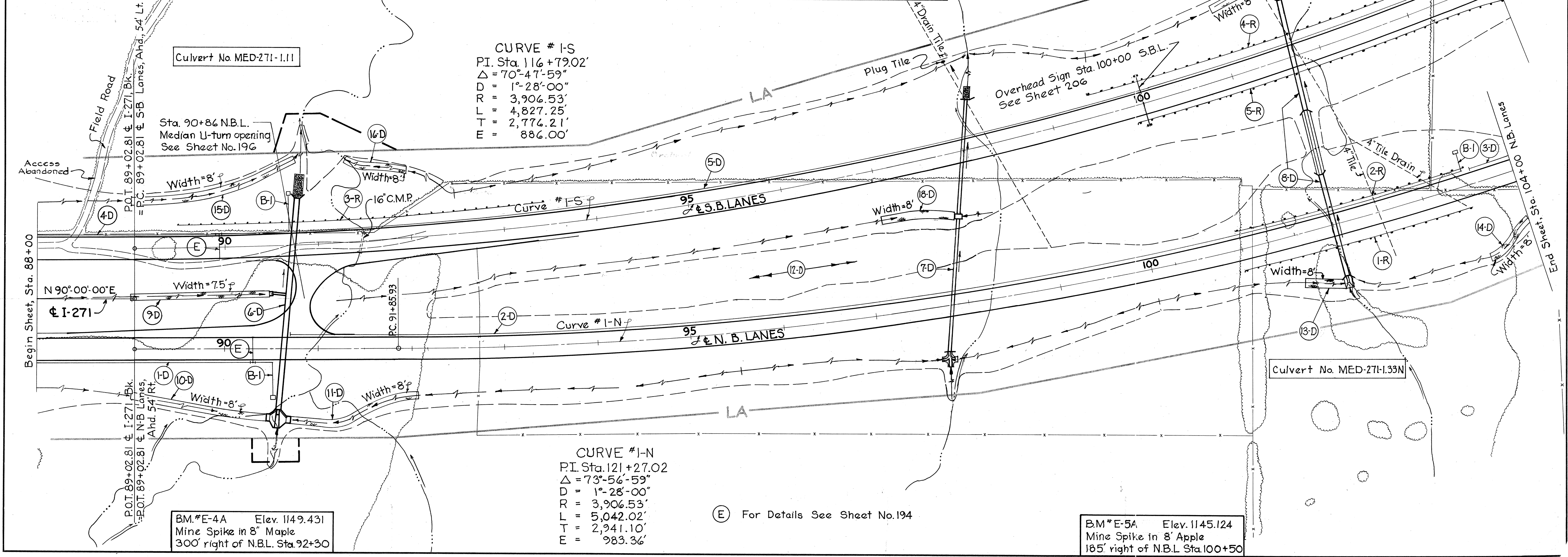
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13)-221

MEDINA COUNTY
MED-271-0.00

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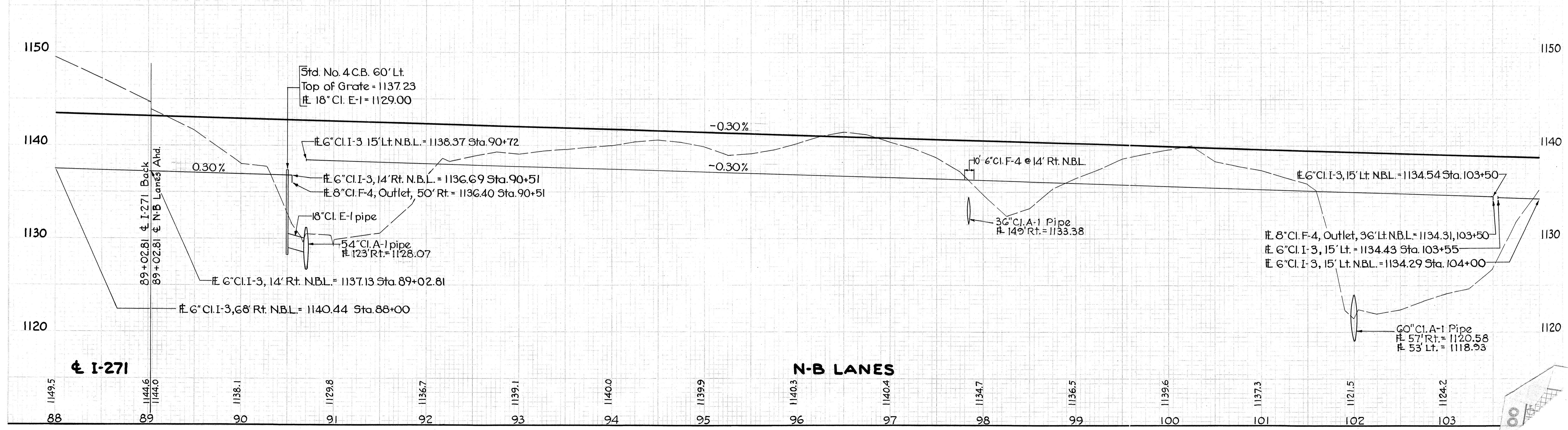
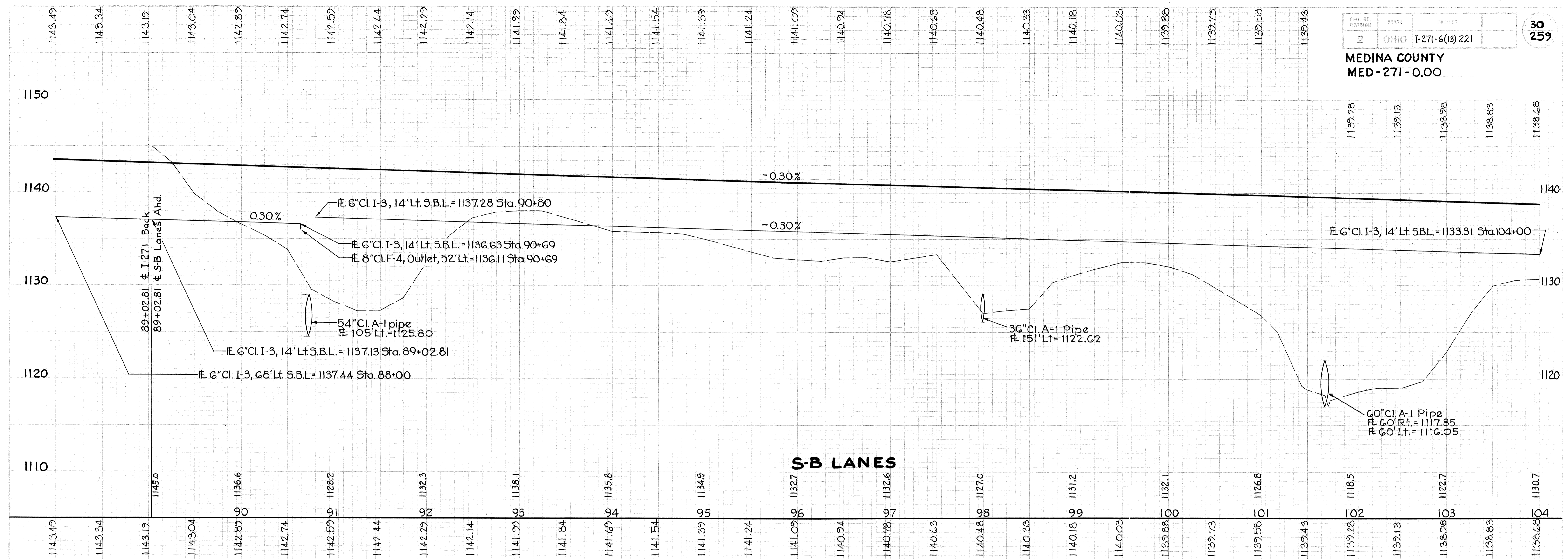
ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	I-1										E-3	I-2			I-5			I-8		I-10		I-15		L-10		L-120		L-G	See Sheet No.
			Class A-1 Pipe			Class E-1	Class G	Class F-4	CI-I-3	CI-I-3	Channel Excav.	Masonry Hd. wall Type 3		Masonry Hd. wall No. 2	Pipe Bend	Pipe Specials	Mod. No. 2	Std. No. 4	Dumped Rock Channel Protection	6" Reinf. Concrete Riprap	Guard Rail	Sodding	Jute Matting	Roadside Cleanup							
			M-6.6(b)	M-6.4(a)	M-6.6(c)																										
			54"	36"	60"	15"			6" Deep	6" Shallow																					
			Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.			Lin. Ft.	Lin. Ft.	Lin. Ft.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Each	Each	Each	Each	Each	Cu. Yd.	Sq. Yd.	Lin. Ft.	Sq. Yd.	Sq. Yd.	Unit						
1-D	88+00 to 90+51 N.B.L.	Rt.																													
2-D	90+72 to 103+50 N.B.L.	Lt.																													
3-D	103+55 to 104+00 N.B.L.	Lt.																													
4-D	88+00 to 90+63	Lt.																													
5-D	90+80 to 104+00	Lt.																													
6-D	90+64 N.B.L. Rt. & Lt.		228																												
7-D	97+83 N.B.L. 98+00 S.B.L.	REL.		300		16						42	20.6								20	35		9					185		
8-D	102+00 N.B.L. 101+68 S.B.L.	REL.			230							15		13.2							10	25		8					185		
9-D	89+00 to 90+50 N.B.L.	Lt.										46	47.2								21	91		4.3					186		
10-D	89+00 to 90+50 N.B.L.	Rt.																													
11-D	90+70 to 92+10 N.B.L.	Rt.																													
12-D	92+20 to 104+00 N.B.L.	Lt.																													
13-D	101+60 to 102+00 N.B.L.	Rt.																													
14-D	103+50 to 104+00 N.B.L.	Rt.																													
15-D	89+00 to 90+70 S.B.L.	Lt.																													
16-D	91+30 to 92+00 S.B.L.	Lt.																													
17-D	101+00 to 101+70 S.B.L.	Lt.																													
18-D	97+00 to 97+75 S.B.L.	Rt.																													
1-R	101+00 to 103+50 N.B.L.	Rt.																													
2-R	101+00 to 103+50 N.B.L.	Lt.																													
3-R	89+50 to 93+50 S.B.L.	Lt.																													
4-R	99+50 to 104+00 S.B.L.	Lt.																													
5-R	99+87.5 to 104+00 S.B.L.	Rt.																													
TOTALS			228	300	230	16	10	30	663	2598	103	67.8	13.2	3	1	2	1	1	51	151	1762.5	775	125	66							

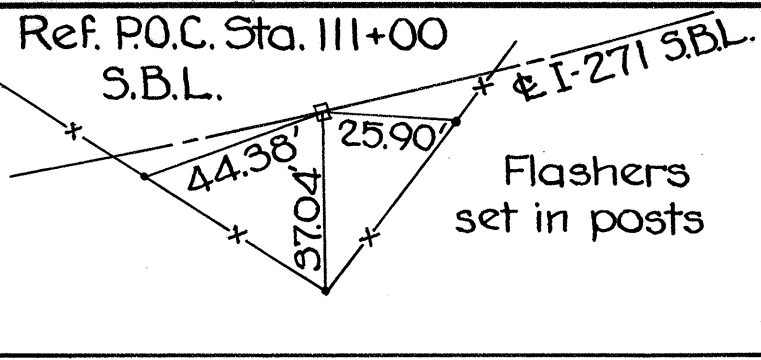


(E) For Details See Sheet No. 194

**MEDINA COUNTY
MED-271-0.00**



PROFILE • I-271 Sta. 88+00 to 104+00



B.M.*E-6
cut in S.E. corner of bridge wing
wall - 250' left of S.B.L. Sta. 114+50

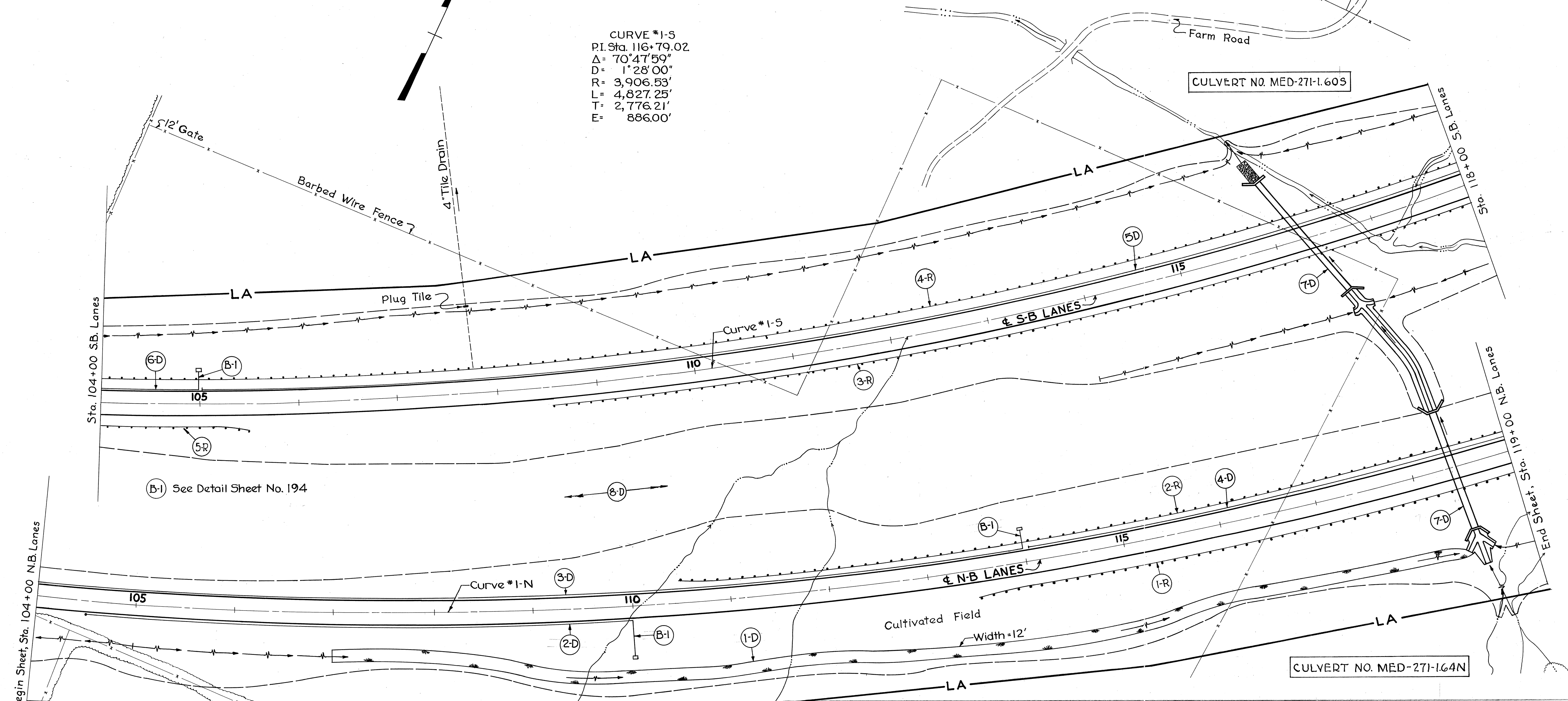
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13)221

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MEDINA COUNTY
MED-271-O.00

CURVE *I-5
P.I. Sta. 116+79.02
 $\Delta = 70^\circ 47' 59''$
 $D = 1^\circ 28' 00''$
 $R = 3,906.53'$
 $L = 4,827.25'$
 $T = 2,776.21'$
 $E = 886.00'$

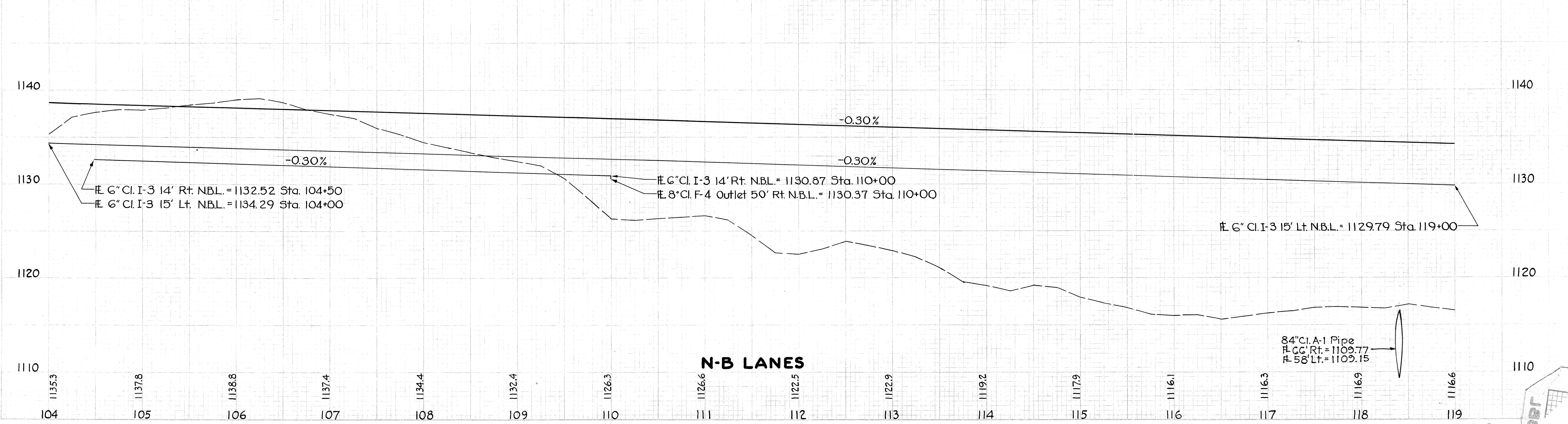
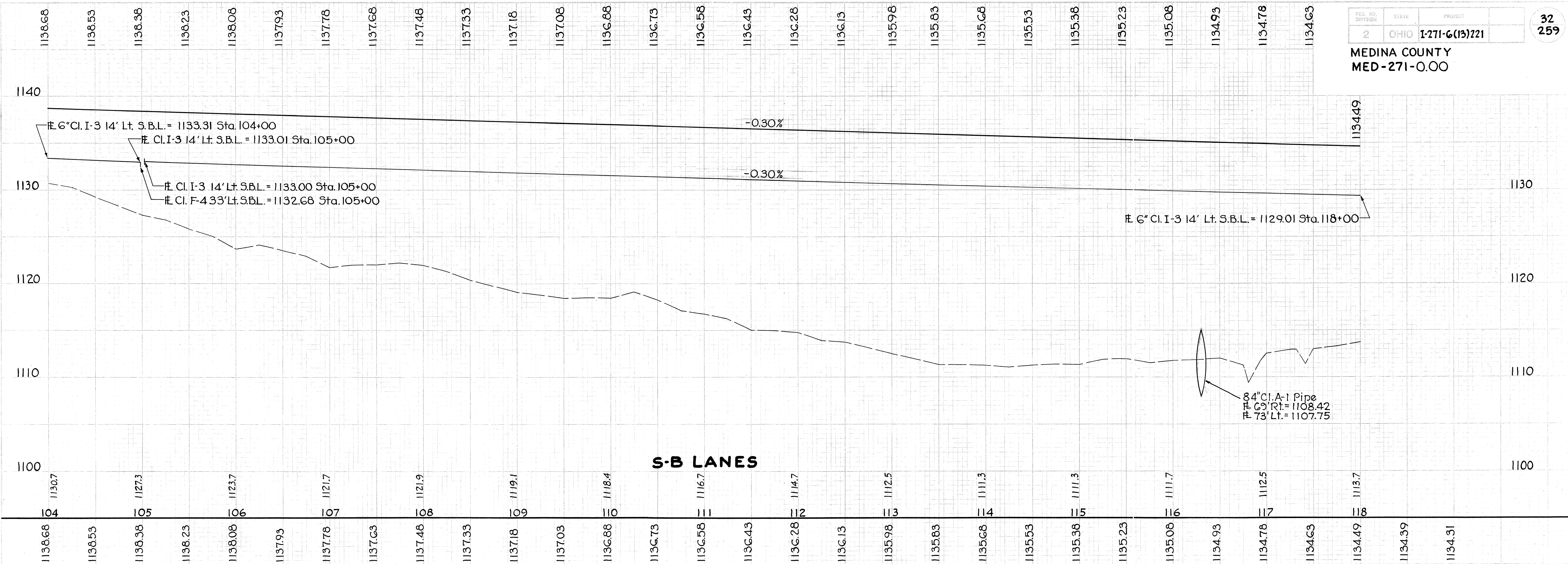
Curve *I-N
P.I. Sta. 121+27.02
 $\Delta = 73^\circ 56' 59''$
 $D = 1^\circ 28' 00''$
 $R = 3,906.53'$
 $L = 5,042.02'$
 $T = 2,941.09'$
 $E = 983.36'$



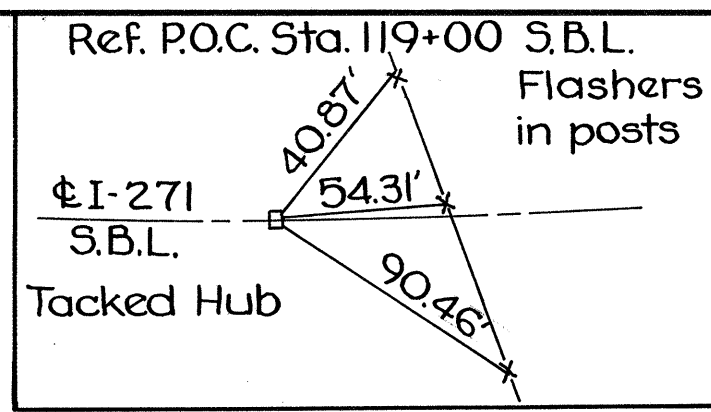
ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	I-1		Class F-4 Pipe 6" Lin. Ft.	I-2 Masonry Hdwl. No. 3 Cu. Yds.	I-5		I-10 Dumped Rock Cu. Yds.	I-15 Guard Rail Lin. Ft.	L-10 Sodding Sq. Yds.	E-3 Channel Excavat. Cu. Yds.	L-6 Roadside Cleanup Unit	See Sheet No.
			Class I-3 Pipe 6" Lin. Ft.	Class I-3 Pipe 6" Lin. Ft.			Pipe Specials Each	Pipe Specials Each						
1-D	108+00 to 118+30 NBL	Rt.									1380			
2-D	104+50 to 110+00 NBL	Rt.		575	10									
3-D	104+00 to 114+00 NBL	Lt.	1010		10									
4-D	114+00 to 119+00 NBL	Lt.	500											
5-D	105+00 to 118+00 SBL	Lt.		1300										
6-D	104+00 to 105+00 SBL	Lt.		110	10									
7-D	116+30 SBL & 118+41 NBL	☉	266			92.2		26	288		77	662		186
8-D	104+00 to 119+00 NBL	Lt.											150	
1-R	113+50 to 119+00 NBL	Rt.								550				
2-R	110+50 to 119+00 NBL	Lt.								850				
3-R	108+50 to 118+00 SBL	Rt.								850				
4-R	104+00 to 118+00 SBL	Lt.								1400				
5-R	104+00 to 105+50 SBL	Rt.								150				
TOTALS			266	1,510	1,985	30	92.2	3	26	288	3,800	1,457	662	15

MEDINA COUNTY
MED-271-0.00

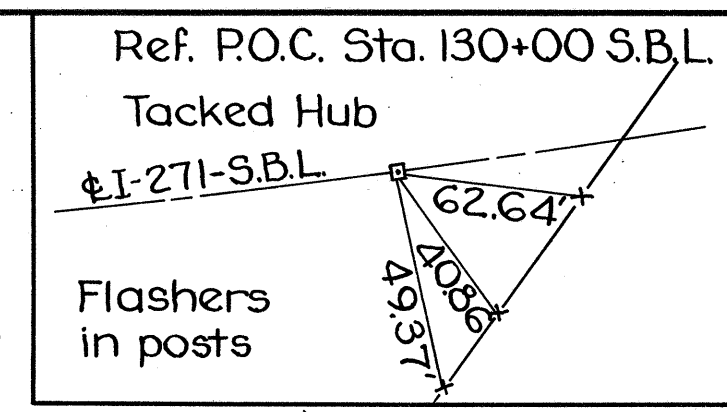


PROFILE • I-271 Sta. 104+00 to 119+00 NBL, Sta. 104+00 to 118+00

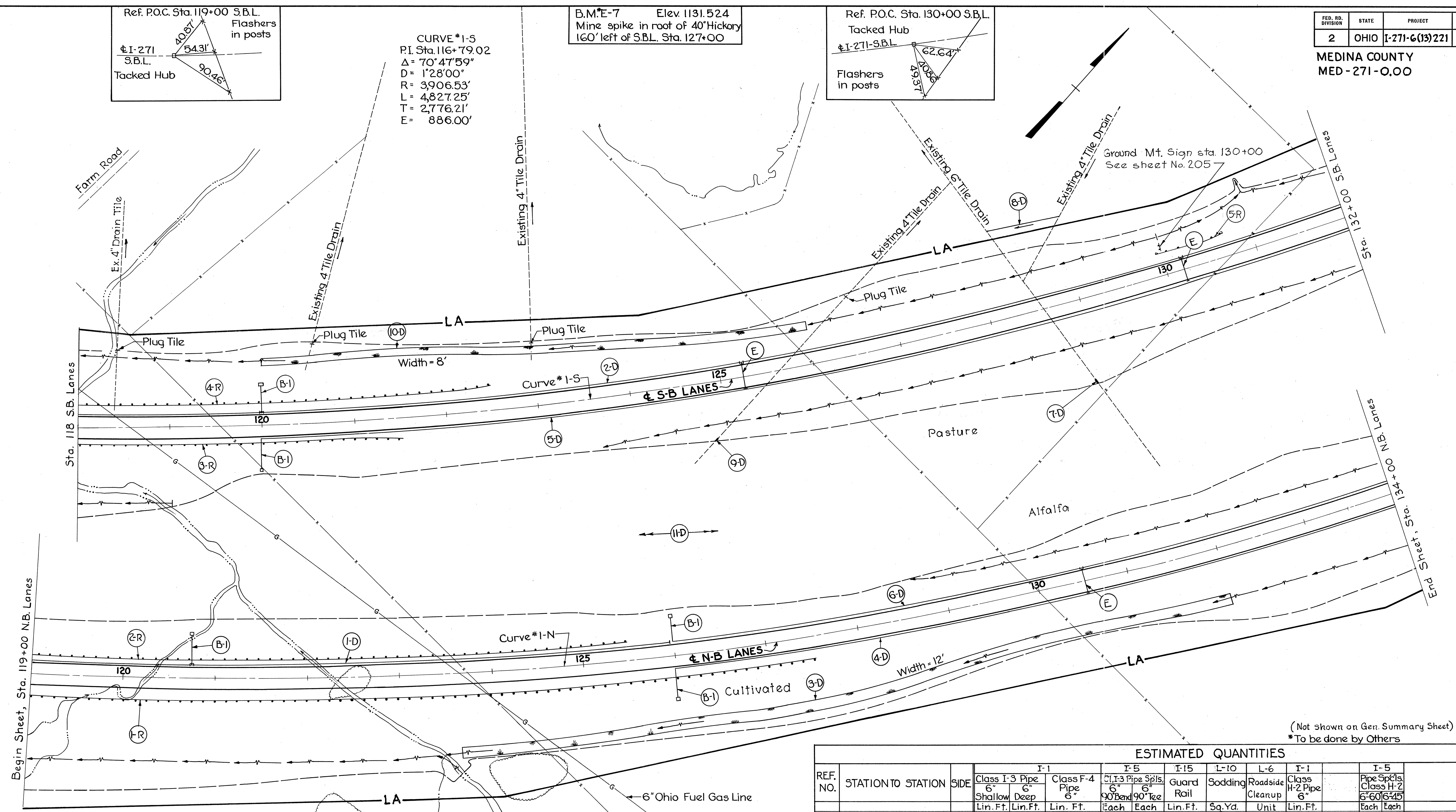


CURVE *1-S
PI. Sta. 116+79.02
 $\Delta = 70^\circ 47' 59''$
D = 1'28'00"
R = 3,906.53'
L = 4,827.25'
T = 2,776.21'
E = 886.00'

B.M. E-7 Elev. 1131.524
Mine spike in roof of 40' Hickory
160' left of S.B.L. Sta. 127+00



MEDINA COUNTY
MED-271-0.00



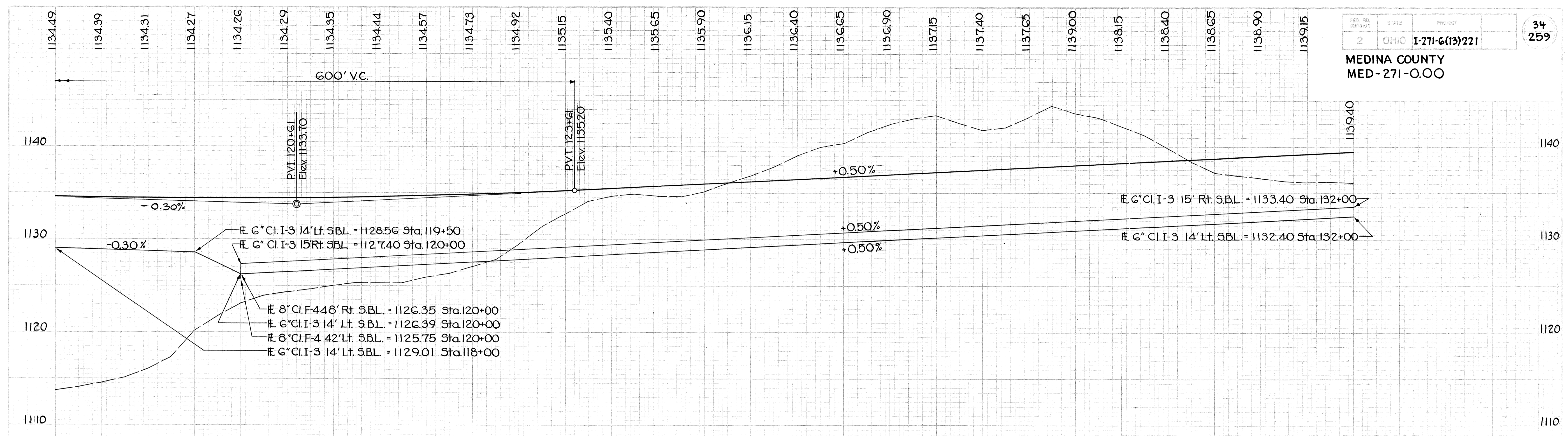
CURVE *1-N
PI. Sta. 121+27.02
 $\Delta = 73^\circ 56' 59''$
D = 1'28'00"
R = 3,906.53'
L = 5,042.02'
T = 2,941.09'
E = 983.36'

(Not shown on Gen. Summary Sheet)
*To be done by Others

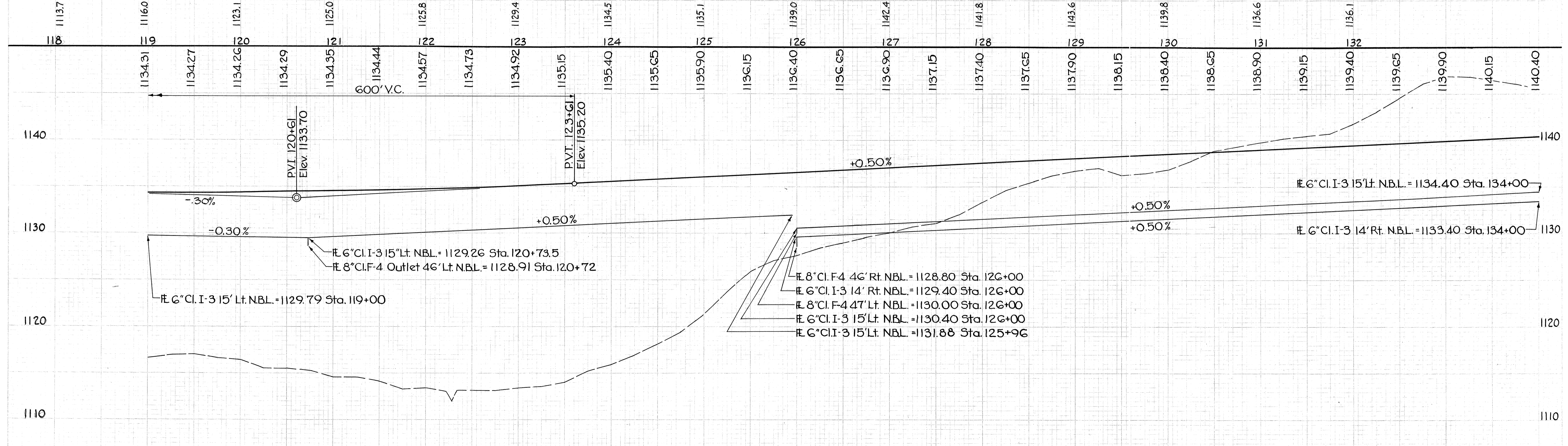
REF. NO.	STATION TO STATION	SIDE	ESTIMATED QUANTITIES										See Sheet No.			
			Class I-3 Pipe		Class F-4 Pipe	Class I-3 Pipe Spls.		Guard Rail	L-10 Sodding	L-6 Roadside Cleanup	I-1 Class H-2 Pipe	I-5 Pipe Spls.				
			6" Shallow	6" Deep	6"	6" Bend	90° Tee	Lin. Ft.	Sq. Yd.	Unit	Lin. Ft.	Each		Each		
1-D	119+00 to 126+00 NBL	Lt.	725		10											
2-D	118+00 to 132+00 SBL	Lt.		1458	10		3									
3-D	123+65 to 132+00 NBL	Rt.							1120							
4-D	126+00 to 134+00 NBL	Rt.		825	10											
5-D	120+00 to 132+00 SBL	Rt.		1225	10											
6-D	126+00 to 134+00 NBL	Lt.		845	20											
7-D	129+00 SBL	Rt.			10											
8-D	128+20 to 129+03 SBL	Lt.														
9-D	124+90 SBL	Rt.			10								84			
10-D	120+00 to 126+00	Lt.							533							
11-D	119+00 to 134+00 NBL	Lt.								255						
1-R	119+00 to 127+50 NBL	Rt.						850								
2-R	119+00 to 125+50 NBL	Lt.						650								
3-R	118+00 to 121+50 SBL	Rt.						350								
4-R	118+00 to 122+50 SBL	Lt.						450								
5-R	129+97 to 130+72 SBL	Lt.						75								
TOTALS			725	4353	80	3	5	2375	1653	255	*84		*1	*1		

(E) See Detail Sheet No. 194

MEDINA COUNTY
MED-271-0.00



S-B LANES



N-B LANES

PROFILE • I-271 Sta. 119+00 to 134+00 NBL, Sta. 118+00 to 132+00 SBL

MICROFILMED
JUN 5 1986

CURVE *I-S
P.I. Sta. 116+79.02
 $\Delta = 70^\circ 47' 59''$
D = 1°28'00"
R = 3,906.53'
L = 4,827.25'
T = 2,776.21'
E = 886.00'

B.M. *E-8 Elev. 1138.311
R.R. Spike in 24" Hickory
160' Left of S.B.L. Sta. 134+50

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	I-1		I-2		I-5		I-15	E-3	L-10	See Sheet No.	
			6" Cl. I-3 Pipe Deep Lin. Ft.	8" Cl. F-4 Pipe Lin. Ft.	Class I-3 Pipe Specials 6" Tee Each	Pipe Specials 6" Tee Each	Guard Rail Lin. Ft.	Channel Excav. Cu. Yd.					Sodding Sq. Yd.
1-D	134+00 to 142+96 NBL	Rt.	898										
2-D	134+00 to 142+96 NBL	Lt.	925										
3-D	143+04 to 149+00 NBL	Rt.	598										
4-D	143+04 to 149+00 NBL	Lt.	598										
5-D	143+00 Lt. & Rt. NBL												
6-D	132+00 to 136+50 SBL	Rt.	450		86				534	6	188		
7-D	132+00 to 136+50 SBL	Lt.	450										
8-D	136+57 Rt. & Lt. SBL												
9-D	136+65 to 143+00 SBL	Rt.	654	10									
10-D	136+65 to 143+00 SBL	Lt.	654	10									
11-D	148+65 NBL	Rt.		10									
12-D	143+00 to 146+00 SBL	Rt.	300										
1-R	138+57 to 139+57 NBL	Lt.							100				
2-R	138+63 to 139+68 NBL	Rt.							100				
3-R	135+35 to 136+35 SBL	Rt.							100				
4-R	135+20 to 136+20 SBL	Lt.							100				
13-D	143+00 to 146+00 SBL	Lt.											
			5827	30	86	80		22.4	1	2	400	715	13

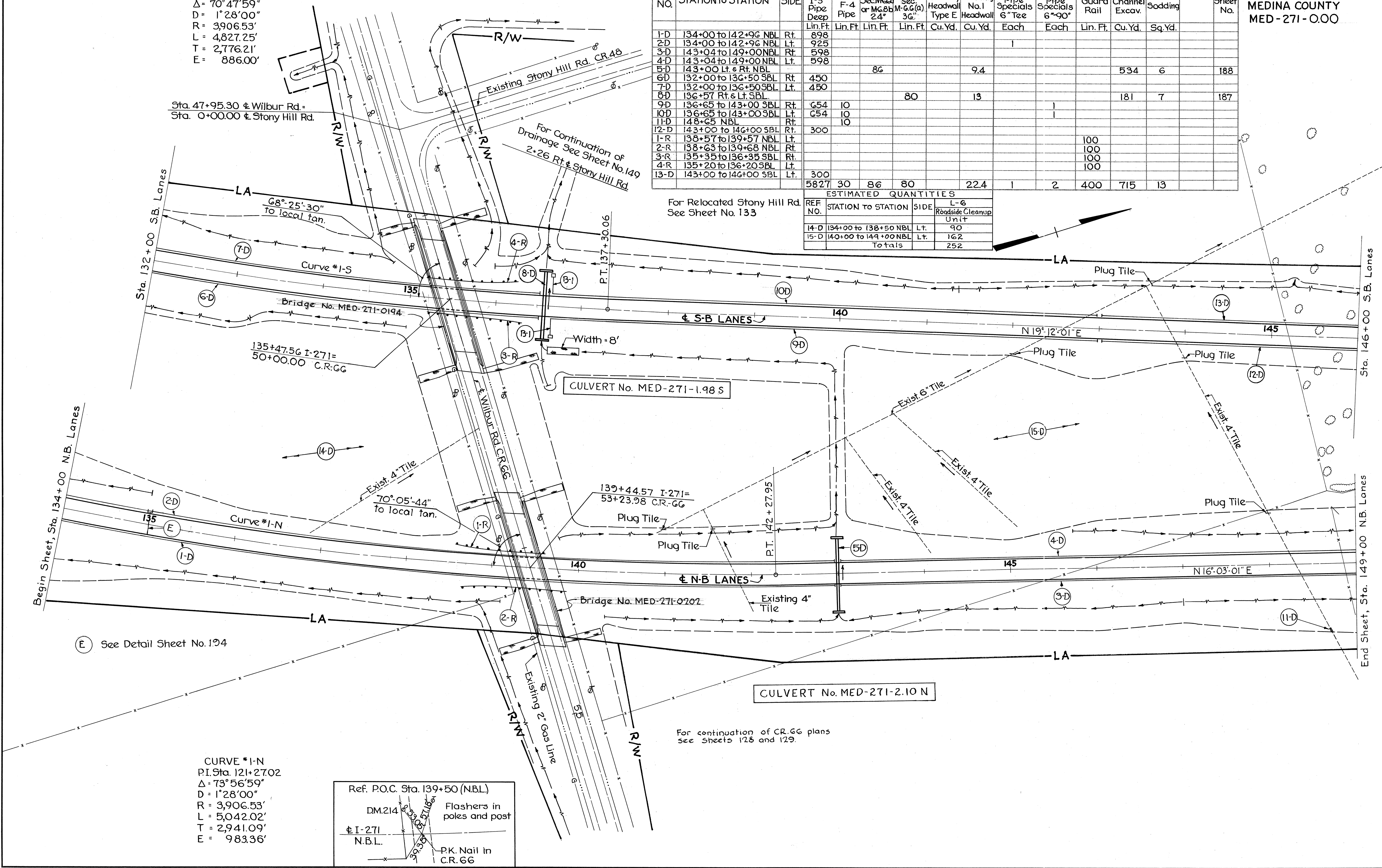
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

MEDINA COUNTY
MED-271-0.00

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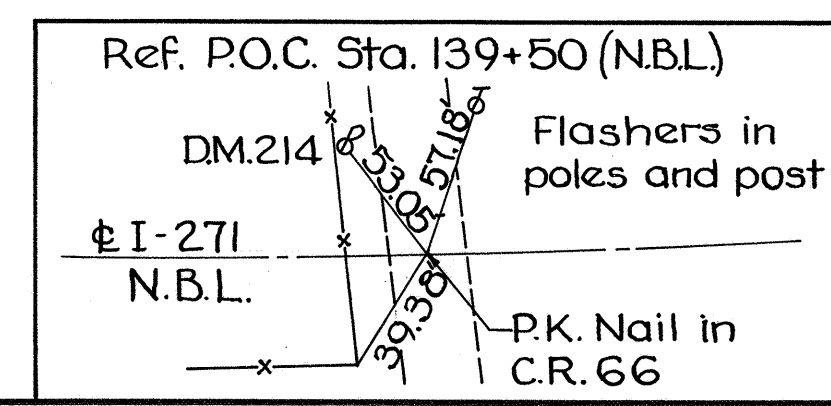
For Relocated Stony Hill Rd. See Sheet No. 133

REF. NO.	STATION TO STATION	SIDE	L-6 Roadside Cleanup Unit
14-D	134+00 to 138+50 NBL	Lt.	90
15-D	140+00 to 149+00 NBL	Lt.	162
Totals			252

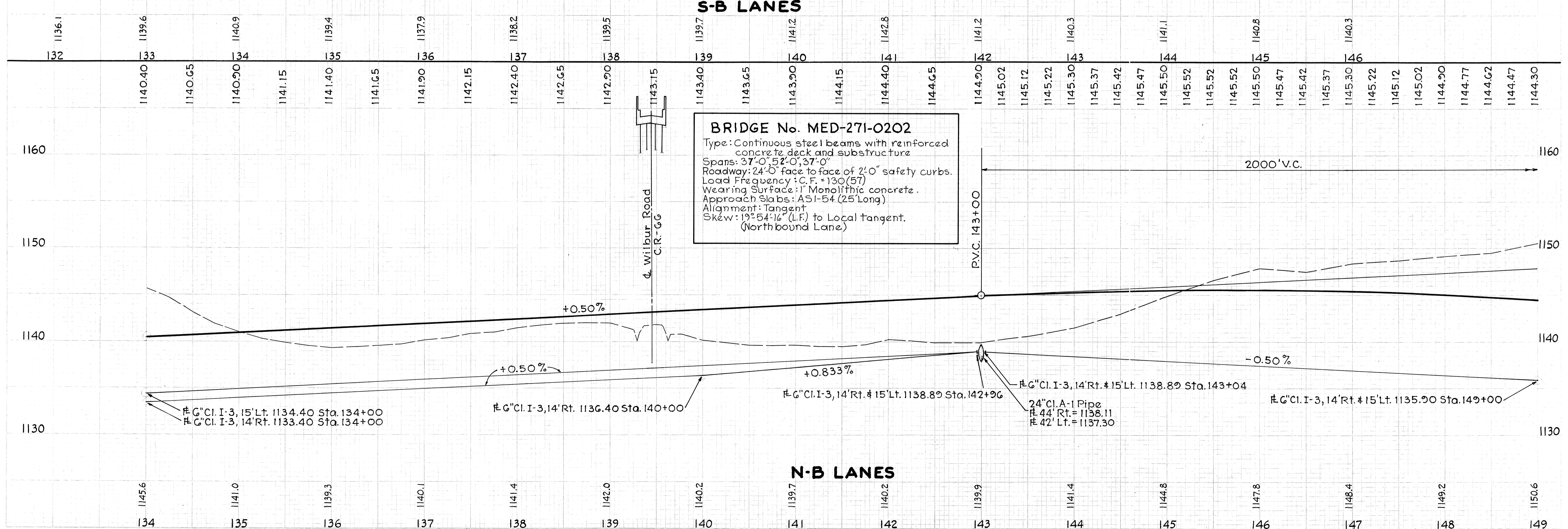
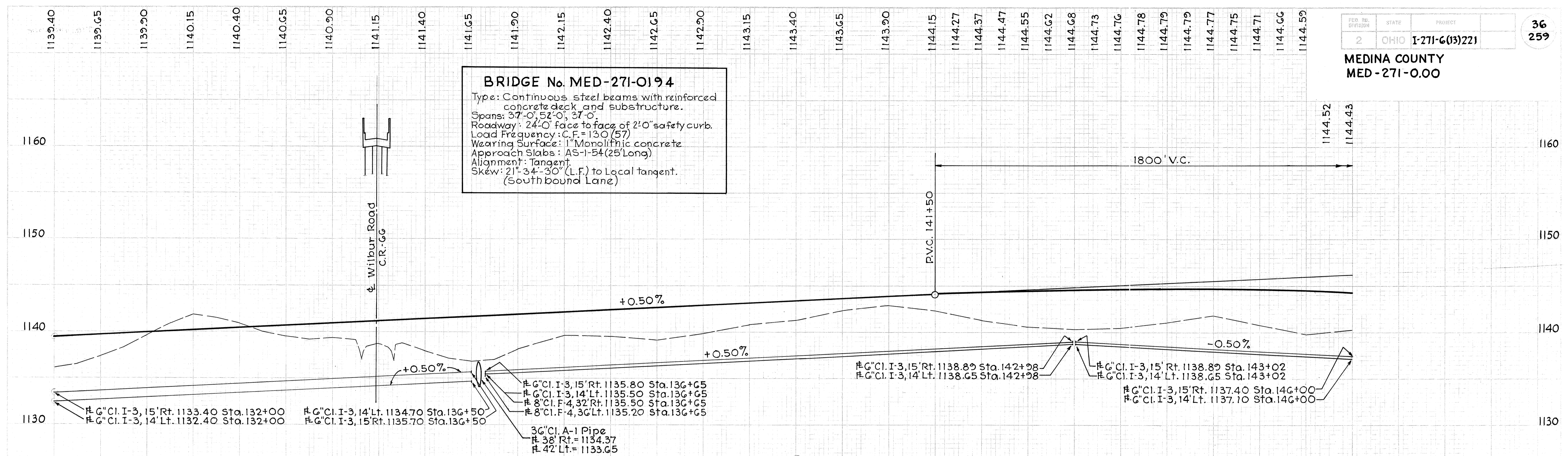


See Detail Sheet No. 194

CURVE *I-N
P.I. Sta. 121+27.02
 $\Delta = 73^\circ 56' 59''$
D = 1°28'00"
R = 3,906.53'
L = 5,042.02'
T = 2,941.09'
E = 983.36'



**MEDINA COUNTY
MED-271-0.00**



B.M.*E-9A Elev. 1152.778
 Mine Spike in 14" Elm
 150' left of S.B.L. Sta. 149+50

B.M.*E-9B Elev. 1118.09
 Mine Spike in 20" Ash in
 fence row left of S.B.L. Sta. 159+00

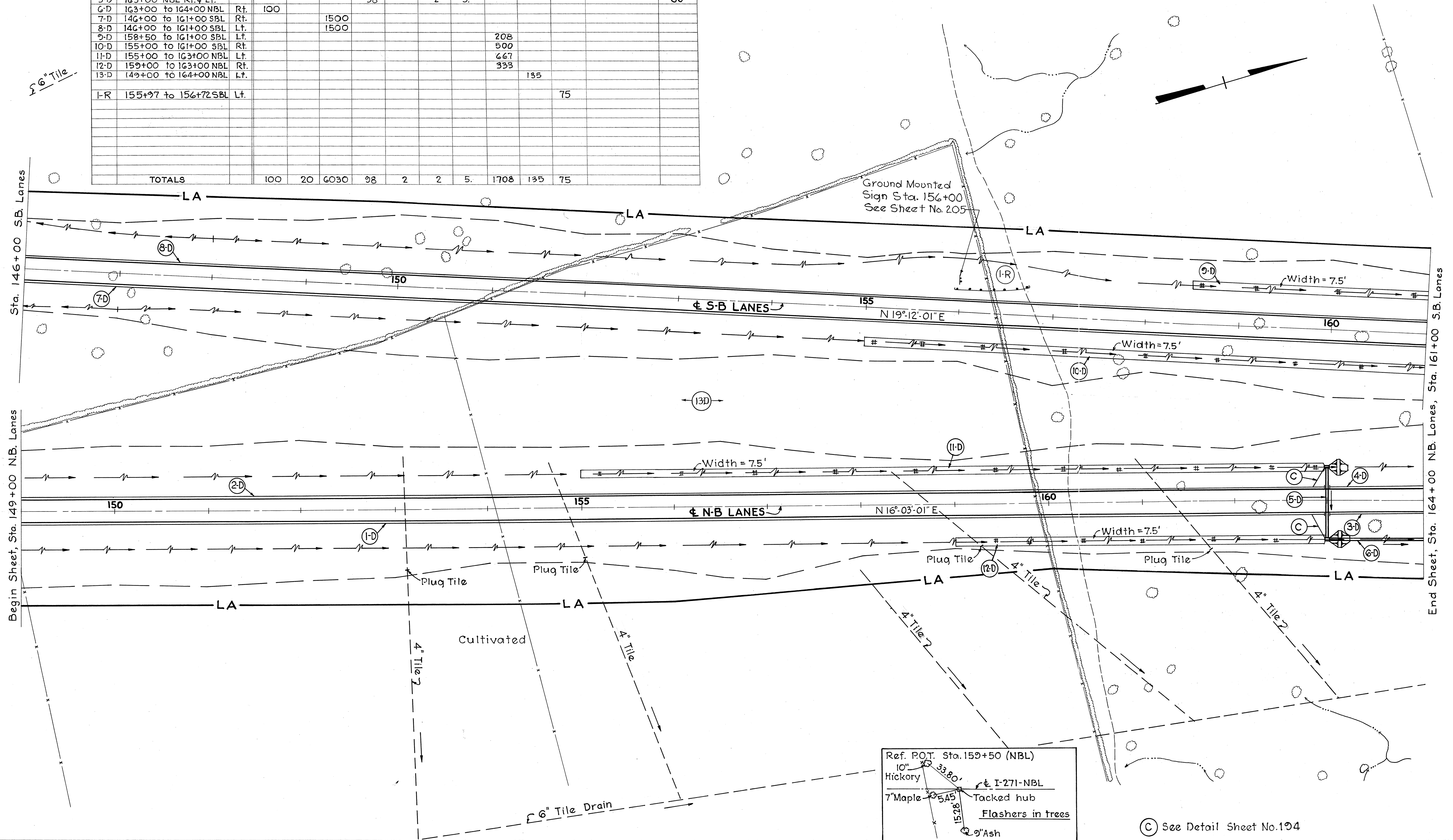
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13)221

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MEDINA COUNTY
 MED-271-0.00

REF. NO.	STATION TO STATION	SIDE	ESTIMATED QUANTITIES										See Sheet No.										
			I-1		I-3		I-5		I-8		I-10			I-15									
			Cl. E-1 Pipe	Cl. F-4 Pipe	Cl. I-3 Pipe Deep	Cl. J-1 Pipe	Pipe cl. I-3 Specials 6"-60" Wye	Std. No. 5 C.B.	Sodding	Jute Matting	Roadside Cleanup	Guard Rail		18" Lin. Ft.	6" Lin. Ft.	1417 Lin. Ft.	98 Lin. Ft.	2 Each	5 Each	1708 Sq. Yd.	135 Unit	75 Lin. Ft.	
1-D	149+00 to 162+97 NBL	Rt.		10	1417			1															
2-D	149+00 to 162+97 SBL	Lt.		10	1417			1															
3-D	163+02 to 164+00 NBL	Rt.			98																		
4-D	163+02 to 164+00 SBL	Lt.			98																		
5-D	163+00 NBL Rt. & Lt.						98		2	5													80
6-D	163+00 to 164+00 NBL	Rt.	100																				
7-D	146+00 to 161+00 SBL	Rt.			1500																		
8-D	146+00 to 161+00 SBL	Lt.			1500																		
9-D	158+50 to 161+00 SBL	Lt.																					
10-D	155+00 to 161+00 SBL	Rt.																					
11-D	155+00 to 163+00 NBL	Lt.																					
12-D	159+00 to 163+00 NBL	Rt.																					
13-D	149+00 to 164+00 NBL	Lt.																					
I-R	155+97 to 156+72 SBL	Lt.																					
TOTALS			100	20	6030	98	2	2	5	1708	135	75											

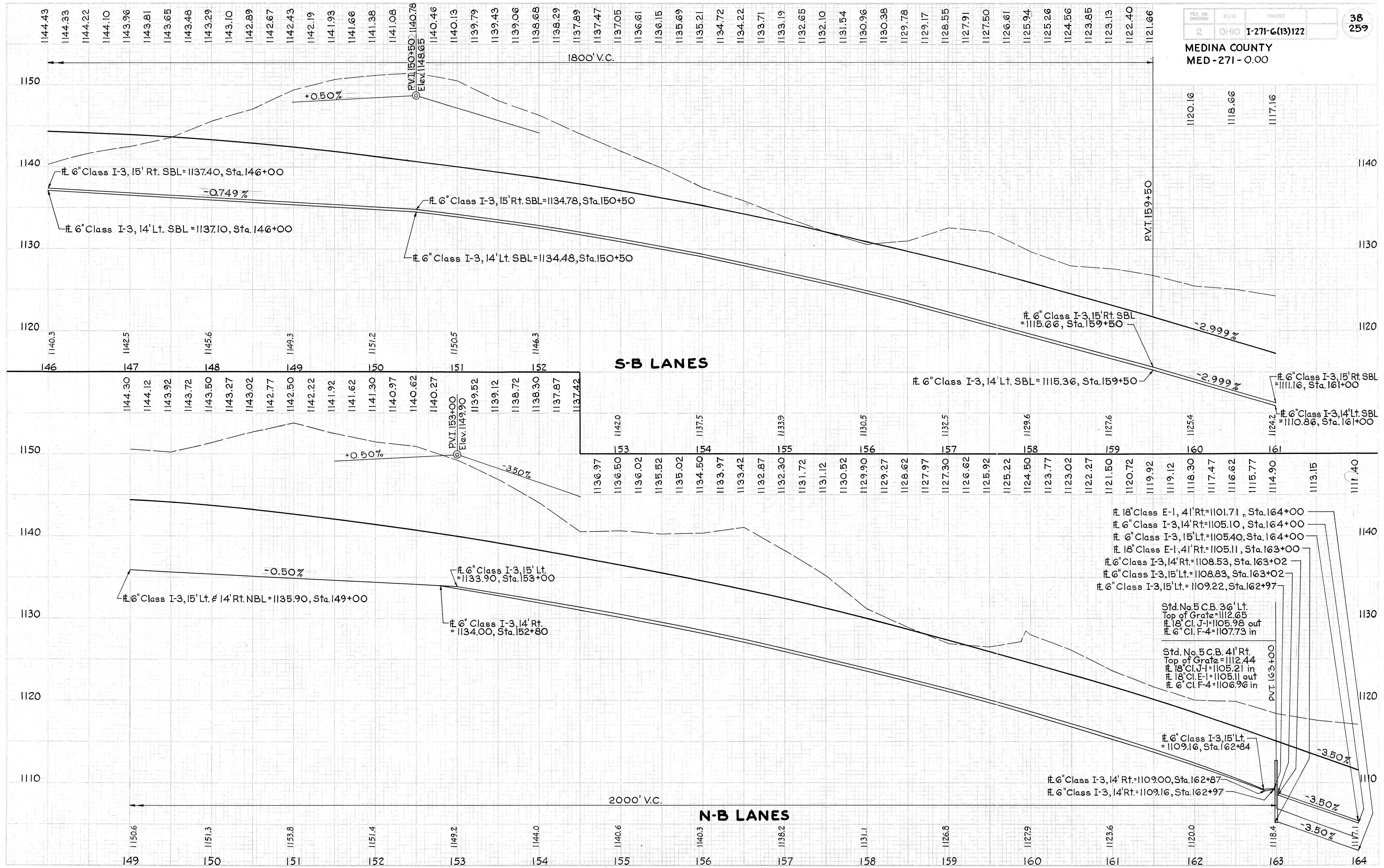
6" Tile



Ref. P.O.T. Sta. 159+50 (NBL)
 10" Hickory 33.80'
 7" Maple 5.45'
 9" Ash 15.15'
 I-271-NBL
 Tacked hub
 Flashers in trees

See Detail Sheet No. 194

**MEDINA COUNTY
MED-271-0.00**

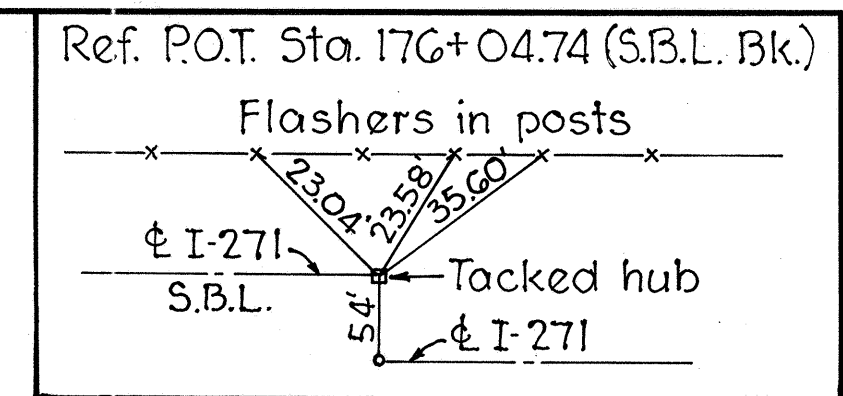


S-B LANES

N-B LANES

PROFILE • I-271 Sta. 149 +00 to 164 +00 NBL, Sta. 146 +00 to 161 +00 SBL

B.M.#E-11A Elev.1053.47
 Boat Spike in 24" Twin Ash
 250' right of S.B.L. Sta.172+50



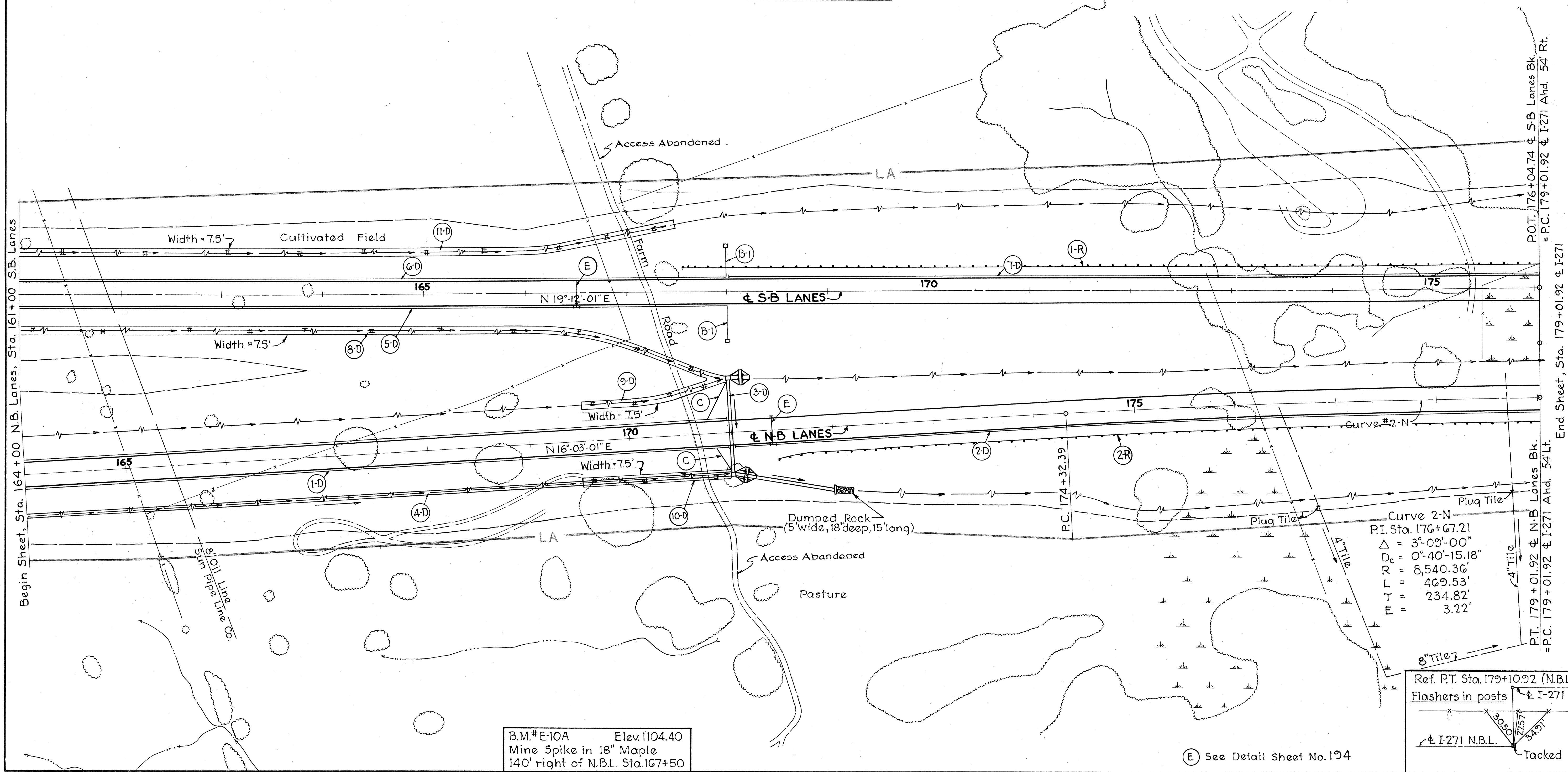
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

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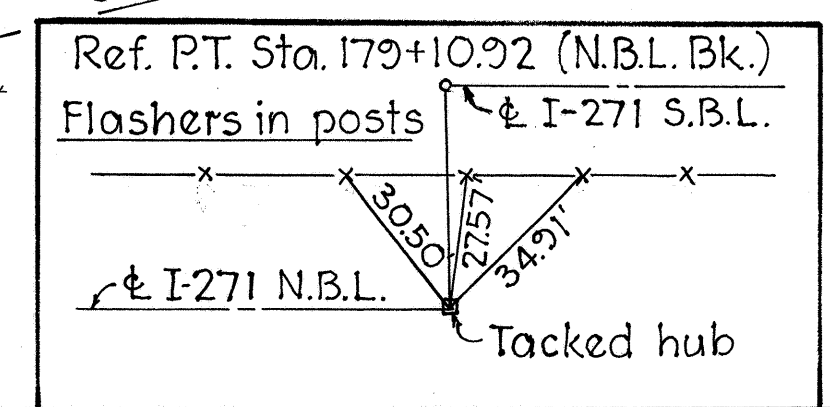
MEDINA COUNTY
 MED-271-0.00

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	Class E-1 Pipe		Class J-1 Pipe		Class F-4 Pipe		Class I-3 Pipe		I-2 Masonry Hdwall Type E	I-5 Pipe Specials			I-8 Std. No. 5 C.B.	I-10 Dumped Rock Channel Protect.	L-10 Sodding	L-120 Jute Matting	I-15 Guard Rail	See Sheet No.	
			18" Lin. Ft.	21" Lin. Ft.	18" Lin. Ft.	6" Lin. Ft.	8" Lin. Ft.	6" Shallow Lin. Ft.	6" Deep Lin. Ft.	Cl. I-3 G" Wye		Cl. I-3 G" Tee	Cl. I-3 G" Tee	Each							Each
1-D	164+00 to 171+00 NBL	Rt.					20			756				2							
2-D	171+04 to 179+00 NBL	Rt.								826											
3-D	171+00 NBL	Rt. & Lt.			94																81
4-D	164+00 to 171+00 NBL	Rt.	700	100							0.3				2	4	3				
5-D	161+00 to 168+00 SBL	Rt.						10													
6-D	161+00 to 168+00 SBL	Lt.						10													
7-D	168+04 to 176+04 SBL	Lt.							800												
8-D	161+00 to 168+00 SBL	Rt.																			
9-D	169+50 to 171+00 NBL	Lt.																			585
10-D	169+50 to 171+00 NBL	Rt.																			125
11-D	161+00 to 167+50 SBL	Lt.																			125
1-R	167+48 to 176+05 SBL	Lt.																			542
2-R	171+45 to 179+02 NBL	Rt.																			857
Totals			700	100	94	20	20	1626	2292	0.3	2	2	1	2	4	3	1375	1614			

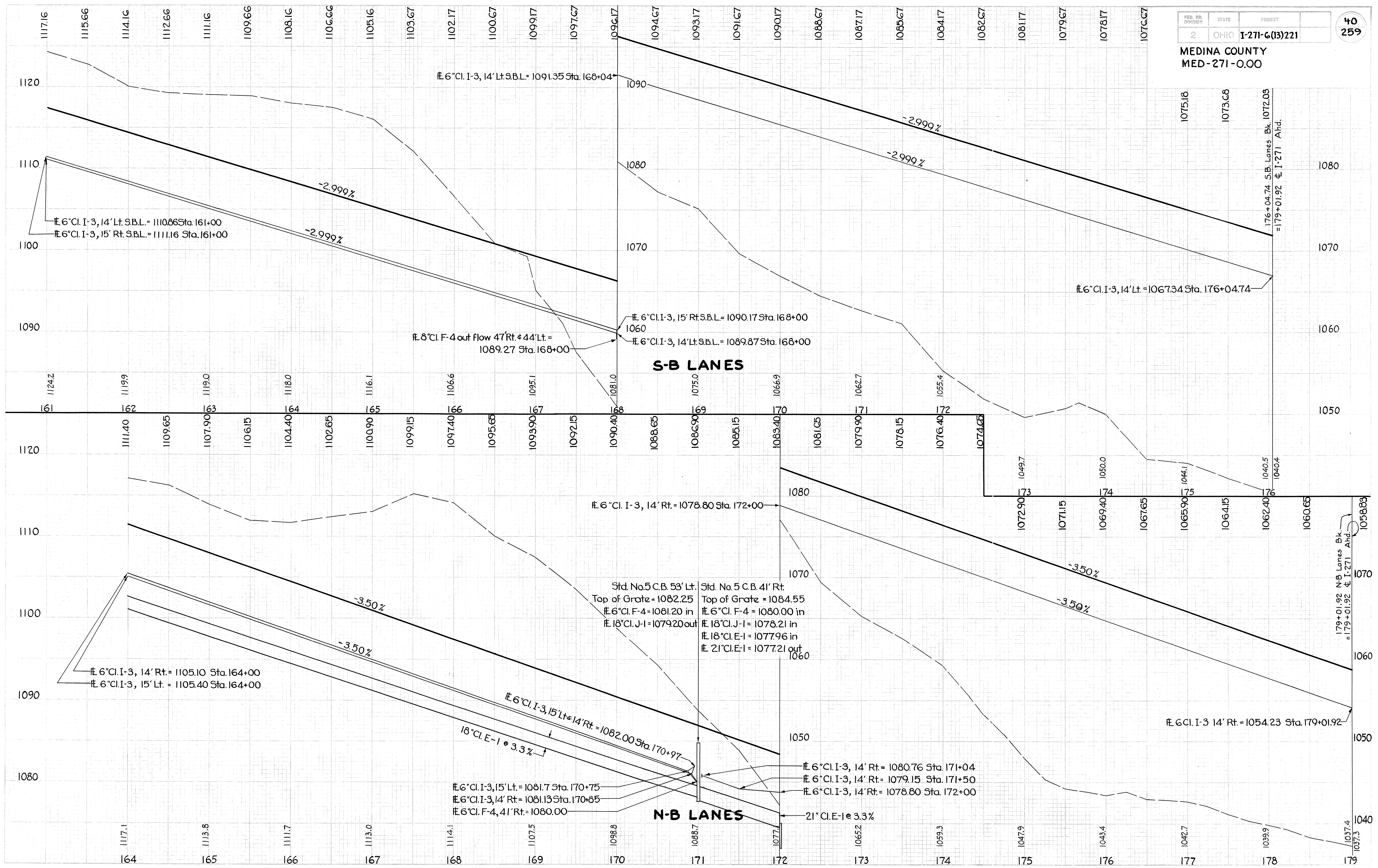


B.M.#E-10A Elev.1104.40
 Mine Spike in 18" Maple
 140' right of N.B.L. Sta.167+50

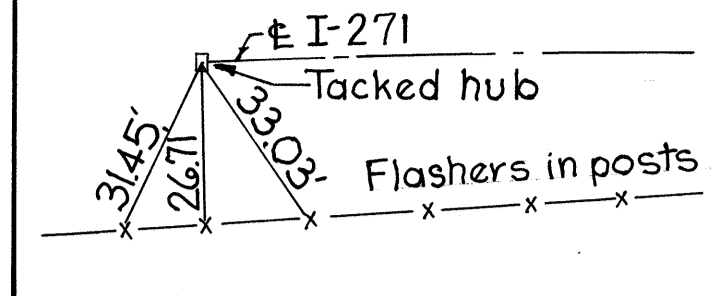


(E) See Detail Sheet No. 194

MEDINA COUNTY
MED-271-0.00

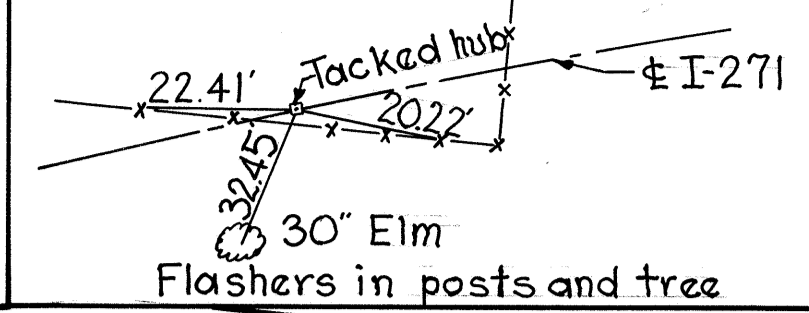


PROFILE • I-271 Sta. 164+00 to 179+01.92 NBL, Sta. 161+00 to 176+04.74 SBL

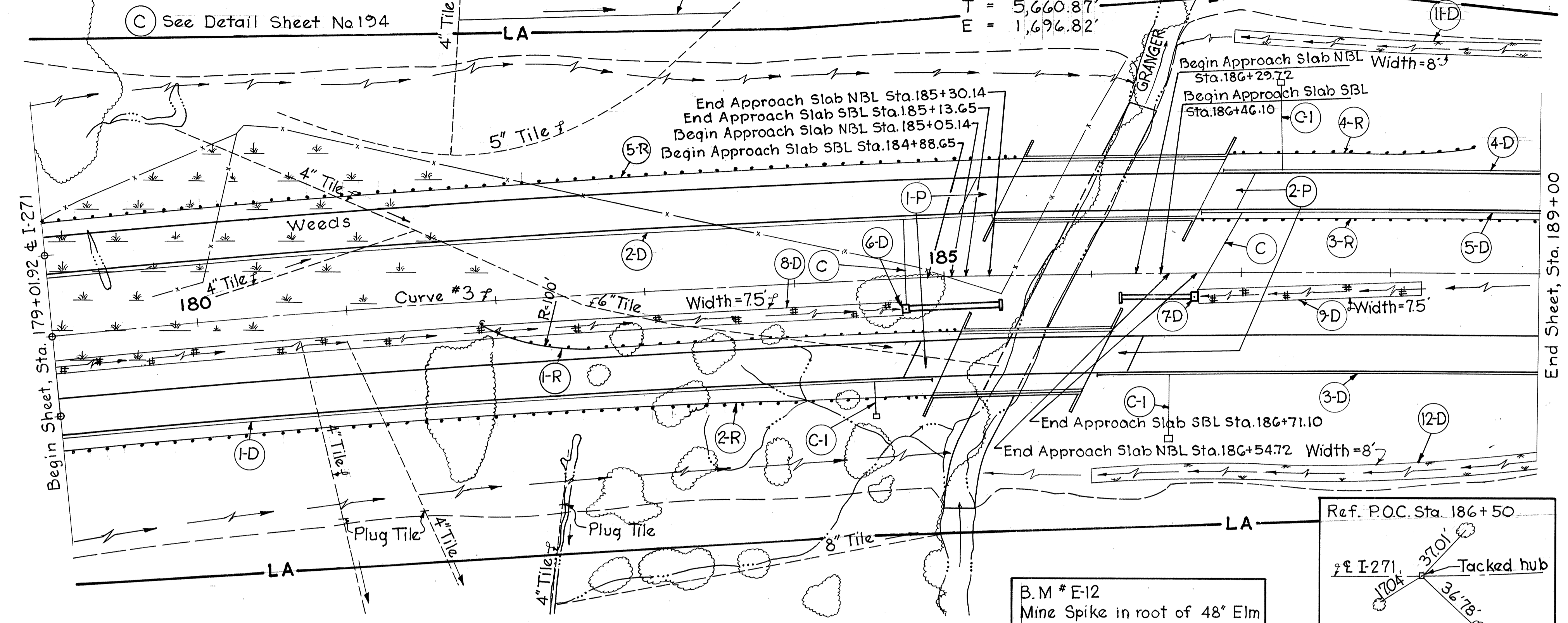


B.M. #E-11B Elev. 1039.22
Mine Spike in 18\"/>

CURVE #3
P.I. Sta. 235+62.79
 $\Delta = 66^\circ 44' 37''$
 $D = 0^\circ 40' 00''$
 $R = 8,594.36'$
 $L = 10,011.54'$
 $T = 5,660.87'$
 $E = 1,696.82'$



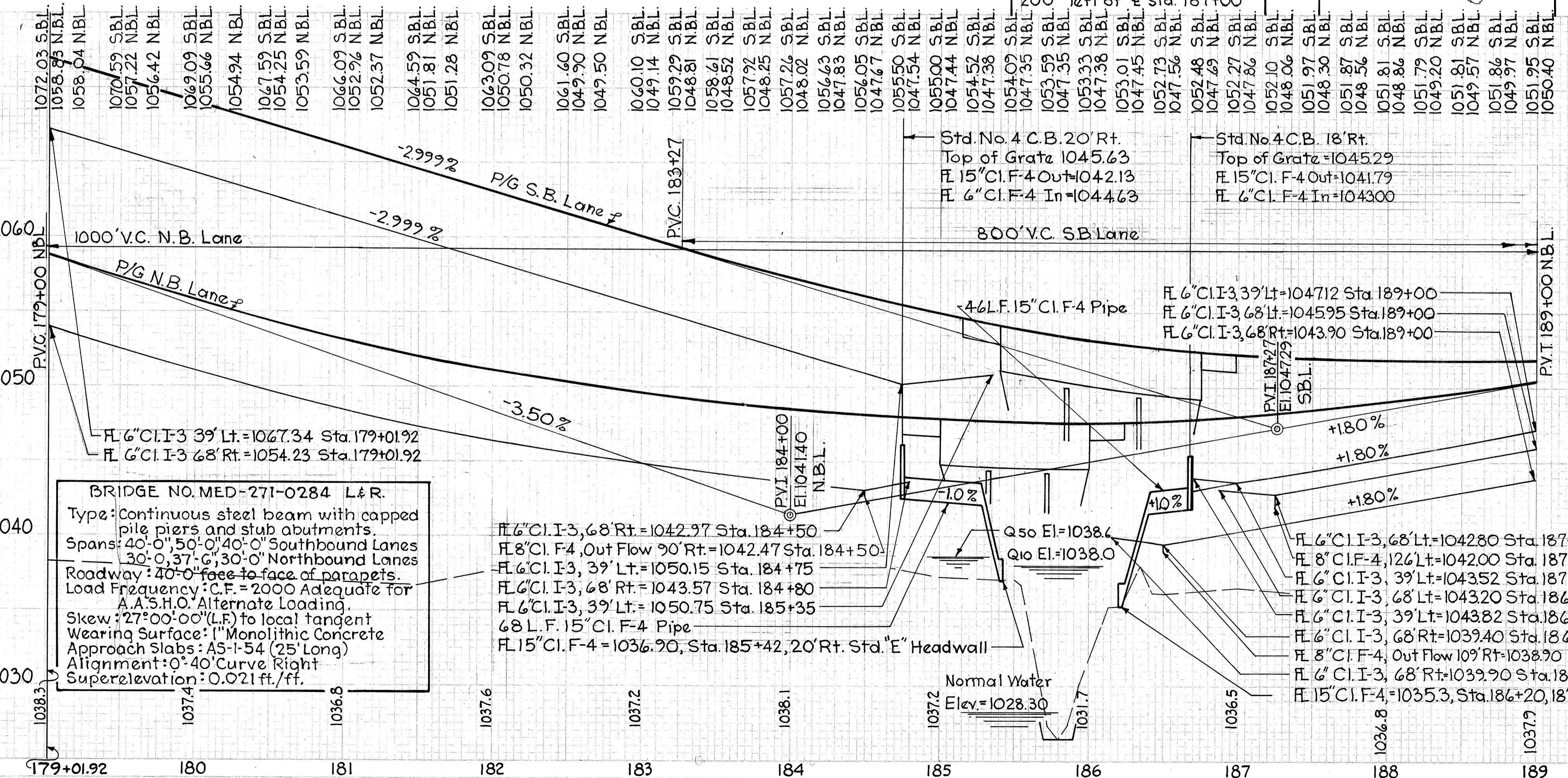
FED. RD. DIVISION	STATE	PROJECT
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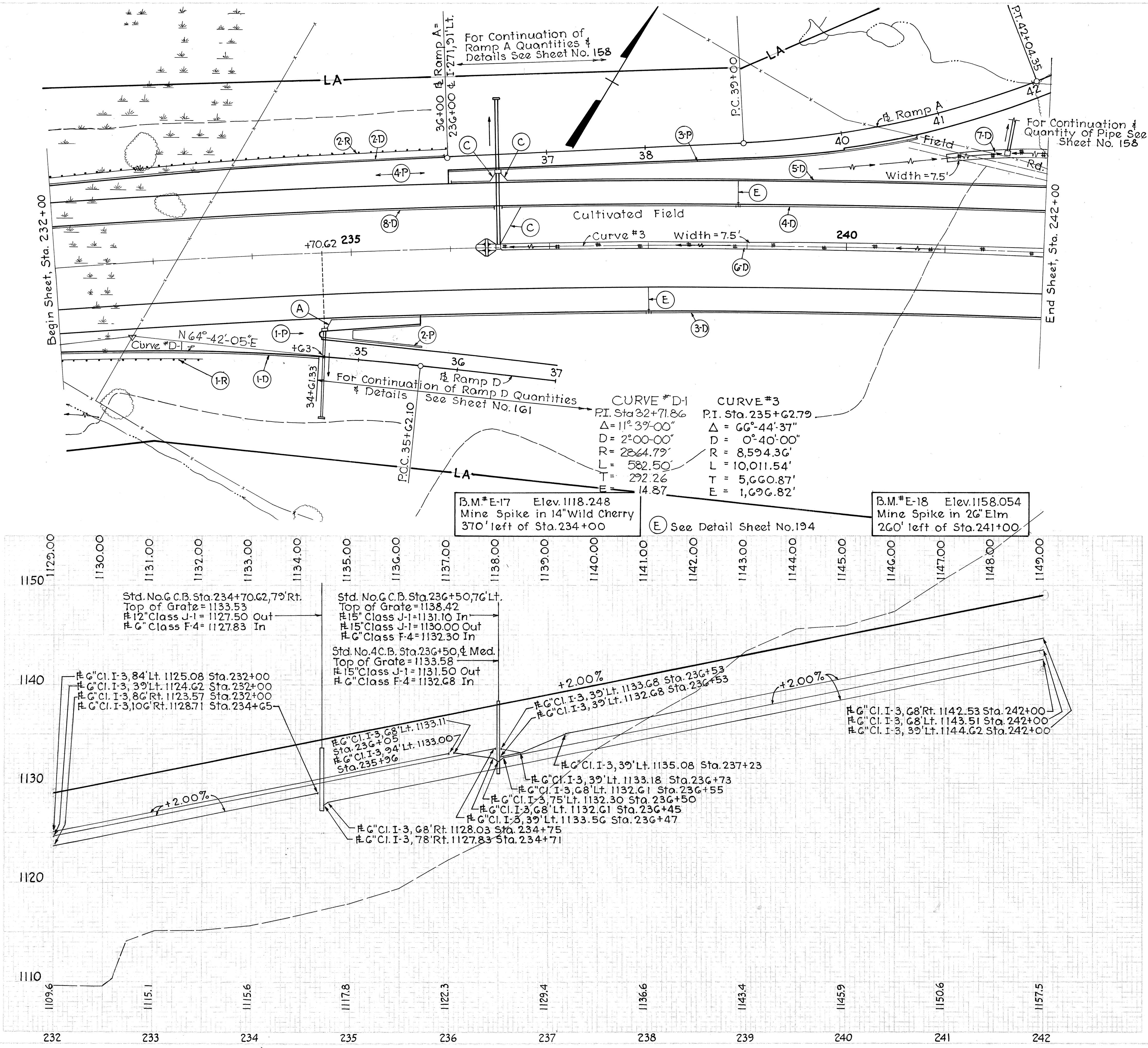


* To be done by others

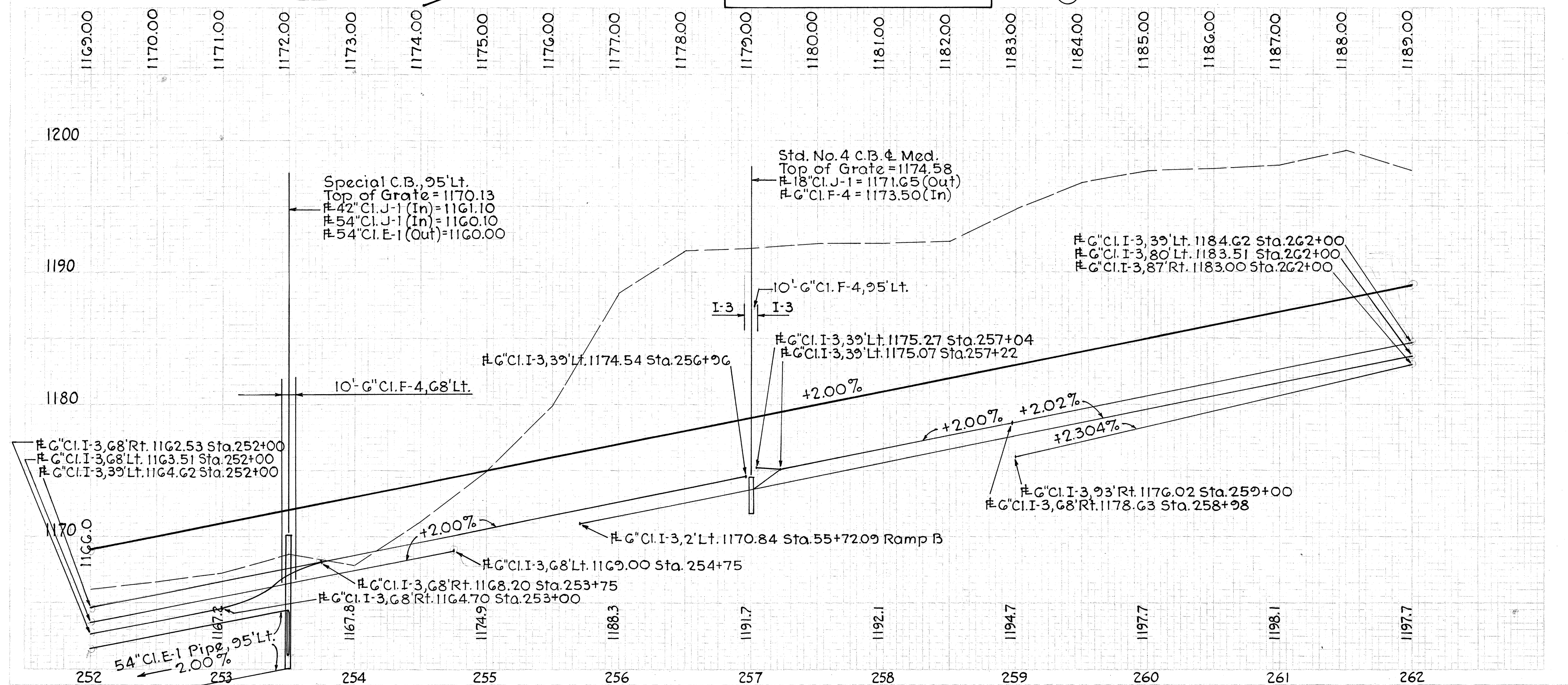
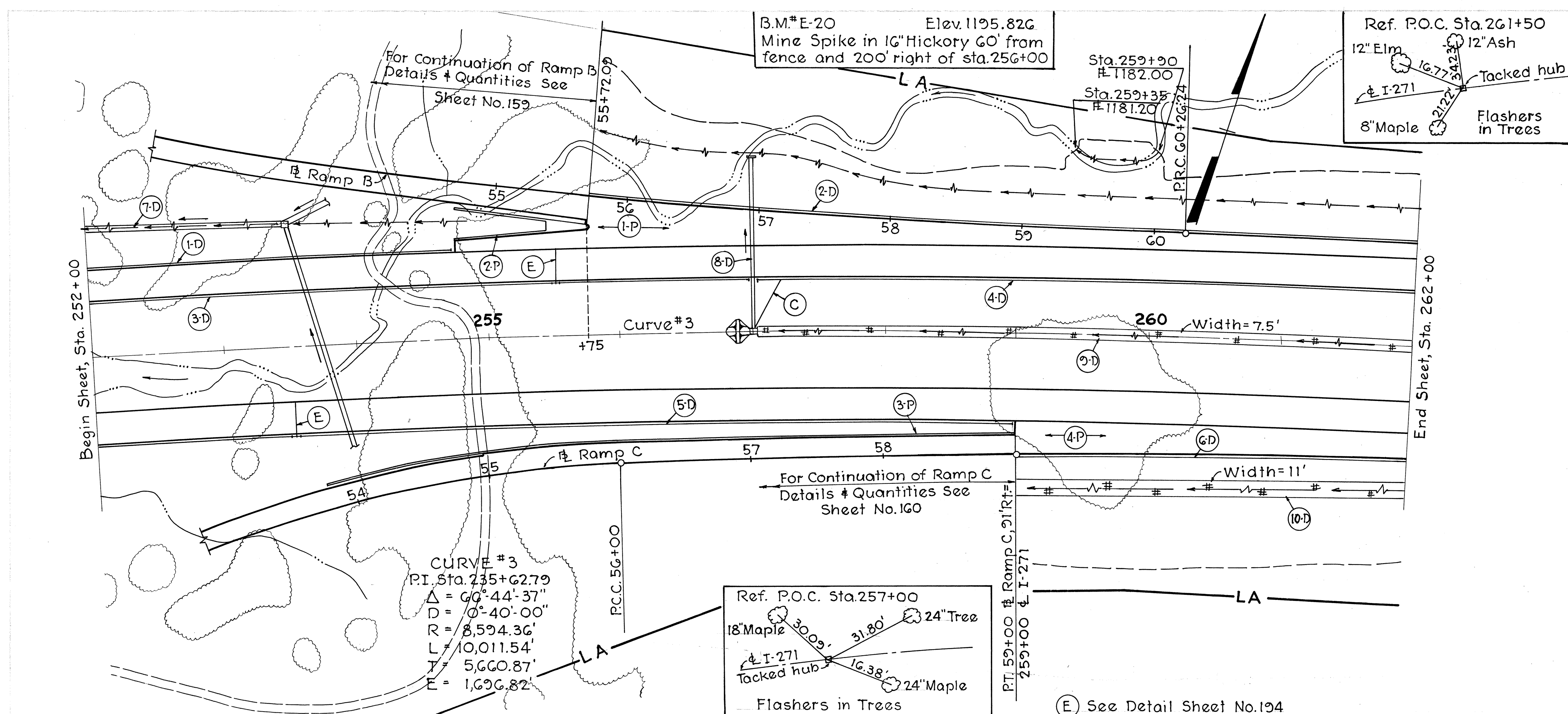
ESTIMATED QUANTITIES

REF. NO.	CLASS	STATION TO STATION	SIDE	QTY	UNIT	PRICE	TOTAL
1-D	I-1	179+02 to 184+50	Rt.	10	40	114	1570
2-D	I-1	179+02 to 185+35	Lt.	10	40	114	1570
3-D	I-1	186+14 to 189+00	Rt.	10	40	114	1570
4-D	I-1	186+67 to 189+00	Lt.	10	40	114	1570
5-D	I-1	186+72 to 189+00	Rt.	10	40	114	1570
6-D	I-1	184+75	Rt.	10	40	114	1570
7-D	I-1	186+68	Rt.	10	40	114	1570
8-D	I-1	179+02 to 184+72	Rt.	10	40	114	1570
9-D	I-1	186+70 to 188+22	Rt.	10	40	114	1570
10-D	I-1	181+87 to 183+66	Lt.	10	40	114	1570
11-D	I-1	187+00 to 189+00	Lt.	10	40	114	1570
12-D	I-1	186+00 to 189+00	Rt.	10	40	114	1570
1-P	I-5	184+95 to 185+15	L&R	2	2666	1881	450
2-P	I-5	186+00 to 189+00	L&R	2	2666	1881	450
1-R	I-5	181+90 to 184+90	Rt.	1	577	0.80	464
2-R	I-5	179+02 to 184+70	Rt.	1	577	0.80	464
3-R	I-5	186+80 to 189+00	Rt.	1	577	0.80	464
4-R	I-5	187+00 to 188+50	Lt.	1	577	0.80	464
5-R	I-5	179+02 to 185+45	Lt.	1	577	0.80	464
TOTALS				10	40	114	1570

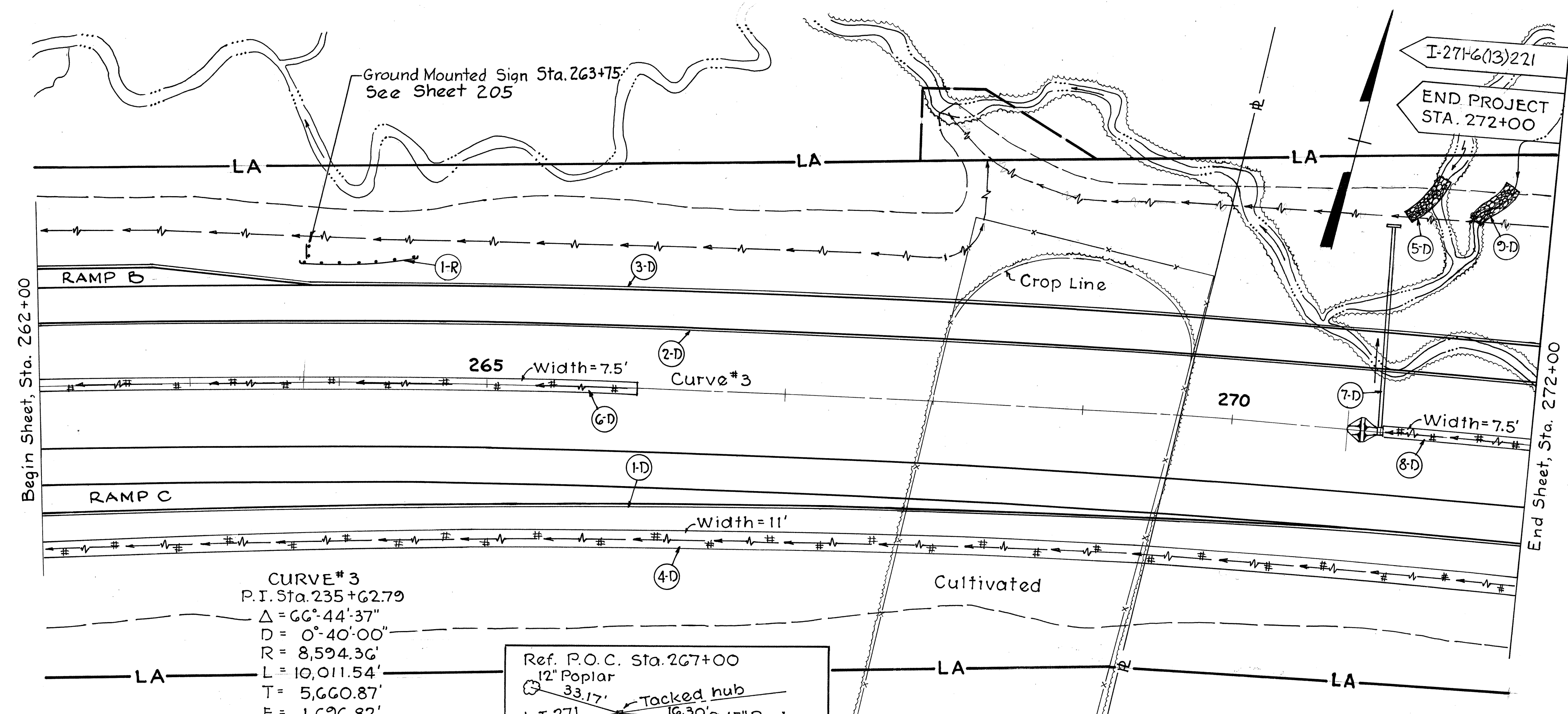




REF. NO.	STATION TO STATION	SIDE	ESTIMATED QUANTITIES										TOTALS									
			G/C.I. F-4 Pipe	Class I-3 Pipe Shallow	Class I-3 Pipe Deep	Pipe Specials	Concrete Curb	Guard Med. Rail	Conc. Channel	Diagonal Stripping	Curb & Island Marking	L-12C										
			Lin. Ft.	Lin. Ft.	Lin. Ft.	Each	Each	Each	Each	Each	Each	Each	Each	Each	Sq. Yd.	Lump	Lump	Lump	Lump	Sq. Yd.		
1-D	232+00 to 234+65	Rt.		260																		
2-D	232+00 to 236+00	Lt.		400																		
3-D	234+75 to 242+00	Rt.			751																	
4-D	236+53 to 242+00	Lt.			601																	
5-D	236+53 to 242+00	Lt.			597																	
C-D	236+50 to 242+00	Med																				
7-D	241+00 to 242+00	Lt.																				
8-D	252+00 to 256+47	Lt.			447																	
1-P	234+00	Rt.																				
2-P	34+G1 to 35+G2	Ramp D																				
3-P	36+00 to 40+75	Ramp A																				
4-P	235+00	Lt.																				
1-R	232+00 to 233+50																					
2-R	232+00 to 236+00																					
TOTALS																						



REF. NO.	STATION TO STATION	SIDE	SEE SHEET NO.	I-1	I-2	I-5	I-8	I-12	I-21	I-125	I-10	L-120
				Class	Class	Pipe	Std. C.B.	Standard Concrete Curb	Conc. Med. Pav.	Channel Diagonal Stripping Marking Lines	Sodding Matting	Jute Matting
				Lin. Ft.	Lin. Ft.	Each	Each	Type	Type	Sq. Yd.	Sq. Yd.	Sq. Yd.
I-D	252+00 to 254+75	Lt.		265								
2-D	55+72.09 Ramp B to 262+00	Lt.		615								
3-D	252+00 to 256+96	Lt.		522		1						
4-D	257+04 to 262+00	Lt.		528		1						
5-D	252+00 to 258+98	Rt.		518								
6-D	259+00 to 262+00	Rt.		300								
7-D	252+00 to 253+50	Lt.		150								
8-D	257+00 to 262+00	Lt.			130							
9-D	257+00 to 262+00	Med.			0.3							
10-D	259+00 to 262+00	Rt.					1					
I-P	256+00	Lt.						129				
2-P	54+72 to 55+72 Ramp B	Rt.							264			
3-P	53+25 to 59+00 Ramp C	Lt.						97	437			
4-P	260+00	Rt.										
TOTALS												

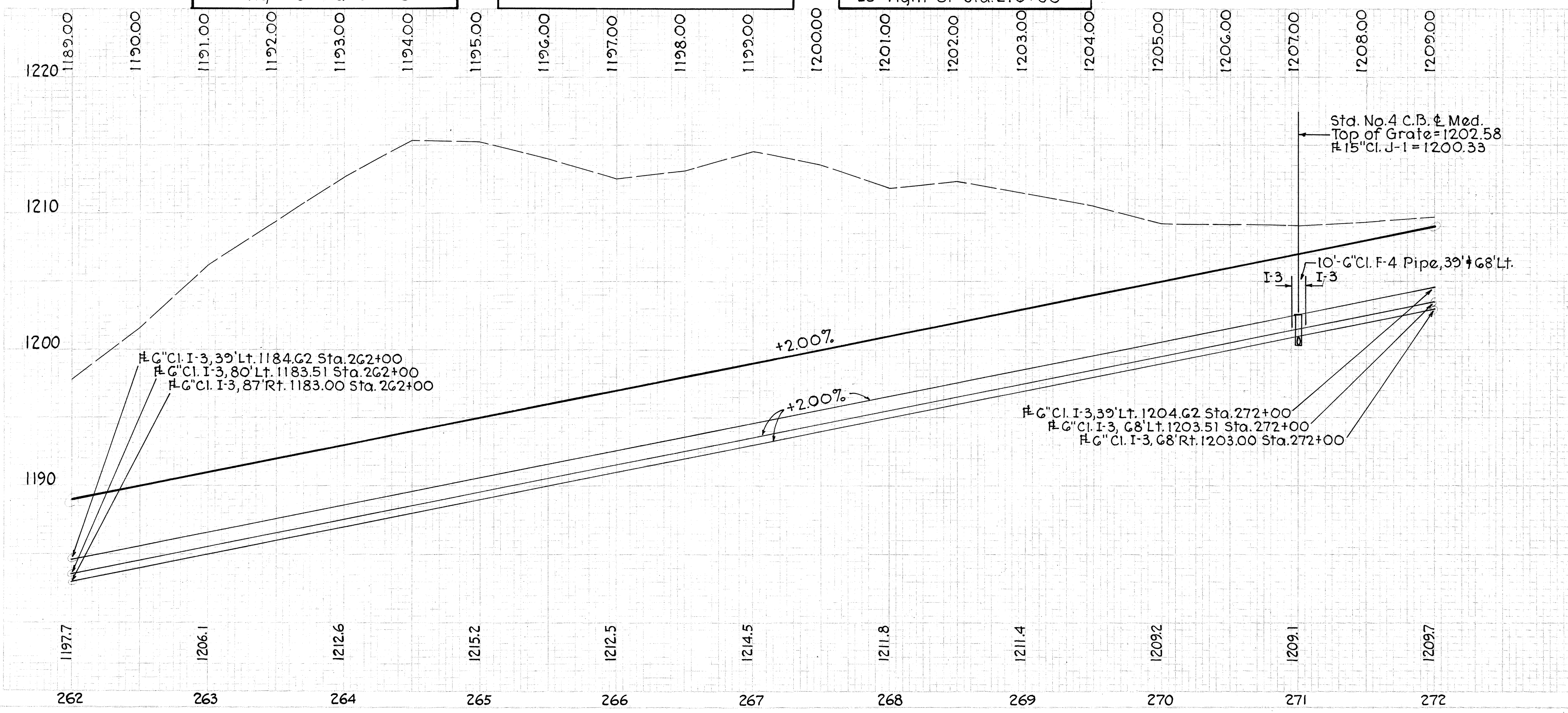


CURVE #3
 P.I. Sta. 235+62.79
 $\Delta = 66^{\circ}44'37''$
 $D = 0^{\circ}40'00''$
 $R = 8,594.36'$
 $L = 10,011.54'$
 $T = 5,660.87'$
 $E = 1,696.82'$

Ref. P.O.C. Sta. 267+00
 12" Poplar
 33.17'
 Tacked hub
 16.30'
 15" Poplar
 18.11'
 8" Poplar
 Flashers in trees

B.M.#E-21 Elev. 1224.852
 Mine Spike in root of 24" Beech
 400' right of Sta. 263+00

B.M.#E-22 Elev. 1221.144
 Mine Spike in root of 12" Elm
 20' right of Sta. 270+00



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	Class I-3 Pipe Shallow Lin. Ft.	Class J-1 Pipe Lin. Ft.	Masonry Headwall Type E Cu. Yd.	I-2 Sta. No. 4 C.B. Each	L-10 Sodding Sq. Yd.	L-120 Jute Matting Sq. Yd.	I-1 Class F-4 Pipe Lin. Ft.	I-10 Dumped Rock Crusher Material Cu. Yd.	I-15 Guard Rail Lin. Ft.	SEE SHEET NO.
I-D	262+00 to 272+00	Rt.	1000						10			123
2-D	262+00 to 272+00	Lt.	990					10				123
3-D	262+00 to 272+00	Lt.					1222					123
4-D	262+00 to 272+00	Rt.								20		123
5-D	271+20	Lt.										
6-D	262+00 to 266+00	Med			140	1	333					
7-D	271+00	Med					83					
8-D	271+00 to 272+00	Med										
9-D	271+70	Lt.										
I-R	263+72 to 264+41	Lt.									75	
TOTALS												

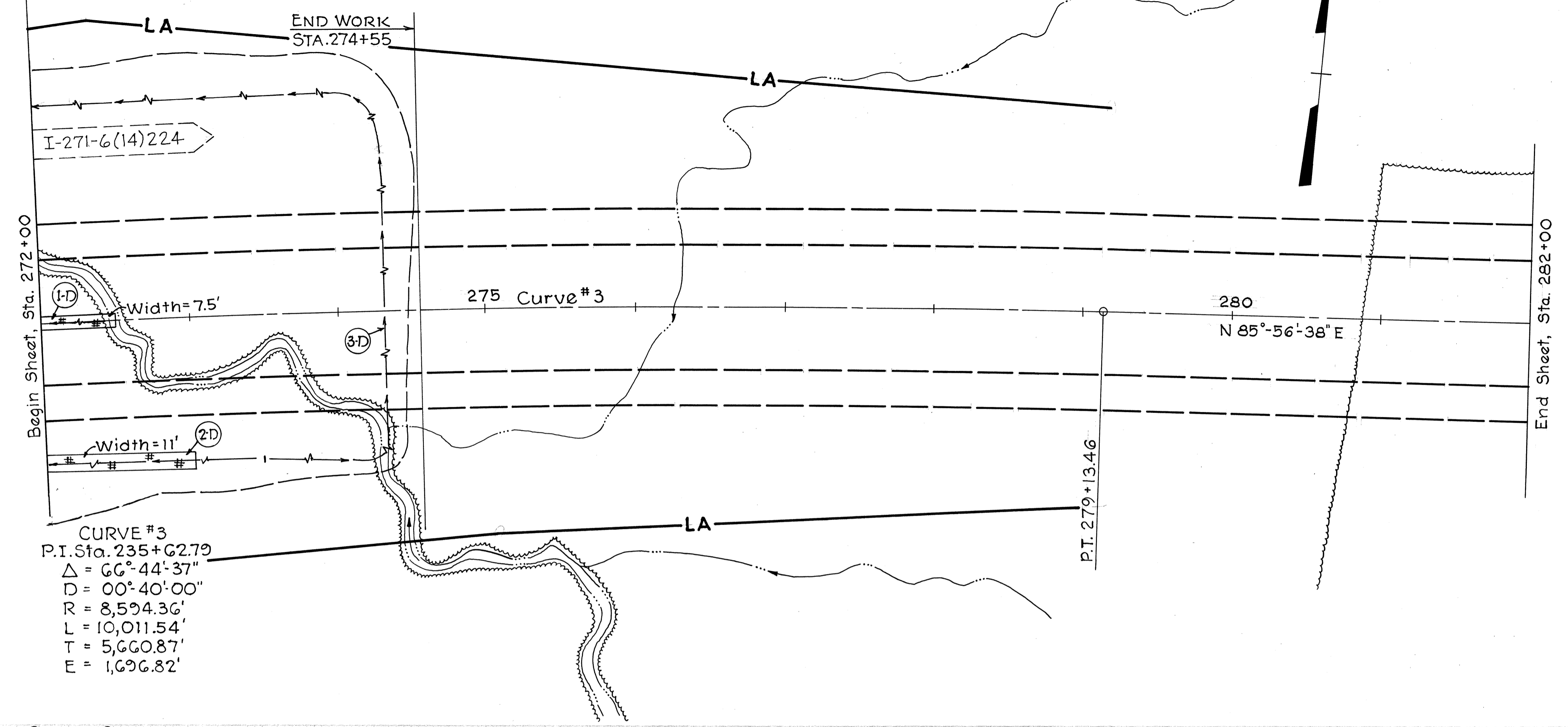
MED-271-4.53
SUM-271-0.00

Note: Proposed Typical Section of
Adjoining Project same as shown
for this Project on sheet No.7.

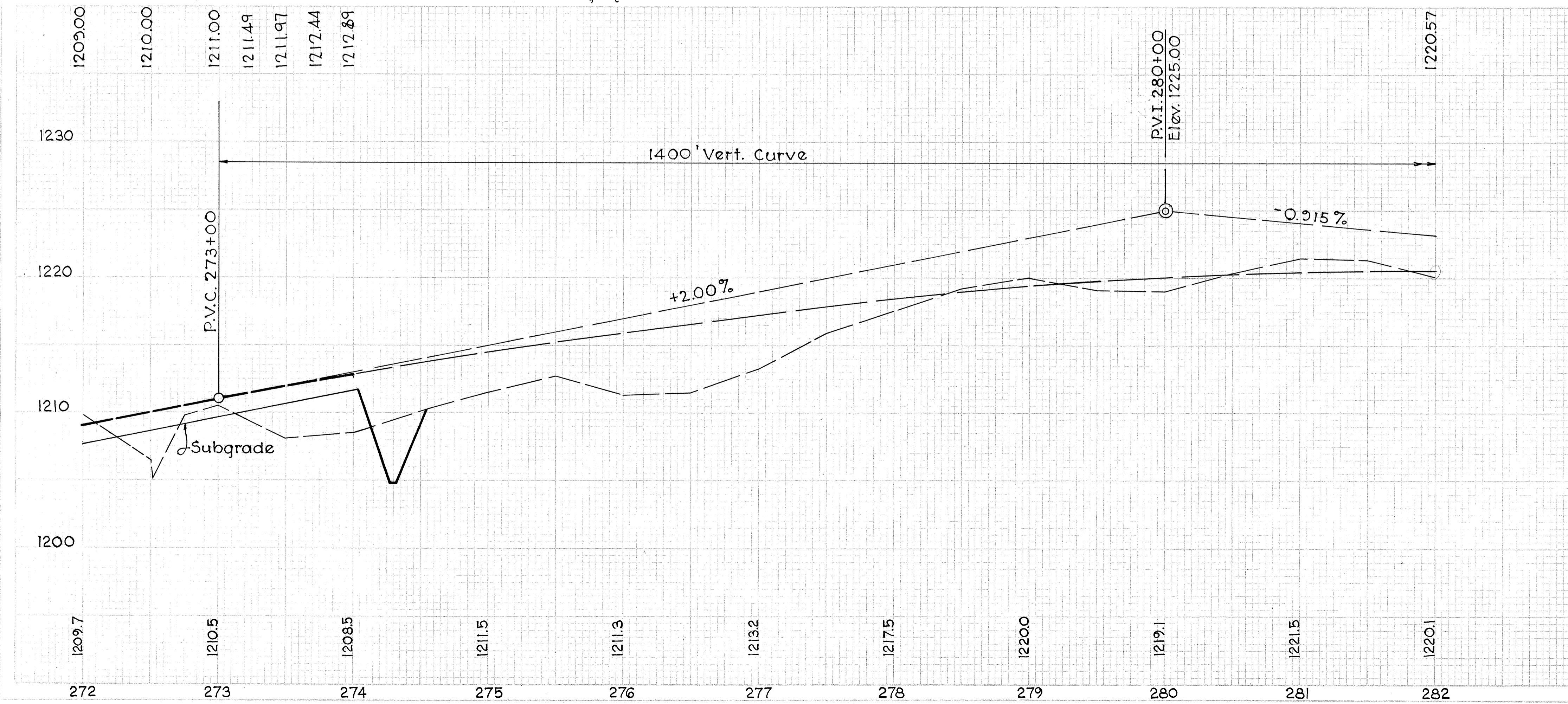
MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
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CURVE #3
P.I. Sta. 235+62.79
 $\Delta = 66^\circ 44' 37''$
 $D = 00^\circ 40' 00''$
 $R = 8,594.36'$
 $L = 10,011.54'$
 $T = 5,660.87'$
 $E = 1,696.82'$



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	E-3 Channel Excav. Cu.Yd.	L-150 Jute Matting Sq.Yd.	
1-D	272+00 to 272+50	Med		42	
2-D	272+00 to 273+00	Rt.		122	
3-D	274+00	Lt. # Rt.	990		
TOTAL					164

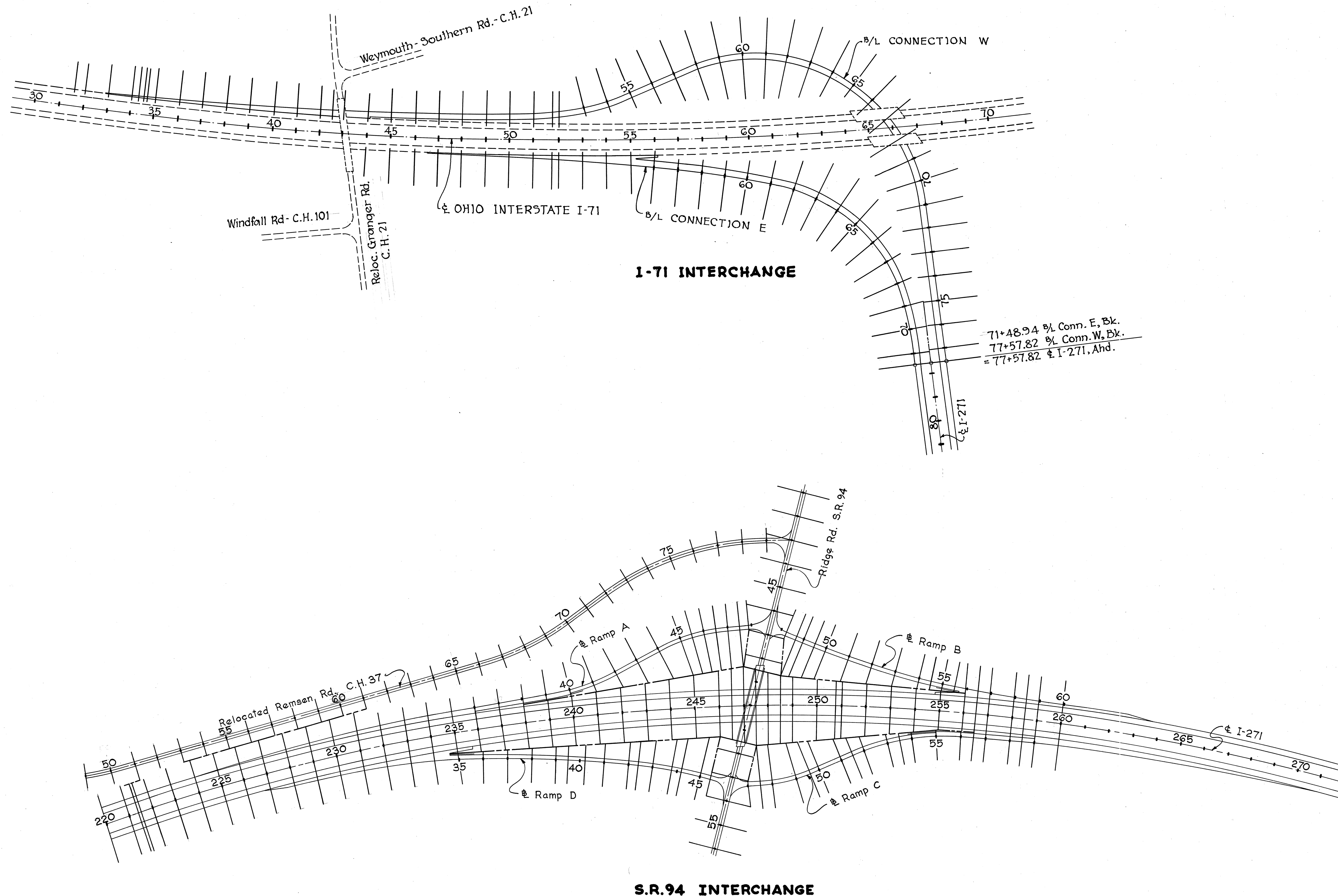
CROSS SECTION LAYOUT

1" = 200'

FED. NO. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13)221

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MEDINA COUNTY
MED - 271-0.00



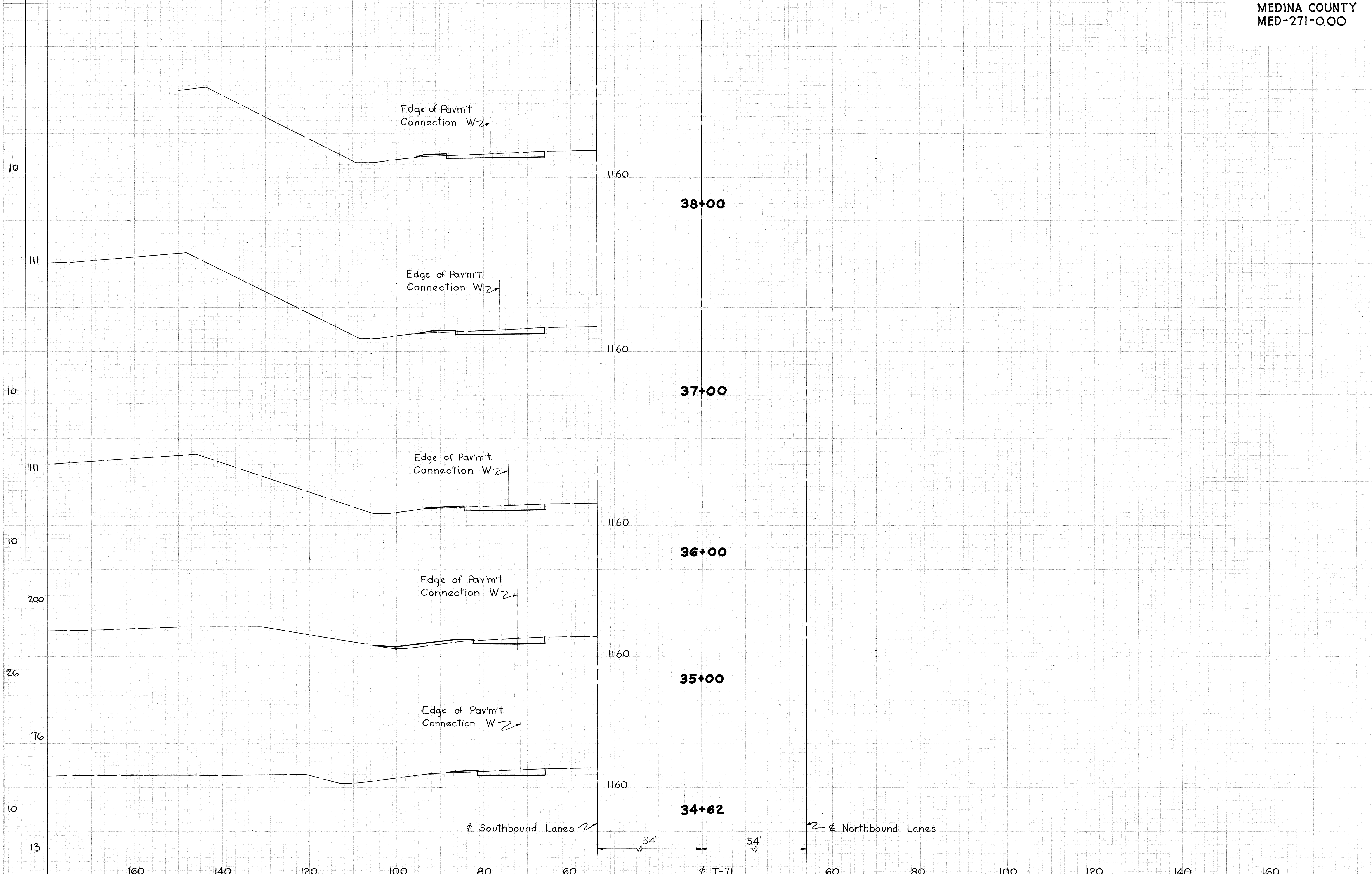
S.R.94 INTERCHANGE

SEEDING
END SQ.
WIDTH YDS.

JOB NO. DIVISION STATE PROJECT
2 OHIO I-71-6(13)221

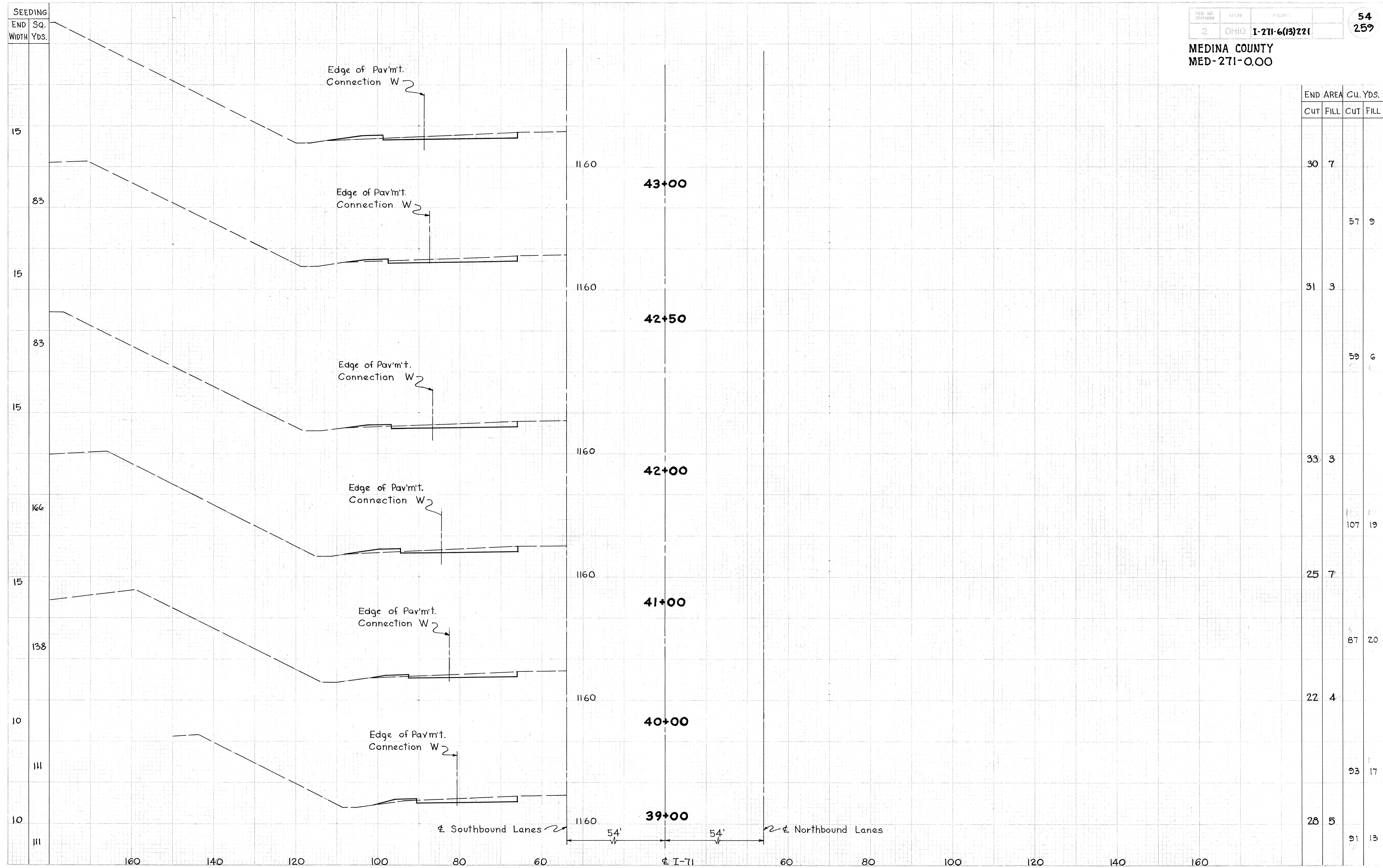
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MEDINA COUNTY
MED-271-0.00



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
21	2		
		78	7
21	2		
		78	7
21	2		
		74	24
19	11		
		27	8
19	1		
		9	1

MEDINA COUNTY
MED-271-0.00

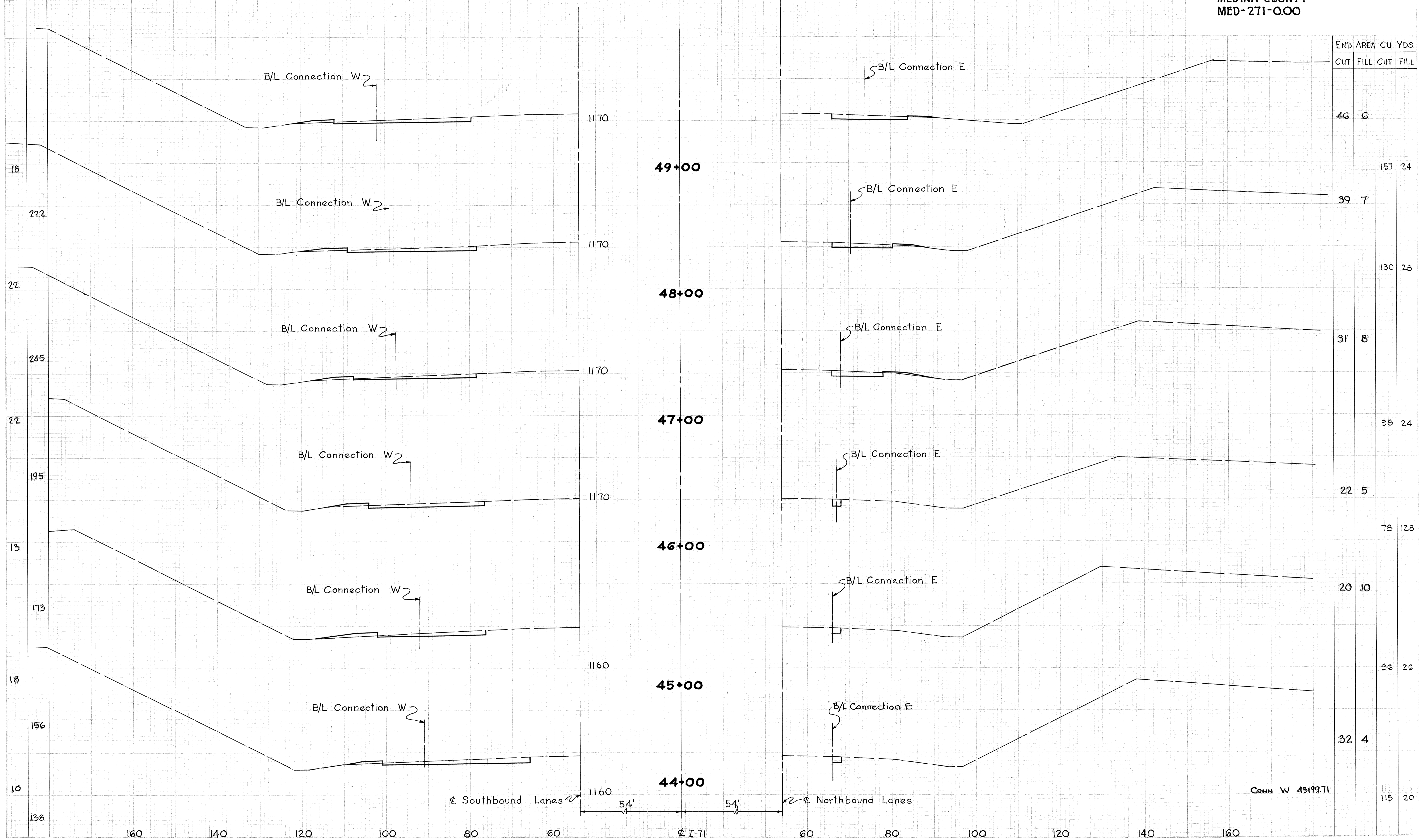


SEEDING
END SQ.
WIDTH YDS.

FED. DIST. DISTRICT	STATE	PROJECT
2	OHIO	I-71-6(13)221

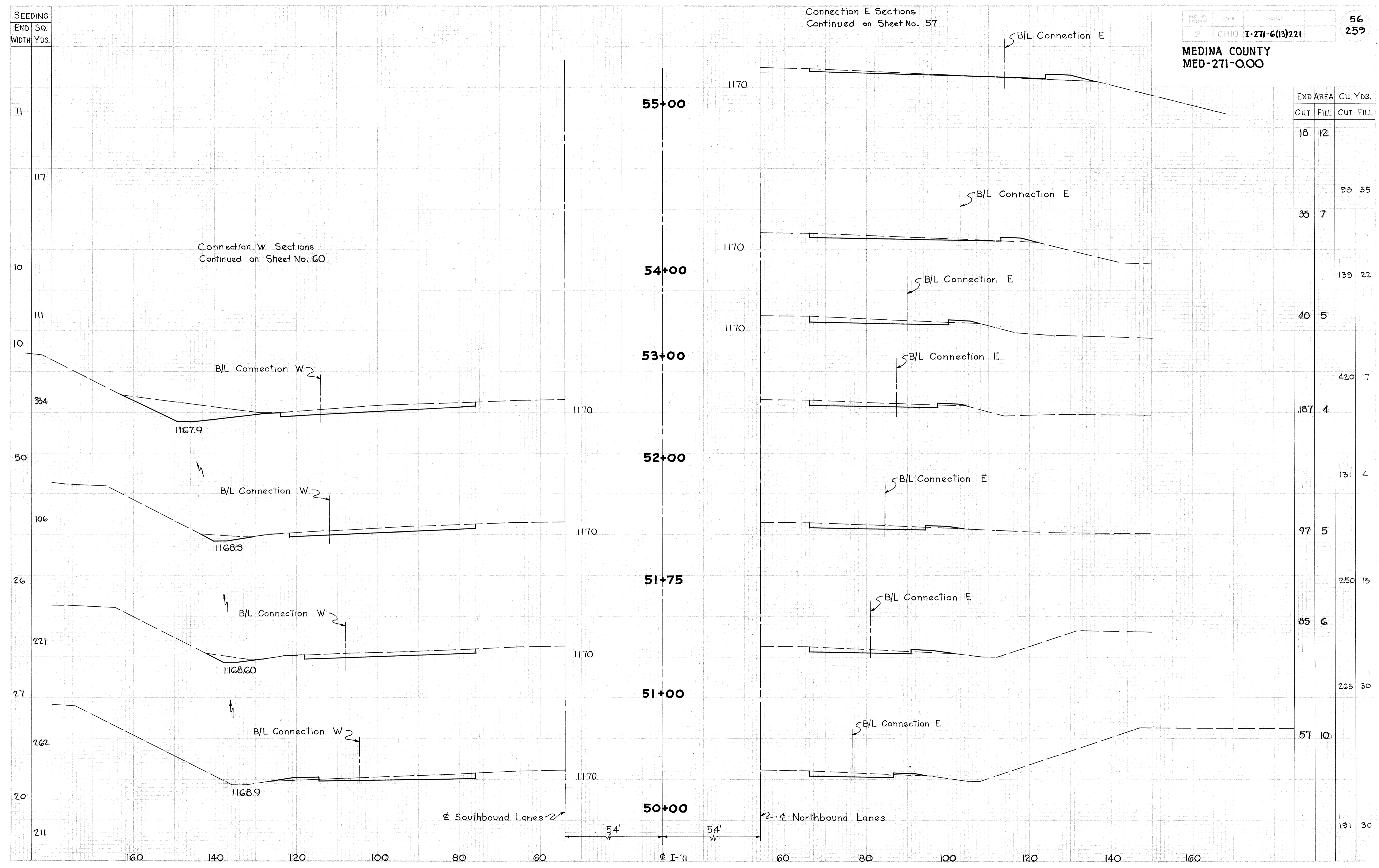
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END STA.	AREA		CU. YDS.	
	CUT	FILL	CUT	FILL
49+00	46	6	157	24
48+00	39	7	130	28
47+00	31	8	98	24
46+00	22	5	78	128
45+00	20	10	96	26
44+00	32	4	115	20

CONN W 43199.71

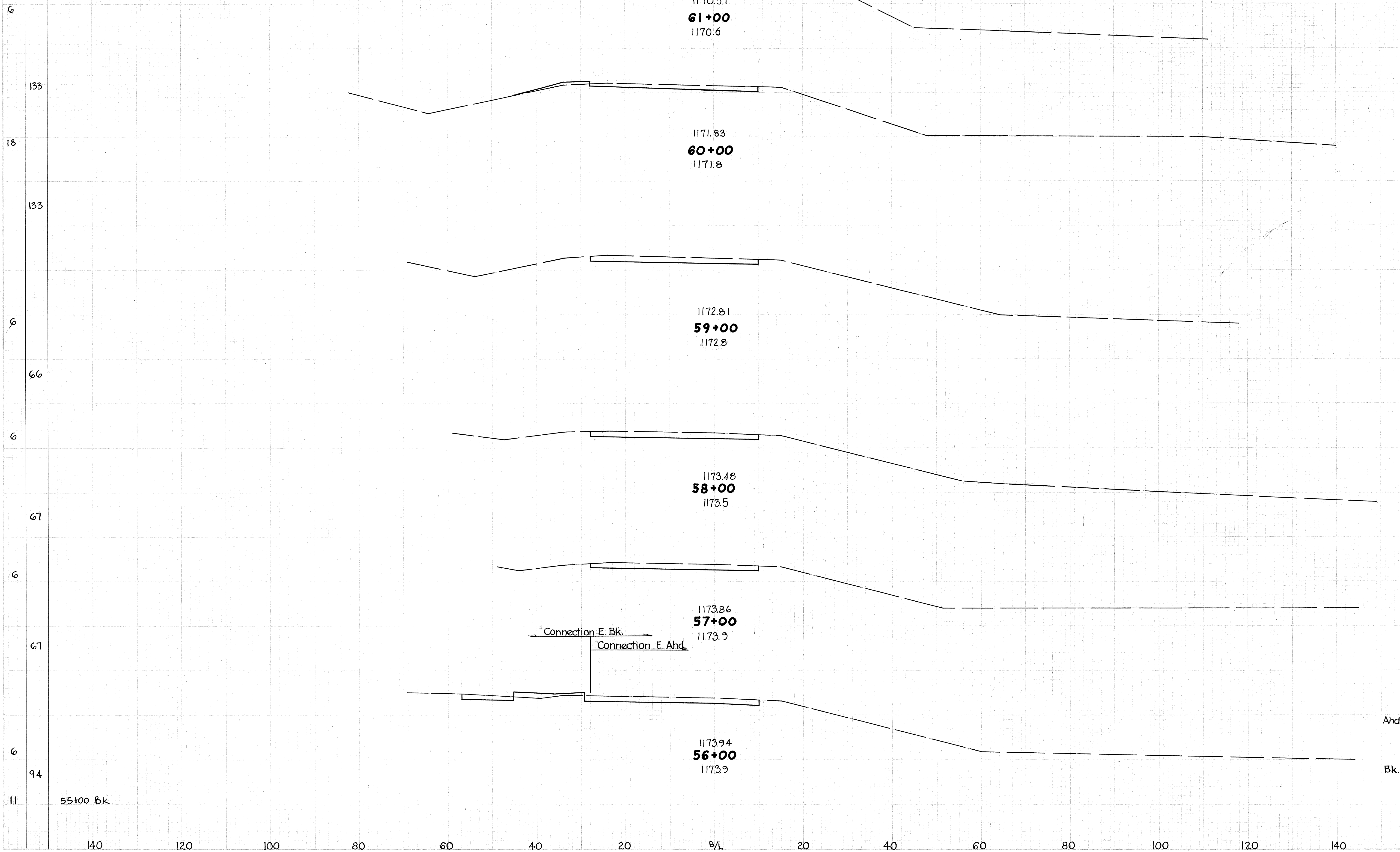


SEEDING
END SQ.
WIDTH YDS.

2	OHIO	I-271-6(13)221
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MEDINA COUNTY
MED-271-0.00



END AREA		Cu. Yds.	
Cut	FILL	Cut	FILL
50	0		
		169	20
41	11		
		169	20
50	0		
		185	0
50	0		
		185	0
50	0		
		185	0
Ahd.	50	0	
Bk.	66	15	
		155	50

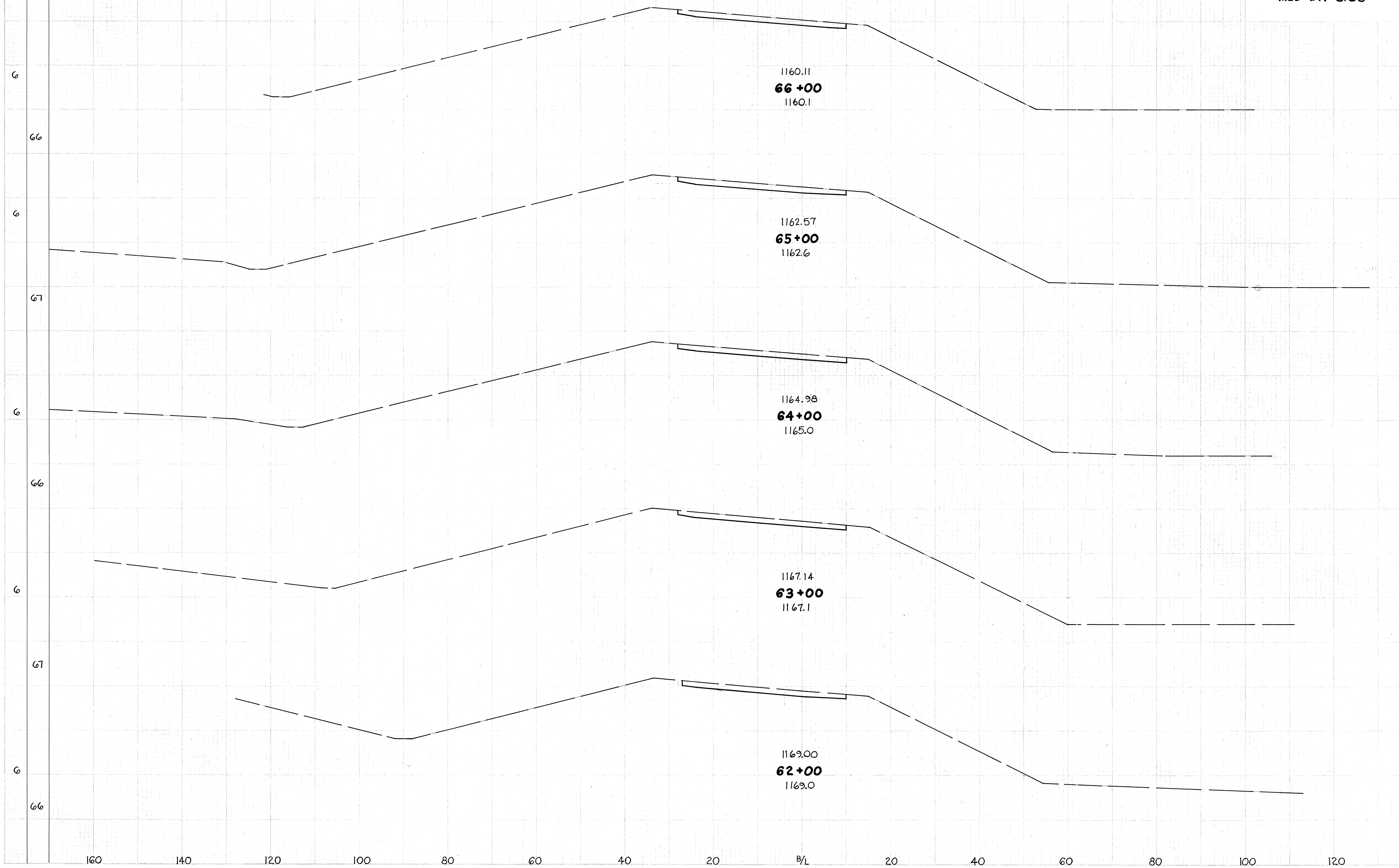
CONN. E • Sta. 56+00 to 61+00

SEEDING
END SQ.
WIDTH YDS.

2	OHIO	I-271-6(13)221
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259

MEDINA COUNTY
MED-271-0.00



END AREA		Cu. Yds.	
Cut	Fill	Cut	Fill
50	0		
51	0	187	0
50	0	187	0
48	0	181	0
48	0	178	0
48	0	181	0

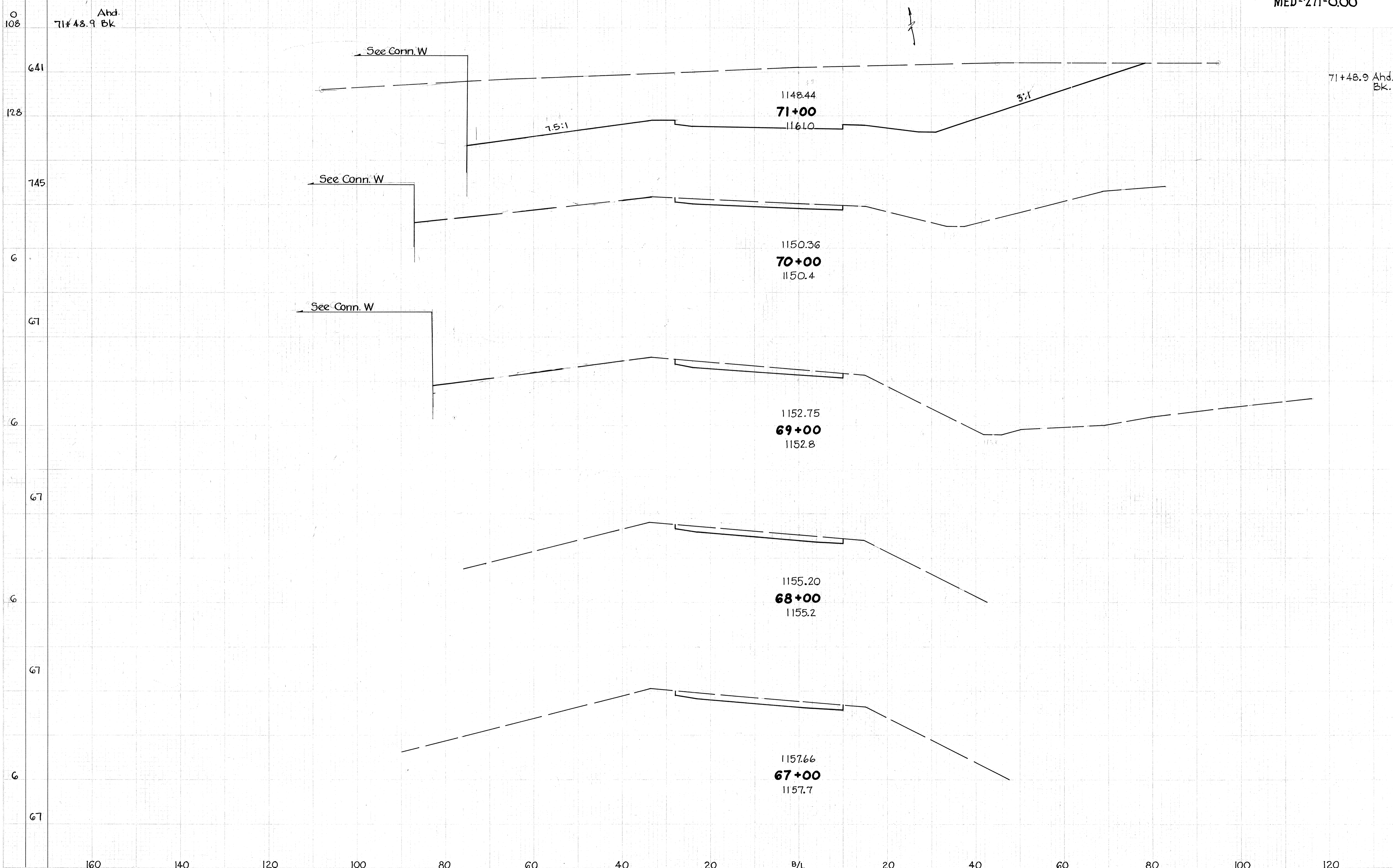
CONN. E · Sta. 62+00 to 66+00

SEEDING
END SQ.
WIDTH YDS.

FILE NO.	STATE	PROJECT
2	OHIO	I-271-G(13)221

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MEDINA COUNTY
MED-271-0.00

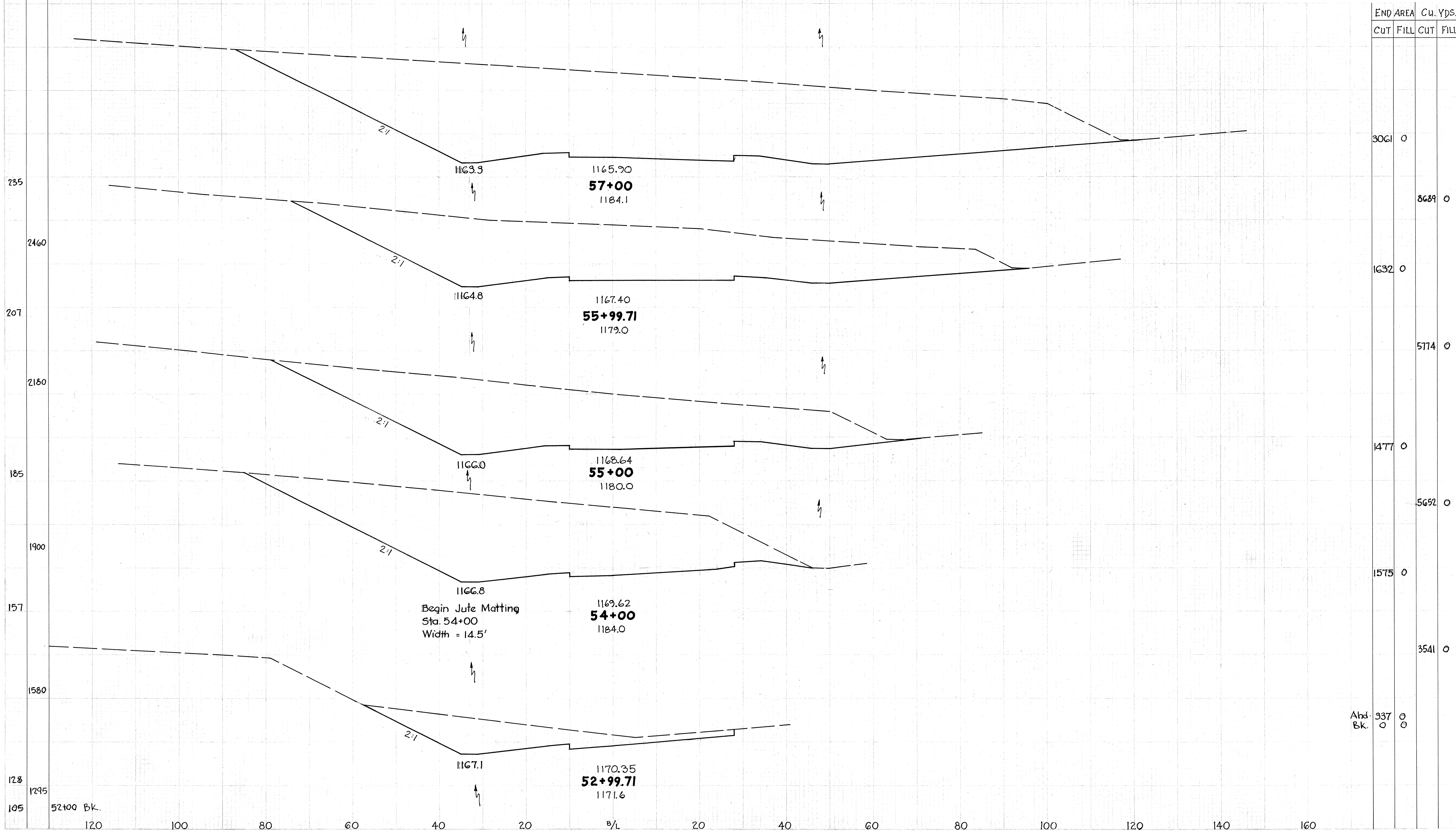


END AREA	Cu. Yds.	
	CUT	FILL
71+48.9 Ahd. Bk. 0 1690	0	0
1760	0	3124
0	0	0
69	0	3387
67	0	254
68	15	28
6	0	220
67	51	0
6	0	187
67	50	0
6	0	185

CONN. E · Sta. 67+00 to 71+00

SEEDING
END SQ.
WIDTH YDS

MEDINA COUNTY
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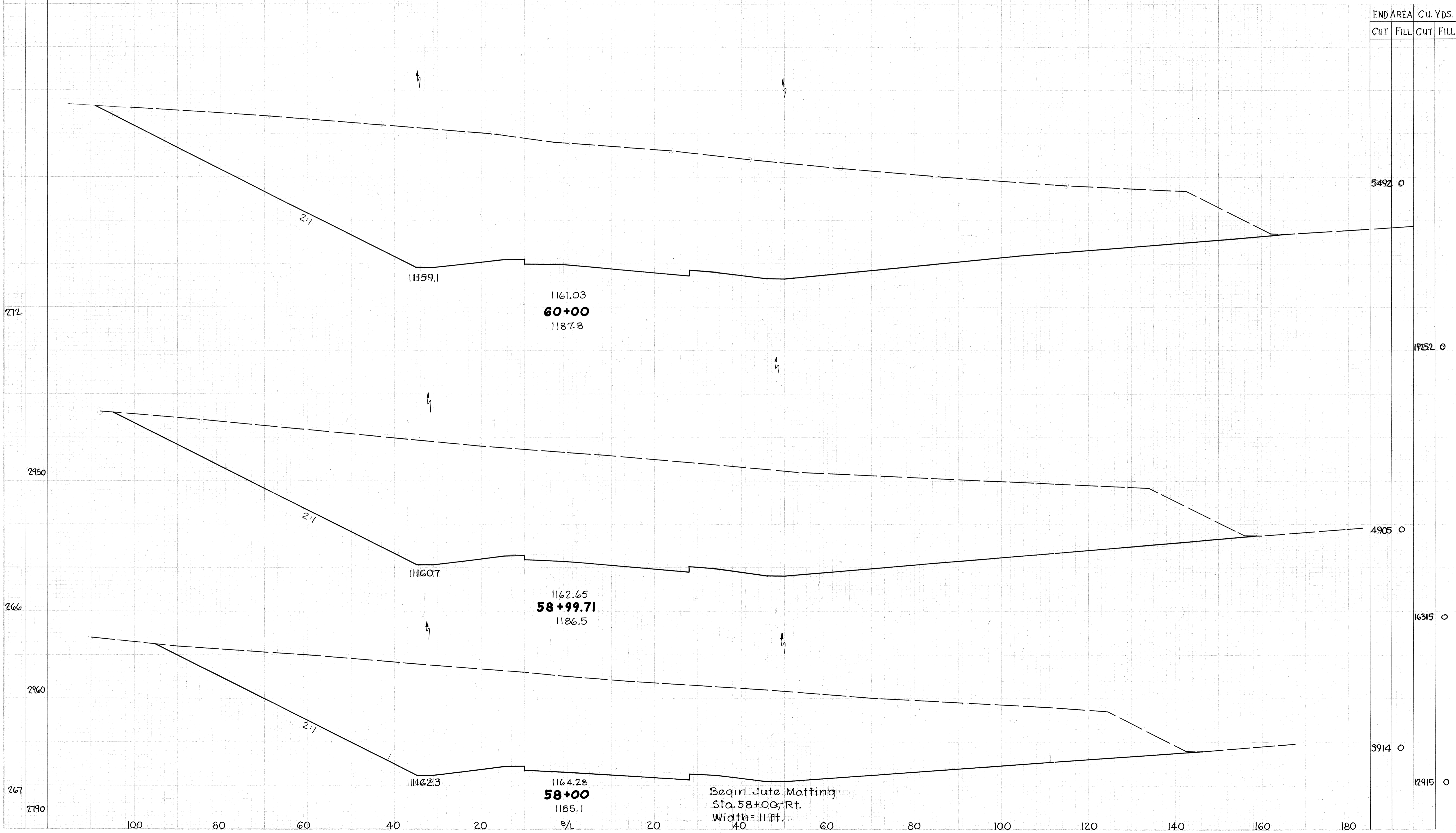


SEEDING
END SQ.
WIDTH YDS.

FED. RD. DIST. NO.	STATE	PROJECT
2	OHIO	I-271-6(13)221

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MEDINA COUNTY
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END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

5492	0	19232	0
4905	0	16315	0
3914	0	12915	0

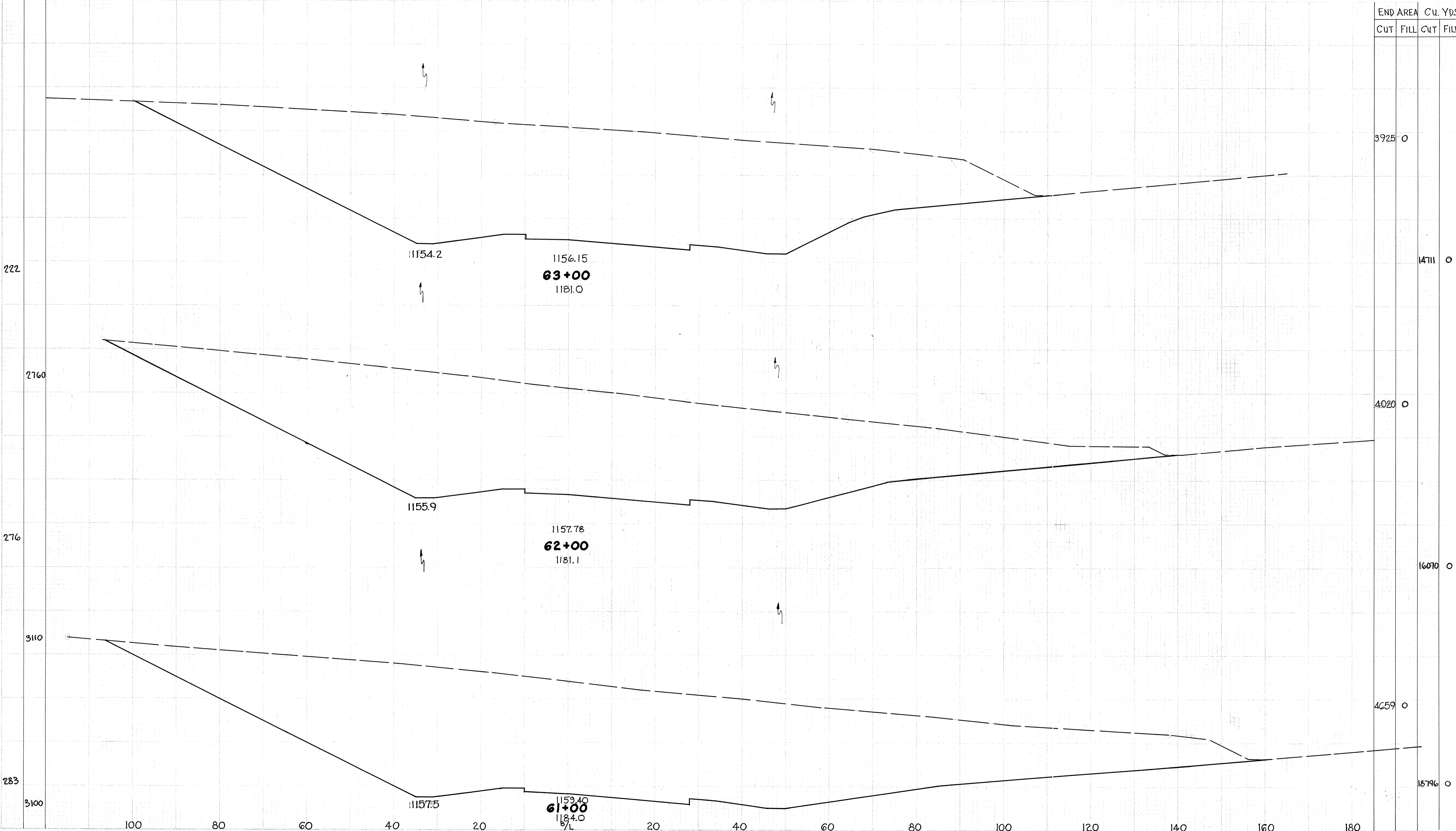
CONN. W. Sta. 58+00 to 60+00

SEEDING
END SQ.
WIDTH YDS.

2 OHIO I-271-G(13)221

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MEDINA COUNTY
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END AREA
CUT FILL CUT FILL

3925 0

222

2760

276

310

283

3100

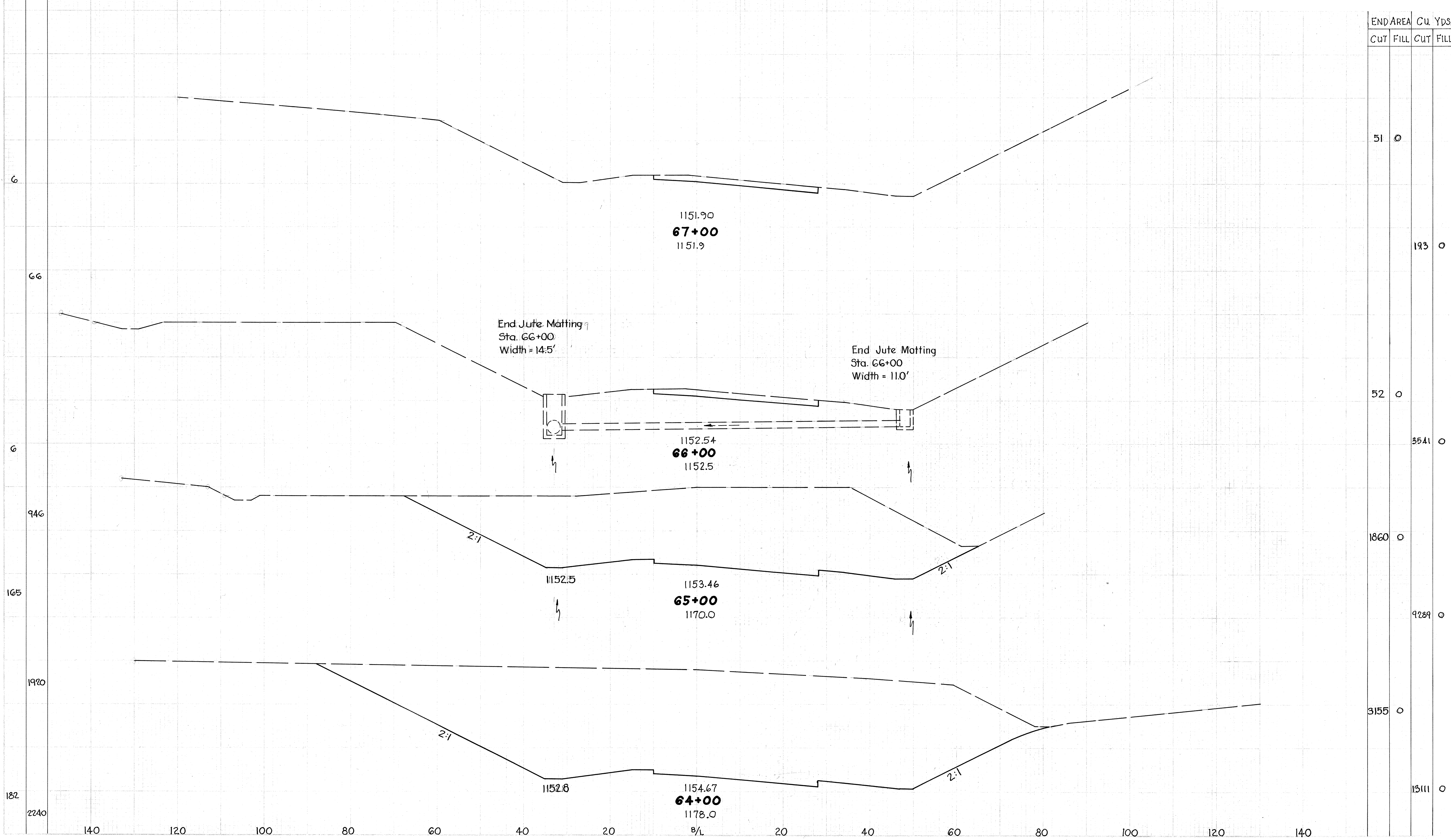
CONN. W · Sta. 61+00 to 63+00

SEEDING
END SQ.
WIDTH YDS.

FED. RD. DISTRICT	STATE	PROJECT
2	OHIO	I-271-6(13)221

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MED-271-000



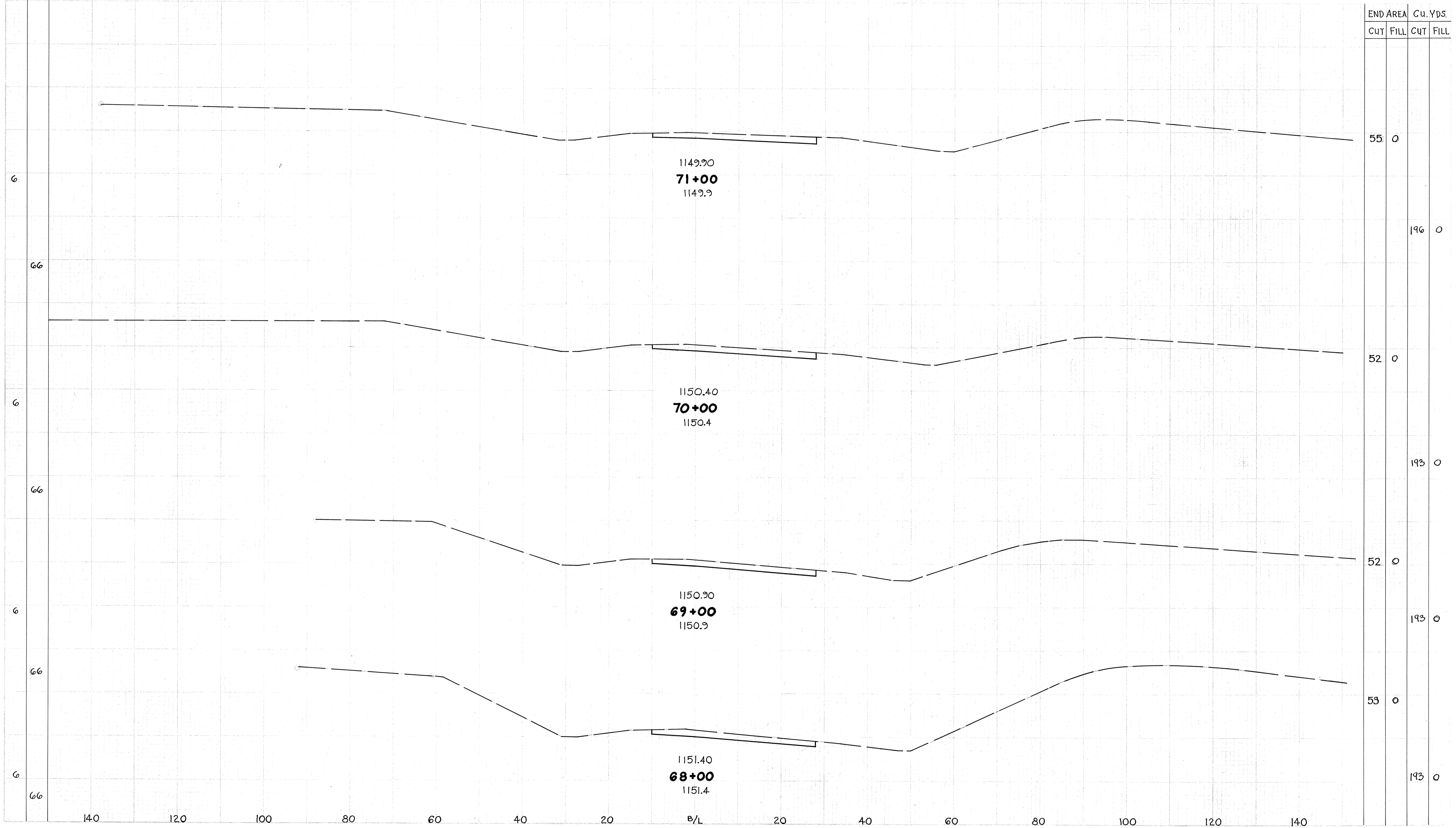
CONN. W · Sta. 64+00 to 67+00

SEEDING
END SQ.
WIDTH YDS.

2 OHIO I-271-6(13)221

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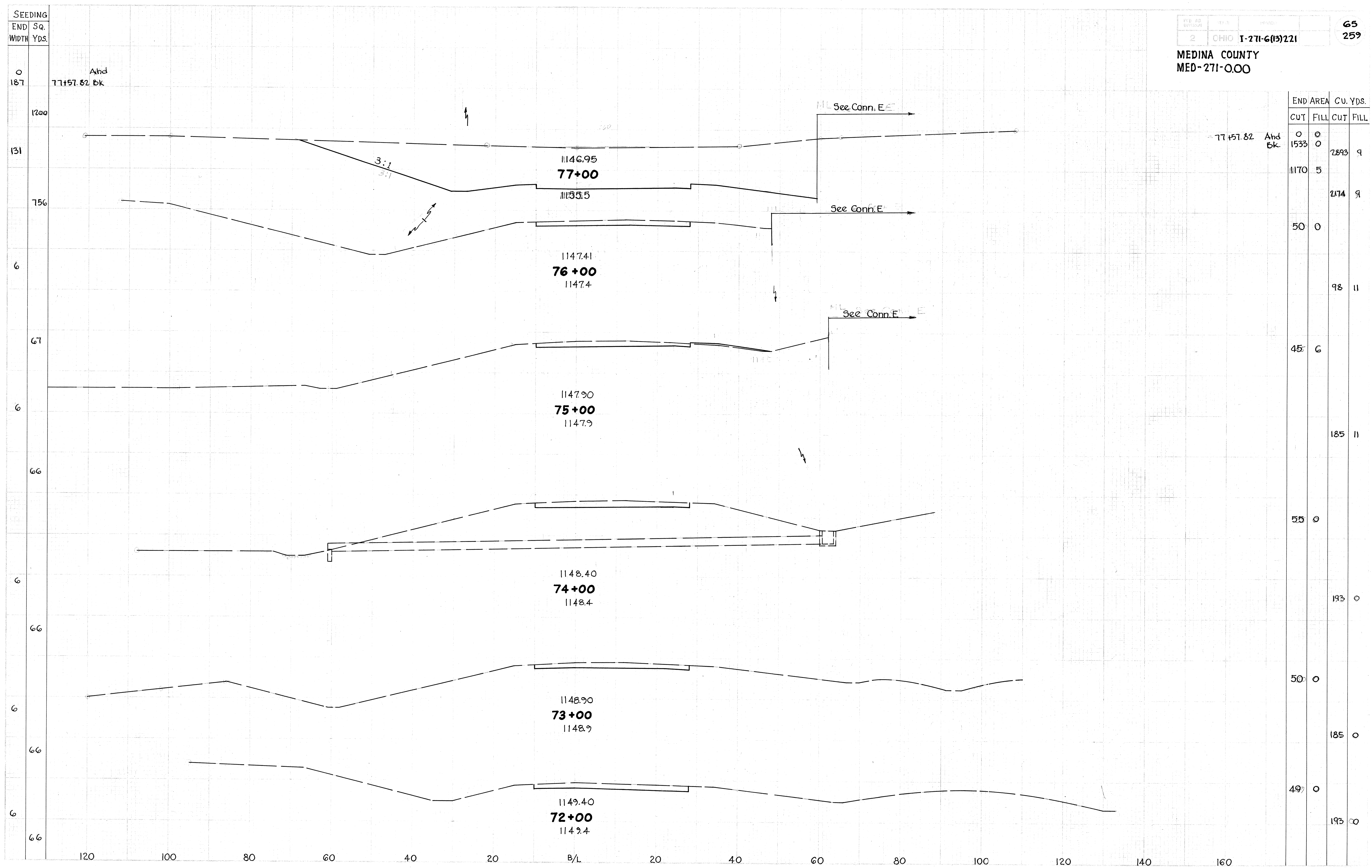
MEDINA COUNTY
MED-271-0.00



CONN. W · Sta. 68+00 to 71+00

SEEDING
END SQ.
WIDTH YDS.

MEDINA COUNTY
MED-271-0.00



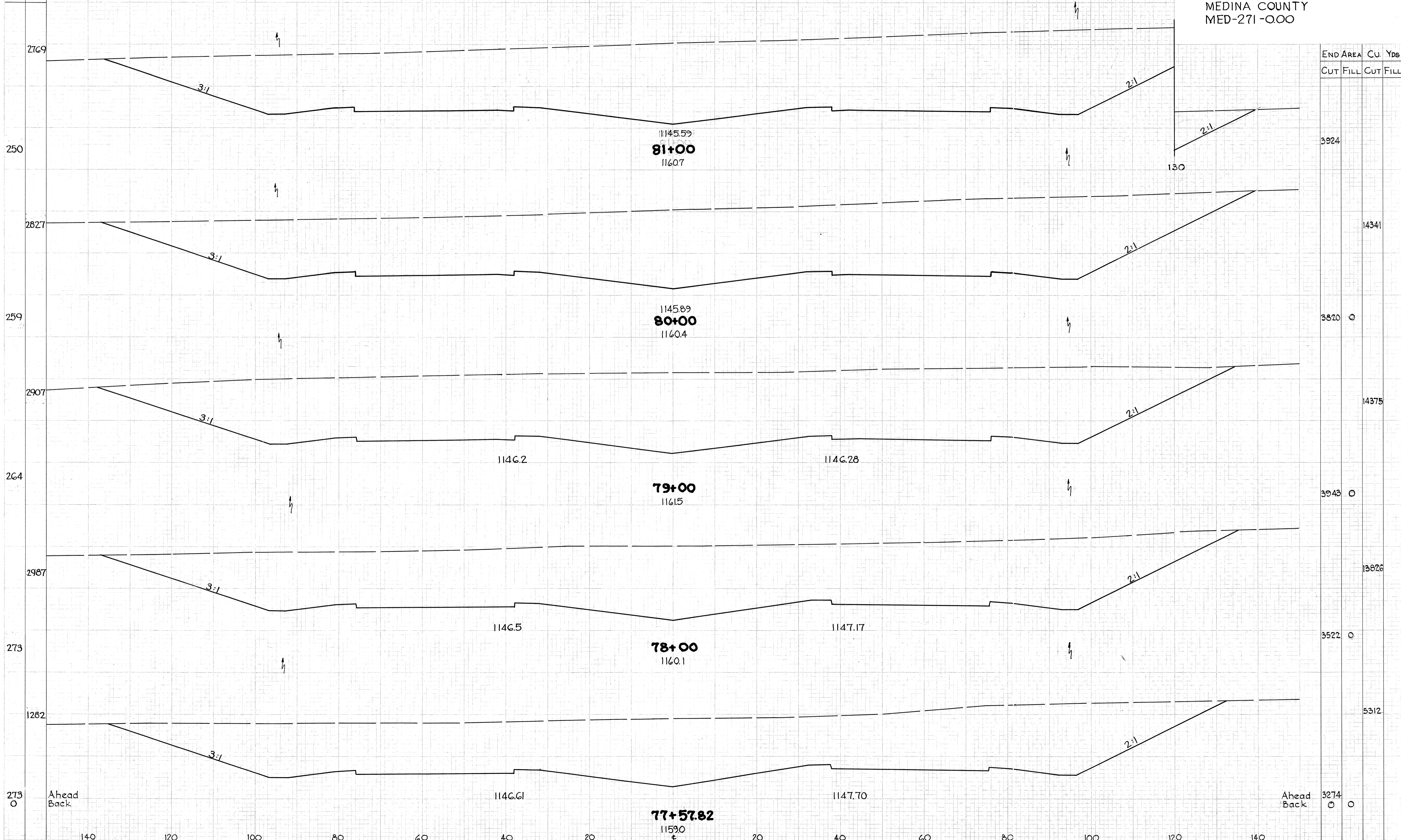
END AREA	CU. YDS.	
	CUT	FILL
0	0	0
1533	0	2893
1170	5	2174
50	0	0
67	6	98
6	0	185
66	0	0
6	0	193
66	0	0
6	0	185
66	0	0
6	0	185
66	0	0
6	0	193

SEEDING
END SQ.
WIDTH YDS

FED. RD. DIVISION STATE PROJECT
2 OHIO I-271-G(13)221

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END AREA	CU. Yds.
CUT	FILL

3924	14341
3820	14375
3948	13826
3522	5312
3274	

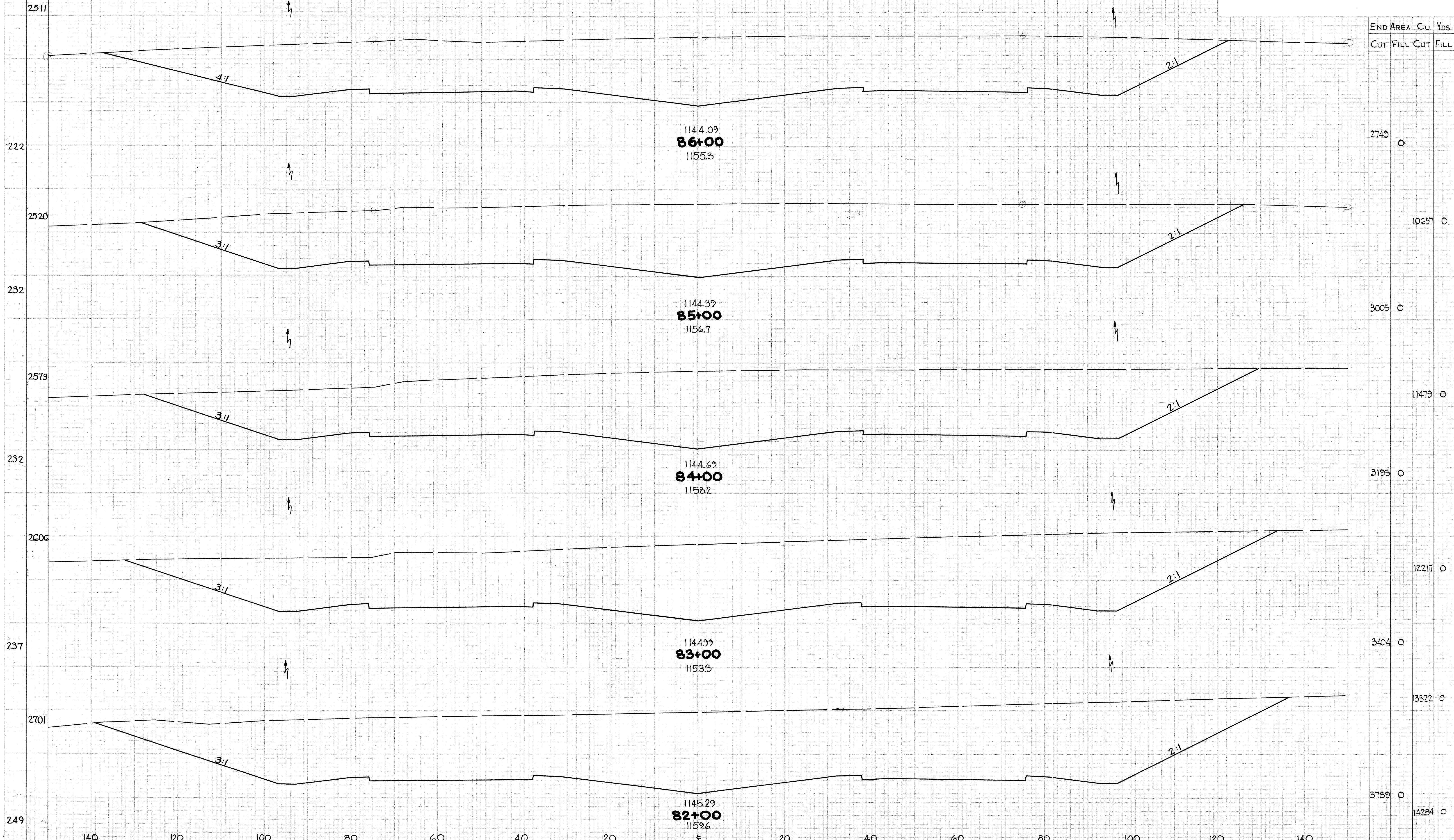
I-271 STA. 77+57.82 to 81+00

SEEDING
END SQ.
WIDTH Yds.

FIG. NO.	STATE	PROJECT
2	OHIO	I-271-G(13)221

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MEDINA COUNTY
MED-271-000



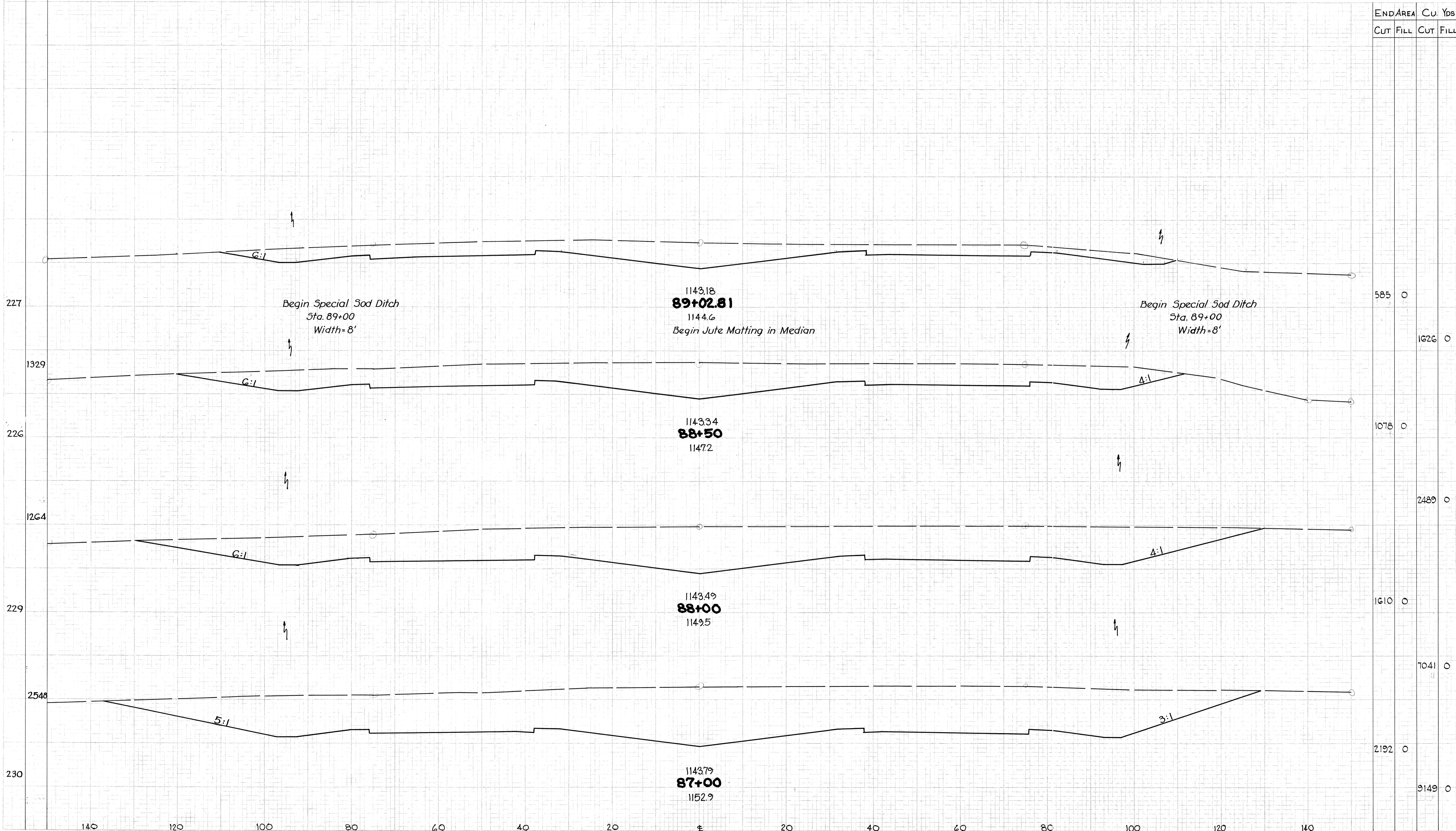
I-271 STA. 82+00 to 86+00

SEEDING
END Sta.
WIDTH Yds.

FED. RD. DISTRICT	STATE	PROJECT
2	OHIO	I-271-G(13)221

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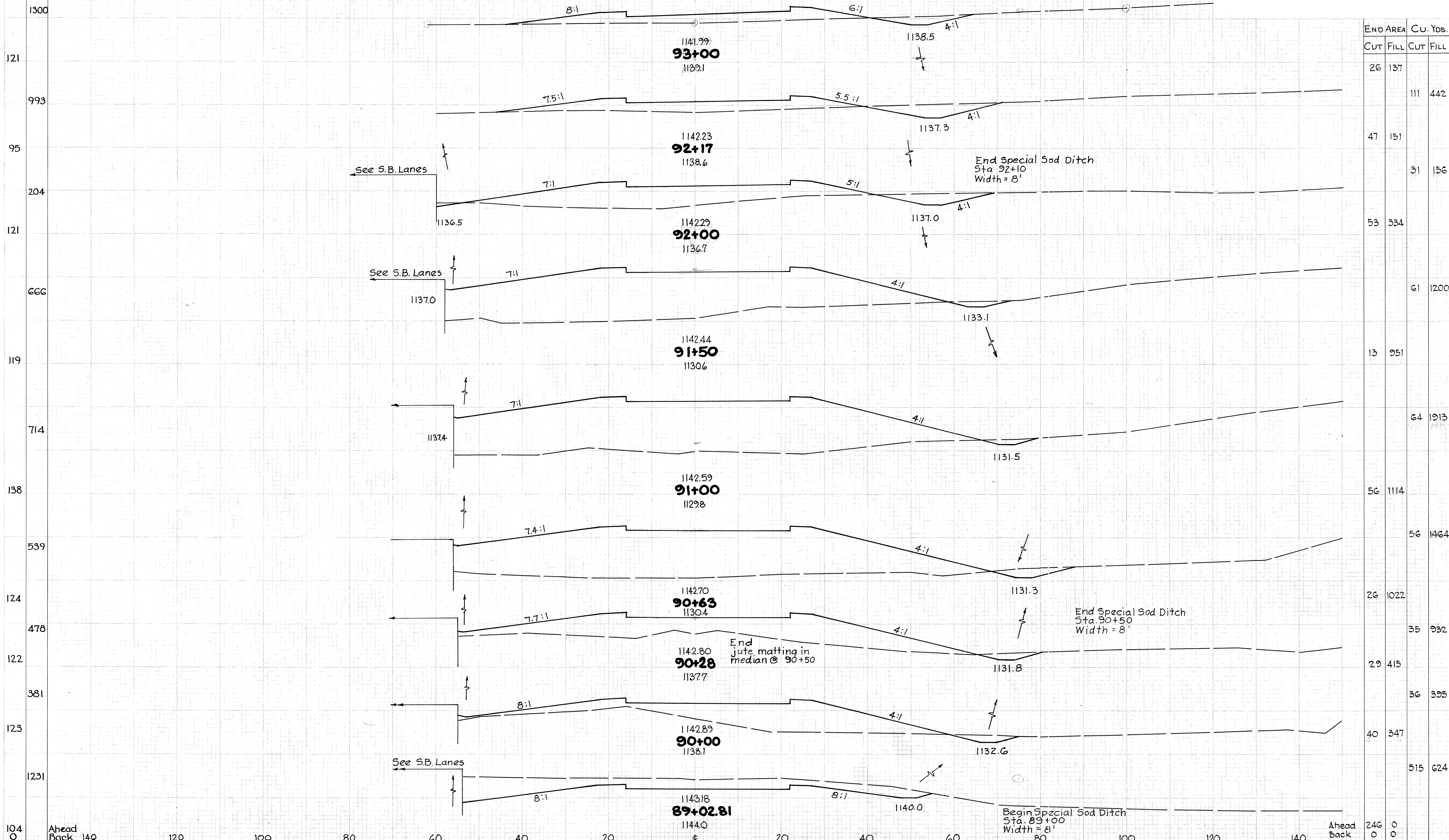
MEDINA COUNTY
MED-271-000



I-271 STA. 87+00 to 89+02.81

SEEDING
END Sta
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00

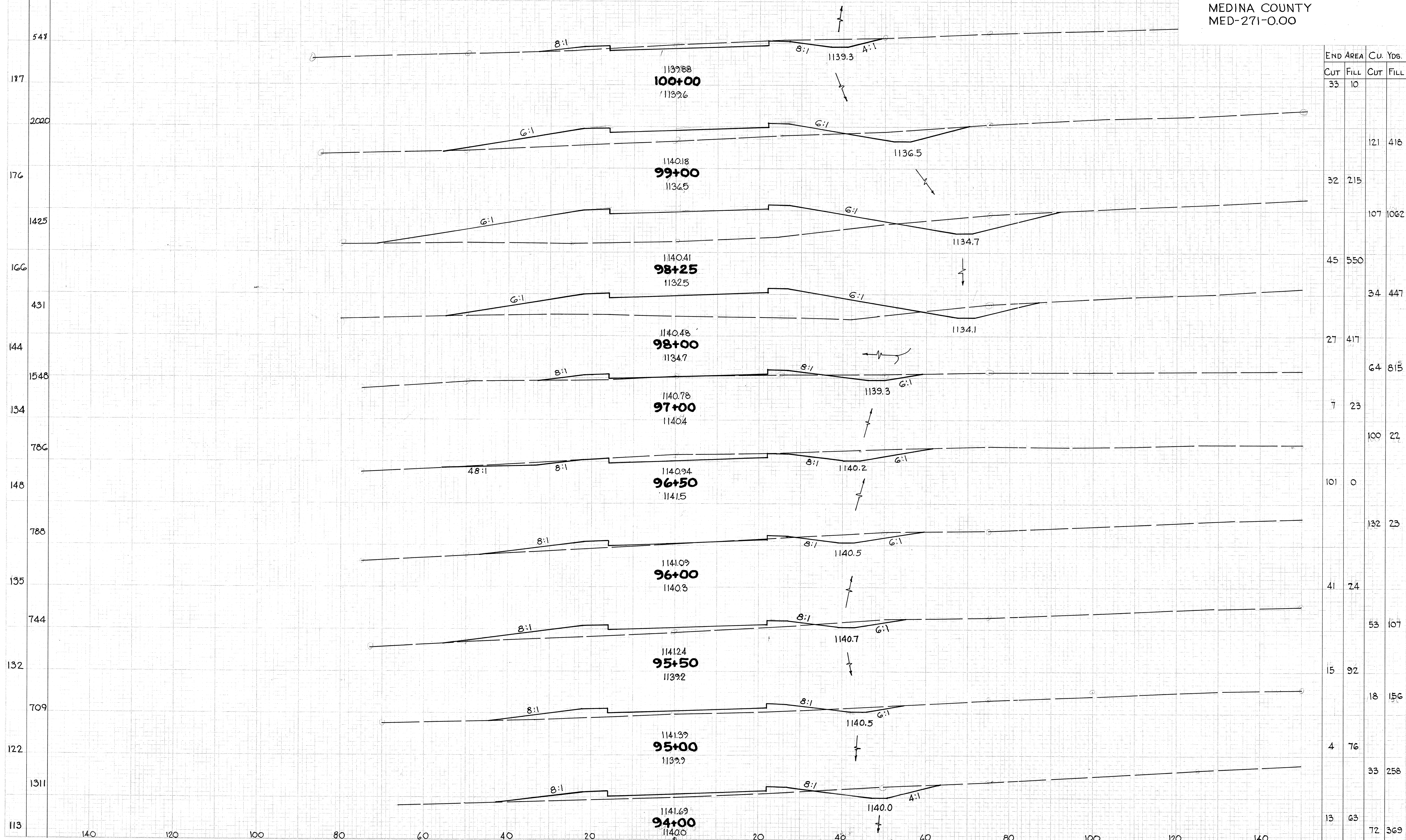


SEEDING
END SQ.
WIDTH YDS.

FED. RD. DIVISION STATE PROJECT
2 OHIO I-271-6(13)221

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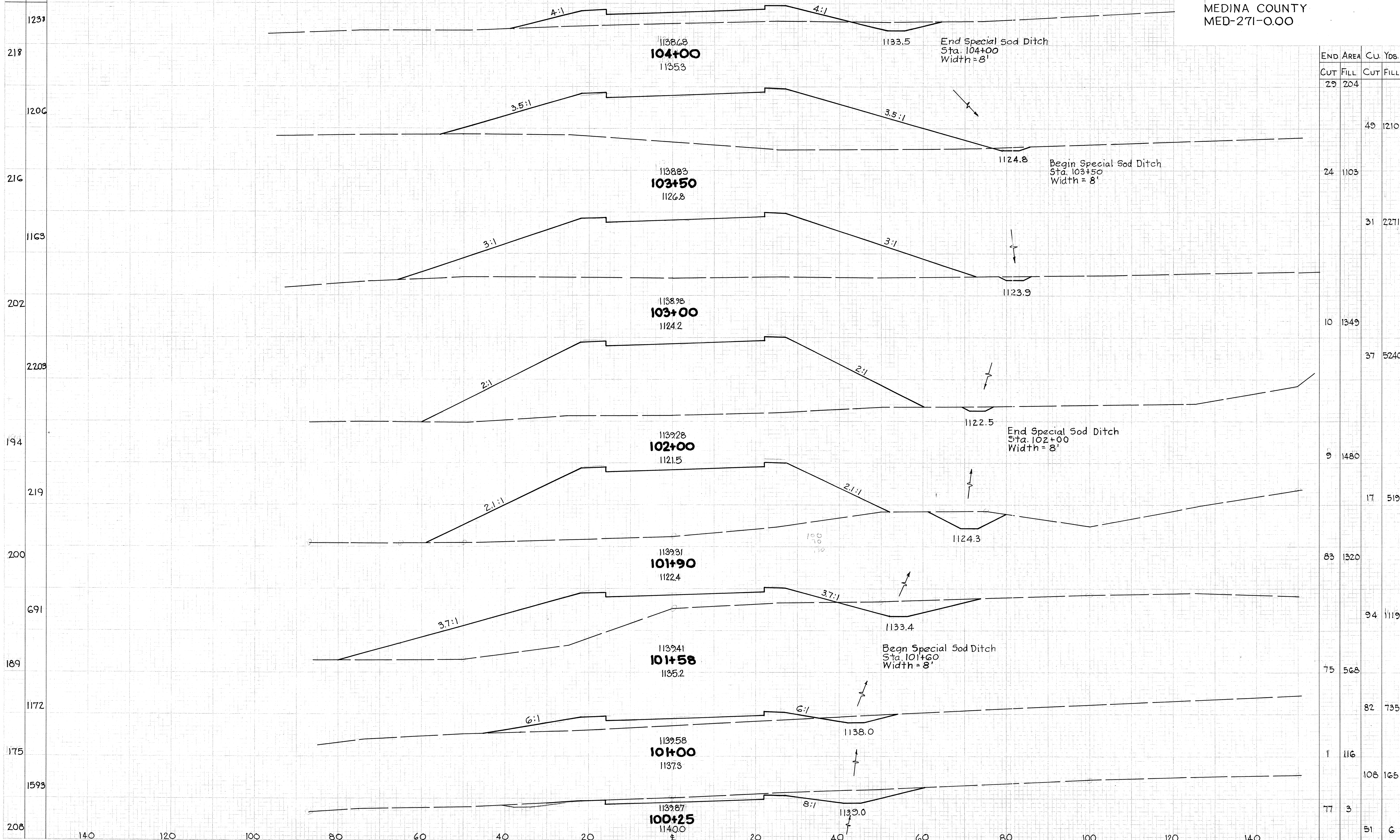
MEDINA COUNTY
MED-271-0.00



N.B.L. STA. 94+00 to 100+00

SEEDING
END Sta.
WIDTH Yds.

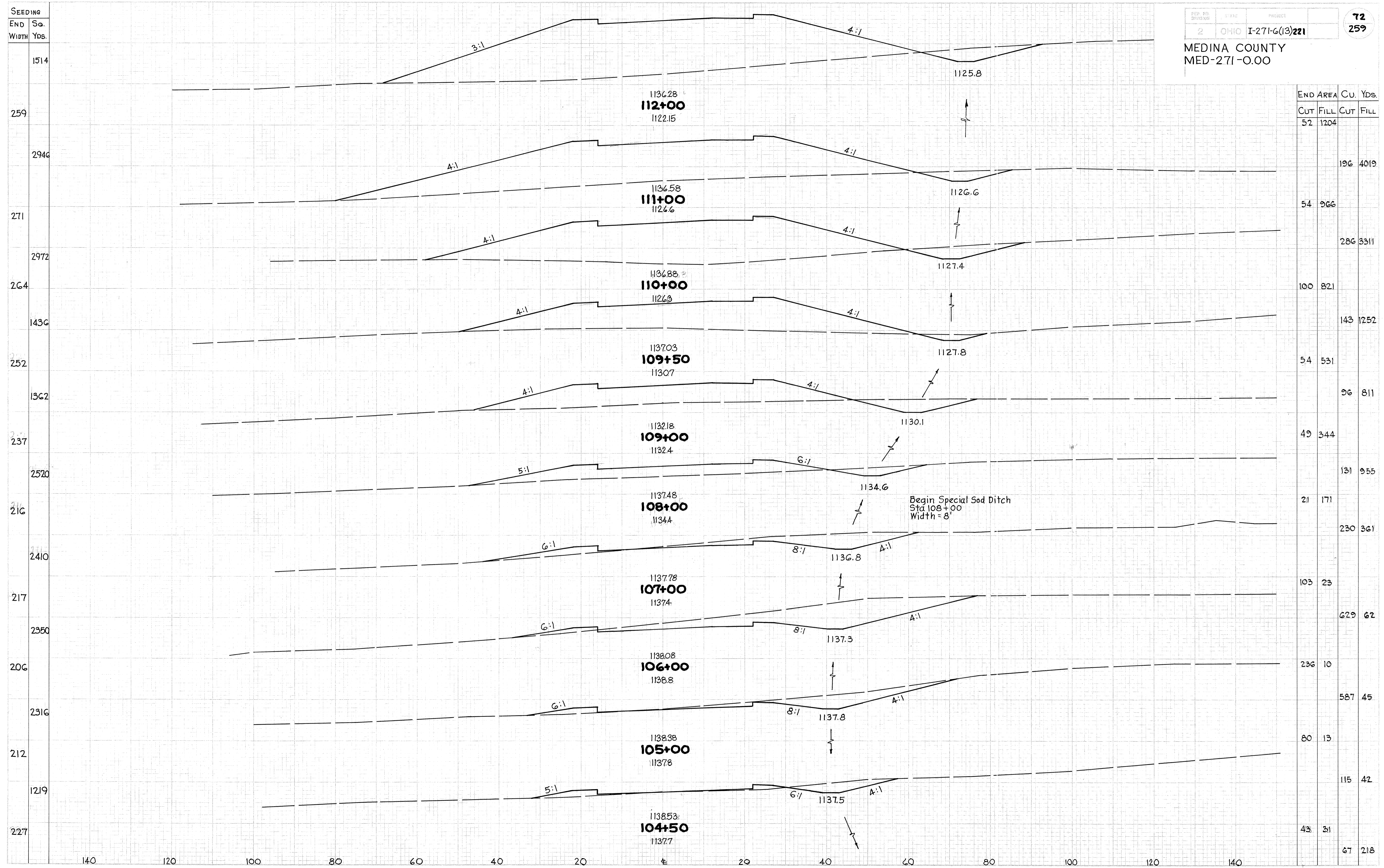
MEDINA COUNTY
MED-271-0.00



END AREA		CU. Yds.	
CUT	FILL	CUT	FILL
29	204		
		49	1210
24	1103		
		31	2271
10	1349		
		37	5240
9	1480		
		17	519
63	1320		
		94	1119
75	568		
		82	735
1	116		
		108	165
77	3		
		51	6

N.B.L. STA. 100+25 to 104+00

MEDINA COUNTY
MED-271-0.00



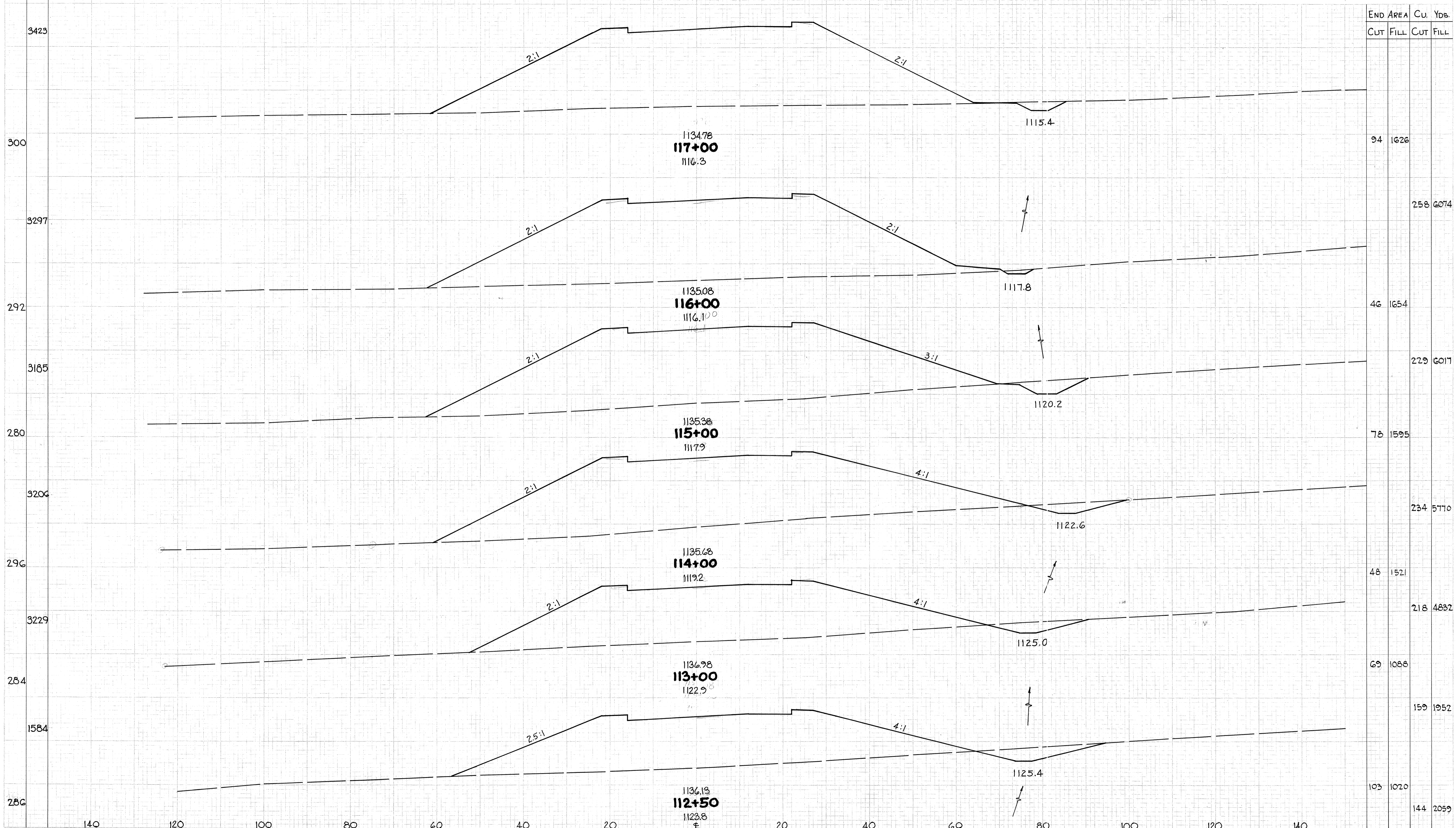
N.B.L. STA. 104+50 to 112+00

SEEDING
END Sta.
WIDTH Yds.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

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MEDINA COUNTY
MED-271-0.00



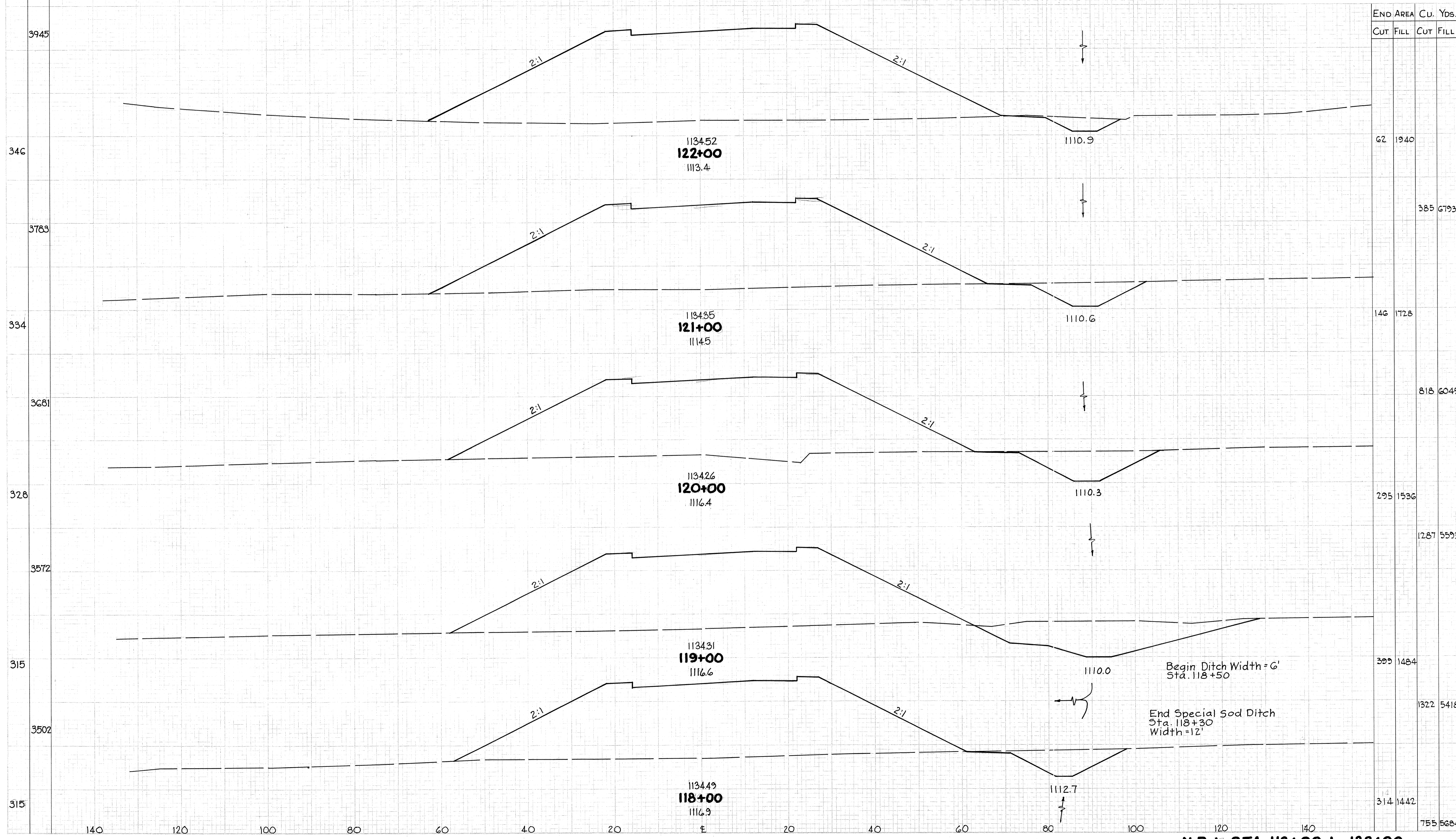
N.B.L. STA. 112+50 to 117+00

SEEDING
END SQ.
WIDTH Yds.

FED. HD. DISTRICT STATE PROJECT
2 OHIO I-271-G(13)221

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MEDINA COUNTY
MED-271-0.00



Begin Ditch Width = 6'
Sta. 118+50

End Special Sod Ditch
Sta. 118+30
Width = 12'

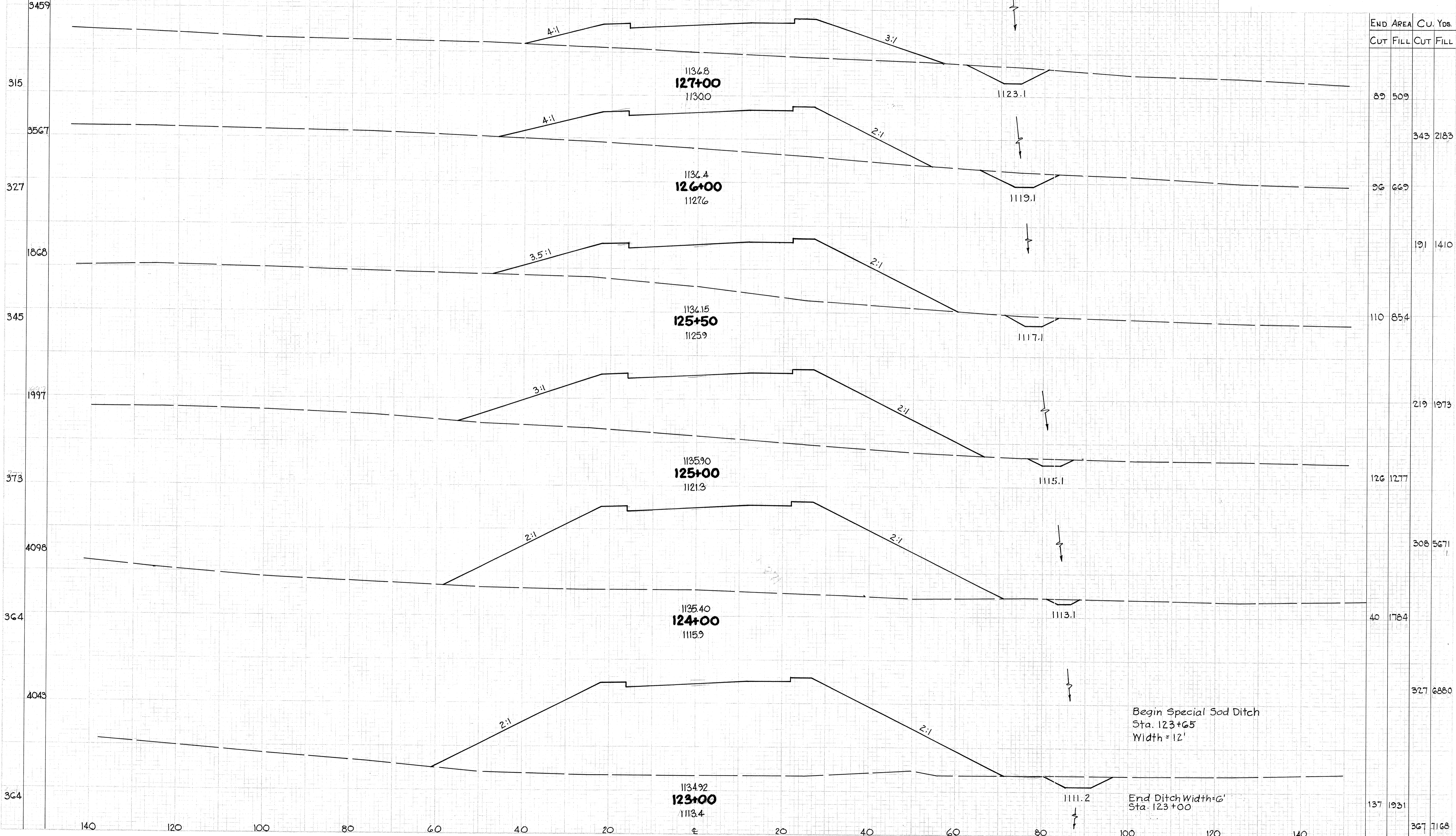
N.B.L. STA. 118+00 to 122+00

SEEDING
END Sta.
WIDTH Yds.

FED. RD. DIVISION STATE PROJECT
2 OHIO I-271-G(13)221

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259

MEDINA COUNTY
MED-271-0.00



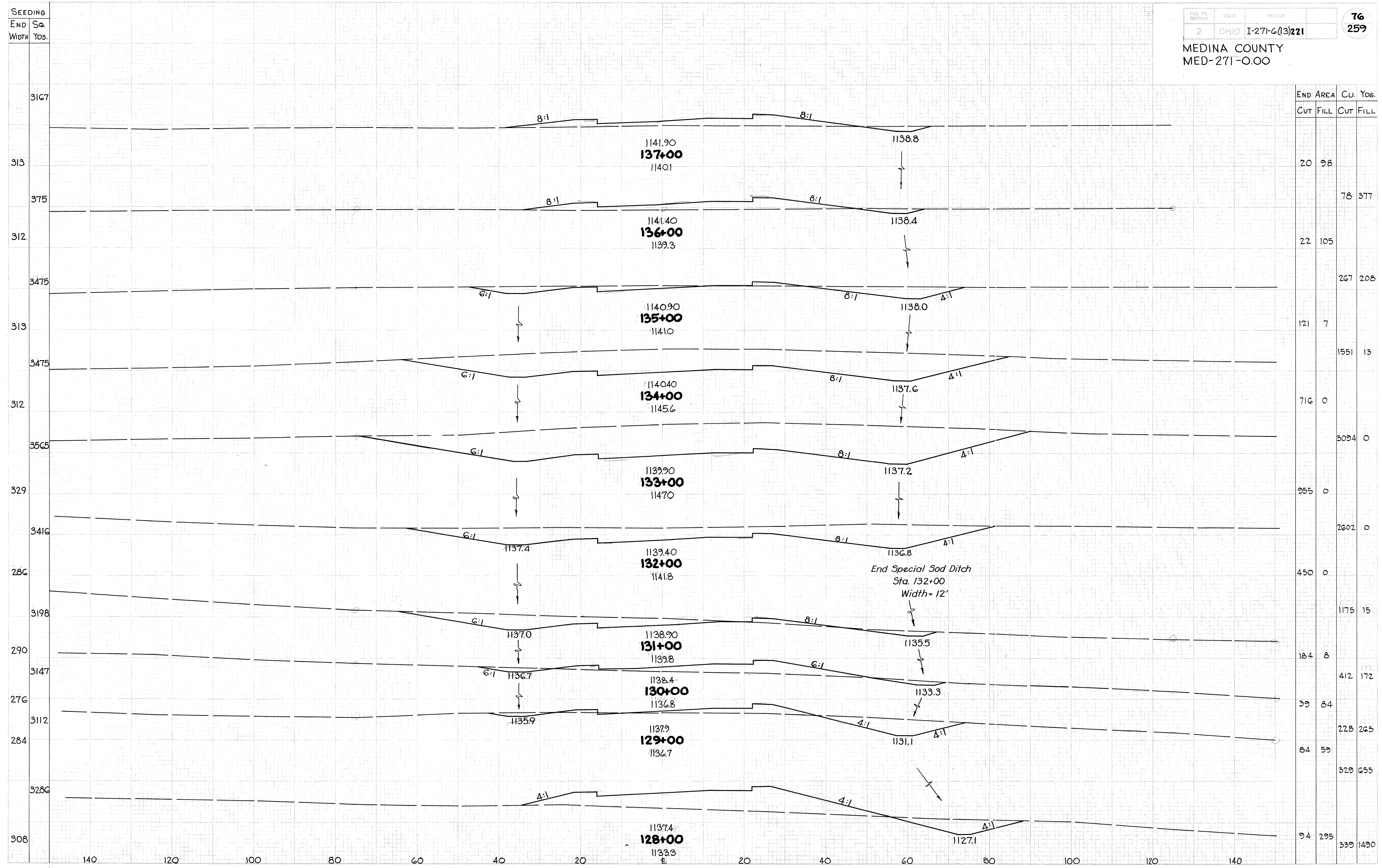
END AREA		CU. Yds.	
CUT	FILL	CUT	FILL
89	509		
	343	2183	
96	669		
	191	1410	
110	854		
	219	1973	
126	1277		
	308	5671	
40	1784		
	327	6880	
137	1931		
	367	7168	

Begin Special Sod Ditch
Sta. 123+65
Width = 12'

End Ditch Width = 6'
Sta. 123+00

N.B.L. STA. 123+00 to 127+00

MEDINA COUNTY
MED-271-0.00



N.B.L. STA. 128+00 to 137+00

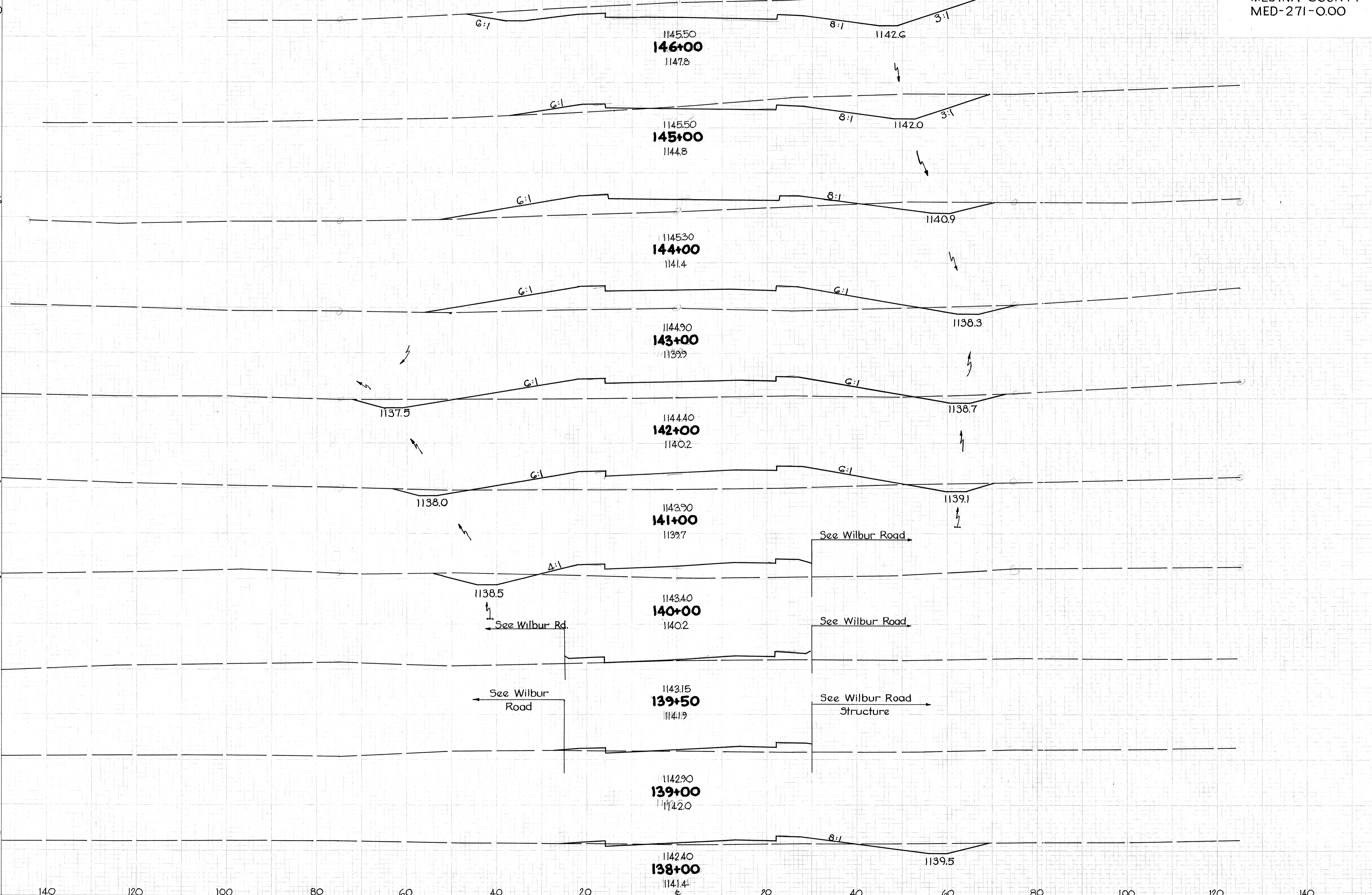
SEEDING
END Sta.
WIDTH Yds.

2 OHIO I-271-G(13)221

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259

MEDINA COUNTY
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3260
272
3331
327
3616
323
3511
309
3311
287
3147
279
3016
264
929
71
367
61
1770
257



END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
335	0		
		950	34
179	19		
		424	370
50	181		
		165	915
38	312		
		152	1024
43	240		
		144	913
34	252		
		163	779
54	168		
		95	208
48	56		
		76	84
34	35		
		149	129
46	34		
		122	245

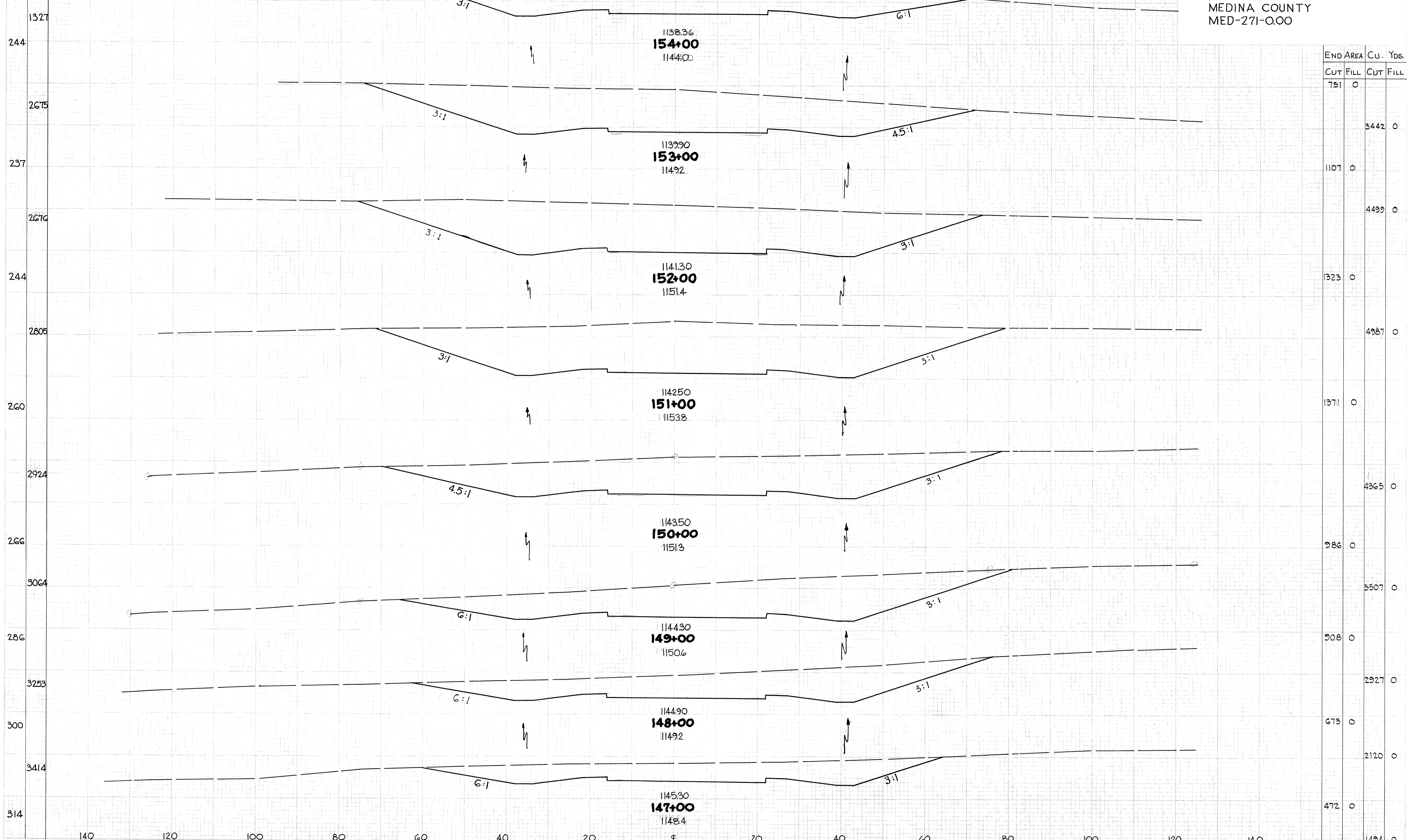
N.B.L. STA. 138+00 to 146+00

SEEDING
END Sta.
WIDTH Yds.

FED. RD. DIVISION STATE PROJECT
2 OHIO I-271-G(13)221

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MEDINA COUNTY
MED-271-0.00



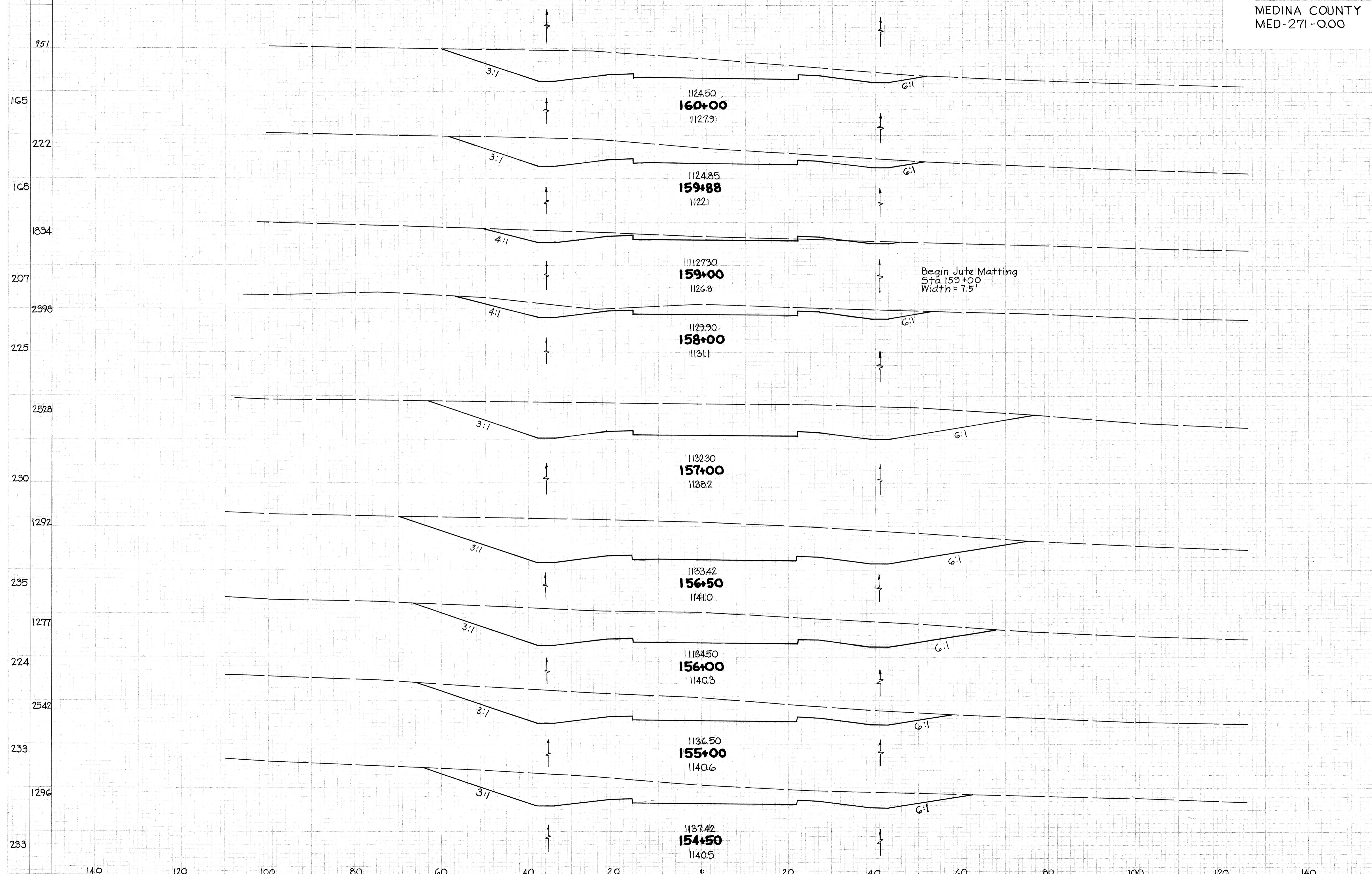
N.B.L. STA. 147+00 to 154+00

SEEDING
END SQ.
WIDTH Yds.

FED. RD. DIVISION STATE PROJECT
2 OHIO I-271-G(13)221

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MEDINA COUNTY
MED-271-0.00

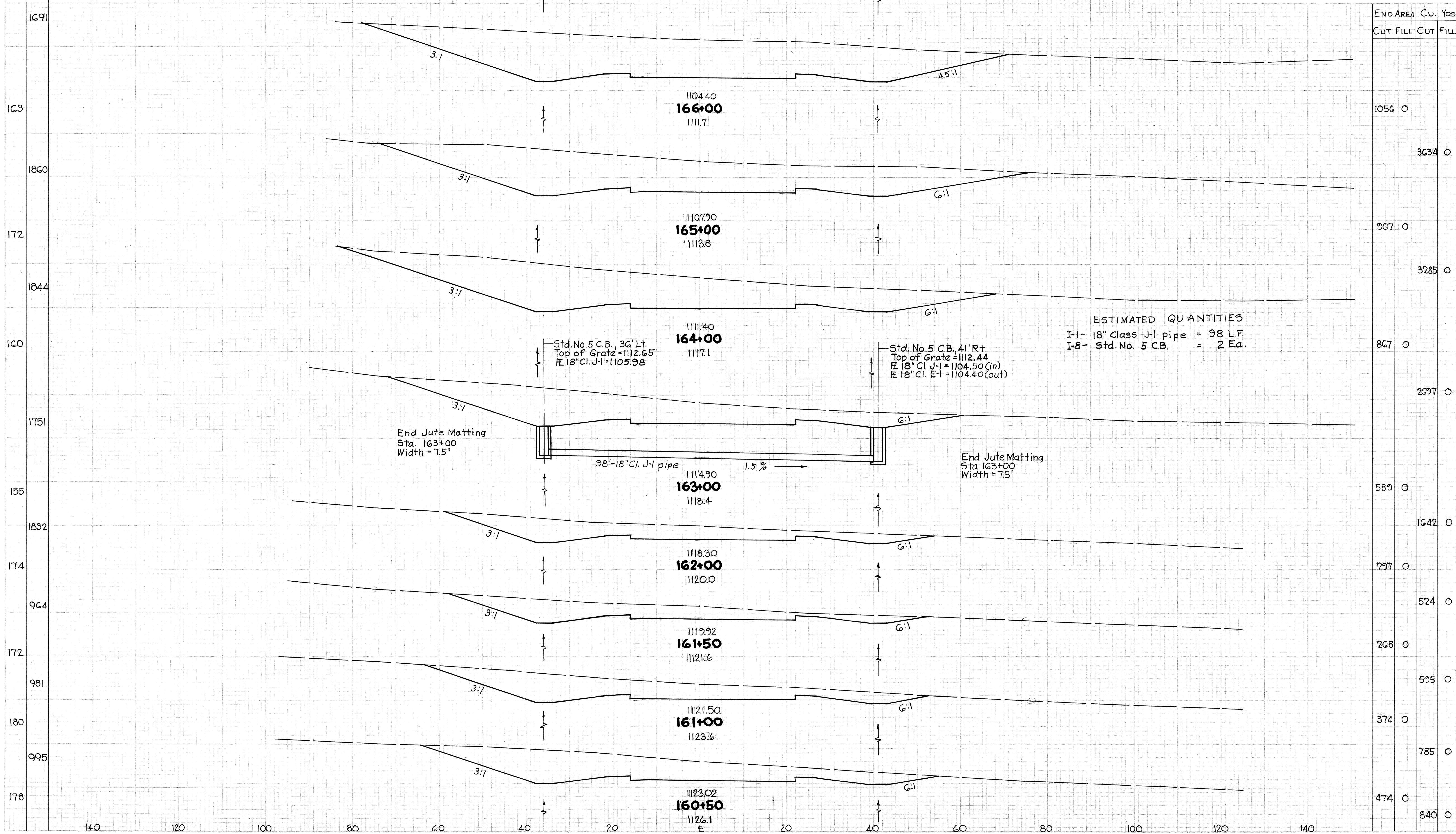


END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
433	0		176
			0
358	0		740
			7
96	4		582
			8
218	0		
			1302
			0
809	0		
			1646
			0
969	0		
			1567
			0
723	0		
			2312
			0
526	0		
			948
			0
498	0		
			1157
			0

N.B.L. STA. 154+50 to 160+00

SEEDING
END SQ.
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00

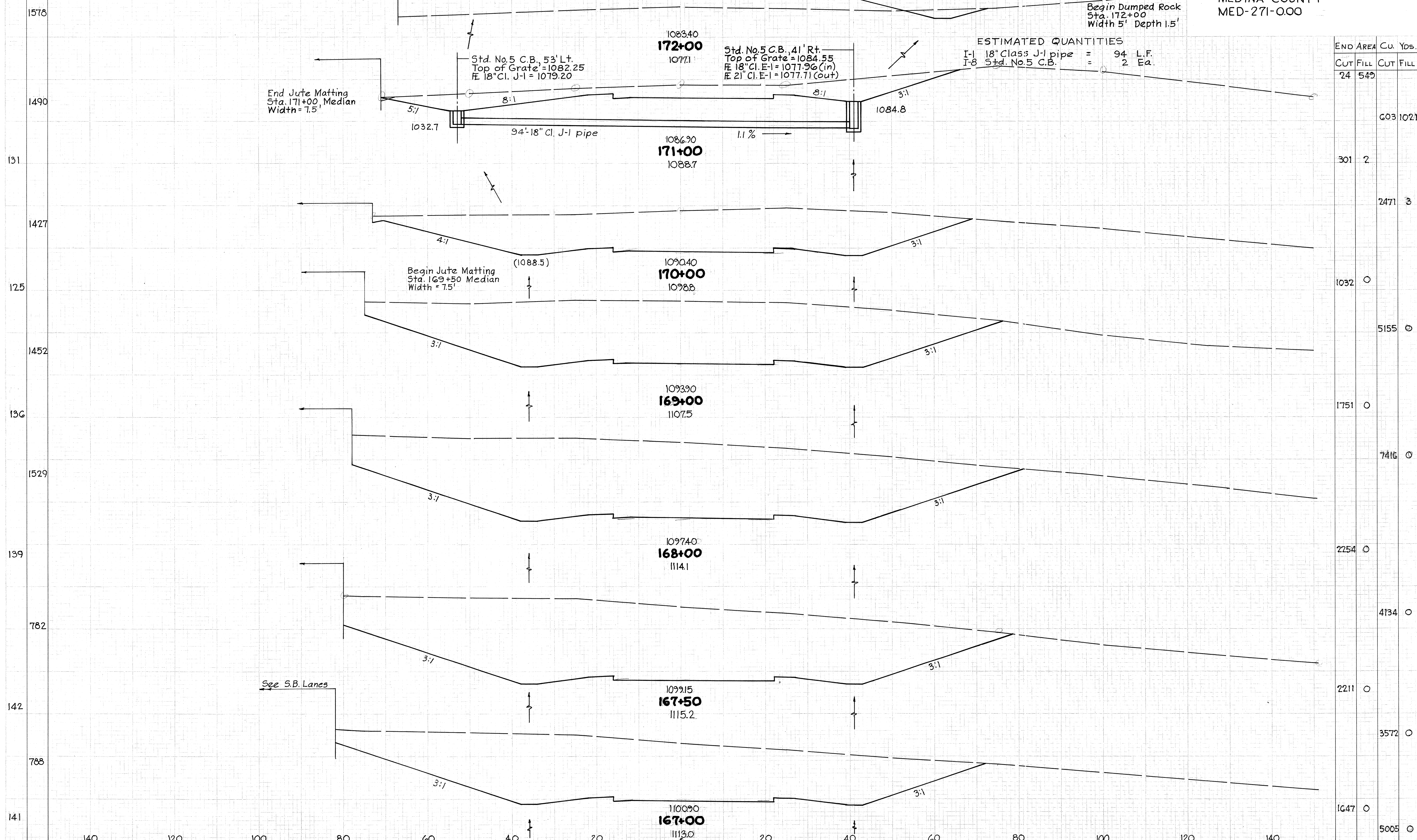


END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
1056	0		
		3634	0
907	0		
		3285	0
867	0		
		2697	0
589	0		
		1642	0
297	0		
		524	0
268	0		
		595	0
374	0		
		785	0
474	0		
		840	0

ESTIMATED QUANTITIES
I-1- 18" Class J-1 pipe = 98 L.F.
I-8- Std. No. 5 C.B. = 2 Ea.

SEEDING
END Sta.
WIDTH Yds.

MEDINA COUNTY
MED-271-000



Begin Dumped Rock
Sta. 172+00
Width 5' Depth 1.5'

ESTIMATED QUANTITIES
I-1 18" Class J-1 pipe = 94 L.F.
I-8 Std. No. 5 C.B. = 2 Ea.

End Jute Matting
Sta. 171+00, Median
Width = 7.5'

Std. No. 5 C.B., 53' Lt.
Top of Grate = 1082.25
E 18" Cl. J-1 = 1079.20

Std. No. 5 C.B., 41' Rt.
Top of Grate = 1084.55
E 18" Cl. E-1 = 1077.96 (in)
E 21" Cl. E-1 = 1077.71 (out)

END AREA	CUT	FILL	CUT	FILL	Cu. Yds.
24	549				
					603 1021
301	2				
					2471 3
1032	0				
					5155 0
1751	0				
					7416 0
2254	0				
					4134 0
2211	0				
					3572 0
1647	0				
					5005 0

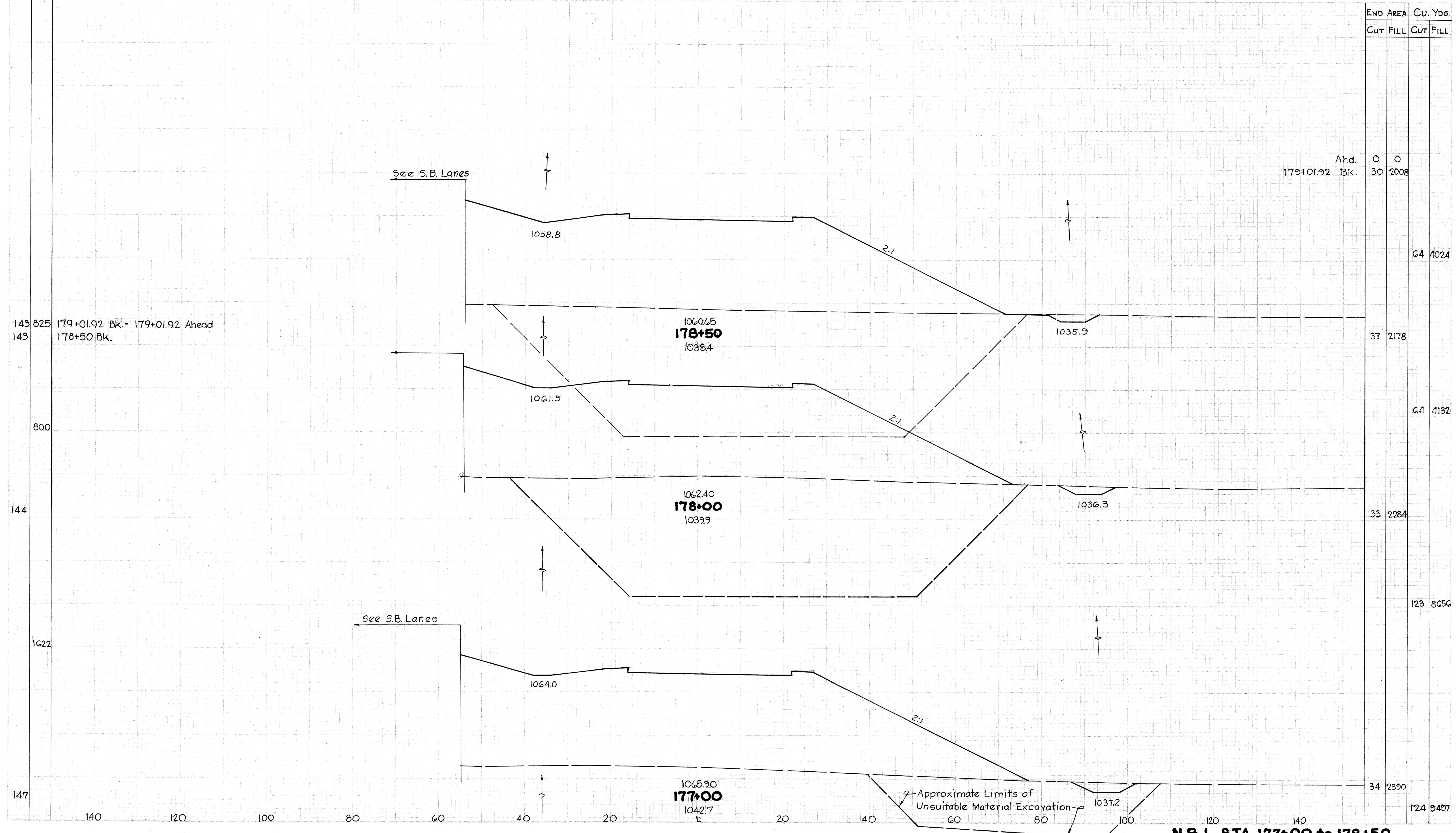
N.B.L. STA. 167+00 to 172+00

SEEDING
END Sq.
WIDTH Yds.

FED. RD. DIVISION	STATE	PROJECT
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143 825 179+01.92 Bk. = 179+01.92 Ahead
143 178+50 Bk.

Ahd. 0 0
179+01.92 Bk. 30 2008

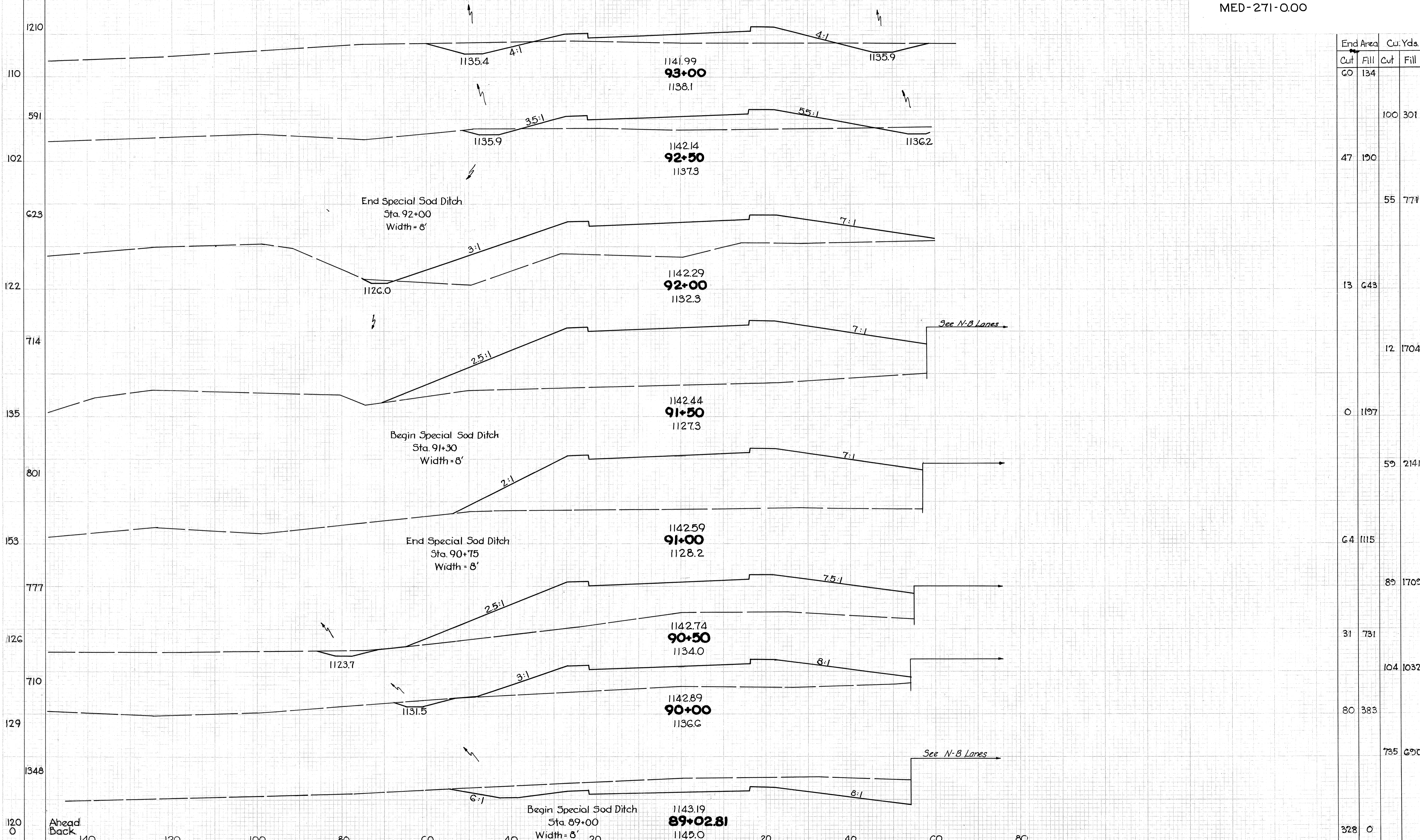
END AREA	CU. Yds.	
	CUT	FILL
	0	0
64	4024	
37	2178	
64	4132	
33	2284	
123	8656	
34	2390	
124	9497	

N.B.L. STA. 177+00 to 178+50

SEEDING

End Sq. Width Yds.

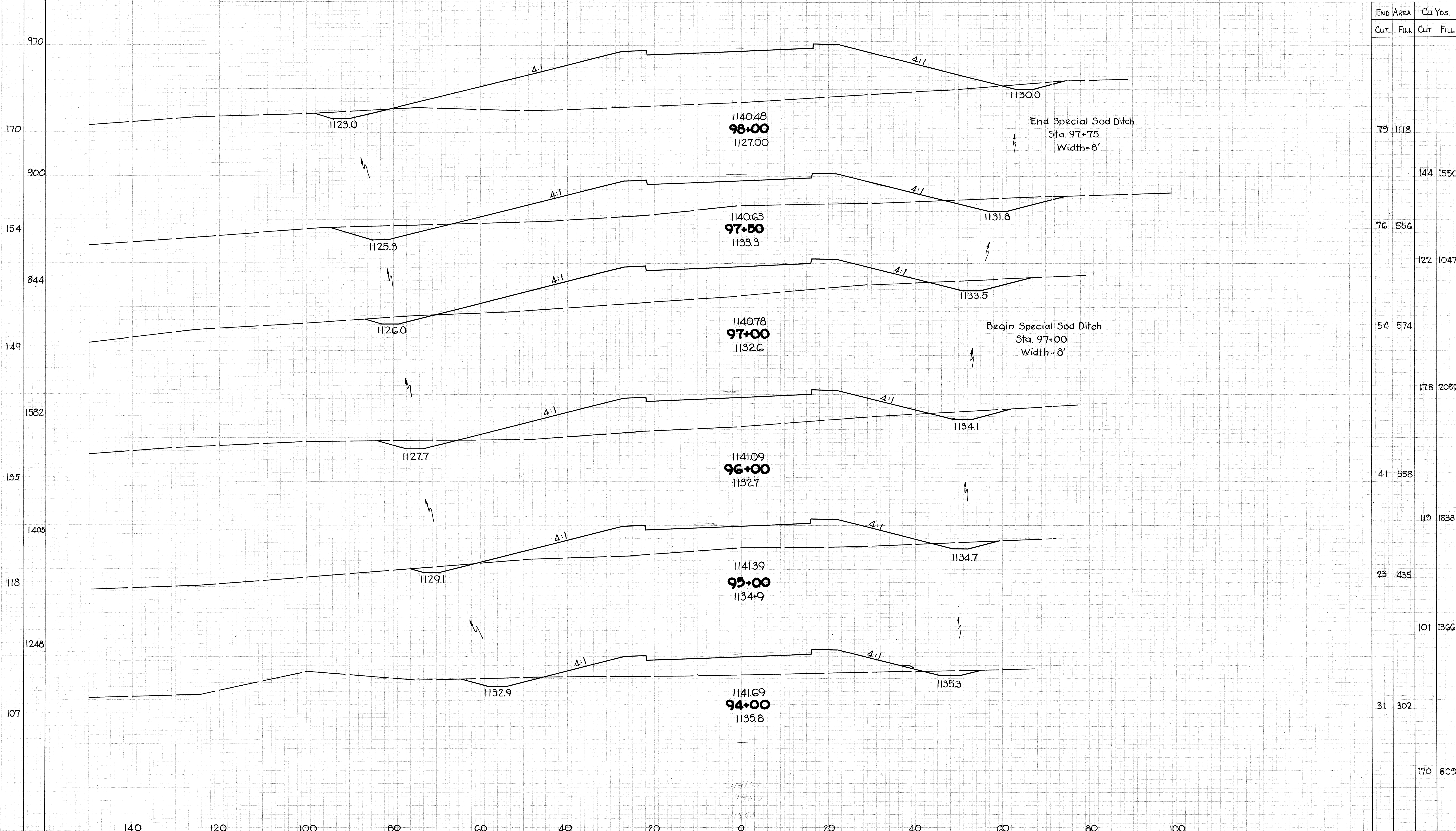
MEDINA COUNTY
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Station	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
93+00	60	134		
92+50	47	190	100	301
92+00	13	643	55	771
91+50	0	1197	12	1704
91+00	64	1115	59	2141
90+50	31	731	89	1709
90+00	80	383	104	1032
89+02.81	328	0	735	690

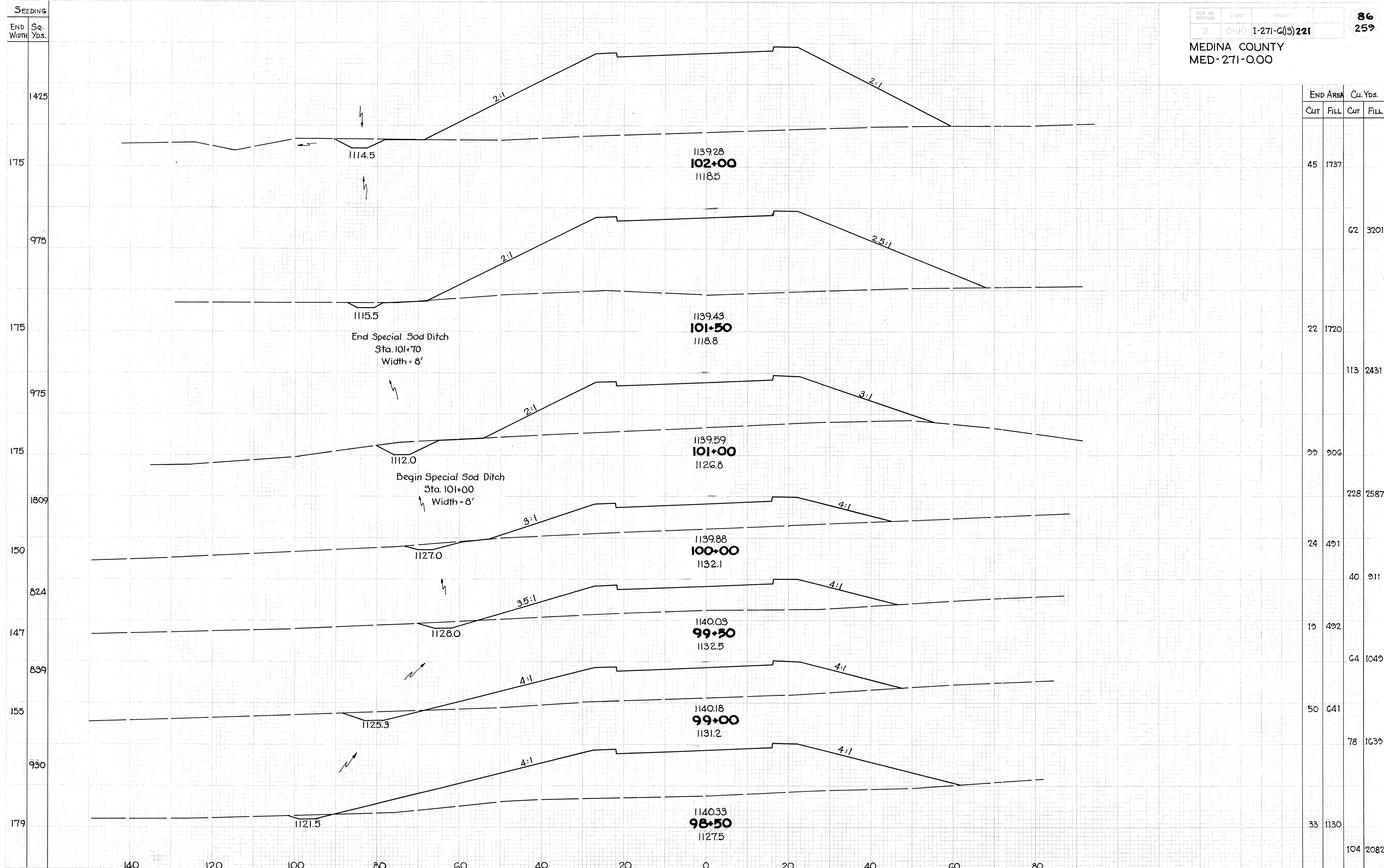
SEEDING
END WIDTH
Sq. Yds.

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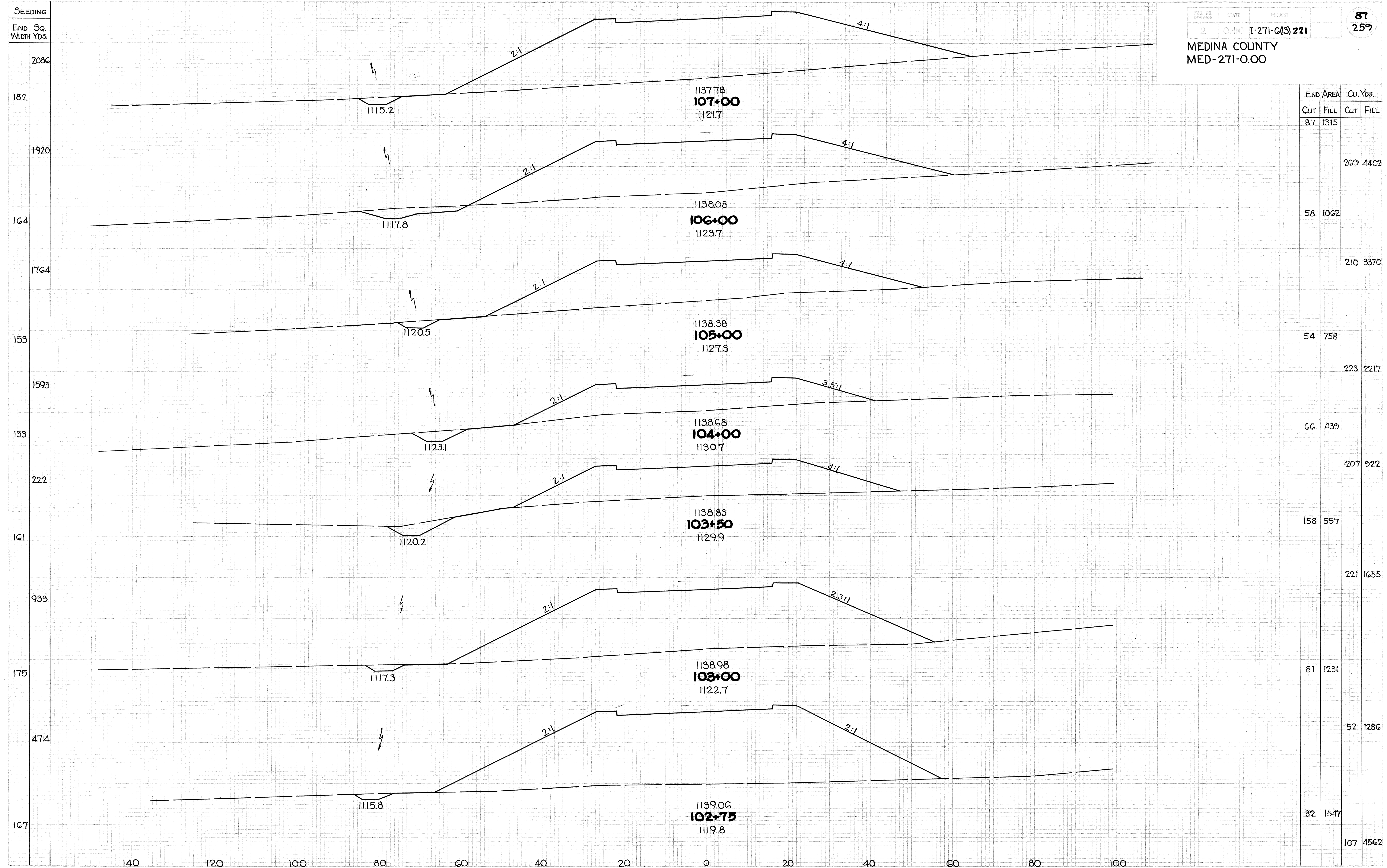
END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
79	1118		
		144	1550
76	556		
		122	1047
54	574		
		178	2097
41	558		
		119	1838
23	435		
		101	1366
31	302		
		170	809

MEDINA COUNTY
MED-271-0.00



S.B.L. STA. 98+50 to 102+00

MEDINA COUNTY
MED-271-0.00



Sta.	END AREA		Cu. Yds.	
	Cut	Fill	Cut	Fill
87	1315			
58	1062		269	4402
54	758		210	3370
66	439		54	758
158	557		223	2217
81	1231		66	439
52	1286		207	922
32	1547		158	557
107	4562		221	1655

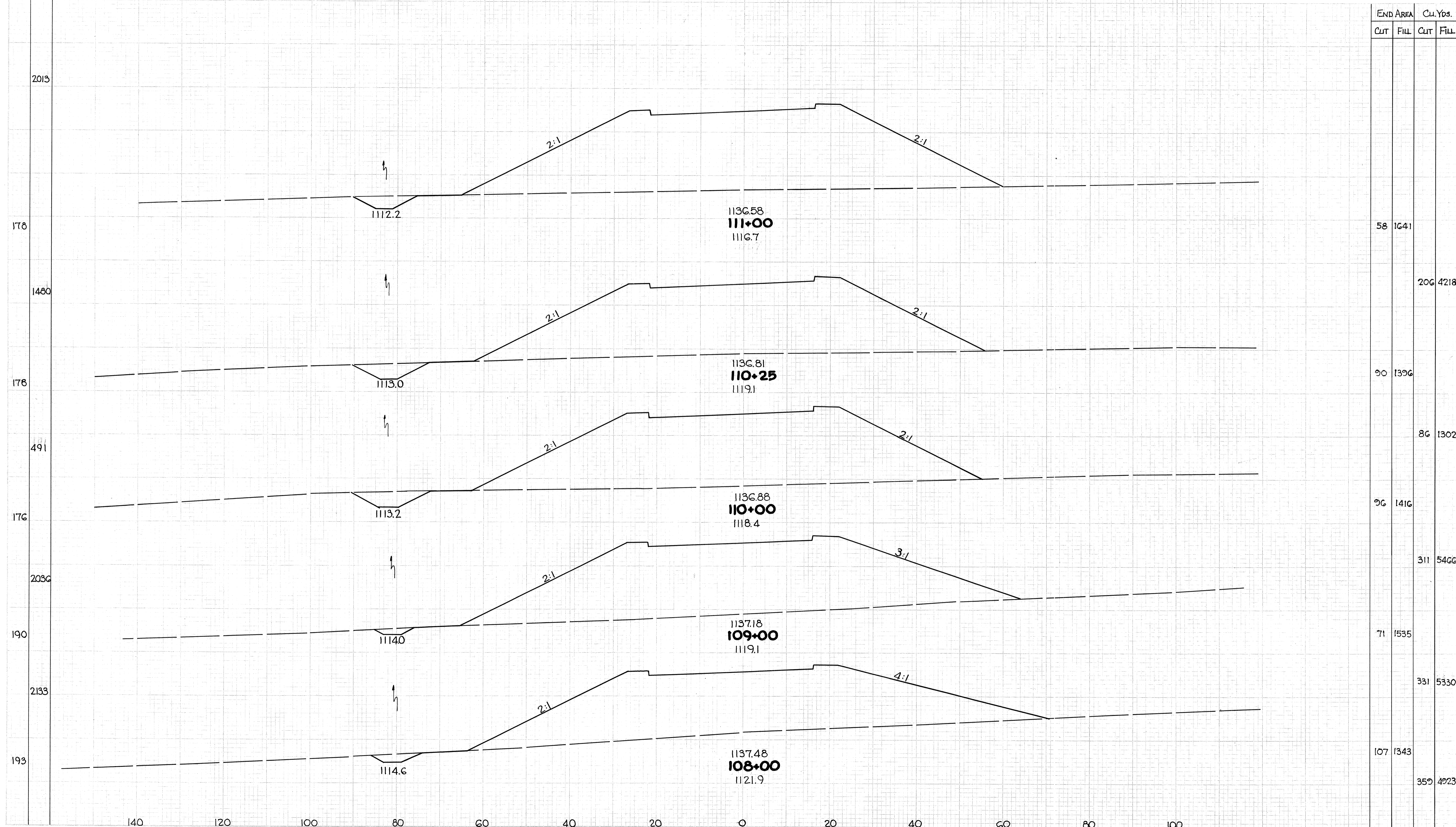
SEEDING

END WIDTH
Sq. Yds.

PLAN NO.	STATE	PROJECT
2	OHIO	I-271-G(3) 221

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MEDINA COUNTY
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S.B.L. STA. 108+00 to 111+00

SEEDING

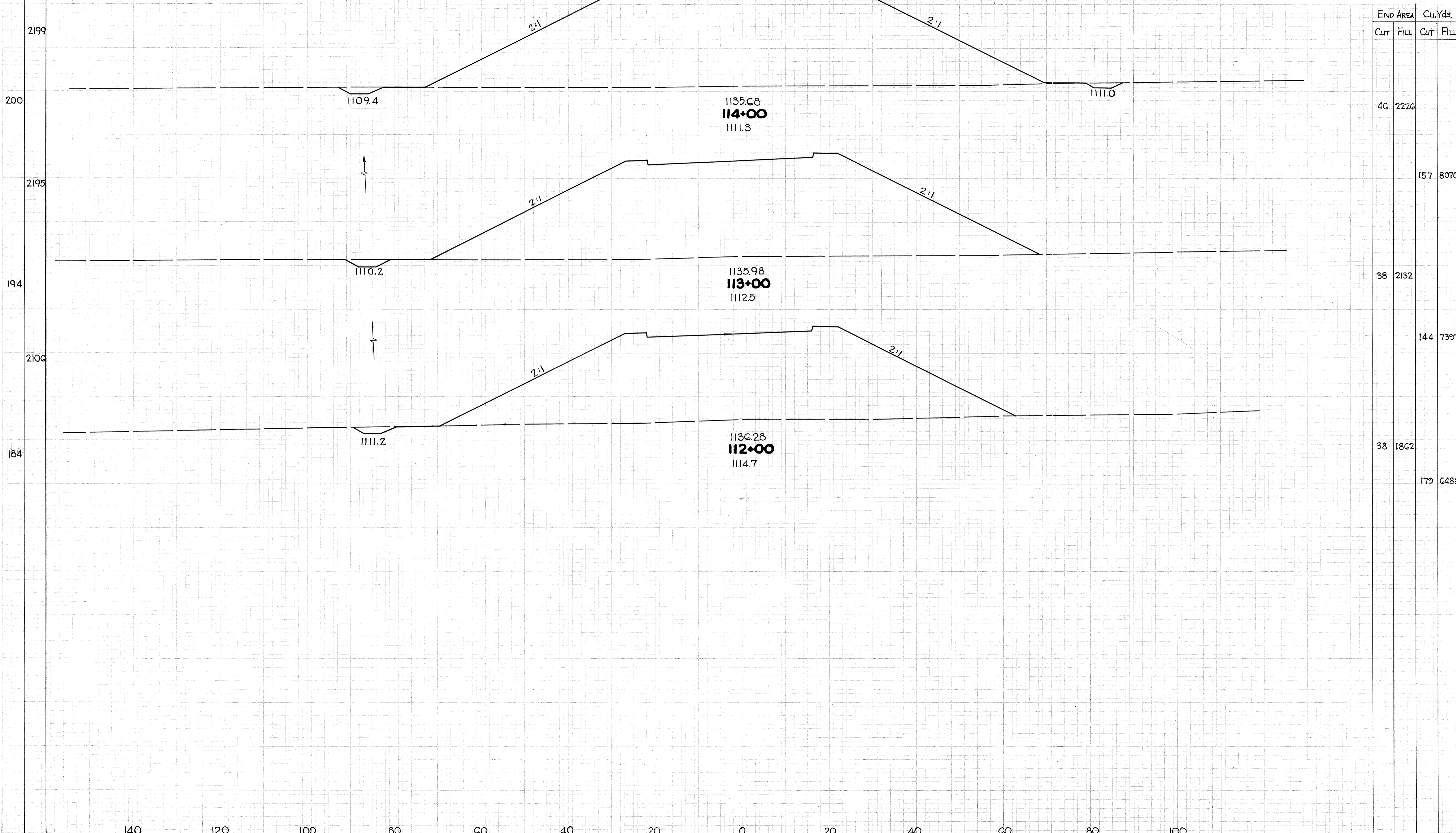
END WIDTH

Sq. Yds.

FIG. NO. 2 STATE OHIO PROJECT I-271-C(3)221

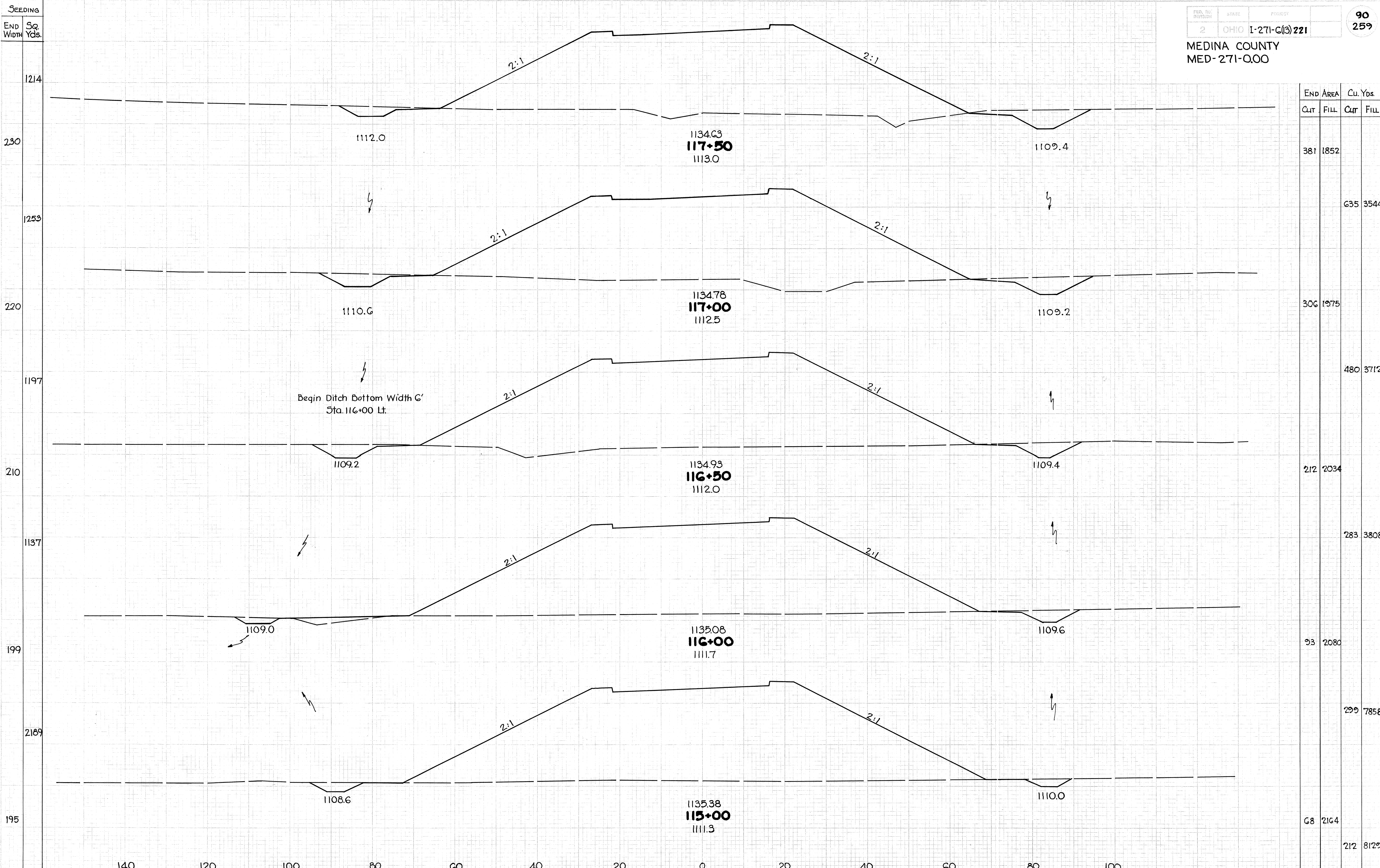
89 259

MEDINA COUNTY MED-271-0.00



S.B.L. STA. 112+00 to 114+00

MEDINA COUNTY
MED-271-Q.00

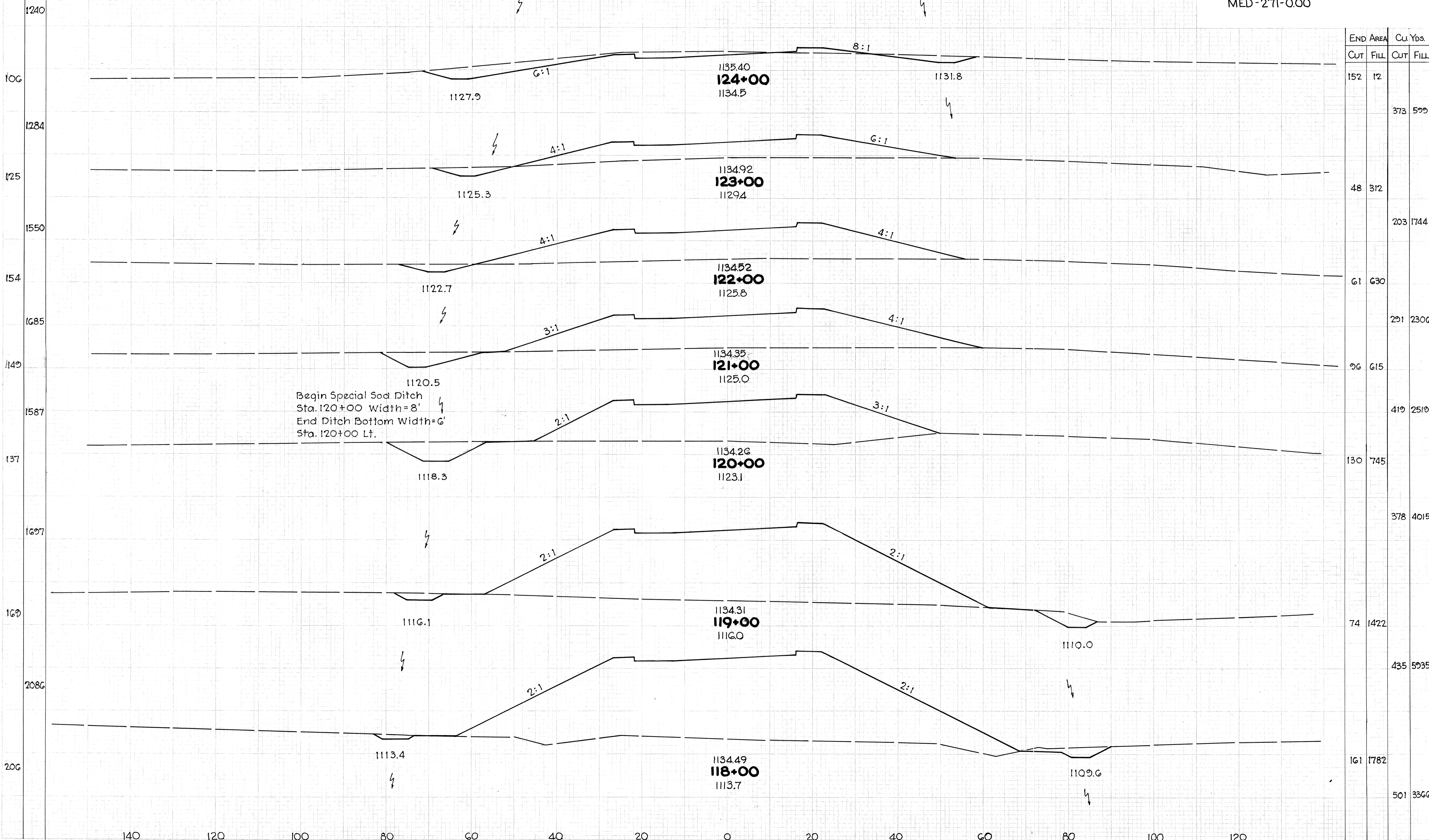


SEEDING
END WIDTH
Sq. Yds.

FED. RD. DISTRICT 2 OHIO STATE PROJECT I-271-G(3) 221

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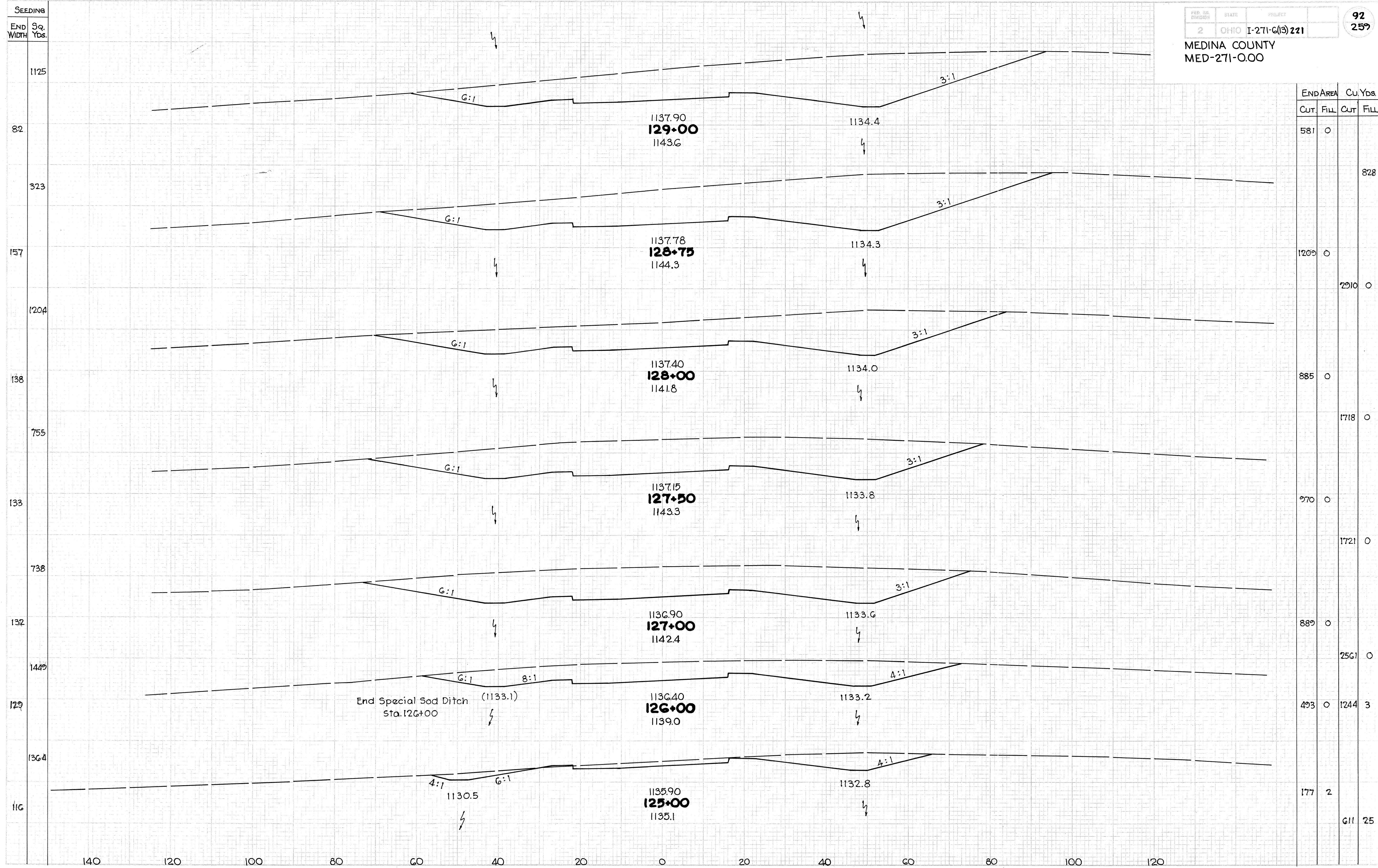
MEDINA COUNTY
MED-271-0.00



Begin Special Sod Ditch
Sta. 120+00 Width=8'
End Ditch Bottom Width=6'
Sta. 120+00 Lt.

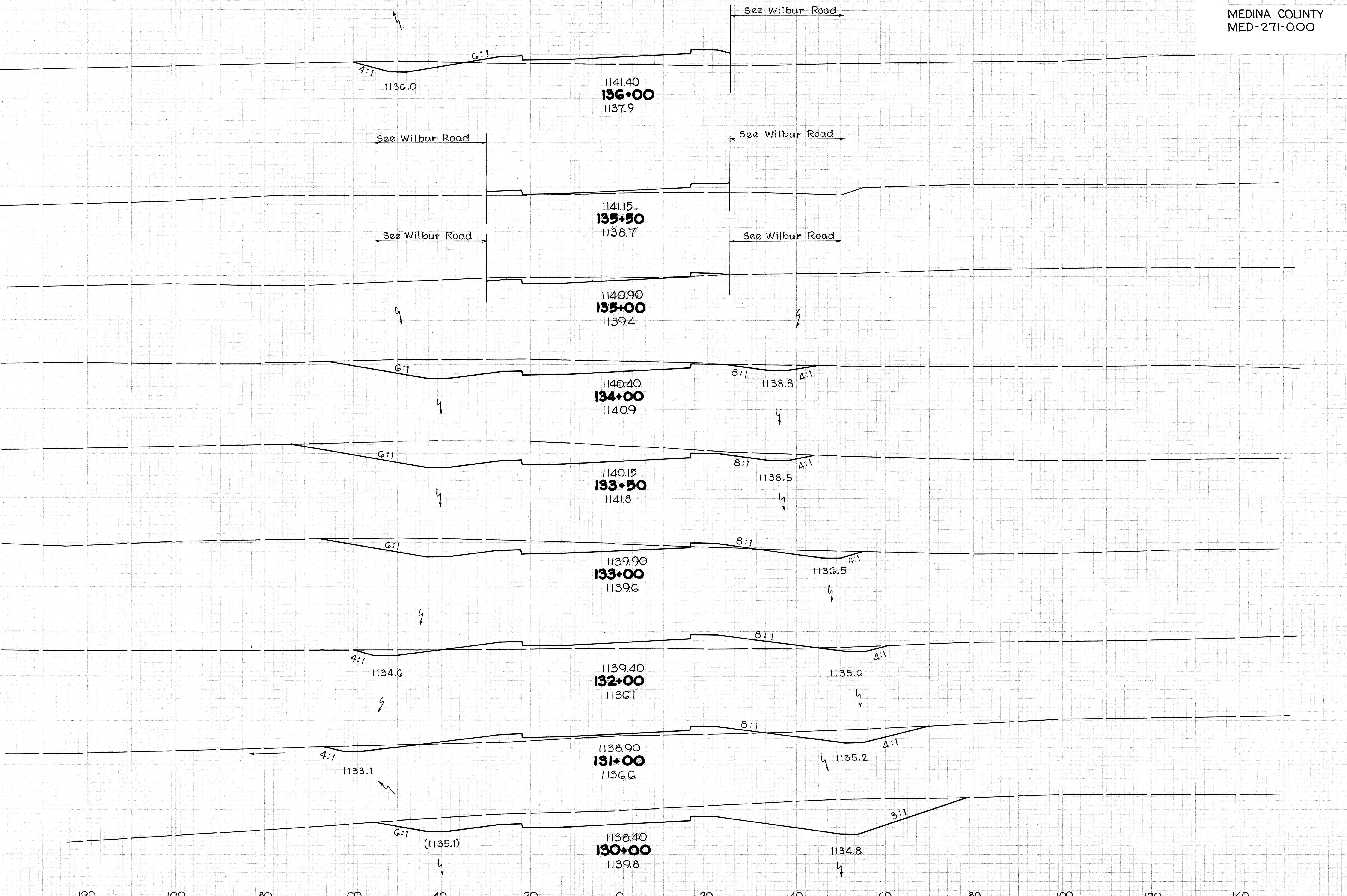
S.B.L. STA. 118+00 to 124+00

MEDINA COUNTY
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END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
581	0		
			828
1200	0		
		2910	0
885	0		
		1718	0
970	0		
		1721	0
889	0		
		2561	0
493	0	1244	3
177	2		
		611	25

SEEDING
 END WIDTH SQ. YDS.
 545
 103
 543
 93
 530
 98
 1149
 109
 526
 106
 621
 117
 1236
 105
 1156
 103
 1244
 121



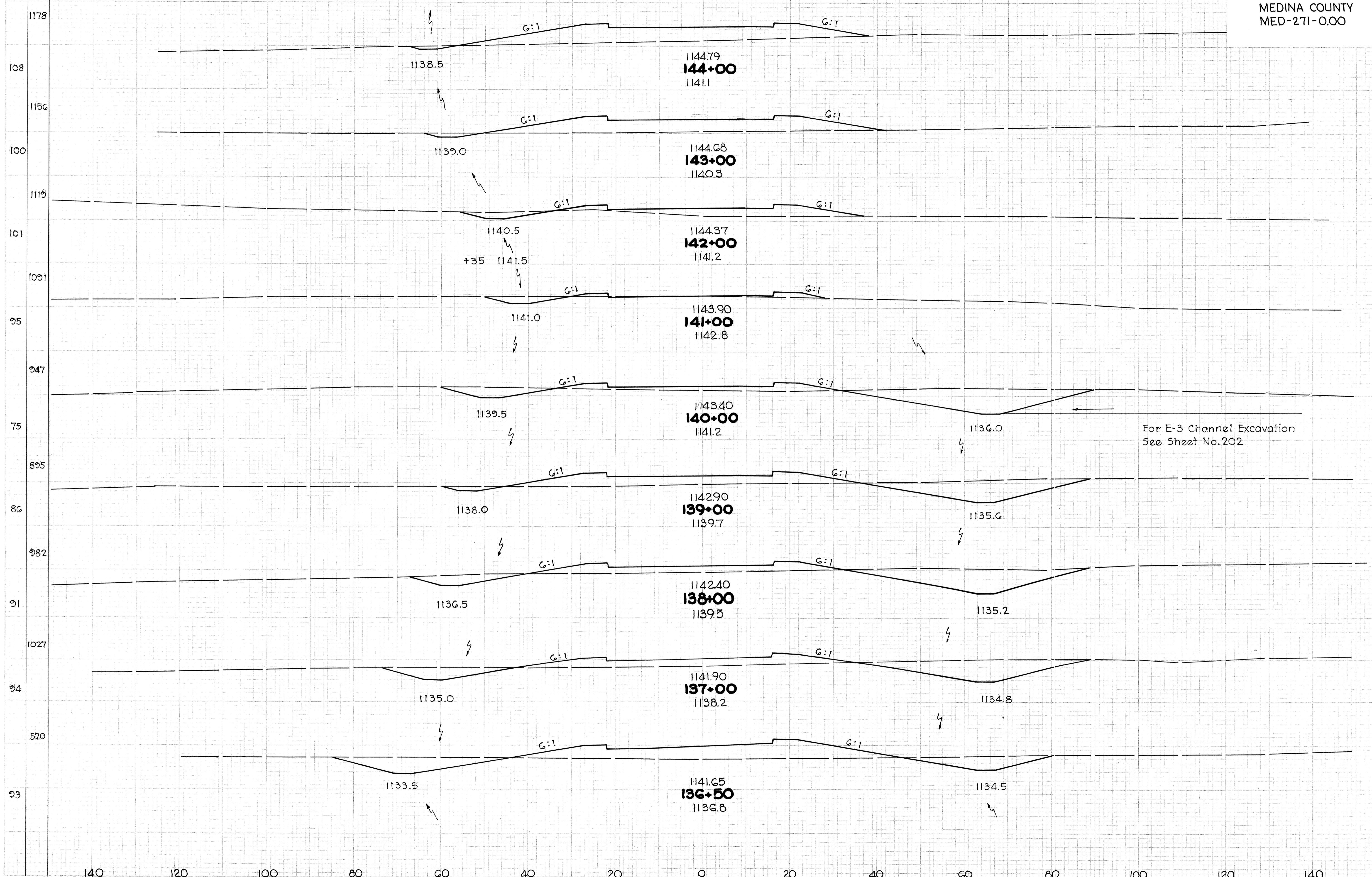
END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
33	125		
		46	167
17	55		
		76	56
65	5		
		554	9
234	0		
		552	0
362	0		
		524	10
204	11		
		427	243
26	120		
		192	333
78	60		
		1043	110
486	0		
		1976	0

SEEDING
END S. Width Yds.

FED. RD. DIST. NO. STATE PROJECT
2 OHIO I-271-G(3) 221

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MED-271-0.00

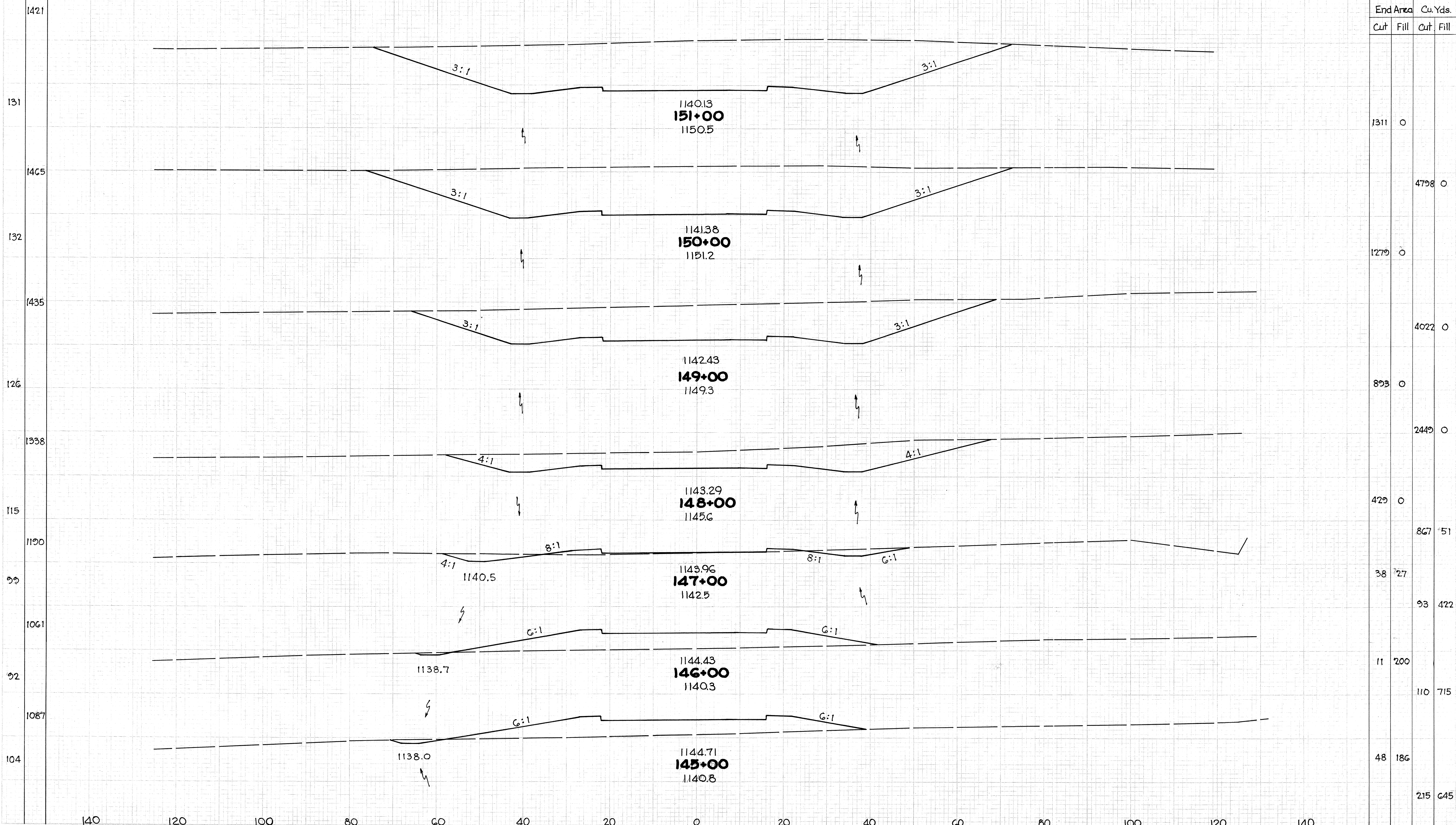


END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
68	162		
		180	638
29	215		
		46	596
8	87		
		63	200
26	21		
		83	161
19	66		
		66	377
17	138		
		125	433
50	96		
		164	427
38	135		
		54	317
20	208		
		50	308

S.B.L. STA. 136+50 to 144+00

Seeding
End Width
Sq. Yds.

MEDINA COUNTY
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S.B.L. STA. 145+00 to 151+00

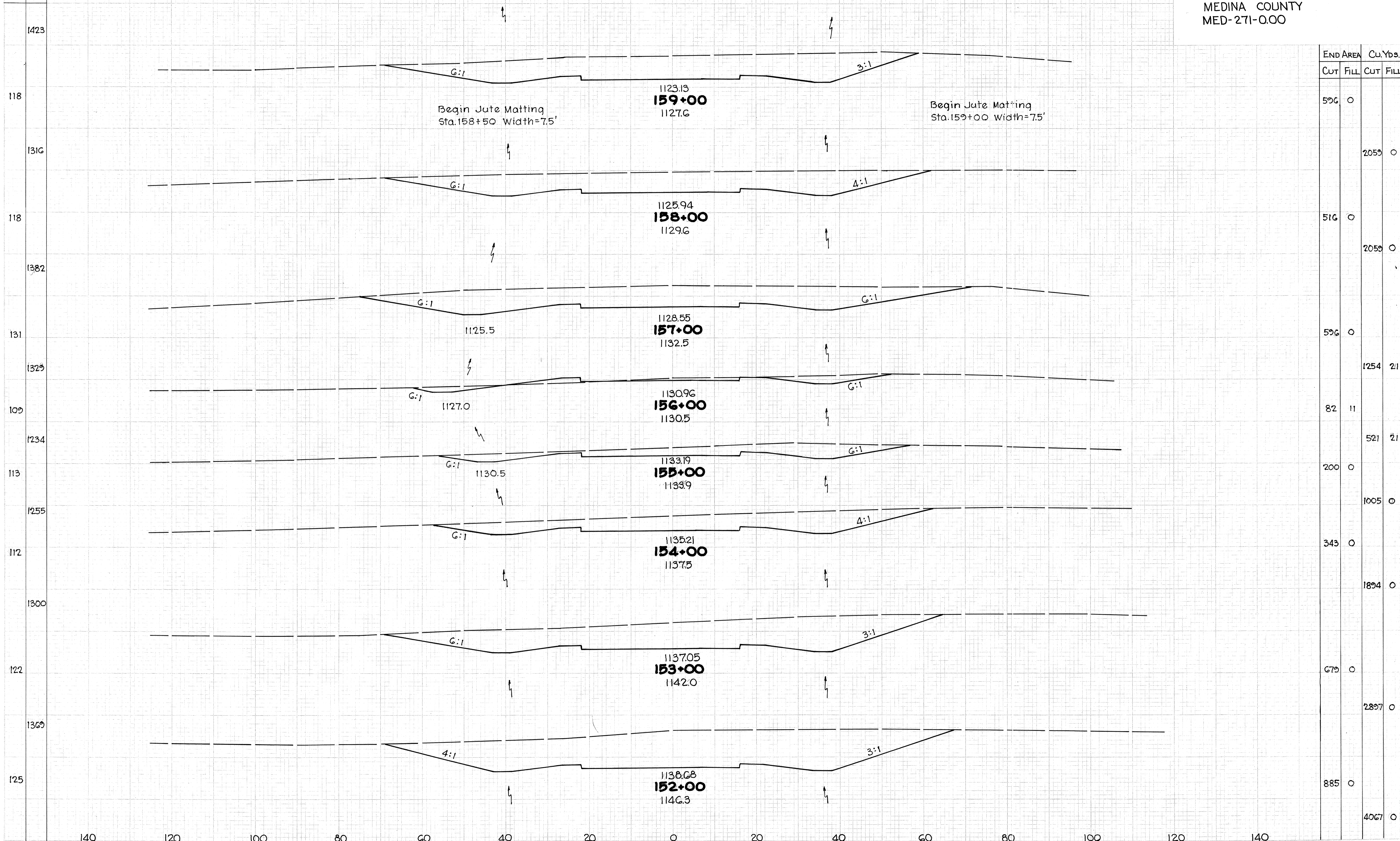
SEEDING

END WIDTH Sq. Yds.

FED. RD. DIVISION STATE PROJECT
2 OHIO I-271-G(3) 221

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MEDINA COUNTY
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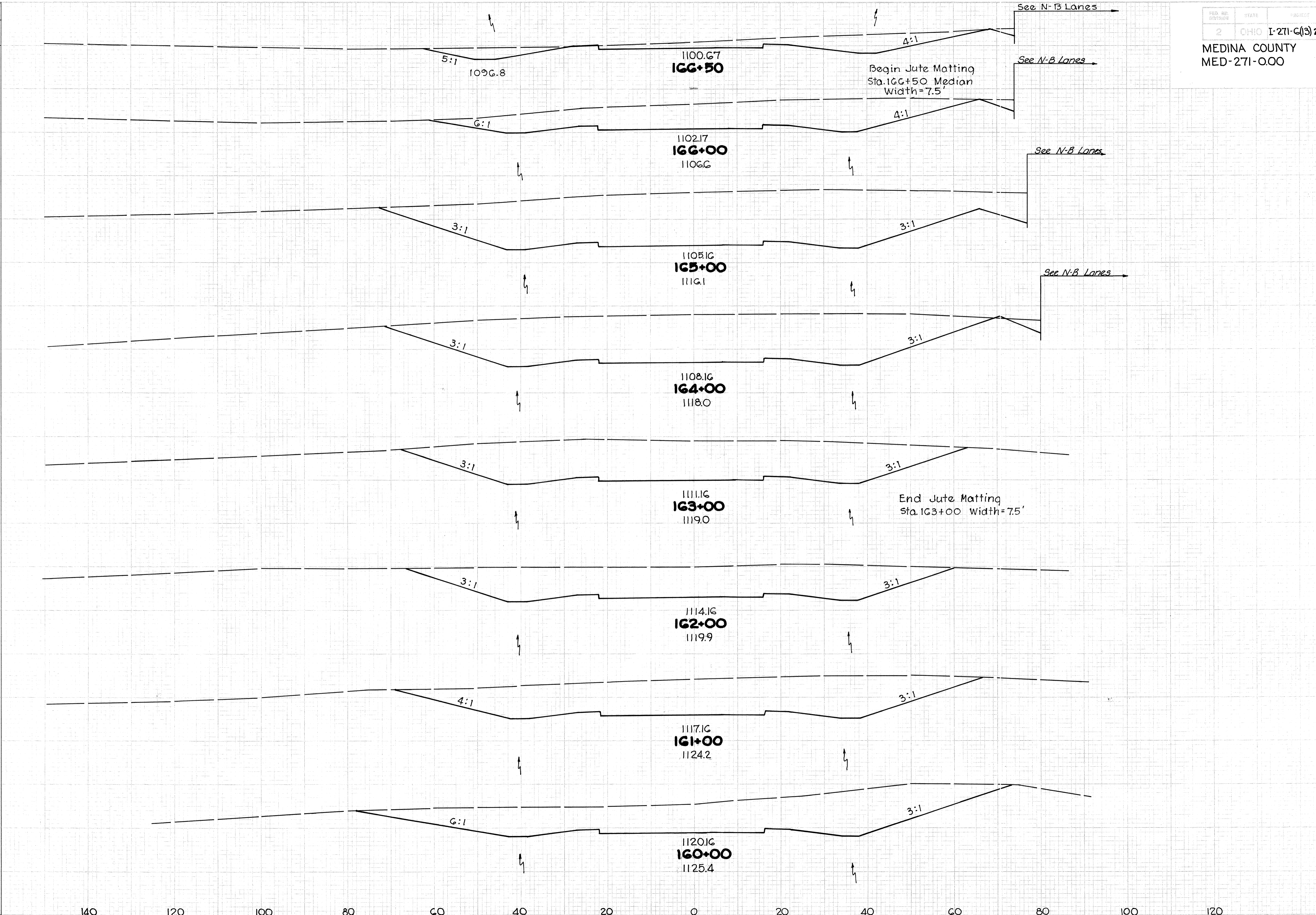
END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
596	0		
		2059	0
516	0		
		2058	0
596	0		
		1254	21
82	11		
		521	21
200	0		
		1005	0
343	0		
		1894	0
679	0		
		2897	0
885	0		
		4067	0

S.B.L. STA. 152+00 to 159+00

SEEDING

END WIDTH Sq. Yds.

142
814
150
1699
155
1722
154
1572
129
1398
123
1401
129
1482
137

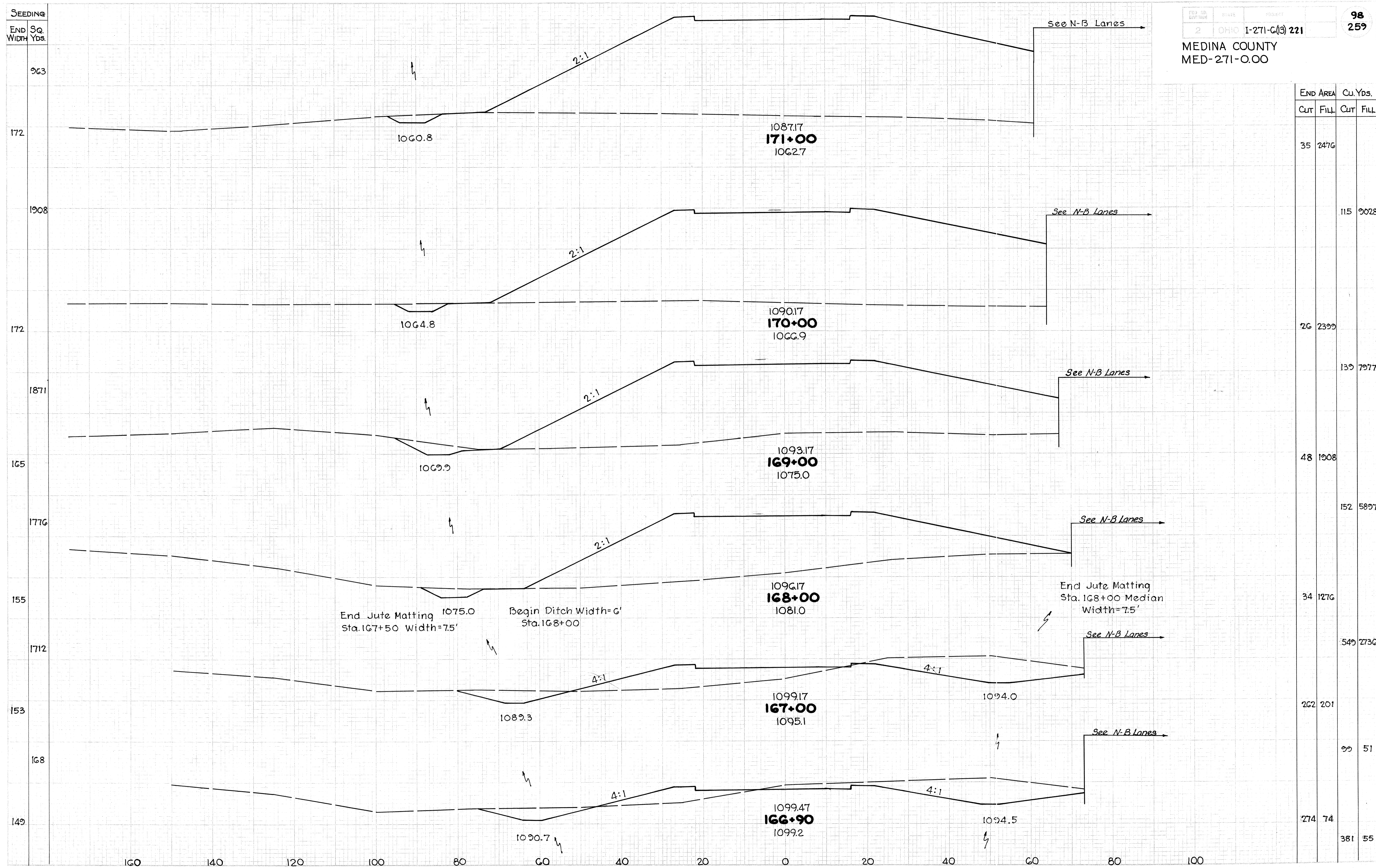


PROJ. NO.	STATE	SUBJECT	97 259
2	OHIO	I-271-G(3) 221	

MEDINA COUNTY
MED-271-0.00

END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
241	1	785	1
607	0		
		3770	0
1428	0		
		4943	2
1241	1		
		4107	2
976	0		
		3224	0
764	0		
		3050	0
882	0		
		3296	0
897	0		
		2765	0

MEDINA COUNTY
MED-271-0.00



S.B.L. STA. 166+90 to 171+00

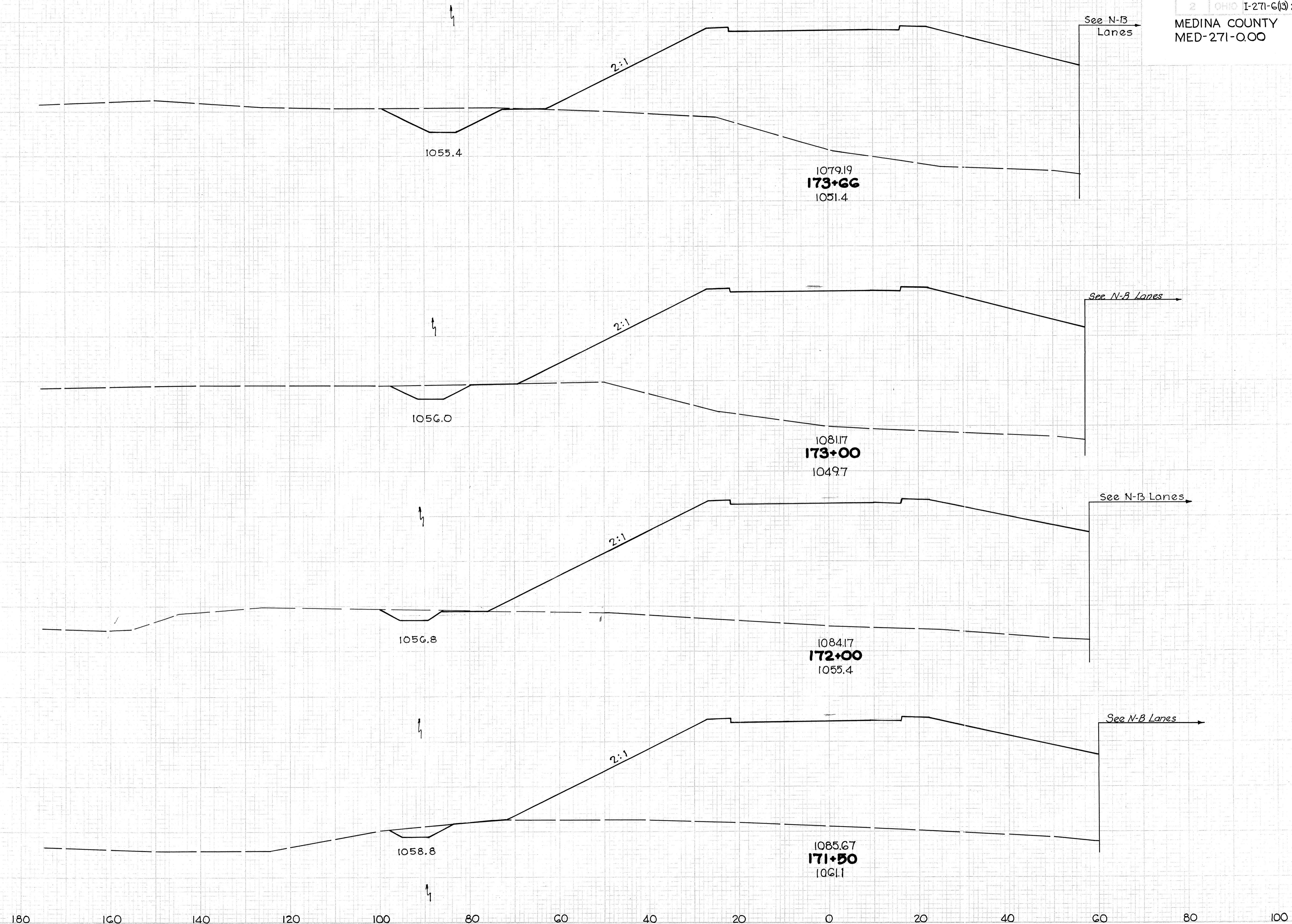
SEEDING
END SQ.
WIDTH YDS.

FED. RD. DIST. NO. 2 STATE OHIO PROJECT I-271-G(3) 271

99
259

MEDINA COUNTY
MED-271-0.00

712
189
1377
186
2034
180
986
175

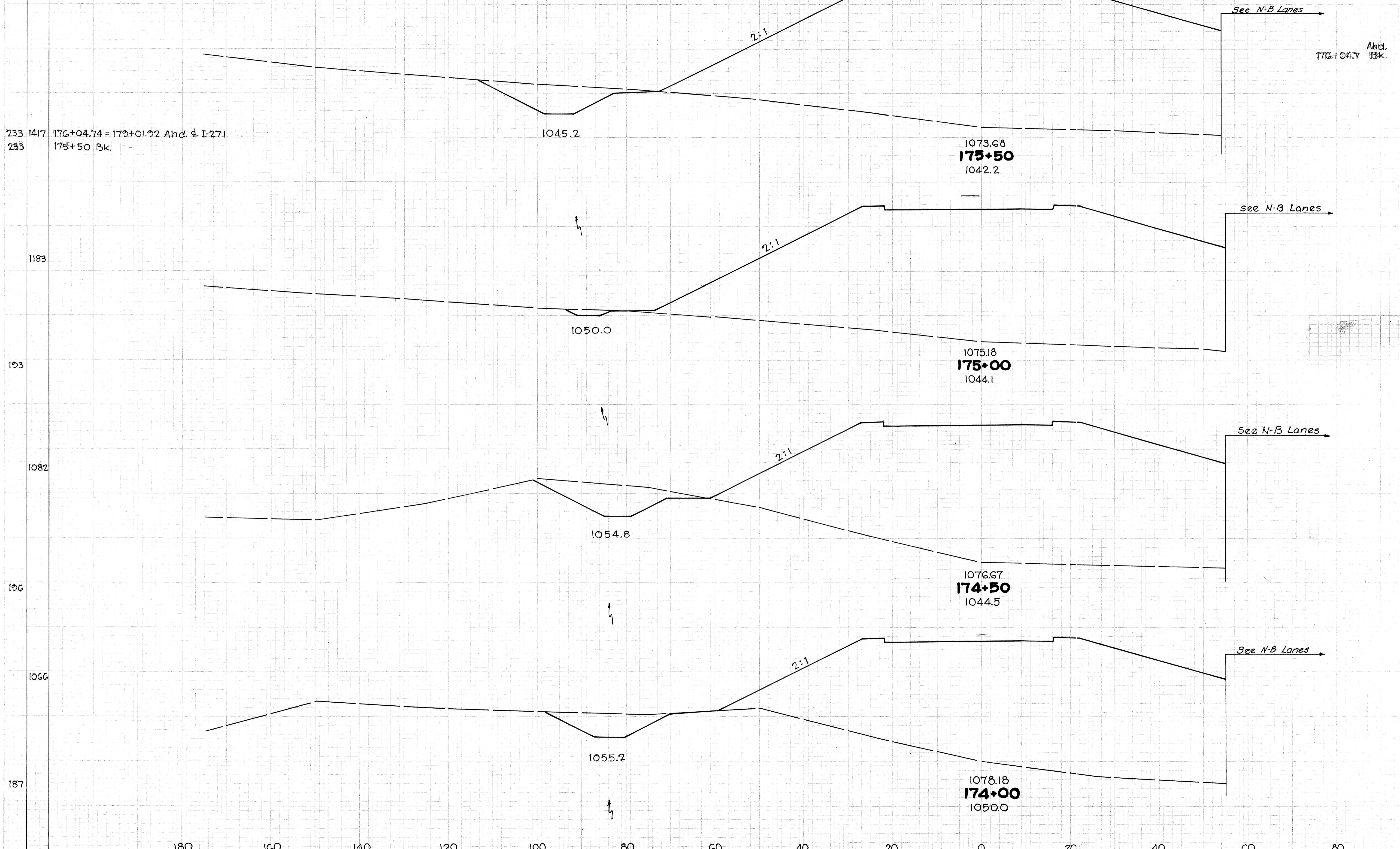


END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
160	2513		
		1272	6680
62	2952		
		143	10887
16	2927		
		57	5015
46	2490		
		76	4599

S.B.L. STA. 171+50 to 173+66

Seeding
End Width
Sq. Yds.

MEDINA COUNTY
MED-271-0.00



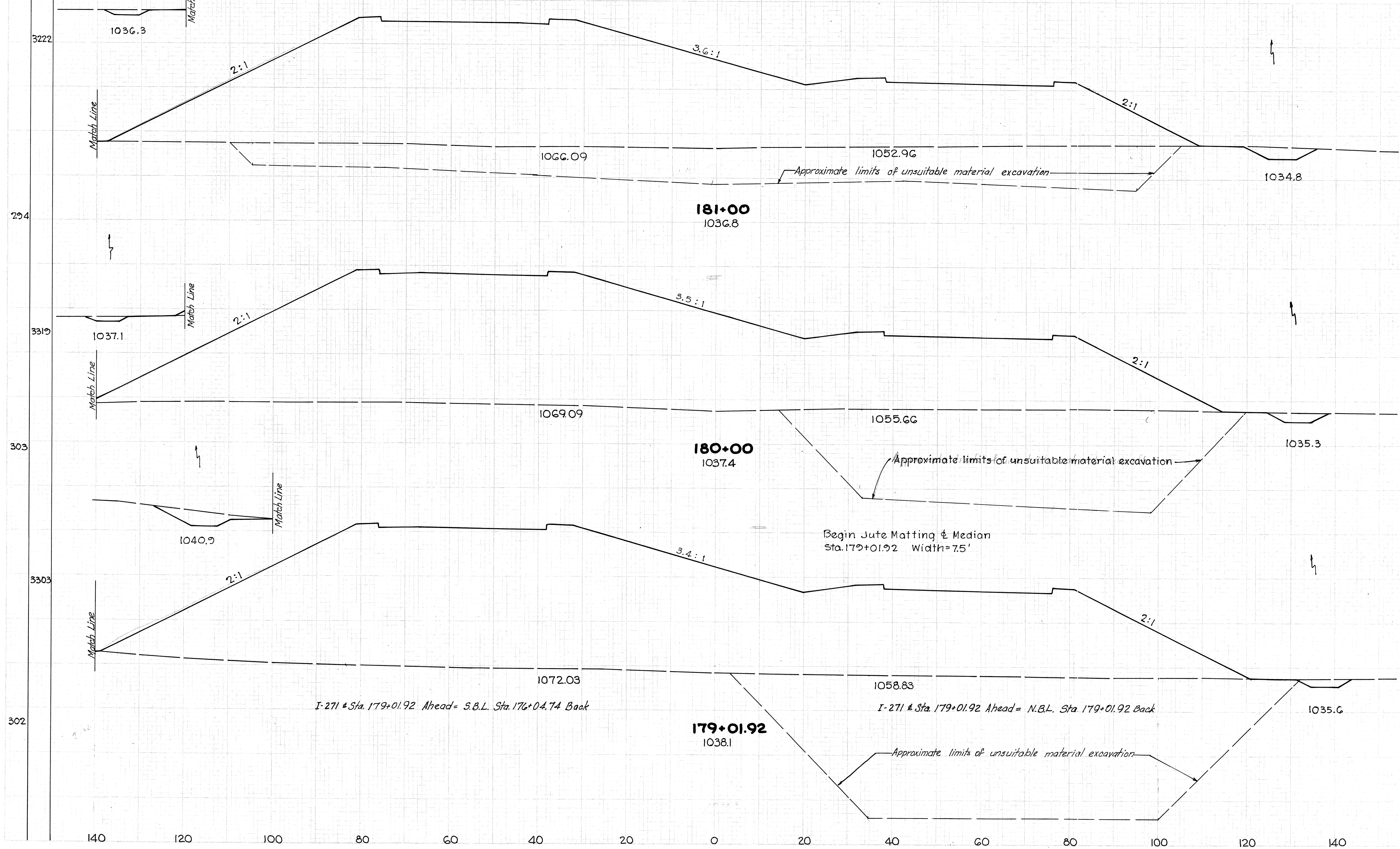
END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	0		
77	3408		
		316	6442
235	2957		
		230	5496
14	2978		
		225	5337
229	2785		
		368	4878
168	2484		
		207	3146

SEEDING
END SQ.
WIDTH Yds.

FED. RD. DISTRICT STATE PROJECT
2 OHIO I-271-6(3)221

101
259

MEDINA COUNTY
MED-271-0.00



END AREA	Cu. Yds.	
	CUT	FILL
66	4364	
209	16,989	
47	4811	
265	18,626	
99	5442	

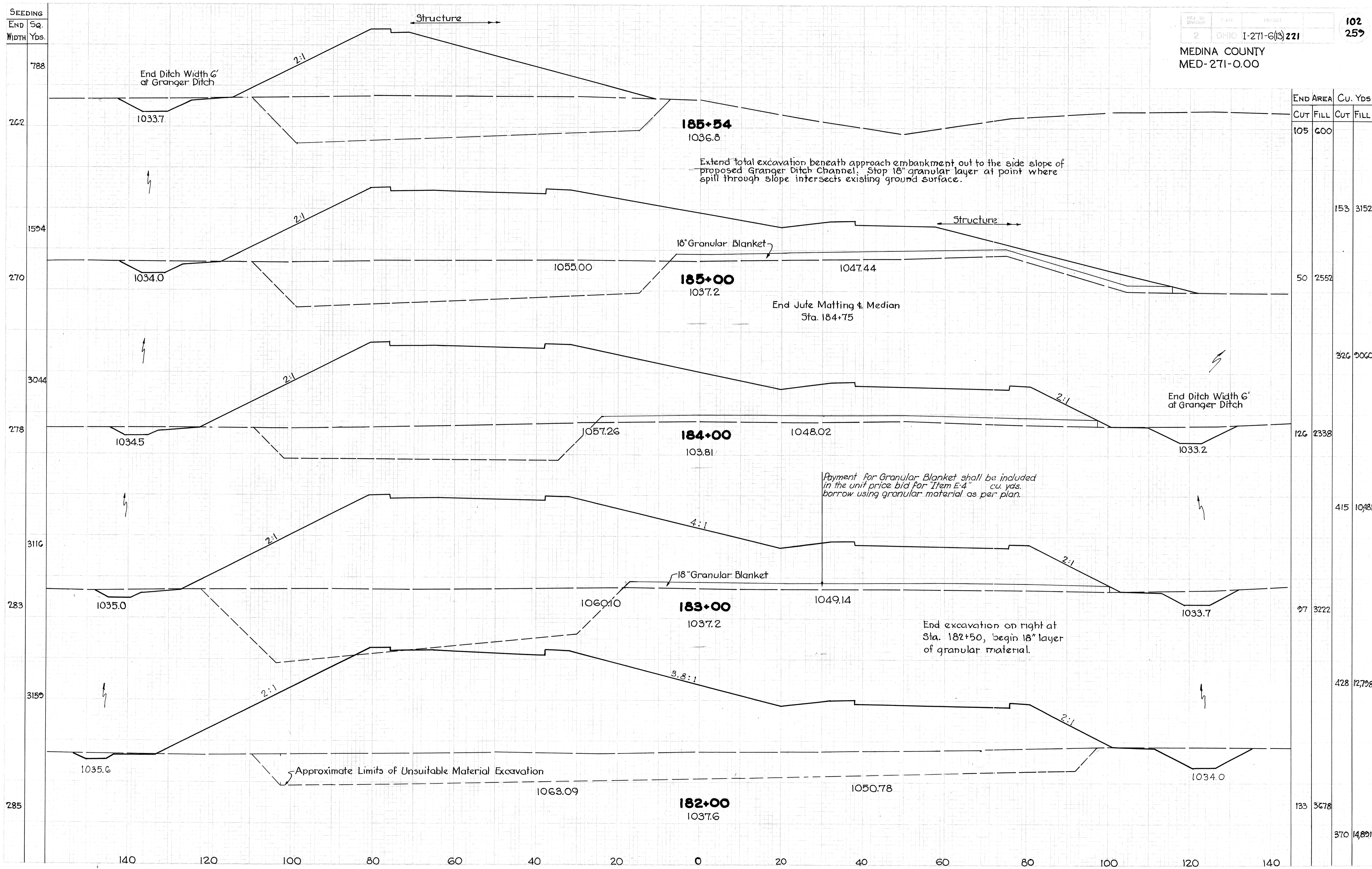
STA. 179+01.92 to 181+00

SEEDING
END SQ.
WIDTH Yds.

2 OHIO I-271-G(3) 221

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259

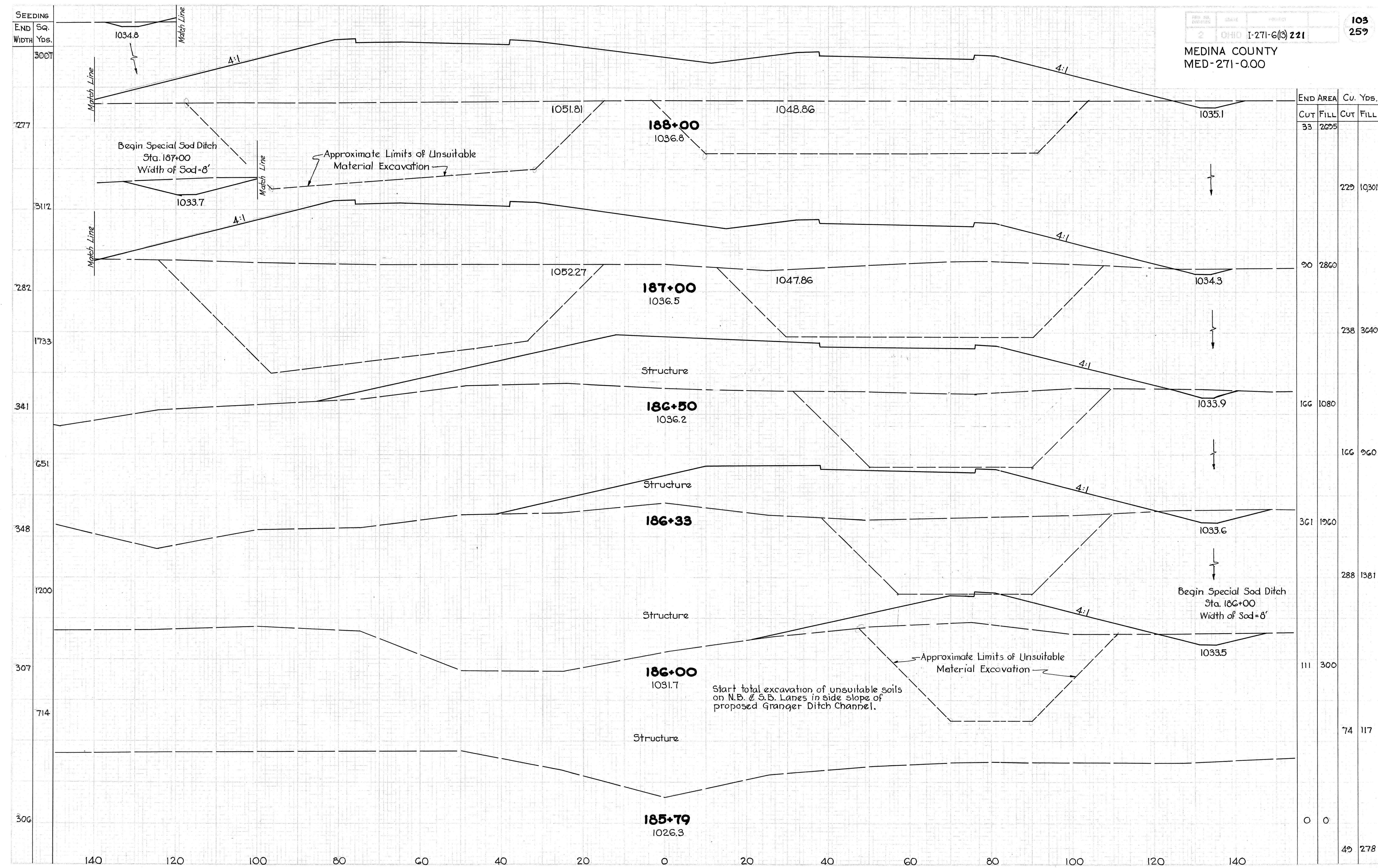
MEDINA COUNTY
MED-271-0.00



END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
105	600		
		153	3152
50	2552		
		326	9060
126	2338		
		415	10481
97	3222		
		428	12798
133	3678		
		370	14891

STA. 182+00 to 185+54

MEDINA COUNTY
 MED-271-0.00

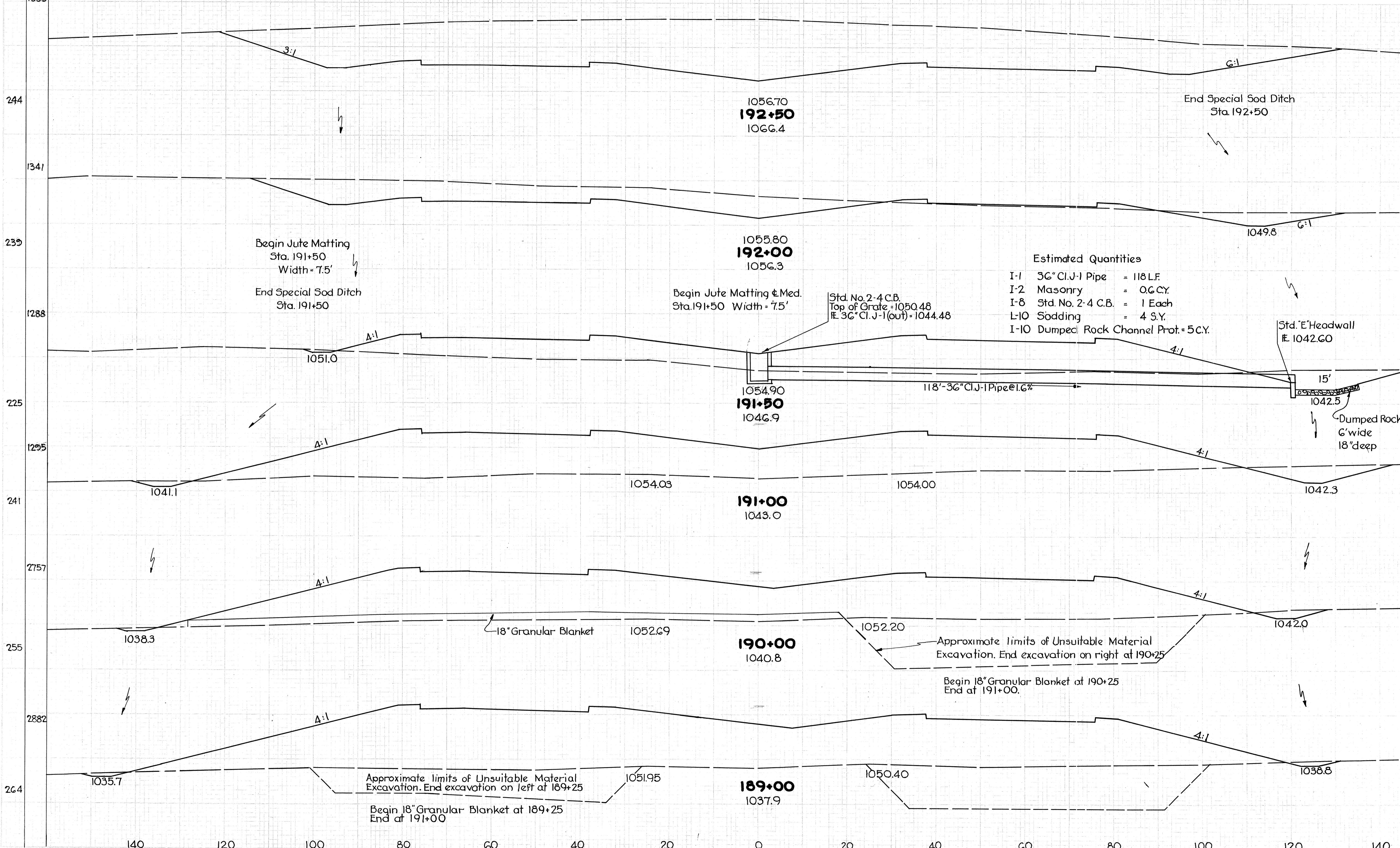


END AREA	Cu. Yds.	
	CUT	FILL
33	2695	
		229 10301
90	2860	
		238 3640
166	1080	
		166 960
361	1960	
		288 1381
111	300	
		74 117
0	0	
		49 278

STA. 185+79 to 188+00

SEEDING
END SQ.
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00



END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
2160	0		
		2564	13.
608	15		
		577	951
16	1012		
		38	2527
26	1700		
		75	6090
14	1588		
		57	8195
16	2462		
		90	9552

- Estimated Quantities
- I-1 36" C.I.-1 Pipe = 118 LF.
 - I-2 Masonry = 0.6 CY.
 - I-8 Std. No. 2-4 C.B. = 1 Each
 - L-10 Sodding = 4 S.Y.
 - I-10 Dumped Rock Channel Prot. = 5 CY.

Std. No. 2-4 C.B.
Top of Grate = 1050.48
E. 36" C.I.-1 (out) = 1044.48

Std. 'E' Headwall
E. 1042.60

118'-36" C.I.-1 Pipe @ 1.6%

Dumped Rock
6' wide
18" deep

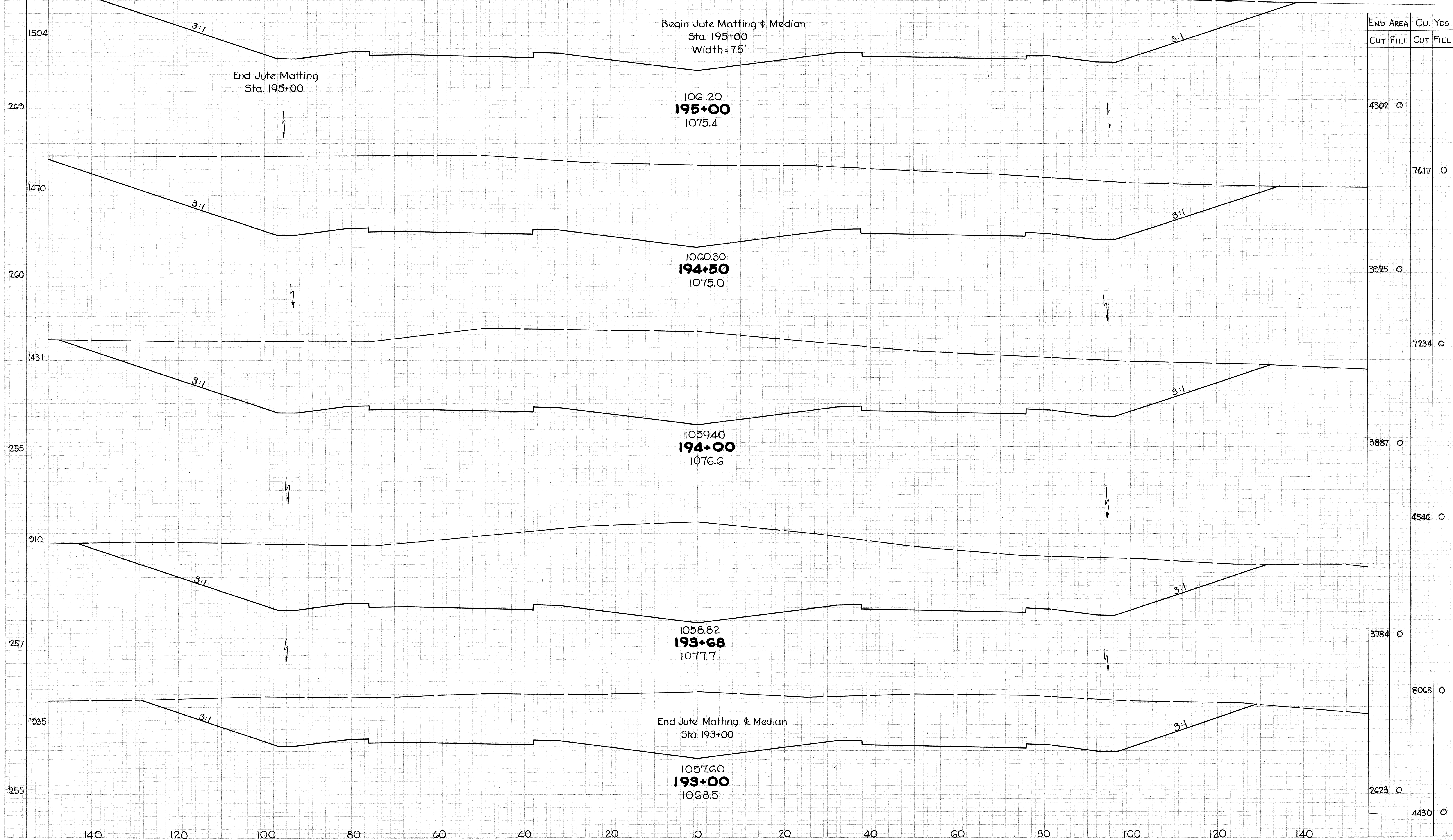
Approximate limits of Unsuitable Material
Excavation. End excavation on right at 190+25

Begin 18" Granular Blanket at 190+25
End at 191+00.

Approximate limits of Unsuitable Material
Excavation. End excavation on left at 189+25
Begin 18" Granular Blanket at 189+25
End at 191+00

SEEDING
END SQ.
WIDTH Yds.

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MED-271-0.00



STA. 193+00 to 195+00

SEEDING
END Sta.
WIDTH Yds.

Begin Jute Matting
Sta. 199+00
Width = 7.5'

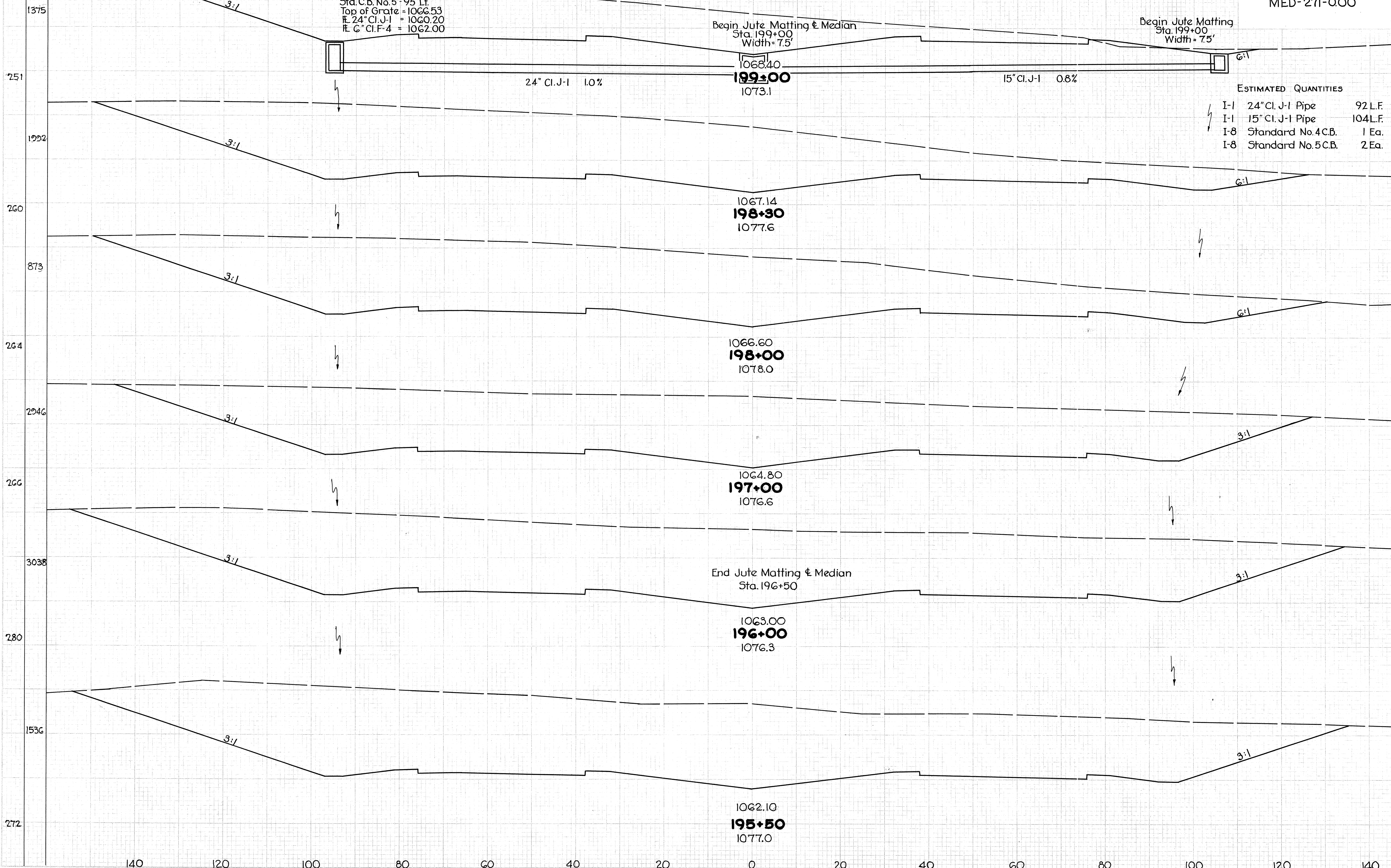
Standard No. 4 C.B. & Median
Top of Grate = 1063.96
E 24" Cl. J-1 (in) = 1059.18
E 15" Cl. J-1 (in) = 1059.93
E 30" Cl. E-1 (in) = 1058.68
E 36" Cl. E-1 (out) = 1058.18

Standard C.B. No. 5 106' Rt.
Top of Grate = 1065.53
E 15" Cl. J-1 = 1060.75
E 6" Cl. F-4 = 1061.50

FED. RD. DISTRICT	STATE	PROJECT
2	OHIO	I-271-G(3) 221

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MEDINA COUNTY
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END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
1598	10		
		5554	12
2686	0		
		3170	0
3020	0		
		11,163	0
3007	0		
		12,611	0
3803	0		
		7280	0
4060	0		
		7742	0

ESTIMATED QUANTITIES

I-1	24" Cl. J-1 Pipe	92 L.F.
I-1	15" Cl. J-1 Pipe	104 L.F.
I-8	Standard No. 4 C.B.	1 Ea.
I-8	Standard No. 5 C.B.	2 Ea.

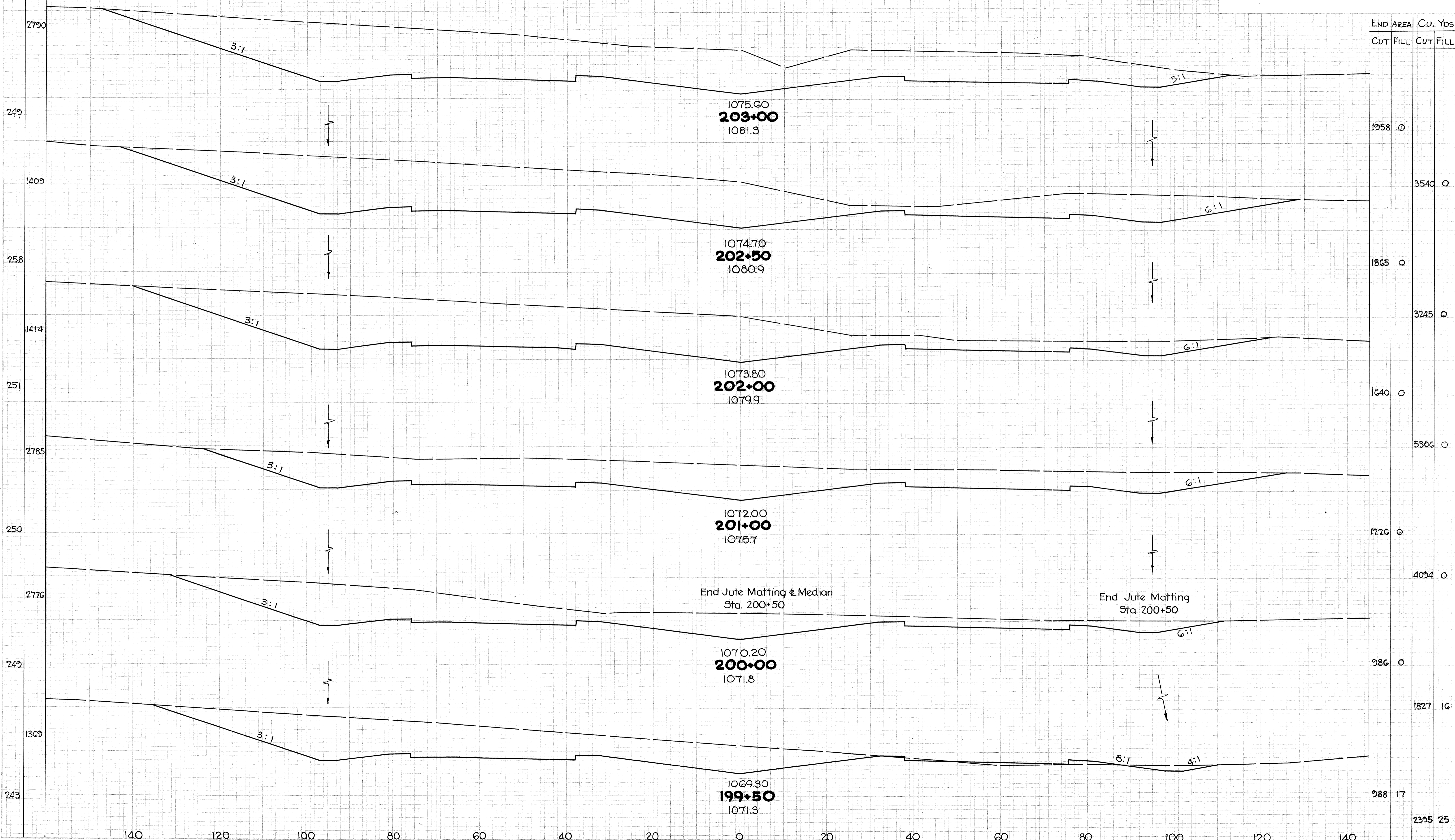
STA. 195+50 to 199+00

SEEDING
END SR.
WIDTH Yds.

PUB. NO.	STATE	PROJECT
2	OHIO	I-271-6(3)221

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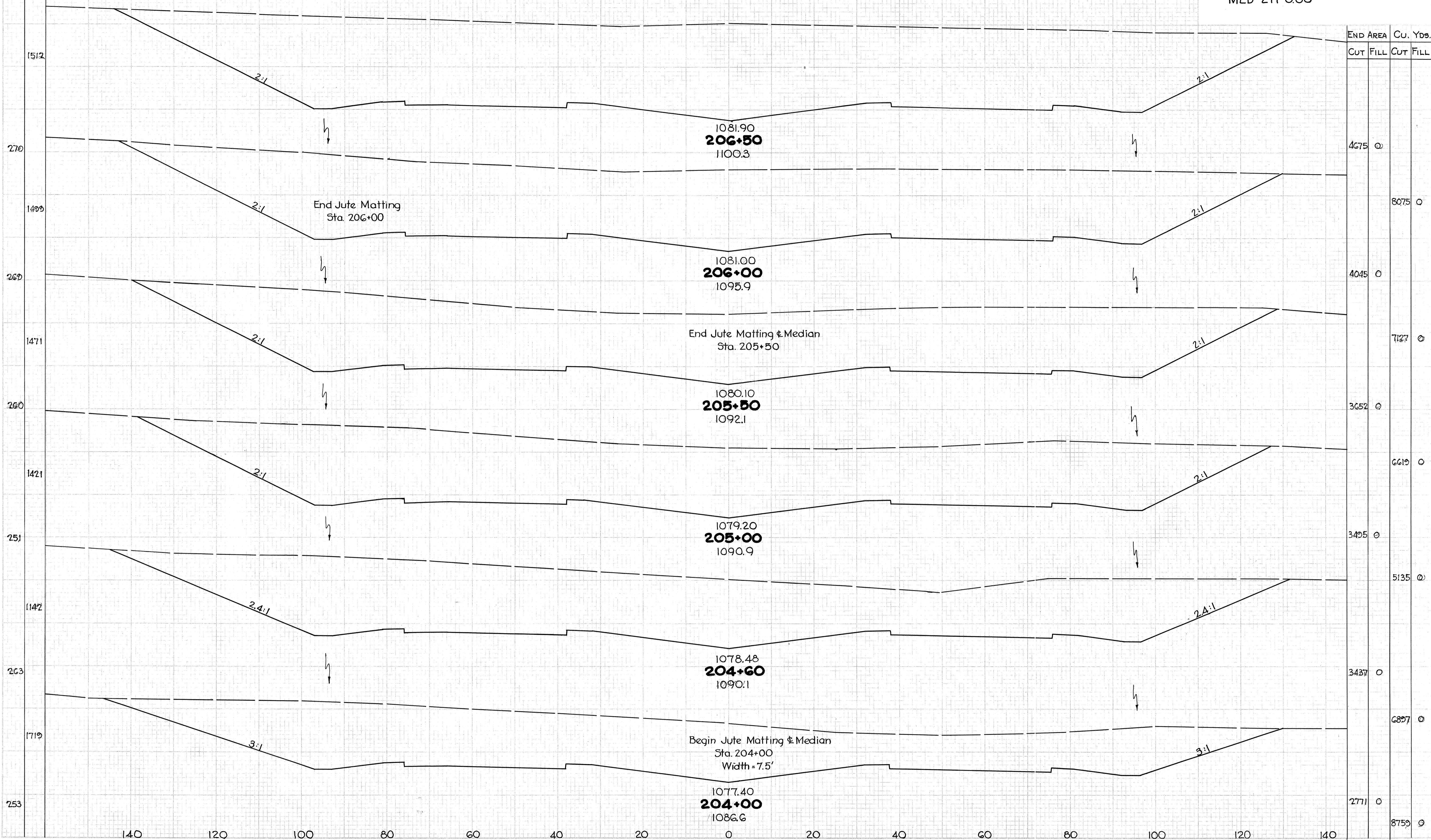
MEDINA COUNTY
MED-271-0.00



STA. 199+50 to 203+00

SEEDING
END SQ.
WIDTH YDS.

MEDINA COUNTY
MED-271-0.00



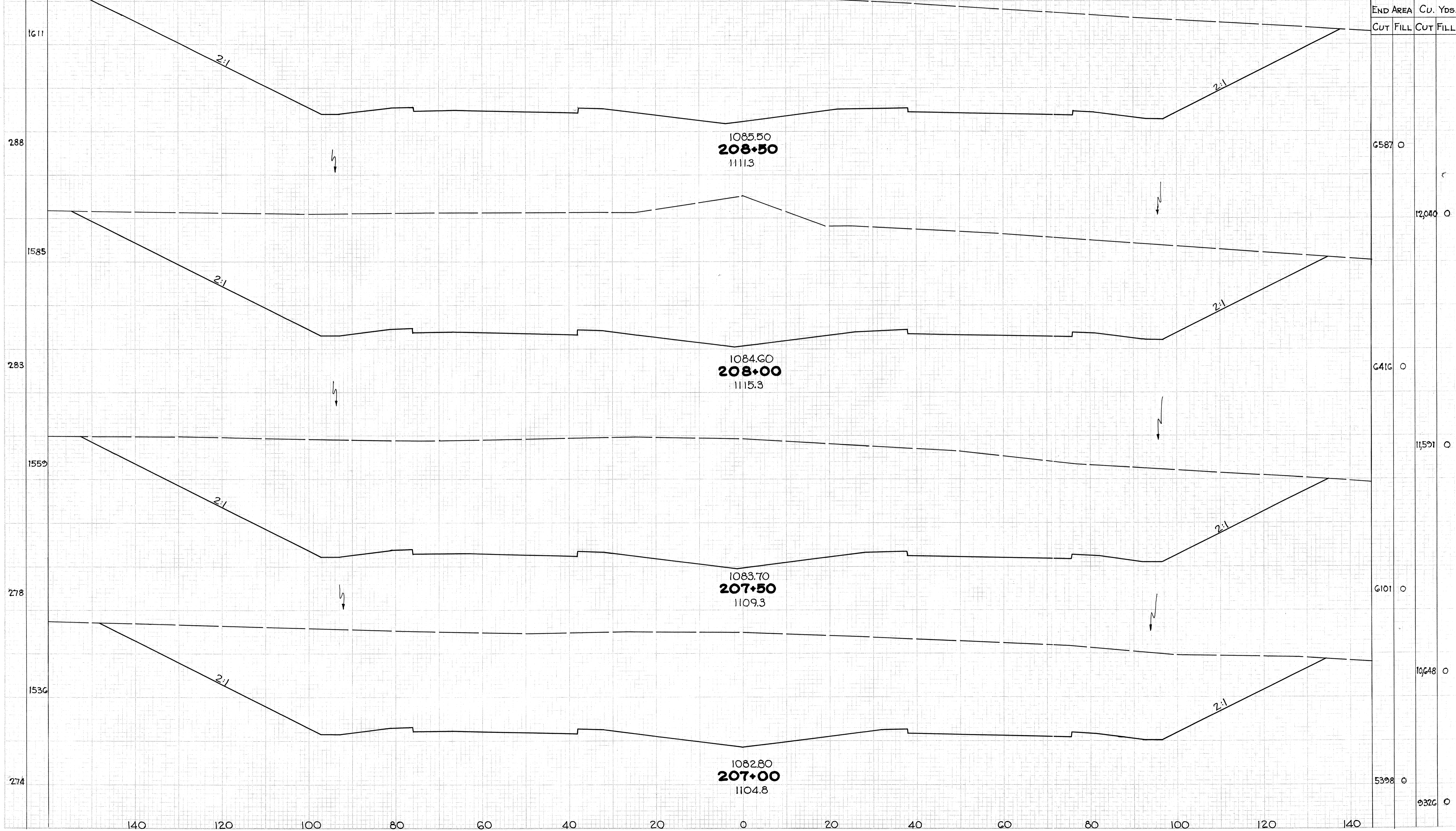
STA. 204+00 to 206+50

SEEDING
END SQ.
WIDTH Yds.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(3) 221

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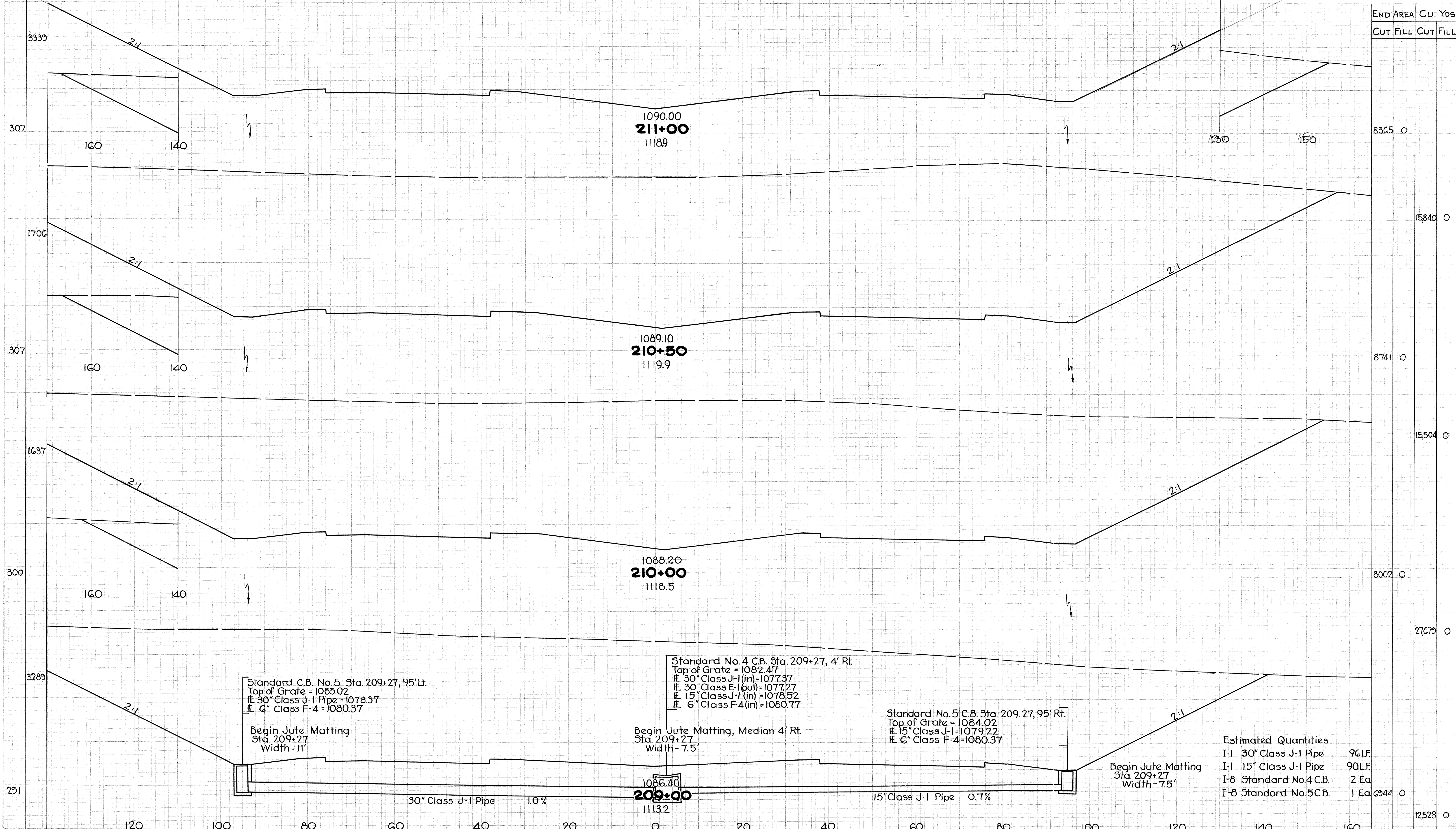
MEDINA COUNTY
MED-271-0.00



STA. 207+00 to 208+50

SEEDING
END¹ Sq.
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00



Estimated Quantities

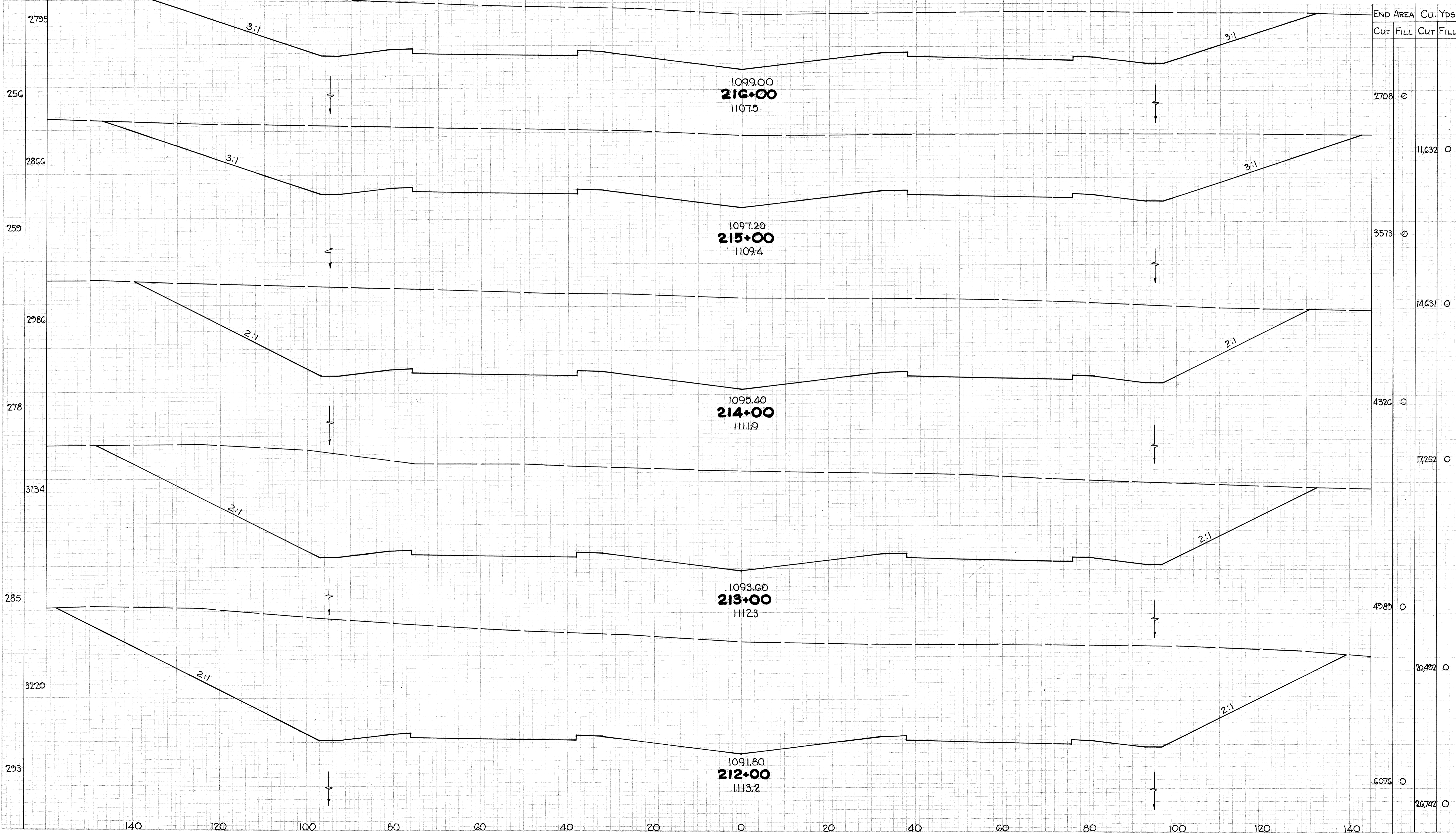
I-1 30" Class J-1 Pipe	96LF
I-1 15" Class J-1 Pipe	90LF
I-8 Standard No.4 C.B.	2 Ea
I-8 Standard No.5 C.B.	1 Ea

SEEDING
END SQ.
WIDTH Yds.

FED. RD. DISTRICT	STATE	PROJECT
2	OHIO	I-271-6(3) 271

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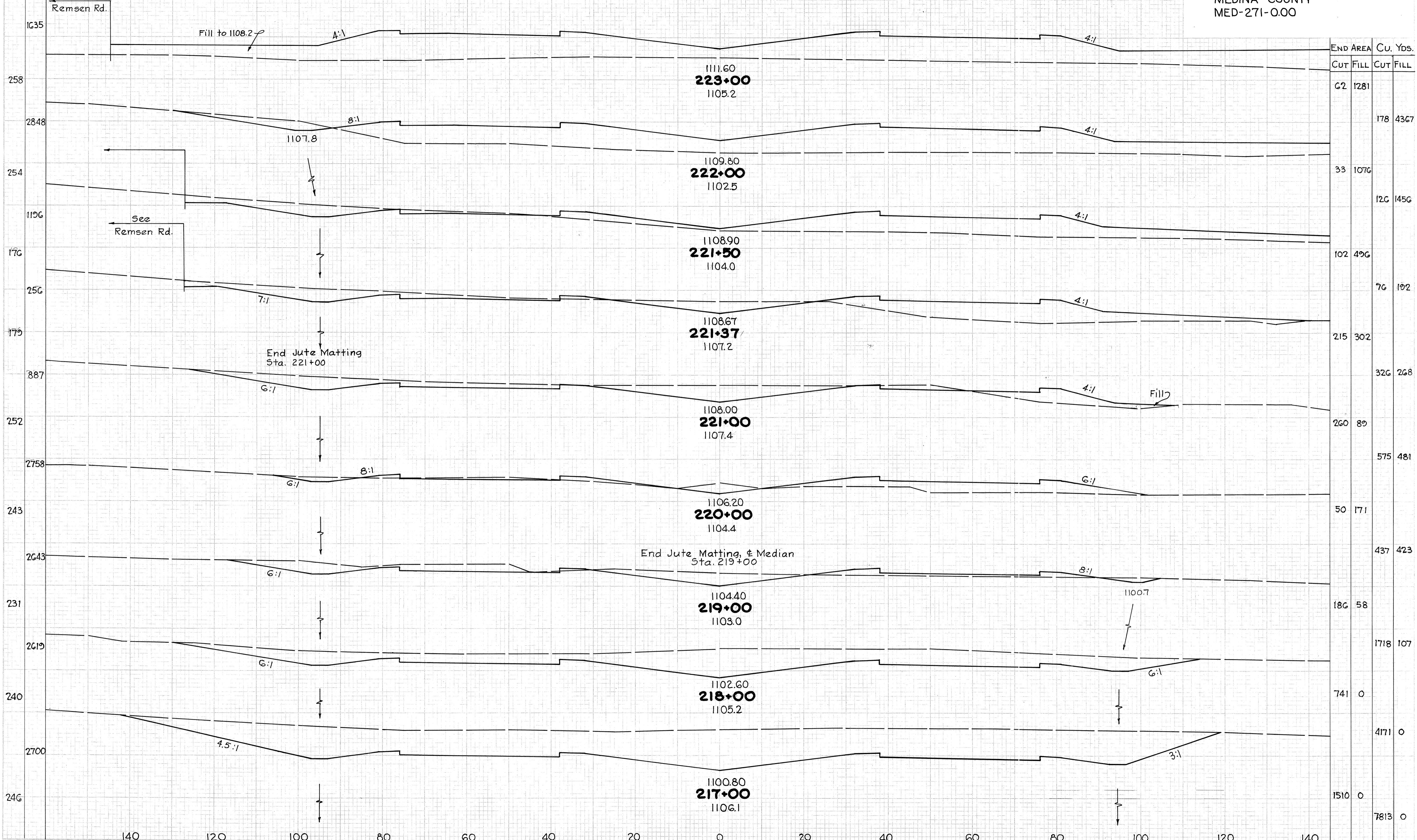
MEDINA COUNTY
MED-271-0.00



STA. 212+00 to 216+00

SEEDING
END SQ.
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00



STA. 217+00 to 223+00

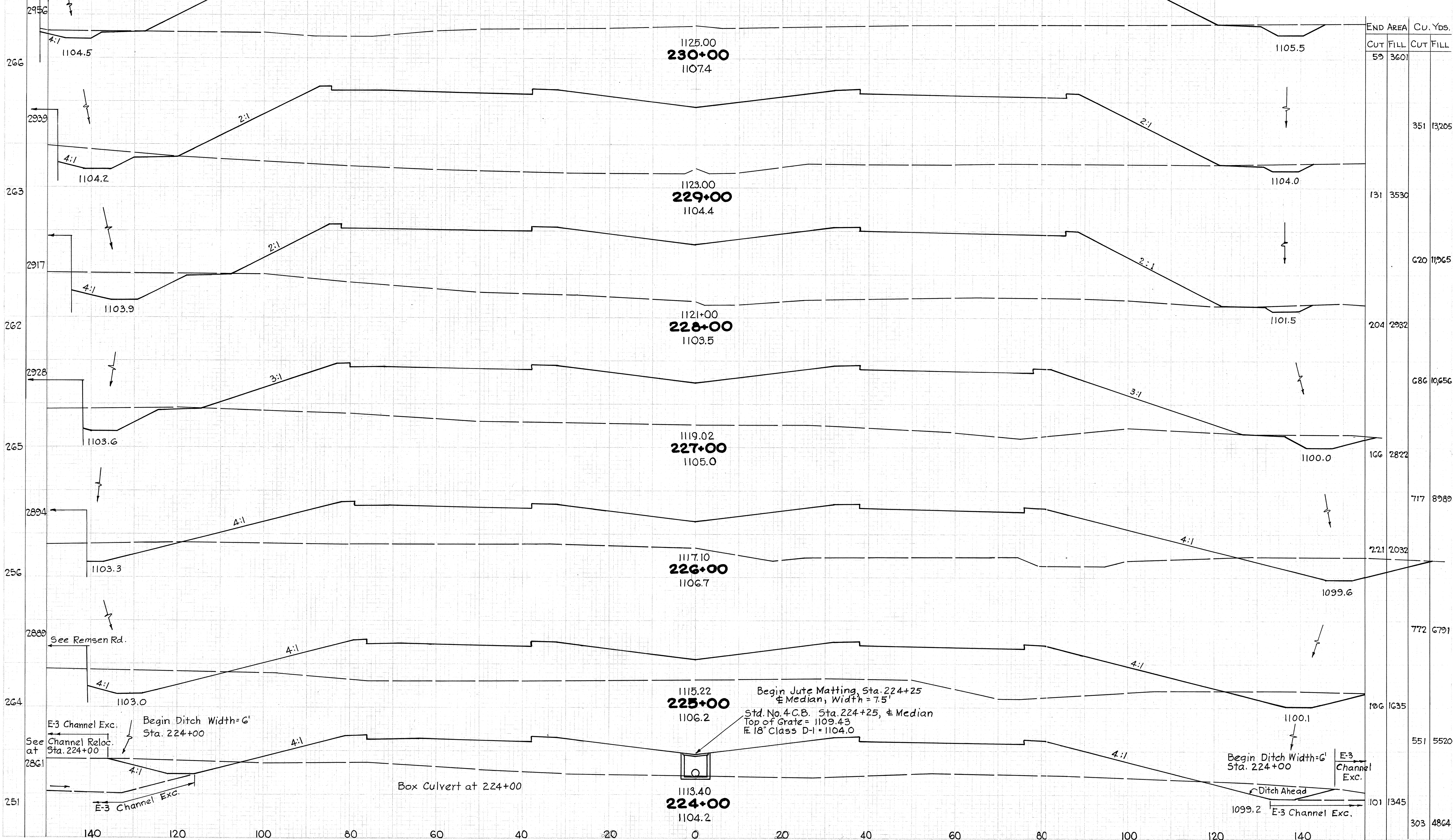
SEEDING
END Sq.
WIDTH Yds.

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MEDINA COUNTY
MED-271-000

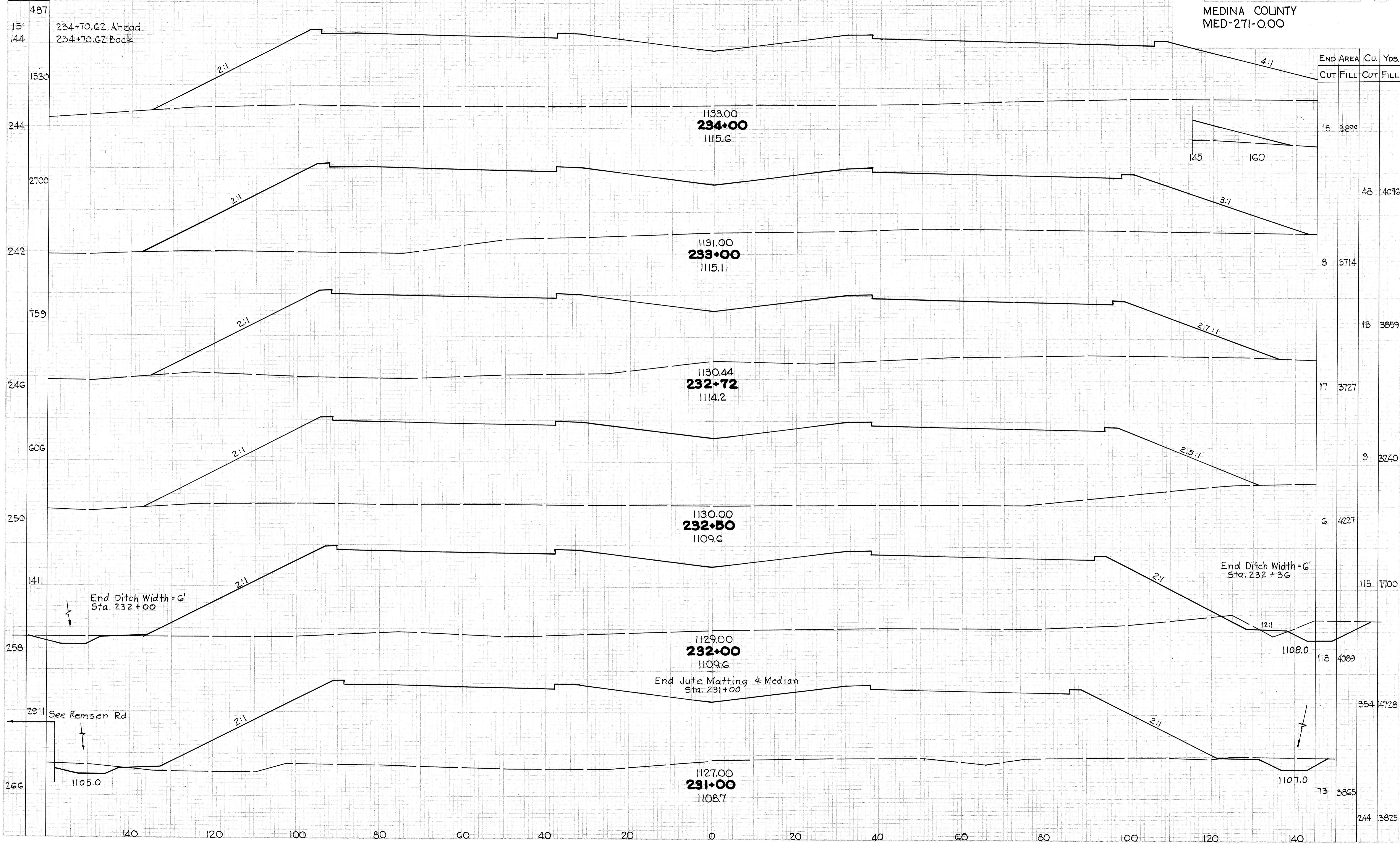
See Remsen Rd.



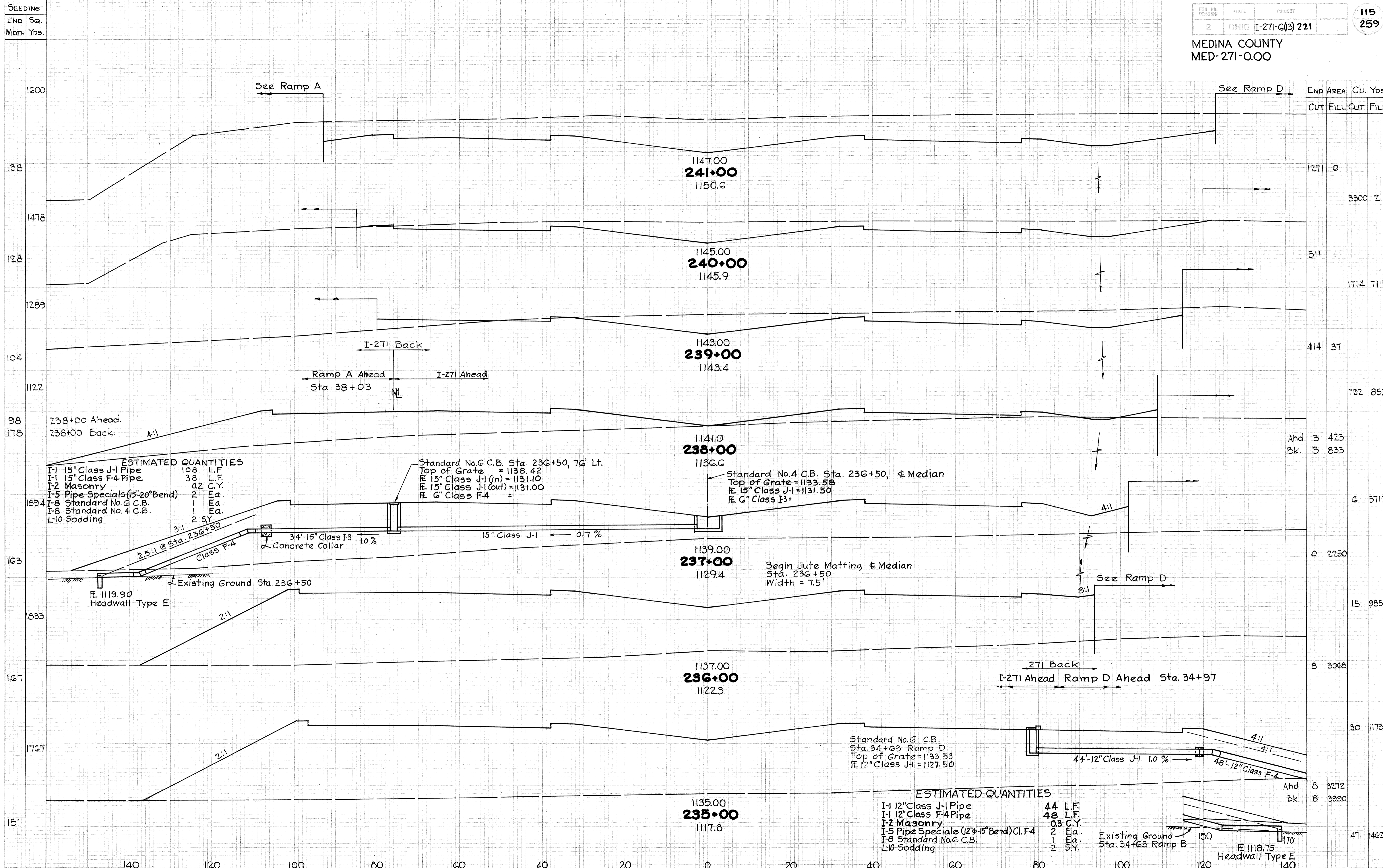
STA. 224+00 to 230+00

SEEDING
END 5q.
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00



MEDINA COUNTY
MED-271-0.00



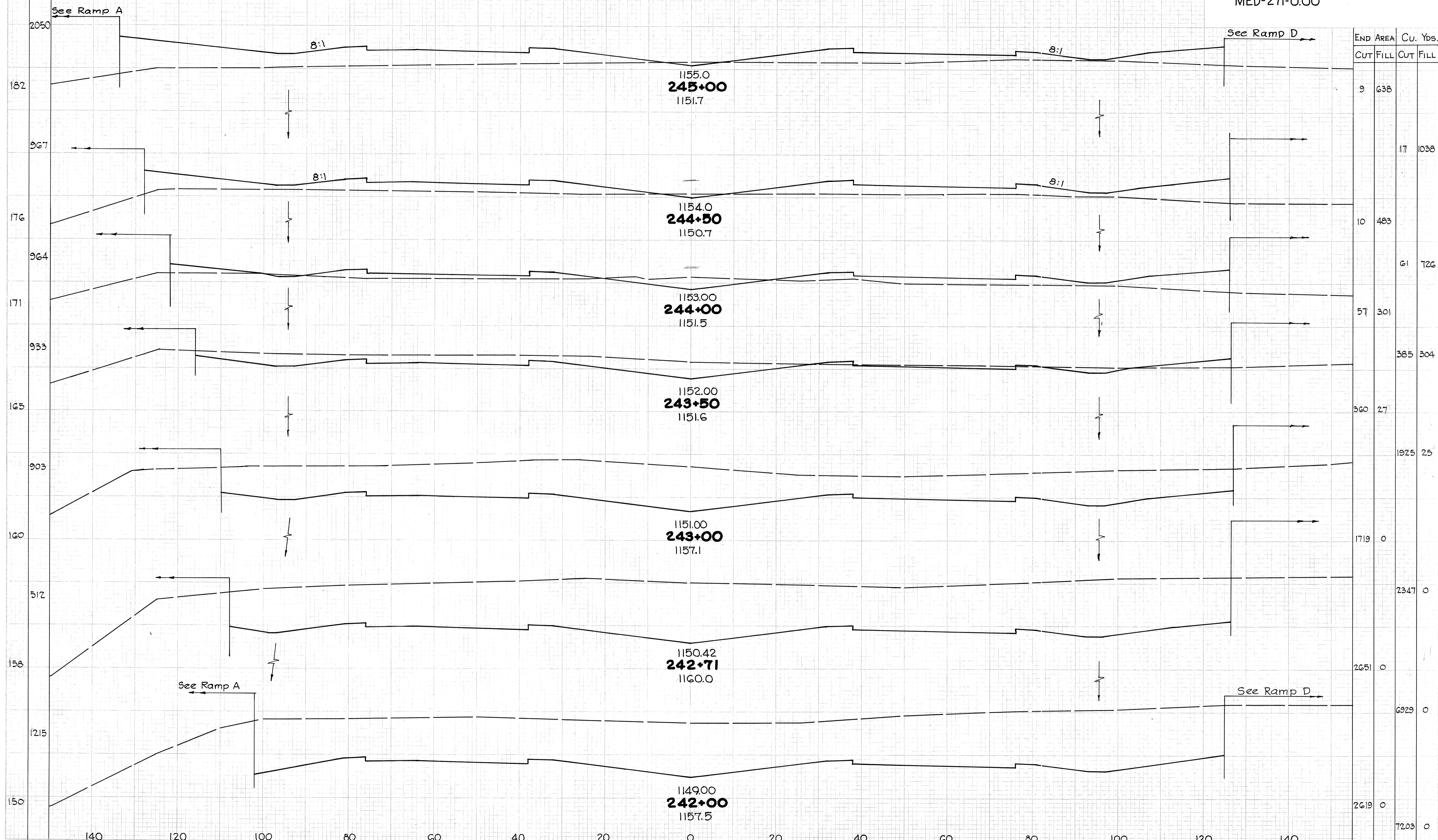
END STA.	AREA		CU. Yds.	
	CUT	FILL	CUT	FILL
1600				
138	1271	0		
1478			3300	2
128	511	1		
1289			1714	71
104	414	37		
1122			722	853
98				
178	Ahd. 3	423		
	Bk. 3	833		
1894			6	5712
163	0	2250		
1833			15	9850
167	8	3068		
1767			30	11730
	Ahd. 8	3272		
	Bk. 8	3990		
151			47	14673

SEEDING
END 5q.
WIDTH Yos.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(3) 221

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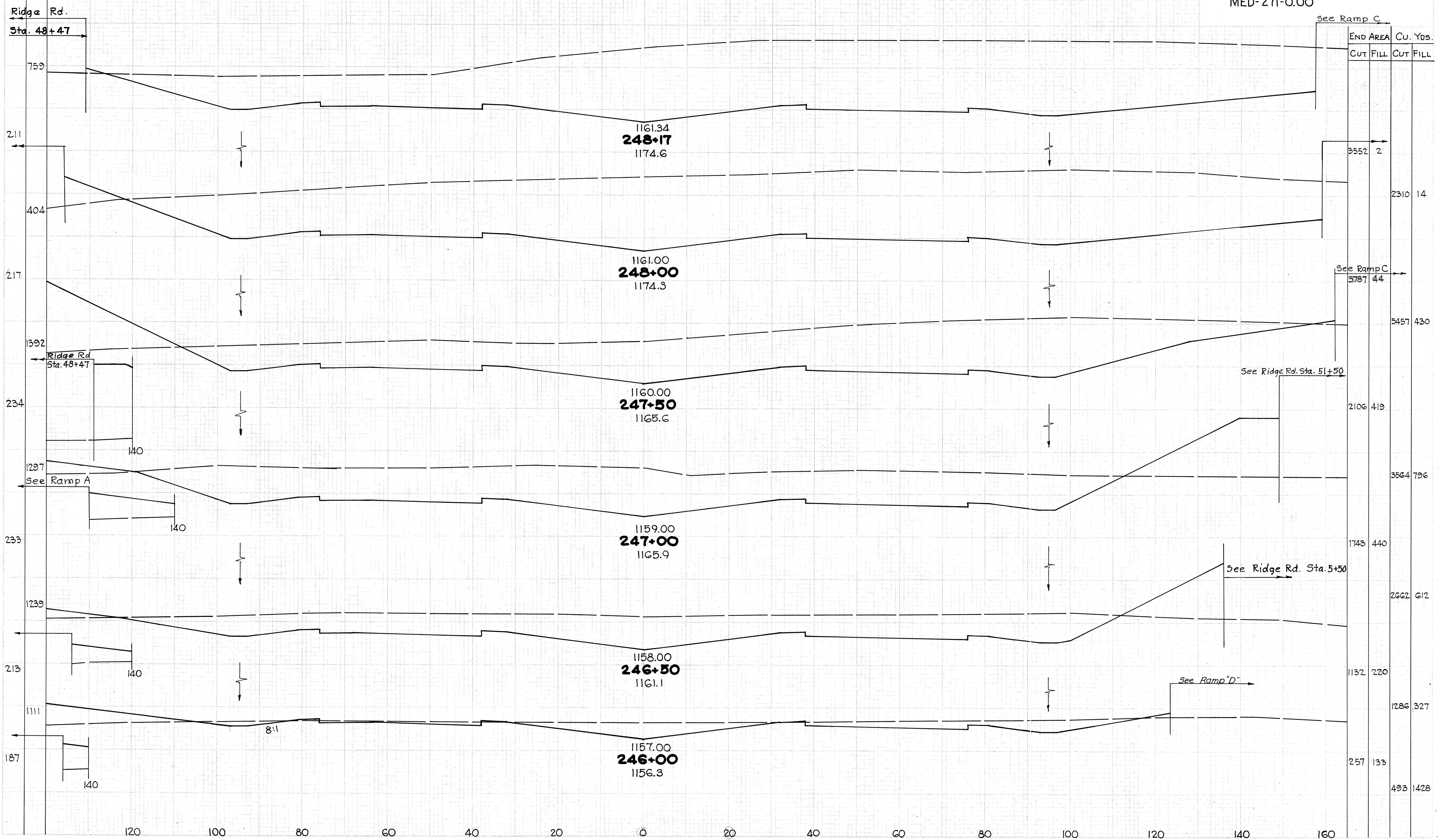
STA. 242+00 to 245+00

SEEDING
END Sq.
WIDTH Yds.

FED. RD. DIVISION STATE PROJECT
2 OHIO I-271-G(3) 221

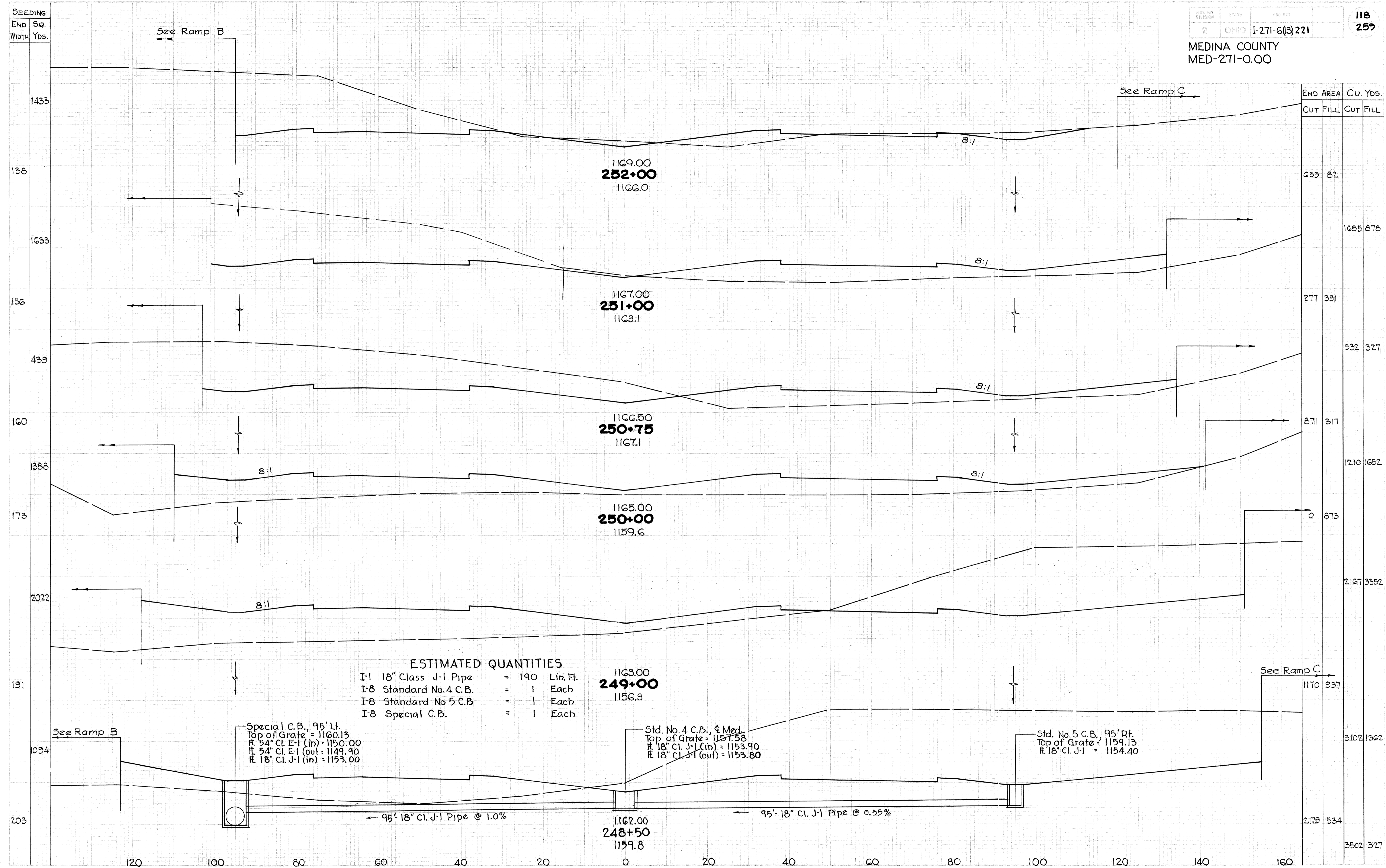
117
259

MEDINA COUNTY
MED-271-0.00

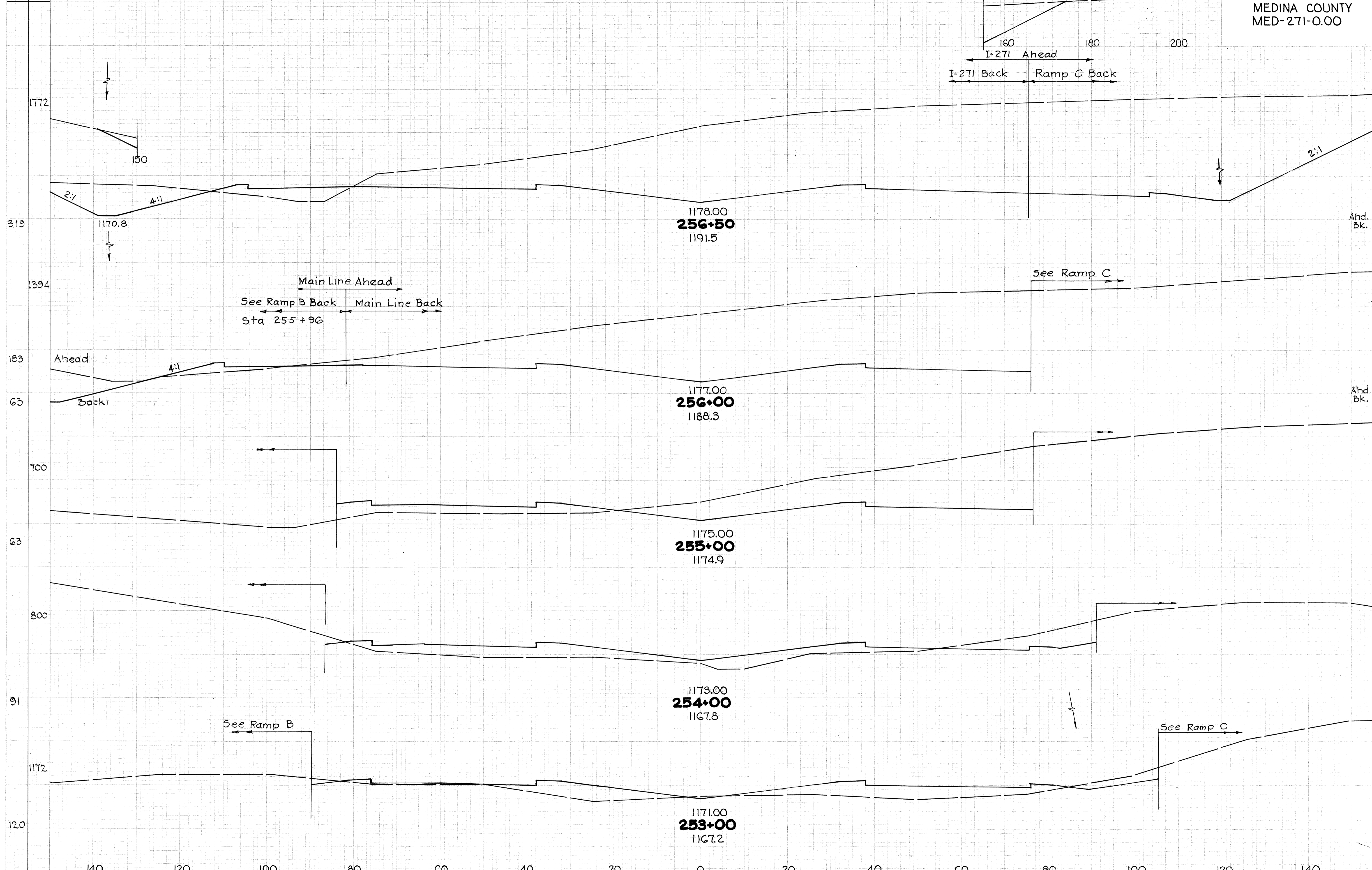


STA. 246+00 to 248+17

MEDINA COUNTY
MED-271-0.00



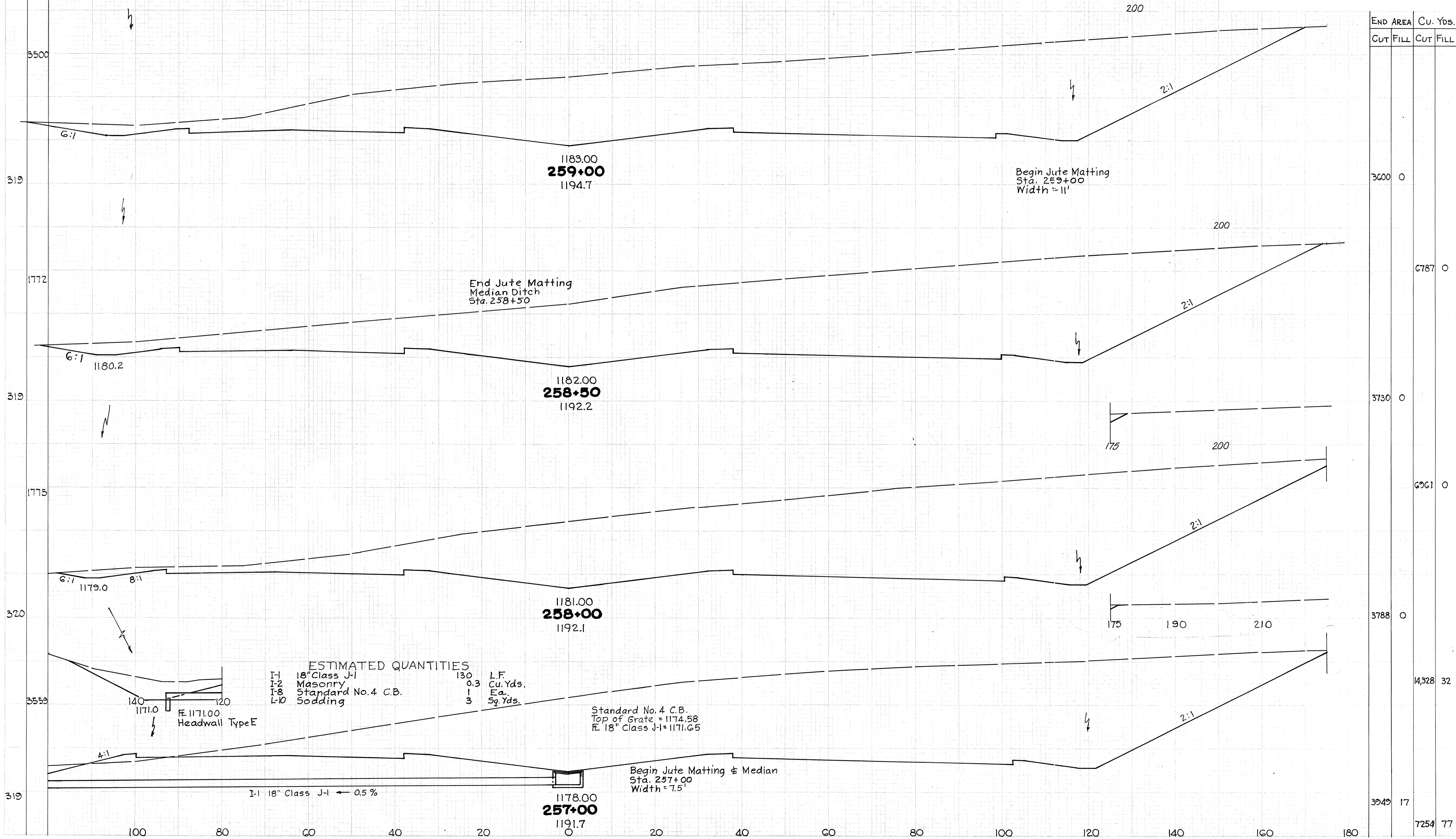
SEEDING
END Sq.
WIDTH Yds.



END AREA		Cu. Yds.	
CUT	FILL	CUT	FILL
Ahd. 3901	66		
Bk. 2237	67		
		3862	95
Ahd. 1929	35		
Bk. 1885	0		
		4796	235
		700	127
		1485	777
		102	292
		262	1058
		40	279
		1246	671

SEEDING
END SQ.
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00



ESTIMATED QUANTITIES

I-1	18" Class J-1	130	L.F.
I-2	Masonry	0.3	Cu. Yds.
I-8	Standard No. 4 C.B.	1	Ea.
L-10	Sodding	3	Sq. Yds.

Standard No. 4 C.B.
Top of Grate = 1174.58
E. 18" Class J-1 = 1171.65

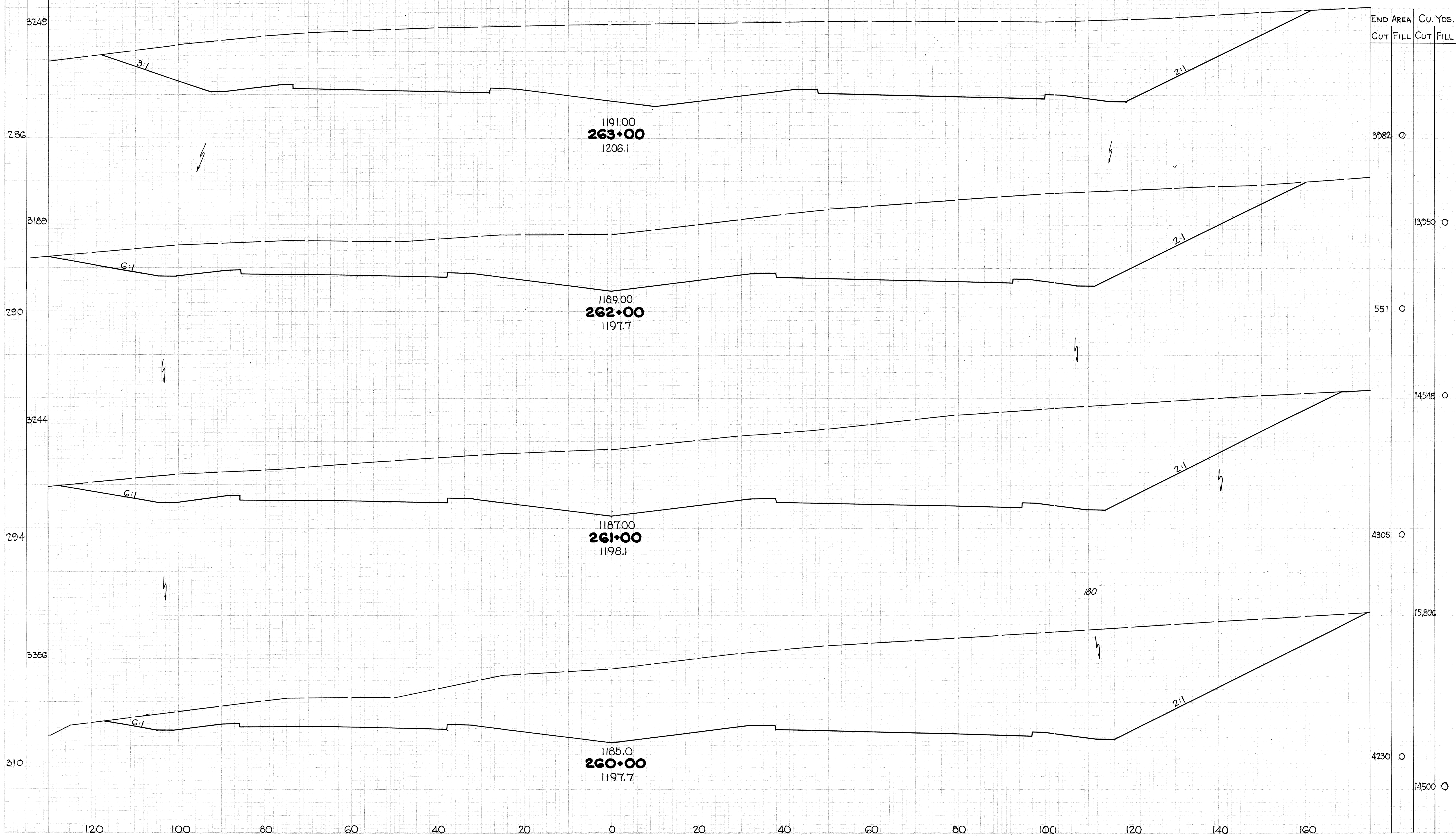
Begin Jute Matting & Median
Sta. 257+00
Width = 7.5'

Headwall Type E

I-1 18" Class J-1 ← 0.5%

SEEDING
END SQ.
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00



1191.00
263+00
1206.1

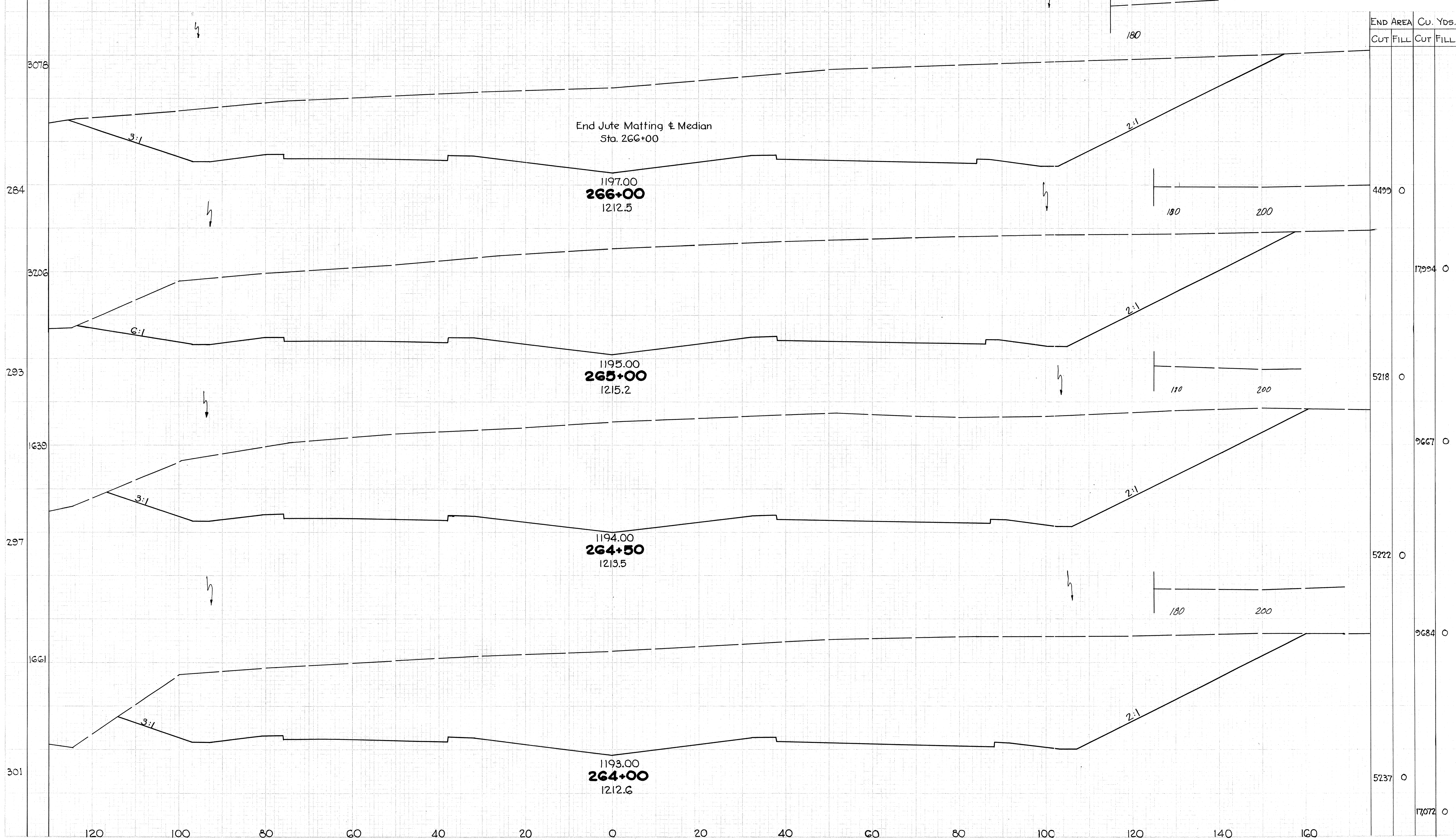
1189.00
262+00
1197.7

1187.00
261+00
1198.1

1185.0
260+00
1197.7

SEEDING
END SQ.
WIDTH YDS.

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STA. 264+00 to 266+00

SEEDING
END Sta.
WIDTH Yds.

END PROJECT STA. 272+00

MEDINA COUNTY
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Ahd. 334
Bk. 258

ESTIMATED QUANTITIES
I-3 15" Class J-1 Pipe 140 L.F.
I-2 Masonry 0.3 C.Y.
I-8 Standard No. 4 C.B. 1 Each
L-10 Sodding 2 S.Y.

Standard No. 4 C.B. & Median
Top of Grate = 1202.58
15" Class J-1 = 1200.33
Begin Jute Matting & Median
Sta. 271+00 width = 7.5

Dumped Rock Channel
Protection Sta. 271+20 Lt.
and Sta. 271+70 Lt.
Length = 35' Width = 10'
Depth = 1.5'

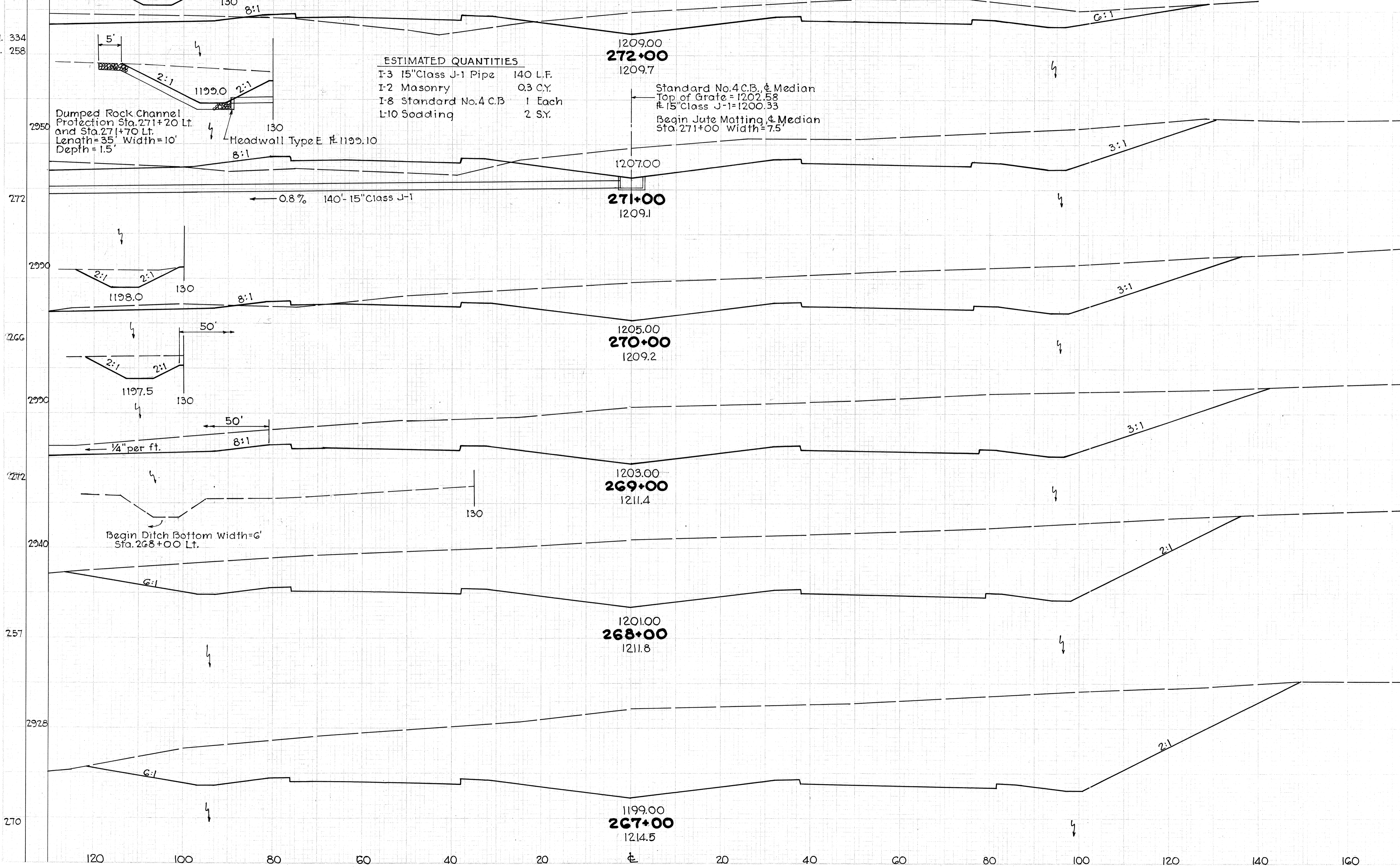
Headwall Type E # 1199.10

← 0.8% 140' 15" Class J-1

← 1/4" per ft. 50'

Begin Ditch Bottom Width = 6'
Sta. 268+00 Lt.

END AREA	CU. Yds.
CUT	FILL
792	116
	3413
1051	156
	4343
1294	13
	6570
2254	0
	9330
2784	0
	12116
3789	0
	15348

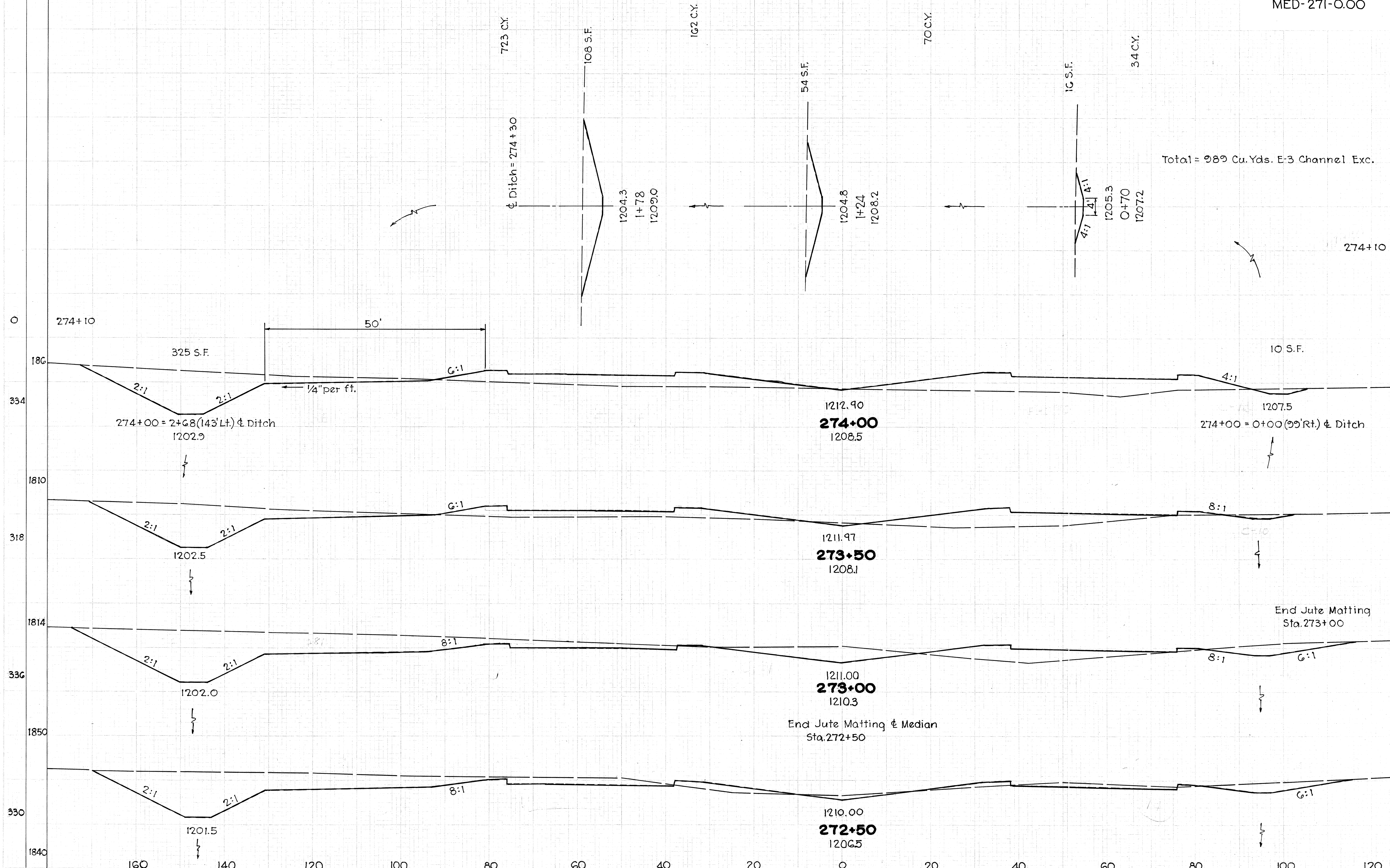


SEEDING
END SQ.
WIDTH Yds.

END WORK STA. 274+55

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MEDINA COUNTY
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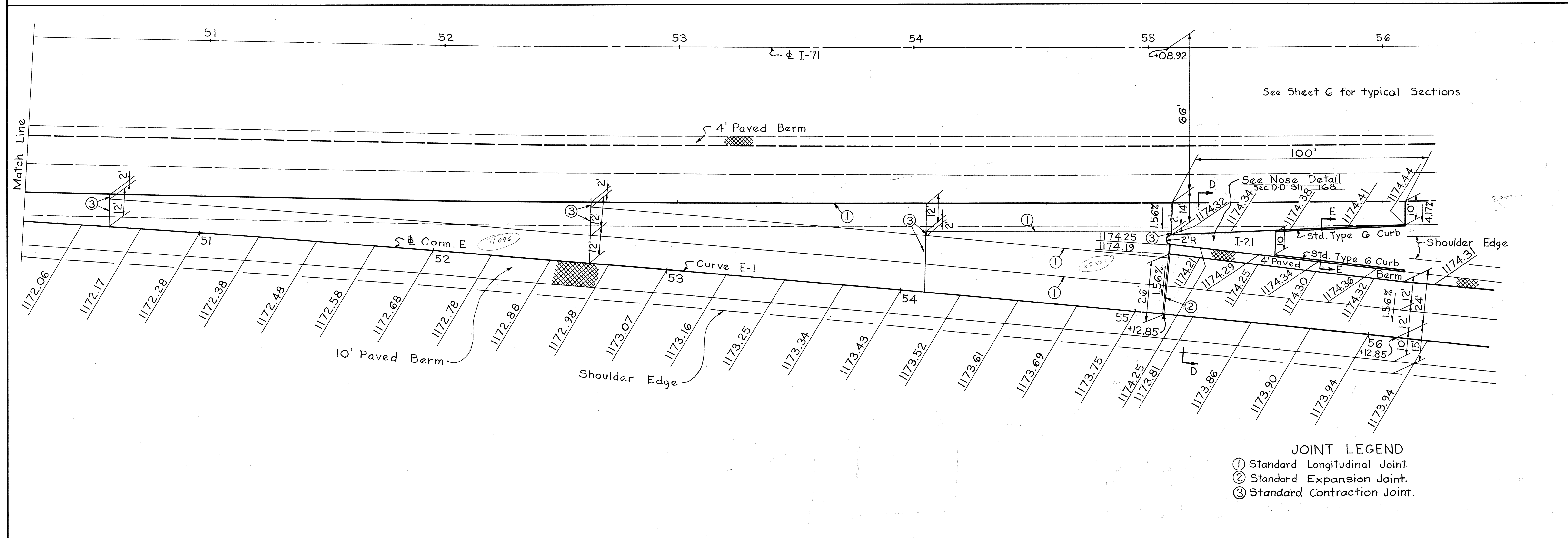
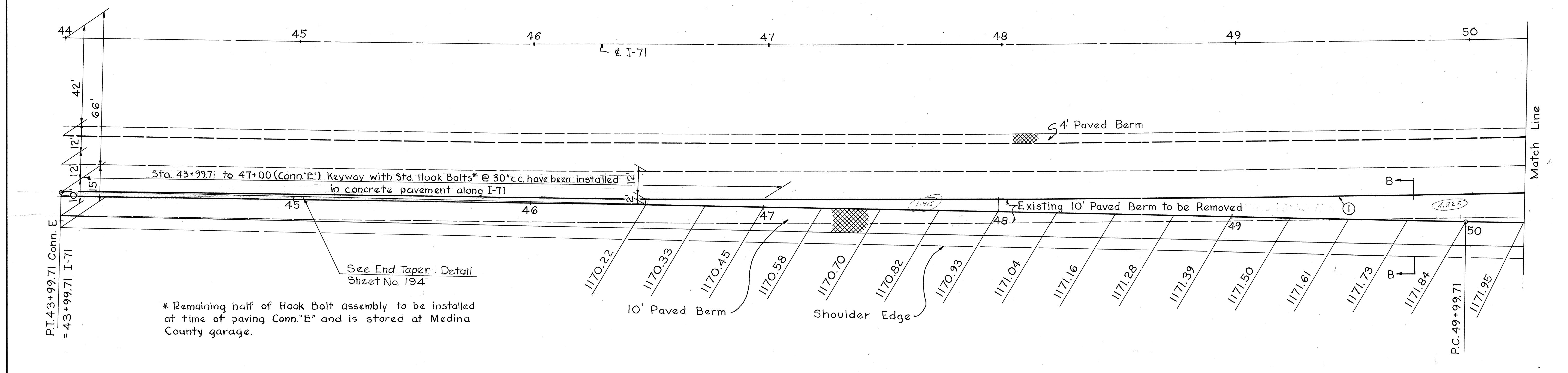
124
259



Total = 989 Cu. Yds. E-3 Channel Exc.

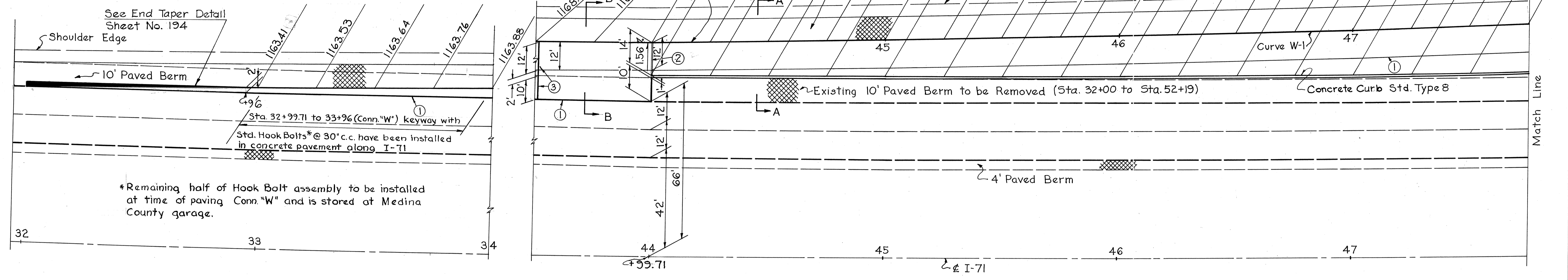
END AREA	Cu. Yds.	
	CUT	FILL
274+10	0	0
	56	91
	300	494
	549	789
	293	358
	897	463
	676	142
	1024	193
	430	66
	1131	168

STA. 272+50 to 274+00

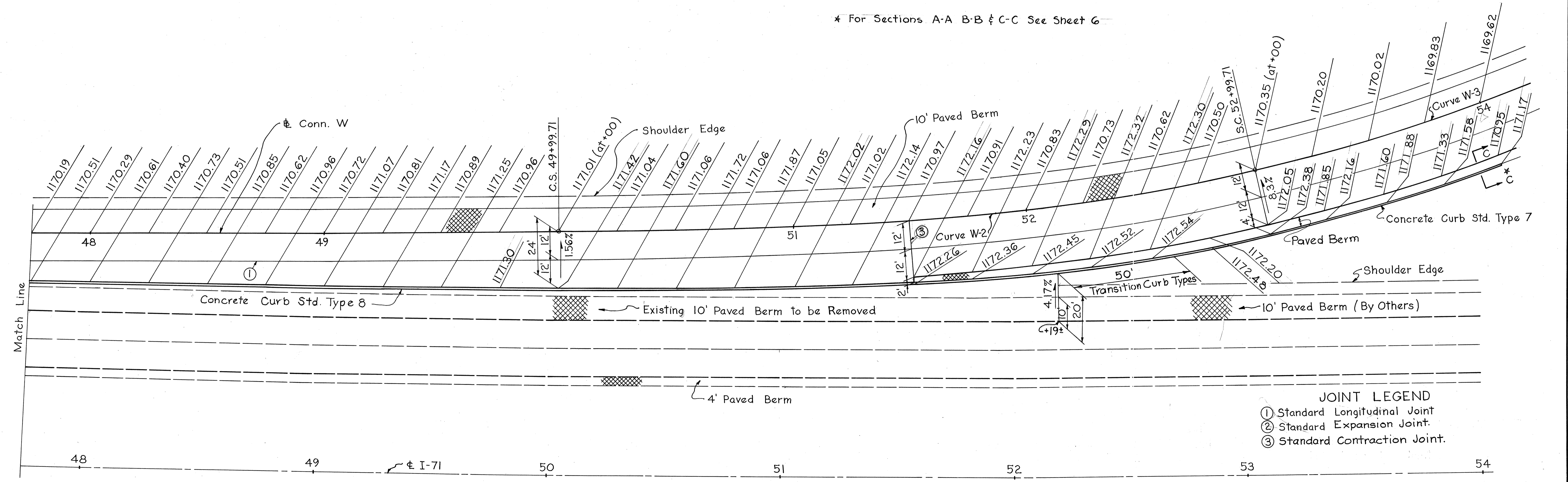


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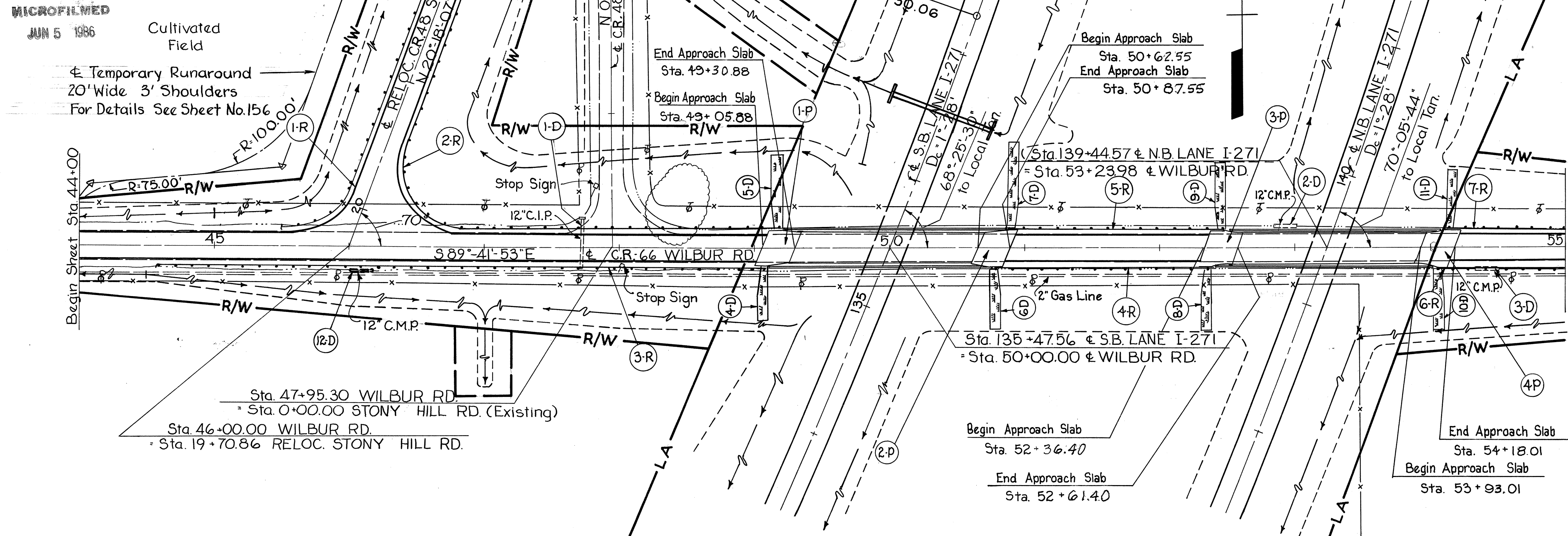
PAVEMENT ELEV.	
Sta.	Outer Edge
34+00	1163.88
+25	1164.00
+50	1164.12
+75	1164.24
35+00	1164.35
+25	1164.47
+50	1164.59
+75	1164.72
36+00	1164.83
+25	1164.95
+50	1165.06
+75	1165.18
37+00	1165.30
+25	1165.42
+50	1165.53
+75	1165.65
38+00	1165.77
+25	1165.90
+50	1166.01
+75	1166.13
39+00	1166.24
+25	1166.36
+50	1166.48
+75	1166.60
40+00	1166.72
+25	1166.84
+50	1166.95
+75	1167.07
41+00	1167.19
+25	1167.31
+50	1167.42
+75	1167.54
42+00	1167.66
+25	1167.79
+50	1167.90
+75	1168.02
43+00	1168.13
+25	1168.25
+50	1168.37



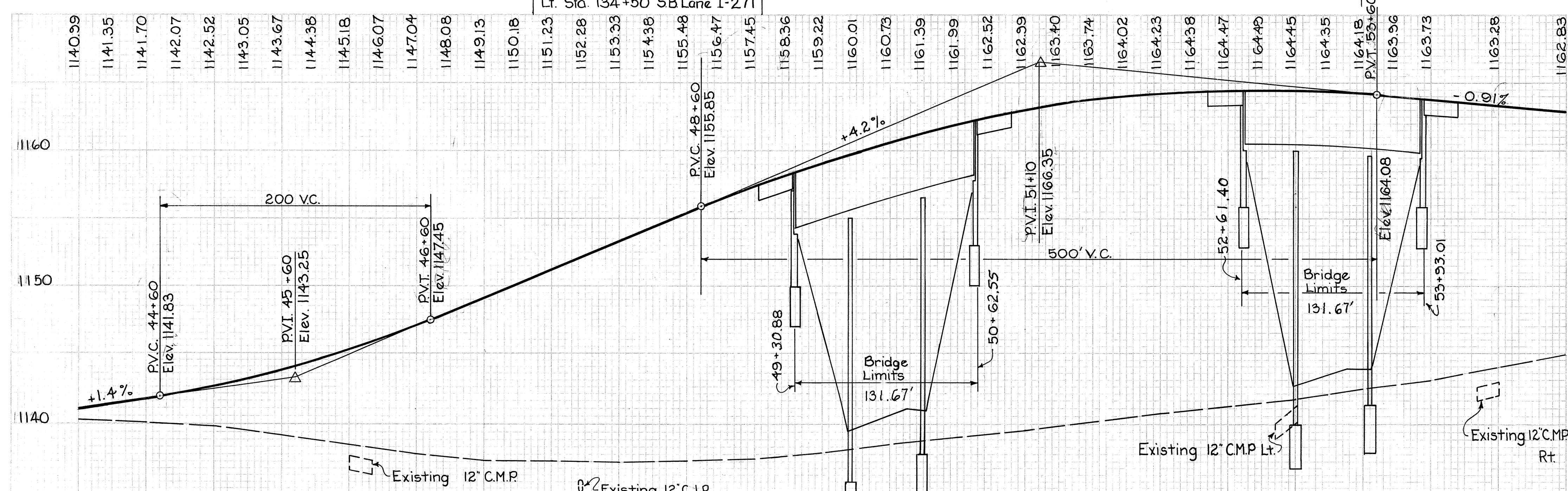
* For Sections A-A B-B & C-C See Sheet 6



MICROFILMED
JUN 5 1986



B.M. *E-8 Elev. 1138.31
 R.R. Spike in 24" Hickory, 160'
 L.F. Sta. 134+50 SB Lane I-271



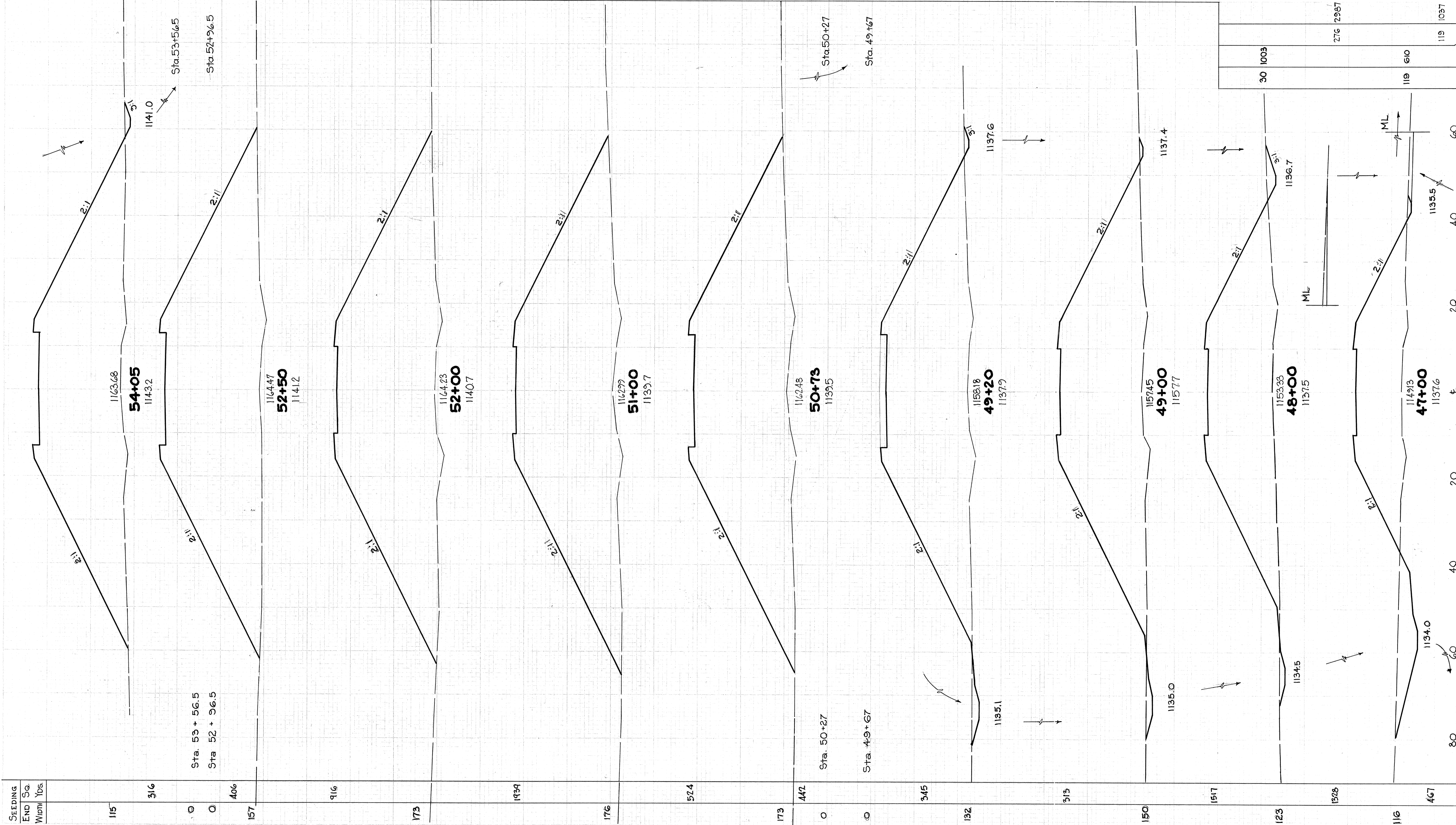
BRIDGE No. MED - 271-0194
 Type: Continuous steel beams with reinforced concrete deck and substructure.
 Spans: 37'-0", 52'-0", 37'-0".
 Roadway: 24'-0" face to face of 2'-0" safety curb.
 Load Frequency: C.F. = 130 (57)
 Wearing Surface: 1" Monolithic concrete

BRIDGE No. MED - 271-0202
 Type: Continuous steel beams with reinforced concrete deck and substructure.
 Spans: 37'-0", 52'-0", 37'-0".
 Roadway: 24'-0" face to face of 2'-0" safety curbs.
 Load Frequency: C.F. = 130 (57)
 Wearing Surface: 1" Monolithic concrete.

REF. NO.	STATION TO STATION SIDE	E-12 Pipe Removal 15' & Under	I-15 Guard Rail	I-10 Special Seeding For Slope & Berms. Prof.	I-7 1'-15" Reint. Conc. Approach Slab	ESTIMATED QUANTITIES
		Lin. Ft.	Lin. Ft.	Sq. Yd.	Sy.	
1-D	47+42 to 49+30	39				
2-D	49+30 to 50+60	61				
3-D	50+60 to 52+35	17		33		
4-D	52+35 to 54+15			48		
5-D	54+15 to 55+00			48		
6-D	55+00 to 55+00			58		
7-D	55+00 to 55+00			48		
8-D	55+00 to 55+00			54		
9-D	55+00 to 55+00			38		
10-D	55+00 to 55+00	16		38		
11-D	55+00 to 55+00					
12-D	55+00 to 55+00					
1-P	49+30 to 49+30				778	
2-P	50+60 to 50+60				778	
3-P	52+35 to 52+35				778	
4-P	54+15 to 54+15				778	
1-R	45+50 to 21+00 C.R. 48		150			
2-R	21+00 C.R. 48 to 49+20		362.5			
3-R	49+20 to 49+20		450			
4-R	49+20 to 49+20		162.5			
5-R	50+18 to 52+50		95			
6-R	54+05 to 55+00		87.5			
7-R	54+12 to 55+00					
TOTAL						311.2

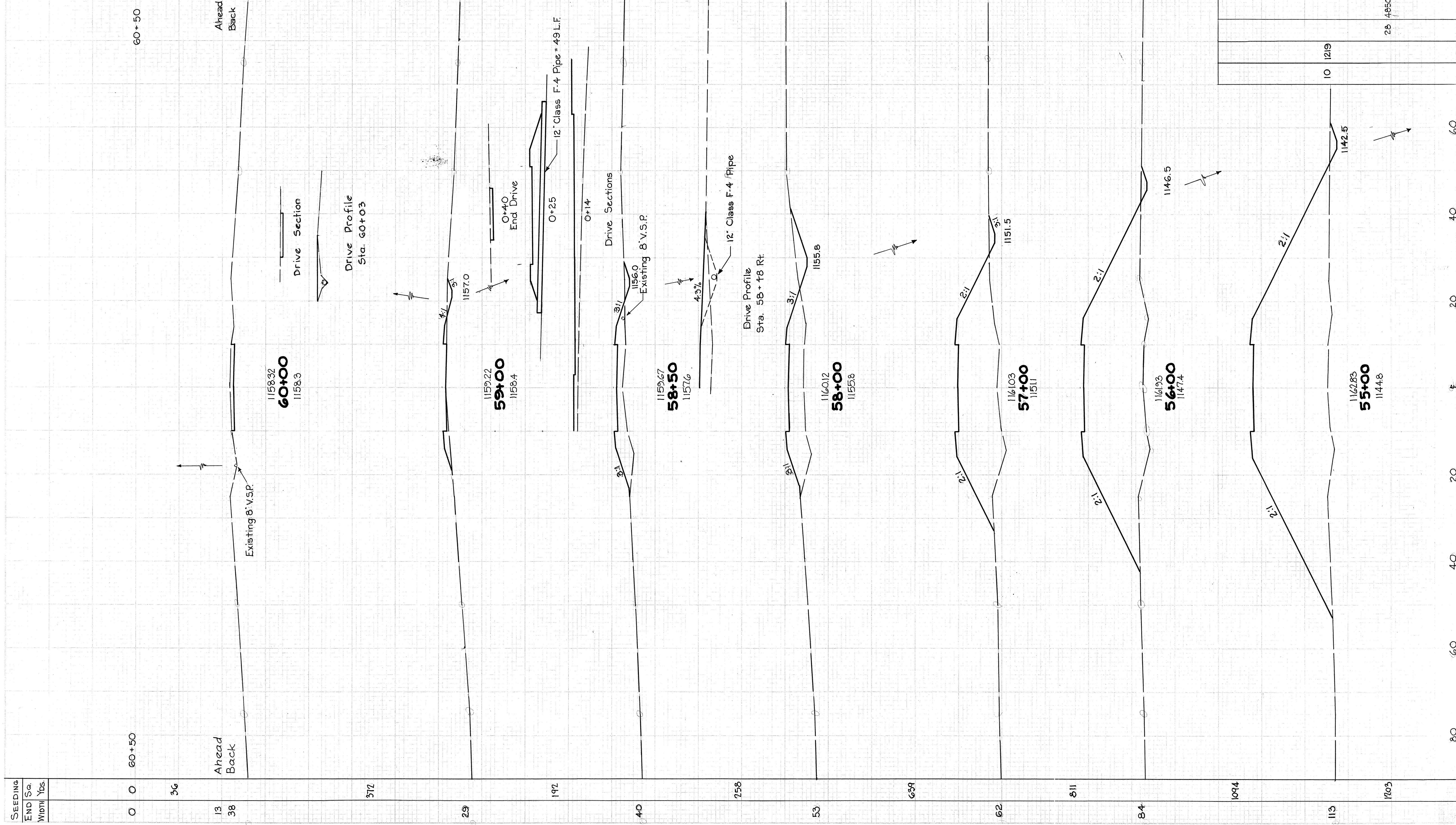
SEEDING END Sq. Width Yds	END AREA Cu. Yds. CUT FILL
115	6 1538
316	5 1381
0	0 0
0	0 0
406	0 1559
157	0 1810
916	0 3411
173	0 1874
1939	0 6922
176	0 1864
524	0 1840
173	0 1815
442	0 1546
0	0 0
0	0 0
345	24 1262
192	27 1450
313	16 1067
150	15 1432
1517	83 4509
123	
1328	
116	
467	

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 MEDINA COUNTY
 MED-271-0.00
 131
 259

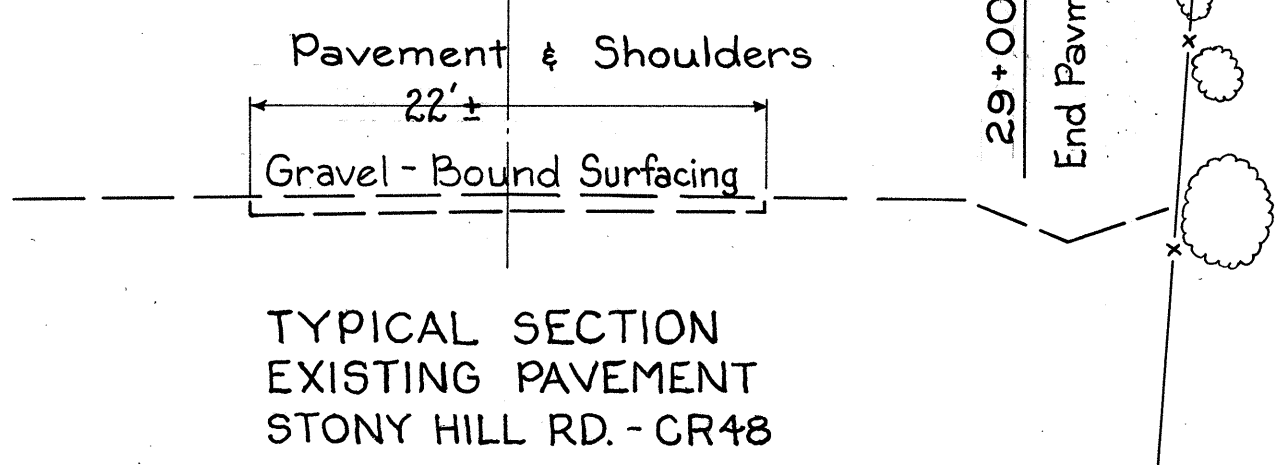
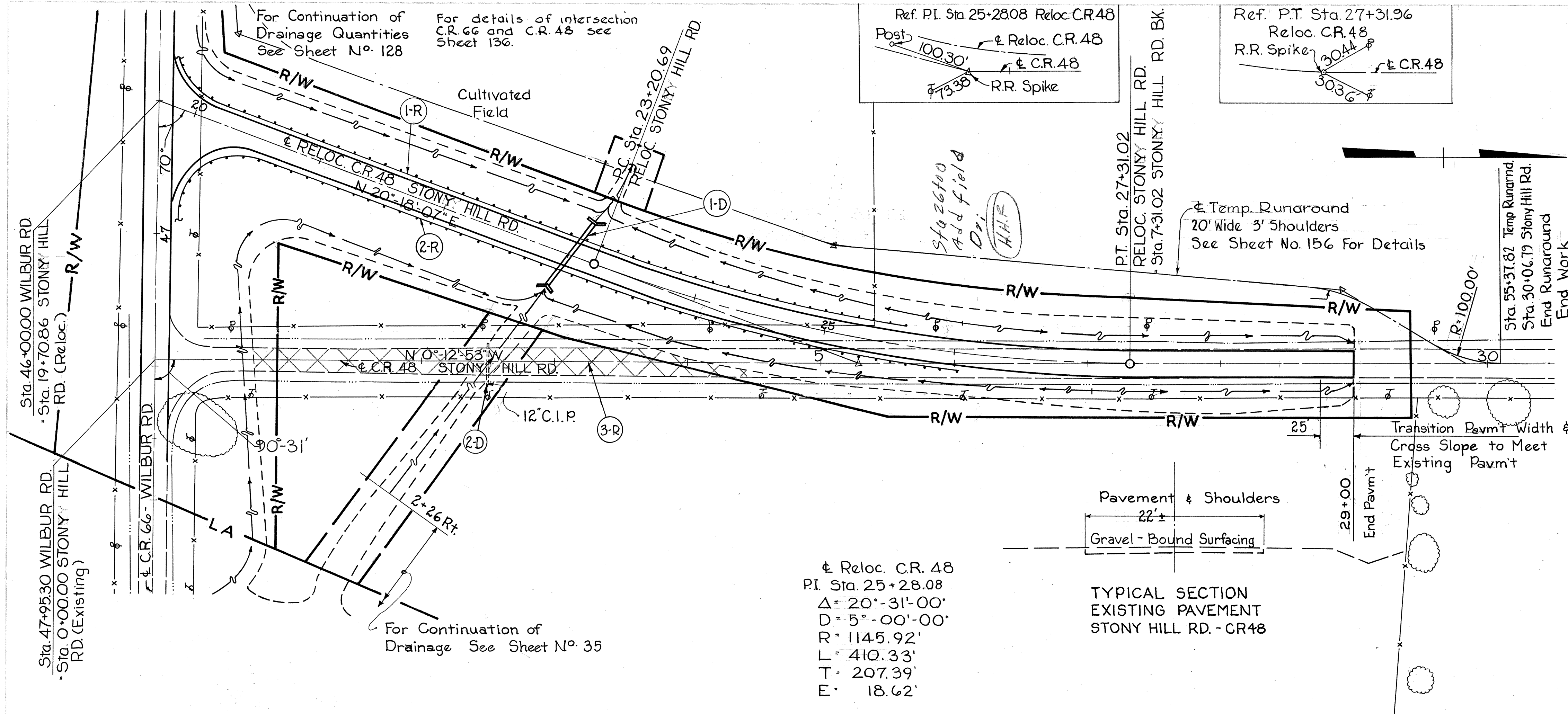


WILBUR RD. C.R. 66 Sta. 47+00 to Sta. 54+05

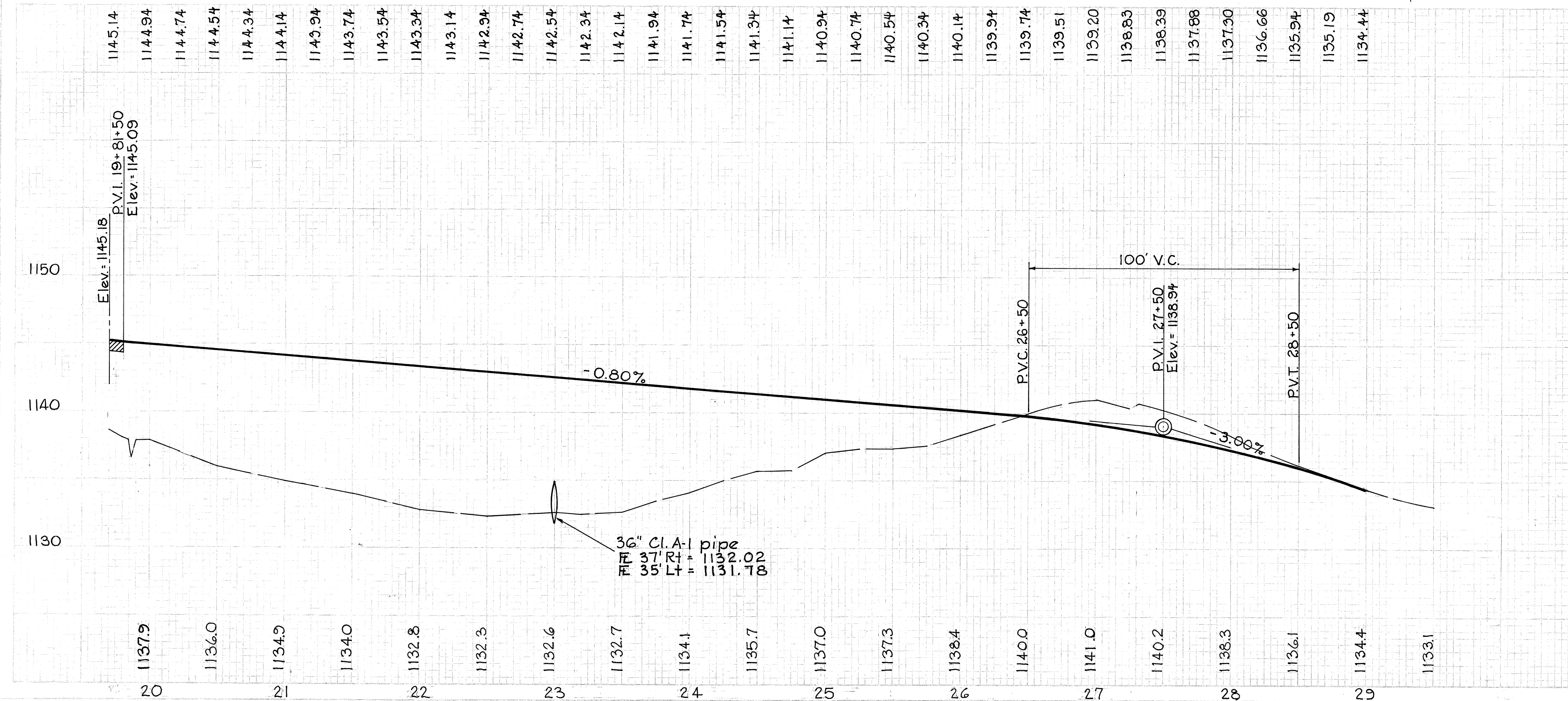
SEEDING END Sta. WIDTH Yds.	END AREA Cu. Yds.	CUT	FILL	CUT	FILL
0	0	60+50	0	0	0
36					9
13		Ahead	10	0	
38		Back	10	3	
372			41	41	
29			12	19	
192			19	101	
40			8	90	
258			40	238	
53			35	169	
639			78	1159	
62			7	457	
811			30	2363	
84			9	819	
1094			35	3574	
113			10	1219	
1203			28	4650	



WILBUR RD. C.R. 66 Sta. 55+00 to Sta. 60+00



Reloc. C.R. 48
PI Sta. 25+28.08
 $\Delta = 20^\circ - 31' - 00''$
 $D = 5^\circ - 00' - 00''$
 $R = 1145.92'$
 $L = 410.33'$
 $T = 207.39'$
 $E = 18.62'$

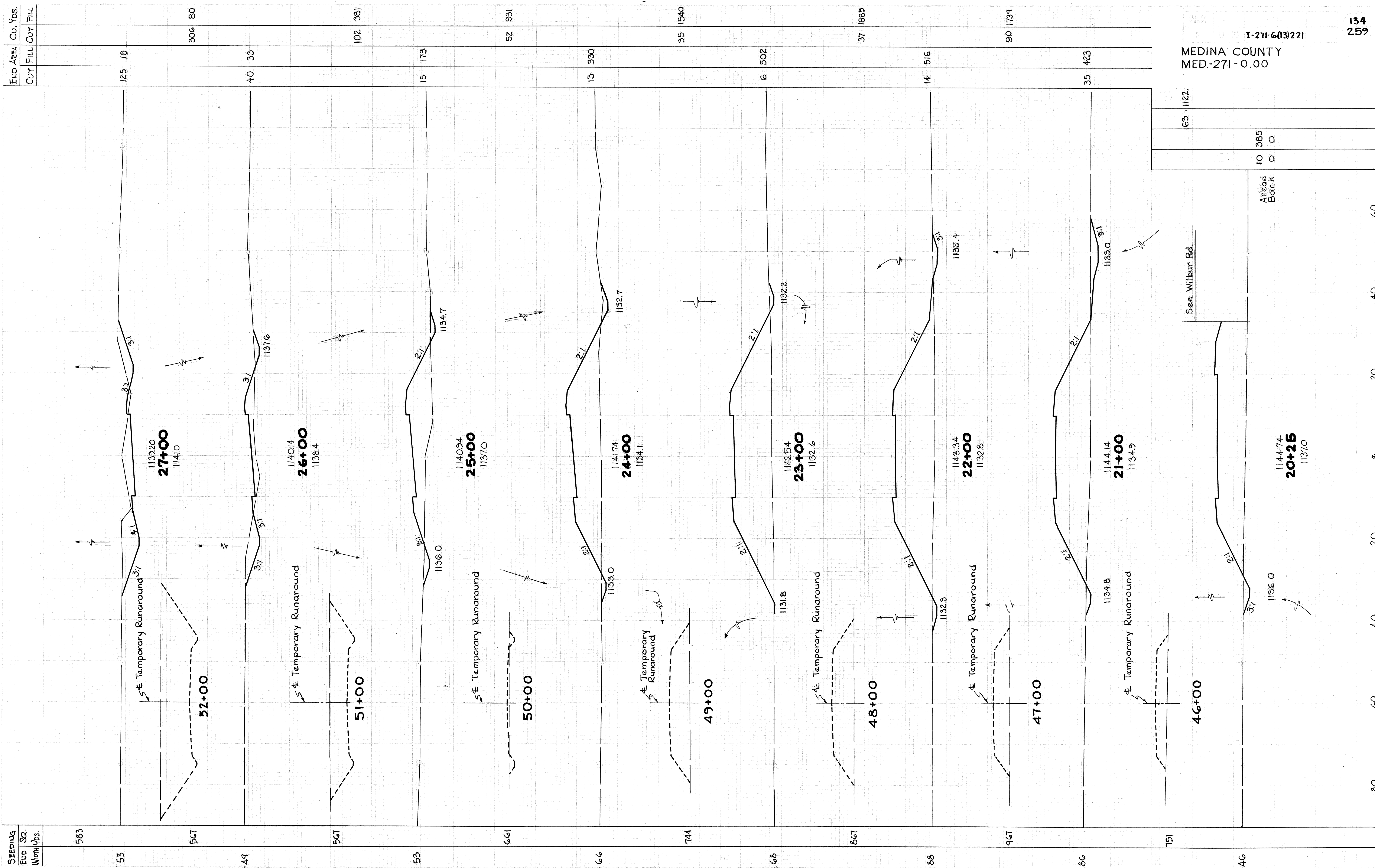


ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	I-1	I-2	I-10	E-3	I-15	E-12	E-8
			Class A-1 M-66(a)	Masonry Headwall E	Sodding	Channel Excavation	Guard Rail	Pipe Removal 15" & Under	Removal and Disposal of Exist. Pavmt.
			36" Lin. Ft.	Cu. Yd.	Sq. Yd.	Cu. Yd.	Lin. Ft.	Lin. Ft.	Sq. Yds.
1-D	23+00	Lt. & Rt.	72	1.2	8	140		34	
2-D	23+50	Existing Stony Hill Rd.							
1-R	21+00 to 25+50	Lt.				450			
2-R	21+00 to 26+00	Rt.				500			
3-R	20+00 to 24+00	Rt.							700
TOTAL									700

SEEDING
Elev. SQ.
Width Yds.

END AREA
CUT FILL
Cu. Yds.



1-271-6(13)221
134
259

MEDINA COUNTY
MED-271-0.00

RELOC. STONY HILL RD. CR.48 Sta. 20+25 to Sta. 27+00

SEEDING
EOD SQ
WIDTH YDS.

EOD AREA
COT YDS.

COT FILL
COT FILL



EXIST. STONY HILL RD. CR. 48 Sta. 28+00 to Sta. 31+00

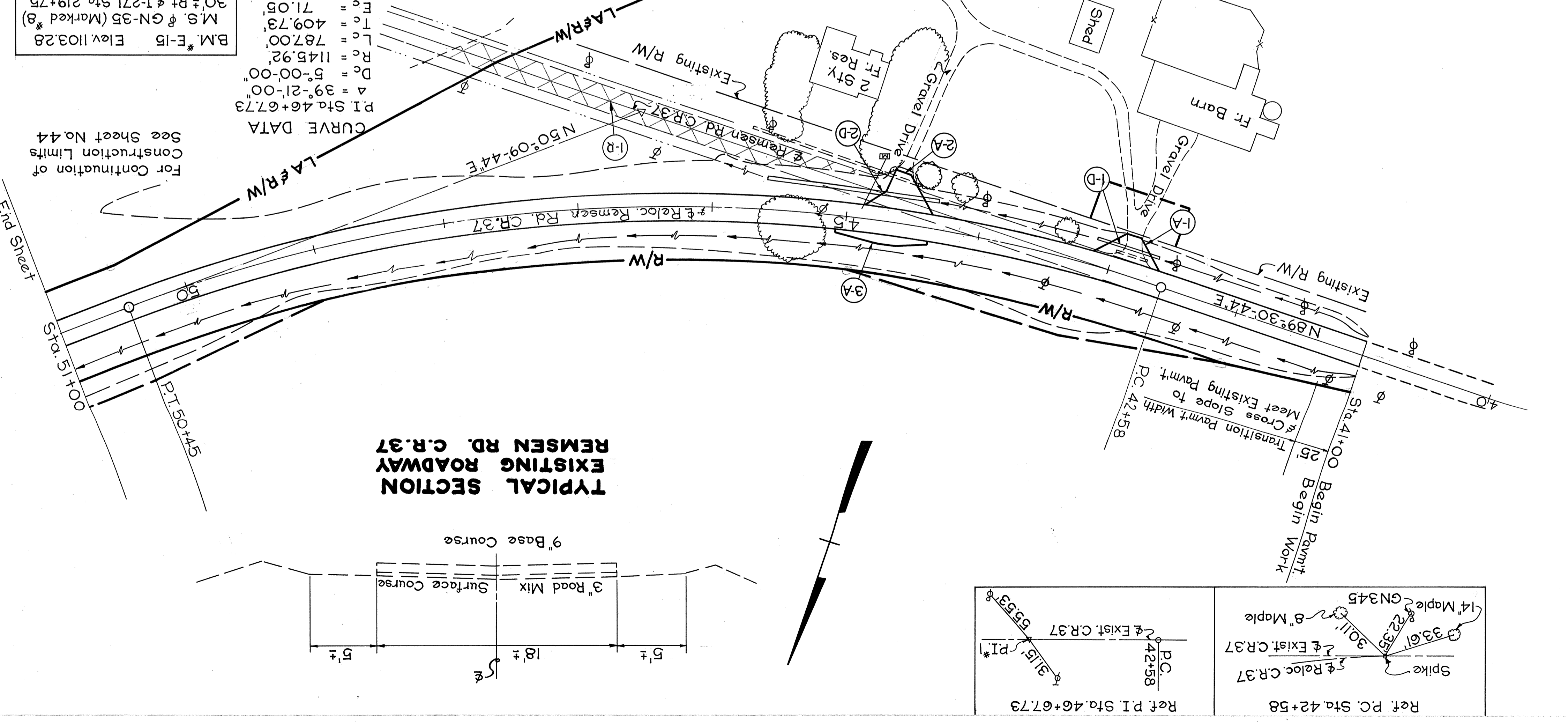
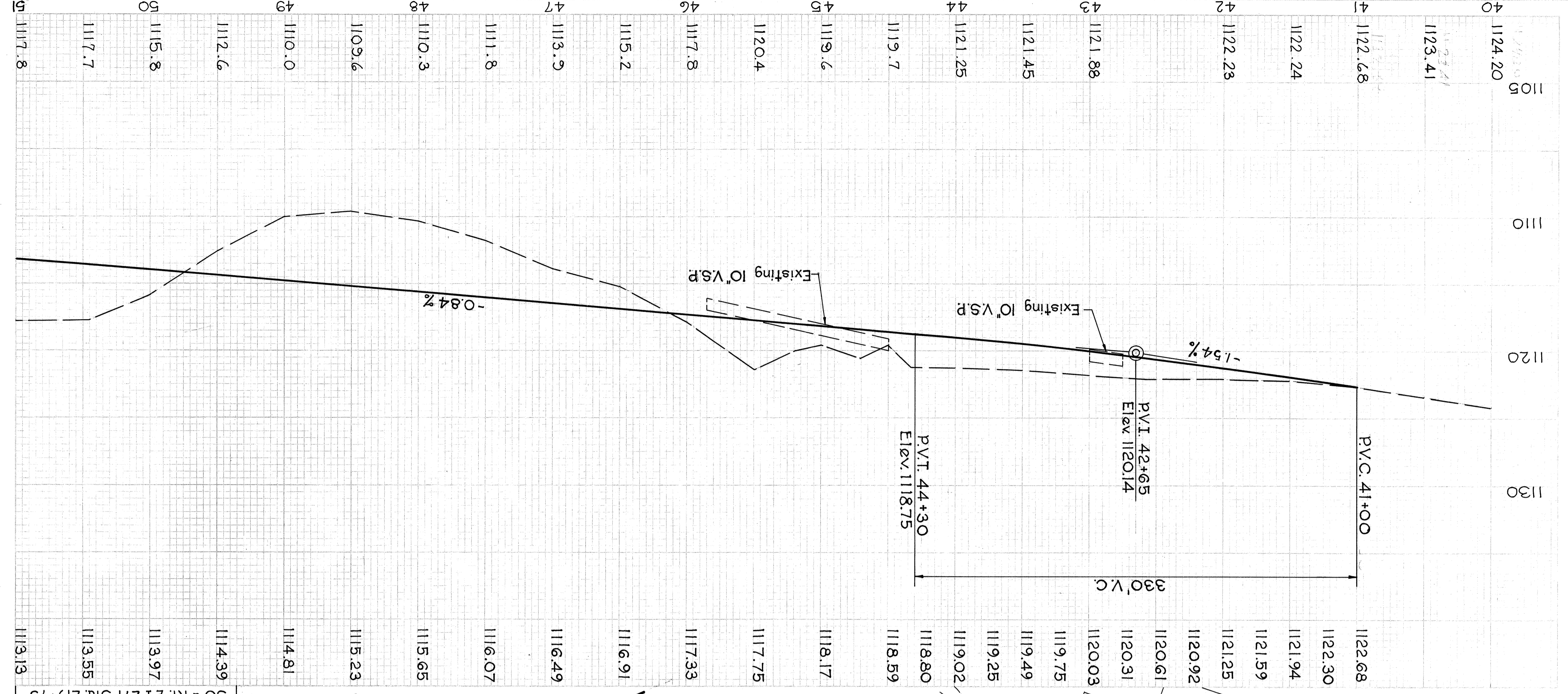
1-271-6(13)221
MEDINA COUNTY
MED-271-0.00

SUPER ELEVATION TABLES

RELOC. STONY HILL		REMSSEN RD. C.R. 37		RELOCATED STONY HILL ROAD	
STATION	LEFT & RIGHT	STATION	LEFT & RIGHT	STATION	LEFT & RIGHT
40+91	1122.61	40+91	1116.41	40+91	1122.82
41+00	1122.47	41+00	1116.68	41+00	1122.68
42+00	1121.04	42+00	1119.24	42+00	1121.04
43+00	1119.40	43+00	1120.65	43+00	1119.40
44+00	1118.02	44+00	1120.90	44+00	1118.02
45+00	1117.34	45+00	1120.00	45+00	1117.34
46+00	1116.50	46+00	1119.00	46+00	1116.50
47+00	1115.55	47+00	1118.00	47+00	1115.55
48+00	1114.42	48+00	1117.00	48+00	1114.42
49+00	1113.19	49+00	1116.00	49+00	1113.19
50+00	1111.86	50+00	1115.00	50+00	1111.86
51+00	1110.43	51+00	1114.00	51+00	1110.43
52+00	1108.90	52+00	1113.00	52+00	1108.90
53+00	1107.27	53+00	1112.00	53+00	1107.27
54+00	1105.54	54+00	1111.00	54+00	1105.54
55+00	1103.71	55+00	1110.00	55+00	1103.71
56+00	1101.78	56+00	1109.00	56+00	1101.78
57+00	1100.00	57+00	1108.00	57+00	1100.00
58+00	1098.27	58+00	1107.00	58+00	1098.27
59+00	1096.50	59+00	1106.00	59+00	1096.50
60+00	1094.69	60+00	1105.00	60+00	1094.69
61+00	1092.84	61+00	1104.00	61+00	1092.84
62+00	1090.95	62+00	1103.00	62+00	1090.95
63+00	1089.02	63+00	1102.00	63+00	1089.02
64+00	1087.05	64+00	1101.00	64+00	1087.05
65+00	1085.04	65+00	1100.00	65+00	1085.04
66+00	1083.00	66+00	1099.00	66+00	1083.00
67+00	1080.93	67+00	1098.00	67+00	1080.93
68+00	1078.83	68+00	1097.00	68+00	1078.83
69+00	1076.70	69+00	1096.00	69+00	1076.70
70+00	1074.54	70+00	1095.00	70+00	1074.54
71+00	1072.35	71+00	1094.00	71+00	1072.35
72+00	1070.13	72+00	1093.00	72+00	1070.13
73+00	1067.88	73+00	1092.00	73+00	1067.88
74+00	1065.60	74+00	1091.00	74+00	1065.60
75+00	1063.29	75+00	1090.00	75+00	1063.29
76+00	1060.95	76+00	1089.00	76+00	1060.95
77+00	1058.58	77+00	1088.00	77+00	1058.58
78+00	1056.18	78+00	1087.00	78+00	1056.18
79+00	1053.75	79+00	1086.00	79+00	1053.75
80+00	1051.29	80+00	1085.00	80+00	1051.29
81+00	1048.80	81+00	1084.00	81+00	1048.80
82+00	1046.28	82+00	1083.00	82+00	1046.28
83+00	1043.73	83+00	1082.00	83+00	1043.73
84+00	1041.15	84+00	1081.00	84+00	1041.15
85+00	1038.54	85+00	1080.00	85+00	1038.54
86+00	1035.91	86+00	1079.00	86+00	1035.91
87+00	1033.25	87+00	1078.00	87+00	1033.25
88+00	1030.56	88+00	1077.00	88+00	1030.56
89+00	1027.84	89+00	1076.00	89+00	1027.84
90+00	1025.09	90+00	1075.00	90+00	1025.09
91+00	1022.31	91+00	1074.00	91+00	1022.31
92+00	1019.50	92+00	1073.00	92+00	1019.50
93+00	1016.67	93+00	1072.00	93+00	1016.67
94+00	1013.82	94+00	1071.00	94+00	1013.82
95+00	1010.95	95+00	1070.00	95+00	1010.95
96+00	1008.06	96+00	1069.00	96+00	1008.06
97+00	1005.14	97+00	1068.00	97+00	1005.14
98+00	1002.20	98+00	1067.00	98+00	1002.20
99+00	999.24	99+00	1066.00	99+00	999.24
100+00	996.26	100+00	1065.00	100+00	996.26
101+00	993.25	101+00	1064.00	101+00	993.25
102+00	990.22	102+00	1063.00	102+00	990.22
103+00	987.17	103+00	1062.00	103+00	987.17
104+00	984.10	104+00	1061.00	104+00	984.10
105+00	981.01	105+00	1060.00	105+00	981.01
106+00	977.90	106+00	1059.00	106+00	977.90
107+00	974.77	107+00	1058.00	107+00	974.77
108+00	971.62	108+00	1057.00	108+00	971.62
109+00	968.45	109+00	1056.00	109+00	968.45
110+00	965.26	110+00	1055.00	110+00	965.26
111+00	962.05	111+00	1054.00	111+00	962.05
112+00	958.82	112+00	1053.00	112+00	958.82
113+00	955.57	113+00	1052.00	113+00	955.57
114+00	952.30	114+00	1051.00	114+00	952.30
115+00	949.01	115+00	1050.00	115+00	949.01
116+00	945.70	116+00	1049.00	116+00	945.70
117+00	942.37	117+00	1048.00	117+00	942.37
118+00	939.02	118+00	1047.00	118+00	939.02
119+00	935.65	119+00	1046.00	119+00	935.65
120+00	932.26	120+00	1045.00	120+00	932.26
121+00	928.85	121+00	1044.00	121+00	928.85
122+00	925.42	122+00	1043.00	122+00	925.42
123+00	921.97	123+00	1042.00	123+00	921.97
124+00	918.50	124+00	1041.00	124+00	918.50
125+00	915.01	125+00	1040.00	125+00	915.01
126+00	911.50	126+00	1039.00	126+00	911.50
127+00	907.97	127+00	1038.00	127+00	907.97
128+00	904.42	128+00	1037.00	128+00	904.42
129+00	900.85	129+00	1036.00	129+00	900.85
130+00	897.26	130+00	1035.00	130+00	897.26
131+00	893.65	131+00	1034.00	131+00	893.65
132+00	890.02	132+00	1033.00	132+00	890.02
133+00	886.37	133+00	1032.00	133+00	886.37
134+00	882.70	134+00	1031.00	134+00	882.70
135+00	879.01	135+00	1030.00	135+00	879.01
136+00	875.30	136+00	1029.00	136+00	875.30
137+00	871.57	137+00	1028.00	137+00	871.57
138+00	867.82	138+00	1027.00	138+00	867.82
139+00	864.05	139+00	1026.00	139+00	864.05
140+00	860.26	140+00	1025.00	140+00	860.26
141+00	856.45	141+00	1024.00	141+00	856.45
142+00	852.62	142+00	1023.00	142+00	852.62
143+00	848.77	143+00	1022.00	143+00	848.77
144+00	844.90	144+00	1021.00	144+00	844.90
145+00	841.01	145+00	1020.00	145+00	841.01
146+00	837.10	146+00	1019.00	146+00	837.10
147+00	833.17	147+00	1018.00	147+00	833.17
148+00	829.22	148+00	1017.00	148+00	829.22
149+00	825.25	149+00	1016.00	149+00	825.25
150+00	821.26	150+00	1015.00	150+00	821.26
151+00	817.25	151+00	1014.00	151+00	817.25
152+00	813.22	152+00	1013.00	152+00	813.22
153+00	809.17	153+00	1012.00	153+00	809.17
154+00	805.10	154+00	1011.00	154+00	805.10
155+00	801.01	155+00	1010.00	155+00	801.01
156+00	796.90	156+00	1009.00	156+00	796.90
157+00	792.77	157+00	1008.00	157+00	792.77
158+00	788.62	158+00	1007.00	158+00	788.62
159+00	784.45	159+00	1006.00	159+00	784.45
160+00	780.26	160+00	1005.00	160+00	780.26
161+00	776.05	161+00	1004.00	161+00	776.05
162+00	771.82	162+00	1003.00	162+00	771.82
163+00	767.57	163+00	1002.00	163+00	767.57
164+00	763.30	164+00	1001.00	164+00	763.30
165+00	759.01	165+00	1000.00	165+00	759.01
166+00	754.70	166+00	999.00	166+00	754.70
167+00	750.37	167+00	998.00	167+00	750.37
168+00	746.02	168+00	997.00	168+00	746.02
169+00	741.65	169+00	996.00	169+00	741.65
170+00	737.26	170+00	995.00	170+00	737.26
171+00	732.85	171+00	994.00	171+00	732.85
172+00	728.42	172+00	993.00	172+00	728.42
173+00	723.97	173+00	992.00	173+00	723.97
174+00	719.50	174+00	991.00	174+00	719.50
175+00	715.01	175+00	990.00	175+00	715.01
176+00	710.50	176+00	989.00	176+00	710.50
177+00	706.00	177+00	988.00	177+00	706.00
178+00	701.49	178+00	987.00	178+00	701.49
179+00	696.96	179+00	986.00	179+00	696.96
180+00	692.41	180+00	985.00	180+00	692.41
181+00	687.84	181+00	984.00	181+00	687.84
182+00	683.25	182+00	983.00	182+00	683.25
183+00	678.64	183+00	982.00	183+00	678.64
184+00	674.01	184+00	981.00	184+00	674.01
185+00	669.36	185+00	980.00	185+00	669.36
186+00	664.69	186+00	979.00	186+00	664.69
187+00	660.00	187+00	978.00	187+00	660.00
188+00	655.29	188+00	977.00	188+00	655.29
189+00	650.56	189+00	976.00	189+00	650.56
190+00	645.81	190+00	975.00	190+00	645.81
191+00	641.04	191+00			

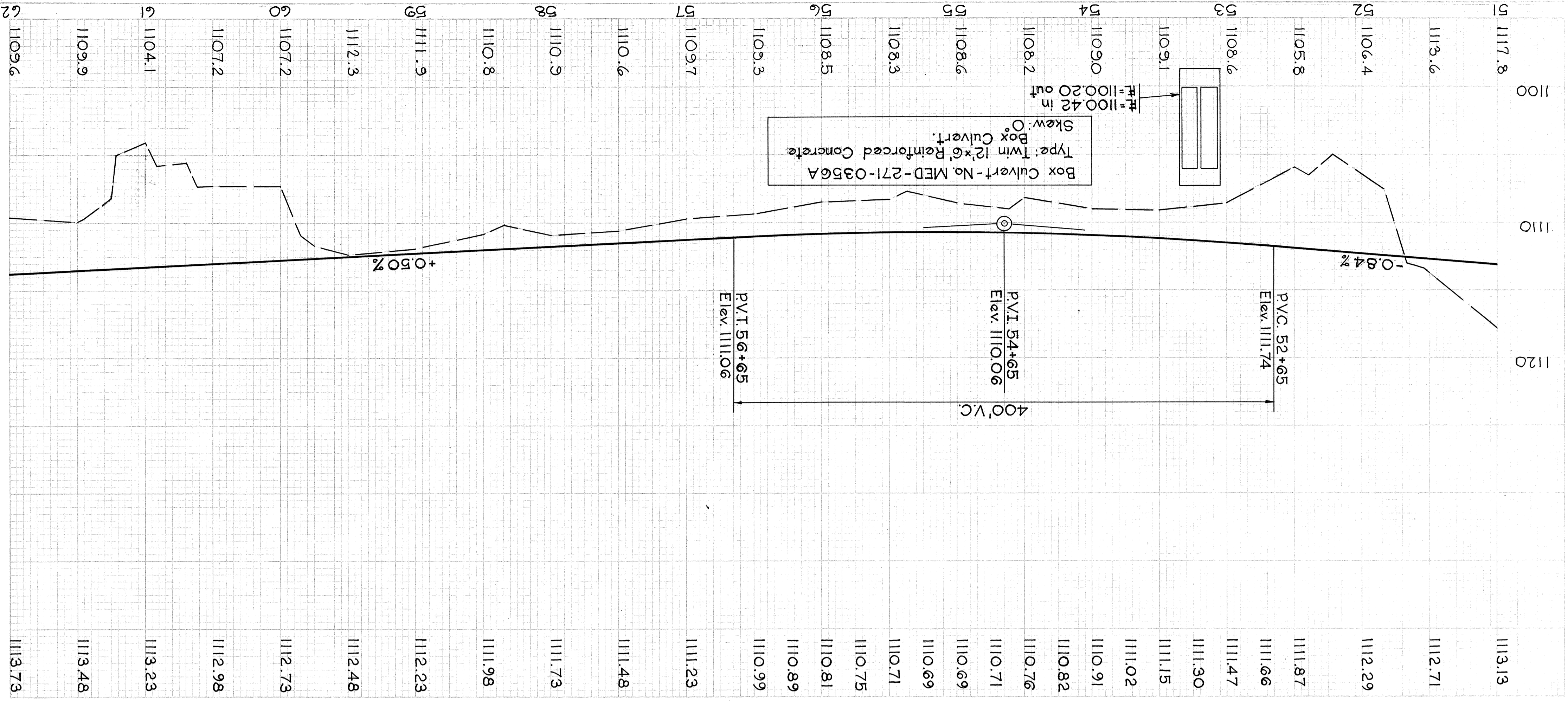
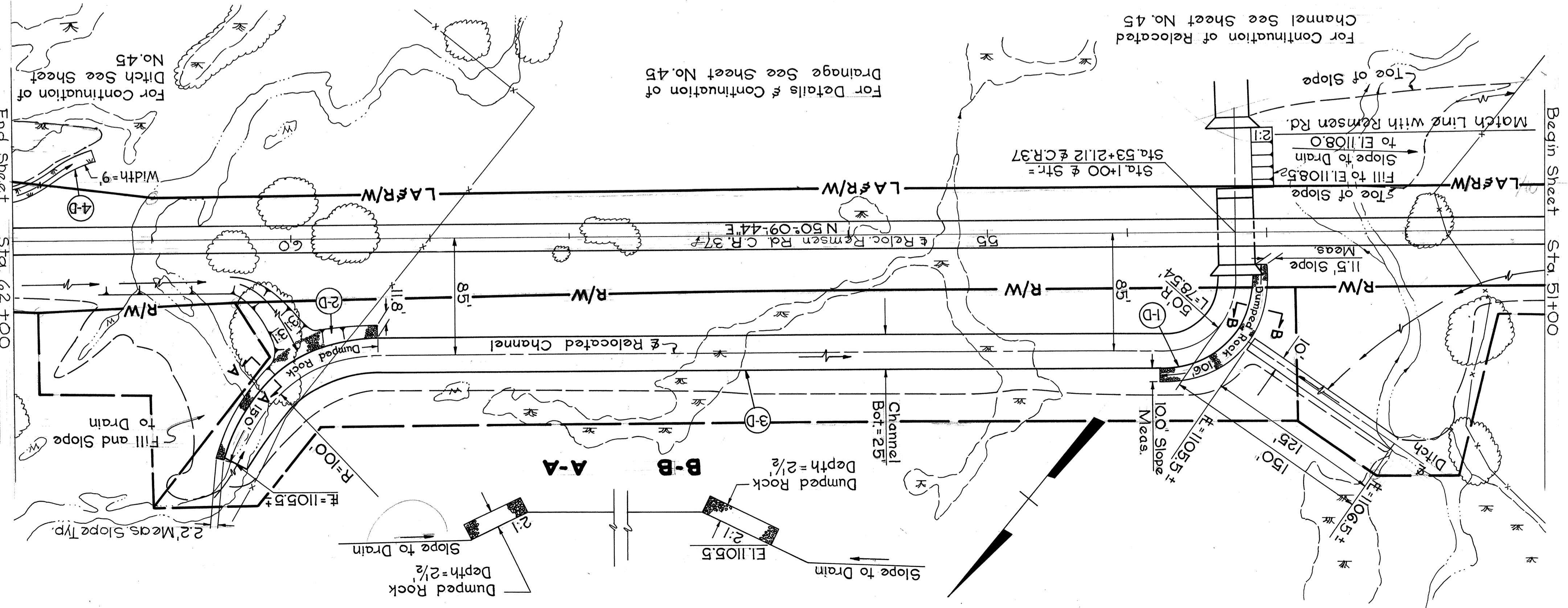
REF. NO.	STATION TO STATION	SIDE	I-1	B-19	T-35	E-8
			Class	Aggregate Base	Type of Concrete	Removal and Disposal of Exst. Pavt
			Lin. Ft.	Cu. Yd.	Cu. Yd.	Sq. Yds.
I-D	42+90 to 44+71	Rt.	48			
2-D		Rt.	130			
I-A	42+90 to 44+71	Rt.		9.9	4.0	
2-A		Rt.		12.6	5.0	
3-A		Lt.		3.9	1.5	
I-R	45+00 to 48+00	Rt.				600
TOTALS			178	26.4	10.5	600

ESTIMATED QUANTITIES



Ref. P.C. Sta. 42+58
 5' Reloc. CR.37
 2' Exst. CR.37
 14' Maple GN345
 8' Maple
 30' P.I.*

Ref. P.I. Sta. 46+67.73
 2' Exst. CR.37
 31.5' P.I.*

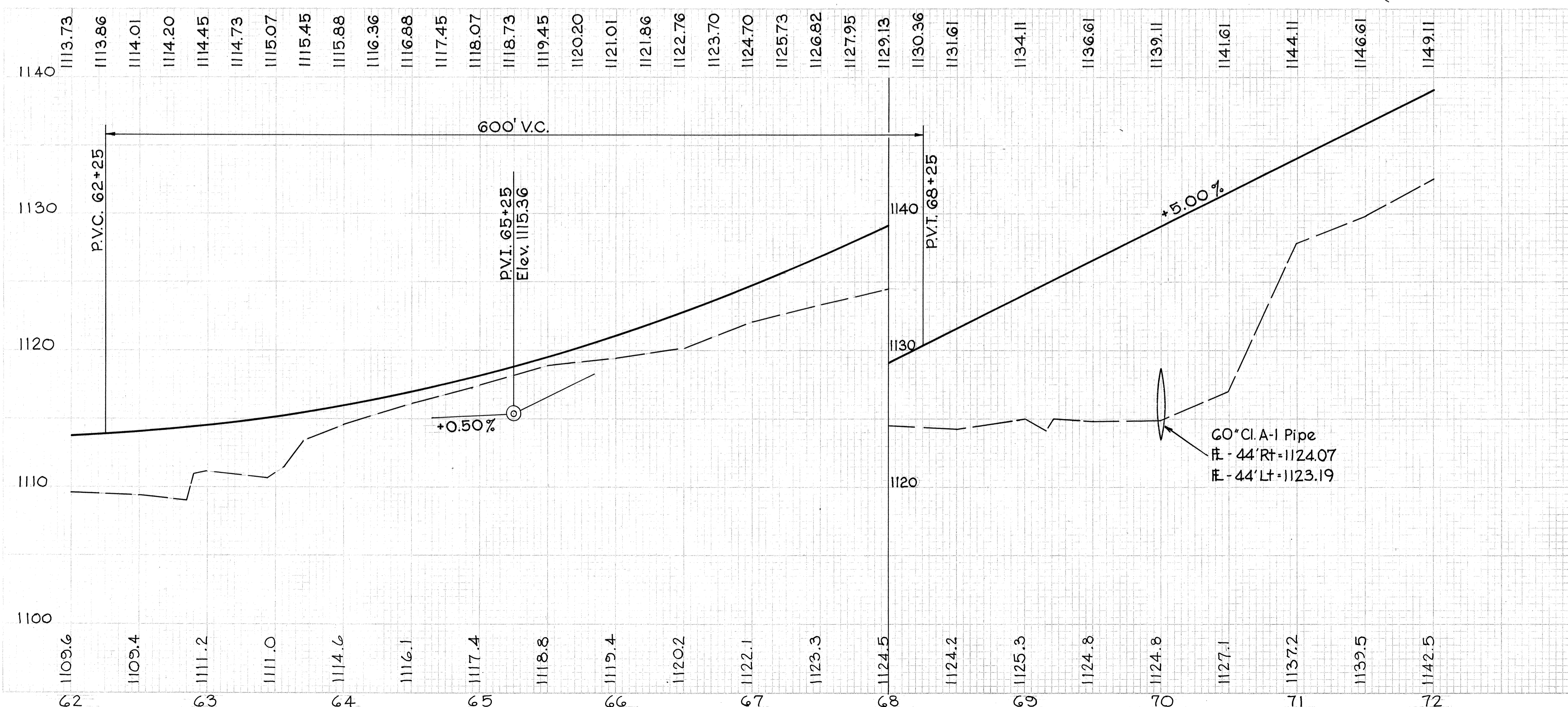
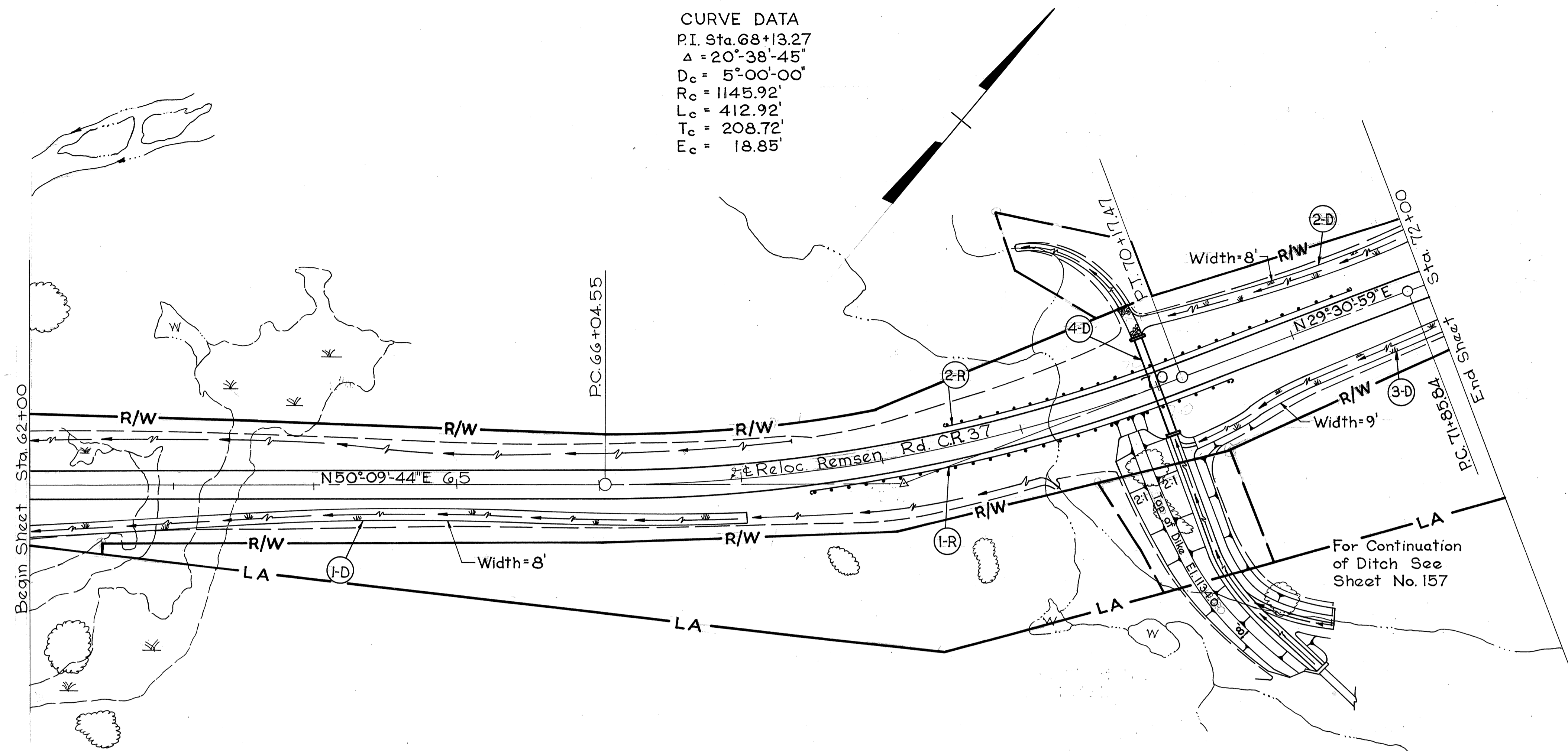


ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	I-10 Dumped Rock Channel Protection	E-3 Channel Excavation	L-10 Sodding
			Cu. Yd.	Cu. Yd.	Sq. Yd.
1-D	53+00 to 53+76	Lt.	105		
2-D	49+35 to 60+50	Lt.	97		
3-D	53+21 to 60+40	Lt.		8,216	
4-D	61+40 to 62+00	Rt.			63

TOTALS	202	8,216	63
--------	-----	-------	----

CURVE DATA
 P.I. Sta. 68+13.27
 $\Delta = 20^{\circ}-38'-45''$
 $D_c = 5^{\circ}-00'-00''$
 $R_c = 1145.92'$
 $L_c = 412.92'$
 $T_c = 208.72'$
 $E_c = 18.85'$

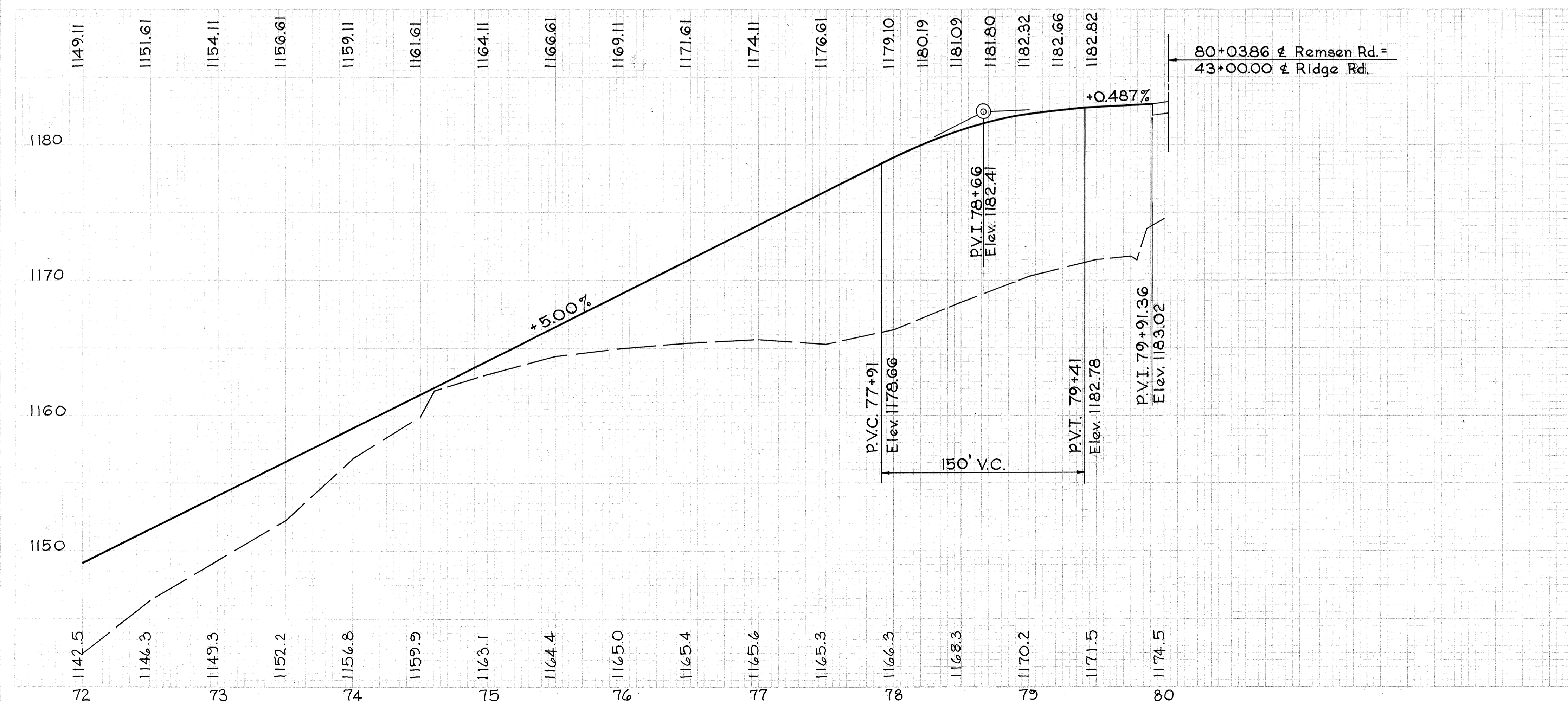
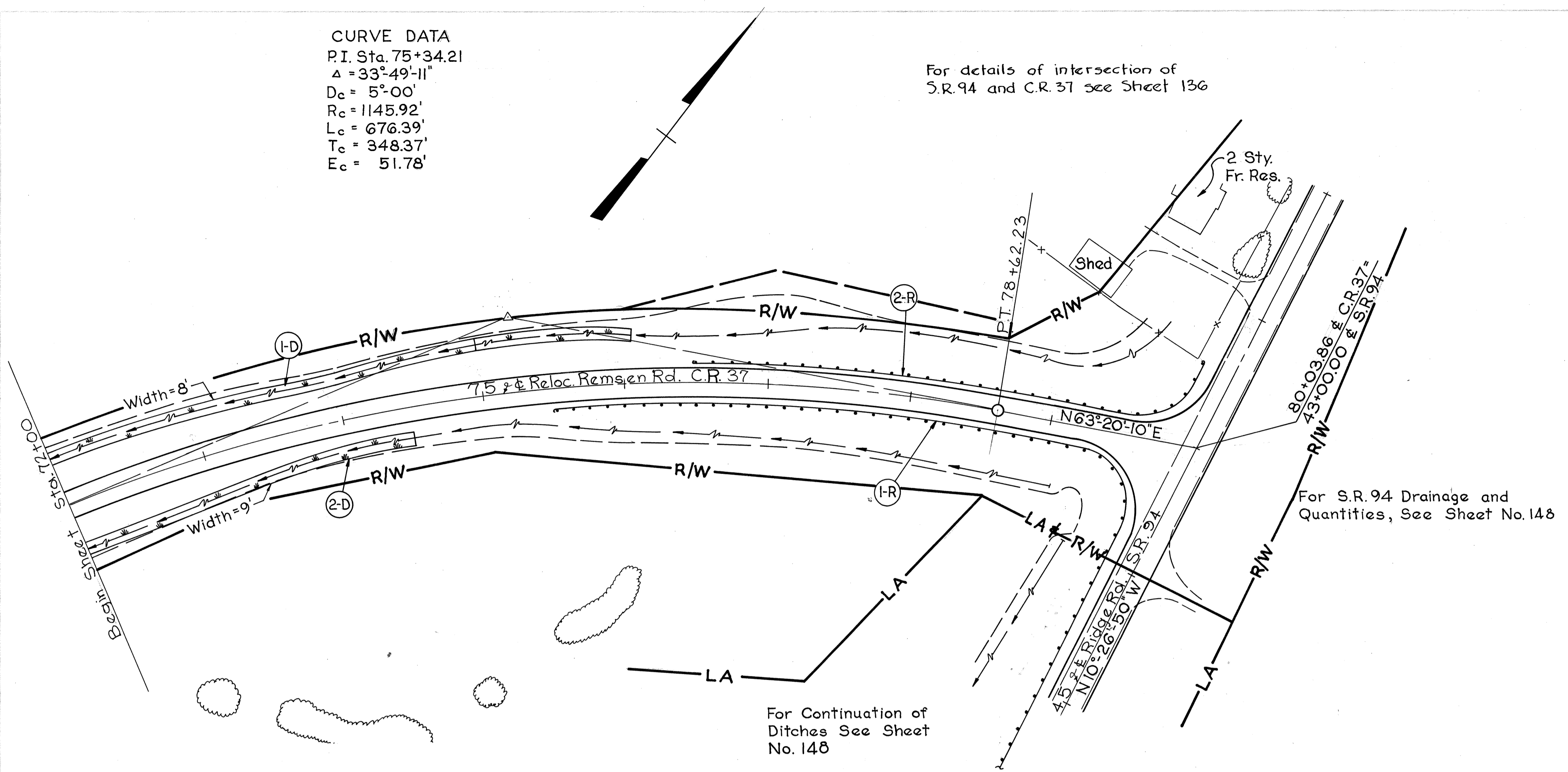


ESTIMATED QUANTITIES

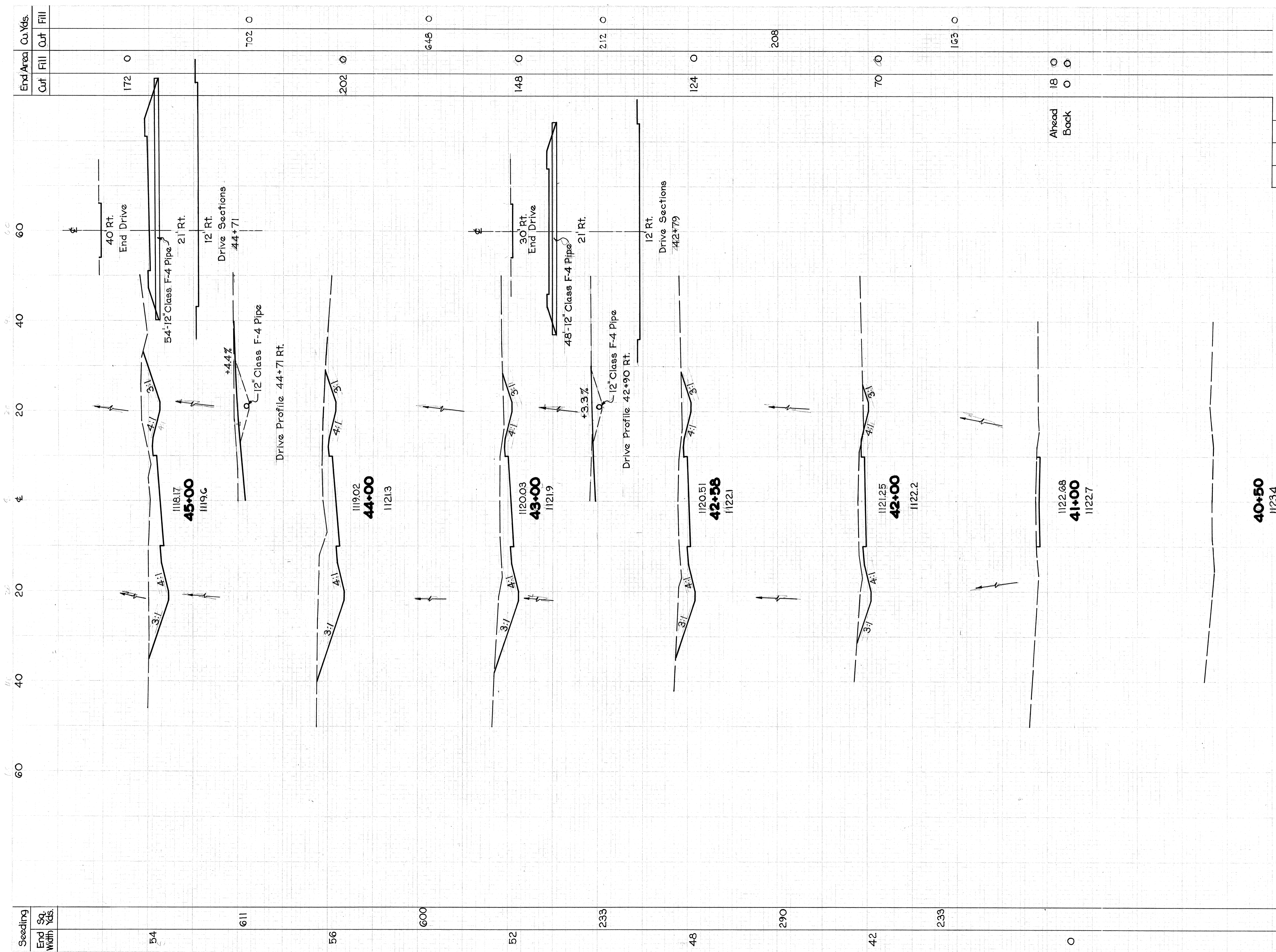
REF. NO.	STATION TO STATION	SIDE	I-1 Class A-1 M 6.6(b) 60° Lin. Ft.	I-2 Masonry SP-53 Headwall Cu. Yd.	I-10 Dumped Rock Channel Protection Cu. Yd.	I-10 & Reinf. Conc. Riprap Sq. Yd.	I-15 Guard Rail Lin. Ft.	L-10 Sodding Sq. Yd.	E-3 Channel Excavation Cu. Yd.	
1-D	62+00 to 67+00	Rt.						445		
2-D	70+10 to 72+00	Lt.						169		
3-D	70+10 to 72+00	Rt.	88	5.2	21	322		190		
4-D	70+00	---						79	476	
1-R	67+50 to 70+50	Rt.					300			
2-R	68+50 to 71+50	Lt.					300			
TOTALS									883	476

CURVE DATA
 P.I. Sta. 75+34.21
 $\Delta = 33^{\circ}49'11''$
 $D_c = 5^{\circ}00'$
 $R_c = 1145.92'$
 $L_c = 676.39'$
 $T_c = 348.37'$
 $E_c = 51.78'$

For details of intersection of
S.R.94 and C.R.37 see Sheet 136



SEE SHEET NO.	ESTIMATED QUANTITIES	
	I-15	I-10
	Guard Rail	Sodding
	Lin. Ft.	Sq. Yd.
I-D	72+00 to 75+00 Lt.	266
2-D	72+00 to 74+50 Rt.	250
I-R	75+50 to 44+00 SR94 Rt.	462.5
2-R	76+50 to 42+50 SR94 Lt.	375
	TOTALS	8375
		516

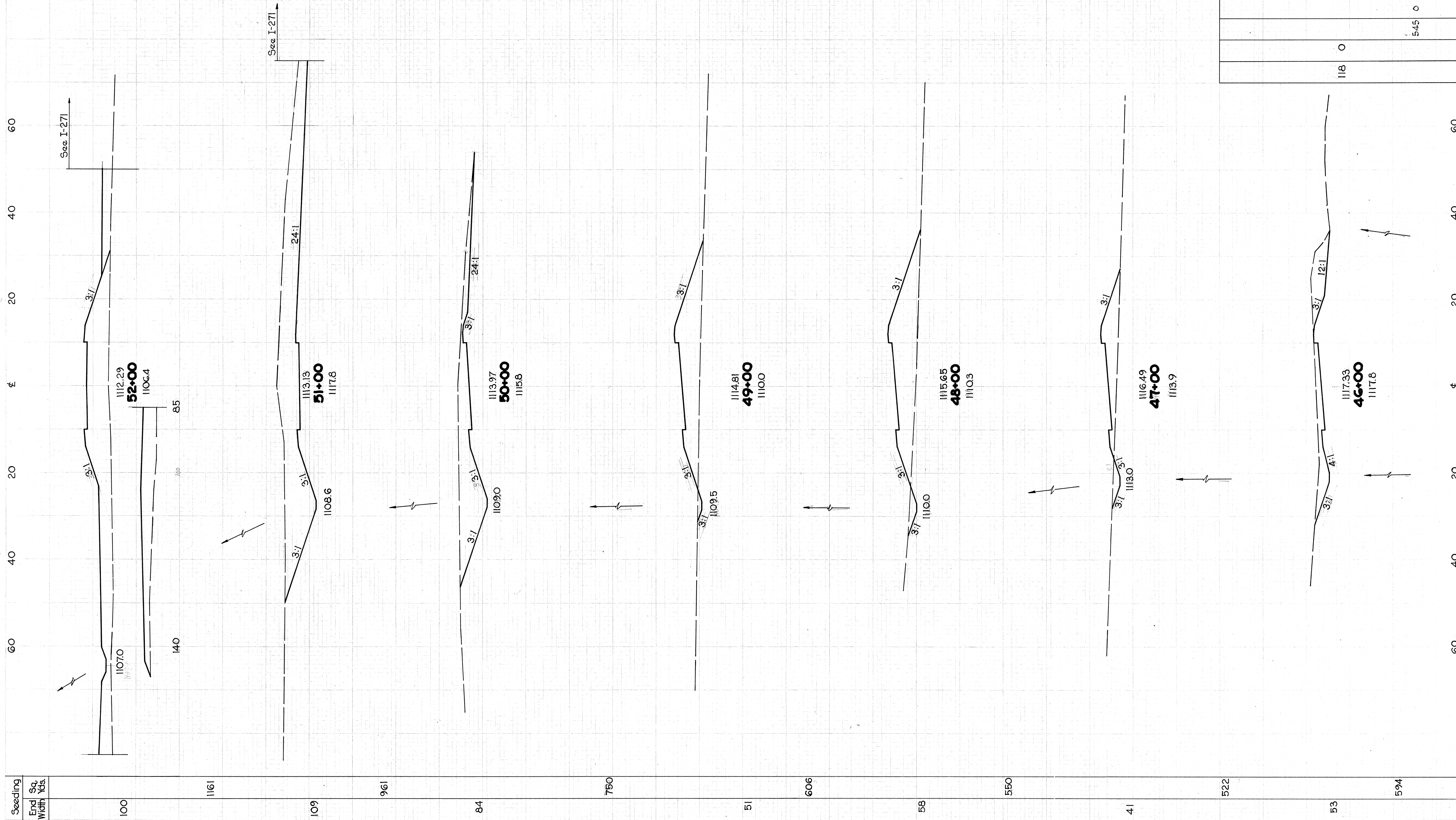


End Area	Cu. Yds.
Cut	172 0
Fill	202 0
	702 0
	645 0
	212 0
	208
	124 0
	70 0
	163 0
Ahead	18 0
Back	0 0

Seeding	End Sq. Width Yds.
54	611
56	600
52	233
48	290
42	233
0	0

End Area	Cu. Yds.
Cut	
Fill	
Cut	0 590
Fill	933 1055
Cut	
Fill	1341 0
Cut	
Fill	218 0
Cut	
Fill	415 359
Cut	
Fill	6 194
Cut	
Fill	26 118
Cut	
Fill	8 226
Cut	
Fill	30 574
Cut	
Fill	8 84
Cut	
Fill	253 156

2 0110 I-271-6(13)221
 MEDINA COUNTY
 MED-271-0.00
 142
 259



118 0	545 0
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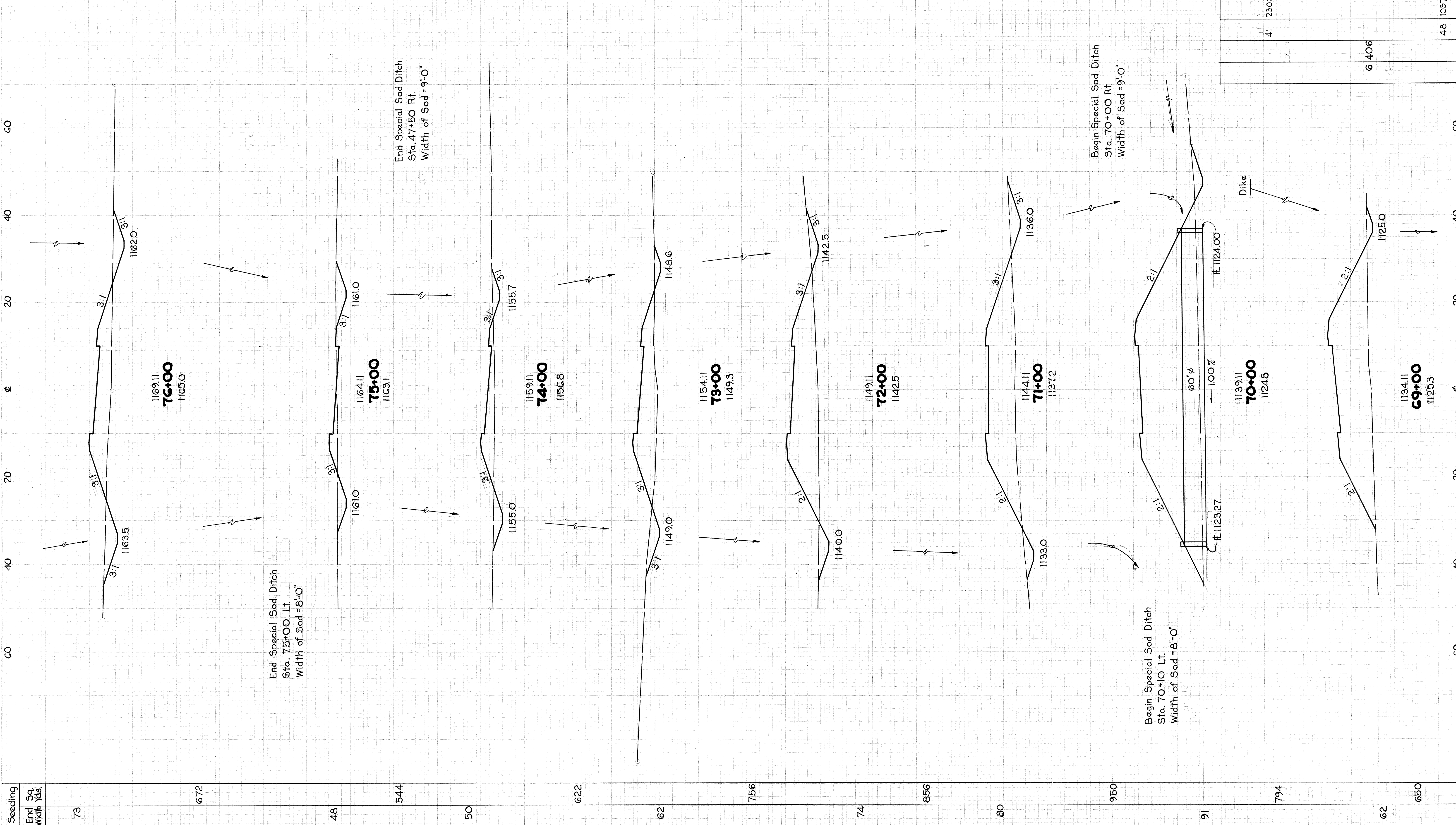
Seeding	End Sq. Width Yds.
100	
1161	
109	
961	
84	
750	
51	
606	
58	
550	
41	
522	
53	
594	

RELOCATED REMSEN RD. C.R.37 Sta. 46+00 to 52+00

End Area	Cu. Yds.
Cut	Fill
42	135
39	20
28	52
30	158
36	270
36	300
16	836

FED. RD. DIST. NO.	STATE	PROJECT	145
2	OHIO	I-271-6(13)221	259

MEDINA COUNTY
MED-271-0.00



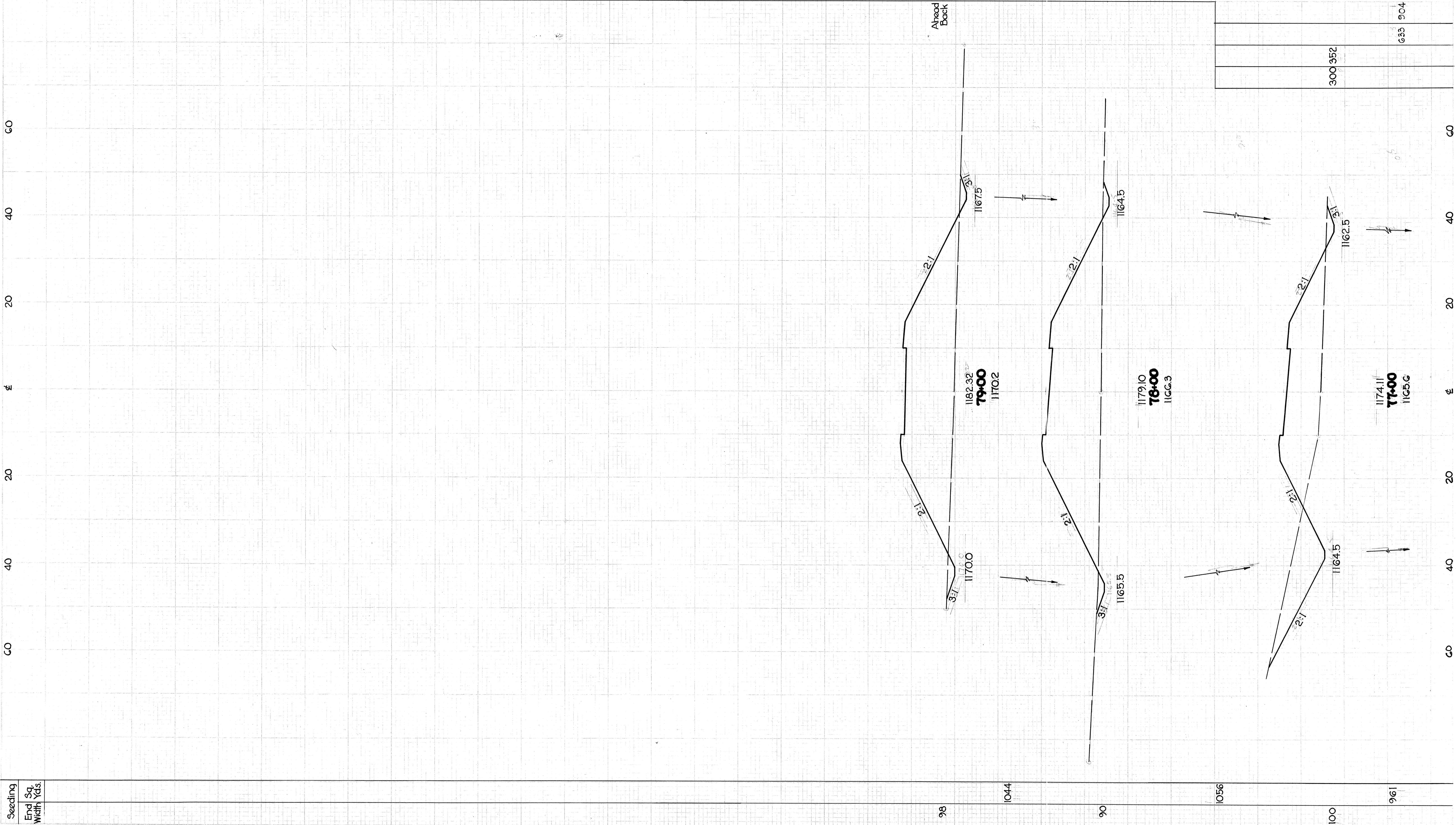
Seeding	End Sq. Width Yds.	Cu. Yds.
73	42	135
672	39	20
48	28	52
544	30	158
50	36	270
622	36	300
62	16	836
756	96	2104
74	41	2300
856	6	406
80	48	1037
950		
91		
794		
62		
650		

RELOCATED REMSEN RD. C.R. 37 Sta. 69+00 to Sta. 76+00

End Area	Cu. Yds.
Cut	Fill

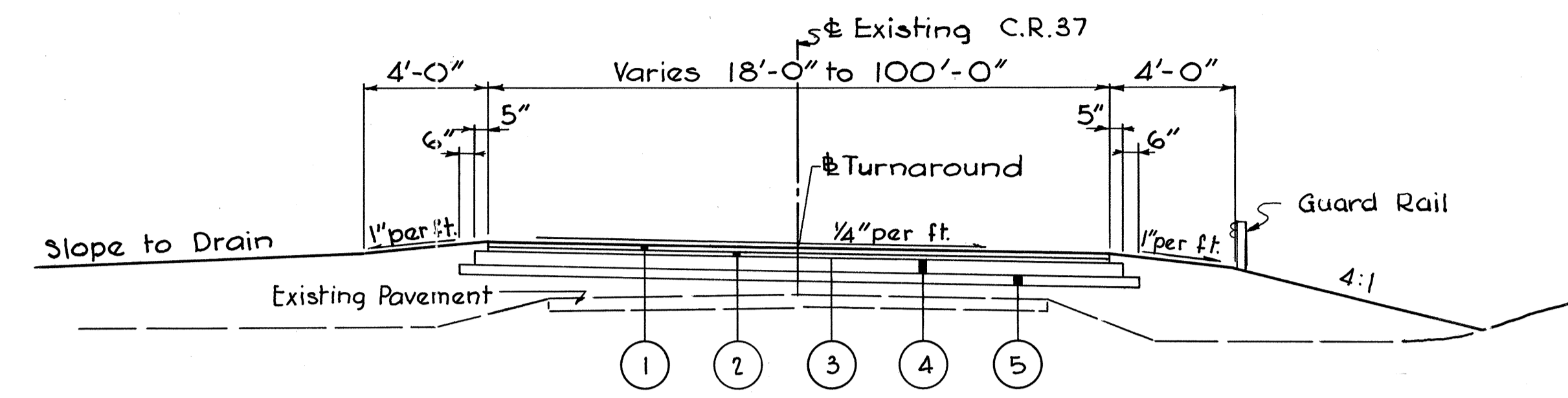
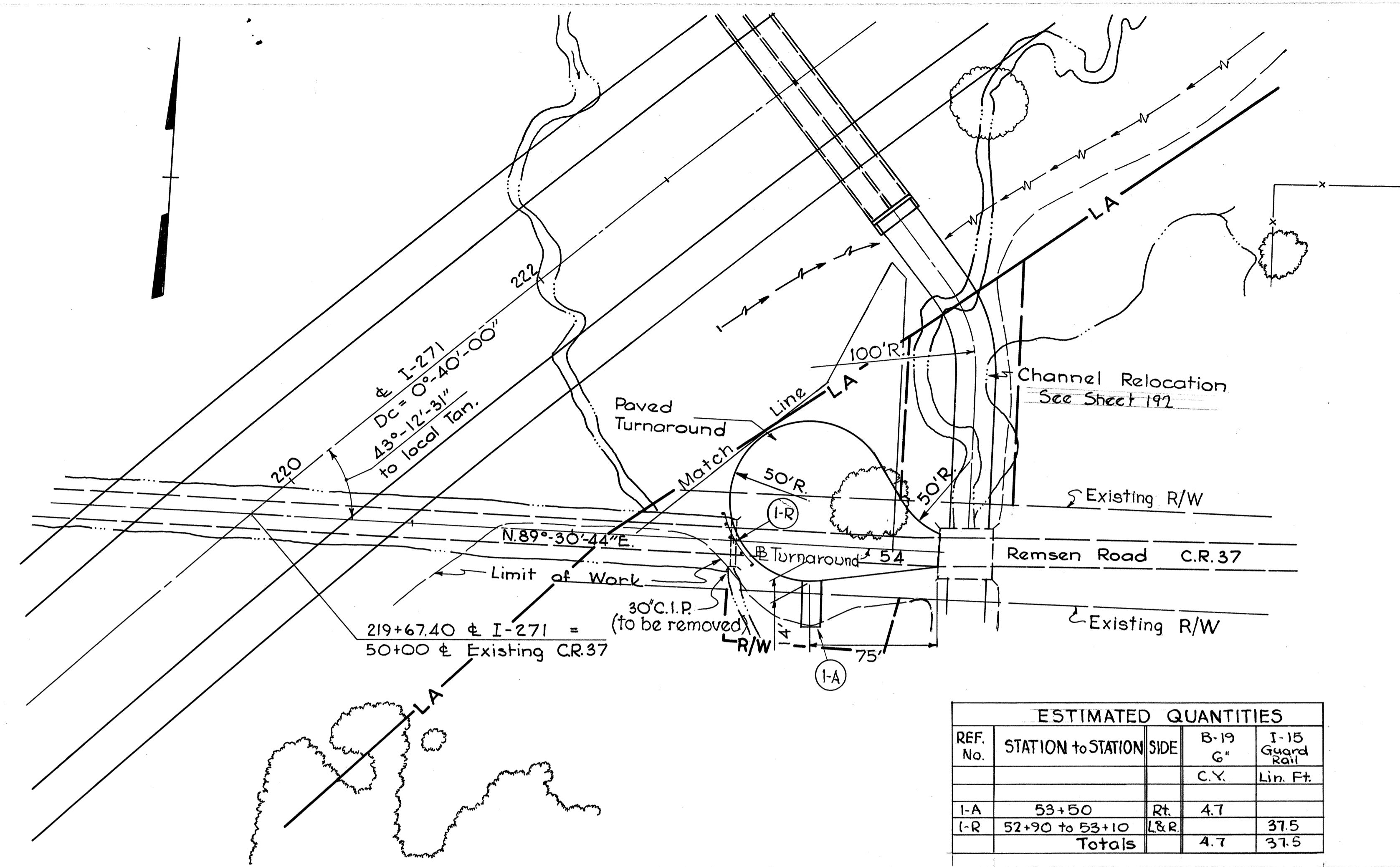
COUNTY: 2 OHIO PROJECT: I-271-6(13)721
 MEDINA COUNTY
 MED-271-0.00

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259



RELOCATED REMSEN RD. C.R.37 Sta. 77+00 to Sta. 80+00

MEDINA COUNTY
MED-271-0.00

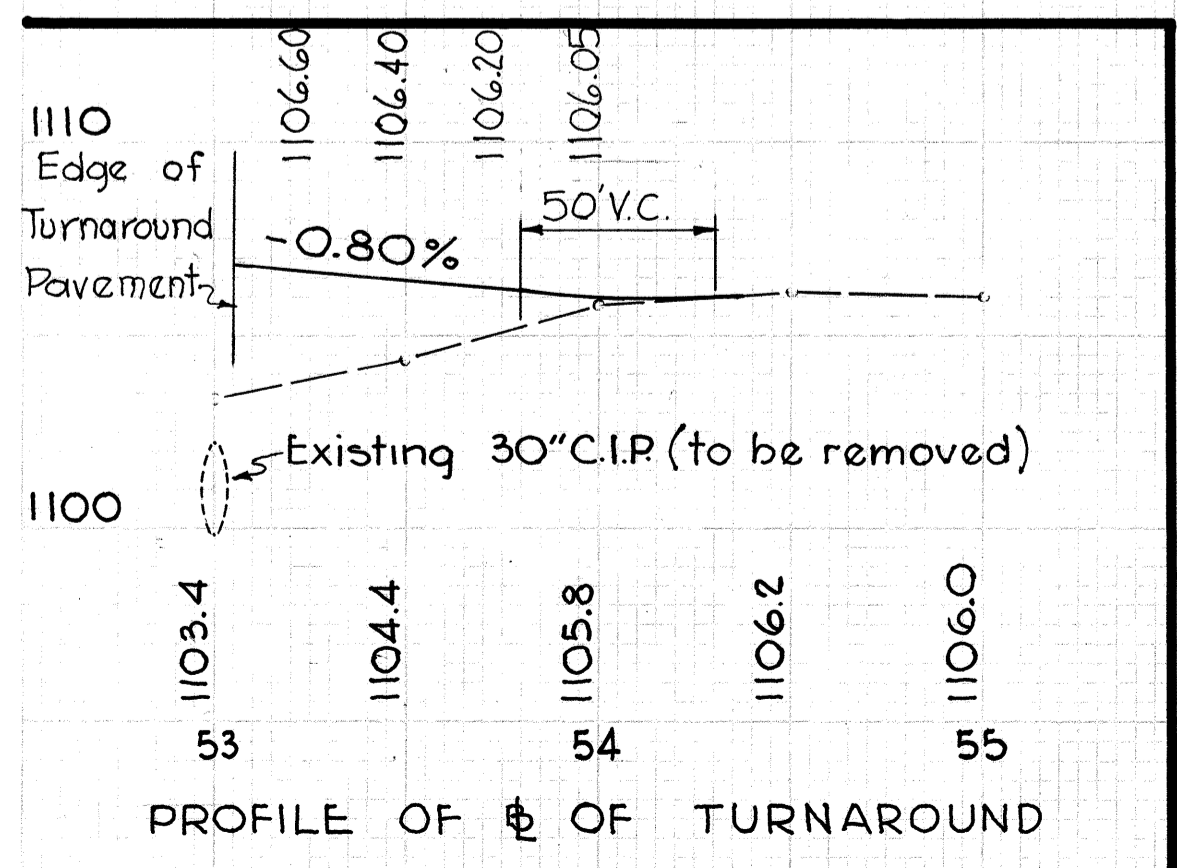
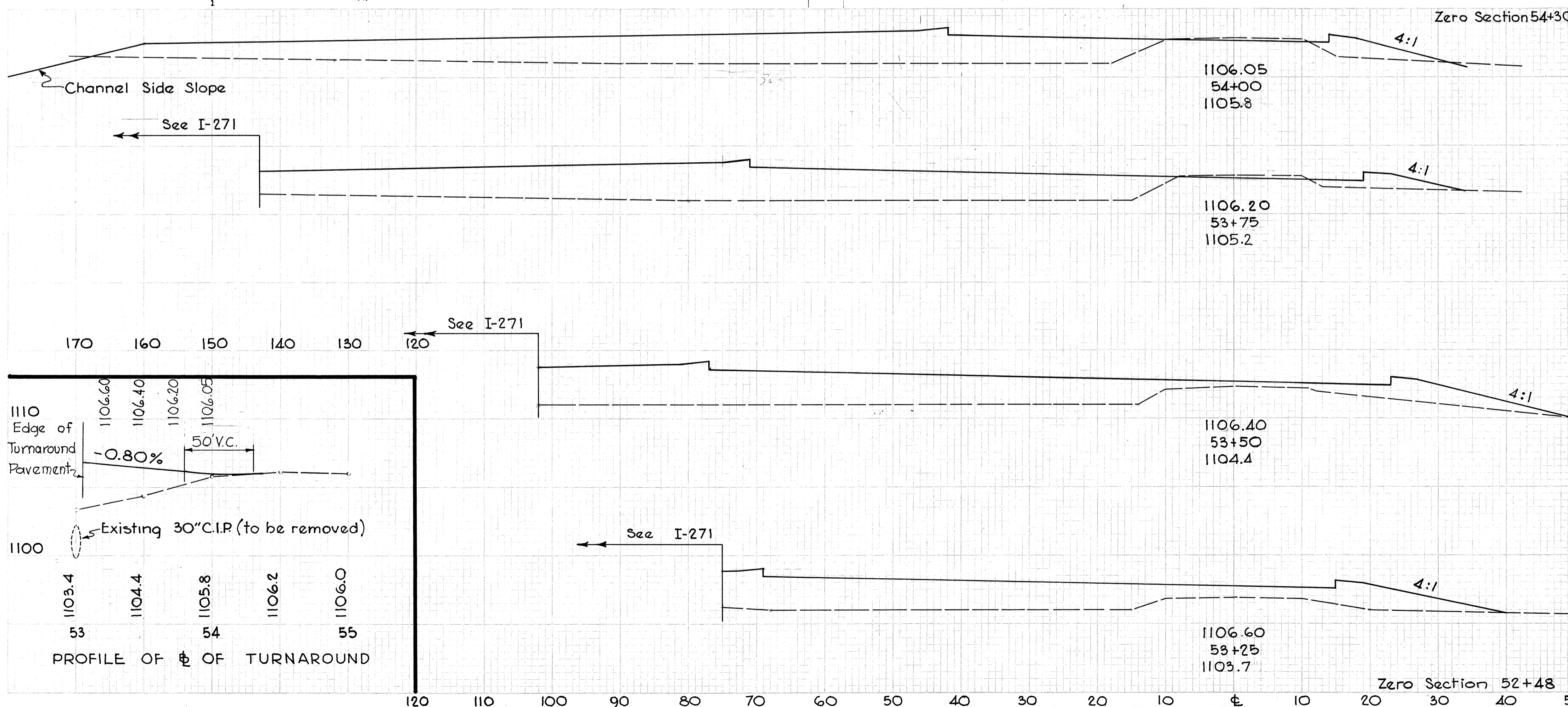


TYPICAL SECTION
TURNAROUND

LEGEND

- ① *Item T-35 - 1" Asphaltic Concrete Surface Course, Type C (85-100)
- ② *Item B-35 - 1" Asphaltic Concrete Leveling Course, (85-100)
- ③ Item T-30 - Bituminous Prime Coat, Sec. M-57, RT-2 or RT-3 applied at the rate of 0.40 gal. per sq. yd.
- ④ Item B-19 - 5" Aggregate Base Course as per plan.
- ⑤ Item I-22 - 4" Subbase, Regular Grading

ESTIMATED QUANTITIES				
REF. No.	STATION to STATION	SIDE	B-19 C.Y.	I-15 Guard Rail Lin. Ft.
I-A	53+50	Rt.	4.7	
I-R	52+90 to 53+10	L&R		37.5
Totals			4.7	37.5

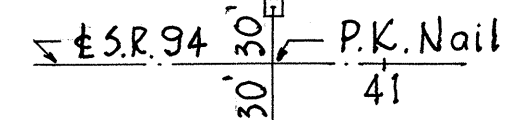


EARTH WORK		SEEDING	
End Area	Cu. Yds.	End Width	Sq. Yds.
Cut	Fill		
0	0	115	
	326	418	
652		134	
	629	309	
0	706	88	
	626	189	
646		49	
	529	111	
496		31	
0	708	133	

* Thickness shown is design thickness as described in Sec. T-35.01 and Sec. B-35.01 respectively.

2818 Cu. Yds. Fill
1100 Sq. Yds. Seeding

Ref. P.O.T. Sta. 40+83.57

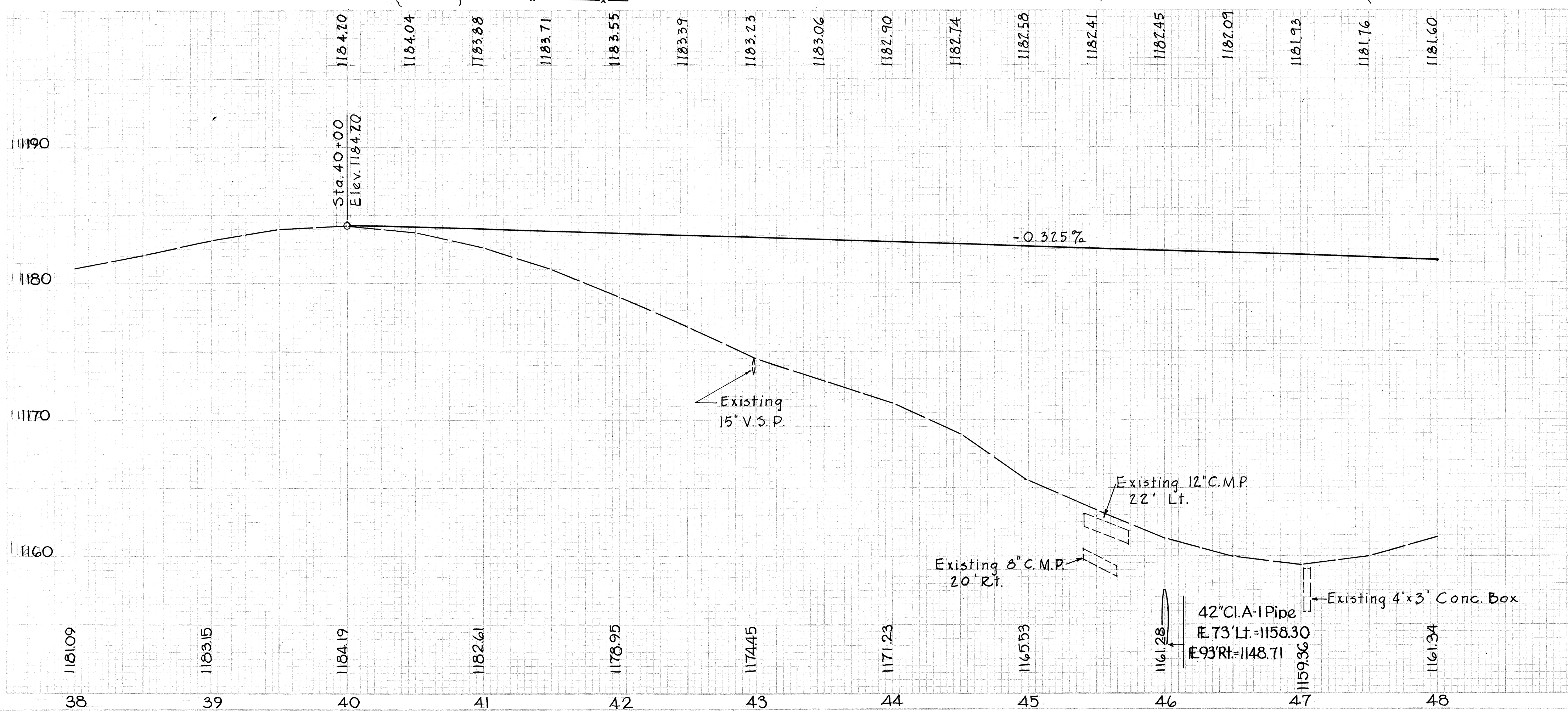
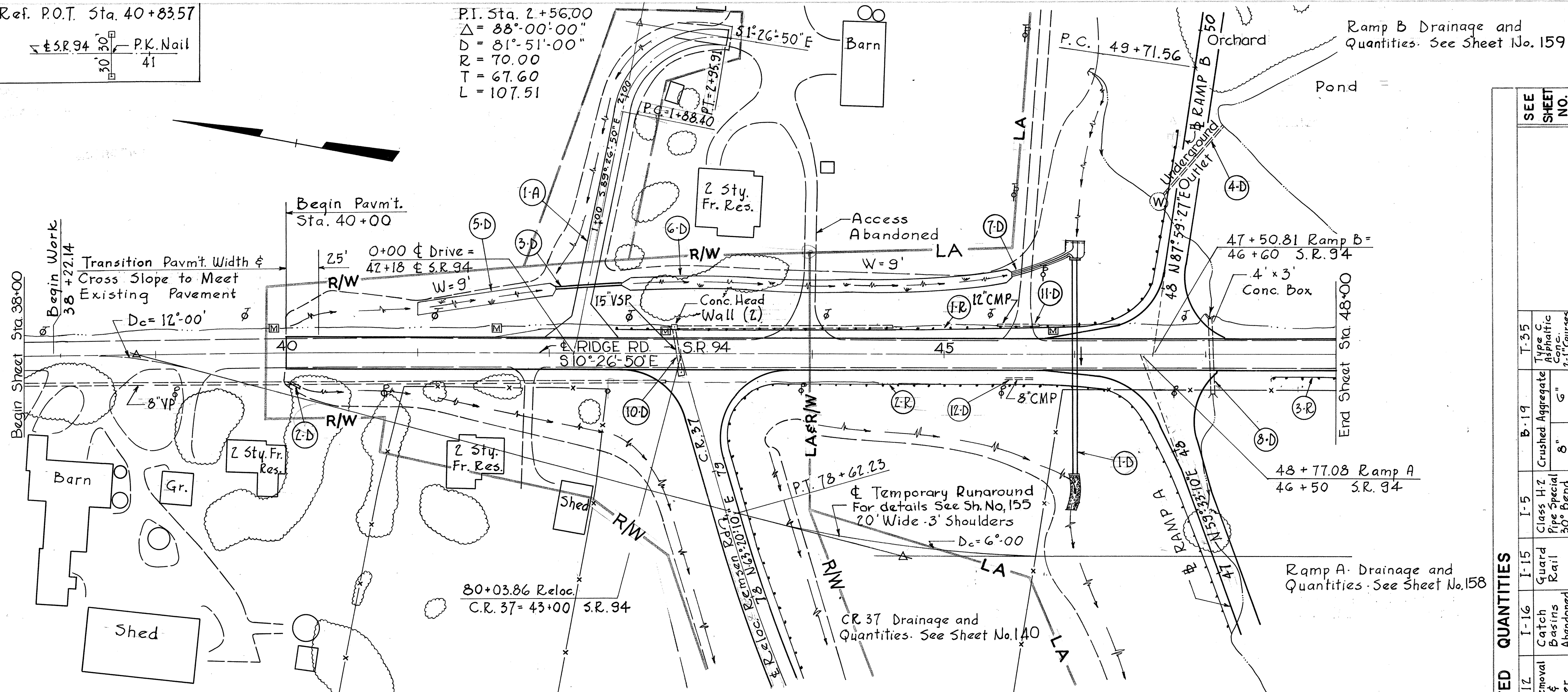


P.I. Sta. 2+56.00
 $\Delta = 88^{\circ}00'00''$
 $D = 81^{\circ}51'00''$
 $R = 70.00$
 $T = 67.60$
 $L = 107.51$

MEDINA COUNTY
 MED-271-0.00

FED. DIST.	STATE	PROJECT
2	OHIO	I-271-6(13)221

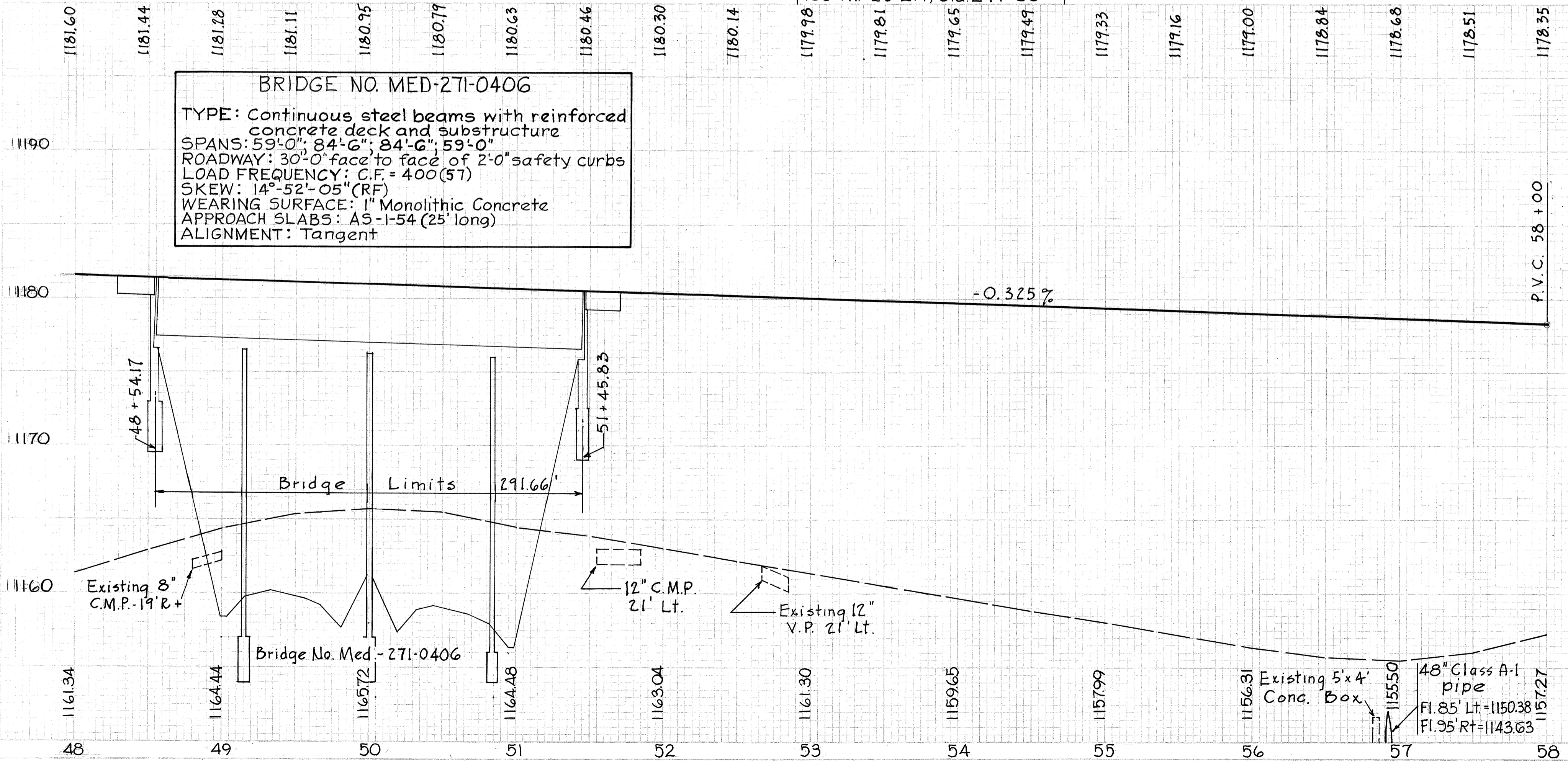
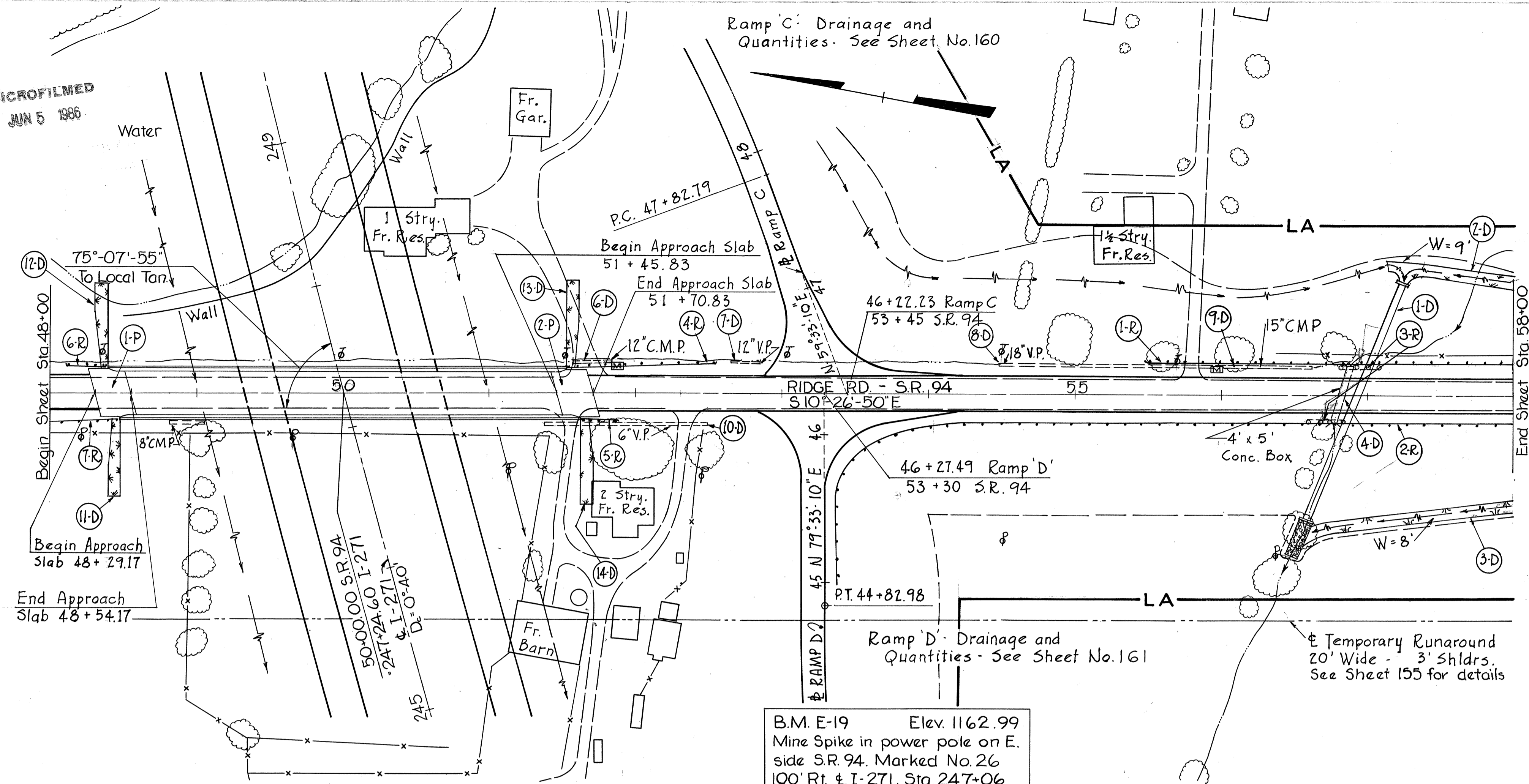
148
259



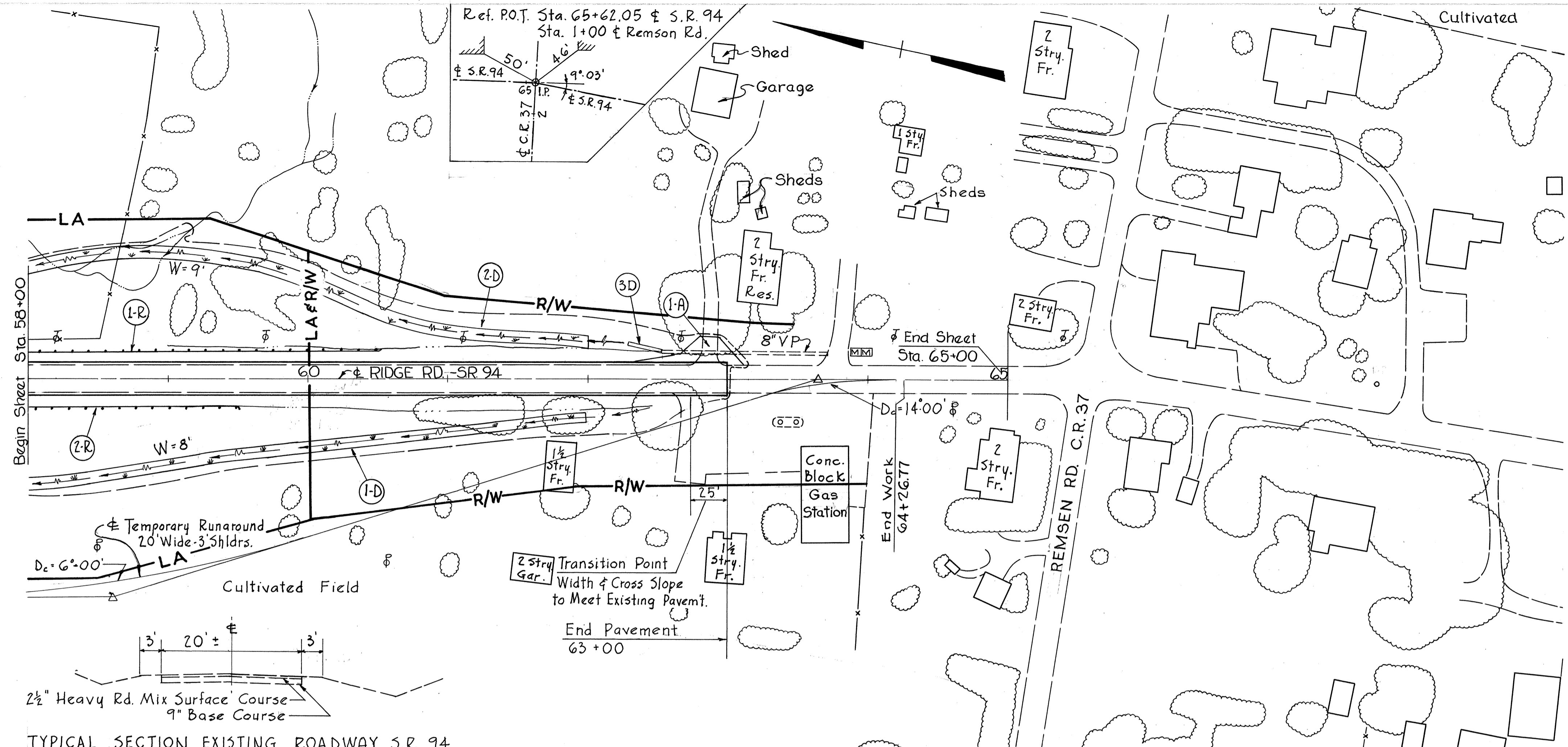
REF. NO.	STATION TO STATION SIDE	ESTIMATED QUANTITIES										SEE SHEET NO.			
		I-1 Class A-1 M. & S. (d) 42" Lin. Ft.	I-2 Masonry Cu. Yd.	L-10 Sodding Sq. Yd.	I-10 Dumped Rec. Channel Protection Cu. Yd.	I-1 Class H-2 Pipe 8" Lin. Ft.	I-1 Class H-2 Pipe 15" Lin. Ft.	I-10 Removal of Existing Structure Sq. Yd.	S-24 Removal of Existing Structure Lump	E-12 Pipe Removal 15" & Under Lin. Ft.	I-16 Catch Basins Abandoned Each		I-15 Guard Rail Lin. Ft.	I-5 Class H-2 Pipe Special 30" Bend 8" Each	B-19 Crushed Aggregate 8" Cu. Yd.
1-D	46+00 to 40+10 Rt.	166	1.7	10	19	10	32								191
2-D	40+00 to 40+10 Lt.														
3-D	42+18 Lt.					51									
4-D	46+67 to 47+12 Lt.			105					70						
5-D	41+00 to 42+05 Lt.			295											
6-D	42+55 to 45+50 Lt.						37								
7-D	45+50 to 45+90 Lt.														
8-D	47+05 Lt.														
10-D	45+40 to 45+73 Lt.								35						
12-D	45+45 to 45+66 Rt.								35						
									21	2					
1-R	42+50 to 48+00 Ramp B Lt.														
2-R	44+00 to 48+00 Ramp A Lt.														
3-R	47+48 to 48+00 Rt.														
1-A	42+18 Lt.														
Totals		166	1.7	410	19	10	69	Lump	159	2	752	1	76.5	10.1	5.3

RIDGE RD. - S.R. 94 Sta. 38+00 to Sta. 48+00

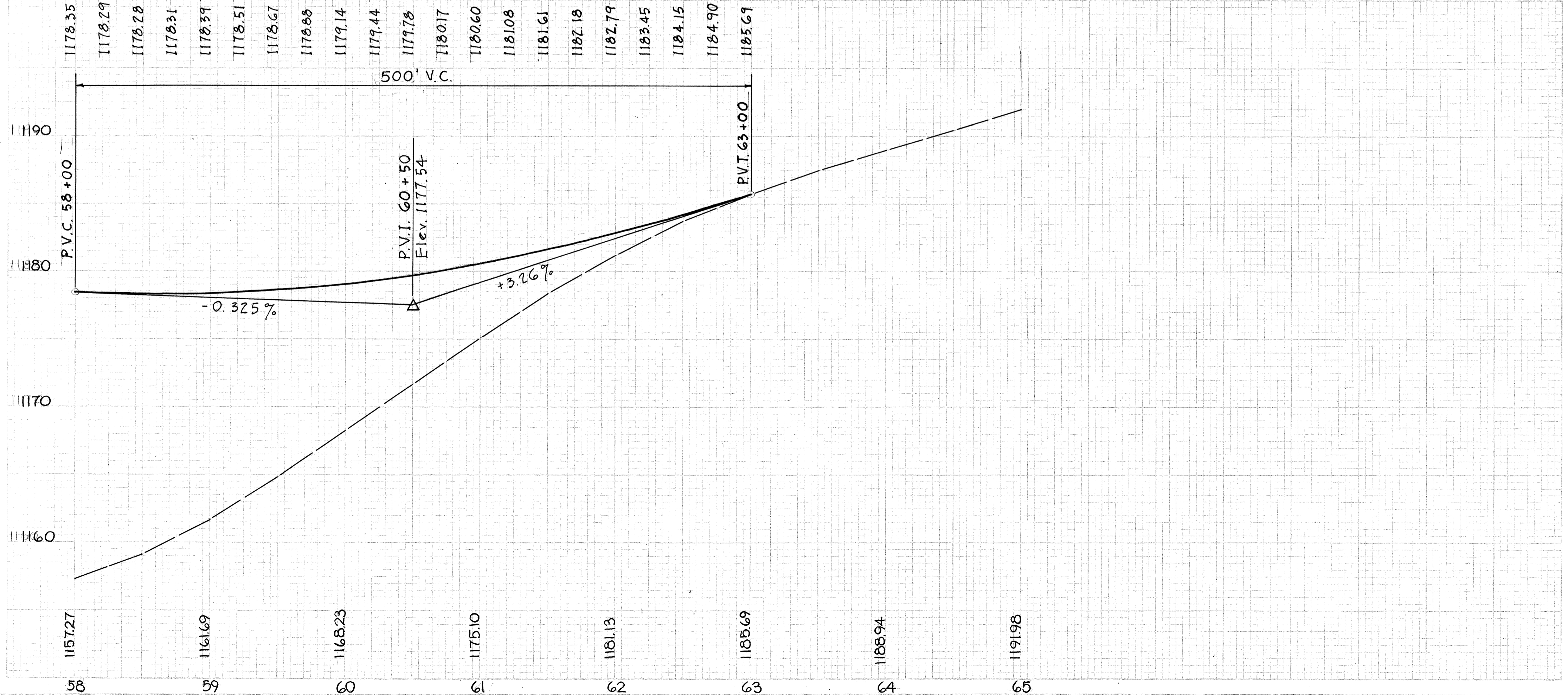
MICROFILMED
JUN 5 1986



REF. NO.	STATION TO STATION SIDE	i-1 Class M-44(g) Gage 8	i-2 Masonry	L-10 Sodding	i-10 Dumped Rocks Channel Protection	S-24 Removal of Existing Structures	Guard Rail Removed & Disposed	i-15 Guard Rail	i-7 Reinf. Conc. Approach Slab	E-12 Pipe Removal 15" Under	L-10 Special Slabbing for Slope & Berm Protection	SEE SHEET NO.	
1-D	56+93 to 58+00 Lt.	180	1.7	12	21							191	
2-B	57+10 to 58+00 Rt.			90									
3-B	56+60 to 58+00			125									
4-D	56+83					Lump							
6-D	51+49 to 51+75 Lt.								26				
7-B	52+67 to 52+85 Lt.								18				
8-D	54+48 to 55+55 Lt.								108				
9-D	55+55 to 56+63 Lt.								112				
10-D	51+38 to 52+50 Rt.												
11-D	48+45 Rt.												
12-D	48+37 Lt.												
13-D	51+55 Lt.												
14-B	51+65 Rt.												
1-P	48+29 to 48+54							83.4					
2-P	51+46 to 51+71							83.4					
1-R	55+50 to 58+00 Lt.						250						
2-R	54+00 to 58+00 Rt.						400						
3-R	56+59 to 57+10 Lt.&Rt.						55						
4-R	51+53 to 52+53 Lt.						100						
5-R	51+63 to 51+88 Rt.						25						
6-R	48+17 to 48+42 Lt.						25						
7-R	48+00 to 48+48 Rt.						48						
TOTALS													
										166.8	264	107	124



TYPICAL SECTION EXISTING ROADWAY S.R. 94

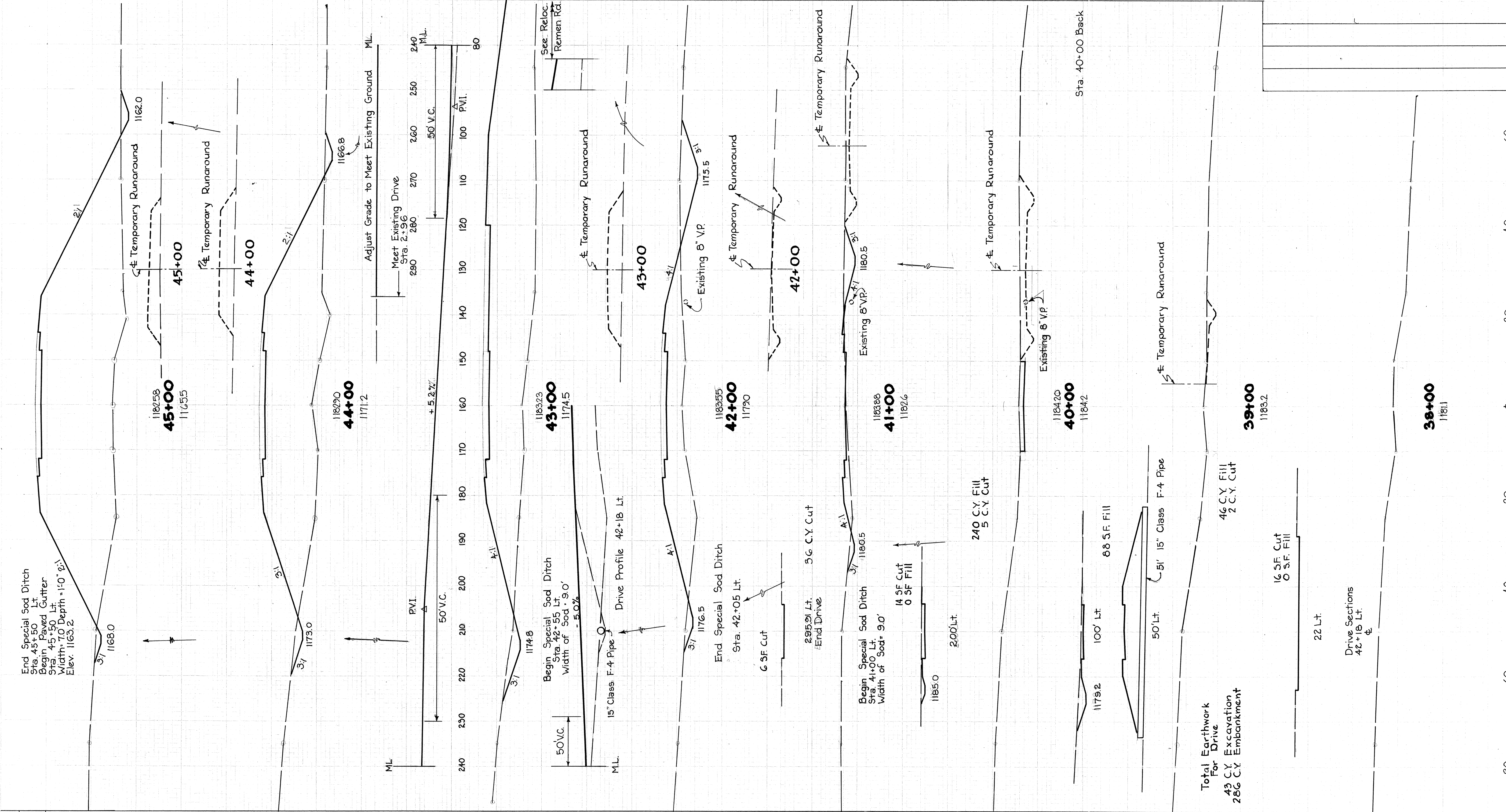


ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	L-10 Sodding	I-15 Guard Rail	B-19 Crushed Aggregate	T-35 Type C Asphaltic Conc. 2 1/2 Courses	I-1 Class H-2 8"	SEE SHEET NO.
			Sq. Yd.	Lin. Ft.	Cu. Yd.	Cu. Yd.	Lin. Ft.	
I-D	58+00 to 62+00	Rt.	356					
Z-D	58+00 to 62+00	Lt.	400				24	
S-D	62+30 to 62+54	Lt.						
I-R	58+00 to 60+50	Lt.		250				
Z-R	58+00 to 59+50	Rt.		150				
I-A	62+87	Lt.			7.4	4.5		
	TOTAL		756	400	7.4	4.5	24	

SEEDING END Sta. Width Yds.	END AREA CUT FILL	Cu. Yds.
118	28	913
107		4272
100		3828
185		2704
74		306
204		620
306		54

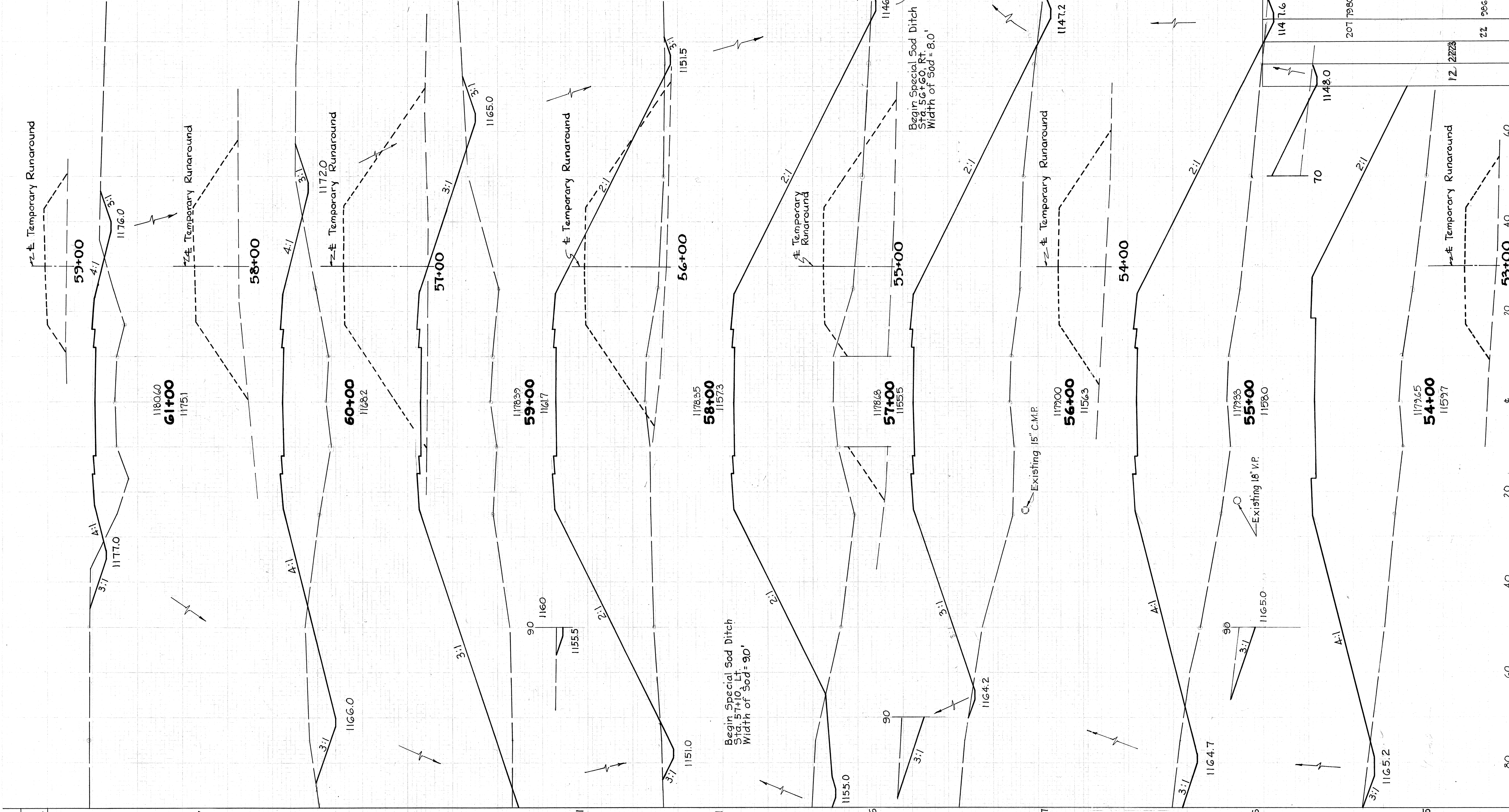
1-271-6(13)22.1
 MEDINA COUNTY
 MED-271-0.00
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SEEDING END Sta. Width Yds.	END AREA CUT FILL	Cu. Yds.
129	30	1367
118	28	913
107		4272
100		3828
185		2704
74		306
204		620
306		54

RIDGE RD. SR. 94 Sta. 38+00 to Sta. 45+00

END AREA	Cu Yds.
50	303
165	630
30	1650
30	2074
90	2570
26	2224
100	2086



SEEDING	END Sq. Width Yds.
80	1217
139	1517
134	1661
165	2011
197	2056
173	2017
190	2056
180	1355

SEEDING
END Sta.
Width Yds.

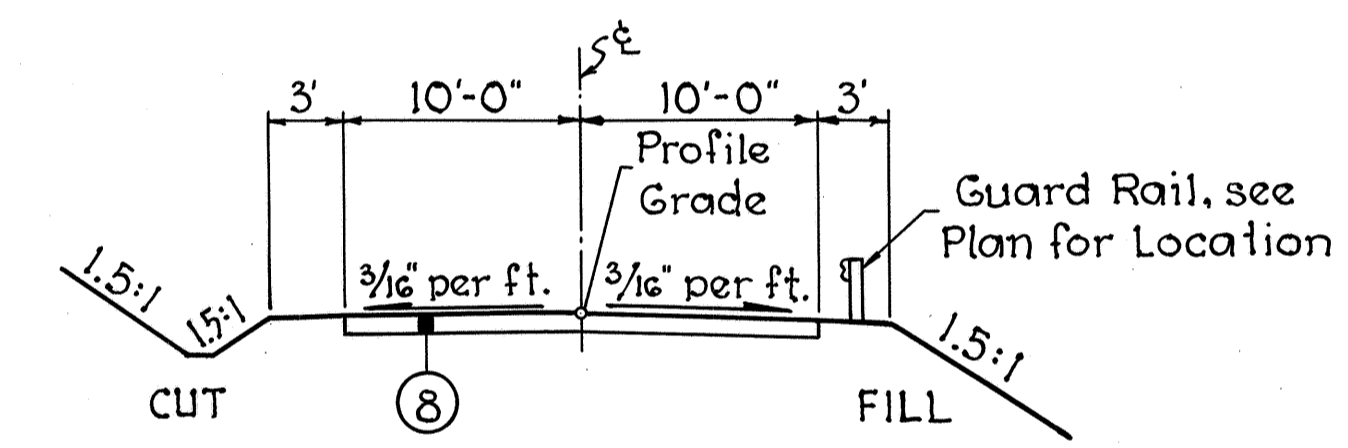
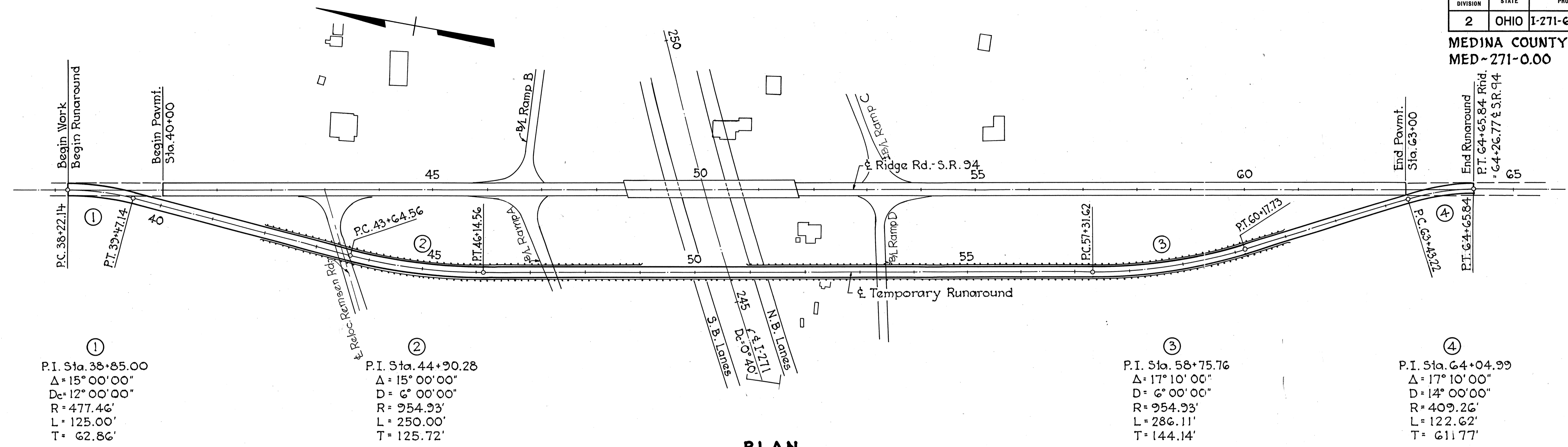
END AREA
Cu. Yds.
CUT FILL CUT FILL



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MEDINA COUNTY
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RIDGE RD. S.R. 94 Sta. 62+00 to Sta. 64+00

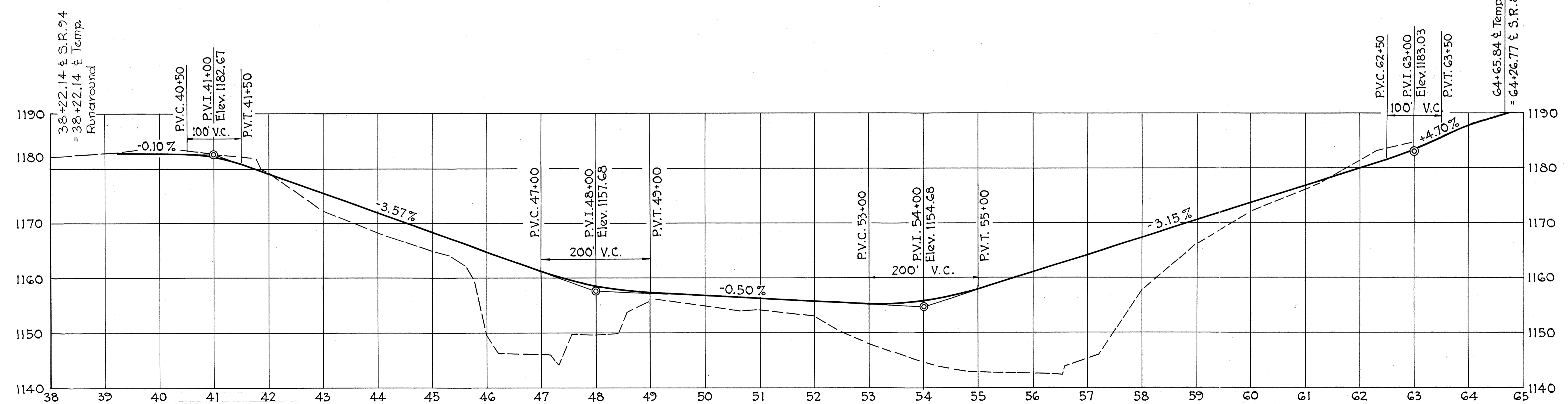
**MEDINA COUNTY
MED-271-0.00**



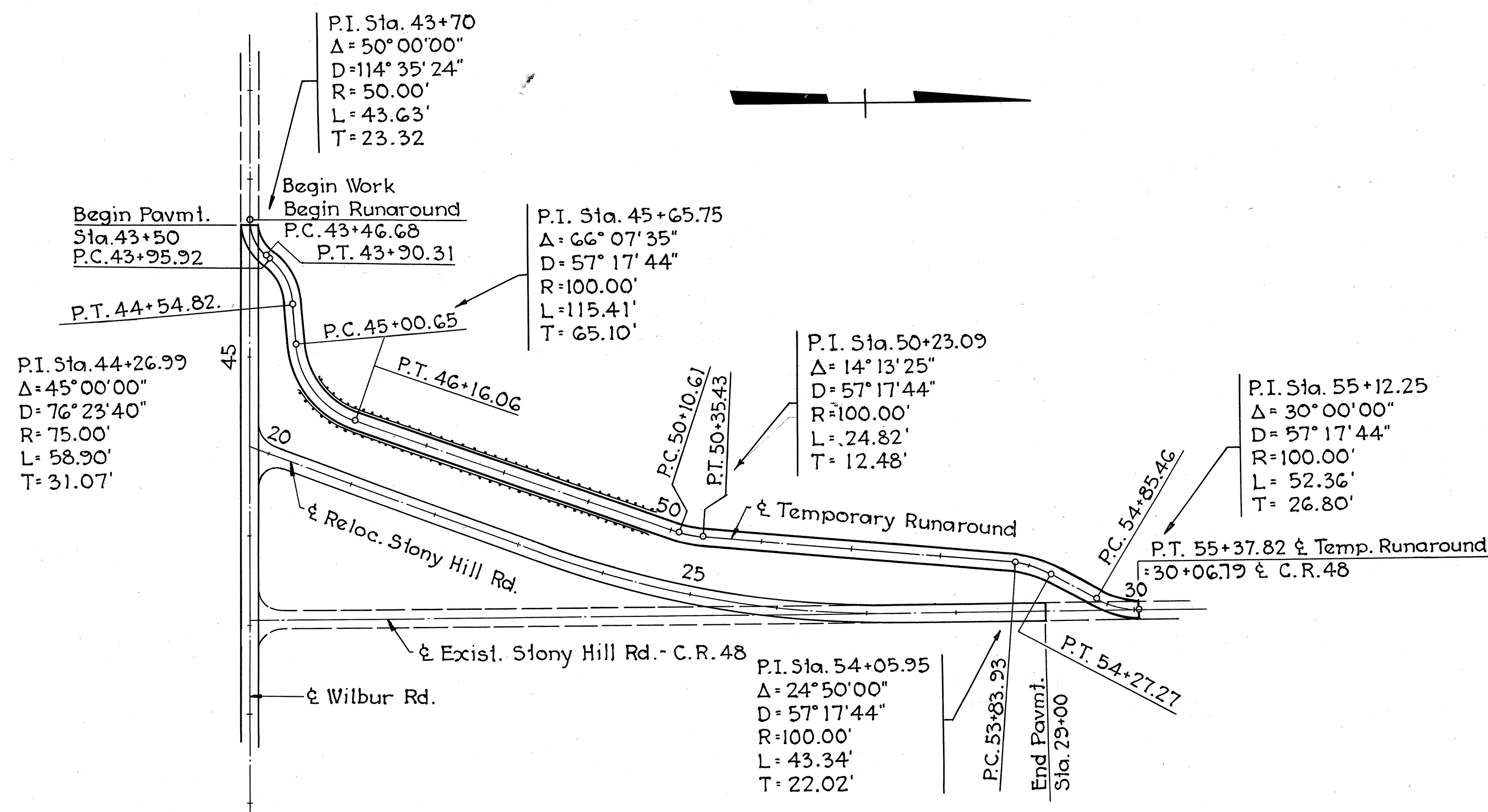
ESTIMATED QUANTITIES
 Item S-15 Temporary Runaround Road
 using Class 'B' Pavement as per plan - Lump Sum

Note:
 Provide ditches as required to permit normal drainage. Payment for construction, maintenance and subsequent removal of temporary drainage structures, where required, is included in the Lump Sum bid for Item S-15, Temporary Runaround Road.

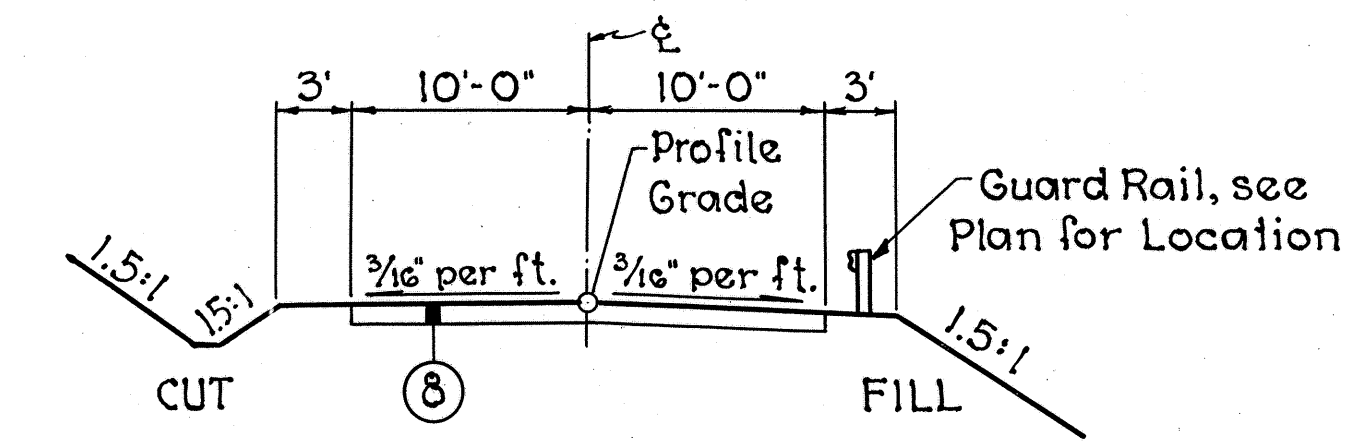
⑧ Class "B" Pavement (Item S-15).



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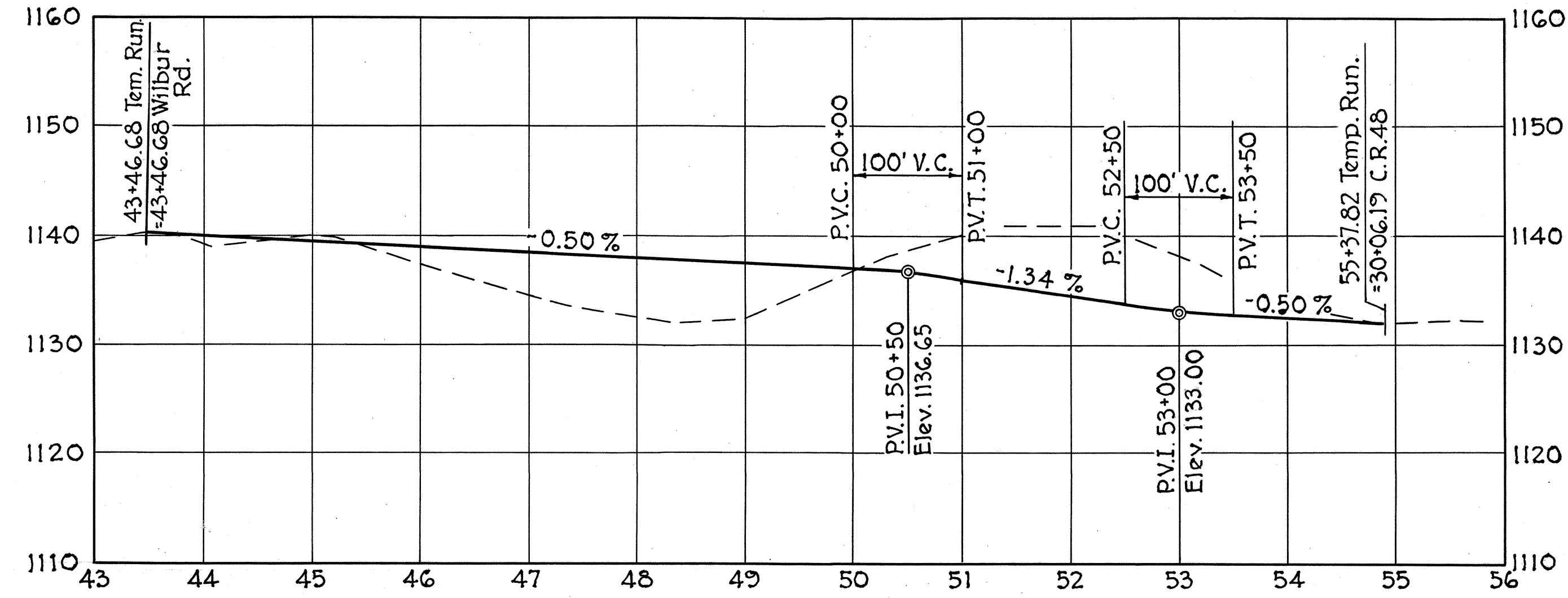
PLAN
Scale: 1" = 100'



⑧ Aggregate stabilized with Calcium Chloride
TYPICAL SECTION
TEMPORARY RUNAROUND
Scale: 1/8" = 1'-0"

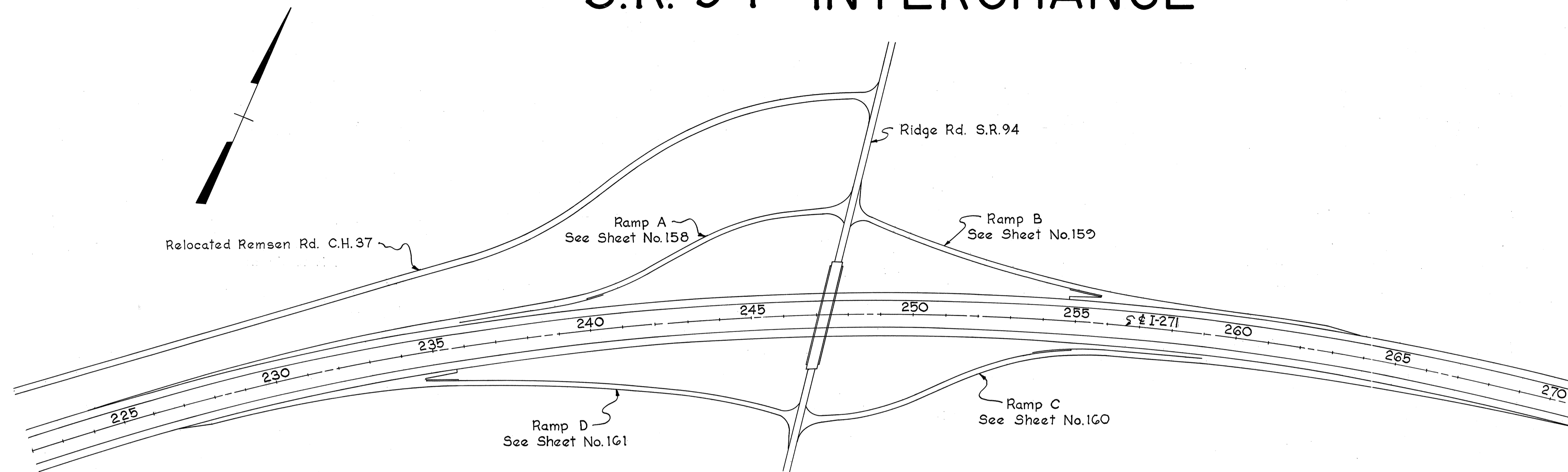
ESTIMATED QUANTITIES		
Item S-15	Temporary Runaround Road	Lump Sum
Item S-15	Furnishing and placing Aggregate for Traffic Bound Surface Course	900 Cu. Yd.
Item I-4	Calcium Chloride for Dust Control	18 Ton

Note:
Provide ditches as required to permit normal drainage. Payment for construction, maintenance and subsequent removal of temporary drainage structures, where required, is included in the Lump Sum bid for Item S-15, Temporary Runaround Road.



PROFILE
Scale: 1" = 100' Hor.
1" = 10' Vert.

S.R. 94 INTERCHANGE



INTERCHANGE SUB-SUMMARY

SHEET No.				ITEM	QUANTITIES		UNIT	DESCRIPTION
158	159	160	161		TOTAL			
DRAINAGE								
		254		I-1	254	Lin. Ft.	42" Pipe Class A-1	
	116			I-1	116	Lin. Ft.	54" Pipe Class A-1 Sec. M.G.G.(a)	
236				I-1	236	Lin. Ft.	54" Pipe Class A-1 Sec. M.G.G.(c)	
10		20		I-1	30	Lin. Ft.	6" Pipe Class F-4	
10	10	20	10	I-1	50	Lin. Ft.	8" Pipe Class F-4	
			48	I-1	48	Lin. Ft.	12" Pipe Class F-4	
38				I-1	38	Lin. Ft.	15" Pipe Class F-4	
1465	471	64	1235	I-1	3235	Lin. Ft.	6" Pipe Class I-3 Shallow	
	387	1424		I-1	1811	Lin. Ft.	6" Pipe Class I-3 Deep	
		44		I-1	44	Lin. Ft.	12" Pipe Class J-1	
108		86		I-1	194	Lin. Ft.	15" Pipe Class J-1	
114				I-1	114	Lin. Ft.	15" Pipe Class J-1 Sec. M.G.G.(c)	
10.7	12.2	7.0	0.6	I-2	30.5	Cu. Yd.	Masonry	
	1	2		I-5	3	Each	6" Pipe Special Class I-3 60° Wye	
1		2	1	I-5	4	Each	6" Pipe Special Class I-3 90° Bend	
1				I-5	1	Each	6" Pipe Special Class I-3 60° Bend	
			2	I-5	2	Each	12" Pipe Special Class F-4 15° Bend	
2				I-5	2	Each	15" Pipe Special Class F-4 20° Bend	
1				I-8	1	Each	Std. No. 4 C.B.	
1			1	I-8	2	Each	Std. No. 5 C.B.	
1			1	I-8	2	Each	Std. No. 6 C.B.	
1	1			I-8	2	Each	Special C.B.	
	17	30		I-10	47	Cu. Yd.	Dumped Rock Channel Protection	
	65	37		I-10	102	Sq. Yd.	6" Reinforced Concrete Riprap	
ROADWAY								
1050	250		425	I-15	1725	Lin. Ft.	Guard Rail	
	80			E-12	80	Lin. Ft.	Pipe Removal over 15"	
7	152	14	5	L-10	178	Sq. Yds.	Sodding	
	677	458		L-120	1135	Sq. Yds.	Jute Matting	

B-19 AGGREGATE BASE COURSE AS PER PLAN

Ramp A = 5,309 Cu. Ft.
 Ramp B = 3,726 " "
 Ramp C = 4,999 " "
 Ramp D = 3,429 " "
 Total Volume = 17,463 Cu. Ft. ÷ 27 = 647 Cu. Yds. *

B-21 6" WATERPROOFED AGGREGATE BASE COURSE

Ramp A = 347 Cu. Yds.
 Ramp B = 232 " "
 Ramp C = 341 " "
 Ramp D = 252 " "
 Total = 1,172 Cu. Yds. *

B-21 3" WATERPROOFED AGGREGATE BASE COURSE

Ramp A = 14 Cu. Yds.
 Ramp C = 19 " "
 Total = 33 Cu. Yds. *

T-31 BITUMINOUS SURFACE TREATMENT

Ramp A = 19,505 Sq. Ft.
 Ramp B = 12,506
 Ramp C = 18,864
 Ramp D = 13,624 Total Volume = 64,499 Sq. Ft. ÷ 7 = 7,167 Sq. Yds.
 Bituminous Material:
 7,167 Sq. Yds. × 0.25 Gal./Sq. Yd. = 1,792 Gal. *
 No. 6 Aggregate
 7,167 Sq. Yds. × 0.008 Cu. Yd./Sq. Yd. = 57 Sq. Yds. *

T-71 10" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

Ramp A Terminal = 1,680 Sq. Yds.
 Ramp B Terminal = 1,621 " "
 Ramp C Terminal = 1,677 " "
 Ramp D Terminal = 1,671 " "
 Total = 6,649 Sq. Yds. *

T-71 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

Ramp A = 2,403 Sq. Yds.
 Ramp B = 1,655 " "
 Ramp C = 2,484 " "
 Ramp D = 2,278 " "
 Total = 8,820 Sq. Yds. *

SPECIAL DRAINAGE CONNECTION, USING No. 6 AGGREGATE

Ramp A = 1,410 Lin. Ft.
 Ramp B = 818 " "
 Ramp C = 1,426 " "
 Ramp D = 1,215 " "
 Ramp A Terminal = " "
 Ramp B Terminal = 903 " "
 Ramp C Terminal = 1,300 " "
 Ramp D Terminal = 990 " "
 Total = 8,062 Lin. Ft.
 8,062 Lin. Ft. × 2.04 ÷ 27 = 609 Cu. Yds. *

I-22 SUBBASE, GRADING "A" or "B" AS PER PLAN

Ramp A Terminal = 16,919 Sq. Ft.
 Ramp A = 22,852
 Ramp B Terminal = 15,392
 Ramp B = 16,486
 Ramp C Terminal = 17,196
 Ramp C = 24,041
 Ramp D Terminal = 15,832
 Ramp D = 22,902
 Total Volume = 151,620 Sq. Ft. × 0.5 ÷ 27 = 2,808 Cu. Yds. *

I-22 SUBBASE, REGULAR GRADING.

Ramp A = 7,160 Cu. Ft.
 Ramp B = 4,214
 Ramp C = 6,910
 Ramp D = 4,591
 Total Volume = 22,875 Cu. Ft. ÷ 27 = 847 Cu. Yds. *

* Quantities carried to Sheet No. 20.

ESTIMATED QUANTITIES

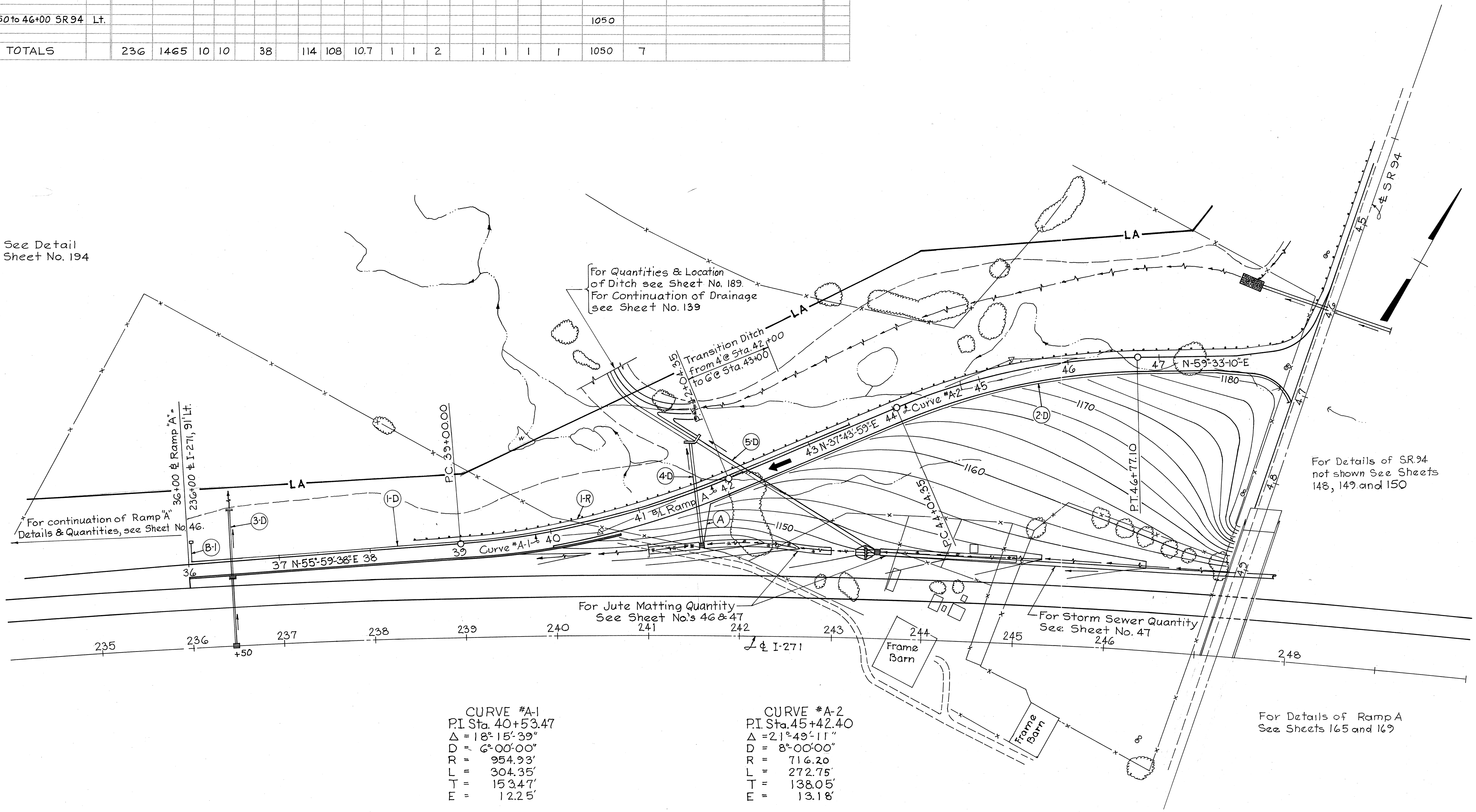
REF. NO.	STATION TO STATION	SIDE	Class A-1 Pipe		Class I-3 Pipe		I-1			I-2		I-5			I-8			I-15	L-10	SEE SHEET NO.
			54" Lin. Ft.	6" Lin. Ft.	6" Lin. Ft.	8" Lin. Ft.	15" Lin. Ft.	Sec. M 6.6(C) Lin. Ft.	Head Wall No. 3 Lin. Ft.	Masonry Head Wall No. 3 Cu. Yds.	6" Bend	90" Bend	15" Bend	Std. No. 4 C.B.	Std. No. 5 C.B.	Std. No. 6 C.B.	Special C.B.	Guard Rail Lin. Ft.	Sodding Sq. Yds.	
I-D	36+05 to 43+50	Lt.																		
2-D	41+50 to 48+43	Rt.																		
3-D	236+50	Lt.																		115
4-D	41+50 Ramp A	Lt.																		170
5-D	42+25 Ramp A	Lt.	236																	189
I-R	38+50 to 46+00 SR 94	Lt.																		1050
TOTALS			236	1465	10	10	38	114	108	10.7	1	1	2	1	1	1	1	1050	7	

FED. RD. DIVISION	STATE	PROJECT
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(A) See Detail Sheet No. 194



For Quantities & Location of Ditch see Sheet No. 189.
For Continuation of Drainage see Sheet No. 139

For continuation of Ramp A* Details & Quantities, see Sheet No. 46.

For Jute Matting Quantity See Sheet No's 46 & 47

For Storm Sewer Quantity See Sheet No. 47

For Details of SR 94 not shown See Sheets 148, 149 and 150

For Details of Ramp A See Sheets 165 and 169

CURVE #A-1
PI Sta. 40+53.47
Δ = 18° 15' 39"
D = 6° 00' 00"
R = 954.93'
L = 304.35'
T = 153.47'
E = 12.25'

CURVE #A-2
PI Sta. 45+42.40
Δ = 21° 49' 11"
D = 8° 00' 00"
R = 716.20'
L = 272.75'
T = 138.05'
E = 13.18'

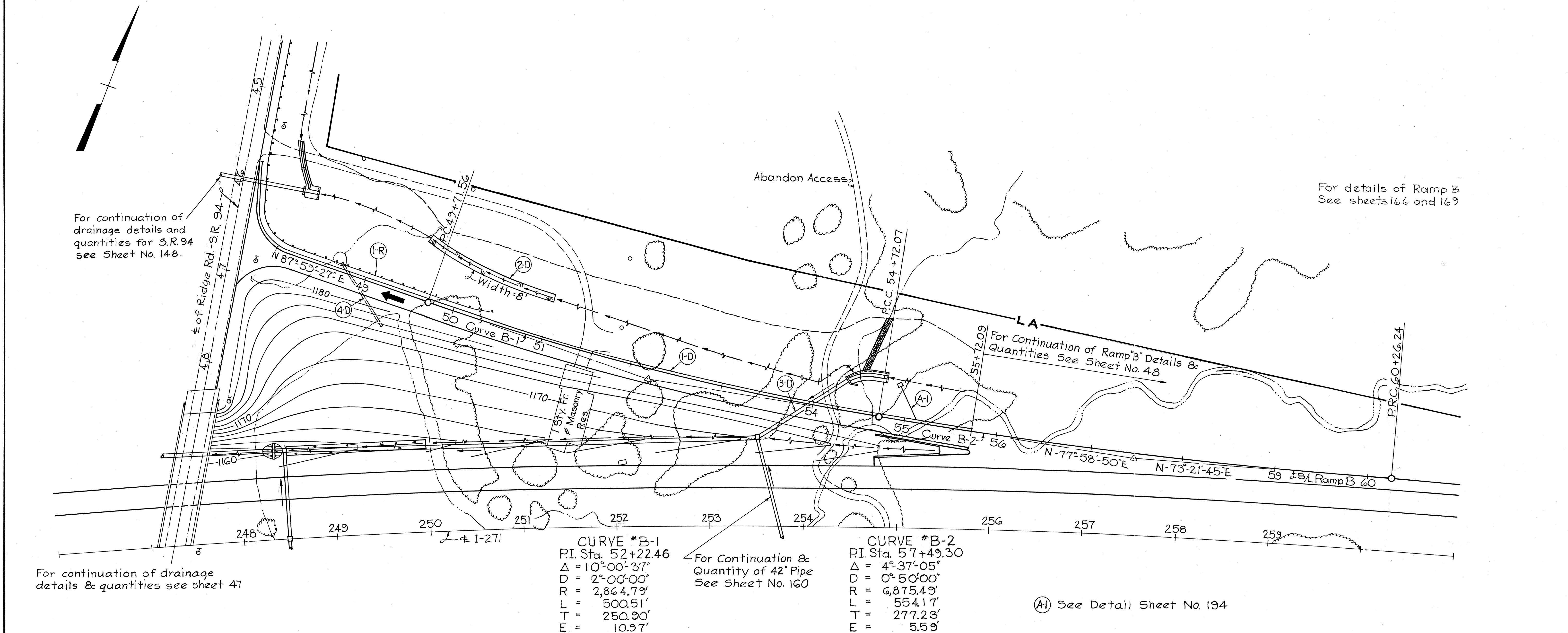
ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	ESTIMATED QUANTITIES											SEE SHEET NO.					
			I-1		I-2		I-5		I-8		I-10		I-15		L-10		E-12		
			Class I-3 Pipe Deep 6"	Class I-3 Pipe Shallow 6"	Class I-4 Pipe 8"	Class A1 Pipe Sec. M-6.66 5.4"	Masonry Headwall No. 3 Cu. Yd.	Pipe Specials Class I-3 6" 60° Wye Each	Special C.B. Each	6" Reinforced Concrete Riprap Sq. Yd.	Dumped Rock Channel Protection Cu. Yd.	Guard Rail Lin. Ft.	Sodding Sq. Yd.		Pipe Removal Over 15" Lin. Ft.				
1-D	47+54 to 55+72.09	Lt.	387	471	10														
2-D	49+50 to 51+00	Lt.													133				
3-D	53+96	—				116	12.2			65	17			19			80	190	
4-D	48+80	—																	
I-R	48+00 to 50+50	Lt.									250								
TOTALS			387	471	10	116	12.2	1	1	65	17	250	152	80					

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

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MED-271-0.00

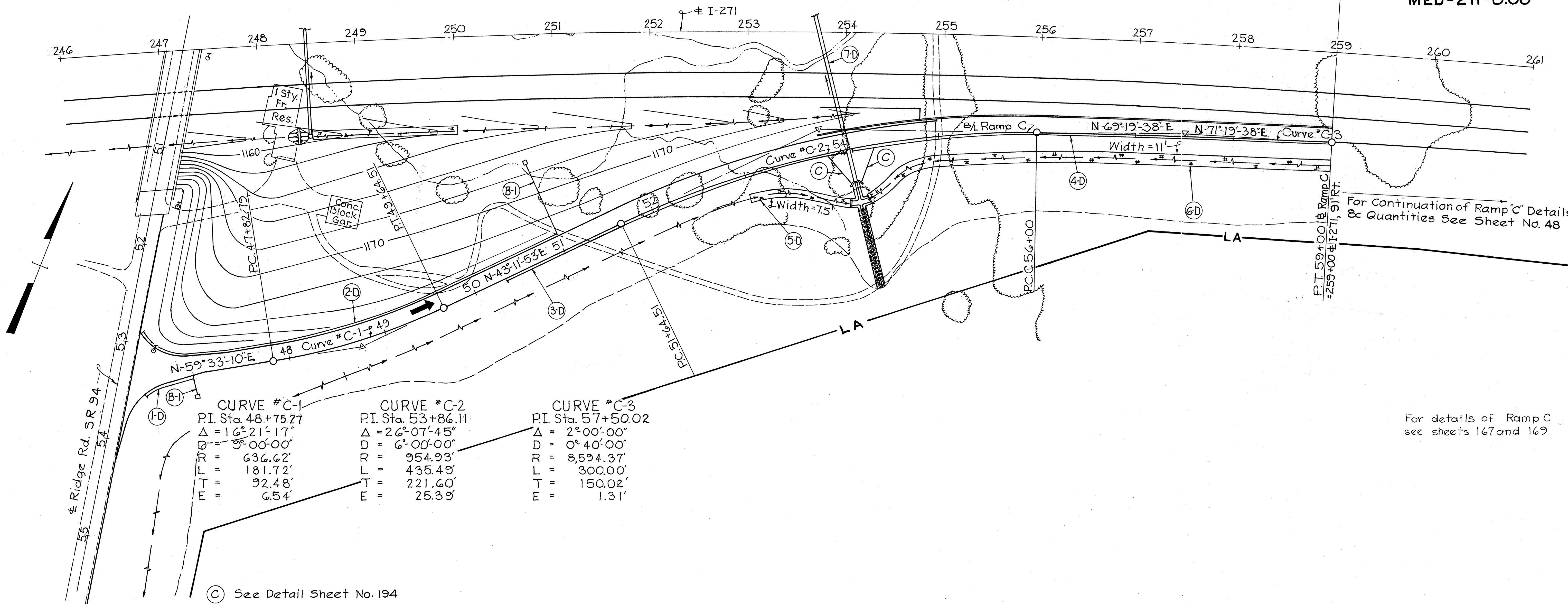


For drainage details and quantities not shown see sheets 47 and 48.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(5)221

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MEDINA COUNTY
MED-271-0.00



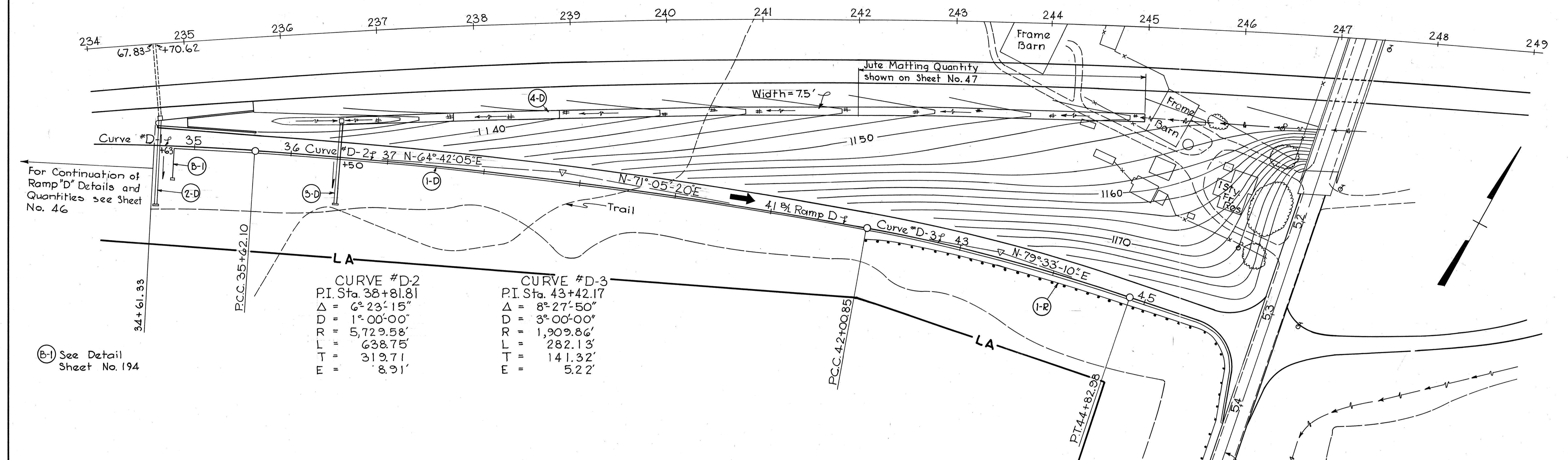
<p>CURVE #C-1 P.I. Sta. 48+75.27 $\Delta = 16^{\circ}21'17''$ $D = 9^{\circ}00'00''$ $R = 636.62'$ $L = 181.72'$ $T = 92.48'$ $E = 6.54'$</p>	<p>CURVE #C-2 P.I. Sta. 53+86.11 $\Delta = 26^{\circ}07'45''$ $D = 6^{\circ}00'00''$ $R = 954.93'$ $L = 435.49'$ $T = 221.60'$ $E = 25.39'$</p>	<p>CURVE #C-3 P.I. Sta. 57+50.02 $\Delta = 2^{\circ}00'00''$ $D = 0^{\circ}40'00''$ $R = 8,594.37'$ $L = 300.00'$ $T = 150.02'$ $E = 1.31'$</p>
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For Continuation of Ramp 'C' Details & Quantities See Sheet No. 48

For details of Ramp 'C' see sheets 167 and 169

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	ESTIMATED QUANTITIES										SEE SHEET NO.			
			I-1		I-2		I-5		I-10		L-10	L-120				
			Shallow 6"	Deep 6"	Class F4 Pipe 6"	Class A1 Pipe 8"	42" Headwall No. 3	Masonry Cu. Yd.	6" Wye	90° Bend	Pipe Specials Class I-3 Each	Dumped Rock Channel Protection Cu. Yd.		6" Reinforced Concrete Riprap Sq. Yd.	Sodding Sq. Yd.	Jute Matting Sq. Yd.
I-D	46+50 to 47+00	Rt.	64													
2-D	46+56 to 51+00	Lt.		512												
3-D	50+35 to 54+04	Rt.		396	10											
4-D	54+12 to 59+00	Rt.		516	10											
5-D	53+00 to 54+00	Rt.													83	
6-D	54+14 to 59+00	Rt.													594	
T-D	54+08	Lt.&Rt.				254	7.0			30	37	14				190
TOTALS			64	1424	20	20	254	7.0	2	2	30	37	14		677	



CURVE #D-2
 P.I. Sta. 38+81.81
 $\Delta = 6^{\circ}23'15''$
 $D = 1^{\circ}00'00''$
 $R = 5,729.58'$
 $L = 638.75'$
 $T = 319.71'$
 $E = 8.91'$

CURVE #D-3
 P.I. Sta. 43+42.17
 $\Delta = 8^{\circ}27'50''$
 $D = 3^{\circ}00'00''$
 $R = 1,909.86'$
 $L = 282.13'$
 $T = 141.32'$
 $E = 5.22'$

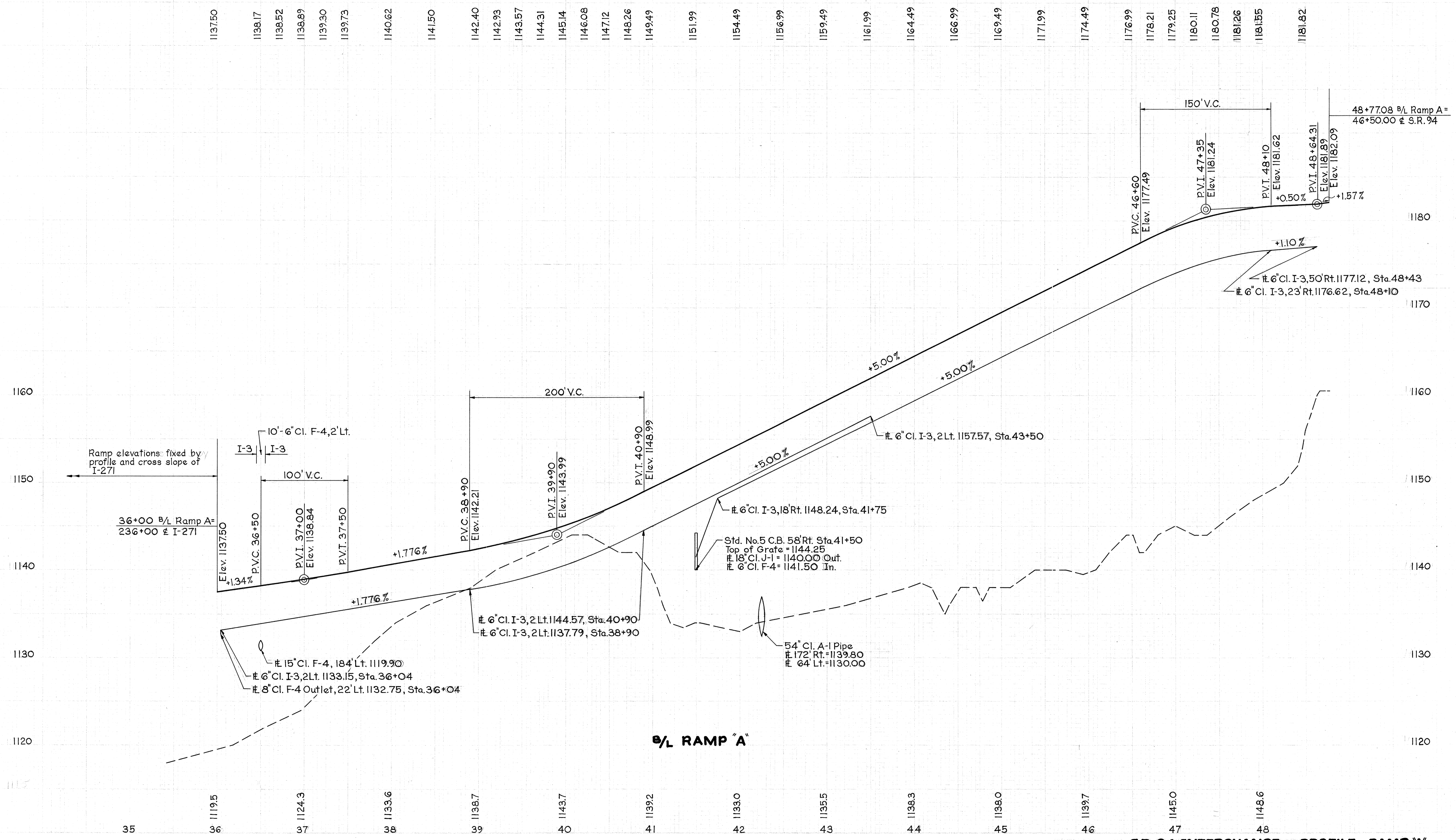
ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	I - 1											SEE SHEET NO.			
			Class J-1				I-2		I-5		I-8		I-15		L-10	L-120	
			12"	15"	8"	12"	Cl. I-3 Shallow	Masonry Headwall E	Cl. I-3 6"-90° Bend	Pipe Specials Cl. F-4 12"-15° Bend	Std No. 5 C.B.	Std No. 6 C.B.	Guard Rail		Sodding	Jute Matting	
Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Cu. Yds.	Each	Each	Each	Each	Lin. Ft.	Sq. Yds.	Sq. Yds.					
1-D	34+61 to 46+13	Rt.			10		1,235		1								
2-D	34+63 Ramp D	-	44					0.3		2				2			
3-D	36+50 Ramp D	-		86				0.3		1				3			
4-D	236+50 to 242+00	Rt.														458	
1-R	24+00 to 54+00 S.R. 94	Rt.											425				
TOTALS			44	86	10	48	1,235	0.6	11	2	11	11	425	5	458		

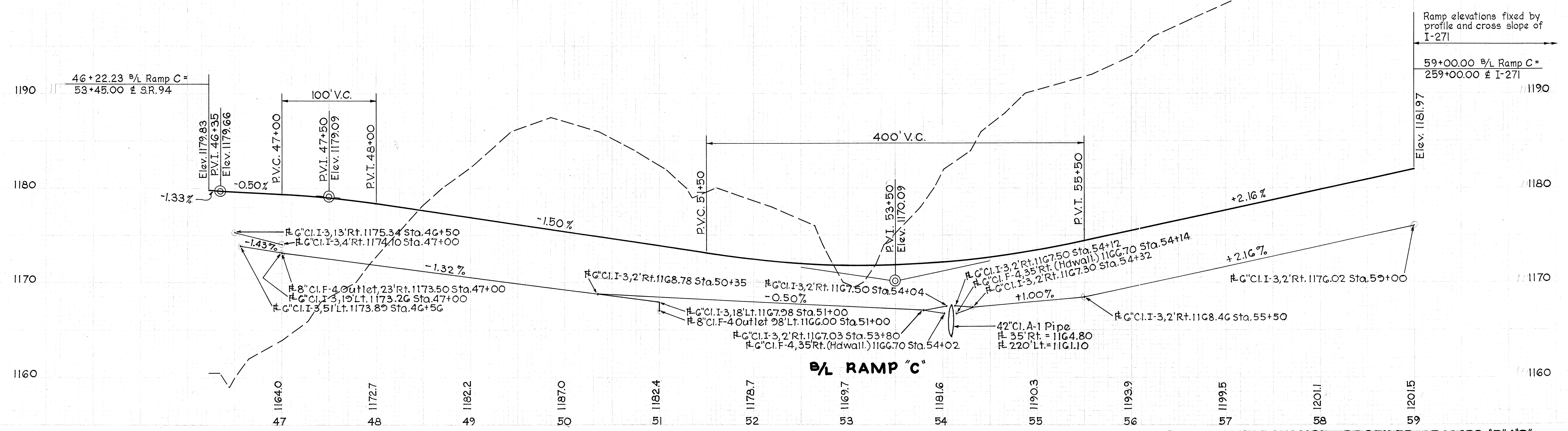
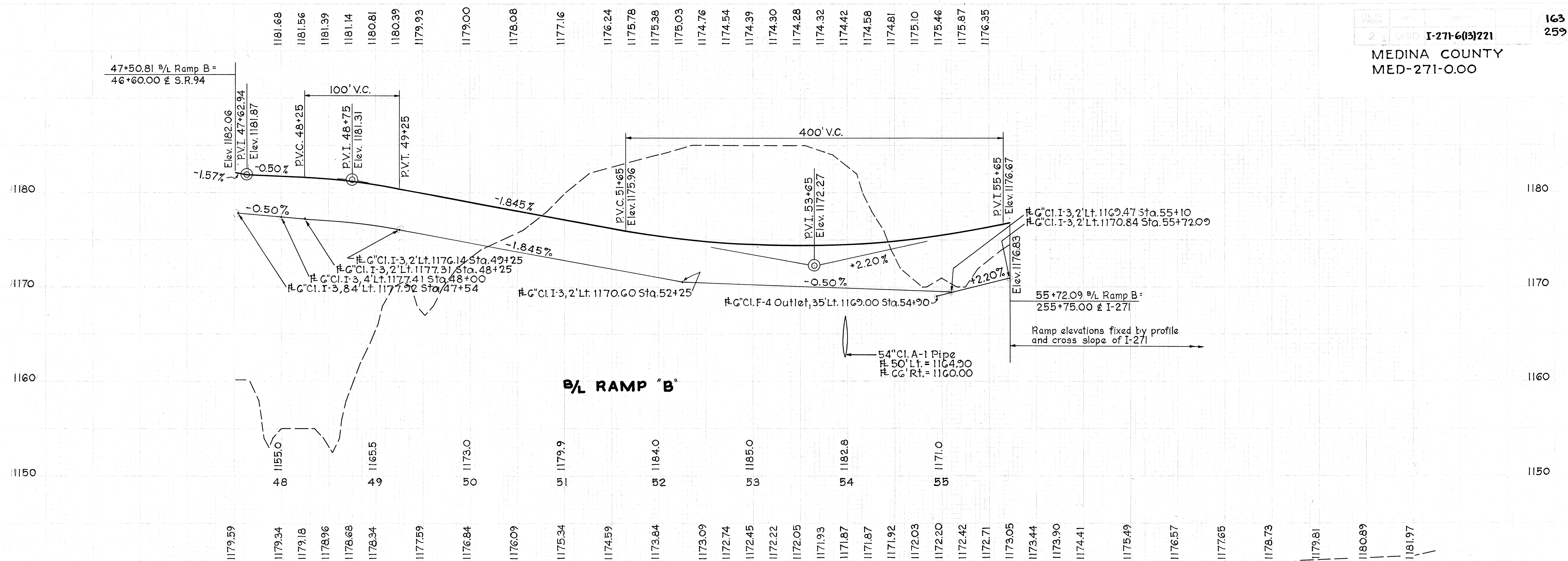
For drainage details and quantities not shown for S.R. 94 see Sheet No. 149.

For details of Ramp D See sheets 168 and 169.

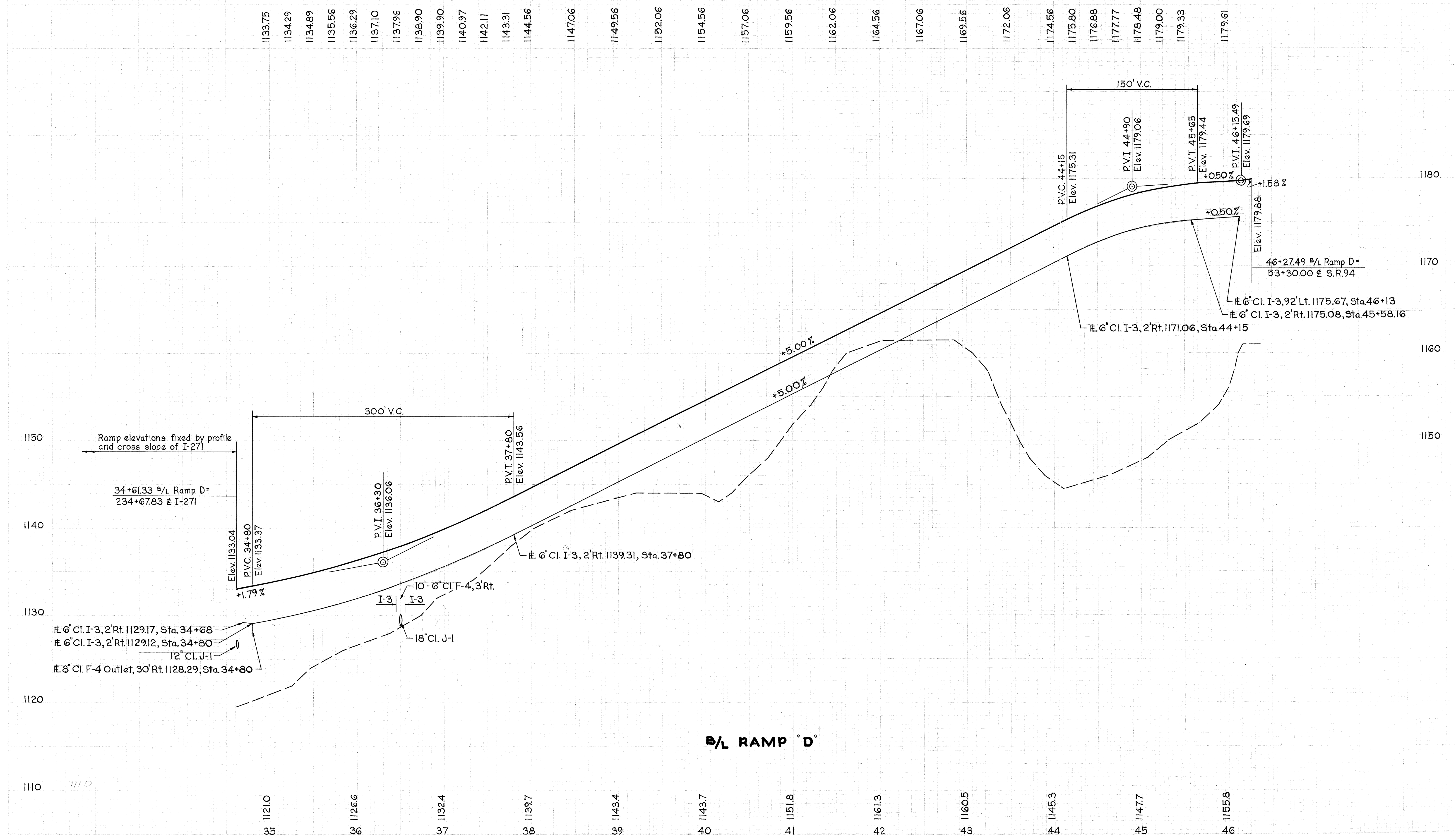
MEDINA COUNTY
MED-271-0.00



MEDINA COUNTY
MED-271-0.00



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MED-271-0.00

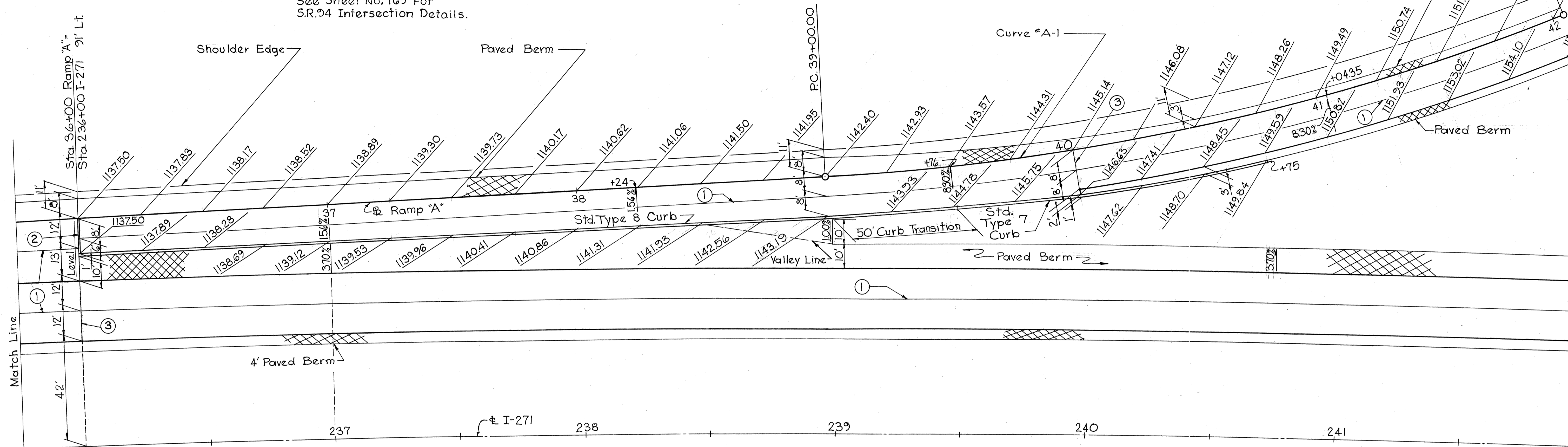


S.R. 94 INTERCHANGE - PROFILE - RAMP "D"

MEDINA COUNTY
MED-271-0.00

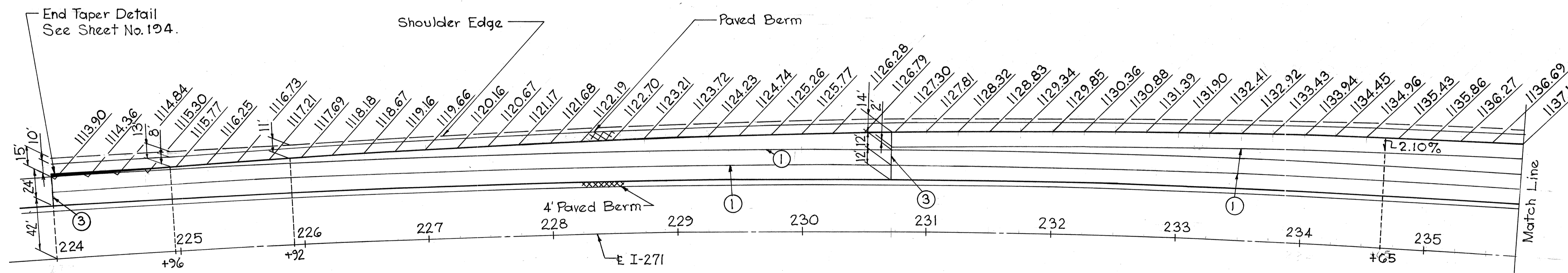
SUPERELEVATION TABLE					
Ramp A Stations	Edge of Pavement Elev's		Ramp A Stations	Edge of Pavement Elev's	
	B/L	Outer Edge		B/L	Outer Edge
42+25	1155.74	1156.27	44+75	1168.24	1167.11
+50	1156.99	1157.35	45+00	1169.49	1168.19
+75	1158.24	1158.44	+25	1170.74	1169.41
43+00	1159.49	1159.52	+50	1171.99	1170.66
+25	1160.74	1160.60	+75	1173.24	1171.91
+50	1161.99	1161.69	46+00	1174.49	1173.29
+75	1163.24	1162.77	+25	1175.74	1174.67
44+00	1164.49	1163.86	+50	1176.99	1176.06
+25	1165.74	1164.94	+75	1178.21	1177.41
+50	1166.99	1166.02	47+00	1179.25	1178.58
			+25	1180.11	1179.58

See Sheet No. 169 For
S.R.94 Intersection Details.



RAMP A CONNECTION
Scale: 1"=20'

Note: See Sheet No. 12 For
Typical Sections.



RAMP A ACCELERATION LANE & TAPER
Scale: 1"=50'

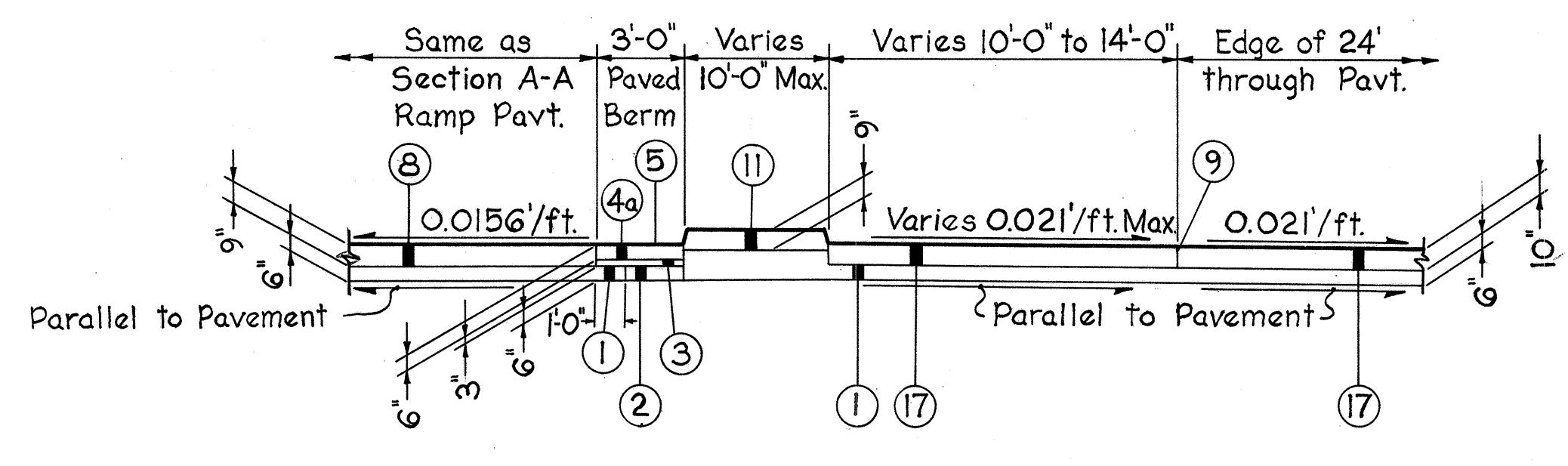
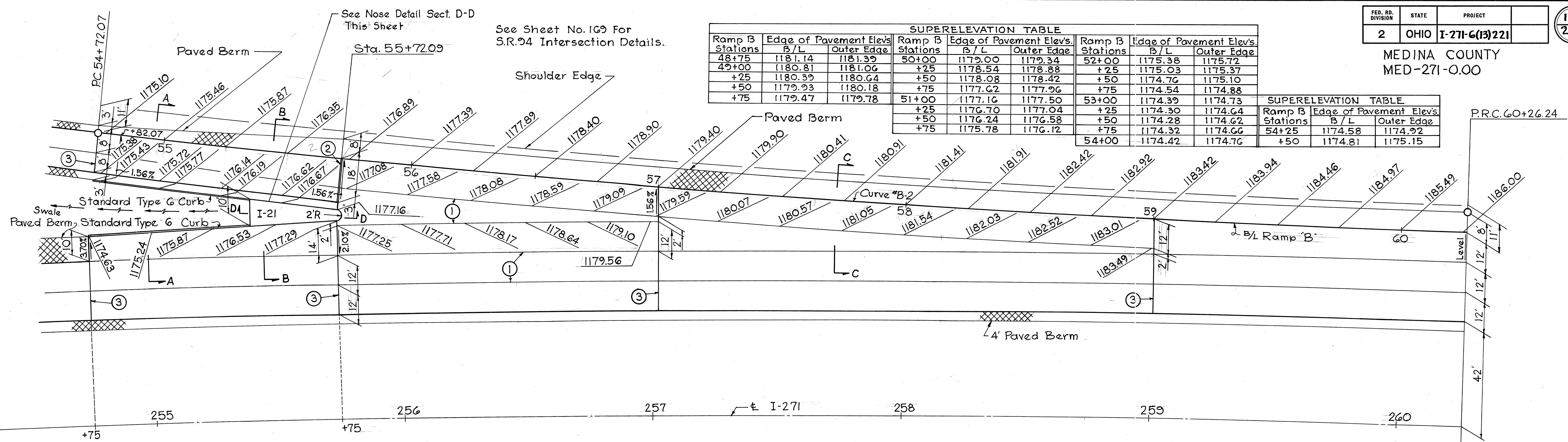
JOINT LEGEND

- ① Standard Longitudinal Joint
- ② Standard Expansion Joint
- ③ Standard Contraction Joint

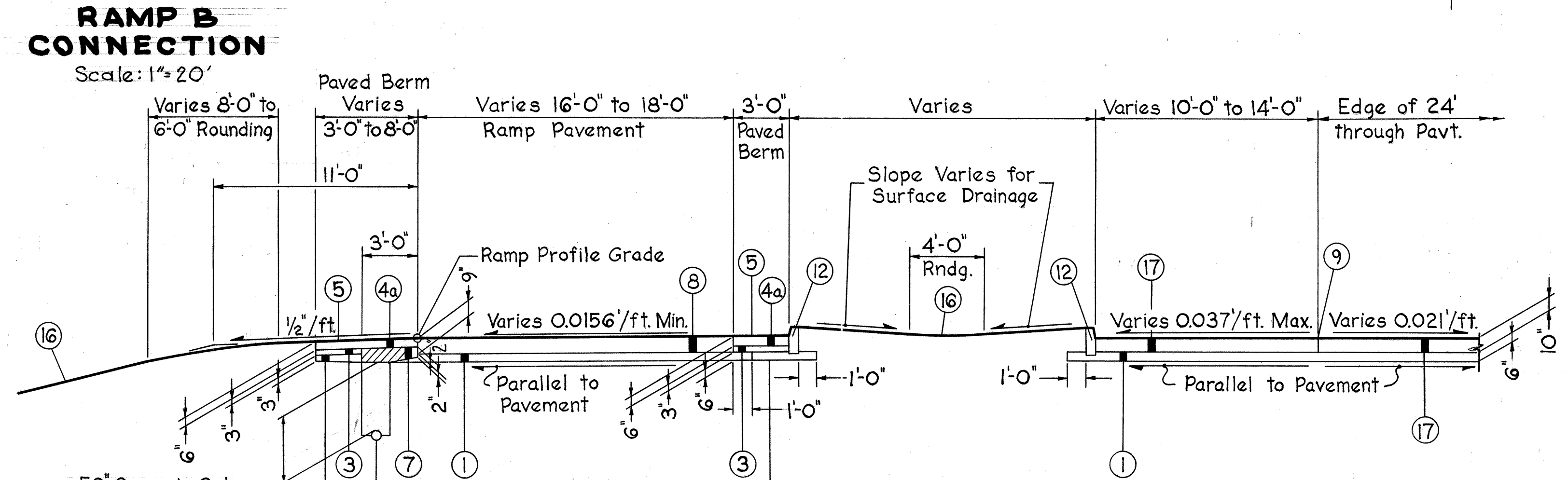
MEDINA COUNTY
MED-271-0.00

SUPERELEVATION TABLE					
Ramp B Stations	B/L	Outer Edge	Ramp B Stations	B/L	Outer Edge
48+75	1181.14	1181.39	50+00	1179.00	1179.34
49+00	1180.81	1181.06	+25	1178.54	1178.88
+25	1180.39	1180.64	+50	1178.08	1178.42
+50	1179.93	1180.18	+75	1177.62	1177.96
+75	1179.47	1179.78	51+00	1177.16	1177.50
			+25	1176.70	1177.04
			+50	1176.24	1176.58
			+75	1175.78	1176.12

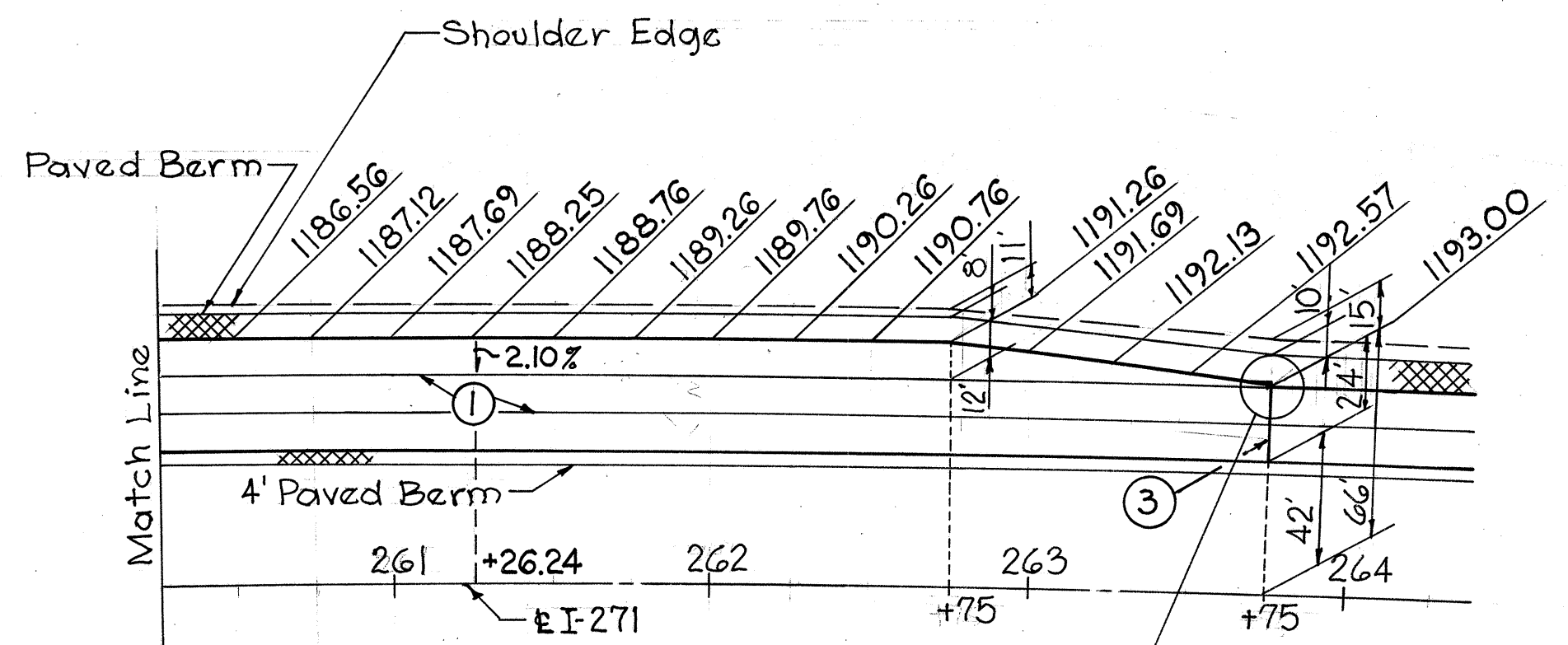
SUPERELEVATION TABLE		
Ramp B Stations	B/L	Outer Edge
52+00	1175.38	1175.72
+25	1175.03	1175.37
+50	1174.76	1175.10
+75	1174.54	1174.88
53+00	1174.39	1174.73
+25	1174.30	1174.64
+50	1174.28	1174.62
+75	1174.32	1174.66
54+00	1174.42	1174.76



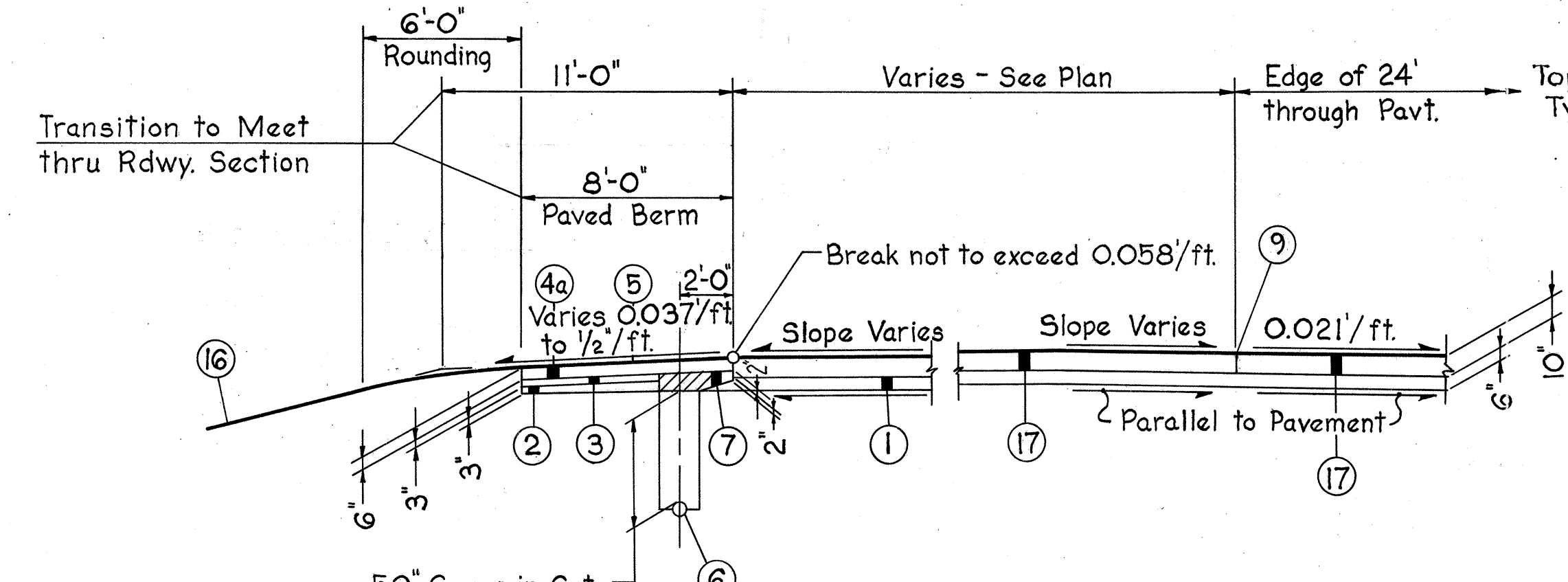
SECTION B-B
Scale: 1"=5'



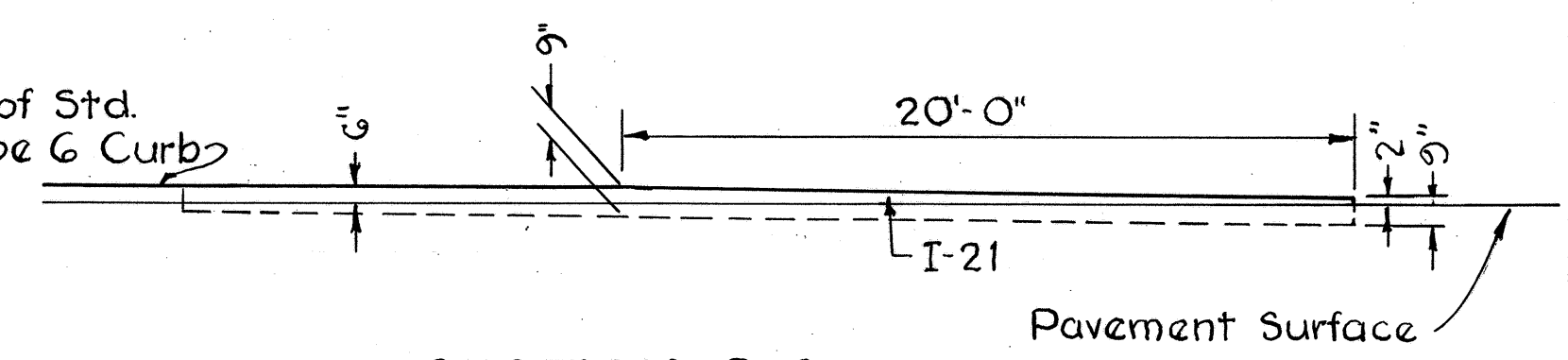
SECTION A-A
Scale: 1"=5'



RAMP B DECELERATION LANE & TAPER
Scale: 1"=50'



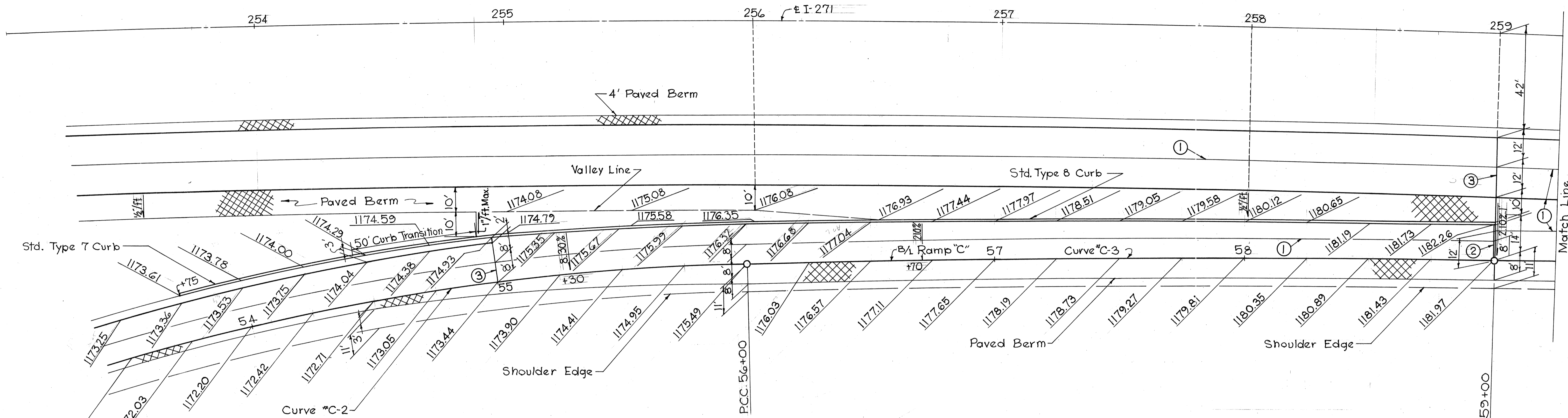
SECTION C-C
Scale: 1"=5'



SECTION D-D
Scale: 1"=5'

- JOINT LEGEND**
- ① Standard Longitudinal Joint
 - ② Standard Expansion Joint
 - ③ Standard Contraction Joint

Notes:
See Typical Sections ON RAMP TERMINALS For Legend, Sheet No. 12.
For slope treatment of side slopes see Sheet No. 9.



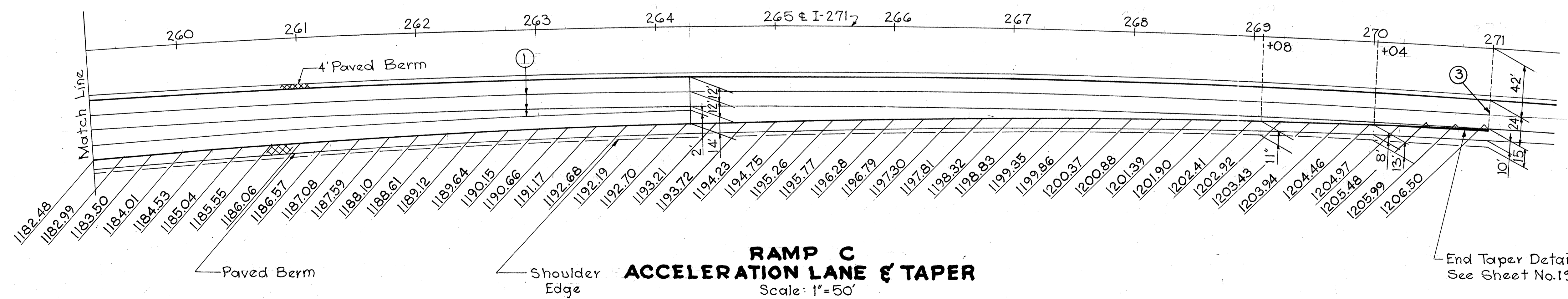
RAMP C CONNECTION
Scale: 1"=20'

- JOINT LEGEND**
- ① Standard Longitudinal Joint
 - ② Standard Expansion Joint
 - ③ Standard Contraction Joint

SUPERELEVATION TABLE

Ramp C Stations	Edge of Pavement Elev's B/L	Outer Edge	Ramp C Stations	Edge of Pavement Elev's B/L	Outer Edge
47+75	1178.68	1178.37	50+50	1174.59	1174.54
48+00	1178.34	1177.94	+75	1174.22	1174.29
+25	1177.97	1177.48	51+00	1173.84	1174.08
+50	1177.59	1177.01	+25	1173.47	1173.87
+75	1177.22	1176.56	+50	1173.09	1173.66
49+00	1176.84	1176.27	+75	1172.74	1173.47
+25	1176.47	1175.98	52+00	1172.45	1173.35
+50	1176.09	1175.69	+25	1172.22	1173.29
+75	1175.72	1175.41	+50	1172.05	1173.28
50+00	1175.34	1175.11	+75	1171.93	1173.26
+25	1174.97	1174.83	53+00	1171.87	1173.20
			+25	1171.87	1173.20

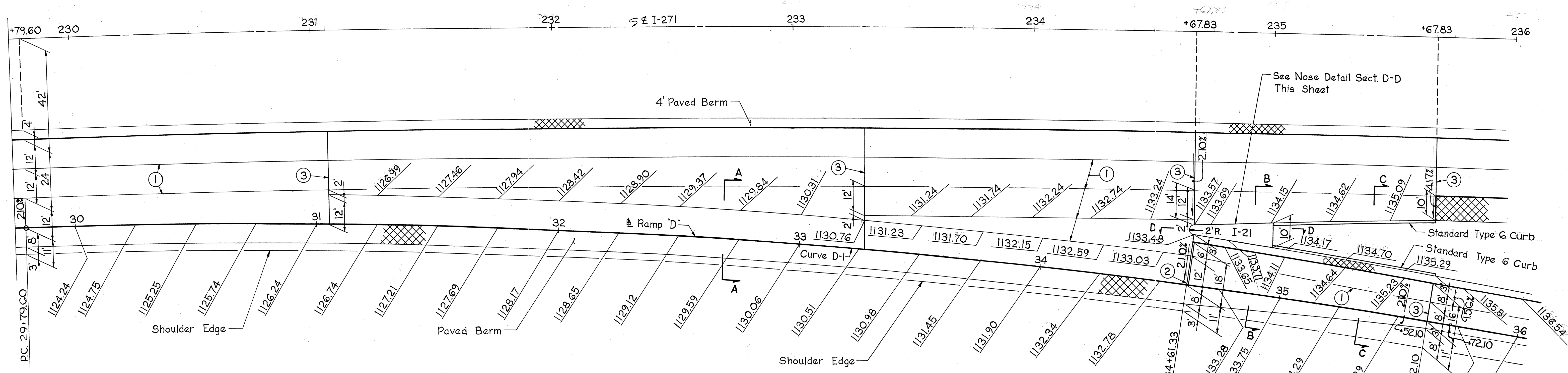
See Sheet No. 169 For S.R.94 Intersection Details.



RAMP C ACCELERATION LANE & TAPER
Scale: 1"=50'

End Taper Detail See Sheet No. 194.

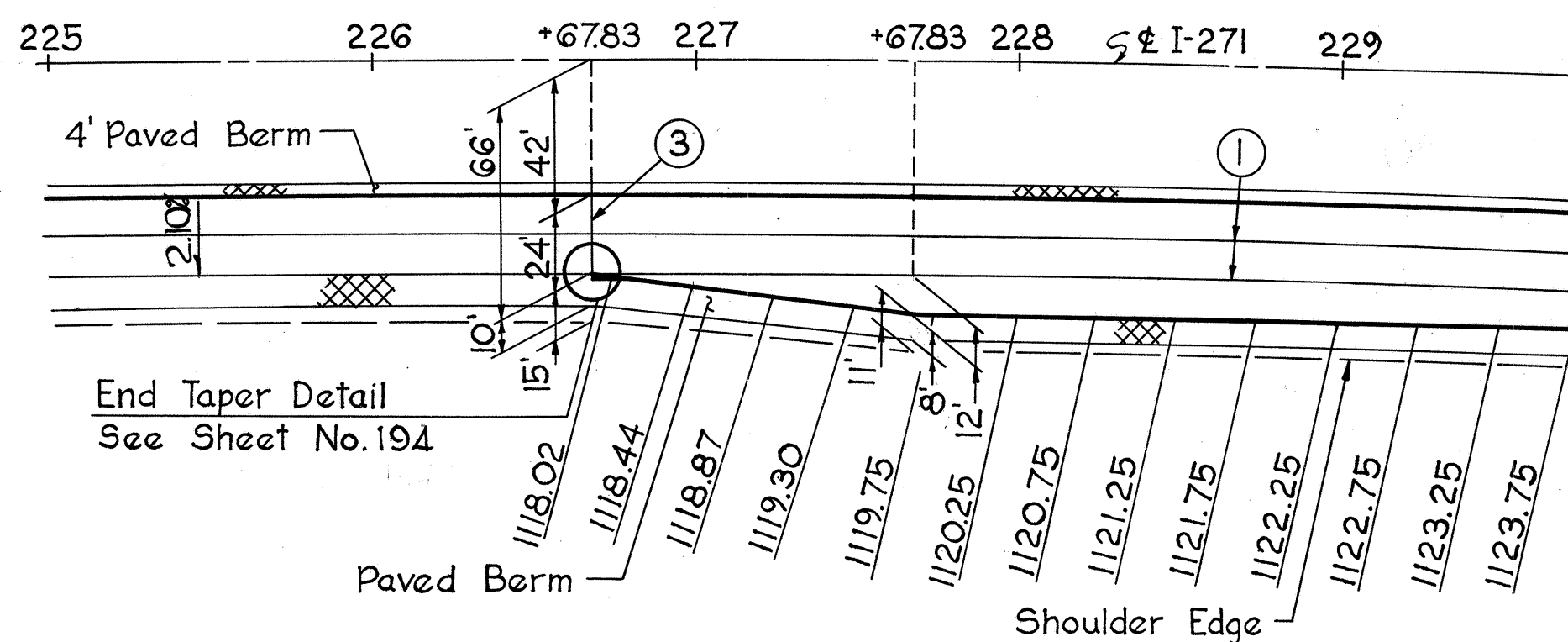
Note: See Sheet No. 12 For Typical Sections.



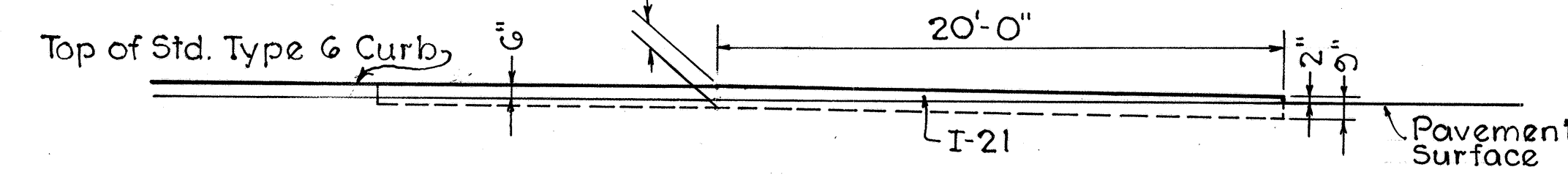
SUPERELEVATION TABLE

Ramp D Stations	Edge of Pavement Elev's B/L	Outer Edge	Ramp D Stations	Edge of Pavement Elev's B/L	Outer Edge	Ramp D Stations	Edge of Pavement Elev's B/L	Outer Edge
36+25	1137.10	1137.35	39+25	1150.81	1150.06	42+25	1165.81	1166.30
+50	1137.26	1138.21	+50	1152.06	1152.31	+50	1167.06	1167.57
+75	1138.20	1139.15	+75	1153.31	1153.56	+75	1168.31	1168.82
37+00	1139.20	1140.15	40+00	1154.56	1154.81	43+00	1169.56	1170.07
+25	1140.27	1141.22	+25	1155.81	1156.06	+25	1170.81	1171.32
+50	1142.11	1142.36	+50	1157.06	1157.31	+50	1172.06	1172.57
+75	1143.31	1143.56	+75	1158.31	1158.56	+75	1173.31	1173.82
38+00	1144.56	1144.81	41+00	1159.56	1159.81	44+00	1174.56	1175.07
+25	1145.81	1146.06	+25	1160.81	1161.06	+25	1175.81	1176.32
+50	1147.06	1147.31	+50	1162.06	1162.31	+50	1177.06	1177.57
+75	1148.31	1148.56	+75	1163.31	1163.56	+75	1178.31	1178.82
39+00	1149.56	1149.81	42+00	1164.56	1164.81	45+00	1179.56	1180.07

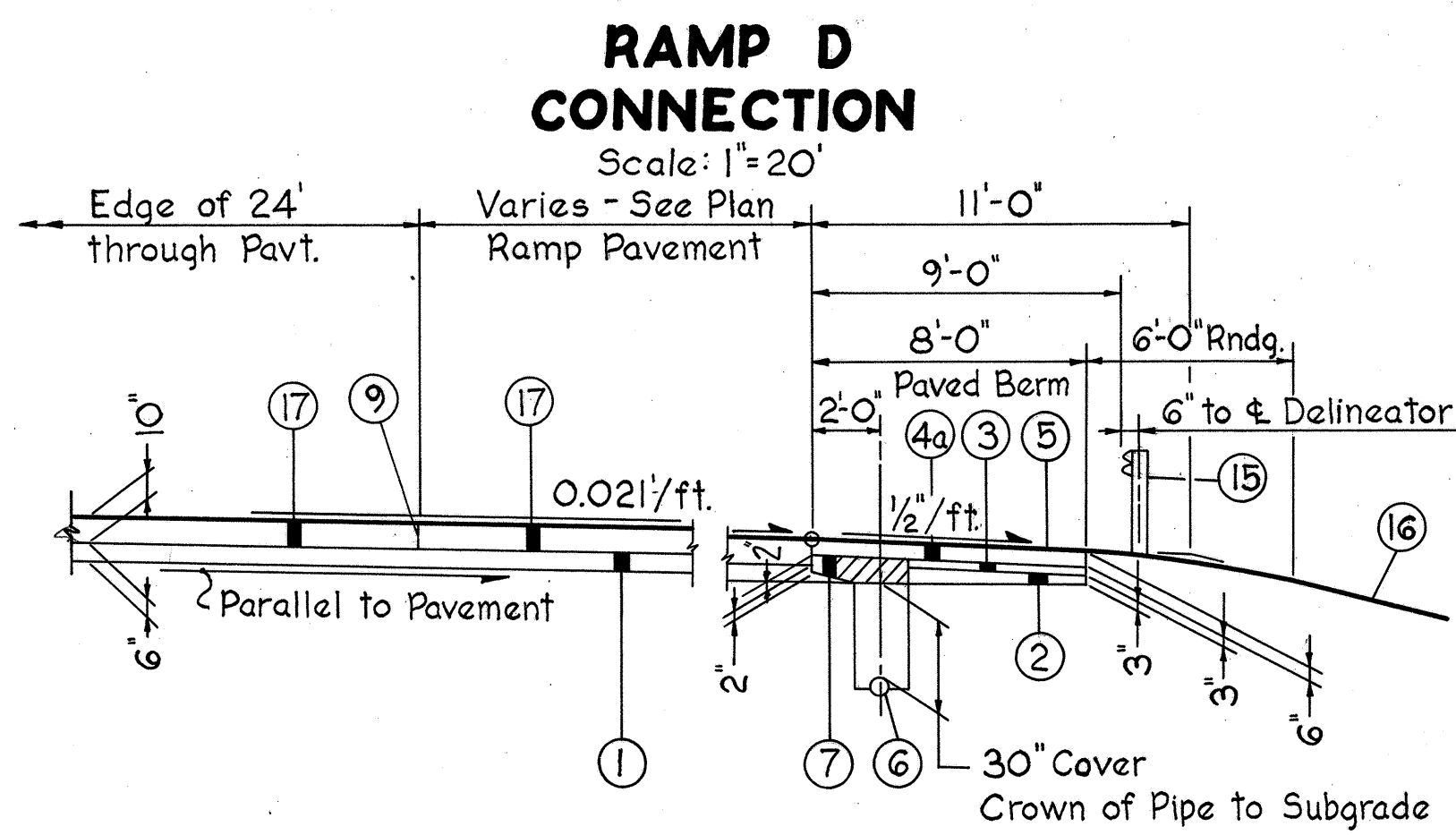
See Sheet No. 169 For S.R. 94 Intersection Details.



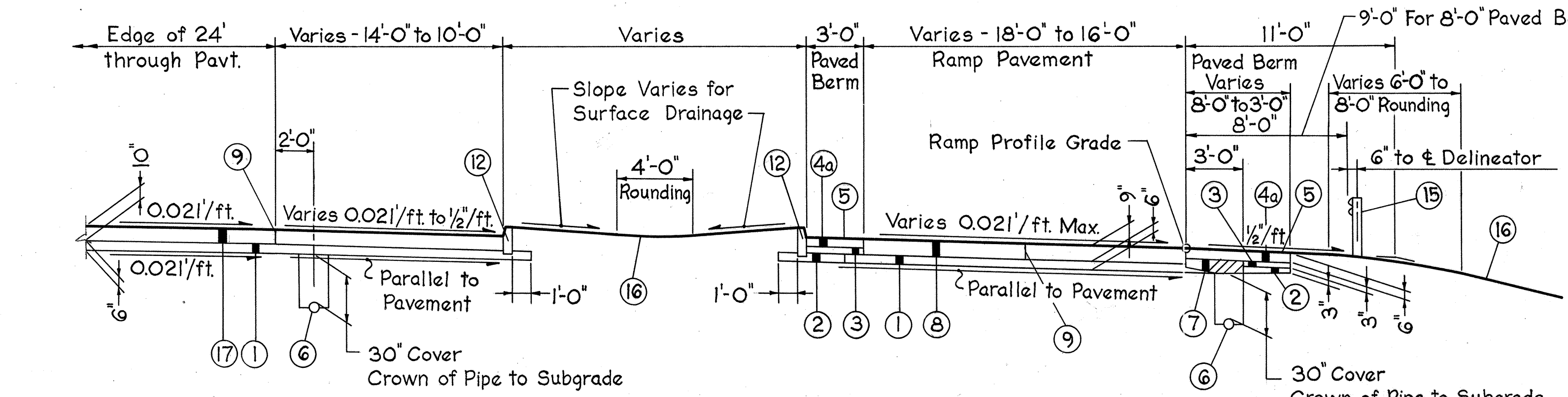
RAMP D DECELERATION LANE & TAPER
Scale: 1"=50'



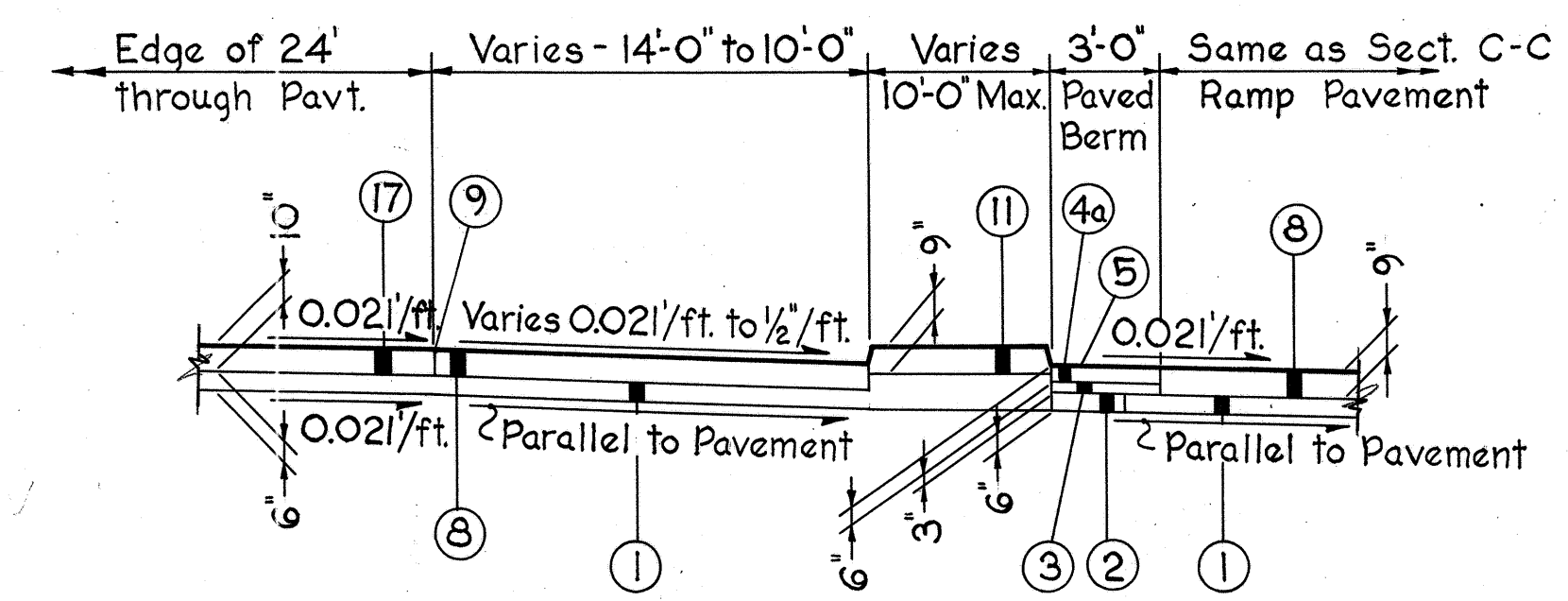
SECTION D-D
Scale: 1"=5'



SECTION A-A
Scale: 1"=5'



SECTION C-C
Scale: 1"=5'

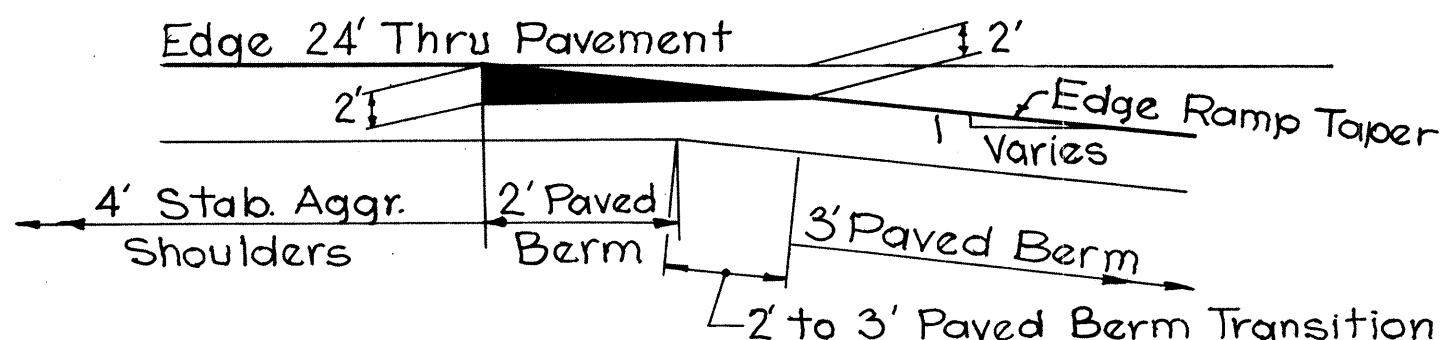
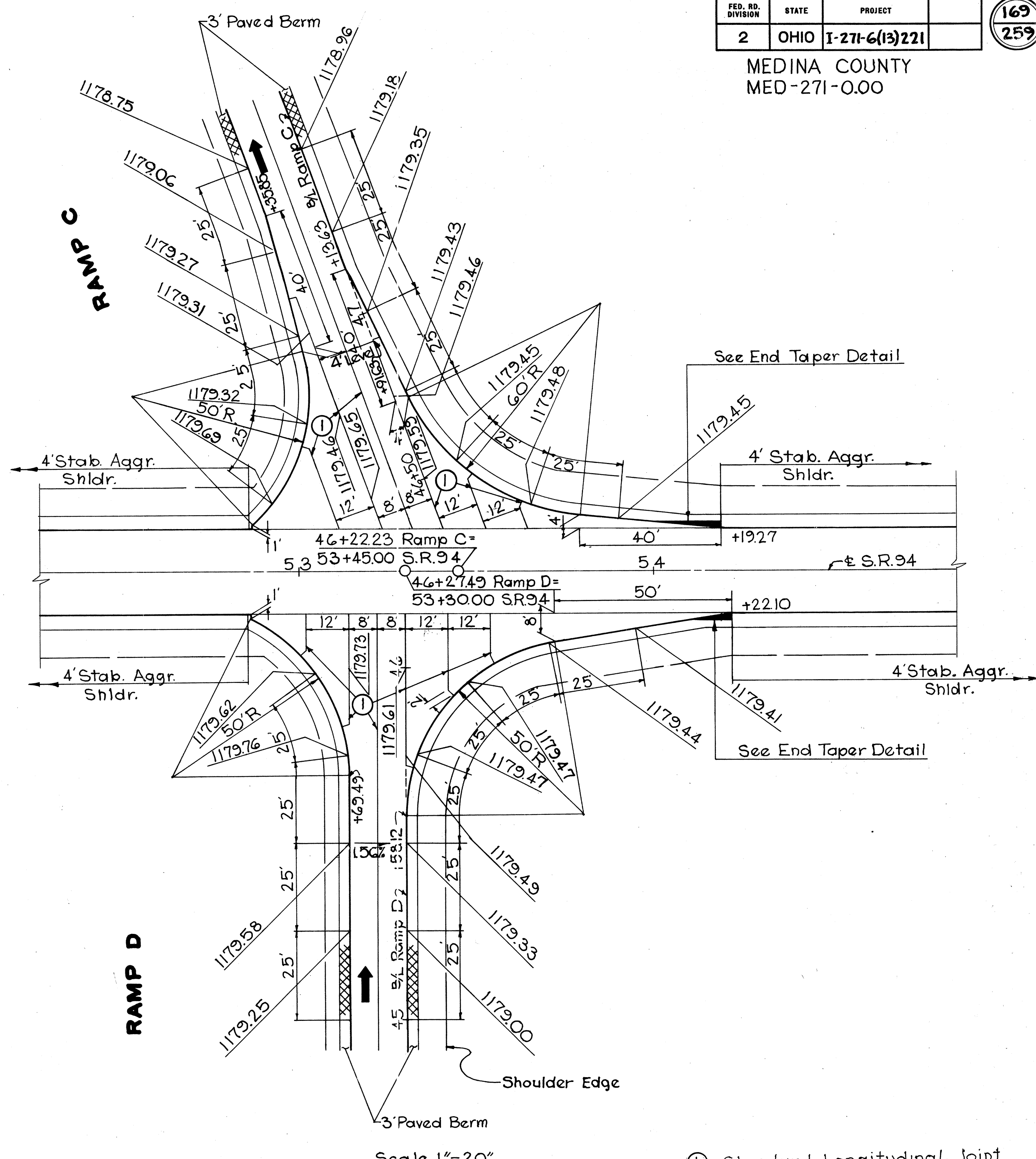
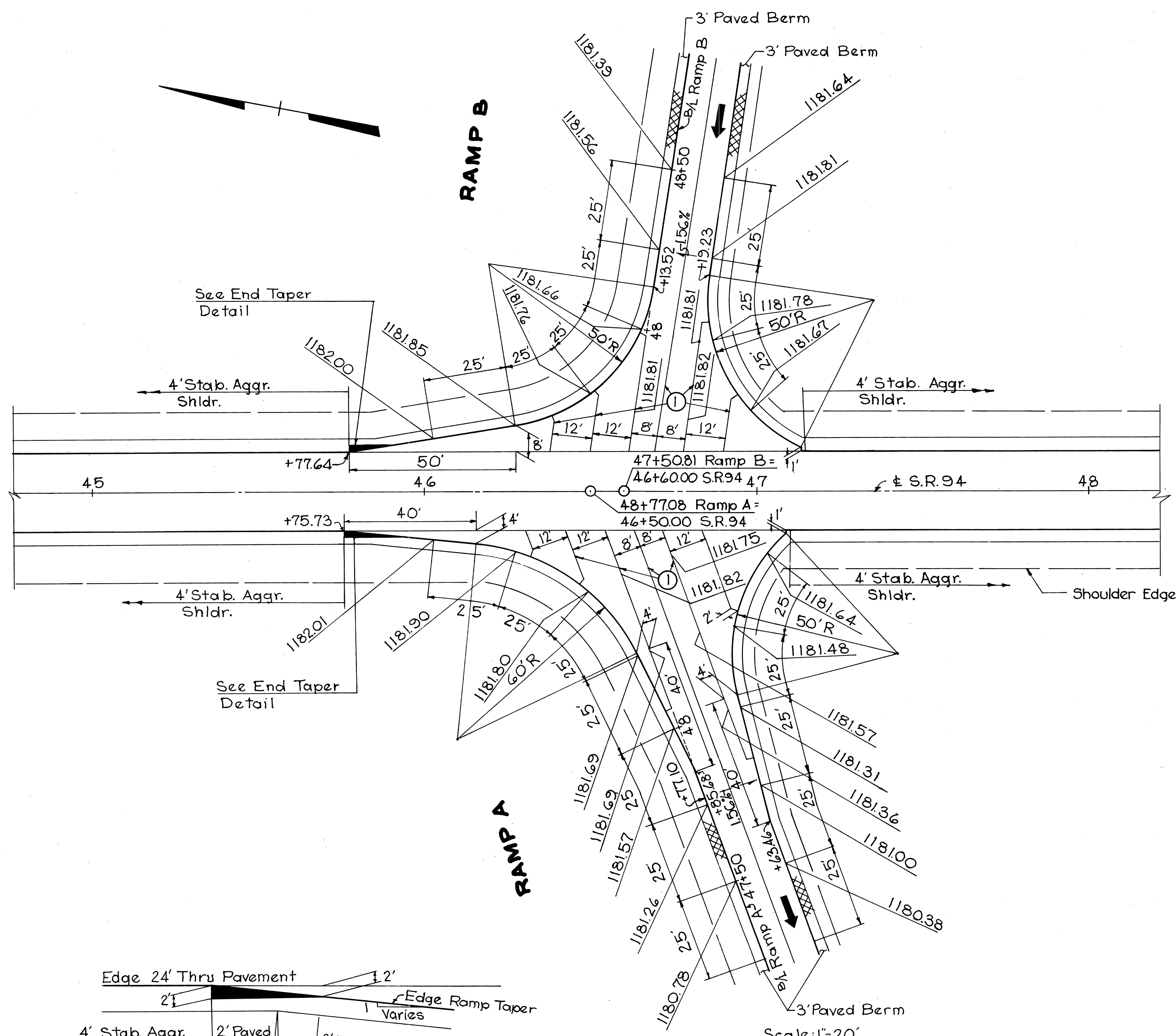


SECTION B-B
Scale: 1"=5'

Notes:
See Typical Sections ON RAMP TERMINALS For Legend, Sheet No. 12.
For slope treatment of side slopes see Sheet No. 9.

- JOINT LEGEND**
- ① Standard Longitudinal Joint
 - ② Standard Expansion Joint
 - ③ Standard Contraction Joint

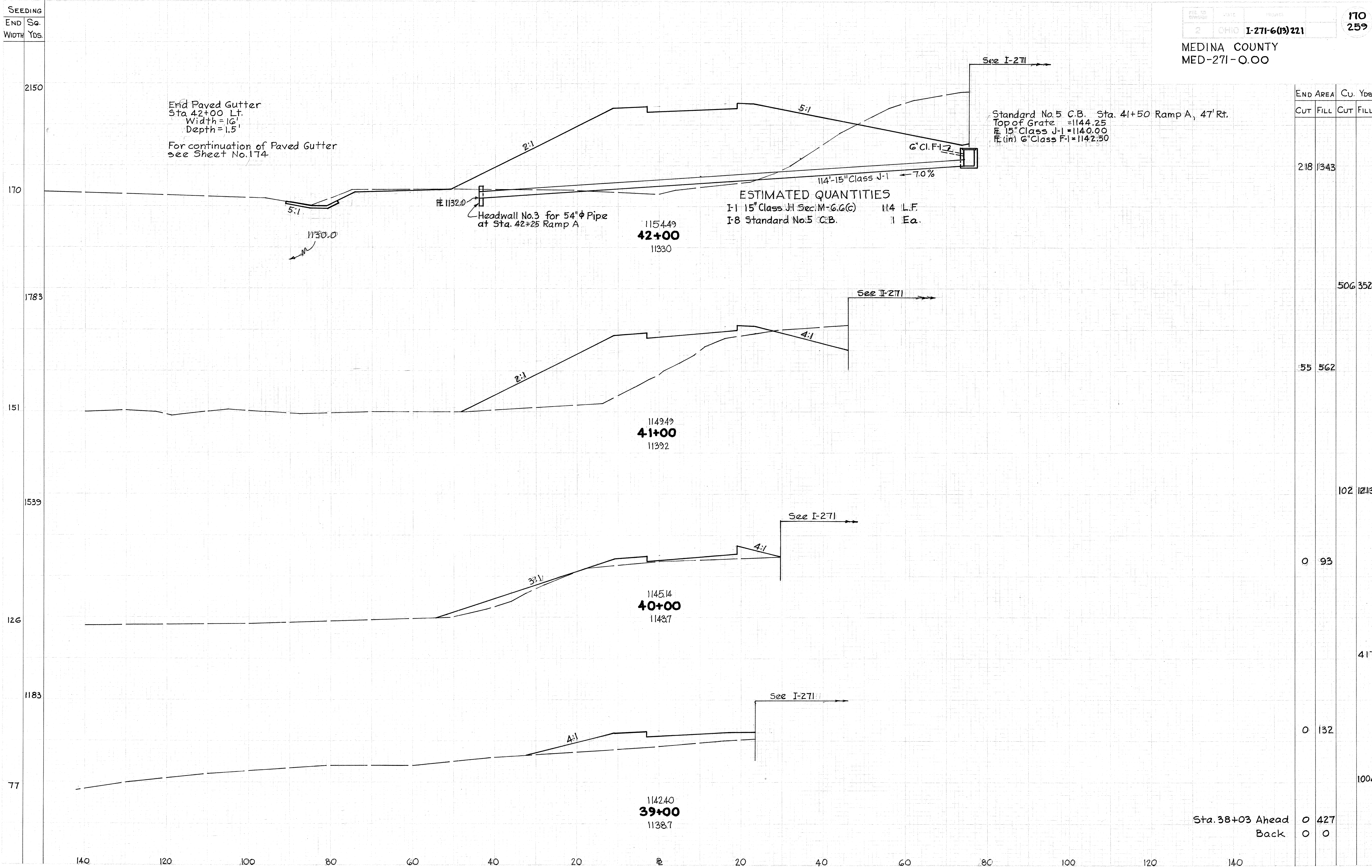
MEDINA COUNTY
MED-271-0.00



The shaded area shall be constructed of Concrete Pavement to an elevation one half inch lower than the adjacent pavement and surfaced with T-31, using No. 6 Aggregate as the maximum size. The shaded area shall be paid for as full depth T-71 and the surface treatment as T-31.

END TAPER DETAIL
Scale: 1"=10'

⓪ Standard Longitudinal Joint



SEEDING	END	Sta.	Width	Yds.
---------	-----	------	-------	------

END AREA	CU. Yds.	
	CUT	FILL
218	1343	
1783		506 3528
151	55	562
1539		102 1213
126	0	93
1183		417
77	0	132
		1004
	0	427
	0	0

ESTIMATED QUANTITIES
 I-1 15" Class J-1 Sec. M-G.G.C. 114 L.F.
 I-8 Standard No. 5 C.B. 11 Ea.

Standard No. 5 C.B. Sta. 41+50 Ramp A, 47' Rt.
 Top of Grate = 1144.25
 E 15" Class J-1 = 1140.00
 E (in) 6" Class F-1 = 1142.50

End Paved Gutter
 Sta. 42+00 Lt.
 Width = 16'
 Depth = 1.5'
 For continuation of Paved Gutter
 see Sheet No. 174

Headwall No. 3 for 54" φ Pipe
 at Sta. 42+25 Ramp A

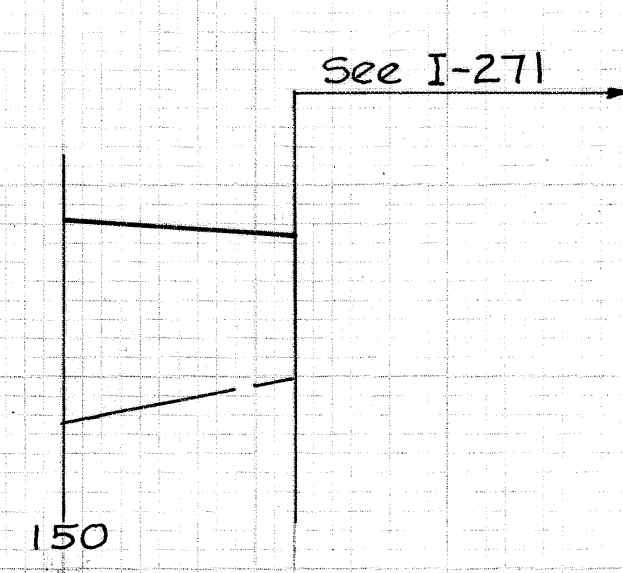
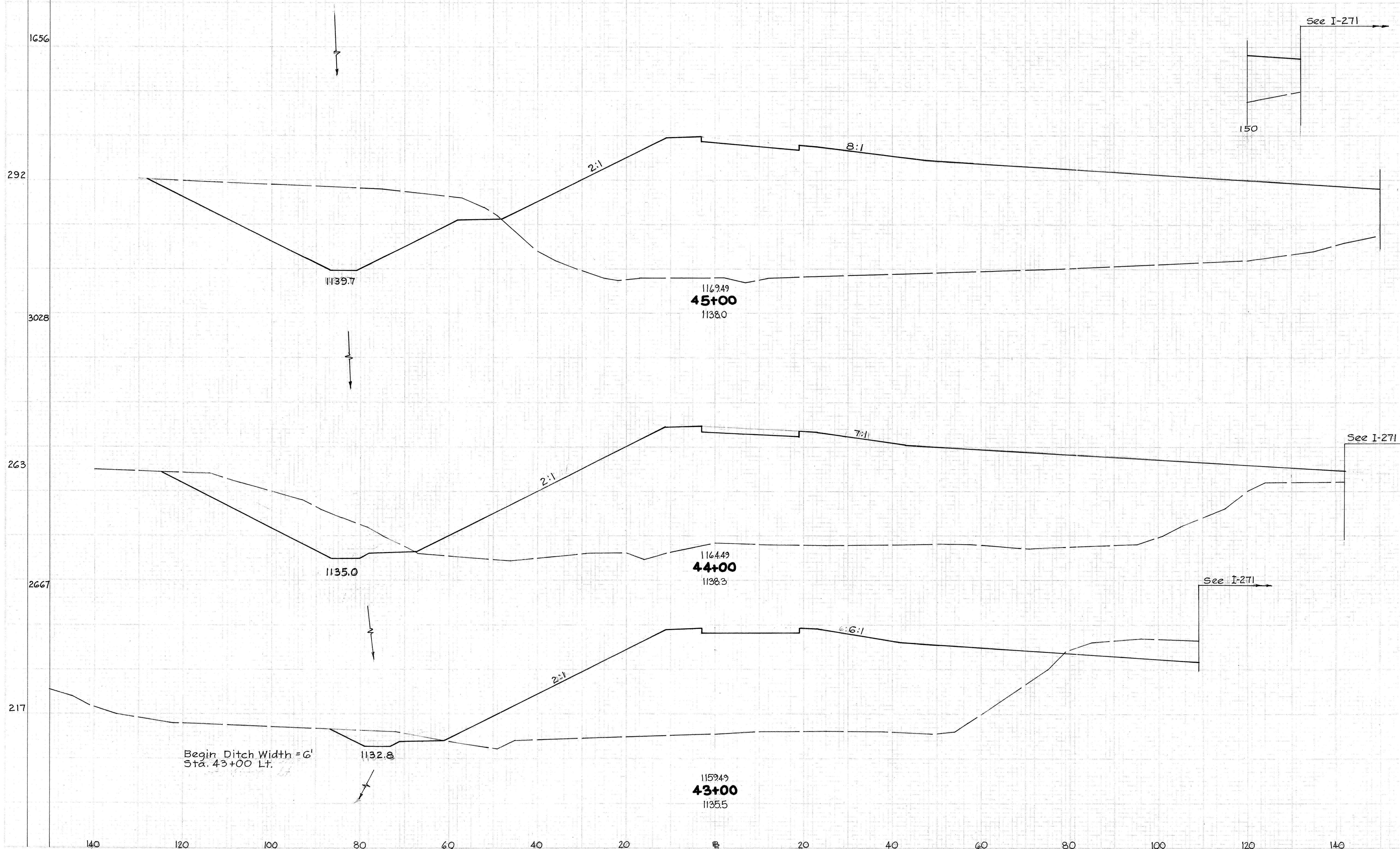
Sta. 38+03 Ahead 0 427
 Back 0 0

SEEDING
END Sta.
WIDTH Yds.

2 OHIO I-271-6(13)221

171
259

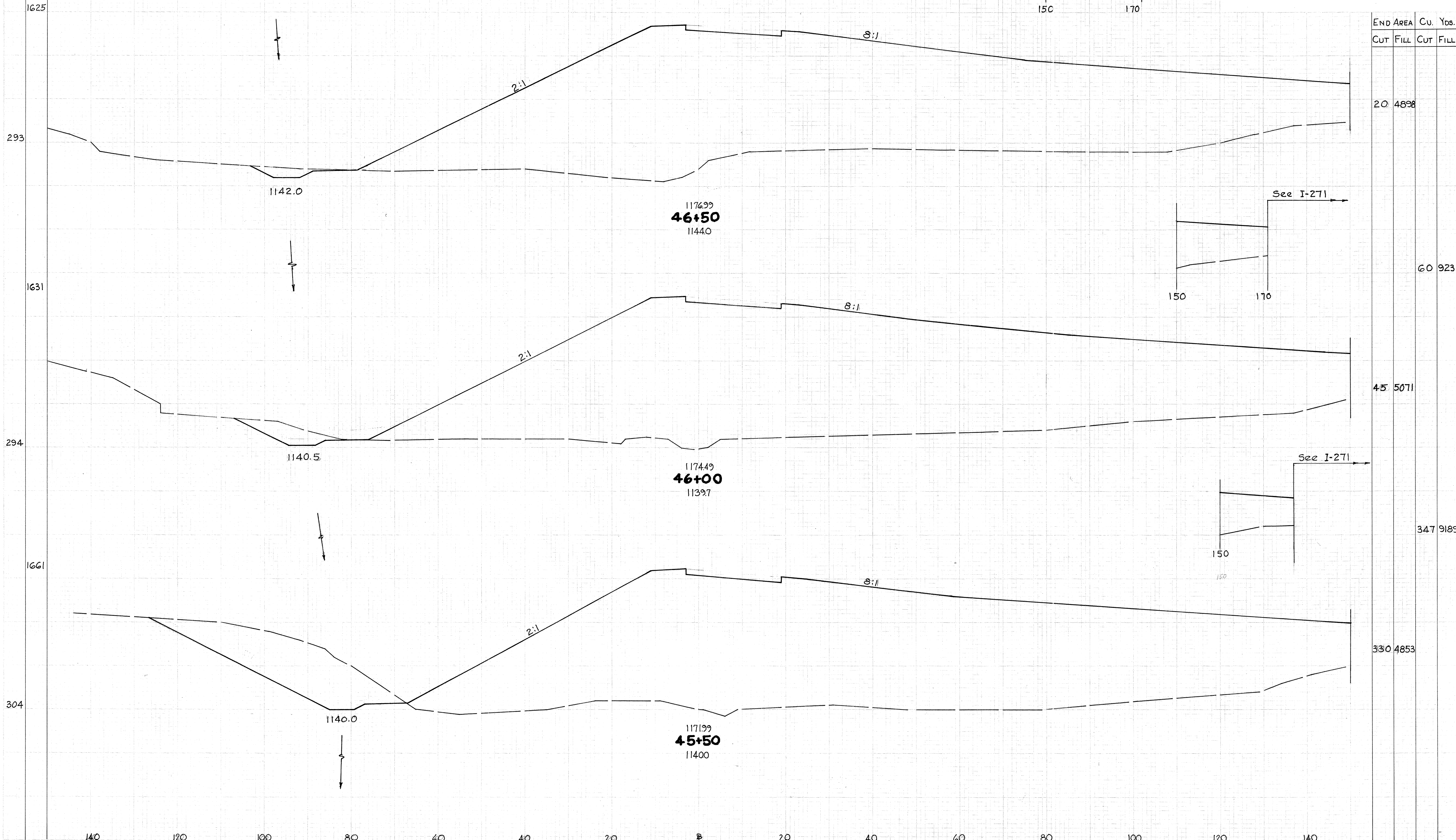
MEDINA COUNTY
MED-271-0.00



END AREA		CU. Yds.	
CUT	FILL	CUT	FILL
			10288753
780	4600		
			170715580
142	3813		
			53011418
144	2353		
			6706844

SEEDING
END SQ.
WIDTH YDS.

MEDINA COUNTY
MED-271-0.00



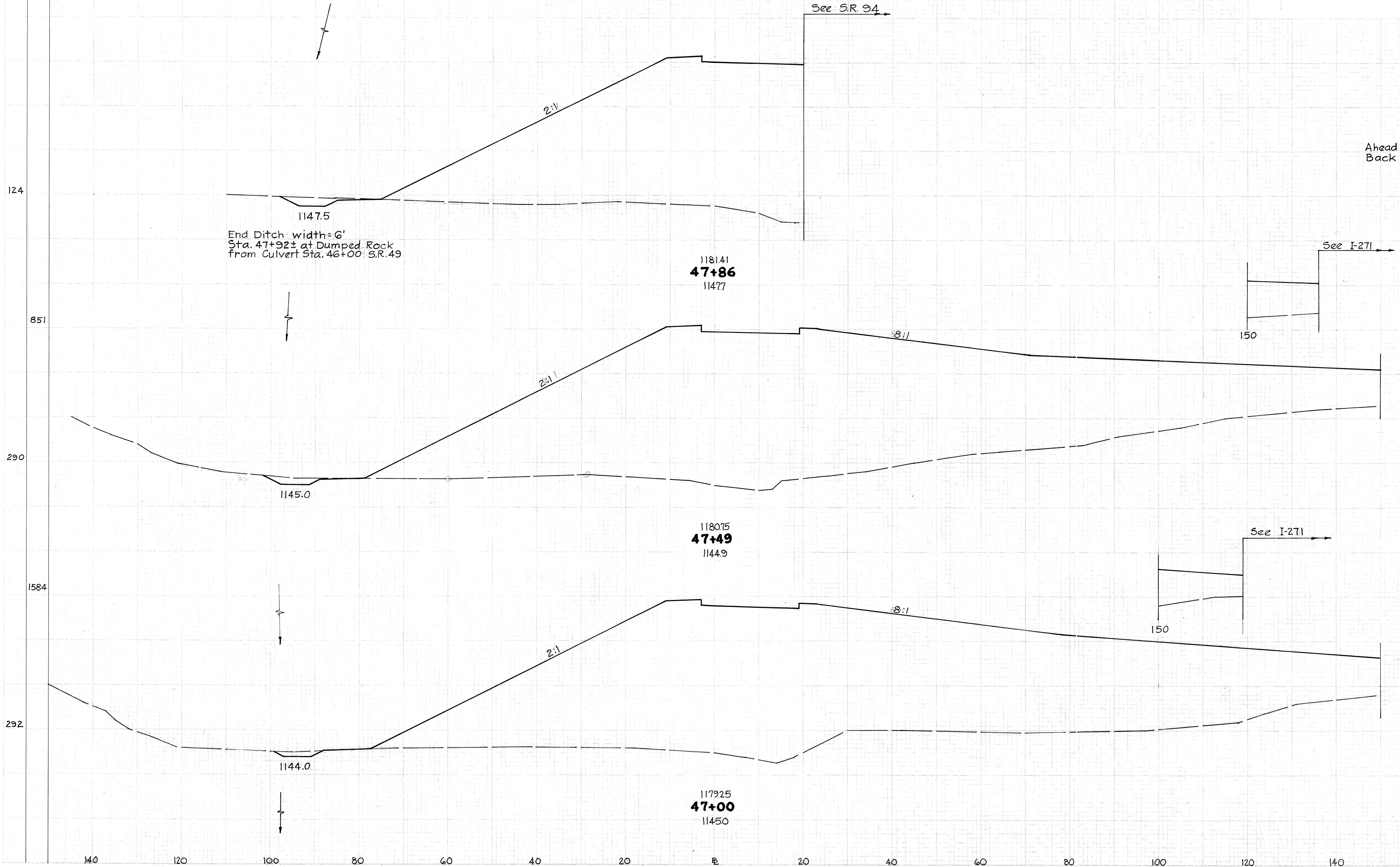
S.R.94 INTERCHANGE RAMP A Sta. 45+50 to Sta. 46+50

SEEDING
END Sta.
WIDTH Yds.

FED. RD. DIST. NO. 2 STATE OHIO PROJECT I-271-G(13)221

173
259

MEDINA COUNTY
MED-271-0.00



END AREA		CU. Yds.	
CUT	FILL	CUT	FILL

Ahead 0
Back 87 2149

		75	4829
--	--	----	------

		73	4899
--	--	----	------

		93	8951
--	--	----	------

		30	4965
--	--	----	------

		46	9132
--	--	----	------

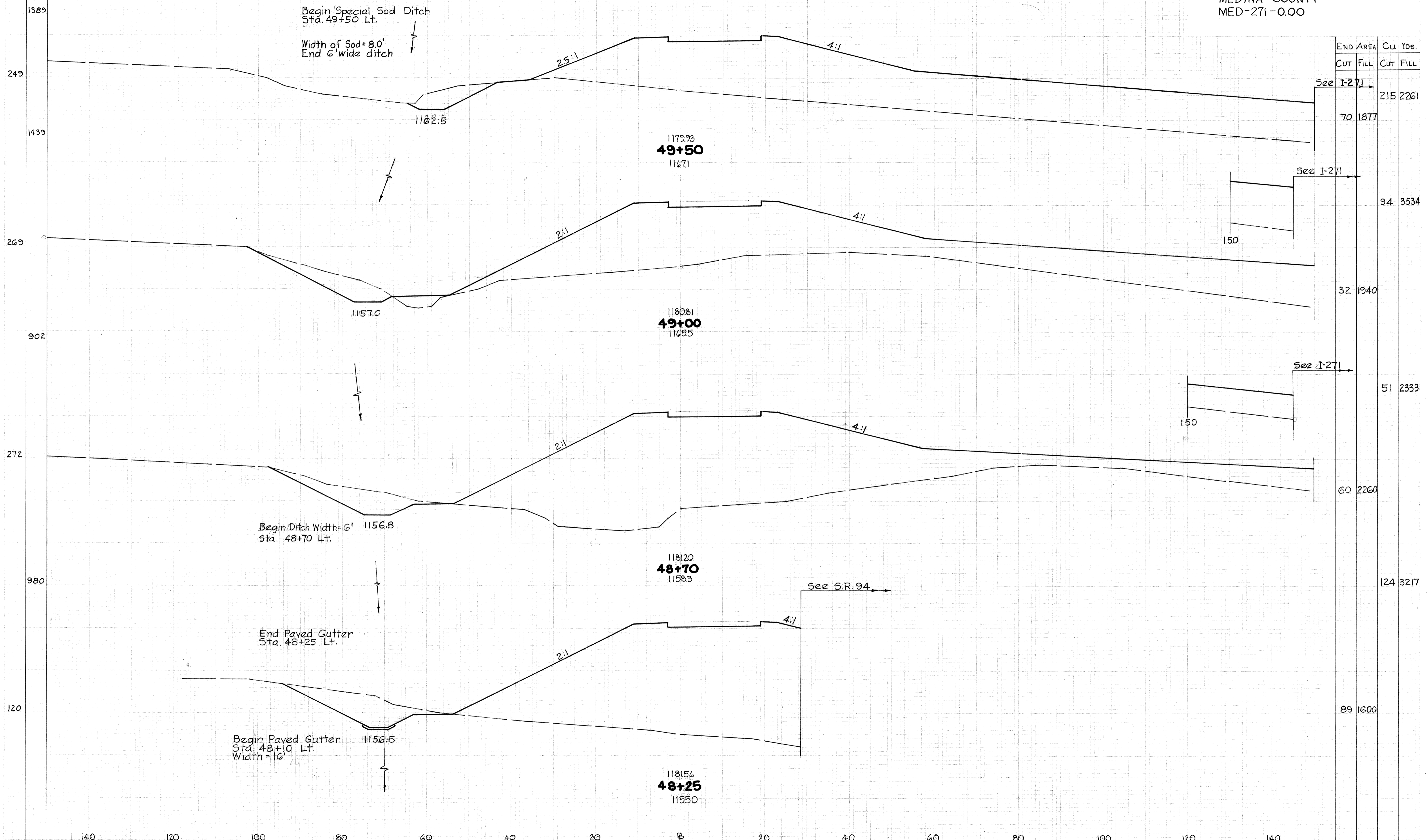
S.R. 94 INTERCHANGE RAMP A Sta. 47+00 to Sta. 47+86

SEEDING
END Sta.
Width Yds.

2 OHIO I-271-6(13)221

174
259

MEDINA COUNTY
MED-271-0.00



END AREA	Cu. Yds.	
	CUT	FILL
70	1877	215 2261
32	1940	94 3534
60	2260	51 2333
89	1600	124 3217

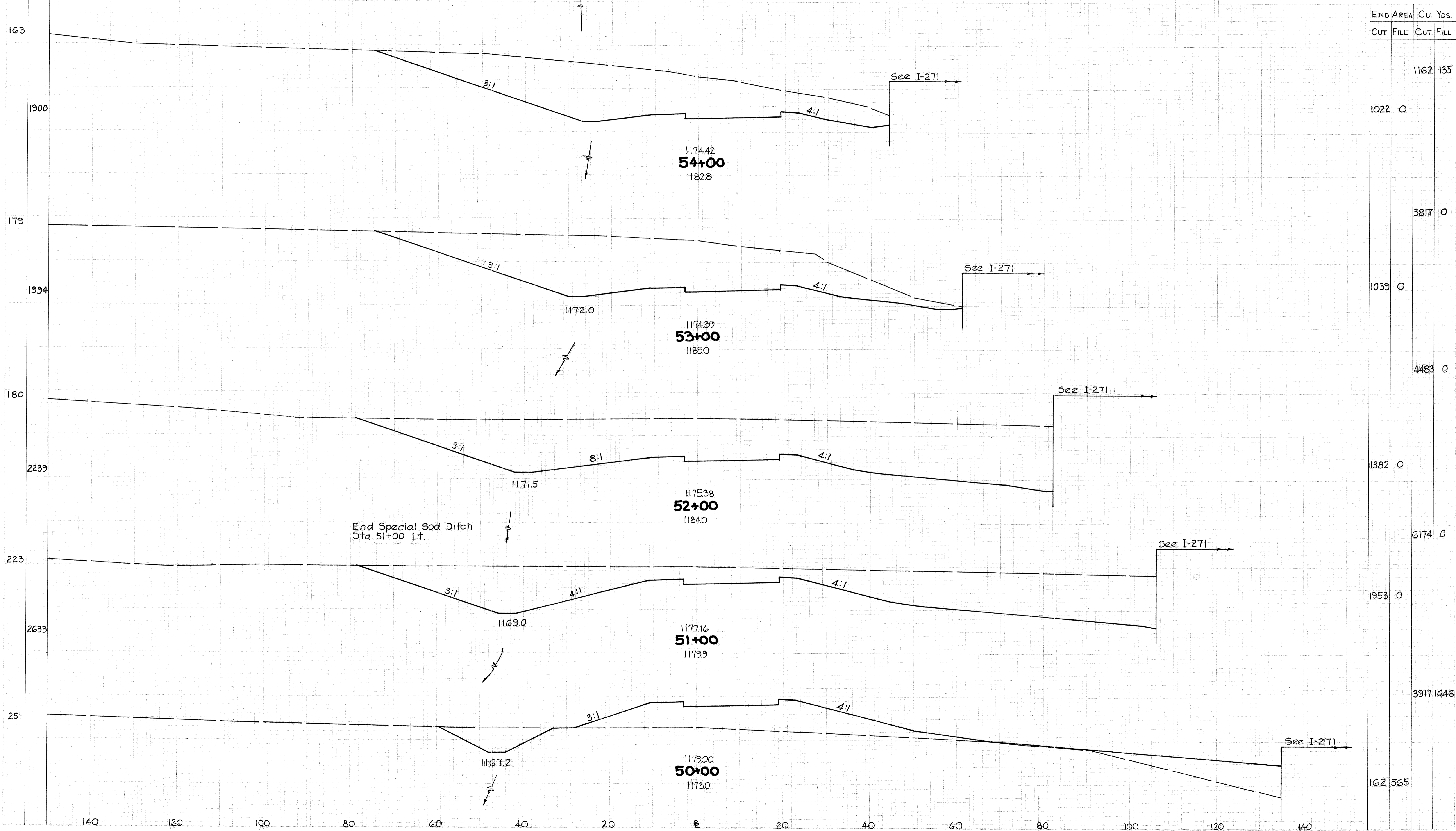
S.R. 94 INTERCHANGE RAMP B Sta. 48+25 to Sta. 49+50

SEEDING
END Sta.
WIDTH Yds.

2 OHIO 1-271-6(13)221

175
259

MEDINA COUNTY
MED-271-0.00



END AREA	Cu. Yds.	
	CUT	FILL
163		1162 135
1900	1022	0
179		3817 0
1994	1039	0
180		4483 0
2239	1382	0
223		6174 0
2633	1953	0
251		3917 1046
	162	565

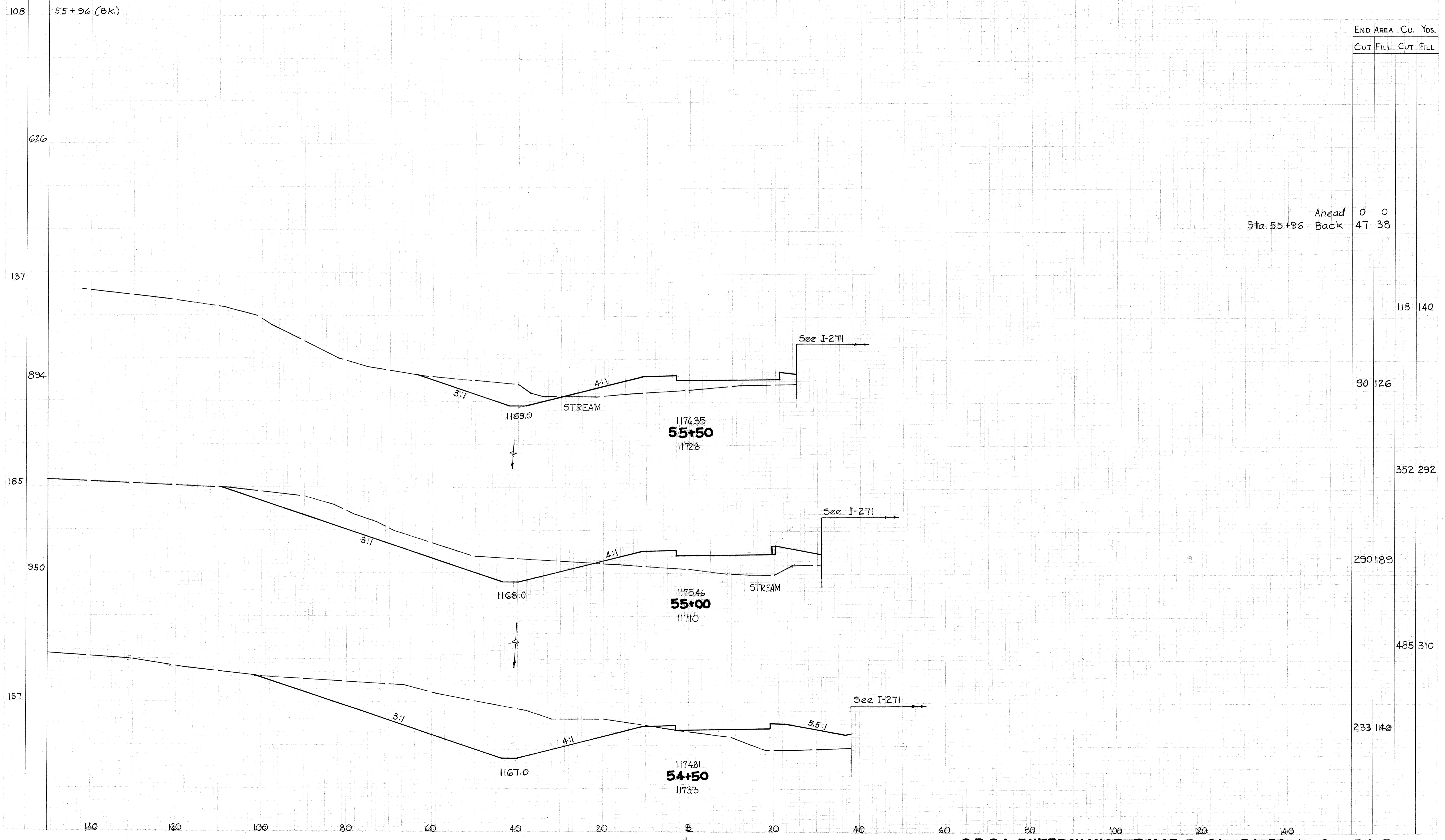
S.R.94 INTERCHANGE RAMP B Sta.50+00 to Sta.54+00

SEEDING
END Sta
WIDTH Yds.

2 OHIO I-271-G(13)221

176
259

MEDINA COUNTY
MED-271-000



END AREA		CU. Yds.	
CUT	FILL	CUT	FILL

Ahead 0 0
Sta. 55+96 Back 47 38

118 140

90 126

352 292

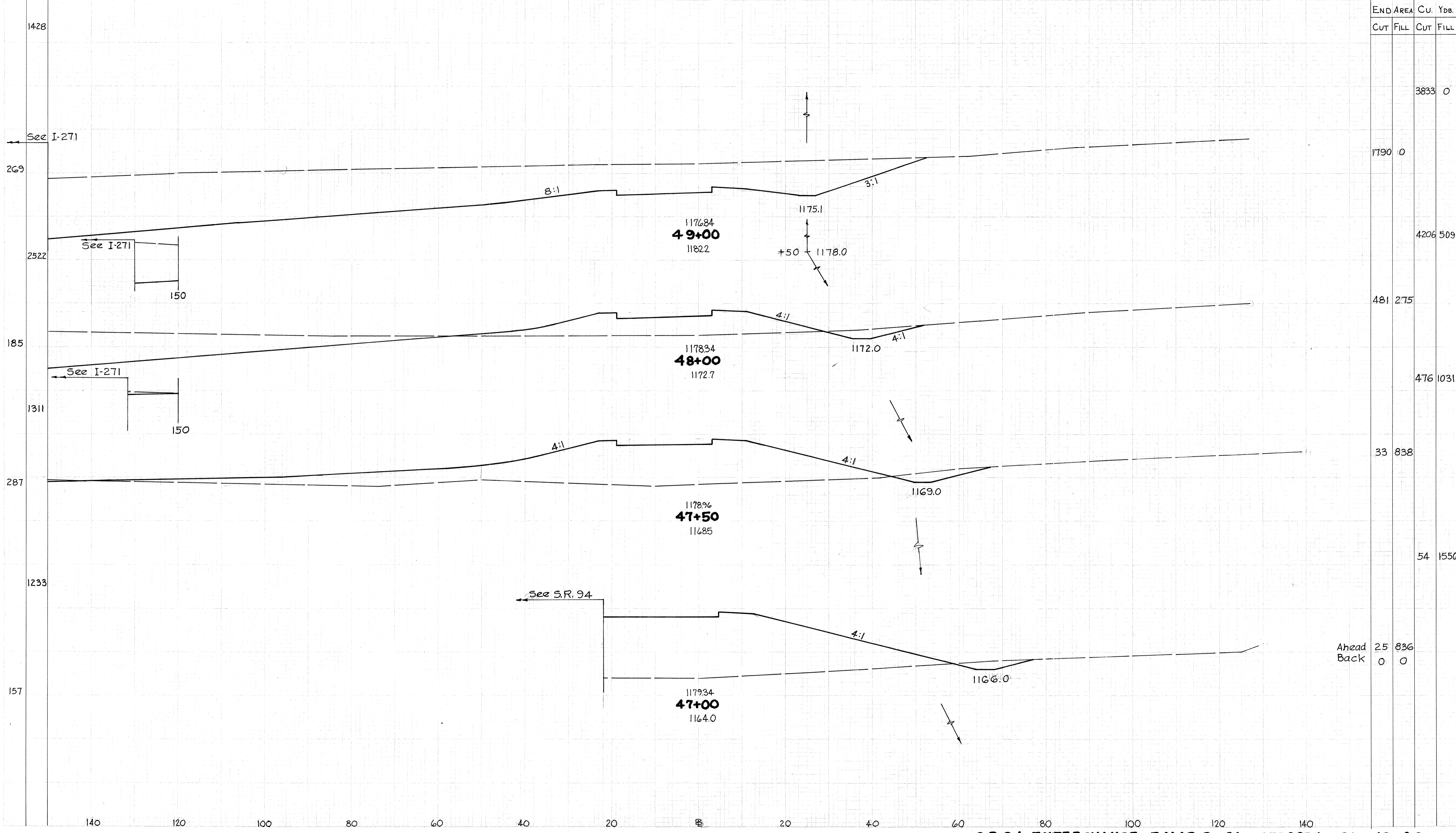
290 189

485 310

233 146

SEEDING
END Sq.
WIDTH Yds.

MEDINA COUNTY
MED-271-0.00



END AREA		Cu. Yds.	
Cut	Fill	Cut	Fill
			3833 0
1790	0		
		4206	509
481	275		
		476	1031
33	838		
		54	1550
Ahead	25	836	
Back	0	0	

S.R. 94 INTERCHANGE RAMP C Sta. 47+00 to Sta. 49+00

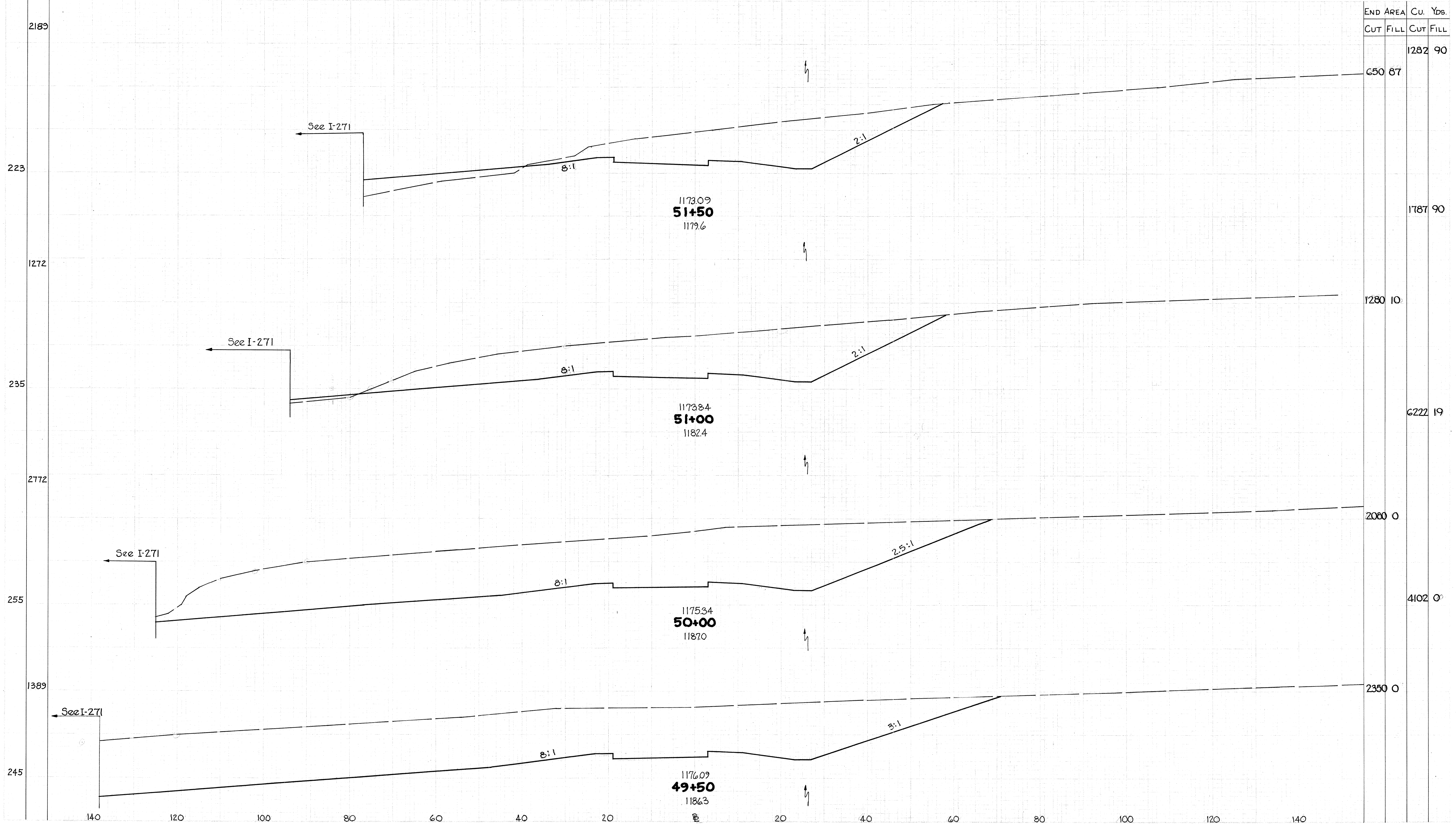
SEEDING
END So.
Width Yds.

2 OHIO I-271-6(13)221

178
259

MEDINA COUNTY
MED-271-0.00

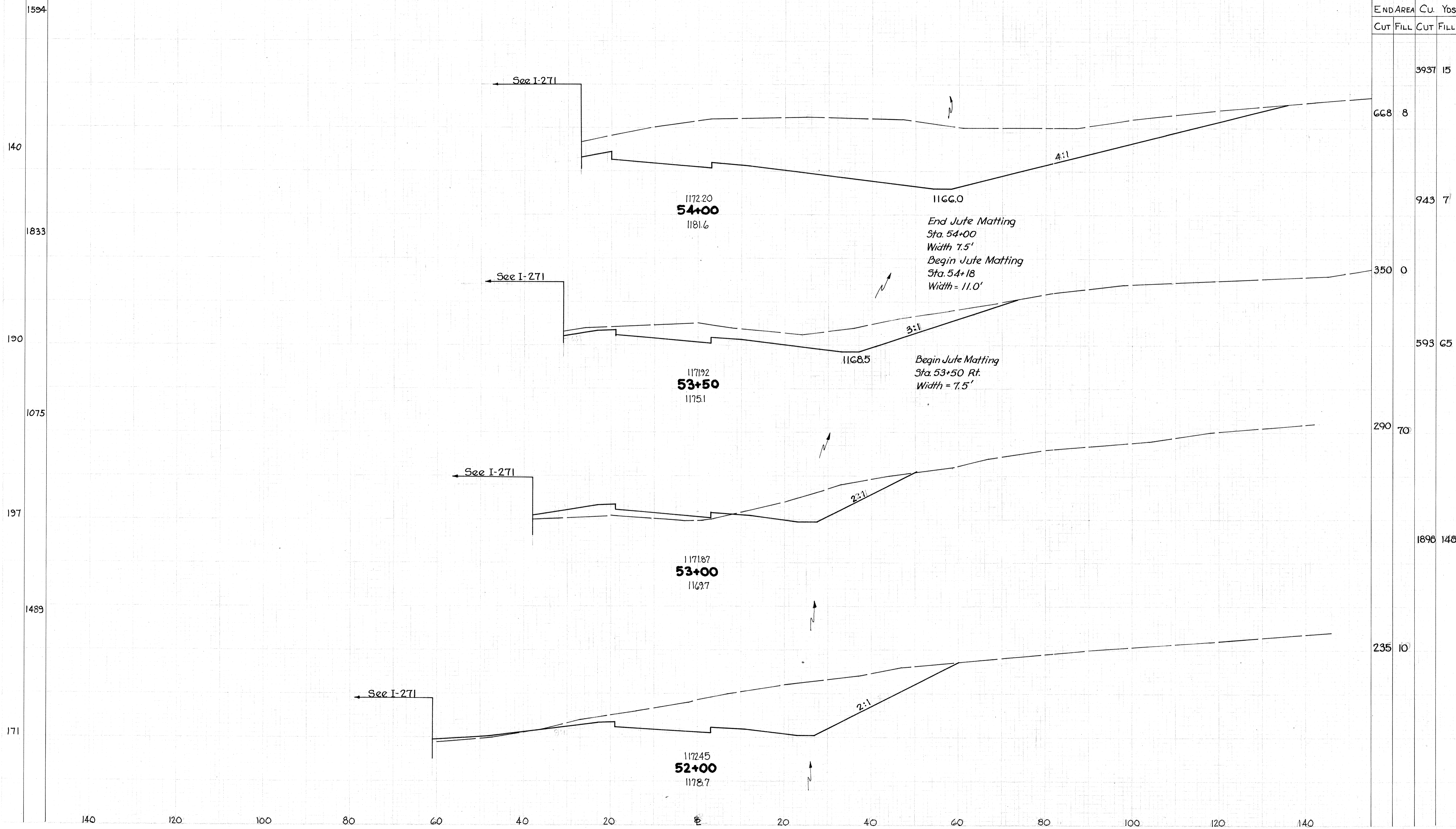
END AREA Cu. Yds.
CUT FILL CUT FILL



S.R. 94 INTERCHANGE RAMP C Sta. 49+50 to Sta. 51+50

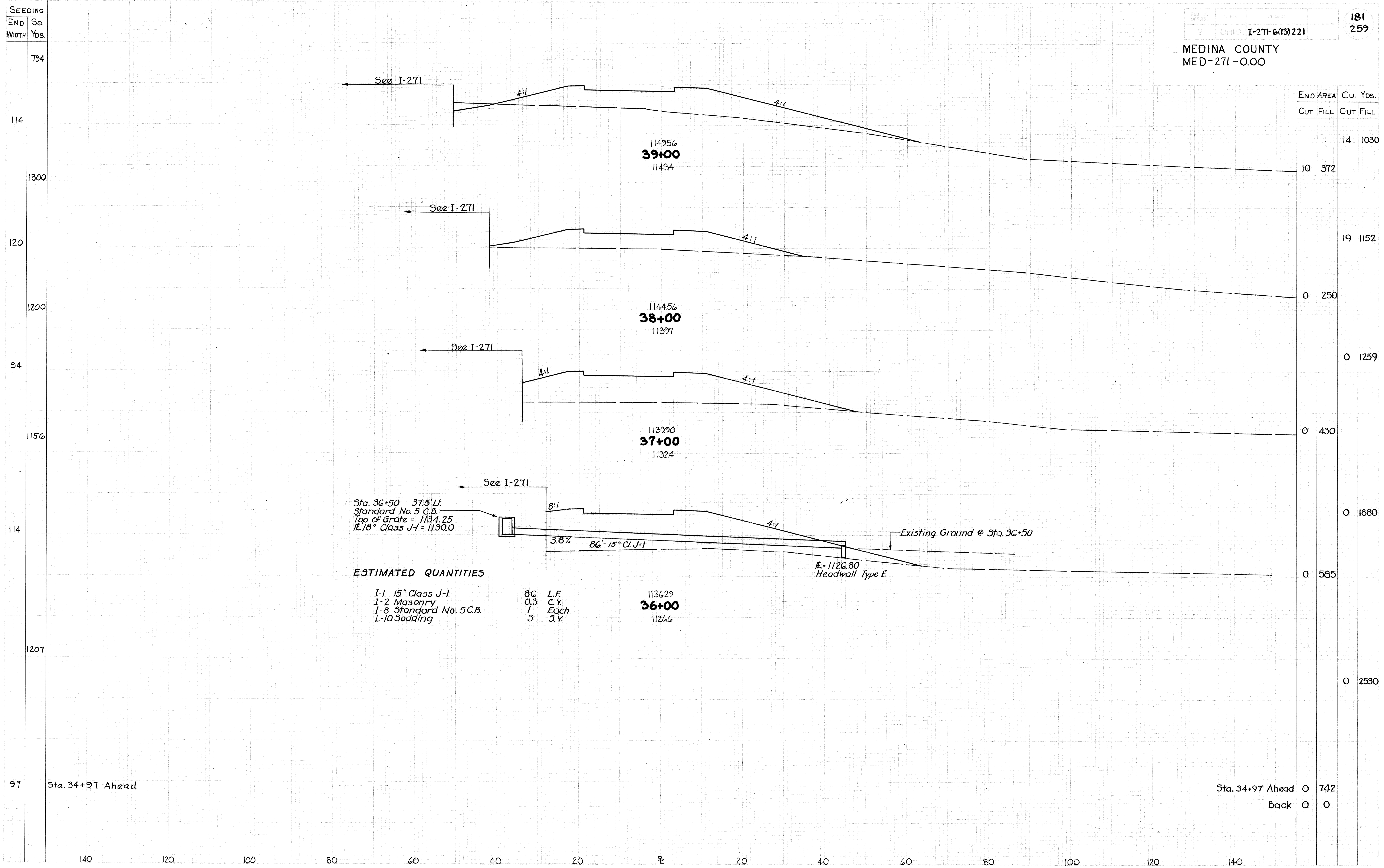
SEEDING
END Sta.
WIDTH Yds.

179
259
MEDINA COUNTY
MED-271-0.00



S.R.94 INTERCHANGE RAMP C Sta.52+00 to Sta.54+00

MEDINA COUNTY
MED-271-0.00



END STA.	END AREA		Cu. Yds.	
	CUT	FILL	CUT	FILL
114			14	1030
1300	10	372		
120			19	1152
1200	0	250		
94			0	1259
1156	0	430		
114			0	1680
1207	0	585		
97			0	2530
Sta. 34+97 Ahead	0	742		
Back	0	0		

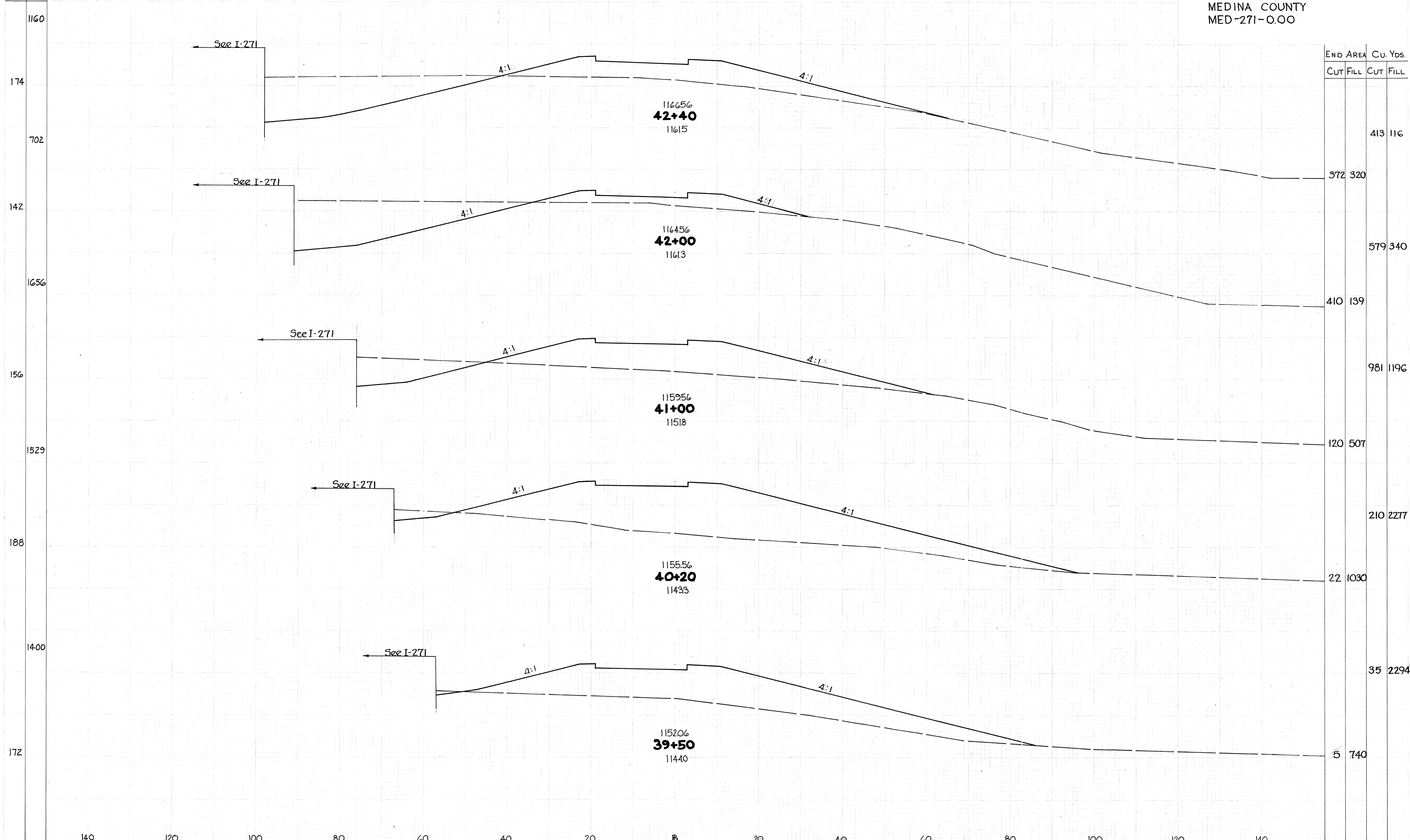
Sta. 36+50 37.5' Lt.
Standard No. 5 C.B.
Top of Grate = 1134.25
R. 18" Class J-1 = 1130.0

ESTIMATED QUANTITIES

I-1 15" Class J-1	86	L.F.	113629
I-2 Masonry	0.3	C.Y.	36+00
I-8 Standard No. 5 C.B.	1	Each	11266
L-10 Sodding	3	S.Y.	

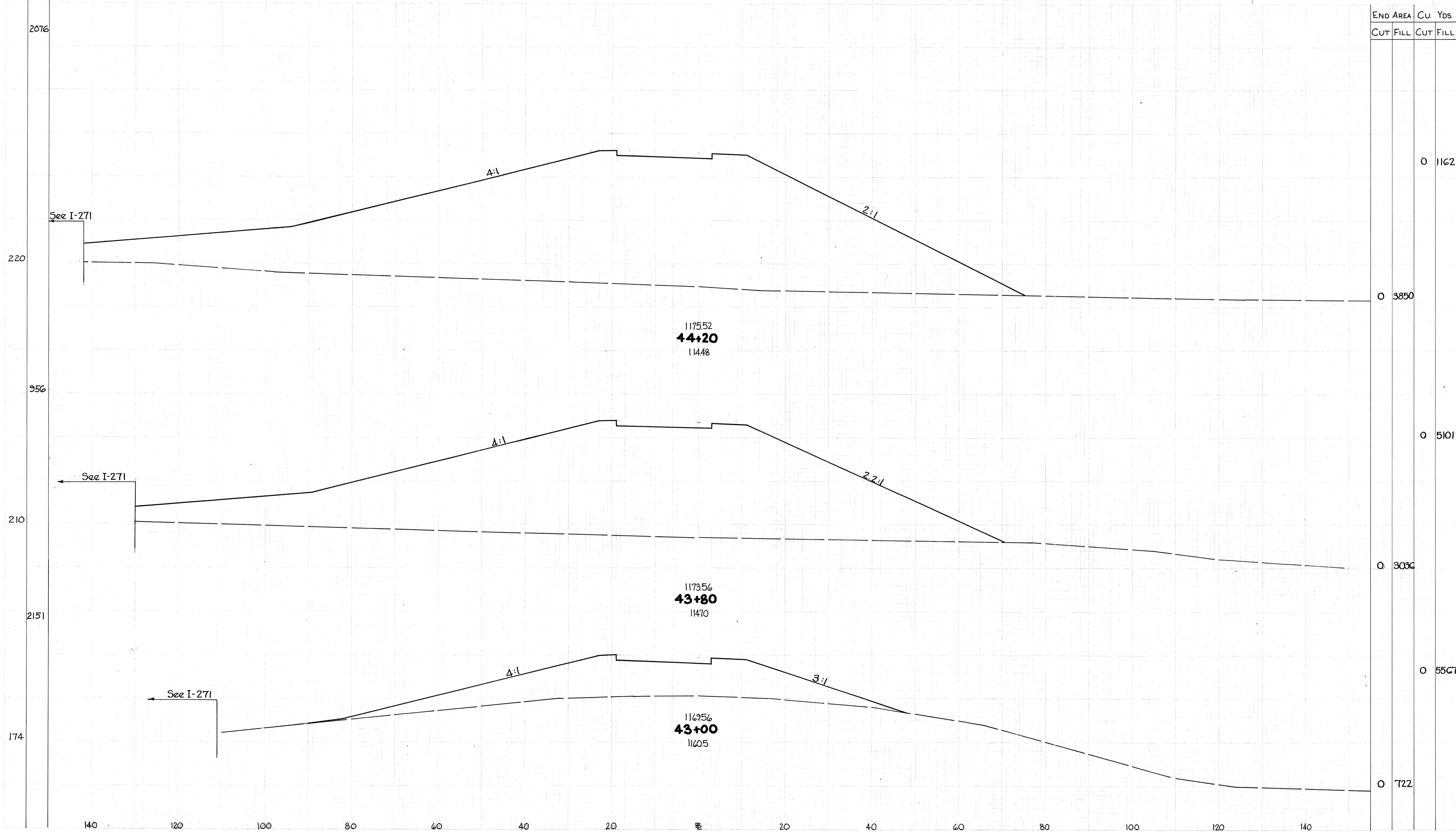
SEEDING
END Se.
Width Yds.

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S.R. 94 INTERCHANGE RAMP D Sta. 39+50 to Sta. 42+40

SEEDING
END Sta.
WIDTH Yds.



S.R. 94 INTERCHANGE RAMP D Sta 43+00 to Sta. 44+20

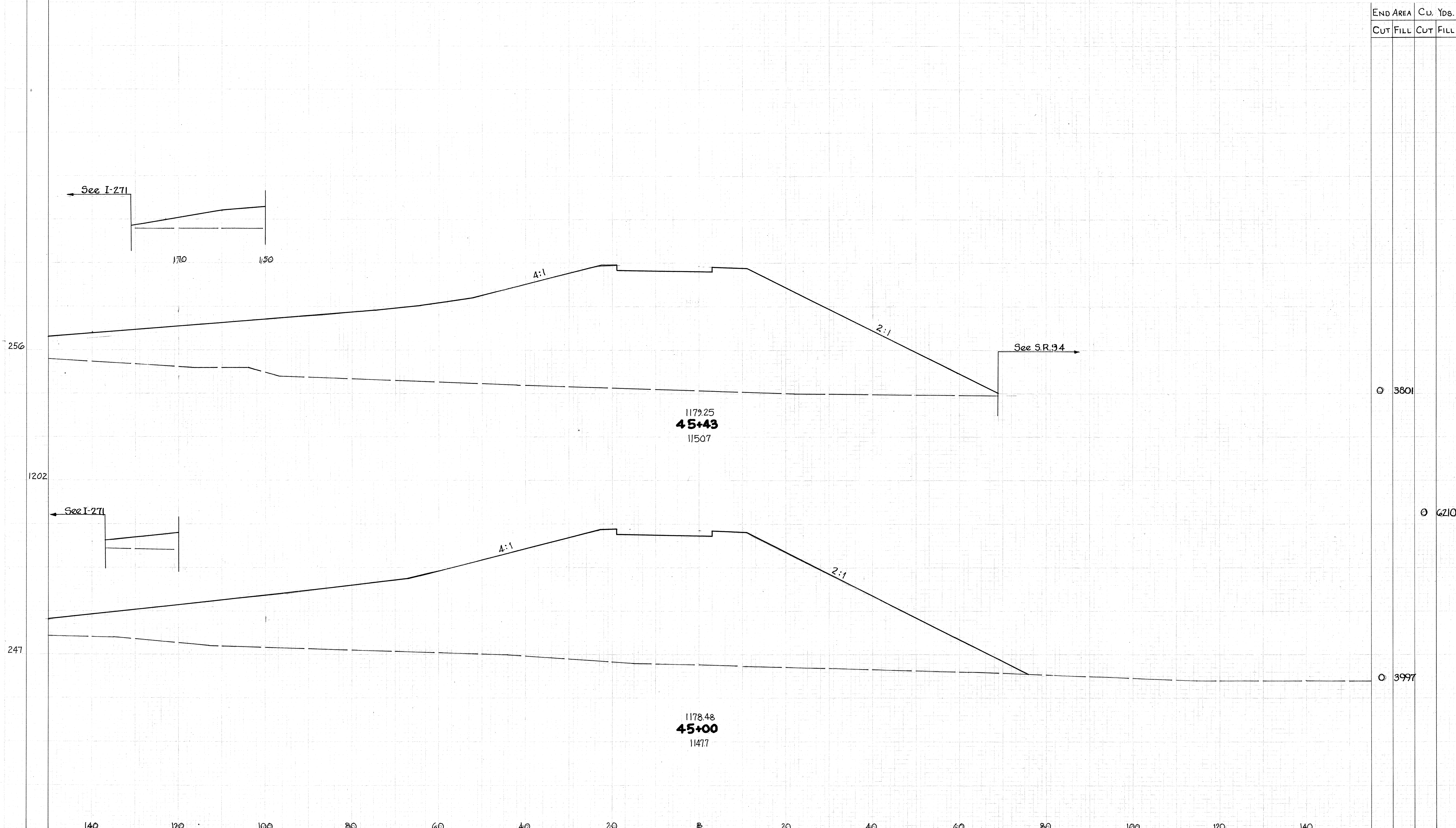
SEEDING
END Sta.
Width Yds.

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END AREA		CU. Yds.	
CUT	FILL	CUT	FILL



S.R.94 INTERCHANGE RAMP D Sta. 45+00 to Sta. 45+43

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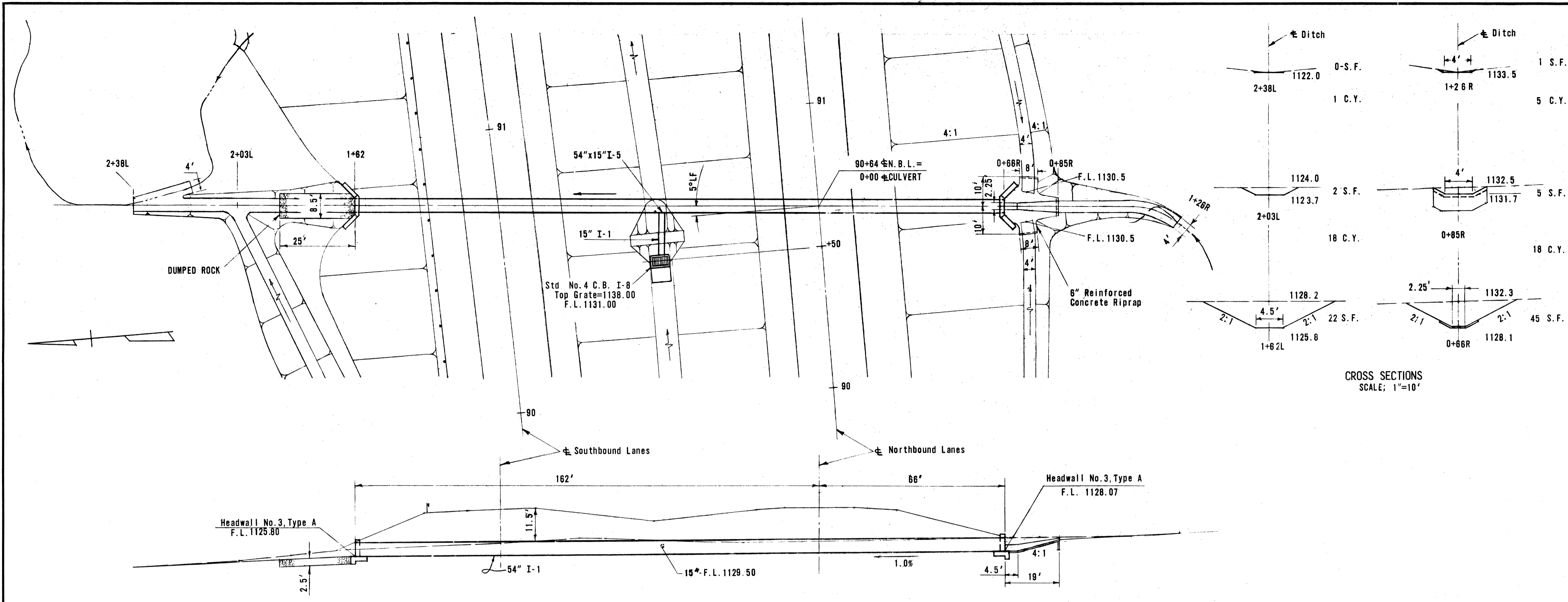
185
259

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ESTIMATED QUANTITIES

I-1 54" Class A-1 Sec. M-6.6(b)	228	L.F.
I-1 15" Class E-1	16	L.F.
I-2 Masonry	20.6	C.Y.
I-5 54"x15" Tee, Pipe Special	1	Ea.
I-8 Std. No. 4 Catch Basin	1	Ea.
I-10 Dumped Rock Channel Protection	20	C.Y.
I-10 6" Reinforced Concrete Riprap	35	S.Y.
L-10 Sodding	9	S.Y.
E-3 Channel Excavation	42	C.Y.

AREA	76.2	Ac.
Q ₅₀	168	c.f.s.

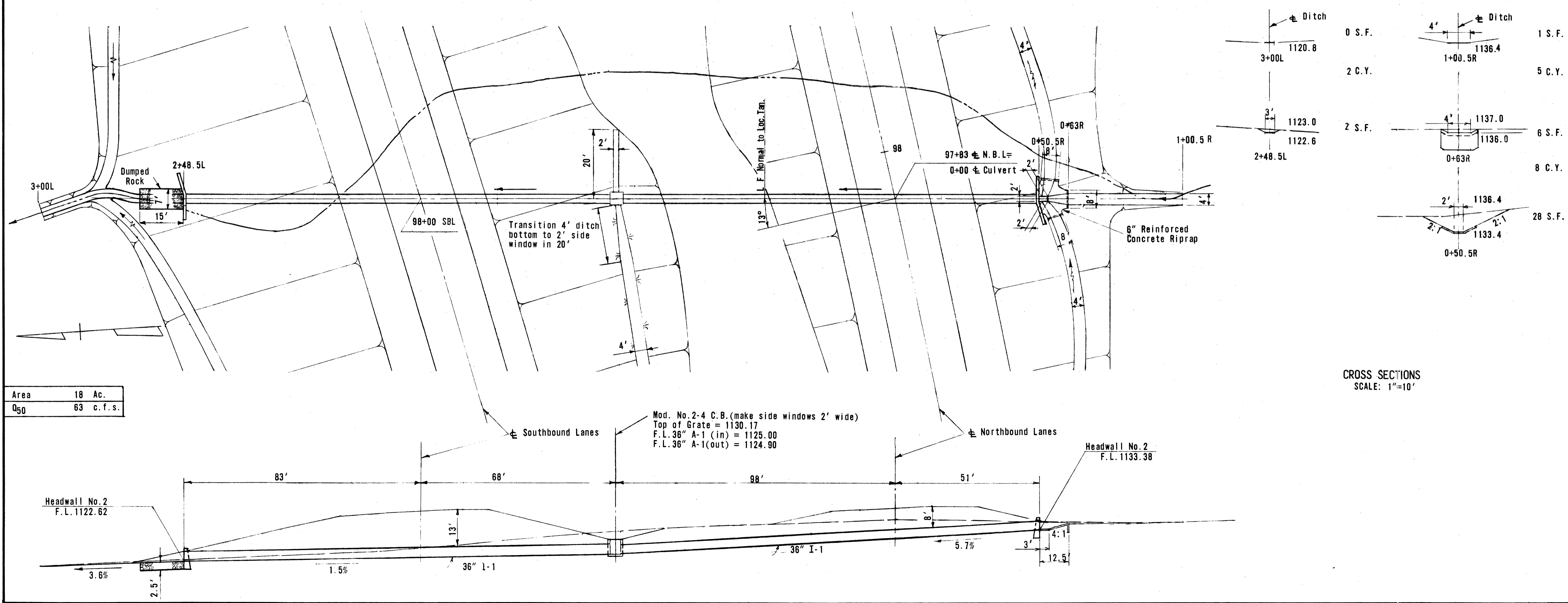


PIPE CULVERT AT STA. 90+64 N.B.L.
SCALE: 1"=20'

ESTIMATED QUANTITIES

I-1 36" Class A-1 Sec. M-6.4(d)	300	L.F.
I-2 Masonry	13.2	C.Y.
I-10 Dumped Rock Channel Protection	10	C.Y.
I-10 6" Reinforced Concrete Riprap	25	S.Y.
L-10 Sodding	8	S.Y.
E-3 Channel Excavation	15	C.Y.
I-8 Mod. No. 2-4C.B. (make side windows 2' wide)	1	Ea.

AREA	14.5	Ac.
Q ₅₀	55	c.f.s.



PIPE CULVERTS STA. 90+64 N.B.L. & STA. 97+83 N.B.L. 98+00 S.B.L.
SCALE: 1"=20'

Area	18	Ac.
Q ₅₀	63	c.f.s.

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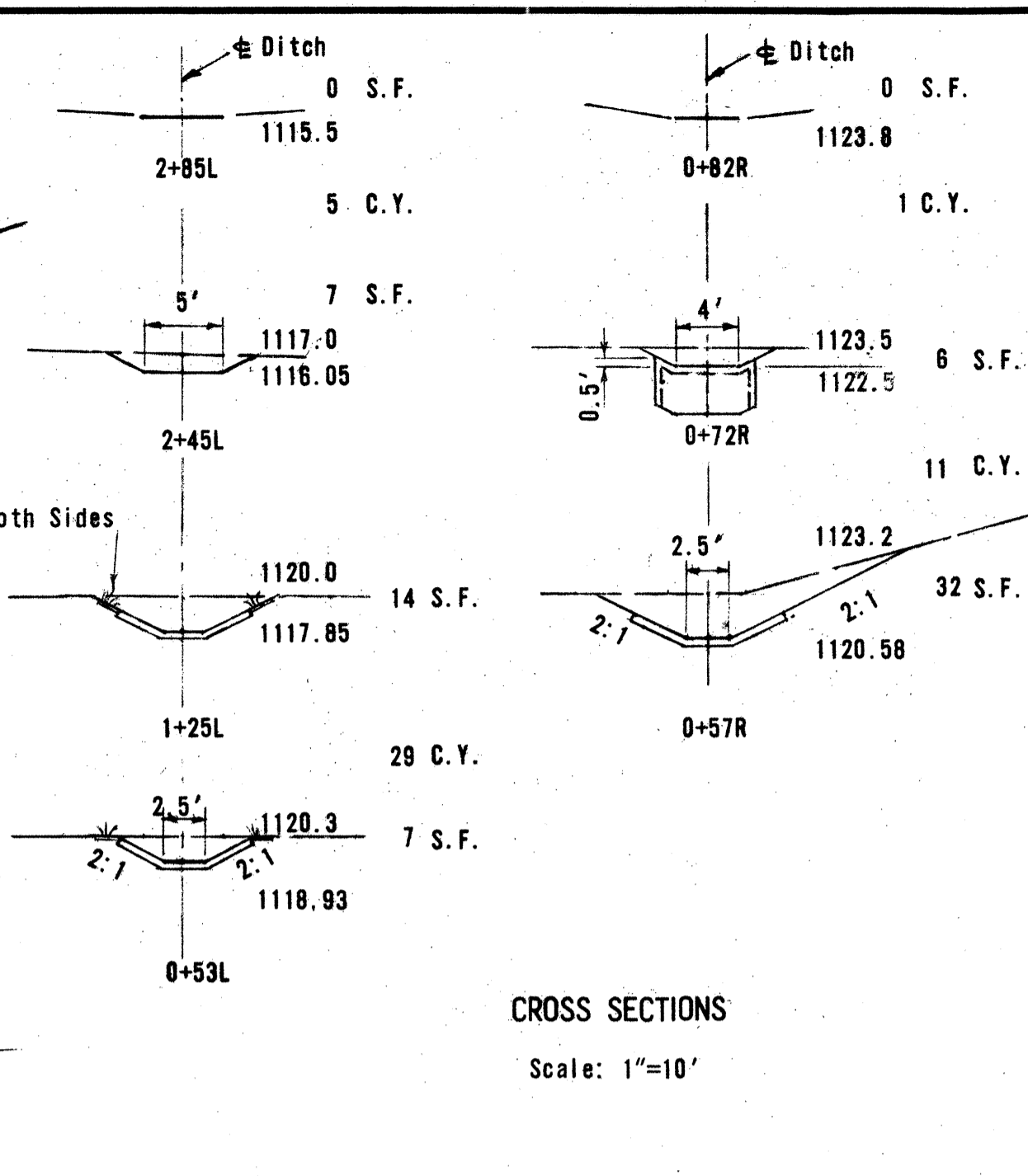
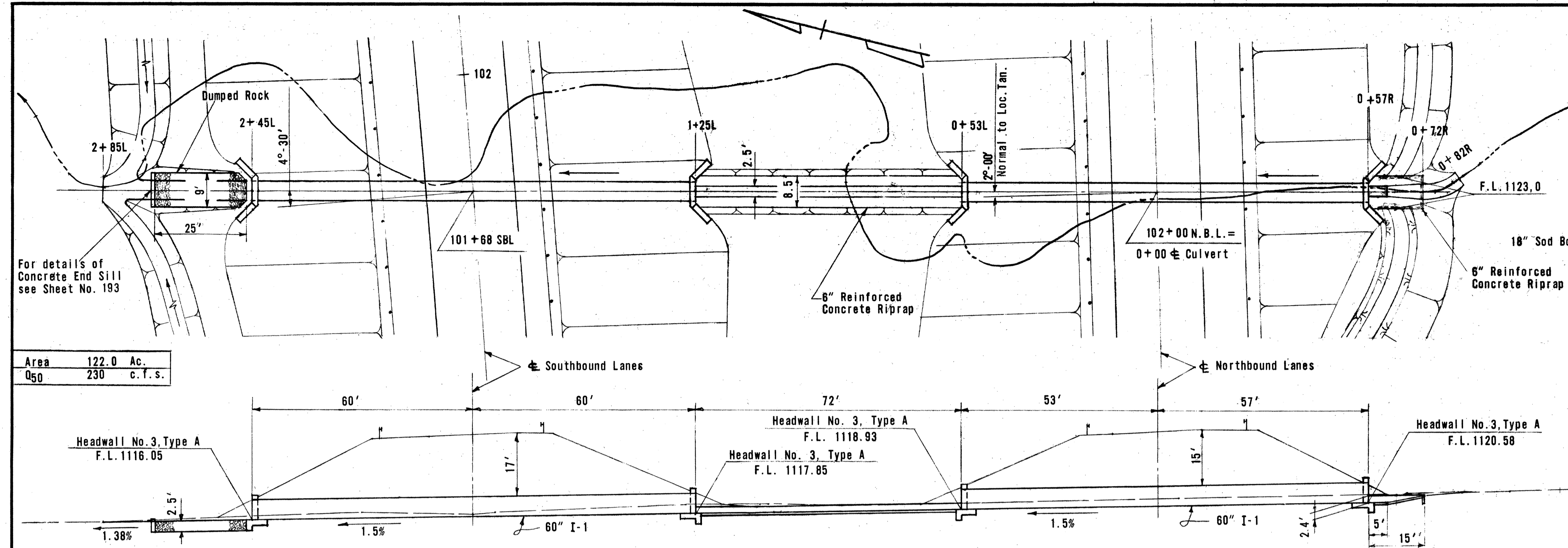
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ESTIMATED QUANTITIES

I-1	60" Class A-1 Pipe Sec. M-6.6(c)	230	L.F.
I-2	Masonry	47.2	C.Y.
I-10	Dumped Rock Channel Protection	21	C.Y.
I-10	6" Reinforced Concrete Riprap	91	S.Y.
L-10	Sodding	43	S.Y.
E-3	Channel Excavation	46	C.Y.

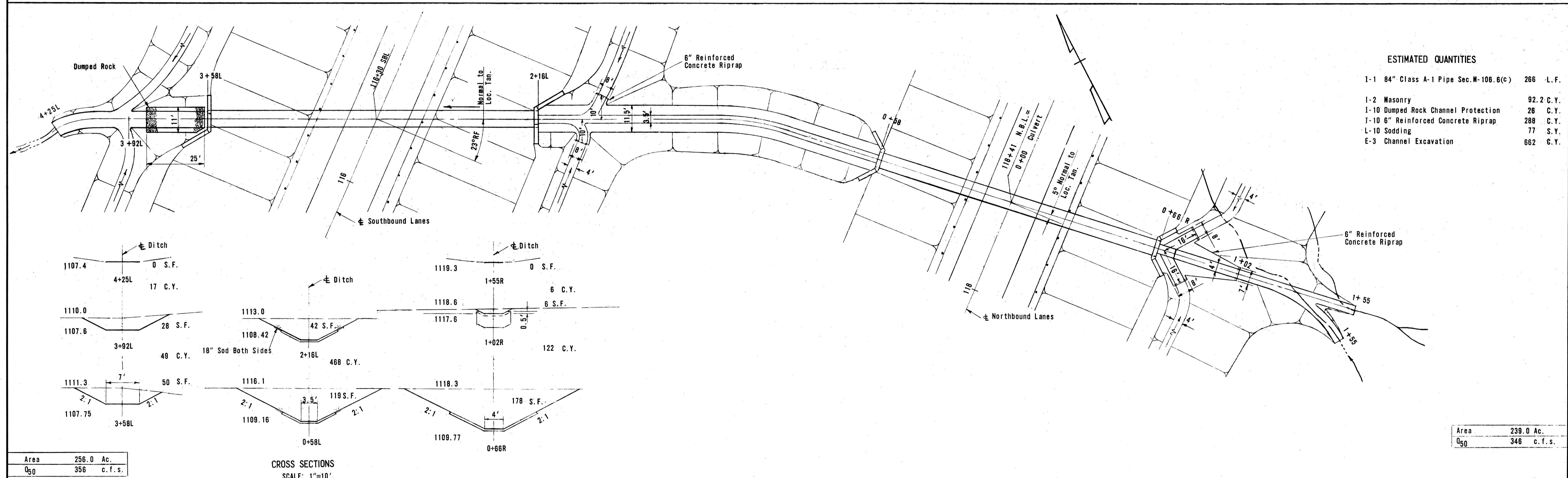
Area	120.0	Ac.
Q ₅₀	230	c. f. s.



CROSS SECTIONS

Scale: 1"=10'

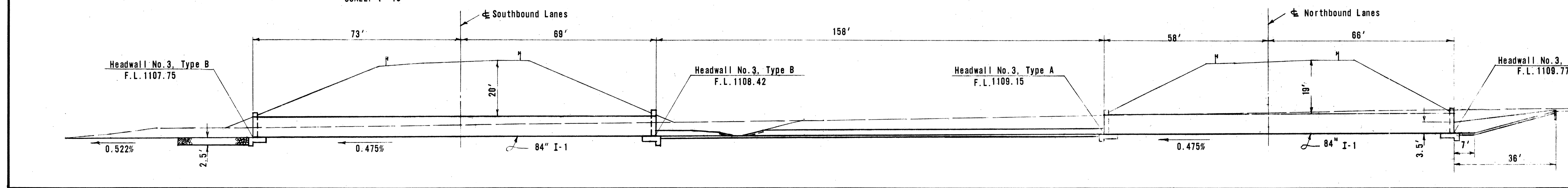
PIPE CULVERT AT STATION 102+00 N.B.L. 101+68 S.B.L.
SCALE: 1" = 20'



ESTIMATED QUANTITIES

I-1	84" Class A-1 Pipe Sec. M-106.6(c)	266	L.F.
I-2	Masonry	92.2	C.Y.
I-10	Dumped Rock Channel Protection	26	C.Y.
I-10	6" Reinforced Concrete Riprap	288	C.Y.
L-10	Sodding	77	S.Y.
E-3	Channel Excavation	662	C.Y.

Area	256.0	Ac.
Q ₅₀	356	c. f. s.



CROSS SECTIONS

SCALE: 1"=10'

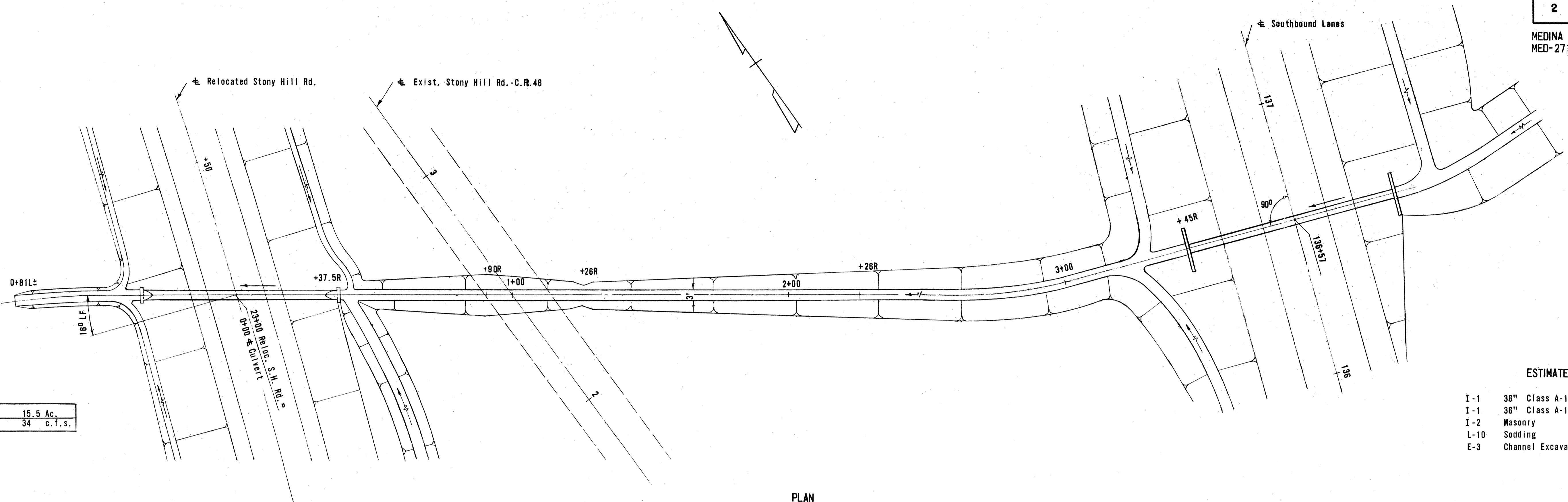
PIPE CULVERT AT STATION 118+41 N.B.L. 116+30 S.B.L.
SCALE: 1" = 20'

PIPE CULVERTS STA. 102+00 N.B.L. 101+68 S.B.L. & STA. 118+41 N.B.L. 116+30 S.B.L.

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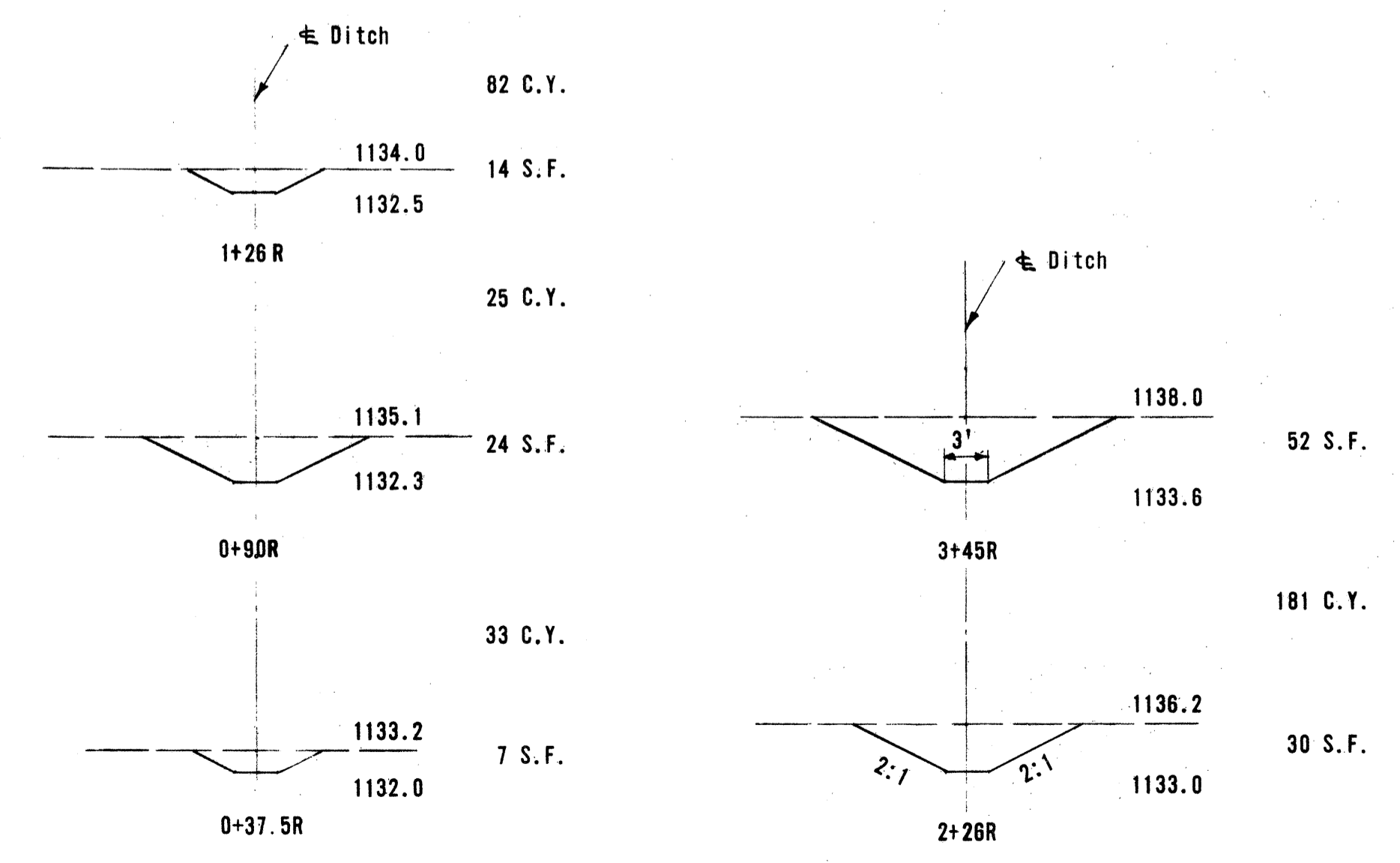
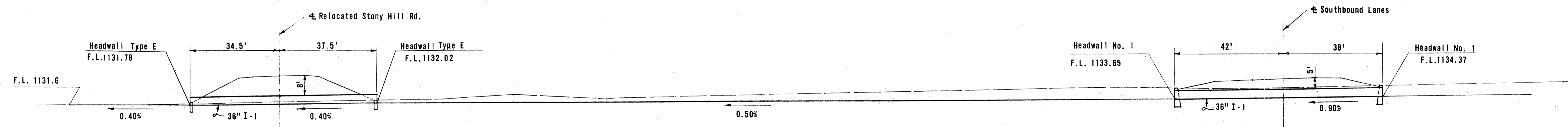


Area	15.5 Ac.
Q ₁₀	34 c.f.s.

AREA	11.4 Ac.
Q ₅₀	46 c.f.s.

ESTIMATED QUANTITIES

I-1	36" Class A-1 Sec. M-6.6(a)	80 L.F.
I-1	36" Class A-1 Sec. M-6.6(a)	72 L.F.
I-2	Masonry	14.2 C.Y.
L-10	Sodding	15 S.Y.
E-3	Channel Excavation	321 C.Y.



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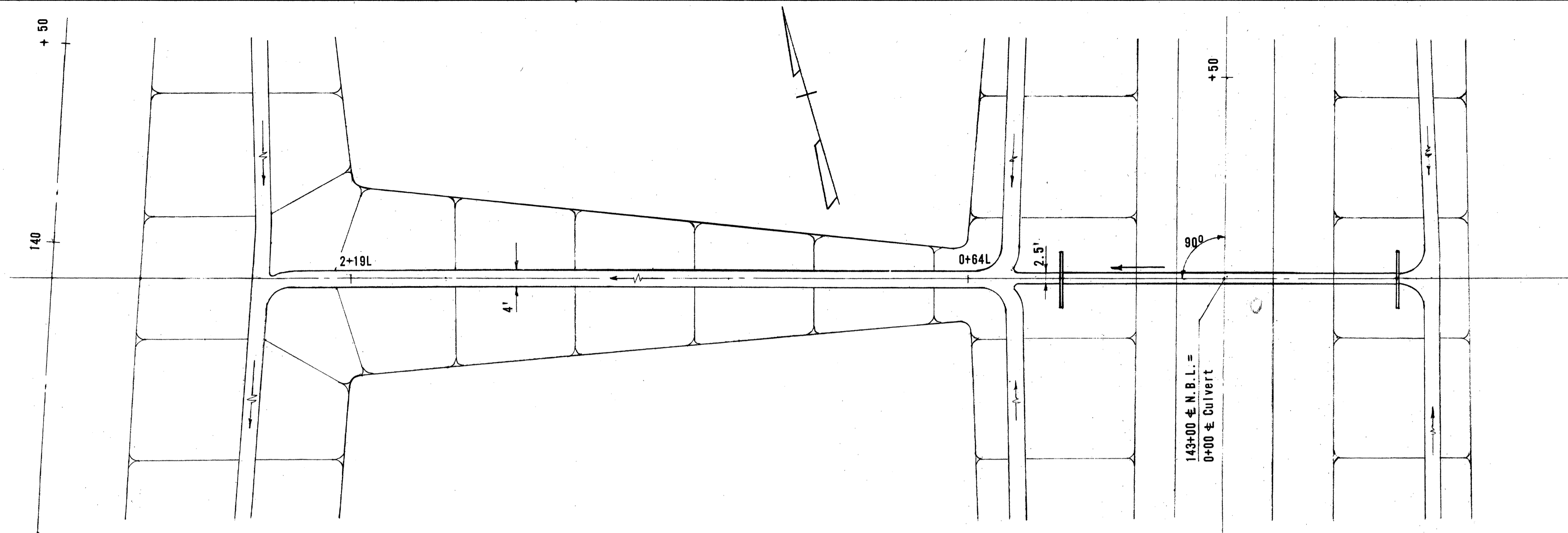
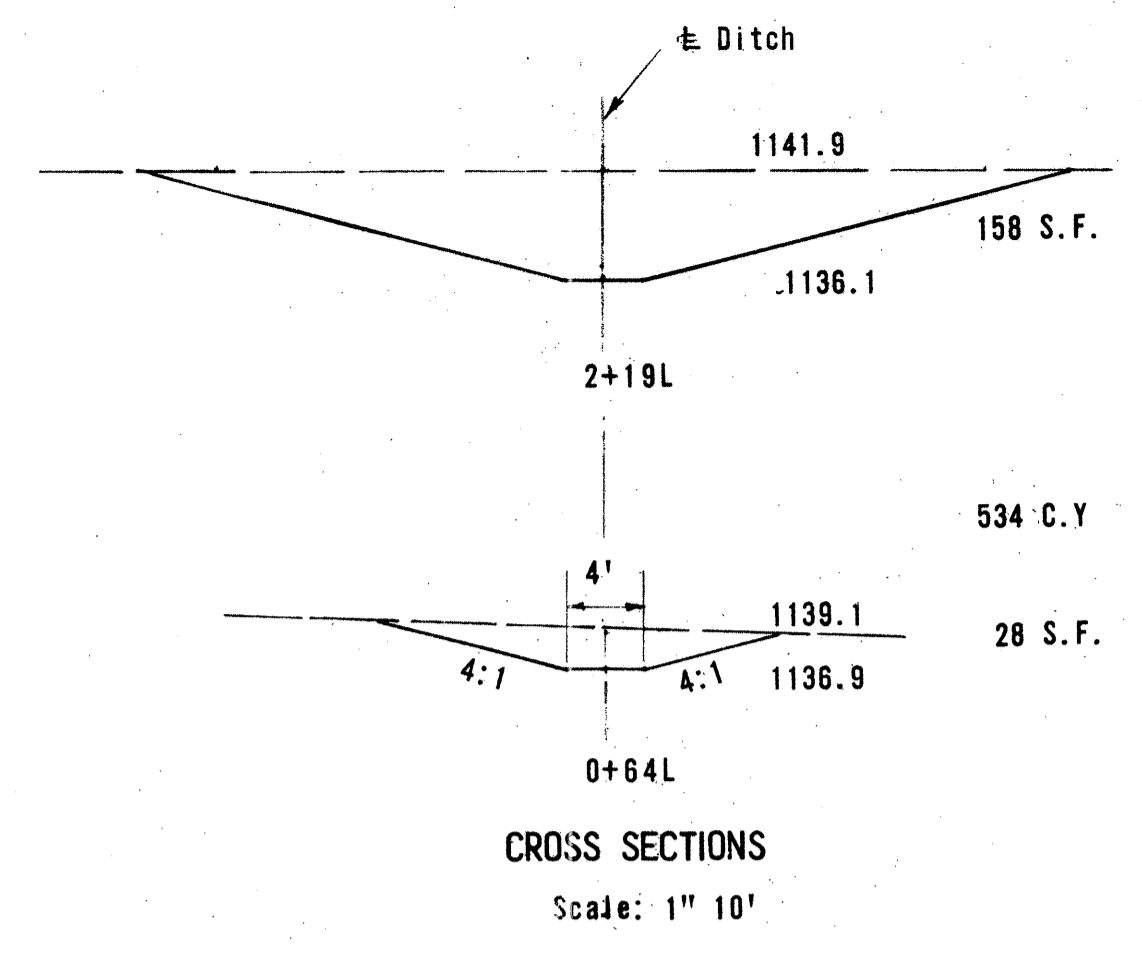
188
259

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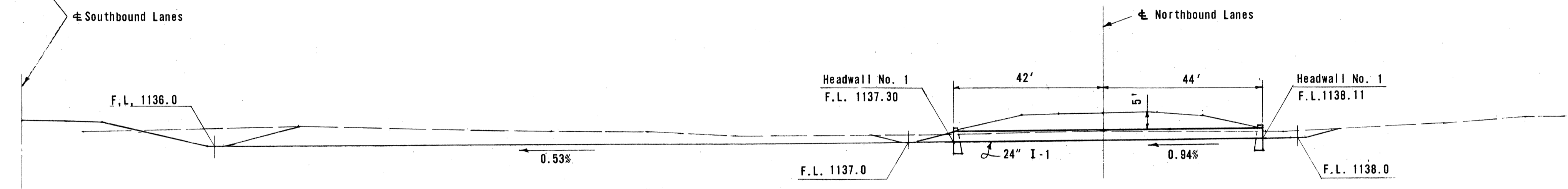
ESTIMATED QUANTITIES

I-1	24" Class A-1 Pipe Sec.M-6.6(a) or M-6.8(b)	86 L.F.
I-2	Masonry	9.4 C.Y.
L-10	Sodding	6 S.Y.
E-3	Channel Excavation	534 C.Y.

Area	4.8 Ac.
Q ₅₀	25 c.f.s.



PLAN
Scale: 1" = 20'



PROFILE
Scale: 1" = 20'

PIPE CULVERT STA. 143+00 N.B.L.

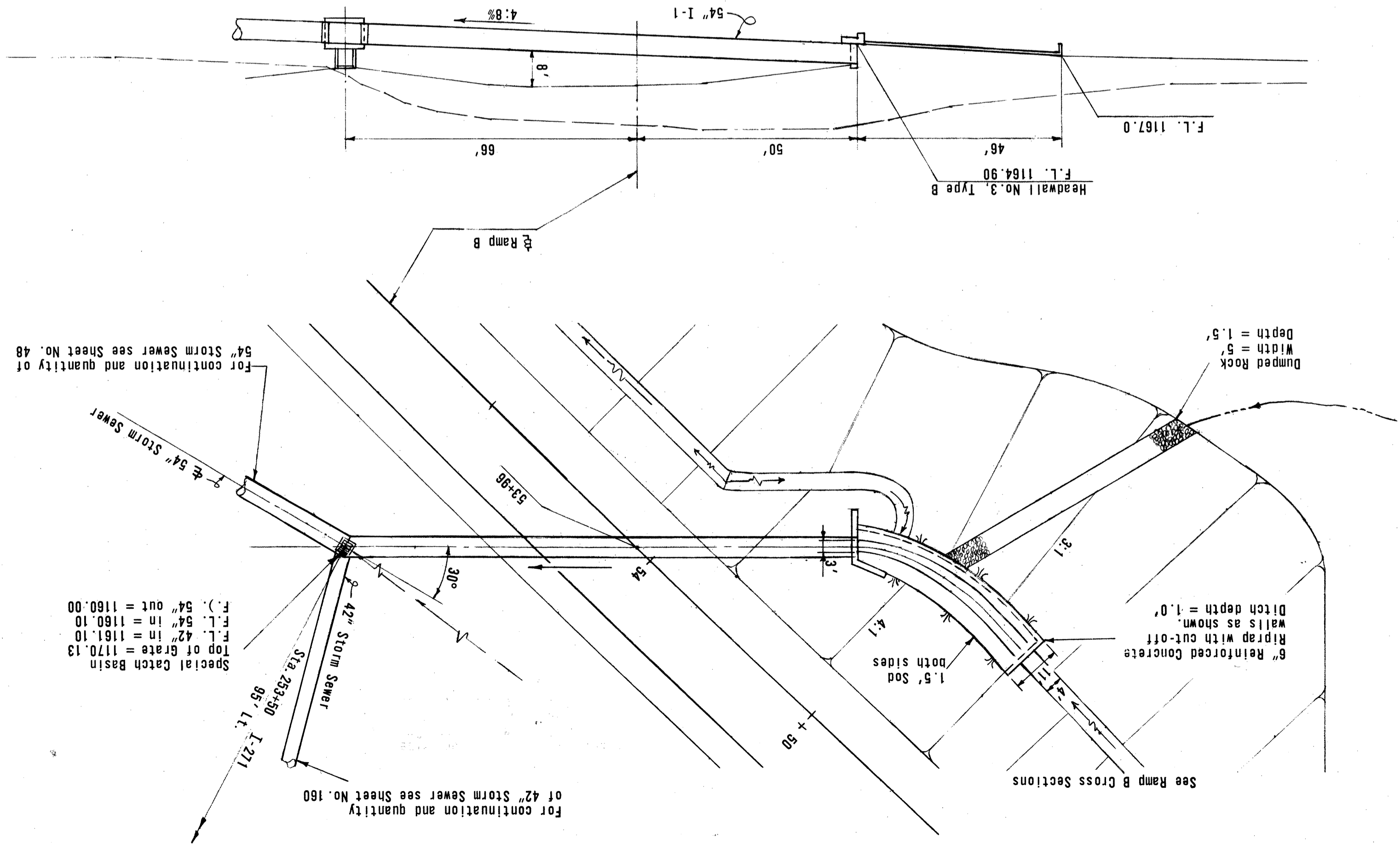
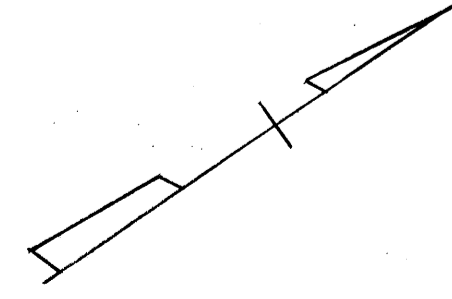
PIPE CULVERT STA. 143+00 N.B.L.

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DIVISION	STATE
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ESTIMATED QUANTITIES

L.F.	116	I-1 54" Class A-1 Pipe, Sec. M-B, 6(a)
C.Y.	12.2	Masonry
Ea.	1	Special Catch Basin
C.Y.	17	Dumped Rock
S.Y.	65	1-10 6" Reinforced Concrete Riprap
S.Y.	19	L-10 Sodding



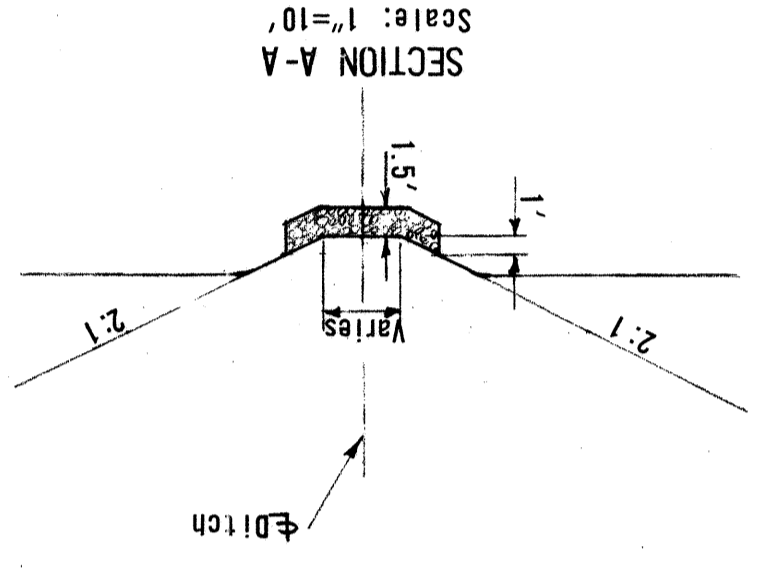
STORM SEWER AT STA. 53+96 RAMP B

Scale: 1"=20'

Area	109 Ac.
Q50	200 c.f.s.

ESTIMATED QUANTITIES

L.F.	254	I-1 42" Class A-1 Pipe
C.Y.	7.0	Masonry
C.Y.	30	Dumped Rock
S.Y.	37	1-10 6" Reinforced Concrete Riprap
S.Y.	14	L-10 Sodding

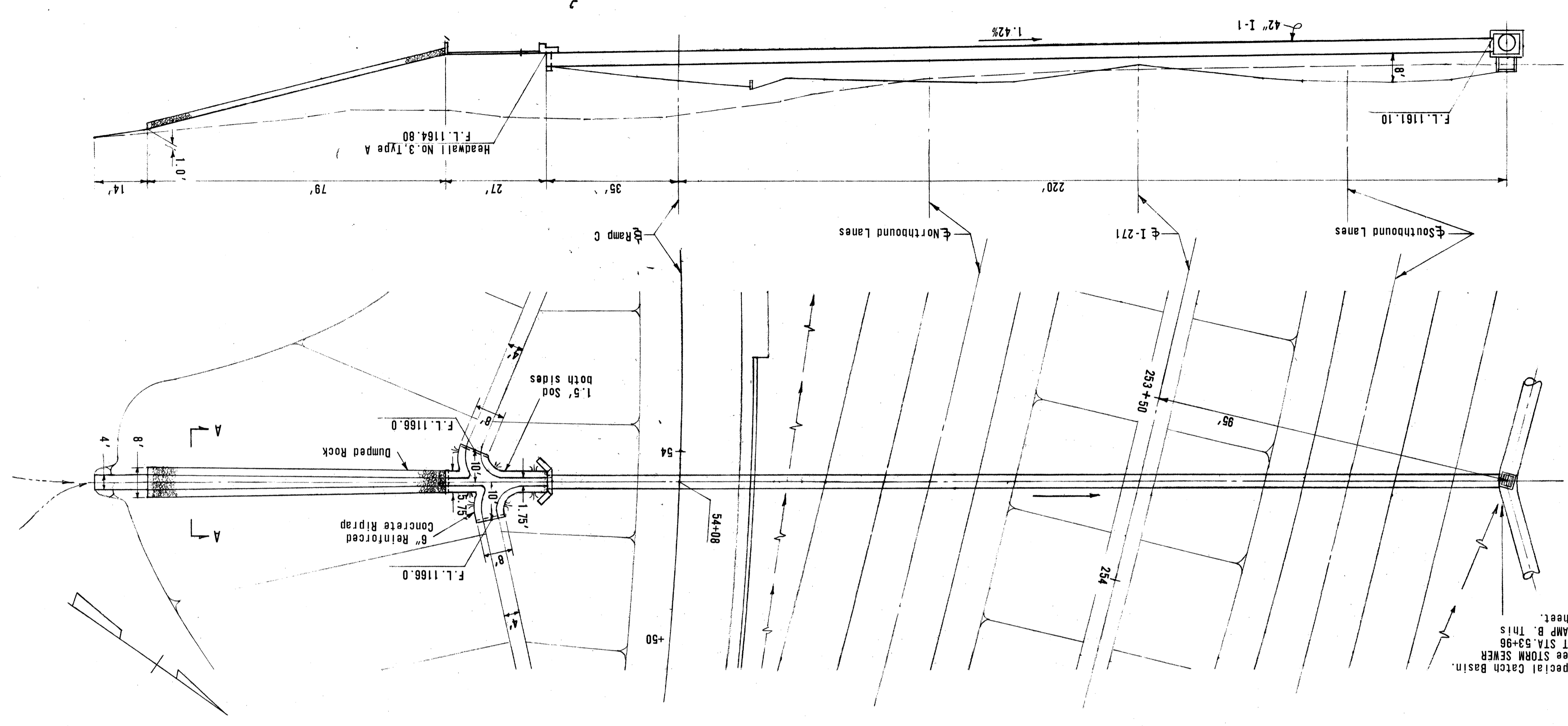


SECTION A-A

Scale: 1"=10'

ESTIMATED QUANTITIES

L.F.	254	I-1 42" Class A-1 Pipe
C.Y.	7.0	Masonry
C.Y.	30	Dumped Rock
S.Y.	37	1-10 6" Reinforced Concrete Riprap
S.Y.	14	L-10 Sodding



STORM SEWER AT STA. 54+08 RAMP C

Scale: 1"=20'

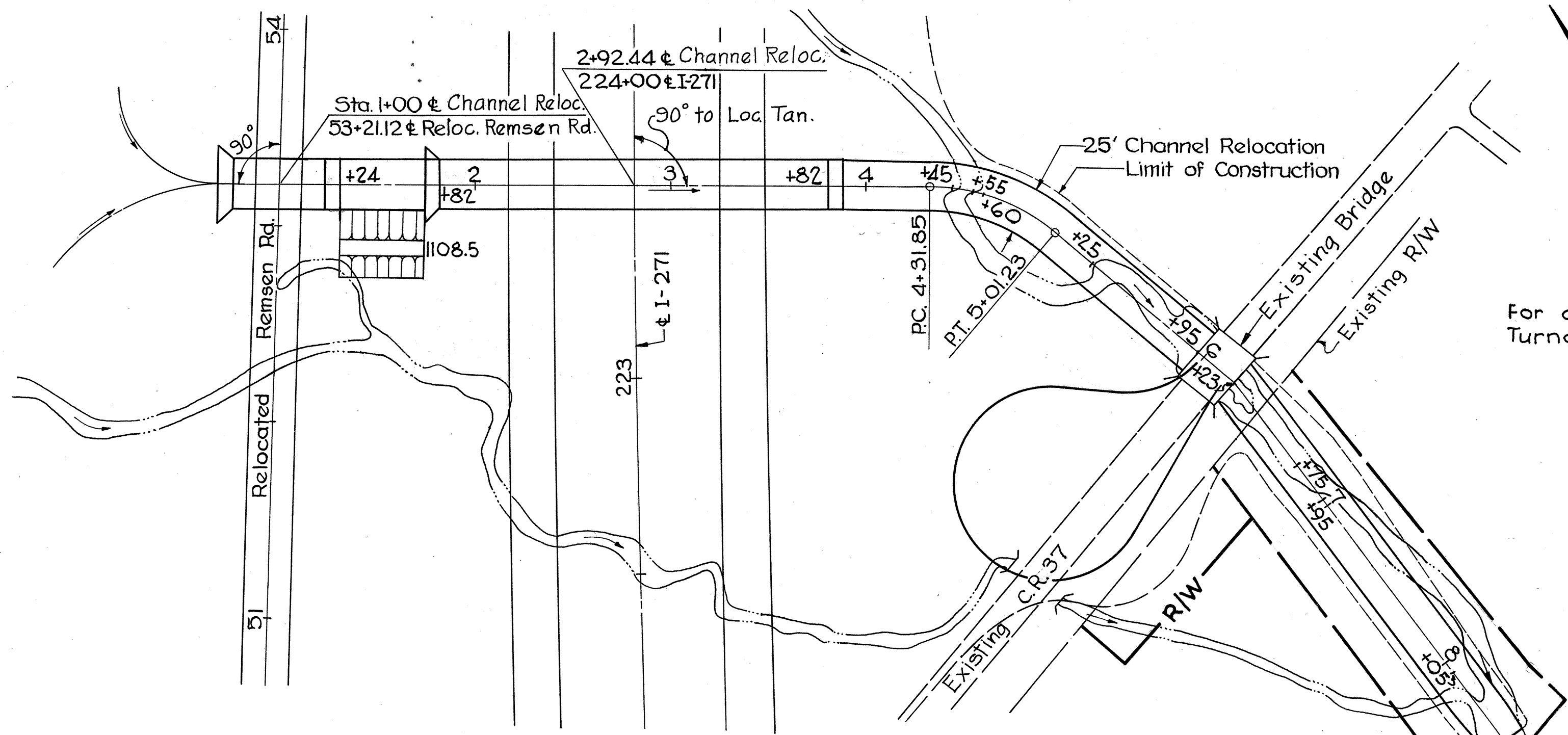
Area	31 Ac.
Q50	89 c.f.s.

ESTIMATED QUANTITIES

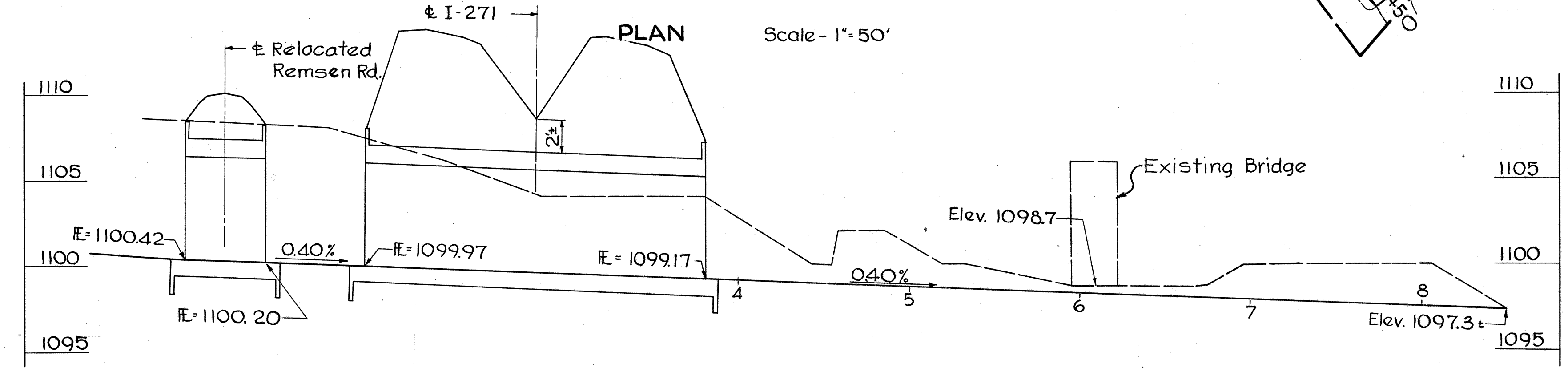
L.F.	254	I-1 42" Class A-1 Pipe
C.Y.	7.0	Masonry
C.Y.	30	Dumped Rock
S.Y.	37	1-10 6" Reinforced Concrete Riprap
S.Y.	14	L-10 Sodding

See STORM SEWER
AT STA. 53+96
RAMP B. This
sheet.

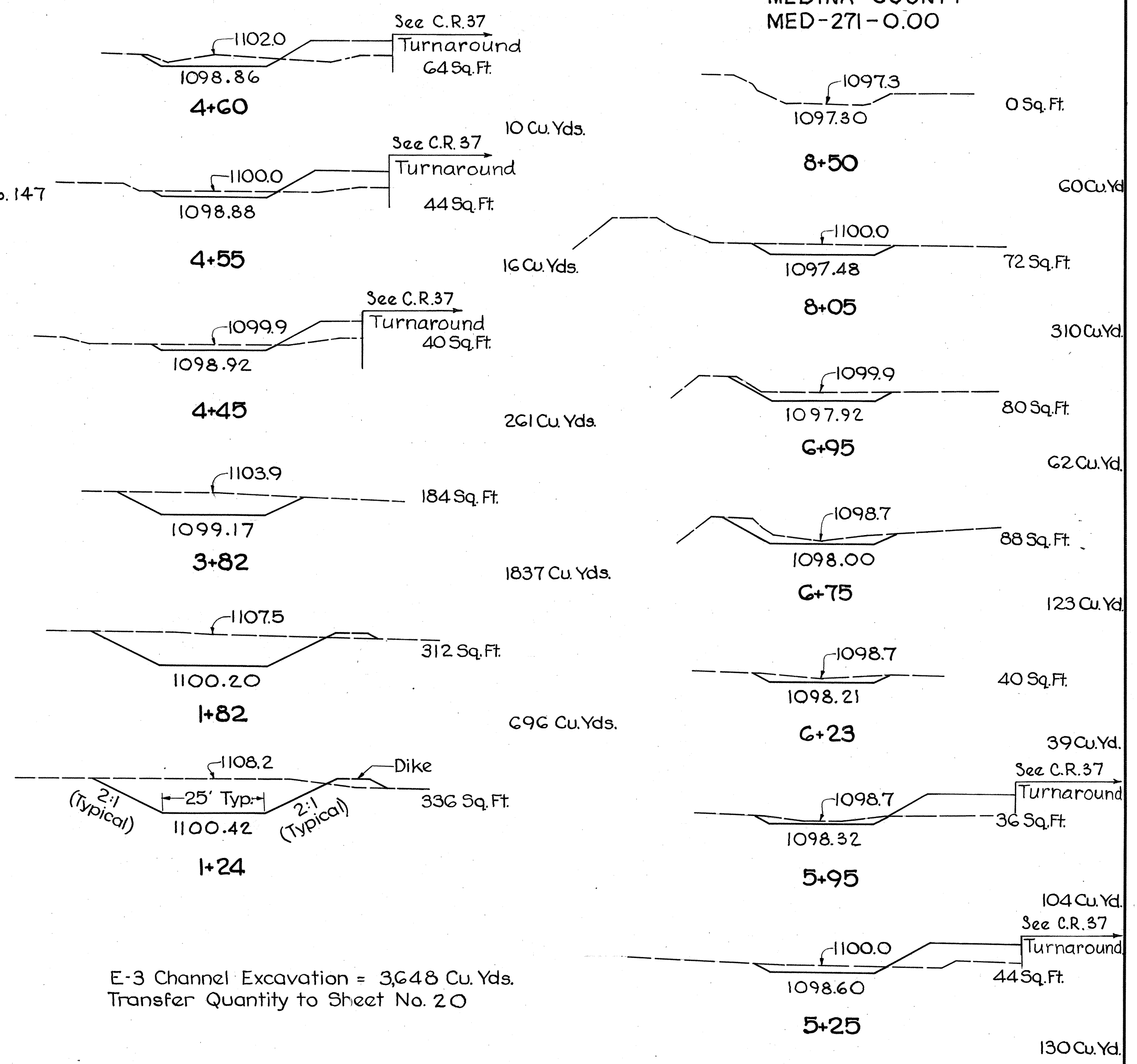
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For details of the Turnaround See Sheet No. 147



PROFILE Scale - 1" = 50' Hor. 1" = 5' Vert.

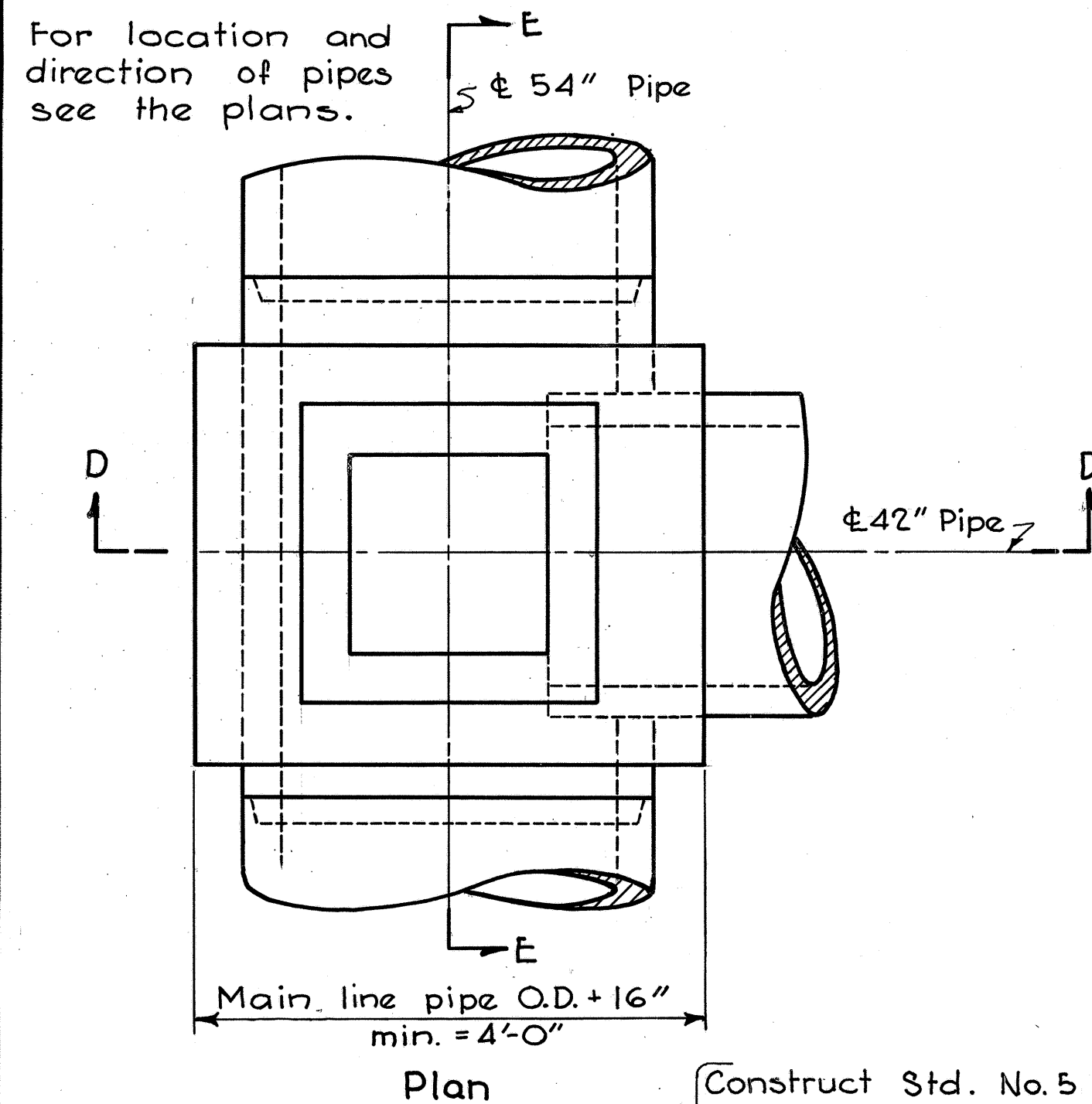


CROSS SECTIONS Scale - 1" = 20'

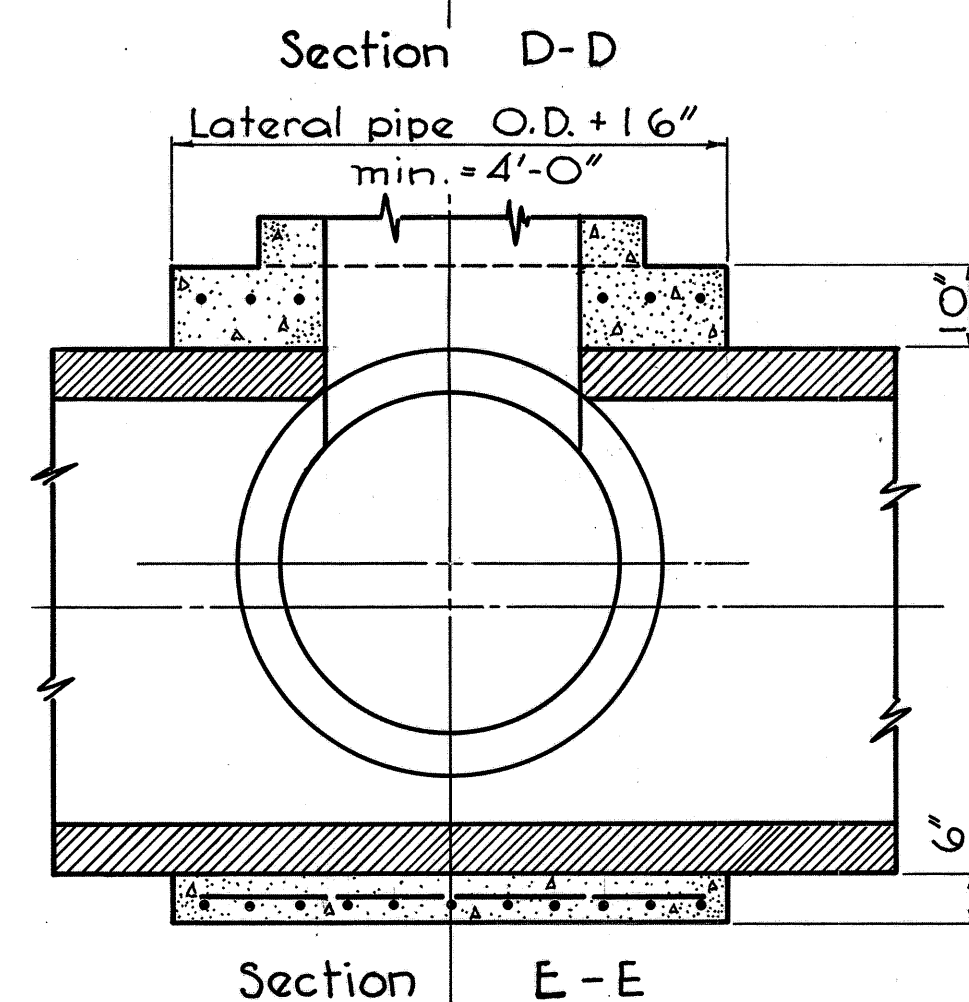
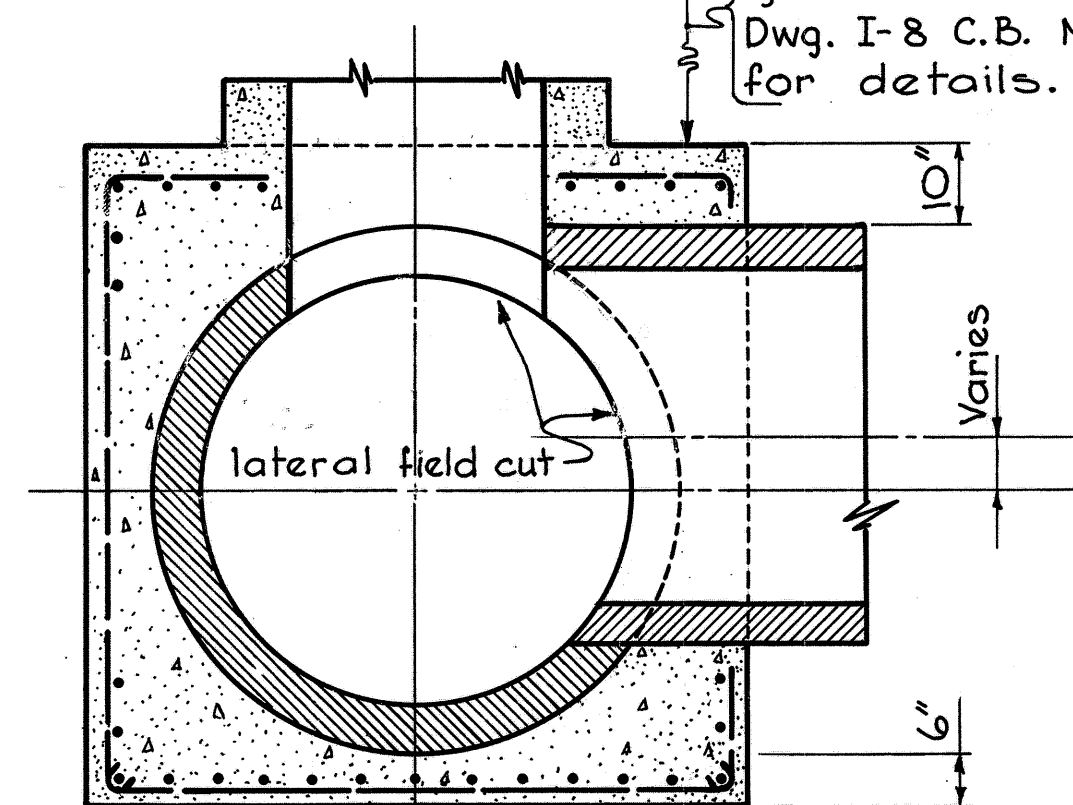
Embankment to be included with the Remsen Road Turnaround

STATION	AREA SQ. FT.	CU. YDS. FILL
3+90	0	0
4+45	68	69
+55	108	33
+60	104	59
5+25	128	279
5+95 Bk.	128	332
5+95 Ahd.	0	0

E-3 Channel Excavation = 3,648 Cu. Yds.
Transfer Quantity to Sheet No. 20

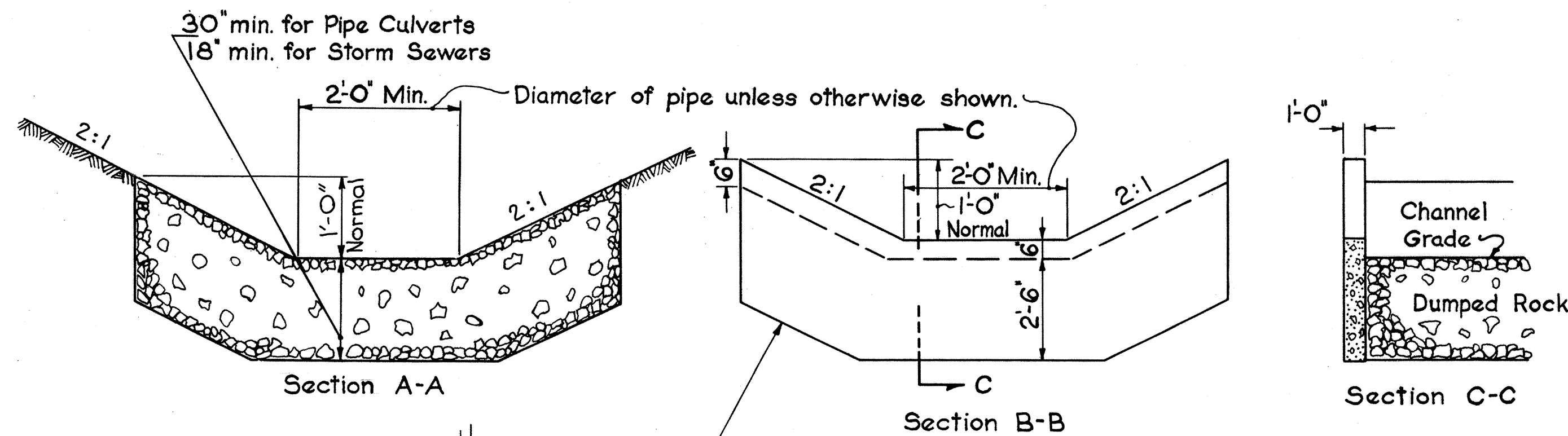


Construct Std. No. 5 Catch Basin up to grade. See Std. Dwg. I-8 C.B. No. 5 for details.

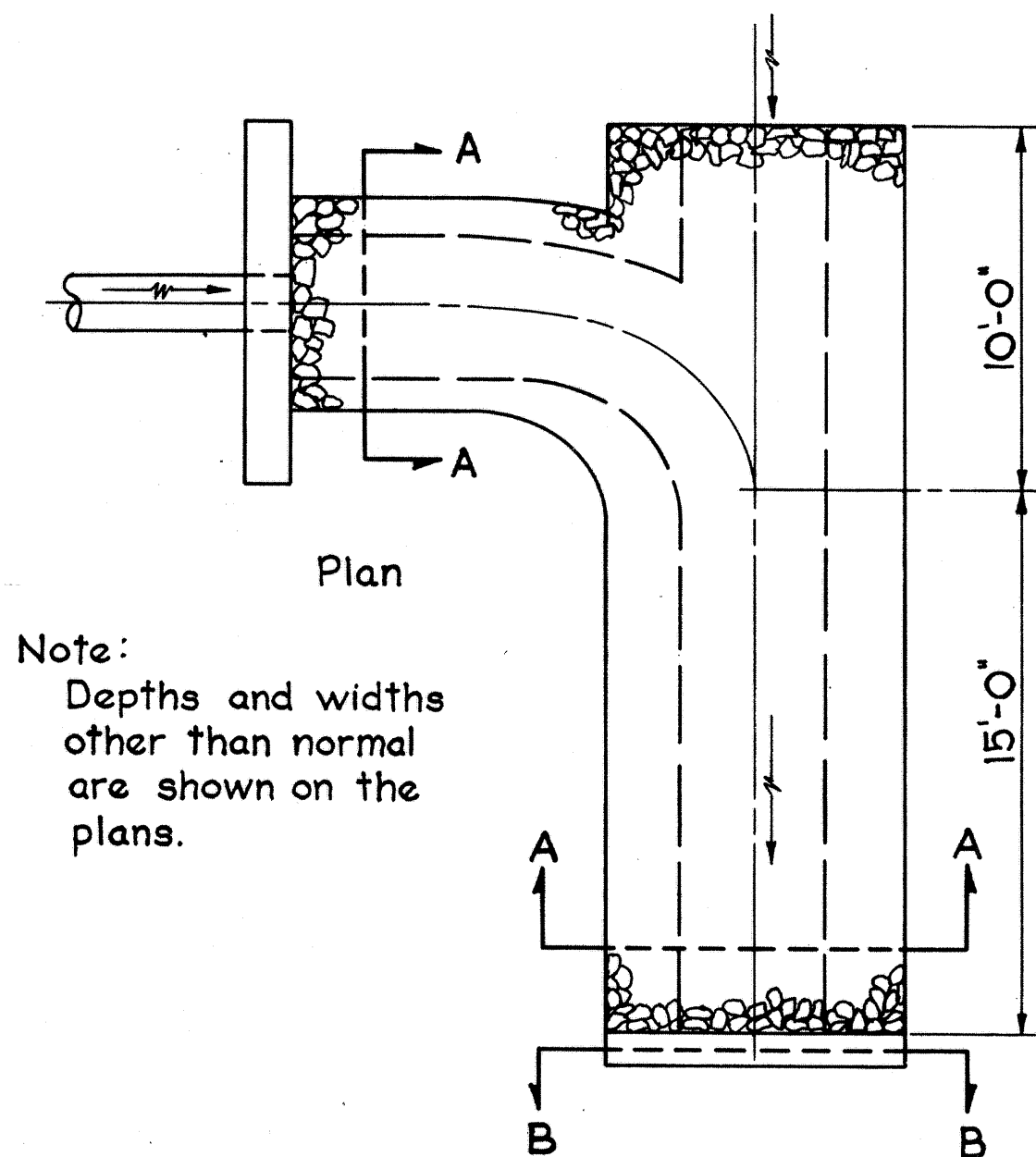


SPECIAL CATCH BASIN

Notes:
Concrete to be Class "C"
Reinf. Steel $\frac{1}{2}$ " ϕ @ 6" \pm c/c.

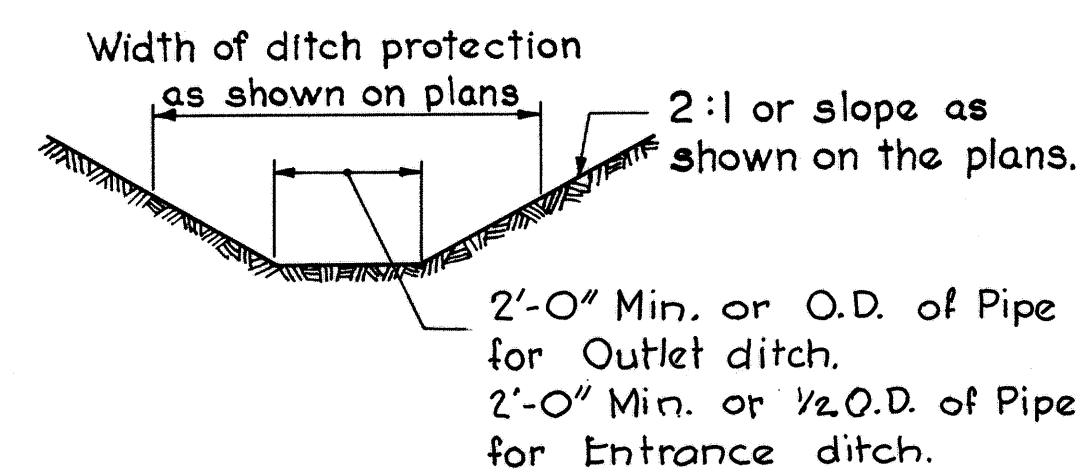


Note: Use End sill only when shown on the Plans. Payment for the End Sill shall be included in the Unit Price per Cu. Yd. bid for Item I-2 Masonry.

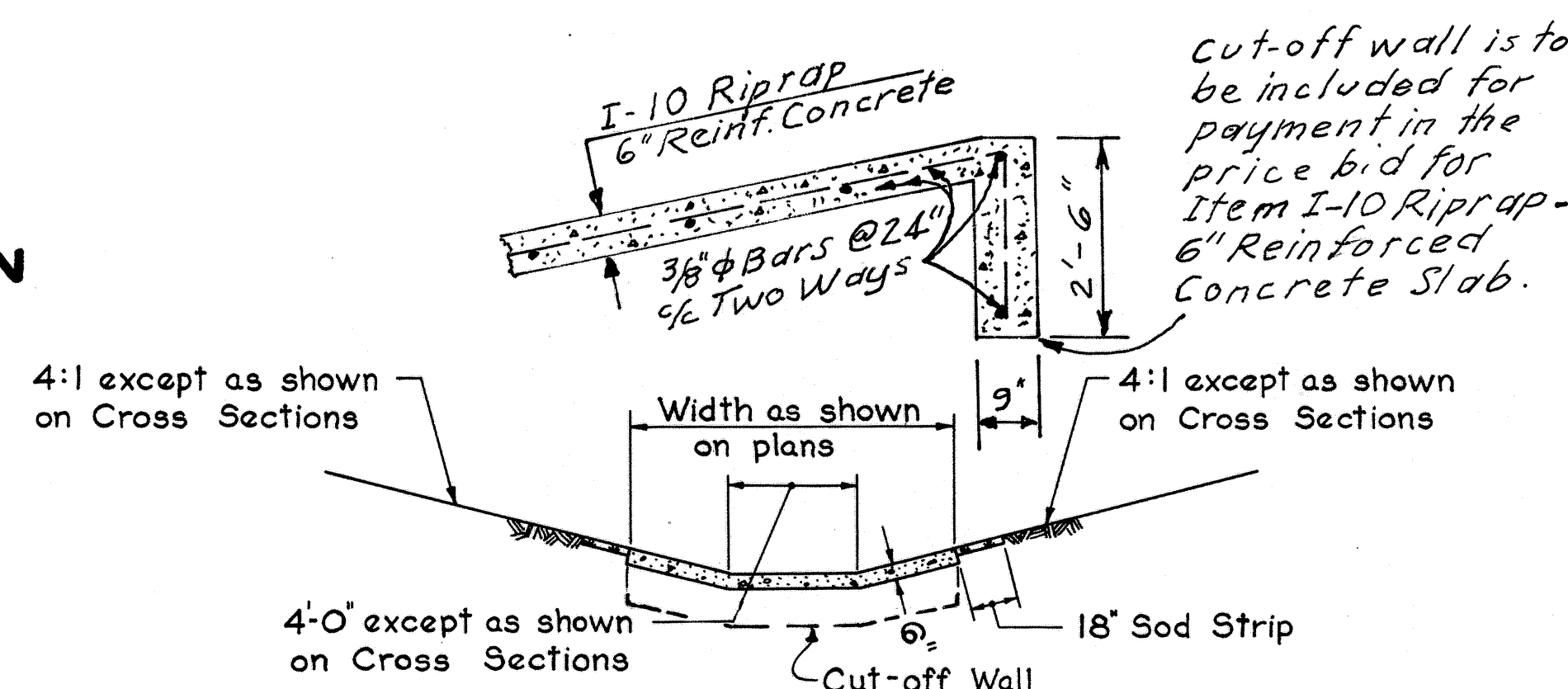


Note: Depths and widths other than normal are shown on the plans.

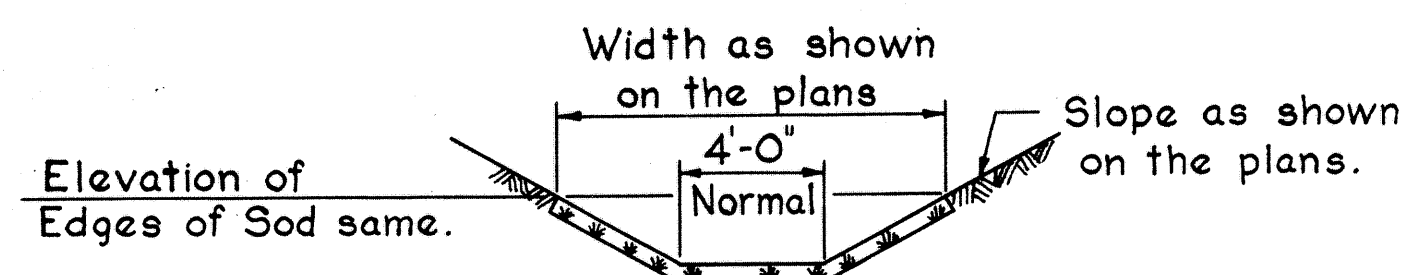
DUMPED ROCK CHANNEL PROTECTION



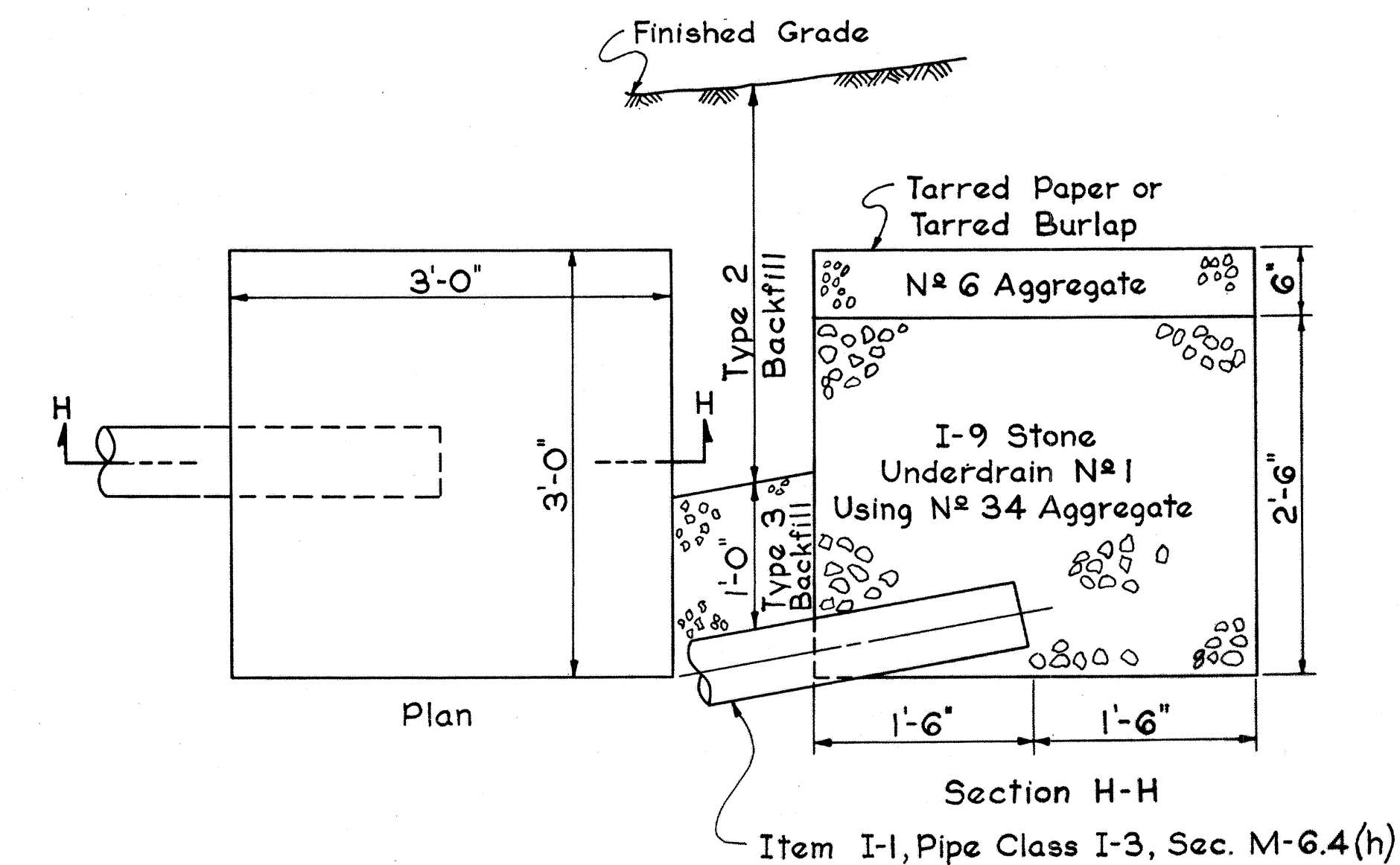
ENTRANCE AND OUTLET DITCHES



DITCH PAVING USING REINFORCED CONCRETE RIPRAP



SPECIAL SOD DITCH



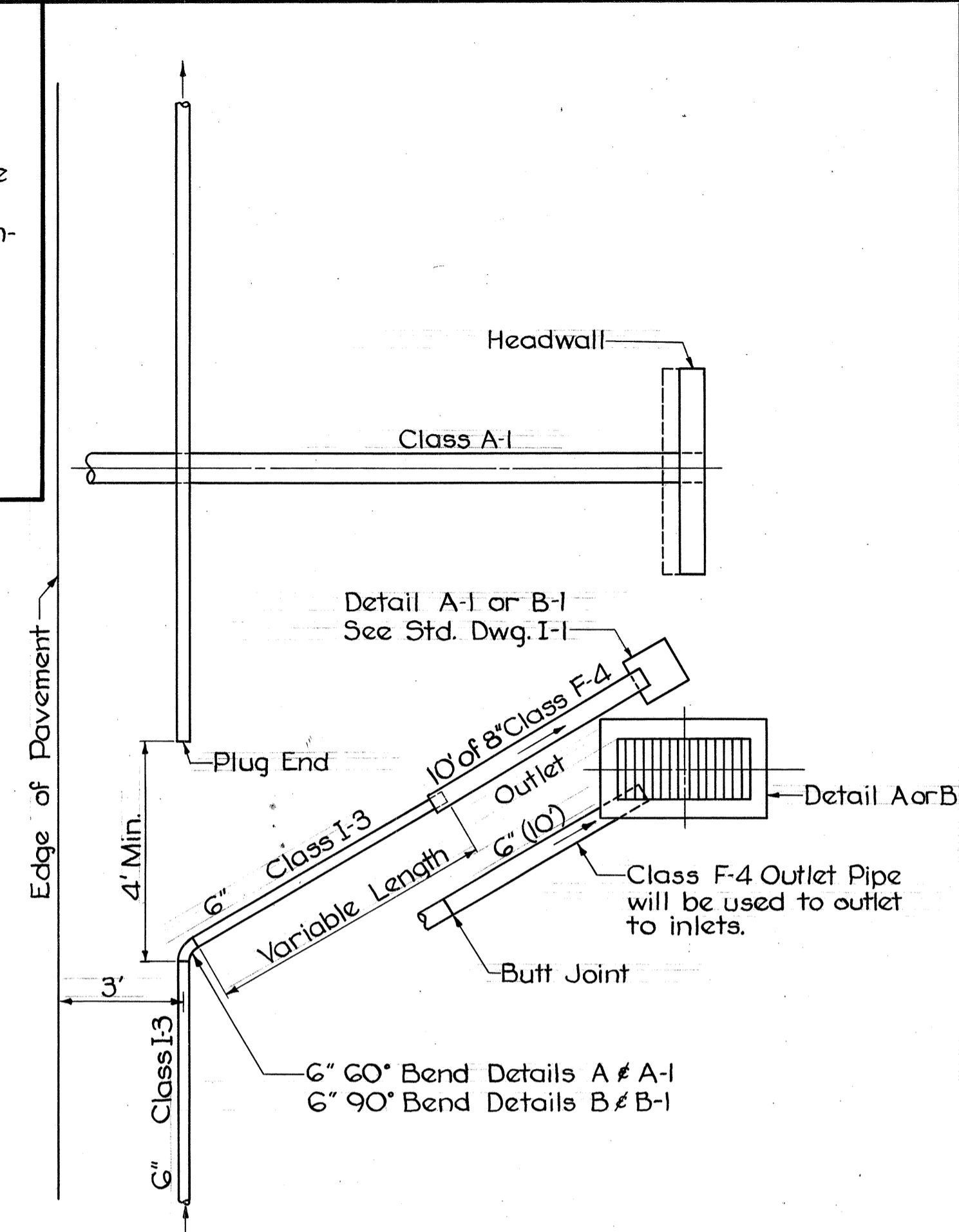
Note:
No. 34 Aggregate shall be used with a 6" layer of No. 6 Aggregate over the top and sealed with Tarred Paper or Tarred Burlap.
Aggregates, Tarred Paper or Tarred Burlap, and necessary Excavation for Spring Drains shall be paid for at Unit Price Bid Per Lin. Ft. of Item I-9, Stone Underdrains, No. 1, as per plan. Spring Drains are to be placed at locations designated by the Engineer.
Estimated Quantities of I-9, Stone Underdrains, No. 1, and of 6" I-1 Pipe, Class I-3 are carried in the General Notes (Sheet No. 14) for draining springs. This Item shall be non-performed in the event that none are encountered and payment is to be made on final measurement.
A Spring Drain constitutes 3 Lin. Ft.

DETAIL SECTION SPRING DRAIN

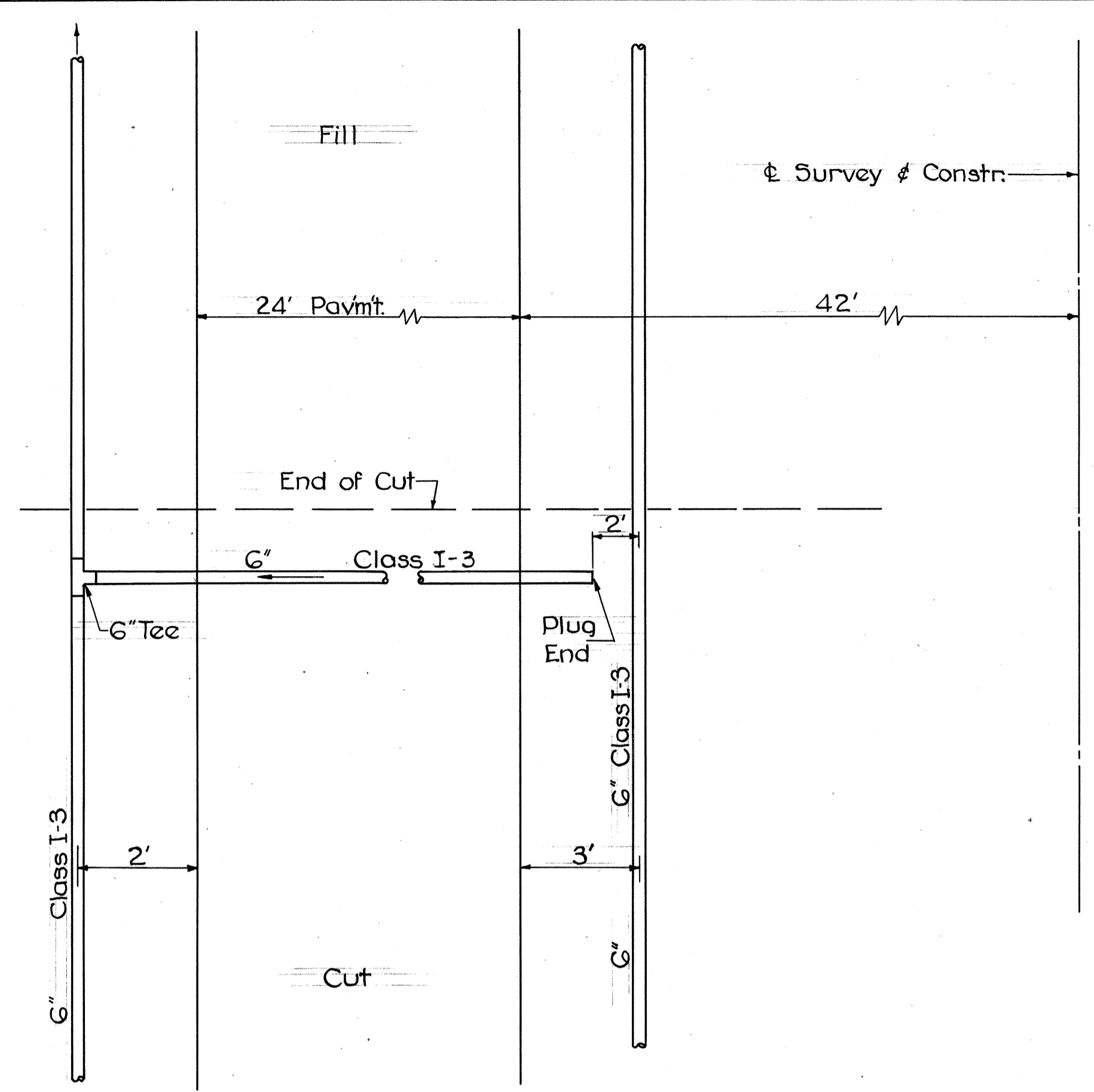
NOTES

The cost of plugging all ends of underdrains shall be included in the unit cost bid for Item I-1 (Class I-3) Pipe Underdrains.

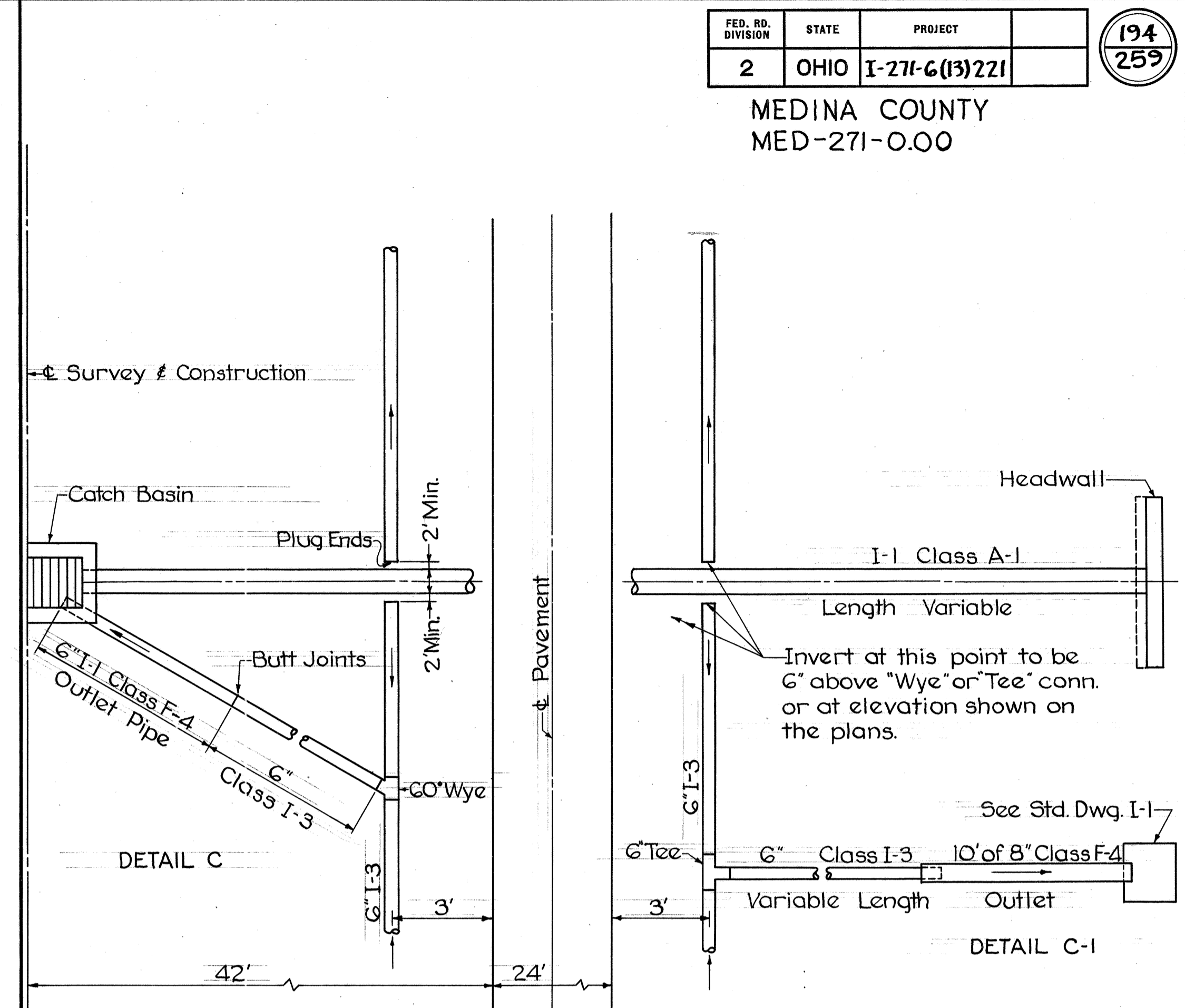
All I-5 Pipe Specials required for Underdrain and Underdrain Outlets shall be of the same quality as the best adjoining pipe.



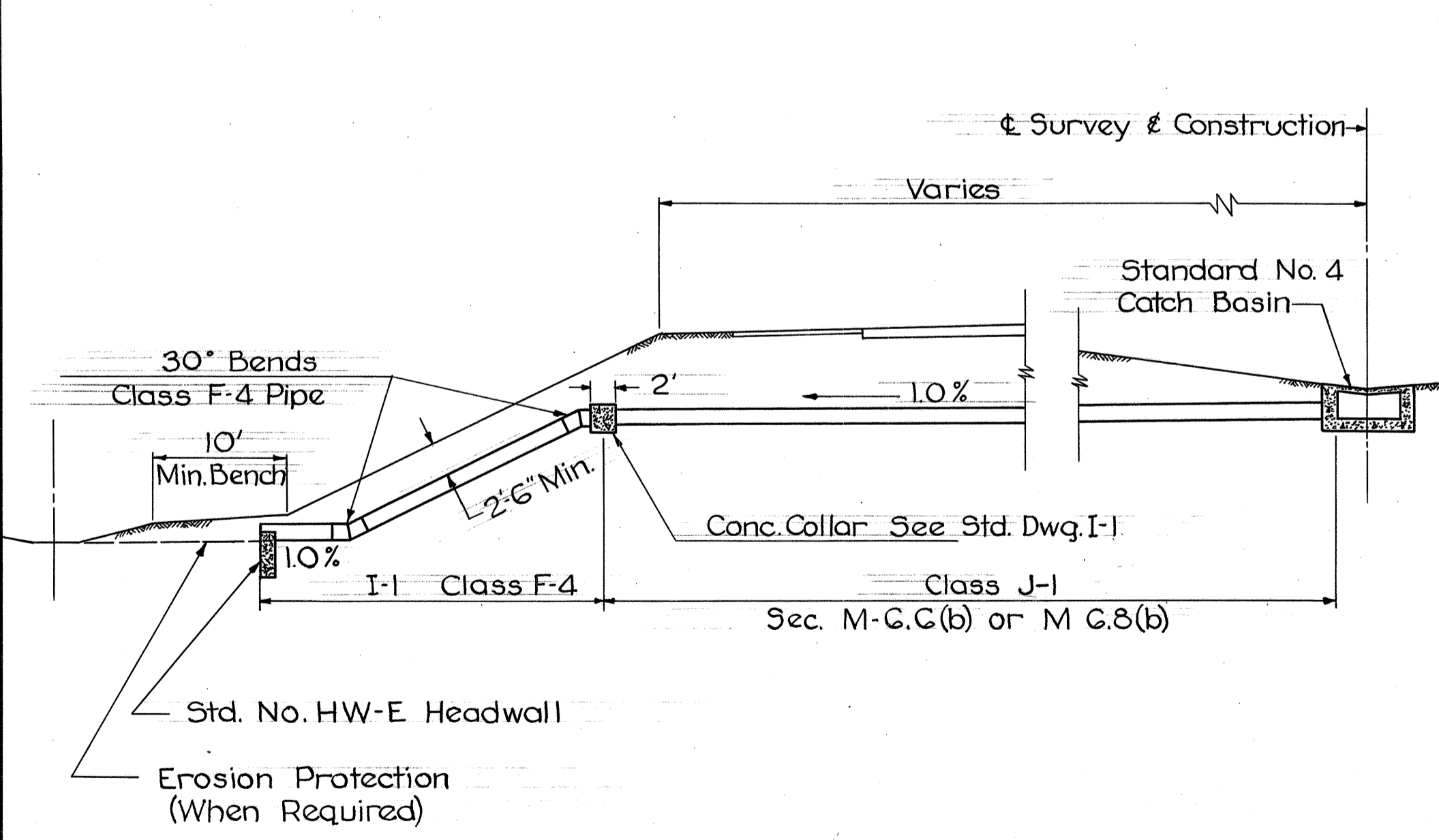
UNDERDRAIN OUTLET DETAIL A & B



UNDERDRAIN INTERCEPTOR - IN CUT

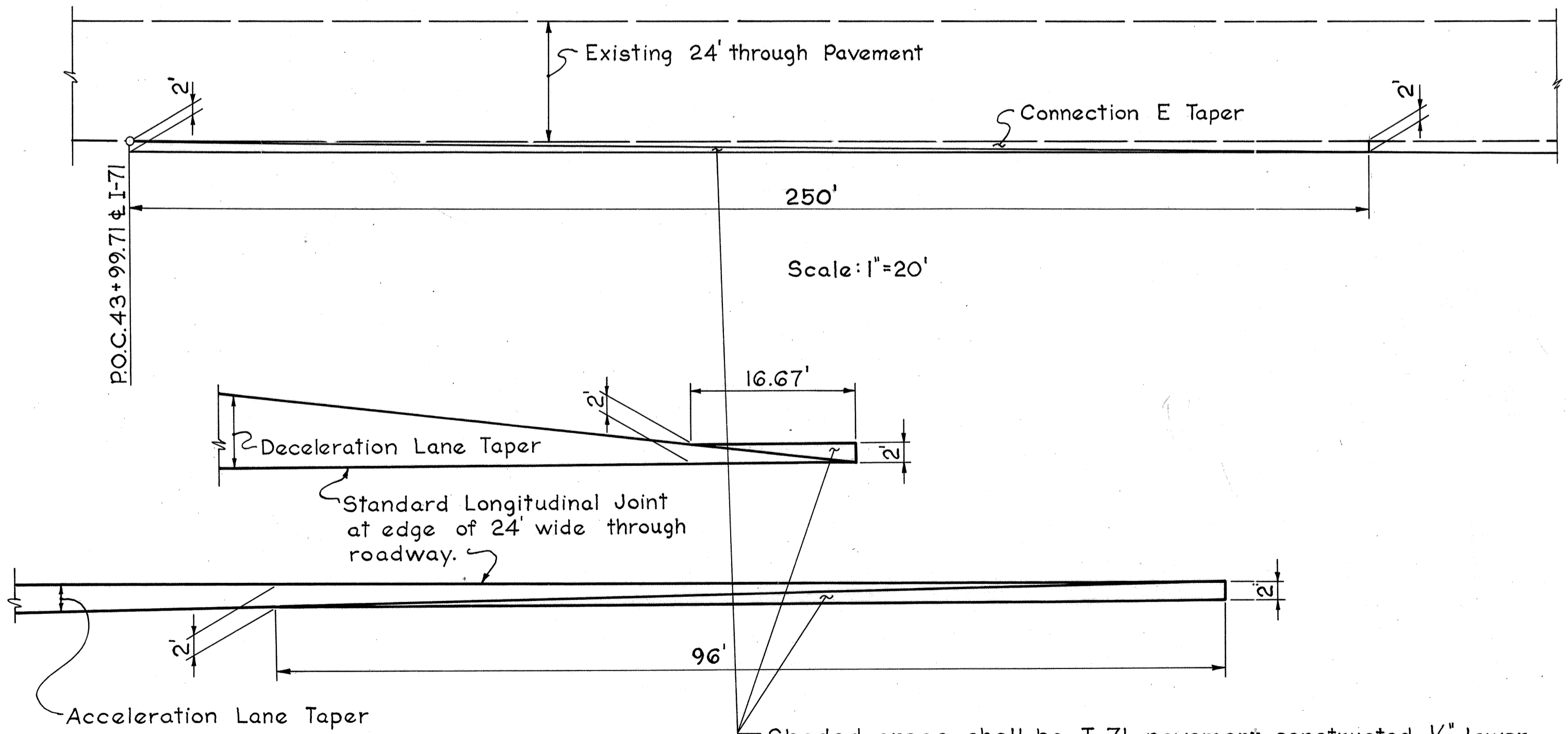


UNDERDRAIN OUTLET DETAIL C



NOTE: Concrete collar to be included in bid price for I-1 Pipe. On 4:1 slopes, carry pipe out to ditch.

MEDIAN OUTLET DETAIL IN HIGH FILL



Shaded areas shall be T-71 pavement constructed 1/2 inch lower than the adjacent pavement and surfaced with T-31 and No. 6 aggregate. The shaded area of I-71 shall be paid for as full depth of T-71, and the surface treatment shall be paid for as T-31.

END TAPER DETAIL
Scale: 1" = 10'

SPECIAL BERM & SLOPE PROTECTION

Prior to placement of sod in the berm and slope galvanized poultry fence shall be placed on the finished grade in strands which shall be at right angles to the direction of flow. Each strand shall be staked securely on top and bottom with stakes spaced at four foot intervals.

Stakes shall be 1"x1.8" wood stakes and shall be perpendicular to the ground and flush with the top of the sod.

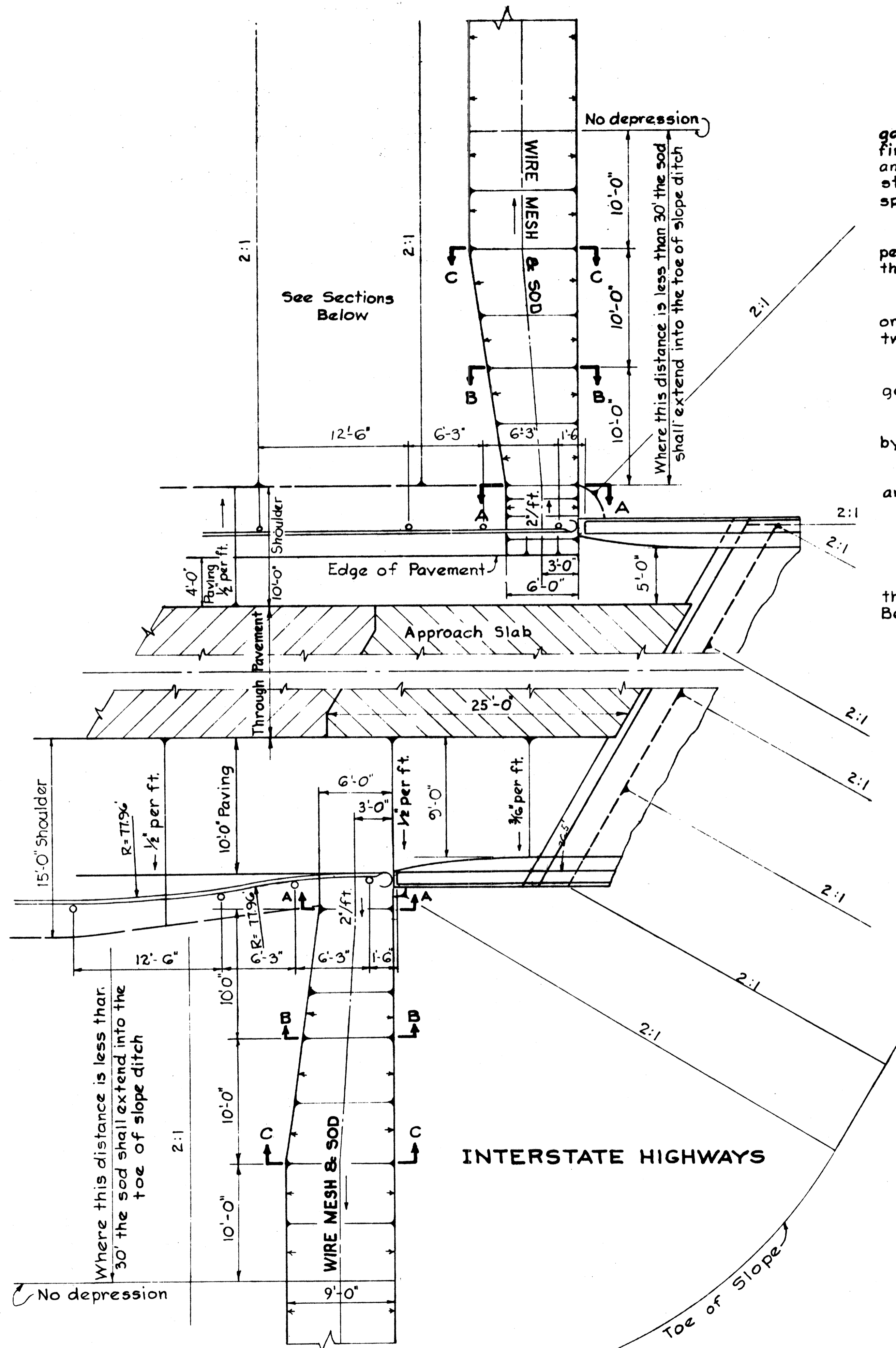
The fence shall be Straight Line Poultry Fence or equivalent with strand width of four feet, having a two inch mesh and all wires No. 20 Gauge.

The strands of fencing shall be fastened together at twelve inch intervals by means of hog rings.

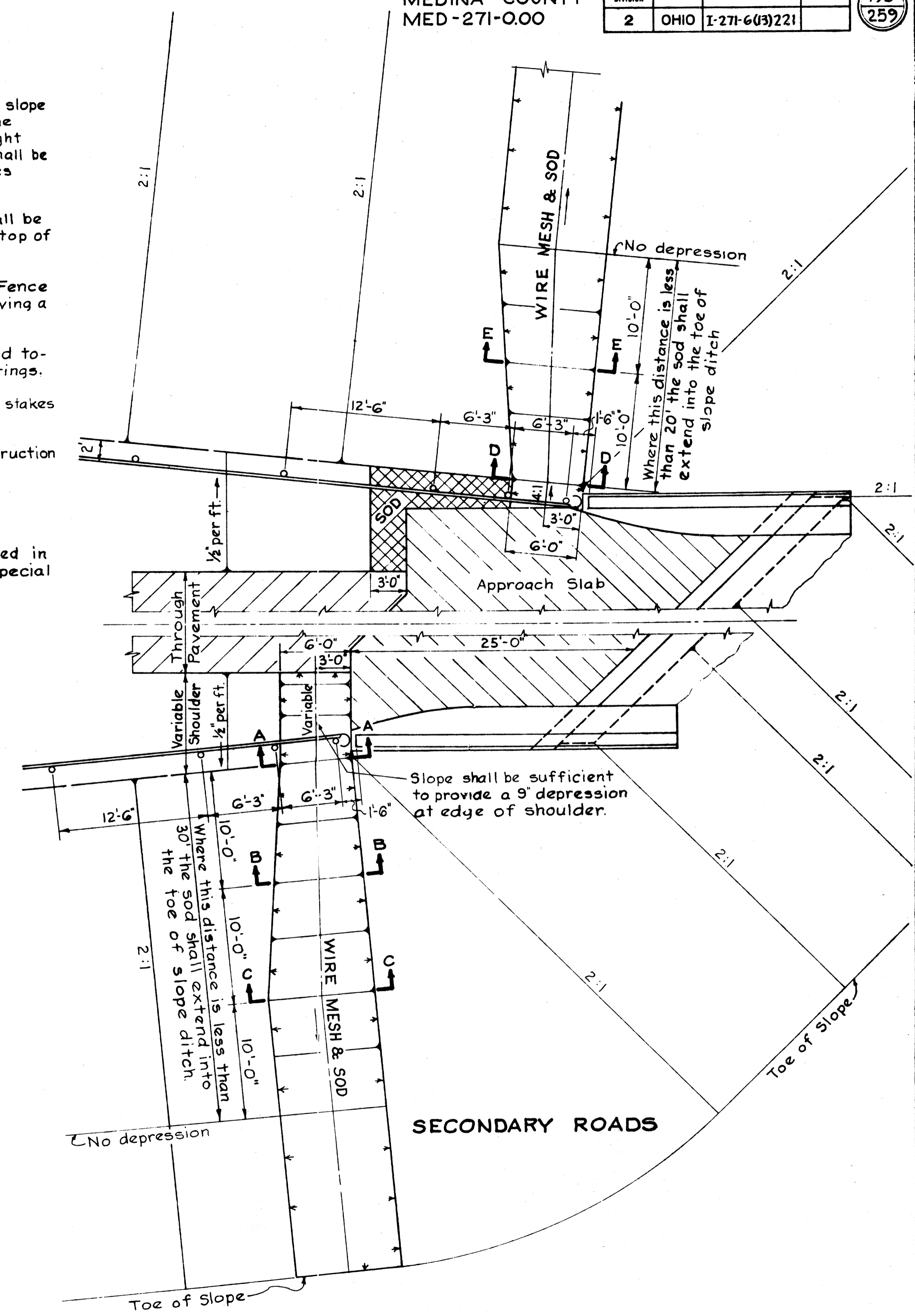
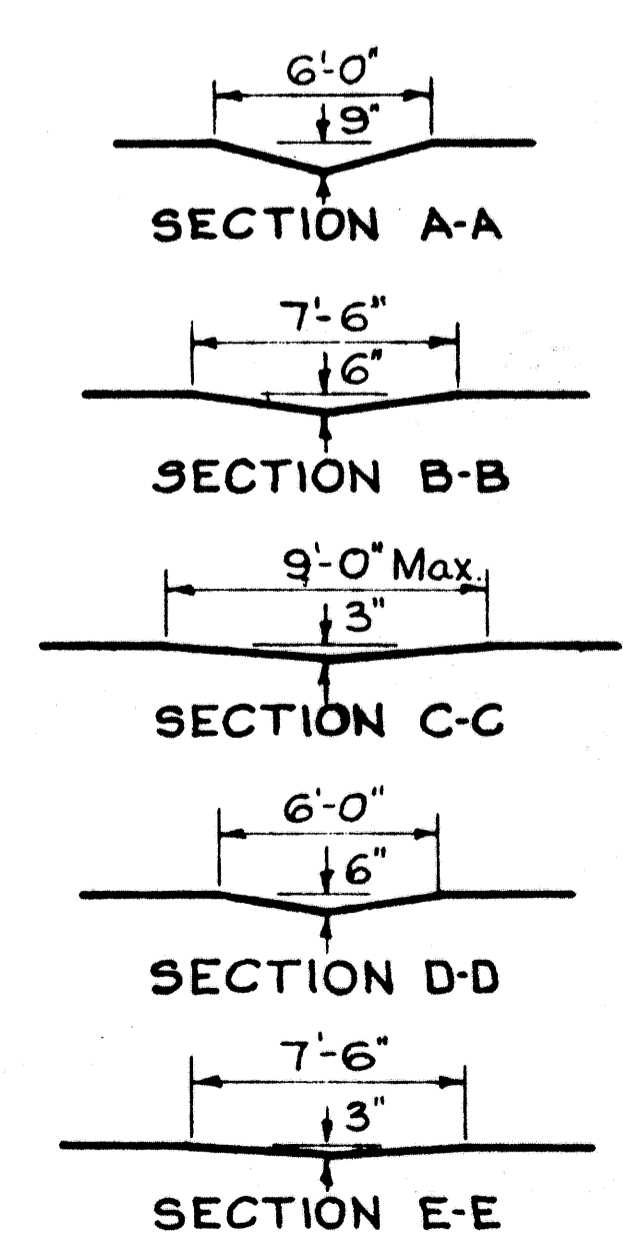
The fence shall be secured to the wood stakes by metal staples.

Sod shall be laid in accordance with Construction and Materials Specifications Section L-10.07.

Payment for all the above shall be included in the unit price bid for Item L-10 Sodding for Special Berm and Slope Protection.



INTERSTATE HIGHWAYS



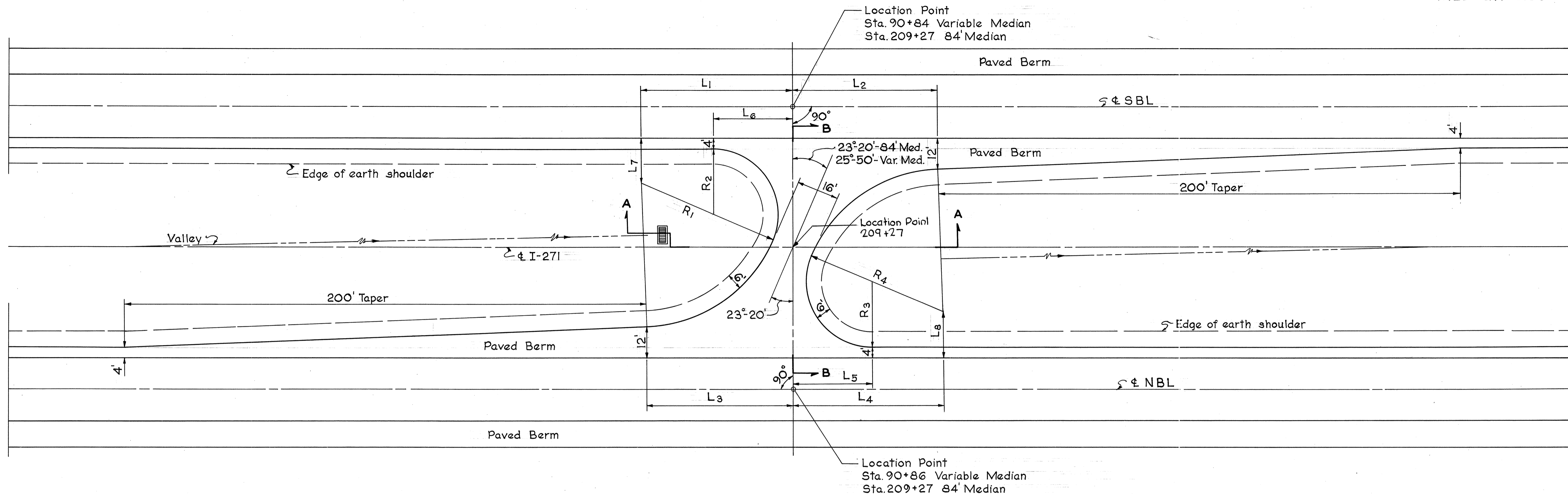
SECONDARY ROADS

STANDARD U-TURN MEDIAN OPENINGS

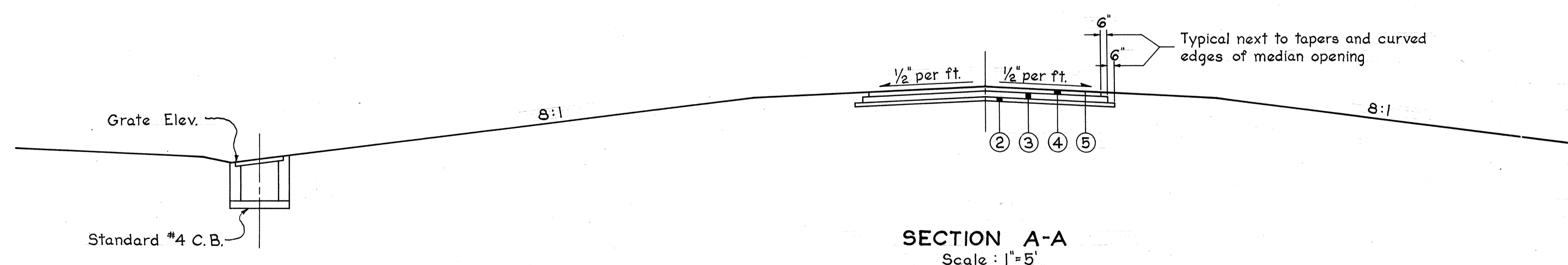
FED. RD. DIVISION	STATE	PROJECT
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PLAN
Scale: 1"=20'



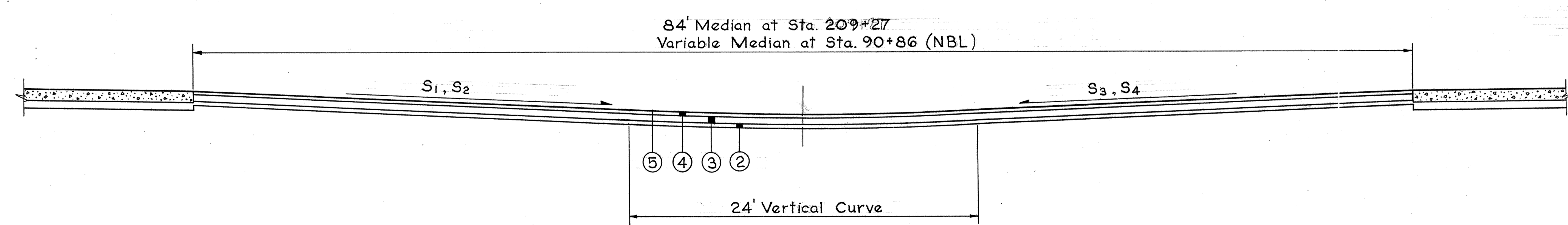
SECTION A-A
Scale: 1"=5'

LEGEND

- ② Item I-22 3" Subbase, Regular Grading.
- ③ Item B-19 7" Aggregate Base Course
- ④ Item B-21 * 3" Waterproofed Aggregate Base Course (Type "A" T-35 Material may be used in construction of this course - See note in Proposal).
- ⑤ Item T-31 Bituminous Surface Treatment using 0.008 Cu.Yd. N^o 6 aggregate per Sq. Yd. and 0.25 Gal. bituminous material per Sq. Yd. (See note in Proposal).

* Thickness shown is design thickness as described in Sec. B-21.01.

	84' Median Sta. 209+27	Variable Median Sta. 90+86 (NBL)
R ₁	55.0'	59.0'
R ₂	25.0'	25.5'
R ₃	25.0'	27.0'
R ₄	55.0'	64.0'
L ₁	57.8'	59.7'
L ₂	55.7'	61.0'
L ₃	55.7'	59.5'
L ₄	57.8'	66.2'
L ₅	30.3'	32.0'
L ₆	30.3'	30.0'
L ₇	17.0'	15.5'
L ₈	17.0'	16.0'
S ₁	—	1.10%
S ₂	4.17%	—
S ₃	4.17%	—
S ₄	—	3.70%



SECTION B-B
Scale: 1"=5'

Quantities req'd. for U-Turn Median Opening between the Normal 4'-0" paved berms for the through roadways

Item	Unit	Quantities	
		Sta. 90+86 (NBL)	Sta. 209+27
I-22	C.Y.	46	43
B-19	C.Y.	107	100
B-21	C.Y.	45	42
T-31	C.Y.	4.3	4.1
T-31	Gal.	135	127

Carry Quantities to Calculation Sheet.

SUPERELEVATION TABLES

MEDINA COUNTY
MED-271-0.00

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SOUTHBOUND LANE				NORTHBOUND LANE				SOUTHBOUND LANE				NORTHBOUND LANE				D _c =0°-40'Rt. S=0.021'/'					D _c =0°-40'Rt. S=0.021'/'					D _c =0°-40'Rt. S=0.021'/'																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
D _c =1°-28'Lt. S=0.047'/' Max. Superelevation for 24'=1.13'				D _c =1°28' S=0.047'/' Max. Superelevation for 24'=1.13'				D _c =0°-40'Rt. S=0.021'/' Max. Superelevation for 24'=0.50'				D _c =0°-40'Rt. S=0.021'/' Max. Superelevation for 24'=0.50'				Max. Superelevation for 24'=0.50'					Max. Superelevation for 24'=0.50'					Max. Superelevation for 24'=0.50'																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
STATION	OUTER EDGE	CENTERLINE	PROFILE GRADE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	OUTER EDGE	CENTERLINE	PROFILE GRADE	STATION	OUTER EDGE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE	STATION	PROFILE GRADE	CENTERLINE	OUTER EDGE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
131+75	1138.14	1138.71	1139.27	134+50	1140.65	1141.21	1141.78	175+75	1073.17	1073.12	1072.93	178+50	1060.65	1060.40	1060.15	194+75	1060.75	1061.26	1061.01	1060.50	1060.25	212+25	1092.25	1092.76	1092.50	1092.00	1091.75	229+75	1124.50	1125.00	1124.75	1124.25	1124.00	132+00	1138.27	1138.83	1139.40	+75	1140.77	1141.34	1141.90	176+00	1072.48	1072.37	1072.18	+75	1059.78	1059.52	1059.27	195+00	1061.20	1061.71	1061.46	1060.95	1060.70	230+00	1125.00	1125.50	1125.25	1124.75	1124.50	+25	1138.39	1138.96	1139.52	135+00	1140.90	1141.46	1142.03	+25	1071.68	1071.49	1071.30	+25	1061.65	1062.16	1061.91	1061.40	1061.15	+50	1125.00	1126.00	1125.75	1125.25	1125.00	+50	1138.52	1139.08	1139.65	+25	1141.02	1141.59	1142.15	179+00	1058.90	1058.65	1058.40	+50	1062.10	1062.61	1062.36	1061.85	1061.60	+25	1126.00	1126.50	1126.25	1125.75	1125.50	+75	1138.64	1139.21	1139.77	+50	1141.15	1141.71	1142.28	176+04.74	BK =	-	-	+01.92	BK =	-	-	+75	1062.55	1063.06	1062.81	1062.30	1062.05	213+00	1093.60	1094.11	1093.85	1093.30	1093.10	+25	1126.50	1127.00	1126.75	1126.25	1126.00	133+00	1138.77	1139.33	1139.90	+75	1141.27	1141.84	1142.40	179+01.92	(P.C.)	-	-	+01.92	P.C.	-	-	196+00	1063.00	1063.51	1063.26	1062.75	1062.50	+25	1126.50	1127.00	1126.75	1126.25	1126.00	+25	1138.89	1139.46	1140.02	136+00	1141.40	1141.96	1142.53	+25	1071.08	1070.84	1070.59	+25	1063.45	1063.96	1063.71	1063.20	1062.95	231+00	1127.00	1127.50	1127.25	1126.75	1126.50	+50	1139.02	1139.58	1140.15	+50	1141.65	1142.21	1142.78	+26.21	1071.68	1071.49	1071.30	+75	1064.95	1065.46	1065.20	1064.70	1064.45	+25	1127.00	1127.50	1127.25	1126.75	1126.50	+75	1139.14	1139.71	1140.27	+75	1141.77	1142.34	1142.90	+50	1071.08	1070.84	1070.59	+50	1063.90	1064.41	1064.16	1063.65	1063.40	+50	1128.00	1128.50	1128.25	1127.75	1127.50	134+00	1139.27	1139.83	1140.40	+25	1141.77	1142.34	1142.90	+51.92	1071.04	1070.78	1070.53	+75	1064.35	1064.86	1064.61	1064.10	1063.85	+75	1128.50	1129.00	1128.75	1128.25	1128.00	+25	1139.39	1139.96	1140.52	137+00	1141.90	1142.46	1143.03	+75	1141.77	1142.34	1142.90	+75	1070.34	1070.09	1069.84	+25	1058.04	1057.79	1057.54	197+00	1064.80	1065.31	1065.06	1064.55	1064.30	+25	1129.00	1129.50	1129.25	1128.75	1128.50	+50	1139.52	1140.08	1140.65	+25	1142.02	1142.59	1143.15	+75	1070.34	1070.09	1069.84	+75	1058.50	1058.25	1058.00	+25	1063.20	1063.71	1063.46	1063.00	1062.75	232+00	1129.00	1129.50	1129.25	1128.75	1128.50	+75	1139.64	1140.21	1140.77	+50	1142.15	1142.71	1143.28	180+00	1069.59	1069.34	1069.09	+25	1059.25	1059.00	1058.75	+25	1063.65	1064.16	1063.91	1063.40	1063.15	+25	1129.50	1130.00	1129.75	1129.25	1129.00	135+00	1139.77	1140.33	1140.90	+75	1142.27	1142.84	1143.40	+25	1068.84	1068.59	1068.34	+25	1054.94	1054.69	1054.44	+75	1063.90	1064.41	1064.16	1063.65	1063.40	+50	1130.00	1130.50	1130.25	1129.75	1129.50	+25	1139.89	1140.46	1141.02	138+00	1142.40	1142.96	1143.53	+50	1068.09	1067.84	1067.59	+25	1054.25	1054.00	1053.75	+75	1064.35	1064.86	1064.61	1064.10	1063.85	+75	1130.50	1131.00	1130.75	1130.25	1130.00	+50	1140.02	1140.58	1141.15	139+00	1143.00	1143.56	1144.13	+75	1067.35	1067.09	1066.84	+75	1053.59	1053.33	1053.08	+25	1058.04	1057.79	1057.54	198+00	1066.60	1067.11	1066.85	1066.35	1066.10	+25	1131.00	1131.50	1131.25	1130.75	1130.50	+75	1140.14	1140.71	1141.27	+25	1142.52	1143.09	1143.65	181+00	1066.60	1066.34	1066.09	+75	1052.96	1052.71	1052.46	+75	1058.50	1058.25	1058.00	+25	1063.00	1063.51	1063.26	1062.75	1062.50	+50	1131.50	1132.00	1131.75	1131.25	1131.00	+75	1140.26	1140.83	1141.40	+50	1142.65	1143.21	1143.78	+25	1065.85	1065.59	1065.34	+25	1052.37	1052.11	1051.86	+25	1058.50	1058.25	1058.00	+75	1063.45	1063.96	1063.71	1063.20	1062.95	+75	1132.00	1132.50	1132.25	1131.75	1131.50	+50	1140.77	1141.34	1141.90	+75	1142.77	1143.34	1143.90	+50	1065.10	1064.84	1064.59	+50	1051.81	1051.55	1051.30	+75	1064.95	1065.46	1065.20	1064.70	1064.45	+75	1132.50	1133.00	1132.75	1132.25	1132.00	+25	1140.48	1141.05	1141.62	+25	1143.02	1143.59	1144.15	+75	1064.35	1064.09	1063.84	+75	1051.28	1051.03	1050.78	+25	1058.50	1058.25	1058.00	199+00	1068.40	1068.91	1068.65	1068.15	1067.90	+25	1133.00	1133.50	1133.25	1132.75	1132.50	+50	1141.19	1141.76	1142.32	+50	1143.15	1143.71	1144.28	+25	1063.09	1062.84	1062.59	182+00	1050.78	1050.53	1050.28	+25	1058.50	1058.25	1058.00	+25	1063.45	1063.96	1063.71	1063.20	1062.95	+50	1133.50	1134.00	1133.75	1133.25	1133.00	+75	1141.49	1142.06	1142.62	+75	1143.59	1144.15	1144.71	+25	1062.85	1062.60	1062.35	+25	1050.32	1050.07	1049.82	+75	1064.95	1065.46	1065.20	1064.70	1064.45	+75	1134.00	1134.50	1134.25	1133.75	1133.50	+72.08	1141.88	1142.45	1143.01	+50	1143.15	1143.71	1144.28	+50	1062.10	1061.85	1061.59	183+00	1049.90	1049.64	1049.39	+25	1058.50	1058.25	1058.00	+25	1064.35	1064.86	1064.61	1064.10	1063.85	+75	1134.50	1135.00	1134.75	1134.25	1134.00	+75	1141.91	1142.48	1143.04	+75	1143.27	1143.84	1144.40	+75	1061.35	1061.10	1060.84	+75	1049.90	1049.64	1049.39	+25	1058.50	1058.25	1058.00	200+00	1070.20	1070.71	1070.45	1069.95	1069.70	+75	1135.00	1135.50	1135.25	1134.75	1134.50	+75	1142.09	1142.66	1143.22	+25	1143.59	1144.15	1144.71	+75	1060.35	1060.09	1059.84	+75	1049.50	1049.25	1049.00	+25	1058.50	1058.25	1058.00	+25	1070.65	1071.16	1070.90	1070.40	1070.15	+75	1135.50	1136.00	1135.75	1135.25	1135.00	+25	1142.27	1142.84	1143.40	+50	1143.65	1144.21	1144.78	+25	1059.85	1059.60	1059.34	+25	1049.50	1049.25	1049.00	+75	1065.10	1065.61	1065.35	+50	1071.10	1071.61	1071.35	1070.85	1070.60	+75	1136.00	1136.50	1136.25	1135.75	1135.50	+50	1142.45	1143.01	1143.57	+75	1143.77	1144.34	1144.90	+25	1059.85	1059.60	1059.34	+25	1048.81	1048.56	1048.31	+25	1058.50	1058.25	1058.00	201+00	1070.20	1070.71	1070.45	1069.95	1069.70	+75	1136.50	1137.00	1136.75	1136.25	1136.00	+75	1142.62	1143.18	1143.74	+50	1143.99	1144.55	1145.11	+25	1059.85	1059.60	1059.34	+25	1048.81	1048.56	1048.31	+25	1058.50	1058.25	1058.00	+25	1072.00	1072.51	1072.25	1071.75	1071.50	+75	1137.00	1137.50	1137.25	1136.75	1136.50	+75	1142.82	1143.38	1143.94	+50	1144.21	1144.77	1145.33	+25	1059.85	1059.60	1059.34	+25	1048.81	1048.56	1048.31	+25	1058.50	1058.25	1058.00	+25	1072.45	1072.96	1072.70	1072.20	1071.95	+75	1137.50	1138.00	1137.75	1137.25	1137.00	+75	1143.01	1143.57	1144.13	+50	1144.49	1145.05	1145.61	+25	1059.85	1059.60	1059.34	+25	1048.81	1048.56	1048.31	+25	1058.50	1058.25	1058.00	+25	1072.90	1073.41	1073.15	1072.65	1072.40	+75	1138.00	1138.50	1138.25	1137.75	1137.50	+75	1143.22	1143.78	1144.34	+50	1144.61	1145.17	1145.73	+25	1059.85	1059.60	1059.34	+25	1048.81	1048.56	1048.31	+25	1058.50	1058.25	1058.00	+25	1073.30	1073.81	1073.55	1073.05	1072.80	+75	1138.50	1139.00	1138.75	1138.25	1138.00	+75	1143.43	1143.99	1144.55	+50	1144.81	1145.37	1145.93	+25	1059.85	1059.60	1059.34	+25	1048.81	1048.56	1048.31	+25	1058.50	1058.25	1058.00	+25	1073.75	1074.26	1074.00	1073.50	1073.25	+75	1139.00	1139.50	1139.25	1138.75	1138.50	+75	1143.65	1144.21	1144.77	+50	1145.05	1145.61	1146.17	+25	1059.85	1059.60	1059.34	+25	1048.81	1048.56	1048.31	+25	1058.50	1058.25	1058.00	+25	1074.25	1074.76	1074.50	1074.00	1073.75	+75	1139.50	1140.00	1139.75	1139.25	1139.00	+75	1143.87	1144.43	1144.99	+50	1145.27	1145.83	1146.39	+25	1059.85	1059.60	1059.34	+25	1048.81	1048.56	1048.31	+25	1058.50	

SUPERELEVATION TABLES

MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-G(13)-221	

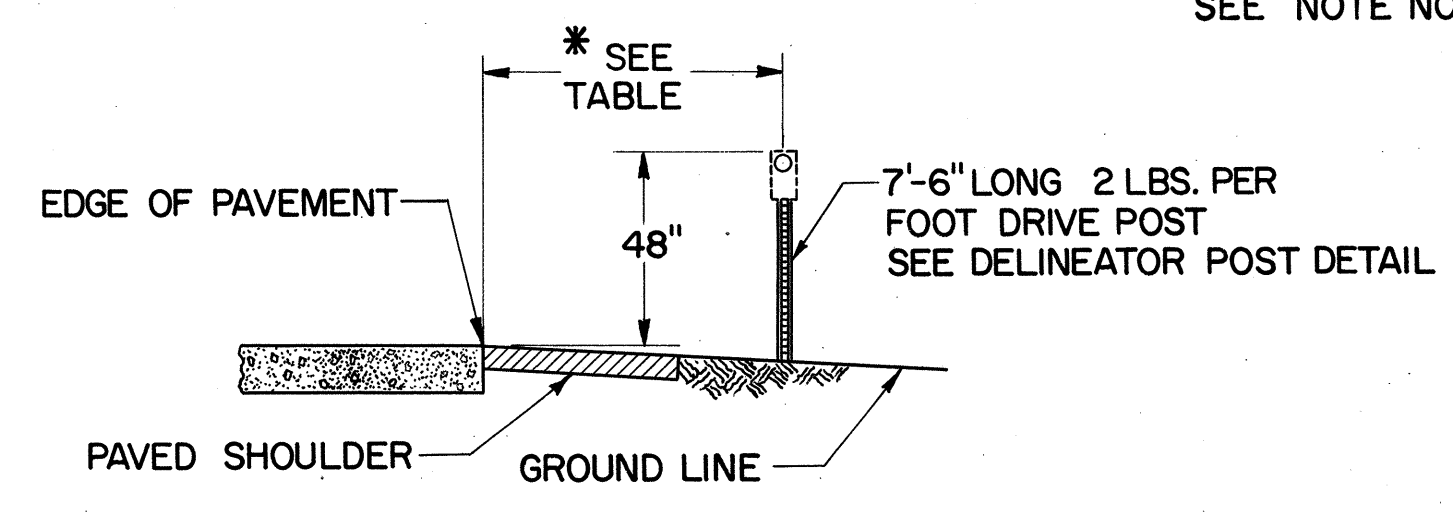
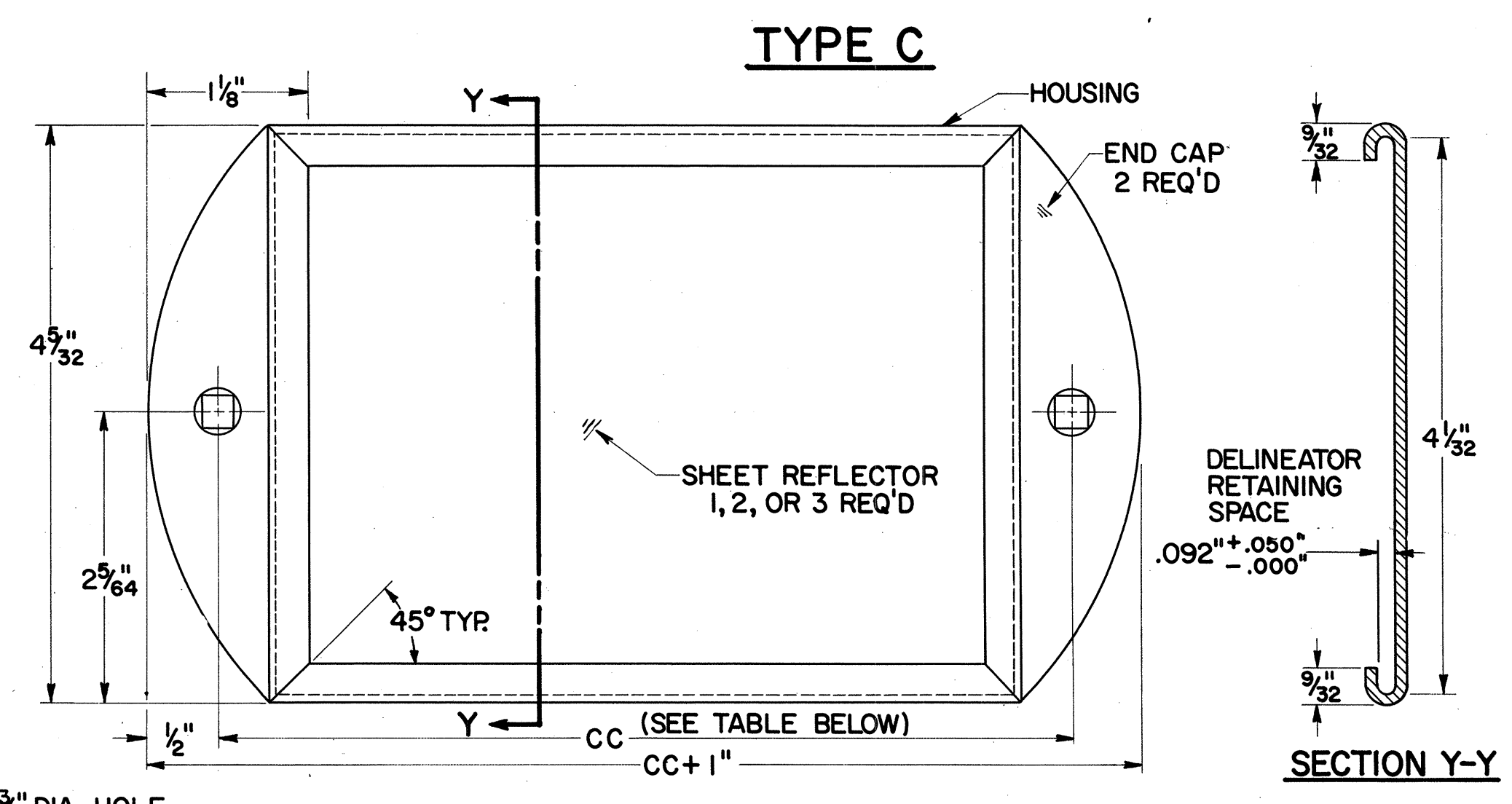
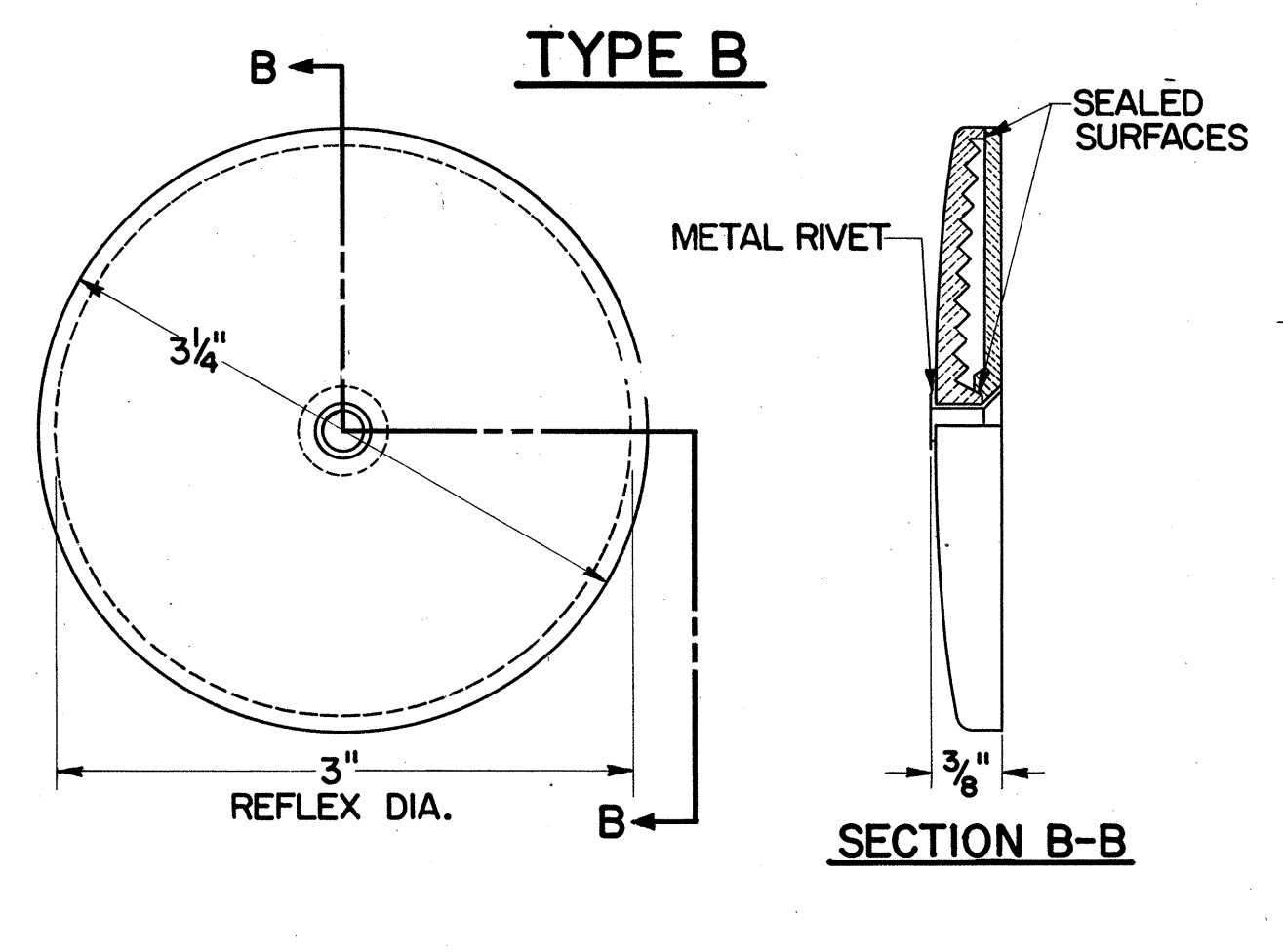
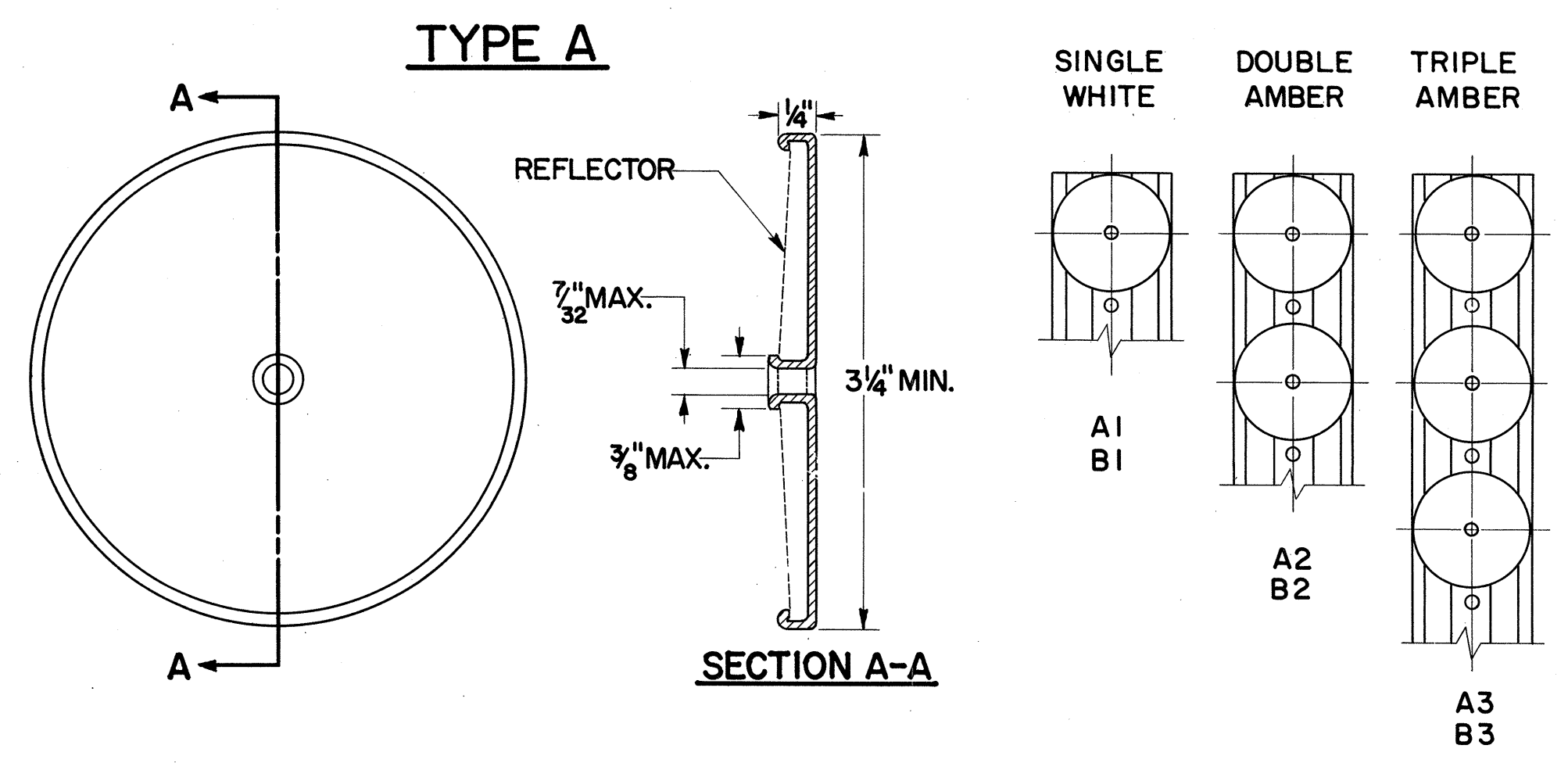


D _c =0°-40'Rt. S=0.021'/'						D _c =0°-40'Rt. S=0.021'/'					
Max. Superelevation for 24'=0.50'						Max. Superelevation for 24'=0.50'					
STATION	PROFILE GRADE	SOUTHBOUND LANE		NORTHBOUND LANE		STATION	PROFILE GRADE	SOUTHBOUND LANE		NORTHBOUND LANE	
		OUTER EDGE	CENTERLINE	CENTERLINE	OUTER EDGE			OUTER EDGE	CENTERLINE	CENTERLINE	OUTER EDGE
247+25	1159.50	1160.00	1159.75	1159.25	1159.00	264+75	1194.50	1195.00	1194.75	1194.25	1194.00
+50	1160.00	1160.50	1160.25	1159.75	1159.50	265+00	1195.00	1195.50	1195.25	1194.75	1194.50
+75	1160.50	1161.00	1160.75	1160.25	1160.00	+25	1195.50	1196.00	1195.75	1195.25	1195.00
248+00	1161.00	1161.50	1161.25	1160.75	1160.50	+50	1196.00	1196.50	1196.25	1195.75	1195.50
+25	1161.50	1162.00	1161.75	1161.25	1161.00	+75	1196.50	1197.00	1196.75	1196.25	1196.00
+50	1162.00	1162.50	1162.25	1161.75	1161.50	266+00	1197.00	1197.50	1197.25	1196.75	1196.50
+75	1162.50	1163.00	1162.75	1162.25	1162.00	+25	1197.50	1198.00	1197.75	1197.25	1197.00
249+00	1163.00	1163.50	1163.25	1162.75	1162.50	+50	1198.00	1198.50	1198.25	1197.75	1197.50
+25	1163.50	1164.00	1163.75	1163.25	1163.00	+75	1198.50	1199.00	1198.75	1198.25	1198.00
+50	1164.00	1164.50	1164.25	1163.75	1163.50	267+00	1199.00	1199.50	1199.25	1198.75	1198.50
+75	1164.50	1165.00	1164.75	1164.25	1164.00	+25	1199.50	1200.00	1199.75	1199.25	1199.00
250+00	1165.00	1165.50	1165.25	1164.75	1164.50	+50	1200.00	1200.50	1200.25	1199.75	1199.50
+25	1165.50	1166.00	1165.75	1165.25	1165.00	+75	1200.50	1201.00	1200.75	1200.25	1200.00
+50	1166.00	1166.50	1166.25	1165.75	1165.50	268+00	1201.00	1201.50	1201.25	1200.75	1200.50
+75	1166.50	1167.00	1166.75	1166.25	1166.00	+25	1201.50	1202.00	1201.75	1201.25	1201.00
251+00	1167.00	1167.50	1167.25	1166.75	1166.50	+50	1202.00	1202.50	1202.25	1201.75	1201.50
+25	1167.50	1168.00	1167.75	1167.25	1167.00	+75	1202.50	1203.00	1202.75	1202.25	1202.00
+50	1168.00	1168.50	1168.25	1167.75	1167.50	269+00	1203.00	1203.50	1203.25	1202.75	1202.50
+75	1168.50	1169.00	1168.75	1168.25	1168.00	+25	1203.50	1204.00	1203.75	1203.25	1203.00
252+00	1169.00	1169.50	1169.25	1168.75	1168.50	+50	1204.00	1204.50	1204.25	1203.75	1203.50
+25	1169.50	1170.00	1169.75	1169.25	1169.00	+75	1204.50	1205.00	1204.75	1204.25	1204.00
+50	1170.00	1170.50	1170.25	1169.75	1169.50	270+00	1205.00	1205.50	1205.25	1204.75	1204.50
+75	1170.50	1171.00	1170.75	1170.25	1170.00	+25	1205.50	1206.00	1205.75	1205.25	1205.00
253+00	1171.00	1171.50	1171.25	1170.75	1170.50	+50	1206.00	1206.50	1206.25	1205.75	1205.50
+25	1171.50	1172.00	1171.75	1171.25	1171.00	+75	1206.50	1207.00	1206.75	1206.25	1206.00
+50	1172.00	1172.50	1172.25	1171.75	1171.50	271+00	1207.00	1207.50	1207.25	1206.75	1206.50
+75	1172.50	1173.00	1172.75	1172.25	1172.00	+25	1207.50	1208.00	1207.75	1207.25	1207.00
254+00	1173.00	1173.50	1173.25	1172.75	1172.50	+50	1208.00	1208.50	1208.25	1207.75	1207.50
+25	1173.50	1174.00	1173.75	1173.25	1173.00	+75	1208.50	1209.00	1208.75	1208.25	1208.00
+50	1174.00	1174.50	1174.25	1173.75	1173.50	272+00	1209.00	1209.50	1209.25	1208.75	1208.50
+75	1174.50	1175.00	1174.75	1174.25	1174.00						
255+00	1175.00	1175.50	1175.25	1174.75	1174.50						
+25	1175.50	1176.00	1175.75	1175.25	1175.00						
+50	1176.00	1176.50	1176.25	1175.75	1175.50						
+75	1176.50	1177.00	1176.75	1176.25	1176.00						
256+00	1177.00	1177.50	1177.25	1176.75	1176.50						
+25	1177.50	1178.00	1177.75	1177.25	1177.00						
+50	1178.00	1178.50	1178.25	1177.75	1177.50						
+75	1178.50	1179.00	1178.75	1178.25	1178.00						
257+00	1179.00	1179.50	1179.25	1178.75	1178.50						
+25	1179.50	1180.00	1179.75	1179.25	1179.00						
+50	1180.00	1180.50	1180.25	1179.75	1179.50						
+75	1180.50	1181.00	1180.75	1180.25	1180.00						
258+00	1181.00	1181.50	1181.25	1180.75	1180.50						
+25	1181.50	1182.00	1181.75	1181.25	1181.00						
+50	1182.00	1182.50	1182.25	1181.75	1181.50						
+75	1182.50	1183.00	1182.75	1182.25	1182.00						
259+00	1183.00	1183.50	1183.25	1182.75	1182.50						
+25	1183.50	1184.00	1183.75	1183.25	1183.00						
+50	1184.00	1184.50	1184.25	1183.75	1183.50						
+75	1184.50	1185.00	1184.75	1184.25	1184.00						
260+00	1185.00	1185.50	1185.25	1184.75	1184.50						
+25	1185.50	1186.00	1185.75	1185.25	1185.00						
+50	1186.00	1186.50	1186.25	1185.75	1185.50						
+75	1186.50	1187.00	1186.75	1186.25	1186.00						
261+00	1187.00	1187.50	1187.25	1186.75	1186.50						
+25	1187.50	1188.00	1187.75	1187.25	1187.00						
+50	1188.00	1188.50	1188.25	1187.75	1187.50						
+75	1188.50	1189.00	1188.75	1188.25	1188.00						
262+00	1189.00	1189.50	1189.25	1188.75	1188.50						
+25	1189.50	1190.00	1189.75	1189.25	1189.00						
+50	1190.00	1190.50	1190.25	1189.75	1189.50						
+75	1190.50	1191.00	1190.75	1190.25	1190.00						
263+00	1191.00	1191.50	1191.25	1190.75	1190.50						
+25	1191.50	1192.00	1191.75	1191.25	1191.00						
+50	1192.00	1192.50	1192.25	1191.75	1191.50						
+75	1192.50	1193.00	1192.75	1192.25	1192.00						
264+00	1193.00	1193.50	1193.25	1192.75	1192.50						
+25	1193.50	1194.00	1193.75	1193.25	1193.00						
+50	1194.00	1194.50	1194.25	1193.75	1193.50						

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NOTES

- TYPE A1 OR B1 DELINEATORS ON THE RIGHT OF THE THROUGH ROADWAY ARE TO BE SPACED AT 200 FT. INTERVALS THROUGHOUT, REGARDLESS OF CURVES, BEGINNING AT STA. +00, +25, +50, OR +75.
- DELINEATORS SHALL BE FURNISHED AND ERECTED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION NO. I-127, (1-15-62).
- PAYMENT FOR SUPPORTS (DRIVEPOST OR BRACKET) SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR "ITEM I-127 DELINEATORS".
- WHEN CROSSING FROM LEFT TO RIGHT OR FROM RIGHT TO LEFT ON THE RAMPS THE DELINEATORS AT THE POINT OF CROSSOVER ARE TO BE AT THE SAME STATION ON EACH SIDE.
- NO DELINEATORS ARE TO BE PLACED IN PAVED BERM.
- WHEN RADII OF CURVE ON RAMPS REQUIRE 100' SPACING THE DELINEATORS SHALL BE PLACED ON THE RIGHT IN RELATION TO THE FLOW OF TRAFFIC.
- RAMP DELINEATOR AT END OF ACCELERATION & BEGINNING OF DECELERATION LANES TO BE A MAXIMUM OF 5' FROM POINT OF TANGENCY AT MAIN LINE.
- ALL RAMP DELINEATORS SHALL BE PLACED TO THE NEAREST 5' INCREMENTS, SUCH AS +05, +10, +15, +20 AND SO ON.

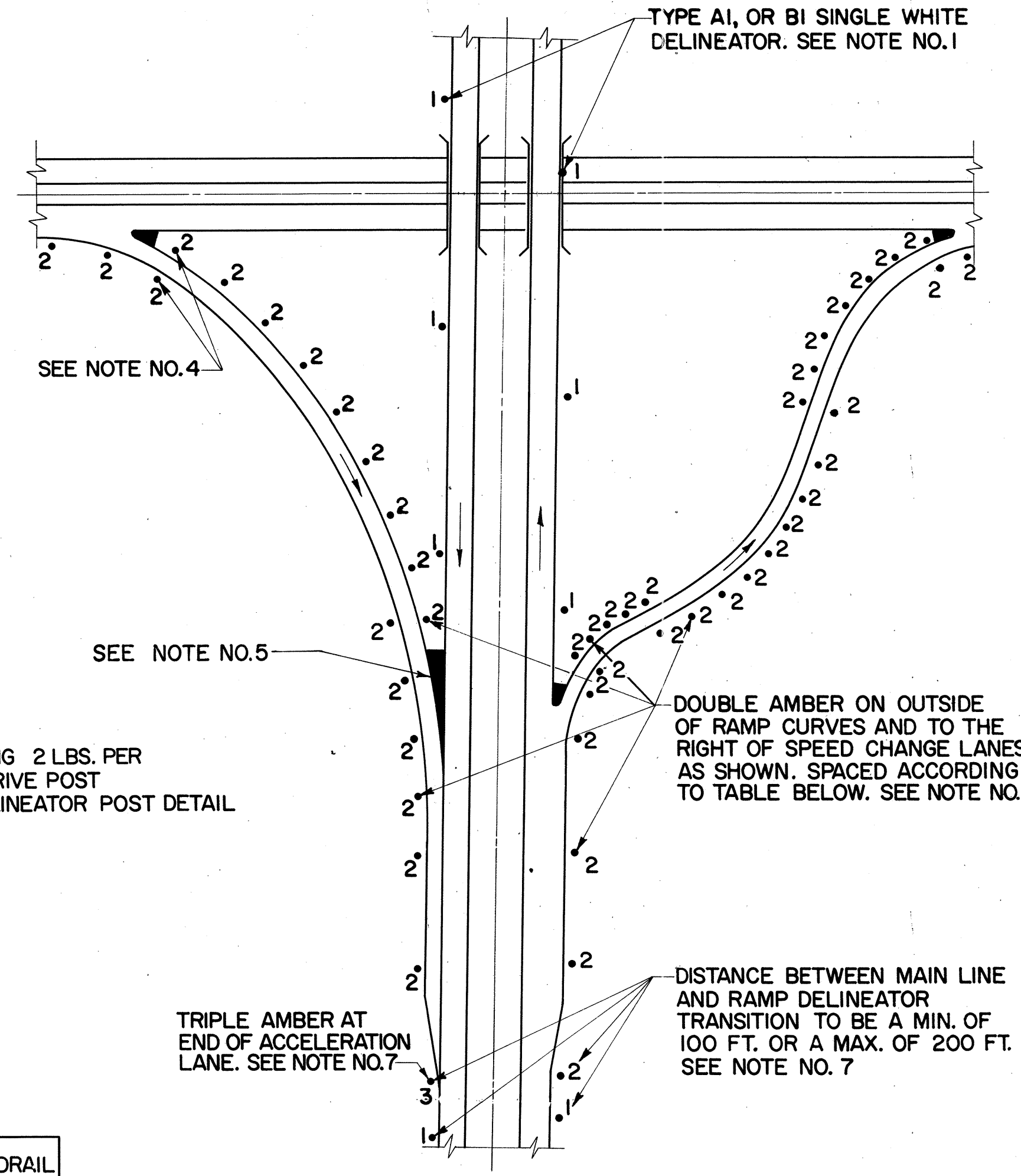


LATERAL PLACEMENT OF DELINEATORS

* TABLE

TYPE DELINEATOR	NO GUARDRAIL	GUARDRAIL
SINGLE WHITE	12'-6"	6" OUTSIDE
DOUBLE AMBER RIGHT SIDE	** 8'-6"	6" OUTSIDE
DOUBLE AMBER LEFT SIDE	4'-6"	6" OUTSIDE
TRIPLE AMBER	12'-6"	6" OUTSIDE

** THIS DIMENSION SHALL VARY ON SPEED CHANGE LANES TO MAINTAIN MINIMUM DISTANCE OF 2'-6" FROM EDGE OF PAVED SHOULDER.



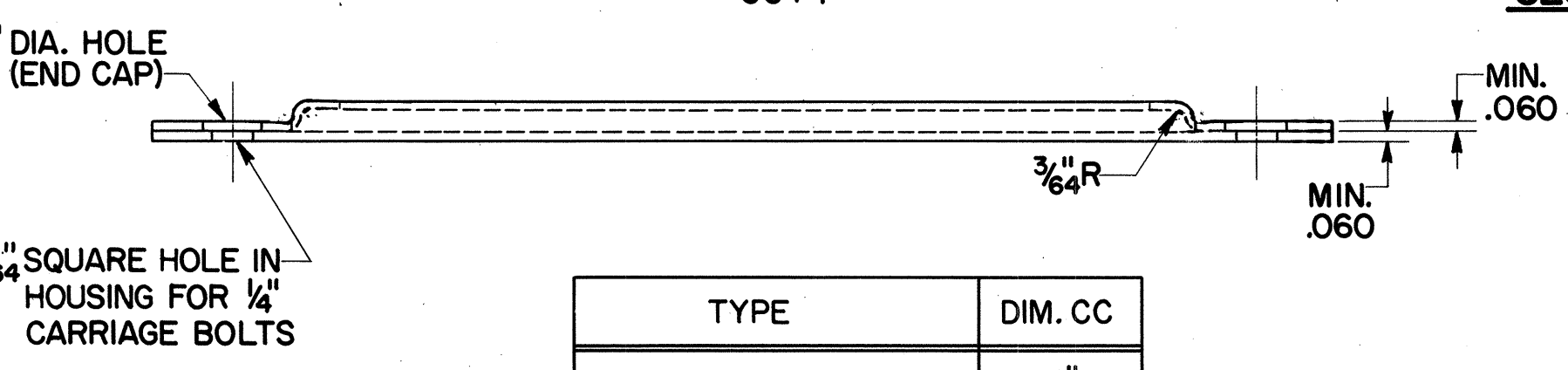
TYPICAL DELINEATOR PLACEMENT

DELINEATOR SPACING ON RAMP HORIZONTAL CURVES

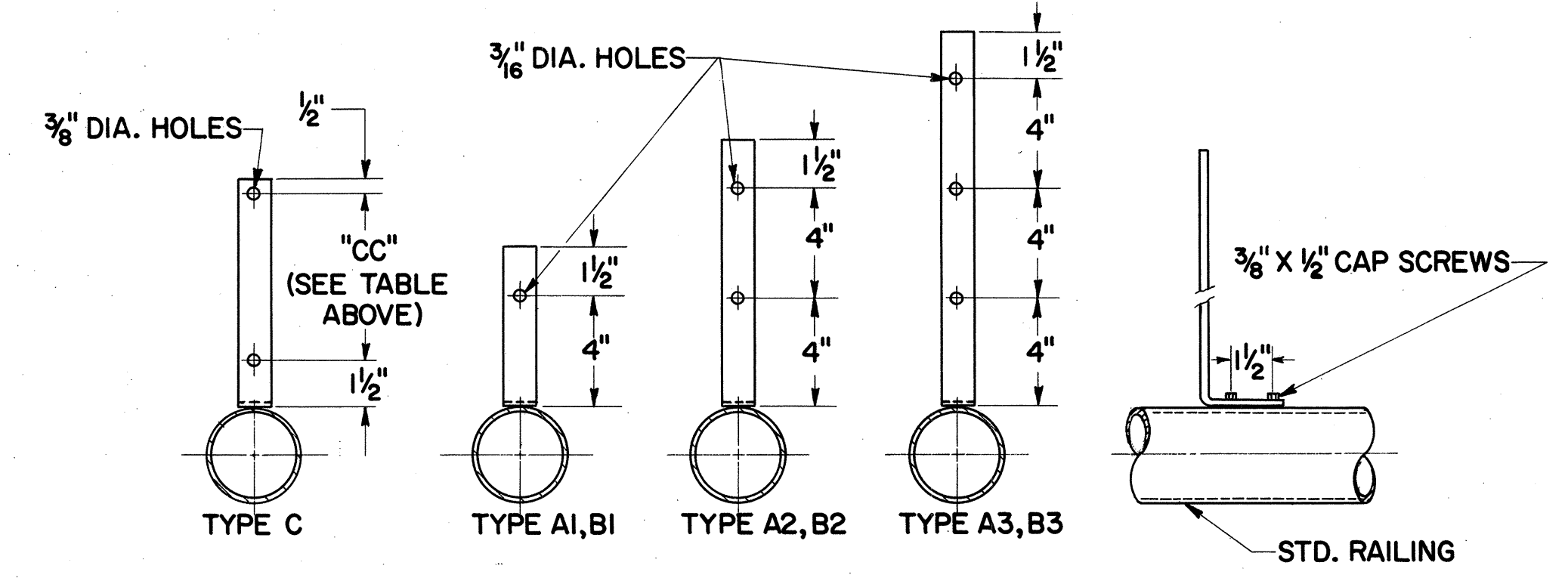
RADI, FT.	FROM	TO	SPACING ON CURVE	* TRANSITION SPACING	
				100'	100'
TANGENT	1,801	1,401	100'	100'	100'
	1,800	1,401	80'	100'	100'
	1,400	1,001	70'	100'	100'
	1,000	751	60'	100'	100'
	750	551	50'	80'	100'
	550	326	40'	70'	100'
	325		30'	60'	100'

* SUCH AS 40' TO 70' TO 100' OR 100' TO 80' TO 50' OR ANY OTHER COMBINATION SHOWN ABOVE.

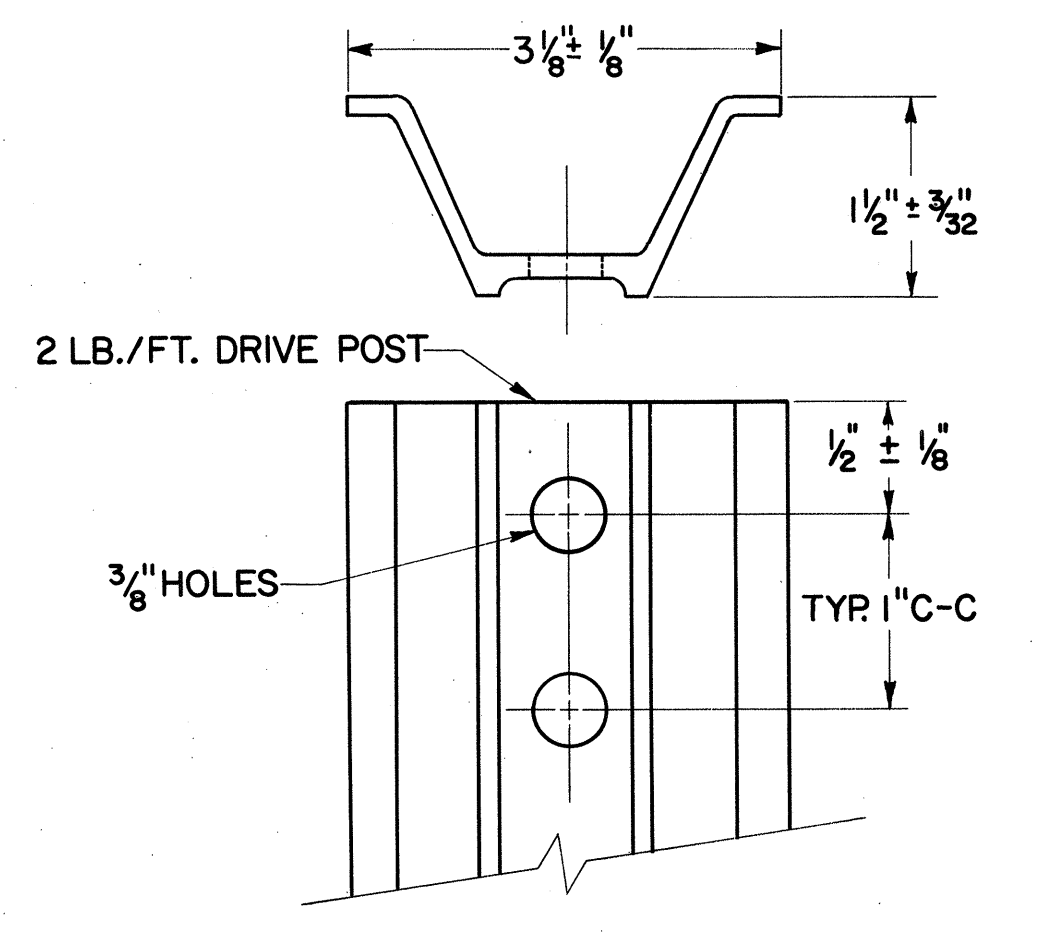
TYPE	DIM. CC
C1-SINGLE WHITE	6"
C2-DOUBLE AMBER	11"
C3-TRIPLE AMBER	16"



ALL BRACKETS 1/4" x 1/4" STAINLESS STEEL



BRIDGE RAIL BRACKET



DELINEATOR POST

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

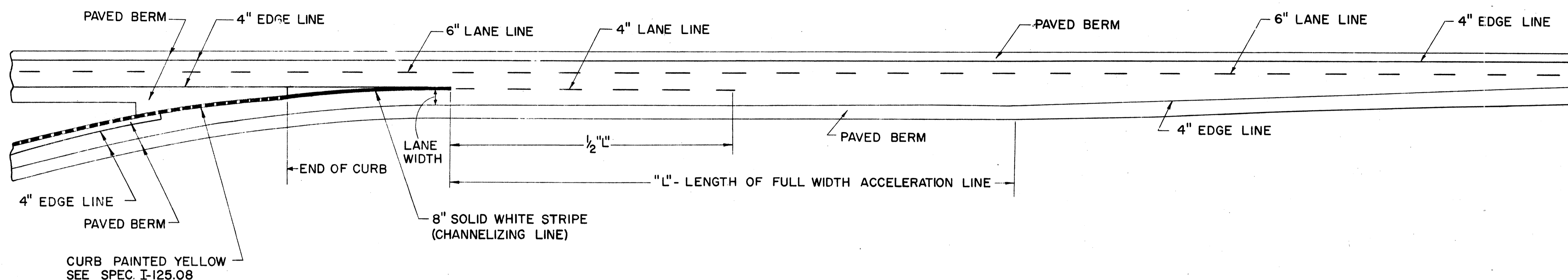
DELINEATOR DETAILS

I-127

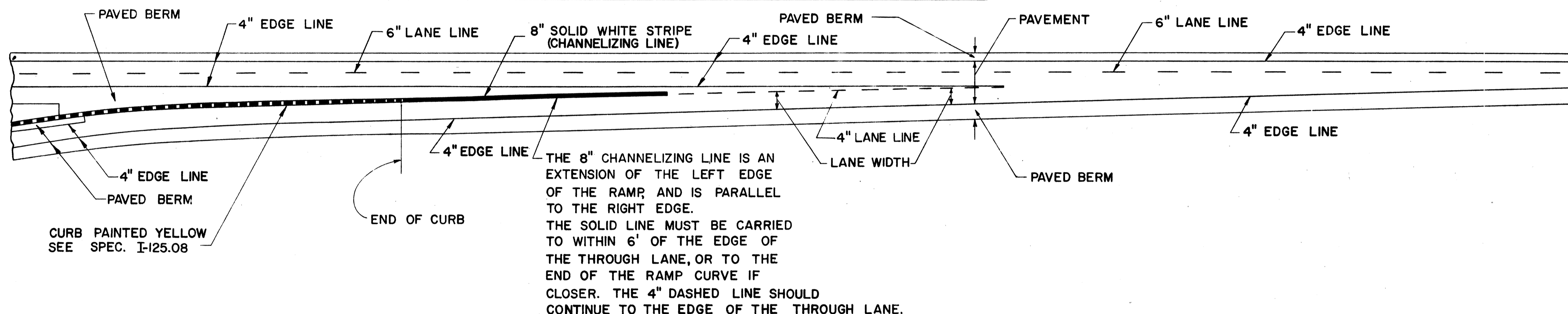
APPROVED *Robert Calomes*
ENGINEER OF TRAFFIC

DATE
9-25-62
10-2-63

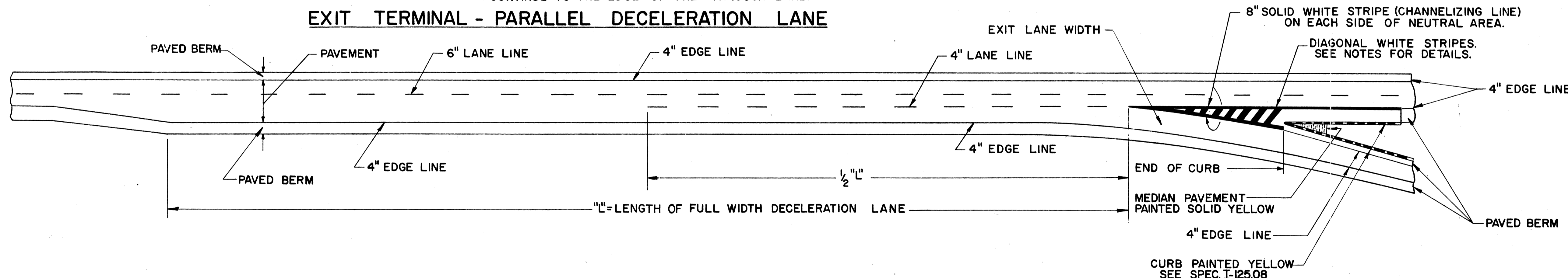
ENTRANCE TERMINAL - PARALLEL ACCELERATION LANE



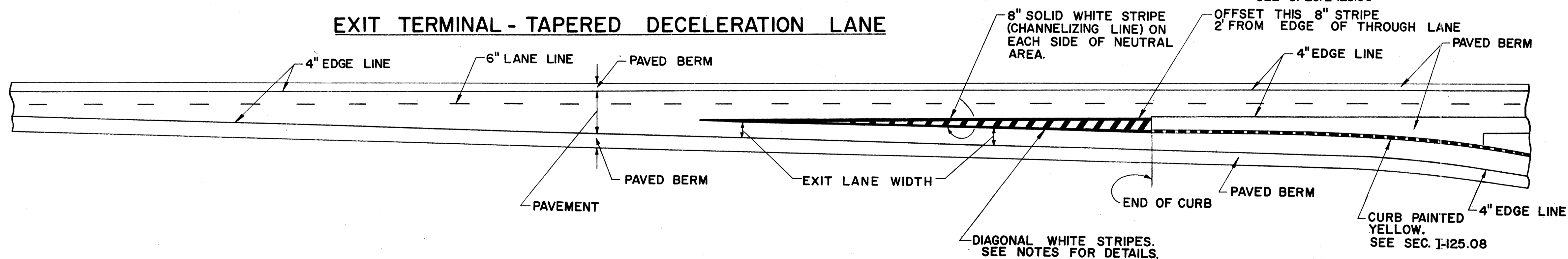
ENTRANCE TERMINAL - TAPERED ACCELERATION LANE



EXIT TERMINAL - PARALLEL DECELERATION LANE



EXIT TERMINAL - TAPERED DECELERATION LANE



NOTES

EDGE LINES SHALL BE PLACED IN THE LOCATIONS AS SHOWN TO CONFORM TO SUPPLEMENTAL SPECIFICATION No. I-125 AND DEFINED IN SECTION I-125.06.

LANE LINES SHALL BE PLACED IN THE LOCATIONS AS SHOWN TO CONFORM TO SUPPLEMENTAL SPECIFICATION No. I-125 AND DEFINED IN SECTION I-125.07.

CHANNELIZING LINES SHALL BE CONTINUOUS WHITE BEADED STRIPES 8" IN WIDTH PLACED IN THE LOCATIONS AS SHOWN TO CONFORM TO SUPPLEMENTAL SPECIFICATION No. I-125 AND DEFINED IN SECTION I-125.07 b.

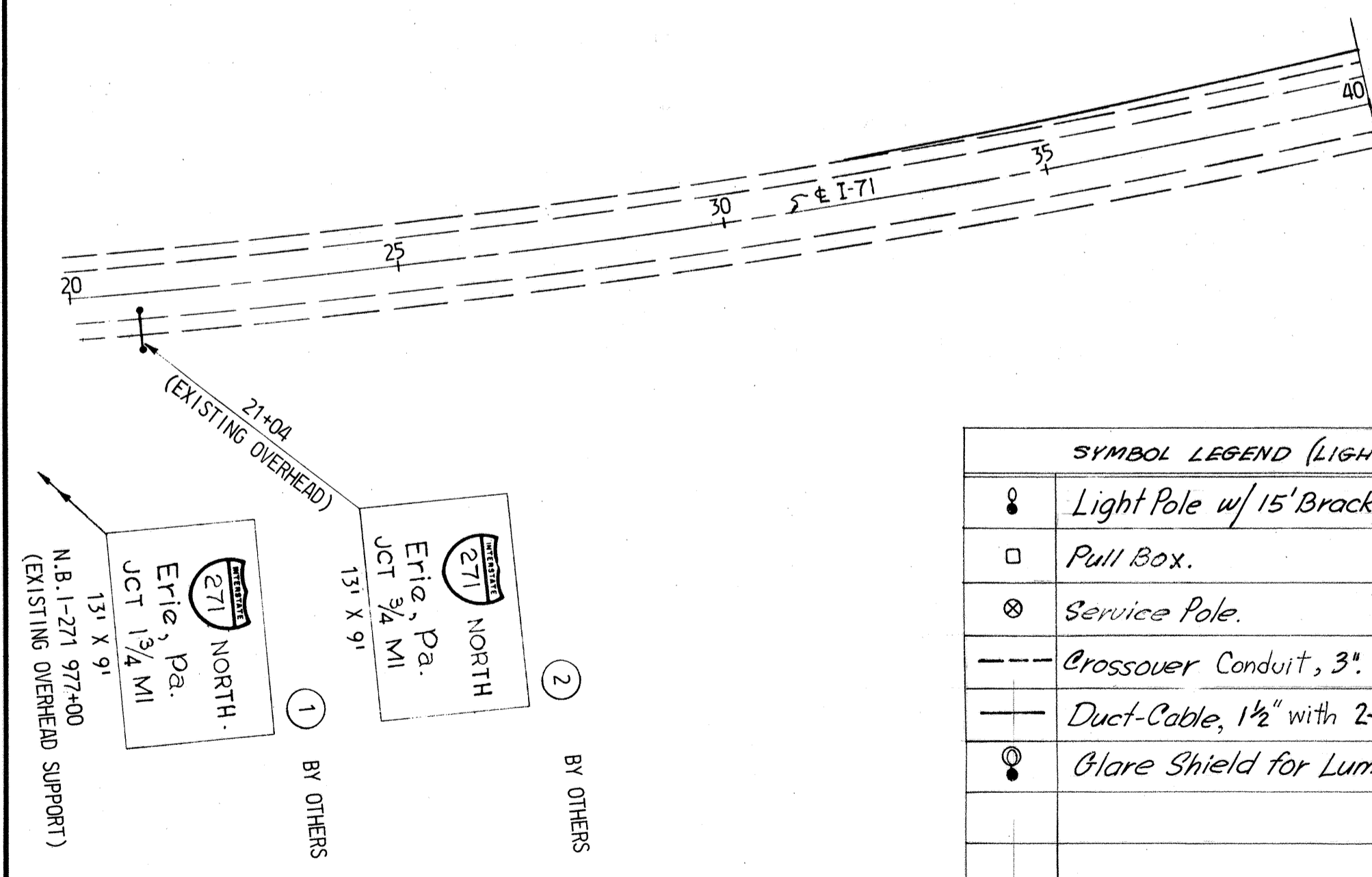
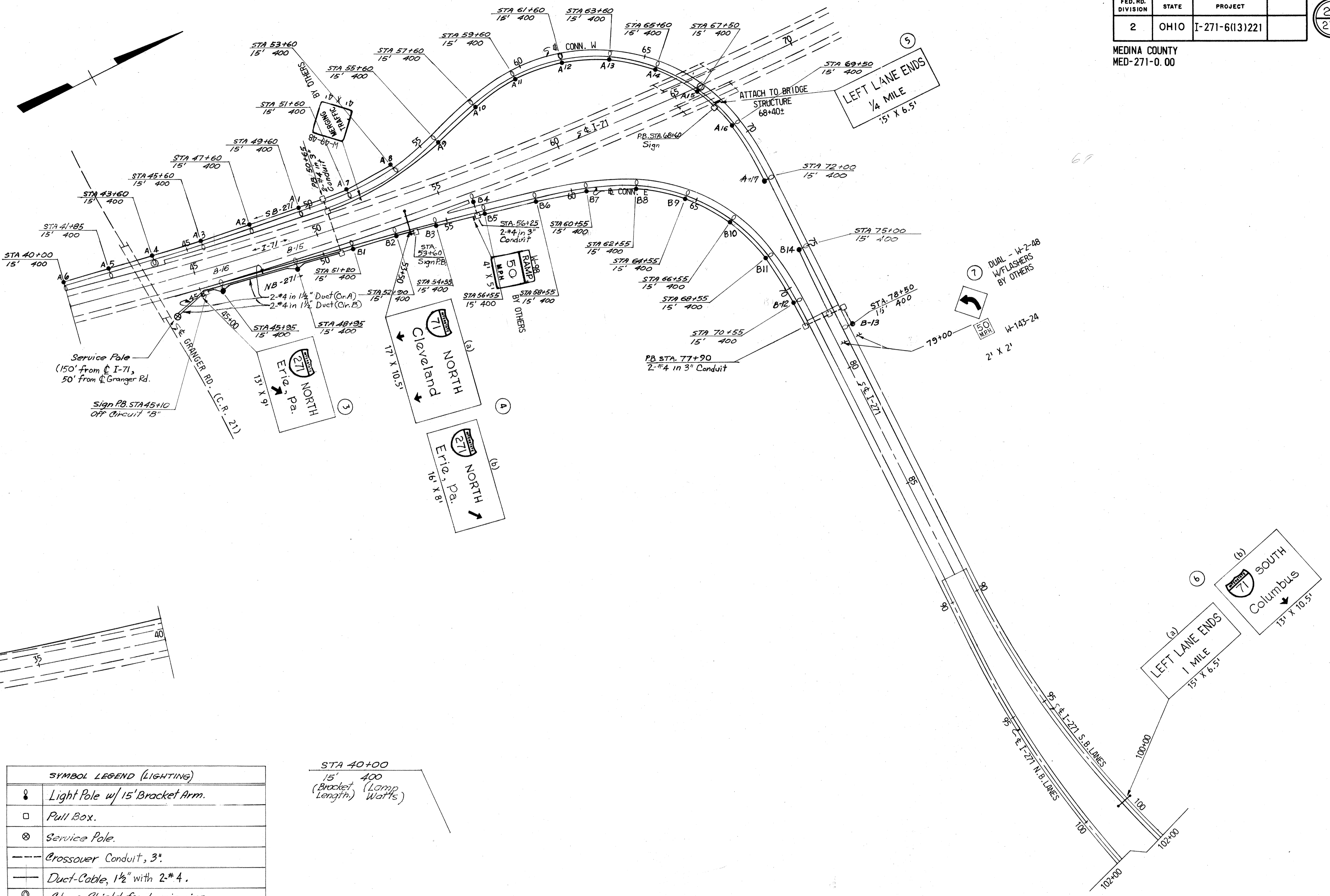
DIAGONAL STRIPES IN EXIT RAMP MARKINGS SHALL BE 2' WIDE WHITE BEADED STRIPES SET AT A 45° ANGLE TO THE CENTER LINE OF THE THROUGH PAVEMENT AND SLANTED IN THE DIRECTION OF THE FLOW OF TRAFFIC ON SAID PAVEMENT. SPACE BETWEEN THE 2' DIAGONAL STRIPES SHALL BE 6' AS MEASURED PARALLEL TO THE CENTER LINE OF THE THROUGH PAVEMENT. PAINT ON THE DIAGONAL STRIPES SHALL BE APPLIED AT THE RATE OF ONE GALLON TO EACH 100 SQUARE FEET AND GLASS BEADS SHALL BE APPLIED AT THE RATE OF SIX POUNDS PER GALLON OF PAINT. DIAGONAL WHITE STRIPES SHALL BE PLACED BETWEEN THE TWO 8" WHITE CHANNELIZING LINES AT EXIT RAMP AS SHOWN TO CONFORM TO SUPPLEMENTAL SPECIFICATION No. I-125 AND DEFINED IN SECTION I-125.07 c.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

PAVEMENT MARKING PM-I

DATE
7-17-61
4-6-62

APPROVED *Robert E. Lower*
ENGINEER OF TRAFFIC



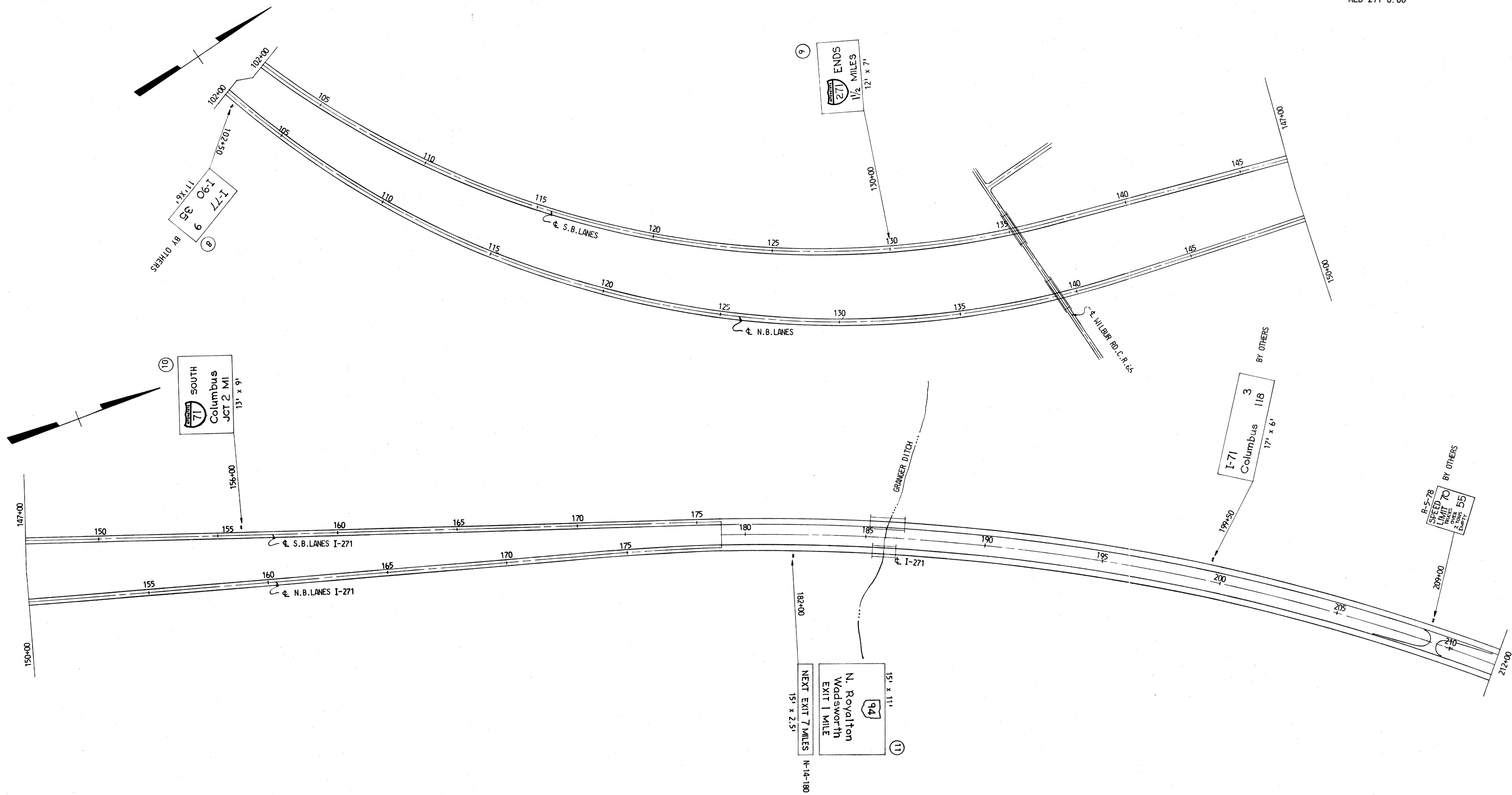
SYMBOL LEGEND (LIGHTING)	
	Light Pole w/ 15' Bracket Arm.
	Pull Box.
	Service Pole.
	Crossover Conduit, 3".
	Duct-Cable, 1 1/2" with 2-# 4.
	Glare Shield for Luminaire

STA 40+00
15' 400
(Bracket Length)
(Lamp Watts)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-6(13)221	

203
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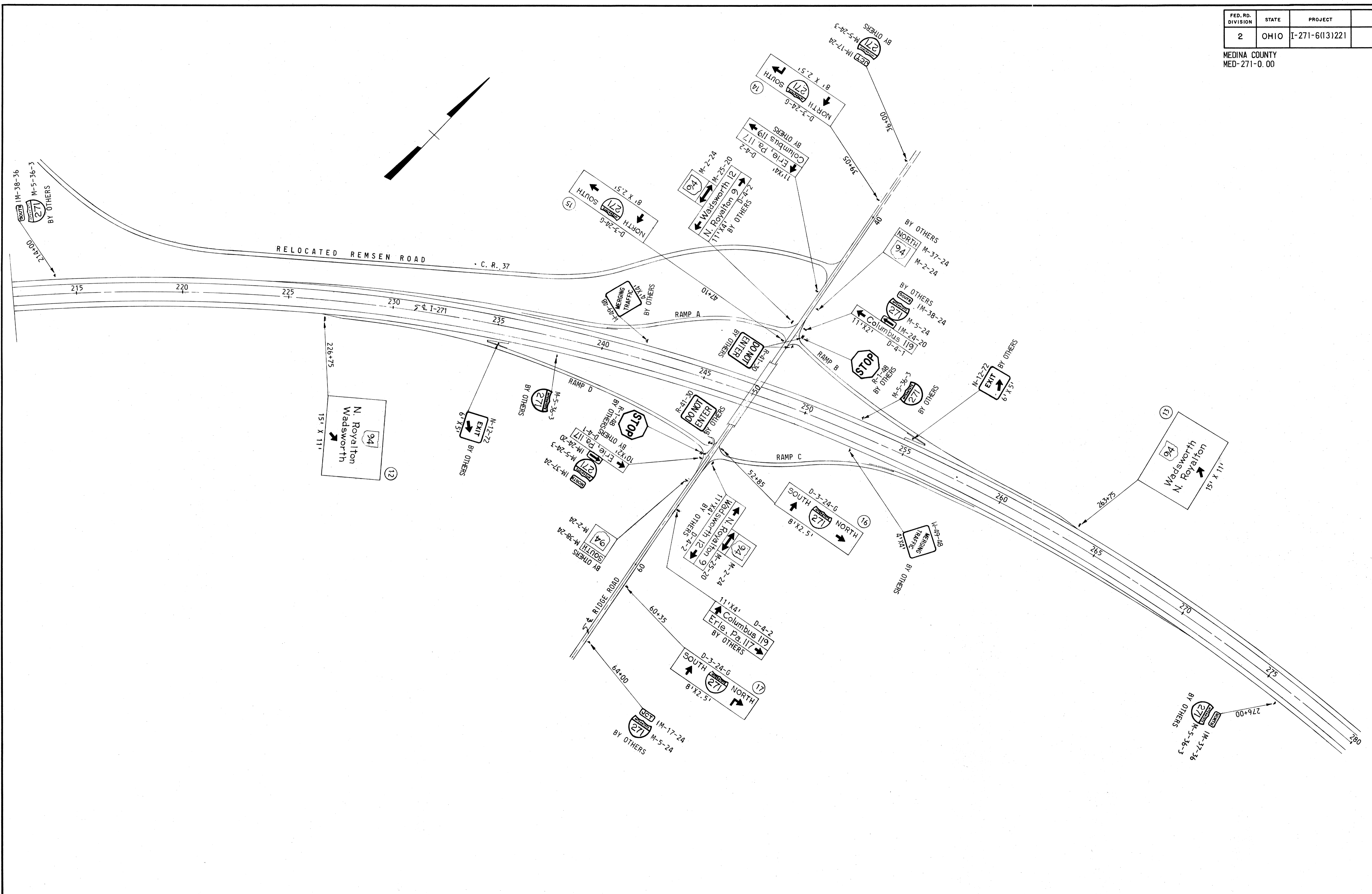
MEDINA COUNTY
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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-6(13)221	

204
259

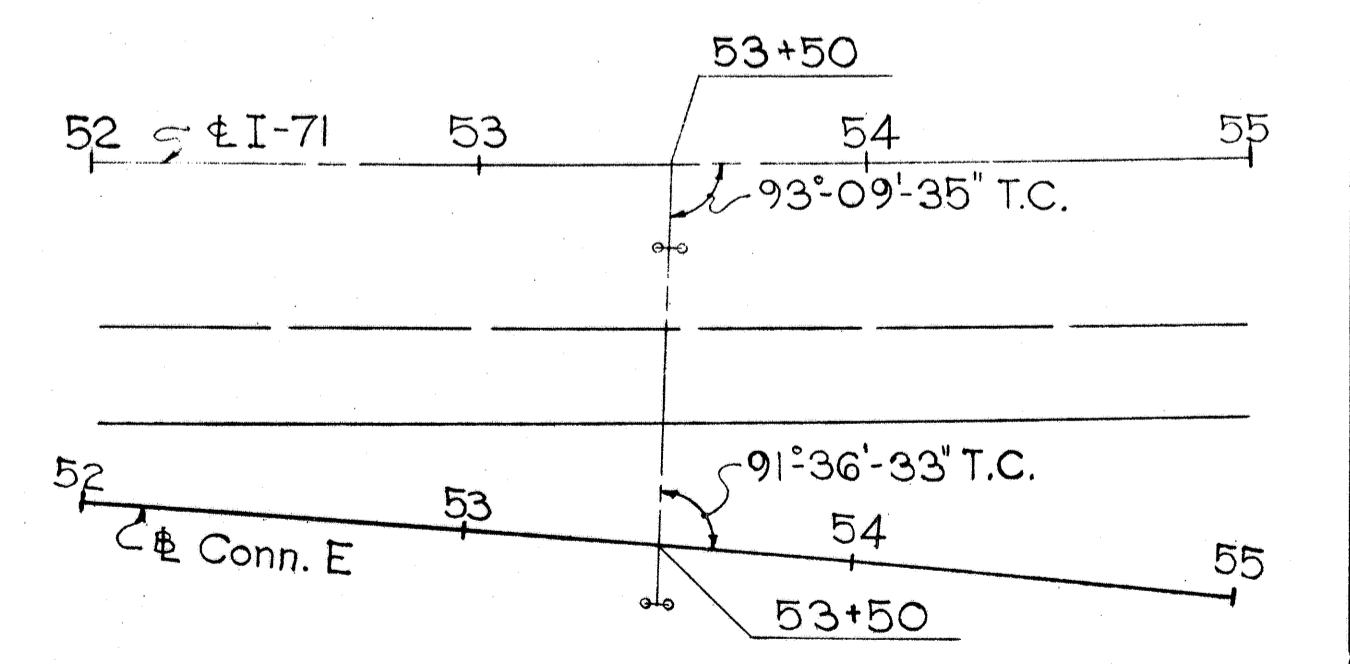
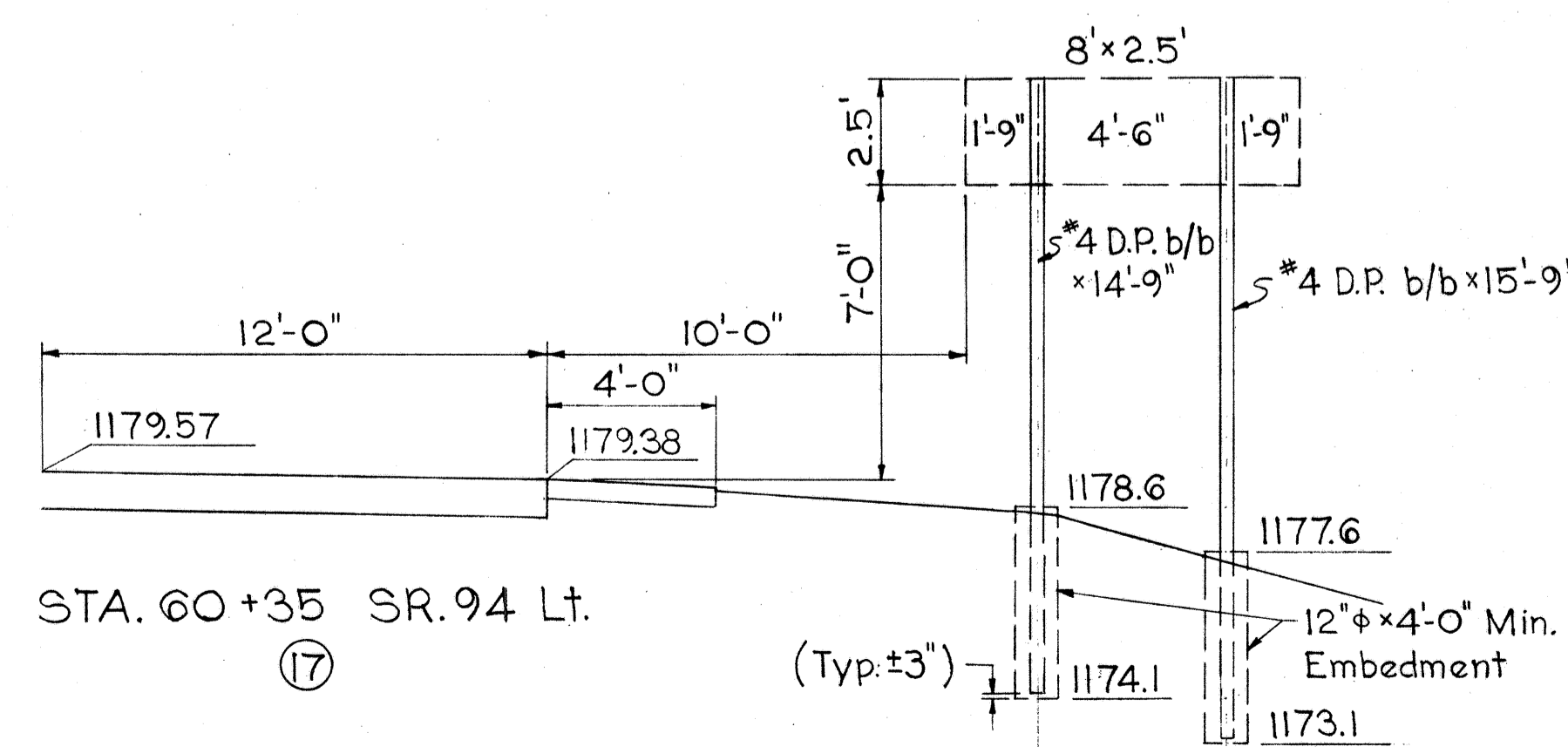
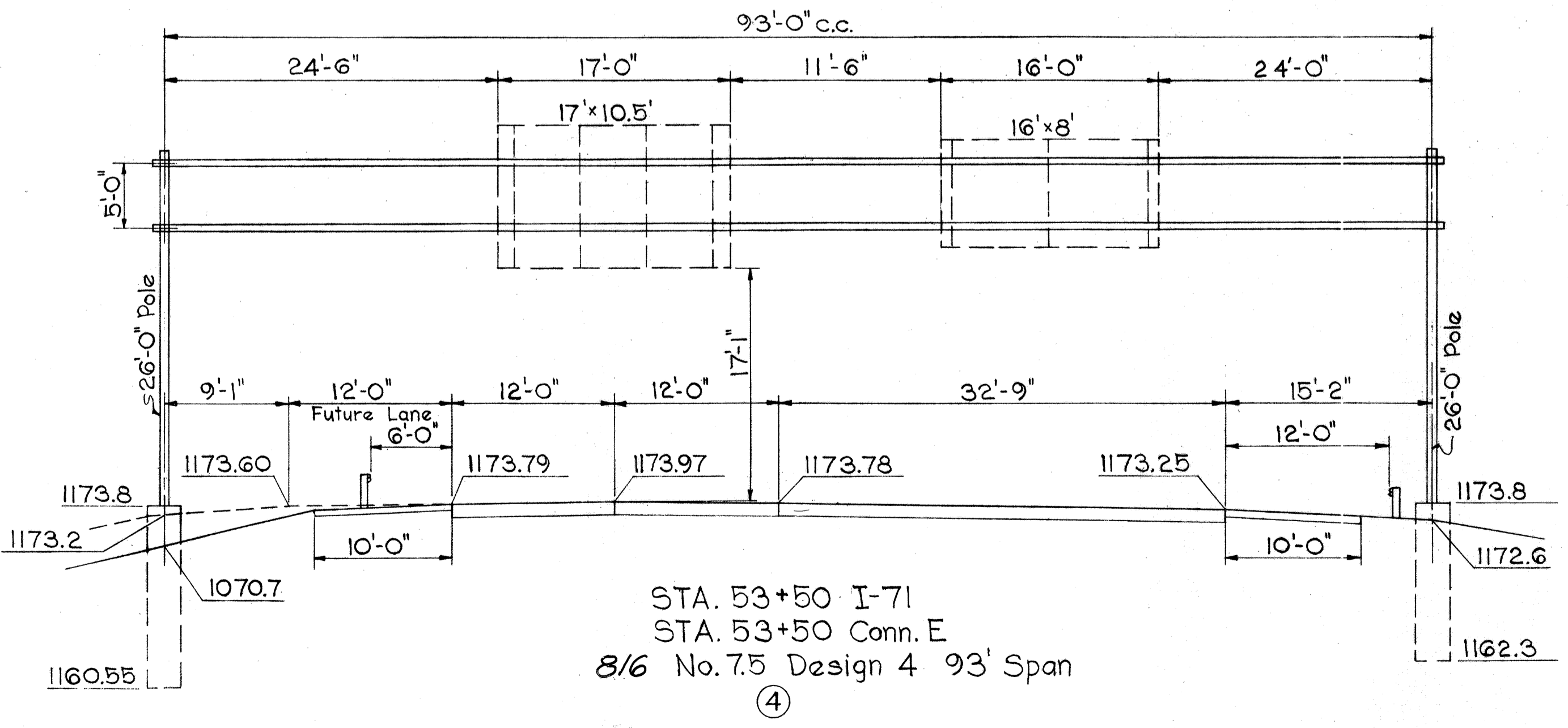
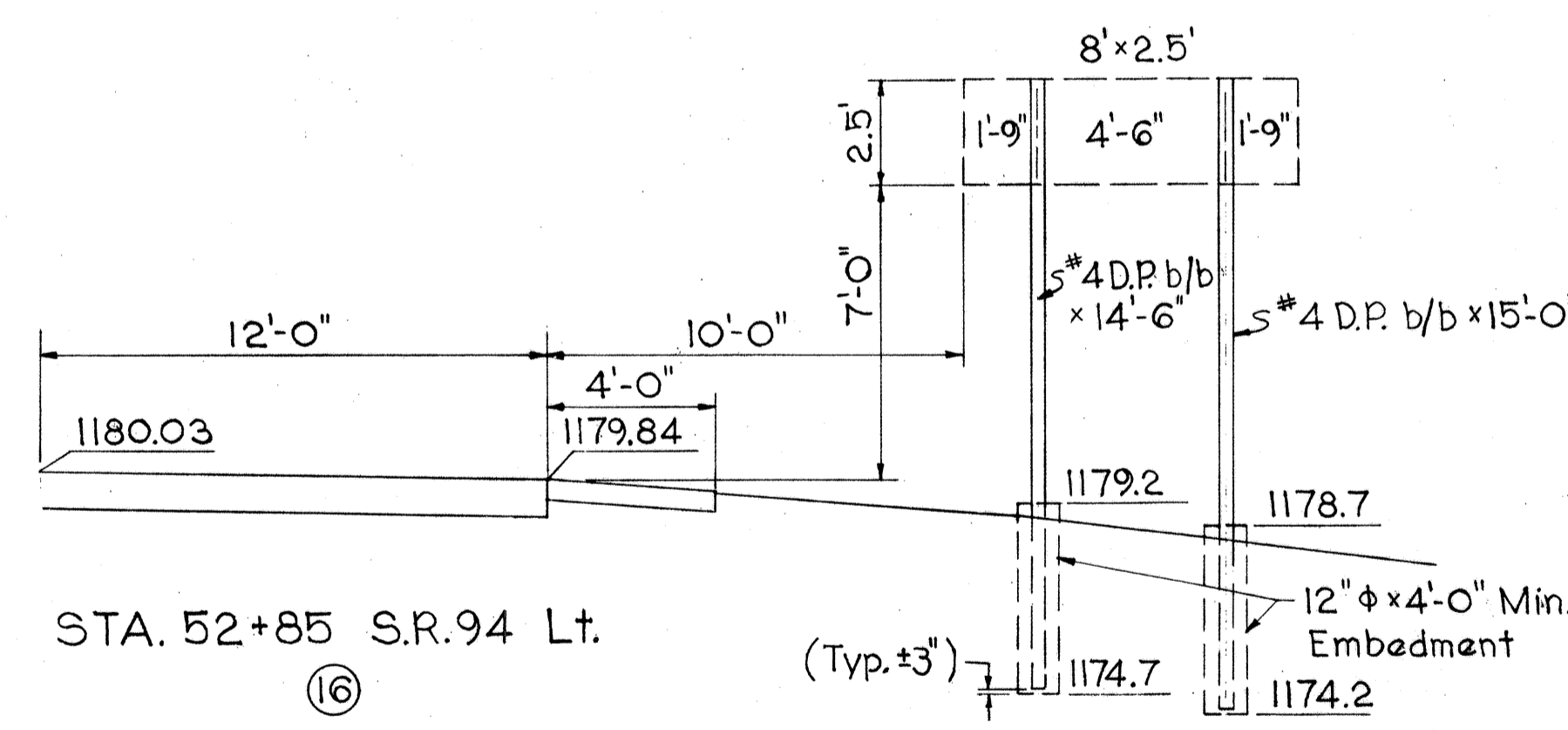
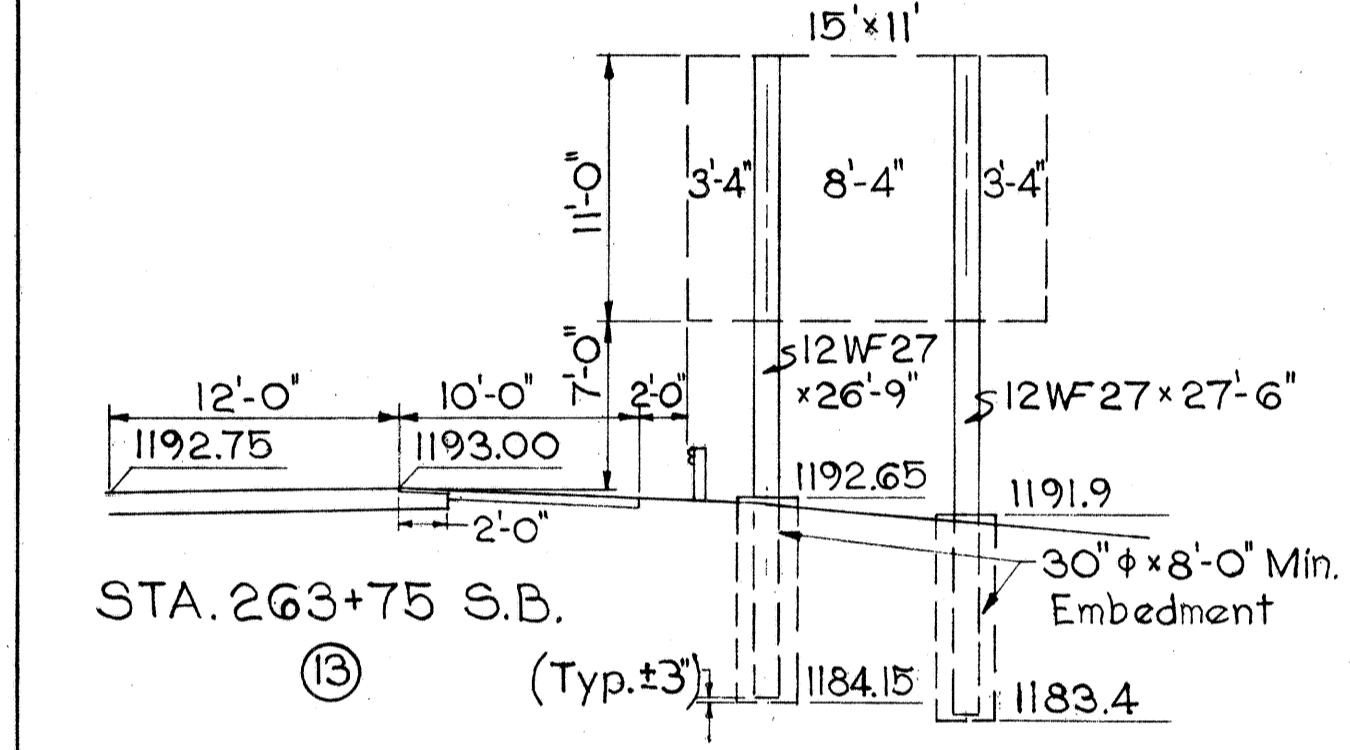
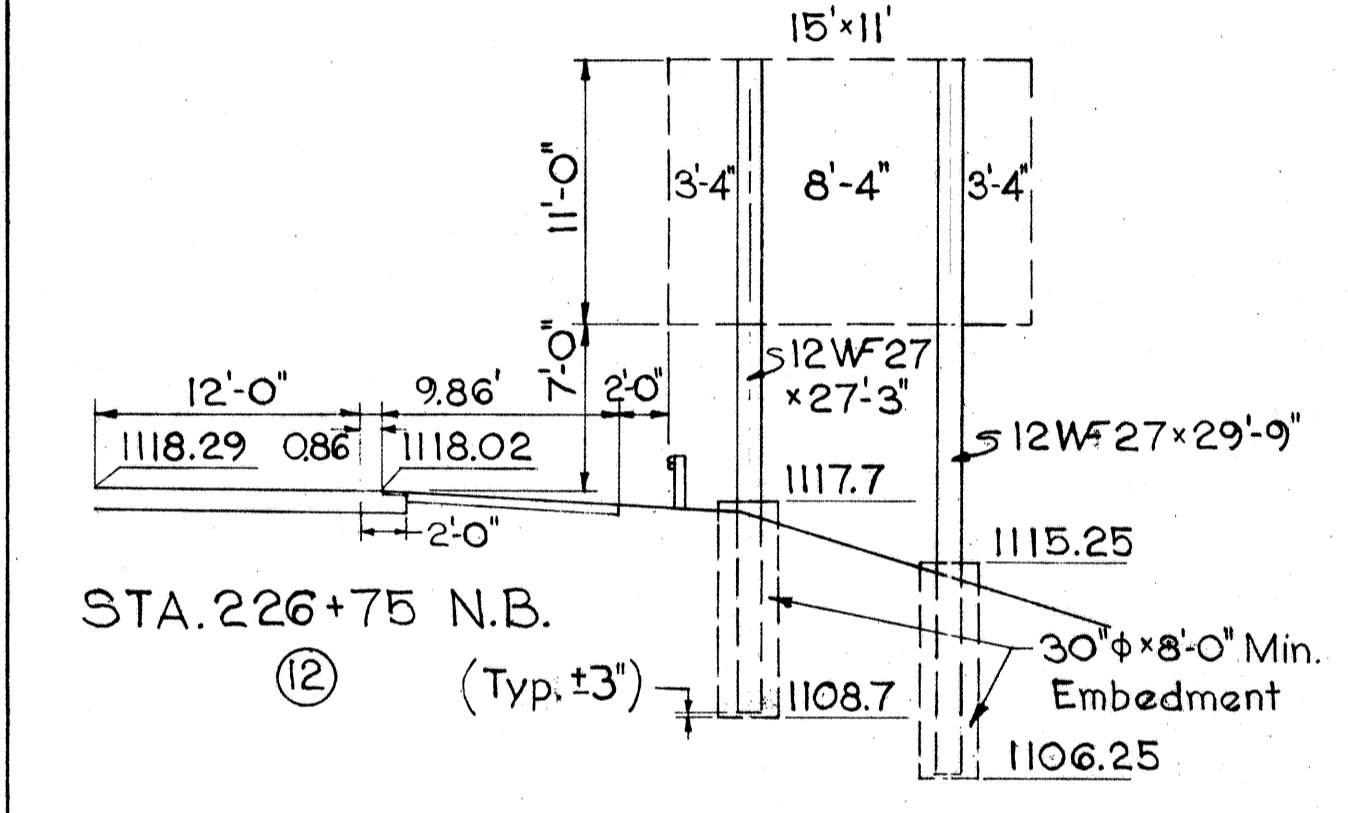
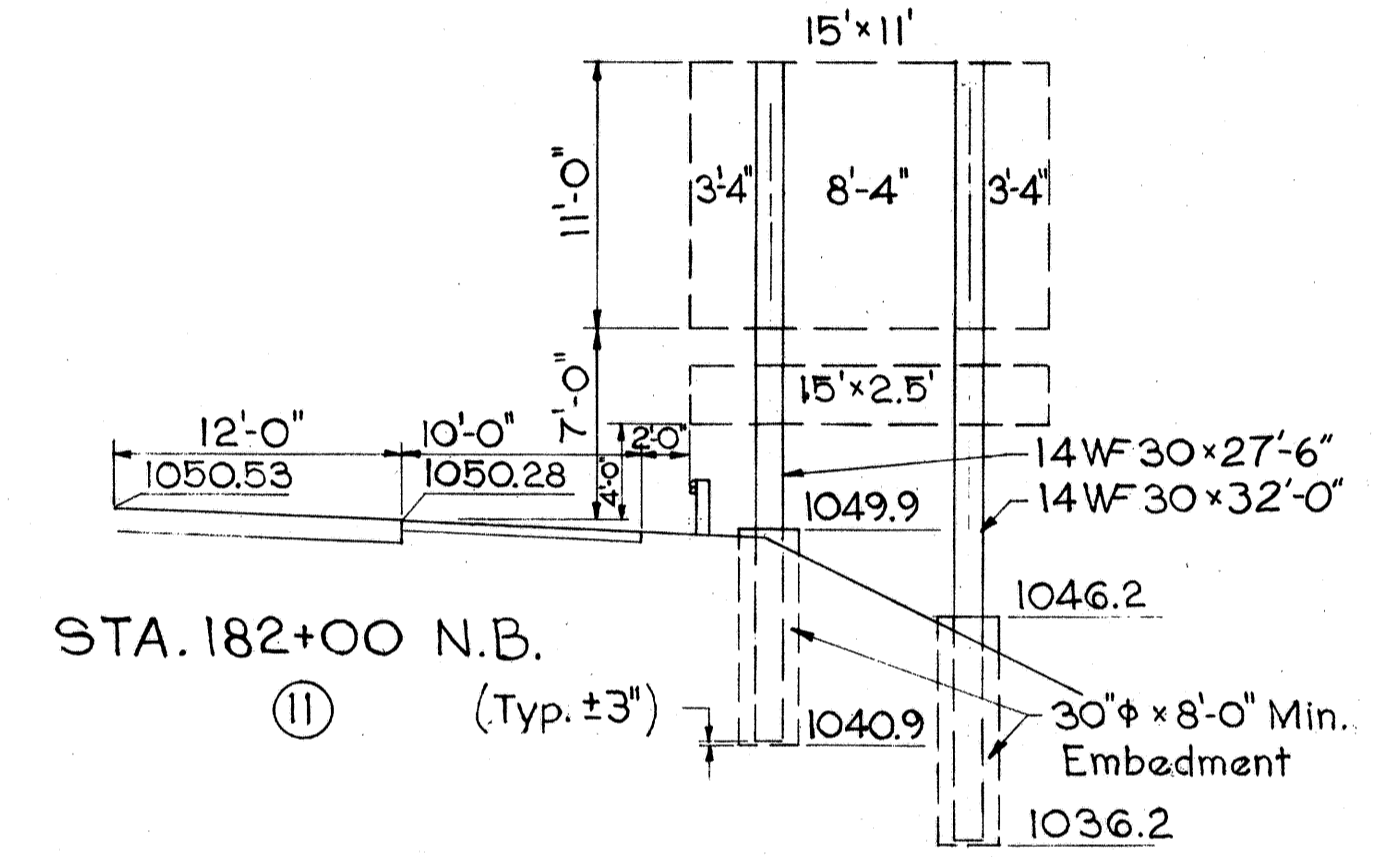
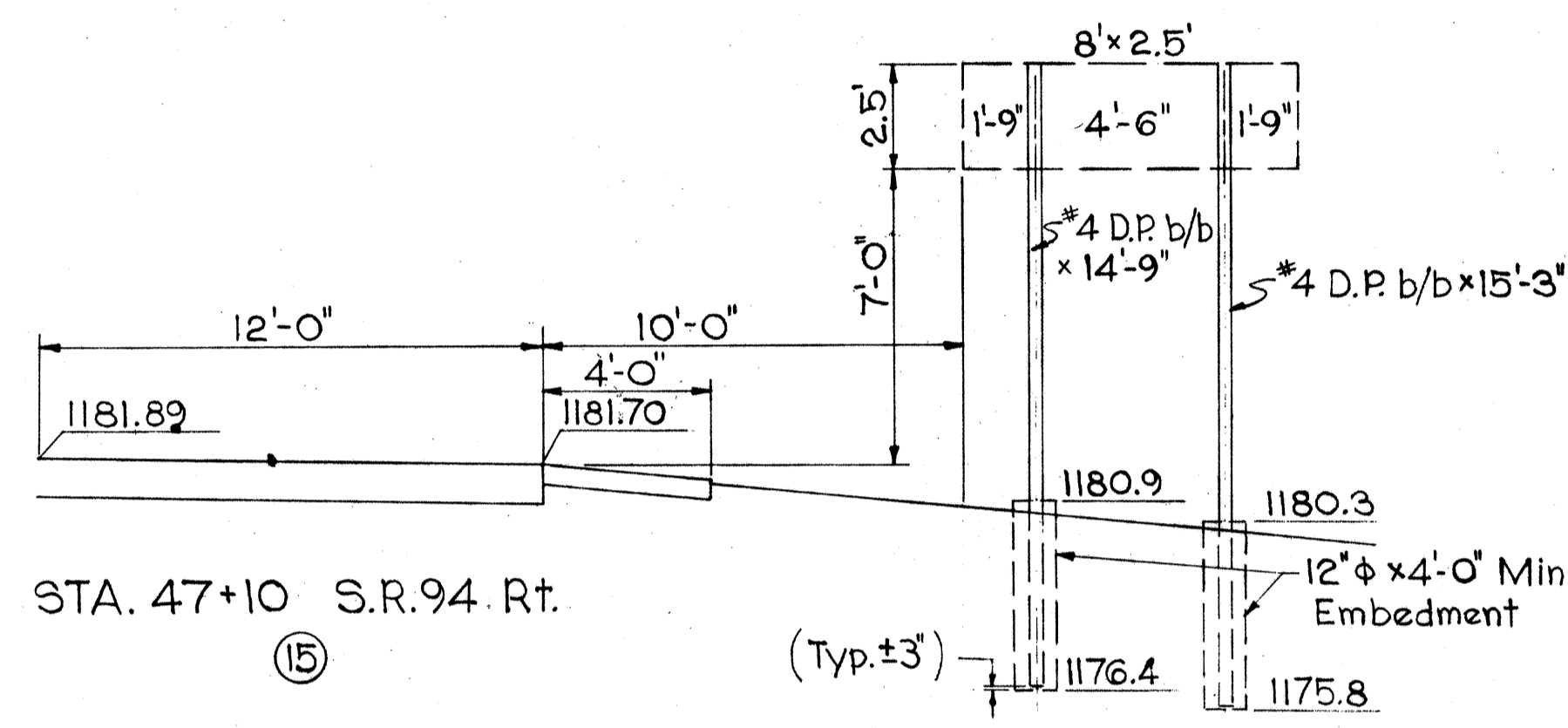
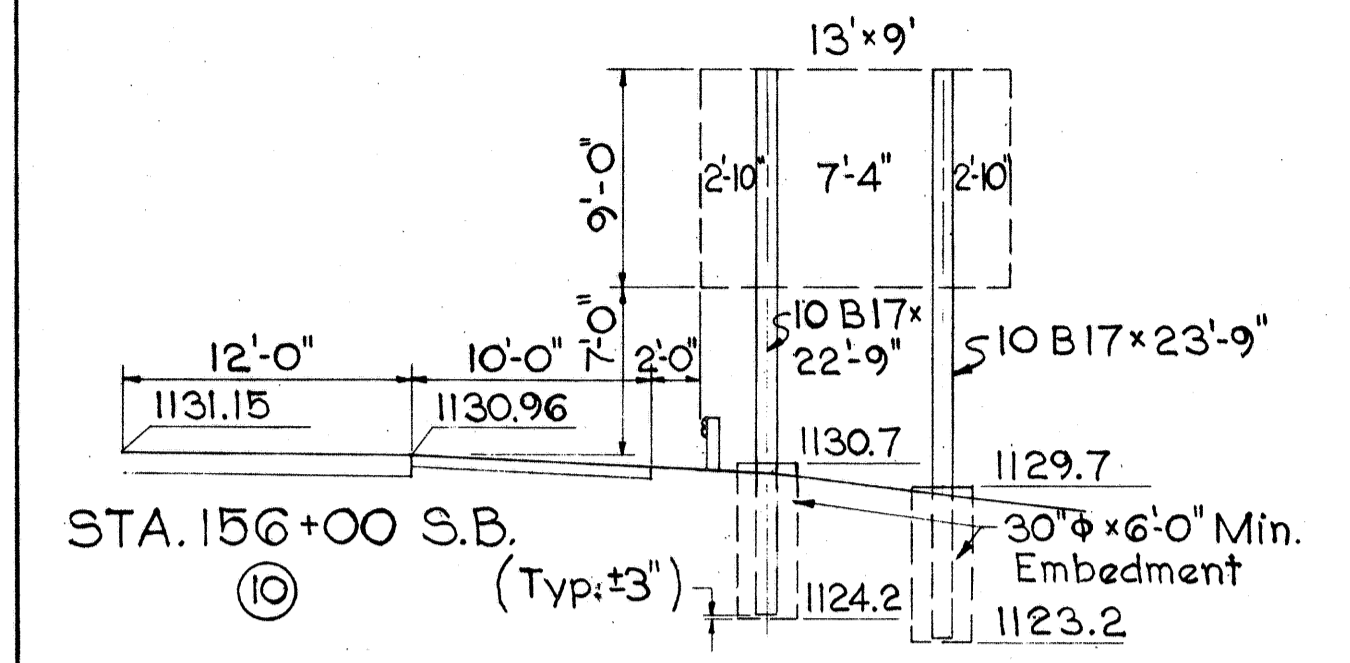
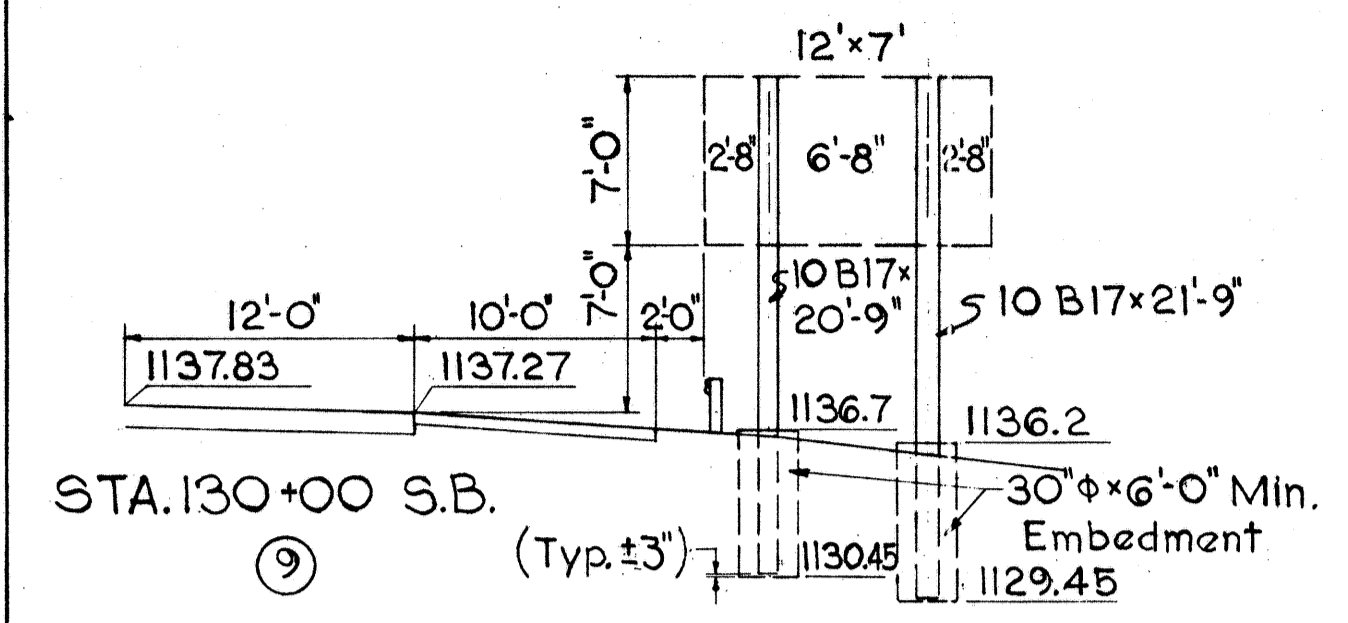
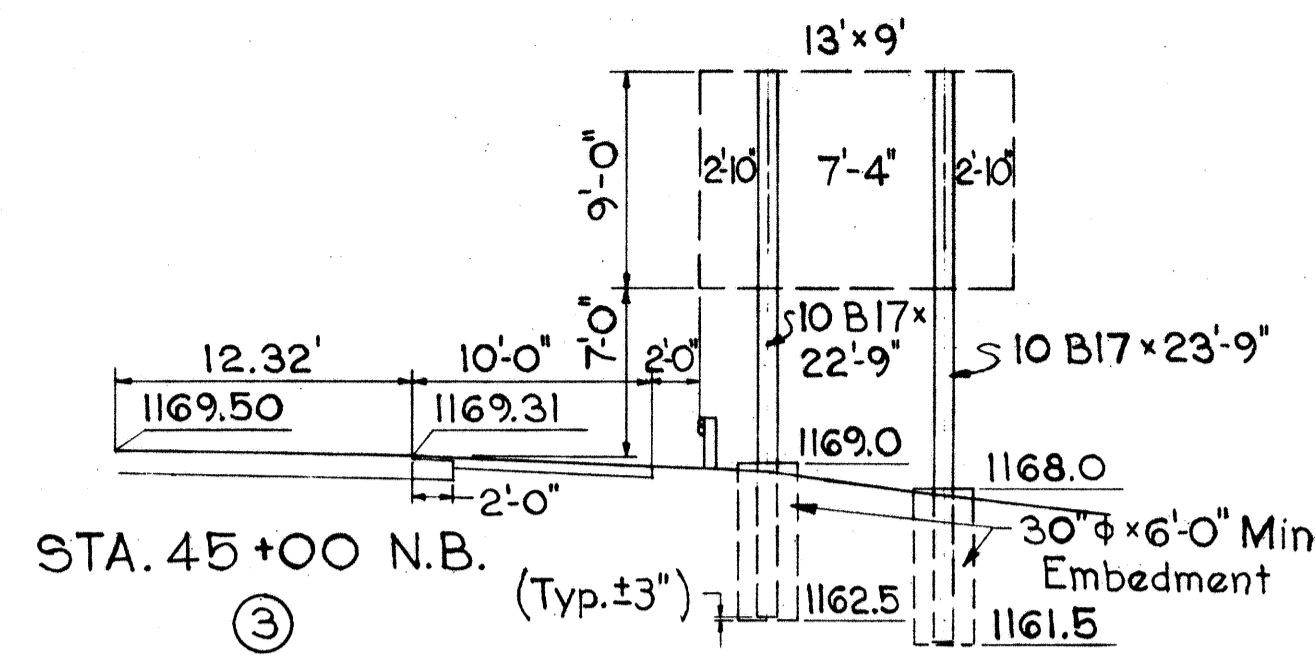
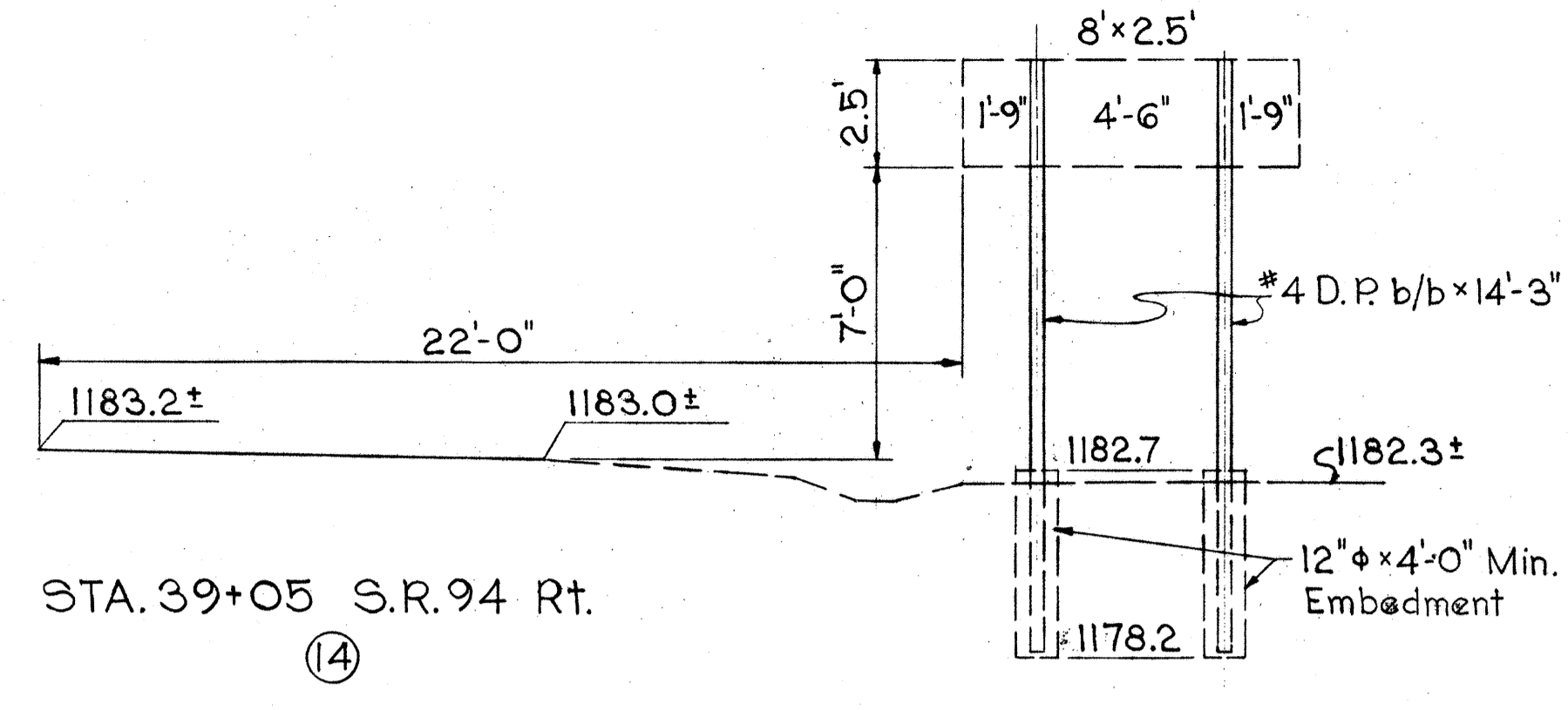
MEDINA COUNTY
MED-271-0.00



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-6(13)221	

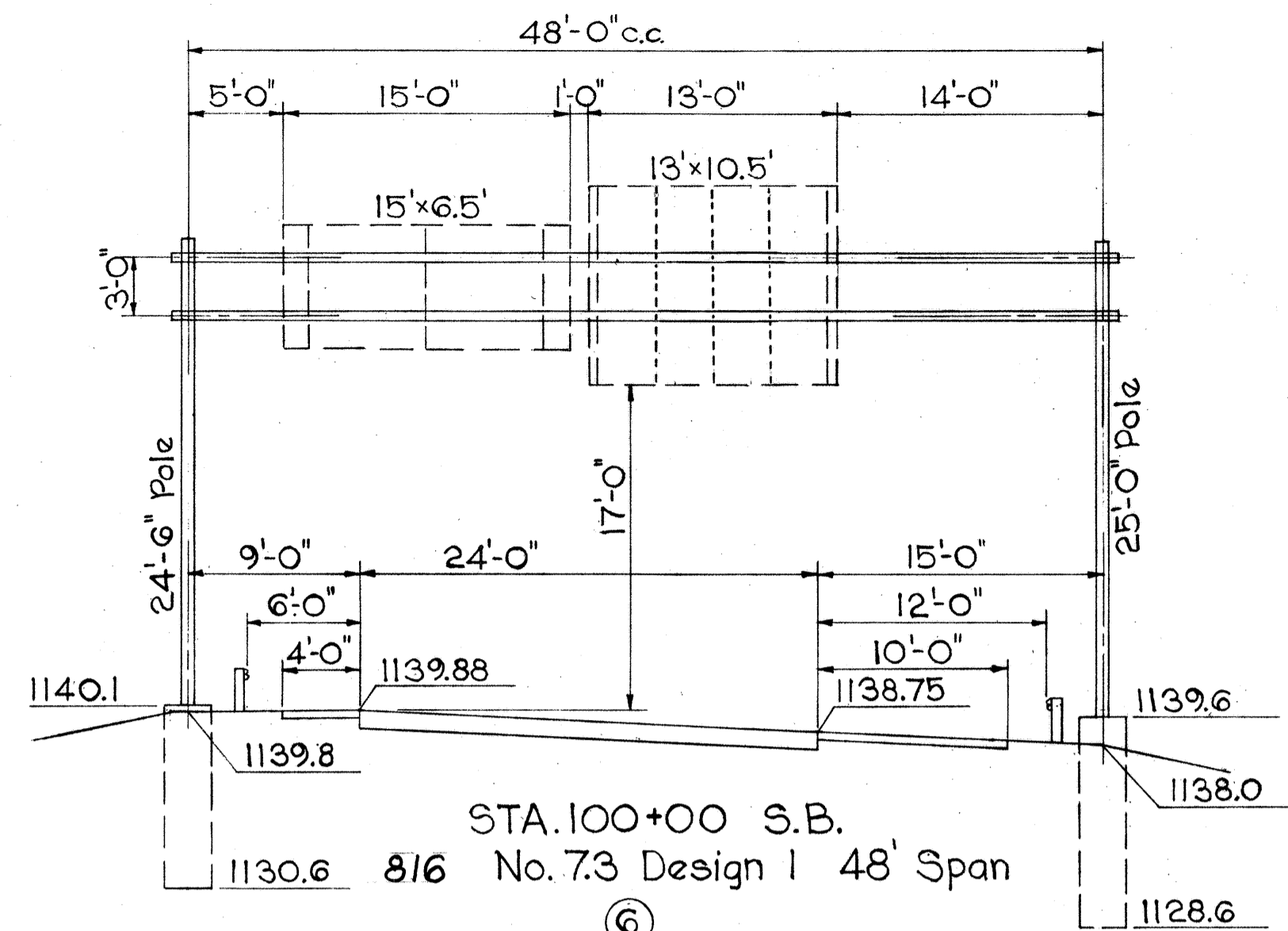
205
259

MEDINA COUNTY
MED-271-0.00



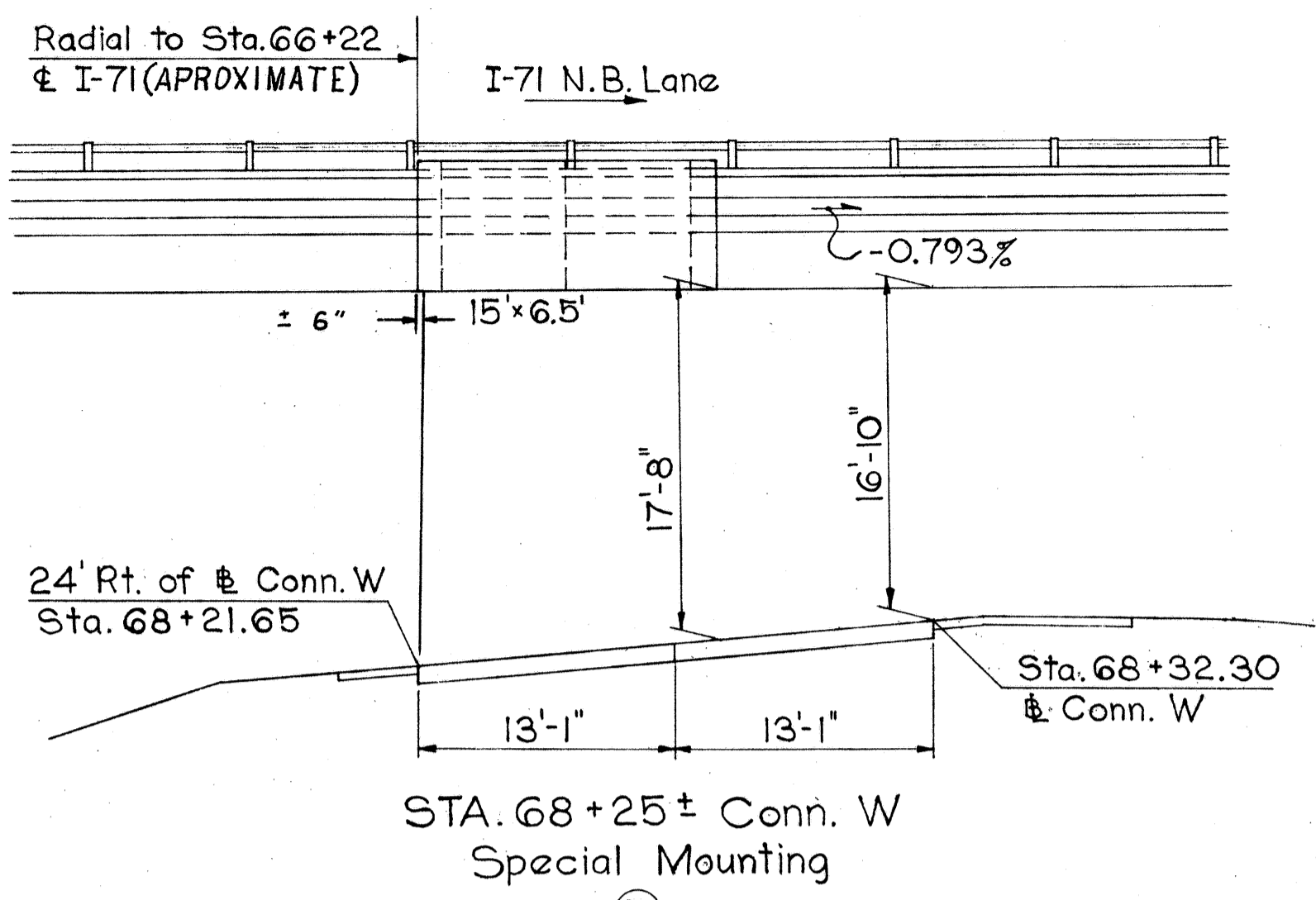
17' x 10.5' = 178.5 Sq. Ft.
Spacing: 14 7/8", 75 7/8", 50", 49 7/8", 14 7/8"
No. of Brk. = 4, Hgt. = 105', Type Ya

16' x 8' = 128 Sq. Ft.
Spacing: 8 7/8", 75 7/8", 99 7/8", 8 7/8"
No. of Brk. = 3, Hgt. = 8', Type Xa

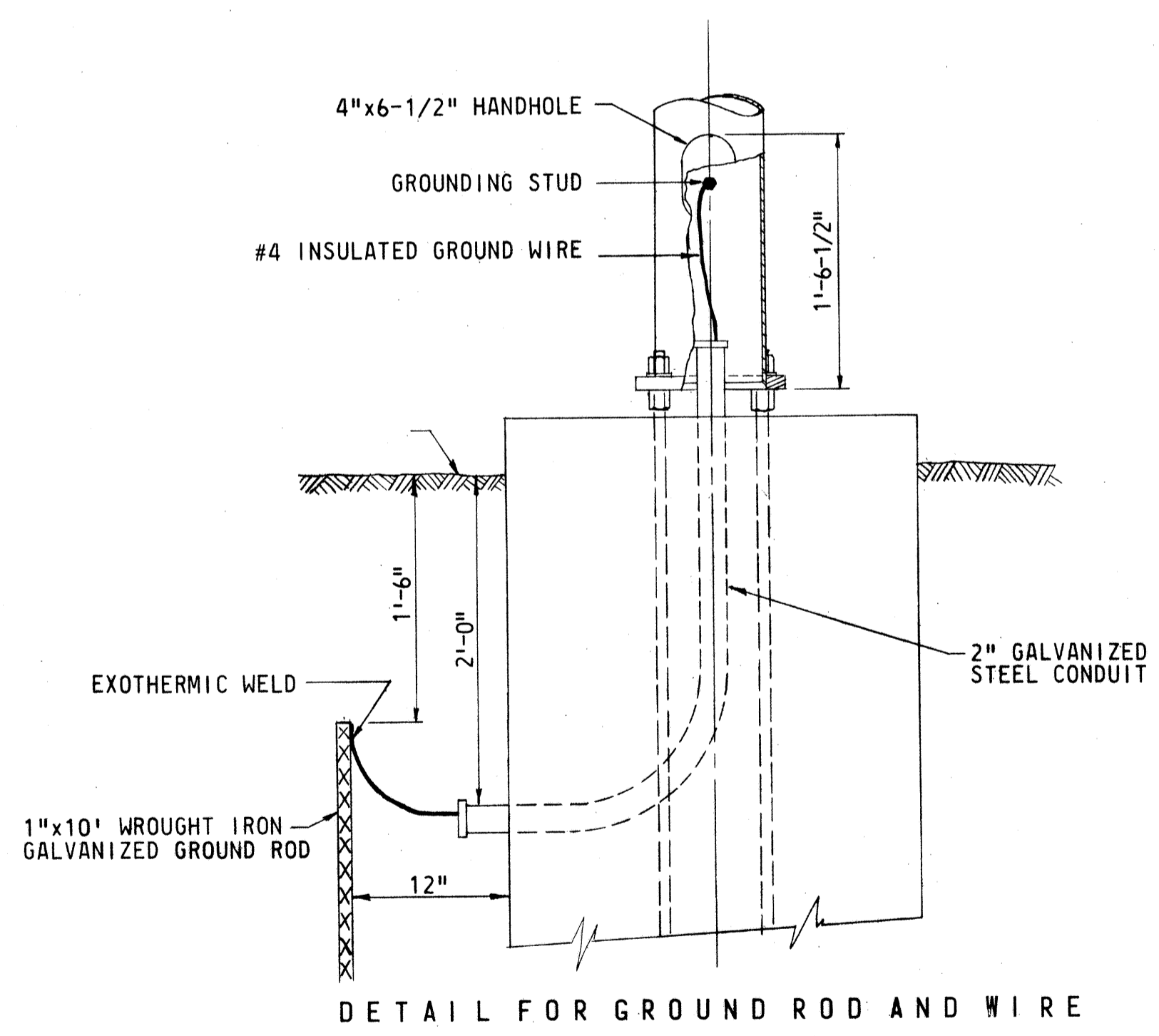
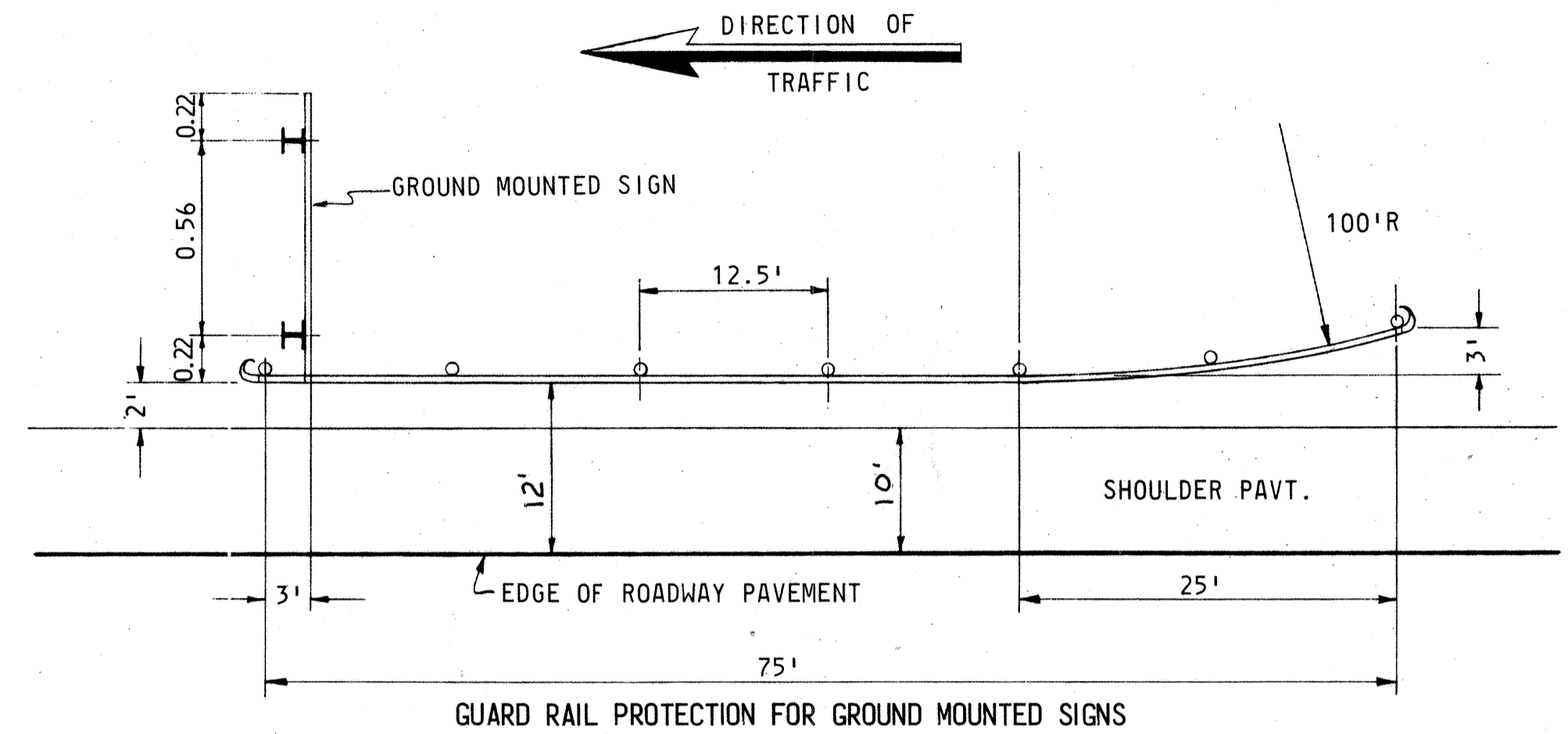


15'x6.5' = 97.5 Sq. Ft.
Spacing: 1'-2 5/8", 6'-3 3/8", 6'-3 3/8", 1'-2 5/8"
No. of Brk. = 3; Hgt. = 6.5'; Type Ya

13'x10.5' = 136.5 Sq. Ft.
Spacing: 0'-6" - 3'-0" - 3'-0" - 3'-0" - 3'-0" - 0'-6"
No. of Brk. = 5; Hgt. = 10.5'; Type Ya



15'x6.5' = 97.5 Sq. Ft.
Spacing: 1'-2 5/8", 6'-3 3/8", 6'-3 3/8", 1'-2 5/8"
No. of Brk. = 3; Hgt. = 6.5'; Type Ya



NOTE: EACH SIGN SUPPORT OR STRUCTURE SHALL BE GROUNDED WITH A #4 RUBBER INSULATION AND NEOPRENE JACKETED CONDUCTOR. THE GROUNDING CONDUCTOR SHALL BE CONNECTED TO THE GROUNDING STUD IN THE SIGN SUPPORT THEN TO A 1"x10" GALVANIZED WROUGHT IRON GROUND ROD. GROUND CONDUCTOR SHALL EXOTHERMICALLY WELDED TO GROUND ROD AND THEN TAPED WITH PLASTIC ELECTRICAL TAPE AT EACH EXPOSED PORTION OF CONDUCTOR. THE WELDED CONNECTION AND TAPED PORTION SHALL BE PAINTED TWO COATS OF GLYPTAL INSULATING ENAMEL.

GENERAL SUMMARY																	
TRAFFIC CONTROL																	
INSTALLATION NUMBER													GRAND TOTAL	UNIT	ITEM NO.	DESCRIPTION	
3	4	5	6	9	10	11	12	13	14	15	16	17					
46.5				42.5	46.5									136	L.F.	816	10 B17 GROUND MTD. SIGN SUPPORT
							57	54.25						111	L.F.	816	12 WF27 GROUND MTD. SIGN SUPPORT
							59.5							60	L.F.	816	14 WF30 GROUND MTD. SIGN SUPPORT
									57	60	59	61		237	L.F.	816	#4 DRIVE POST b/b GRD. MTD. SIGN SUPPORT
		1												1	EACH	816	OVERHEAD SIGN SUPPORT, SPECIAL, AS PER PLAN.
			1											1	EACH	816	OVERHEAD SIGN SUPPORT, NO. 7.3, DESIGN 1, 48' SPAN.
	1													1	EACH	816	OVERHEAD SIGN SUPPORT, NO. 7.5, DESIGN 4, 93' SPAN.
	9.6	0	8.5											18	C.Y.	816	CONC. FOUNDATIONS FOR OVERHEAD SIGN SUPPORTS,
2.2				2.2	2.2	3.0	2.9	2.9	0.2	0.2	0.2	0.2		16	C.Y.	816	CONC. FOUNDATIONS FOR GRD. MTD SIGN SUPPORTS,
	50	100												150	L.F.	625	DIRECT BURIAL CABLE 10 RHW. 600VOLT CONDUCTOR
	2	1												3	EACH	625	SIGN WIRING COMPLETE
	306.5	97.5	234											638	S.F.	816	SIGN ERECTION, OVERHEAD GUIDE TYPE,
117				84	117	202.5	165	165	20	20	20	20		931	S.F.	816	SIGN ERECTION, GRD.MTD. GUIDE TYPE,
	10													10	L.F.	625	2" CONDUIT 713.04 TYPE II OR III
	1	1	1											3	EACH	625	GROUND ROD UNITS
		2												2	EACH	625	72" LIGHTING FIXTURES WITH HO LAMPS
	2													2	EACH	625	72" LIGHTING FIXTURES WITH SHO LAMPS
	2													2	EACH	625	96" LIGHTING FIXTURES WITH SHO LAMPS
		1												1	EACH	625	SIGN BALLAST TYPE B
	2													2	EACH	625	SIGN BALLAST TYPE D
		1												1	EACH	625	TRANSFORMERS TYPE II
	1													1	EACH	625	TRANSFORMERS TYPE V
		1												1	EACH	625	30 AMPERE FUSIBLE DISCONNECT SWITCH WITH TYPE Y ENCLOSURE
	1													1	EACH	625	30 AMPERE FUSIBLE DISCONNECT SWITCH WITH TYPE Z ENCLOSURE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-6(13)122	

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MATERIALS - GENERAL

MATERIALS TO BE FURNISHED MAY BE SPECIFIED IN THE PLANS BY A GIVEN MANUFACTURER'S CATALOG NUMBER OR TYPE. THIS IS FOR DESCRIPTIVE PURPOSES ONLY AND THE CONTRACTOR MAY ASSUME THAT APPROVED EQUAL MATERIALS MAY BE FURNISHED.

816 STRUCTURAL SUPPORTS STEEL BEAM (TYPE), AS PER PLAN

THE STRUCTURAL STEEL BEAM SUPPORTS SHALL BE GALVANIZED (AFTER PUNCHING) IN ACCORDANCE WITH ASTM A-123. QUANTITIES FOR ITEM 816 "STRUCTURAL SUPPORTS, STEEL BEAM (TYPE), AS PER PLAN" APPEARING IN THE QUANTITY TABLES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT SUPPORT LENGTHS PRIOR TO FABRICATION AND GALVANIZING OF SUPPORTS. PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE BID PER LIN. FOOT WHICH PRICE AND PAYMENT SHALL INCLUDE ALL COSTS IN CONNECTION WITH THE EMBEDMENT OF THE SUPPORTS. THE COST OF THE CONCRETE USED FOR EMBEDMENT WILL BE A SEPARATE PAY ITEM.

816 OVERHEAD SIGN SUPPORT, BY TYPE, AS PER PLAN

ALL COMPONENT PARTS OF THE OVERHEAD SIGN SUPPORTS SHALL BE STEEL, EXCEPT FOR THE TRUSS AND COMPONENTS FOR THE NUMBER 7 SERIES WHICH SHALL BE ALUMINUM. FOR SPECIFIC DETAILS AND MATERIALS SEE SHEET NUMBERS 208 AND 209.

PAYMENT FOR THIS ITEM SHALL BE MADE AT THE CONTRACT UNIT PRICE BID FOR EACH "OVERHEAD SIGN SUPPORT, BY TYPE, AS PER PLAN" INSTALLED IN PLACE AND ACCEPTED, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL ANCHOR BOLTS (FOR INSTALLATION UNDER ITEM 816 "CONCRETE FOR OVERHEAD SIGN SUPPORT FOUNDATIONS"), AND FOR FURNISHING AND INSTALLING EACH OVERHEAD SIGN SUPPORT STRUCTURE SHOWN ON SHEET NUMBERS 205 AND 206 INCLUDING SIGN BRACKETS, GROUND ROD AND WIRE CONNECTIONS AND ALL COMPONENT PARTS NECESSARY TO MAKE A COMPLETE WORKABLE INSTALLATION READY FOR SIGN ERECTION.

ERECTION OF THESE SUPPORTS SHALL BE ACCOMPLISHED IN A MANNER MEETING THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION NUMBER 816.

816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS, BY TYPE, AS PER PLAN

PAYMENT FOR THIS ITEM SHALL BE PER CUBIC YARD BASED ON APPROVED PLAN DIMENSIONS OR DIMENSIONS AS MODIFIED BY THE ENGINEER IN LIEU OF PLAN QUANTITIES AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 816.

PAYMENT FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF CONCRETE FOR OVERHEAD SIGN SUPPORT FOUNDATIONS IN LIEU OF BEING A SEPARATE PAY ITEM AS CALLED FOR IN SUPPLEMENTAL SPECIFICATION NO. 816.

PAYMENT FOR INSTALLATION ONLY OF THE 2 INCH GALVANIZED STEEL CONDUIT ELLS AND THE 1/2 INCH EMT GROUND WIRE CONDUIT WILL BE INCLUDED IN THIS ITEM. PAYMENT FOR FURNISHING THIS CONDUIT IS INCLUDED UNDER "GROUND ROD AND WIRE CONNECTION AS PER PLAN" FOUNDATIONS SHALL BE CONSTRUCTED IN THE MANNER CALLED FOR UNDER SUPPLEMENTAL SPECIFICATION 816. CONCRETE SHALL BE CLASS "C".

816 SIGN ERECTION, BY TYPE, AS PER PLAN

THE CONTRACTOR SHALL ERECT SIGN PANELS FURNISHED BY OTHERS AS NOTED ON THE SCHEMATIC SIGNING LAYOUT SHEET NUMBER 202,203 AND 204. THE PANELS SHALL BE MOUNTED ON THE BRACKETS OR BEAM SUPPORTS PROVIDED IN THE PLANS.

A SCHEDULE FOR SIGN ERECTION SHALL BE SUBMITTED TO THE ENGINEER, BUREAU OF TRAFFIC, 450 EAST TOWN STREET, COLUMBUS, OHIO, SIXTY CALENDAR DAYS PRIOR TO THE START OF ANY SCHEDULED ERECTION WORK. THE SCHEDULE SHALL INCLUDE PROPOSED DATES, TIME, SIGN NUMBERS AND DELIVERY POINT.

THE PRICE BID PER SQUARE FOOT FOR ITEM 816, "SIGN ERECTION BY TYPE, AS PER PLAN" SHALL INCLUDE ALL NECESSARY EQUIPMENT, MANPOWER AND TOOLS TO ERECT THE SIGNS NOTED. ALL SIGN MATERIAL AND ACCESSORIES WILL BE FURNISHED AND TRANSPORTED TO A DESIGNATED DELIVERY POINT, ON OR NEAR THE SUBJECT PROJECT BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HANDLING AND STORAGE OF THE SIGN PANELS AND ACCESSORIES FROM THE TIME OF ARRIVAL AT THE DELIVERY POINT.

625 GROUND ROD AND WIRE CONNECTION

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING GROUND ROD AND WIRE AS DETAILED AND SPECIFIED ON SHEET 206. ALSO INCLUDED WILL BE THE COST FURNISHING THE 1/2 EMT GROUND WIRE CONDUIT FOR INSTALLATION UNDER ITEM 816 "CONCRETE FOR SIGN SUPPORT FOUNDATIONS".

BASIS OF PAYMENT FOR THIS ITEM SHALL BE AT CONTRACT UNIT PRICE PER EACH, WHICH SHALL INCLUDE ALL LABOR, TOOLS, MATERIALS AND EQUIPMENT REQUIRED FOR THE COMPLETE ITEM OF WORK.

CERTIFICATION AND APPROVAL OF SIGN SUPPORTS AND LIGHTING ITEMS

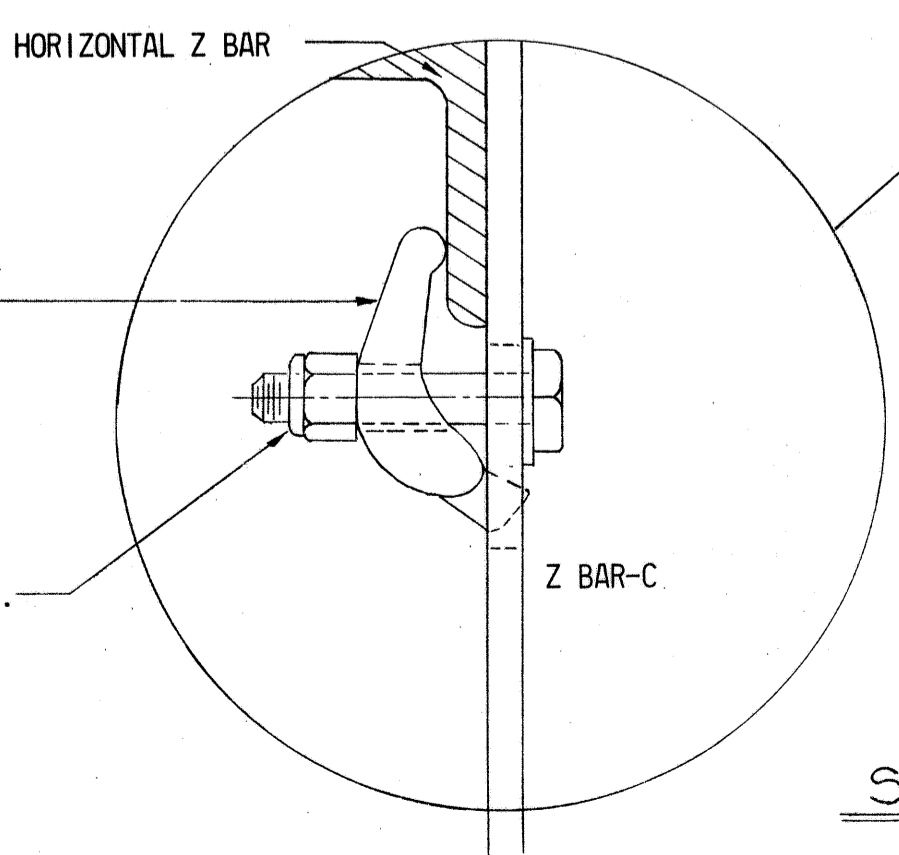
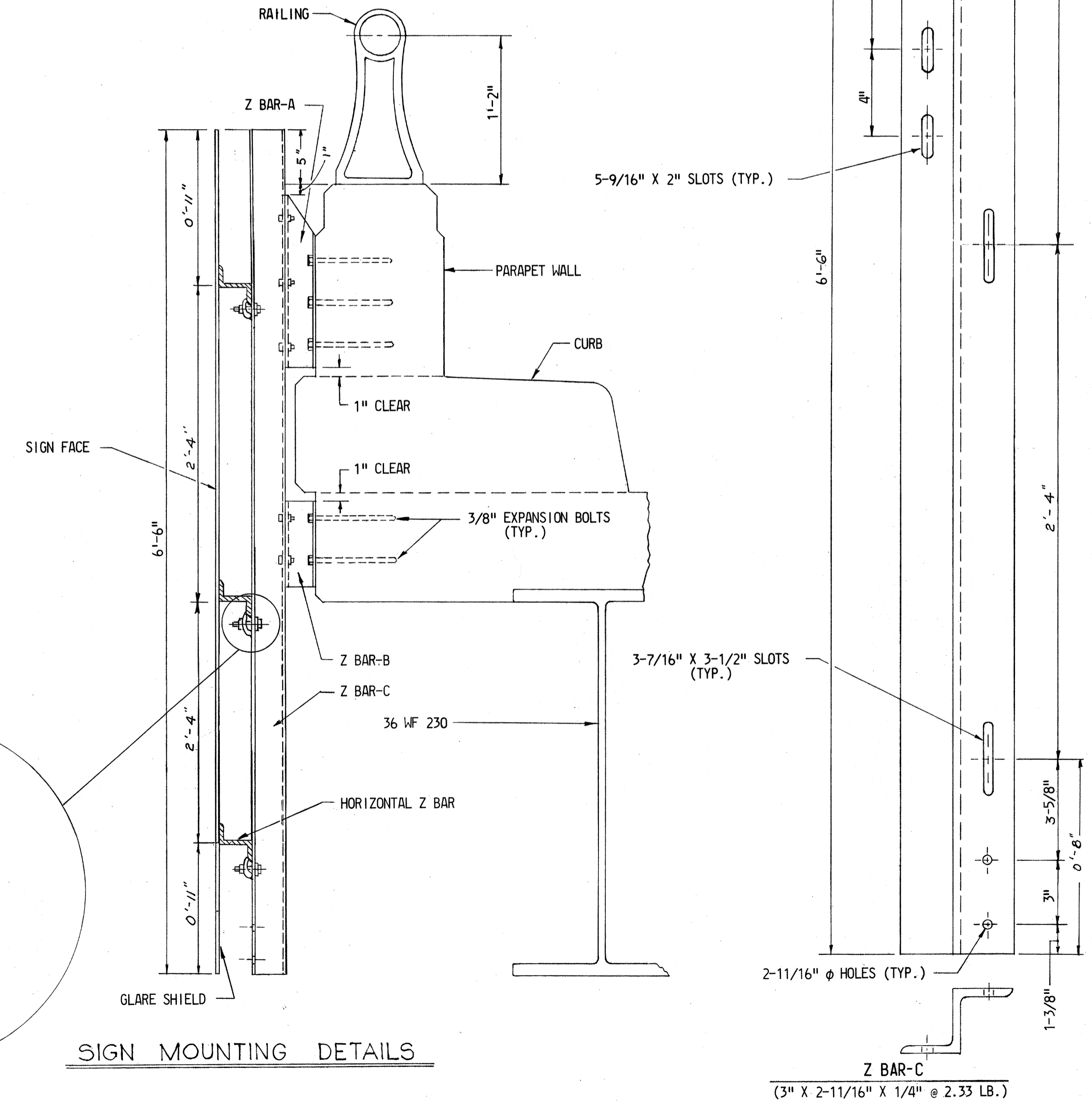
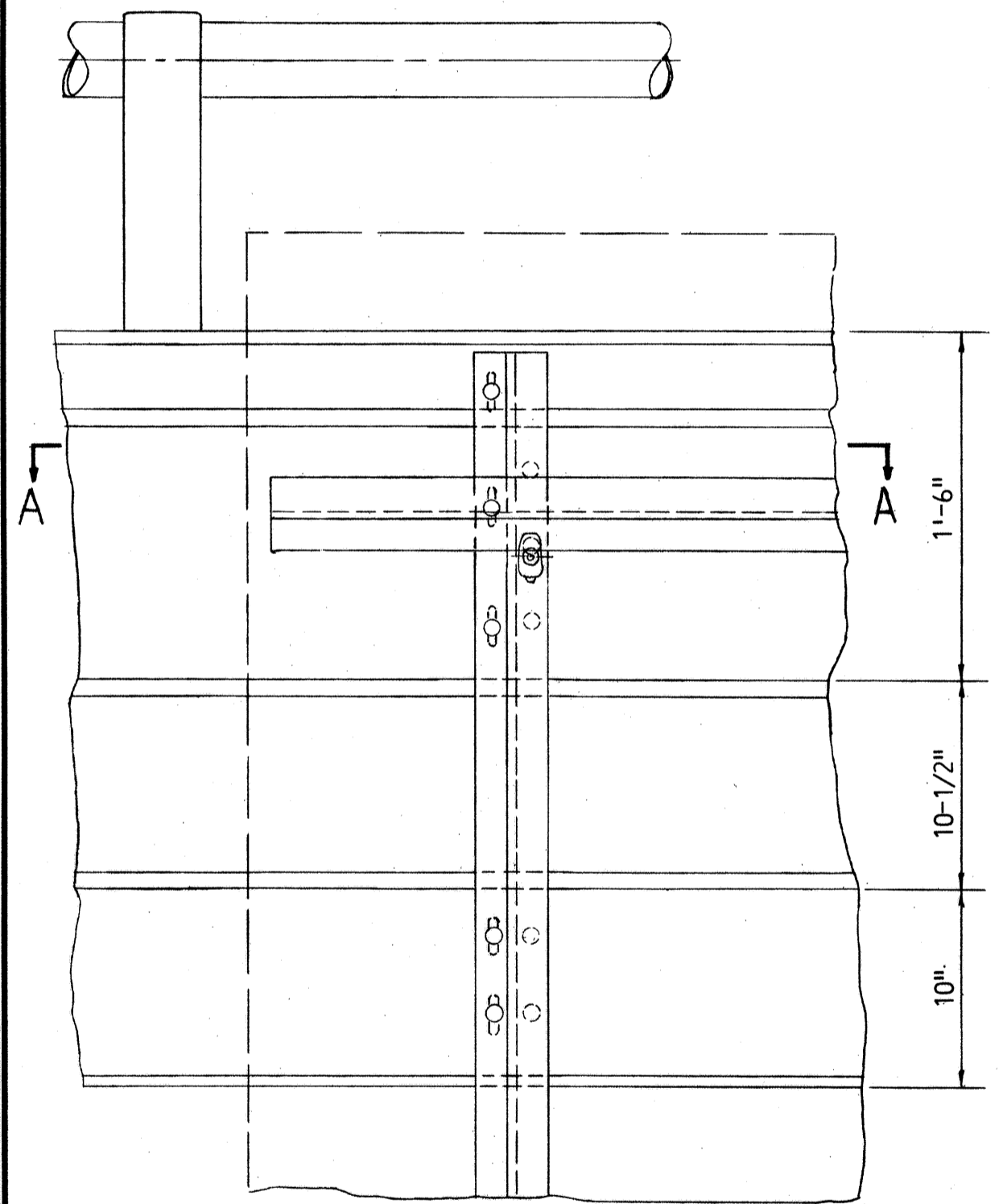
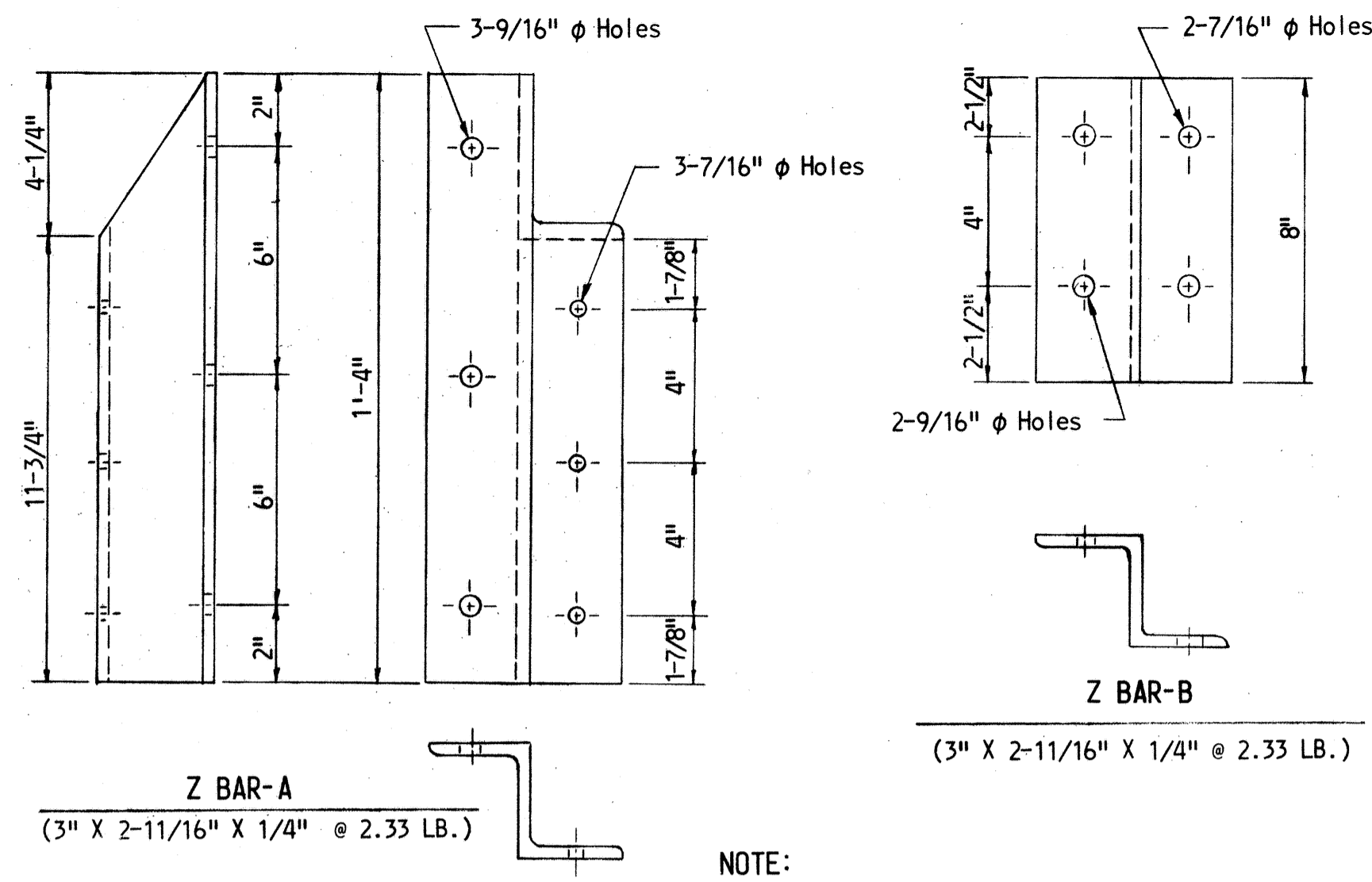
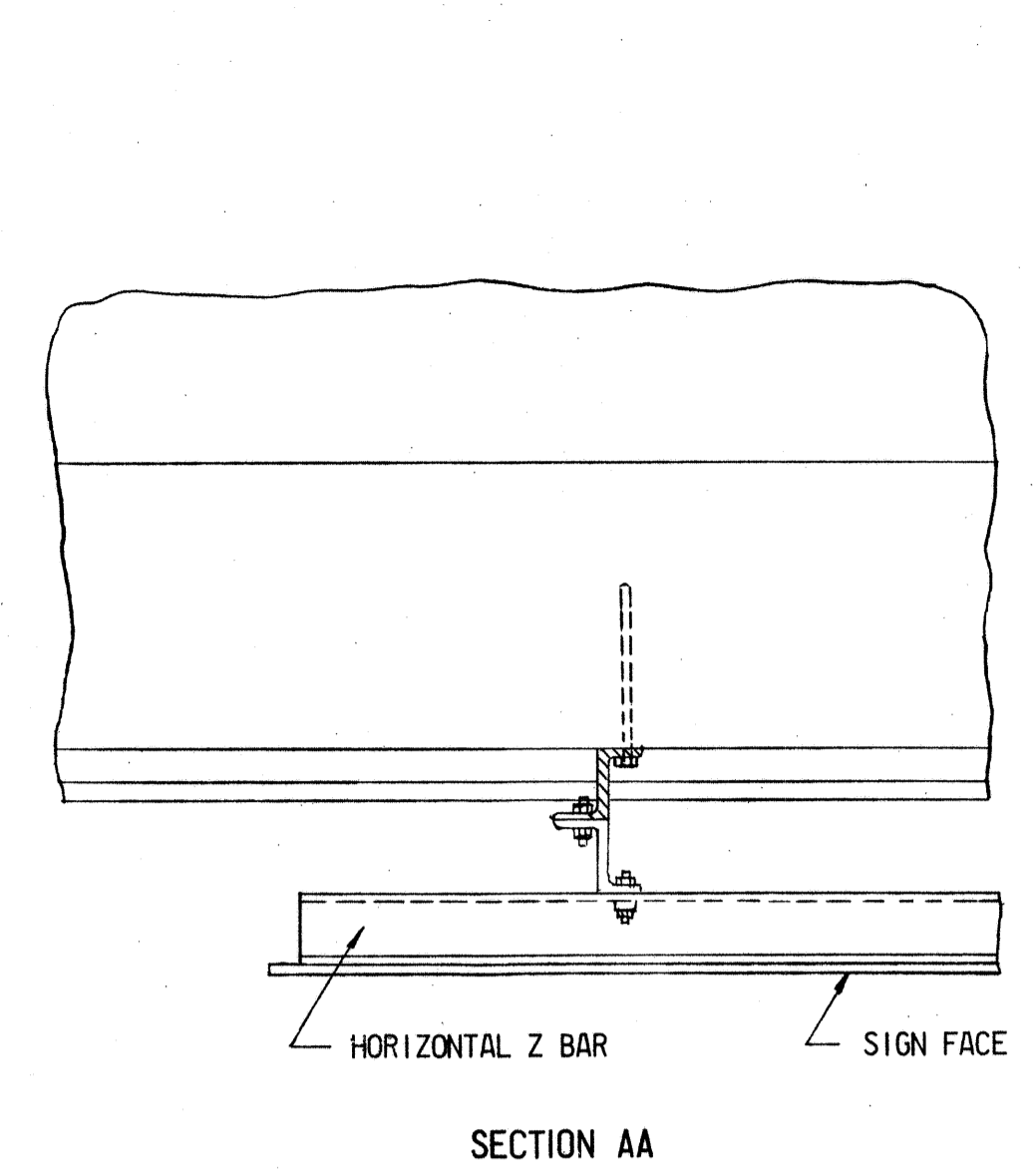
THE CONTRACTOR SHALL SUBMIT THROUGH PROPER CHANNELS THE DRAWINGS, INFORMATION OR SAMPLES AS REQUIRED BELOW:

(A) SIX (6) COPIES OF THE FOLLOWING:

SHOP DRAWINGS AND MATERIAL LISTS FOR APPROVAL FOR

- OVERHEAD SIGN SUPPORTS.
- SIGN LIGHTING DETAILS.
- CATALOG CUTS, DESCRIPTIONS OR SAMPLES OF FABRICATOR'S STANDARD ITEMS AS SHOWN IN THE PLANS OR THEIR EQUAL FOR APPROVAL.

(B) CERTIFICATIONS OR SAMPLES FOR ALL MATERIALS WHICH HAVE BEEN APPROVED ABOVE UNDER ITEM (A) SHALL BE IN POSSESSION OF THE CONTRACTOR PRIOR TO ANY PURCHASE OR INSTALLATION.



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-6(13)122	

207A
259

MEDINA COUNTY
MED-271-0.00

FIXTURE SUPPORT ARM "G" AND ENCLOSURE MOUNTING BRACKET

COST OF FURNISHING AND INSTALLING THE FIXTURE SUPPORT ARMS "G" AND THE ENCLOSURE MOUNTING BRACKETS WITH MOUNTING HOLES AND HARDWARE (SEE SHEETS 210, 210.A AND 210.B) SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR OVERHEAD SIGN SUPPORT #4. PRICE BID FOR MOUNTING SIGN #5 (OVERHEAD SIGN SUPPORT SPECIAL) SHALL INCLUDE FIXTURE SUPPORT ARMS "G."

DISCONNECT SWITCH WITH TYPE "Y" OR "Z" ENCLOSURE

THIS ITEM SHALL INCLUDE FURNISHING AND INSTALLING A 30AMP, 600VOLT FUSED DISCONNECT SWITCH OF THE TYPE AND MAKE AS INDICATED ON SHEET 32. IT SHALL BE MOUNTED IN A NEMA (4) STAINLESS STEEL ENCLOSURE TYPE "Y" OR "Z" AND ATTACHED TO EACH SIGN SUPPORT (UNLESS OTHERWISE NOTED) BY A MOUNTING BRACKET AS DETAILED ON THE ABOVE SHEET. ENCLOSURES ON BRIDGES WILL BE FASTENED DIRECTLY TO THE CONCRETE PIERS.

PAYMENT FOR THIS ITEM SHALL BE ON A BID BASIS OF UNITS INSTALLED AND ACCEPTED. EACH SWITCH ENCLOSURE SHALL BE FURNISHED WITH ONE PADLOCK. PADLOCKS SHALL HAVE A BRASS BODY AND WROUGHT IRON SHACKLE EQUAL TO RUSSWIN NO. 2882 KA OR MASTER NO. 4KA OR APPROVED EQUAL. PAYMENT FOR LOCKS SHALL BE INCLUDED IN THE COST OF SWITCH ENCLOSURES.

BALLAST

BALLAST FOR FIXTURES SHALL BE WEATHER-PROOF OUTDOOR TYPE FOR A 120 VOLT 60 CYCLE SYSTEM AND SHALL PROVIDE LAMP STARTING AT AN AMBIENT TEMPERATURE OF -20°F. PAYMENT FOR THIS ITEM SHALL BE ON A BID BASIS OF DIFFERENT TYPE UNITS FURNISHED.

WIRE AND CABLE G25 AND 713.02

WIRE OR CABLE INSTALLED IN CONDUIT ON SIGN STRUCTURES, ABOVE THE SWITCH ENCLOSURE, SHALL BE #12 RHW (3/64" INSULATION AND 3/64" JACKET), 600 VOLT, STANDARD COPPER WIRE.

WIRE OR CABLE INSTALLED UNDERGROUND SHALL BE THE SIZES SHOWN ON THE PLANS AND CONFORM TO FEDERAL AVIATION AGENCY ADVISORY CIRCULAR NUMBER AC 150/5345-7 DATED NOVEMBER 4, 1963, SPECIFICATION FOR L-834 TYPE A UNDERGROUND ELECTRICAL CABLE FOR AIRPORT LIGHTING CIRCUITS.

PAYMENT FOR WIRE AND CABLE SHALL BE MADE AT THE CONTRACT UNIT PRICE WHICH SHALL INCLUDE ALL TESTING, SPLICING, MATERIAL, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

TRANSFORMERS

TRANSFORMERS TYPES SHALL BE AS SHOWN ON SHEET 32. TRANSFORMERS ARE TO BE MOUNTED IN THE BOTTOM OF THE SWITCH ENCLOSURE CABINET. PAYMENT FOR TRANSFORMERS SHALL BE PER CONTRACT UNIT PRICE BID FOR EACH TYPE INSTALLED AND ACCEPTED.

SIGNS WIRED, COMPLETE AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND/OR INSTALLATION OF THE ELECTRICAL SIGN LIGHTING SYSTEM COMPONENTS FOR EACH ILLUMINATED SIGN. WORK SHALL INCLUDE THE INSTALLATION OF LIGHT FIXTURES AND BALLASTS AND INSTALLATION OF ALL RIGID AND FLEXIBLE CONDUIT, CONDULETS, JUNCTION BOXES, WIRE, FASTENERS, HARDWARE AND ALL OTHER ITEMS REQUIRED TO ENERGIZE THE SIGN LIGHTING SYSTEM. SEE DETAILS ON SHEET 110A.

THE COST OF FURNISHING AND INSTALLING WIRE AND NECESSARY FASTENERS FROM THE DISCONNECT SWITCH TO THE SIGNS (OR BETWEEN SIGNS) ON THE SAME SUPPORTS MEMBERS SHALL BE INCIDENTAL TO THE COST OF VARIOUS ITEMS INCLUDED IN THIS WORK. BASIS OF PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER EACH SIGN WIRED WHICH PRICE SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS TO PROVIDE A COMPLETE AND ACCEPTED ITEM.

IN ADDITION TO THE ABOVE, THE CIRCUIT FOR SIGN #5 SHALL BE CARRIED IN 1" CONDUIT FROM THE PULL BOX AT STA. 68+60 TO THE SIGN OVER I-271. THE CONDUIT SHALL BE UNDERGROUND FROM THE PULL BOX TO THE BRIDGE PIER. THE CONDUIT AND SWITCH ENCLOSURE SHALL BE FASTENED TO THE CONCRETE BRIDGE PIER AND DECK.

FIXTURES AND LAMPS

ILLUMINATION OF SIGNS ON THIS PROJECT SHALL BE BY ATTACHED FLUORESCENT FIXTURES AS SHOWN ON ILLUMINATED SIGN DETAIL SHEETS. LIGHT FIXTURES SHALL BE ATTACHED TO BOTTOM OF SIGNS. PROXIMITY OF LIGHT FIXTURES FROM SIGNS IS SHOWN IN THE TABLE ON SHEET 34.

INSPECTION AND TESTING OF SIGN LIGHTING

REQUIREMENTS FOR INSPECTION AND TESTING SHALL BE THE SAME AS REQUIRED FOR ROADWAY LIGHTING. DURING THE TEST PERIOD, ADJUSTMENTS TO FIXTURE AIMING ANGLES SHALL BE MADE AS DIRECTED BY THE ENGINEER TO OBTAIN MAXIMUM UNIFORMITY IN SIGN ILLUMINATION.

MEDINA COUNTY
MED-271-0.00

NOTES

MATERIALS
THE OVERHEAD SPAN TRUSS SHALL BE ALUMINUM AND THE END FRAMES SHALL BE STEEL.
SPAN TRUSS AND END FRAMES, INCLUDING HARDWARE, SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 816 UNLESS OTHERWISE NOTED.

STEEL POLE BASES AND GUSSETS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A-373.

AFTER FABRICATION THE TAPERED POLES SHALL HAVE A MINIMUM YIELD STRENGTH OF 48,000 PSI.

FABRICATION
THE ENTIRE STEEL END FRAME SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH SEC. M-7440. MAXIMUM LENGTH OF SPAN SECTIONS IS 30 FT.

ERECTION
USE A MINIMUM OF 1" CAMBER IN SPAN TRUSS MEMBER FOR A 50' SPAN; ADD 1/4" OF CAMBER FOR EACH 5' OF INCREASE IN SPAN OVER 50'.

PAYMENT
PAYMENT FOR THE GALVANIZED CONDUIT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OVERHEAD SIGN SUPPORTS.

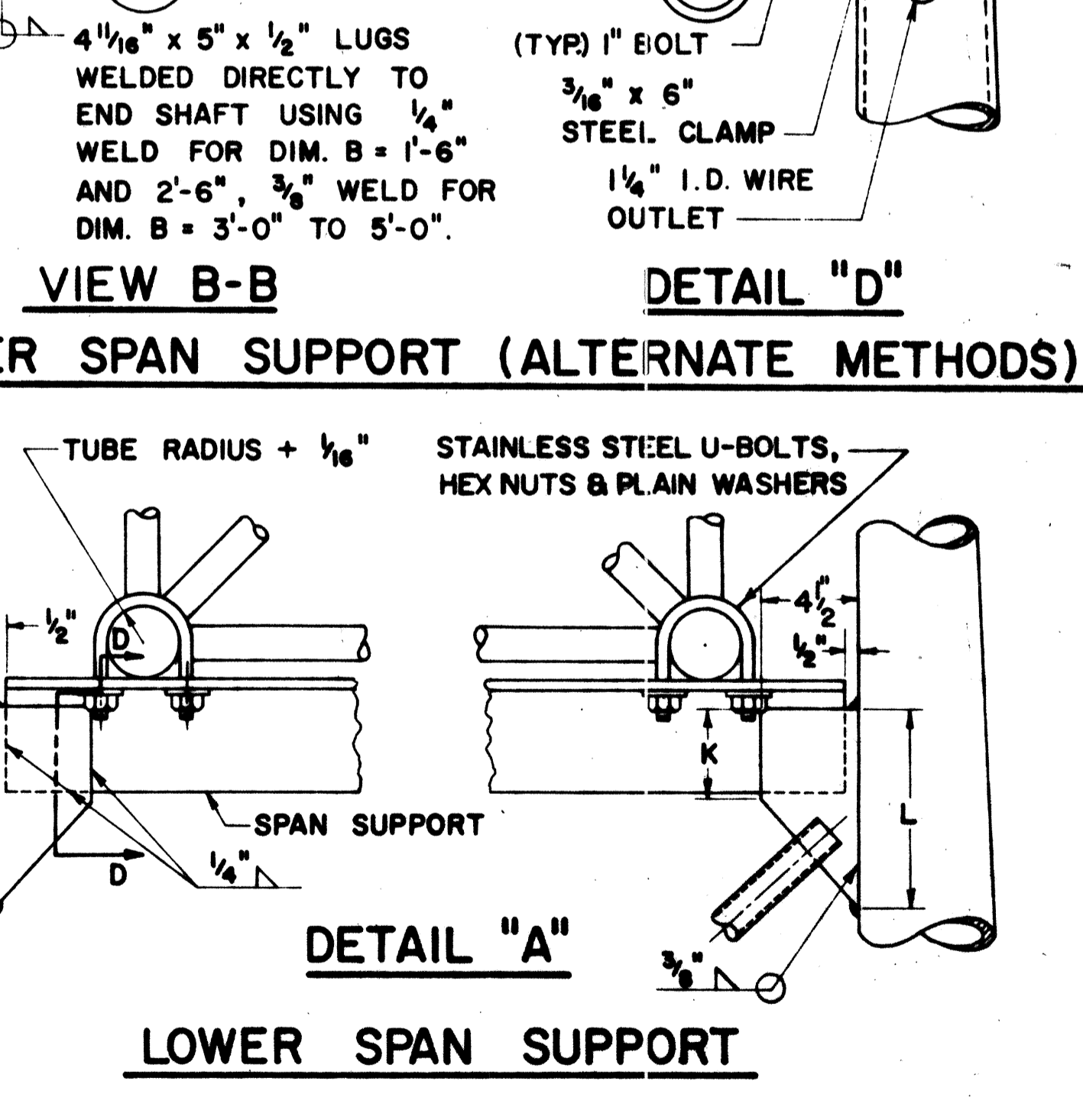
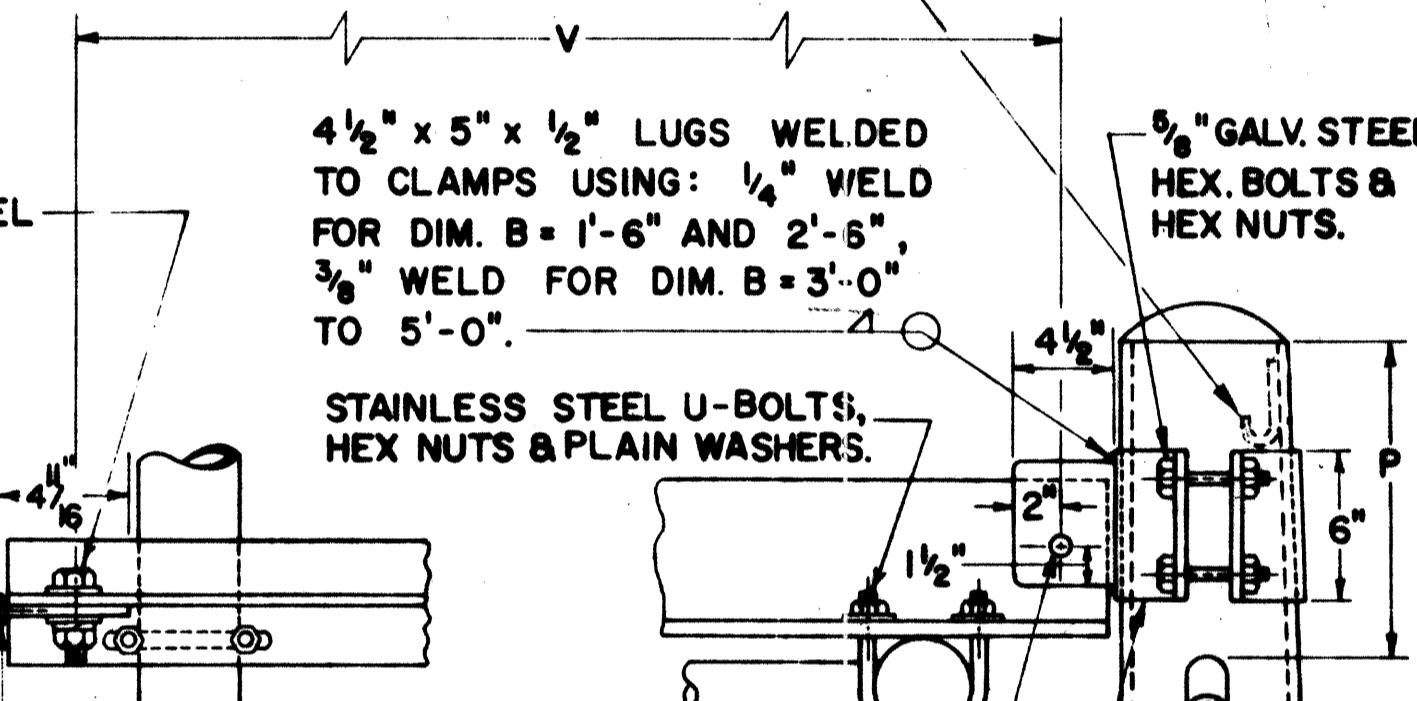
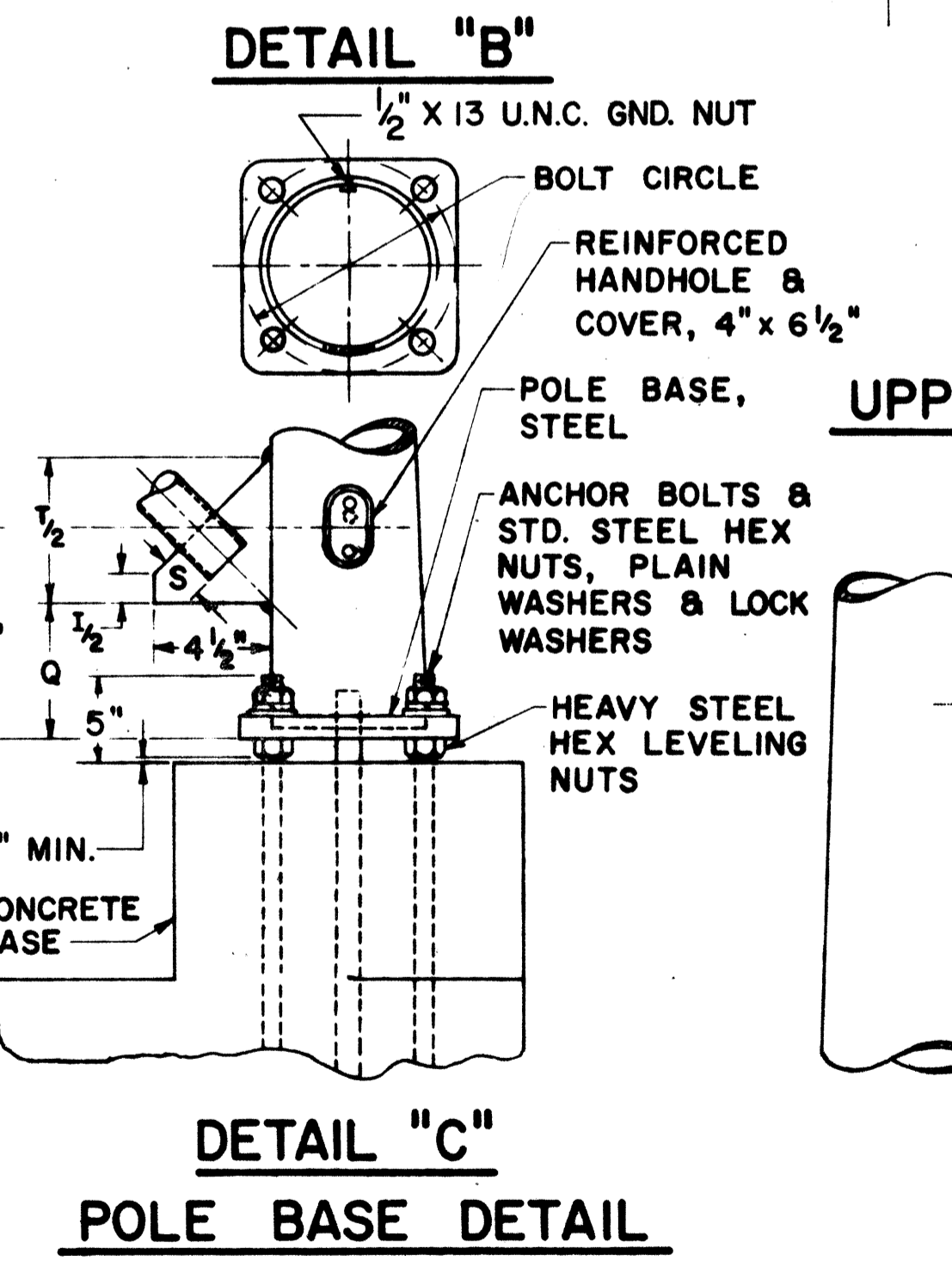
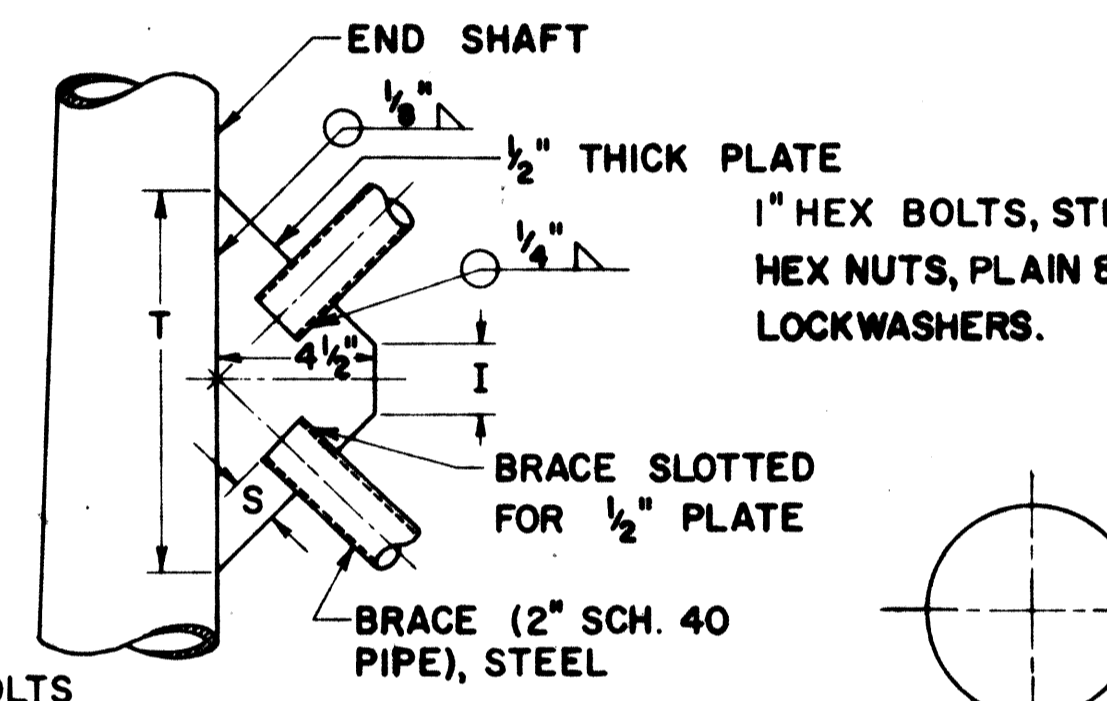
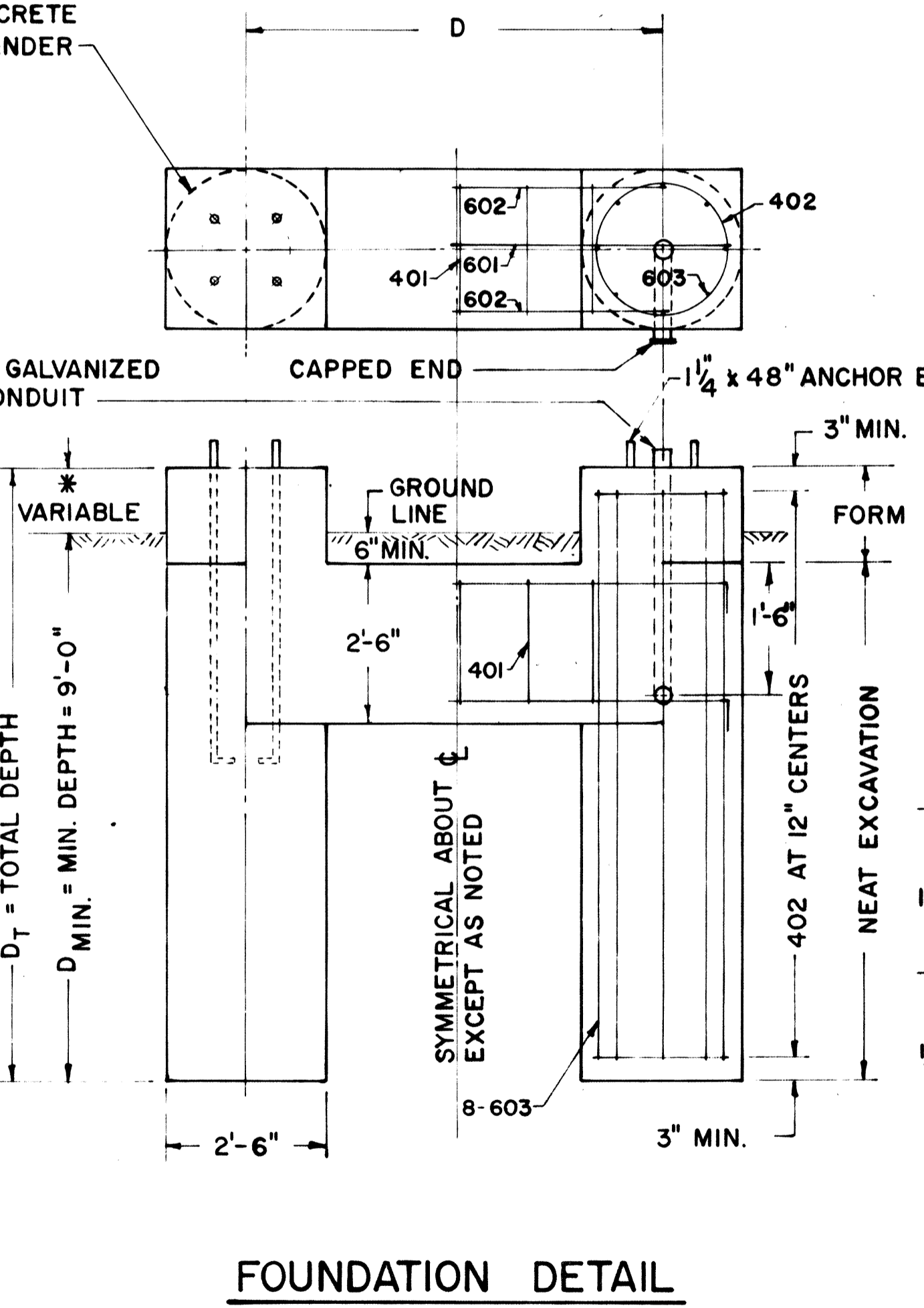
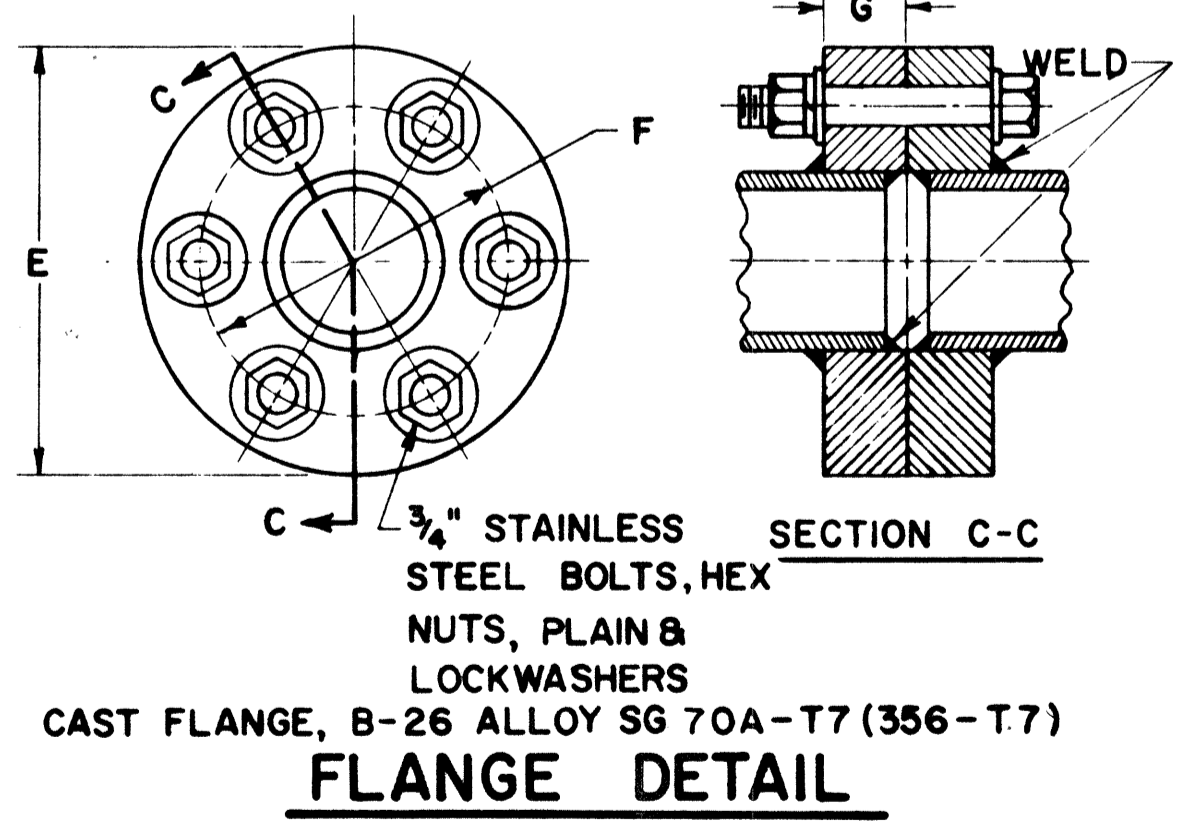
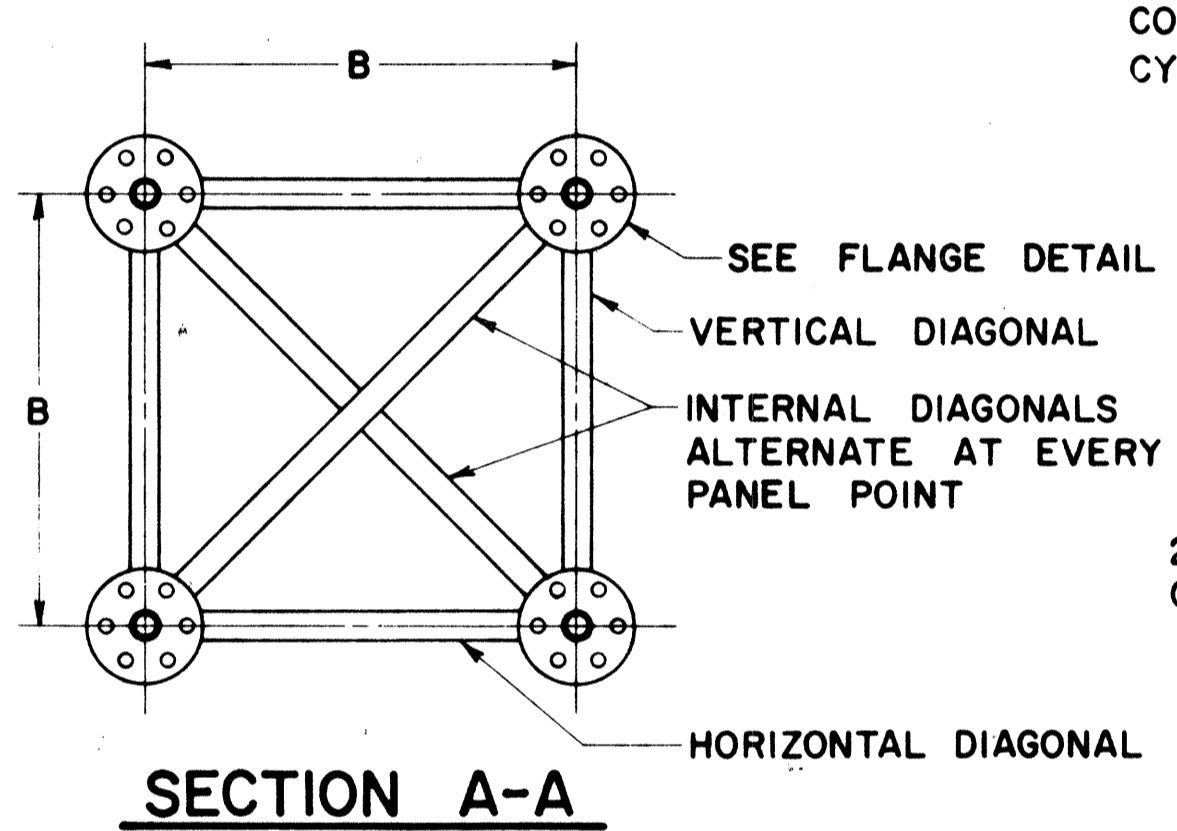
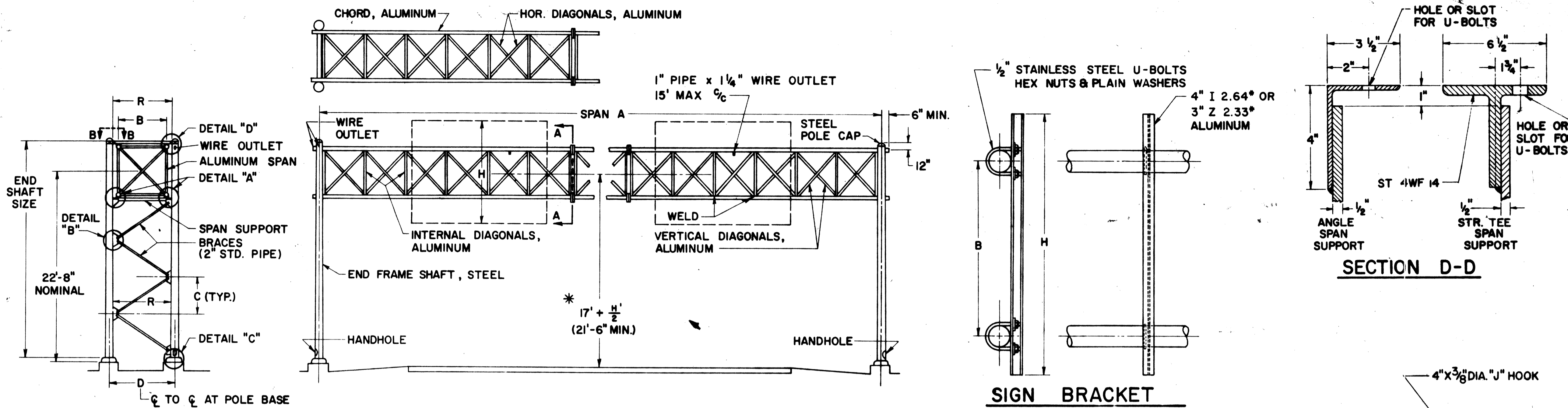
SOILS
THE FOUNDATION DETAILS SHOWN ARE FOR AVERAGE SOIL CONDITIONS (MEDIUM CLAY, CEMENTED SAND AND GRAVEL, SANDY CLAY, OR STIFF CLAY). FOR POOR SOIL CONDITIONS, INCREASE "D" MIN. BY: 50% IN DRY OR WET SAND, 60% IN SILTY CLAY, 100% IN SOFT CLAY, AND FROM 75% TO 150% IN WET SILT, DEPENDING ON QUICKSAND ACTION.

REINFORCING STEEL
COST OF REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER.

FOUNDATION ELEVATION
ELEVATION OF TOPS OF FOUNDATIONS SHALL BE BUILT UP SO THAT 17" CLEARANCE IS MAINTAINED OVER THE ENTIRE WIDTH OF THE PAVEMENT AND SHOULDERS.

DESIGN
THE DESIGN OF OVERHEAD SUPPORTS IS IN ACCORDANCE WITH A.A.S.H.O. SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, ADOPTED JUNE 12, 1961.



DESIGN NO.	SPAN A	B	C	D	E	END SHAFT	BRACE LENGTH	F	G	I	K	L	P	Q	R	S	T	U BOLTS	V	BOLT CIRCLE	SPAN SUPPORT SECTION D-D	CHORDS	HORIZONTAL AND INTERNAL DIAGONAL	VERTICAL DIAGONAL
1	50' Thru 55'	3'-0"	4'-11 3/4"	4'-5"	7"	8" x 4.5" x 25'-0", 3GA	5'-10 13/16"	5 1/2"	1 1/4"	3 1/2"	4 3/4"	8"	12"	6 5/8"	3'-9"	1 1/2"	10"	5/8"	3'-3 5/8"	11"	SPLIT TEE 3'-8"	3 1/2" x .188"	1.660" x .140"	1.660" x .140"
2	56' Thru 80'	3'-0"	4'-11 3/4"	4'-5"	9 1/4"	8" x 4.5" x 25'-0", 3GA	5'-10 13/16"	7 7/16"	1 3/8"	3 1/2"	4 3/4"	8"	12"	6 5/8"	3'-9"	1 1/2"	10"	5/8"	3'-3 5/8"	11"	SPLIT TEE 3'-8"	4 3/4" x .188"	1.900" x .145"	1.660" x .140"
3	81' Thru 90'	4'-0"	4'-10 1/4"	5'-7"	9 1/4"	8" x 6.22" x 25'-6", 3GA	6'-7 7/8"	7 7/16"	1 3/8"	5/8"	4 3/8"	7 3/4"	12"	6 1/4"	4'-11"	1 1/2"	9 1/2"	5/8"	4'-5 5/8"	11"	SPLIT TEE 4'-10"	4 3/4" x .188"	1.900" x .145"	1.900" x .145"
4	91' Thru 105'	4'-0"	4'-10 1/4"	5'-7"	9 1/4"	8" x 6.22" x 25'-6", 3GA	6'-7 7/8"	7 7/16"	1 3/8"	5/8"	4 3/8"	7 3/4"	12"	6 1/4"	4'-11"	1 1/2"	9 1/2"	5/8"	4'-5 5/8"	11"	SPLIT TEE 4'-10"	4 3/4" x .188"	2" x .188"	1.900" x .145"

REINFORCEMENT SCHEDULE			
MARK	NO.	LENGTH	TYPE
401	12" C/C	8'-6"	102
402	12" C/C	7'-6"	103
601	4	D+4'-0"	101
602	8	D+2'-0"	101
603	32	D_T--6"	STR.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

OVERHEAD SIGN SUPPORTS No. 73

816

DATE 7-25-62 5-5-64

APPROVED *Robert E. Jones*
ENGINEER OF TRAFFIC

NOTES

MATERIALS
 THE OVERHEAD SPAN TRUSS SHALL BE ALUMINUM AND THE END FRAMES SHALL BE STEEL.
 SPAN TRUSS AND END FRAMES, INCLUDING HARDWARE, SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 816 UNLESS OTHERWISE NOTED.

STEEL POLE BASES AND GUSSETS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A-373.
 AFTER FABRICATION THE TAPERED POLES SHALL HAVE A MINIMUM YIELD STRENGTH OF 48,000 PSI.

FABRICATION
 THE ENTIRE STEEL END FRAME SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH SEC. M-7.4(d). MAXIMUM LENGTH OF SPAN SECTIONS IS 30 FT.

ERECTION
 USE A MINIMUM OF 1" CAMBER IN SPAN TRUSS MEMBER FOR A 50' SPAN; ADD 1/4" OF CAMBER FOR EACH 5' OF INCREASE IN SPAN OVER 50'.

PAYMENT
 PAYMENT FOR THE GALVANIZED CONDUIT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OVERHEAD SIGN SUPPORTS.

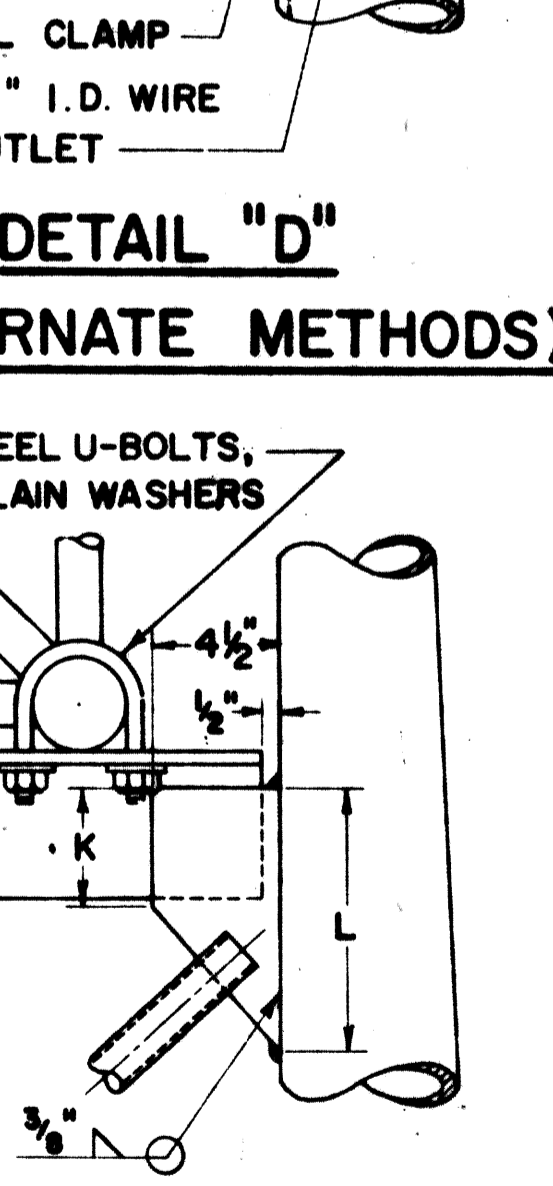
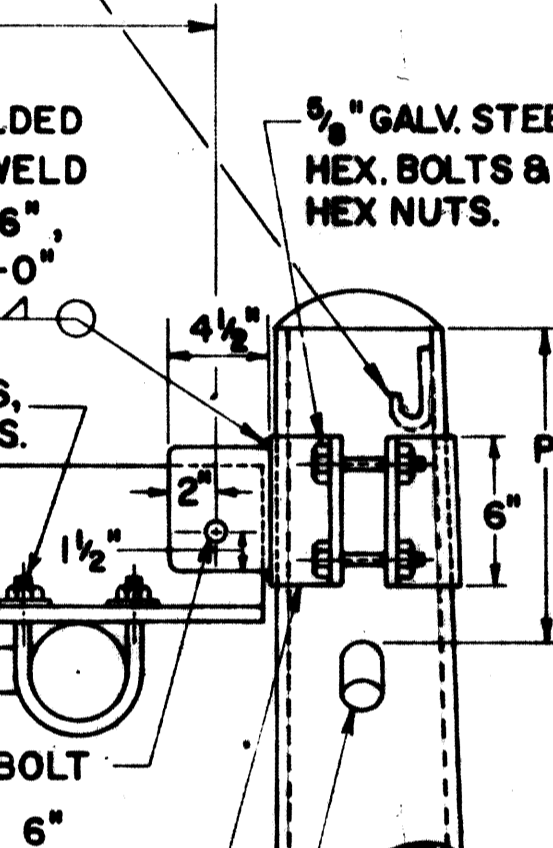
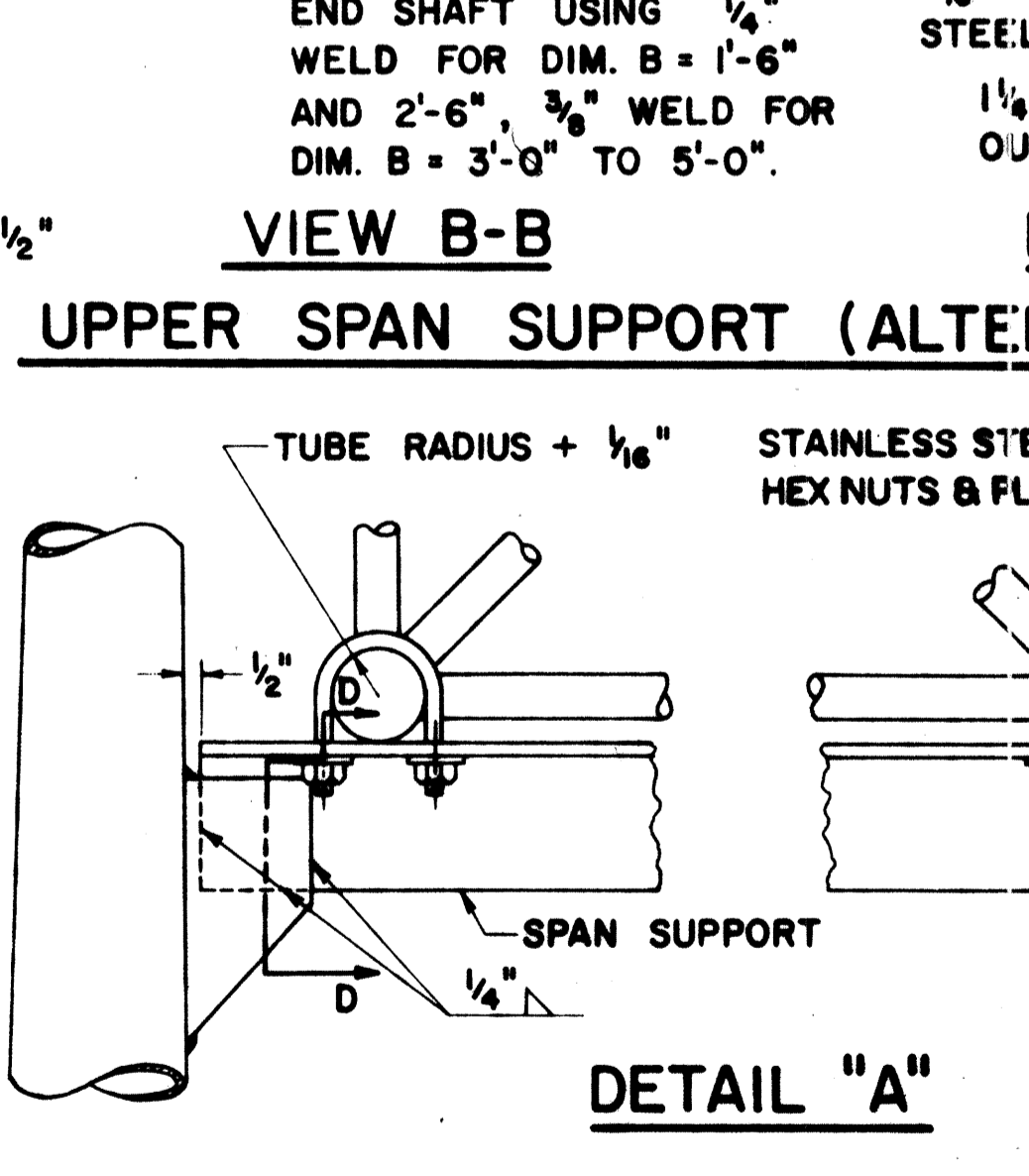
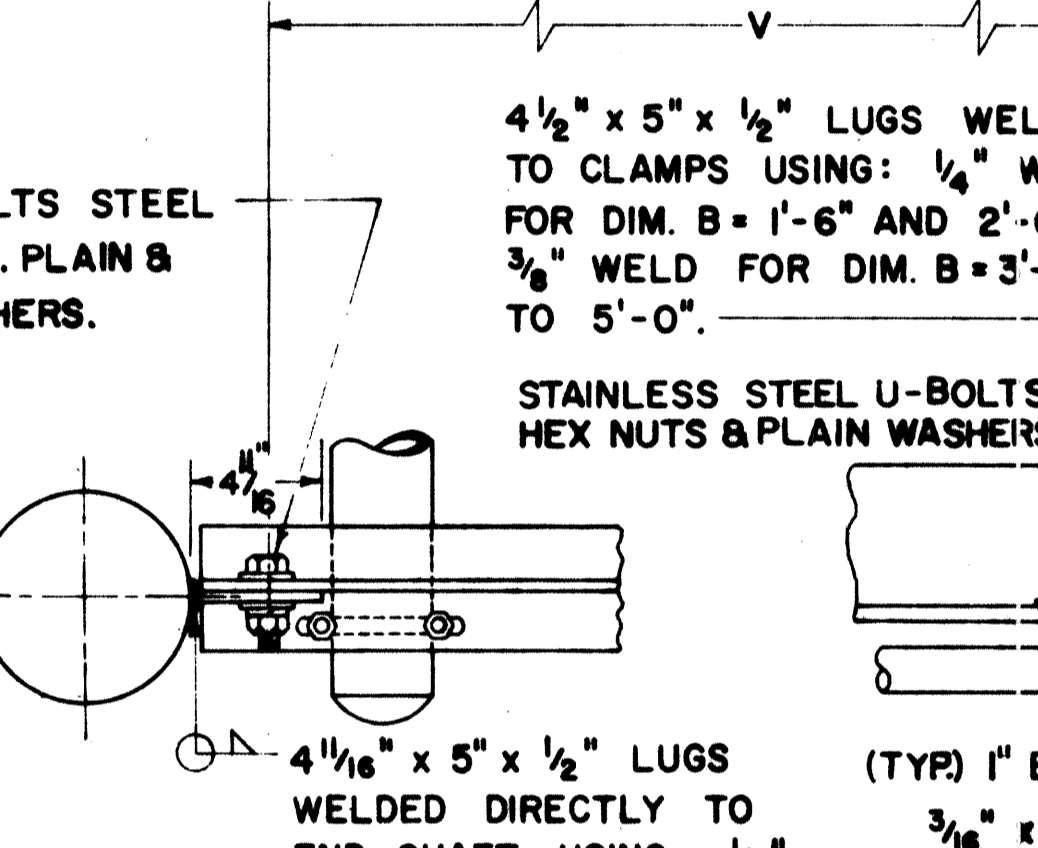
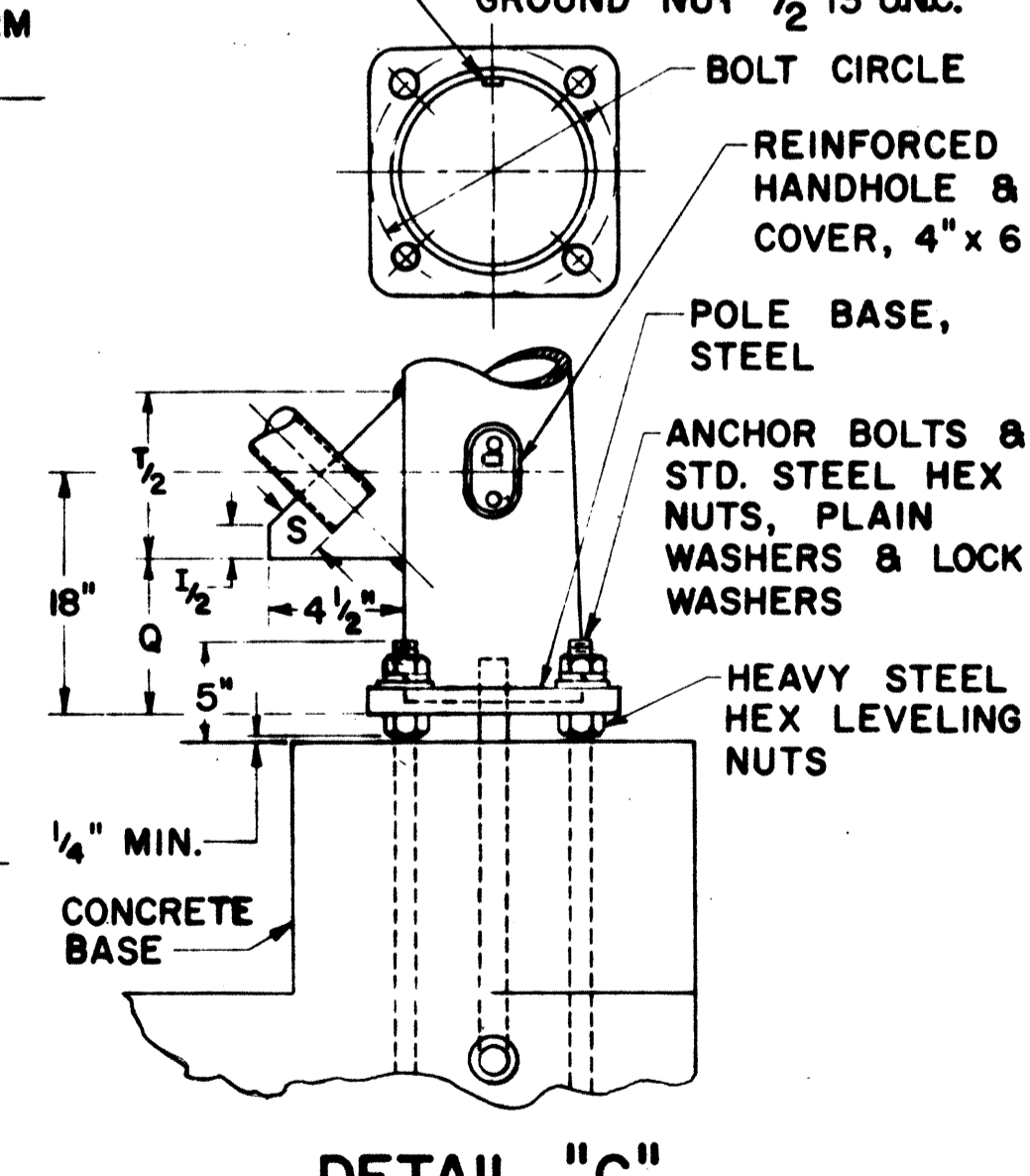
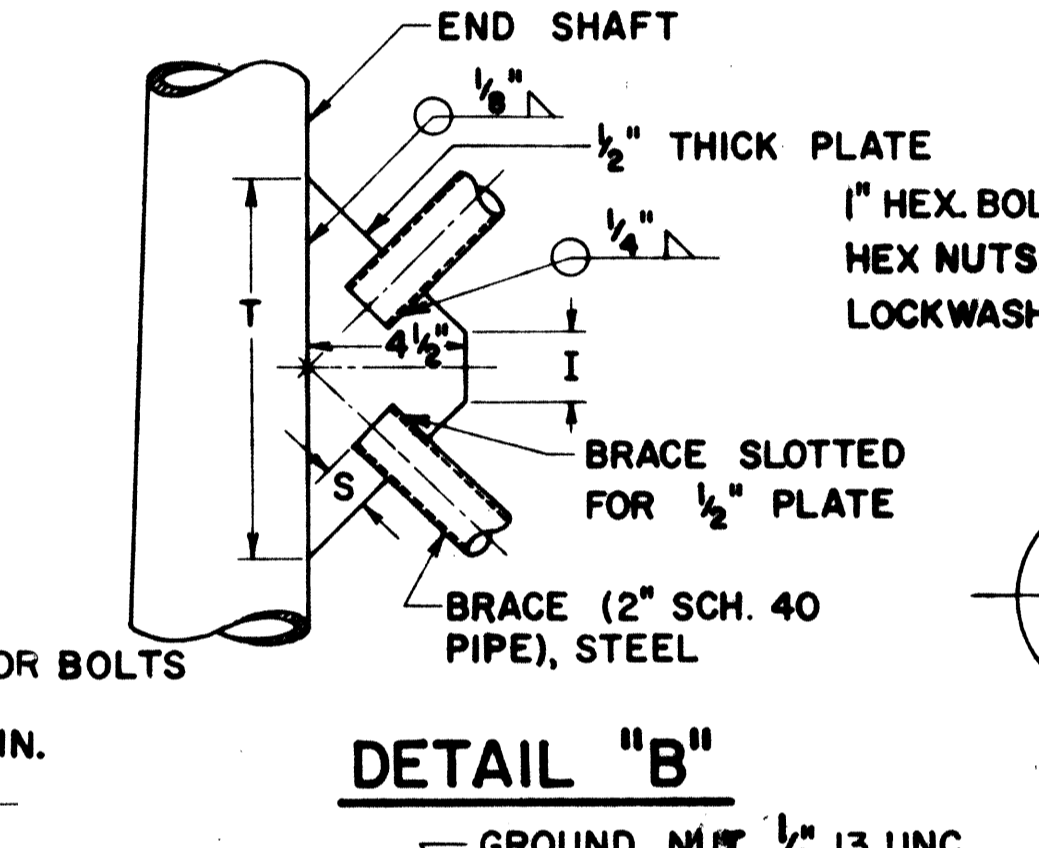
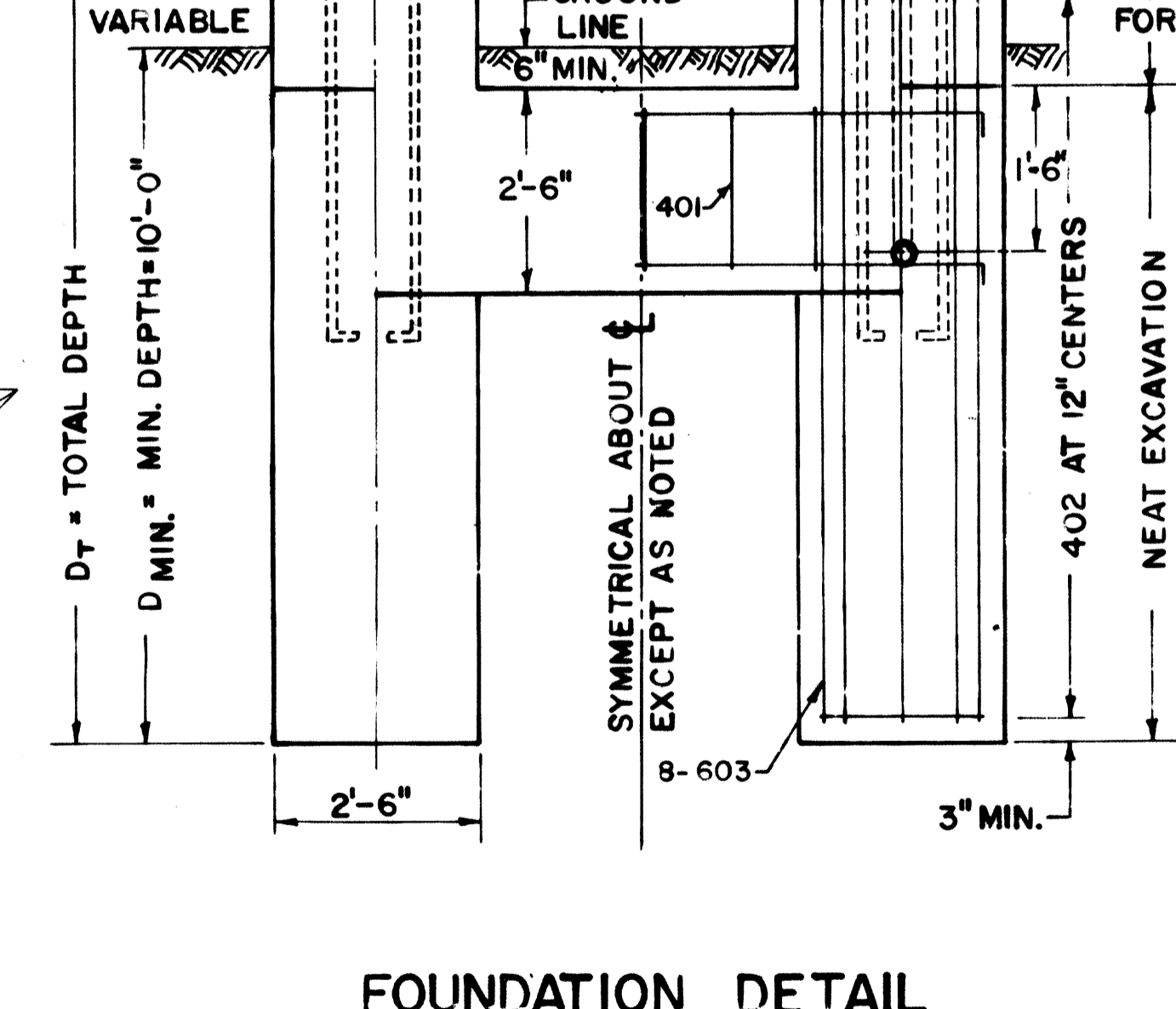
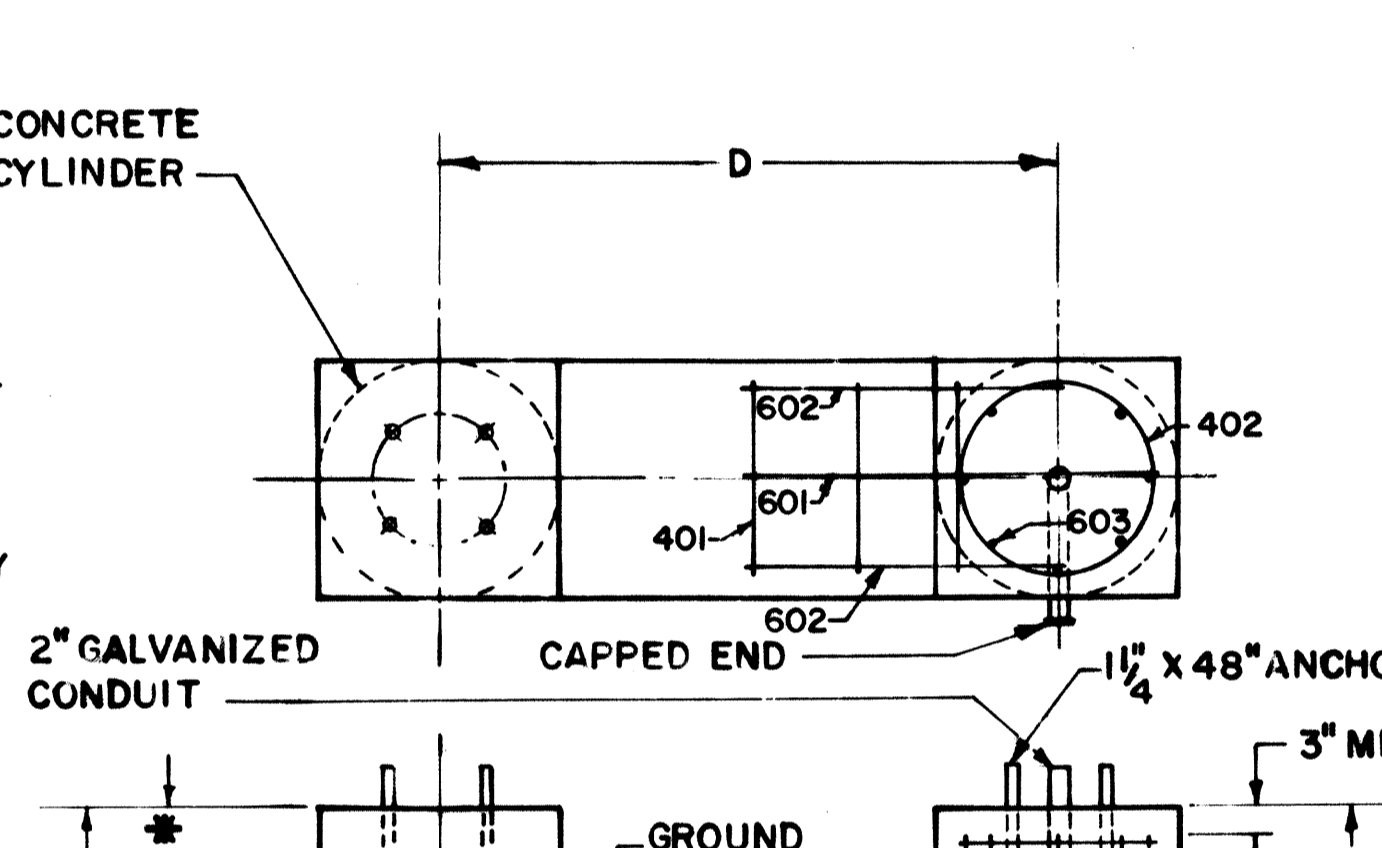
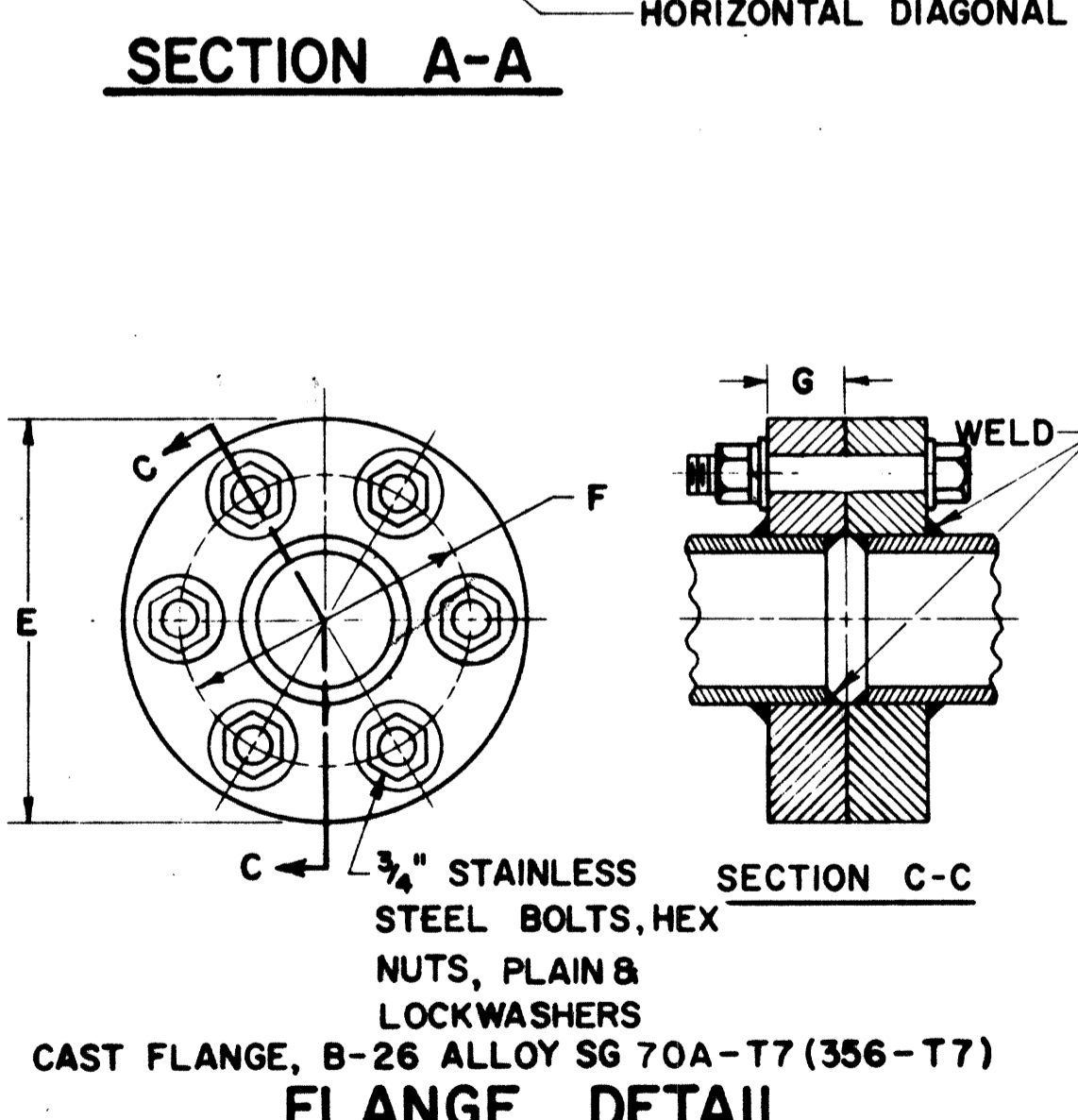
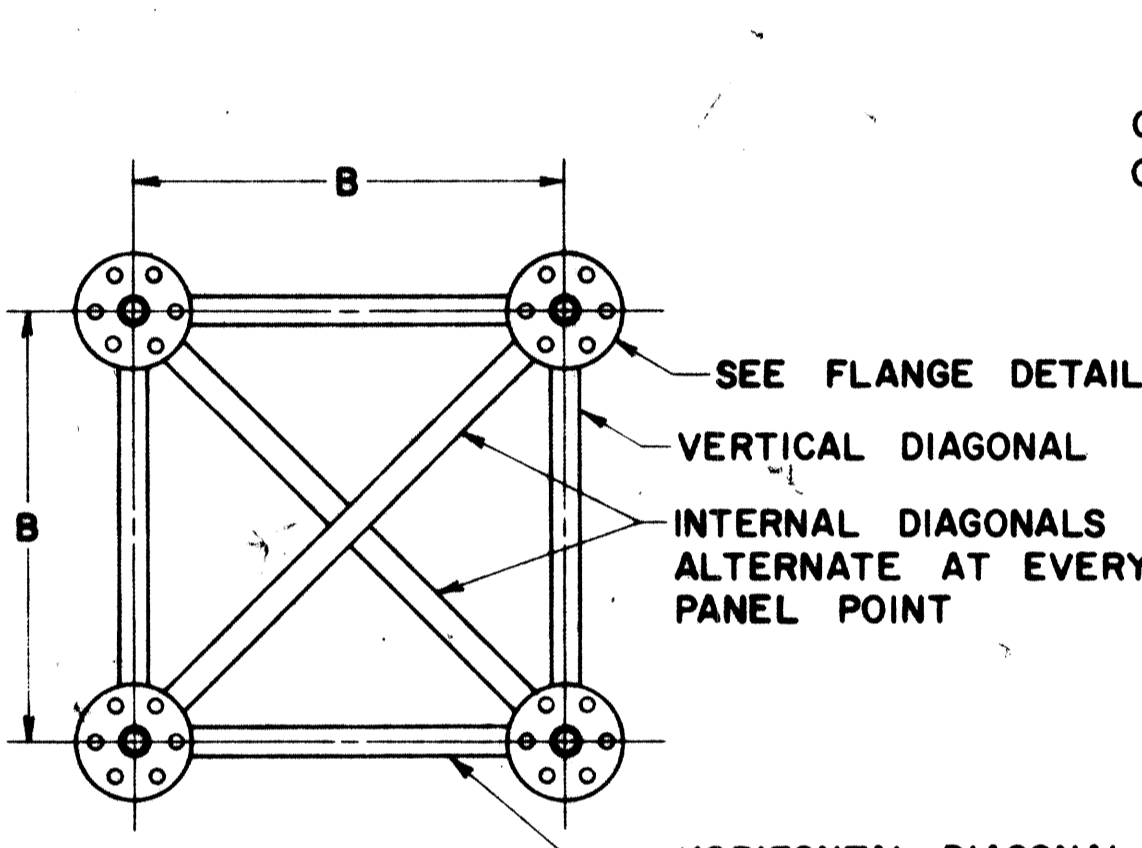
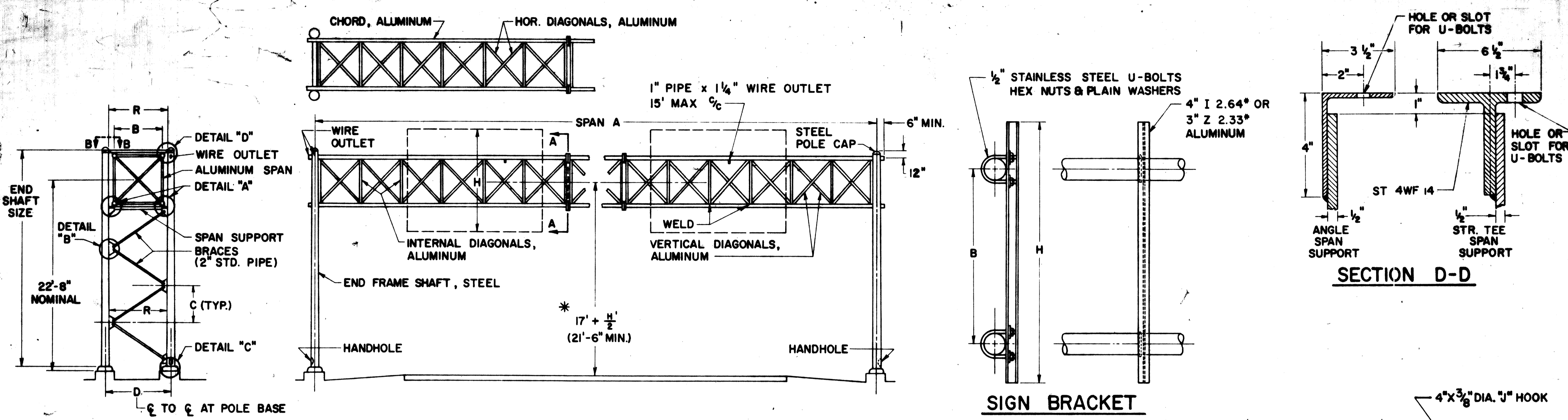
SOILS
 THE FOUNDATION DETAILS SHOWN ARE FOR AVERAGE SOIL CONDITIONS (MEDIUM CLAY, CEMENTED SAND AND GRAVEL, SANDY CLAY, OR STIFF CLAY); FOR POOR SOIL CONDITIONS, INCREASE "D" MIN. BY: 50% IN DRY OR WET SAND, 60% IN SILTY CLAY, 100% IN SOFT CLAY, AND FROM 75% TO 150% IN WET SILT, DEPENDING ON QUICKSAND ACTION.

REINFORCING STEEL
 COST OF REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER.

***FOUNDATION ELEVATION**
 ELEVATION OF TOPS OF FOUNDATIONS SHALL BE BUILT UP SO THAT 17' CLEARANCE IS MAINTAINED OVER THE ENTIRE WIDTH OF PAVEMENT AND SHOULDERS.

DESIGN
 THE DESIGN OF OVERHEAD SUPPORTS IS IN ACCORDANCE WITH A.A.S.H.O. SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, ADOPTED JUNE 12, 1961.



DESIGN NO.	SPAN A	B	C	D	E	END SHAFT	BRACE LENGTH	F	G	I	K	L	P	Q	R	S	T	U BOLTS	V	BOLT CIRCLE	SPAN SUPPORT SECTION D-D	CHORDS	HORIZONTAL AND INTERNAL DIAGONAL	VERTICAL DIAGONAL	REINFORCEMENT SCHEDULE
1	50' THRU 70'	3'-0"	4'-1 3/4"	4'-5"	9 1/4"	8" X 4.5" X 25'-0" 3GA	5'-10 3/8"	7 7/16"	1 3/8"	3 1/2"	4 3/4"	8"	12"	6 5/8"	3'-9"	1 1/2"	10"	5 1/8"	3'-3 5/8"	11"	SPLIT TEE 3'-8"	4 3/4" X .188"	1.900" X .145"	1.660" X .140"	MARK NO. LENGTH TYPE
2	71' THRU 80'	4'-0"	4'-10 1/4"	5'-7"	9 1/4"	8" X 6.22" X 25'-6" 3GA	6'-7 1/8"	7 7/16"	1 3/8"	5 3/8"	4 3/8"	7 3/4"	12"	6 1/4"	4'-11"	1 1/2"	9 1/2"	5 1/8"	4'-5 5/8"	11"	SPLIT TEE 4'-10"	4 3/4" X .188"	2" X .188"	1.900" X .145"	401 12" C/C 8'-6" 102
3	81' THRU 86'	4'-0"	4'-10 1/4"	5'-7"	11"	8" X 6.22" X 25'-6" 3GA	6'-7 1/8"	8 1/2"	1 1/2"	5 3/8"	4 3/8"	7 3/4"	12"	6 1/4"	4'-11"	1 1/2"	9 1/2"	5 1/8"	4'-5 5/8"	11"	SPLIT TEE 4'-10"	5 1/2" X .250"	2" X .188"	1.900" X .145"	402 12" C/C 7'-6" 103
4	86' THRU 110'	5'-0"	4'-8 1/2"	6'-7"	11"	8" X 6.18" X 26'-0" 3GA	7'-3 1/4"	8 1/2"	1 1/2"	-	3 1/2"	7 3/4"	12"	7 1/4"	5'-11"	1 3/4"	11 1/4"	3 3/4"	5'-5 5/8"	11"	SPLIT TEE 5'-10"	5 1/2" X .250"	2 1/2" X .188"	2 1/2" X .188"	601 4 D+4'-0" 101 602 8 D+2'-0" 101 603 32 D+6" STR. 103

BUREAU OF TRAFFIC
 OHIO DEPARTMENT OF HIGHWAYS

OVERHEAD SIGN SUPPORTS No. 7.5

APPROVED *Robert E. Comer*
 ENGINEER OF TRAFFIC

DATE 5-2-62
 7-25-62
 4-20-62

MEDINA COUNTY
MED-271-0.00

NOTES

GENERAL

DETAILS OF THIS SHEET SHALL APPLY TO EACH OVERHEAD SIGN STRUCTURE TO SUPPORT EXTERNALLY ILLUMINATED SIGNS.

SERVICE

ELECTRIC SERVICE SHALL ENTER THROUGH A 2" GALVANIZED RIGID STEEL CONDUIT INSTALLED IN STRUCTURE FOUNDATION AS PER DETAIL. SIGN SERVICE OR CIRCUITRY SHALL BE CONTROLLED AS REQUIRED BY THE SYSTEM DESIGN AT THE PRIMARY SOURCE.

SERVICE CONDUCTORS SHALL BE THE SIZE AND TYPE AS SPECIFIED.

COMBINATION SWITCH AND TRANSFORMER

(TYPE Y OR Z ENCLOSURE REQUIRED AS PER SCHEDULE ON THIS SHEET)

THIS COMBINATION SHALL BE A 30 OR 60 AMPERE 600 VOLT SWITCH WITH A .25 TO 3.0 KVA TRANSFORMER. THE COMBINATION AND ENCLOSURE SHALL BE AS SQUARE D CLASS 9421, COLUMBUS ELECTRIC WORKS CLASS 101, PANALS INCORPORATED-CLASS 9400, OR APPROVED EQUAL.

TRANSFORMER

THE TRANSFORMER SHALL BE DRY TYPE SINGLE FACE 240/480 VOLT PRIMARY 120/240 VOLT SECONDARY, THE TYPE AND CAPACITY AS SPECIFIED IN DETAILED SCHEDULE ON THIS SHEET.

ENCLOSURE

THE ENCLOSURE SHALL BE NEMA #4 WATER TIGHT .063 GAGE STAINLESS STEEL A151 302-303. A DISCONNECT HANDLE SHALL BE FLANGE MOUNTED AND CAPABLE OF BEING LOCKED IN EITHER POSITION. THE ENCLOSURE SHALL BE EQUIPPED WITH A DOOR LOCKING MECHANISM WITH A DEFEATER THAT NECESSITATES TWO HANDS TO OPERATE MECHANISM WITH THE SWITCH IN OFF POSITION. SPACE FOR A 2" INSULATED CHASE NIPPLE SHALL BE PROVIDED APPROXIMATELY 2 1/4" ABOVE THE CENTER LINE OF THE LOWER MOUNTING SLOT. THIS ENCLOSURE AND STRUCTURE SHALL BE FIELD DRILLED AND TAPPED FOR THE REQUIRED NIPPLE AS SHOWN ON THE DETAIL ON THIS SHEET.

THIS ENCLOSURE SHALL BE FLANGE MOUNTED ON BRACKETS WITH 3/8"-18x3/4" HEX HEAD CADMIUM PLATED MACHINE BOLTS. ENCLOSURES SHALL BE TYPE Y OR Z AS SPECIFIED AND DIMENSIONED ON THIS SHEET.

ENCLOSURE MOUNTING BRACKET

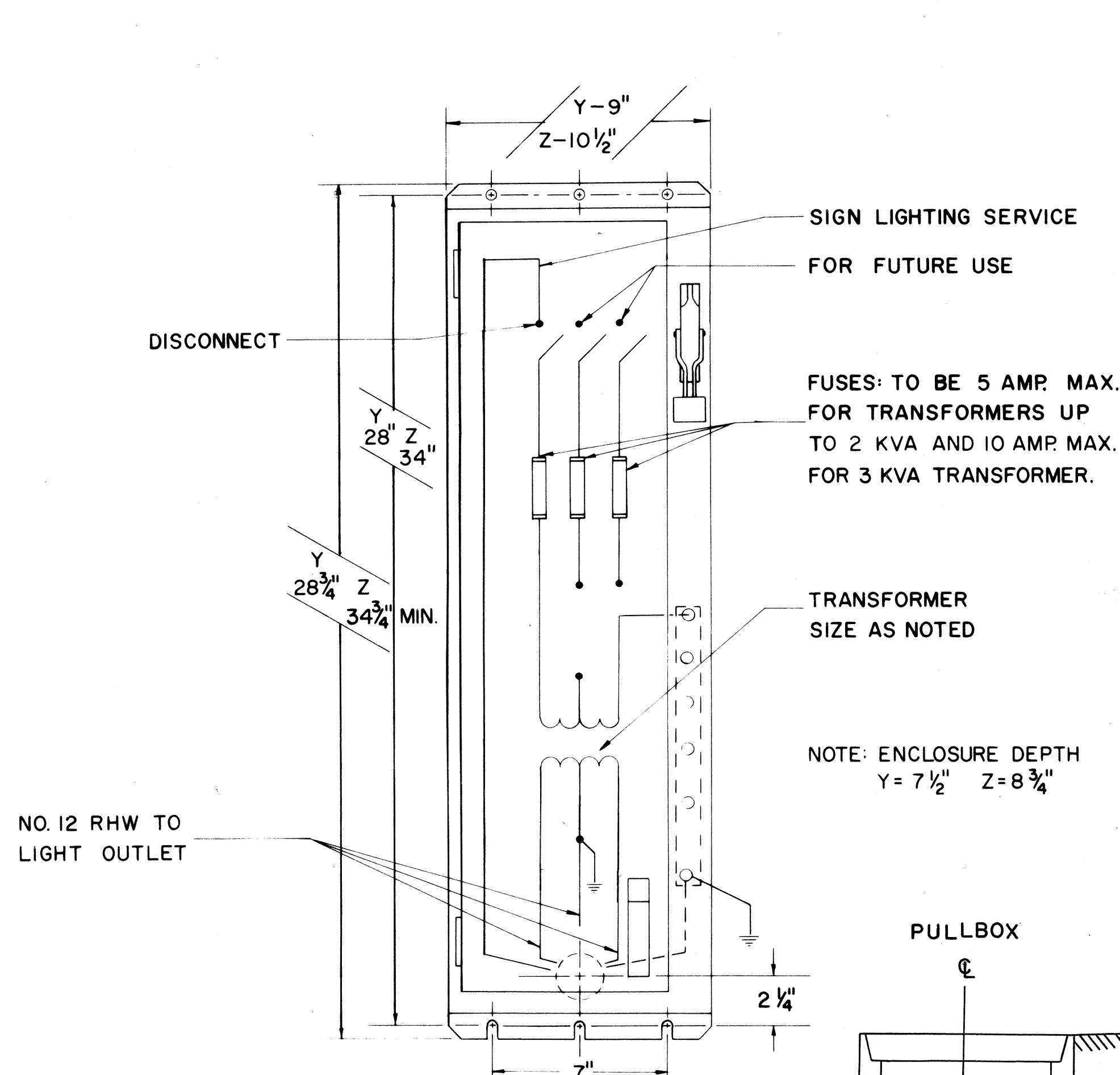
THE ENCLOSURE MOUNTING BRACKET SHALL BE FABRICATED THEN GALVANIZED BEFORE ASSEMBLY. THE BRACKET SHALL BE FIELD MOUNTED WITH 3/8" HEX HEAD SELF TAPPING CADMIUM PLATED SCREWS. THE SIGN SUPPORT SHALL BE FIELD DRILLED, AS PER DETAIL.

WIRE AND CABLE

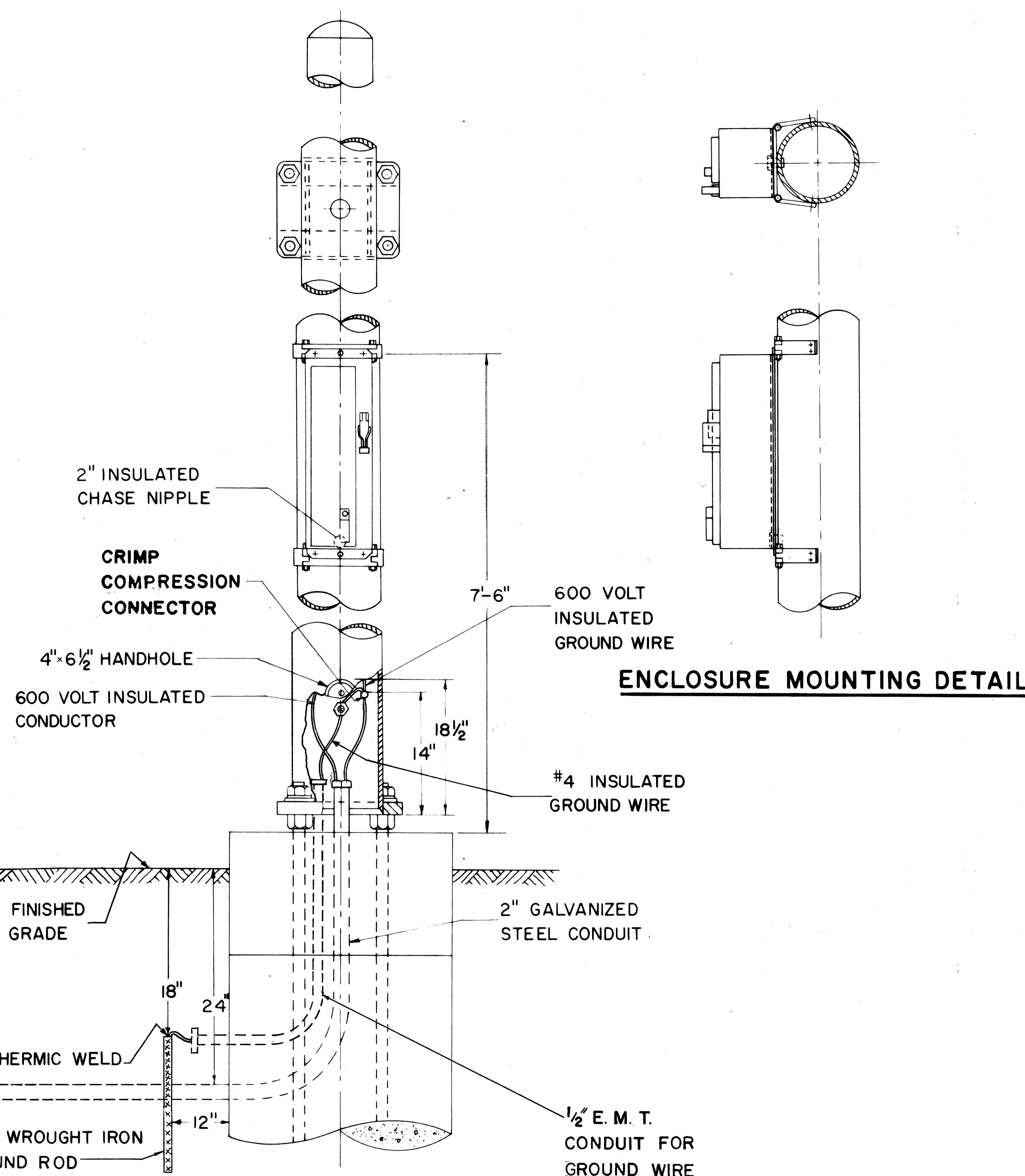
ALL WIRE AND CABLE UP TO AND INCLUDING #4 SHALL COMPLY WITH FAA TYPE A SPECIFICATIONS. #2 OR LARGER WIRE OR CABLE SHALL BE G. E. 58006 OR ANACONDA AP-10711, OR EQUAL. ALL WIRE AND CABLE SHALL BE 600 VOLT.

GROUNDING

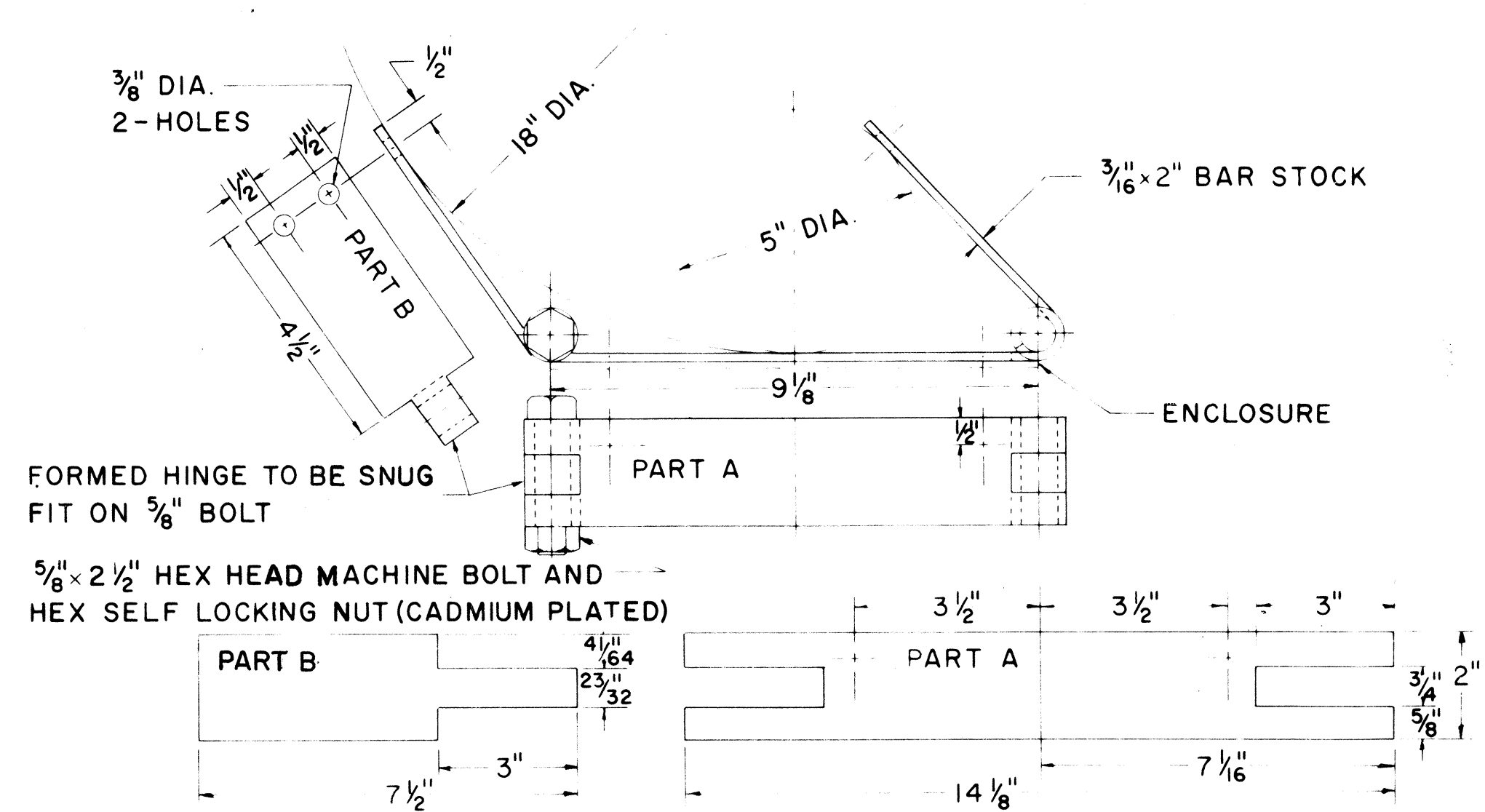
EACH SIGN SUPPORT OR STRUCTURE SHALL BE GROUNDED WITH A #4 RUBBER INSULATION AND NEOPRENE JACKETED CONDUCTOR. THE GROUNDING CONDUCTOR SHALL BE CONNECTED TO THE SWITCH THEN TO THE COMPRESSION CONNECTOR IN THE SIGN SUPPORT THEN TO A 1"x10" SOLID WROUGHT IRON GROUND ROD. GROUND CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO GROUND ROD AND THEN TAPED WITH PLASTIC ELECTRICAL TAPE AT EACH EXPOSED PORTION OF CONDUCTOR. THE WELDED CONNECTION AND TAPED PORTION SHALL BE PAINTED 2 COATS OF INSULATING ENAMEL.



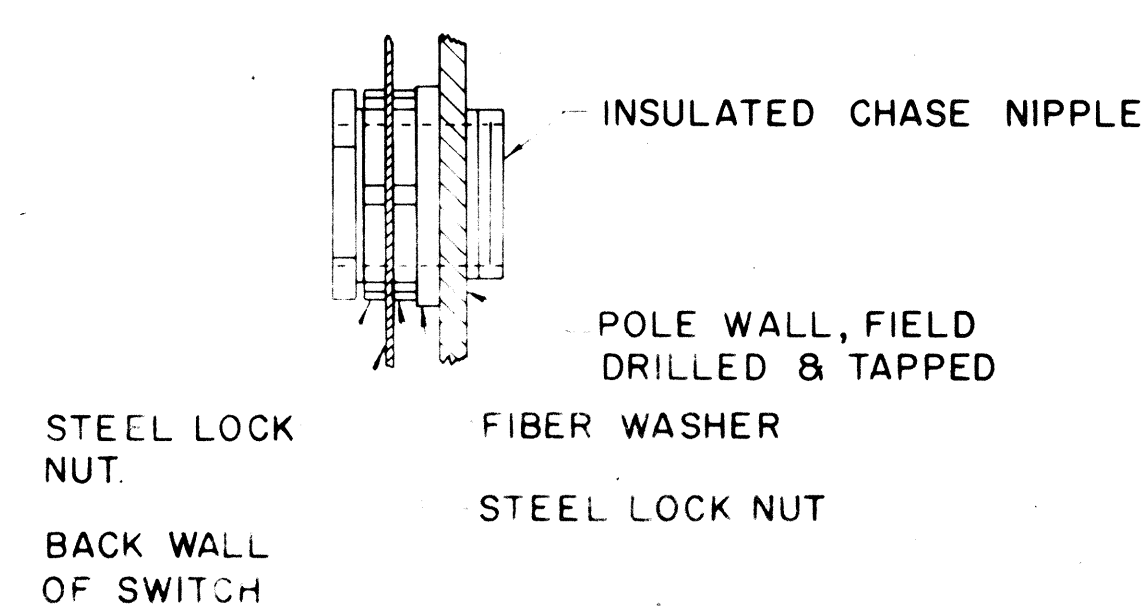
TYPICAL ENCLOSURE DETAIL
480 VOLT SIGN LIGHTING SERVICE



SIGN SUPPORT DETAIL FOR ILLUMINATED SIGNS



ENCLOSURE MOUNTING BRACKET



INSULATED CHASE NIPPLE ASSEMBLY DETAIL

AS MANUFACTURED BY THOMAS BETTS, APPELTON, STEEL CITY OR EQUAL.

TRANSFORMERS

TYPE	MANUFACTURERS G.E.	JEFFERSON	OUTPUT K.V.A.	SWITCH TRANSFORMER ENCLOSURE
I	9T5IY7	244-241	.25	Y
II	9T5IY8	244-251	.50	Y
III	9T5IY9	244-261	.75	Y
IV	9T5IY10	244-40-100	1.00	Z
V	9T5IY11	244-41-100	1.50	Z
VI	9T5IY12	244-42-100	2.00	Z
VII	9T5IY13	244-431	3.00	Z

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

ELECTRICAL SIGN
SERVICE DETAILS
480 VOLT SYSTEM

ES-3A

DATE
6-18-64

APPROVED _____
ENGINEER OF TRAFFIC

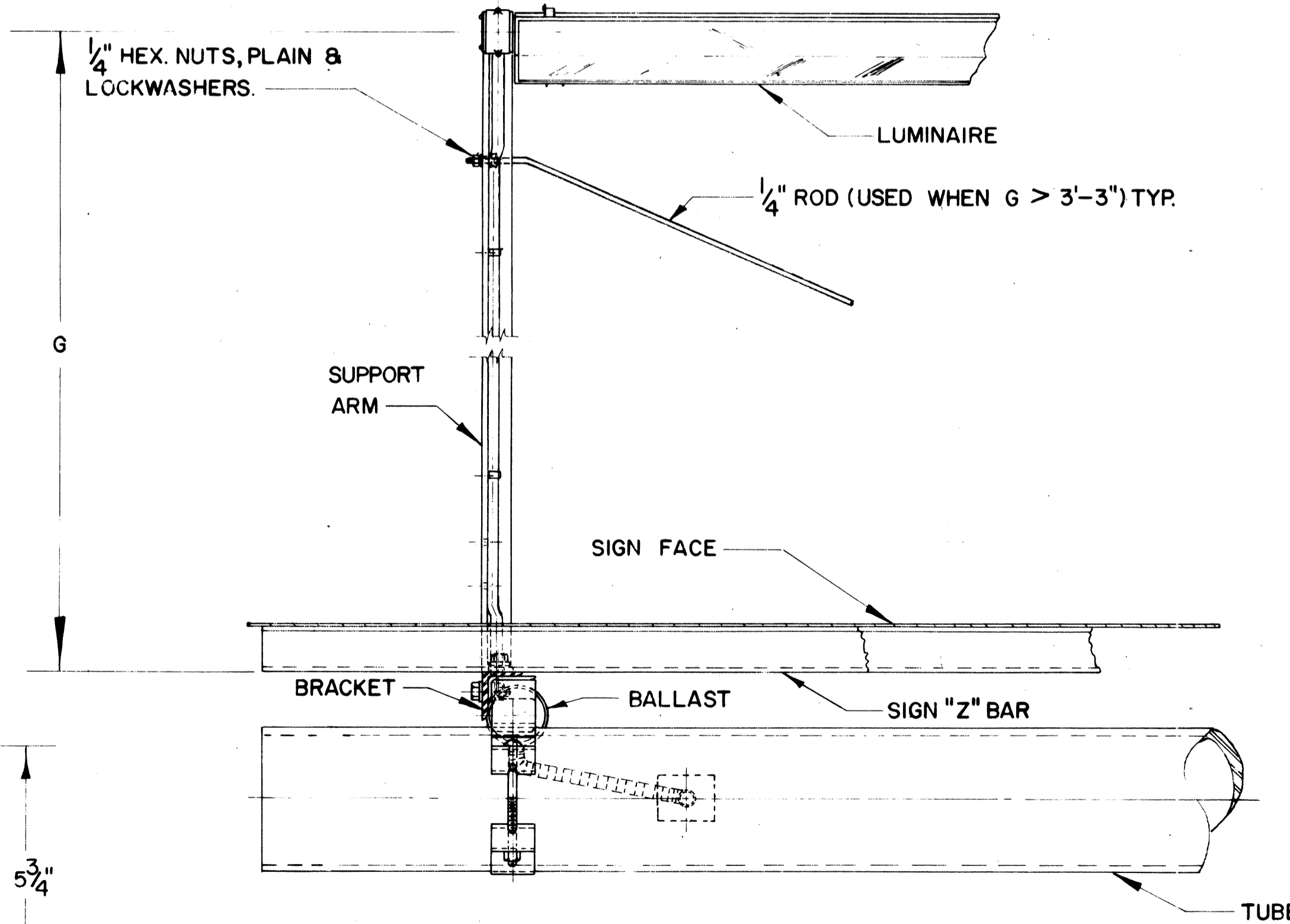
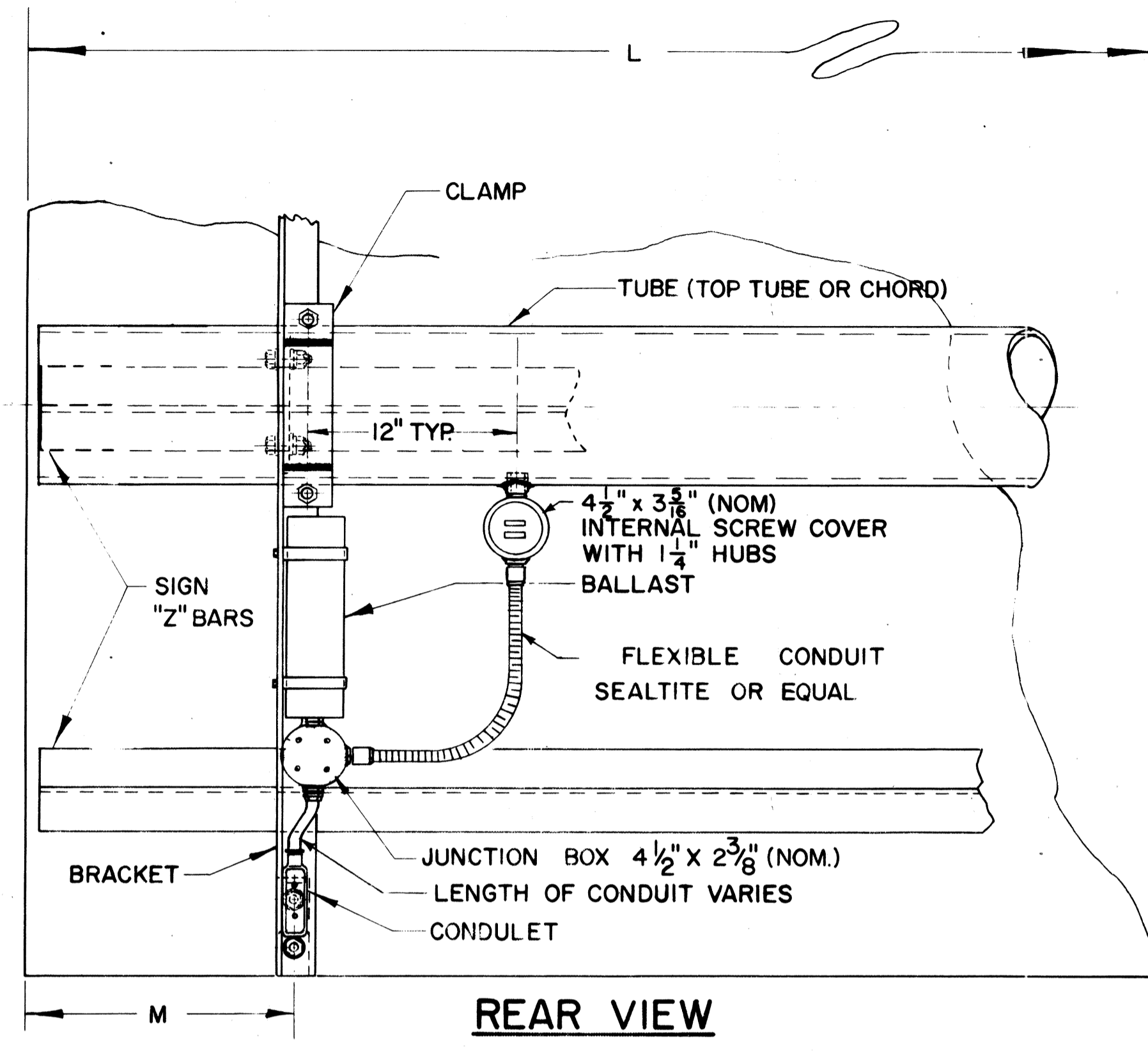
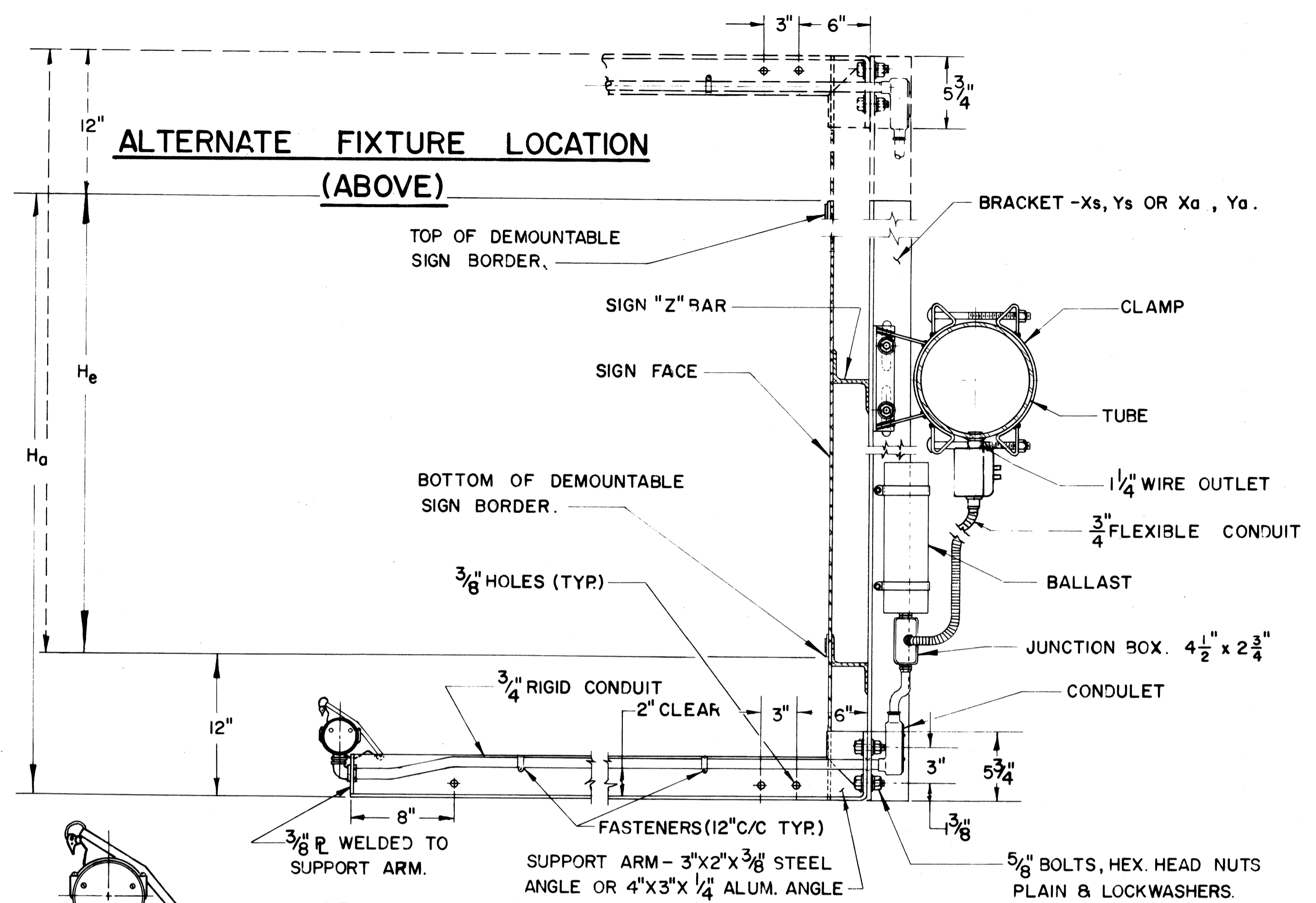


TABLE III.

L	K
6'-0"	7 1/8"
7'-0"	1 1/8"
12'-0"	9 3/8"
13'-0"	3 3/8"

1/2" BOLT, STAINLESS STEEL, TAPERED WASHERS & LOCKWASHERS

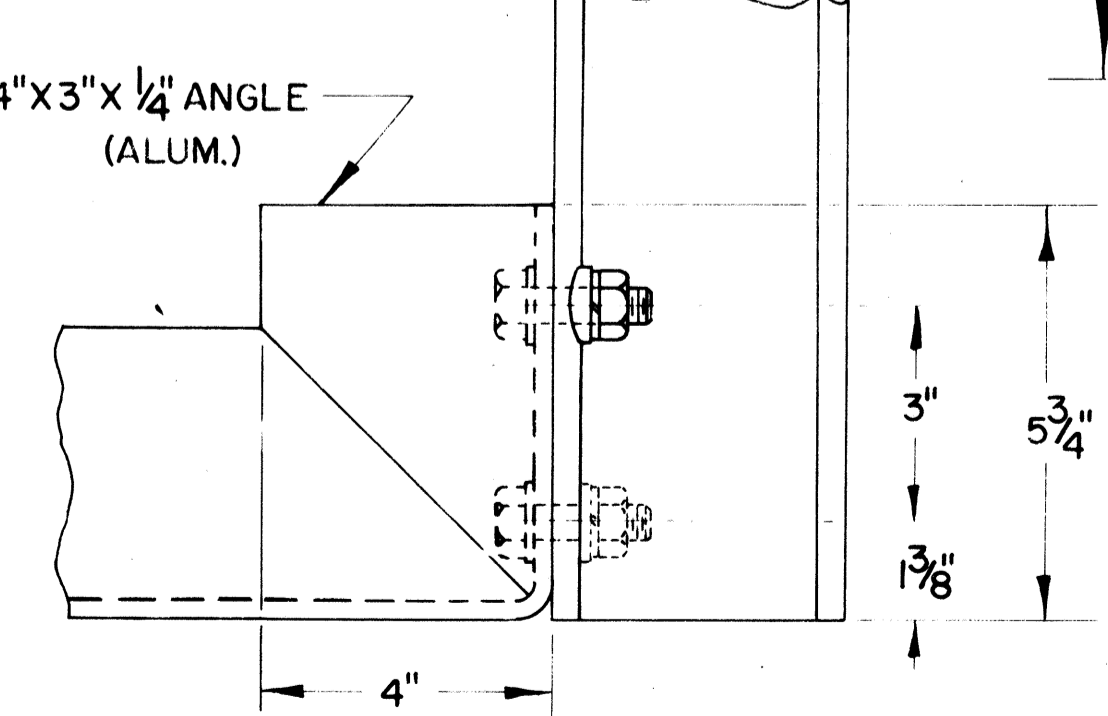
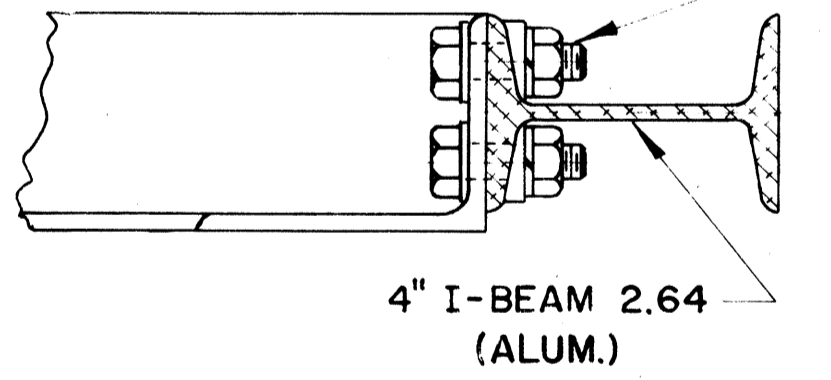


TABLE I.

"L" SIGN LENGTH	"M" EDGE DISTANCE	NUMBER OF FIXTURES	"M" EDGE DISTANCE				NO. BALLAST	Sn=Nominal Fixture Length, 72" & 96" respectively. Sa=Actual Fixture Length, for mounting purposes, 75 3/8" and 99 3/8" respectively. (Slight variation for different manufacturers.)
			A	B	LT.	RT.		
6'-0"	7'-0"	1	6"	6"	6"	6"	1	M=Distance from edge of sign to center of notch, min. 6". When the length of the sign minus 1'-0" is less than the sum of the actual fixture lengths, an offset "K" is used. For additional details see detail A and table III.
8'-0"	9'-0"	1	10 3/8"	10 1/4"	16 3/8"	16 1/4"	1	
10'-0"	11'-0"	1	10 3/8"	10 1/4"	16 3/8"	16 1/4"	1	
12'-0"	13'-0"	2	6"	6"	6"	6"	1	
14'-0"	15'-0"	2	8 5/8"	8 5/8"	14 5/8"	14 5/8"	1	
16'-0"	17'-0"	1	8 5/8"	8 5/8"	14 5/8"	14 5/8"	1	
18'-0"	19'-0"	2	8 5/8"	8 5/8"	14 5/8"	14 5/8"	1	
20'-0"	21'-0"	3	7"	6 7/8"	13	12 7/8"	2	
22'-0"	23'-0"	2	7"	6 7/8"	13	12 7/8"	2	
24'-0"	25'-0"	1	7"	6 7/8"	13	12 7/8"	2	
26'-0"	27'-0"	3	7"	6 7/8"	13	12 7/8"	2	

TABLE II.

MAX. BRACKET SPACING FOR EXTERNALLY ILLUMINATED SIGNS

ACTUAL SIGN HEIGHT "Ha"	SUPPORT TYPES			
	9.12, 11.08, 13.2, 7.2	9.24, 10.48, 12.24, 14.5, 15.8, 7.2 to 7.6	DOUBLE TUBE	
	SINGLE TUBE	C/C 36"-42" C/C 48"-54" C/C 60"-72"		
to 5'-0"	6'-4" with X 8'-4" with Y	8'-4" with X	8'-4" with X	8'-4" with X
5'-6" to 8'-0"	6'-4" with Y	4'-2" with X 6'-4" with Y	6'-4" with X 8'-4" with Y	8'-4" with X
8'-6" to 10'-0"	3'-2" with X 4'-2" with Y	6'-4" with Y	6'-4" with Y	8'-4" with Y
10'-6" to 12'-0"		4'-2" with Y	6'-4" with Y	6'-4" with Y
12'-6" to 14'-0"		3'-2" with Y	3'-2" with Y	4'-2" with Y

Ha= ACTUAL SIGN HEIGHT
He= EFFECTIVE SIGN HEIGHT
BRACKET SIZE: Xs=3 1/2" x 2 1/4" x 5/16" - L @ 6.1 LB. STEEL } 9.12, 10.48, 11.08,
Ys=4" x 3 1/4" x 1/4" - Z @ 8.2 LB. STEEL } 12.24, 14.5 & 15.8
Xa= 3" x 2 1/16" x 1/4" - Z @ 2.33 LB. ALUM. } 7.2 Thru 7.6
Ya= 4" x 2 1/32" x 3/16" - I @ 2.64 LB. ALUM.

WHEN MAX. ALLOWABLE SPACING IS LESS THAN ACTUAL FIXTURE LENGTHS, Sa, ADDITIONAL STANDARD BRACKETS MUST BE FURNISHED, EQUAL IN HEIGHT TO "Ha".

SUPPORTS 7.2 THROUGH 7.6 SHALL HAVE AN ALUMINUM FIXTURE ARM, 4"x3"x1/4" ANGLE. SEE DETAIL B. BOLTS AND ACCESSORIES SHALL BE STAINLESS STEEL.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

STRUCTURAL DETAILS FOR EXTERNALLY ILLUMINATED SIGNS

APPROVED *Jack C. Taylor*
ENGINEER OF TRAFFIC

DATE
10-16-63
5-6-64
10-29-64

EI-1

FABRICATION - ALL STRUCTURAL COMPONENTS SHOWN ON THIS SHEET SHALL CONFORM TO SUPPLEMENT SPECIFICATIONS I-129.
MATERIALS - THE MATERIALS USED IN THE COMPONENTS SHOWN ON THIS SHEET SHALL BE IN CONFORMANCE WITH THE MATERIALS USED IN THE SIGN SUPPORT.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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MEDINA COUNTY
MED. - 271 - 0-00

SIGN LIGHTING NOTES

SIGN ILLUMINATION

SIGN ILLUMINATION SHALL BE BY ATTACHED FLUORESCENT FIXTURES AS SHOWN ON ILLUMINATED SIGN DETAIL SHEETS.

LAMPS

LAMPS SHALL BE TYPE F72 OR F96-T12/CW/HO AS MANUFACTURED BY WESTINGHOUSE, GENERAL ELECTRIC OR APPROVED EQUAL FOR SIGNS TO A MAXIMUM HEIGHT OF 6'-6". LAMP TYPE SHALL BE F72 OR F96-T12/CW/SHO AS MANUFACTURED BY WESTINGHOUSE, F72 OR F96-P617/CW AS MANUFACTURED BY GENERAL ELECTRIC OR APPROVED EQUAL FOR SIGNS THAT ARE 7'-0" OR GREATER IN HEIGHT.

LAMP FIXTURES

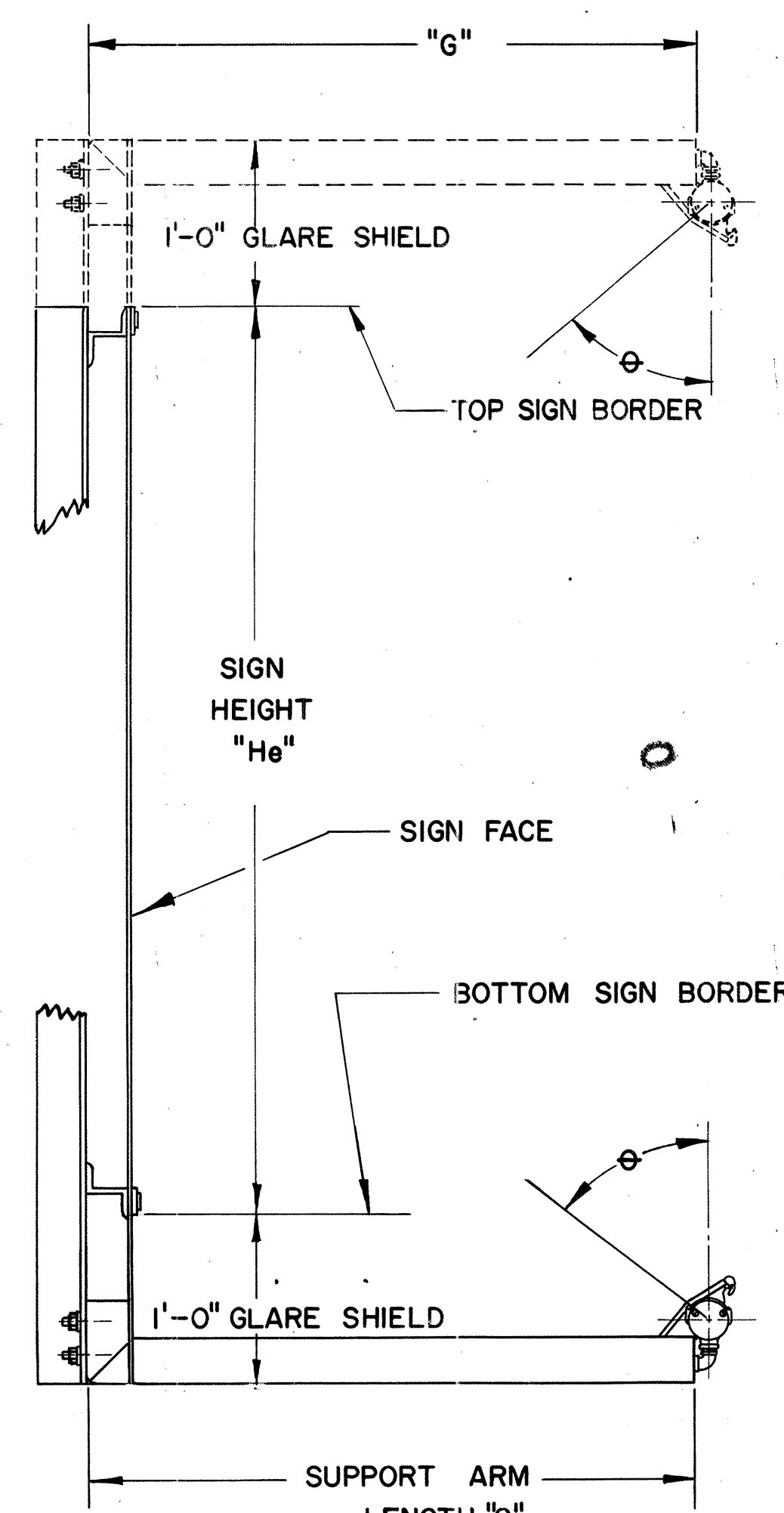
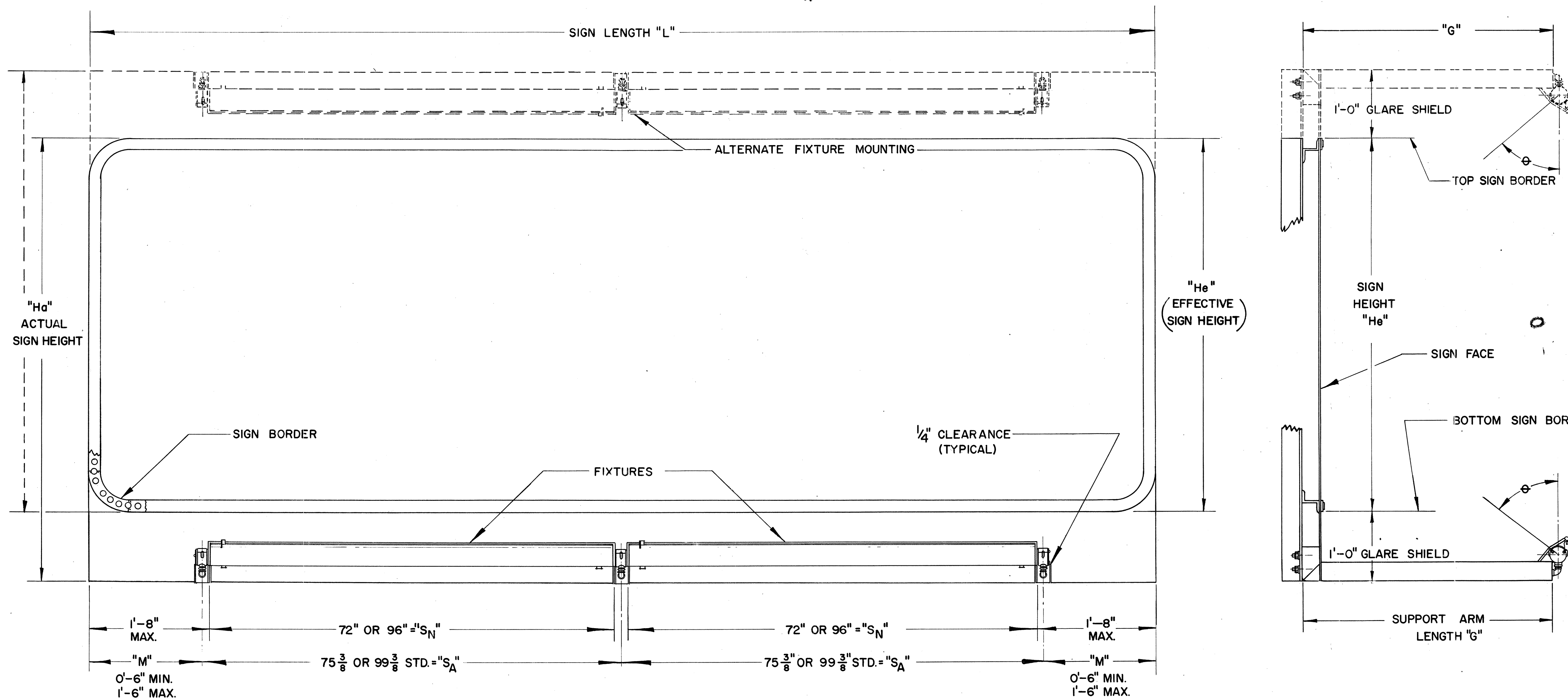
LIGHTING FIXTURES SHALL BE CONSTRUCTED OF CORROSION RESISTANT MATERIALS OR WITH HIGH QUALITY CORROSION RESISTANT FINISH. ALL FIXTURES SHALL BE SPECIFICALLY DESIGNED FOR OUTDOOR SIGN LIGHTING SERVICE. MAJOR COMPONENTS SHALL INCLUDE WEATHERPROOF CAST ALUMINUM MOUNTING HUBS DESIGNED TO SECURELY LOCK THE FIXTURES AT ANY ANGLE THROUGH 360 DEGREES. INDICATORS IN 10 DEGREE INCREMENTS SHALL BE STAMPED OR CAST INTO THE HUB TO FACILITATE PROPER AIMING OF THE FIXTURE. FINAL ADJUSTMENT OF FIXTURE SHALL BE DONE AT NIGHT UNDER THE PROJECT ENGINEER'S DIRECTION.

THE BODY DESIGN OF THE FIXTURE SHALL PROVIDE AN ASYMMETRIC SPECULAR ALZAK REFLECTOR TO GIVE A HIGH LEVEL OF UNIFORM ILLUMINATION AND SHALL PROVIDE A WIREWAY FROM END TO END. WHEN ADJACENT FIXTURES ARE WIRED TOGETHER THROUGH THE WIREWAY, WIRE BETWEEN FIXTURES SHALL BE ENTIRELY ENCLOSED.

EXTERIOR FINISH OF THE FIXTURE BODY SHALL BE INTERSTATE GREEN COLOR, HEAT RESISTANT BAKED ENAMEL SUCH AS UNIVERSAL PAINT AND VARNISH INC. #3950 OR EQUIVALENT BY MIDWESTERN COLOR WORKS OR APPROVED EQUAL. REFLECTOR, LAMP, AND SOCKETS SHALL BE PROTECTED BY A HINGED DOOR OF CLEAR ACRYLIC PLASTIC WITH ALUMINUM OR STAINLESS STEEL FRAME AND NEOPRENE GASKETING.

BALLASTS

BALLASTS FOR FIXTURES SHALL BE WEATHER-PROOF OUTDOOR TYPE FOR A 120 VOLT 60 CYCLE SYSTEM AND SHALL PROVIDE LAMP STARTING AT AN AMBIENT TEMPERATURE OF -20°F. BALLASTS SHALL BE MOUNTED ON SIGN BRACKET ONLY. WIRING SHALL BE ACCOMPLISHED IN SUCH A MANNER THAT THE SIGN MAY BE REMOVED WITHOUT DISTURBING THE ELECTRICAL WIRING.



EFFECTIVE SIGN HEIGHT "H"	SUPPORT ARM LENGTH "G"	APPROX. AIMING ANGLE ϕ
3'-0" to 5'-0"	2'-9"	25°
5'-0" to 6'-6"	3'-3"	25°
7'-0" to 10'-0"	4'-3"	17°
10'-6" to 13'-0"	5'-9"	23°

"L" SIGN LENGTH	NO. OF FIXTURES		H _e = 3'-0" to 6'-6" LAMP = T12/cw/ho		H _e = 7'-0" to 13'-0" LAMP = T12/cw/sho	
	72	96	BALLAST NO.	WATTAGE PER SIGN	BALLAST NO.	WATTAGE PER SIGN
6'-0" to 7'-0"	1		1 A	190	1 C	250
8'-0" to 9'-0"	1		1 A	190	1 C	250
10'-0" to 11'-0"		1	1 A	190	1 C	250
12'-0" to 13'-0"	2		1 B	250	1 D	425
14'-0" to 15'-0"	2		1 B	250	1 D	425
16'-0" to 17'-0"	1	1	1 B	250	1 D	425
18'-0" to 19'-0"		2	1 B	250	1 D	425
20'-0" to 21'-0"	3		2 A & B	440	2 C & D	675
22'-0" to 23'-0"	2	1	2 A & B	440	2 C & D	675
24'-0" to 25'-0"	1	2	2 A & B	440	2 C & D	675
26'-0" to 27'-0"		3	2 A & B	440	2 C & D	675

BALLASTS

TYPE	MANUFACTURERS		WATTAGE
	G.E.	JEFFERSON	
A	GG 3583	257-151	190
B	GG 3535	257-171	250
C	GG 3585	257-231	250
D	GG 3588	257-181	425

BALLASTS SHALL BE GENERAL ELECTRIC, JEFFERSON AS SPECIFIED ABOVE OR EQUAL.

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

ELECTRICAL DETAILS
FOR EXTERNALLY
ILLUMINATED SIGNS

EI-2

DATE
10-31-63
5-6-64
10-29-64

APPROVED *[Signature]*
ENGINEER OF TRAFFIC

NOTES (Electrical)

GENERAL This contract shall include all labor and materials to provide a complete lighting system, tested and ready for operation. All work shall conform to the Ohio Department of Highways Construction and Material Specifications, January 1, 1965.

GENERAL 625.03 Power will be supplied by the Ohio Edison Co., Main Office, Akron, Ohio.

LIGHTING STANDARDS OR POLES, 625.05 and 713.01.

Pole Size	MECHANICAL PROPERTIES (Anchor Base)											
	GA.	Anchor Bolt Dia.	Anchor Bolt Proj'n. above Found.	Max. Arm Length	Mtgy. Hgt.	Elastic Deflection Rate in. per 100 lb.	At 2/3 Load in LBS.	Yield Strength Total Defl. in Inches	Perm. Set in Inches	At Yield Strength Load in LBS.	Yield Strength Total Defl. in Inches	Perm. Set in Inches
9'-0" x 4.87' x 29'-6"	11	12.5"	3"	15'-0"	32'-6"	2.16"	659	14.73	.50	969	24.0	2.64

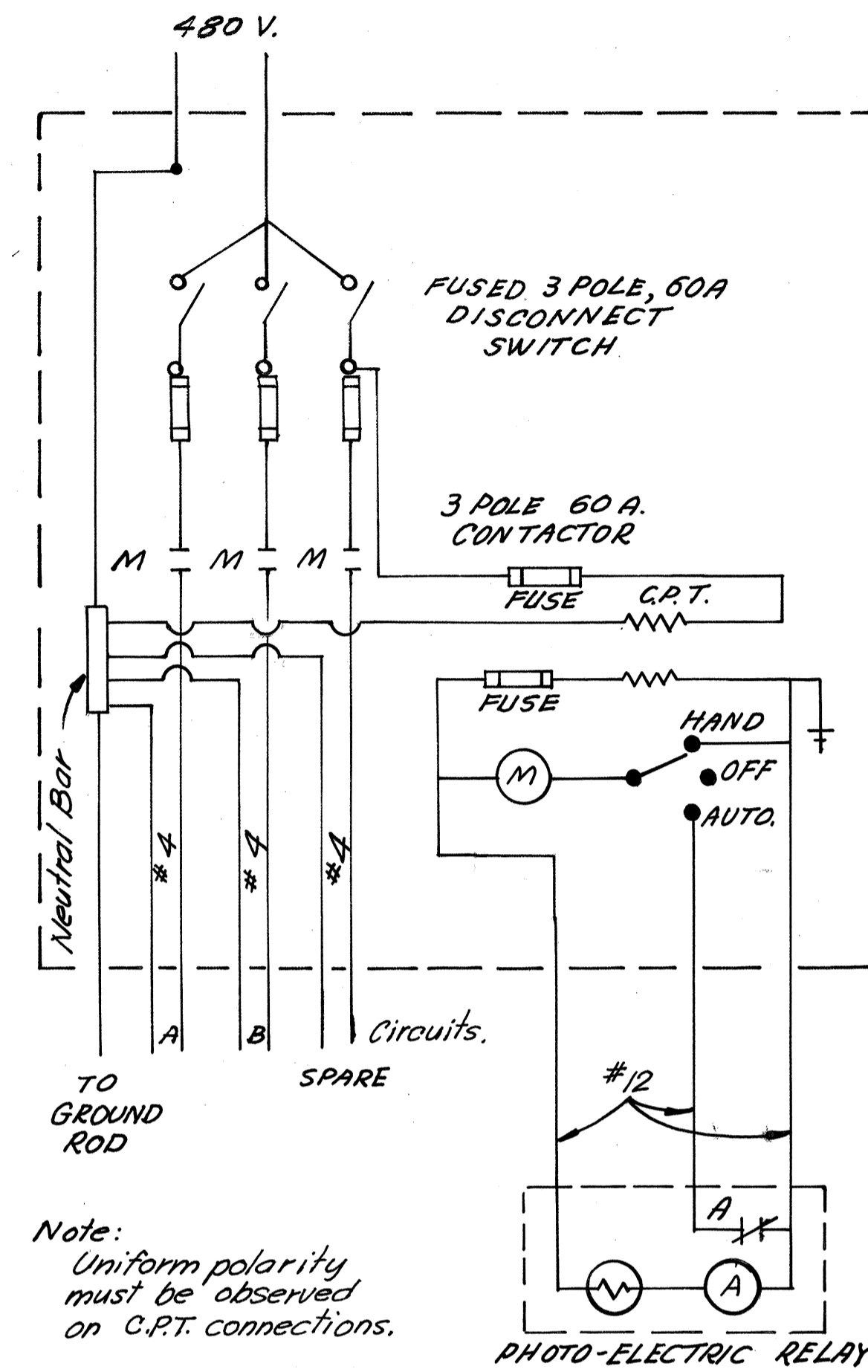
SHAFT TRANSVERSE SECTION CONFIGURATION

1. Bid item, as shown and detailed, is for pole with shaft of circular transverse section.
 2. Alternate bid item is for pole with shaft of transverse section other than circular. Specify configuration bid.
 3. All shafts throughout the project shall have the same transverse sectional configuration.
- Shims for plumbing the pole shall be of galvanized steel. All pole hardware shall be of stainless steel, galvanized steel or everdur.
- ANCHOR BOLTS.** Four high grade steel anchor bolts fitted with hex nuts shall be furnished for each pole. Each anchor bolt shall have an "L" bend at the bottom and be threaded at the top end. Threaded ends and nuts shall be galvanized in accordance with ASTM A-153 with galvanizing extending 1" to 4" beyond threads. Anchor bolts shall conform to ASTM A-107, Grade 1035 Special Quality, and shall comply with the following minimum requirements: Bolt stock shall conform with ASTM specification A-29 and nominal bar size shall equal nominal bolt size.

SIZE YIELD PSI. ULTIMATE PSI.
 3/4" thru 1 1/2" 46,000 67,000

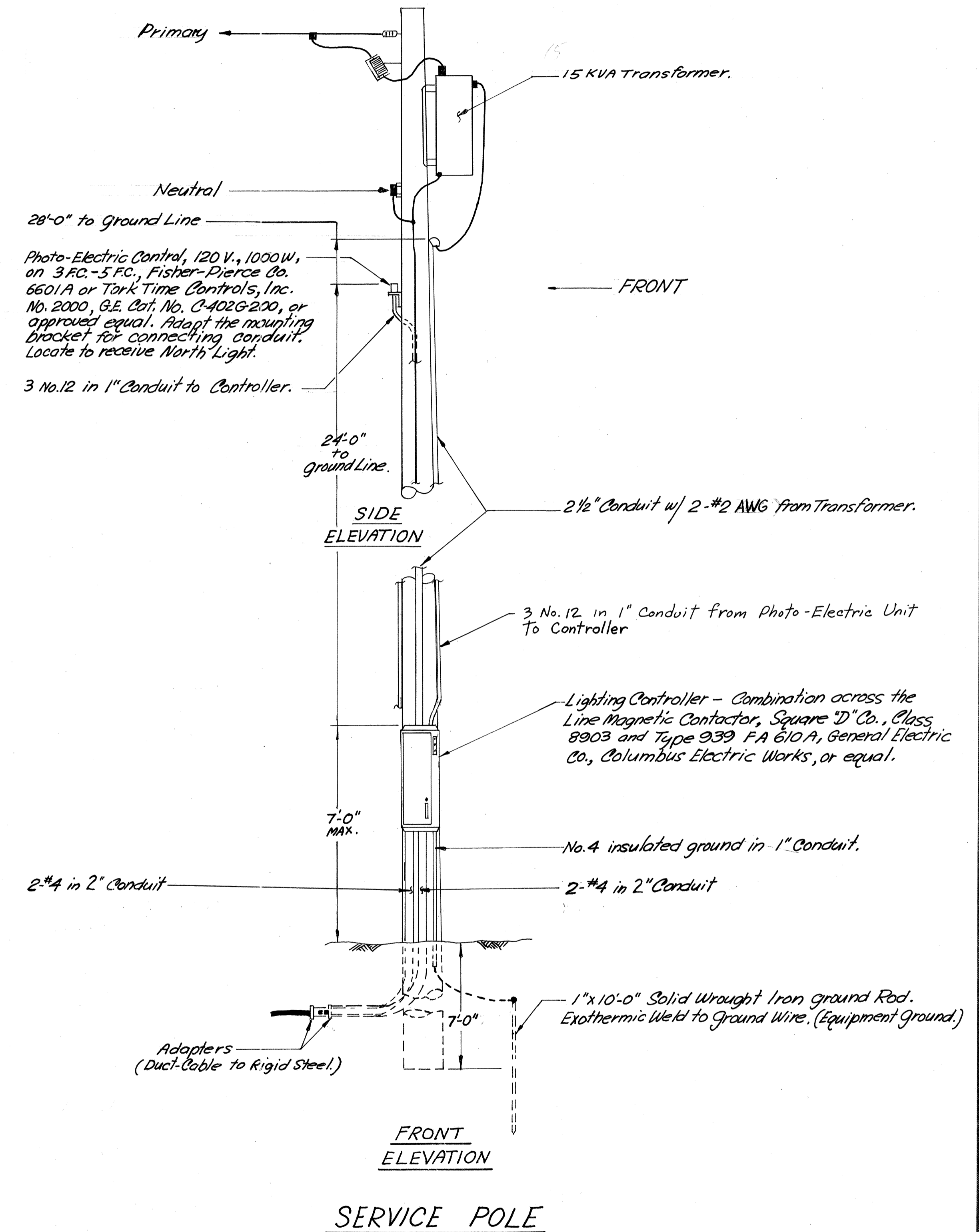
LIGHT STANDARD OR POLE FOUNDATION shall conform with 625.06 and details for ground mount

- Lighting Units.** shall conform to 625.07 and 713.11 and shall be 400 watt size with integral 400 watt ballast having a dual voltage rating of 240/480 volts, and with I.E.S. Type III distribution, Medium-Cutoff. They shall be General Electric type M-400, Westinghouse OV-25, Line Material "Unistyle", or approved equal.
- CABLE** shall conform with 625.14 and shall be 600 volt cable single conductor of size indicated and shall be General Electric Co. cable No. SI 58063 or approved equivalents as manufactured by Rome, Simplex, Phelps Dodge, Kaiser, or other manufacturer's approved product.
- UNIT TYPE DUCT-CABLE** shall conform with 625.15 except that minimum nominal inside diameter of the duct shall not be less than 1 1/2 inches. The material shall conform with 713.03.
- SERVICE POLE** shall be a 35 foot Class III, pent-a-treated full length pole and conform with 625.18 except that cable shall conform with these notes and details. The transformer shall be 15 KVA self-protected with primary rating to the Ohio Edison Co. service voltage, the secondary shall be 480 volts to ground. The transformer and all primary equipment shall be considered as a separate pay item, with 100% State Participation.



SCHEMATIC WIRING DIAGRAM

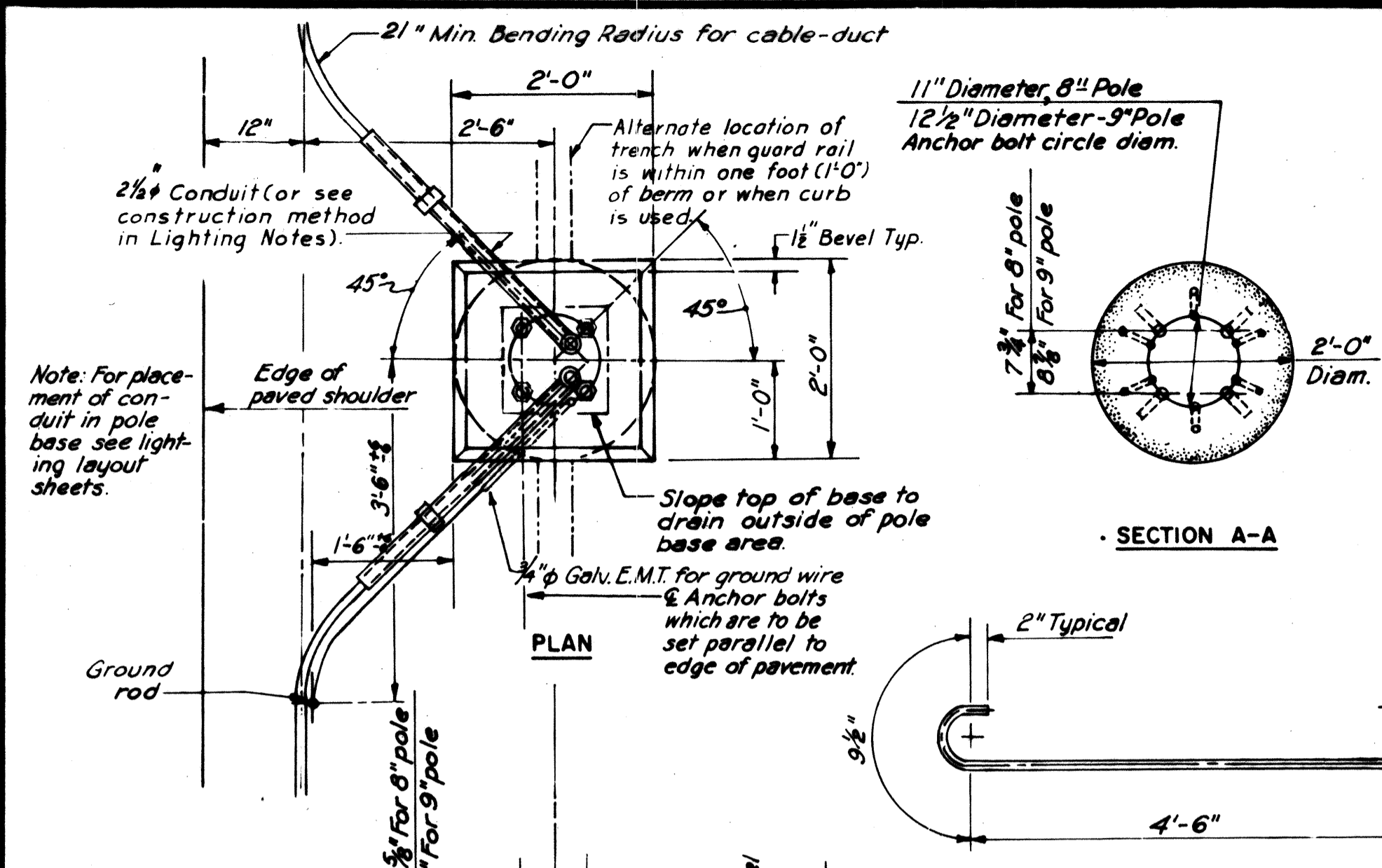
LIGHTING QUANTITIES				
100% STATE	ITEM	UNIT	TOTAL QUANTITY	DESCRIPTION
	625	Ea.	33	Light Pole w/ 15' Bracket Arm (Circular Cross Section).
	625	Ea.	33	Light Pole Foundation.
	625	Ea.	33	Luminaire, 400 Watt, Type III.
	625	Ea.	33	Mercury Vapor Lamp, 400 Watt (H-33-1CD).
	625	Ea.	33	Ground Rod Units
	625	Ea.	10	Pull Box, 18" dia. Fiber.
	625	L.F.	7280	Trench, 24" deep.
	625	Lump		Light Pole Identification.
	625	L.F.	920	Circuit Cable, in conduit, 1/2" #4.
	625	L.F.	3300	Pole and Bracket Cable, 600 V. 1/2" #4.
	625	L.F.	7930	Duct-Cable, 1 1/2" w/ 2 1/2" #4.
	625	Ea.	4	Connector Kit, Type I.
	625	Ea.	33	Connector Kit, Type II.
	625	Ea.	33	Connector Kit, Type III.
	625	Ea.	16	Connector Kit, Type IV.
	625	L.F.	420	3" Conduit 713.04 Type II or III
	625	Lump		Service Pole, complete, less transformer.
	625	Ea.	1	15 KVA Transformer and Primary Accessories.
	625	Ea.	2	glare Shields
	ALTERNATE BID ITEMS			
	625	Ea.	33	Light Pole w/ 15' Bracket Arm. (Other than Circular.)



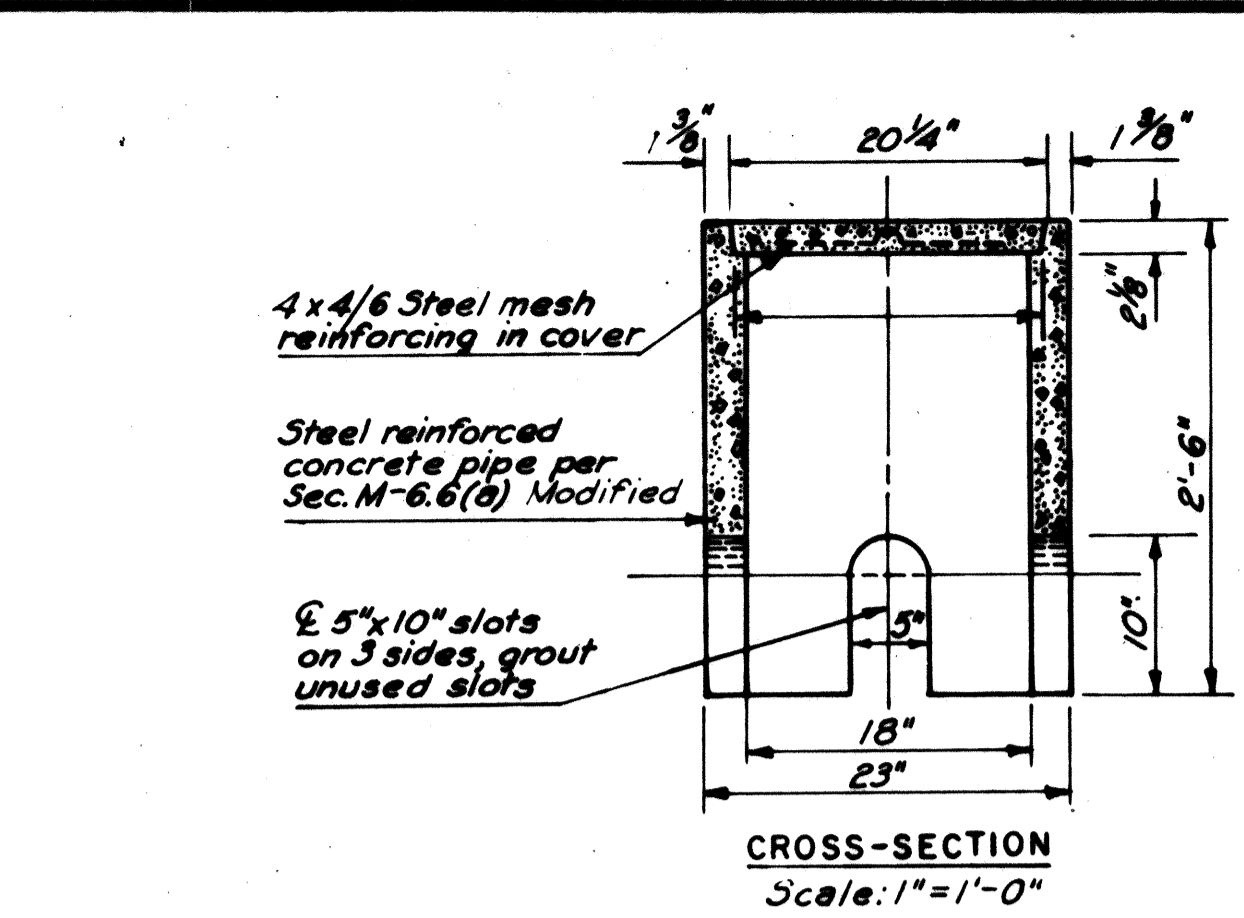
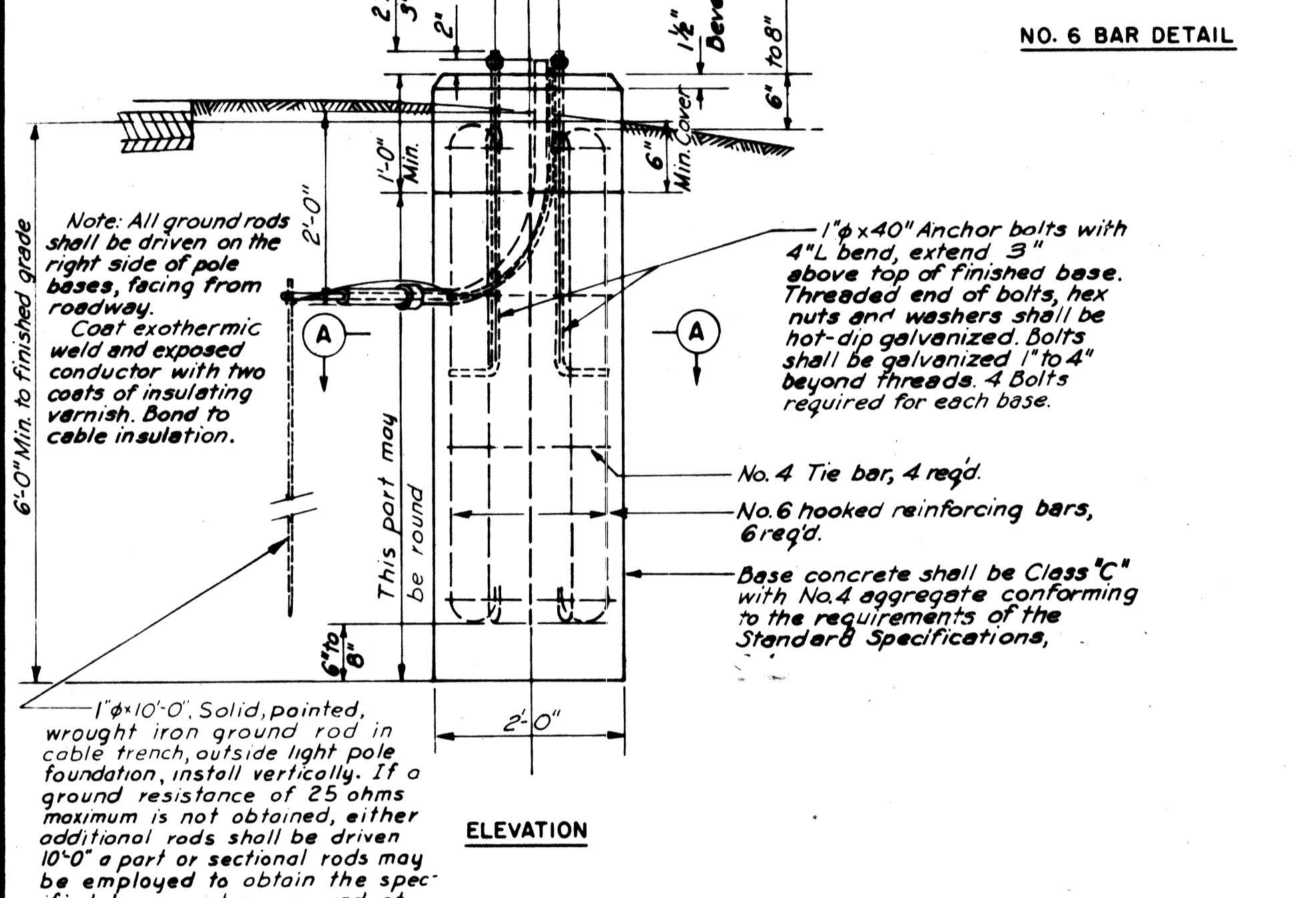
FED. RD. DIVISION	STATE	PROJECT
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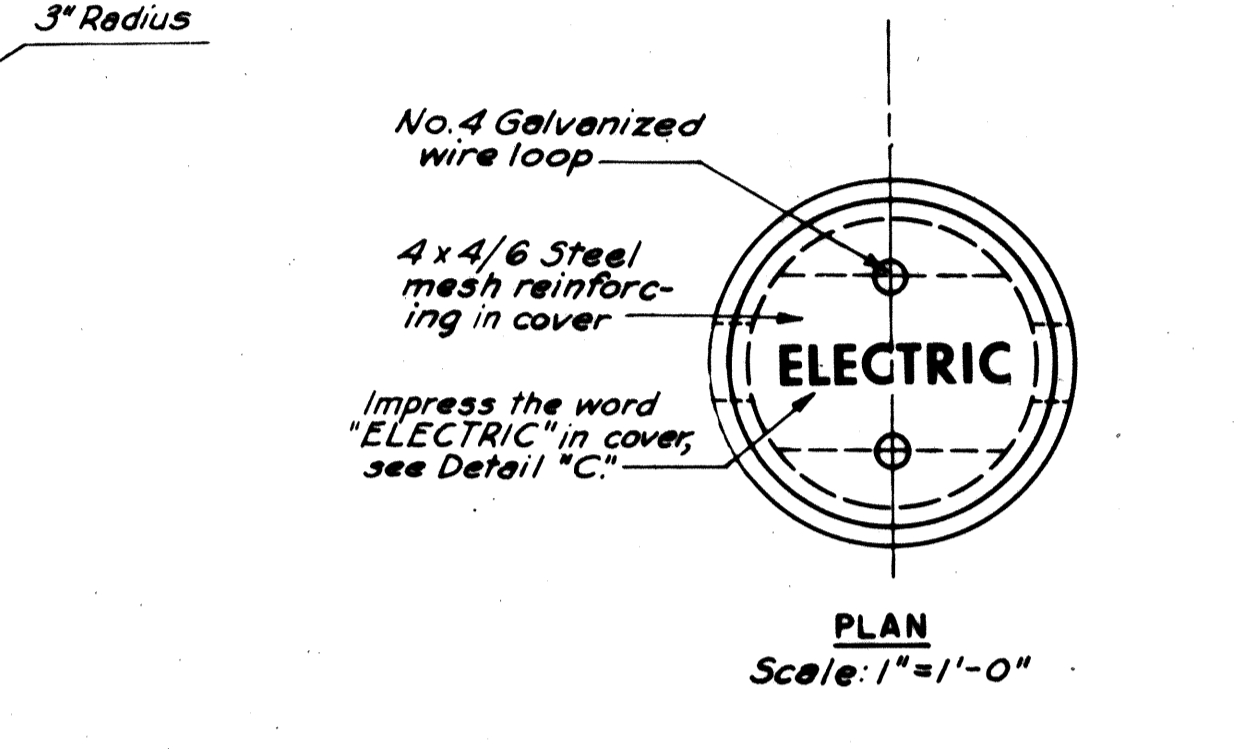
MEDINA COUNTY
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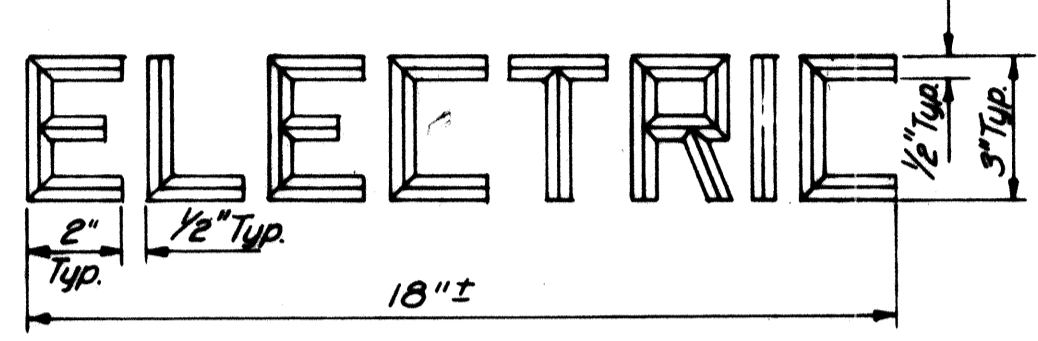
POLE BASE DETAILS
Scale: 3/4"=1'



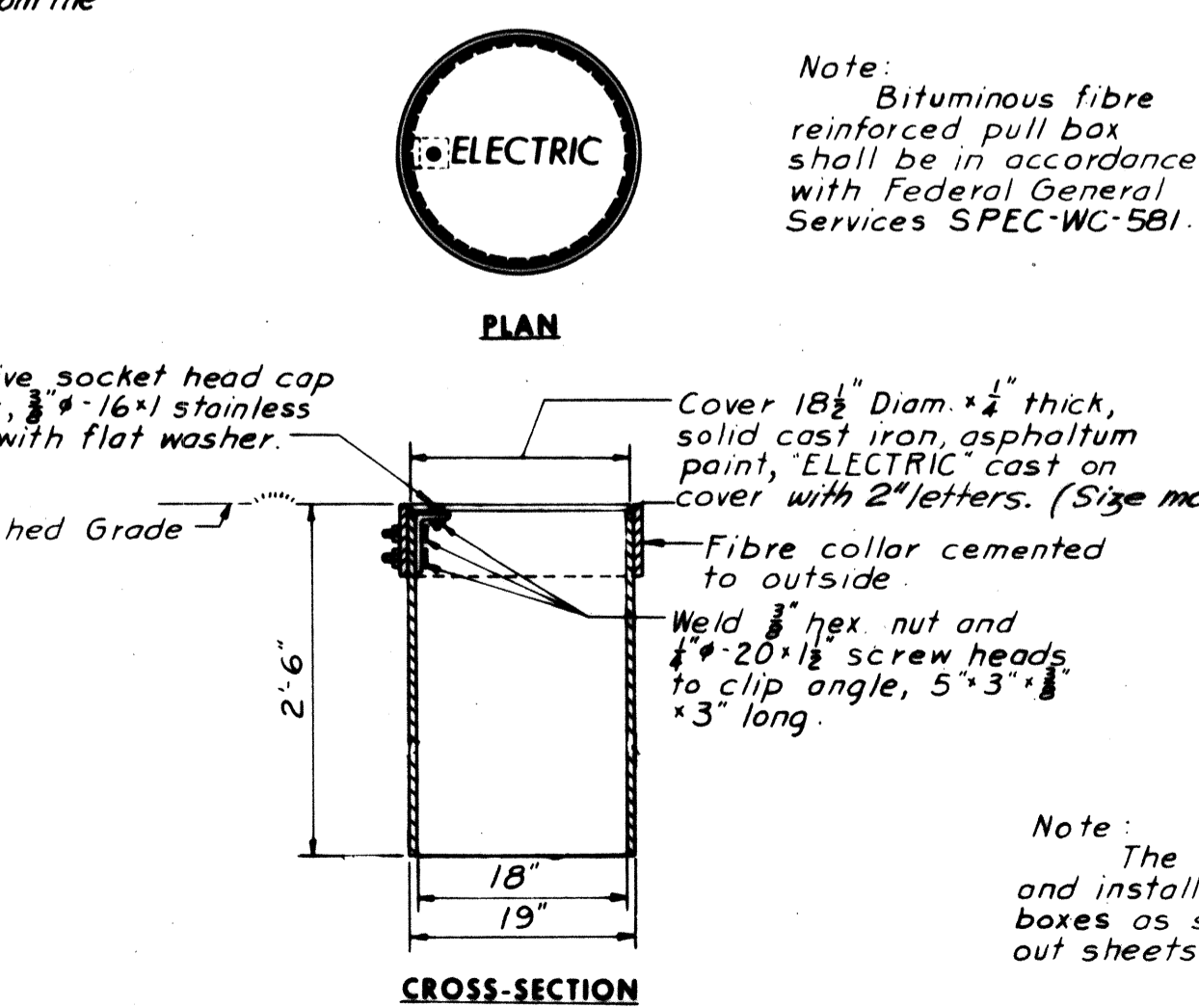
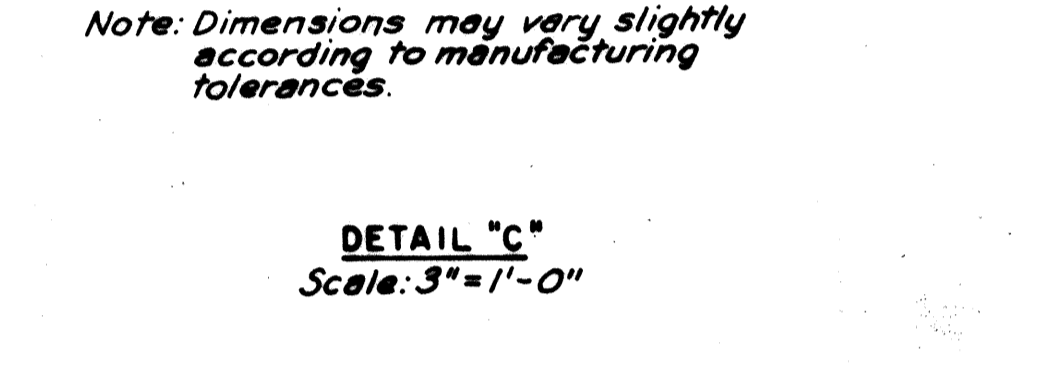
CONCRETE PULL BOX DETAILS
(NOT APPLICABLE)



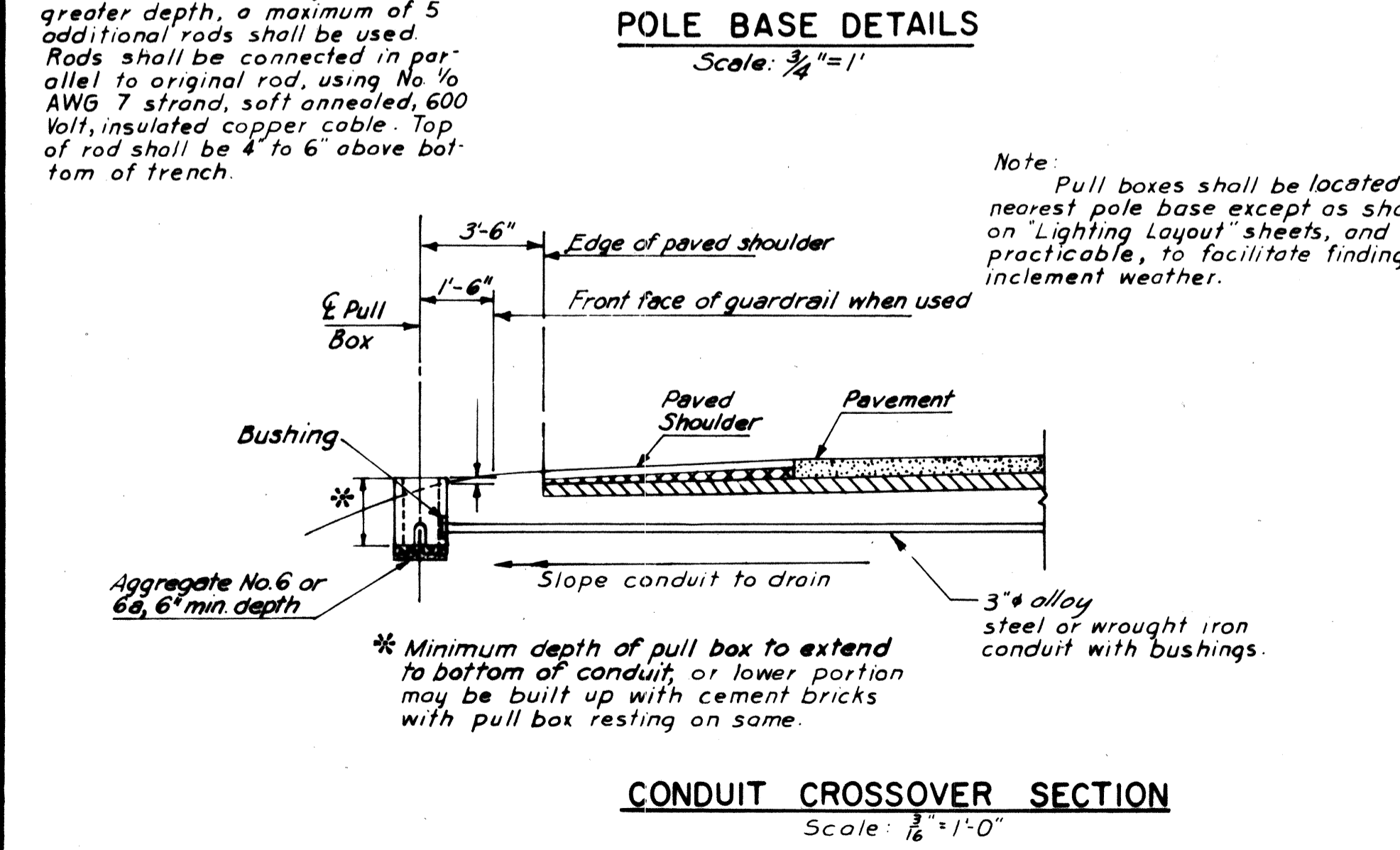
CONDUIT CROSSOVER DETAIL
Scale: 1"=1'-0"



CABLE DUCT TRENCH DETAIL
Scale: 1"=1'-0"

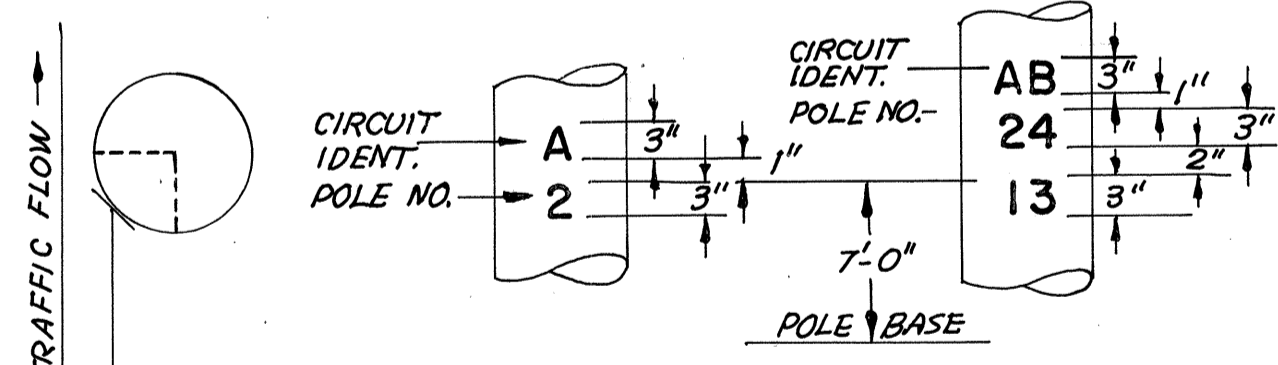


BITUMINOUS FIBRE PULL BOX DETAILS
Scale: 1"=1'-0"



CONDUIT CROSSOVER SECTION
Scale: 1/8"=1'-0"

DECALS SHALL BE ADHESIVE TYPE WITH SILVER WHITE REFLECTIVE CHARACTERS ON A REFLECTIVE GREEN BACKGROUND, WITH CIRCUIT AND POLE NUMBERS AS SCHEDULED ON LIGHTING PLAN SHEETS.



LOCATE IDENTIFICATION DECALS (CIRCUIT and POLE NOS.) IN THIS AREA, and APPROXIMATELY SEVEN FEET (7'-0") ABOVE POLE BASE.

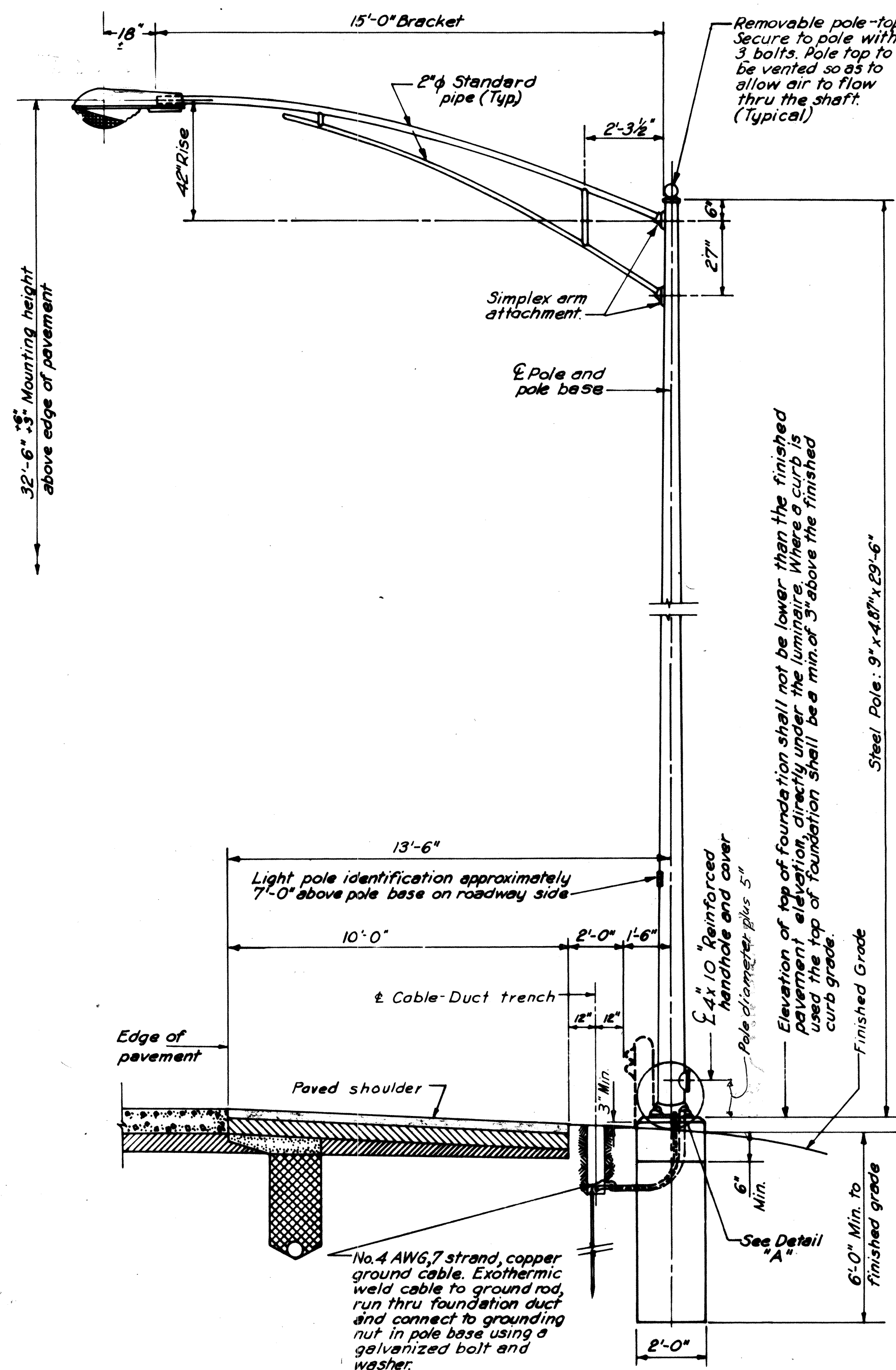
REFLECTIVE LETTERS and NUMBERS (SPECIFICATION MIL-R-13669 A). SERIES "B" TYPE LETTERS and NUMBERS WITH SPACING PER A.A.S.H.O. SPECIFICATIONS

LIGHT POLE CIRCUIT IDENTIFICATION

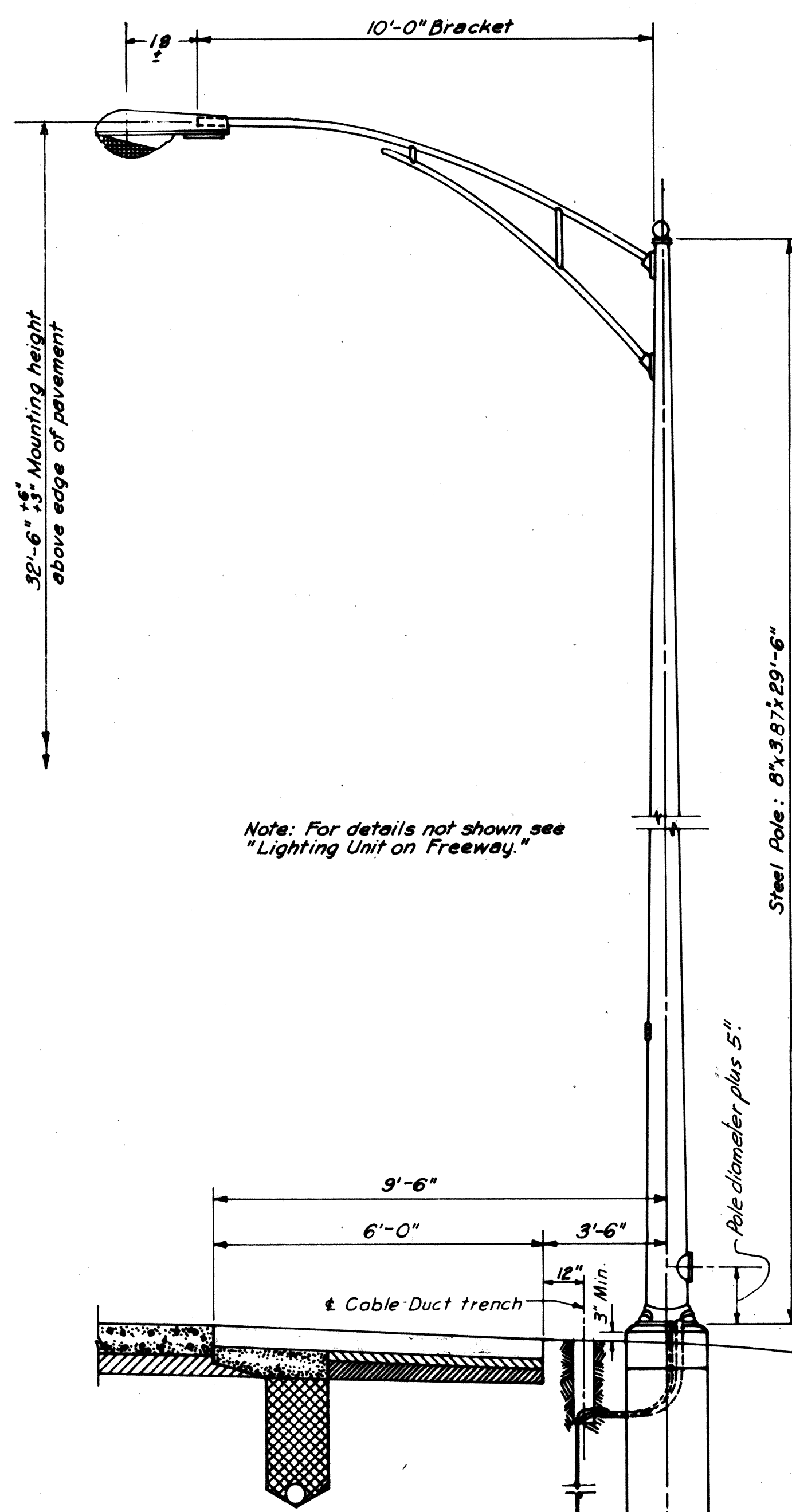
Note: The Contractor shall furnish and install fibre pull boxes as shown on Lighting Layout sheets.

**MEDINA COUNTY
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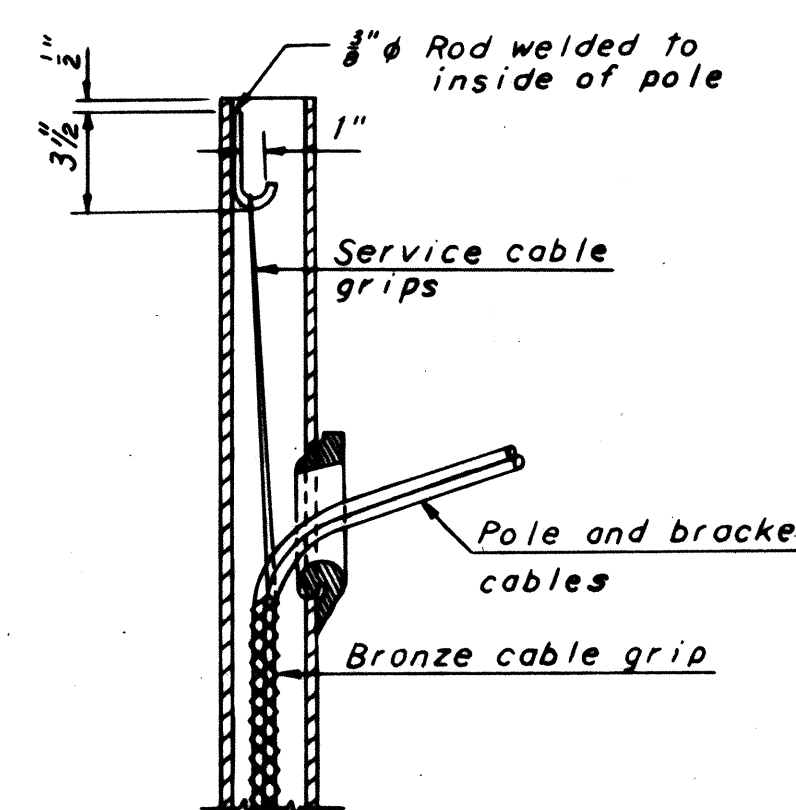
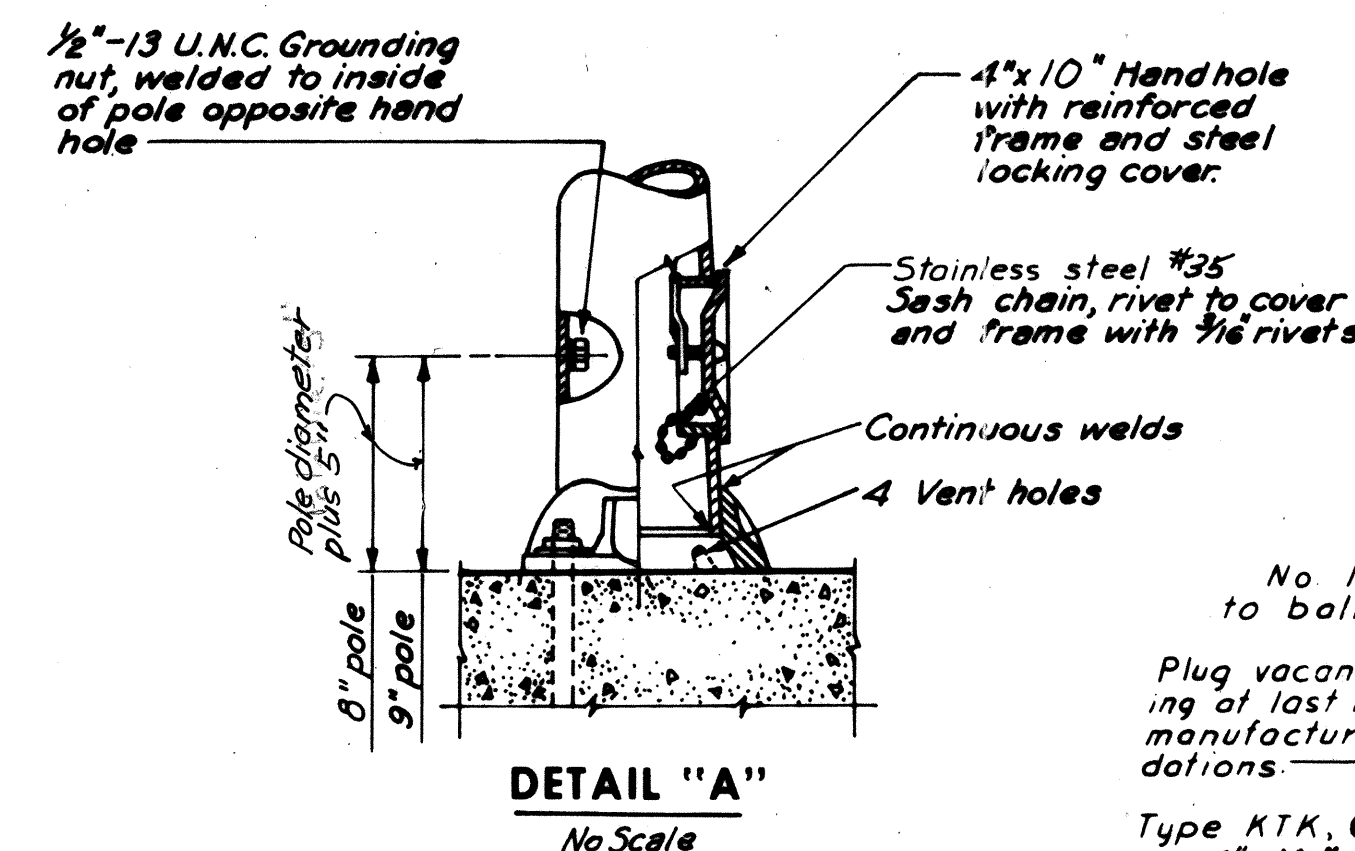
Note: For length of bracket for each pole see "Lighting Plan Sheets."



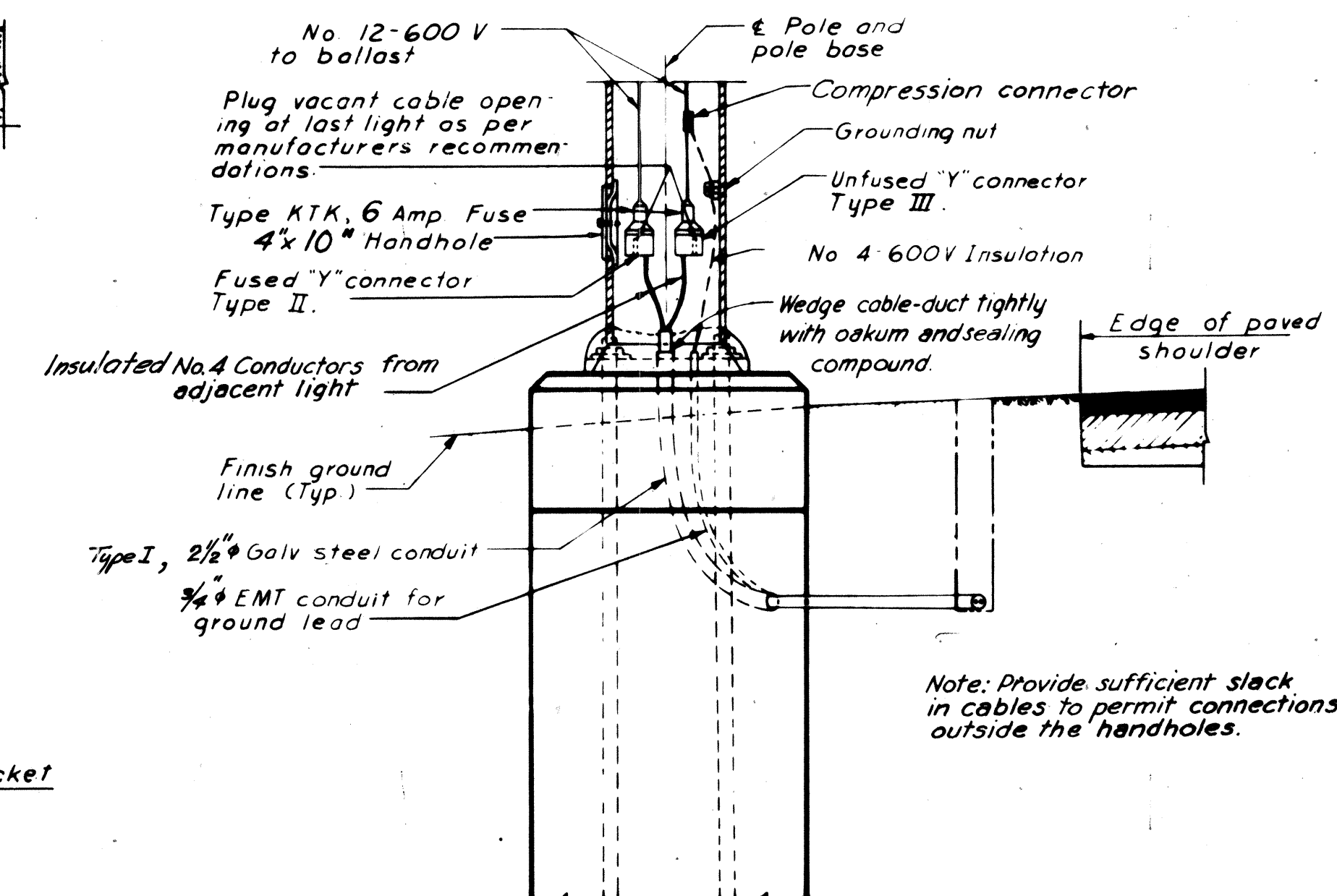
LIGHTING UNIT ON FREEWAY
Scale 3/8" = 1'-0"



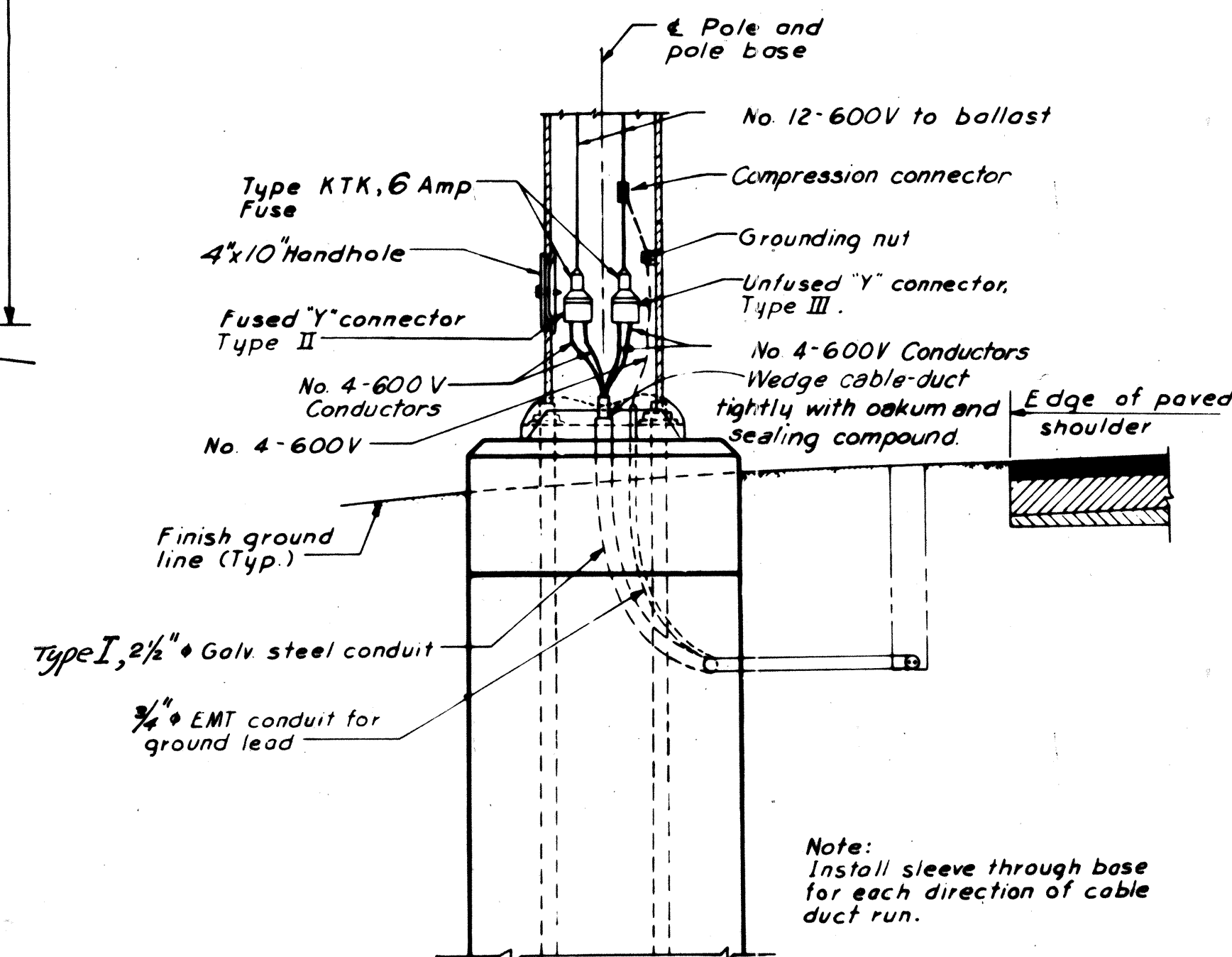
LIGHTING UNIT ON RAMPS
Scale 3/8" = 1'-0"
(Does Not Apply)



"J HOOK" DETAIL
Scale: 1/2" = 1'-0"



CIRCUIT CABLE CONNECTION AT LAST LIGHT POLE
No Scale



CIRCUIT CABLE CONNECTION AT LIGHT POLE
No Scale

MICROFILMED
JUN 5 1986

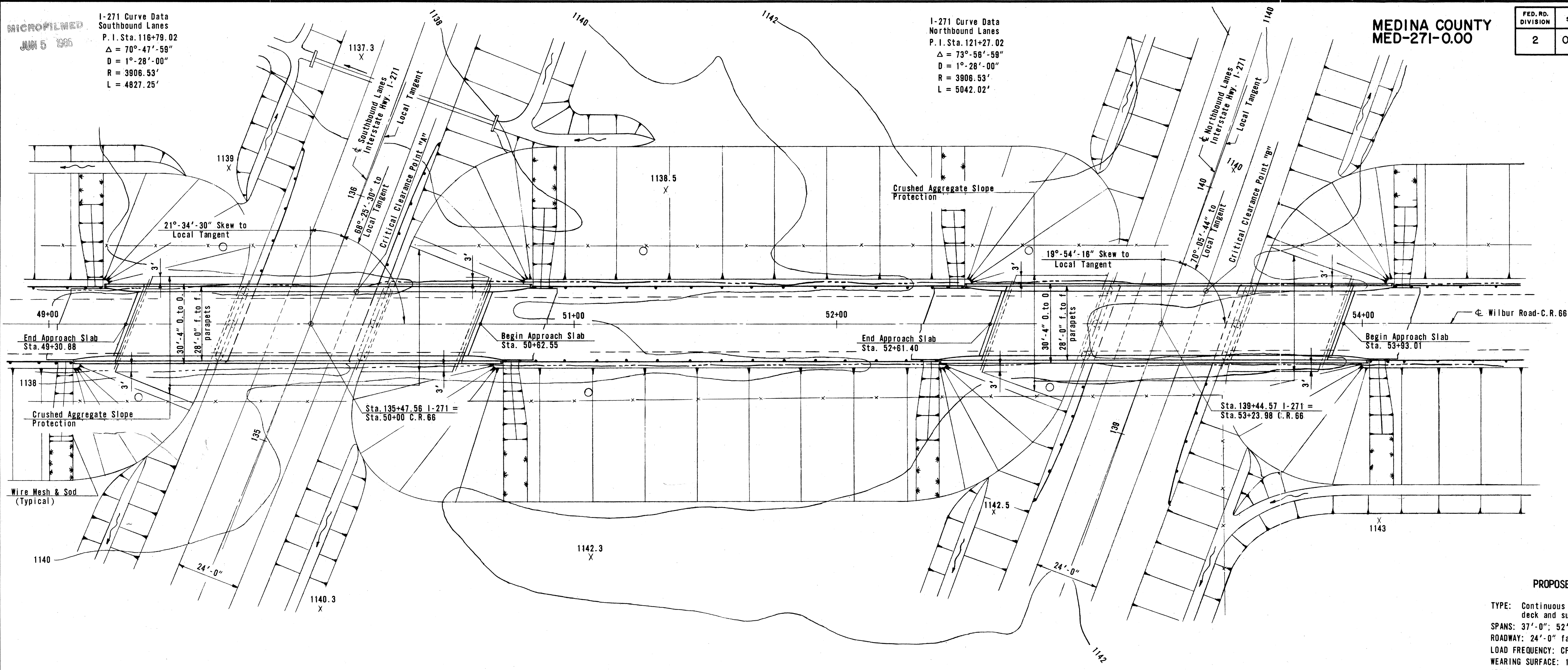
I-271 Curve Data
Southbound Lanes
P. I. Sta. 116+79.02
 $\Delta = 70^\circ-47'-59''$
 $D = 1^\circ-28'-00''$
 $R = 3906.53'$
 $L = 4827.25'$

I-271 Curve Data
Northbound Lanes
P. I. Sta. 121+27.02
 $\Delta = 73^\circ-58'-59''$
 $D = 1^\circ-28'-00''$
 $R = 3906.53'$
 $L = 5042.02'$

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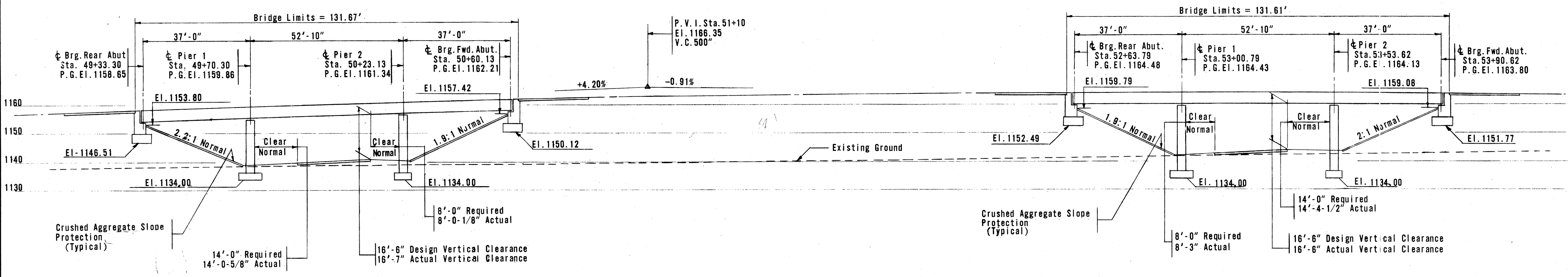
FED. RD. DIVISION	STATE	PROJECT
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PROPOSED STRUCTURES

TYPE: Continuous steel beams with reinforced concrete deck and substructure.
 SPANS: 37'-0"; 52'-10"; 37'-0"
 ROADWAY: 24'-0" face to face of 2'-0" safety curbs.
 LOAD FREQUENCY: CF = 130(57)
 WEARING SURFACE: 1" Monolithic concrete.
 APPROACH SLABS: AS-1-54(25' long).
 ALIGNMENT: Tangent
 SKEW: 19°-54'-16"(L.F.) to local tangent.(Northbound Lanes)
 21°-34'-30"(L.F.) to local tangent.(Southbound Lanes)
 TRAFFIC VOLUME: 355, ADT-1975, C.R. 66
 9970, ADT-1975, I-271
 798, DDHV-1975, I-271



BRIDGE NO. MED-271-0194

BRIDGE NO. MED-271-0202

Flat Drawer #13

J.E. GREINER CO.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

SITE PLAN
BRIDGE NOS. MED-271-0194 & 0202
INTERSTATE HIGHWAY #271 UNDER
MEDINA COUNTY ROAD NO. 66
STA. 135+47.56
STA. 139+44.57

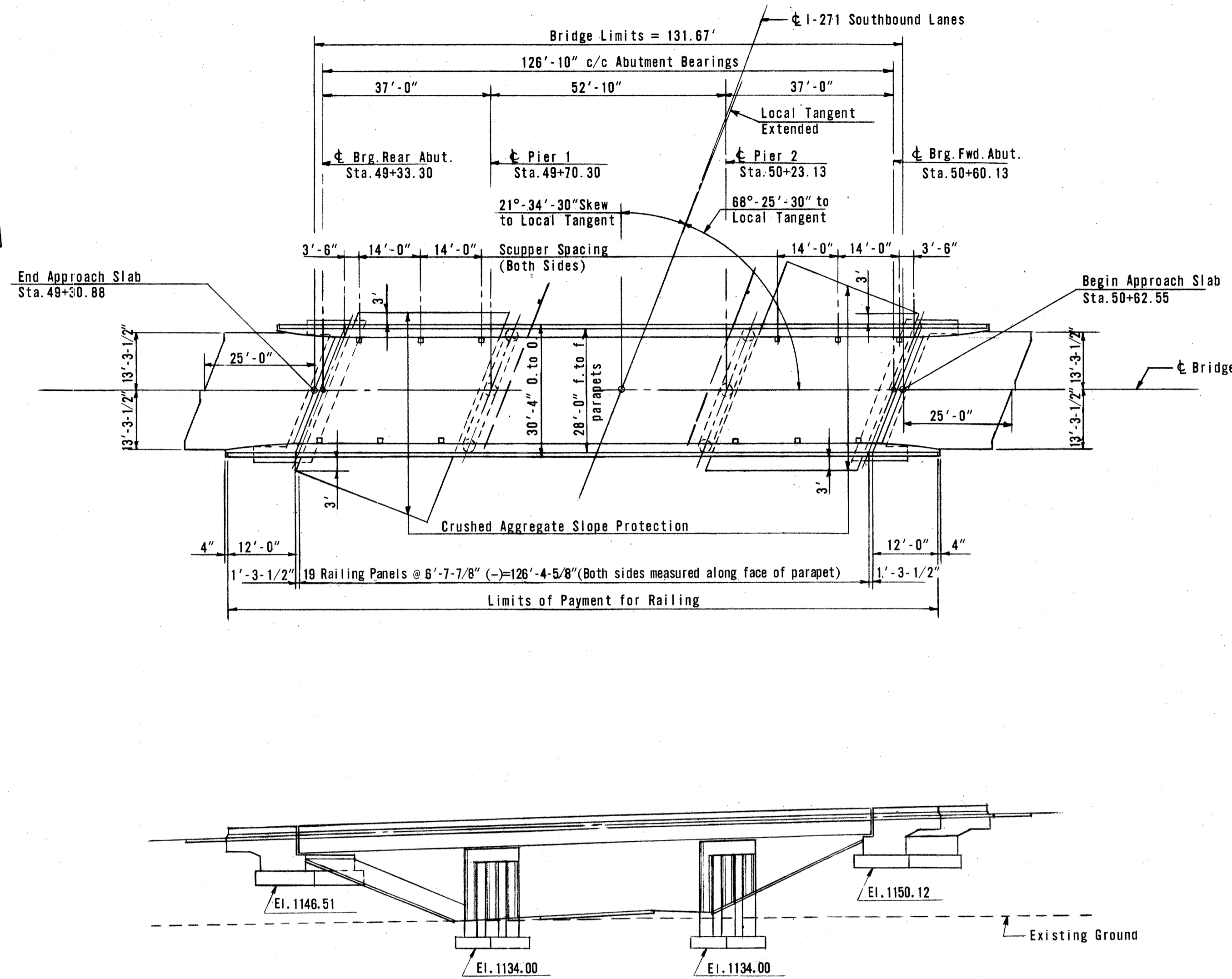
PRESENT TOPOGRAPHY	PROPOSED WORK			
SURVEYED	DESIGNED	DRAWN	CHECKED	REVIEWED
HENRY	SHERMAN	WALTER	SHERMAN	MUDD

MICROFILMED
JUN 5 1986

MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	1-271-6(13)221

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GENERAL NOTES

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with current revisions thereof.
REFERENCE should be made to:
Standard Drawing FSB-1-62, revised 1-15-63, and AS-1-54, revised 7-5-62.
" " SD-1-63, Sheets 1 thru 4, dated 11-12-63.
" " BR-1-65, Type 1, Sheet 1, dated 2-1-65.
" " SD-2-64, dated 11-25-64
Supplemental Specifications:
808 dated 7-14-65
811 dated 3-29-65

EXCAVATION QUANTITY includes the removal of fill material between the surface of the proposed embankment and the bottom of the abutment.

ESTIMATED QUANTITIES

Item	Total	Unit	DESCRIPTION	Super.	Abuts.	Piers	General
503	352	Cu. Yds.	Unclassified excavation		202	150	
511	120	Cu. Yds.	Class "C" concrete, superstructure	120			
511	52	Cu. Yds.	Class "C" concrete, piers above footings			52	
511	92	Cu. Yds.	Class "E" concrete, abutments above footings		92		
511	82	Cu. Yds.	Class "E" concrete, footings		39	43	
509	54,230	Lbs.	Reinforcing Steel	30,922	9,136	14,172	
513	77,200	Lbs.	Structural Steel	77,200			
514	77,200	Lbs.	Field painting of structural steel	77,200			
517	305.94	Lin. Ft.	Railing, Type 1	257.94	48		
503		Lump	Cofferdams, cribs and sheeting				Lump Sum
518	61	Lin. Ft.	6" Helical perforated CMP, 707.06 including specials		61		
518	72	Lin. Ft.	6" Helical CMP, 707.06 non-perforated		72		
518	12	Each	Scuppers, including supports	12			
518	25	Cu. Yds.	Porous backfill		25		
808	120	Each	Water-reducing, set-retarding admixture	120			
601	394	Sq. Yds.	Crushed aggregate slope protection				394

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	SHP.	BENDING DIAGRAMS	MARK	NO.	LENGTH	WEIGHT	SHP.	
ABUTMENTS					PIERS						
A501	18	29'-6"	554	S		P501	72	7'-9"	582	B	
A502	18	31'-6"	591	B		P502	8	25'-10"	216	S	
A503	32	5'-0"	167	S		P503	12	7'-5"	93	B	
A504	26	9'-11"	269	B		P801	4	25'-10"	276	S	
A505	24	8'-6"	200	S		P802	4	28'-2"	301	S	
A506	4	11'-6"	46	S		P803	2	28'-6"	152	S	
A507	4	11'-10"	49	S		P804	4	9'-1"	97	B	
A508	20	8'-6"	177	S		P901	4	32'-7"	443	B	
A509	20	5'-6"	115	S		P902	4	34'-11"	475	B	
A510	4	10'-0"	42	S		P903	2	35'-3"	240	B	
A511	4	6'-6"	27	S		P1001	24	19'-1"	1971	S	
A512	12	4'-0"	50	S		P1002	24	20'-10"	2152	S	
A513	8	13'-10"	115	S		F601	66	7'-8"	760	S	
A514	8	10'-4"	86	S		F602	66	5'-8"	562	S	
A515	8	5'-6"	46	B		F701	18	32'-8"	1202	S	
A516	12	5'-6"	64	B	F801	13	32'-8"	1134	S		
A517	72	4'-2"	313	S	F802	10	13'-0"	347	S		
A518	4	9'-3"	39	B	F1001	48	6'-7"	1360	B		
A519	4	8'-7"	36	B	SUPERSTRUCTURE						
A520	16	7'-11"	132	B	S501	392	2'-3"	920	B		
A521	36	3'-4"	116	B	S502	196	3'-6"	715	B		
A522	28	5'-3"	153	B	S503	196	5'-7"	1141	B		
A523	8	3'-3"	27	B	S601	141	29'-8"	6283	S		
A524	16	11'-10"	197	S	S602	208	33'-6"	10466	S		
A525	36	5'-7"	210	B	S603	36	22'-0"	1190	S		
A526	8	10'-6"	88	S	S604	2	31'-7"	95	S		
A527	8	6'-0"	50	S	S605	6	7'-5"	67	S		
A528	48	3'-1"	154	B	S606	Ser. 27'-4" to 2 to Ea.	8'-5"	540	S		
A529	6	30'-6"	191	S	S701	141	29'-8"	8550	S		
A601	42	13'-1"	825	B	S702	2	31'-7"	129	S		
A602	42	8'-4"	526	B	S703	6	7'-5"	91	S		
A603	42	5'-11"	373	S	S704	Ser. 27'-4" to 2 to Ea.	8'-5"	735	S		
A604	16	33'-3"	809	S	REPLACEMENT BARS						
A605	62	13'-1"	1218	B	RE401	1	5'-3"	-	B		
A606	72	10'-0"	1081	B	RE501	1	5'-7"	-	S		
PARAPET RAILING					RE601	2	5'-11"	-	S		
R501	16	11'-9"	* S	RE701	1	6'-3"	-	S			
R502	16	4'-0"	* S	RE801	1	6'-6"	-	S			
R503	12	4'-2"	* B	RE901	1	6'-10"	-	S			
R504	8	5'-4"	* B	RE1001	1	7'-2"	-	S			
R505	72	13'-0"	* S	SPIRAL BARS							
* Parapet railing bars are included with S-14 for payment.					MARK	NO.	CORE DIA	LENGTH	PITCH	NO. TURNS	WEIGHT
					SP401	3	32"	15'-3"	4-1/2"	44	858
					SP402	3	32"	17'-0"	4-1/2"	48	951

SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "No. of Turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number.
Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 509. 1-1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used indicate the bar size number. For example, A701 is a No. 7 size bar and P1002 is a No. 10 size bar.
Cost of field bending and cutting to be included with Item 509 for payment.

Design Loading - CF130(57)
Concrete Class "C" - basic unit stress 1333 p.s.i.
Concrete Class "E" - basic unit stress 1133 p.s.i.
Structural Steel - ASTM A36 - basic unit stress 20,000 p.s.i.
Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i.
Except spiral reinforcement may be plain, Structural Grade with basic unit stress of 18,000 p.s.i.

J.E. GREINER COMPANY
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

**GENERAL PLAN AND ELEVATION,
NOTES, ESTIMATED QUANTITIES
AND REINFORCING STEEL LIST**
BRIDGE NO. MED-271-0194
I.R.*271 UNDER MEDINA CO. RD. NO. 66
MEDINA CO. STA. 135+47.56

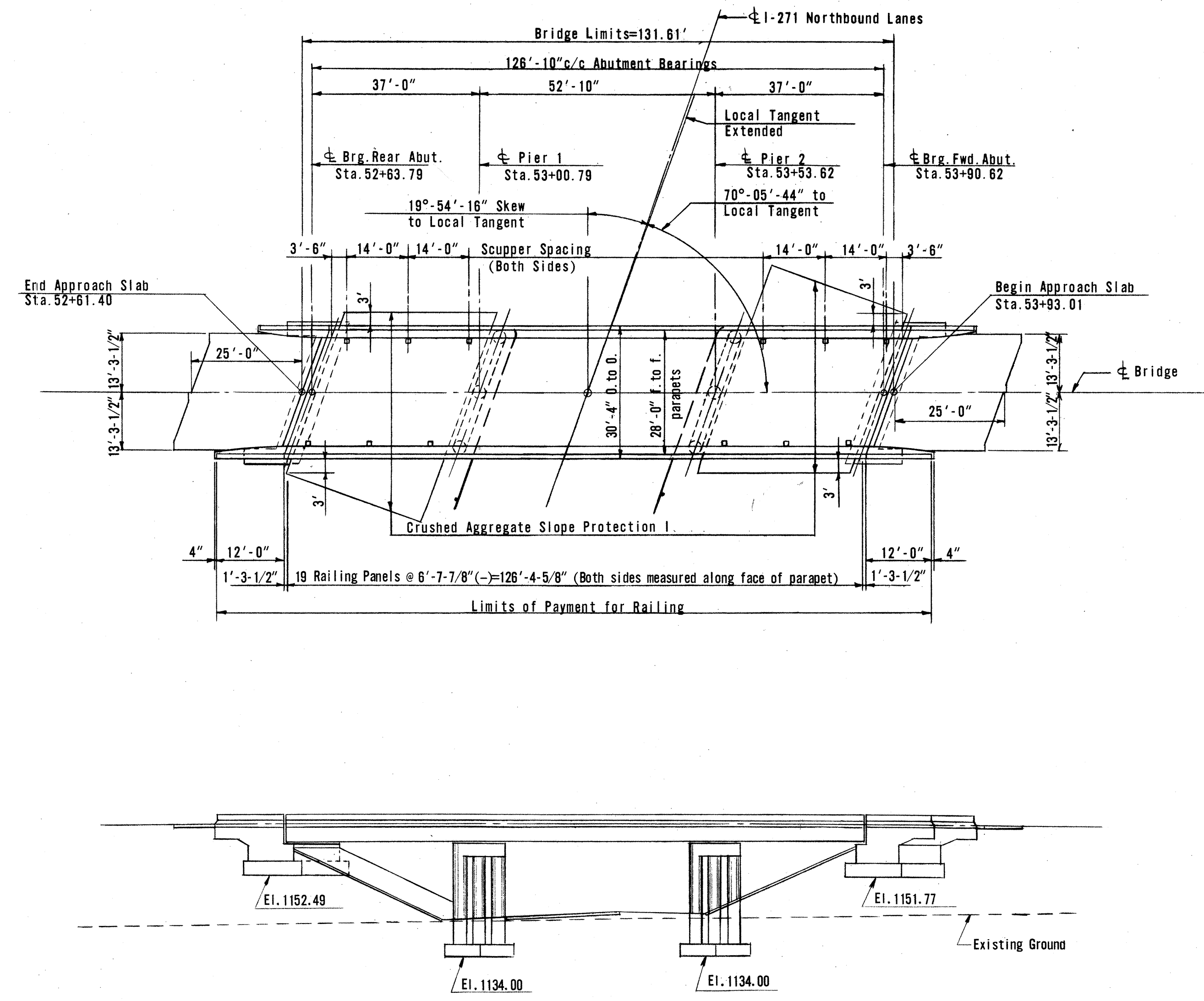
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SHERMAN	WALTER	WALTER	SHERMAN	MUDD	6-11-65	

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JUN 5 1986

MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	1-271-6(13)221

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REINFORCING STEEL LIST														
MARK	NO.	LENGTH	WEIGHT	SHP.	BENDING DIAGRAMS					MARK	NO.	LENGTH	WEIGHT	SHP.
ABUTMENTS					PIERS					SUPERSTRUCTURE				
A501	18	28'-3"	554	S	[Bending Diagrams for Abutments and Piers]					P501	72	7'-9"	587	B
A502	18	31'-9"	591	B						P502	8	25'-8"	213	S
A503	32	5'-0"	167	S						P503	12	7'-5"	93	B
A504	26	9'-11"	269	B						P801	4	25'-6"	272	S
A505	24	8'-0"	200	S						P802	4	27'-10"	297	S
A506	4	11'-0"	46	S						P803	2	28'-2"	150	S
A507	4	11'-10"	49	S						P804	4	9'-1"	97	B
A508	20	8'-6"	177	S						P901	4	32'-3"	438	B
A509	20	5'-6"	115	S						P902	4	34'-7"	470	B
A510	4	10'-0"	42	S						P903	2	34'-11"	237	B
A511	4	6'-6"	27	S						P1001	24	23'-9"	2453	S
A512	12	4'-0"	50	S						P1002	24	23'-8"	2444	S
A513	8	13'-10"	115	S						F601	66	7'-8"	760	S
A514	8	10'-4"	86	S						F602	66	5'-8"	562	S
A515	8	5'-6"	46	B						F701	18	32'-8"	1202	S
A516	12	5'-2"	64	B						F801	13	32'-8"	1134	S
A517	72	4'-2"	313	S						F802	10	13'-0"	347	S
A518	4	9'-3"	39	B						F1001	48	6'-7"	1360	B
A519	4	8'-7"	36	B						REPLACEMENT BARS				
A520	16	7'-11"	132	B						RE401	1	5'-3"	-	B
A521	36	3'-10"	116	B						RE501	1	5'-7"	-	S
A522	28	5'-3"	153	B						RE601	2	5'-11"	-	S
A523	8	3'-3"	27	B						RE701	1	6'-3"	-	S
A524	16	11'-10"	197	S						RE801	1	6'-6"	-	S
A525	36	5'-7"	210	B						RE901	1	6'-10"	-	S
A526	8	10'-6"	88	S						RE1001	1	7'-2"	-	S
A527	8	6'-0"	50	S										
A528	48	3'-1"	154	B										
A529	6	30'-6"	191	S										
A601	42	13'-1"	825	B										
A602	42	8'-4"	526	B										
A603	42	5'-11"	373	S										
A604	16	33'-4"	801	S										
A605	62	13'-1"	1218	B										
A606	72	10'-0"	1081	B										

GENERAL NOTES

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with current revisions thereof.
REFERENCE should be made to:
Standard Drawing FSB-1-62, revised 1-15-63, and AS-1-54, revised 7-5-62.
" SD-1-63, Sheets 1 thru 4, dated 11-12-63.
" BR-1-65, Type 1, Sheet 1, dated 2-1-65.
" SD-2-64, dated 11-25-64.
Supplemental Specifications:
808, dated 7-14-65
811, dated 3-29-65

EXCAVATION QUANTITY includes the removal of fill material between the surface of the proposed embankment and the bottom of the abutment.

ESTIMATED QUANTITIES

Item	Total	Unit	DESCRIPTION	Super.	Abuts.	Piers	General
503	417	Cu. Yds.	Unclassified excavation		201	216	
511	120	Cu. Yds.	Class "C" concrete, superstructure	120			
511	57	Cu. Yds.	Class "C" concrete, piers above footings			57	
511	90	Cu. Yds.	Class "E" concrete, abutments above footings		90		
511	82	Cu. Yds.	Class "E" concrete, footings		39	43	
509	55,365	Lbs.	Reinforcing Steel	30,914	9,128	15,323	
513	77,200	Lbs.	Structural Steel	77,200			
514	77,200	Lbs.	Field painting of structural steel	77,200			
517	305.94	Lin. Ft.	Railing, Type 1	257.94	48		
505		Lump	Cofferdams, cribs and sheeting				Lump Sum
518	60	Lin. Ft.	6" Helical perforated CMP, 707.06 including specials		60		
518	72	Lin. Ft.	6" Helical CMP 707.06 non-perforated		72		
518	12	Each	Scuppers, including supports		12		
518	25	Cu. Yds.	Porous backfill		25		
808	120	Each	Water-reducing, set-retarding admixture	120			
601	379	Sq. Yds.	Crushed aggregate slope protection				379

SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "No. of Turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number.
Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 509 1-1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
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Cost of field bending and cutting to be included with item 509 for payment.

Design Loading - CF130(57)
Concrete Class "C" - basic unit stress 1333 p.s.i.
Concrete Class "E" - basic unit stress 1133 p.s.i.
Structural Steel - ASTM A36 - basic unit stress 20,000 p.s.i.
Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i. Except, spiral reinforcement may be plain, Structural Grade with basic unit stress of 18,000 p.s.i.

J.E. GREINER COMPANY
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

**GENERAL PLAN AND ELEVATION,
NOTES, ESTIMATED QUANTITIES
AND REINFORCING STEEL LIST
BRIDGE NO. MED-271-0202
I.R. 271 UNDER MEDINA CO. RD. NO. 66
MEDINA CO. STA. 139+44.57**

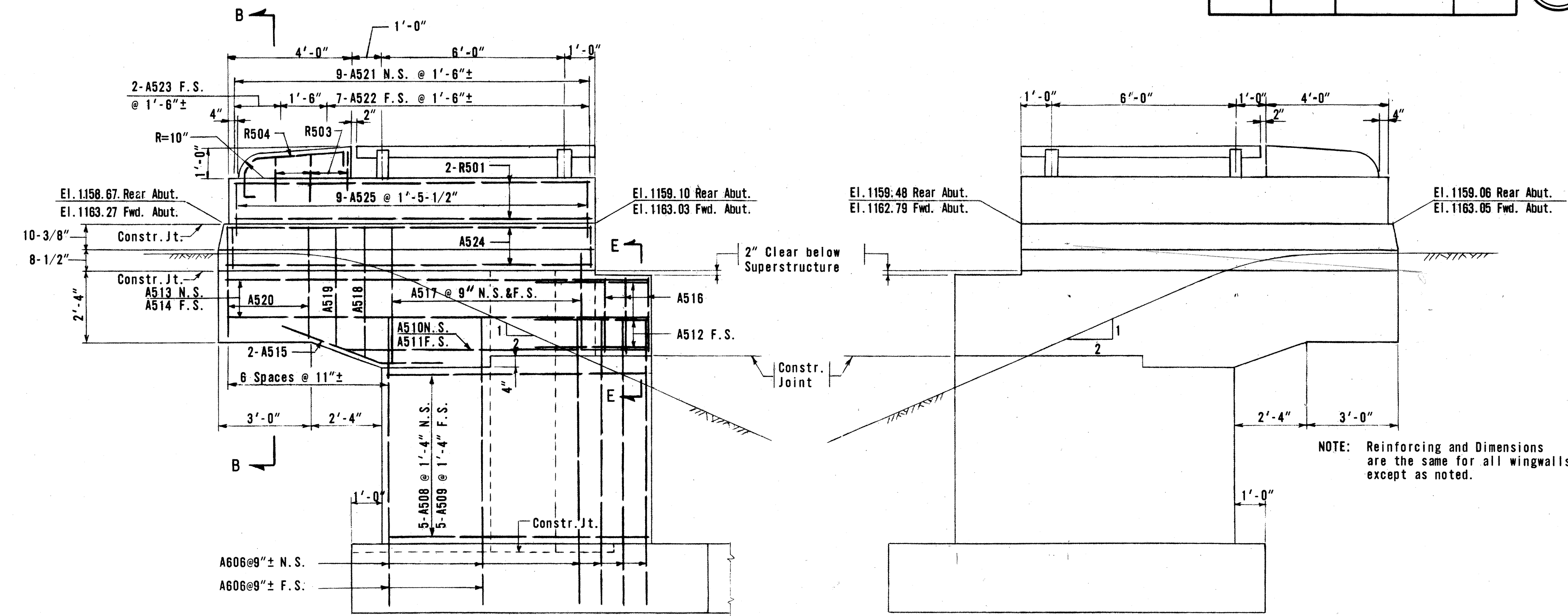
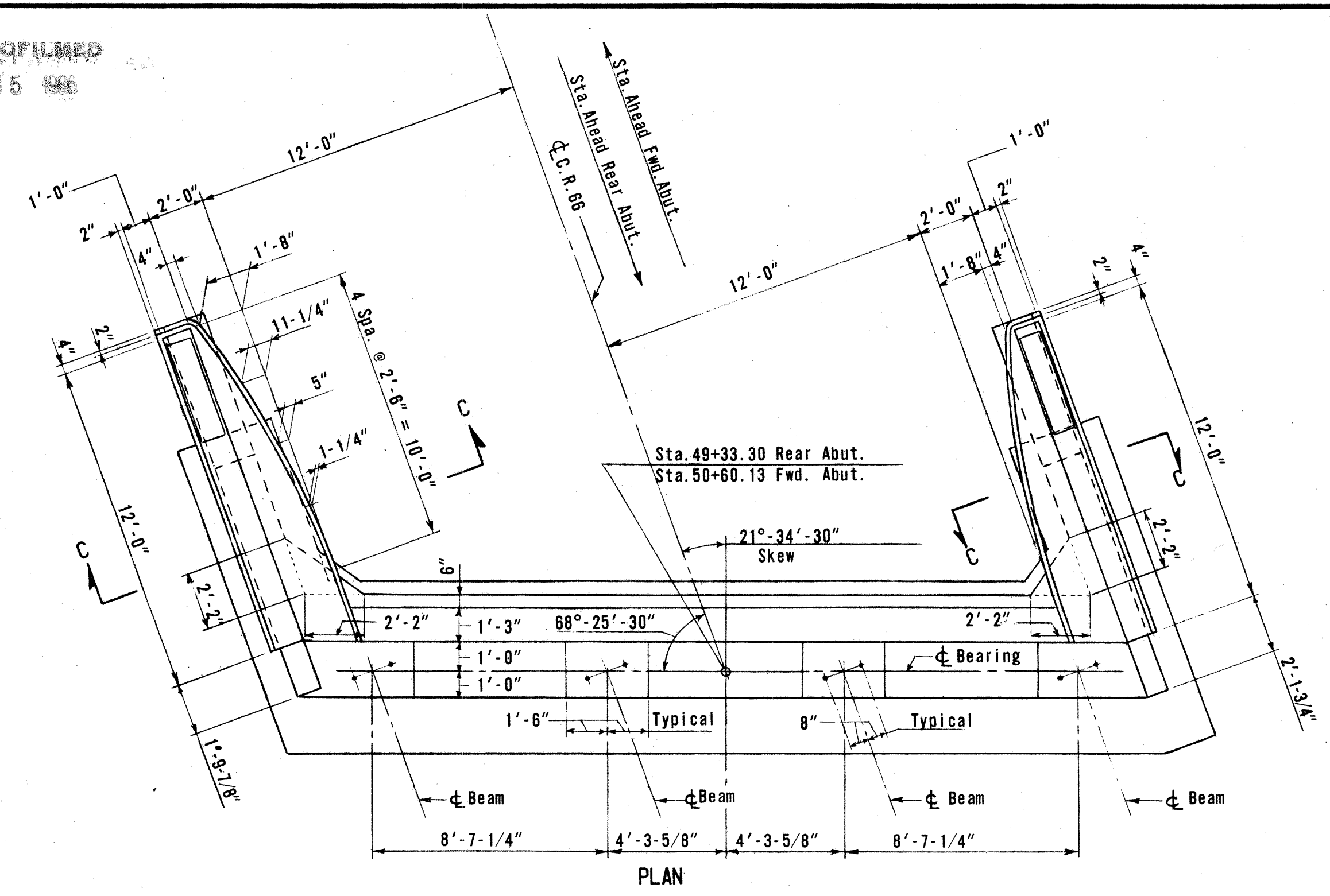
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SHERMAN	WALTER	WALTER	SHERMAN	MUDD	6-11-65	

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JUN 5 1966

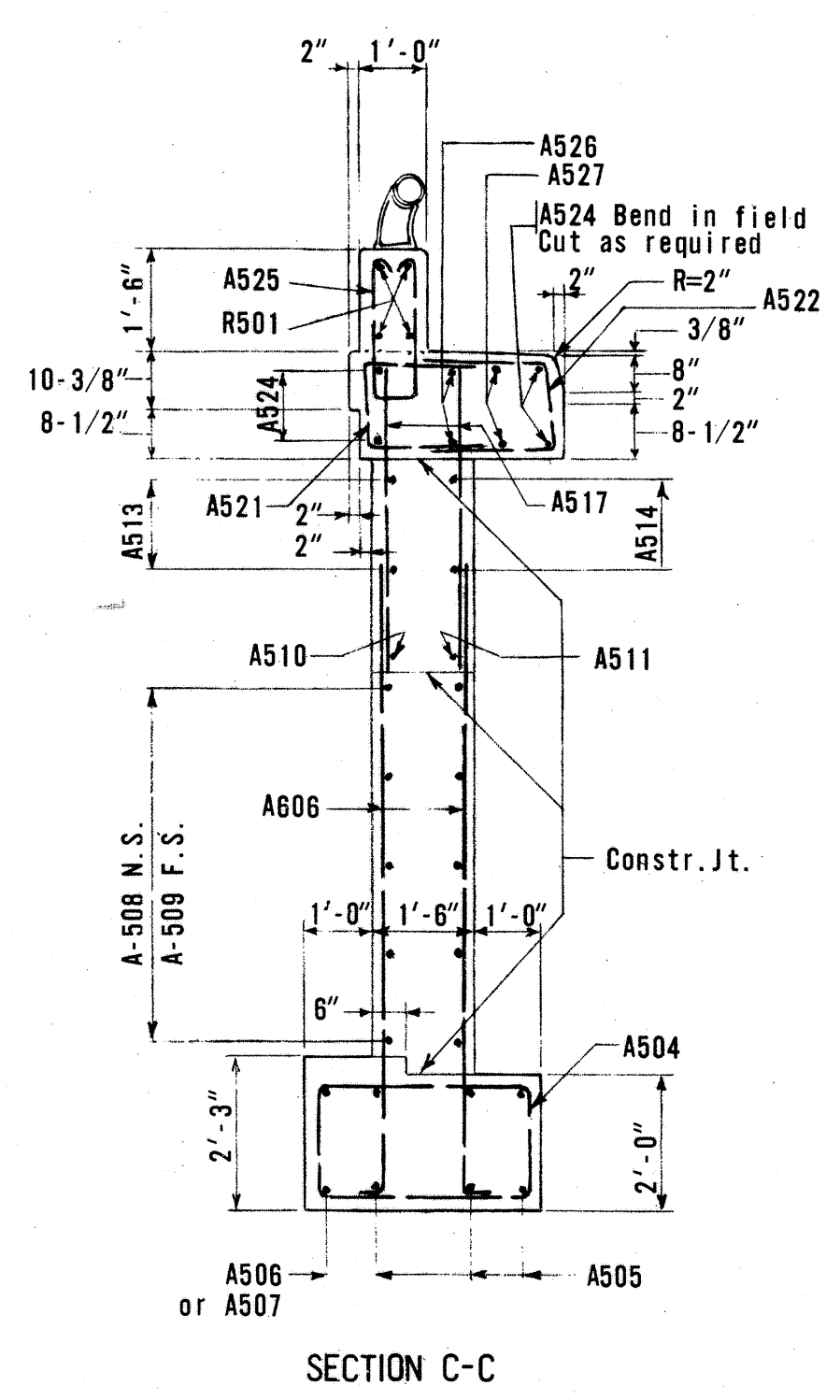
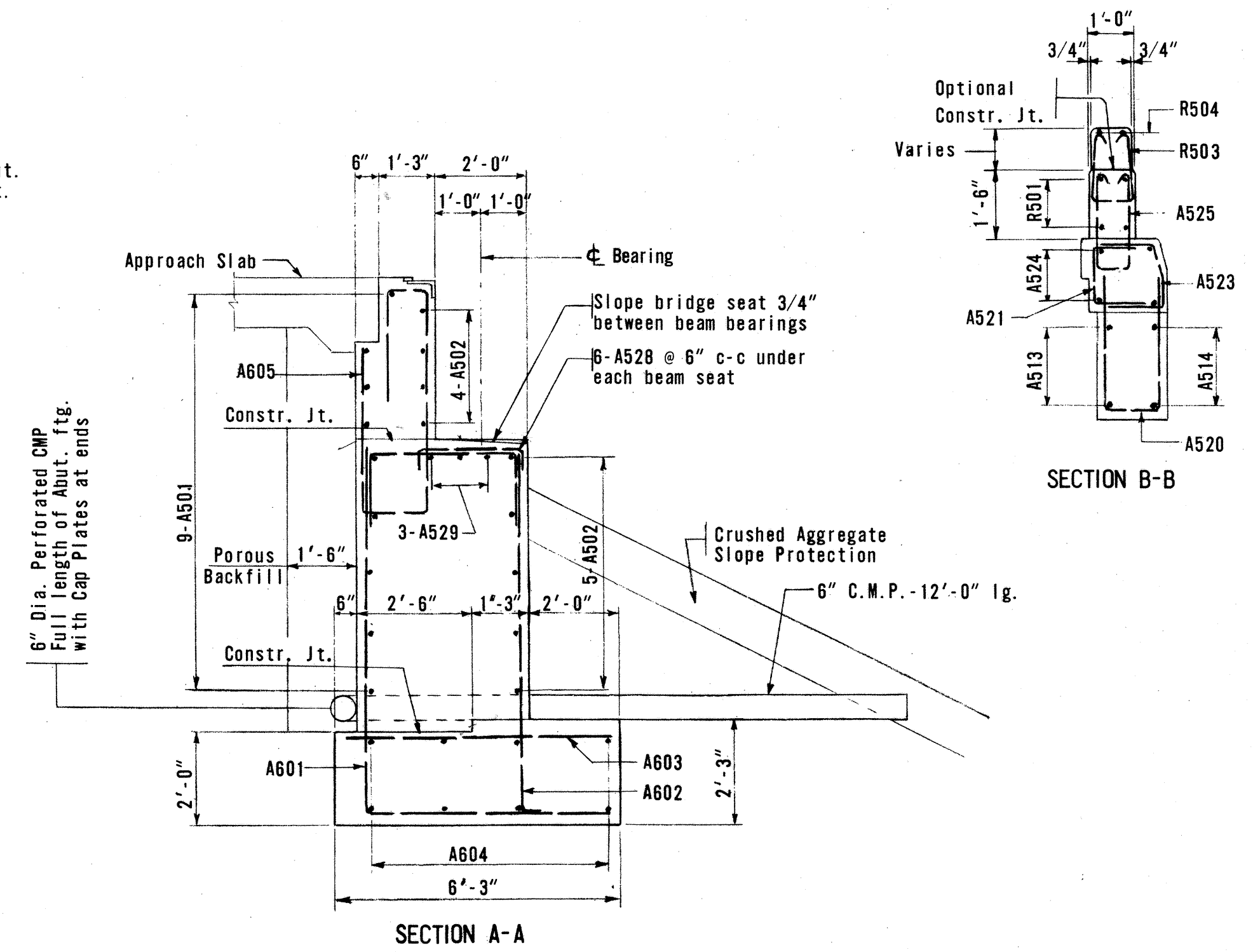
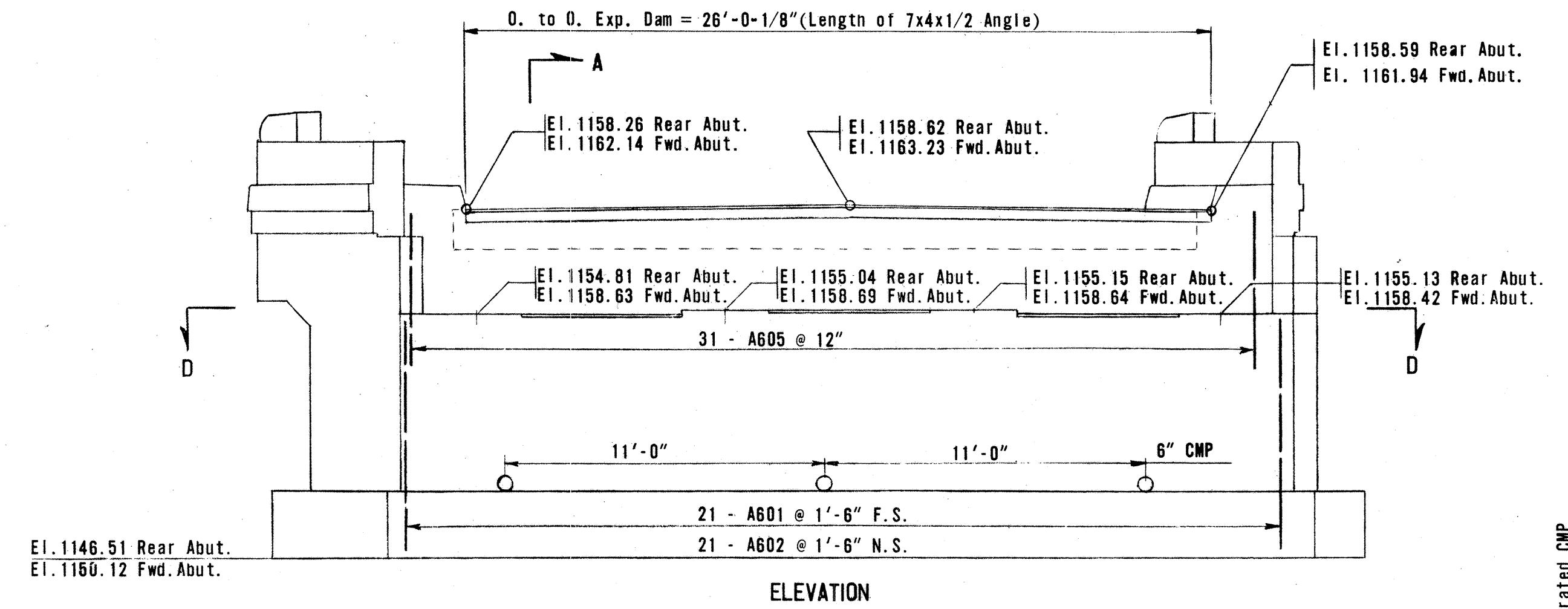
MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	1-271-6-(13)221

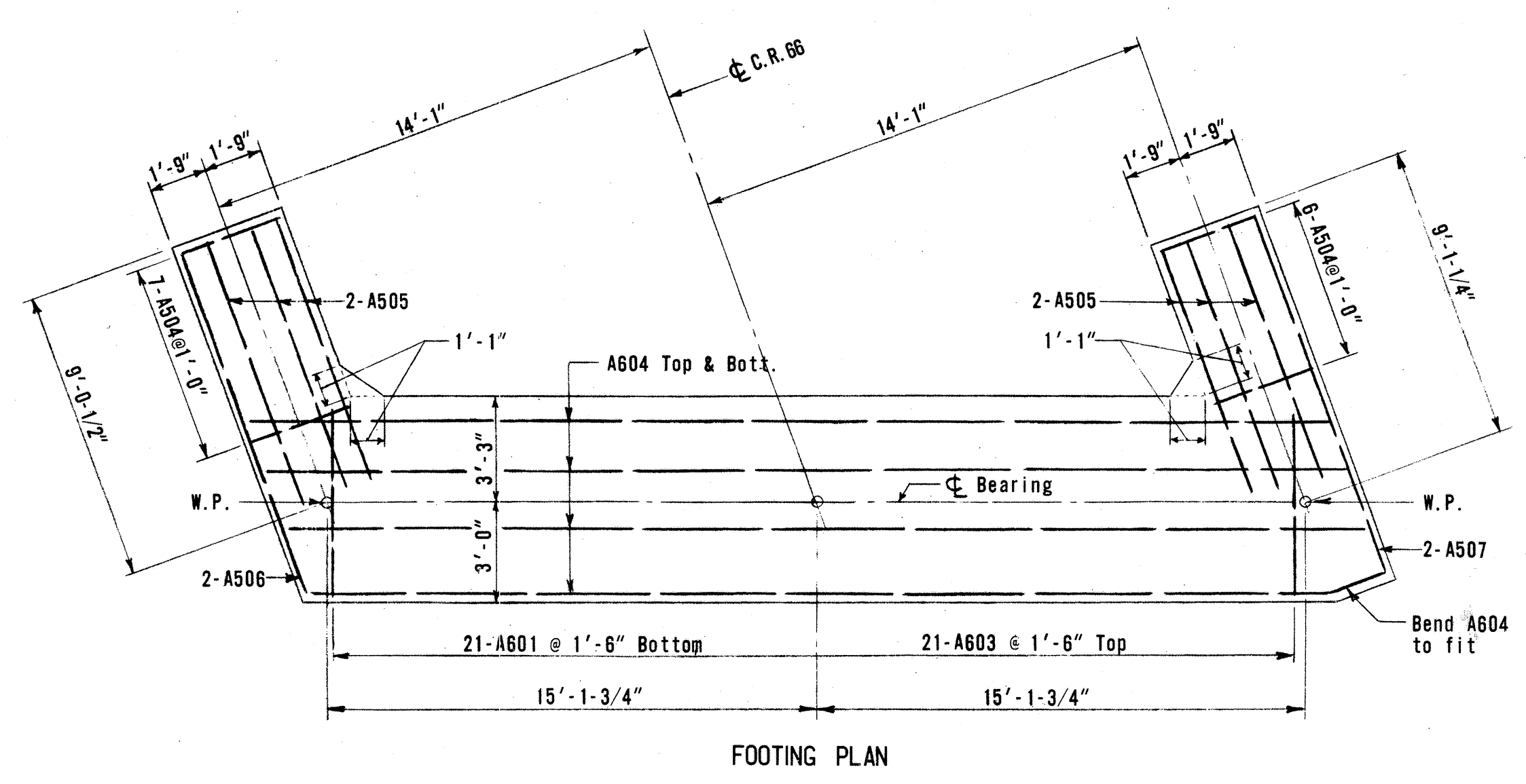
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NOTE: Reinforcing and Dimensions are the same for all wingwalls except as noted.



FOUNDATION BEARING PRESSURE: Abutment footings are designed for a maximum bearing pressure of 2 Tons per Sq. Ft.
 CLEARANCE of reinforcing steel from face of concrete shall be 3" in bottom of footing, 1-1/2" in parapet and safety curb and 2" elsewhere.
 POROUS BACKFILL shall extend upward to the approach slab and to the surface of the earth shoulders and outward to the wingwalls. Excavation therefore, in excess of that required for the construction of the abutment, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.
 PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade for a distance of 200 feet back of the abutments. Excavation shall be made for the abutments after a 60 day waiting period.
 Abutment backwalls above the bridge seat shall not be placed until all steel is erected. Abutment backwalls shall be completed prior to placing bridge deck slab.
 BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor rod holes.
 CONCRETE shall be Class E.
 LEGEND:
 N.S. - Near Side
 F.S. - Far Side
 For details of roadway end finish see Standard Drawing SD-1-63, Sheets 2 and 4.



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BALTIMORE, MARYLAND

ABUTMENT DETAILS
BRIDGE NO. MED-271-0194
I.R.*271 UNDER MEDINA CO. RD. NO. 66

MEDINA CO. STA. 135+47.56

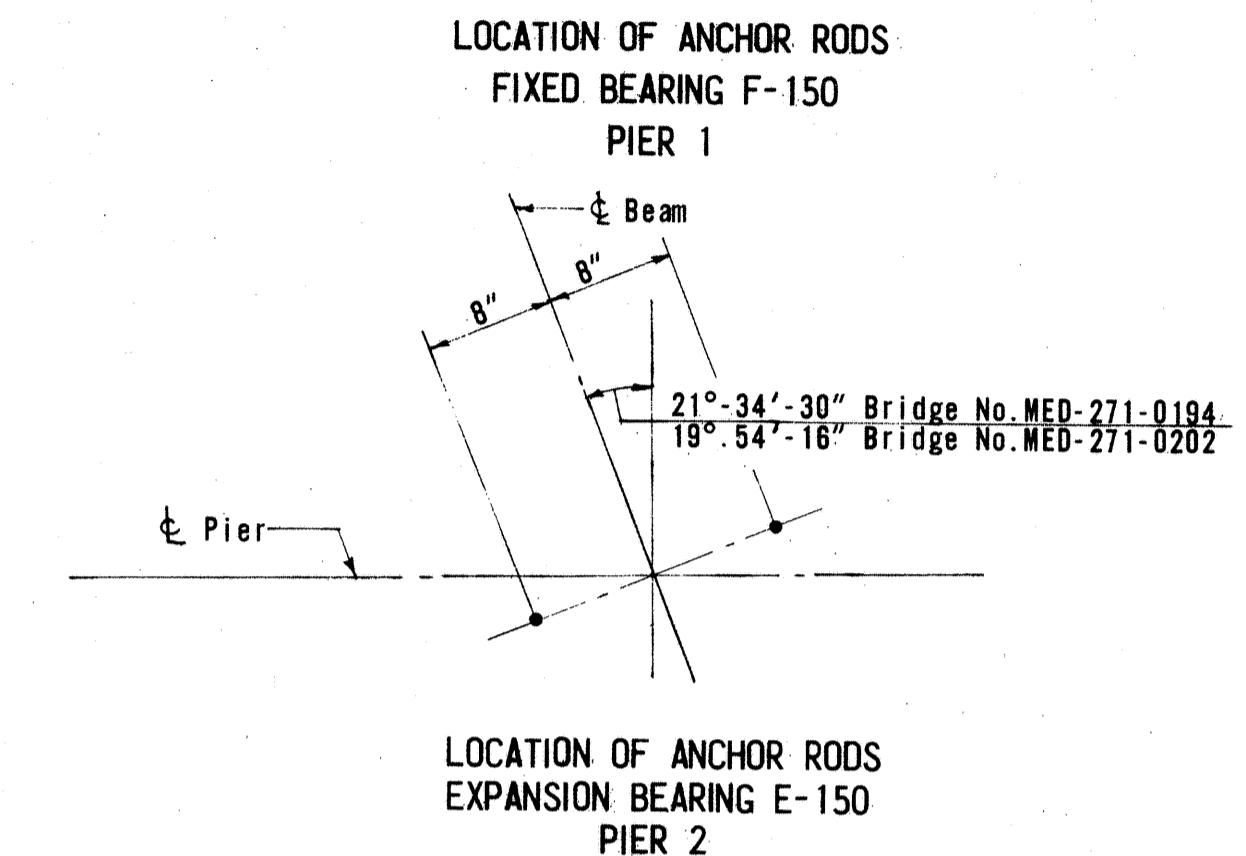
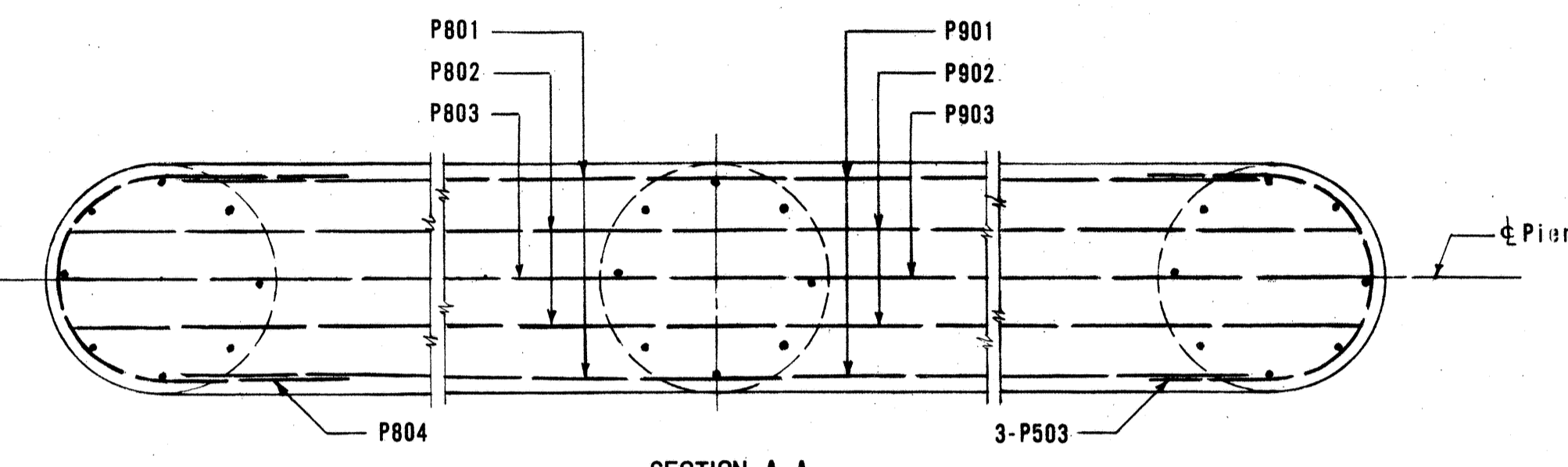
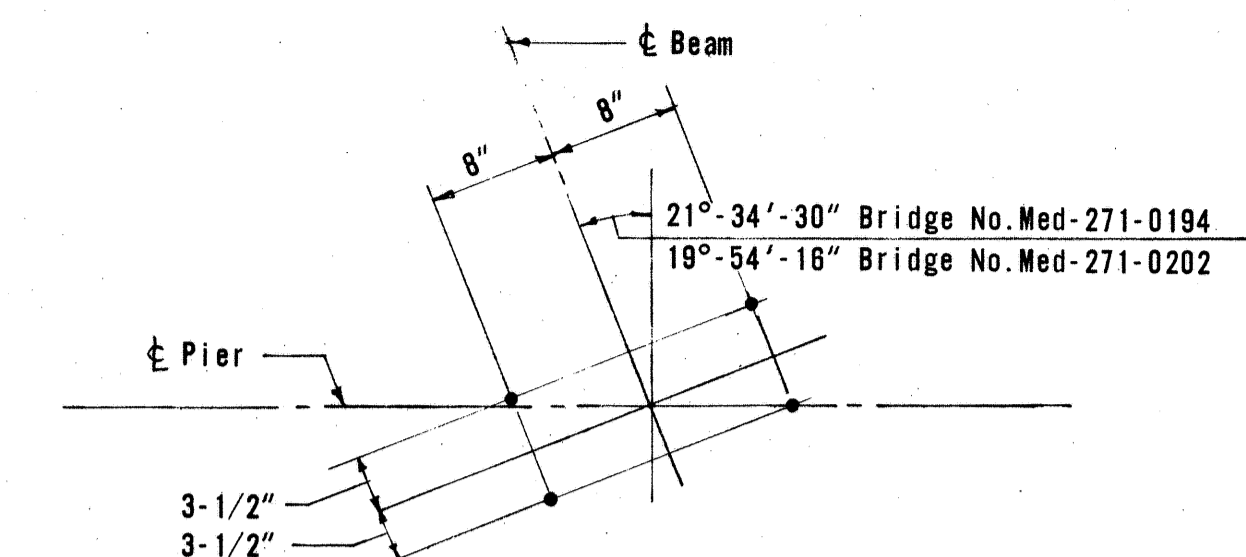
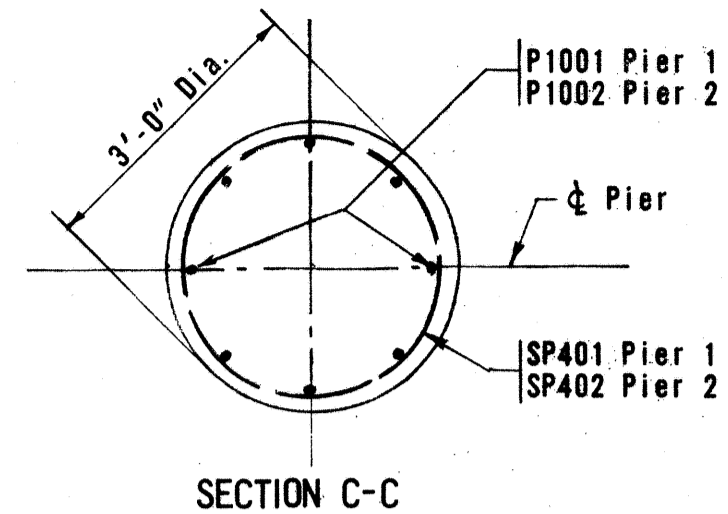
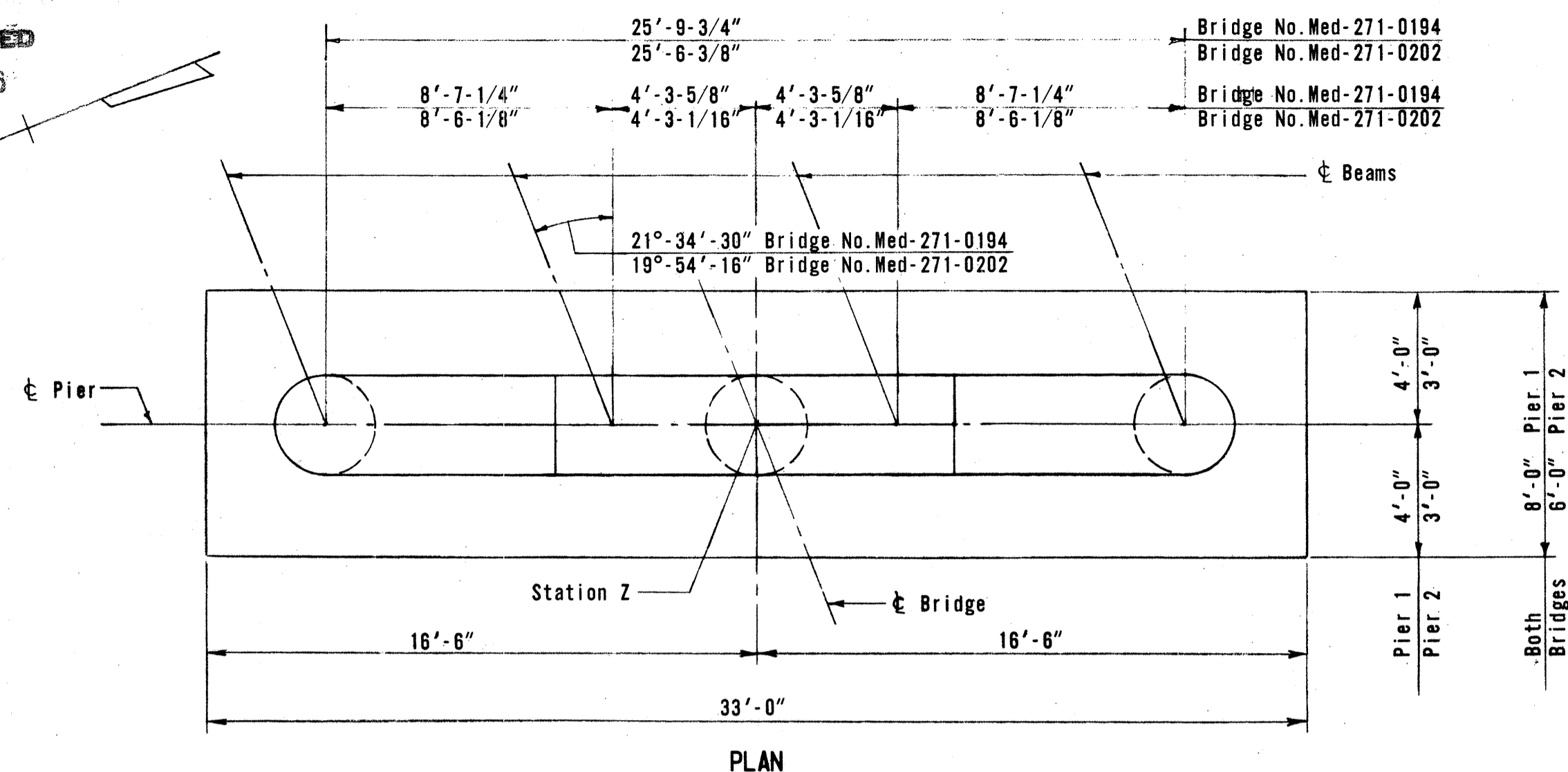
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SHERMAN	ALKEMA	ALKEMA	PAHL	MUDD	6-11-65	

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JUN 5 1986

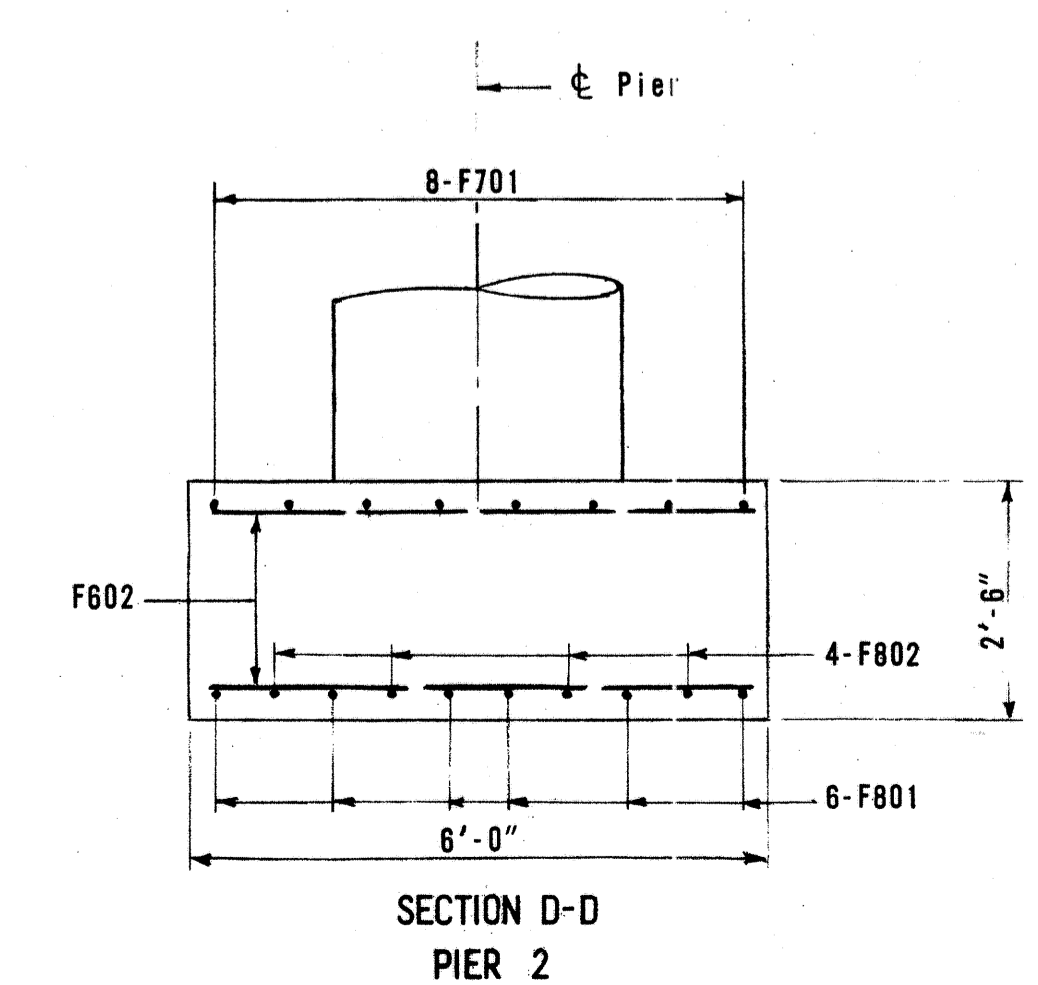
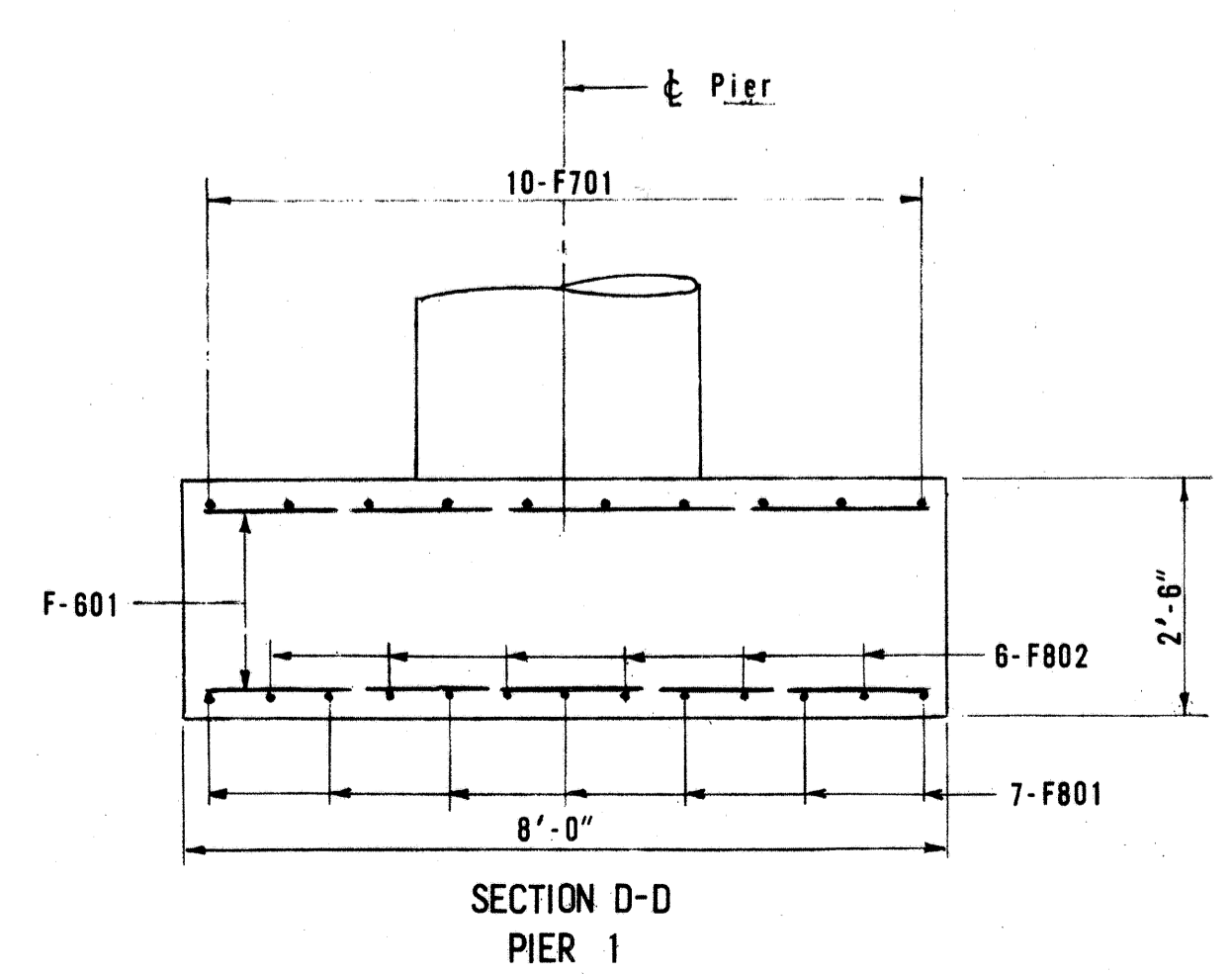
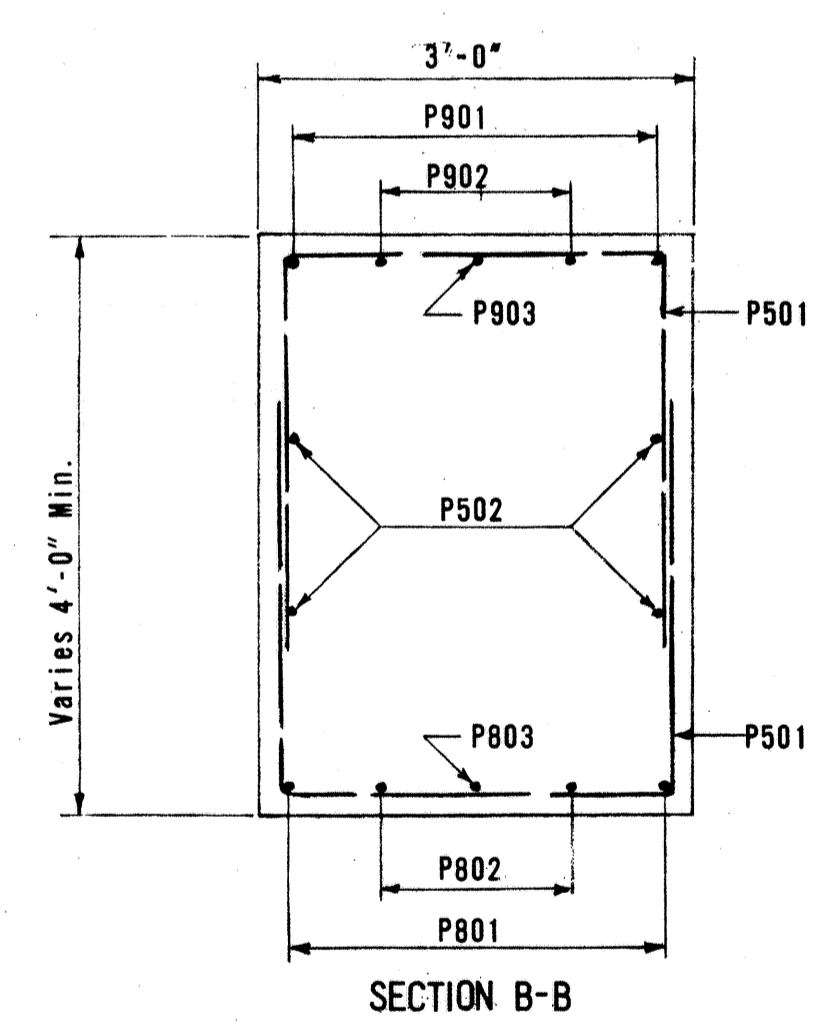
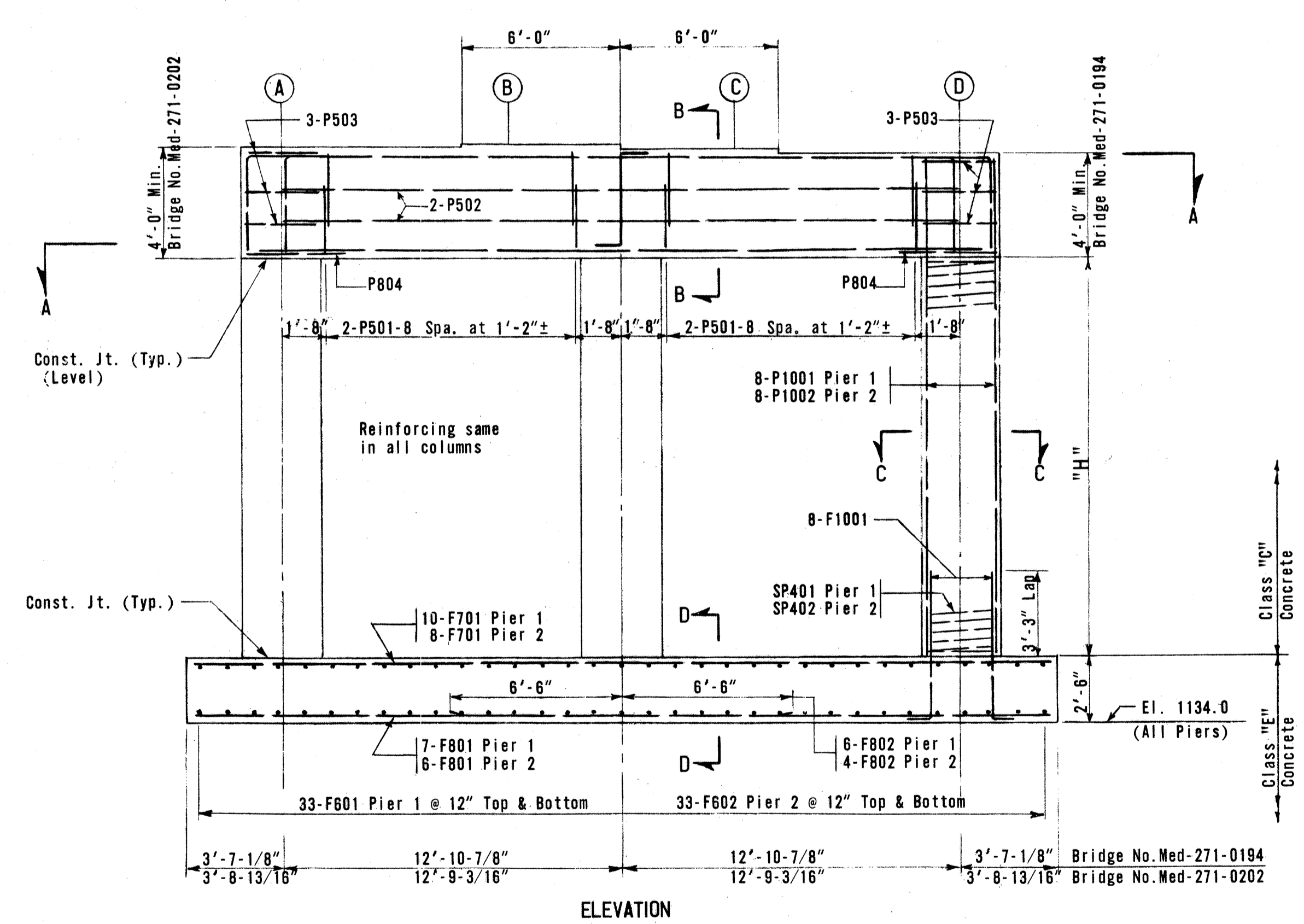
MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6-(13)221

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NOTE: Except as otherwise shown, all dimensions and reinforcing steel apply to both Piers 1 & 2 for each bridge.



FOUNDATION BEARING PRESSURE: Pier Footings are designed for a maximum bearing pressure of 2 Tons per Sq. Ft.
CLEARANCE of reinforcing steel from face of concrete shall be 3" in bottom of footings and 2" elsewhere.
For details of Fixed and Sliding Bearings see Std. Dwg. No. FSB-1-62.
CONCRETE shall be Class E in Footings and Class C above Footings.
BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor rod holes.
PROCEDURE: Excavation for Piers shall not be started until the embankment has been placed.

BRIDGE NO.	STATION Z	ELEVATIONS				DIMENSION H.
		A.	B.	C.	D.	
271-0194	Pier 1 49+70.30	1156.08	1156.11	1156.01	1155.79	15'-3-1/2"
	Pier 2 50+23.13	1157.74	1157.79	1157.71	1157.50	17'-0"
271-0202	Pier 1 53+00.79	1160.49	1160.63	1160.64	1160.52	19'-11-15/16"
	Pier 2 53+53.62	1160.38	1160.53	1160.55	1160.45	19'-10-1/2"

J.E. GREINER COMPANY
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

PIER DETAILS

BRIDGE NOS. MED-271-0194 & 0202
I.R. 271 UNDER MEDINA CO. RD. NO. 66

STA. 135+47.56
STA. 139+44.57

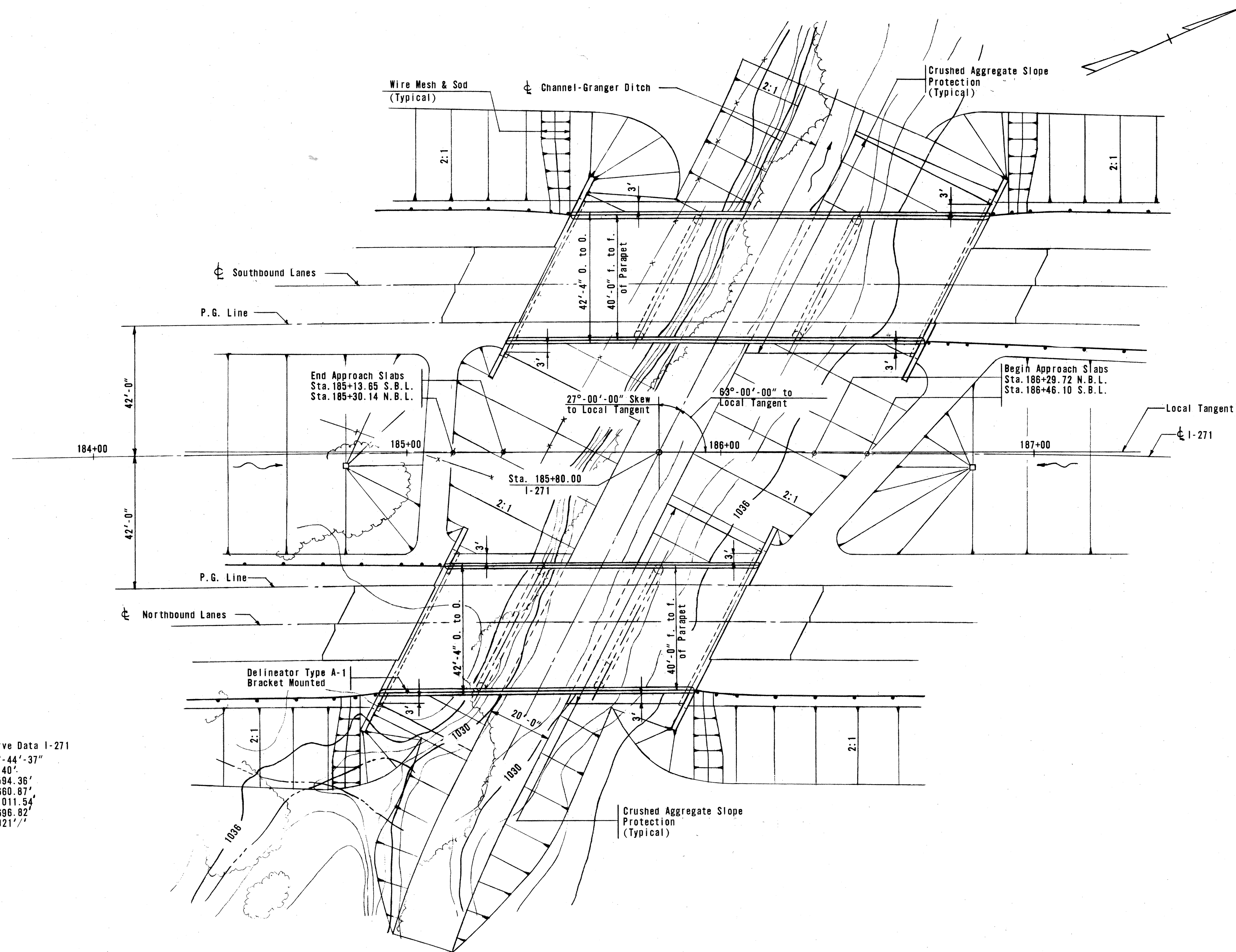
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SHERMAN	HAYDEN	ALKEMASHERMAN	MUDD	6-11-65		

MICROFILMED
JUN 5 1986

MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13)221

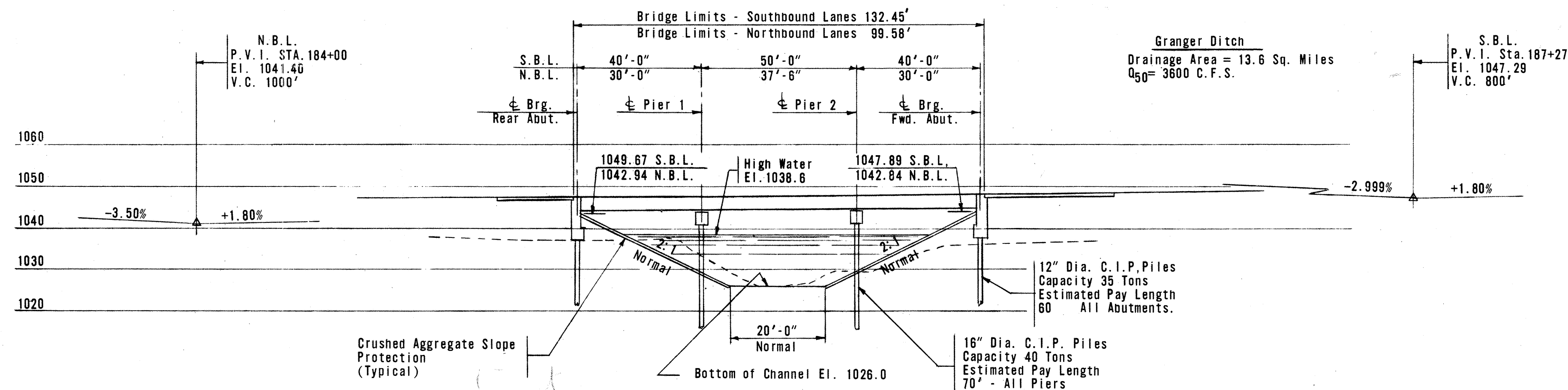
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Curve Data I-271
 $\Delta = 66^\circ-44'-37''$
 $D_c = 0^\circ-40'$
 $R = 8,594.36'$
 $T = 5,660.87'$
 $L = 10,011.54'$
 $E = 1,696.82'$
 $S.E. = 0.021\%$

PROPOSED STRUCTURE

Type: Continuous steel beam with capped pile piers and abutments.
 Spans: 40'-0" - 50'-0" - 40'-0" Southbound Lanes
 30'-0" - 37'-6" - 30'-0" Northbound Lanes
 Roadway: 2-40'-0" face to face of parapets.
 Load Frequency: C.F. = 2000. Adequate for A.A.S.H.O. Alternate Loading.
 Skew: 27°-00'-0" (L.F.) to local tangent.
 Wearing Surface: 1" Monolithic Concrete
 Approach Slabs: AS-1-54 (25' Long)
 Alignment: 0°-40' Curve Right
 Superelevation: 0.021 ft./ft.
 Traffic Volume: 15,500 - ADT - 1975
 1,244 - DDHV - 1975



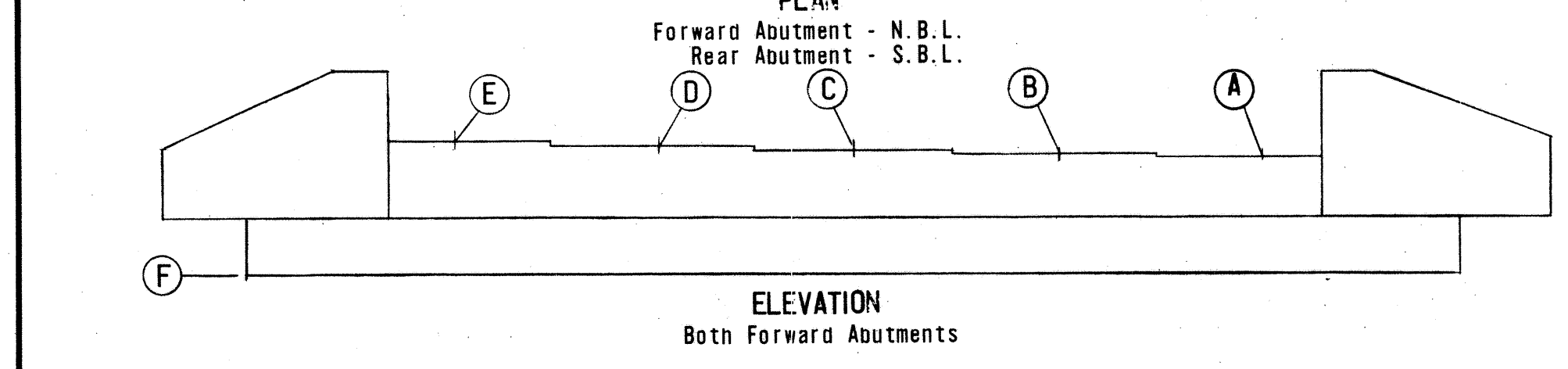
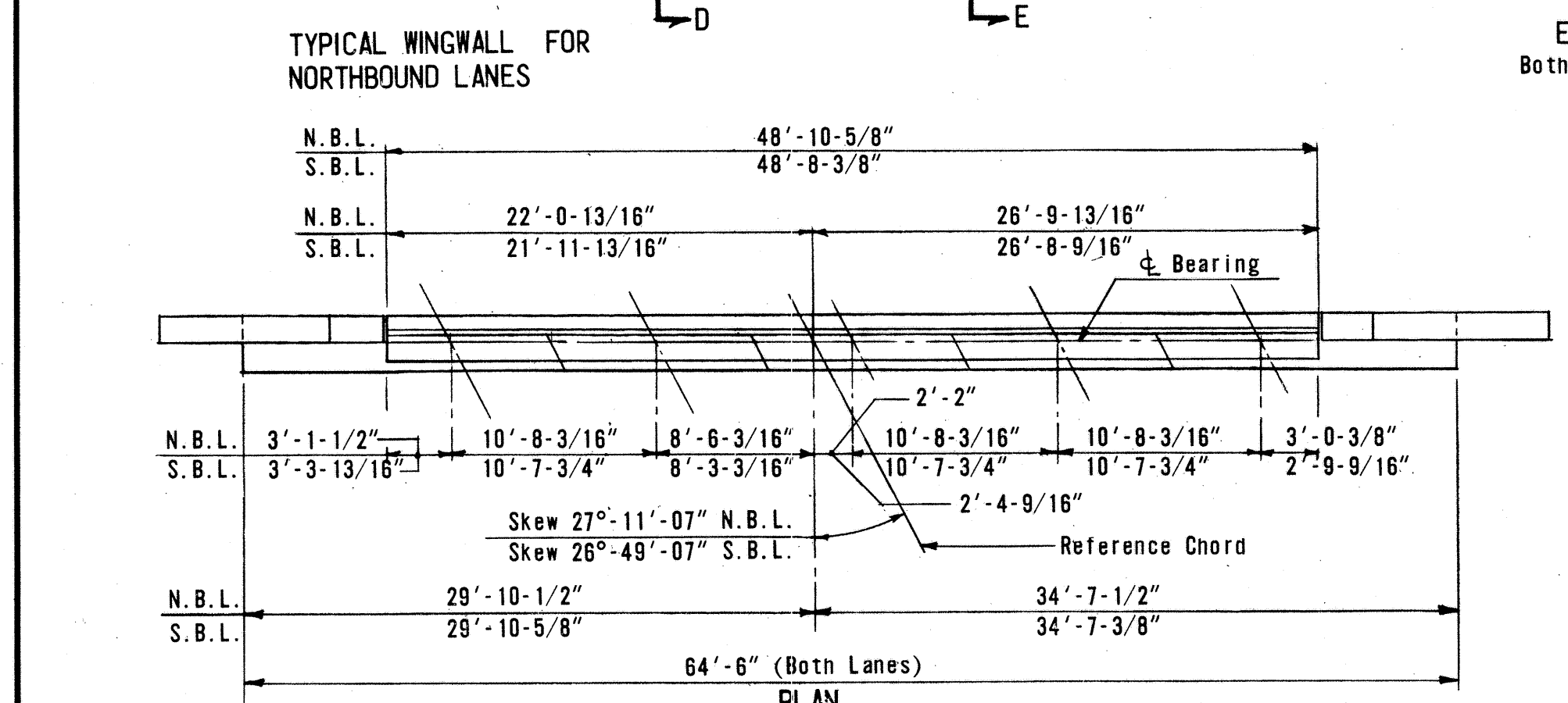
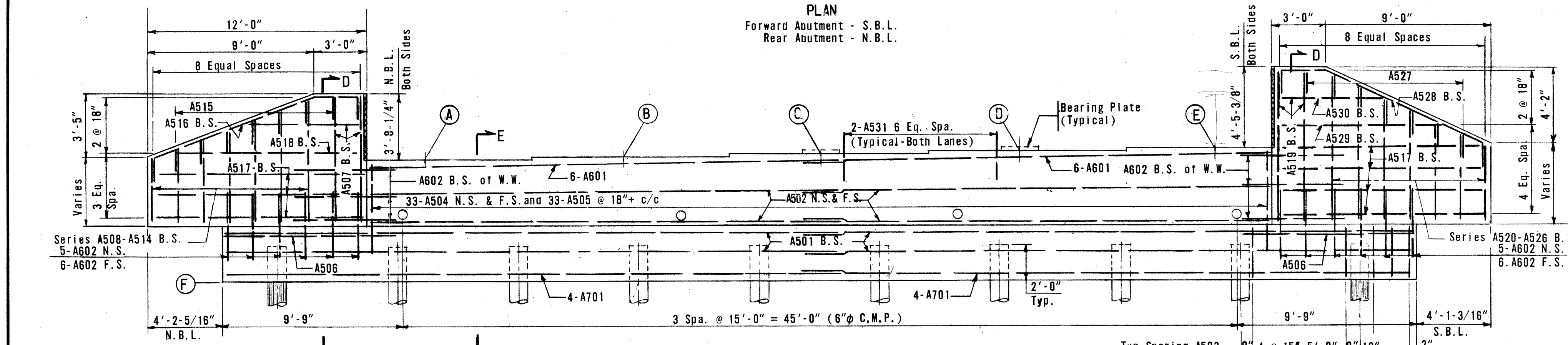
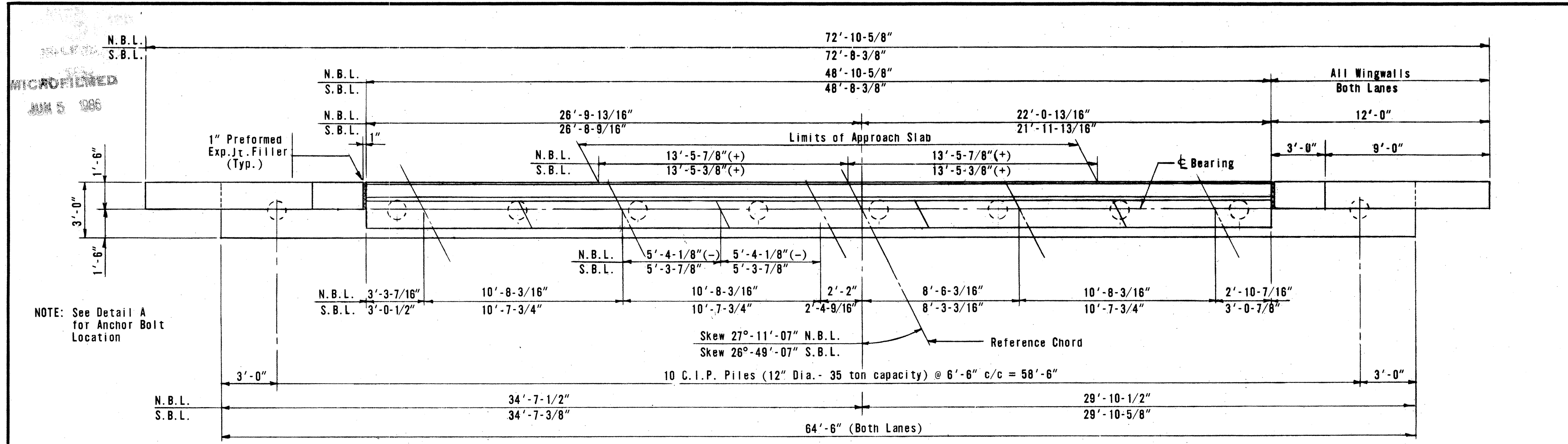
P. G. ELEVATIONS		
STATION	SOUTHBOUND LANES	NOR'THBOUND LANES
185+00	1055.00	1047.44
185+50	1054.09	1047.35
186+00	1053.34	1047.39
186+50	1052.73	1047.56
187+00	1052.27	1047.86

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CONSULTING ENGINEERS
BALTIMORE, MARYLAND

SITE PLAN
BRIDGE NO. MED-271-0284 L. & R.
INTERSTATE HIGHWAY 271 OVER
GRANGER DITCH

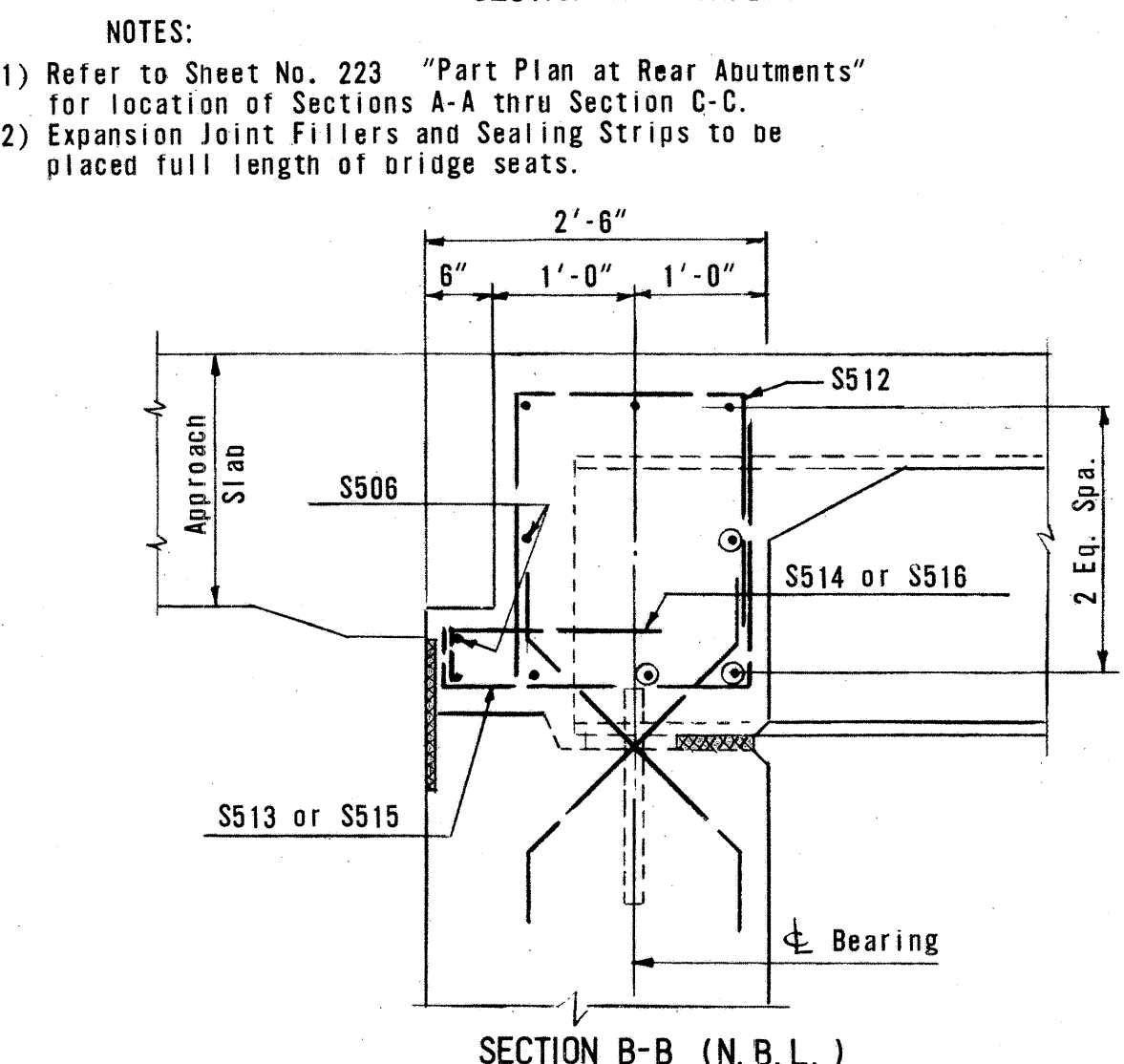
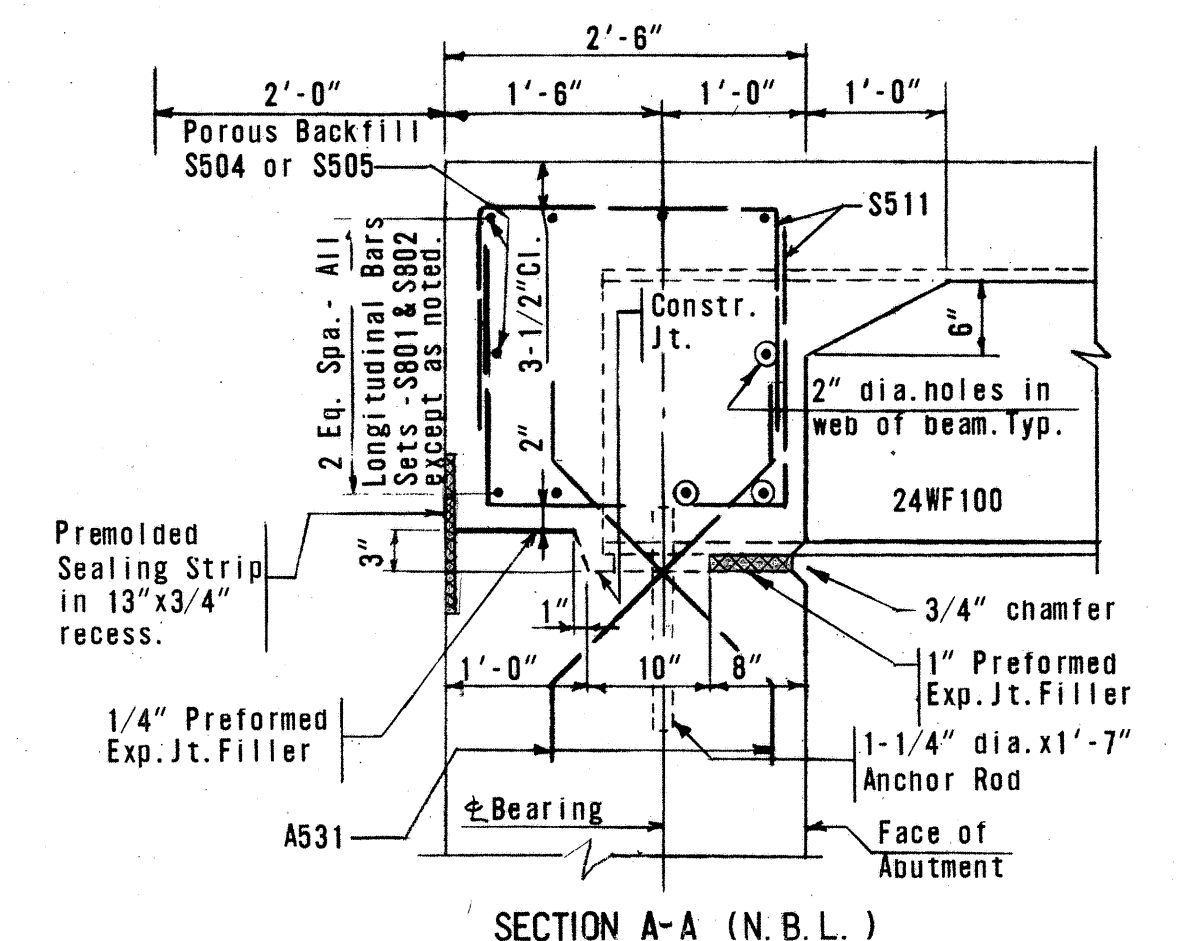
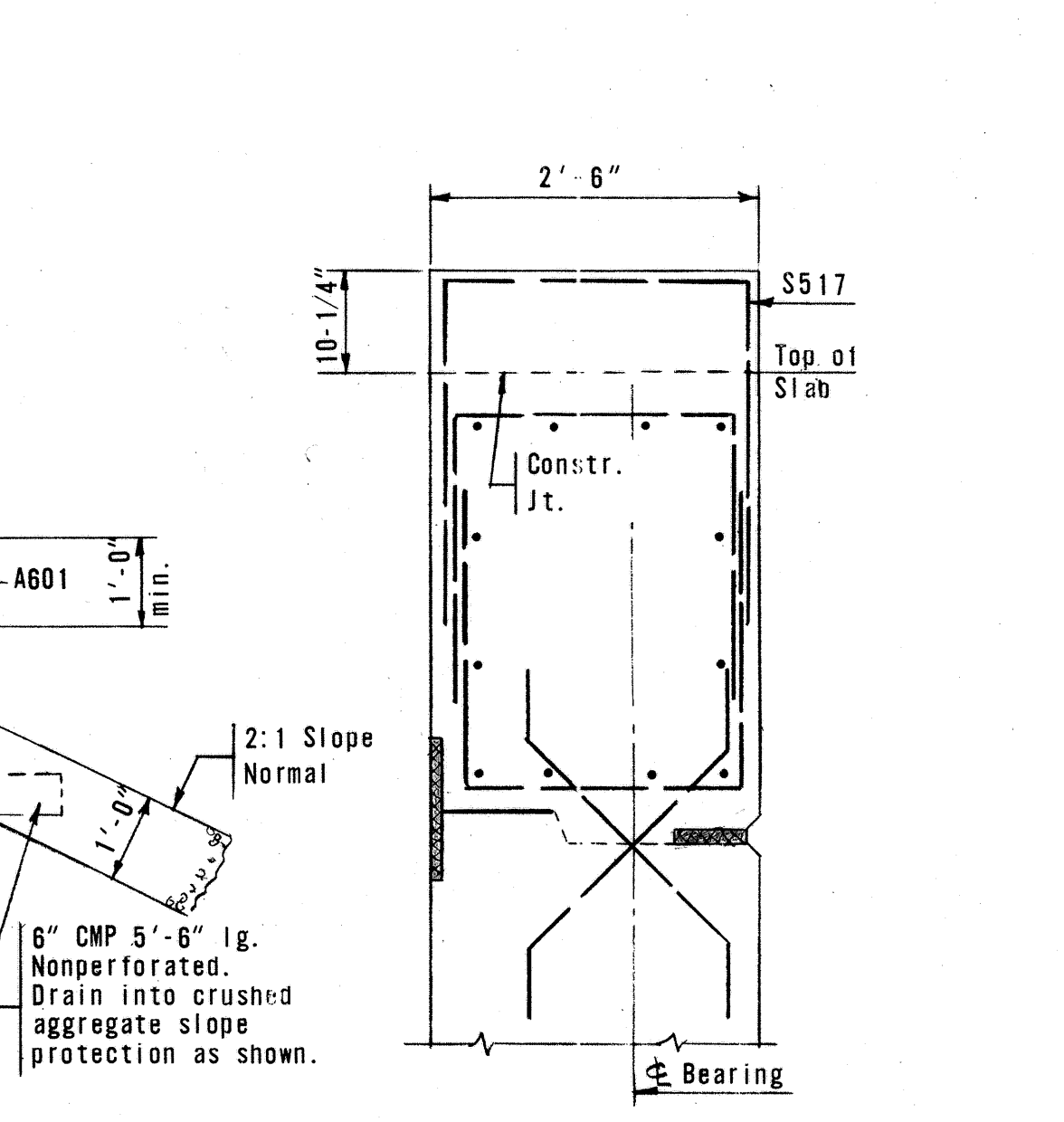
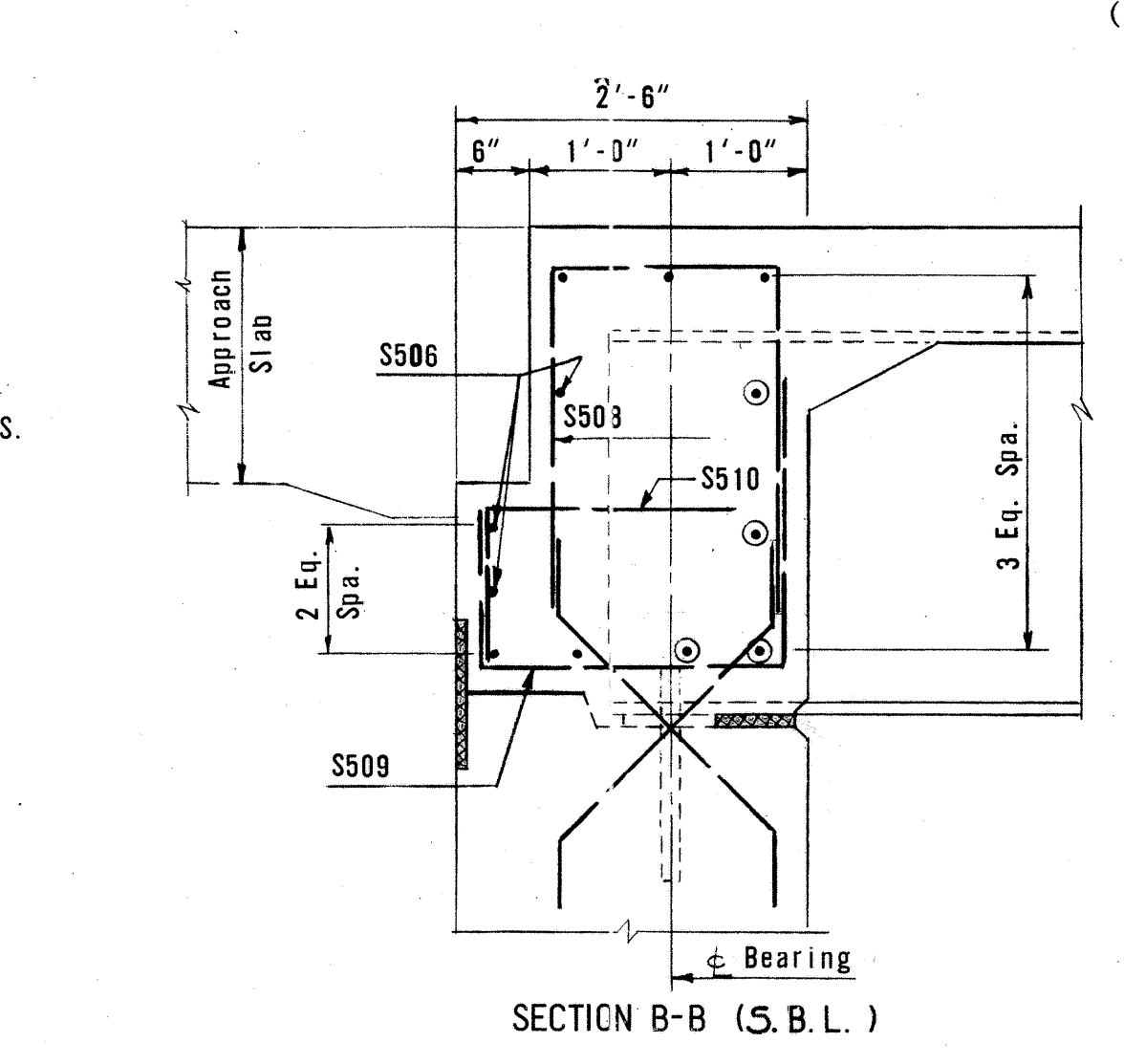
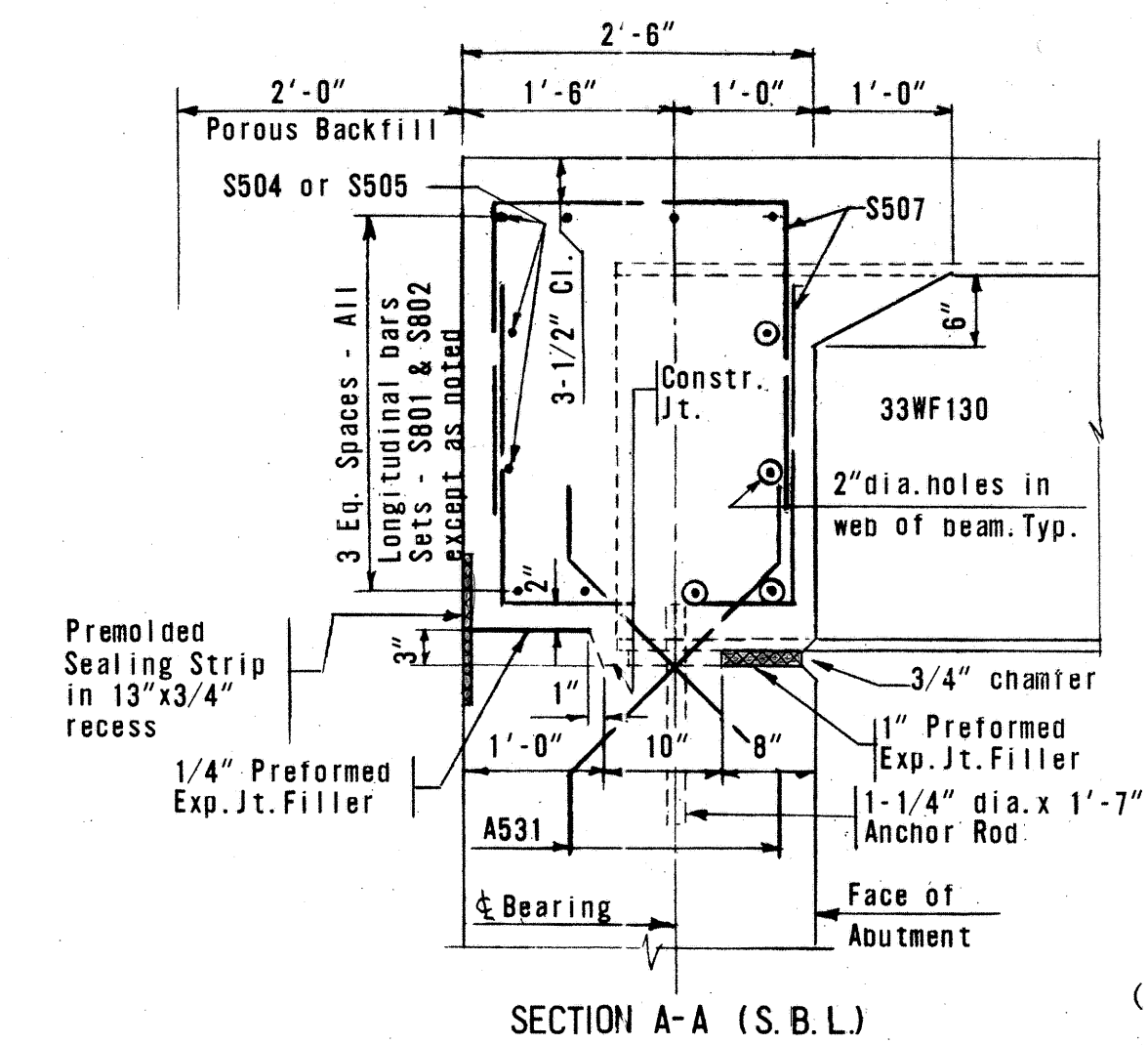
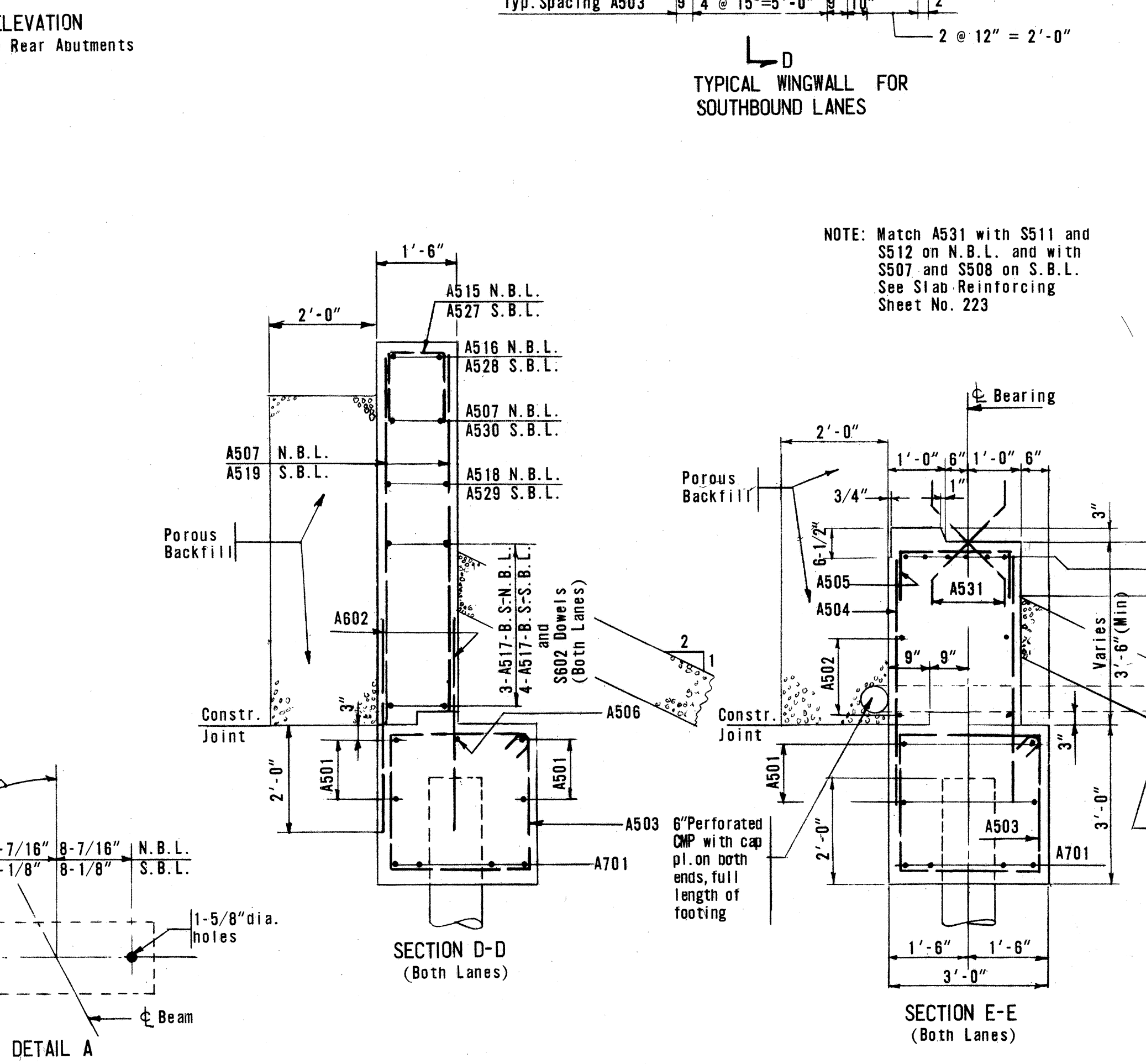
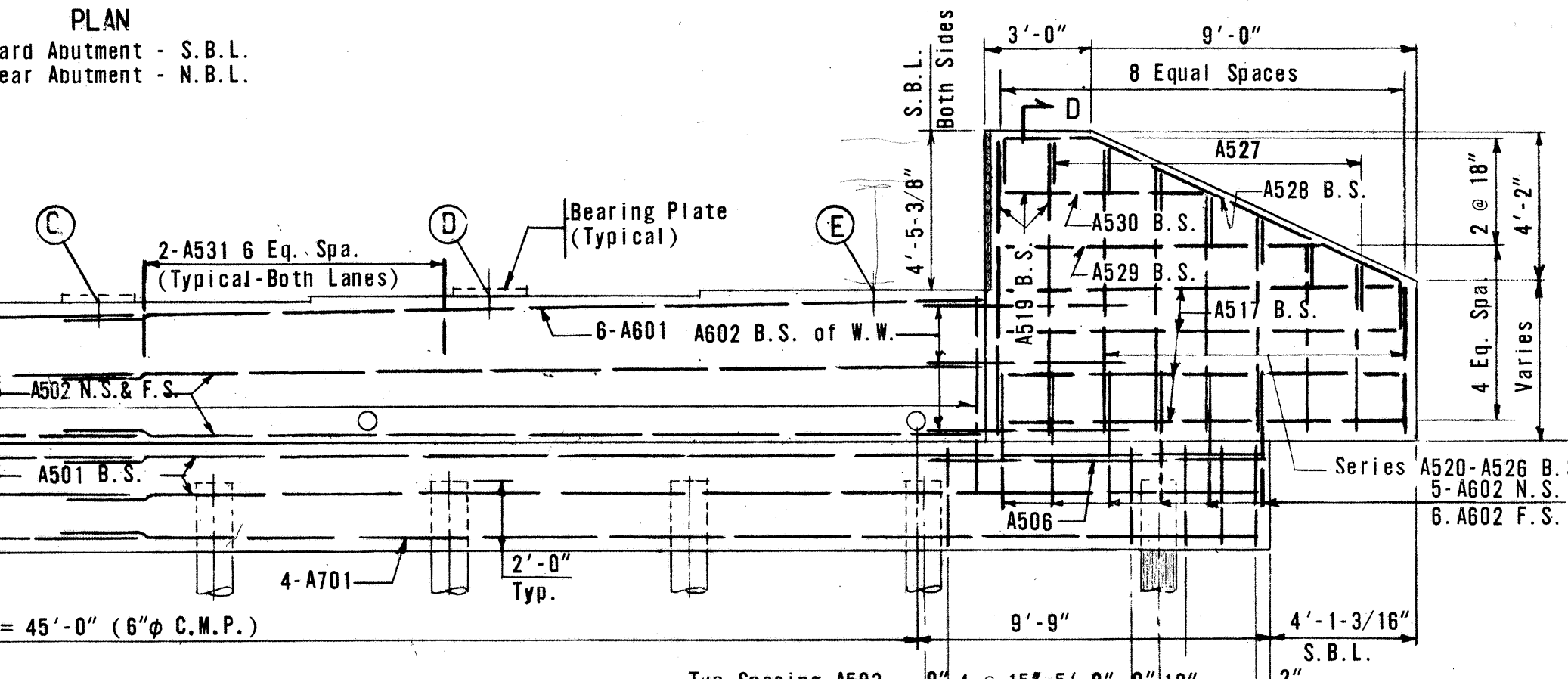
MEDINA CO. STA. 185+80.00

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
HENRY	AIR SURVEY CORP.	WALLACE	WALTER	PAHL	MUDD



(For reinforcing steel piles, dimensions and details not shown, see "ELEVATION-REAR ABUTMENTS".)

		ELEVATIONS					
		A	B	C	D	E	F
Northbound Lanes	Rear Abut.	1043.94	1044.12	1044.31	1044.49	1044.68	1037.44
	Fwd. Abut.	1043.84	1044.05	1044.26	1044.47	1044.68	1037.34
Southbound Lanes	Rear Abut.	1050.67	1050.78	1050.90	1051.02	1051.13	1044.17
	Fwd. Abut.	1048.89	1049.05	1049.20	1049.36	1049.52	1042.39



NOTES:

- Refer to Sheet No. 223 "Part Plan at Rear Abutments" for location of Sections A-A thru Section C-C.
- Expansion Joint Fillers and Sealing Strips to be placed full length of bridge seats.

CLEARANCE of reinforcing steel from face of concrete shall be 3" in bottom of footing and 2" elsewhere.

POROUS BACKFILL shall extend upward to the approach slab and to the surface of the earth shoulders, to the ends of the footing. Excavation therefore, in excess of that required for the construction of the abutment, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

PREMOLDED SEALING STRIP shall conform to Spec. 512.08

BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor rod holes.

CONCRETE shall be Class C.

LEGEND: N.S. - Near Side N.B.L. - Northbound Lanes
F.S. - Far Side S.B.L. - Southbound Lanes
B.S. - Both Sides
W.W. - Wingwalls

Work this sheet with "Superstructure Details", Sheet No. 223 & "Pier Details", Sheet No. 222.

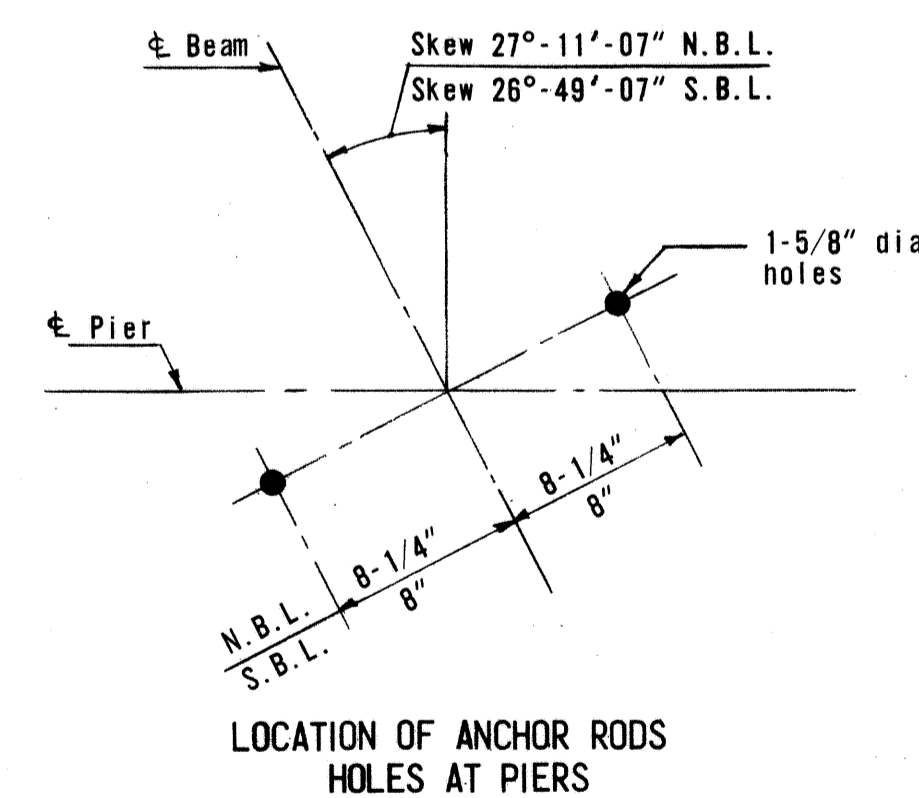
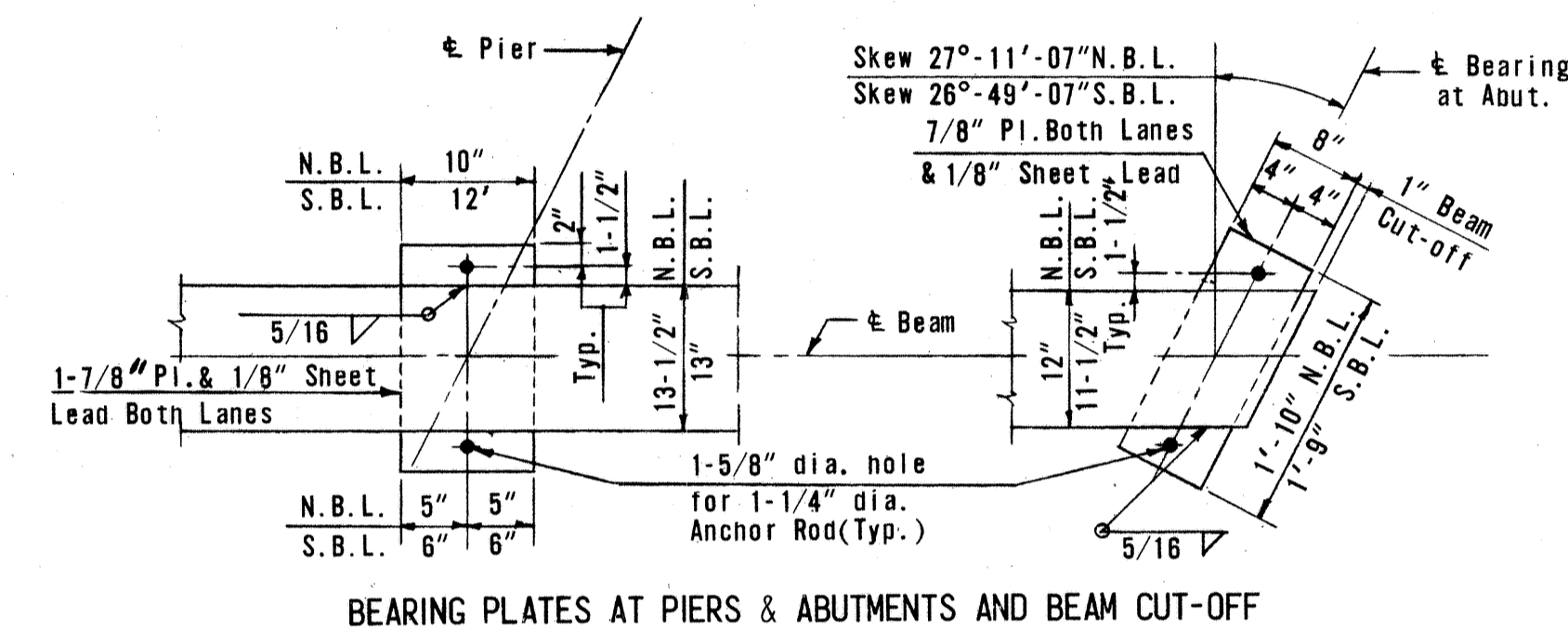
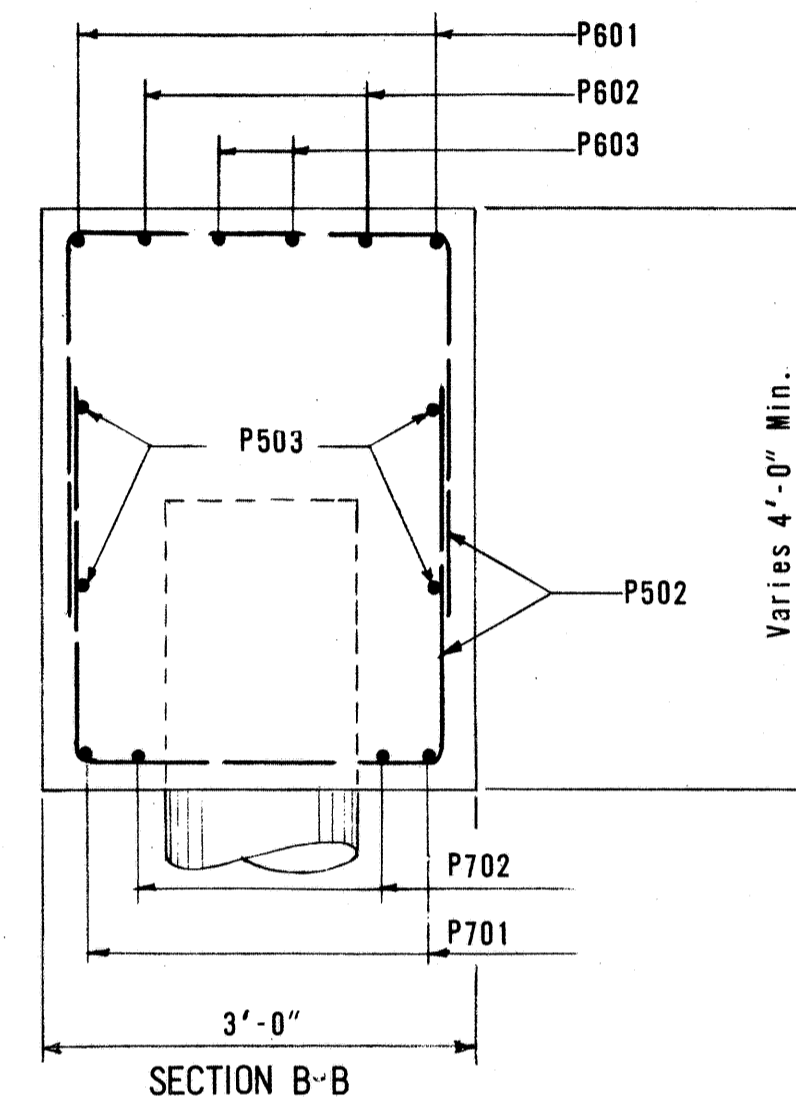
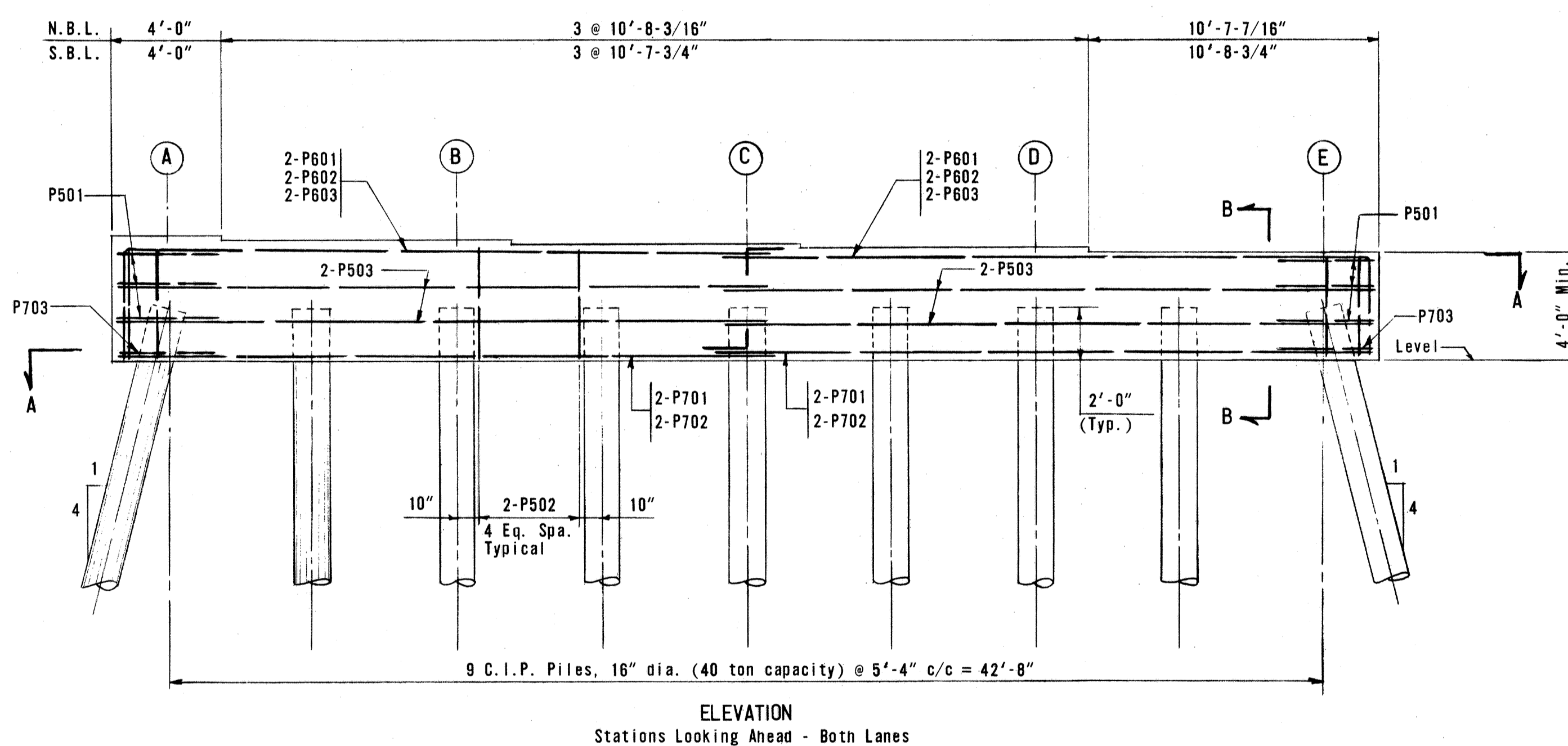
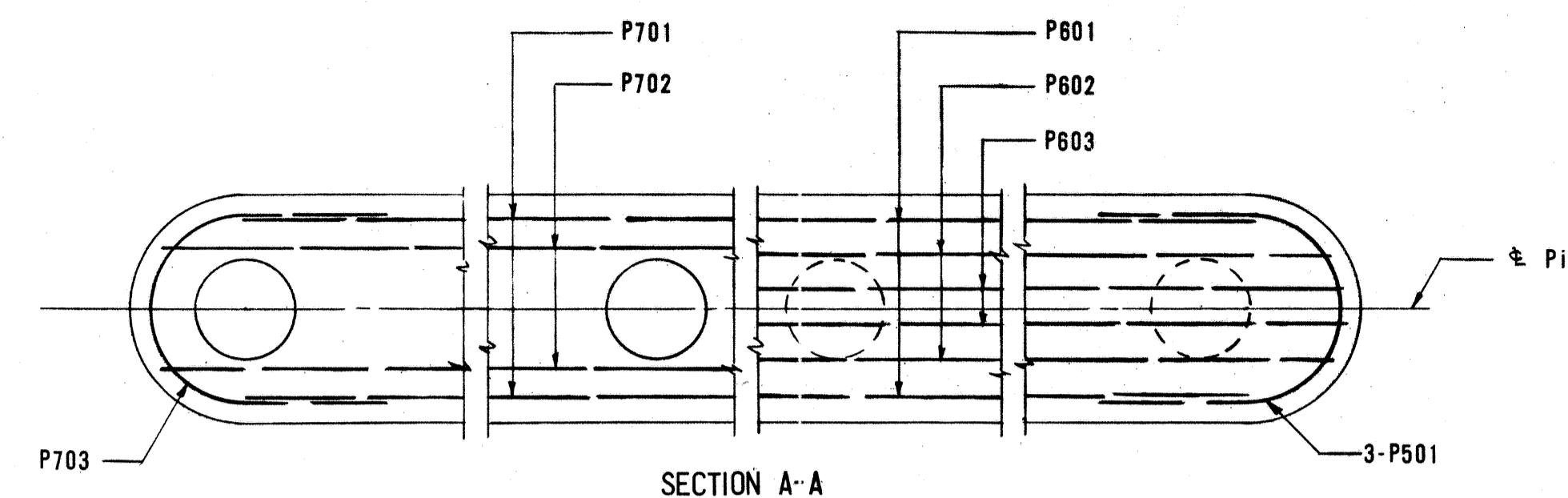
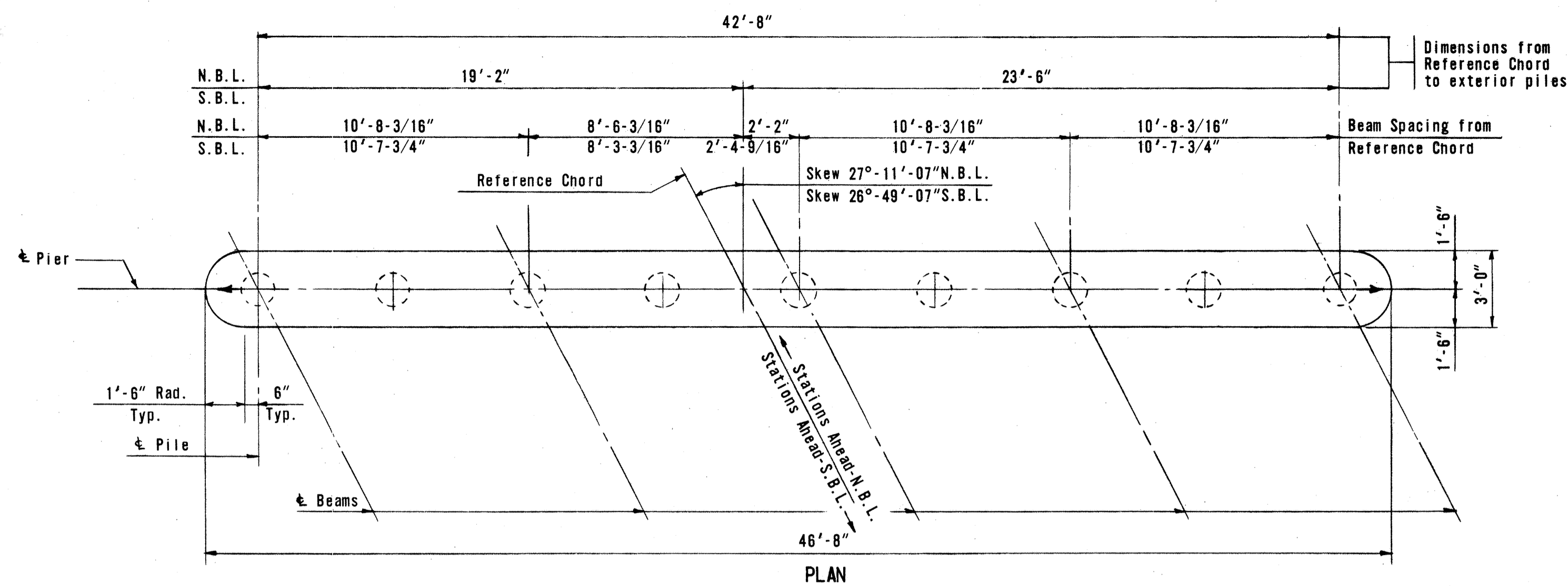
J.E. GREINER COMPANY
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

ABUTMENT DETAILS

BRIDGE NO. MED-271-0284 L. & R.
I.R. 271 OVER GRANGER DITCH

MEDINA CO. STA. 185+80.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RYNAR-ZEWSKI	RYNAR-ZEWSKI	RYNAR-ZEWSKI	WEISER	MUDD	6-11-65	



CLEARANCE of reinforcing steel from face of concrete shall be 2".
CONCRETE shall be Class C.
BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor rod holes.

		ELEVATIONS				
		A	B	C	D	E
Northbound Lanes	Pier 1	1044.50	1044.30	1044.11	1043.92	1043.73
	Pier 2	1044.50	1044.30	1044.09	1043.89	1043.69
Southbound Lanes	Pier 1	1050.40	1050.27	1050.14	1050.01	1049.89
	Pier 2	1049.78	1049.64	1049.49	1049.35	1049.20

J.E. GREINER COMPANY
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

PIER DETAILS

**BRIDGE NO. MED-271-0284 L. & R.
I.R. 271 OVER GRANGER DITCH**

MEDINA CO. STA. 185+80.00

DESIGNED RYMARZEWSKI	DRAWN WALTER	TRACED WALTER	CHECKED WEISER	REVIEWED MUDD	DATE 6-11-65	REVISED
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A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

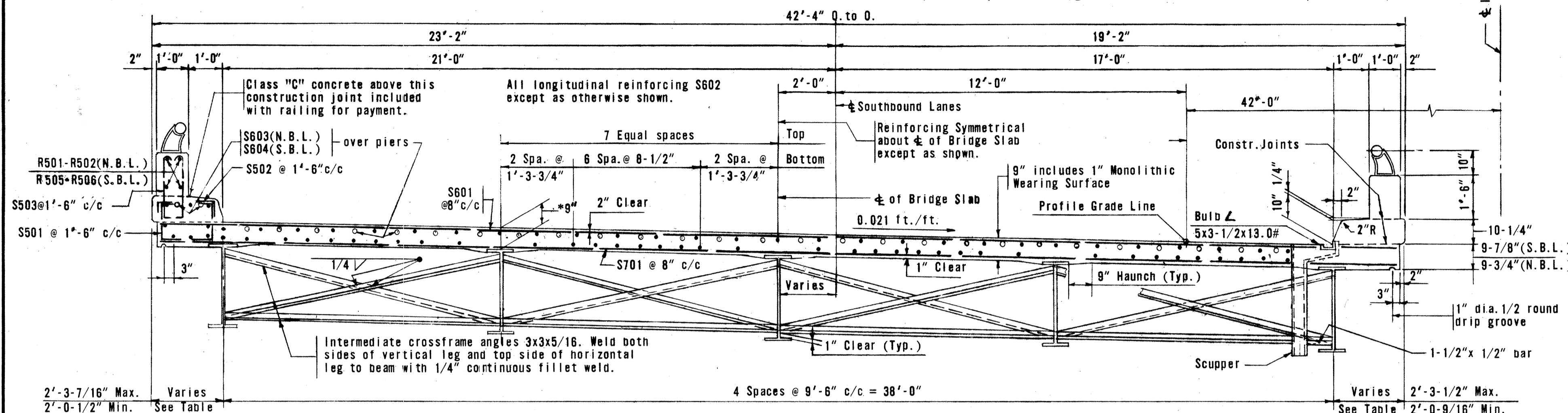
NOTE: Transverse reinforcing in slab is normal to center of lanes. All transverse dimensions for deck curbs, and parapets are radial and these items shall be constructed concentrically to the center of lanes.

*This is the nominal dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per Sec. 511.19 of the Construction and Material Specifications.

MEDINA COUNTY
MED-271-0.00

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2	OHIO	I-271-6(13)221

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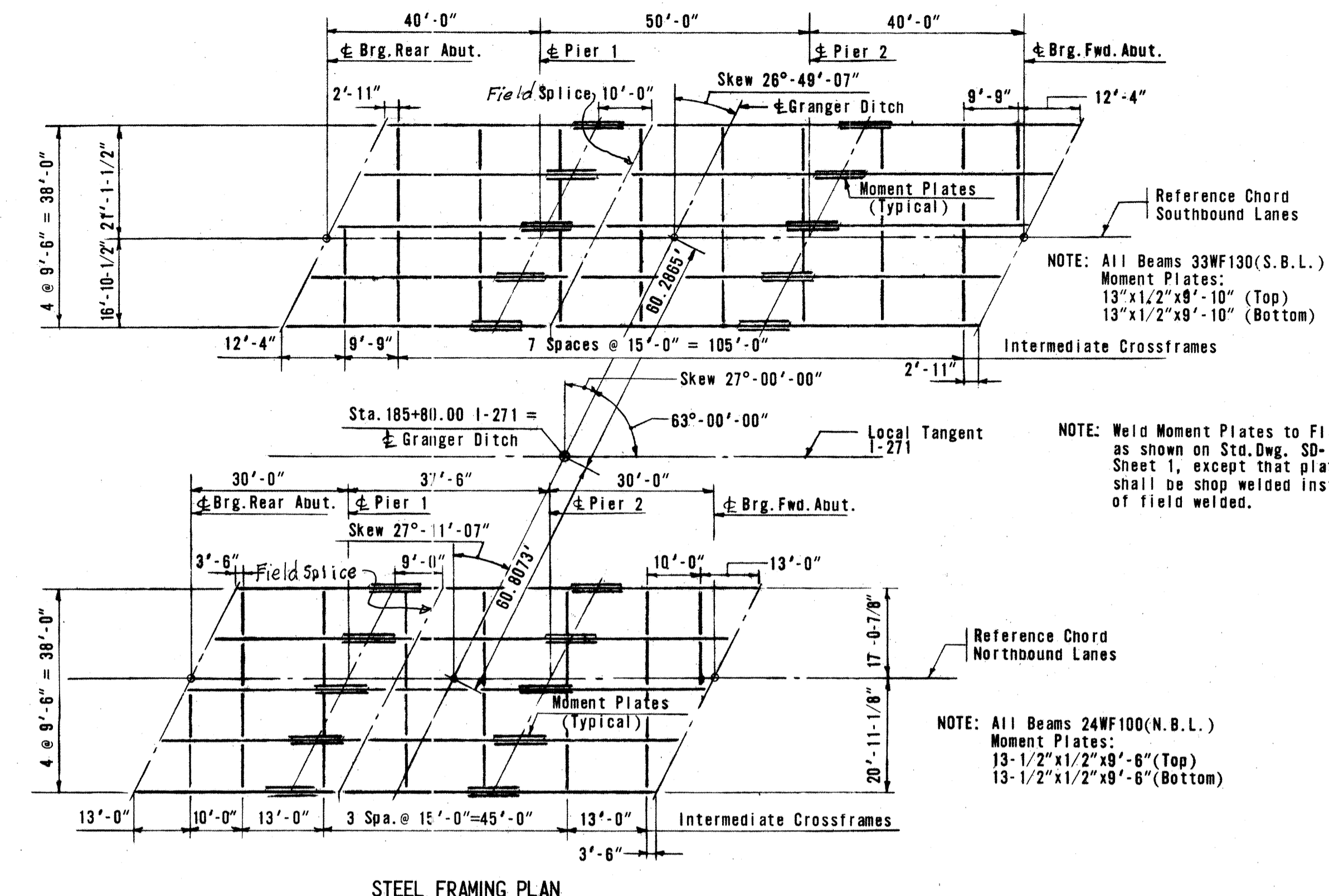
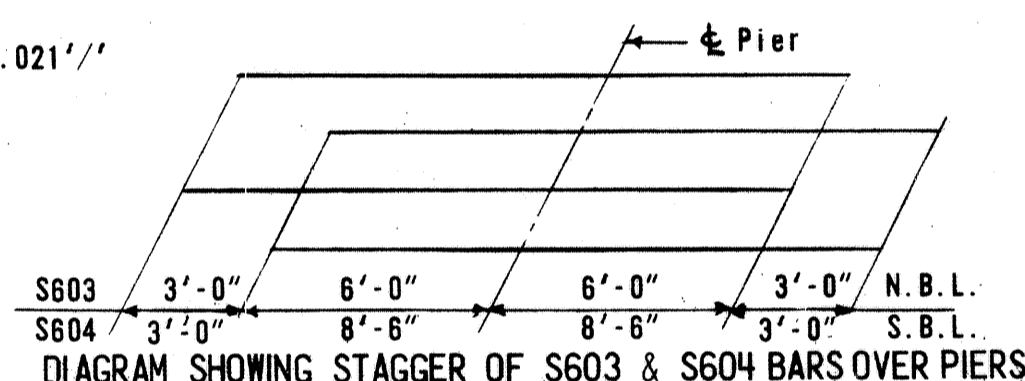
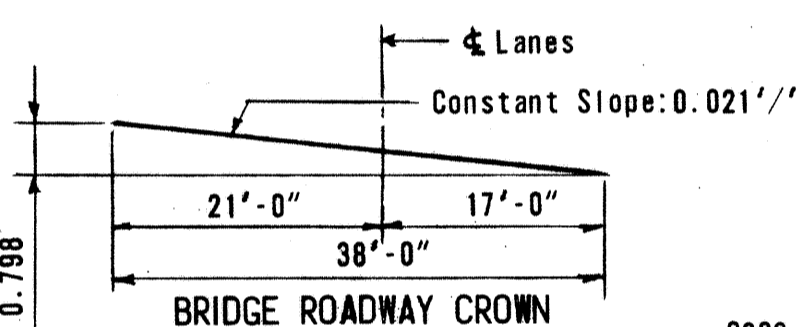


SLAB CANTILEVER		at Brg. at Abut.	at End Span	at Pier	at Inside Span
Northbound Lanes	West Side	2'-1-1/8"	2'-2"	2'-2-9/16"	2'-2-13/16"
	East Side	2'-2-7/8"	2'-2"	2'-1-7/16"	2'-1-3/16"
Southbound Lanes	West Side	2'-0-1/2"	2'-2"	2'-3"	2'-3-7/16"
	East Side	2'-3-1/2"	2'-2"	2'-1"	2'-0-9/16"

Slab cantilever symmetrical about center of Inside Span

	Northbound Lanes				Southbound Lanes			
	End Span	Inside Span	End Span	Inside Span	End Span	Inside Span	End Span	Inside Span
Distance From Pier	15'-0"	7'-6"	9'-4-1/2"	18'-9"	20'-0"	10'-0"	12'-6"	25'-0"
Deflection Due To Weight of Steel	1/32"	0	0	1/32"	1/32"	0	0	1/32"
Remaining D.L.	3/32"	3/32"	3/32"	3/32"	3/32"	3/32"	3/32"	3/32"
Vertical Curve Adj.	-3/32"	-1/16"	-3/32"	-1/8"	-5/32"	-3/32"	-5/32"	-1/32"
Sum of Deflections	1/32"	1/32"	0	0	-1/32"	0	-1/16"	-3/32"
Required Camber	None	None	None	None	None	None	None	None

Symmetrical about center of Inside Span



SUPERSTRUCTURE NOTES

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress up grade. The slab may be placed in sections, between transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

MACHINE FINISH: The concrete bridge deck shall be finished by the use of a finishing machine.

For details of scuppers and gutter supports see Standard Drawing SD-1-63, Sheet 3.

For details of aluminum railing see Standard Drawing BR-1-65, Type 1.

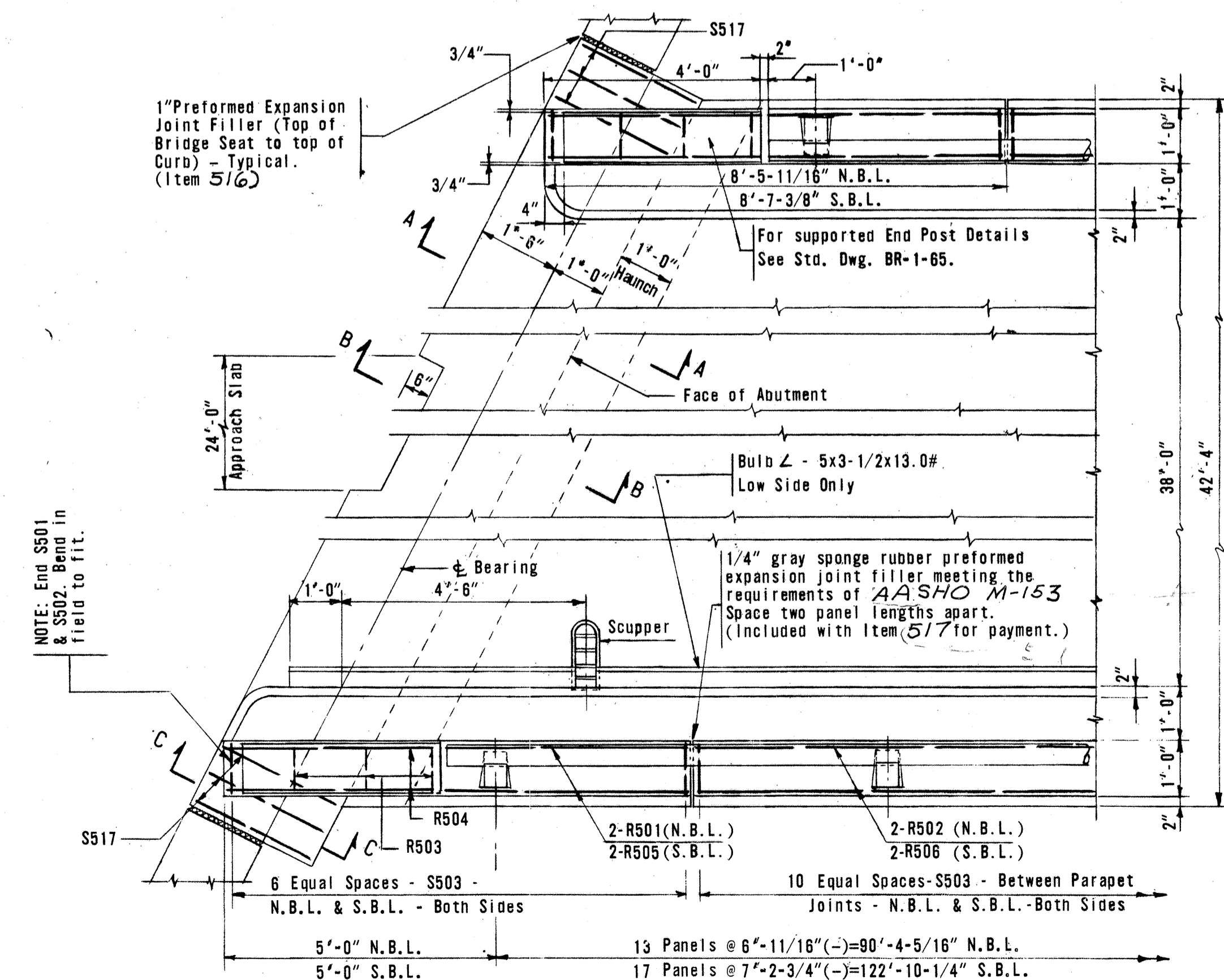
For details of bolted beam splices see Standard Drawing SD-2-64.

For Sec. A-A, Sec. B-B, and Sec. C-C, shown in Part Plan at Rear Abutments, see Sheet No. 221.

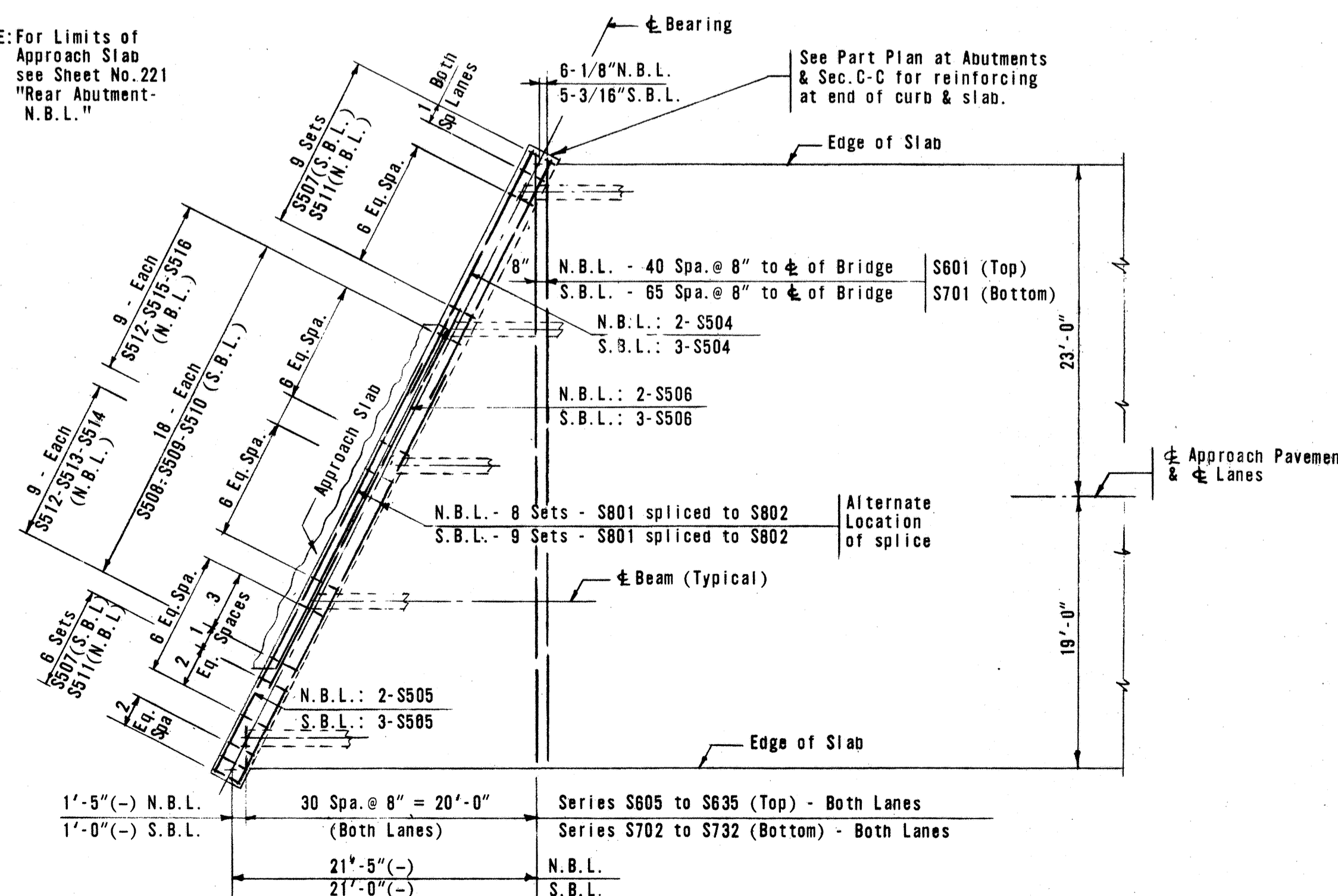
For details of bearing plates at the Piers and Abutments and for beam cutoff at abutments, see Sheet No. 222.

For Scupper spacing see Sheet No. 220.

REINFORCING STEEL shall be 1-1/2" clear of surfaces in parapets and curbs.



NOTE: For Limits of Approach Slab see Sheet No. 221 "Rear Abutment - N.B.L."



Note: Rear Abutment (S.B.L.) & Forward Abutment (N.B.L.) are shown. Others are similar.

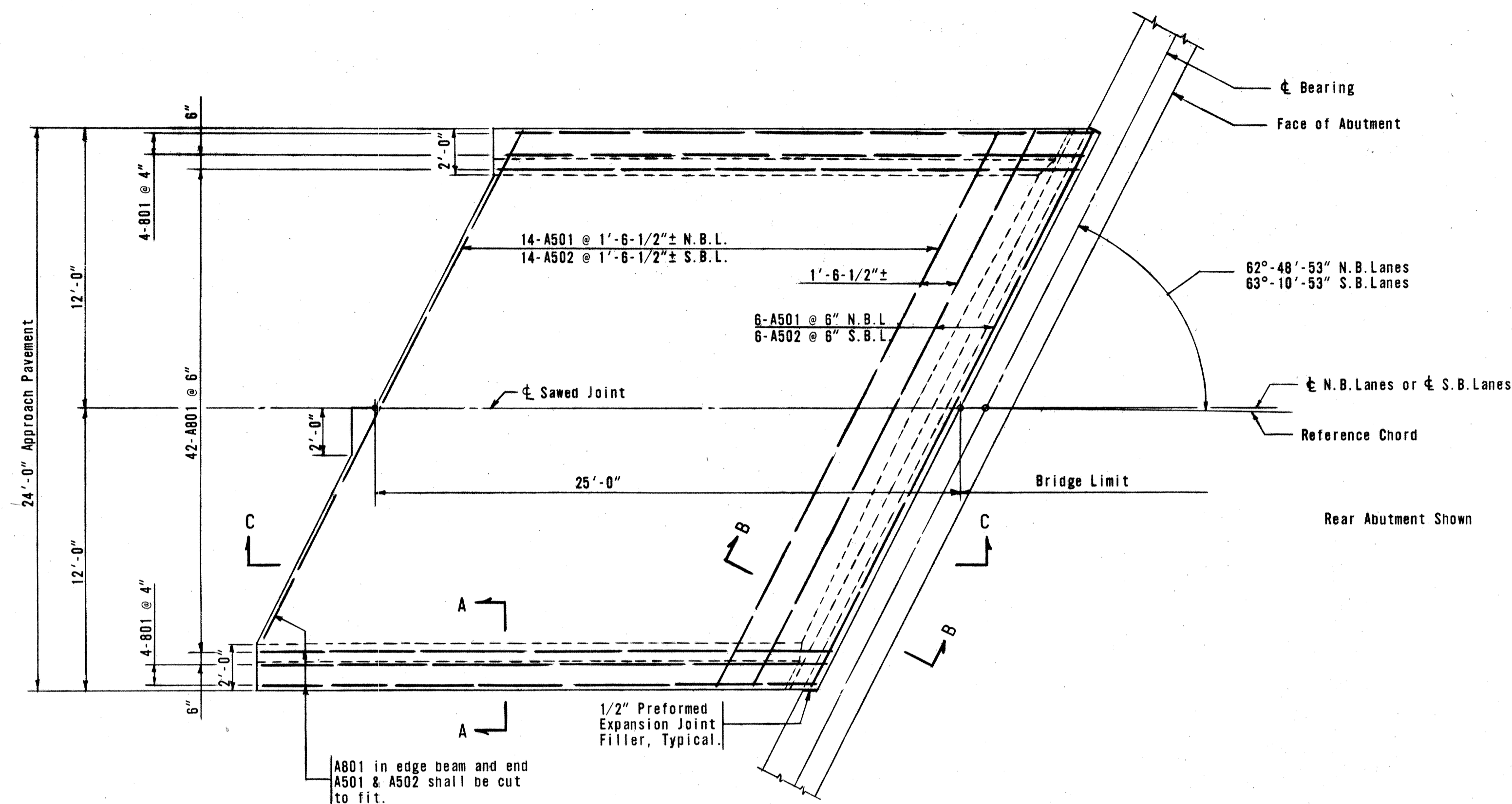
J.E. GREINER COMPANY CONSULTING ENGINEERS BALTIMORE, MARYLAND				
SUPERSTRUCTURE DETAILS				
BRIDGE NO. MED-271-0284 L. & R.				
I.R. 271 OVER GRANGER DITCH				
MEDINA CO.		STA. 185+80.00		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
PAHL	HAYDEN	WALTER	KOHLER	MUDD
				DATE
				6-11-65

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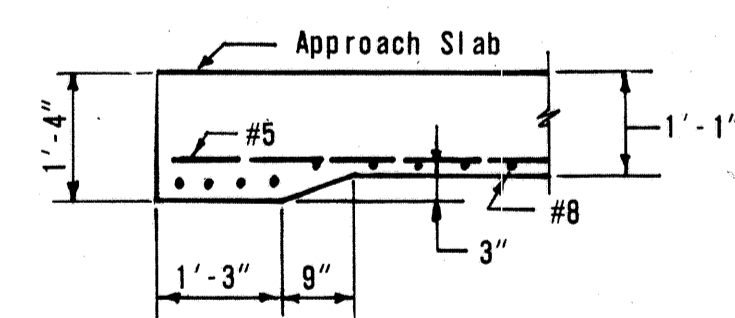
224
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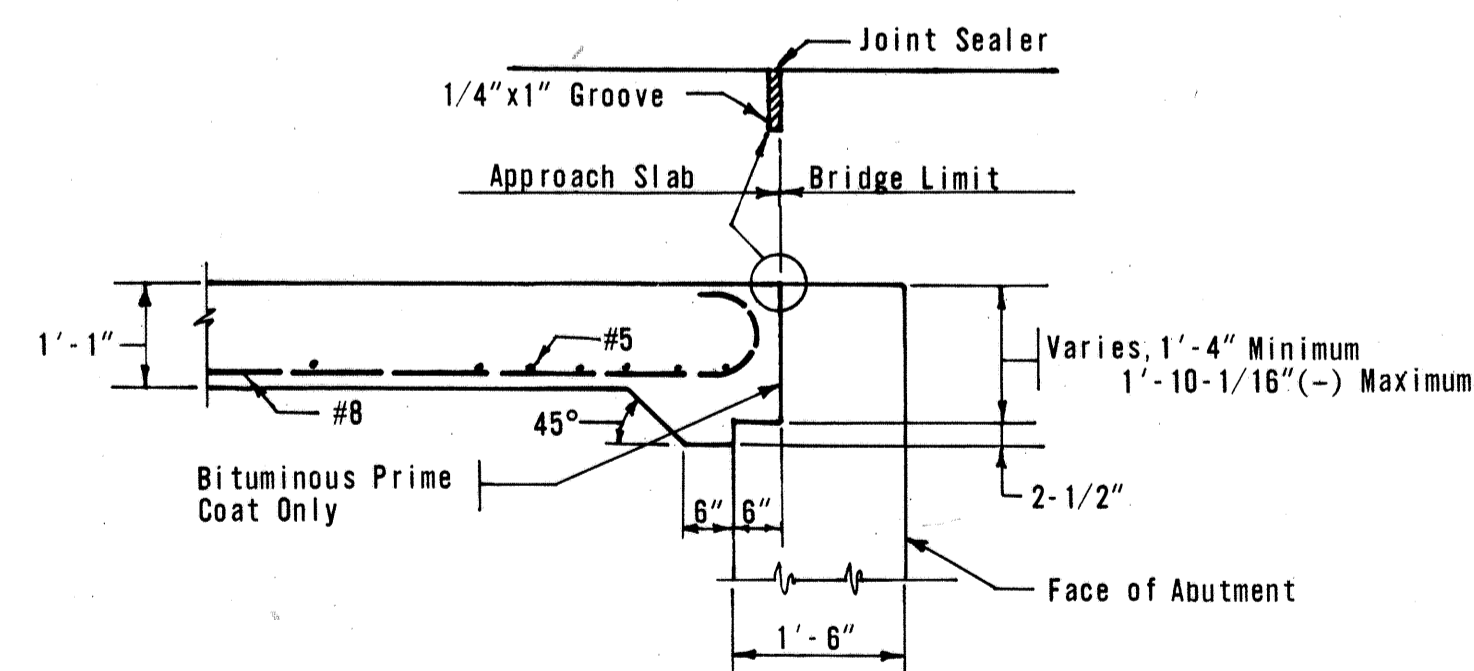
REINFORCING STEEL LIST				
MARK	NO.	LENGTH	WEIGHT	SHP.
A801	200	25'-7"	13.661	B
A501	40	26'-5"	1.102	S
A502	40	26'-4"	1.099	S

Quantities are for 4 Approach Slabs

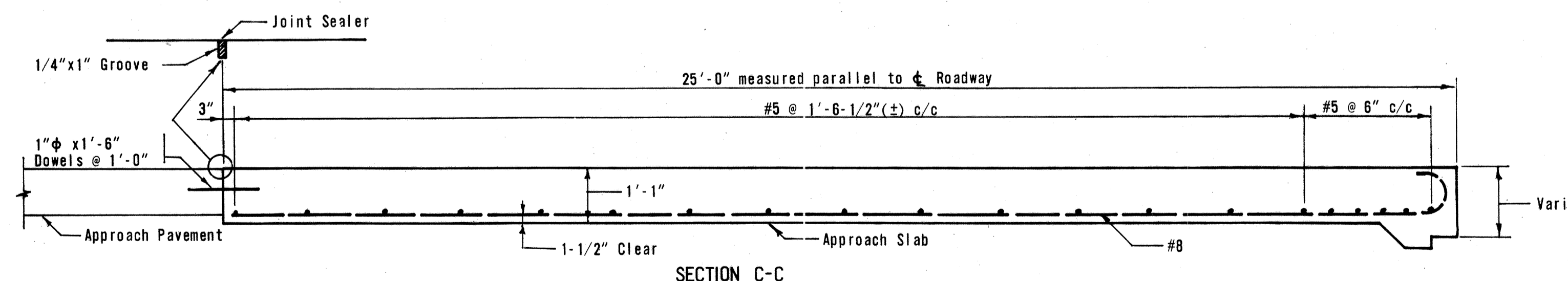
NOTES:
1/2" Preformed Expansion Joint Filler shall be included in Item 611 "Reinforced Concrete Approach Slab" for payment.
Bar Size is indicated in the Bar Mark. The first digit indicates the Bar Size Number. For example: A801 is a No. 8 Bar Size.
Work this sheet with Standard Drawing No. AS-1-54 (Revised 7-5-62).
Concrete in Approach Slabs shall be Class C.



SECTION A-A



SECTION B-B



SECTION C-C

J.E. GREINER COMPANY
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

APPROACH SLAB DETAILS
BRIDGE NO. MED-271-0284 L. & R.
I.R. 271 OVER GRANGER DITCH

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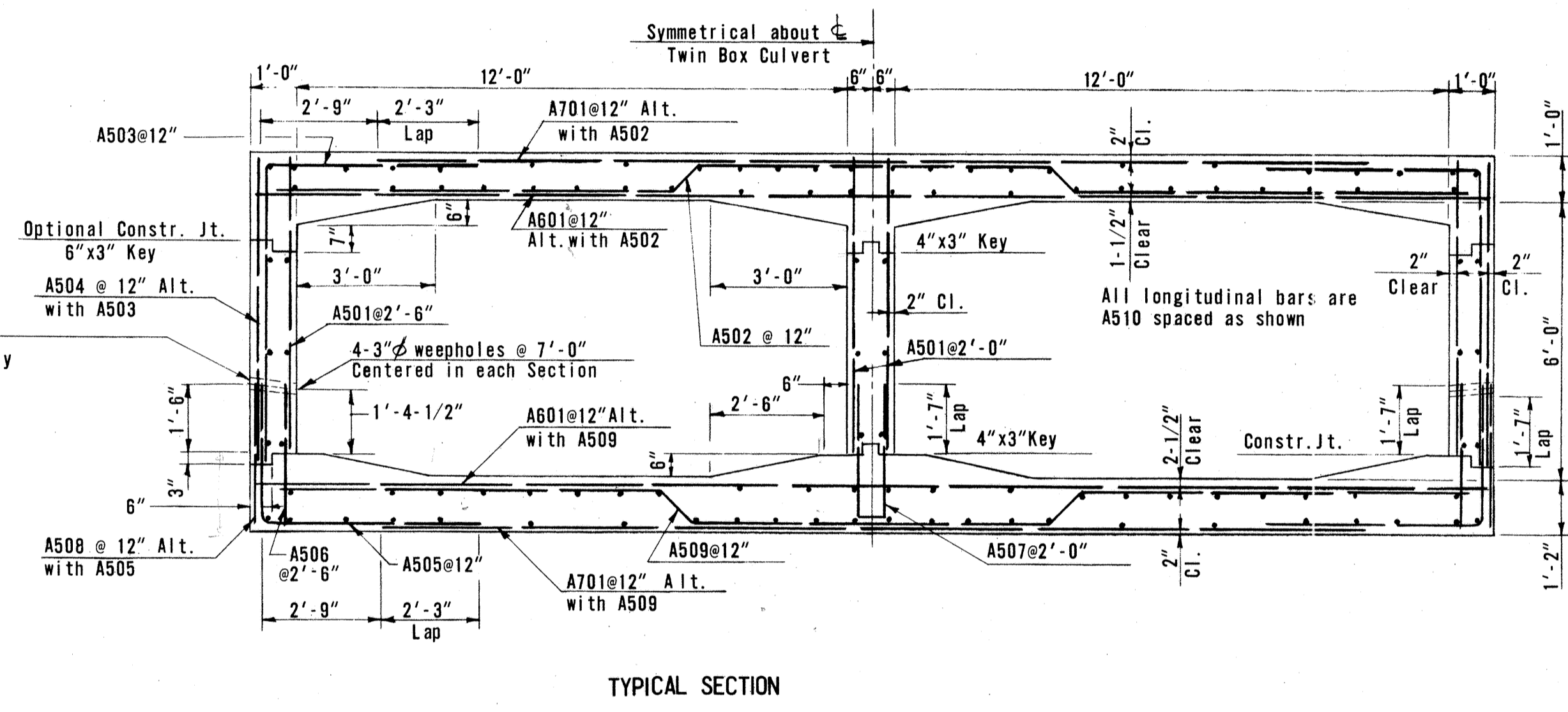
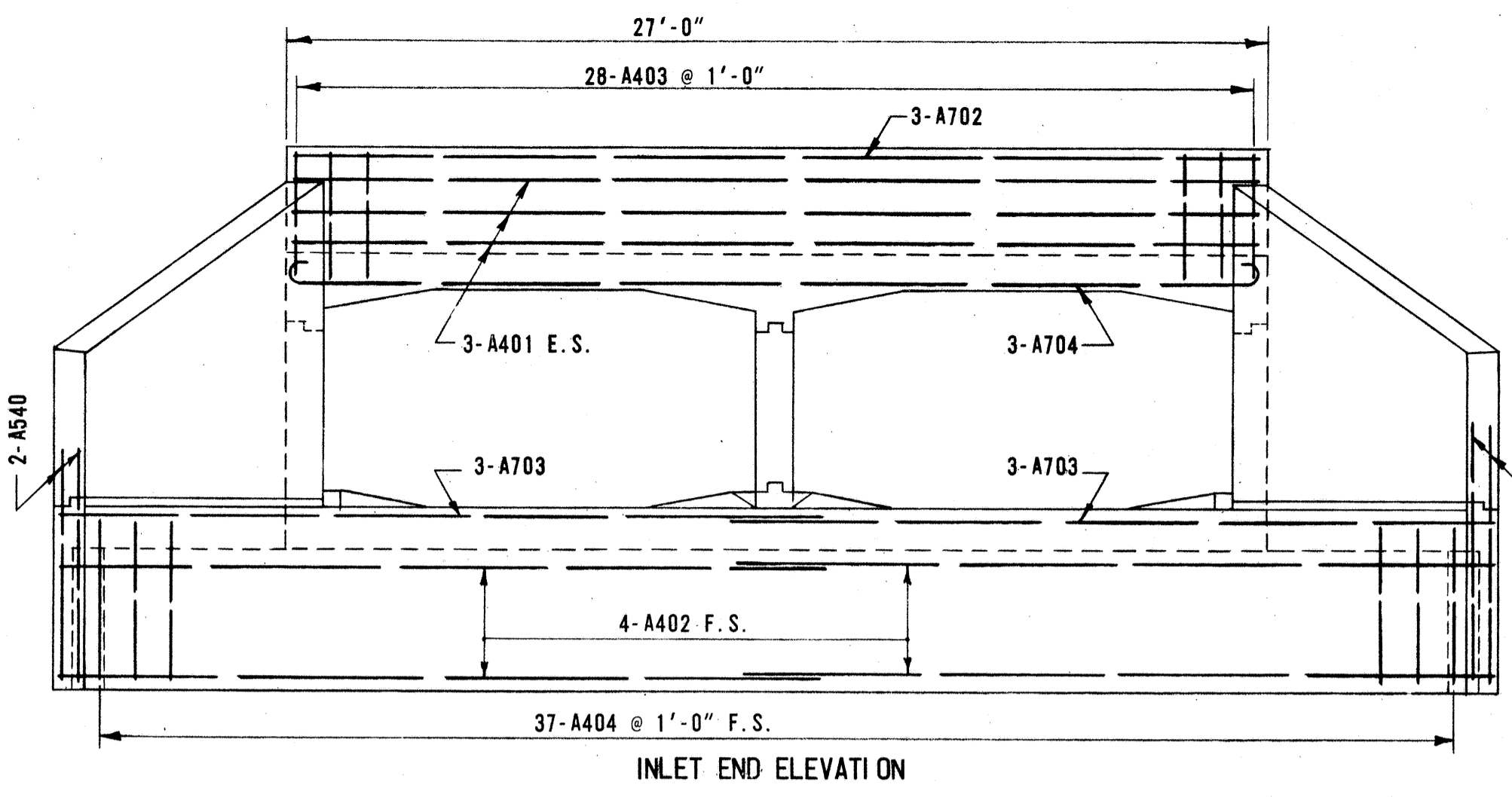
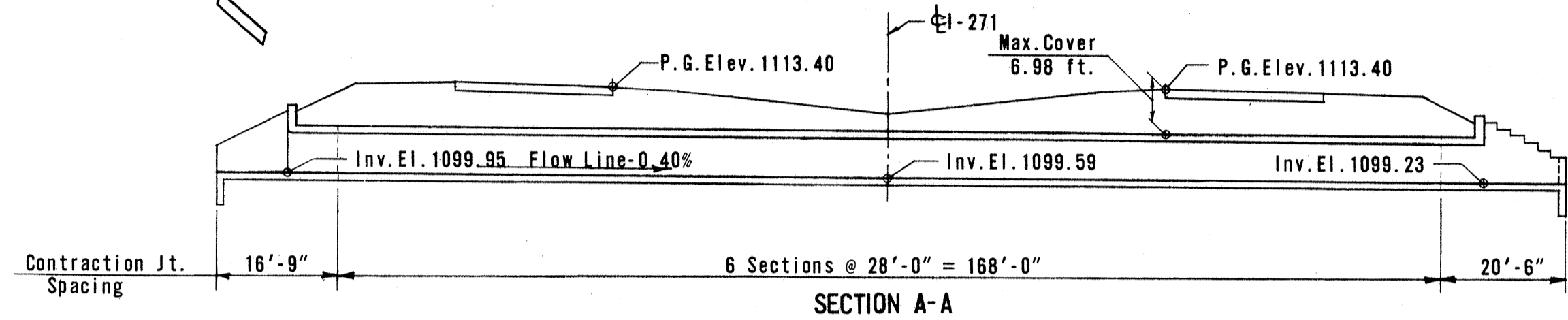
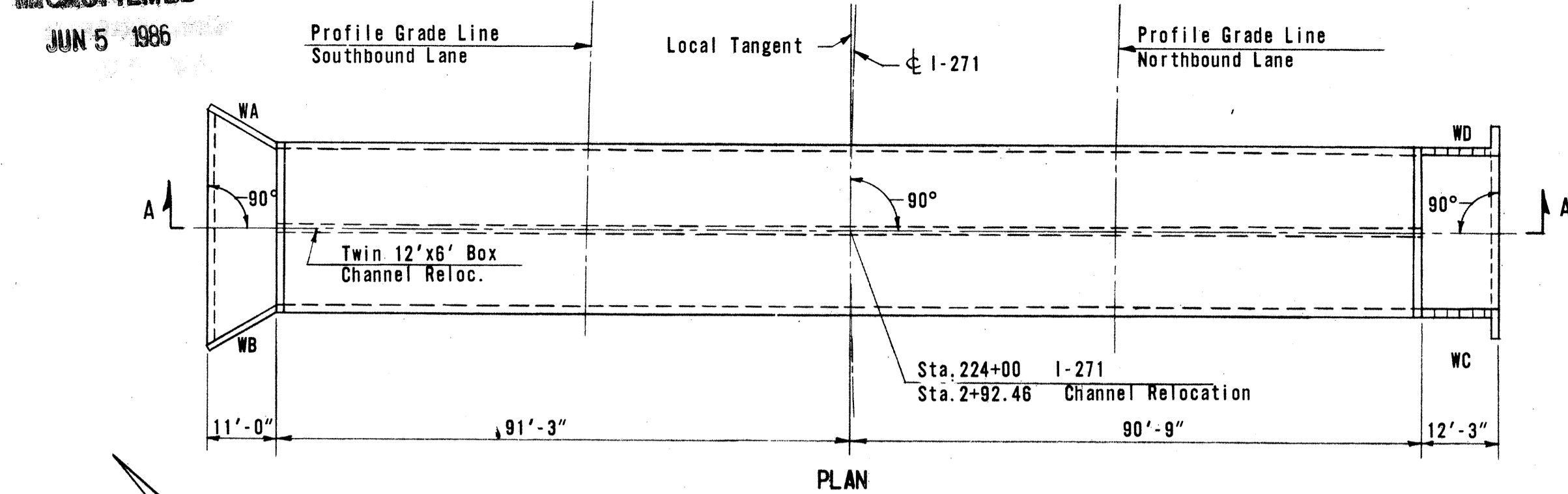
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
PAHL	WALTER	WALTER	SHERMAN	MUDD	6-11-65	

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MED-271-0.00

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2	OHIO	1-271-6(13)221

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GENERAL NOTES

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57 together with current revisions thereof.

DESIGN HEIGHT of Fill = 7.0 feet.

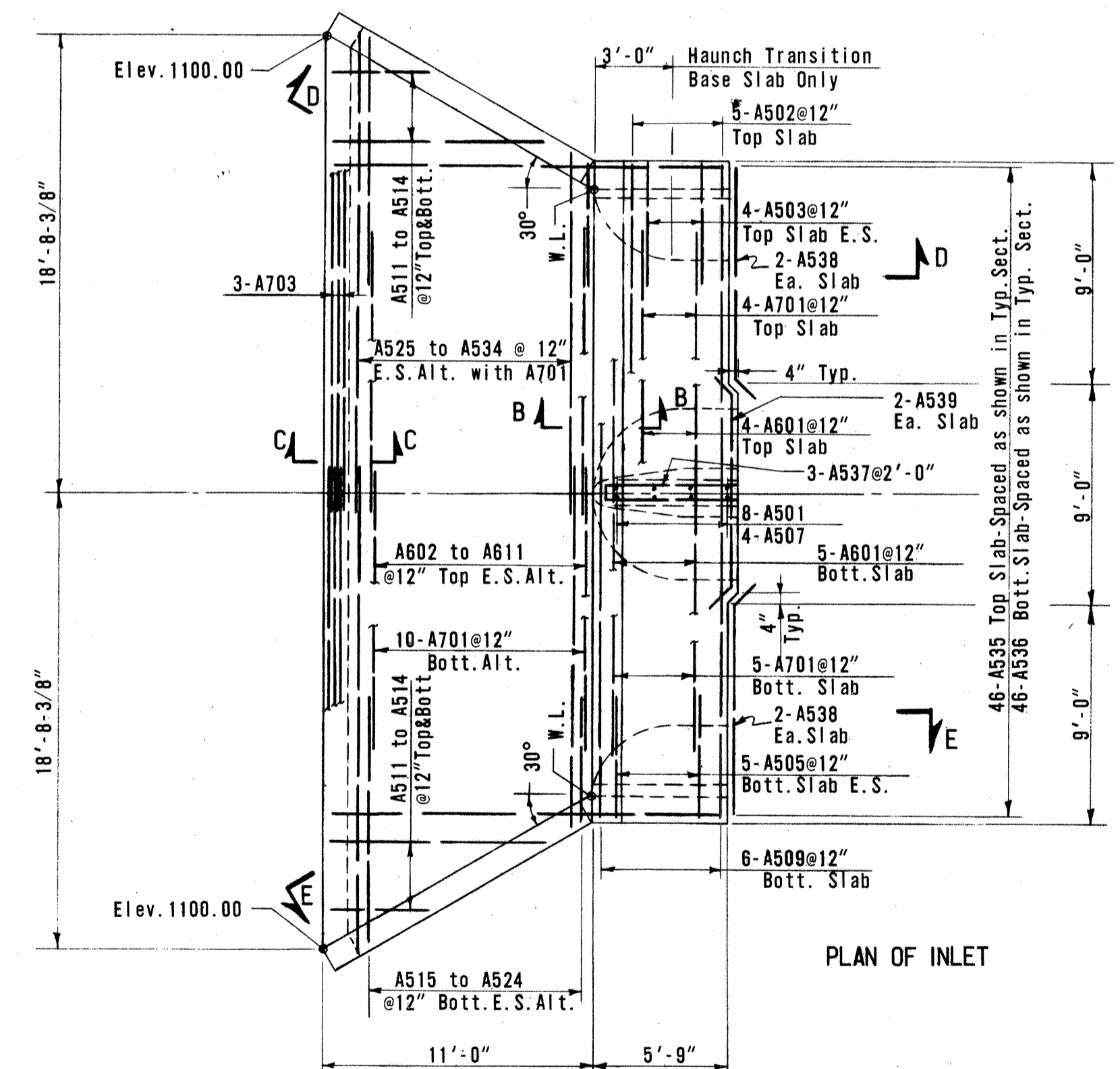
LONGITUDINAL REINFORCING bars do not extend across contraction joints.

FOUNDATION material of approximately uniform bearing capacity is contemplated. Spots of soft earth shall be removed and be replaced with thoroughly compacted granular material. The granular material shall meet the requirements of 310.02 and shall be included with Excavation Item 203 for Payment.

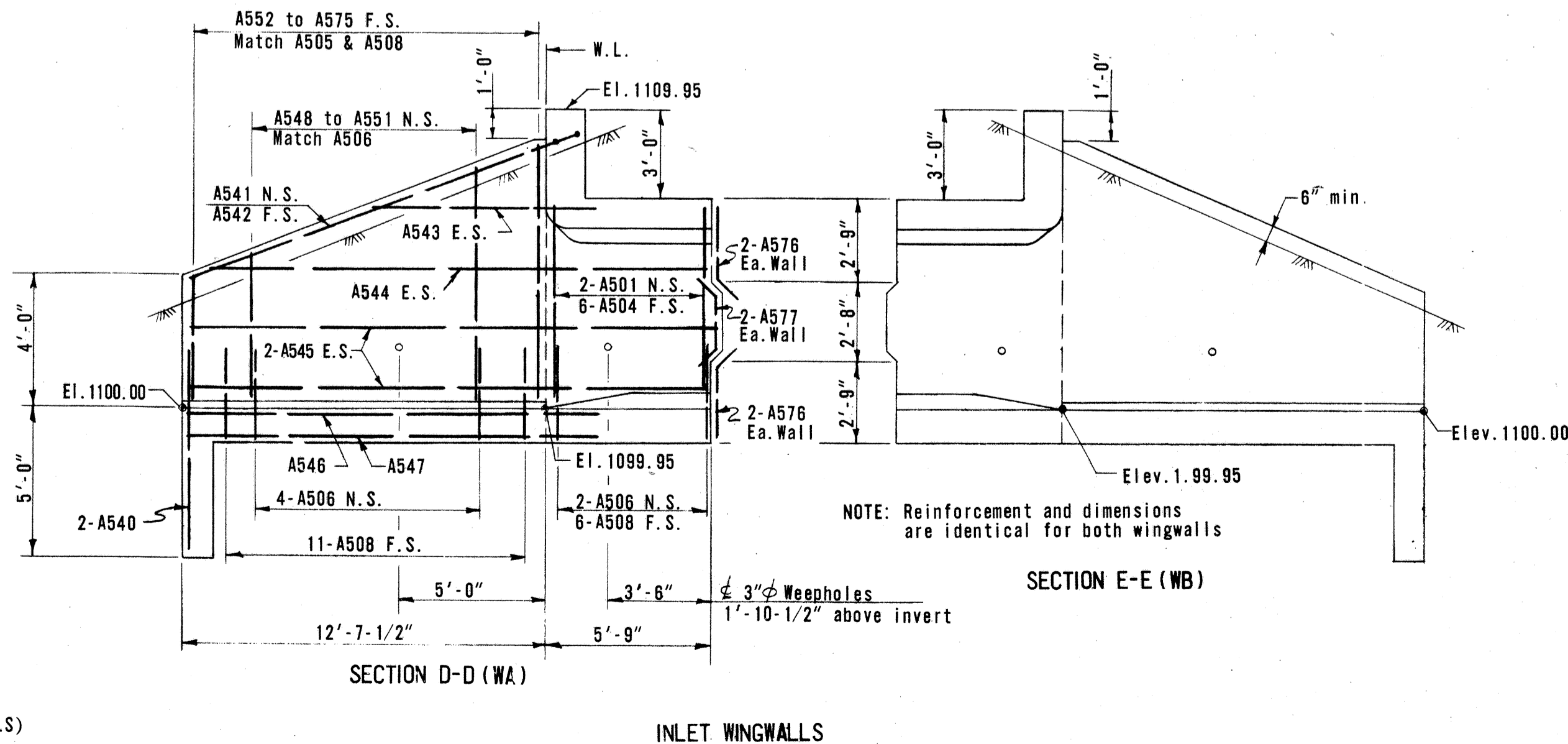
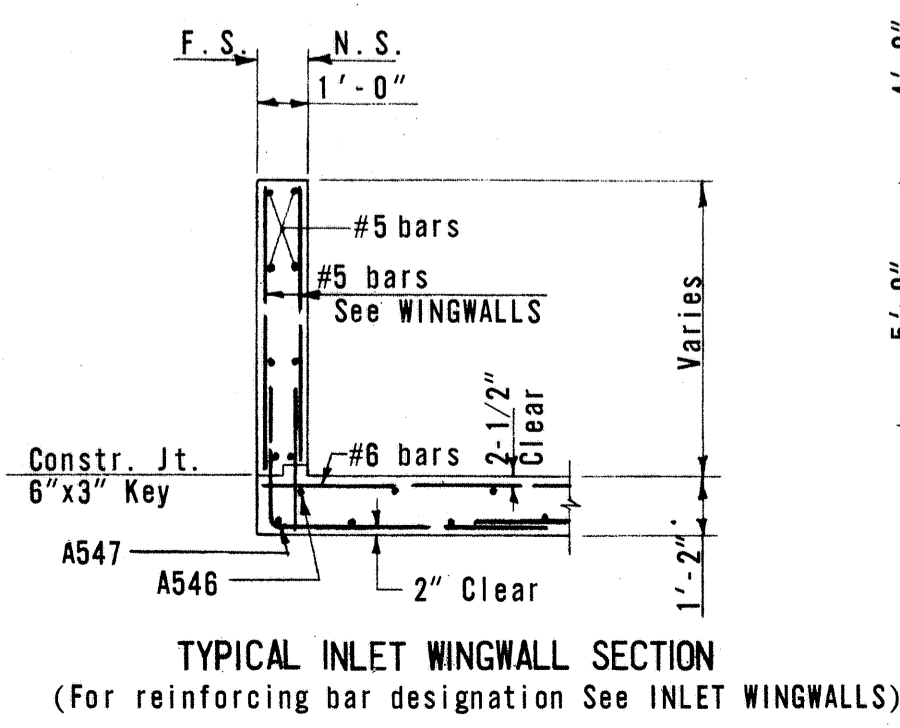
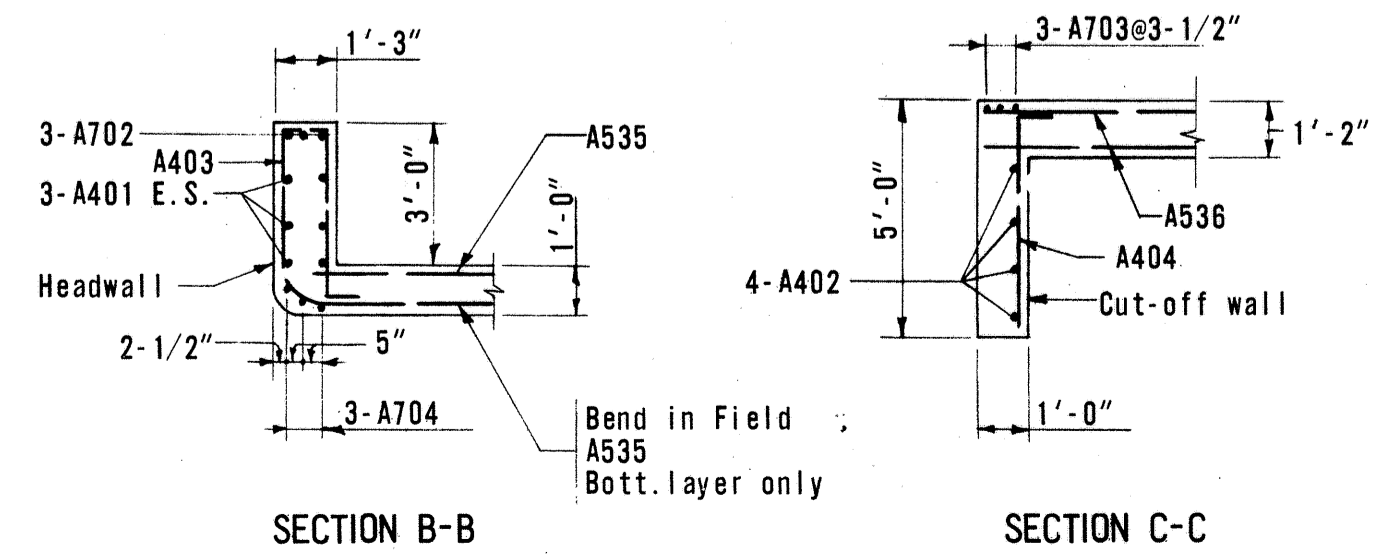
EMBANKMENT shall be placed symmetrically on both sides of the culvert after the top slab is in place. Embankment over the barrel shall be placed in horizontal layers simultaneously with that on each side of the culvert.

UNDER side of roof slab are curved at Entrance End only.

LEGEND: N.S. = Near Side
F.S. = Far Side
E.S. = Each Side
Alt. = Alternate



Provide 2' wide x 2' long and 3' high backfill of coarse aggregate immediately adjacent to all weepholes.



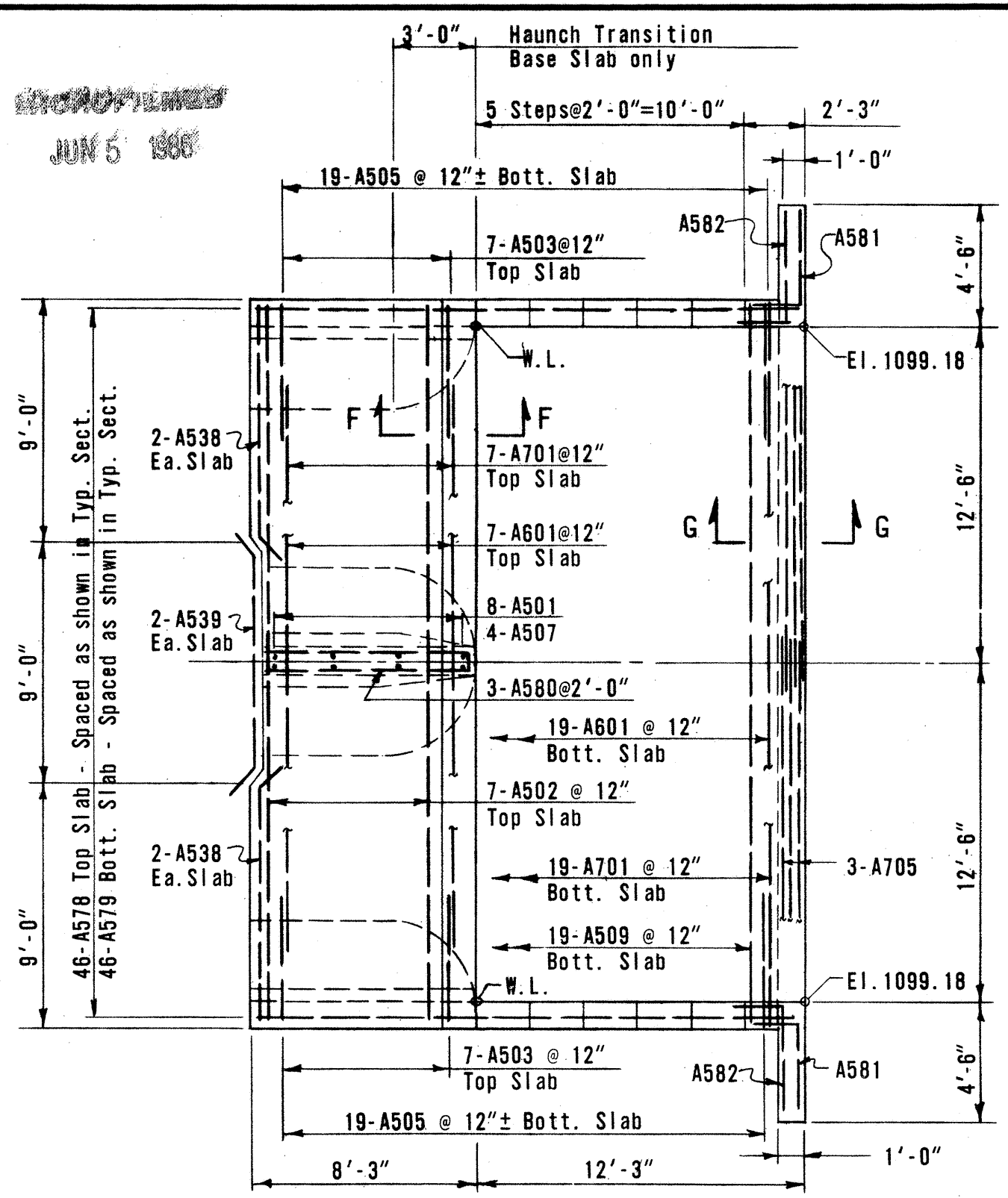
ESTIMATED QUANTITIES			
ITEM	TOTAL	UNIT	DESCRIPTION
503	1580	Cu. Yds.	Unclassified Excavation
511	620	Cu. Yds.	Class "C" Concrete
509	72007	Lbs.	Reinforcing Steel

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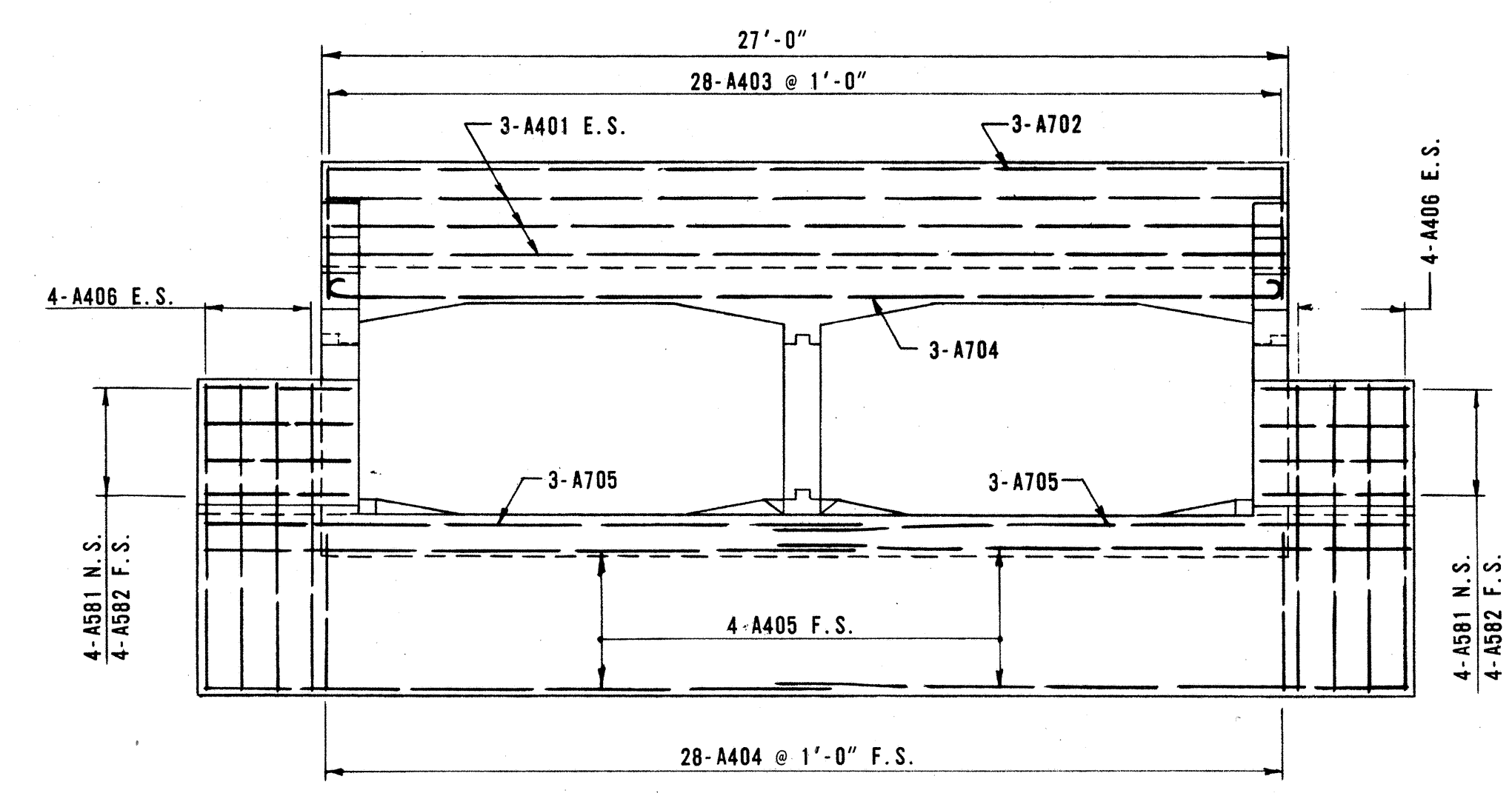
**PLAN, SECTION AND INLET
STRUCTURE NO. MED-271-0356
TWIN 12'x6' BOX CULVERT
STREAM UNDER I.R.#271**

MEDINA CO. STA. 224+00.00

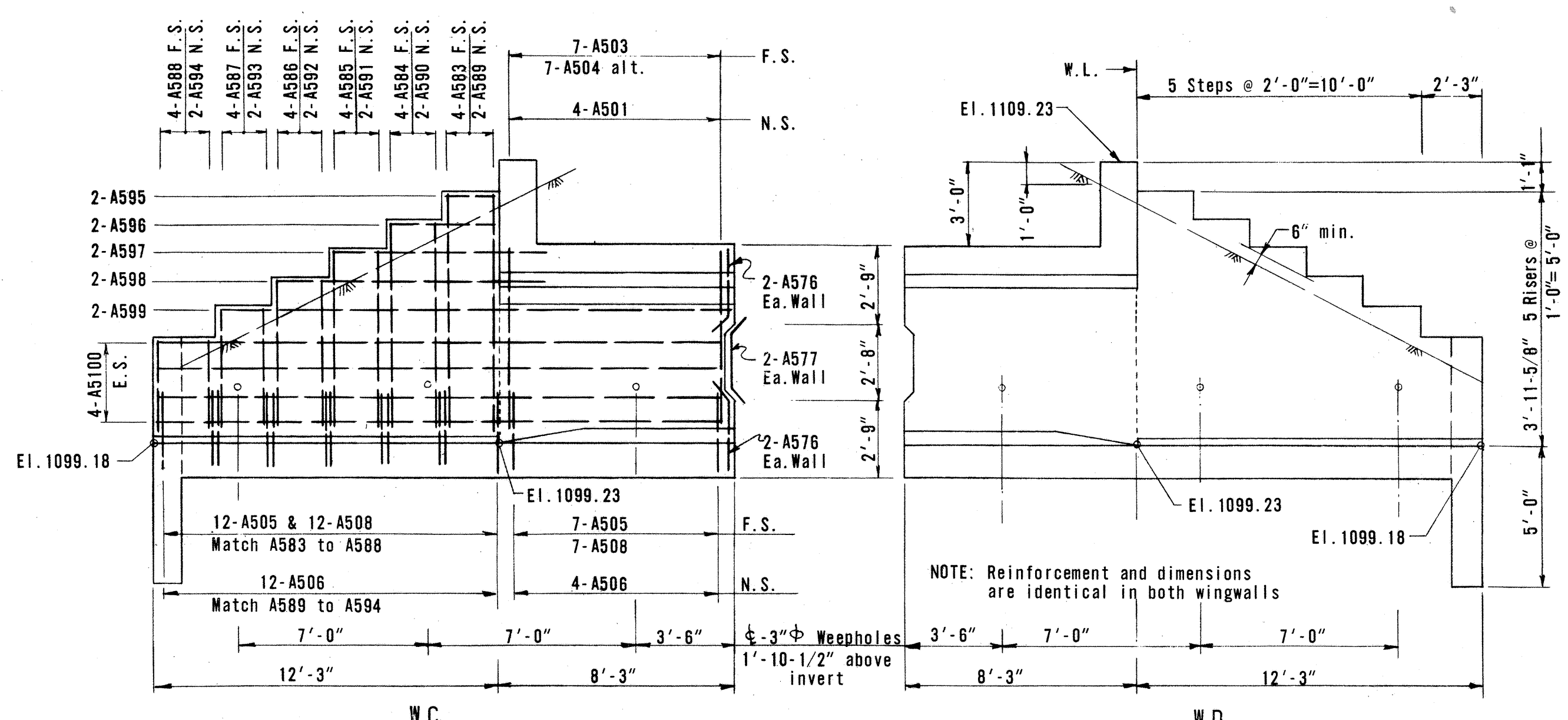
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GREIMANN	CROOKS	BARTO	CROOKS	MUDD	6-11-65	



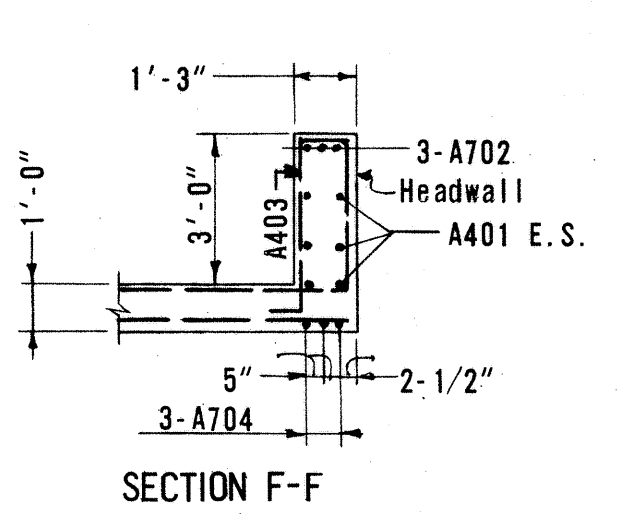
PLAN OF OUTLET



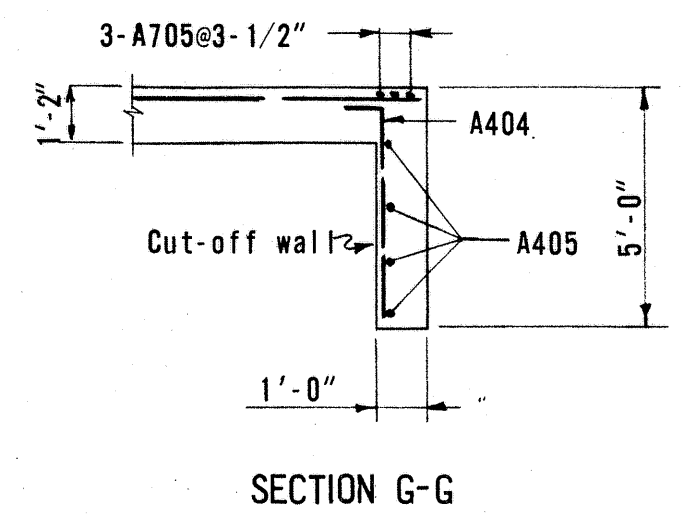
OUTLET END ELEVATION



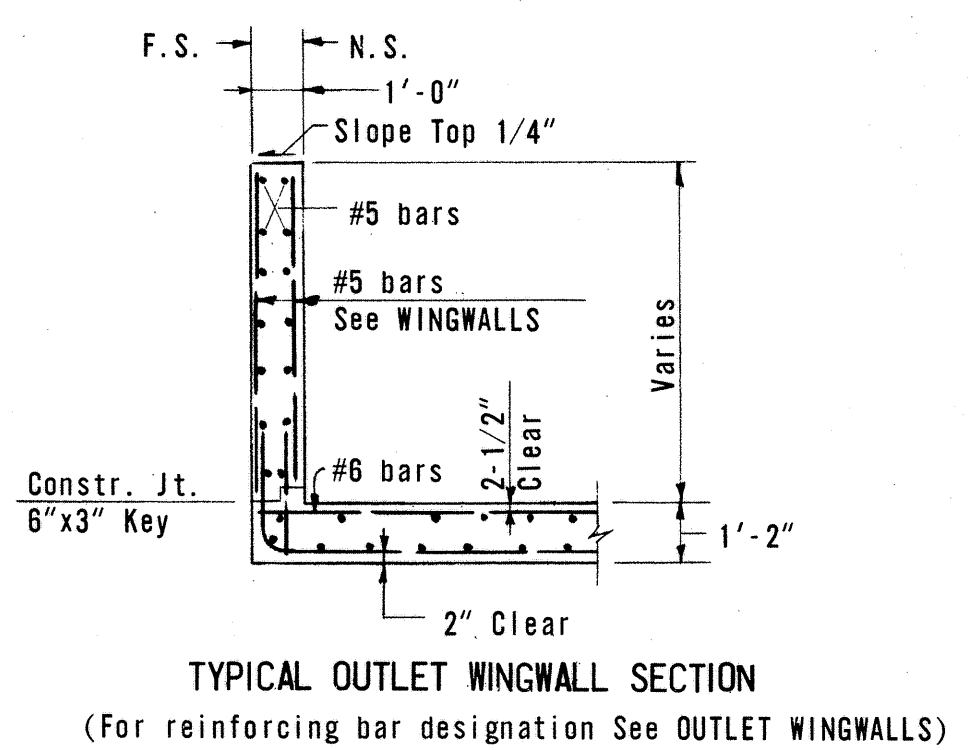
OUTLET WINGWALLS



SECTION F-F



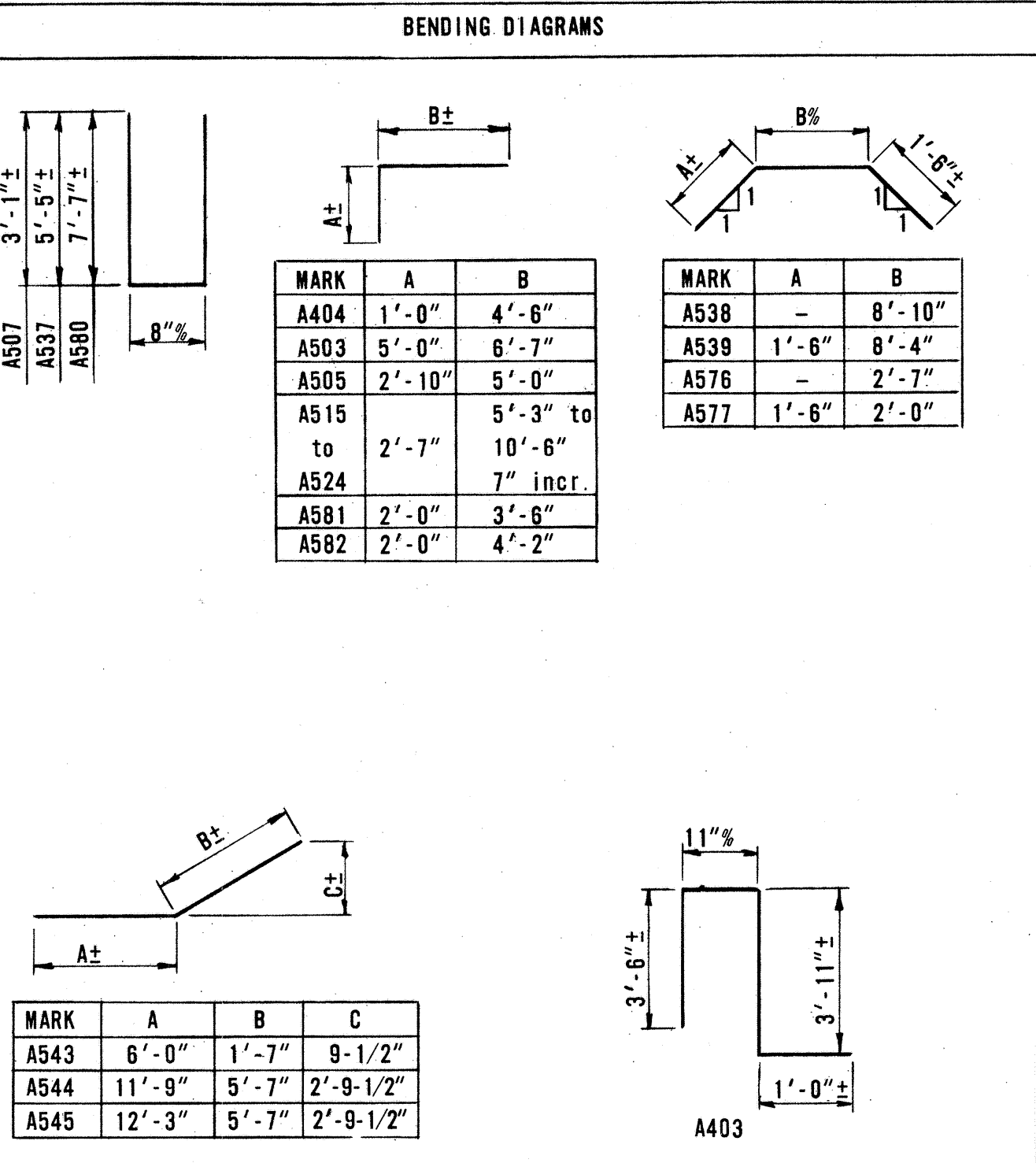
SECTION G-G



TYPICAL OUTLET WINGWALL SECTION
(For reinforcing bar designation See OUTLET WINGWALLS)

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	SHP.	MARK	NO.	LENGTH	WEIGHT	SHP.
BARREL SECTION					INLET END				
A501	300	6'-4"	1,982	S	A701	19	21'-2"	822	S
A502	168	26'-4"	4,614	B	A702	3	26'-8"	164	S
A503	324	11'-5"	3,858	B	A703	6	20'-4"	249	S
A504	336	6'-7"	2,308	S	A704	3	28'-4"	174	B
A505	324	7'-8"	2,591	B					
A506	132	3'-1"	424	S	OUTLET END				
A507	84	6'-7"	577	B	A401	6	26'-8"	107	S
A508	336	2'-10"	922	S	A403	28	9'-0"	168	B
A509	168	26'-5"	4,629	B	A404	28	5'-4"	100	B
A510	660	27'-8"	19,045	S	A405	8	18'-0"	96	S
A538	48	10'-4"	517	B	A406	16	8'-6"	91	S
A539	24	11'-2"	280	B					
A576	48	4'-1"	204	B	A501	16	6'-4"	106	S
A577	24	5'-0"	125	B	A502	7	26'-4"	192	B
					A503	14	11'-5"	167	B
A601	324	26'-8"	9,012	S	A504	14	6'-7"	96	S
					A505	38	7'-8"	304	B
A701	324	21'-2"	7,153	S	A506	32	3'-1"	103	S
					A507	4	6'-7"	27	B
					A508	38	2'-10"	112	S
A401	6	26'-8"	107	S	A509	19	26'-5"	523	B
A402	8	20'-2"	108	S	A538	8	10'-4"	86	B
A403	28	9'-0"	168	B	A576	8	4'-1"	34	B
A404	37	5'-4"	132	B	A578	46	7'-9"	372	S
					A579	46	20'-2"	968	S
A501	12	6'-4"	79	S	A580	3	15'-7"	49	B
A502	5	26'-4"	137	B	A581	8	5'-4"	45	B
A503	8	11'-5"	95	B	A582	8	6'-0"	50	B
A504	12	6'-7"	82	S	A583	8	8'-9"	73	S
A505	10	7'-8"	80	B	A584	8	7'-9"	65	S
A506	12	3'-1"	39	S	A585	8	6'-9"	56	S
A507	4	6'-7"	27	B	A586	8	5'-9"	48	S
A508	34	2'-10"	100	S	A587	8	4'-9"	40	S
A509	6	26'-5"	165	B	A588	8	3'-9"	31	S
A511	4	3'-9" to Series 9'-3" to Series 12'-11" of 10 7" Incr.	108	S	A589	4	8'-6"	35	S
A514	4	1'-10" Incr			A590	4	7'-6"	31	S
A515	2	7'-8" to Series 12'-11" of 10 7" Incr.	215	B	A591	4	6'-6"	27	S
A524	2	14'-7" to Series 19'-10" of 10 7" Incr.	359	B	A592	4	5'-6"	23	S
A525	2	14'-7" to Series 19'-10" of 10 7" Incr.	359	B	A593	4	4'-6"	19	S
A534	46	5'-6"	264	S	A594	4	3'-6"	15	S
A535	46	16'-5"	788	S	A595	4	1'-10"	8	S
A536	46	16'-5"	788	S	A596	4	3'-10"	16	S
A537	3	11'-3"	35	B	A597	4	7'-8"	32	S
A539	4	11'-2"	47	B	A598	4	9'-8"	40	S
A540	4	6'-7"	27	S	A599	4	18'-0"	75	S
A541	2	14'-6"	30	S	A5100	16	20'-0"	334	S
A542	2	14'-0"	29	S					
A543	4	7'-4"	31	B	A701	26	21'-2"	1,125	S
A544	4	17'-4"	72	B	A702	3	26'-8"	164	S
A545	8	17'-10"	149	B	A703	3	28'-4"	174	B
A546	2	14'-6"	30	S	A704	6	18'-0"	221	S
A547	2	14'-2"	30	S					
A548	2	5'-1" to Series 7'-10" of 4 11" Inr.	54	S					
A552	2	4'-4" to Series 8'-2" of 24 2" Inr.	313	S					
A575	4	5'-0"	21	B					
A577	4	5'-0"	21	B					
REPLACEMENT BARS									
A601	9	26'-8"	360	S	RE401	1	5'-3"	---	S
A602	2	14'-7" to Series 19'-10" of 10 7" Inr.	517	S	RE501	3	5'-7"	---	S
A611	of 10	7" Inr.			RE601	1	5'-11"	---	S
					RE701	1	6'-3"	---	S



Cost of Field Bend for 16 longitudinal bars to be included with Item 509 for payment.

BAR SIZE is indicated in the bar mark. The first digit, whether three or four digits are used, indicates the bar size number. For example A501 is a No. 5 size bar and A5107 is a No. 5 size bar.

J.E. GREINER COMPANY
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

OUTLET & REINFORCING STEEL LIST
STRUCTURE NO. MED-271-0356
TWIN 12'x6' BOX CULVERT
STREAM UNDER I.R.#271

MEDINA CO. STA. 224+00.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GREIMANN	CROOKS	BARTO	CROOKS	MUDD	6-11-65	

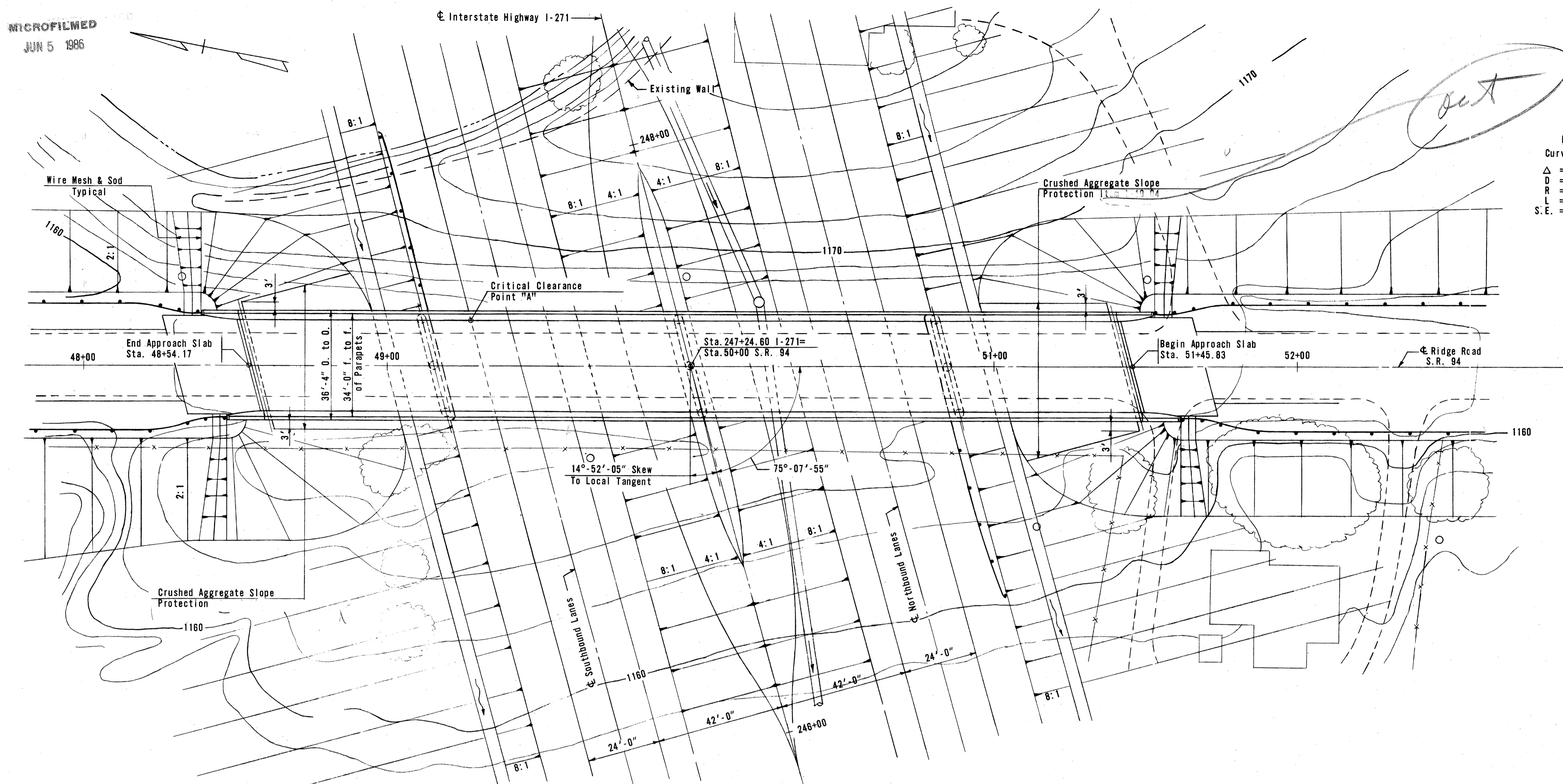
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JUN 5 1986

Interstate Highway I-271

MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6-(13)221

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259

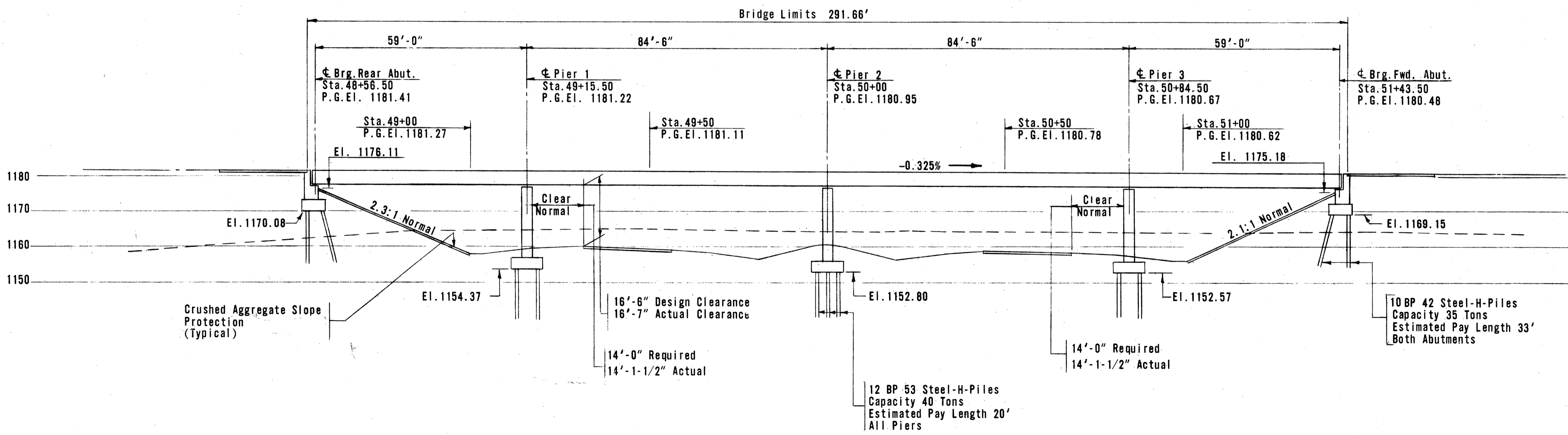


I-271
Curve Data
 $\Delta = 66^{\circ}-44'-37''$
 $D = 0^{\circ}-40'-00''$
 $R = 8594.36$
 $L = 10,011.54$
 $S.E. = 0.021 \text{ ft./ft.}$

PROPOSED STRUCTURE

TYPE: Continuous steel beams with reinforced concrete deck and substructure.
 SPANS: 59'-0"; 84'-6"; 84'-6"; 59'-0"
 ROADWAY: 30'-0" face to face of 2'-0" Safety Curbs.
 LOAD FREQUENCY: C.F. = 400(57)
 SKEW: 14°-52'-05" (R.F.)
 WEARING SURFACE: 1" Monolithic Concrete
 APPROACH SLABS: AS-1-54(25' Long)
 ALIGNMENT: Tangent
 TRAFFIC VOLUME: 10,410, ADT-1975, I-271
 833, DDHV-1975, I-271
 3,990, ADT-1975, SR94

Traffic on State Route No. 94 to be maintained by a temporary run around. See Sheet No.155



J.E. GREINER CO.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

SITE PLAN 0352
BRIDGE NO. MED-271-0406
INTERSTATE HIGHWAY *271 UNDER
STATE ROUTE NO. 94
MEDINA CO. STA. 247+24.60

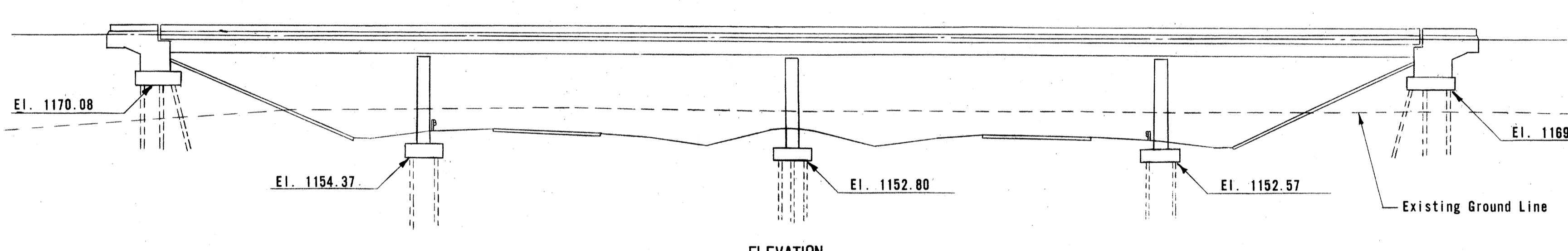
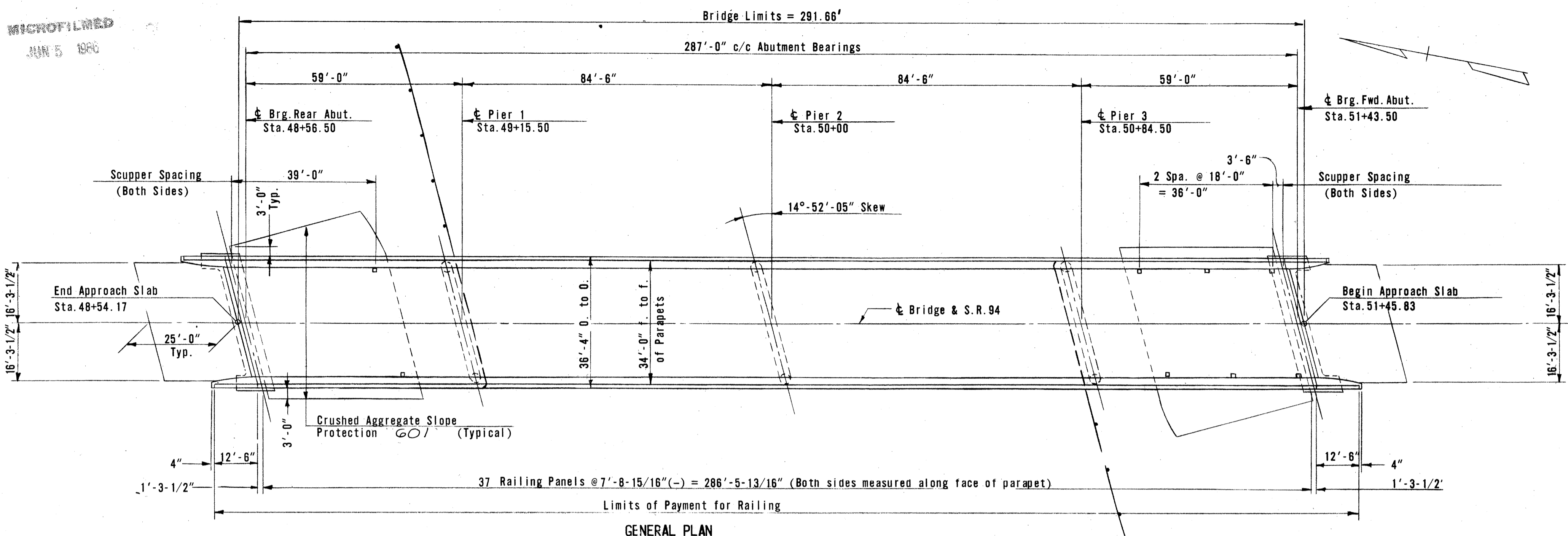
PRESENT TOPOGRAPHY		PROPOSED WORK		
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED
HENRY	AIR SURVEY CORP.	KUNSCH	WALTER	KOHLER
				REVIEWED
				6-11-65

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MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	1-271-6-(13)221

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GENERAL NOTES

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with current revisions thereof.
REFERENCE should be made to:
Standard Drawing FSB-1-62, revised 1-15-63, and AS-1-54, revised 7-5-62.
SD-1-63, Sheets 1 thru 4, dated 11-12-63.
BR-1-65, Type 1, Sheet 1, dated 2-1-65.
SD-2-64, dated 11-25-64.
Supplemental Specifications:
808, dated 1-14-65
811, dated 3-29-65

EXCAVATION QUANTITY includes the removal of fill material between the surface of the proposed embankment and the bottom of the abutment.
PILES shall be driven to a minimum capacity of 35 tons per pile for the abutments and 40 tons per pile for the piers.

ESTIMATED QUANTITIES

Item	Total	Unit	DESCRIPTION	Super.	Abuts.	Piers	General
503	443	Cu. Yds.	Unclassified excavation		201	242	
511	329	Cu. Yds.	Class "C" concrete, superstructure	329			
511	84	Cu. Yds.	Class "C" concrete, piers above footings			84	
511	80	Cu. Yds.	Class "E" concrete, abutments above footings		80		
511	145	Cu. Yds.	Class "E" concrete, footings		64	81	
509	120,779	Lbs.	Reinforcing Steel	88,142	12,615	20,022	
513	338,100	Lbs.	Structural Steel	338,100			
514	338,100	Lbs.	Field painting of structural steel	338,100			
517	628.12	Lin. Ft.	Railing (Type 1)	578.12	50		
505	Lump	Sum	First test pile (12BP53)				Lump
507	858	Lin. Ft.	Steel piles, 10BP42		858		
507	903	Lin. Ft.	Steel piles, 12BP53			903	
518	68	Lin. Ft.	6" Helical perforated CMP, 707.06 including specials		68		
518	64	Lin. Ft.	6" Helical CMP, 707.06 non-perforated		64		
518	8	Each	Scuppers, including supports		8		
518	26	Cu. Yds.	Porous backfill		26		
808	329	Each	Water-reducing, set-retarding admixture	329			
601	497	Sq. Yds.	Crushed aggregate slope protection				497

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	SHP.
ABUTMENTS				
A501	48	8'-4"	417	B
A502	48	7'-0"	350	B
A503	48	7'-0"	350	B
A504	16	11'-11"	190	B
A505	12	6'-3"	78	B
A506	12	3'-6"	44	S
A507	8	14'-4"	120	S
A508	8	11'-1"	92	S
A509	24	7'-6"	188	B
A510	4	8'-4"	35	B
A511	4	9'-2"	38	B
A512	4	9'-10"	41	B
A513	4	10'-8"	45	B
A514	8	5'-5"	45	S
A515	40	4'-8"	195	S
A516	4	2'-9"	11	B
A517	4	3'-9"	16	B
A518	4	4'-9"	20	B
A519	16	5'-9"	96	B
A520	28	2'-9"	80	B
A521	36	5'-7"	210	B
A522	16	12'-4"	206	S
A523	8	8'-6"	71	S
A524	4	8'-10"	37	B
A525	24	7'-1"	177	S
A526	14	34'-4"	501	S
A527	14	37'-5"	546	B
A528	6	36'-1"	226	S
A529	60	3'-1"	193	B
A530	8	5'-0"	42	S
A531	4	5'-7"	23	B
A532	24	5'-3"	131	S
A601	48	14'-3"	1027	B
A602	62	13'-7"	1265	B
A603	68	9'-0"	919	B
A801	14	38'-11"	1445	S
A802	8	10'-11"	228	S
A803	16	4'-11"	192	S
P501	108	7'-8"	864	B
P502	12	31'-9"	391	S
P503	18	7'-5"	139	B
P901	6	33'-7"	685	S
P902	6	33'-5"	682	S
P903	6	32'-8"	666	S
P904	6	30'-11"	631	S
P905	6	9'-9"	199	B
P1001	24	18'-9"	1936	S
P1002	48	19'-8"	4079	S
P1003	6	40'-1"	1035	B
P1004	6	37'-5"	966	B
P1005	9	14'-0"	542	S
F901	132	11'-2"	5012	B
F1001	72	7'-1"	2195	B
SUPERSTRUCTURE				
S501	412	5'-7"	2399	B
S502	412	3'-6"	1504	B
S503	824	2'-4"	2004	B
S601	385	36'-10"	21300	S
S602	504	37'-8"	28577	S
S603	66	34'-0"	3370	S
S701	385	36'-10"	28986	S
PARAPET RAILING				
R501	16	12'-3"	*	S
R502	16	4'-7"	*	S
R503	12	4'-2"	*	B
R504	8	5'-4"	*	B
R505	144	15'-2"	*	S
* Parapet railing bars are included with S-14 for payment				
REPLACEMENT BARS				
RE401	1	5'-3"	-	B
RE501	1	5'-7"	-	S
RE601	3	5'-11"	-	S
RE701	2	6'-3"	-	S
RE801	1	6'-6"	-	S
RE901	1	6'-10"	-	S
RE1001	1	7'-3"	-	S

SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "No. of Turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number.
Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 509.1-1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.
BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used indicate the bar size number. For example, A701 is a No. 7 size bar and P1002 is a No. 10 size bar.
Cost of field bending and cutting to be included with Item 509 for payment.

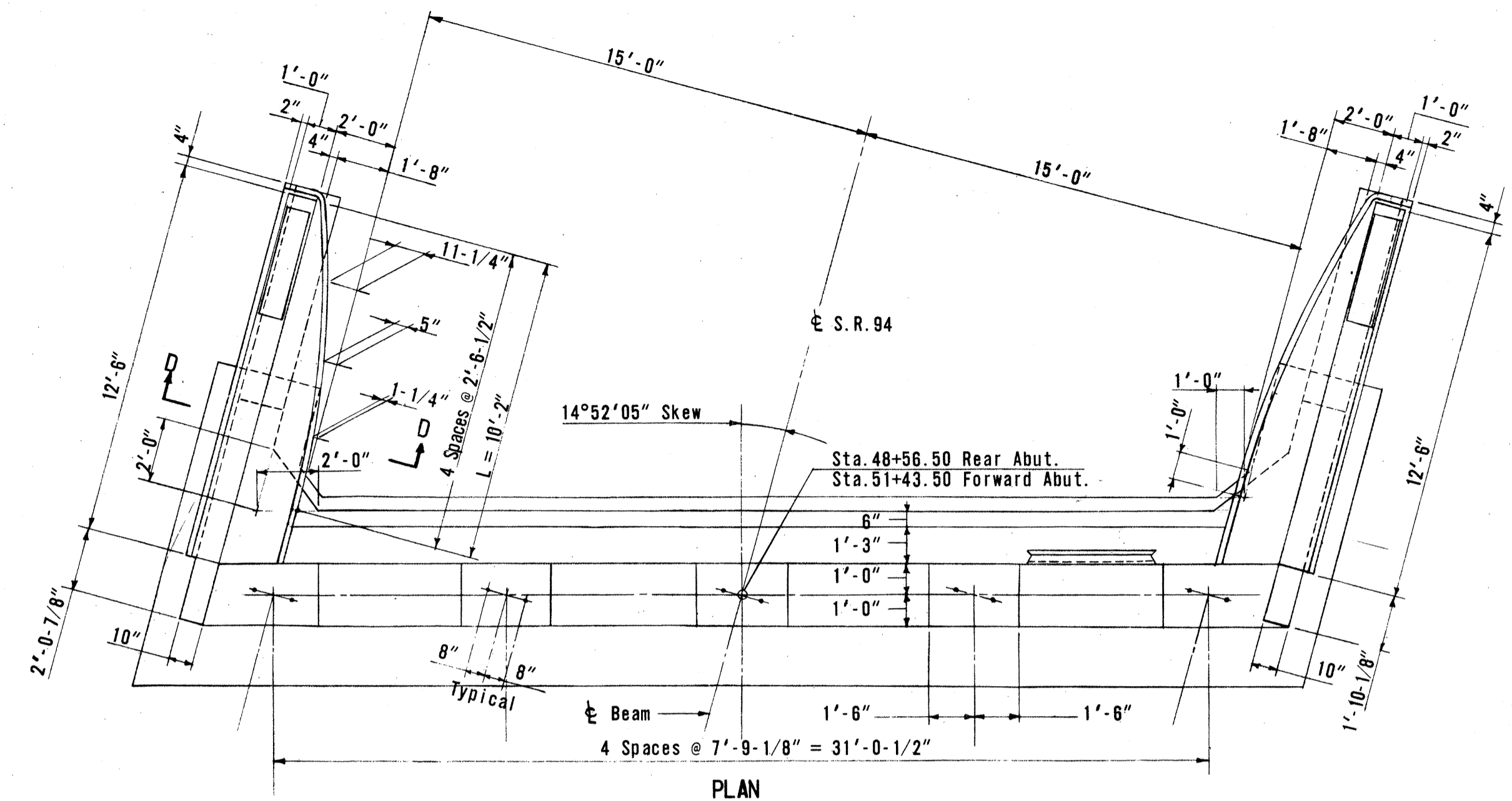
Design Loading - CF 400(57)
Concrete Class "C" - basic unit stress 1333 p.s.i.
Concrete Class "E" - basic unit stress 1133 p.s.i.
Structural Steel - ASTM A36 - basic unit stress 20,000 p.s.i.
Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i. Except, spiral reinforcement may be plain, Structural Grade with basic unit stress of 18,000 p.s.i.

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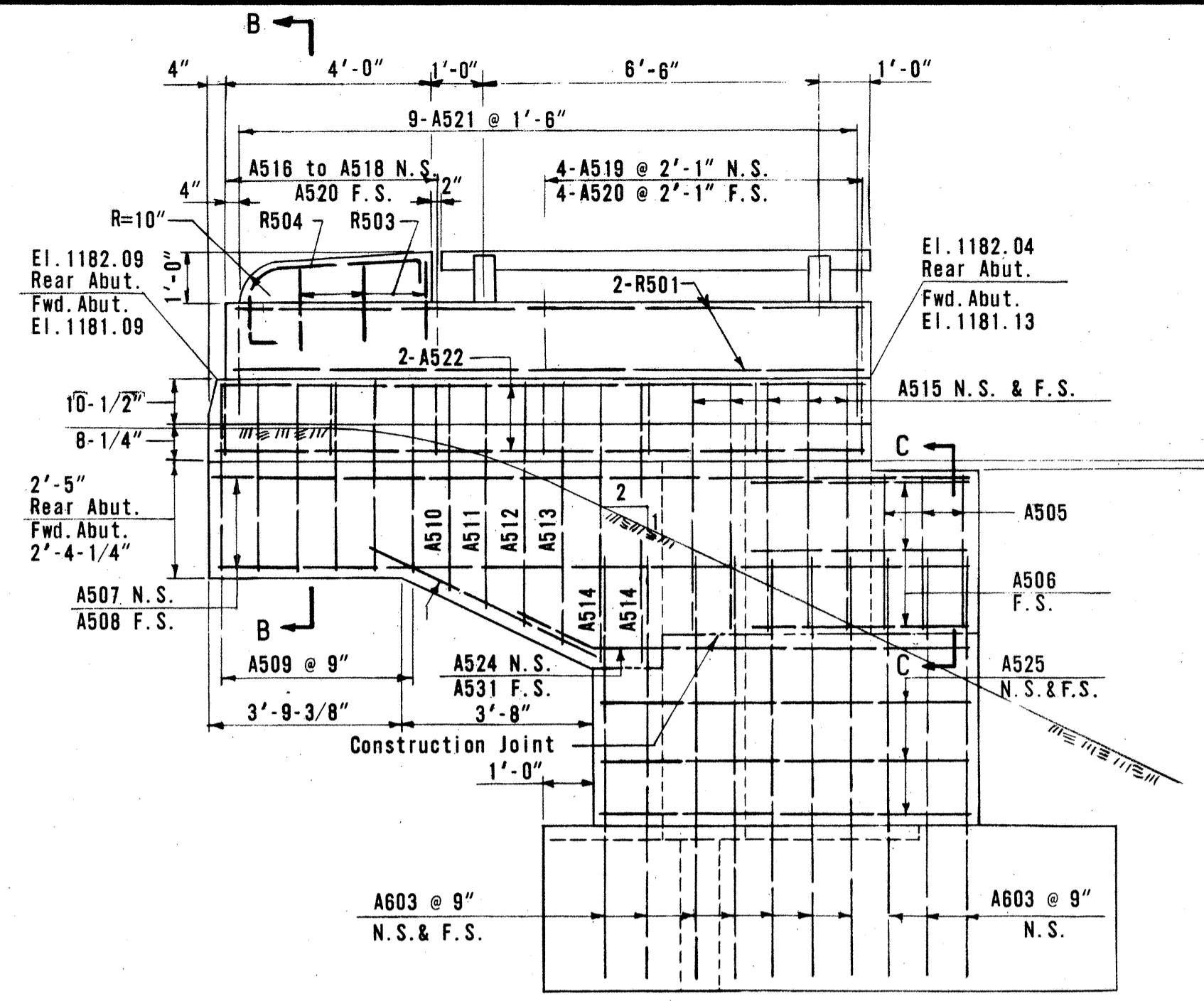
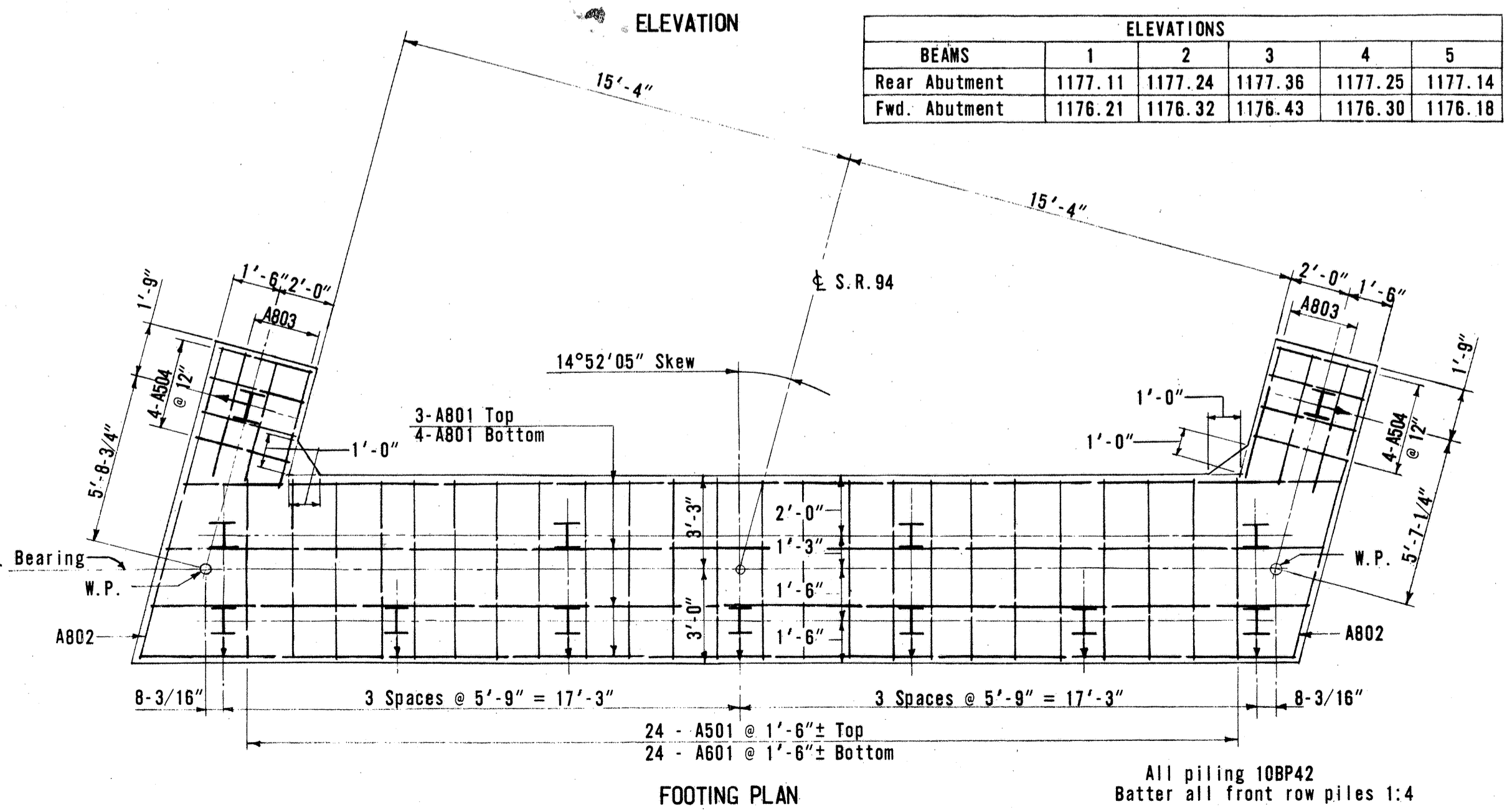
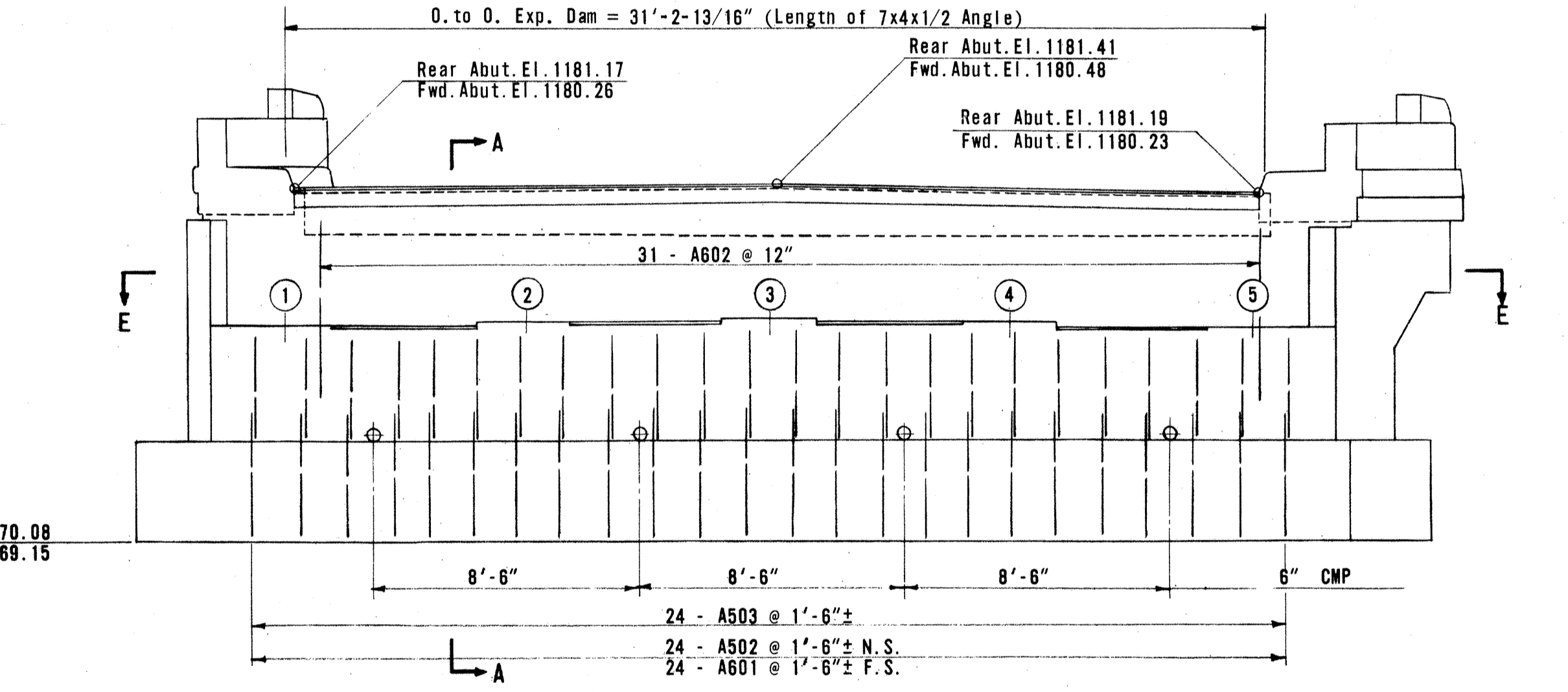
**GENERAL PLAN AND ELEVATION,
NOTES, ESTIMATED QUANTITIES
AND REINFORCING STEEL LIST**
BRIDGE NO. MED-271-0406
I.R. 271 UNDER S.R. 94
MEDINA CO. STA. 247+24.60

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
KUNSCH	BARTO	BARTO	CROOKS	MUDD	6-11-65	

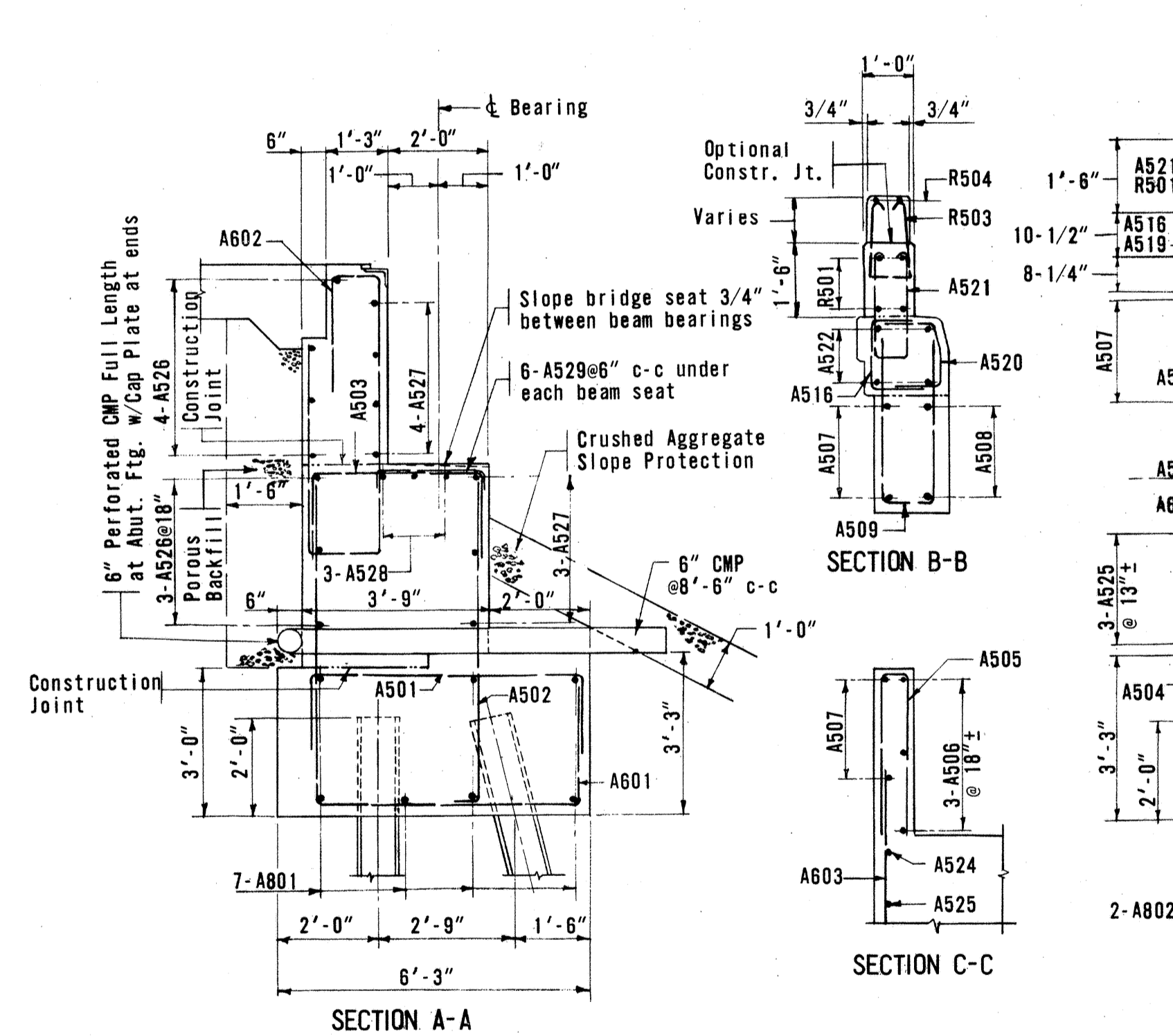
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2	OHIO	I-271-6(13)221	



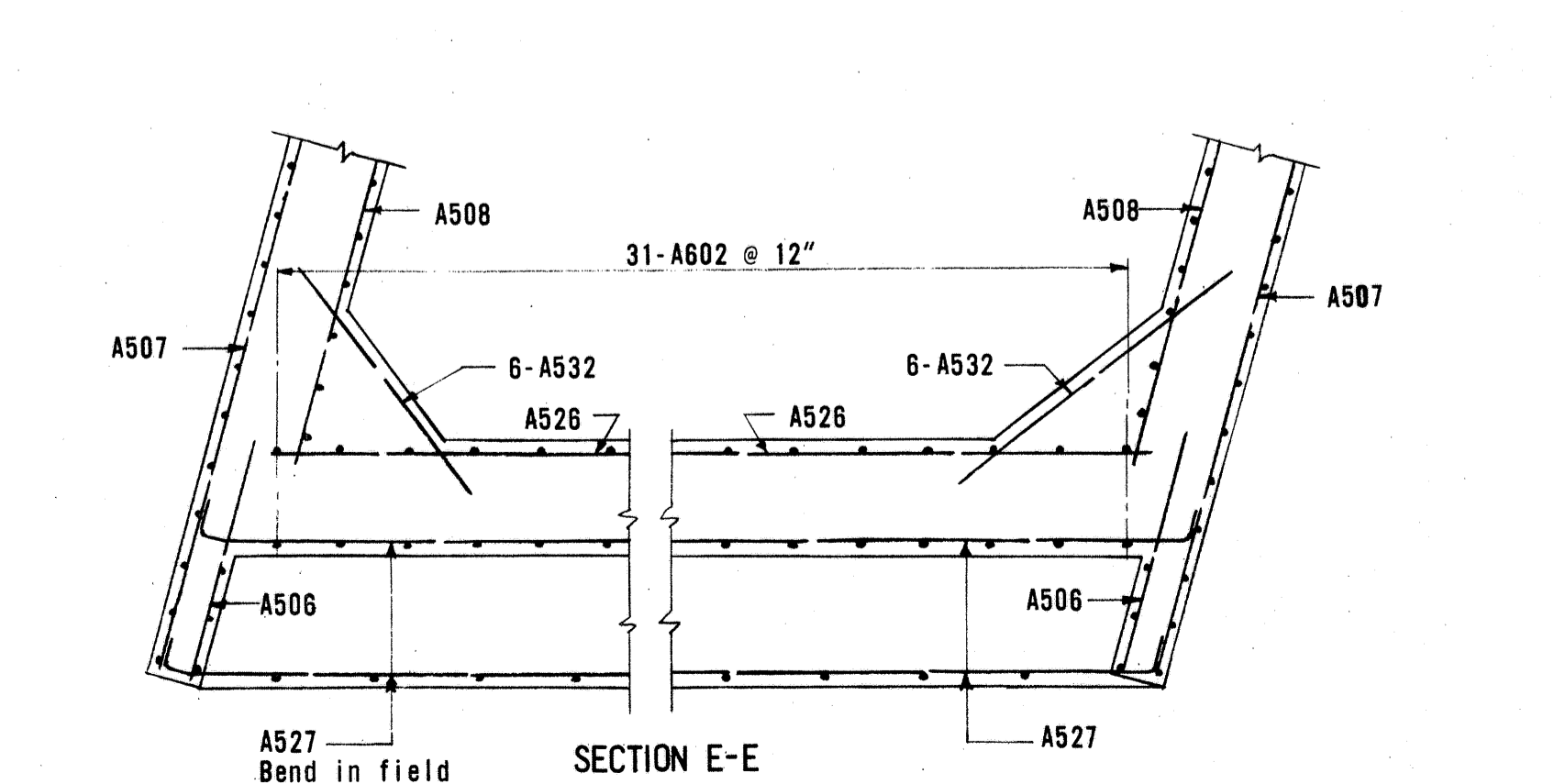
NOTE: Backwall elevations are finished grade at face of backwall.



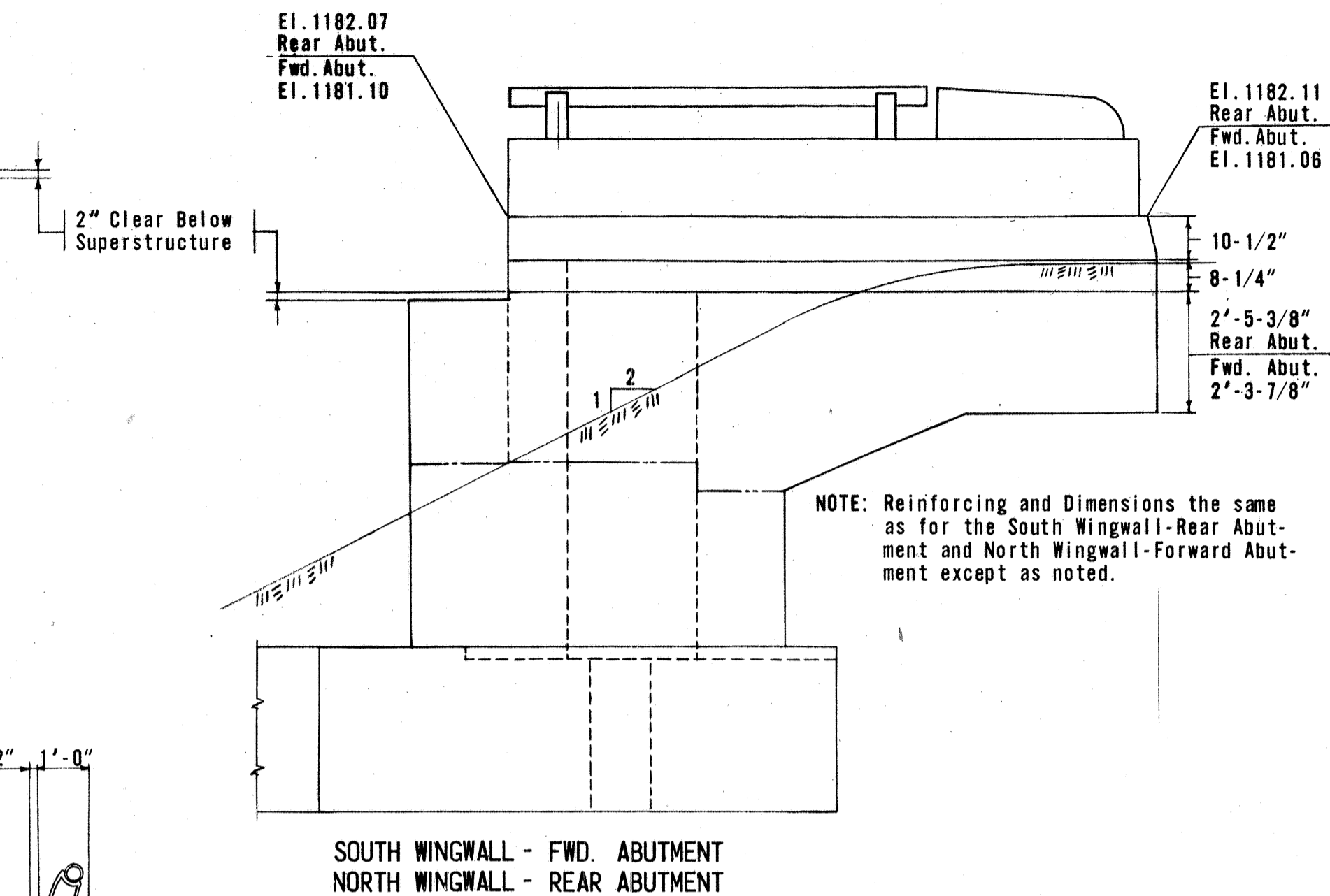
SOUTH WINGWALL - REAR ABUTMENT
NORTH WINGWALL - FWD. ABUTMENT



SECTION A-A



SECTION E-E



SOUTH WINGWALL - FWD. ABUTMENT
NORTH WINGWALL - REAR ABUTMENT

NOTE: Reinforcing and Dimensions the same as for the South Wingwall-Rear Abutment and North Wingwall-Forward Abutment except as noted.

CLEARANCE of reinforcing steel from face of concrete shall be 3" in bottom of footing, 1-1/2" in parapet and safety curb and 2" elsewhere.

POROUS BACKFILL shall extend upward to the approach slab and to the surface of the earth shoulders and outward to the wingwalls. Excavation therefore, in excess of that required for the construction of the abutment, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade for a distance of 200 feet back of the abutments, after which excavation shall be made for the abutments and piles driven.

Abutment backwalls above the bridge seat shall not be placed until all steel is erected. Abutment backwalls shall be completed prior to placing bridge deck slab.

BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor rod holes.

CONCRETE shall be Class E.

LEGEND:
N.S. - Near Side
F.S. - Far Side

For details of roadway end finish, see Standard Drawing SD-1-63, Sheets 2 and 4.

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BALTIMORE, MARYLAND

ABUTMENT DETAILS
BRIDGE NO. MED-271-0406
I.R.#271 UNDER S.R. 94

MEDINA CO. STA. 247+24.60

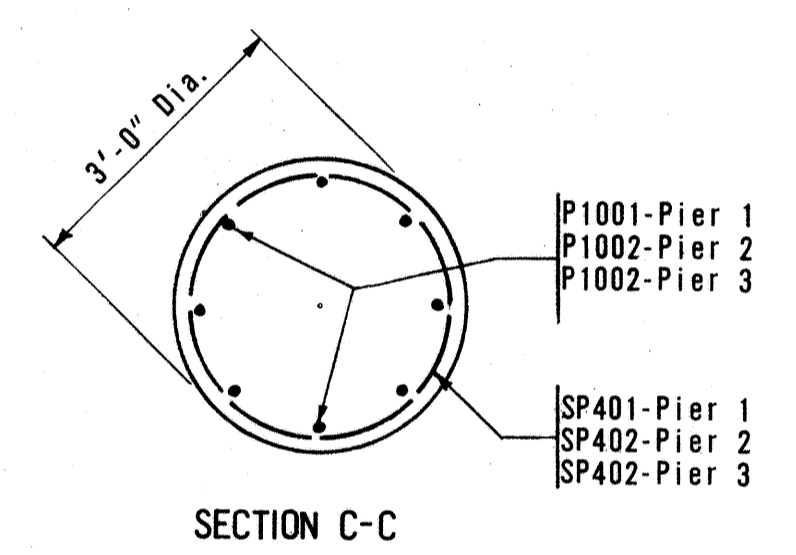
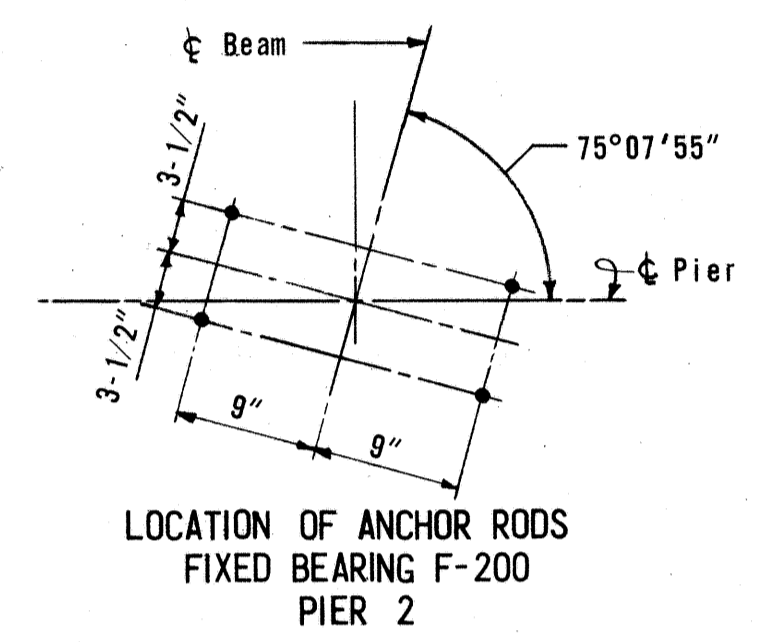
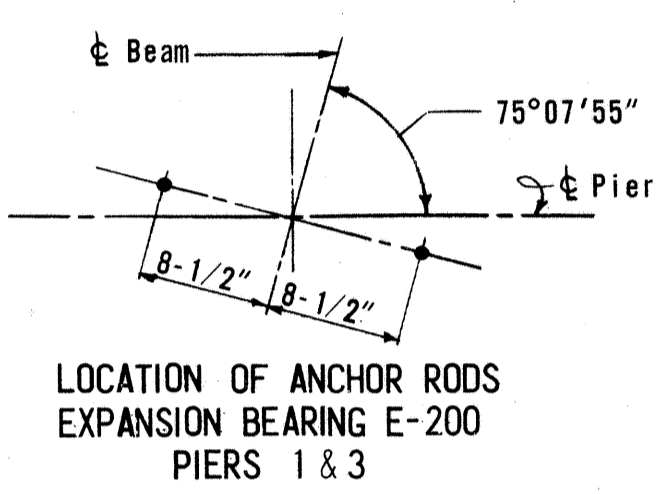
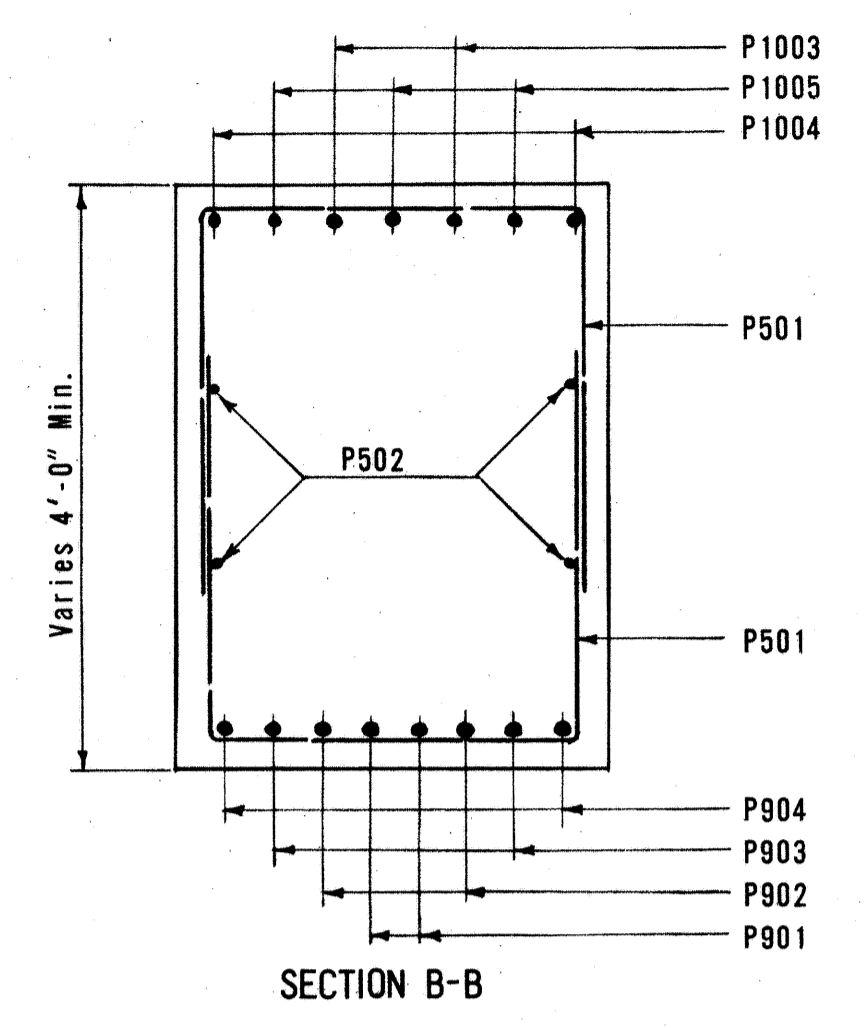
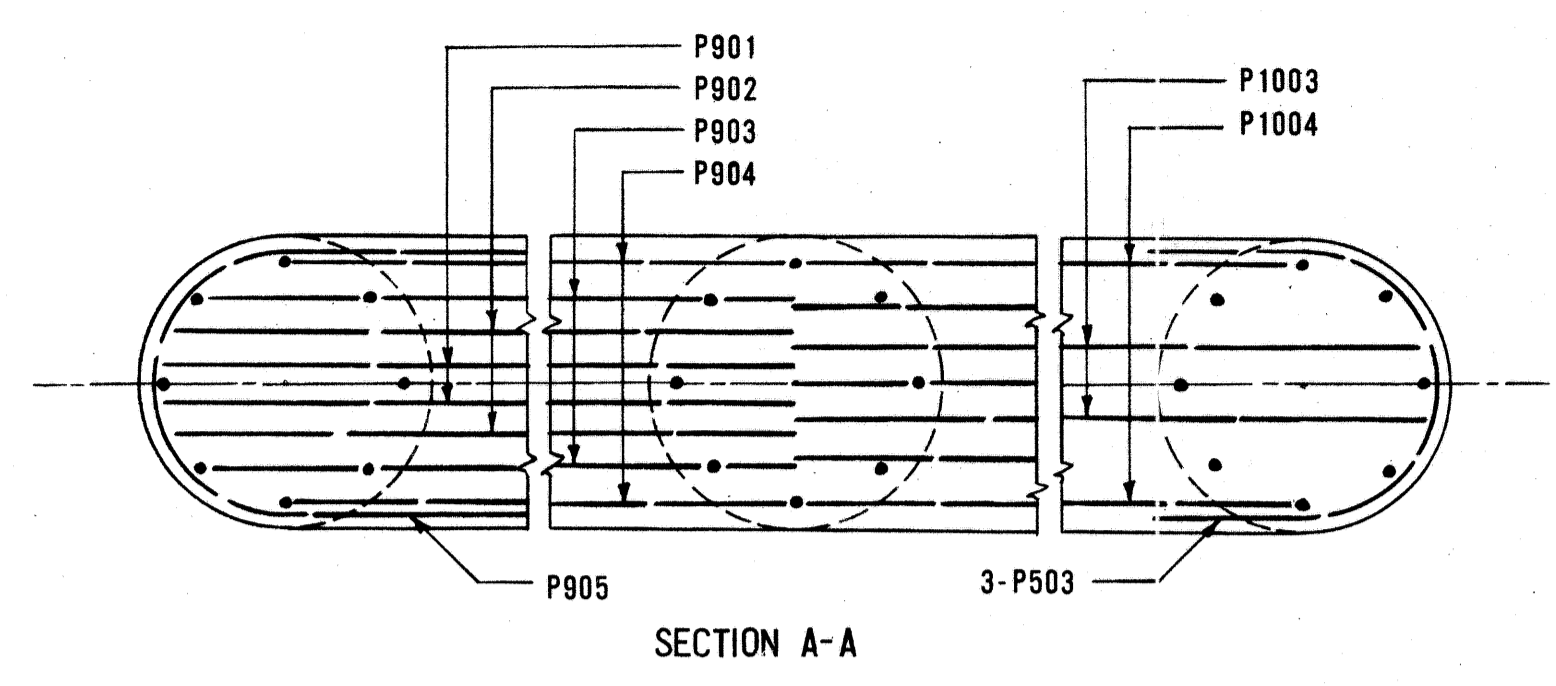
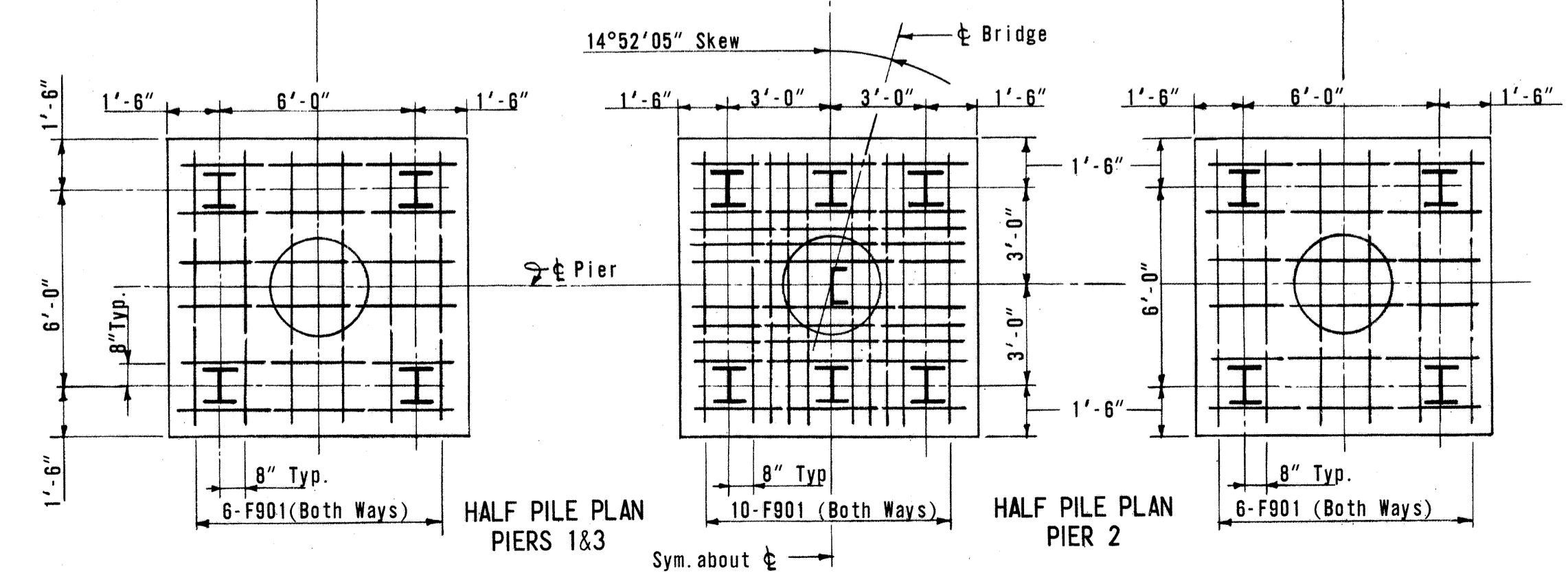
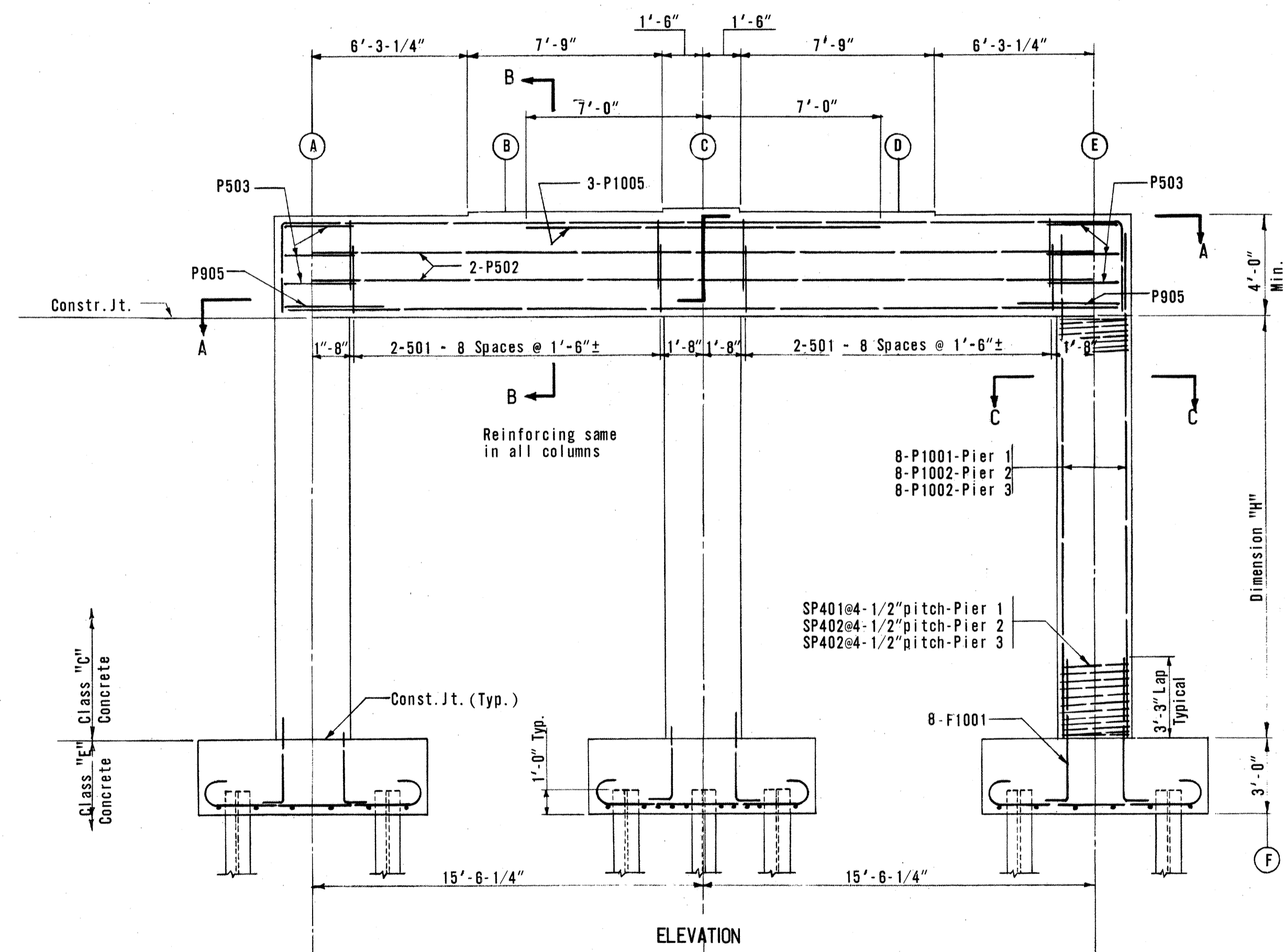
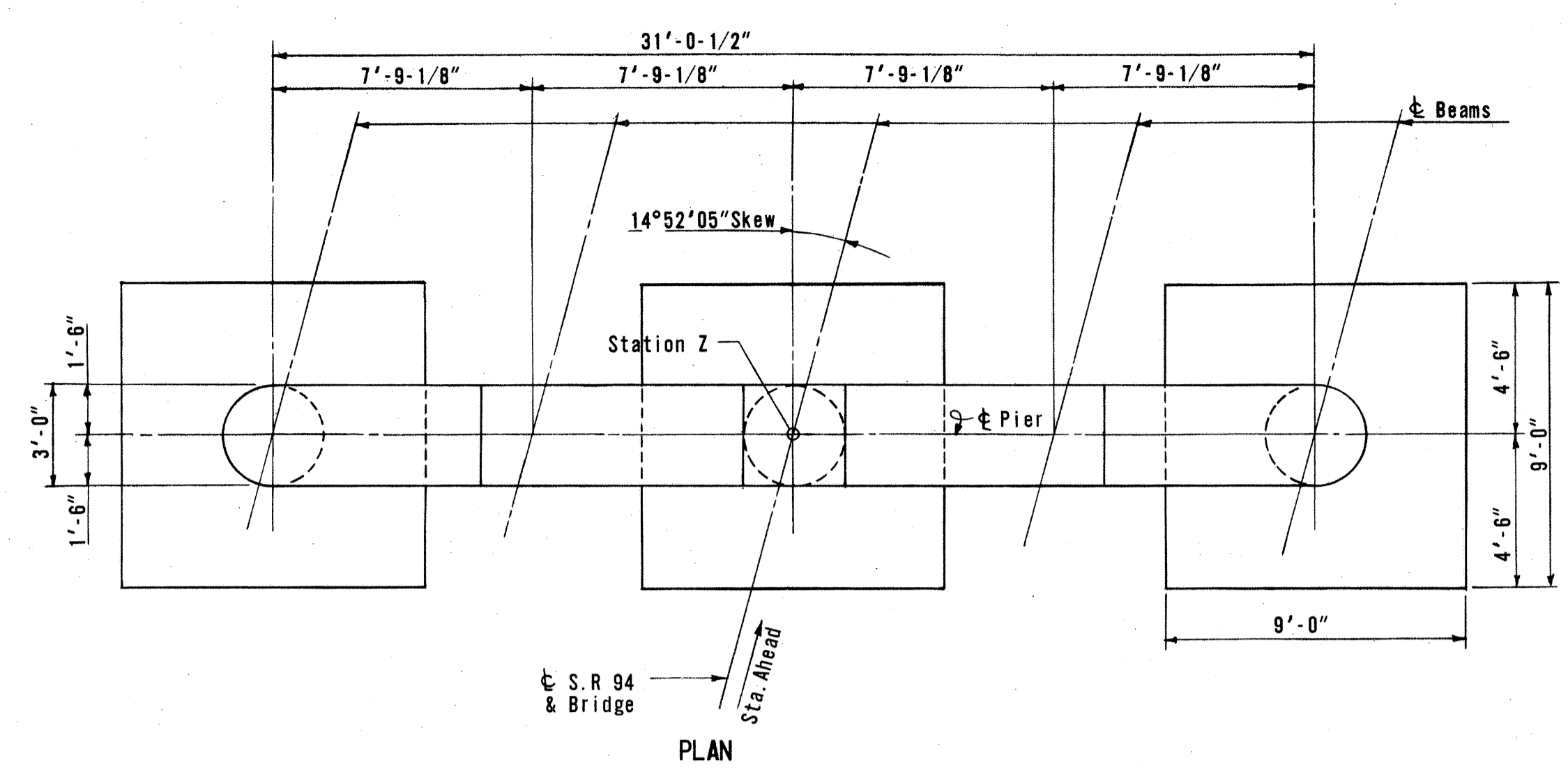
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HENDERSON	HENDERSON	HENDERSON	ROTHEN- HOFER	MUDD	6-11-65	

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STATION	ELEVATION						DIMENSION	
	Z	A	B	C	D	E		F
Pier 1	49+15.50	1176.90	1177.01	1177.12	1177.00	1176.87	1154.37	15'-6"
Pier 2	50+00.00	1176.32	1176.43	1176.54	1176.42	1176.30	1152.80	16'-6"
Pier 3	50+84.50	1176.35	1176.46	1176.57	1176.45	1176.32	1152.57	16'-6"

NOTE: All piles 12BP53

CLEARANCE of reinforcing steel from face of concrete shall be 3" in bottoms of footings and 2" elsewhere.
For details of Fixed and Sliding Bearings see Std. Dwg. No. FSB-1-62.
CONCRETE shall be Class E in Footings and Class C above Footings.
BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor rod holes.

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CONSULTING ENGINEERS
BALTIMORE, MARYLAND

PIER DETAILS

BRIDGE NO. MED-271-0406
I.R. 271 UNDER S.R. 94

MEDINA CO. STA. 247+24.60

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
KOHLER	HENDERSON	HENDERSON	HENDERSON	MUDD	6-11-65	

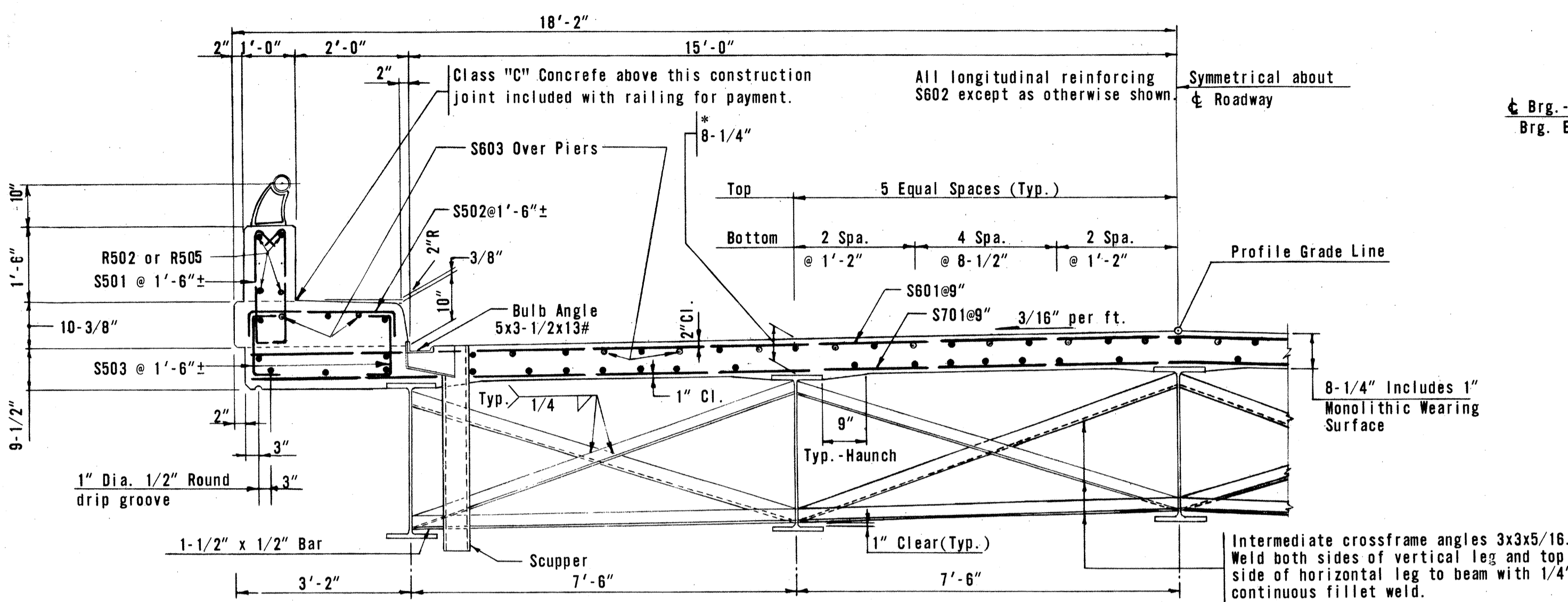
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JUN 5 1986

*This is the nominal dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 311.19 of the Construction and Material Specifications.

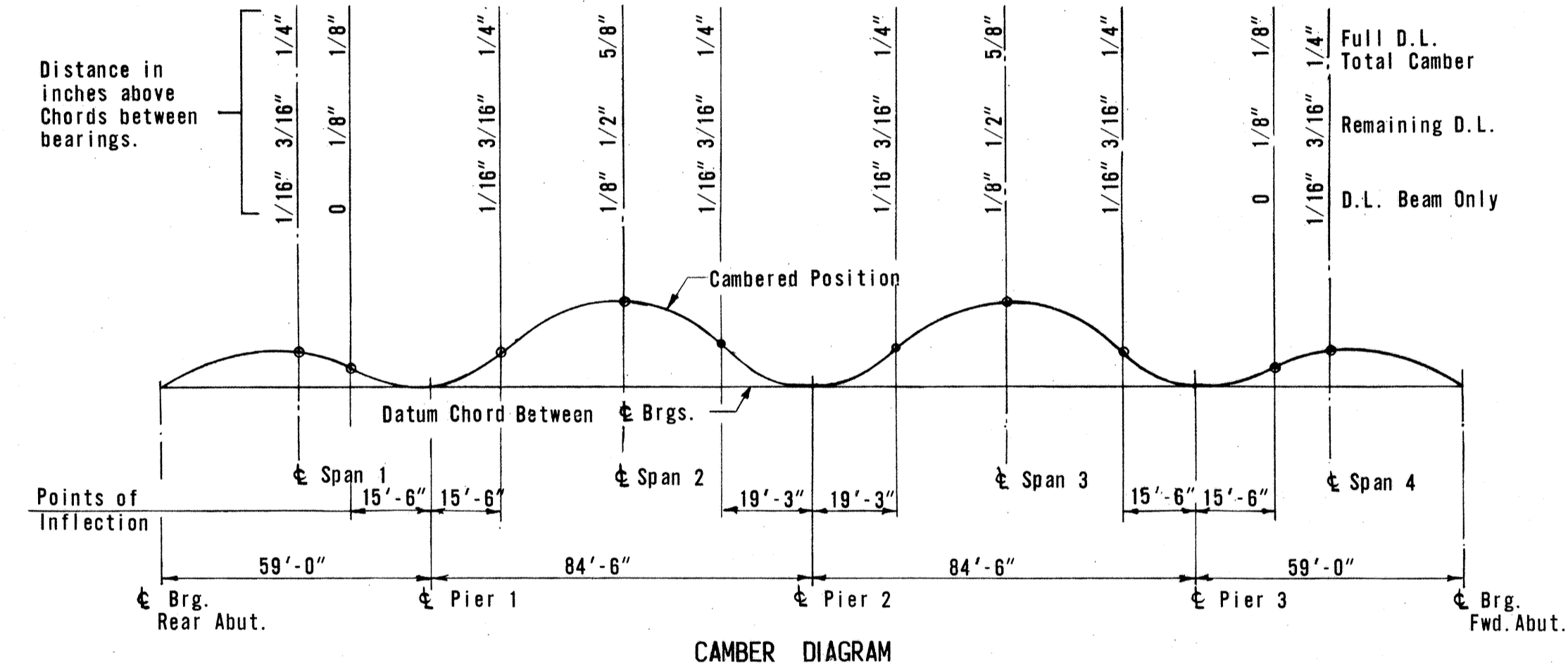
MEDINA COUNTY
MED-271-0.00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13)221

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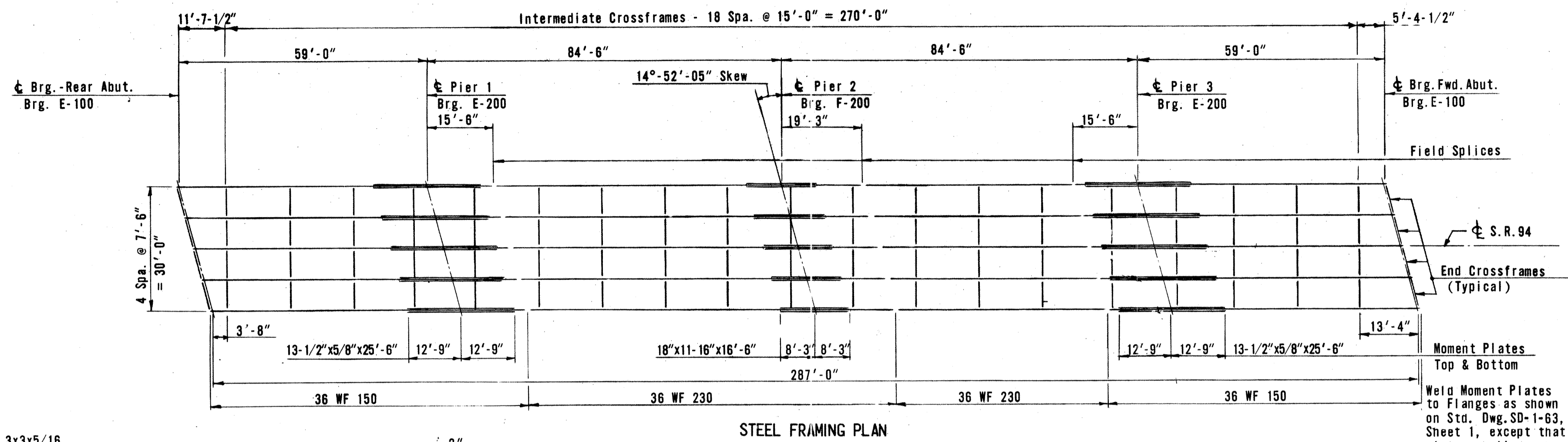


TRANSVERSE SECTION

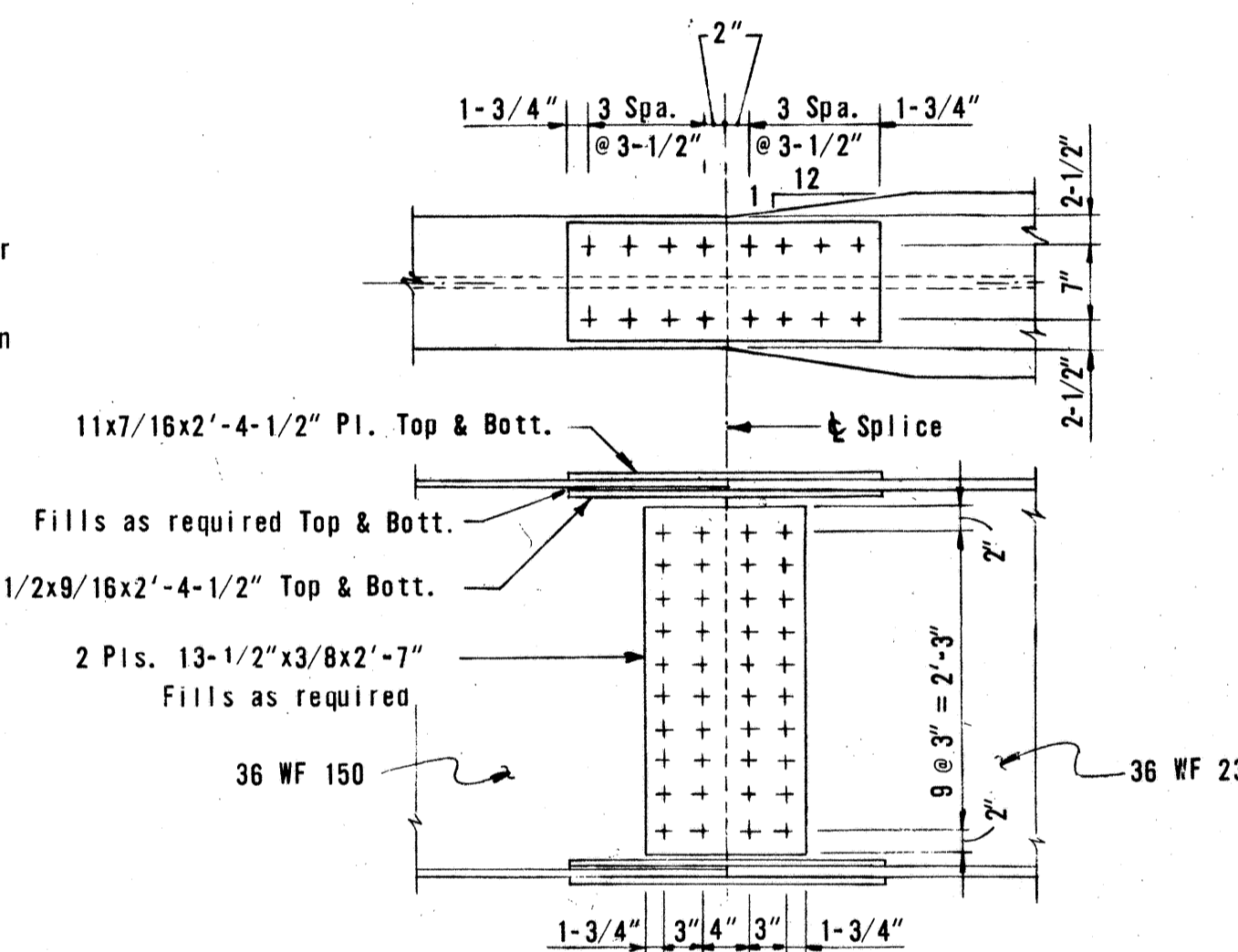


CAMBER DIAGRAM

A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 8" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.



STEEL FRAMING PLAN



BEAM SPLICE DETAIL
36WF150 TO 36WF230

For Details of Beam Splices of 36 WF 230 to 36 WF 230 and other details not shown see Standard Drawing SD-2-64.

SUPERSTRUCTURE NOTES

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress up grade. The slab may be placed in sections, between transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

MACHINE FINISH: The concrete bridge deck shall be finished by the use of a finishing machine.

For details of end crossframes, roadway end finish, beam cut-off at backwall, and welded butt joint in end finish angles at center line of roadway, see Standard Drawing SD-1-63, Sheet 2.

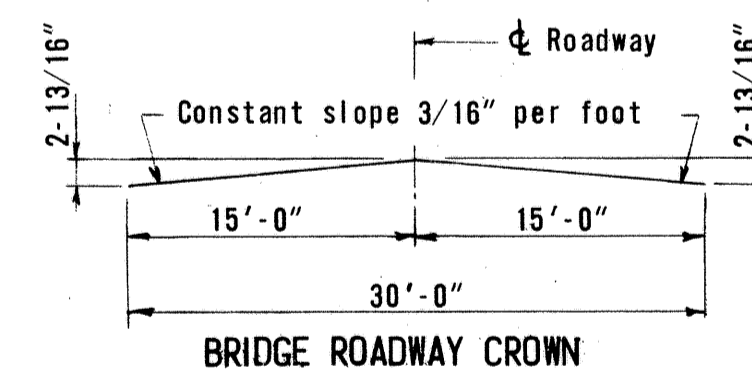
For details of scuppers, curb plates, and gutter supports see Standard Drawing SD-1-63, Sheets 3 & 4.

For details of fixed and sliding bearings see Standard Drawing FSB-1-62.

For details of aluminum railing see Standard Drawing BR-1-65, Type 1.

For Scupper spacing see Sheet No. 230.

REINFORCING STEEL shall be 1-1/2" clear of surfaces in parapets and safety curbs. Place transverse reinforcing parallel to Abutment bearings.



BRIDGE ROADWAY CROWN

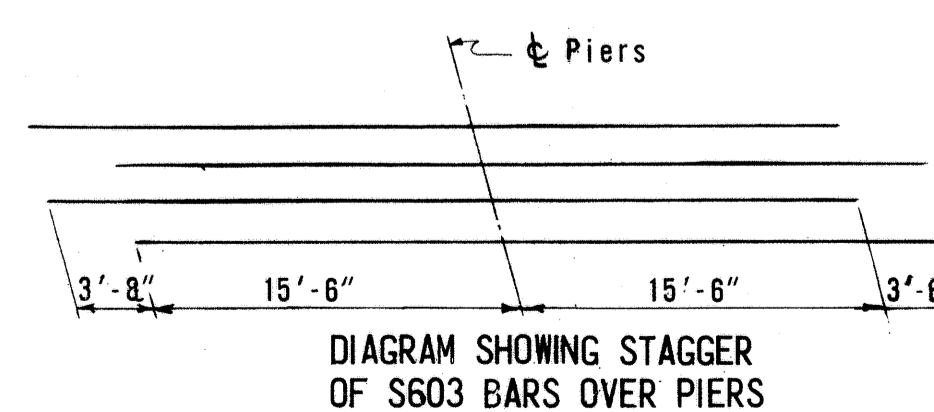
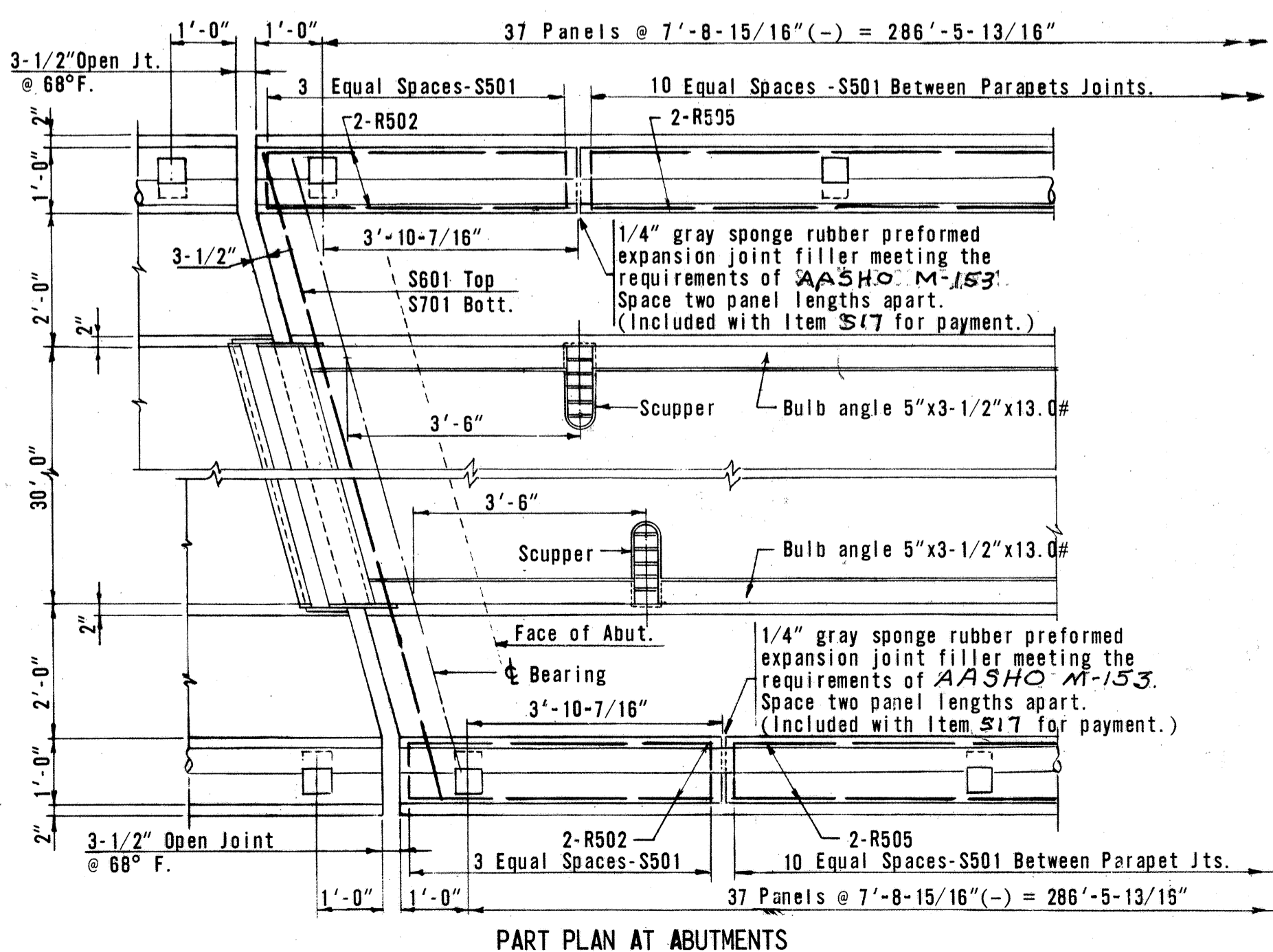


DIAGRAM SHOWING STAGGER OF S603 BARS OVER PIERS



PART PLAN AT ABUTMENTS

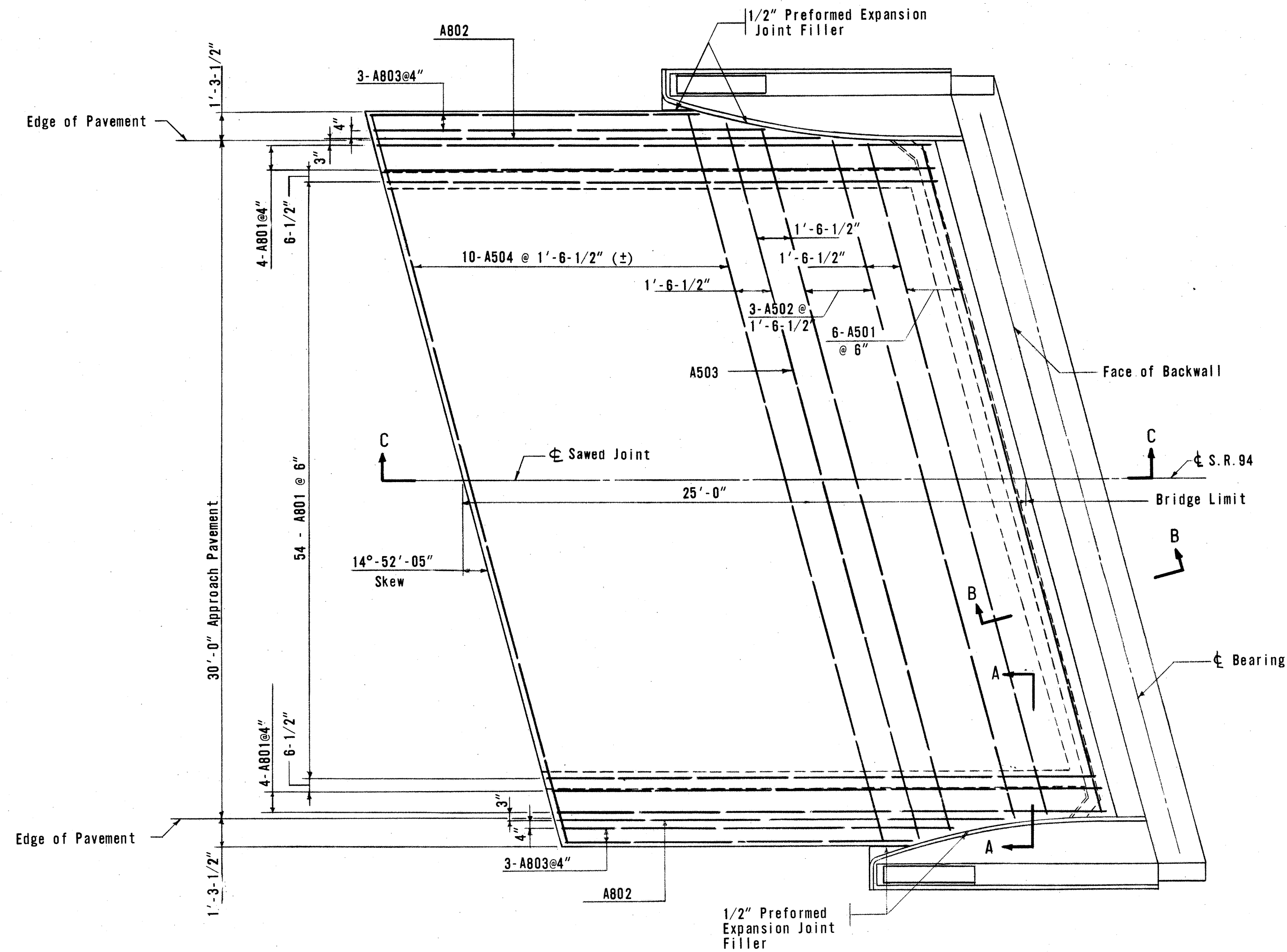
J.E. GREINER COMPANY CONSULTING ENGINEERS BALTIMORE, MARYLAND						
SUPERSTRUCTURE DETAILS						
BRIDGE NO. MED-271-0406						
I.R. 271 UNDER S.R. 94						
MEDINA CO.				STA. 247+24.60		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
KUNTSCH	ALLEN	ALLEN	KOHLER	MUDD	6-11-65	

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MED-271-0.00

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2	OHIO	I-271-6(13)221

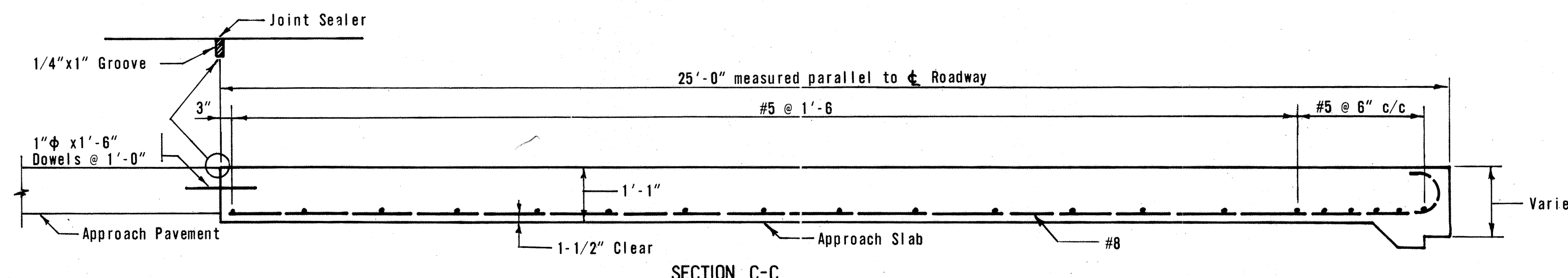
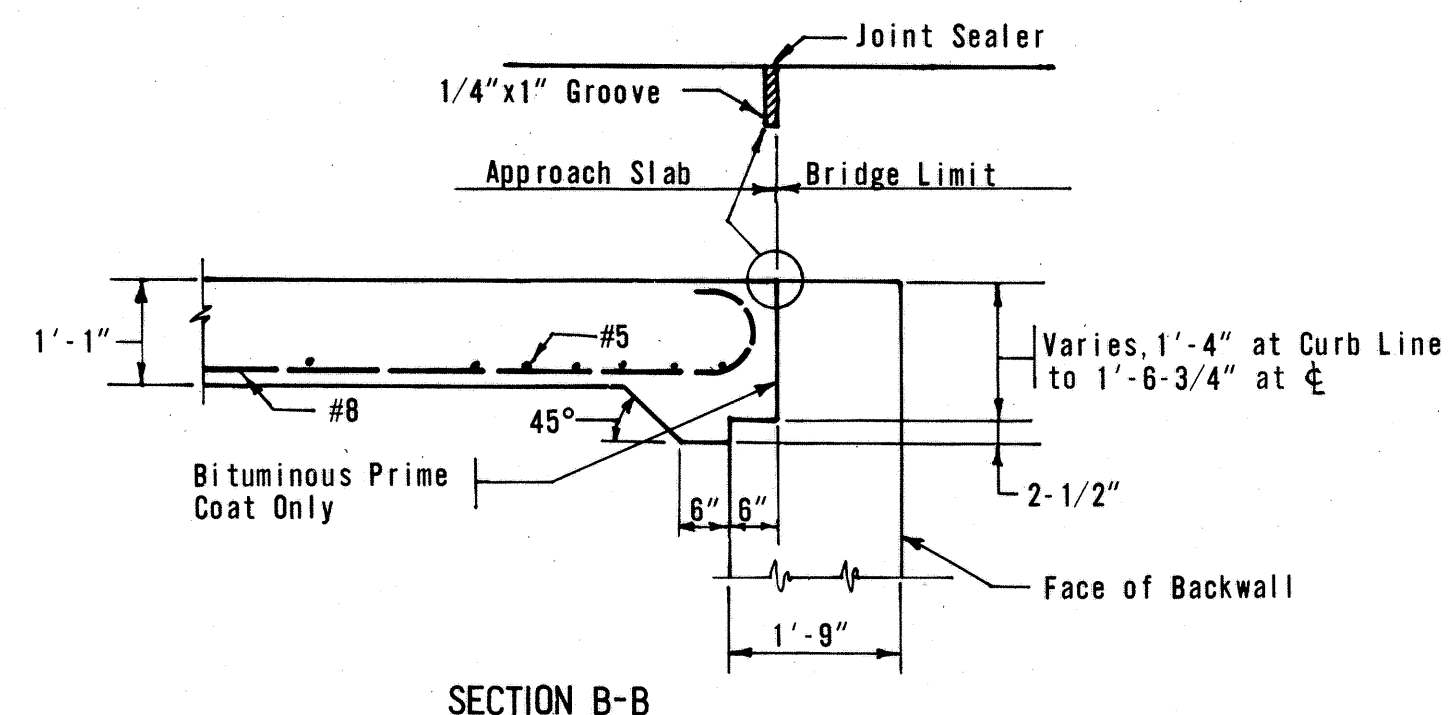
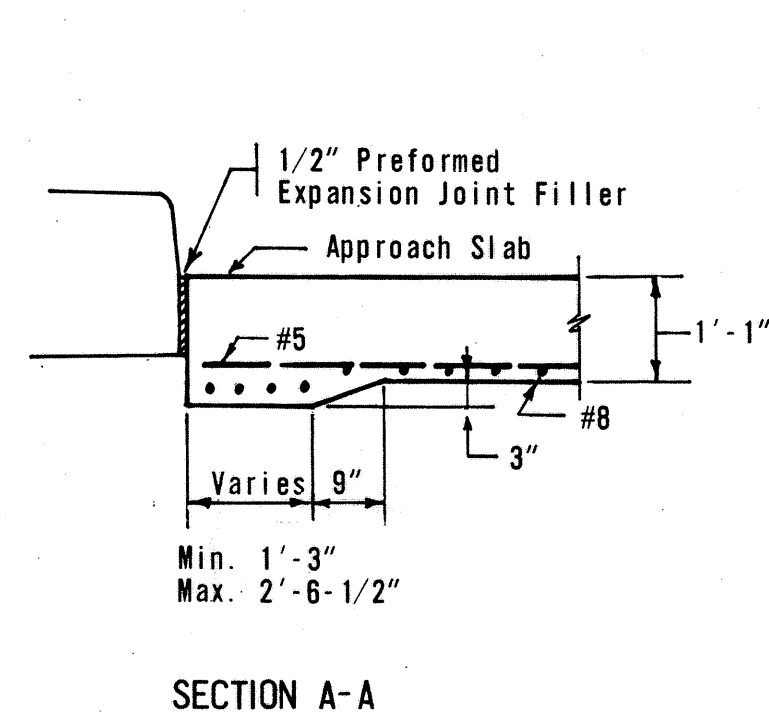
234
259



REINFORCING STEEL LIST				
MARK	NO.	LENGTH	WEIGHT	SHP.
A801	124	25'-7"	8470	B
A802	4	19'-6"	208	S
A803	4 Series of 3 Bars 1'-3" incr.	14'-6" to 17'-0"	505	S
A501	12	30'-6"	382	S
A502	2 Series of 3 Bars 6" incr.	31'-0" to 32'-0"	197	S
A503	2	32'-10"	68	S
A504	20	33'-2"	692	S

Quantities are for two (2) Approach Slabs

NOTES:
1/2" Preformed Expansion Joint Filler shall be included in Item 611 "Reinforced Concrete Approach Slab" for payment.
Bar Size is indicated in the Bar Mark. The first digit indicates the Bar Size Number. For example: A801 is a No. 8 Bar Size.
Work this sheet with Standard Drawing No. AS-1-54 (Revised 7-5-62).
Concrete in Approach Slabs shall be Class C.



J.E. GREINER COMPANY
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

APPROACH SLAB DETAILS
BRIDGE NO. MED-271-0406
I.R. 271 UNDER S.R. 94

MEDINA CO. STA. 247+24.60

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
HENDERSON	HENDERSON	HENDERSON	KOHLER	MUDD	6-11-65	

CENTER LINE SURVEY PLAT

OHIO INTERSTATE 271

MED-271-0.00

MEDINA COUNTY, OHIO

MEDINA TOWNSHIP

T-3N R-14W

GRANGER TOWNSHIP

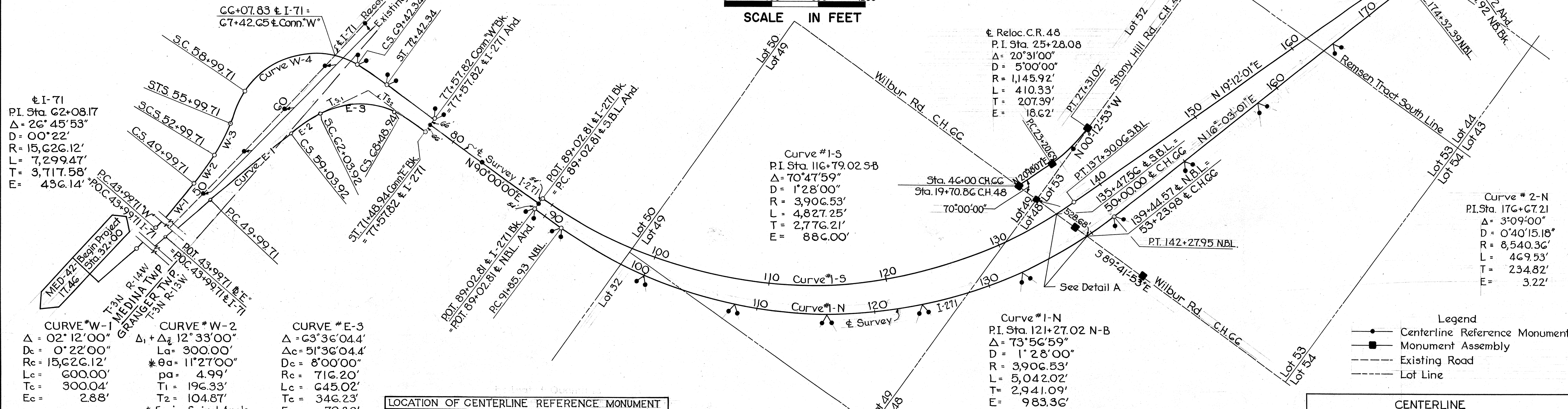
T-3N R-13W

FED. RD. DIVISION	STATE	PROJECT	235 259
2	OHIO	I-271-6(13)221	

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS

THIS IMPROVEMENT HAS BEEN DECLARED
A LIMITED ACCESS HIGHWAY BY ACTION
OF THE DIRECTOR OF HIGHWAYS AND RECORD-
ED IN VOLUME 47 PAGE 1276 OF THE DIRECTOR'S
JOURNAL PURSUANT TO LAW.

SCALE IN FEET
0 400 800 1200



¢ I-71
P.I. Sta. 62+08.17
Δ = 26° 45' 53"
D = 00° 22'
R = 15,626.12'
L = 7,299.47'
T = 3,717.58'
E = 436.14'

CURVE #W-1
Δ = 02° 12' 00"
Dc = 0° 22' 00"
Rc = 15,626.12'
Lc = 600.00'
Tc = 300.04'
Ec = 2.88'

CURVE #W-2
Δ₁ + Δ₂ = 12° 33' 00"
Lc = 300.00'
*θa = 11° 27' 00"
pa = 4.99'
T₁ = 196.33'
T₂ = 104.87'
*Equiv. Spiral Angle

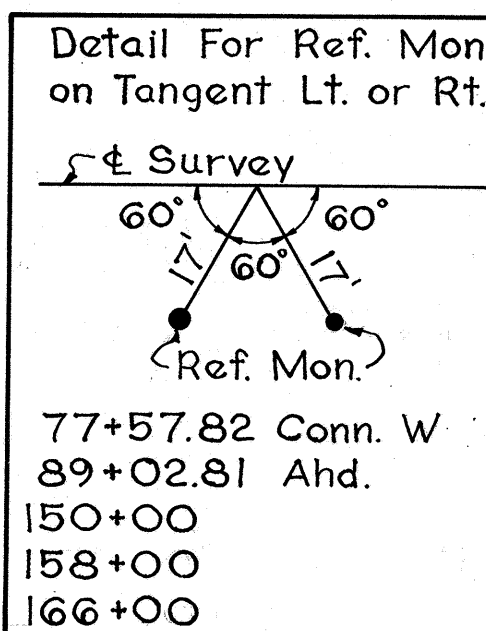
CURVE #E-3
Δ = 63° 36' 04.4"
Dc = 51° 36' 04.4"
Rc = 8° 00' 00"
Lc = 716.20'
Tc = 346.23'
Ec = 79.30'
Ls₂ = 300.00'
θs₂ = 12° 00' 00"
p₂ = 5.23'
k₂ = 149.78'
Xc₂ = 298.69'
Yc₂ = 20.88'
LT₂ = 200.46'
ST₂ = 100.42'
T_{s1} = 449.91'
T_{s2} = 591.26'

CURVE #W-3
Δ = 02° 12' 00"
Dc = 8° 00' 00"
Rc = 716.20'
Lc = 0.00'
Ls = 300.00'
p = 5.23'
k = 149.78'
Xc = 298.69'
Yc = 20.88'
LT = 200.46'
ST = 100.42'

CURVE #W-4
Δ = 107° 24' 36.6"
Dc = 83° 24' 36.6"
Rc = 8° 00' 00"
Lc = 1042.63'
Tc = 638.22'
Ec = 243.11'
Ls₁ = Ls₂ = 300.00'
θs = 12° 00' 00"
p = 5.23'
k = 149.78'
Xc = 298.69'
Yc = 20.88'
LT = 200.46'
ST = 100.42'
Ts = 1132.06'

CURVE #E-1
Δ = 3° 18' 55.6"
D = 0° 22' 00"
R = 15,626.12'
L = 452.23'
T = 904.21'
E = 6.54'

CURVE #E-2
Δ₁ + Δ₂ = 12° 33' 00"
Lc = 300.00'
*θa = 11° 27' 00"
pa = 4.99'
T₁ = 196.33'
T₂ = 104.87'
*Equiv. Spiral Angle

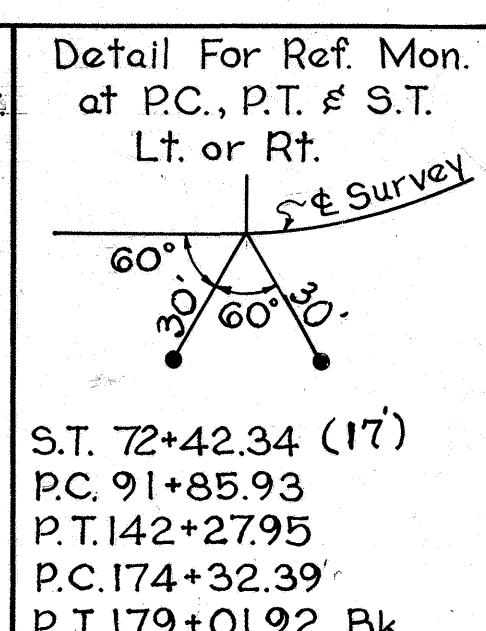
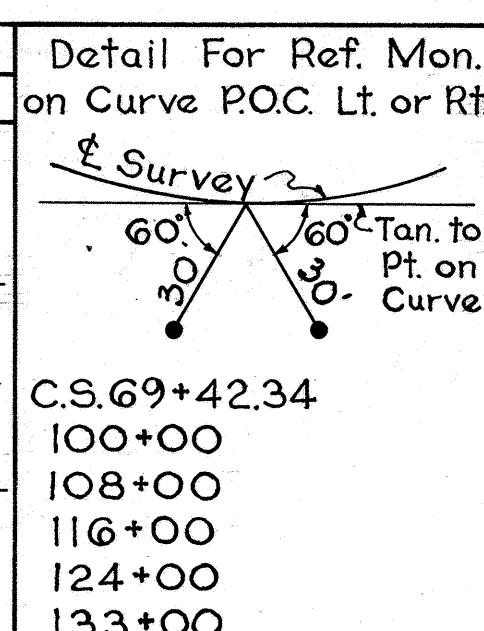
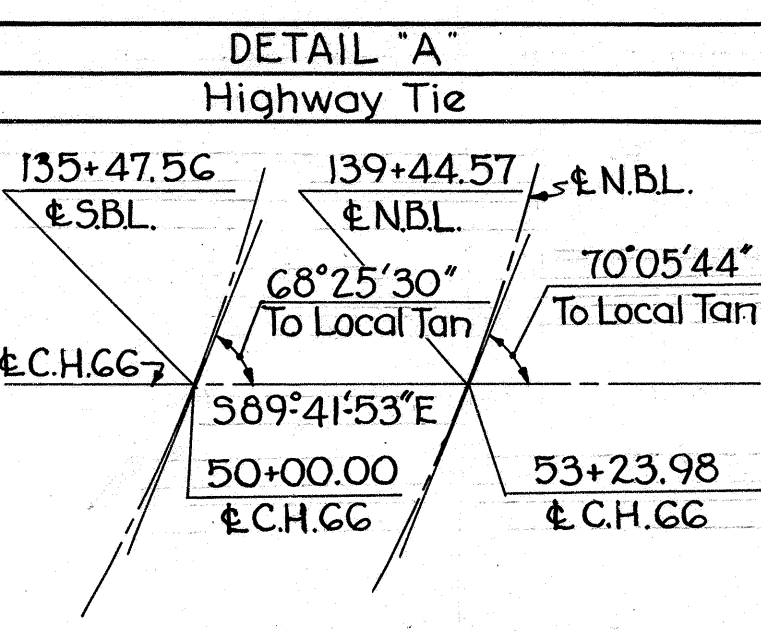


LOCATION OF CENTERLINE REFERENCE MONUMENT		
NO.	STATION	LOCATION
2	C.S. 69+42.34	17' Lt. of Conn. W
2	S.T. 72+42.34	17' Lt. of Conn. W
2	77+57.82 Bk.	17' Lt. of Conn. W
1	77+57.82 Ahd.	¢ I-271
1	83+00	¢ I-271
1	89+02.81 Bk.	¢ I-271
2	89+02.81 Ahd.	30' Rt. of ¢ N.B.L.
2	P.C. 91+85.93	30' Rt. of ¢ N.B.L.
2	100+00	30' Rt. of ¢ N.B.L.
2	108+00	30' Rt. of ¢ N.B.L.
2	116+00	30' Rt. of ¢ N.B.L.
2	124+00	30' Rt. of ¢ N.B.L.
2	133+00	30' Rt. of ¢ N.B.L.
2	P.T. 142+27.95	30' Rt. of ¢ N.B.L.
2	150+00	30' Rt. of ¢ N.B.L.
2	158+00	30' Rt. of ¢ N.B.L.
2	166+00	30' Rt. of ¢ N.B.L.
2	P.C. 174+32.39	30' Rt. of ¢ N.B.L.
2	P.T. 179+01.92 Bk.	30' Rt. of ¢ N.B.L.
1	P.C. 179+01.92 Ahd.	¢ I-271
1	P.I. 25+28.08	P.I. ¢ C.H. 48

MONUMENT ASSEMBLIES	
46+00	¢ C.H. 66 ¢ Rel. Cl. 48
52+00	¢ C.H. 66
59+00	¢ C.H. 66
P.C. 23+20.69	¢ C.H. 48
P.T. 27+31.02	¢ C.H. 48
47+95.30 ¢ C.H. 66 = 0+00	¢ Exist. C.H. 48

See Sheet 2 of 2 For Additional Monuments

Estimated Quantities
Centerline Reference Monuments - 37
Monument Assemblies - 6



I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF HIGHWAYS IN MEDINA COUNTY.

BY J.H. Nelson

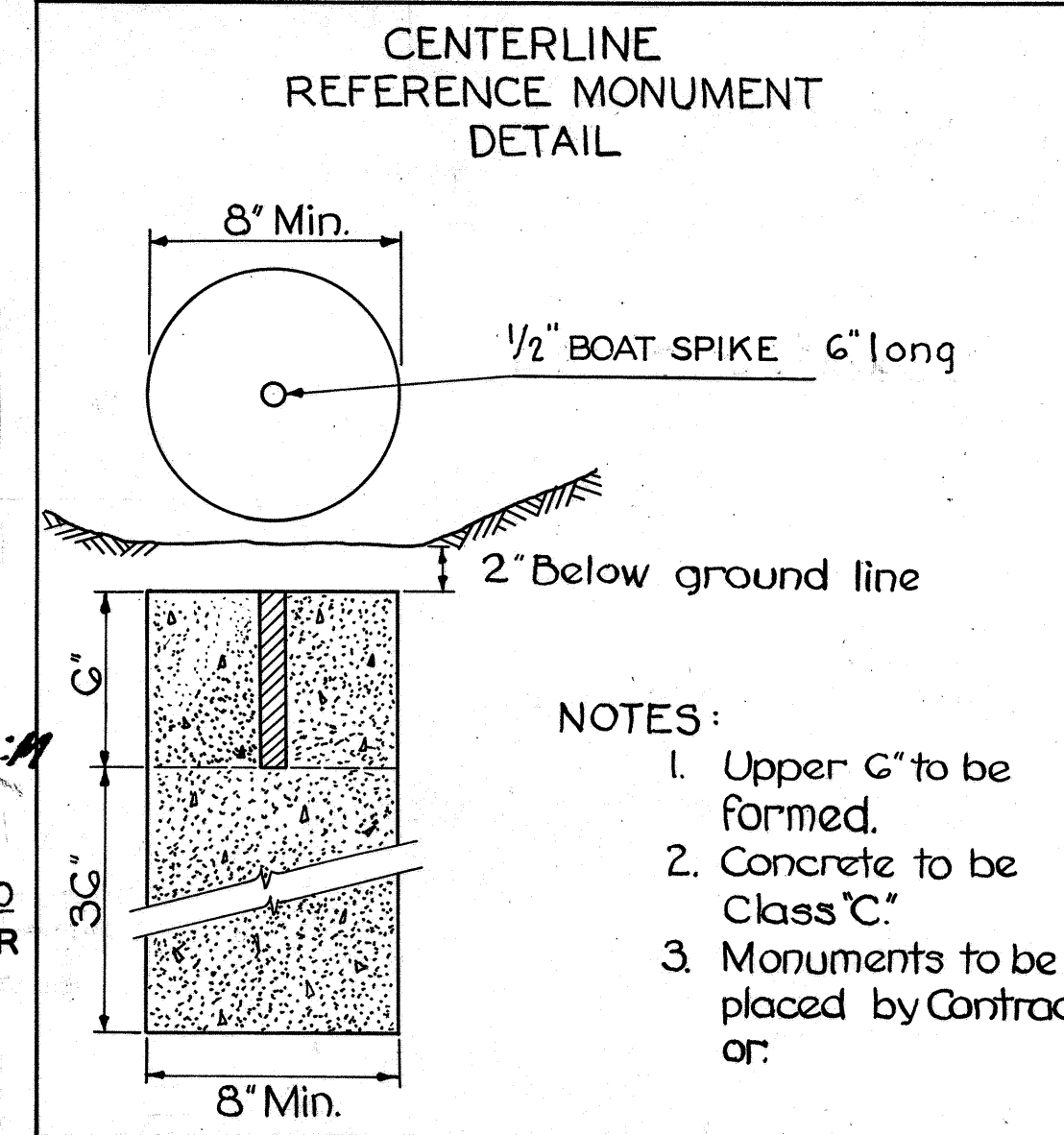
DATE July 22, 1965

REGISTERED SURVEYOR NO. 4629
99397 18 X 11 = 1.98

RECEIVED July 19, 1965 3.96
RECORDED July 19, 1965
PLAT BOOK 12 PAGE 67

SIGNED Elmer L. Phillips, Notary 10:49 A.M.
MEDINA COUNTY RECORDER

SIGNED D.H. Minnie PE. NO. 24400
DATE: 6-3-65 DIV. DEPUTY DIRECTOR
DIV. NO. 3



- NOTES:
- Upper "G" to be formed.
 - Concrete to be Class "C".
 - Monuments to be placed by Contractor.

REVISIONS
1 May 1965

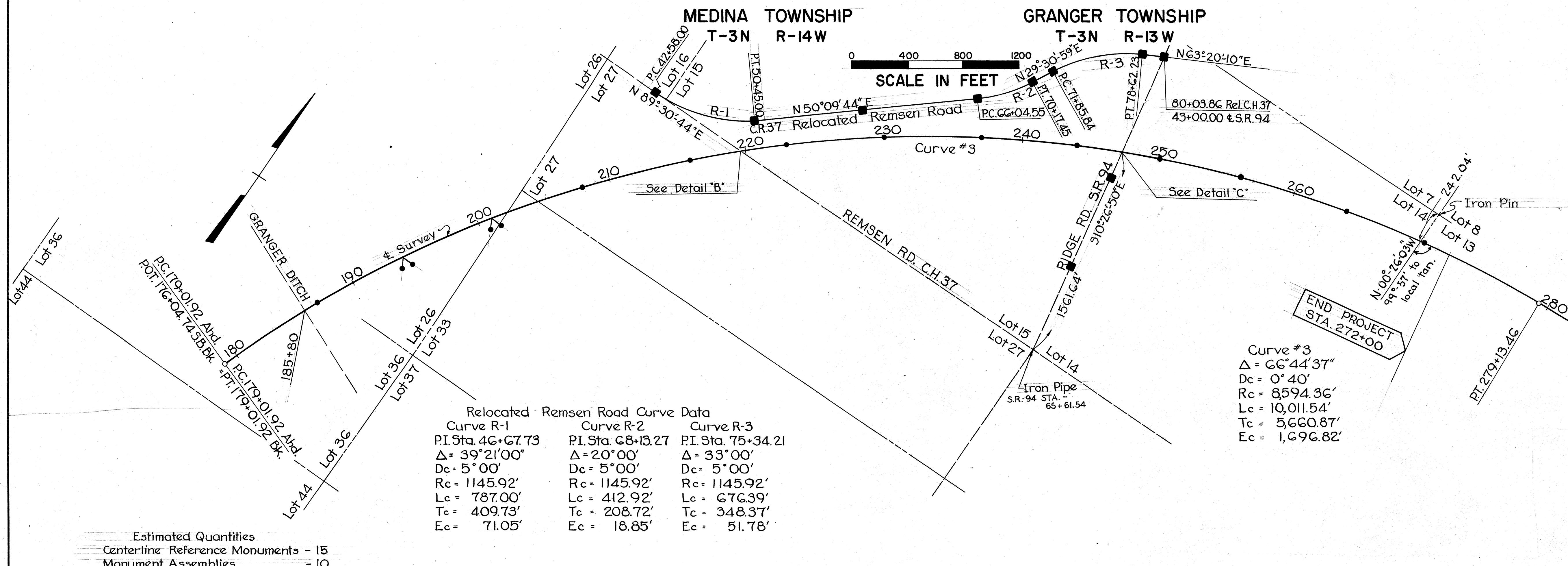
CENTER LINE SURVEY PLAT

OHIO INTERSTATE 271

MED-271-0.00

MEDINA COUNTY, OHIO

THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 47 PAGE 952 OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.



Relocated Remsen Road Curve Data

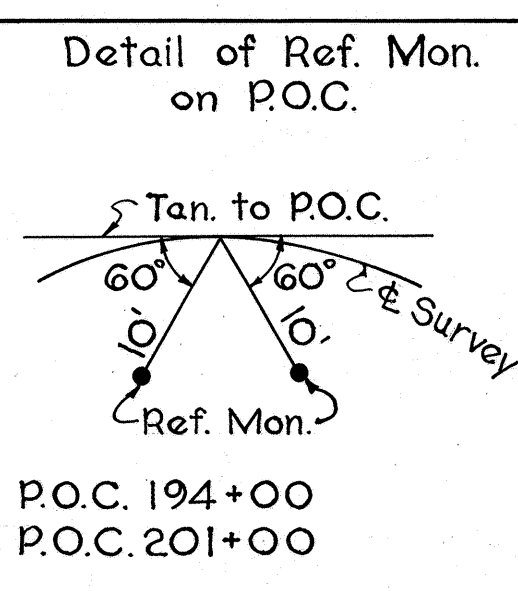
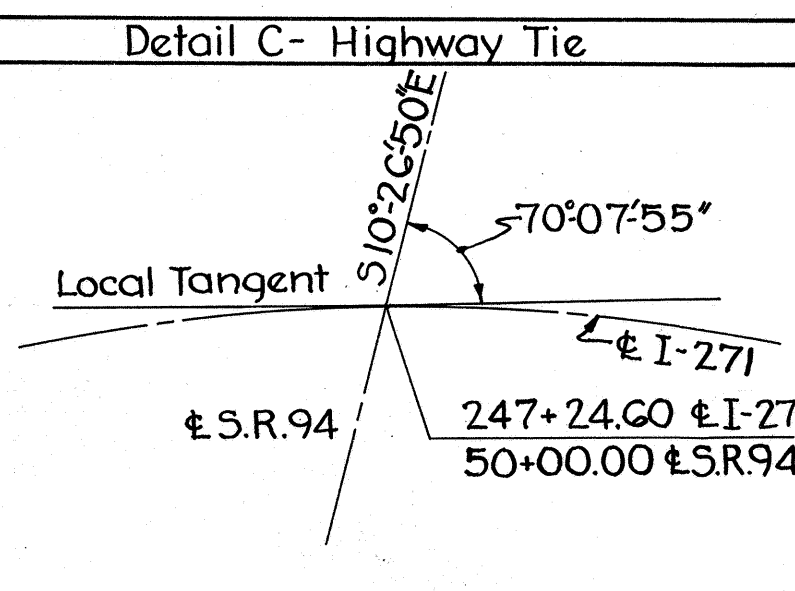
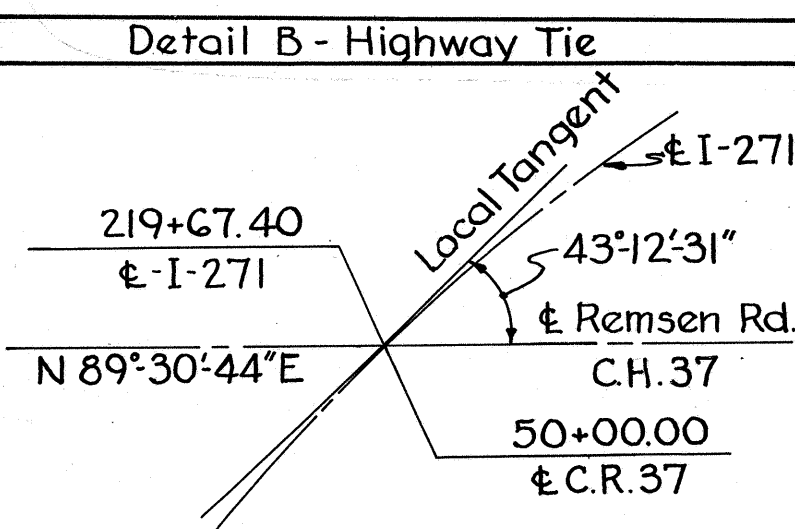
Curve R-1	Curve R-2	Curve R-3
PI. Sta. 46+67.73	PI. Sta. 68+13.27	PI. Sta. 75+34.21
$\Delta = 39^\circ 21' 00''$	$\Delta = 20^\circ 00'$	$\Delta = 33^\circ 00'$
Dc = 5' 00'	Dc = 5' 00'	Dc = 5' 00'
Rc = 1145.92'	Rc = 1145.92'	Rc = 1145.92'
Lc = 787.00'	Lc = 412.92'	Lc = 676.39'
Tc = 409.73'	Tc = 208.72'	Tc = 348.37'
Ec = 71.05'	Ec = 18.85'	Ec = 51.78'

Curve #3

$\Delta = 66^\circ 44' 37''$
Dc = 0' 40'
Rc = 8,594.36'
Lc = 10,011.54'
Tc = 5,660.87'
Ec = 1,696.82'

LOCATION OF CENTERLINE REFERENCE MONUMENTS	
STATION	LOCATION
187+00.00	¢ I-271
194+00.00	See Detail - 10' Rt. of ¢
201+00.00	See Detail - 10' Rt. of ¢
208+00.00	¢ I-271
216+00.00	¢ I-271
223+00.00	¢ I-271
230+00.00	¢ I-271
237+00.00	¢ I-271
244+00.00	¢ I-271
250+00.00	¢ I-271
256+00.00	¢ I-271
264+00.00	¢ I-271
270+00.00	¢ I-271

CROSS ROAD MONUMENT ASSEMBLIES	
PC	¢
42+58.00	¢ C.H.37
50+45.00	¢ Rel. C.H.37
58+00.00	¢ Rel. C.H.37
66+04.55	¢ Rel. C.H.37
70+17.45	¢ Rel. C.H.37
71+85.84	¢ Rel. C.H.37
78+62.23	¢ Rel. C.H.37
80+03.86	Intersect. Rel. C.H.37 & S.R.94
52+00	¢ S.R.94
59+00	¢ S.R.94



I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF HIGHWAYS IN MEDINA COUNTY.

BY E. L. Fetzer

DATE July 22, 1965

REGISTERED SURVEYOR NO. 4629
*99391 18X11=1.98

RECEIVED July 19, 1965

RECORDED July 19, 1965

PLAT BOOK 12 PAGE 67

SIGNED E. L. Fetzer 10:29 A.M.

MEDINA COUNTY RECORDER

RECEIVED July 8, 1968

RERECORDED July 8, 1968

PLAT BOOK 14 PAGE 16

SIGNED E. L. Fetzer

MEDINA COUNTY RECORDER 11x18" = 1.98

REVISIONS

1 May 1965
26 June 1968 25718 256
27 1/2 270 70

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS

PARCEL NO.	OWNER	DEED RECORD		DEED AREA	TO BE ACQUIRED		RESIDUE		SHEET NO.	REMARKS
		BOOK	PAGE		LAND	BLDGS.	LEFT	RIGHT		
1-WL	Hugh N. & Marjorie M. Beattie	182	192	214.64	25.87 (+)		167±	(L) 19±	4, 5, 6	3.52Ac - 005-011-00-002(+)-00 Acquired Under MED-42-17-46 (25.47Ac) Part of 10.40Ac New Draft
1-T	"				0.18				4	18.65Ac - "005-020-00-015-00
1-T1	"				0.02				5	2.75Ac - "005-" 011-00-003-00
1-T2	"				0.07				5	0.95" "005-" 020-00-017-00
2-WL	Ranchwood Homes, Inc.	291	244	89.06	1.07			87.99	6	005-020-00-016-00
3	Not Used									
4-WL	Edward C. McCormick, Jr.	216	206	140.0	36.74		62±	(L) 41±	6, 7, 8, 19, 20	28.21Ac - 005-011-00-004-00
4	aka E.C. McCormick, Jr.	168	355		0.27		8.19, 20			8.84Ac - 005-012-00-018-00
4-T					0.02				7	
4-T1					0.04				8, 19, 20	
5	Not Used									
6	Roy A. & Victoria Collecchi	268	273	45.00	1.66		43±	0.30±	19, 20	
6-X					0.03				19, 20	
6-T					0.04				20	
7	Not Used									
8-WL	Frank & Mary Josephine Bogdanski	271	616	50.00	0.07		49.15±		8, 19	(Total Pro = .75 Ac)
8					0.34		8.19			005-012-00-019-00
9-WL	Edward C. McCormick, Jr.	216	183	310.81	24.71		33±	252.5±	8, 9, 10, 19, 20	005-012-00-020-00
9	aka E.C. McCormick, Jr.	168	206		0.17				20	
9-A					0.17				20	
9-B					0.09				20	
9-X					0.18				20	
10-WL	Harold R. & Fern Loomis	192/172	54/38	139.68	9.09		104±	(L) 26.5±	10, 11	005-009-00-053-06
11-WL	Board of Township Trustees-Granger Township	182	264	16.35	1.57		14.78		11	005-009-00-049-00
12-WL	August Jelen, Jr.	192/186/292	510/540/593	62.16	8.51		35.5±	(L) 18±	11, 12	005-009-00-048-00
13-WL	Ranchwood Inc.	239	520	98.70	1.08		97.62		12	005-009-00-033-00
14-WL	Helen A. Crocker	281	483	103.5	21.99	Yes	48±	(L) 33.5±	12, 13, 14	21.18Ac - 005-009-00-032-00
14-T					0.04		14.21			0.99Ac - 005-009-00-028-00
15	Leslie F. & Alice W. Herrmann	202	299	102.44	0.03		102.41		21	
15-T					0.02				21	
16-WL	John R. & Bonnie Lee Kingan	261	110	39.74	0.34			39.27	14	(Pro = 0.13 Ac) 005-009-00-026-00
16					0.07				14	
16-X					0.23				14	
17-X	Lawrence E. Dean	282/272	191/230	2.43	0.07			2.43	14	
18	Not Used									No R/W needed
19	Not Used									No R/W needed
20-WL	Helen A. Crocker	281	483	61.95	7.00		51±	1±	14, 15	005-002-00-003-00
20					2.58				14, 15, 21	
20-T					0.45				14	
20-X					1.53				14, 15	
20-A					0.17				14	
20-Y					0.20				14	
20-T-1					0.03				21	
20-T-2					0.02				14	
21-WL	Harris & Mary Reid	201	447	11.00	1.10		9.90		14, 15	005-002-00-007-00
22	Not Used									No R/W needed
23-WL	Anna Marie & Anna Hauthal	270/157	253/328	46.93	19.99	Yes	16±	(L) 6±	15, 16, 21, 22	005-002-00-012-00
23					3.21		x	x	15, 21	X (13.5± Ac) on Left 2.5 Ac on Right
23-X					0.18				15	
23-T					0.28				15	
23-T-1					0.10				21	
23-Y					0.17				21	
23-AWL					1.09				16, 22, 23	005-002-00-011-00
23-T-2					0.07				22, 23	
24	Frank Buehner	266	202	1.00	0.23	Yes		0.56	21	(Pro = 0.11 Ac)
24-T					1050 Sq. Ft.				21	
24-T-1					1500 Sq. Ft.				21	
25	Wayne B. Alber	222	533	83.50	1.10		81±	0.58	21, 22	(Total Pro = 0.30 Ac)
25-T					0.10				21	
25-A					0.05				21	
25-WL					0.48				16, 21, 22	005-002-00-013-00
25-T-1					0.12				21, 22	
26-WL	Leland L. Alber	156/240/192	102/8/462	93.30	15.70	Yes	65±	(L) 12±	15, 17, 22	005-003-00-018-00
26					0.34				21, 22	
26-T					0.33				21	
26-AWL					0.17				16, 21, 22	005-003-00-016-00
27-WL	Albert G. & Gladys L. Kahl	250	394	1.80	1.78				16, 22	Total Taking (Pro = 0.24 Ac)
28-WL	Mark D. & Patricia A. Tomko	296	464	10.00	0.77	Yes	(L) 8.96		16, 22, 23	(Pro = 0.27 Ac) 005-003-00-022-00
28-T					0.03				22	

PARCEL NO.	OWNER	DEED RECORD		DEED AREA	TO BE ACQUIRED		RESIDUE		SHEET NO.	REMARKS
		BOOK	PAGE		LAND	BLDGS.	LEFT	RIGHT		
29-WL	Freeda Greene	209	165	3.89	0.21			3.09	23	(Total Pro = 0.41 Ac) 005-028-00-014-00
29					0.18				23	
30-WL	Millard E. & Helen L. Troup	240/238/249	436/118/298	4.76	0.25			3.69	23	(Total Pro = 0.36 Ac) 005-028-00-013-00
30					0.46	Yes			23	
30-T					400 Sq. Ft.				23	
30-T-1					1925.5 Ft.				23	
31	Paul & Lucille H. Franks	217	418	0.67	0.13	Yes		0.30	23	(Total Pro = 0.24 Ac)
31-T					1500 Sq. Ft.				23	
33-WL	John A. & Iva Coddling	110	380	42.367	7.09		(L) 4±	31±	17	005-003-00-019-00
33-T					0.09				17	
32	Not Used									
34	Not Used									
35	Not Used									
6T-1	Roy A. & Victoria Collecchi	268	273		1.34				20	
25T-3	Anna Marie & Anna Hauthal	270/157	253/328		150 SF				22, 21	
30T-2	Millard E. & Helen L. Troup	240/238/249	436/118/298		0.26				23	
25T-2	Wayne B. Alber	272	533		2655F				21	
25T-3	"				0.05				21	
28A	Mark D. & Patricia A. Tomko	324	225	0.11Ac	1185 SF			0.07	23	(PRO = 600SF)
12WL1	August Jelen Jr.	192/186/292	510/540/593	53.65	0.64	NO	35±	16±(L)	11, 12	(Total PRO 0.91Ac) 005-009-00-051-00
12WL2					1.96				11, 12	005-009-00-050-00

(L) = Landlocked

* Parcel added at end of Summary

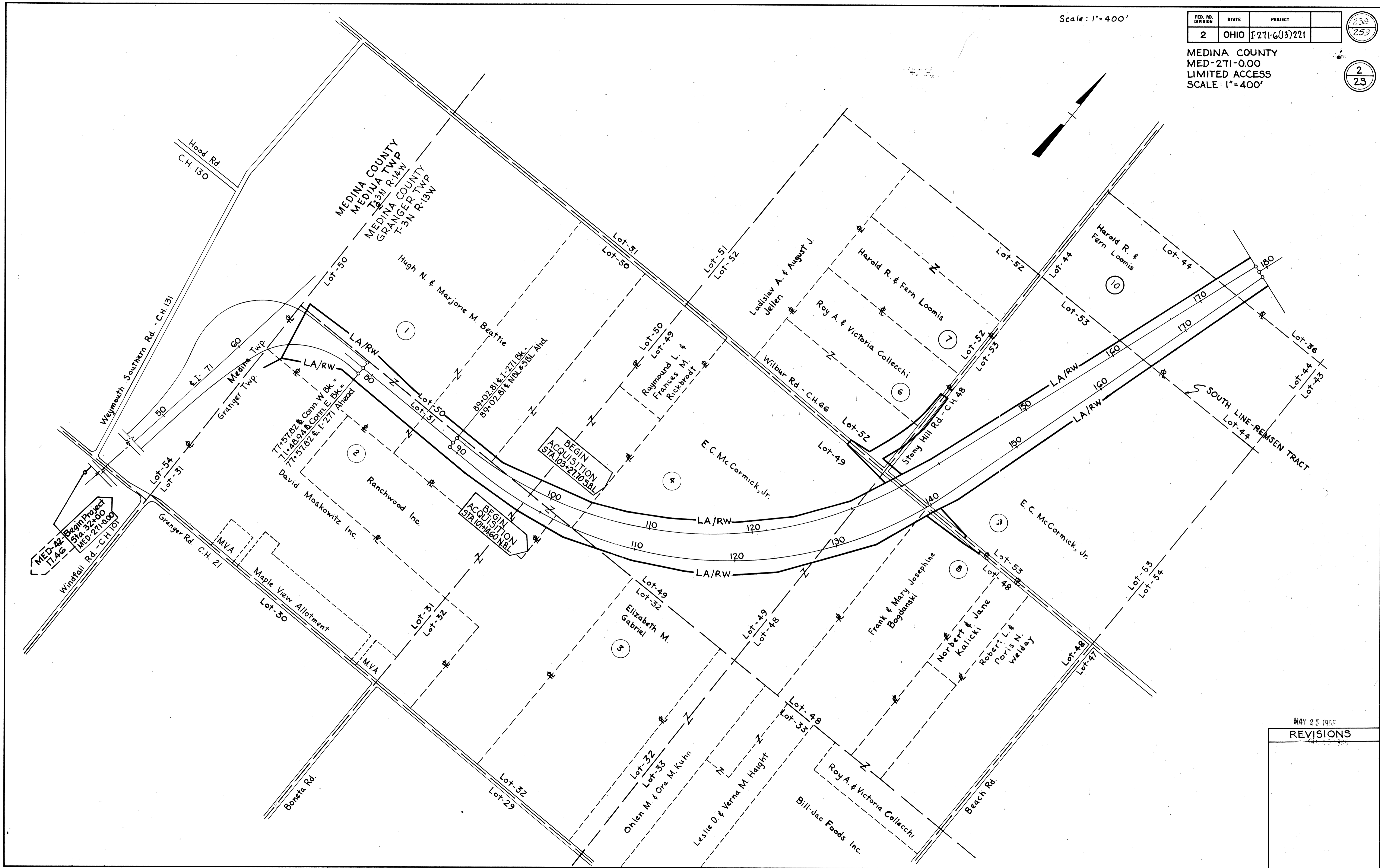
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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-271-6(13)221	

238
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1"=400'

2
23



MAY 25 1965

REVISIONS

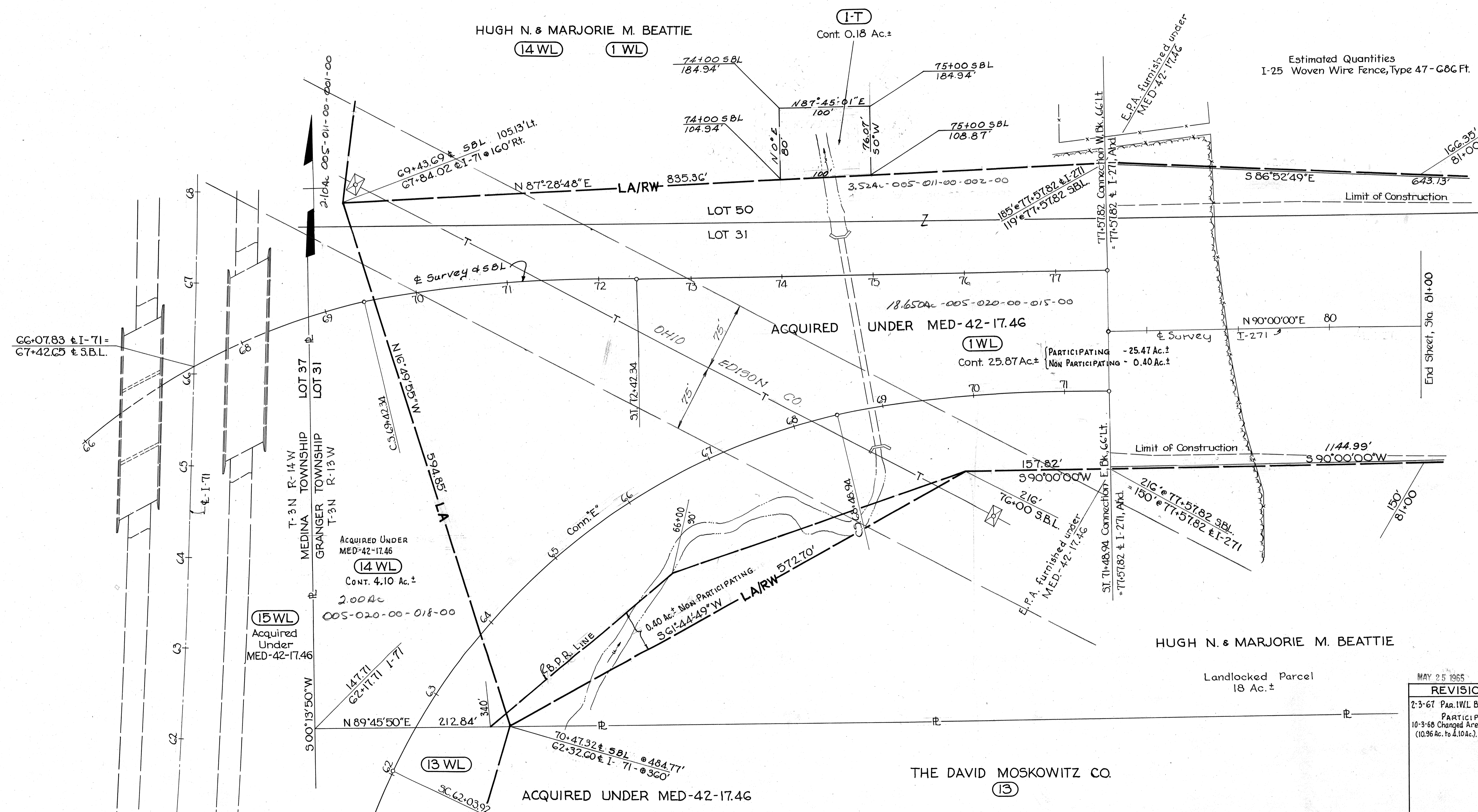
MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
Scale - 1" = 50'

MEDINA COUNTY
LOTS 50 & 31
T-3N R-13W
GRANGER TWP

HUGH N. & MARJORIE M. BEATTIE

(I-T)
Cont. 0.18 Ac.±

Estimated Quantities
I-25 Woven Wire Fence, Type 47-G&G Ft.



MAY 25 1965

REVISIONS
2-3-67 PAR. IWL B.P.R.
PARTICIPATION.
10-3-68 Changed Area Par. 14 WL
(10.96 Ac. to 4.10 Ac.) P.R.J.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

241
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
Scale: 1"=50'

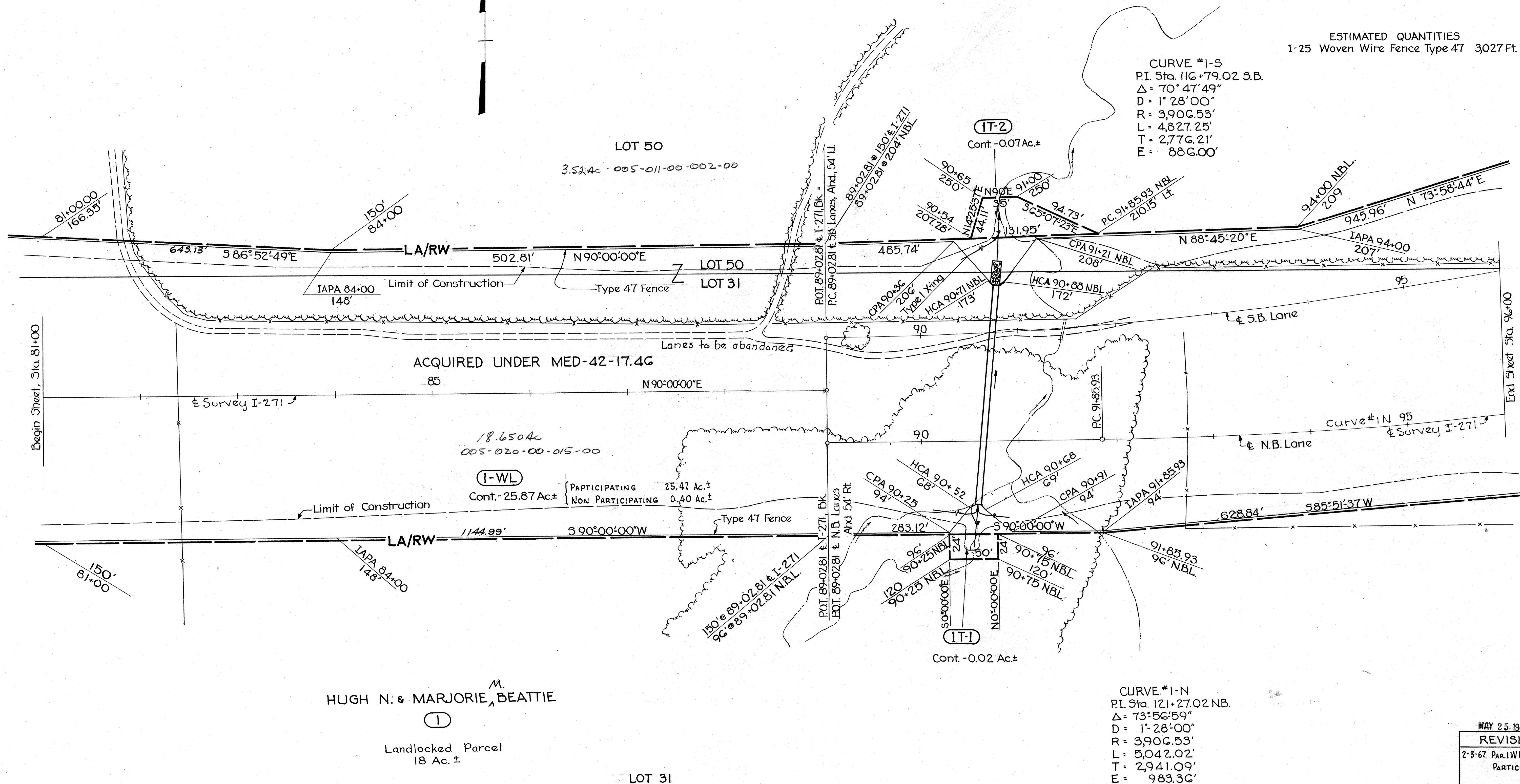
5
23

MEDINA COUNTY
LOTS 50 & 31
T-3N R-13W
GRANGER TWP.

ESTIMATED QUANTITIES
I-25 Woven Wire Fence Type 47 3027Ft.

CURVE #1-S
P.I. Sta. 116+79.02 S.B.
Δ = 70°47'49"
D = 1°28'00"
R = 3,906.53'
L = 4,827.25'
T = 2,776.21'
E = 886.00'

CURVE #1-N
P.I. Sta. 121+27.02 N.B.
Δ = 73°56'59"
D = 1°28'00"
R = 3,906.53'
L = 5,042.02'
T = 2,941.09'
E = 983.36'



Begin Sheet, Sta. 81+00

End Sheet Sta. 96+00

M.
HUGH N. & MARJORIE BEATTIE
Landlocked Parcel
18 Ac. ±

MAY 25 1965
REVISIONS
2-3-67 PAR. IWL B.P.R.
PARTICIPATION.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

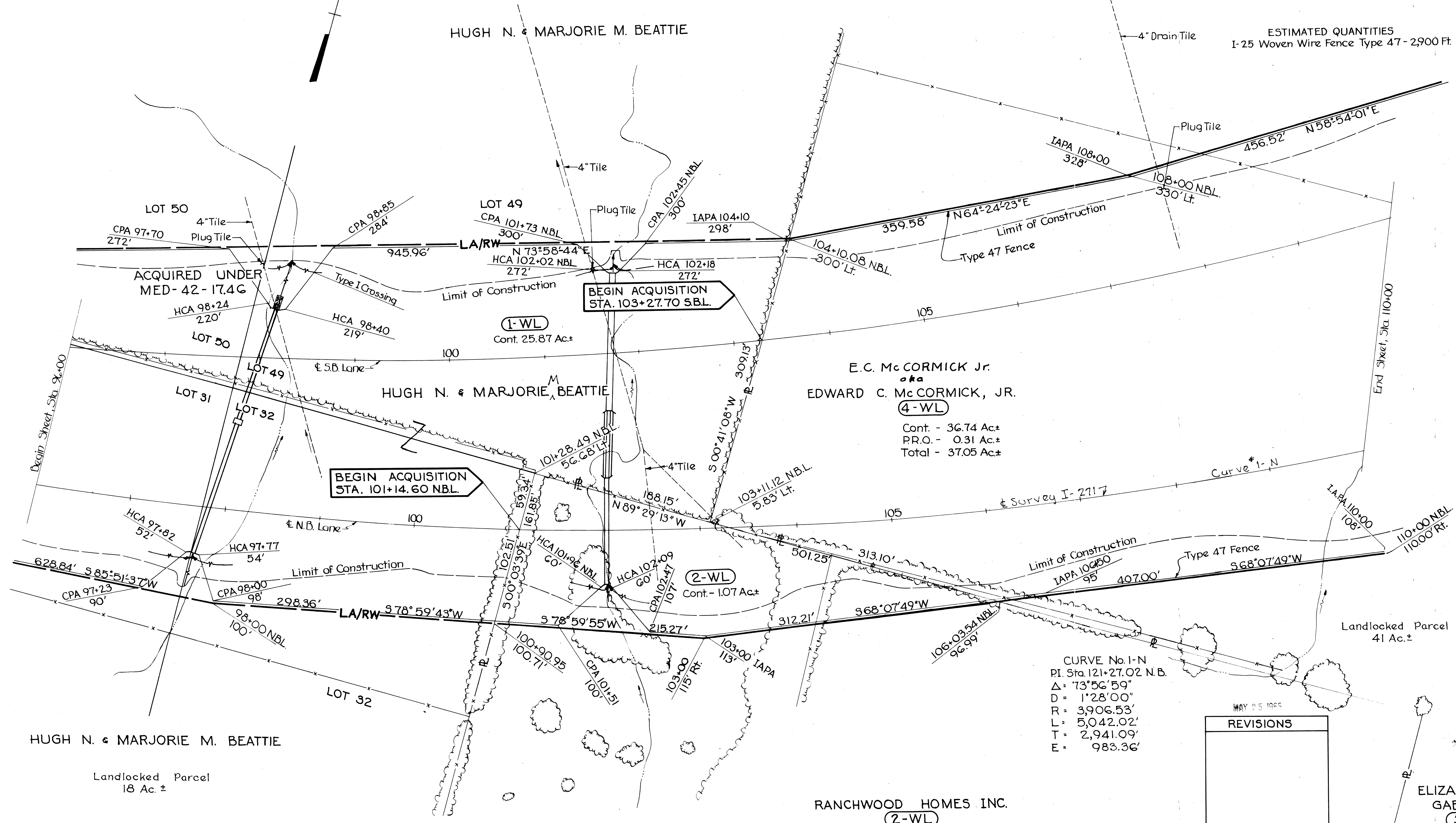
242
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
Scale: 1"=50'

G
23

MEDINA COUNTY
LOTS 31, 32, 49, & 50
T-3N R-13W
GRANGER TWP.

ESTIMATED QUANTITIES
I-25 Woven Wire Fence Type 47 - 2,900 Ft.



E.C. McCORMICK Jr.
aka
EDWARD C. McCORMICK, JR.
(4-WL)
Cont. - 36.74 Ac±
P.R.O. - 0.31 Ac±
Total - 37.05 Ac±

CURVE No. I-N
PI Sta. 121+27.02 N.B.
Δ = 73°56'59"
D = 1'28'00"
R = 3,906.53'
L = 5,042.02'
T = 2,941.09'
E = 983.36'

MAY 25 1995

REVISIONS

ELIZABETH M. GABRIEL
(3)

HUGH N. & MARJORIE M. BEATTIE

Landlocked Parcel
18 Ac ±

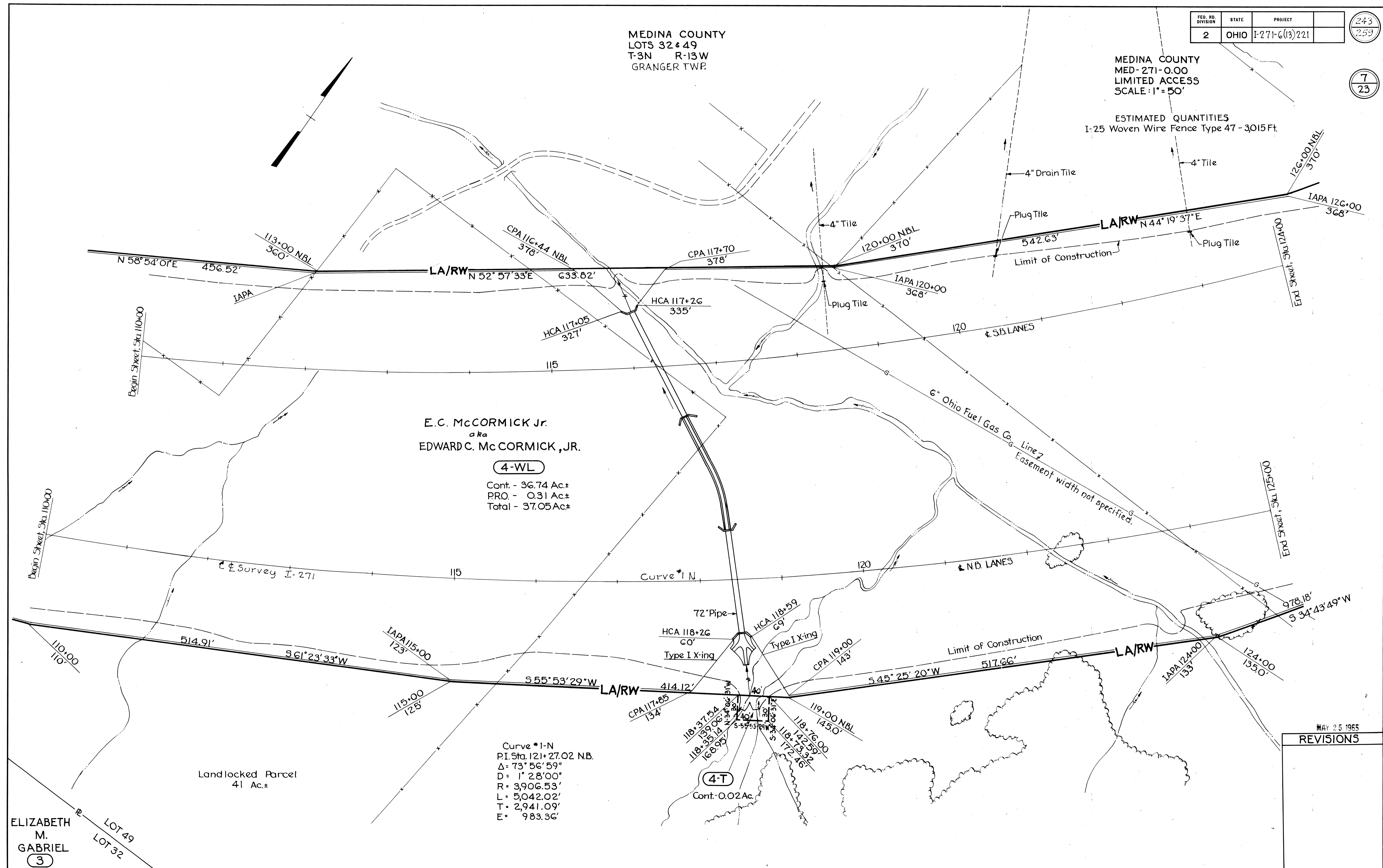
RANCHWOOD HOMES INC.
(2-WL)

Landlocked Parcel
41 Ac ±

MEDINA COUNTY
LOTS 32 & 49
T-3N R-13W
GRANGER TWP.

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1" = 50'

ESTIMATED QUANTITIES
I-25 Woven Wire Fence Type 47 - 3015 Ft.



E.C. McCORMICK Jr.
a.k.a
EDWARD C. McCORMICK, JR.

(4-WL)
Cont. - 36.74 Ac.±
PRO. - 0.31 Ac.±
Total - 37.05 Ac.±

Curve *I-N
P.I. Sta. 121+27.02 NB.
Δ = 73° 56' 59"
D = 1° 28' 00"
R = 3906.53'
L = 5,042.02'
T = 2,941.09'
E = 983.36'

ELIZABETH
M.
GABRIEL
(3)

MAY 25 1965

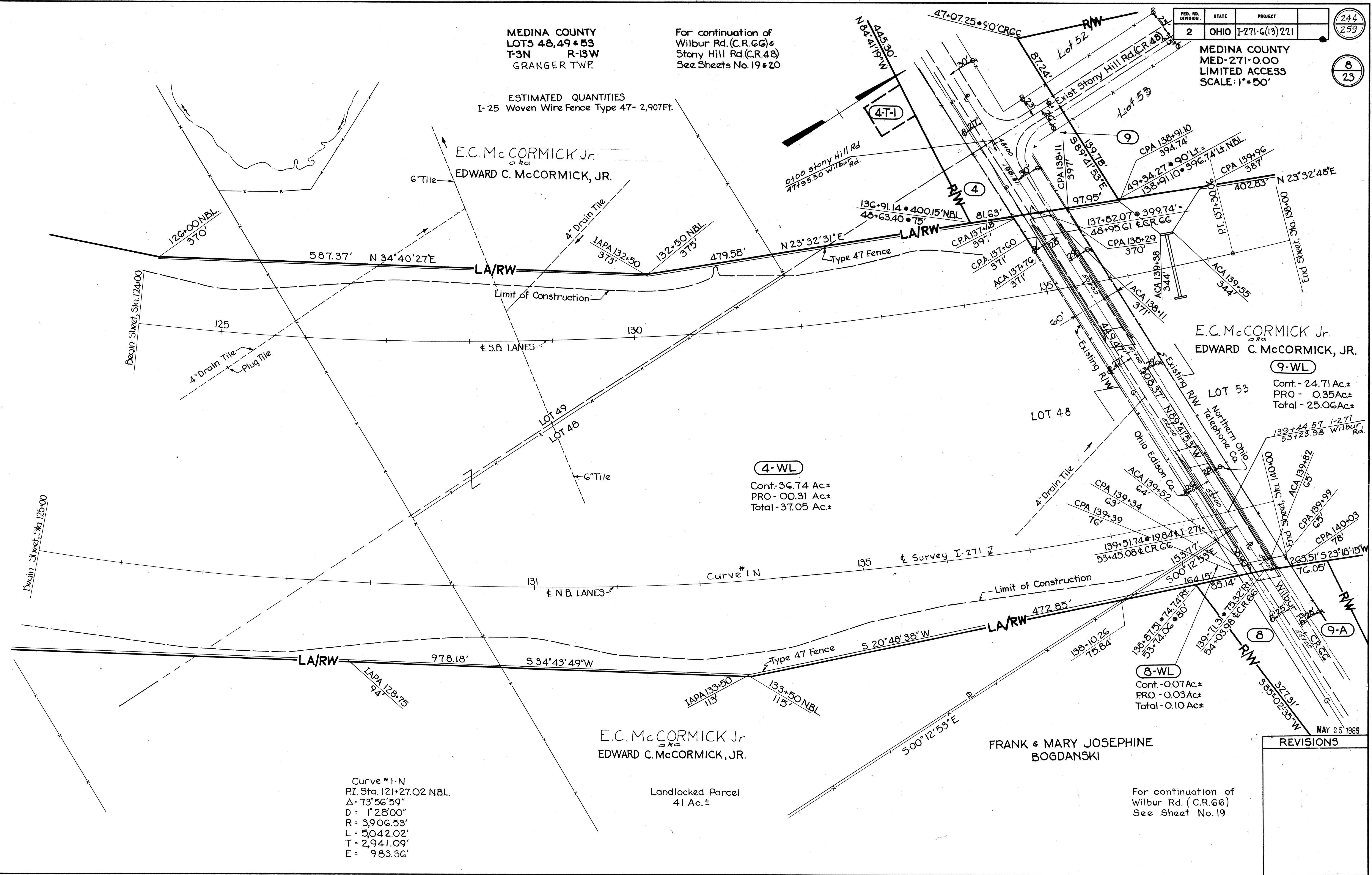
REVISIONS

MEDINA COUNTY
LOTS 48, 49 & 53
T-3N R-13W
GRANGER TWP.

For continuation of
Wilbur Rd. (C.R.66) &
Stony Hill Rd. (C.R.48)
See Sheets No. 19 & 20

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1" = 50'

ESTIMATED QUANTITIES
I-25 Woven Wire Fence Type 47- 2,907Ft.



E.C. McCORMICK Jr.
a.k.a
EDWARD C. McCORMICK, JR.

E.C. McCORMICK Jr.
a.k.a
EDWARD C. McCORMICK, JR.

E.C. McCORMICK Jr.
a.k.a
EDWARD C. McCORMICK, JR.

FRANK & MARY JOSEPHINE
BOGDANSKI

Curve #1-N
PI. Sta. 121+27.02 NBL.
Δ = 73°56'59"
D = 1°28'00"
R = 3,906.53'
L = 5,042.02'
T = 2,941.09'
E = 983.36'

Landlocked Parcel
41 Ac.±

For continuation of
Wilbur Rd. (C.R.66)
See Sheet No. 19

NO.	DATE	REVISIONS

MEDINA COUNTY
 LOT 53 REMSEN TRACT
 T-3N LOT 44
 R-13 W
 GRANGER TWP.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

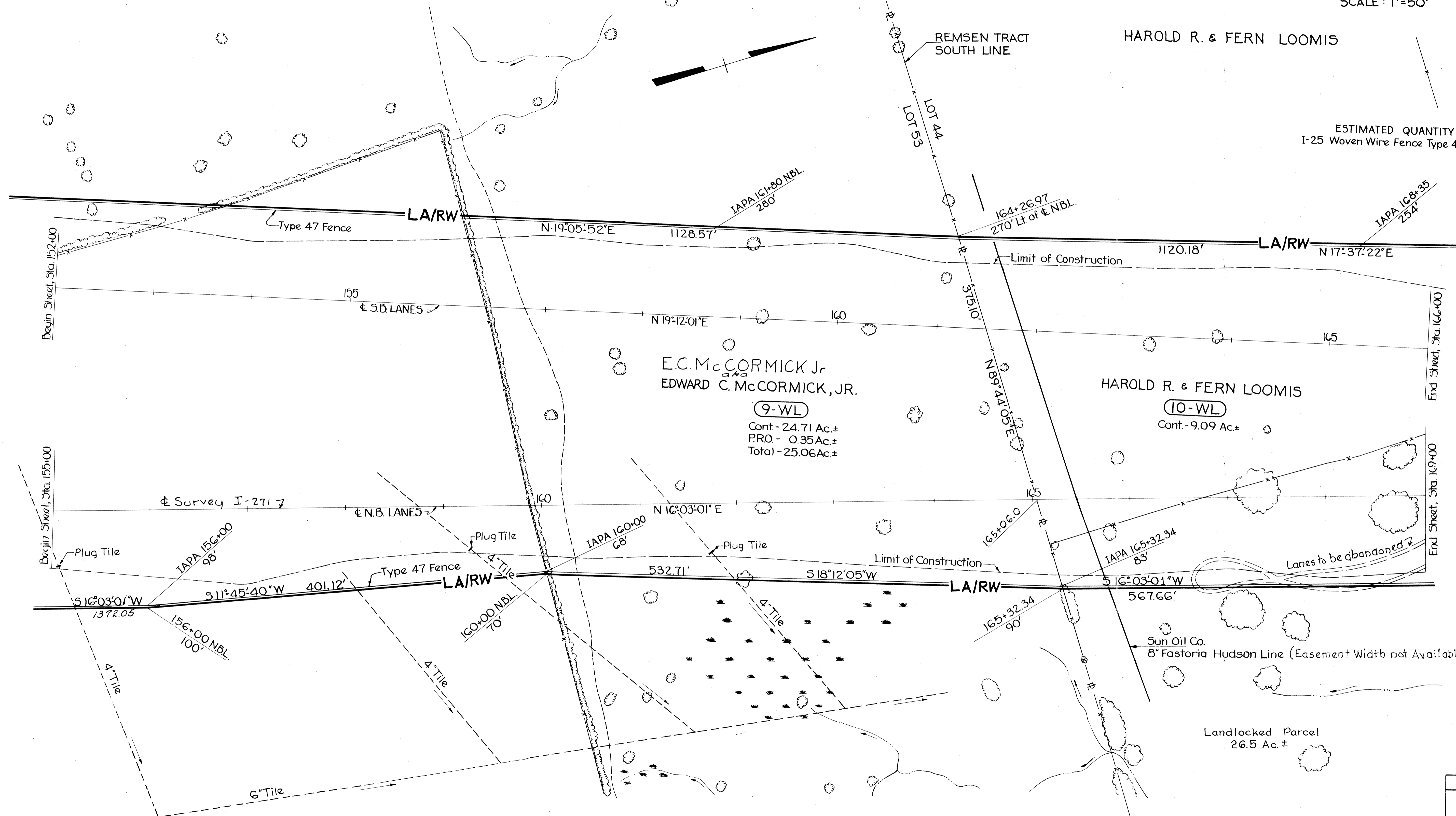
246
259

MEDINA COUNTY
 MED-271-0.00
 LIMITED ACCESS
 SCALE: 1"=50'

10
23

HAROLD R. & FERN LOOMIS

ESTIMATED QUANTITY
 I-25 Woven Wire Fence Type 47 - 2,782 Ft.



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

247
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1"=50'

11
23

MEDINA COUNTY
REMSEN TRACT
LOTS 44 & 36
T-3N R-13W
GRANGER TWP.

BOARD OF
TOWNSHIP TRUSTEES OF
GRANGER TOWNSHIP

ESTIMATED QUANTITIES
I-25 Woven Wire Fence Type 47 - 3,000 Ft.

AUGUST JELEN, JR.
12

HAROLD R. & FERN LOOMIS
10

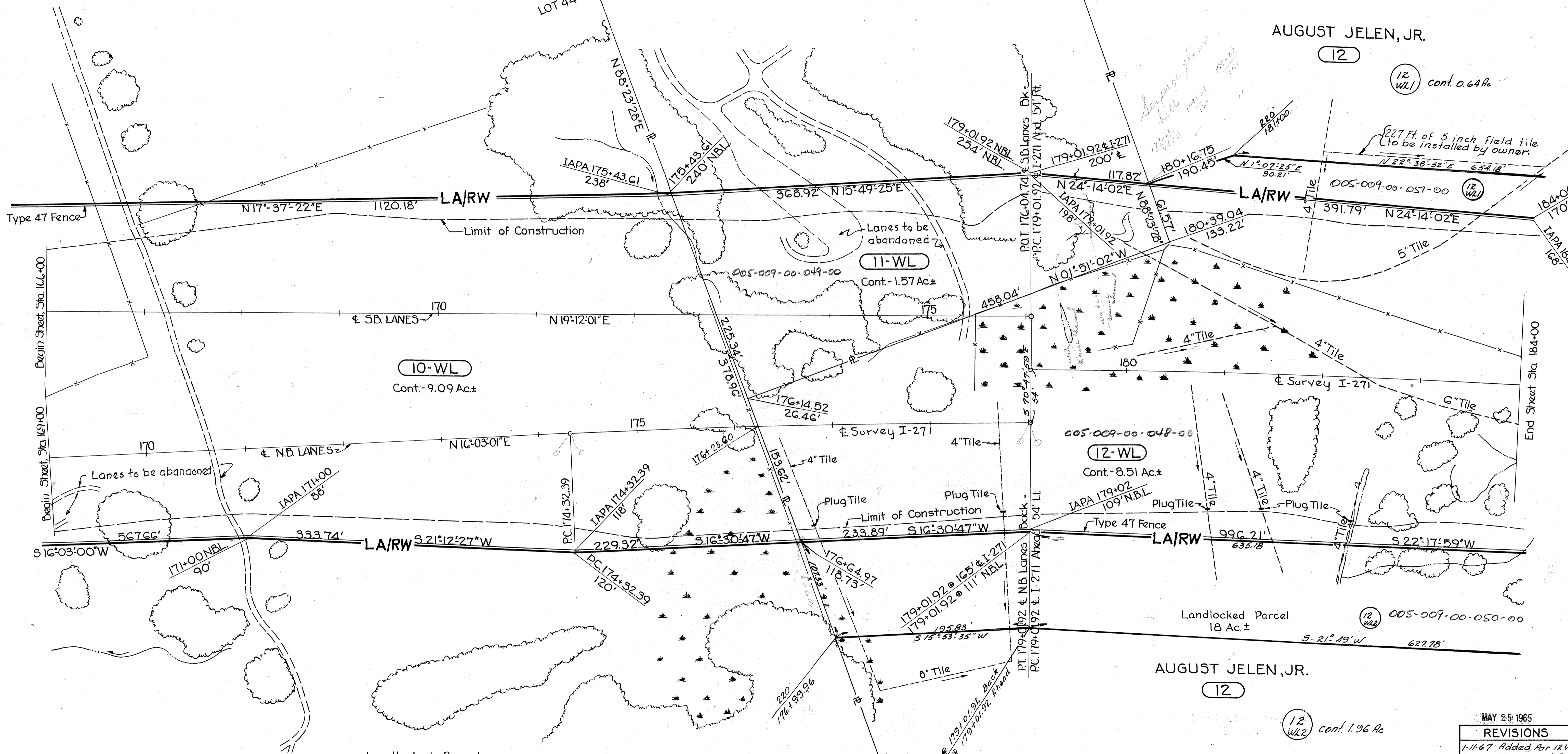
12
W/L1 cont. 0.64 Ac

11-WL
Cont. - 1.57 Ac±

10-WL
Cont. - 9.09 Ac±

12-WL
Cont. - 8.51 Ac±

12
W/L2 cont. 1.96 Ac



Curve *2-N
P.I. Sta. 176+67.21
Δ = 3°09'00"
D = 0°40'15.18"
R = 8,540.36'
L = 469.53'
T = 234.82'
E = 3.22'

Curve *3
P.I. Sta.
Δ = 66°44'37"
D = 0°40'00"
R = 8,594.36'
L = 10,011.54'
T = 5,660.87'
E = 1,696.82'

MAY 25, 1965

REVISIONS
1-11-67 Added Per 12 W/L1 9/12 W/L2

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-G(13)221	

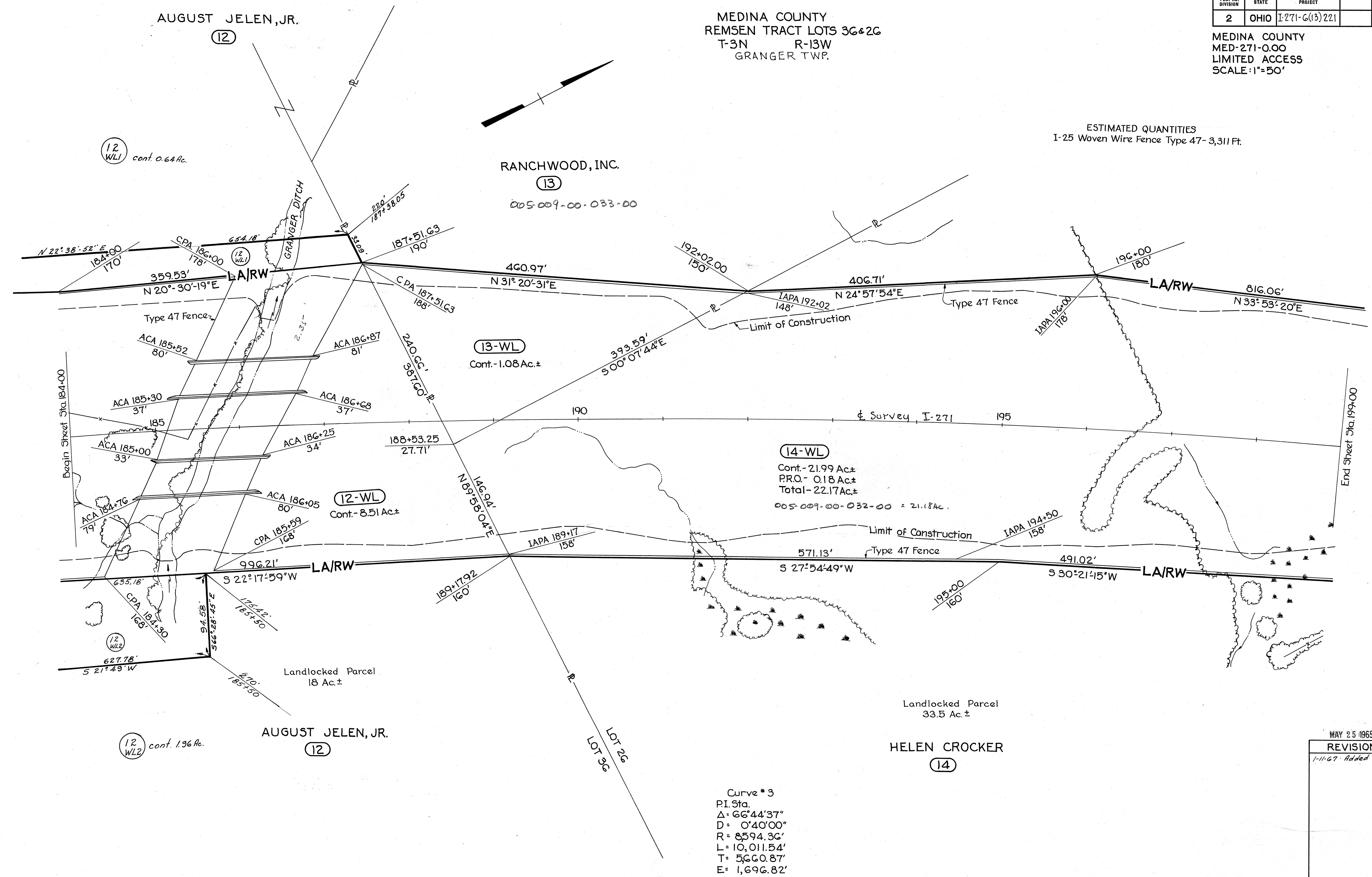
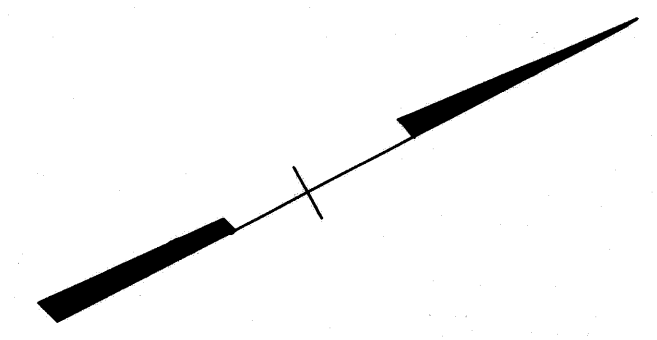
248
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1"=50'

12
23

MEDINA COUNTY
REMSEN TRACT LOTS 36&26
T-3N R-13W
GRANGER TWP.

ESTIMATED QUANTITIES
1-25 Woven Wire Fence Type 47- 3,311 Ft.



(12) WLI cont. 0.64 Ac.

RANCHWOOD, INC.
(13)
005-009-00-033-00

(13-WL)
Cont. - 1.08 Ac.±

(14-WL)
Cont. - 21.99 Ac.±
P.R.O. - 0.18 Ac.±
Total - 22.17 Ac.±
005-009-00-032-00 = 21.18 Ac.

(12-WL)
Cont. - 8.51 Ac.±

Landlocked Parcel
18 Ac.±

Landlocked Parcel
33.5 Ac.±

(12) WLI cont. 1.96 Ac.

Curve # 3
P.I. Sta.
Δ = 66° 44' 37"
D = 0° 40' 00"
R = 8594.36'
L = 10,011.54'
T = 5660.87'
E = 1,696.82'

MAY 25 1965

REVISIONS
1-11-67 - Added 12WLI & 12WLI2

MEDINA COUNTY
 REMSEN TRACT LOTS 26, 27 & 33
 T-3N R-13W
 GRANGER TWP.

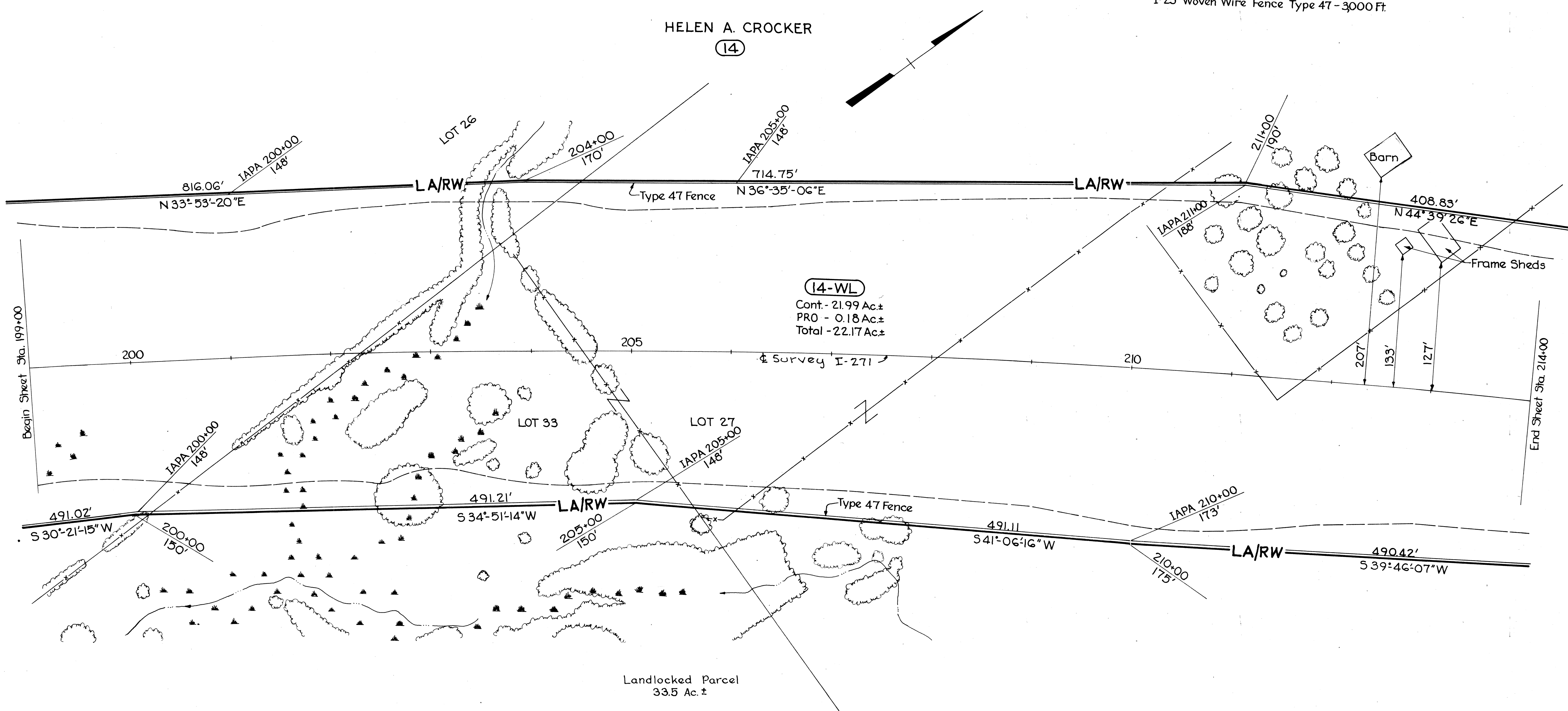
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13)221

249
259

MEDINA COUNTY
 MED-271-0.00
 LIMITED ACCESS
 SCALE: 1"=50'

13
23

ESTIMATED QUANTITIES
 I-25 Woven Wire Fence Type 47 - 3000 Ft.



HELEN A. CROCKER

(14)

(14-WL)

Cont. - 21.99 Ac.±
 PRO - 0.18 Ac.±
 Total - 22.17 Ac.±

Survey I-271

Landlocked Parcel
 33.5 Ac.±

HELEN A. CROCKER

(14)

Curve # 3
 P.I. Sta 235+62.79
 $\Delta = 66^{\circ}44'37''$
 $D = 0^{\circ}40'00''$
 $R = 8594.36'$
 $L = 10,011.54'$
 $T = 5,660.87'$
 $E = 1,696.82'$

MAY 25 1965

REVISIONS

For Continuation of C.H. 37
See Sh. 21

MEDINA COUNTY
REMSEN TRACT LOTS 15 & 27
T-3N R-13W
GRANGER TWP.

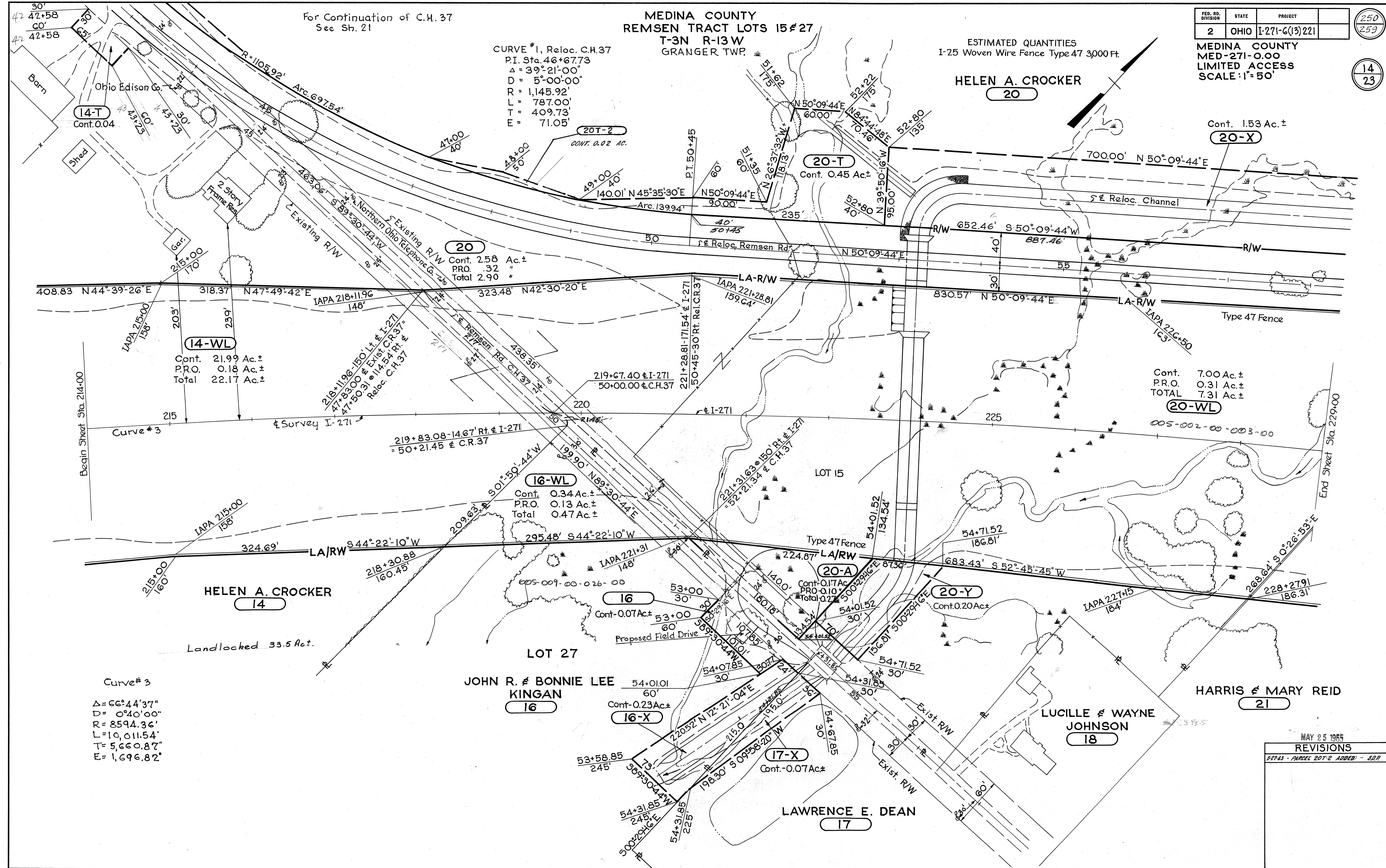
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-G(13)221	

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1"=50'

250
259
14
23

ESTIMATED QUANTITIES
I-25 Woven Wire Fence Type 47 3,000 Ft.

CURVE #1, Reloc. C.H. 37
P.I. Sta. 46+67.73
 $\Delta = 39^\circ 21' 00''$
D = 5°-00'-00"
R = 1,145.92'
L = 787.00'
T = 409.73'
E = 71.05'



Curve #3
 $\Delta = 66^\circ 44' 37''$
D = 0°40'00"
R = 8594.36'
L = 10,011.54'
T = 5,660.87'
E = 1,696.82'

MAY 25 1965

REVISIONS
52763 - PARCEL 20T-2 ADDED - JLR

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-6(13) 221

251
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1" = 50'

15
23

MEDINA COUNTY
REMSEN TRACT LOT 15
T-3N R-13W
GRANGER TWP

CURVE #2 Reloc. C.H.37
P.I. Sta. 68+13.27
 $\Delta = 20^{\circ}38'45''$
 $D = 5^{\circ}00'00''$
 $R = 1,145.92'$
 $L = 412.92'$
 $T = 208.72'$
 $E = 18.85'$

HELEN A. CROCKER
20

ANNA MARIE HAUTHAL
& ANNA HAUTHAL
23

ANNA MARIE HAUTHAL & ANNA HAUTHAL
23-WL

20-X
20

20
20

20-WL
20

21-WL
21

HARRIS & MARY REID
21

ESTIMATED QUANTITIES
I-25 Woven Wire Fence Type 47 - 2,850'

Landlocked Parcel
6 Ac.±

Curve#3
P.I. Sta. 235+62.79
 $\Delta = 66^{\circ}44'37''$
 $D = 0^{\circ}40'00''$
 $R = 8,594.36'$
 $L = 10,011.54'$
 $T = 5,660.87'$
 $E = 1,696.82'$

MAY 25 1965
REVISIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	T-271-G(3)221	

253
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1" = 50'

17
23

MEDINA COUNTY
REMSEN TRACT LOTS 7, 8, 13, & 14
T-3N R-13W
GRANGER TWP.

FRANK & LUCILLE E. HARRIS
(34)

NELLIE GAIDUK
(36)

EVERETT E. & ALICE R. INGALLS
(38)

JOHN A. & IVA CODDING
(33)

LELAND L. ALBER
(26)

Landlocked Parcel
4 Ac. ±

Begin Sheet Sta. 258+00

End Sheet, Sta. 272+00

END ACQUISITION
STA. 269+64.25
MED-IR 271+0.00

ESTIMATED QUANTITIES
I:25 Woven Wire Fence Type 47 - 2,326 Ft.

Curve #3
P.I. Sta. 235+62.79
Δ = 66°44'37"
D = 0°40'00"
R = 8,594.36'
L = 10,011.54'
T = 5,660.87'
E = 1,696.82'

(26-WL)
Cont. - 15.70 Ac. ±
PRO - 0.60 Ac. ±
Total - 16.30 Ac. ±

(33-WL)
Cont. - 7.09 Ac. ±

Landlocked Parcel
12 Ac. ±

MAY 25 1965

REVISIONS

MEDINA COUNTY
REMSSEN TRACT LOTS 8 & 13
T-3N R-13W
GRANGER TWP

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-271-G(13)221

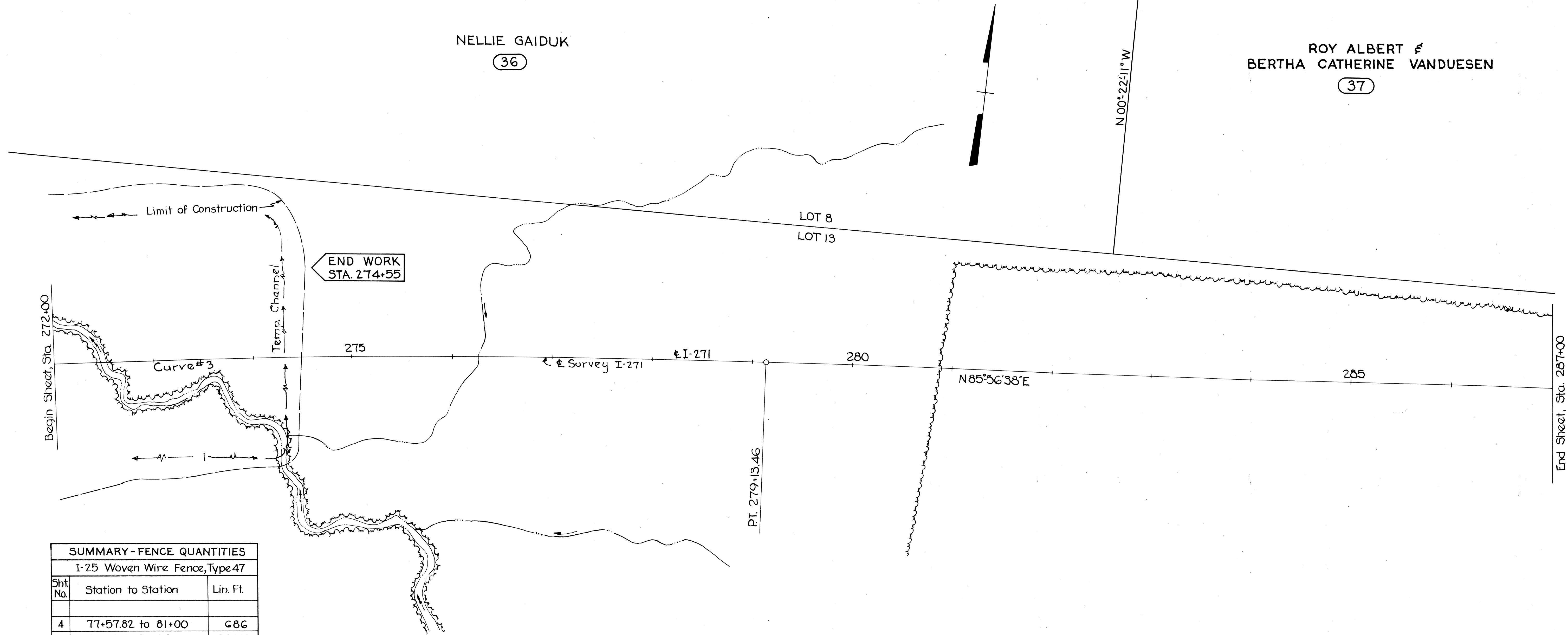
254
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE: 1" = 50'

18
23

NELLIE GAIDUK
(36)

ROY ALBERT &
BERTHA CATHERINE VANDUESEN
(37)



SUMMARY - FENCE QUANTITIES		
I-25 Woven Wire Fence, Type 47		
Sht. No.	Station to Station	Lin. Ft.
4	77+57.82 to 81+00	686
5	81+00 to 96+00	3,027
6	96+00 to 110+00	2,900
7	110+00 to 125+00	3,015
8	125+00 to 140+00	2,907
9	140+00 to 155+00	2,931
10	155+00 to 169+00	2,782
11	169+00 to 184+00	3,000
12	184+00 to 199+00	3,311
13	199+00 to 214+00	3,000
14	214+00 to 229+00	3,000
15	229+00 to 243+00	2,850
16	243+00 to 258+00	2,622
17	258+00 to 269+64.25	2,326
TOTALS		38,357

Curve #3
P.I. Sta. 235+62.79
Δ = 66°44'37"
D = 0°40'00"
R = 8,594.36'
L = 10,011.54'
T = 5,660.87'
E = 1,696.82'

EVERETT E. & ALICE R. INGALLS
(38)

MAY 25 1965

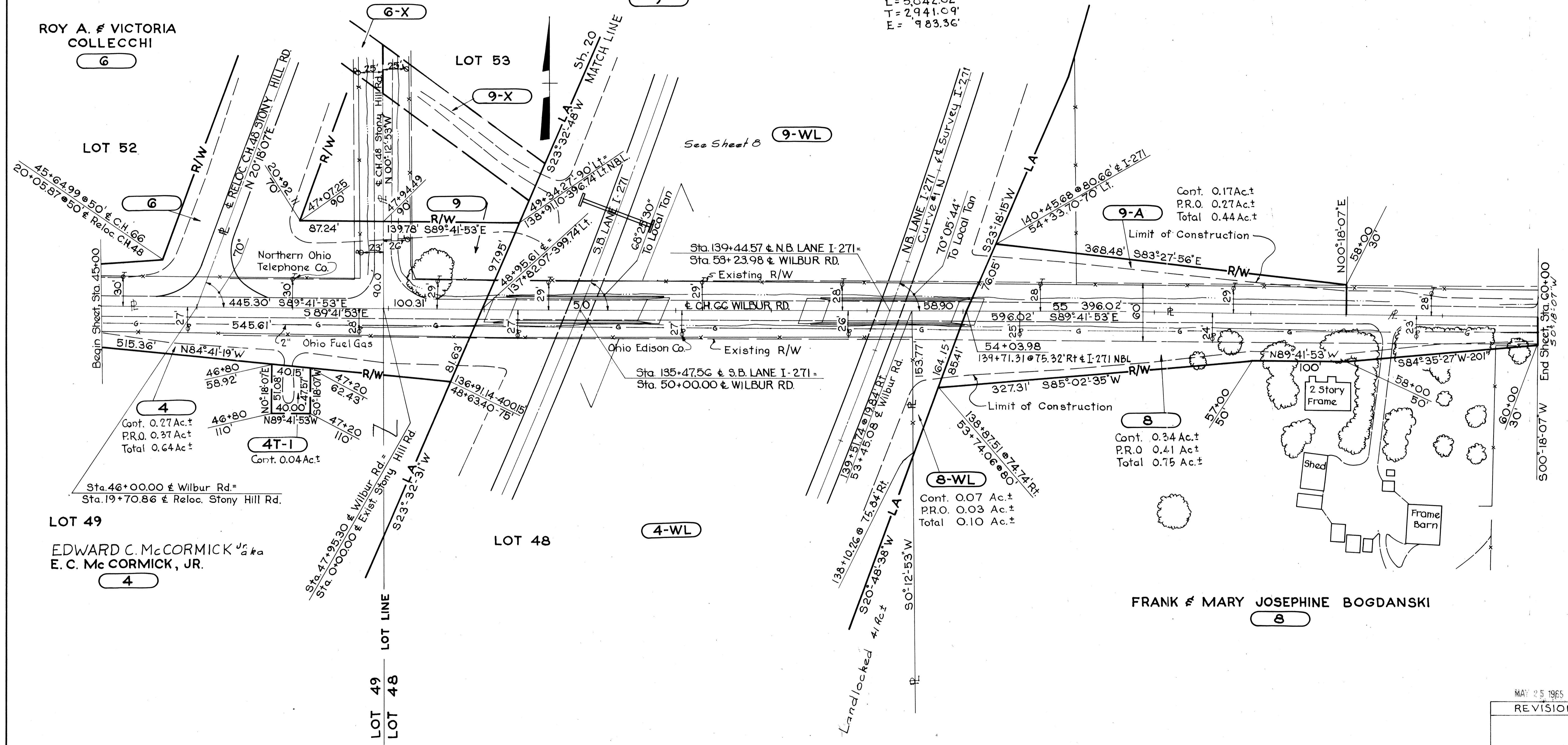
REVISIONS

MEDINA COUNTY
LOTS 48, 49, 52 & 53
T-3N R-13W
GRANGER TWP

For Continuation of
Stoney Hill Rd. C.H.48 and
Wilbur Rd. C.H.66
See Sheet No.20

EDWARD C. McCORMICK Jr.
ORR
E. C. McCORMICK, JR.

Curve# 1-N
P.I. Sta. 121+27.02 NBL
Δ= 73°56'59"
D= 1°28'00"
R= 3,906.53'
L= 5,042.02'
T= 2,941.09'
E= 983.36'



ROY A. & VICTORIA COLLECCHI
6

LOT 52

LOT 53

LOT 49

EDWARD C. McCORMICK Jr.
ORR
E. C. McCORMICK, JR.

LOT 48

FRANK & MARY JOSEPHINE BOGDANSKI

MAY 25 1965

REVISIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-271-6(13)221	

257
259

MEDINA COUNTY
MED-271-000
LIMITED ACCESS
SCALE: 1"=50'

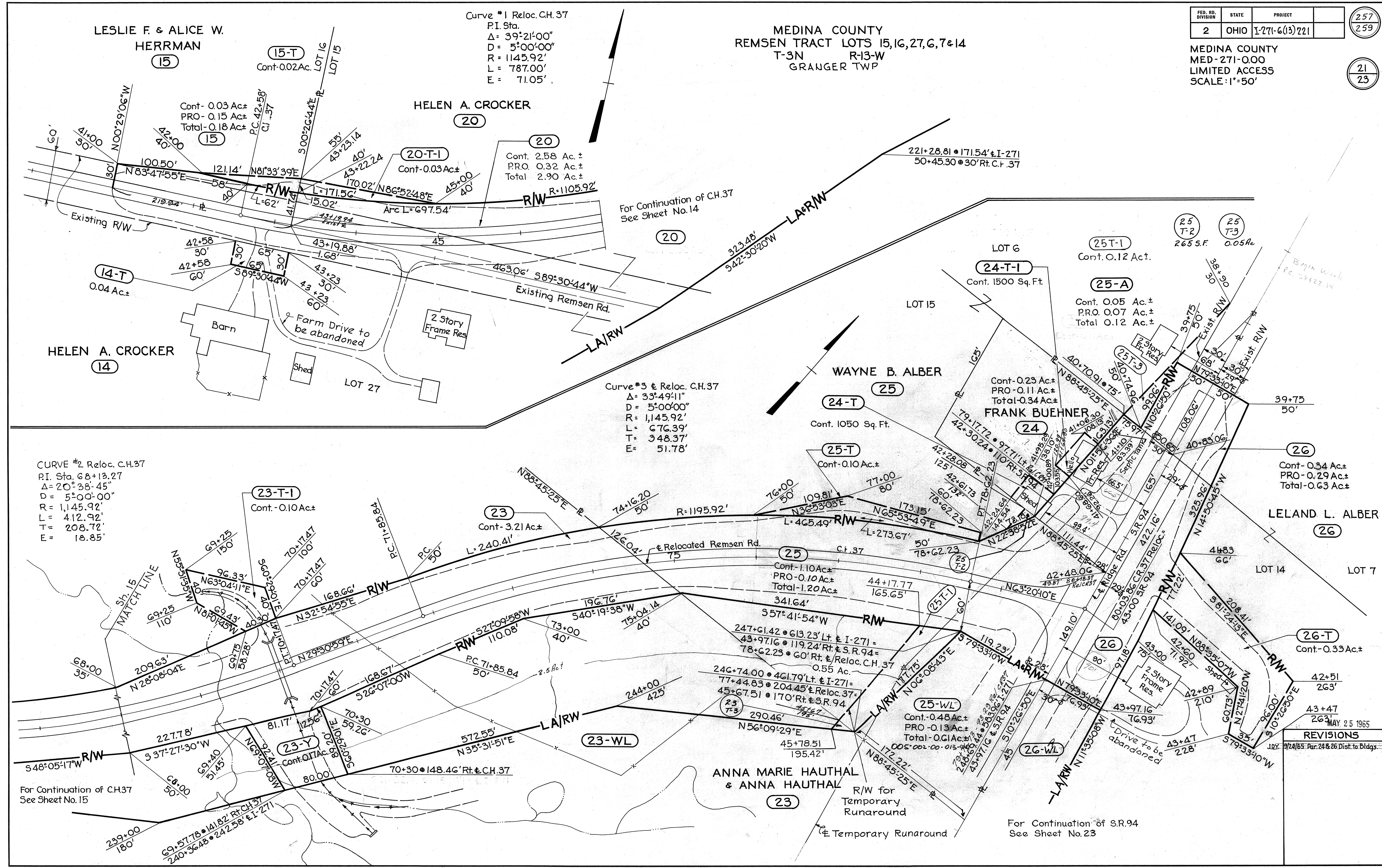
21
23

MEDINA COUNTY
REMSEN TRACT LOTS 15, 16, 27, 6, 7 & 14
T-3N R-13-W
GRANGER TWP

Curve #1 Reloc. CH. 37
P.I. Sta. 68+13.27
 $\Delta = 39^\circ 21' 00''$
 $D = 5^\circ 00' 00''$
 $R = 1145.92'$
 $L = 787.00'$
 $E = 71.05'$

Curve #3 & Reloc. CH. 37
 $\Delta = 33^\circ 49' 11''$
 $D = 5^\circ 00' 00''$
 $R = 1145.92'$
 $L = 676.39'$
 $T = 348.37'$
 $E = 51.78'$

CURVE #2 Reloc. CH. 37
P.I. Sta. 68+13.27
 $\Delta = 20^\circ 38' 45''$
 $D = 5^\circ 00' 00''$
 $R = 1145.92'$
 $L = 412.92'$
 $T = 208.72'$
 $E = 18.85'$



REVISIONS
MAY 25 1965
JRY: 19/24/65 Par. 24 & 26 Dist. to Bldgs.

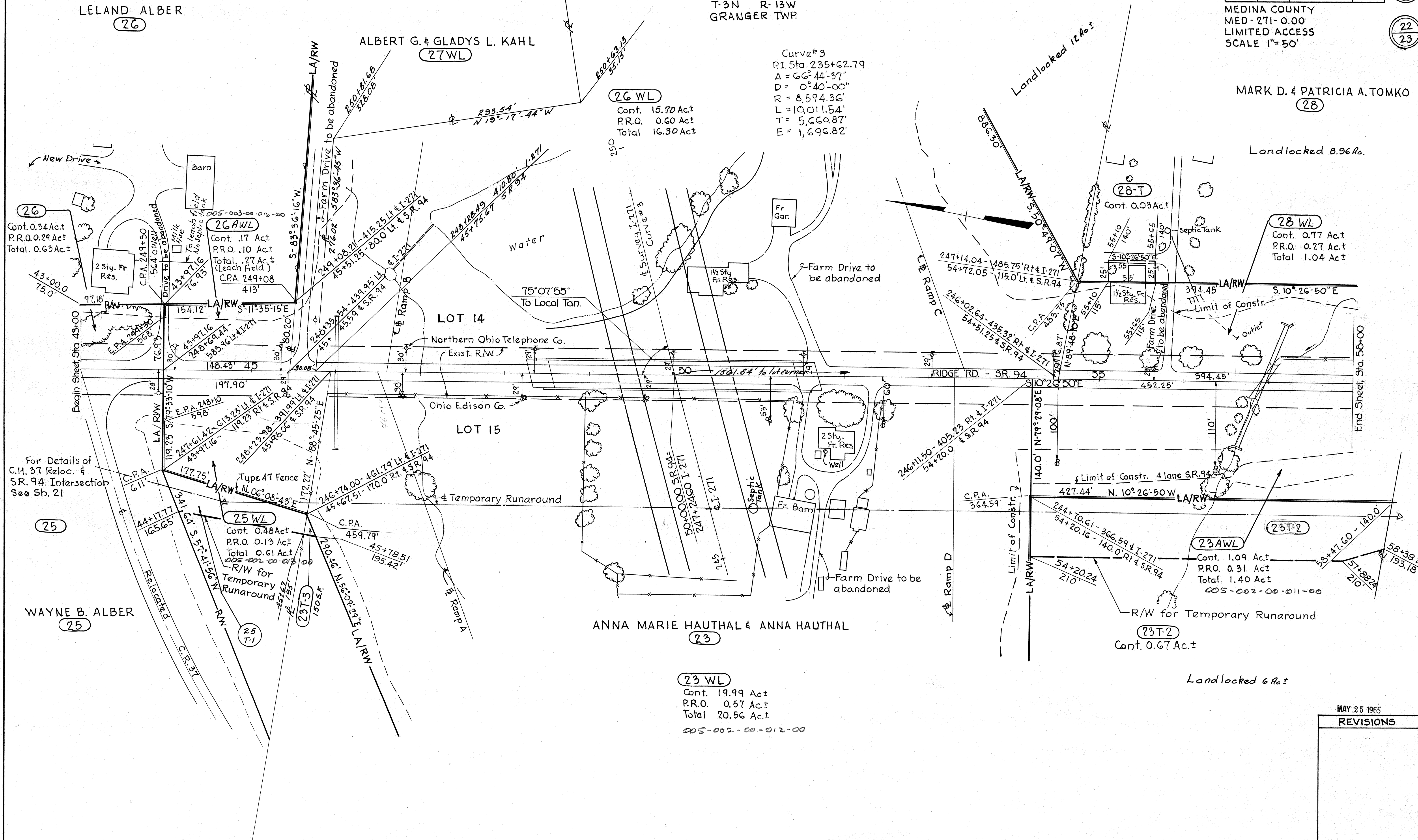
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-271-G(13)221	

258
259

MEDINA COUNTY
MED-271-0.00
LIMITED ACCESS
SCALE 1"=50'

22
23

MEDINA COUNTY
REMSEN TRACT LOTS 14 & 15
T-3N R-13W
GRAINGER TWP.



26 WL
Cont. 15.70 Ac±
P.R.O. 0.60 Ac±
Total 16.30 Ac±

Curve #3
PI Sta. 235+62.79
Δ = 66° 44' 37"
D = 0° 40' 00"
R = 8,594.36'
L = 10,011.54'
T = 5,660.87'
E = 1,696.82'

28 WL
Cont. 0.77 Ac±
P.R.O. 0.27 Ac±
Total 1.04 Ac±

25 WL
Cont. 0.48 Ac±
P.R.O. 0.13 Ac±
Total 0.61 Ac±
R/W for Temporary Runaround

23 WL
Cont. 19.99 Ac±
P.R.O. 0.57 Ac±
Total 20.56 Ac±
005-002-00-012-00

23AWL
Cont. 1.09 Ac±
P.R.O. 0.31 Ac±
Total 1.40 Ac±
005-002-00-011-00

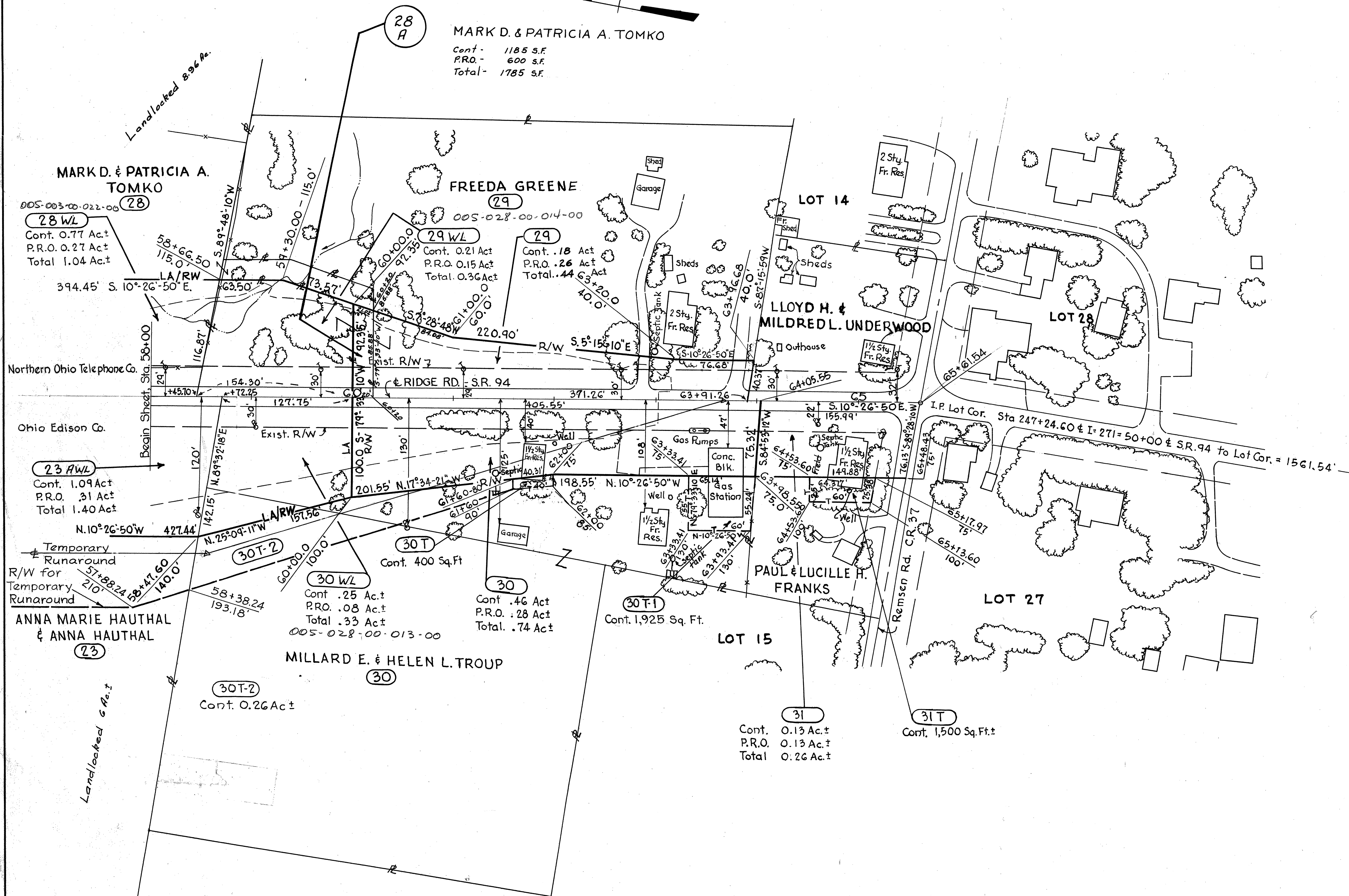
MEDINA COUNTY
 REMSEN TRACT LOTS 14 & 15
 T-3N R-13W
 GRANGER TWP

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	[271-6(13)221	

259
259

MEDINA COUNTY
 MED-271-0.00
 LIMITED ACCESS
 SCALE: 1"=50'

23
23



MAY 25 1965
 REVISIONS
 #1 Rev 6-9-65 Parcel 28A added & Parcel 29 Revised

MICROFILMED

JUN 6 1966

GENERAL INFORMATION

INTRODUCTION

The project consists of the proposed construction of 3.7 miles of IR 271, beginning at IR 71, extending northeastward, and terminating 0.5 mile east of SR 94, 0.4 mile north of Co. Rd. 37. Included in this report are profiles of the SR 94 Interchange Ramps.

Proposed grades indicate the following maximum proposed cuts and fill embankments:

	CUTS (MAX.)	FILL EMBANKMENTS (MAX.)
IR 271	31'	28'
SR 94 Interchange		
Ramp A	-	36'
Ramp B	12'	31'
Ramp C	22'	20'
Ramp D	-	29'

GEOLOGY AND OBSERVATIONS OF THE PROJECT

The alignment traverses a dissected portion of the glaciated Allegheny Plateau, where moderately deep to deep morainal deposits and some alluvial and sedimentary deposits, overlie bedrock, of Pennsylvanian and Mississippian age. Several areas of poor surface drainage were observed along the project.

EXPLORATION

Exploratory borings were made by means of truck-mounted mechanical soil auger, and hand auger (in areas of difficult access), during July, 1964 and between December 1 and 11, 1964.

INVESTIGATIONAL FINDINGS

Materials occurring immediately below proposed grades consist predominantly of silt clays (A-6a) and occasional sandy silts (A-4a), having moisture contents generally in the lower portions of, or below the plastic range. Organic elastic clay and wet materials were encountered at station 203+00.

In the embankment foundation areas, soils are predominantly comprised of sandy silts (A-4a) and silts clays (A-6a) with some sandy gravels and clays (A-7-5 and A-7-6), generally having low moisture contents or moisture contents in the lower portion of the plastic range.

Low strength, wet, compressible peats and organic materials were encountered at Northbound Lane stations 116+75, 176+00 to 179+00, and at mainline stations 177+00 to 192+00, 219+50, 232+00, Ramp A station 44+00, Ramp B station 47+60, and Ramp D station 39+00.

LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS— 549 SAMPLES TESTED

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG	% C SAND	% F SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Gravel and/or stone fragments	A-1-a(0)	A-1-a	64	18	8	-10-		NP	NP	19	15
Gravel and/or stone fragments with sand	A-1-b(0)	A-1-b	44	21	16	-19-		NP	NP	15	19
Coarse and fine sand	-----	A-3a	12	20*	43	12	13	NP	NP	13	3
Gravel and/or stone fragments with sand and silt	A-2-4(0)	A-2-4	39	14	18	17	12	NP	NP	12	18
Gravel and/or stone fragments with sand, silt, and clay	A-2-6(4)	A-2-6	52	13	8	14	13	35	19	12	2
Sandy silt	A-4(4)	A-4a	18	8	20	32	22	15	4	16	130
Silt	A-4(8)	A-4b	1	1	9	59	30	16	2	24	41
Silt and clay	A-6(9)	A-6a	9	5	10	38	38	29	12	22	148
Silty clay	A-6(11)	A-6b	2	1	5	41	51	38	17	30	10
Elastic clay	A-7-5(20)	A-7-5	1	2	8	45	44	74	35	62	44
Clay	A-7-6(15)	A-7-6	0	1	5	46	48	48	23	35	49
Fibrous peat											1
Fine textured peat											11
Loamy											15
Marly-Sedimentary peat											17
Sedimentary peat											26
Various other materials											

▨▨▨▨ Sod and/or Topsoil =X*= Approximate depth.

▨▨▨▨ Berm material.

⊕ Auger boring - plan view.

| Auger boring plotted to vertical scale only.

● Water content nearly equal to or greater than liquid limit

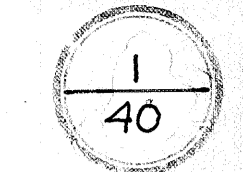
⊖ Indicates a non-plastic material with a high water content.

—w Free water.

NOTE: Figures beside borings indicate water content in percent. e.g. 15

REVISED 1/12/65

SOIL PROFILE

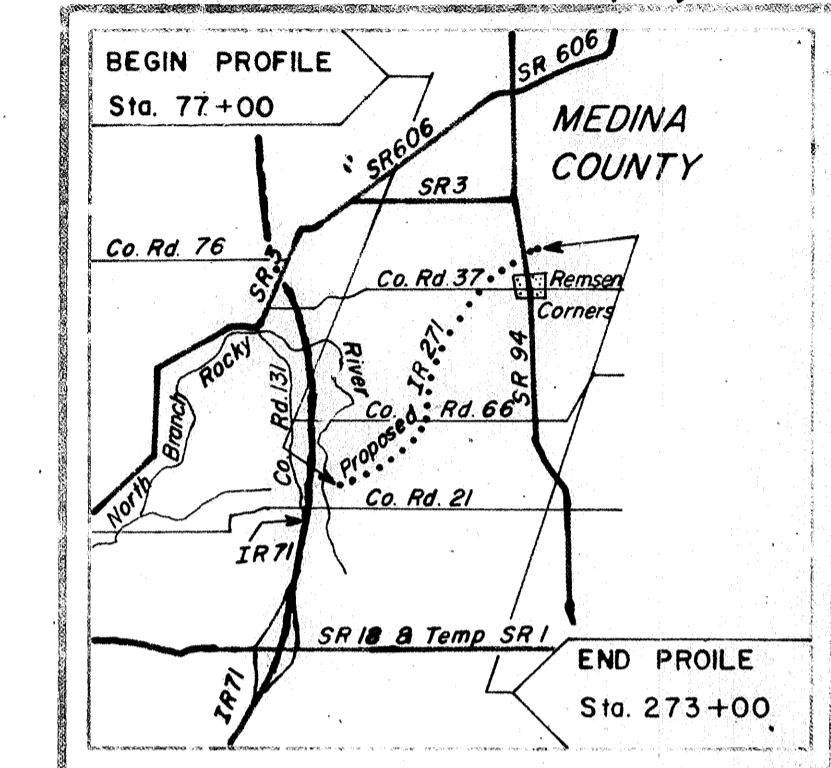


MEDINA COUNTY
MED-IR 271-0.00

OHIO STATE HIGHWAY TESTING LABORATORY
1520 W BROAD ST COLUMBUS, OHIO

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA AND IT IS NOT TO BE CONSIDERED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

FED. NO. I-271-6(13)221



LOCATION MAP

Recon - J.S.M. - 6/26/64

Drilling - C.M.C. - 7/1/64 to 7/7/64,
7/28/64 to 7/30/64

Drafting - R.L.M. - 9/14/64

SUPPLEMENT

Drilling - L.M.D. - 12/1/64 - 12/3/64, 12/9/64 - 12/11/64
Drafting - R.C.B., R.E.L. - 1/12/65

MICROFILMED
JUN 6 1986

SUMMARY OF SOIL TEST DATA
NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.
*Denotes sample taken at or near grade.

SOIL PROFILE

MEDINA COUNTY
MED-IR 271-0.00

REVISIED 1/12/65

2
40

STATION & OFFSET	DEPTH FROM-TO	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
78+55	CL 0.6-5.0	16	5	9	32	38	31	12	13	A-6a
	5.0-10.0	0	0	0	31	31	13	15	15	A-6a
	10.0-16.0	20	9	13	28	27	10	14	15	A-6a
	16.0-19.0	61	9	6	11	13	28	11	13	A-2-6
	19.0-25.0	0	5	12	42	41	26	11	14	A-6a
85+00	60' Lt 0.6-5.0	22	4	8	30	36	32	12	15	A-6a
	5.0-10.0	15	5	10	30	40	31	12	15	A-6a
	10.0-14.0	21	5	10	29	35	28	11	17	A-6a
	14.0-19.0	0	16	11	33	40	23	11	15	A-6a *
	19.0-21.0	29	5	15	31	20	21	5	14	A-6a
	21.0-25.0	18	6	15	36	25	25	9	15	A-6a
IR 271 (Northbound Lanes)										
91+46	58' Lt 0.6-3.0	15	4	11	39	31	27	11	16	Visual
	3.0-7.0	0	6	14	44	36	24	11	13	A-6a
	7.0-10.0	0	6	14	44	36	24	11	13	A-6a
96+07	74' Lt 0.6-4.0	11	4	16	46	34	30	11	17	A-6a *
	4.0-10.0	0	4	10	39	36	25	11	15	A-6a
102+20	95' Lt 0.5-3.0	0	6	28	34	32	37	13	24	A-6a
	3.0-3.5	0	6	28	34	32	37	13	24	Visual
107+00	CL 0.6-6.5	0	3	5	53	39	33	13	13	A-6a *
116+75	CL 0.6-5.0	0	1	6	51	42	42	21	23	A-7-6
	5.0-8.0	29	10	7	36	18	30	11	18	A-6a
	8.0-11.0	0	0	3	49	48	32	12	28	A-6a
	11.0-13.0	17	5	12	38	28	24	6	16	A-6a
121+00	140' Lt 0.6-5.0	0	0	2	41	57	49	27	16	A-7-6
	5.0-10.0	20	5	10	35	30	28	11	16	A-6a
131+00	180' Lt 0.6-4.0	0	5	9	58	28	32	11	17	A-6a
	4.0-10.0	0	6	13	46	35	27	11	17	A-6a
139+00	150' Lt 0.6-4.0	0	10	11	45	34	37	14	24	A-6a
	4.0-10.0	0	1	2	43	54	49	26	25	A-7-6
148+50	130' Lt 0.6-5.0	0	4	10	39	47	38	18	18	A-6a
	5.0-9.5	17	8	12	32	31	31	12	15	A-6a
	9.5-12.0	0	5	17	49	29	22	7	12	A-6a
160+50	CL 0.6-5.0	12	3	10	39	36	34	15	17	A-6a *
	5.0-9.0	14	3	5	45	33	32	12	15	A-6a *
	9.0-12.0	12	5	10	35	38	31	12	15	A-6a
168+00	CL 0.6-6.0	0	4	38	39	19	NP	NP	11	A-6a
	6.0-11.0	16	6	8	33	37	32	13	16	A-6a
	11.0-13.5	21	6	10	33	30	32	14	17	A-6a *
	13.5-19.0	34	30	18	18	NP	NP	NP	9	A-1-b *
	19.0-22.0	59	17	11	13	NP	NP	NP	6	A-1-a *
170+40	30' Lt 0.6-5.0	16	3	1	38	42	34	14	22	A-6a *
	5.0-9.0	0	3	5	45	47	34	15	17	A-6a
	9.0-12.0	26	8	12	33	21	26	9	14	A-6a
	12.0-15.0	26	17	18	20	19	28	8	14	A-6a
175+60	57' Lt 0.6-4.0	0	21	20	37	22	31	12	20	A-6a
	4.0-7.0	0	3	1	48	48	46	22	42	A-7-6
	7.0-11.0	0	1	8	51	40	30	12	32	A-6a
	11.0-15.0	43	16	10	17	14	41	27	10	A-2-7
	15.0-18.0	30	17	14	20	19	21	6	11	A-6a
176+00	94' Rt 0.8-3.0	0	2	10	45	43	92	52	77	A-7-5
	3.0-6.0	0	2	10	45	43	92	52	77	Visual
	6.0-14.0	0	2	10	50	36	13	36	87	A-6a
	14.0-18.0	25	6	10	30	29	26	11	19	A-6a
177+02	20' Rt 0.6-3.0	22	3	11	29	35	39	18	23	A-6b
	3.0-6.0	0	1	7	63	29	NP	NP	26	A-6b
	6.0-11.0	0	1	4	40	55	15	38	26	A-6a
	11.0-18.0	39	10	9	21	21	26	10	17	A-2-4
	18.0-20.0	63	8	7	12	10	24	8	8	A-6a
177+02	95' Rt 0.6-3.0	0	1	4	48	47	64	34	37	A-7-5
	3.0-8.0	0	1	4	48	47	64	34	37	Visual
	8.0-13.0	0	1	4	48	47	64	34	37	Visual
	13.0-16.0	0	1	4	48	47	64	34	37	A-6a
	16.0-19.0	0	1	4	48	47	64	34	37	A-6a
	19.0-25.0	32	15	22	20	11	NP	NP	15	A-6a
178+00	53' Lt 0.6-4.0	0	9	22	42	27	NP	11	16	A-6a
	4.0-7.0	0	8	12	37	43	44	23	22	A-7-6
	7.0-13.0	27	10	10	26	27	26	11	17	A-6a
	13.0-19.0	35	9	10	22	24	26	11	18	A-6a
	19.0-26.0	20	8	10	32	30	28	15	21	A-6a
	26.0-30.0	21	10	16	26	27	27	7	12	A-6a
178+00	22' Rt 0.6-4.0	31	0	0	31	38	85	31	67	A-7-5
	4.0-12.0	0	0	0	31	38	85	31	67	Visual
	12.0-18.0	0	0	0	31	38	85	31	67	Visual
	18.0-27.0	0	1	1	42	55	40	16	11	A-6b
	27.0-32.0	68	19	6	7	NP	NP	NP	15	A-1-a
178+00	97' Rt 0.6-15.0	0	0	0	0	0	0	0	0	Visual
	10.0-20.0	0	0	0	0	0	0	0	0	Visual
	20.0-23.0	0	0	0	0	0	0	0	0	Visual
	23.0-32.0	0	0	0	0	0	0	0	0	A-7-5
IR 271 (Southbound Lanes)										
110+50	CL 0.6-6.0	17	7	14	36	26	27	9	16	A-6a
	6.0-10.0	0	5	10	45	40	24	11	15	A-6a
116+75	CL 0.6-5.0	0	1	4	43	52	44	26	21	A-7-6
	5.0-10.0	0	0	2	34	64	44	18	24	A-7-6
150+50	CL 0.6-4.0	0	2	6	42	50	32	13	15	A-6a *
	5.0-10.0	24	4	8	27	37	29	11	16	A-6a
	10.0-15.0	12	3	12	34	39	24	11	15	A-6a
	15.0-19.0	30	4	11	28	27	24	11	13	A-6a
	19.0-22.0	10	8	15	28	29	24	7	12	A-6a
156+70	CL 0.6-5.0	0	4	9	40	47	34	14	14	A-6a *
	5.0-9.0	12	4	10	32	42	30	12	17	A-6a *
	9.0-12.0	0	5	11	47	37	23	11	13	A-6a
IR 271										
179+00	50' Lt 0.6-5.0	25	12	14	25	24	29	11	11	A-6a
	5.0-10.0	45	10	8	20	17	24	8	12	A-6a
	10.0-13.0	14	4	4	44	34	25	11	25	A-6a
	13.0-18.0	52	13	11	16	8	18	4	16	A-1-b
	18.0-22.0	0	2	28	45	25	NP	NP	25	A-6a
	22.0-26.0	17	3	21	40	19	NP	NP	16	A-6a
	26.0-30.0	33	10	11	25	21	22	7	11	A-6a
179+00	CL 0.5-3.0	14	8	15	32	31	31	12	27	A-6a
	3.0-6.0	16	6	18	39	21	37	12	33	A-6a
	6.0-12.0	0	1	3	47	49	32	13	34	A-6a
	12.0-18.0	41	7	7	21	24	24	7	18	A-6a
179+00	75' Rt 0.6-3.0	0	0	9	48	43	113	70	88	A-7-5
	3.0-10.0	0	0	9	48	43	113	70	88	Visual
	10.0-17.0	0	0	9	48	43	113	70	88	Visual
	17.0-22.0	0	0	9	48	43	113	70	88	Visual
	22.0-27.0	0	1	4	48	47	62	35	68	A-7-5
	27.0-32.0	0	1	3	48	47	71	35	79	A-7-5
179+00	150' Rt 0.6-3.0	0	0	6	61	33	49	21	74	A-7-6
	3.0-10.0	0	0	10	53	37	52	26	49	A-7-6
	10.0-20.0	0	0	10	53	37	52	26	49	Visual
	20.0-30.0	0	0	4	61	35	54	27	44	Visual
	30.0-32.0	0	0	4	61	35	54	27	44	A-7-6
180+00	45' Rt 0.6-3.0	0	0	4	52	44	43	19	25	A-7-6
	3.0-9.0	0	0	4	52	44	43	19	25	Visual
	9.0-15.0	0	1	4	50	45	61	31	47	A-7-5
	15.0-20.0	0	3	6	47	44	69	39	46	A-7-5
	20.0-26.0	0	1	3	56	40	23	6	25	A-1-b
	26.0-30.0	33	21	21	16	9	NP	NP	10	A-1-b
180+00	145' Rt 0.6-5.0	0	0	3	56	41	37			

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SUPPLEMENT 1/12/65

SUMMARY OF SOIL TEST DATA
NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.

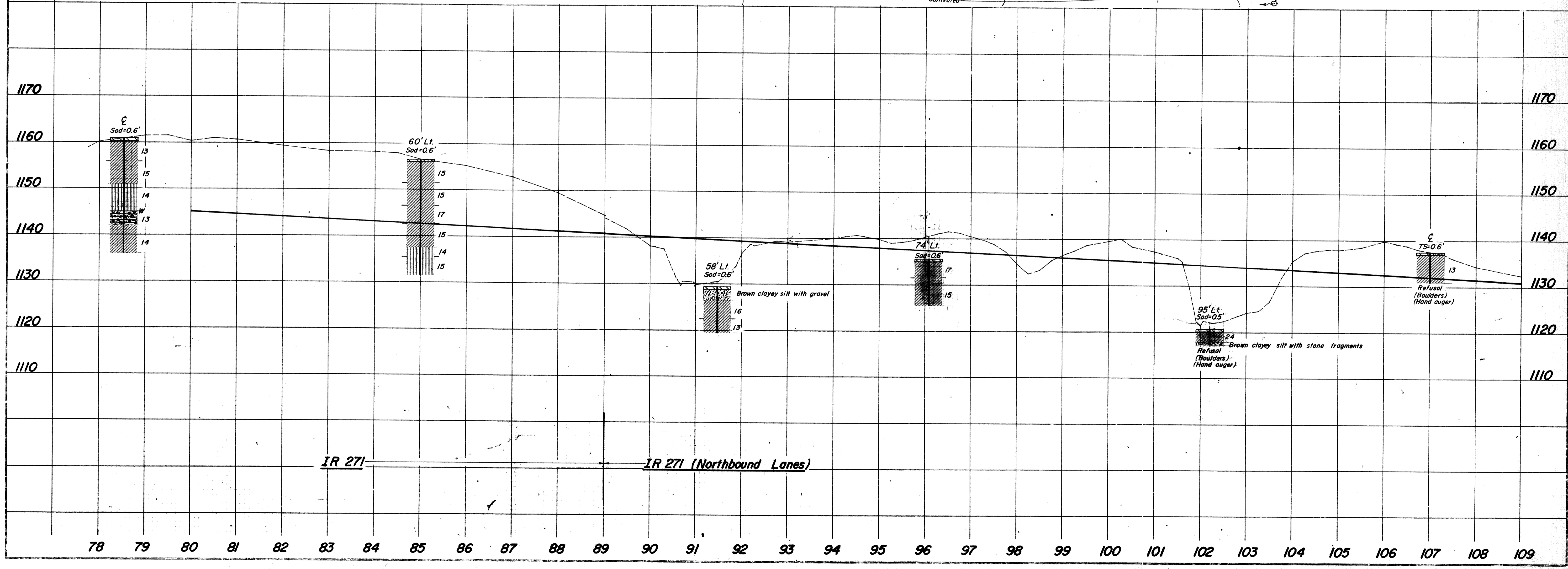
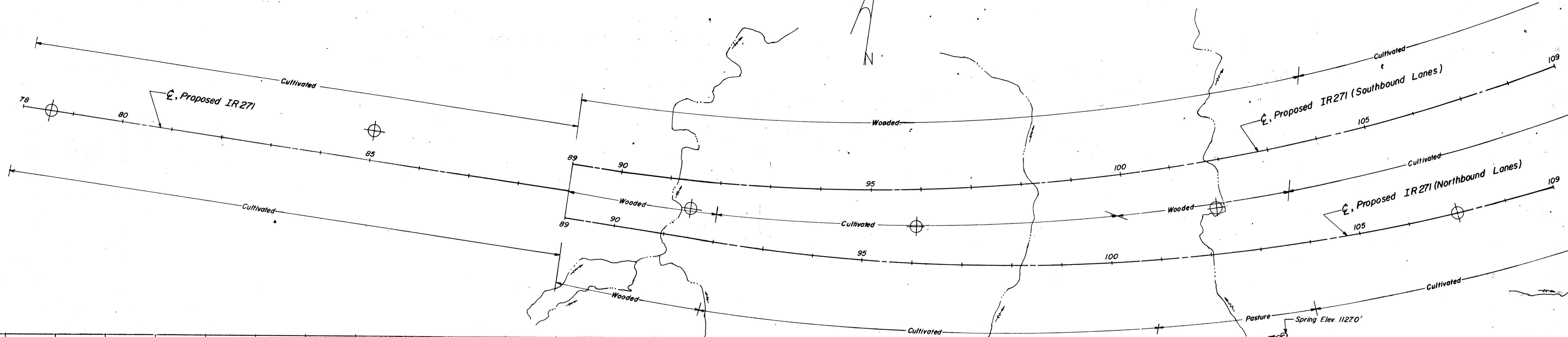
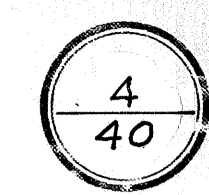
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SOIL PROFILE

MEDINA COUNTY

MED-IR 271-0.00

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

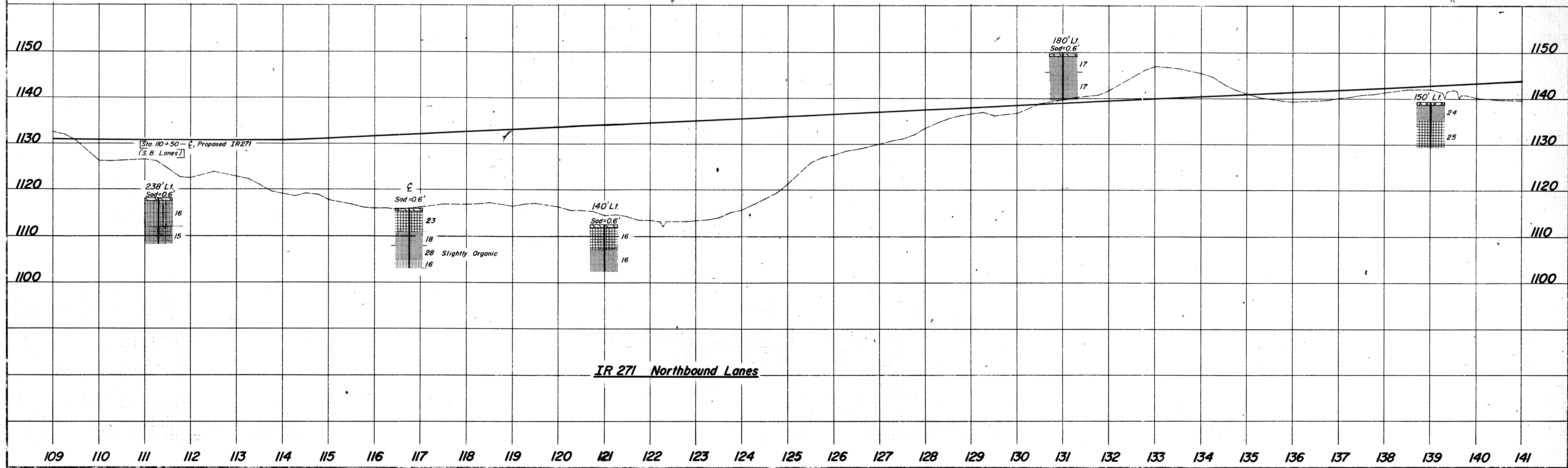
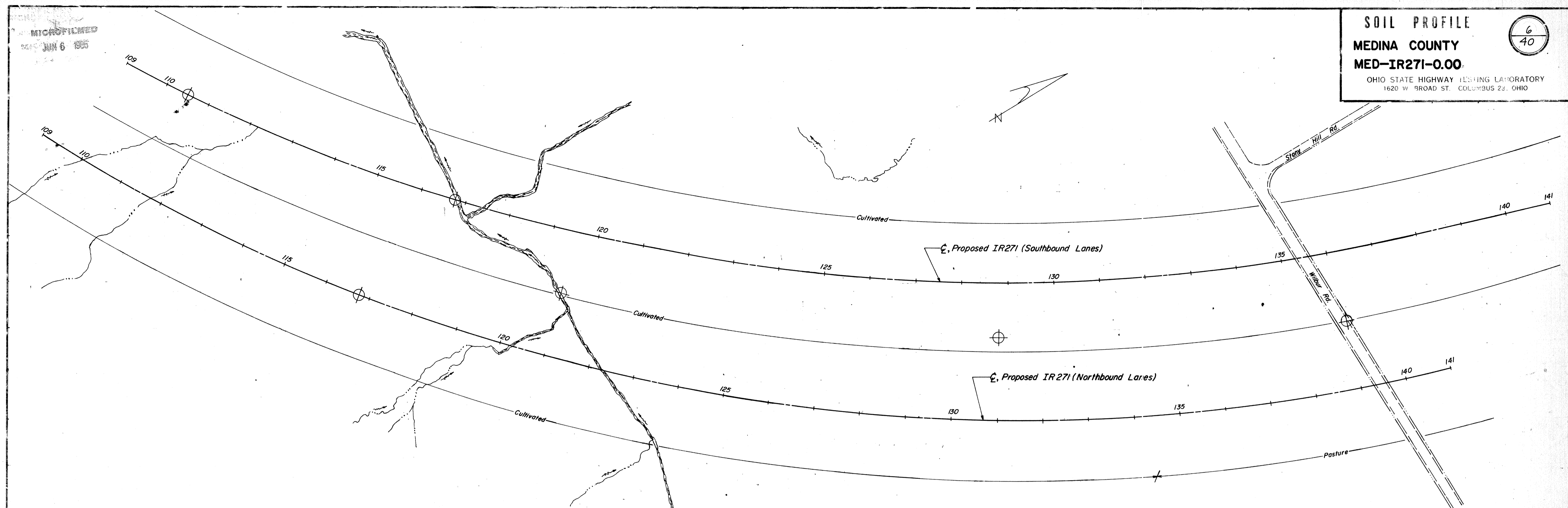
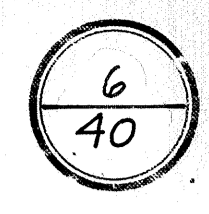


IR 271

IR 271 (Northbound Lanes)

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SOIL PROFILE
MEDINA COUNTY
MED-IR271-0.00
OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

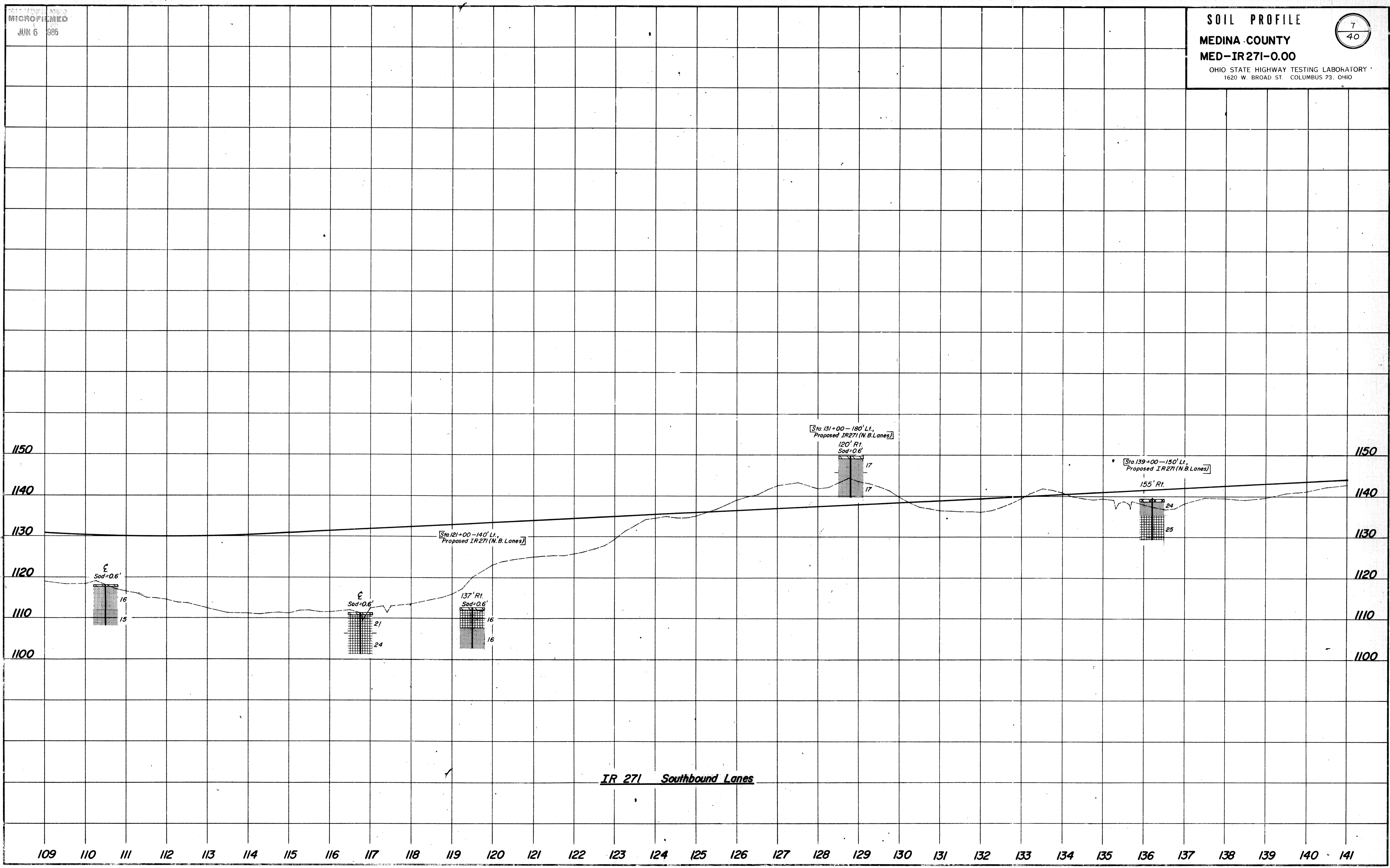


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JUN 6 1986

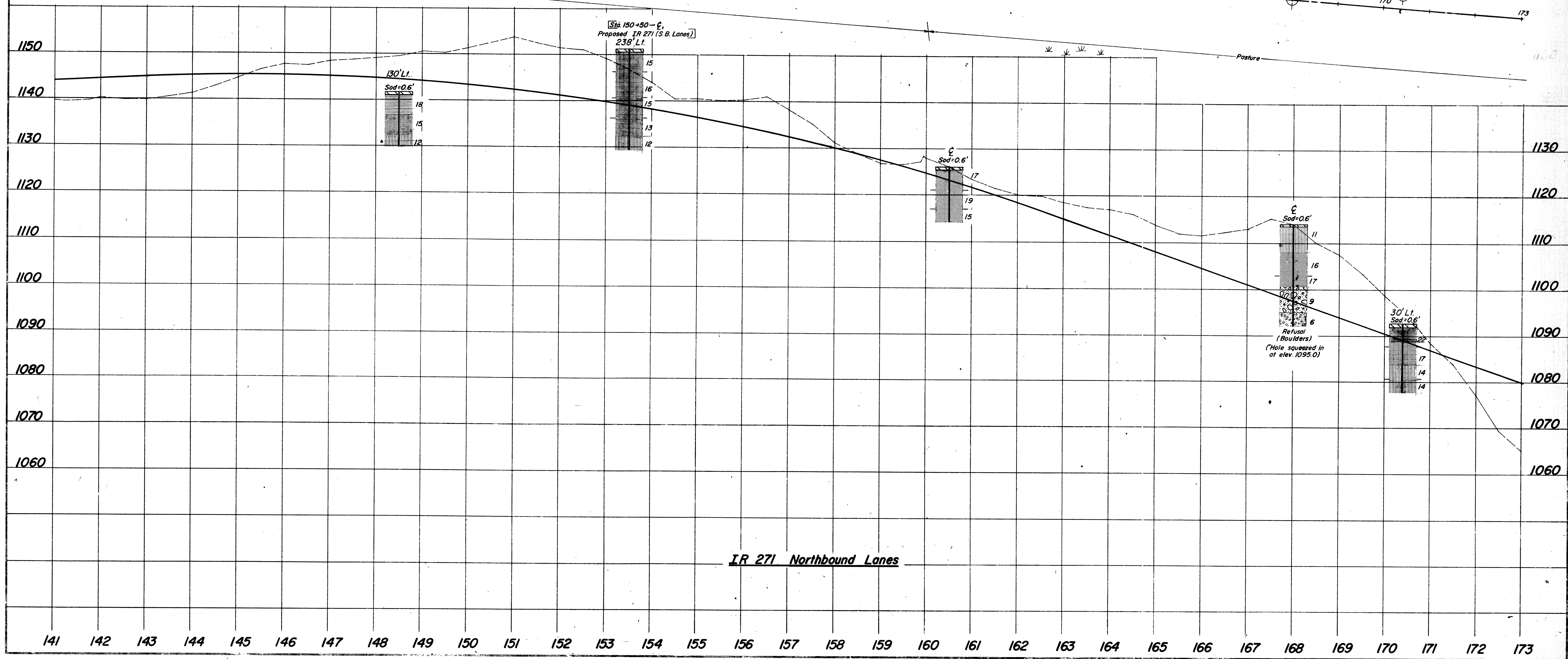
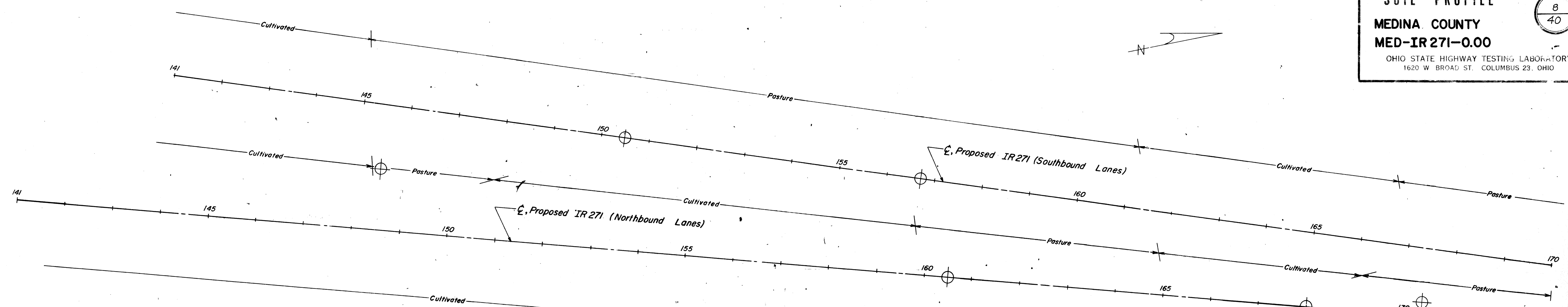
SOIL PROFILE
MEDINA COUNTY
MED-IR271-0.00

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OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO



IR 271 Southbound Lanes



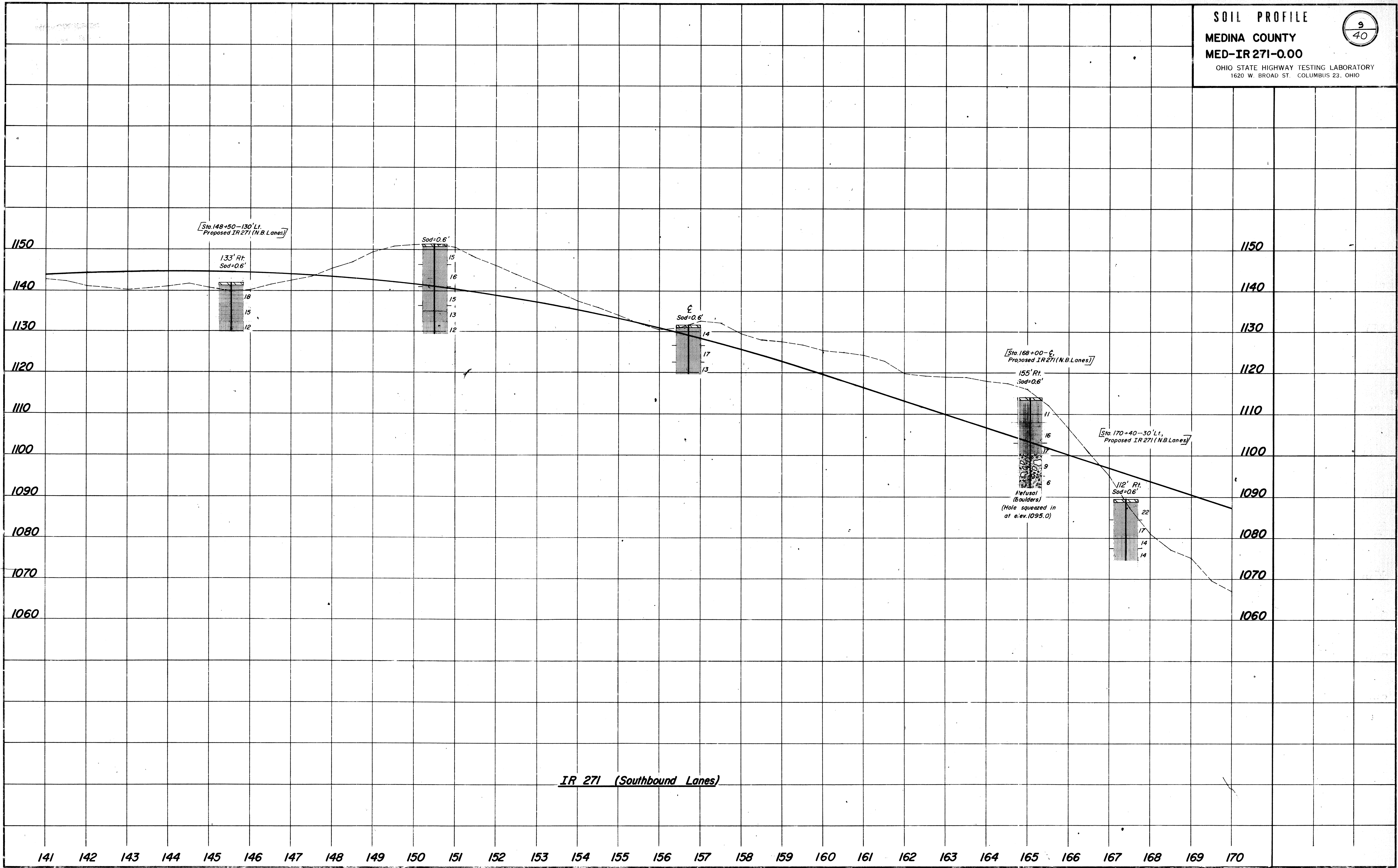
SOIL PROFILE

MEDINA COUNTY

MED-IR 271-0.00

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

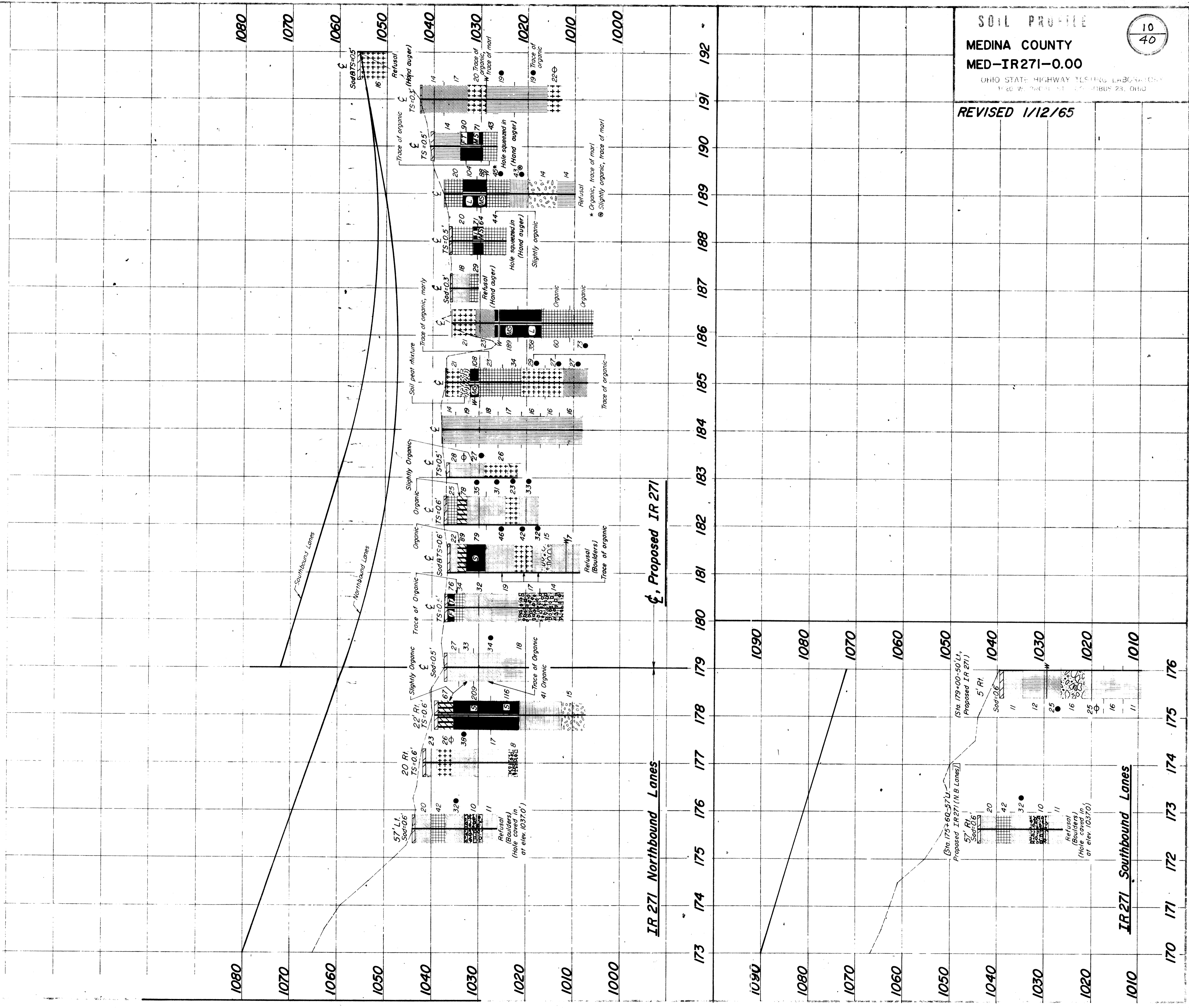
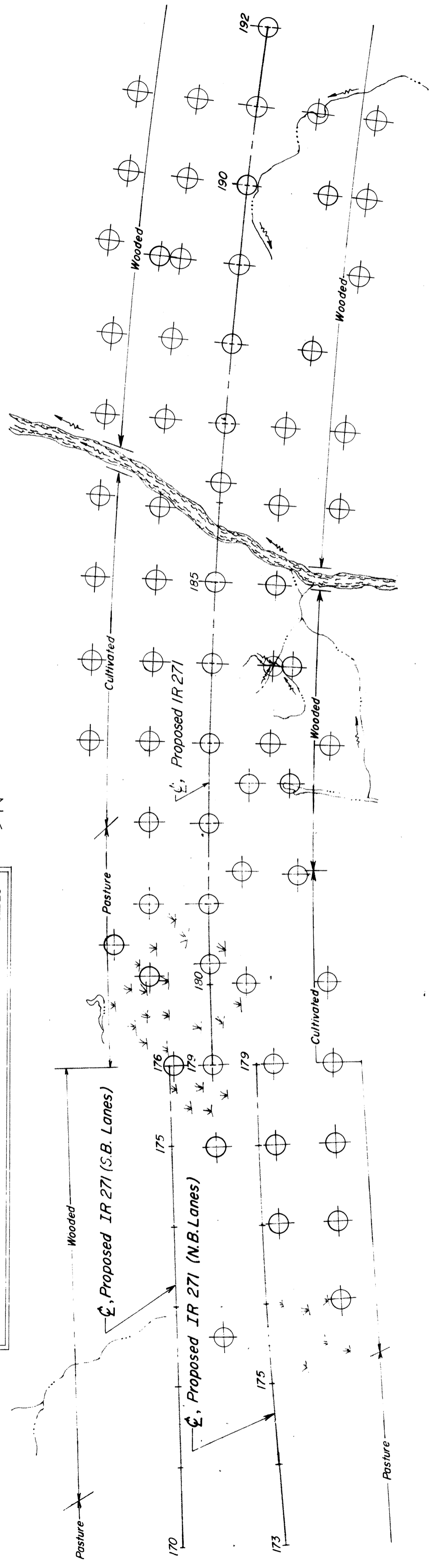
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IR 271 (Southbound Lanes)

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CROSS SECTION INDEX	
STATION	SHEET
176+00	NORTHBOUND LANES
177+00	16
178+00	17
179+01.9	17
180+00	18
181+00	18
182+00	19
183+00	19A
184+00	19A
185+00	19B
186+00	19B
187+00	19C
188+00	20
189+00	20
190+00	20
191+00	20
192+00	20



SOIL PROFILE
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OHIO STATE HIGHWAY TESTING LABORATORY
1720 W. HANCOCK ST., COLUMBUS 23, OHIO
REVISED 1/12/65

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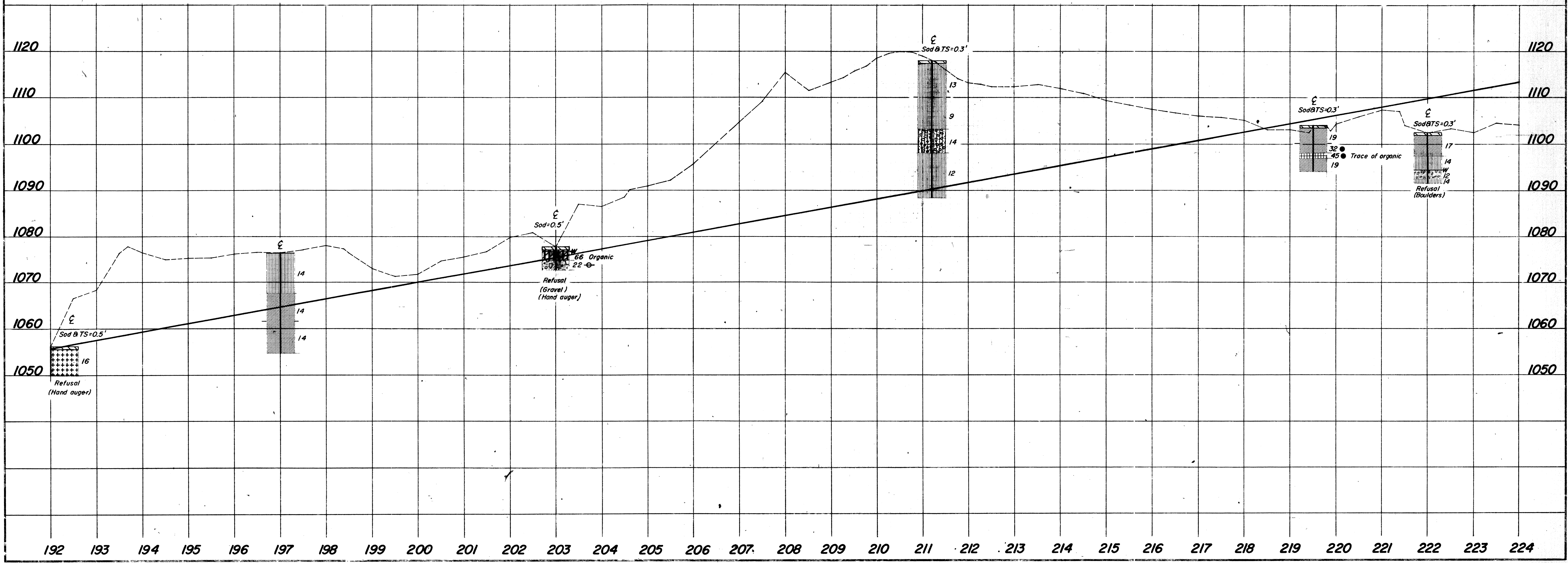
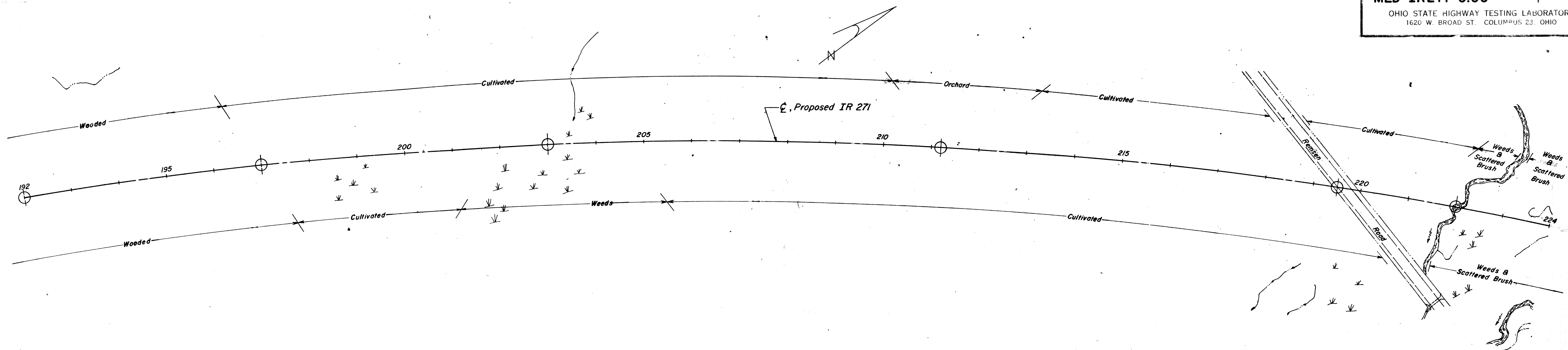
IR 271 Northbound Lanes

IR 271 Southbound Lanes

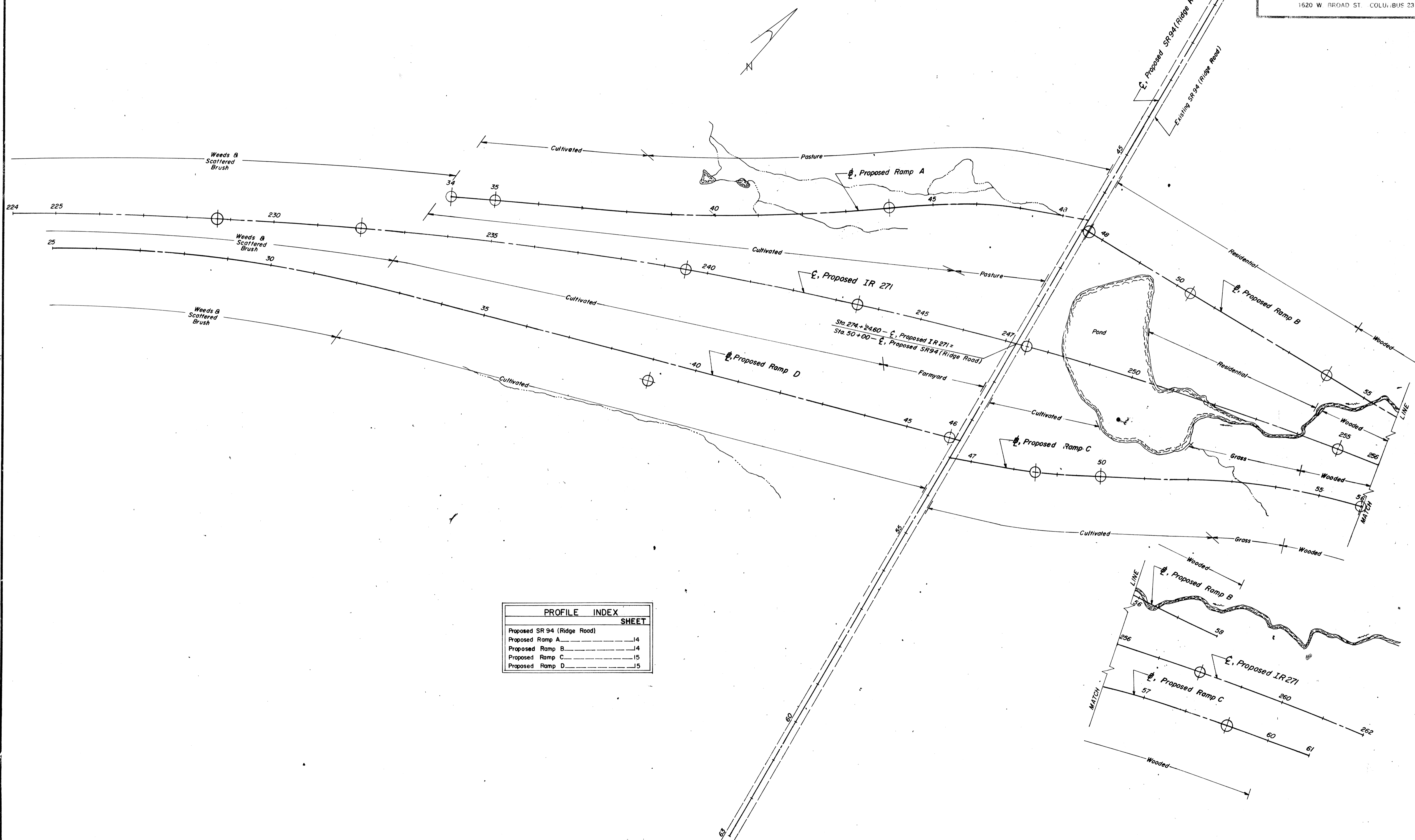
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JUN 6 1986

SOIL PROFILE
MEDINA COUNTY
MED-IR271-0.00
 OHIO STATE HIGHWAY TESTING LABORATORY
 1620 W. BROAD ST. COLUMBUS 23, OHIO

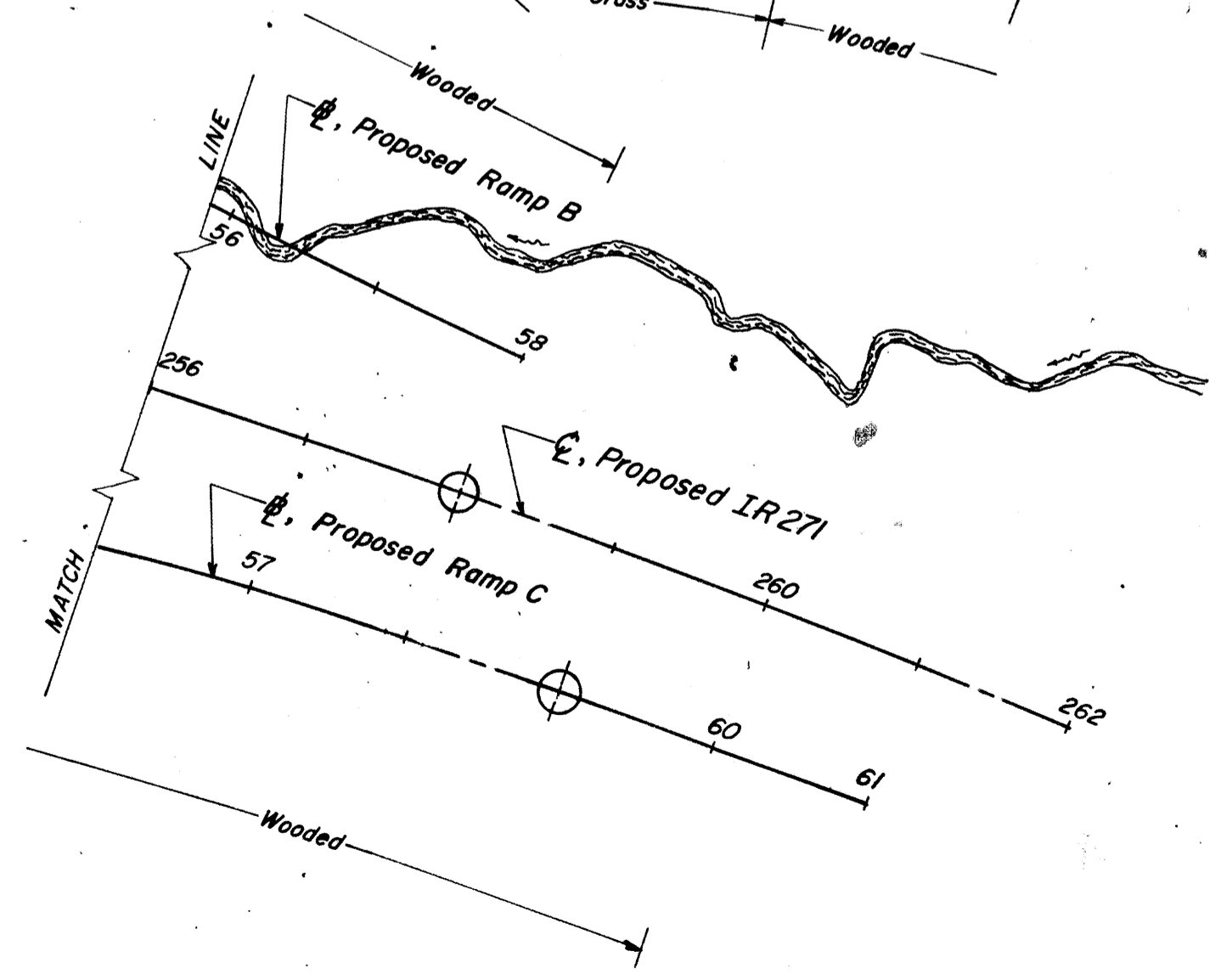
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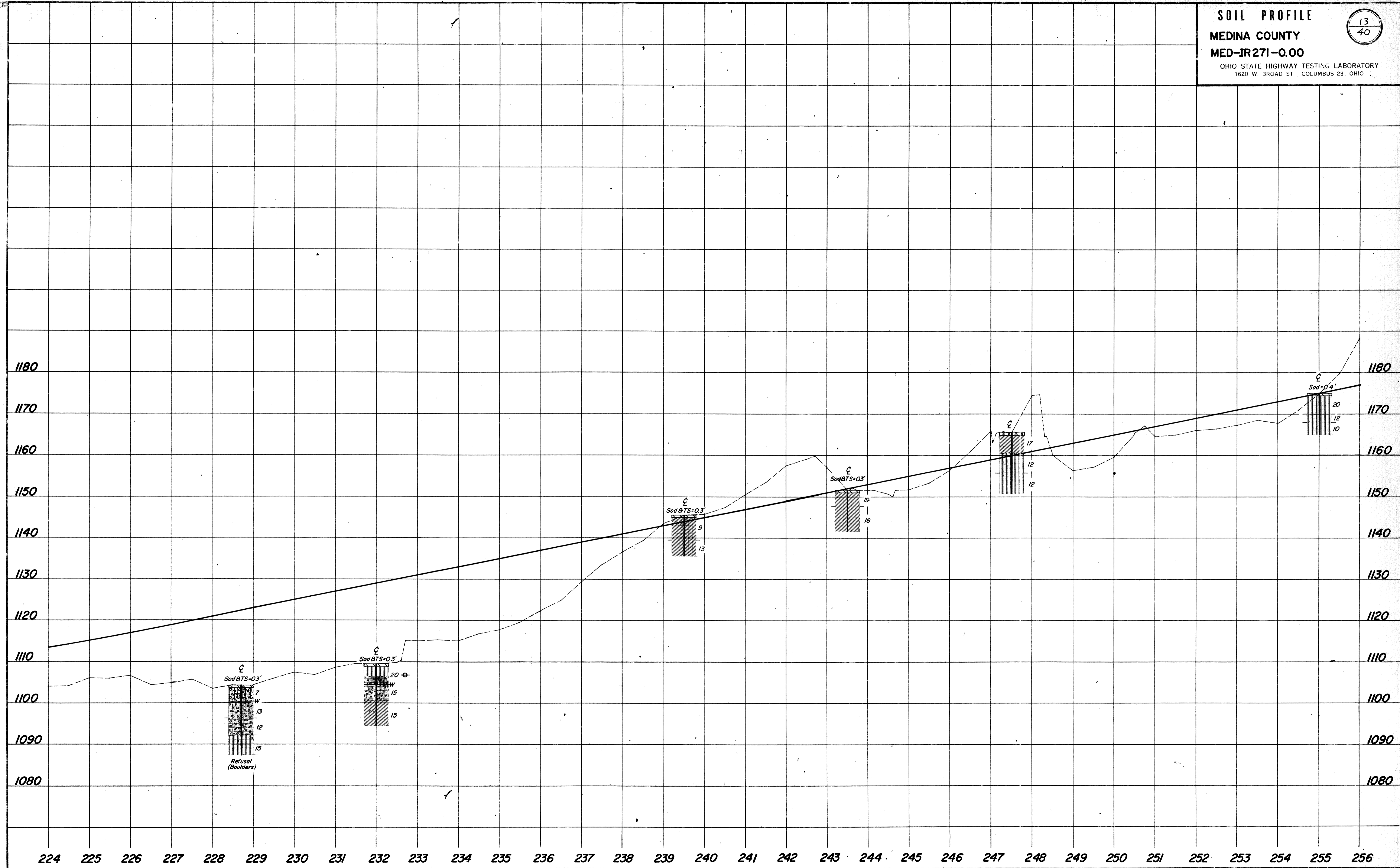


RECORDED
JUN 6 1966



PROFILE INDEX	
	SHEET
Proposed SR 94 (Ridge Road)	14
Proposed Ramp A	14
Proposed Ramp B	14
Proposed Ramp C	15
Proposed Ramp D	15





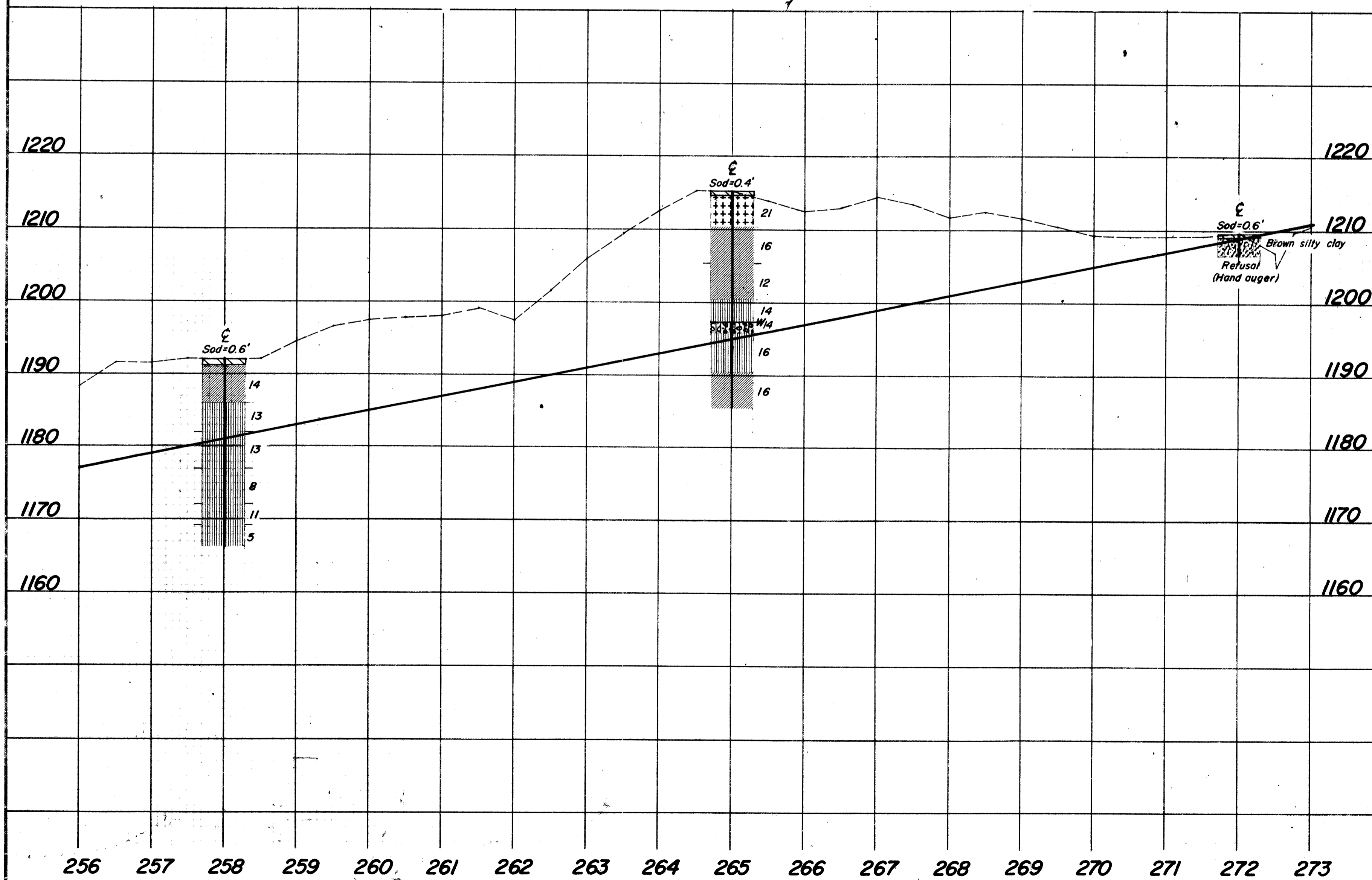
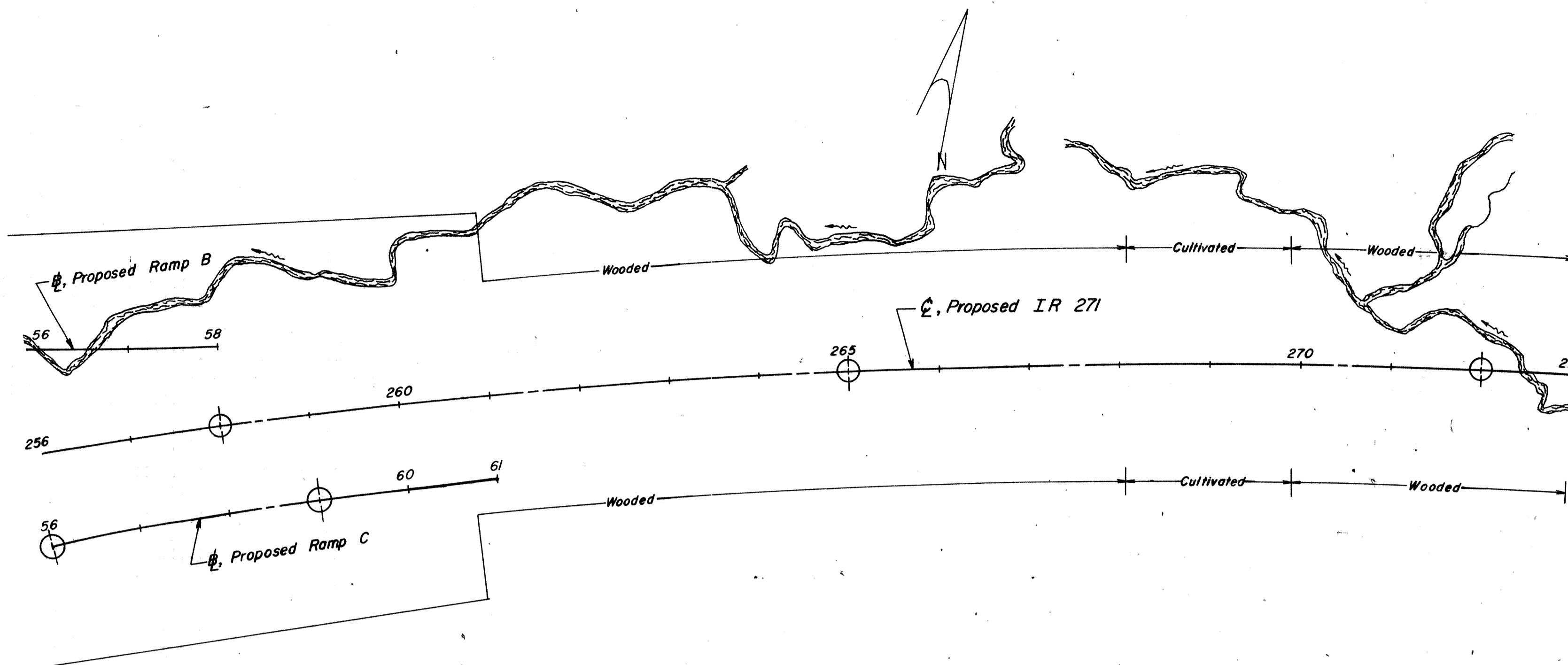
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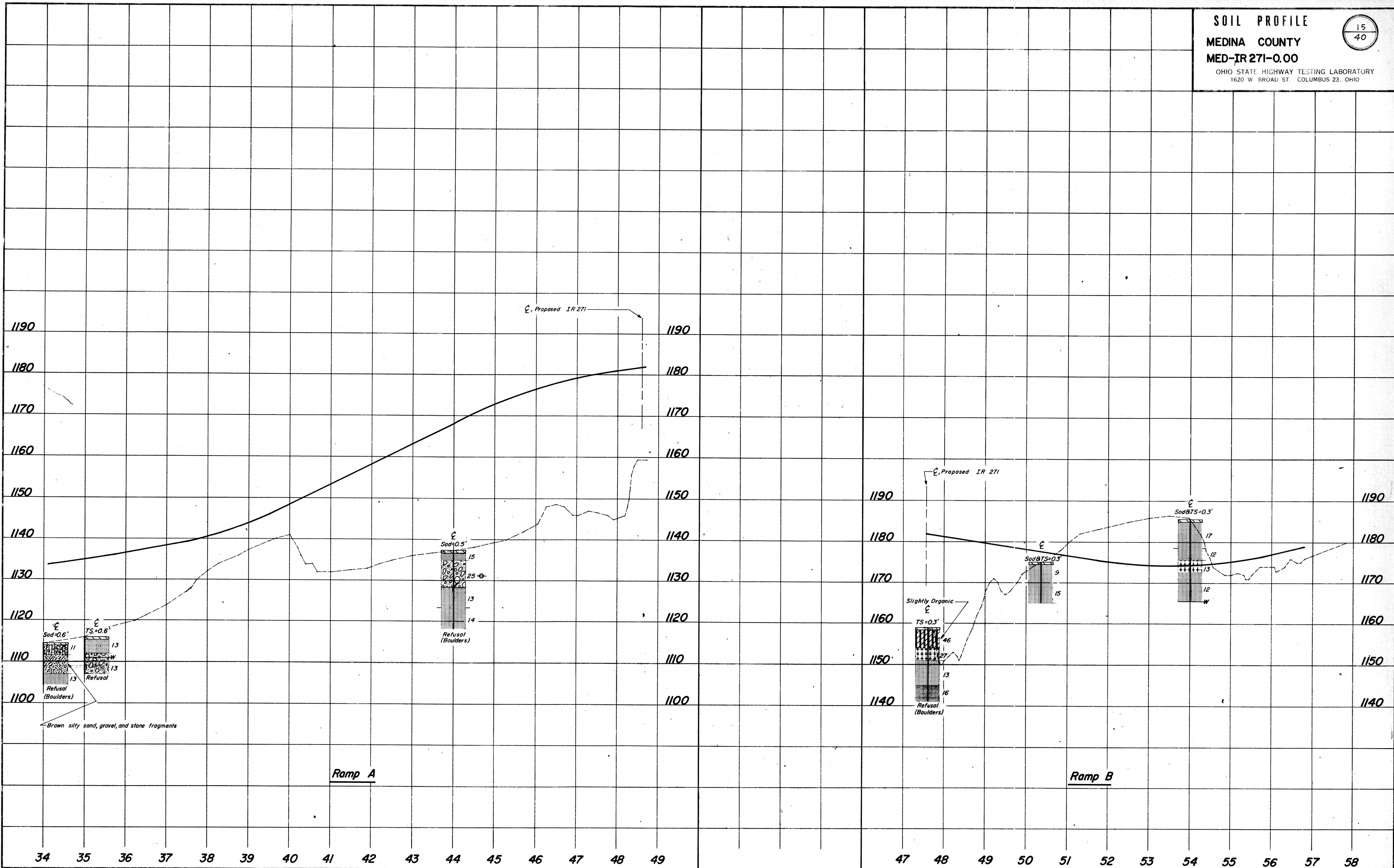
MEDINA COUNTY

MED-IR271-000

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

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1190
1180
1170
1160
1150
1140
1130
1120
1110
1100

1190
1180
1170
1160
1150
1140
1130
1120
1110
1100

1190
1180
1170
1160
1150
1140

Proposed IR 271

Proposed IR 271

Sod & TS = 0.3'

Sod & TS = 0.3'

Slightly Organic
Sod & TS = 0.3'

Sod = 0.6'

TS = 0.6'

Sod = 0.5'

Refusal
(Boulders)

Refusal
(Boulders)

Brown silty sand, gravel, and stone fragments

Ramp A

Ramp B

34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49

47 48 49 50 51 52 53 54 55 56 57 58

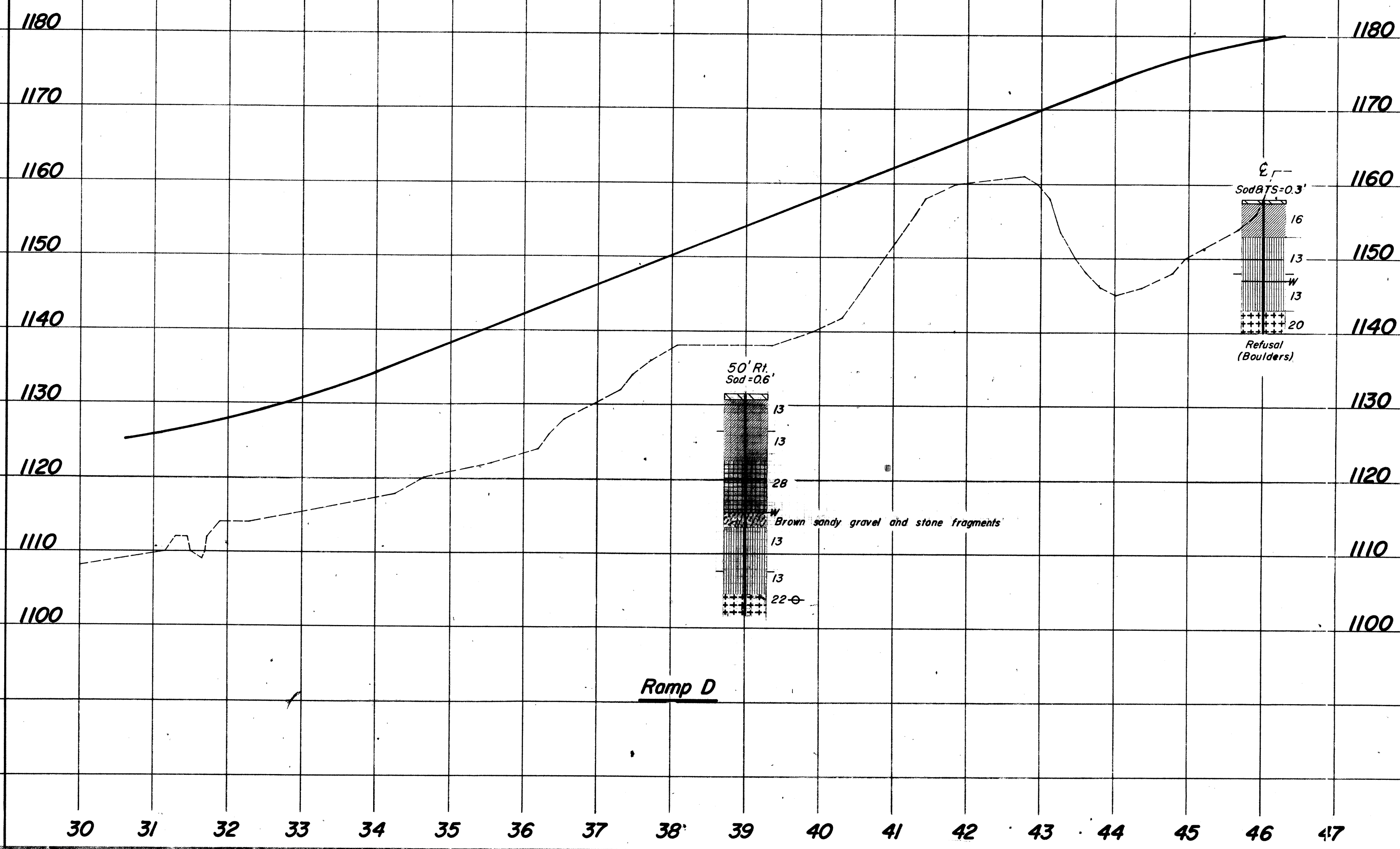
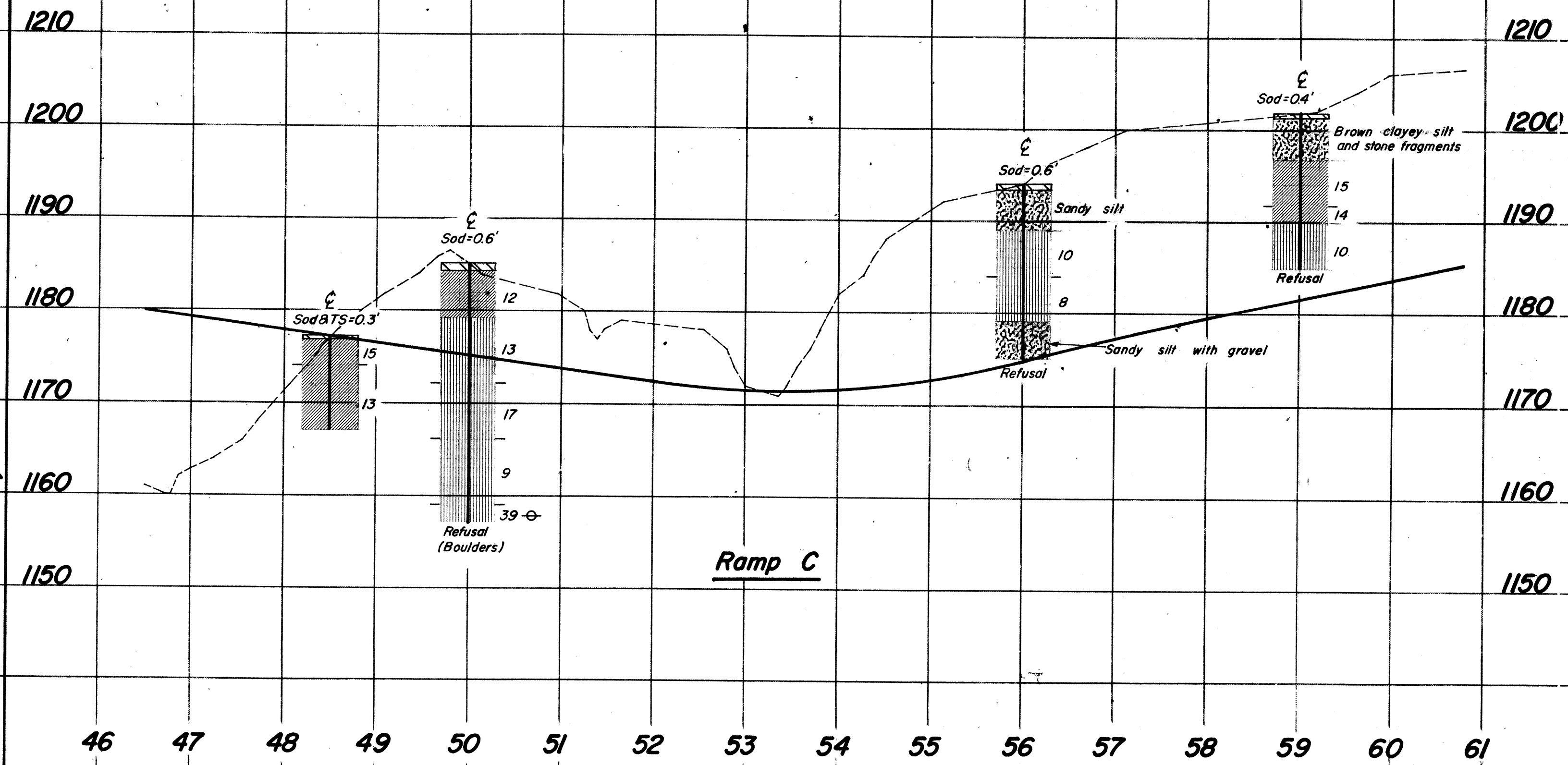
SOIL PROFILE

MEDINA COUNTY

MED-IR271-0.00

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

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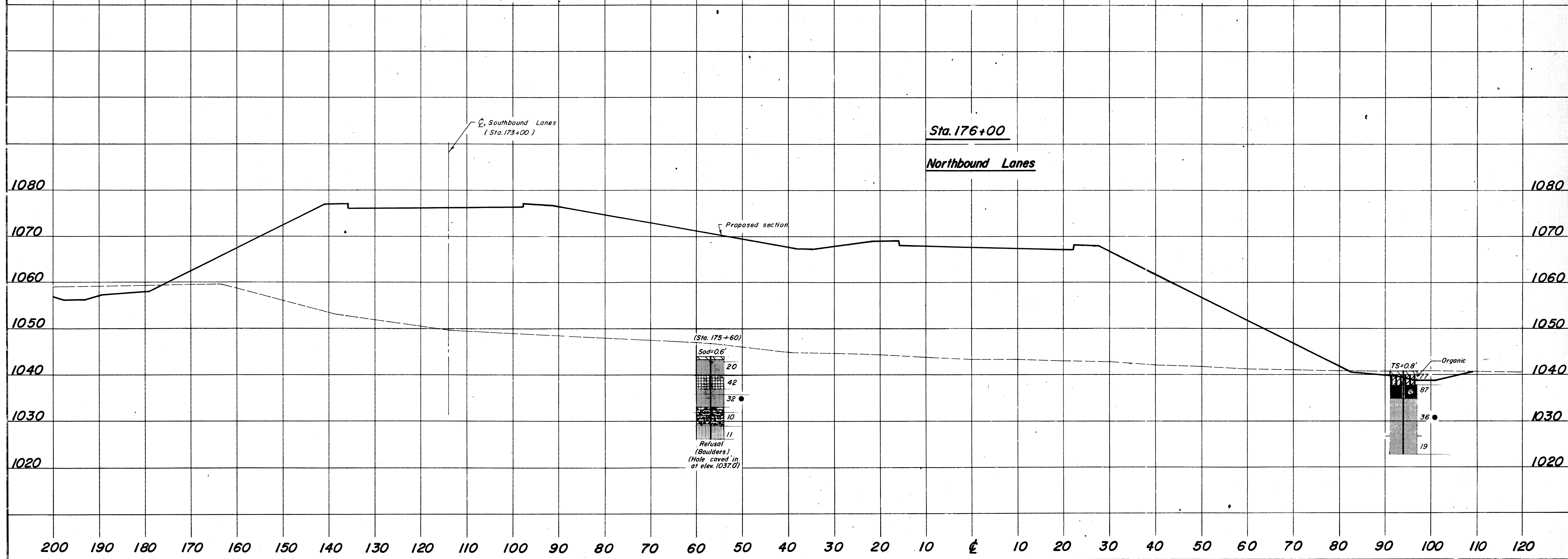
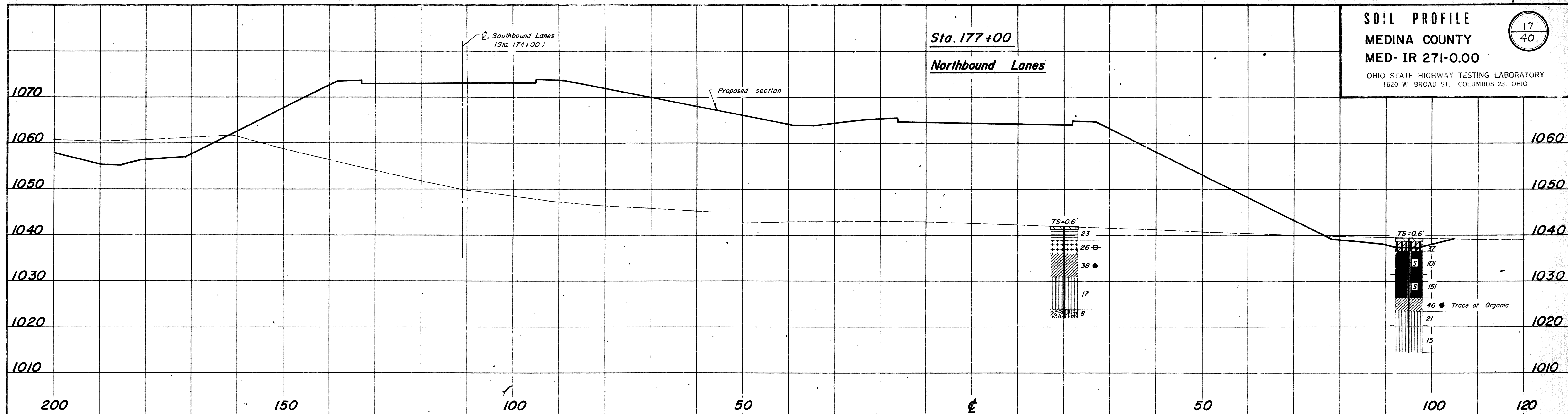
SOIL PROFILE

MEDINA COUNTY

MED- IR 271-0.00

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

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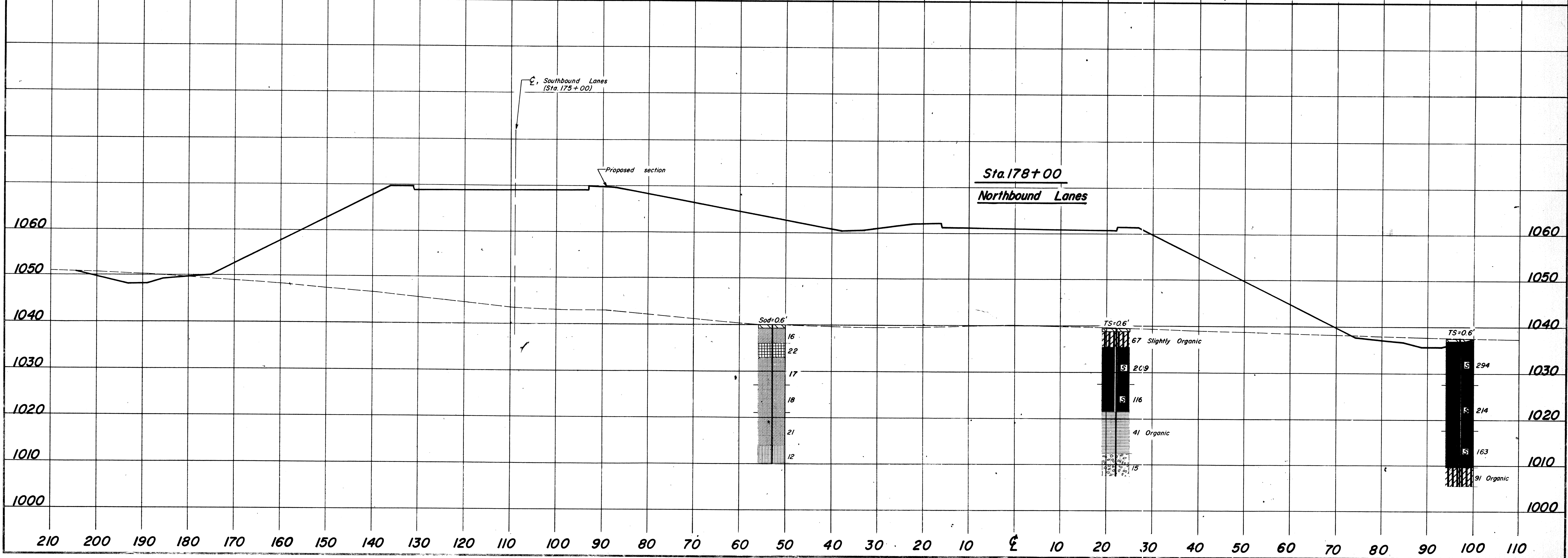
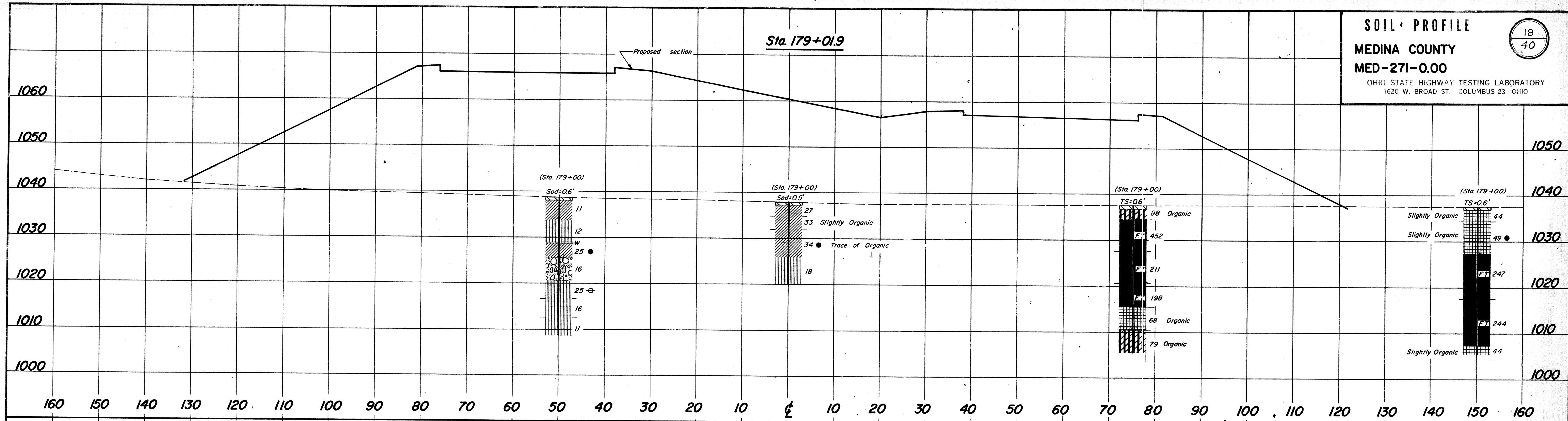
SOIL PROFILE

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MEDINA COUNTY

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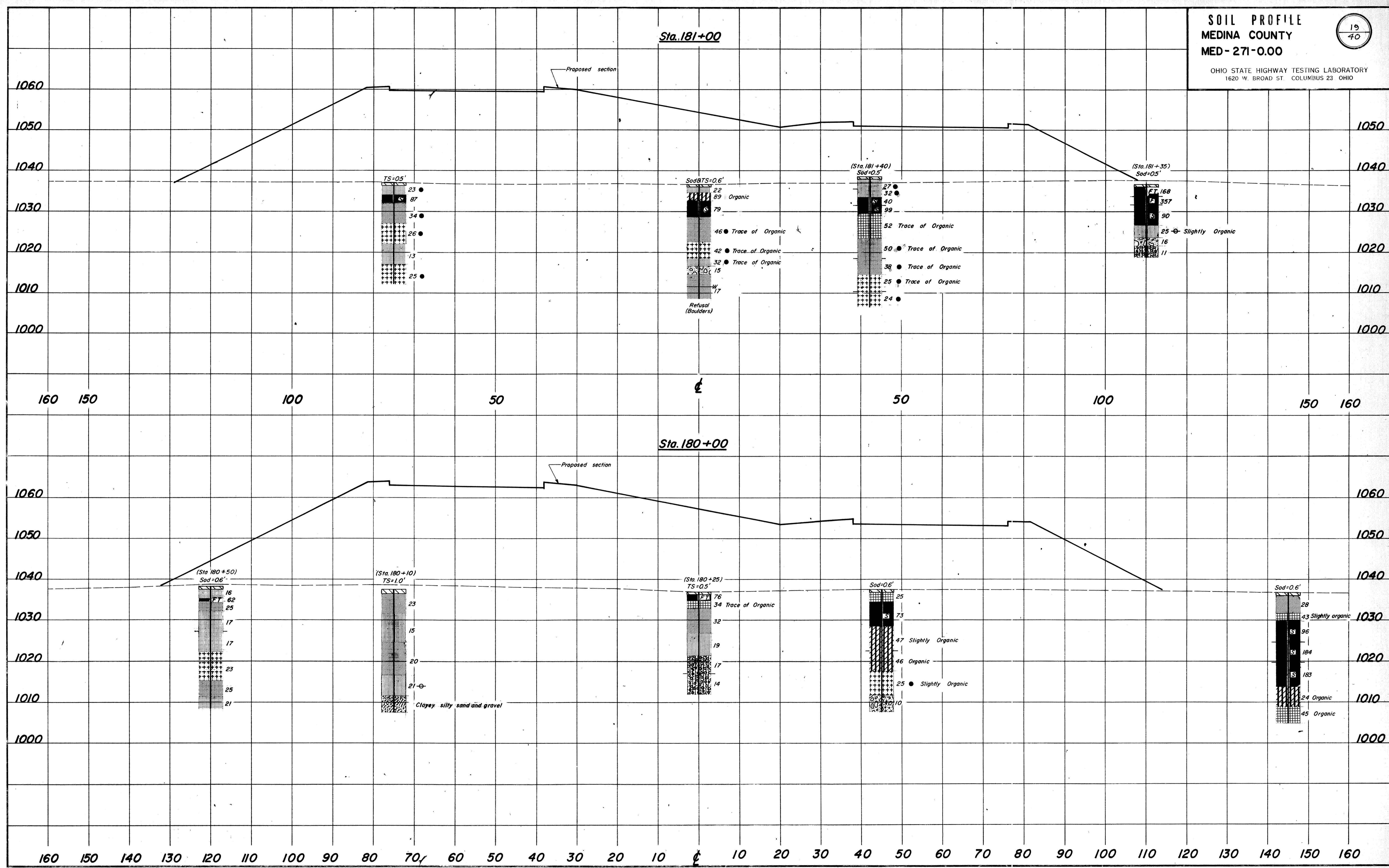
OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO



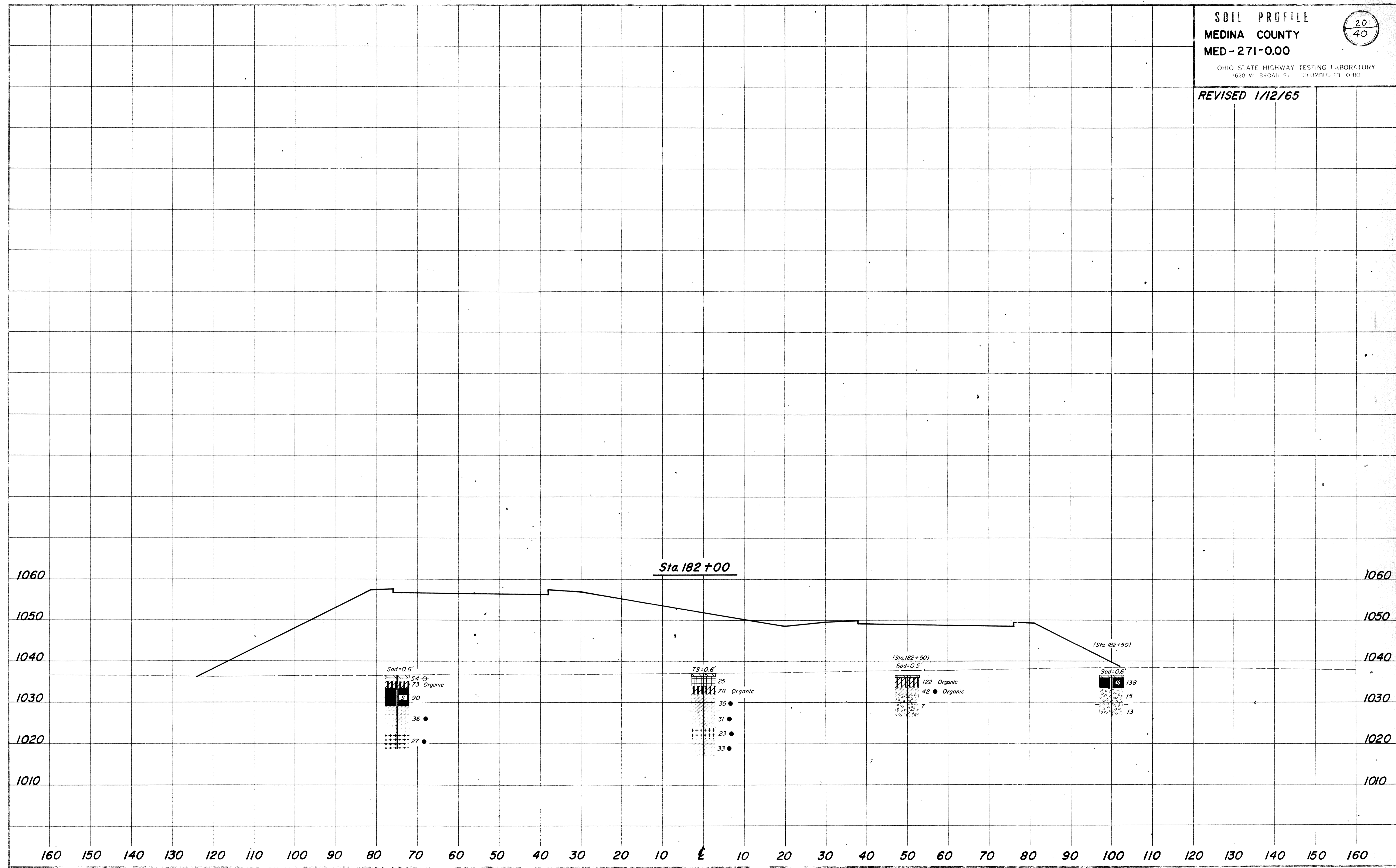
SOIL PROFILE
MEDINA COUNTY
MED-271-0.00

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OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23 OHIO



REVISED 1/12/65

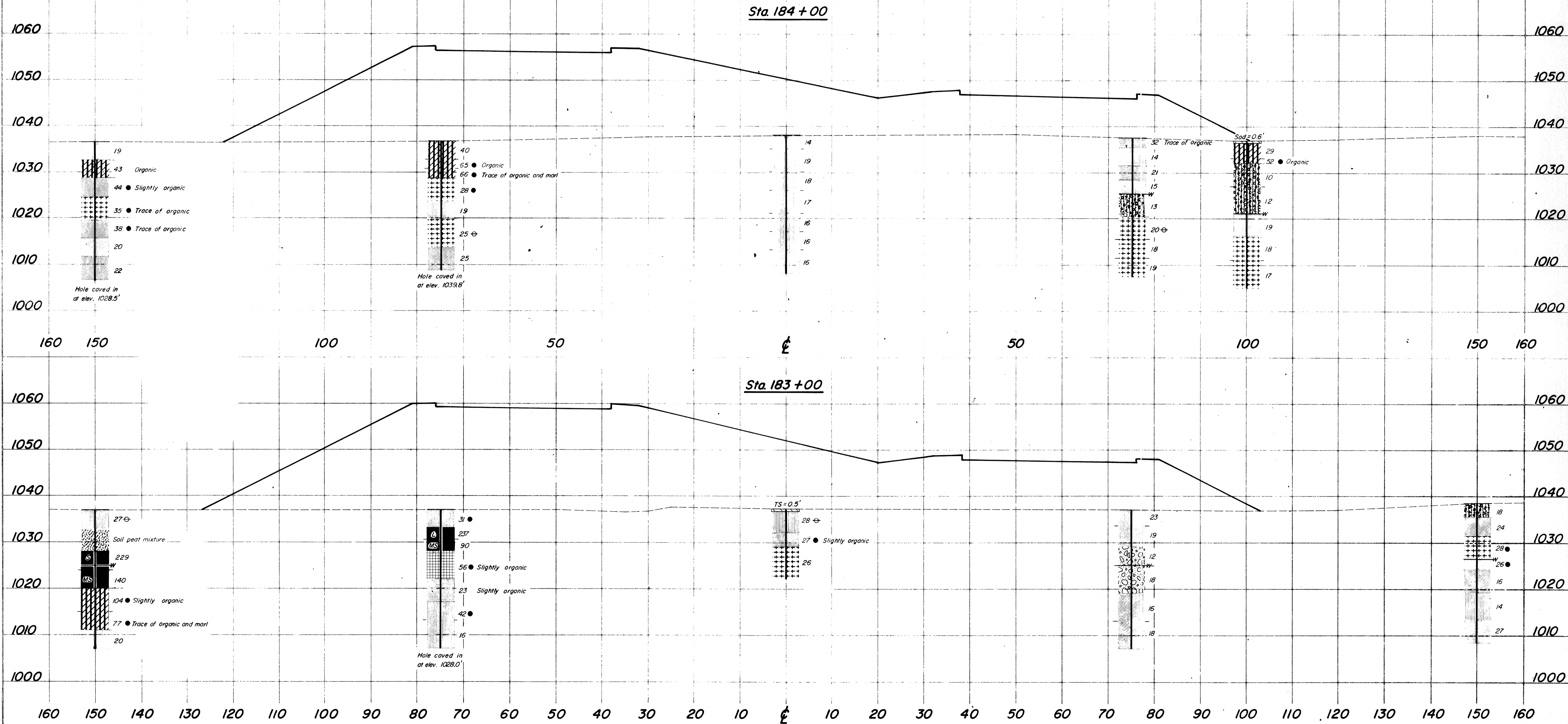


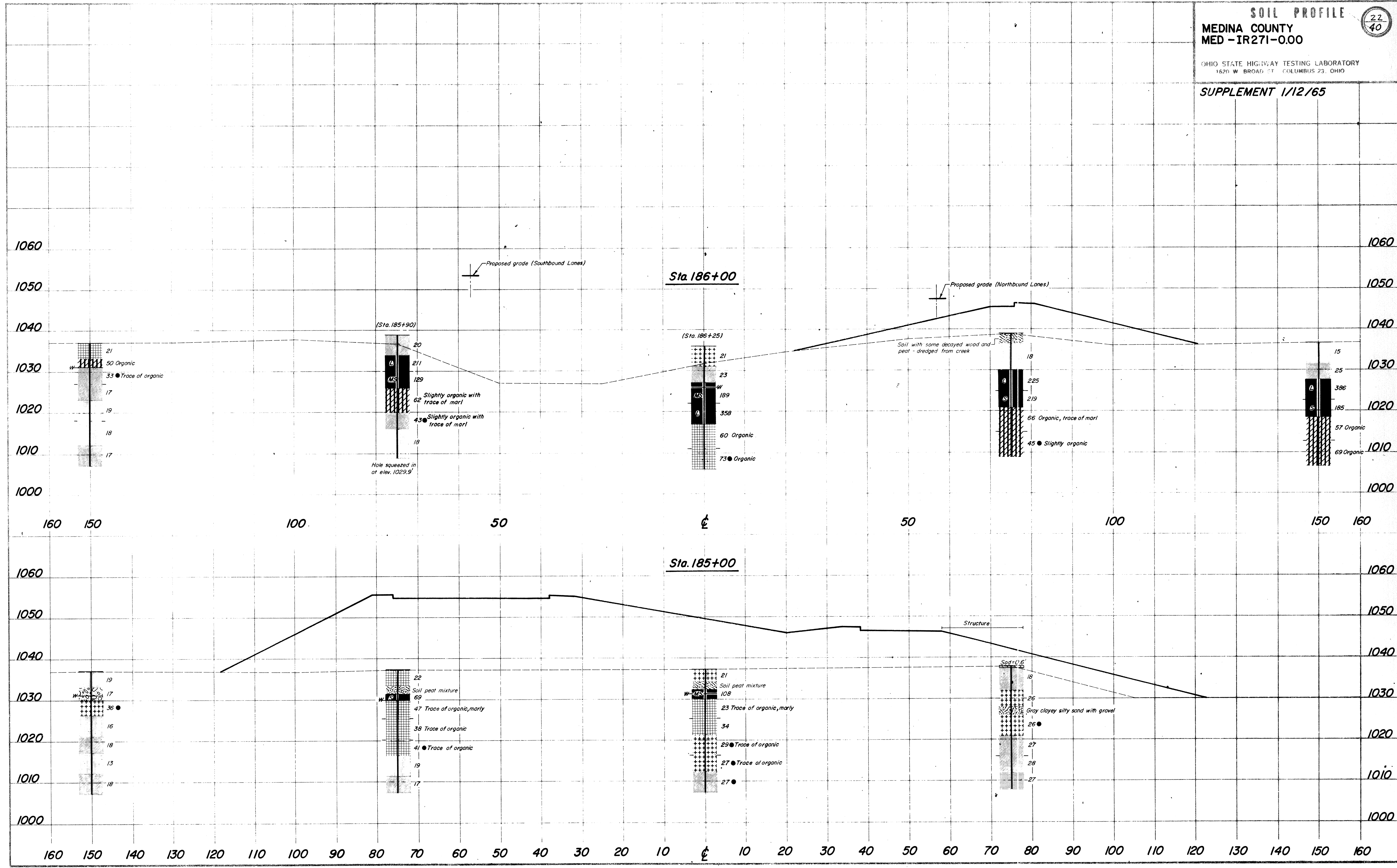
SOIL PROFILE
 MEDINA COUNTY
 MED- IR 271-0.00

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OHIO STATE HIGHWAY TESTING LABORATORY
 1620 W. BROAD ST. COLUMBUS 23, OHIO

SUPPLEMENT 1/12/65



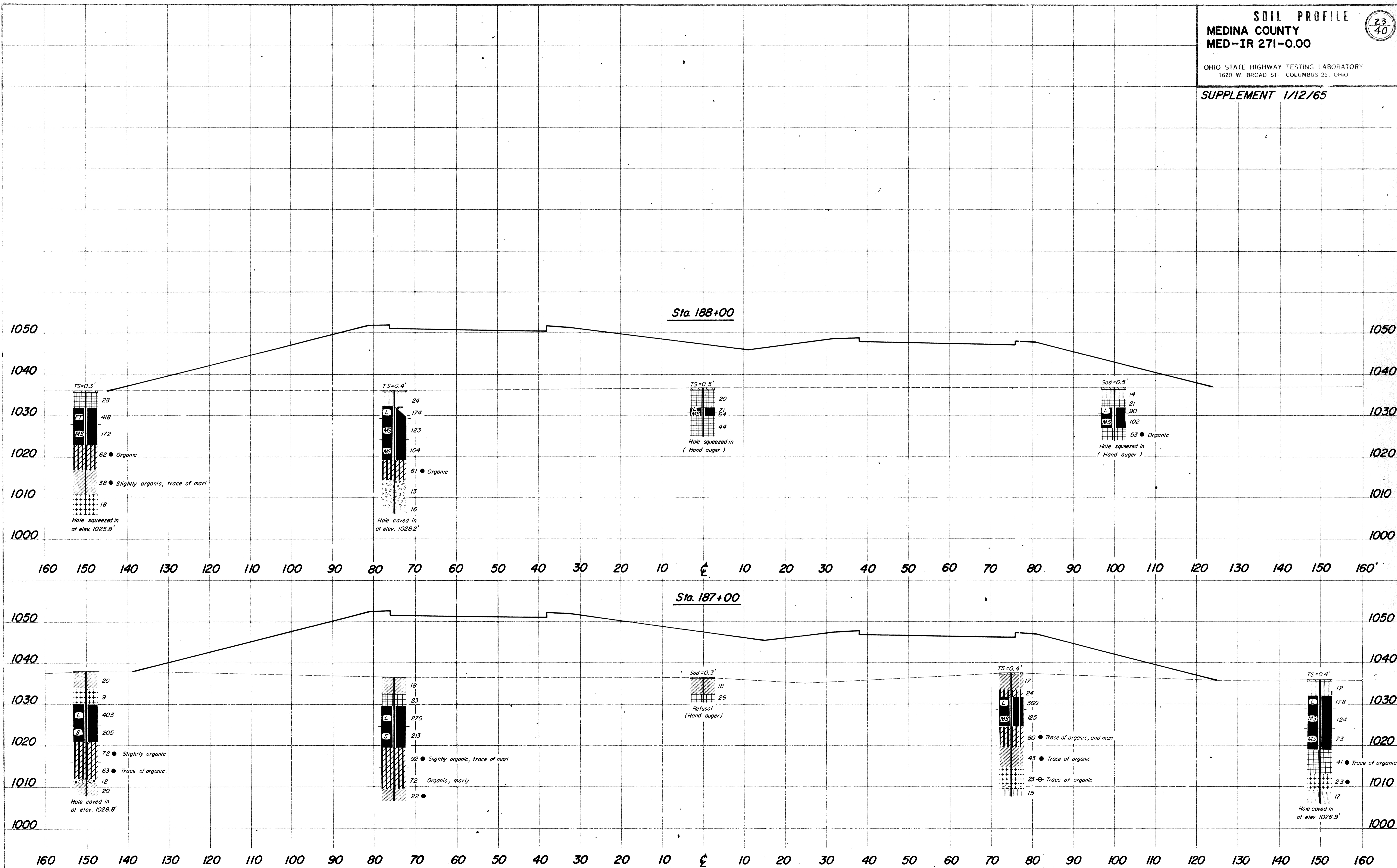


SOIL PROFILE
 MEDINA COUNTY
 MED-IR 271-0.00

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OHIO STATE HIGHWAY TESTING LABORATORY
 1620 W. BROAD ST. COLUMBUS 23, OHIO

SUPPLEMENT 1/12/65

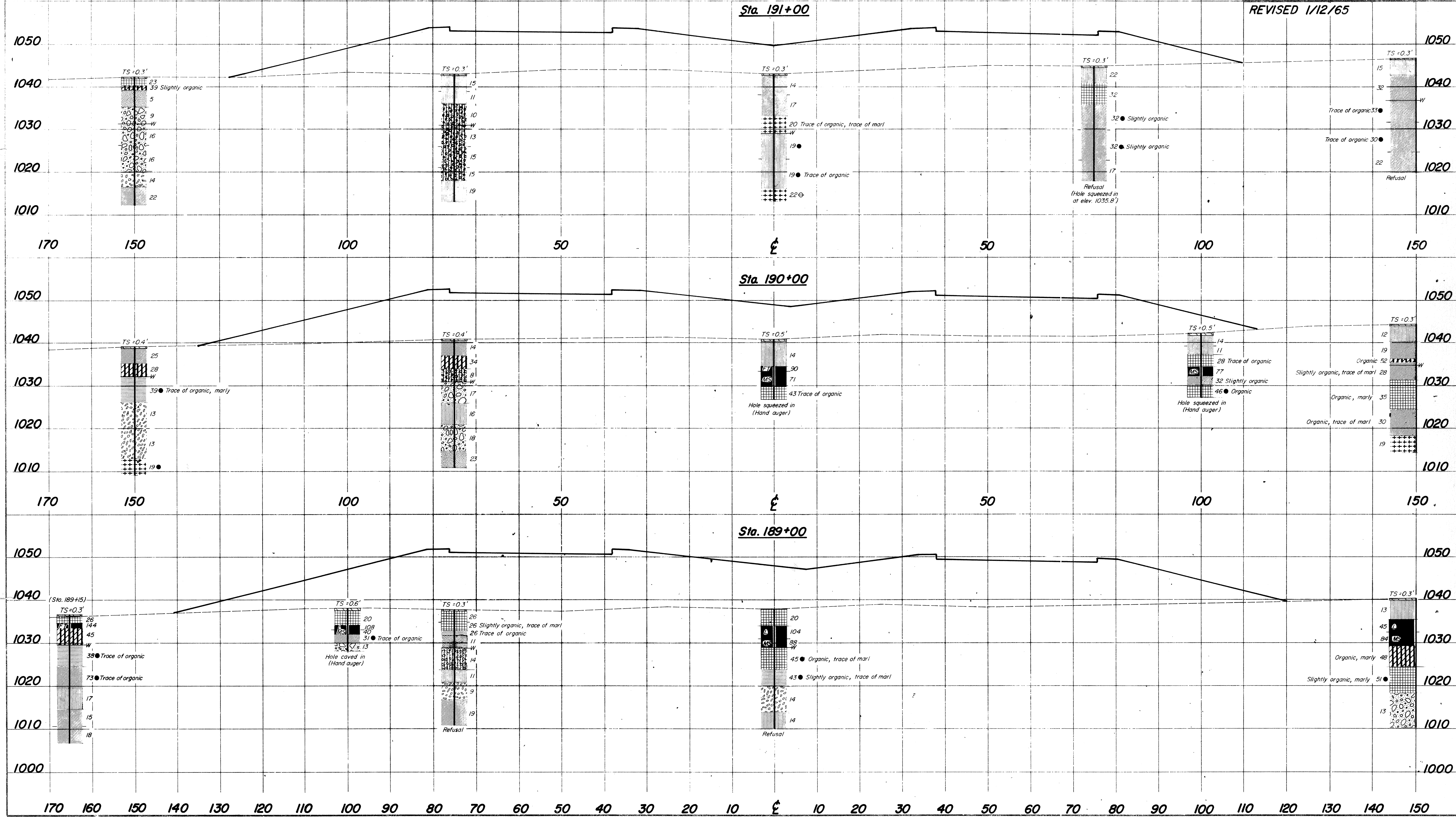


SOIL PROFILE
MEDINA COUNTY
MED-IR 271-0.00

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OHIO STATE HIGHWAY TESTING LABORATORY
 1620 W. BROAD ST. COLUMBUS 23 OHIO

REVISED 1/12/65



GEOLOGY OF THE SITES

The structure sites are located in the dissected portion of the glaciated Allegheny Plateau, in an area where moderately deep alluvium overlies bedrock, of Pennsylvanian and Mississippian ages.

EXPLORATION

The exploration consisted of four drive sample borings and eight drive rod penetration tests, made between September 19 and October 15, 1964.

INVESTIGATIONAL FINDINGS








Borings encountered soft to stiff silts and clays and loose silts and sands to approximately 41-foot depth, elevation 1175 feet; below this, very dense to extremely dense gravels, sands, and silts. The borings were terminated at 55 and 61-foot depths, elevations 1072 and 1073 feet, after penetrating in excess of 30 feet of material requiring in excess of 30 blows per foot in the standard penetration test.

Rod soundings met gradual increase in penetration resistance with increase in depth and were terminated because of medium-high and high resistance to penetration between 36 and 40-foot depths, elevations 1105 and 1100 feet, considered to be in dense intervals of gravels, sands, and silts, as revealed by the borings.







Free water was encountered in rod sounding holes numbers 1 and 8, at elevation 1077 feet.










No test penetrated to bedrock surface.







LEGEND

-  Auger Boring Location - Plan View.
-  Press and/or Drive Sample and/or Core Boring Location - Plan View.
-  Drive Rod Penetration Resistance Sounding Location - Plan View.
-  Capped Pile
-  Footing
-  Footing on Pile
-  Top of Rock

SYMBOLS OF ROCK TYPES

-  Coal
-  Weathered Indurated Clay
-  Indurated Clay
-  Weathered Shale
-  Shale
- 

-  Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
-  Figures Beside the Boring Log in Profile Indicate the Number of Blows For Standard Penetration Test.
X = Number of Blows for First 6 Inches.
Y = Number of Blows for Second 6 Inches.
-  Drive Rod Penetration Resistance Sounding Log - Profile.
-  Casing
-  Resistance " R " $< 10,000$ lbs.
-  Resistance " R " $> 10,000$ lbs.
-  Indicates Final Measurement of Penetration, in Inches.
-  Indicates Free Water Elevation.
-  Indicates Static Water Elevation.

-  Weathered Sandstone
-  Sandstone
-  Leached Dolomite
-  Dolomite
-  Leached Limestone
-  Limestone

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity R , in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value R against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

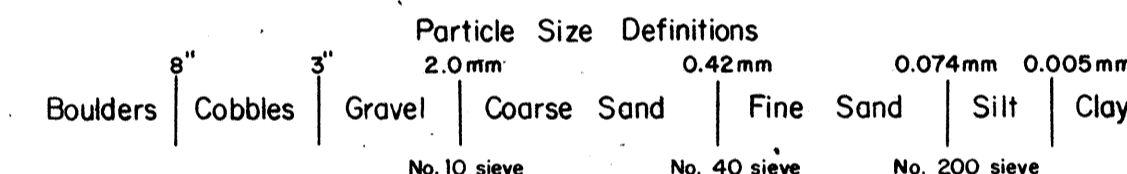
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and/or 5-foot depth intervals, driven by means of a 140-pound drop-hammer, with a free fall of 30 inches. The number of blows required to drive the sampler 2 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

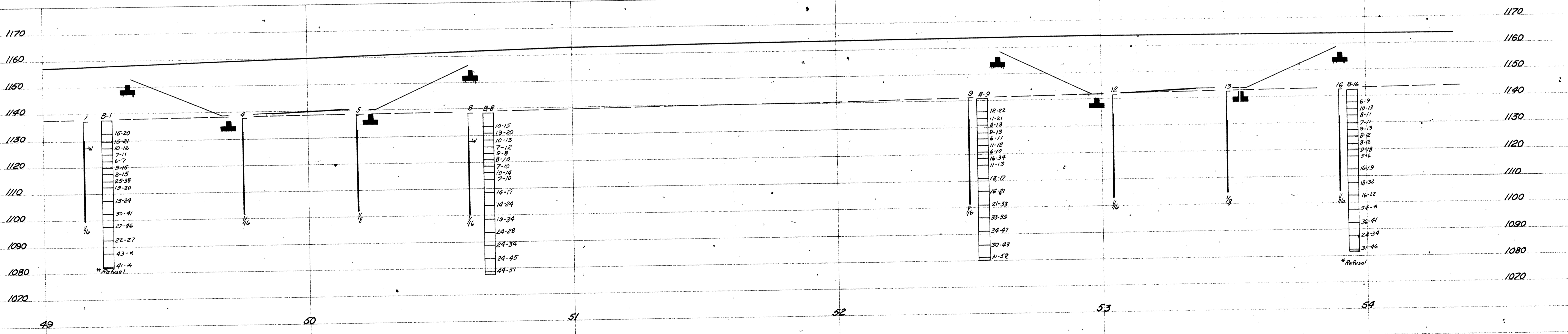
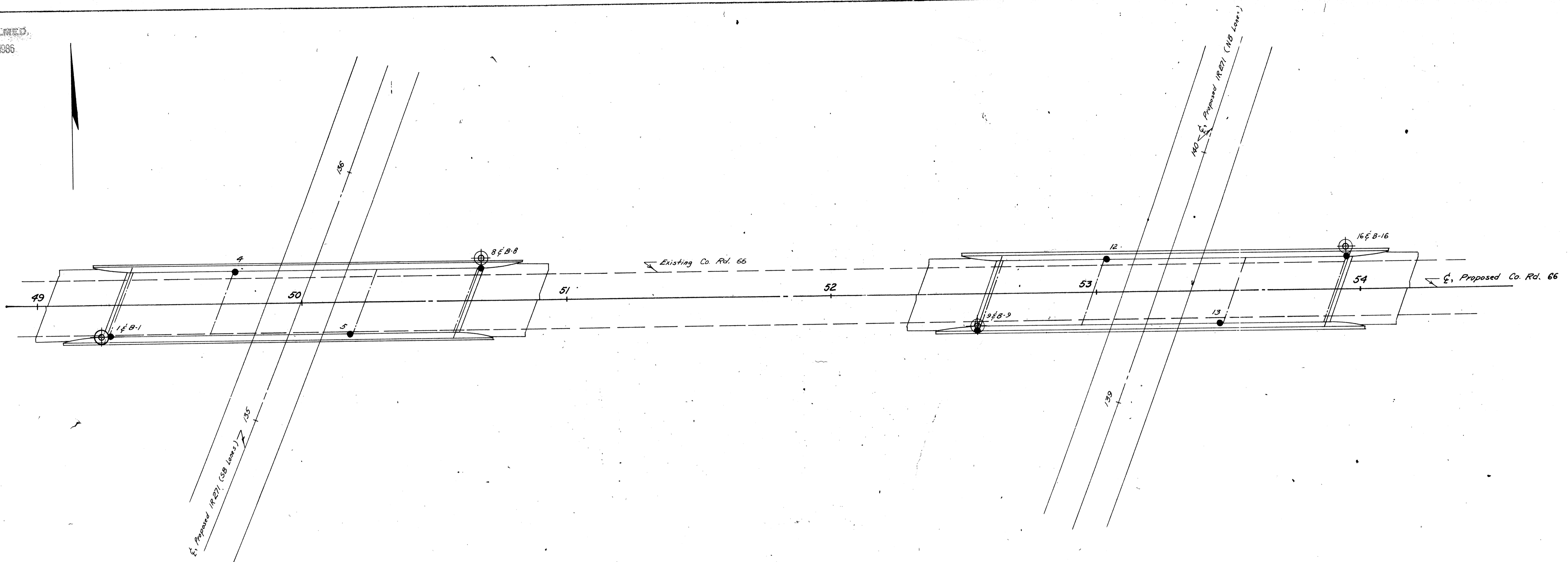
OHIO STATE HIGHWAY
TESTING LABORATORY
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BRIDGE NO. MED-IR 271-0194 8.0202
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SEC. MED-IR 271-0.00

CHECKED BY L.N.L. REVIEWED BY R.D.R. DATE 10/27/64

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SEC. MED-IR 271-0.00

PLAN AND PROFILE

DRAWN BY	CHECKED BY	REVIEWED BY	DATE
R.L.F.	L.N.L.	R.D.R.	10/27/64

SCALE: 1" = 20'

LOG OF BORING
 Date Started: 10-2-54
 Date Completed: 10-2-54
 Boring No.: B-1
 Sample Type: 1 1/2"
 Casing Length: 10'
 Station: 8' Other: 2'
 Water Elev.: 1177.4'

Elev.	Depth	Sh. Pen.	Rec. Lgt.	R. H.	Description	Physical Characteristics				Water Elev.			
						%	CS	S	W.C.				
1177.4	0									1177.4			
	2												
	4												
1132.4	6	15/90			Brown Gravelly Silt	14	4	8	33	41	30	10	23
1129.9	8	15/81			Brown Clayey Silt	0	4	12	43	41	26	7	17
1127.4	10	10/76			Brown and Gray Sandy Gravelly Silt	19	6	10	32	33	25	6	16
1124.9	12	7/71			Gray Gravelly Silt	16	4	9	38	33	22	6	16
1122.4	14	6/7			Brown and Gray Sandy Silt	0	6	16	34	44	21	4	18
1119.9	16	9/15			Gray Sandy Silt	9	5	13	36	37	22	7	18
1117.4	18	9/15			Gray Sandy Gravelly Silt	25	5	10	27	33	22	6	14
1114.9	20	25/38			Gray Silty Sandy Gravel	41	9	16	15	19	17	5	14
1112.4	22	19/38			Gray Silty Sandy Gravel	21	26	11	6	6	MP	MP	9
1107.4	30	15/34			Gray Sandy Gravelly Silt	30	5	10	30	25	19	5	12
1104.9	34	38/41			Gray Silty Sandy Gravel	52	25	12	4	7	MP	MP	9
1099.4	40				Gray Sandy Gravelly Silt	26	5	13	28	29	4	18	
1094.9	44												
1092.4	46	28/27			Gray Gravelly Sandy Silt	18	6	12	35	29	22	7	15
1087.4	50	43/6			Gray Sandy Gravelly Silt	25	8	10	36	21	18	3	15
1082.4	54	43/6			Gray Sandy Gravelly Silt	24	5	14	37	28	20	3	28

LOG OF BORING
 Date Started: 10-2-54
 Date Completed: 10-2-54
 Boring No.: B-2
 Sample Type: 1 1/2"
 Casing Length: 10'
 Station: 8' Other: 2'
 Water Elev.: 1125.6'

Elev.	Depth	Sh. Pen.	Rec. Lgt.	R. H.	Description	Physical Characteristics				Water Elev.			
						%	CS	S	W.C.				
1125.6	0									1125.6			
	2												
	4												
1133.6	6	18/75			Brown and Gray Silt and Clay	0	1	4	37	28	21	14	
1131.1	8	13/29			Brown Gravelly Clay	27	2	5	26	46	23	11	27
1128.6	10	10/13			Brown and Gray Gravelly Clay	26	1	4	23	37	28	12	28
1126.1	12	7/12			Gray Gravelly Silt	46	6	8	21	19	23	7	16
1123.6	14	9/8			Gray Sandy Gravelly Silt	35	9	13	25	18	19	3	11
1121.1	16	8/10			Gray Sandy Gravelly Silt	29	8	14	26	19	18	4	13
1118.6	18	7/10			Gray Gravelly Silt	22	2	5	20	19	24	7	17
1116.1	20	18/14			Gray and Brown Gravelly Silt	28	6	7	26	20	23	8	16
1113.6	22	7/10			Gray Gravelly Silt	28	6	5	28	23	25	9	17
1108.6	30	14/17			Gray Sandy Gravelly Silt	28	18	9	25	18	23	7	23
1103.6	36	14/24			Gray Gravelly Silt	23	3	6	27	23	23	6	18
1098.6	40	18/24			Gray Silty Sandy Gravel								
1093.6	46	24/28			Gray Sandy Gravelly Silt	42	4	5	13	24	18	6	13
1088.6	50	24/24			Gray Sandy Gravelly Silt	24	26	6	28	17	11	MP	18
1083.6	54	24/45			Gray Gravelly Silt	25	39	4	9	28	28	6	11
1078.6	58												
1073.6	60	14/51			Gray Silty Sandy Gravel								

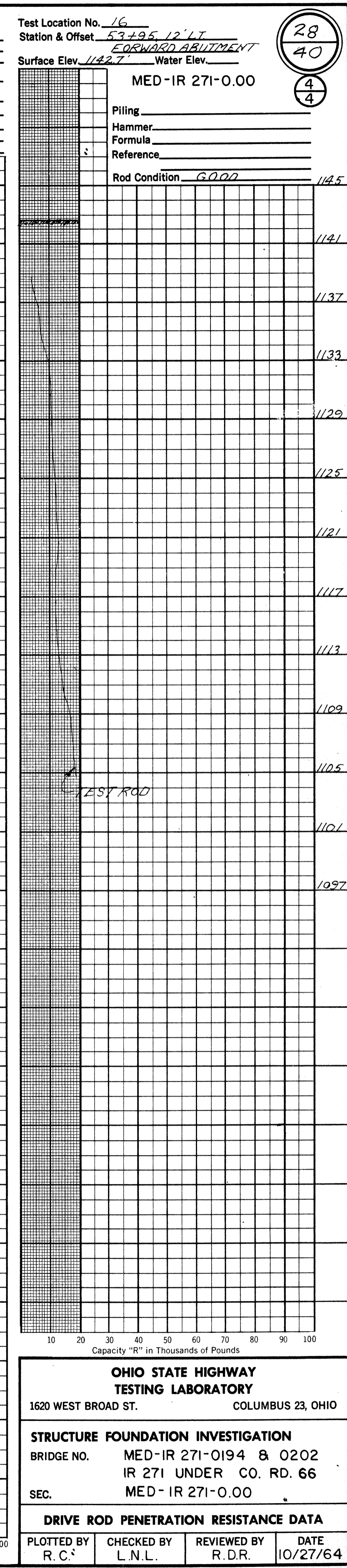
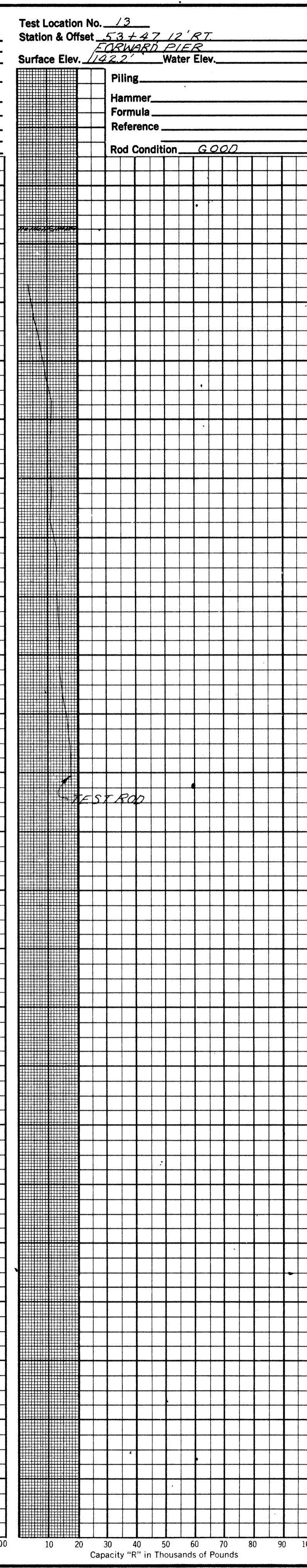
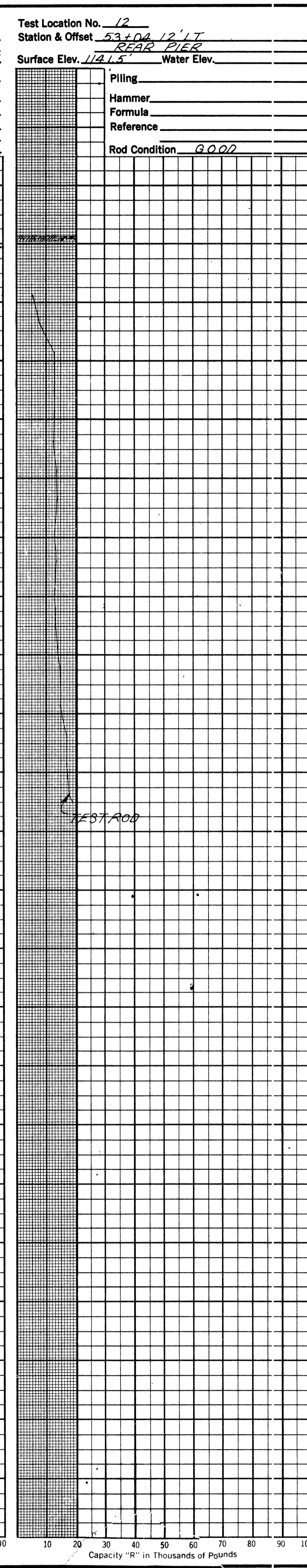
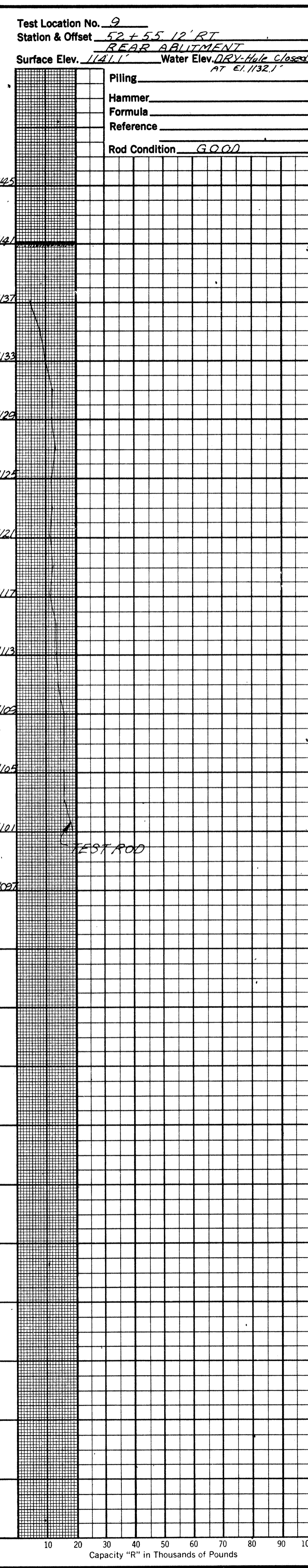
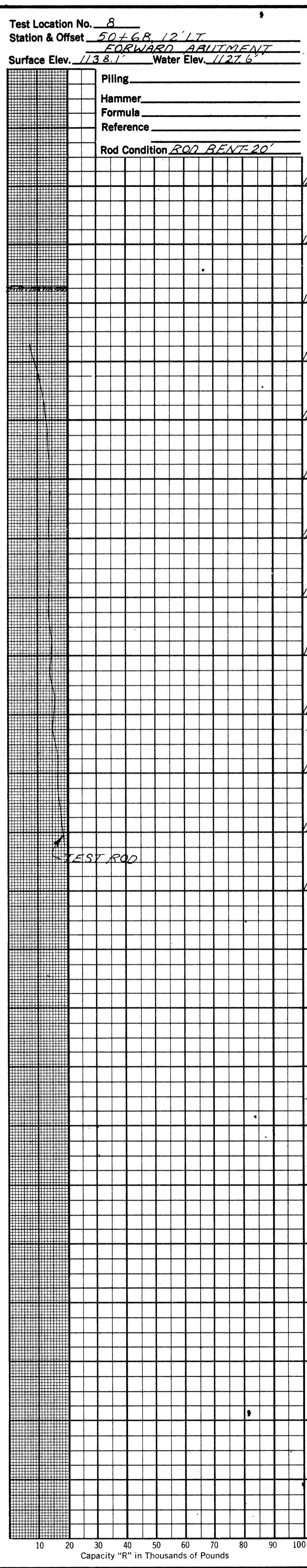
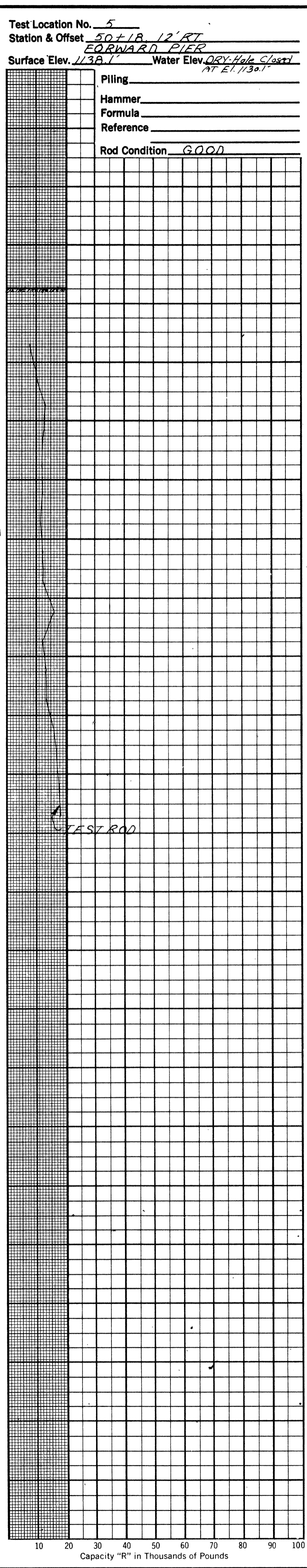
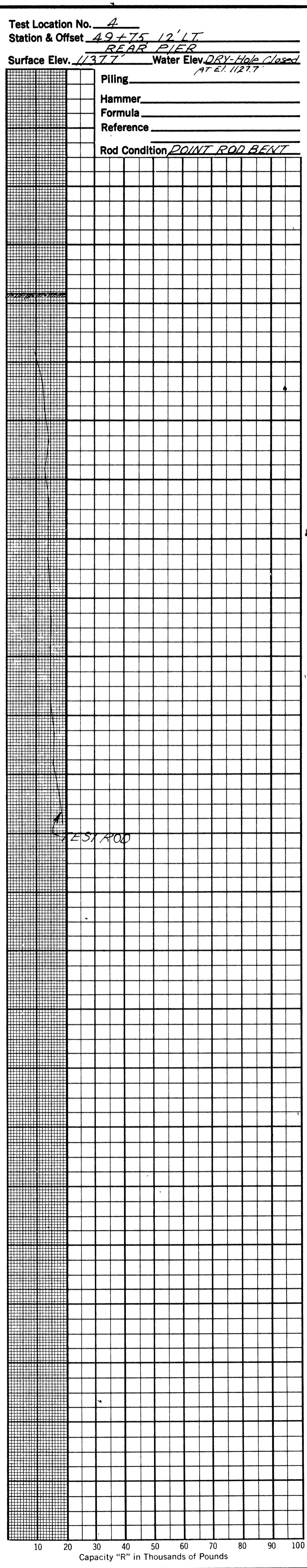
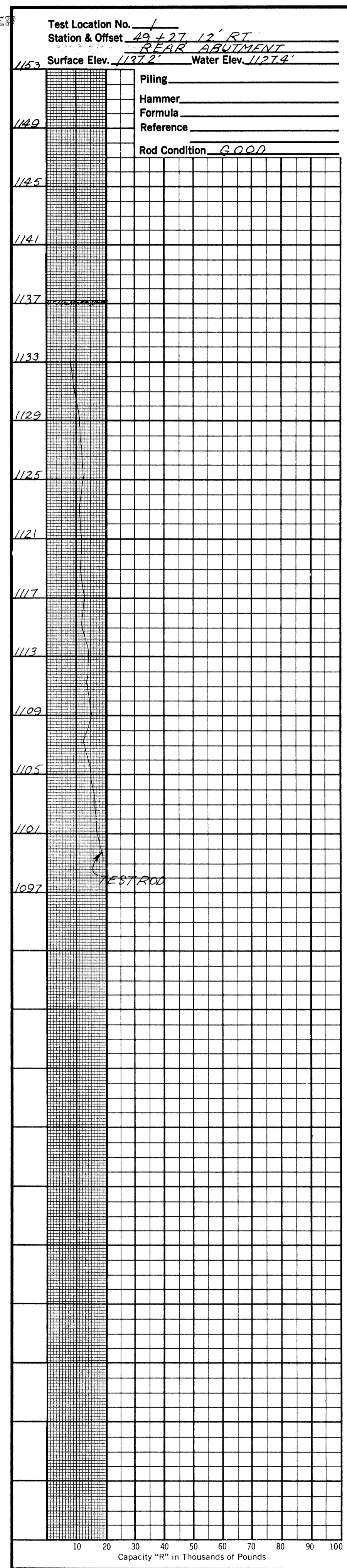
LOG OF BORING
 Date Started: 10-2-54
 Date Completed: 10-2-54
 Boring No.: B-3
 Sample Type: 1 1/2"
 Casing Length: 10'
 Station: 8' Other: 2'
 Water Elev.: 1102.4'

Elev.	Depth	Sh. Pen.	Rec. Lgt.	R. H.	Description	Physical Characteristics				Water Elev.			
						%	CS	S	W.C.				
1102.4	0									1102.4			
	2												
	4												
1137.4	6	6/9			Brown and Gray Clayey Silt	0	3	8	37	32	30	19	20
1134.9	8	10/13			Brown Clayey Silt	0	6	2	47	45	27	9	16
1132.4	10	8/11			Brown and Gray Gravelly Silt	19	5	10	41	25	24	7	16
1129.9	12	7/11			Gray Gravelly Silt	10	7	11	27	15	23	8	14
1127.4	14	9/13			Gray Sandy Gravelly Silt	13	6	11	35	35	25	9	15
1124.9	16	8/12			Gray Clayey Silt	16	7	15	35	27	20	4	16
1122.4	18	8/12			Gray Sandy Gravelly Silt	14	7	10	29	40	24	6	17
1119.9	20	9/18			Gray Silty Sandy Gravel	42	11	12	16	19	19	5	16
1117.4	22	5/6			Gray Gravelly Silt	55	4	7	16	18	23	6	16
1112.4	30	16/19			Gray Gravelly Sandy Silt	50	11	6	18	15	20	3	16
1107.4	36	18/32			Gray Sandy Gravelly Silt	30	5	7	35	23	23	6	13
1102.4	40	16/28			Gray Silty Gravel	22	22	5	12	23	22	3	16
1097.4	44	54/78			Gray Gravelly Silt	27	11	11	23	22	22	12	
1092.4	48	36/41			Gray Sandy Gravelly Silt	27	10	12	32	19	20	1	11
1087.4	52	24/34			Gray and Brown Silt	43	9	3	24	21	25	10	19
1082.4	56	31/46			Gray Gravelly Silt	32	6	11	34	17	17	MP	16

LOG OF BORING
 Date Started: 10-2-54
 Date Completed: 10-2-54
 Boring No.: B-4
 Sample Type: 1 1/2"
 Casing Length: 10'
 Station: 8' Other: 2'
 Water Elev.: 1092.4'

Elev.	Depth	Sh. Pen.	Rec. Lgt.	R. H.	Description	Physical Characteristics				Water Elev.			
						%	CS	S	W.C.				
1092.4	0									1092.4			
	2												
	4												
1137.4	6	6/9			Brown and Gray Clayey Silt	0	1	7	48	44	28	9	18
1134.9	8	10/13			Brown Clayey Silt	0	2	4	24	24	28	28	28
1132.4	10	8/11			Brown and Gray Gravelly Silt	43	4	7	23	23	24	4	20
1129.9	12	7/11			Gray Gravelly Silt	23	3	11	25	28	23	8	26
1127.4	14	9/13			Gray Sandy Gravelly Silt	25	13	9	19	24	23	7	15
1124.9	16	8/12			Gray Clayey Silt	0	4	9	41	46	26	9	17
1122.4	18	8/12			Gray Sandy Gravelly Silt	24	3	14	21	18	18	4	17
1119.9	20	9/18			Gray Silty Sandy Gravel	48	10	7	19	16	23	7	17
1117.4	22	5/6			Gray Gravelly Silt	28	5	3	26	24	24	6	17
1112.4	30	16/19			Gray Gravelly Sandy Silt	16	32	11	28	13	22	3	11
1107.4	36	18/32			Gray Sandy Gravelly Silt	29	7	16	19	19	21	20	13
1102.4	40	16/28			Gray Silty Gravel								
1097.4	44	54/78			Gray Gravelly Silt								
1092.4	48	36/41			Gray Sandy Gravelly Silt								
1087.4	52	24/34			Gray and Brown Silt								
1082.4	56	31/46			Gray Gravelly Silt								

OHIO STATE HIGHWAY TESTING LABORATORY
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 STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. MED-IR 271-0194 & 0202
 IR 271 UNDER CO. RD. 66
 SEC. MED-IR 271-0-00
 BORING DATA
 TYPED BY: J.A.C. CHECKED BY: R.H.P. REVIEWED BY: R.D.R. DATE: 10/27/64



28
40
4
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OHIO STATE HIGHWAY TESTING LABORATORY
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STRUCTURE FOUNDATION INVESTIGATION
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 IR 271 UNDER CO. RD. 66
 SEC. MED-IR 271-0.00

DRIVE ROD PENETRATION RESISTANCE DATA
 PLOTTED BY R.C. CHECKED BY L.N.L. REVIEWED BY R.D.R. DATE 10/27/64

GEOLOGY OF THE SITE

The structure site is located in the dissected portion of the glaciated Allegheny Plateau, in an area where moderately deep alluvium overlies bedrock, of Pennsylvanian and Mississippian ages.

EXPLORATION

The exploration consisted of two drive sample borings and ten drive rod penetration tests, made between September 17 and October 5, 1964.

INVESTIGATIONAL FINDINGS








Borings encountered soft to stiff silts and clays and loose silts and sands to approximately 21-foot depth, elevation 1015 feet; below this, very dense to extremely dense gravels, sands, and silts. Boring B-16, in the forward area of the site, encountered peat and organic soils to elevation 1015 feet. The borings were terminated at 71 and 76-foot depths, elevations 965 and 961 feet, after penetrating in excess of 10 feet of material requiring in excess of 30 blows per foot in the standard penetration test.










Rod soundings met gradual increase in penetration resistance with increase in depth and were terminated because of medium-high and high resistance to penetration between 55 and 72-foot depths, elevations 980 and 967 feet, considered to be in dense intervals of gravels, sands, and silts, as revealed by the borings.

Free water was encountered in rod sounding holes numbers 1, 6, 7 and 11, between elevations 1027 and 1037 feet.

No test penetrated to bedrock surface.

LEGEND

-  Auger Boring Location - Plan View.
-  Press and/or Drive Sample and/or Core Boring Location - Plan View.
-  Drive Rod Penetration Resistance Sounding - Location - Plan View.
-  Capped Pile
-  Footling
-  Footling on Pile
-  Top of Rock

-  Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
-  Figures Beside the Boring Log in Profile Indicate the Number of Blows For Standard Penetration Test.
X = Number of Blows for First 6 Inches.
Y = Number of Blows for Second 6 Inches.
-  Drive Rod Penetration Resistance Sounding Log - Profile.
-  Casing
-  Resistance " R " $< 10,000$ lbs.
-  Resistance " R " $> 10,000$ lbs.
-  Indicates Final Measurement of Penetration, in Inches.
-  Indicates Free Water Elevation.
-  Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

-  Coal
-  Weathered Indurated Clay
-  Indurated Clay
-  Weathered Shale
-  Shale
-  Weathered Sandstone
-  Sandstone
-  Leached Dolomite
-  Dolomite
-  Leached Limestone
-  Limestone

GENERAL INFORMATION

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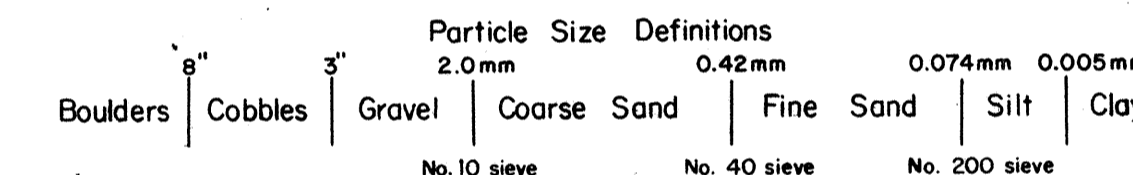
Drive Sample Borings - Drive - Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and/or 5-foot depth intervals, driven by means of a 140-pound drop-hammer, with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive - press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

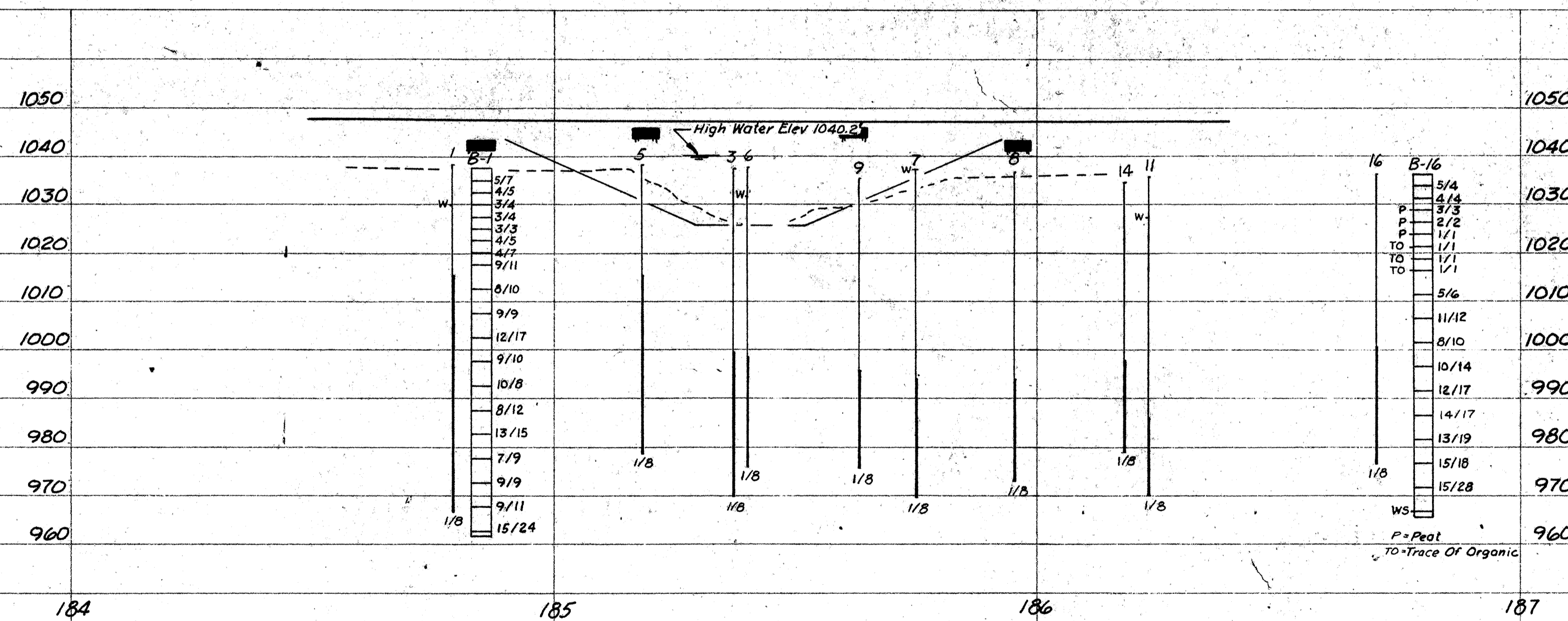
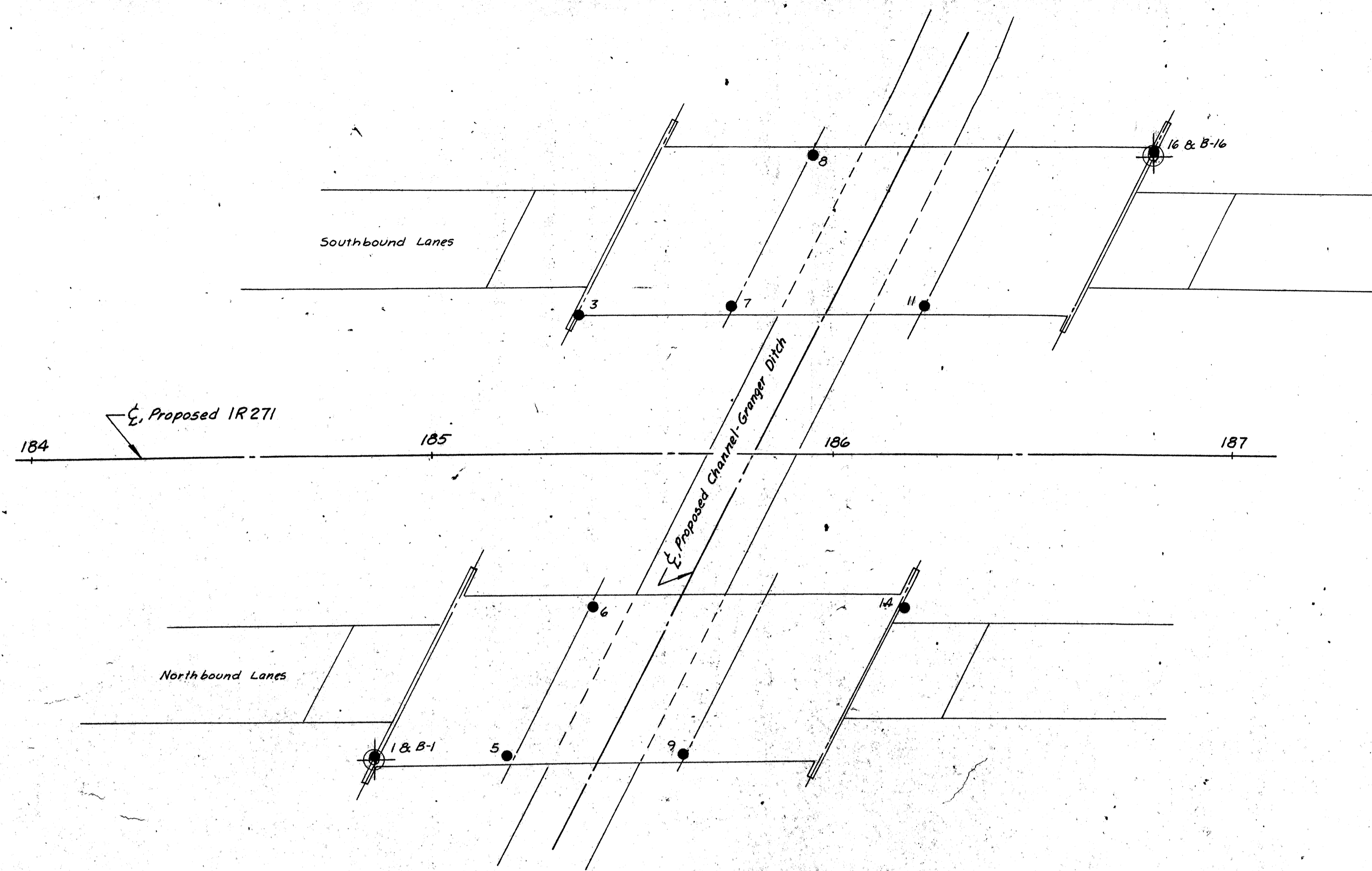
OHIO STATE HIGHWAY
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-IR271-0284
OVER GRANGER DITCH
SEC. MED-IR271-0.00

CHECKED BY R.H.P.	REVIEWED BY R.D.R.	DATE 10/22/64
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OHIO STATE HIGHWAY
TESTING LABORATORY
1620 WEST BROAD ST., COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-IR271-0284
OVER GRANGER DITCH
SEC. MED-IR271-0.00

PLAN AND PROFILE

DRAWN BY R.L.C.	CHECKED BY R.H.P.	REVIEWED BY R.D.R.	DATE 10/22/64
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SCALE: 1" = 20'

LOG OF BORING

Date Started 10-1-64 Sampler Type BB Dia. 1 3/8" Water Elev. _____
 Date Completed 10-5-64 Casing Length 75' Dia. 3 1/2" Surface Elev. 1037.4'
 Boring No. 2-1 Station & Offset 184+85, 75' Rt. (REAR APPROACH)

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics							SHTL Class.			
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI		W.C.		
1037.4	0																
1034.9	2																
1032.4	4	5/7			Brown and Gray Silt and Clay	1	0	1	18	38	43	29	11	27			
1029.9	6	4/5			Gray and Brown Silt and Clay	2	0	1	1	43	55	32	12	28			
1027.4	8	3/4			Gray Silt and Clay	3	0	0	1	40	59	32	12	28			
1024.9	10	3/4			Gray Silt and Clay	4	0	0	4	40	56	32	11	31			
1022.4	12	3/3			Gray Clayey Silt	5	0	0	1	48	51	29	9	31			
1019.9	14	4/5			Gray Clayey Silt	6	0	0	2	41	57	28	9	31			
1017.4	16	4/7			Gray Silt	7	0	2	14	46	38	20	5	29			
1014.9	18	9/11			Gray Silty Gravelly Sand	8	27	14	30	18	11	MP	MP	14			
1012.4	20																
1009.9	22																
1007.4	24	8/10			Brown and Gray Silty Sandy Gravel	9	53	10	10	14	13	21	6	14			
1004.9	26																
1002.4	28																
999.9	30	9/9			Brown and Gray Sandy Gravelly Silt	10	22	6	10	26	36	25	8	15			
997.4	32																
994.9	34																
992.4	36	12/17			Gray Sandy Gravel	11	69	16	7	-8	-	MP	MP	8			
989.9	38																
987.4	40	9/10			Gray Silt	12	0	0	14	73	13	MP	MP	22			
984.9	42																
982.4	44																
979.9	46	10/8			Gray Gravelly Silt	13	24	1	5	57	13	MP	MP	19			
977.4	48																
974.9	50	8/12			Gray Sandy Silt	14	0	0	48	38	14	MP	MP	20			
972.4	52																
969.9	54																
967.4	56	13/15			Gray Sand	15	0	9	77	6	12	MP	MP	20			
964.9	58																
962.4	60	7/9			Gray Silt	16	0	0	19	68	13	MP	MP	21			
959.9	62																
957.4	64																
954.9	66	9/9			Gray Sandy Silt	17	0	1	25	59	15	MP	MP	20			
952.4	68																
949.9	70	9/11			Gray Silt	18	0	1	5	77	17	MP	MP	22			
947.4	72																
944.9	74																
942.4	76	15/10			Gray Silty Gravelly Sand	19	34	1	15	17	11	MP	MP	18			

LOG OF BORING

Date Started 9-29-64 Sampler Type BB Dia. 1 3/8" Water Elev. _____
 Date Completed 10-1-64 Casing Length 75' Dia. 3 1/2" Surface Elev. 1006.2'
 Boring No. 2-16 Station & Offset 186+00, 75' Lt. (FRONT APPROACH)

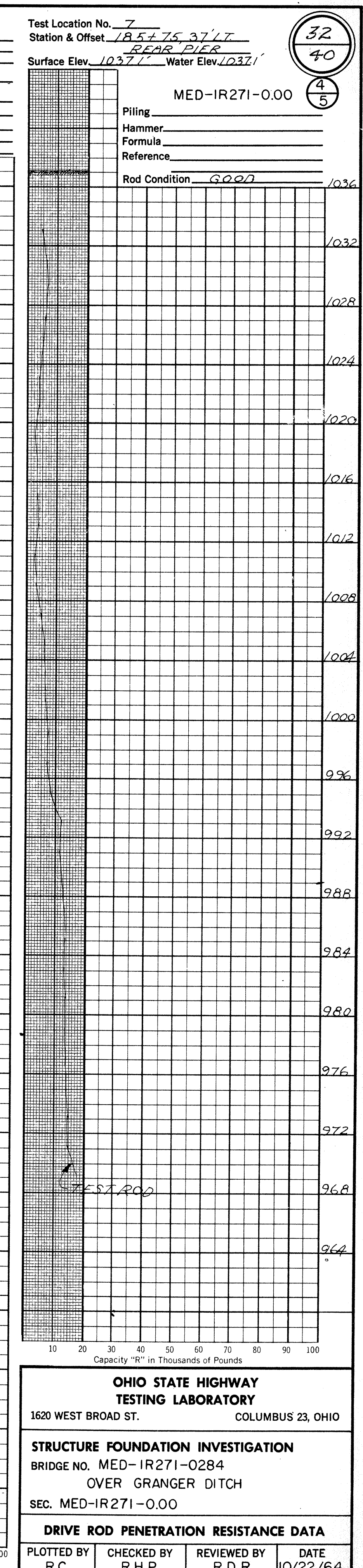
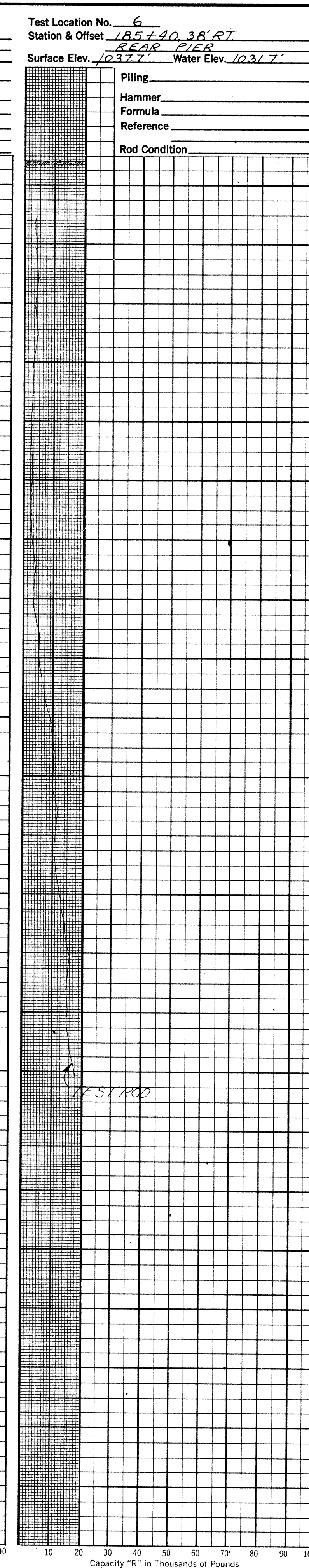
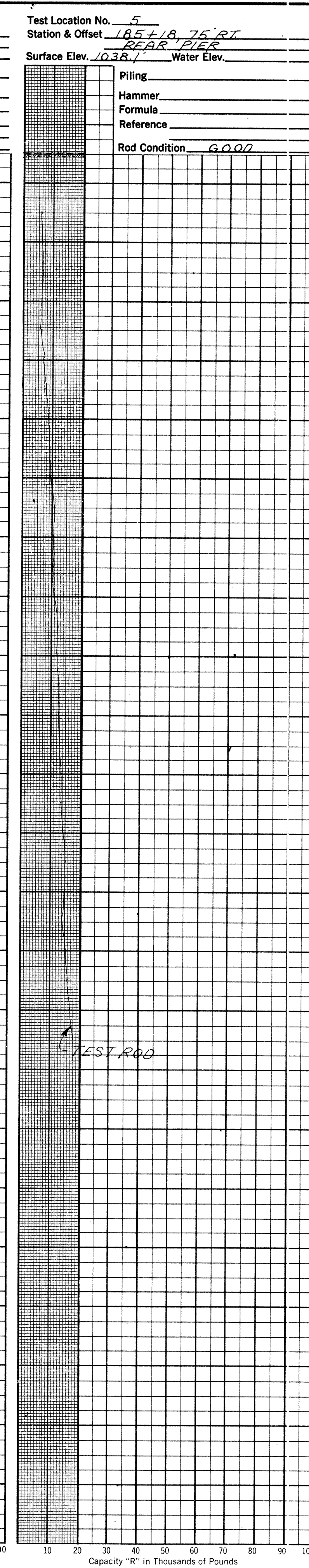
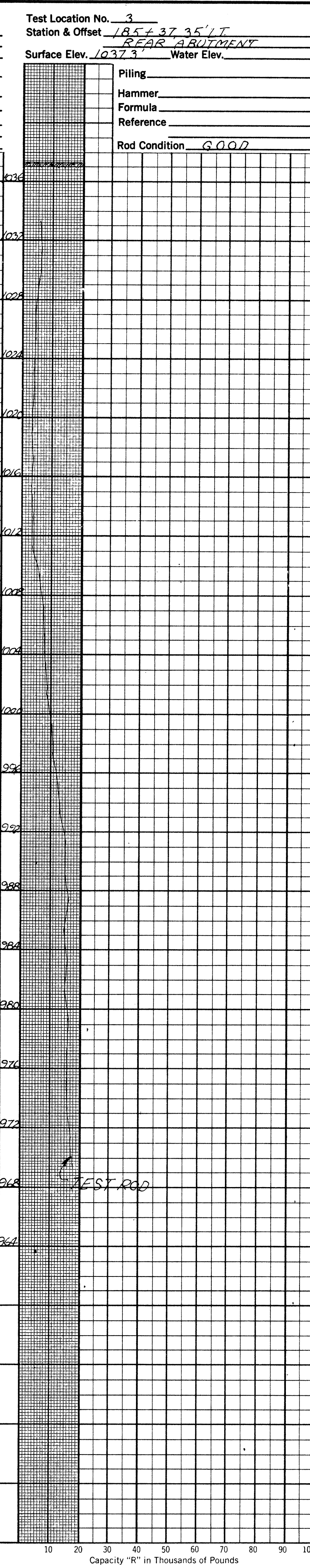
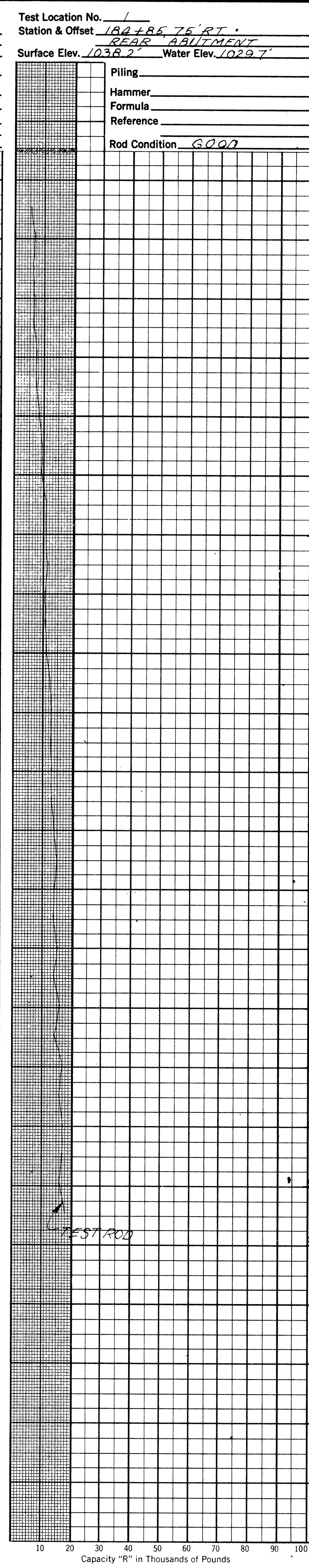
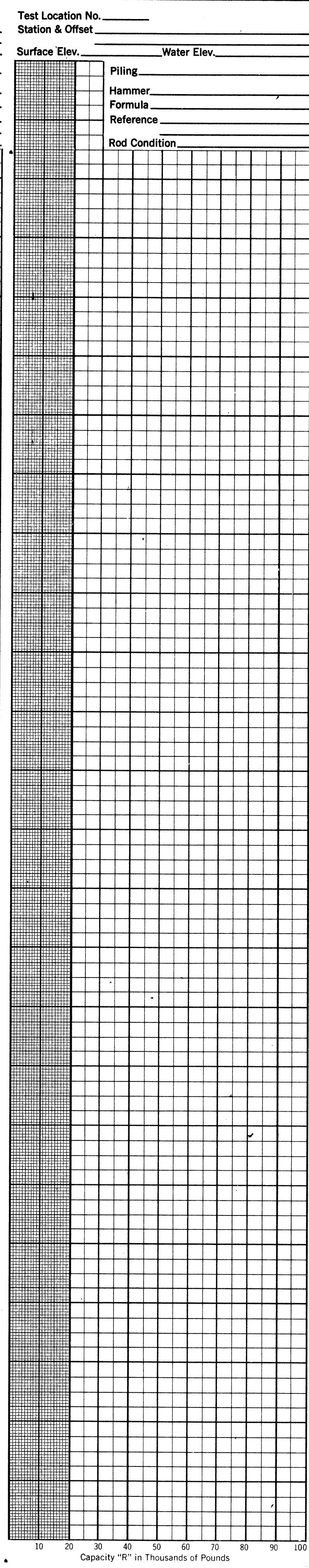
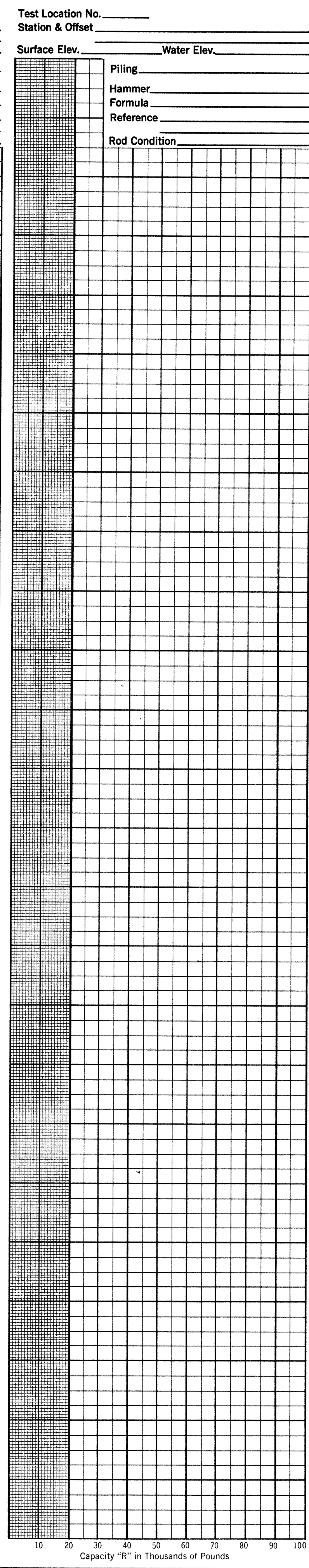
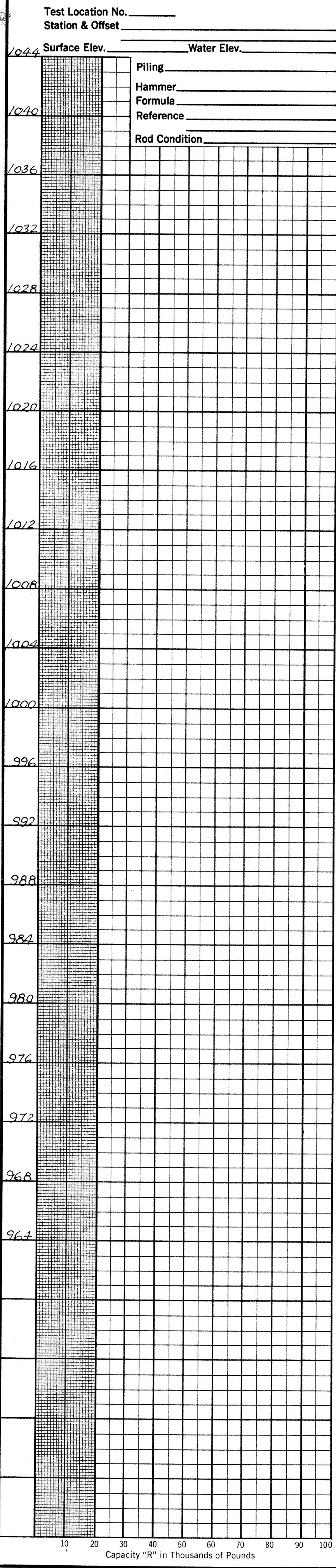
Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics							SHTL Class.			
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI		W.C.		
1006.2	0																
1003.7	2																
1001.2	4	5/4			Brown and Gray Clayey Silt	1	0	1	7	39	53	41	10	19			
998.7	6	4/4			Brown Silty Sand	2	0	21	41	19	19	MP	MP	23			
996.2	8	3/3			Black Fine-Textured Peat	3	V	I	S	U	A	L					207
993.7	10	2/2			Dark-Brown Silty Sedimentary Peat	4	V	I	S	U	A	L	272				234
991.2	12	1/1			Brown Silty Marly Sedimentary Peat	5	V	I	S	U	A	L	432				194
988.7	14	1/1			Gray Silt and Clay, Trace of Organic	6	0	0	1	41	58	41	15	46			
986.2	16	1/1			Gray Silt and Clay, Trace of Organic	7	0	0	0	41	59	38	14	45			
983.7	18	1/1			Gray Silt and Clay, Trace of Organic	8	0	0	1	42	57	34	13	39			
981.2	20																
978.7	22																
976.2	24																
973.7	26	5/6			Gray Silty Gravelly Sand	9	32	34	14	11	9	MP	MP	15			
971.2	28																
968.7	30																
966.2	32	11/12			Gray Sandy Gravel	10	51	33	8	-8	-	MP	MP	15			
963.7	34																
961.2	36	8/10			Gray Gravelly Sandy Silt	11	20	10	12	26	32	22	5	18			
958.7	38																
956.2	40	10/14			Gray Gravelly Silt	12	32	8	8	36	24	21	4	38			
953.7	42																
951.2	44																
948.7	46	12/17			Gray Gravelly Clay	13	V	I	S	U	A	L					11
946.2	48																
943.7	50	14/17			Gray Sandy Silt	14	9	7	11	37	36	22	5	15			
941.2	52																
938.7	54																
936.2	56	13/20			Gray Sandy Gravelly Silt	15	20	5	10	36	29	22	5	16			
933.7	58																
931.2	60	15/18			Gray Sandy Silt	16	12	7	28	29	24	MP	MP	18			
928.7	62																
926.2	64																
923.7	66	10/10			Gray Silty Sandy Gravel	17	74	10	6	-1	0	MP	MP	15			
921.2	68																
918.7	70																
916.2	72																
913.7	74																
911.2	76																

OHIO STATE HIGHWAY
TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-IR 271-0284
OVER GRANGER DITCH
Sec. MED-IR 271-0.00

BORING DATA

TYPED BY J.A.C. CHECKED BY R.H.P. REVIEWED BY R.D.R. DATE 10/22/64



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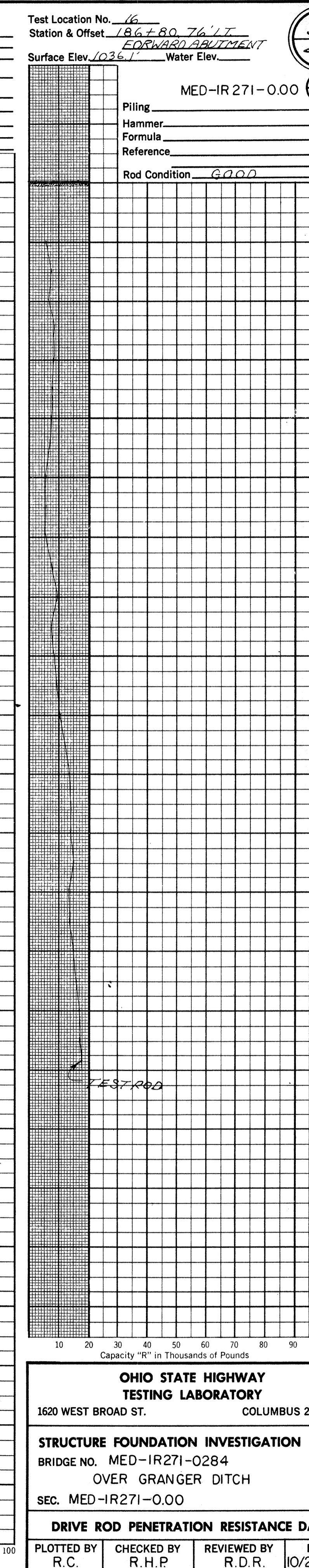
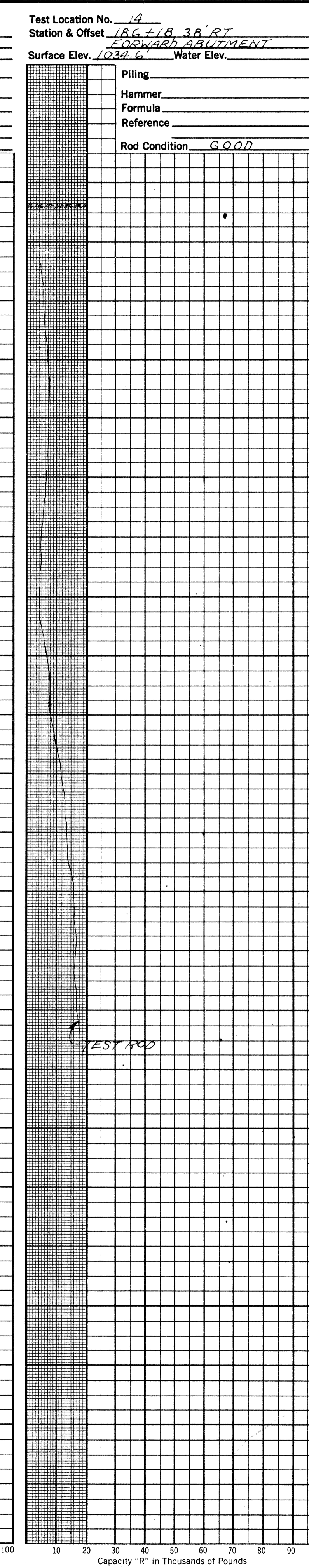
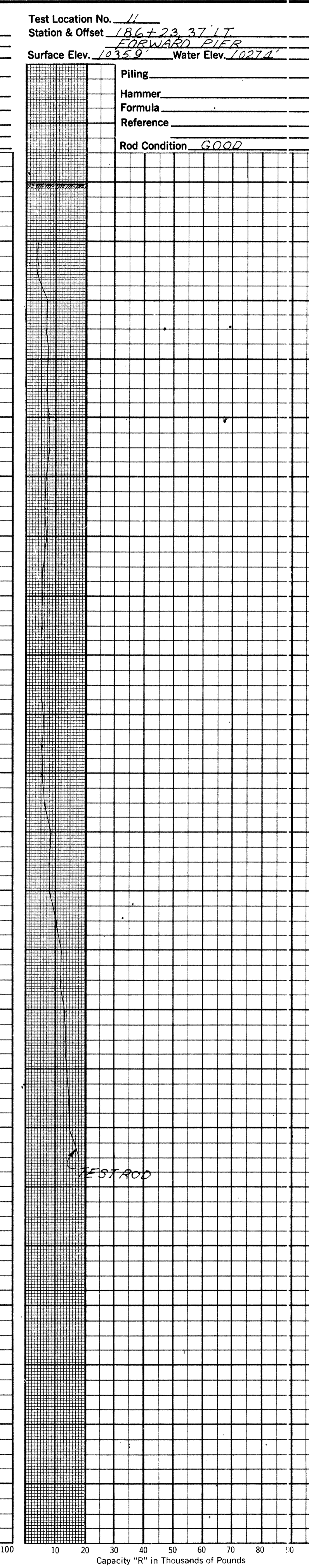
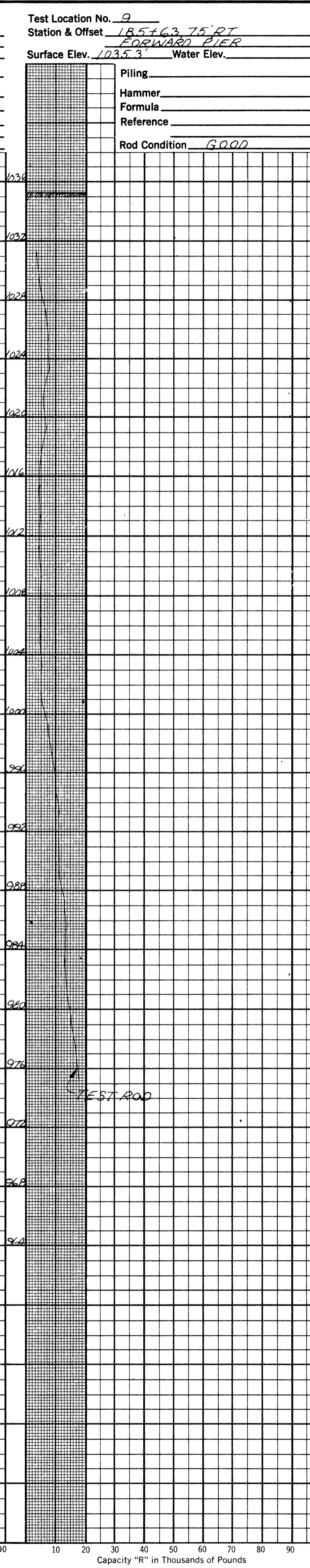
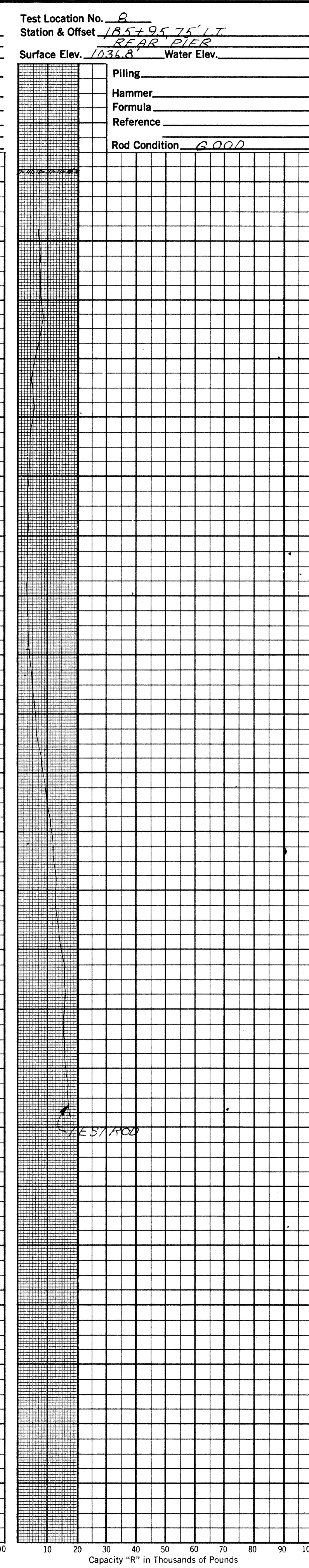
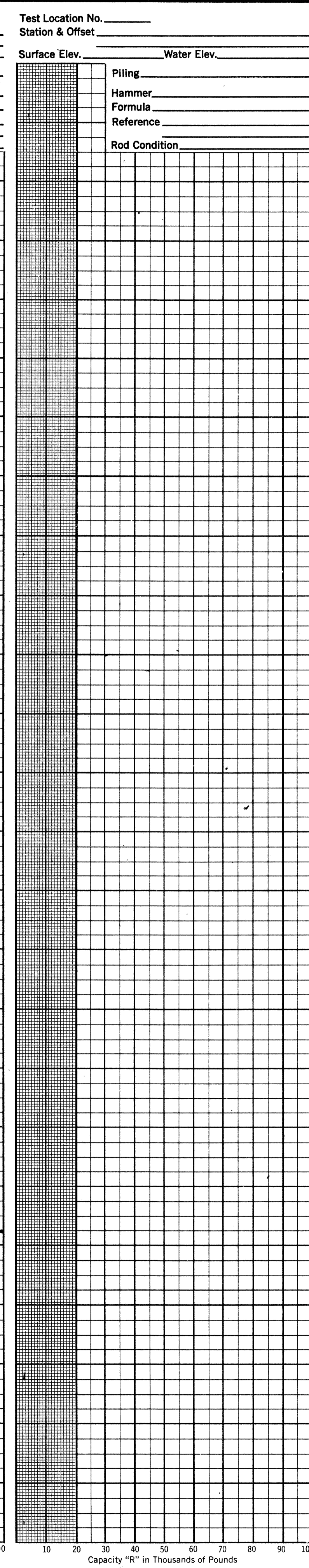
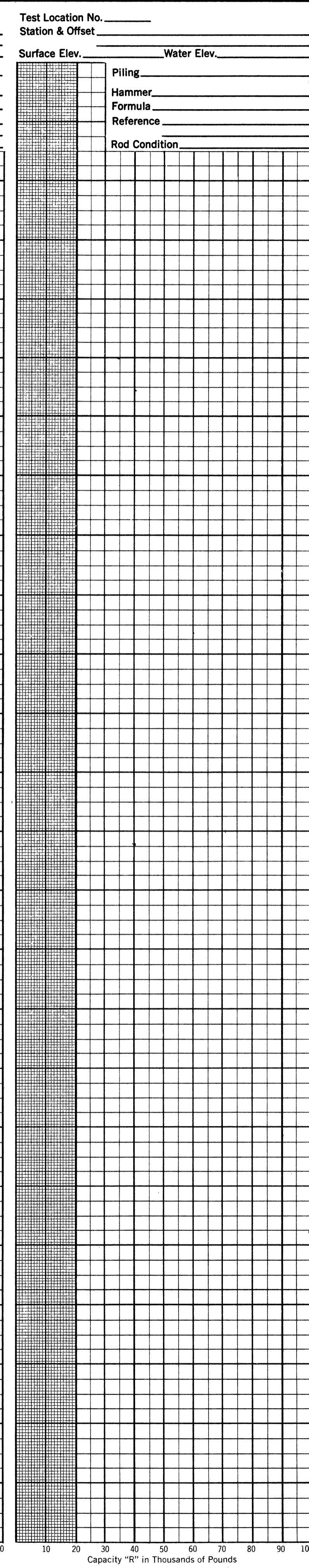
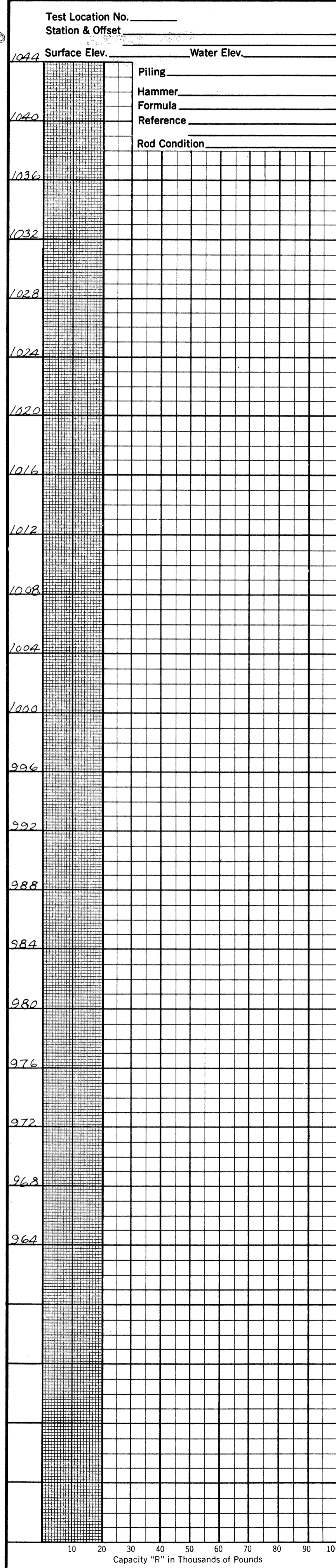
OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-1R271-0284
OVER GRANGER DITCH
SEC. MED-1R271-0.00

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C.	CHECKED BY R.H.P.	REVIEWED BY R.D.R.	DATE 10/22/64
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OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-1R271-0284
OVER GRANGER DITCH
SEC. MED-1R271-0.00

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C. CHECKED BY R.H.P. REVIEWED BY R.D.R. DATE 10/22/64

GEOLOGY OF THE SITE

The structure site is located in the dissected portion of the glaciated Allegheny Plateau, in an area where moderately deep alluvium overlies bedrock, of Pennsylvanian and Mississippian ages.

EXPLORATION

The exploration consisted of two drive sample borings and four drive rod penetration tests, made between September 14 and 30, 1964.

INVESTIGATIONAL FINDINGS

Borings encountered very dense to extremely dense gravels, sands, and silts. The borings were terminated at 66 and 71-foot depths, elevations 1038 and 1037 feet, after penetrating in excess of 20 feet of material requiring in excess of 30 blows per foot in the standard penetration test.

Rod soundings met gradual increase in penetration resistance with increase in depth and were terminated because of medium-high and high resistance to penetration between 40 and 72-foot depths, elevations 1070 and 1035 feet, considered to be in very dense and extremely dense gravels, sands, and silts, as revealed by the borings.

No free water was encountered in any of the rod sounding holes.

No test penetrated to bedrock surface.

LEGEND

- Auger Boring Location - Plan View
- Press and/or Drive Sample and/or Core Boring Location - Plan View
- Drive Rod Penetration Resistance Sounding Location - Plan View
- Electrical Resistivity Probe Location - Plan View
- Footing Capped Pile
- Footing on Pile
- Electrical Resistivity Probe - Profile
- Top of Rock
- Interval of Relatively High Moisture
- Total Depth

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Indurated Clay
- Indurated Clay
- Weathered Shale
- Shale
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

- Horizontal Bar on Boring Log indicates the Depth the Sample Was Taken
- Figures Beside the Boring Log in Profile indicate the Number of Blows For Standard Penetration Test.
X = Number of Blows for First 6 Inches.
Y = Number of Blows for Second 6 Inches.
- Drive Rod Penetration Resistance Sounding Log Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Indicates Final Measurement of Penetration, in Inches.
- Indicates Free Water Elevation.
- Indicates Static Water Elevation.

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1 1/2 inch diameter steel rod, with a 45° cone point, into the ground, using a 120-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation graph prepared by plotting the value "R" against the depth at which the reading was taken, and correlating the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

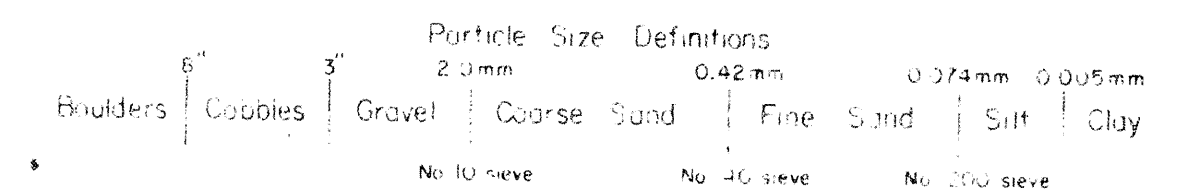
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and/or 5-foot depth intervals, driven by means of a 140-pound drop-hammer with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests at two-foot increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design criteria for the project. The State of Ohio does not guarantee the accuracy of this data and it is to be construed as a part of the plans governing construction of the project.

OHIO STATE HIGHWAY
TESTING LABORATORY
1620 WEST BROAD STREET, COLUMBUS 23, OHIO

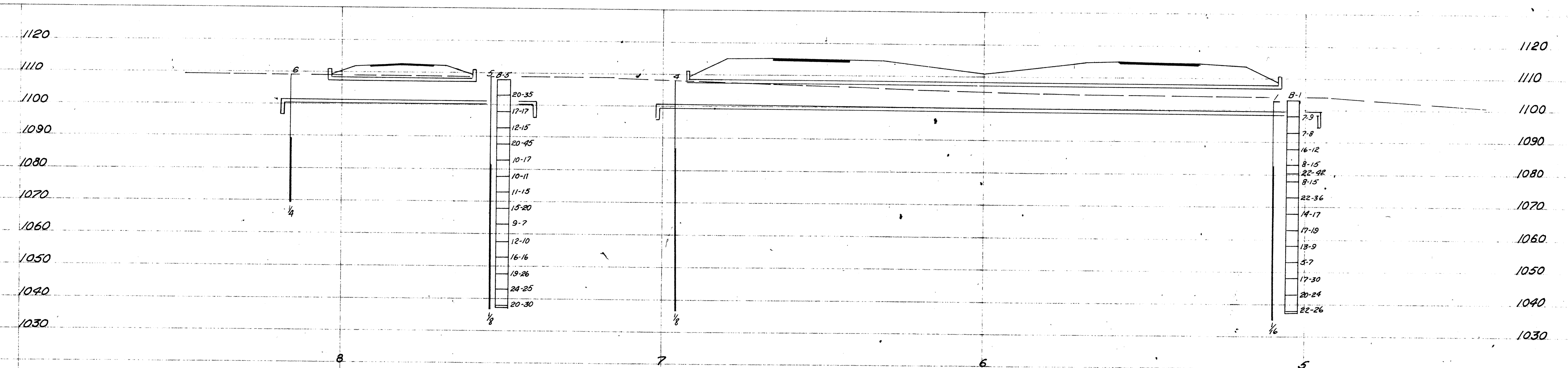
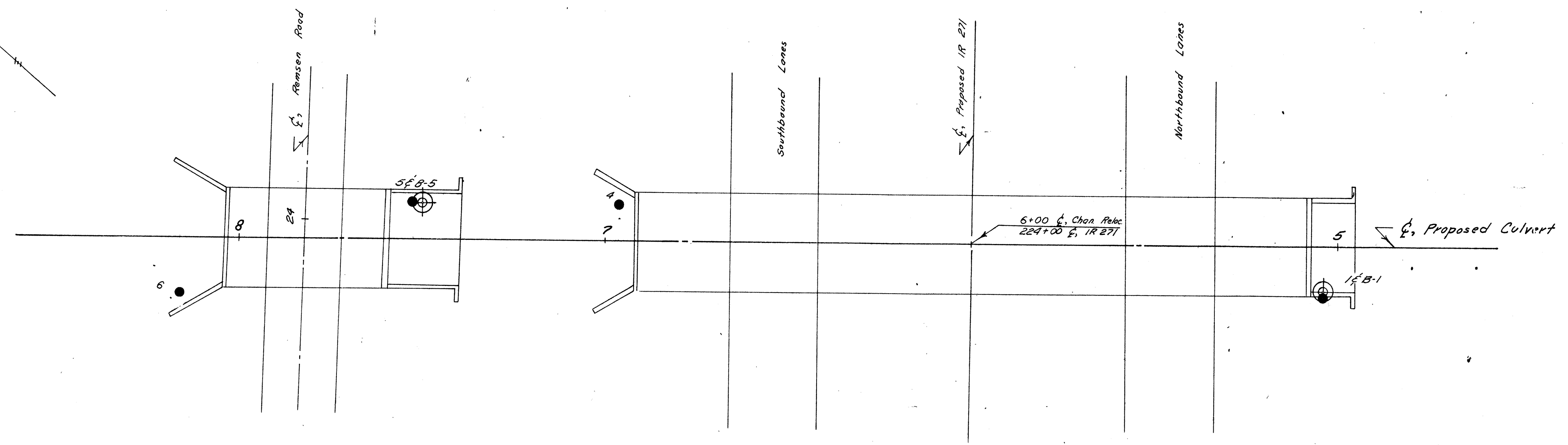
STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-IR 271-0356 & 0356 A
STREAM UNDER IR 271 & REMSEN ROAD
SEC. MED-IR 271-0.00

CHECKED BY: R. H. P. REVIEWED BY: R. D. R. DATE: 10-16-

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MED-IR 271-0.00

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OHIO STATE HIGHWAY
TESTING LABORATORY
1620 WEST BROAD ST., COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-IR 271-0356 & 0356A
STREAM UNDER IR 271 & REMSEN ROAD
SEC. MED-IR 271-0.00

PLAN AND PROFILE

DRAWN BY R. L. F.	CHECKED BY R. H. P.	REVIEWED BY R. D. R.	DATE 10-16-64
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SCALE: 1" = 20'

LOG OF BORING

Date Started 9-23-64 Sampler Type SS Dia. 1 3/8" Water Elev. _____
 Date Completed 9-23-64 Casing Length 65' Dia. 3 1/2" Surface Elev. 1103.0'
 Boring No. 3-1 Station & Offset 7+04, 12' 1st (NEAR ABUTMENT)

Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics							SHTL Class.				
							% Agg.	% CS.	% F.S.	% Silt	% Clay	LL	PI		W.C.			
1098.8	0																	
1098.8	2																	
1098.8	4	7/9			Gray Silty Sandy Gravel	1	41	16	4	30	9	HP	HP	14				
1098.8	6																	
1098.8	8																	
1098.8	10	7/8			Gray Silty Sandy Gravel	2	44	34	9	-13-	HP	HP	13					
1098.8	12																	
1098.8	14																	
1098.8	16	16/12			Gray Gravel	3	81	10	3	-4-	HP	HP	4					
1098.8	18																	
1098.8	20	8/15			Gray Sandy Gravelly Silt	4	33	6	10	26	25	22	6	13				
1098.8	22																	
1098.8	24	22/42			Gray Sandy Gravel	5	80	11	4	-5-	HP	HP	11					
1098.8	26	8/15			Gray Gravel	6	85	12	2	-1-	HP	HP	5					
1098.8	28																	
1098.8	30																	
1098.8	32	22/36			Gray Silty Sandy Gravel	7	65	8	8	9	10	20	3	6				
1098.8	34																	
1098.8	36	14/17			Gray Gravelly Sand	8	30	45	17	-8-	HP	HP	16					
1098.8	38																	
1098.8	40																	
1098.8	42	17/19			Gray Sandy Gravel	9	V I S U A L							24				
1098.8	44																	
1098.8	46	13/9			Brown & Gray Silty Sandy Gravel	10	51	6	25	11	6	HP	HP	16				
1098.8	48																	
1098.8	50	7/7			Gray & Brown Gravelly Sandy Silt	11	16	5	14	47	18	HP	HP	21				
1098.8	52																	
1098.8	54																	
1098.8	56	17/30			Gray & Brown Gravelly Silt	12	33	6	2	42	17	HP	HP	16				
1098.8	58																	
1098.8	60																	
1098.8	62	20/24			Gray & Brown Silty Sandy Gravel	13	47	18	15	12	8	HP	HP	12				
1098.8	64																	
1098.8	66	20/25			Gray Silty Sandy Gravel	14	48	14	20	14	18	HP	HP	14				

LOG OF BORING

Date Started 9-23-64 Sampler Type SS Dia. 1 3/8" Water Elev. _____
 Date Completed 9-30-64 Casing Length 65' Dia. 3 1/2" Surface Elev. 1108.1'
 Boring No. 3-5 Station & Offset 7+50, 10' 1st (CULVERT)

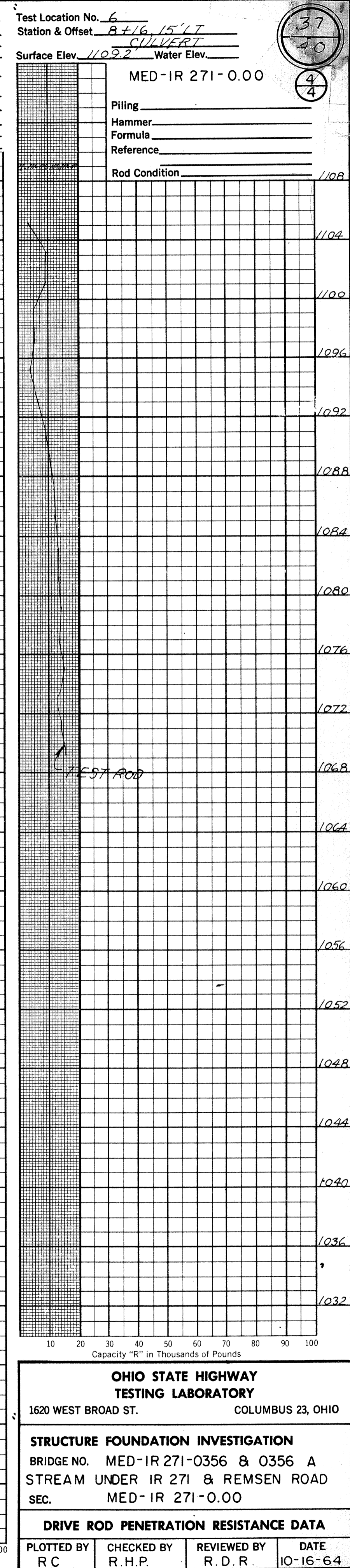
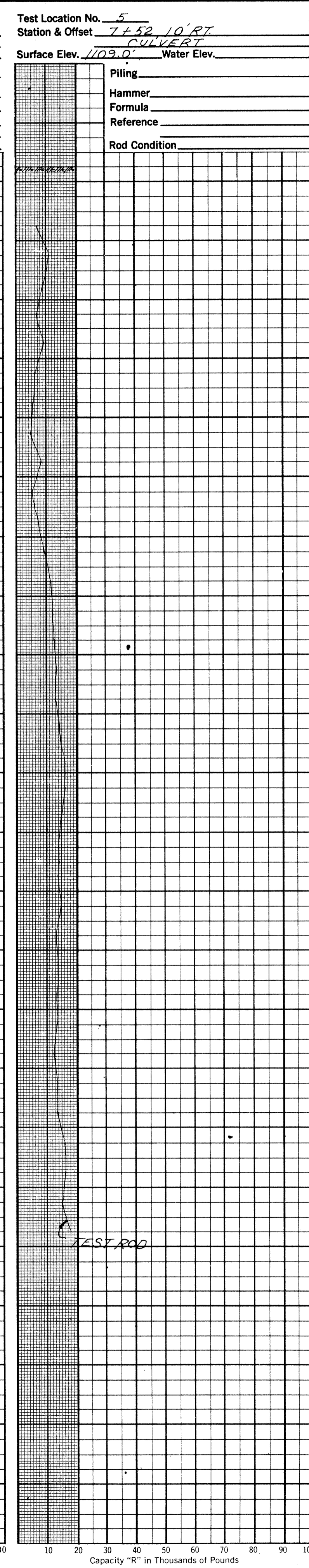
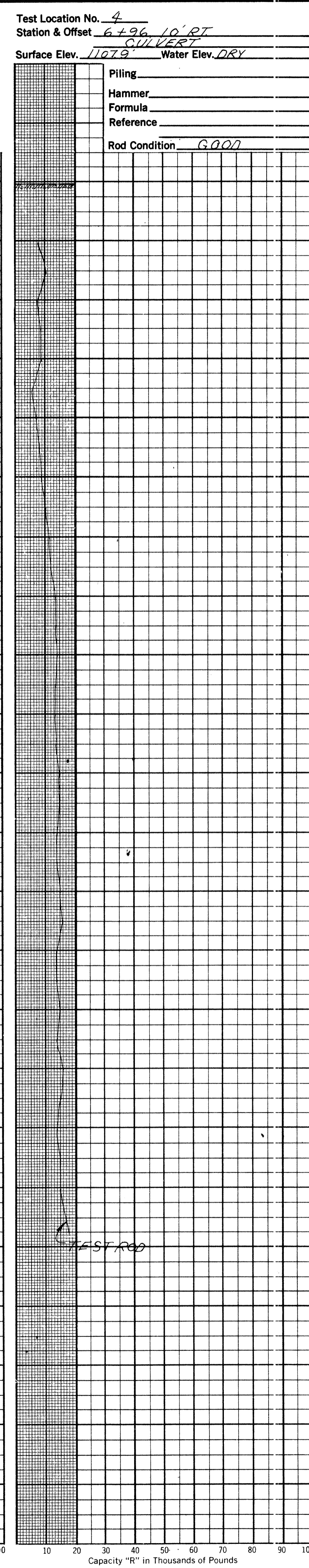
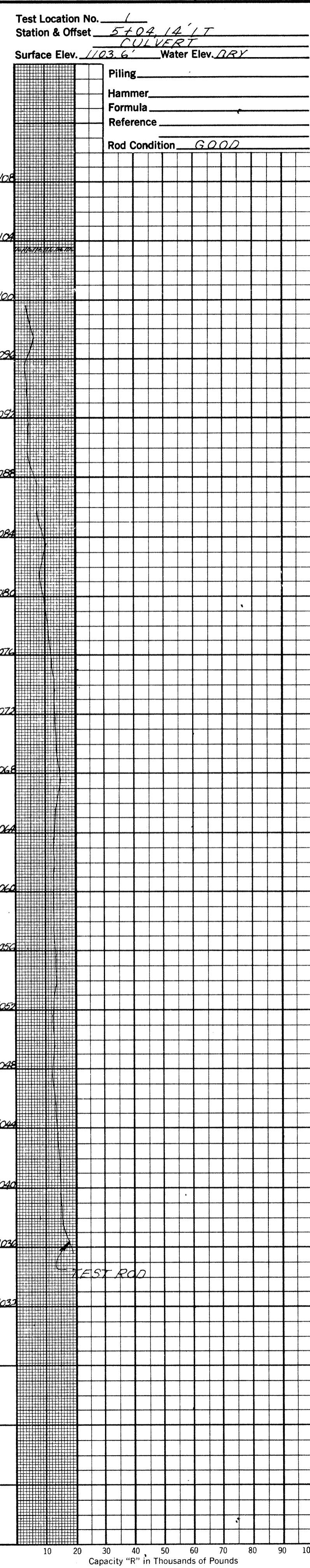
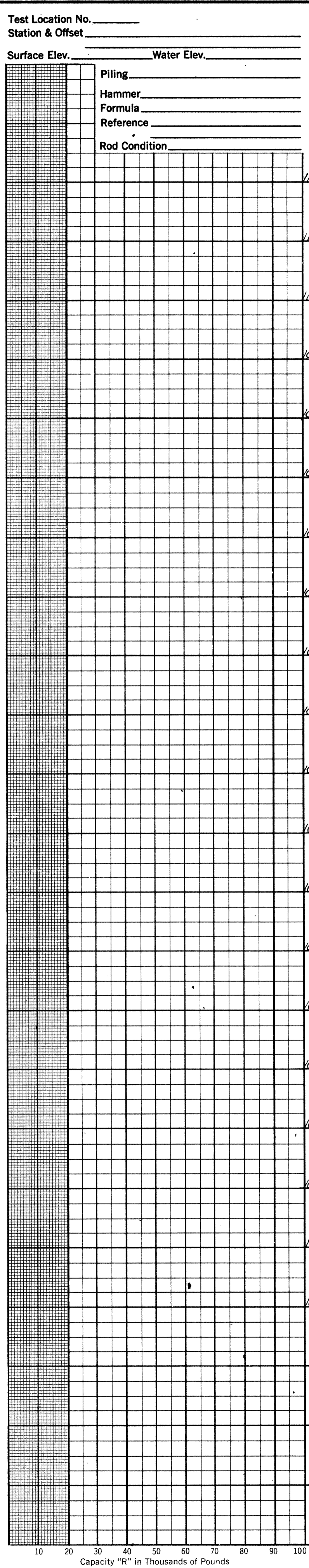
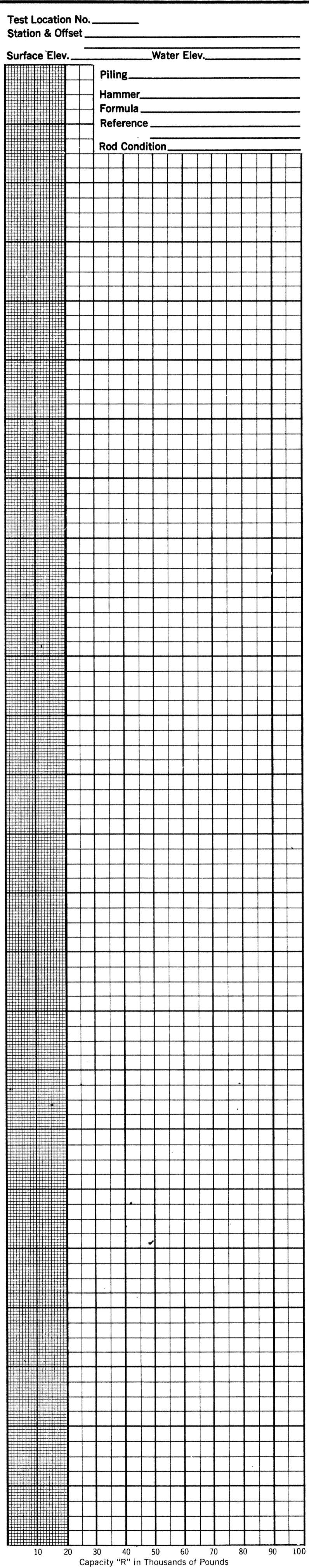
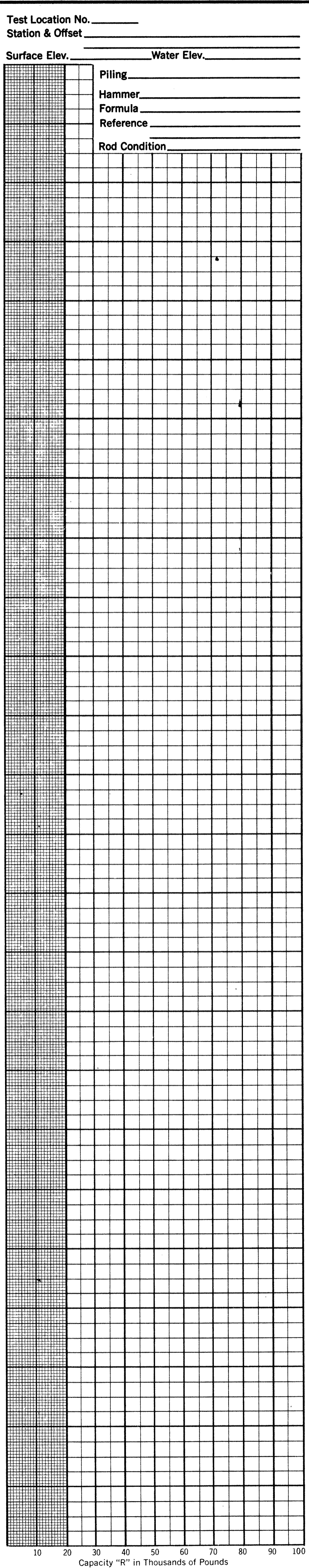
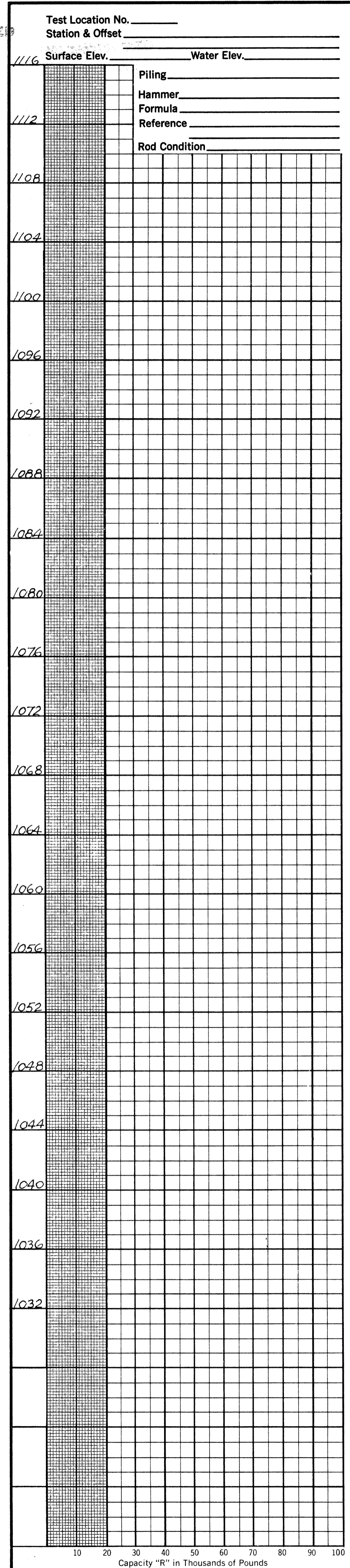
Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics							SHTL Class.			
							% Agg.	% CS.	% F.S.	% Silt	% Clay	LL	PI		W.C.		
1108.1	0																
1108.1	2																
1108.1	4																
1108.1	6	20/35			Brown Sandy Gravel	1	75	12	4	-9-	HP	HP	11				
1108.1	8																
1108.1	10	17/17			Gray Sandy Gravel	2	78	10	5	-7-	HP	HP	9				
1108.1	12																
1108.1	14																
1108.1	16	12/15			Gray Sandy Gravel	3	78	13	3	-6-	HP	HP	13				
1108.1	18																
1108.1	20	20/45			Gray Gravel	4	82	11	3	-4-	HP	HP	8				
1108.1	22																
1108.1	24																
1108.1	26	10/17			Gray Sandy Silt	5	12	5	16	39	28	22	5	16			
1108.1	28																
1108.1	30																
1108.1	32	10/11			Gray Gravelly Sandy Silt	6	V I S U A L							20	5	14	
1108.1	34																
1108.1	36	11/15			Gray Gravelly Silt	7	42	7	7	26	18	25	9	15			
1108.1	38																
1108.1	40																
1108.1	42	15/20			Gray Silt	8	0	1	1	67	31	HP	HP	20			
1108.1	44																
1108.1	46	9/7			Gray Gravelly Silt	9	22	3	4	50	21	HP	HP	26			
1108.1	48																
1108.1	50																
1108.1	52	12/10			Brown Gravel	10	85	6	4	-5-	HP	HP	12				
1108.1	54																
1108.1	56	16/16			Brown and Gray Sandy Gravel	11	V I S U A L							12			
1108.1	58																
1108.1	60																
1108.1	62	10/26			Gray and Brown Silty Sandy Gravel	12	49	31	9	-1-1-	HP	HP	9				
1108.1	64																
1108.1	66	24/25			Gray and Brown Silty Gravelly Sand	13	29	10	25	24	12	HP	HP	12			
1108.1	68																
1108.1	70																
1108.1	72	20/20			Gray Silty Sandy Gravel	14	36	9	22	23	10	HP	HP	13			

OHIO STATE HIGHWAY
 TESTING LABORATORY
 1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
 BRIDGE NO. MED-IR 271-0356 & 0356 A
 STREAM UNDER I.R. 271 & REMOEN RUAL
 SEC. MED-IR 271-0356

BORING DATA

DATE REVIEWED BY DATE
 R.F. H.R. 11/5/64



37
20
4
4

OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST. COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-IR 271-0356 & 0356 A
STREAM UNDER IR 271 & REMSEN ROAD
SEC. MED-IR 271-0.00

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C.
 CHECKED BY R.H.P.
 REVIEWED BY R.D.R.
 DATE 10-16-64

GENERAL INFORMATION

Drive Rod Penetration Sounding Tests

Drive rod penetration resistance tests constitute driving a 1.315-inch diameter steel rod, with a 45° cone point, into the ground, using a 122-pound drop-hammer with a free fall of five feet. At one or two-foot depth intervals, a measurement is taken to determine the amount of penetration achieved in three hammer drops. This reading is converted to an empirical value for capacity "R", in thousands of pounds (which is a measure of both the point resistance and frictional resistance on the rod), by using charts prepared by the Ohio Department of Highways, Bureau of Bridges, on the basis of correlation study of rod penetration with past performance of pile driving. For interpretation, a graph is prepared by plotting the value "R" against the depth at which the reading was taken, and connecting the plotted points. The curve so obtained reflects the density of subsurface materials in a manner that can be readily compared with data from similar tests at other locations on the structure site. From this comparison, the overall uniformity of subsurface condition may be evaluated.

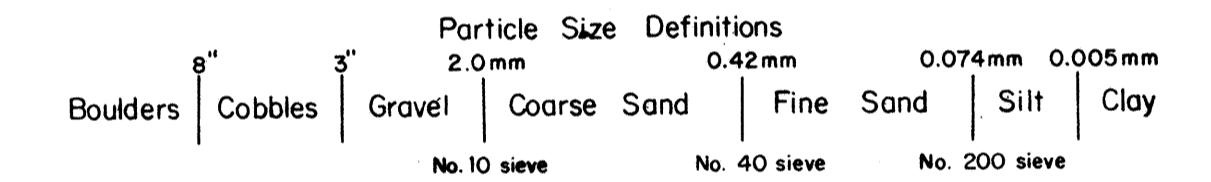
Drive Sample Borings - Drive-Press Sample Borings

Drive sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. sampler, at 2-1/2 and/or 5-foot depth intervals, driven by means of a 140-pound drop-hammer, with a free fall of 30 inches. The number of blows required to drive the sampler 12 inches is considered the standard penetration test.

Drive-press sample borings are made by means of a rotary-type drill rig, employing a 2" O.D., 1-3/8" I.D. drive sampler, and 3" O.D. thin-wall press sampler. The press sampler is advanced by continuous uniform pressure, applied by the drill rig.

The boring log sheets show a graphic plot of the information obtained, including depth and elevation of the sample, number of blows for the standard penetration tests in two 6-inch increments, depth of press samples, field sample number, sample description - based on laboratory tests and the Casagrande AC classification system - and gradation, plasticity, and moisture content determinations. Results of strength and consolidation testing, if performed, appear on separate enclosures.

At depths where materials are bouldery or gravelly to the extent that the sampler can not be driven, a wash sample is procured for visual classification, in order to determine the general character of the material. These samples are not considered sufficiently representative to warrant laboratory testing.



LEGEND

- Auger Boring Location - Plan View.
- Press and/or Drive Sample and/or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- Top of Rock
- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- Figures Beside the Boring Log in Profile Indicate the Number of Blows For Standard Penetration Test.
X = Number of Blows for First 6 Inches.
Y = Number of Blows for Second 6 Inches.
- Drive Rod Penetration Resistance Sounding Log - Profile.
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Indicates Final Measurement of Penetration, in Inches.
- Indicates Free Water Elevation.
- Indicates Static Water Elevation.

SYMBOLS OF ROCK TYPES

- Coal
- Weathered Indurated Clay
- Indurated Clay
- Weathered Shale
- Shale
- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone

GEOLOGY OF THE SITE

The structure sites are located in the dissected portion of the glaciated Allegheny Plateau, in an area where moderately deep alluvium overlies bedrock, of Pennsylvanian and Mississippian ages.

EXPLORATION

The exploration consisted of two drive sample borings and seven drive rod penetration tests, made between September 30 and October 15, 1964.

INVESTIGATIONAL FINDINGS

Borings encountered very dense to extremely dense gravels, sands, silts and boulders. The borings were terminated at 46-foot depth, elevations 1116 and 1115 feet, after penetrating in excess of 30 feet of material requiring in excess of 30 blows per foot in the standard penetration test.

Rod soundings, ceased to proposed footer elevations, as shown on the site plan, at the pier locations, met gradual increase in penetration resistance with increase in depth and were terminated because of high resistance to penetration between 21 and 34-foot depths, elevations 1141 and 1129 feet, considered to be in dense intervals of gravels, sands, and silts, as revealed by the borings.

Free water was encountered in rod sounding holes numbers 5, 6, and 7, between elevations 1150 and 1144 feet.

No test penetrated to bedrock surface.

LOG OF BORING

Date Started 10-5-64		Sampler Type SS Dia. 1 3/8"		Water Elev. _____																
Date Completed 10-6-64		Casing Length 20' Dia. 3 1/2"		Surface Elev. 1160.7'																
Boring No. B-1		Station & Offset 48+52, 15' Lt (REAR ABUTMENT)		Surface Elev. 1160.7'																
Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics										SHTL Class.			
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PL	W.C.						
1160.7	0																			
	2																			
	4																			
1155.7	6	13/15			Brown and Gray Gravelly Sandy Silt	1	21	9	18	30	22	19	2	14						
	8																			
1150.7	10	13/13			Gray Sandy Gravelly Silt	2	37	7	16	25	15	NP	NP	11						
1148.2	12																			
	14	17/30			Gray Sandy Gravelly Silt	3	34	9	14	26	17	NP	NP	9						
1145.7	16	50/*			Gray Sandy Gravelly Silt	4	37	7	14	23	19	NP	NP	10						
1143.2	18				No Sample Recovered - Boulder															
1140.7	20	25/25			Gray Silty Sandy Gravel	5	40	9	16	23	12	NP	NP	12						
1138.2	22																			
	24	23/24			Gray Sandy Gravelly Silt	6	34	7	15	26	18	17	3	7						
1135.7	26	50/*			Gray Sandy Gravelly Silt	7	18	6	11	32	33	23	7	12						
1133.2	28	50/*			Gray Sandy Gravelly Silt	8	35	10	12	20	23	21	7	10						
1130.7	30	50/*			Gray Silty Sandy Gravel	9	41	8	13	18	20	21	5	12						
	32																			
1125.7	34																			
	36	50/*			Gray Sandy Gravelly Silt	10	23	7	15	27	28	21	6	17						
	38																			
1120.7	40	25/25			Gray Gravelly Silt	11	31	2	2	38	27	22	3	19						
	42																			
	44																			
1115.7	46	24/25			Gray Silt	12	8	7	1	48	36	26	5	21						

LOG OF BORING

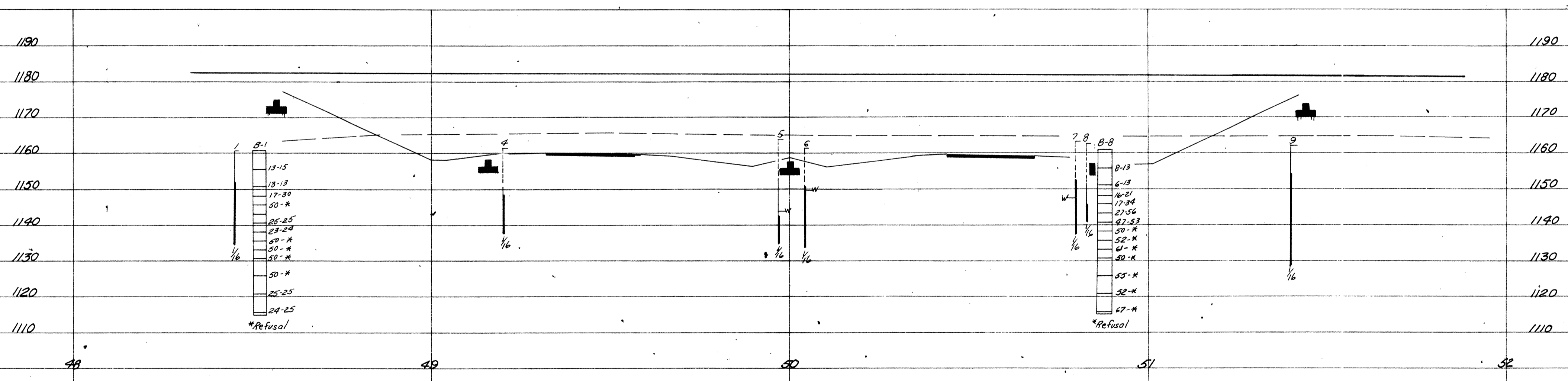
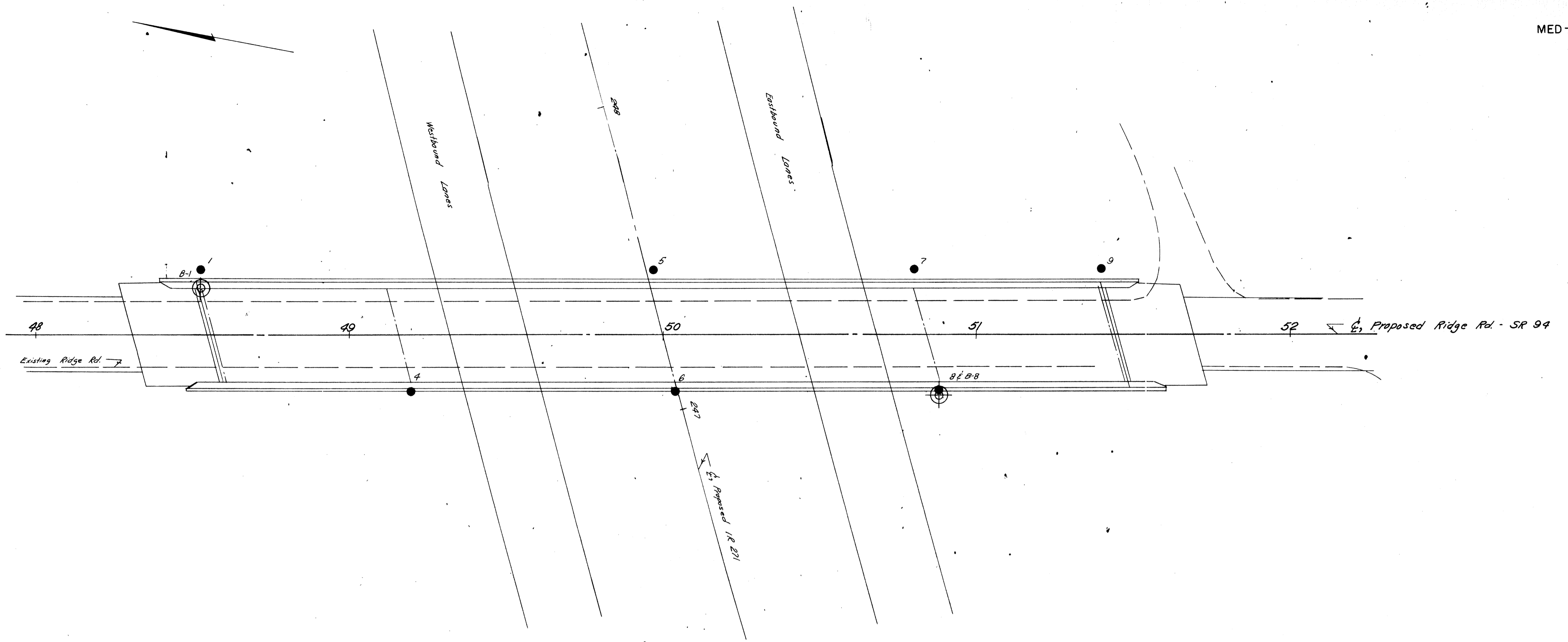
Date Started 10-15-64		Sampler Type SS Dia. 1 3/8"		Water Elev. _____																
Date Completed 10-15-64		Casing Length 25' Dia. 3 1/2"		Surface Elev. 1161.0'																
Boring No. B-8		Station & Offset 50+88, 19' Rt (FORWARD PIER)		Surface Elev. 1161.0'																
Elev.	Depth	Std. Pen. (N)	Rec. ft.	Loss ft.	Description	Sample No.	Physical Characteristics										SHTL Class.			
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PL	W.C.						
1161.0	0																			
	2																			
	4																			
1156.0	6	8/13			Brown Gravelly Sandy Silt	1	22	9	20	28	21	23	6	14						
	8																			
1151.0	10	6/13			Gray and Brown Sandy Gravelly Silt	2	41	5	13	27	14	NP	NP	12						
1148.5	12																			
	14	16/21			Gray and Brown Silty Sandy Gravel	3	46	7	10	25	12	NP	NP	12						
1146.0	16	17/34			Gray Silty Sandy Gravel	4	54	6	11	20	9	NP	NP	12						
1143.5	18	27/56			Gray Sandy Gravelly Silt	5	37	10	10	30	13	NP	NP	8						
1141.0	20	47/53			Gray Silty Sandy Gravel	6	52	7	12	22	7	NP	NP	9						
1138.5	22																			
	24	50/*			Gray Sandy Gravelly Silt	7	32	8	14	30	16	NP	NP	10						
1136.0	26	52/*			Gray Silty Sandy Gravel	8	60	10	13	8	9	NP	NP	10						
1133.5	28	61/*			Gray Silty Sandy Gravel	9	42	7	14	21	16	NP	NP	8						
1131.0	30																			
	32	50/*			Gray Sandy Gravelly Silt	10	32	8	18	28	14	NP	NP	7						
	34																			
1126.0	36	55/*			Gray Gravelly Sandy Silt	11	23	9	16	37	15	NP	NP	10						
	38																			
1121.0	40	52/*			Gray Sandy Gravelly Silt	12	28	7	9	37	19	NP	NP	8						
	42																			
	44																			
1116.0	46	67/*			Gray Silty Sandy Gravel	13	38	8	15	22	17	19	5	10						

NOTE: Information shown by this subsurface investigation was obtained solely for the use in establishing design controls for the project. The State of Ohio does not guarantee the accuracy of this data and it is not to be construed as a part of the plans governing construction of the project.

OHIO STATE HIGHWAY
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1620 WEST BROAD STREET, COLUMBUS 23, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. MED-IR 271-0406
IR 271 UNDER RIDGE RD.-SR 94
SEC. MED-IR 271-0.00

CHECKED BY L.N.L. REVIEWED BY D.E.M. DATE 10/28/64



OHIO STATE HIGHWAY TESTING LABORATORY
1620 WEST BROAD ST., COLUMBUS 23, OHIO

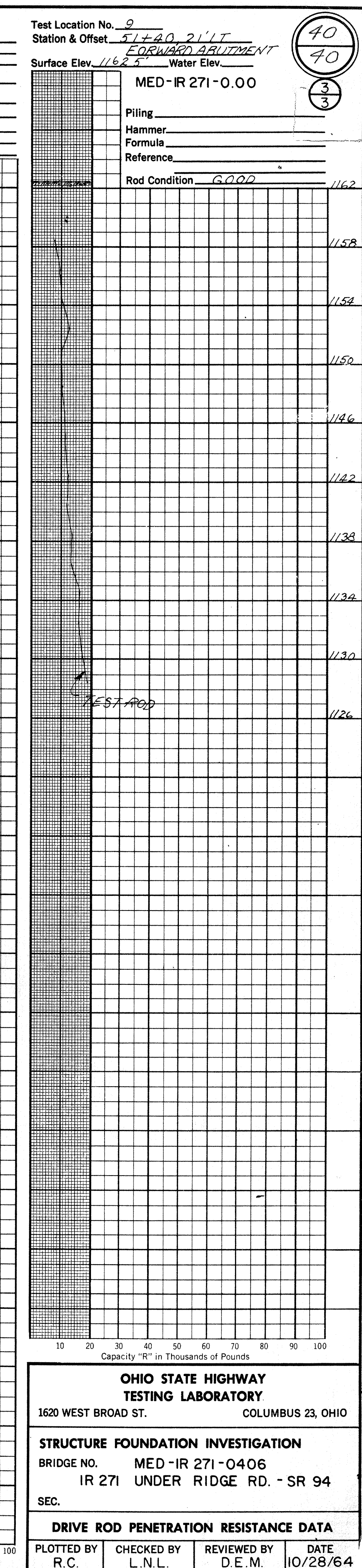
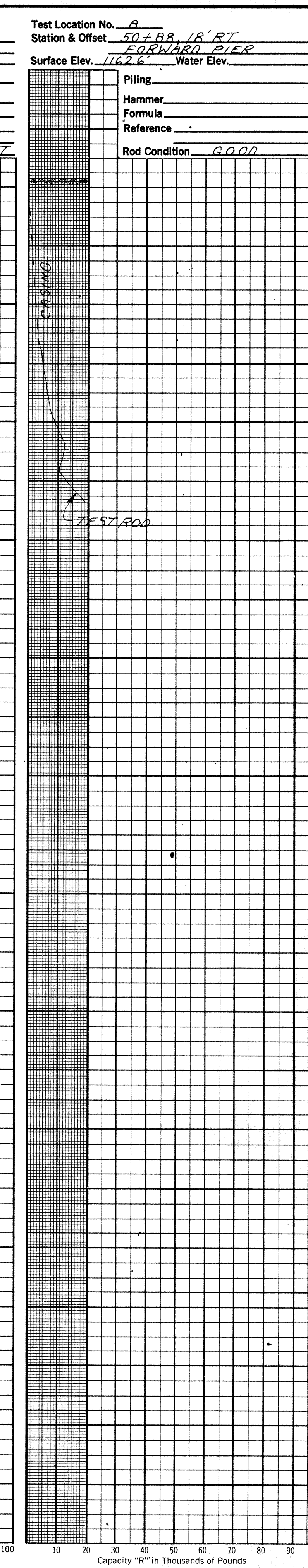
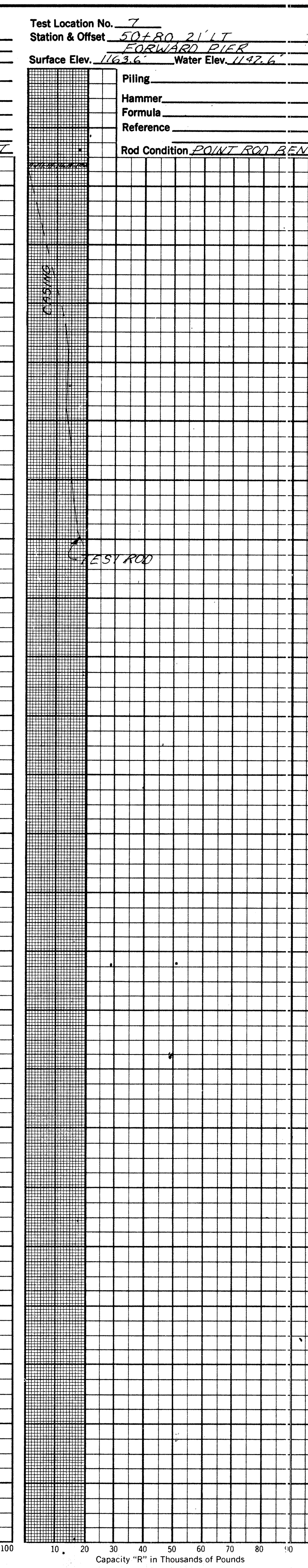
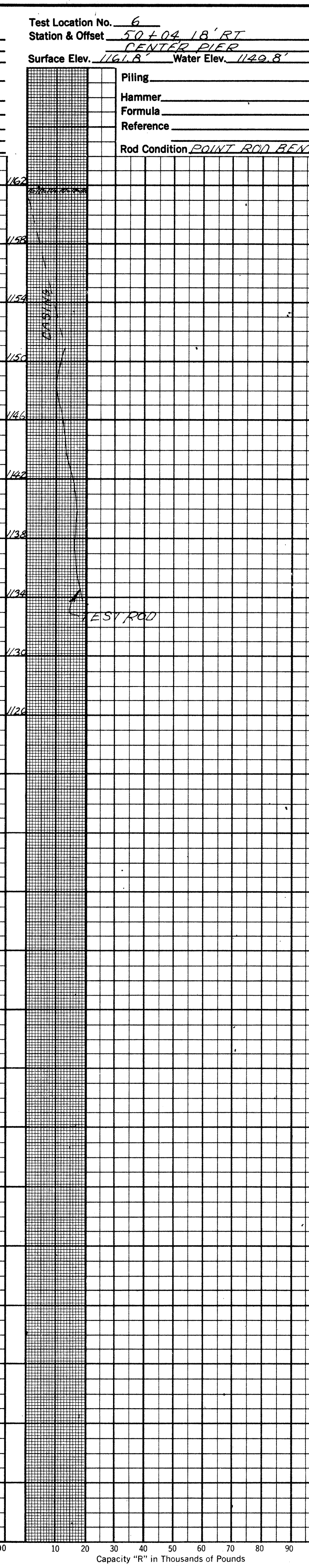
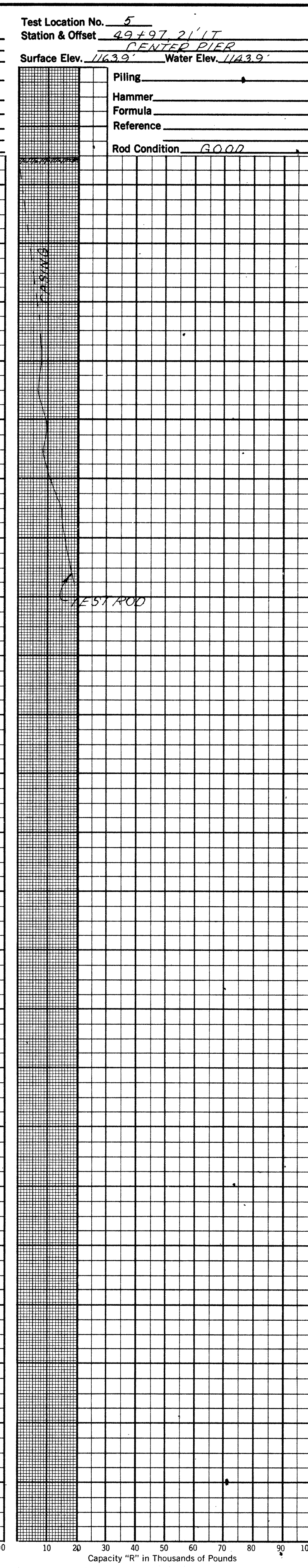
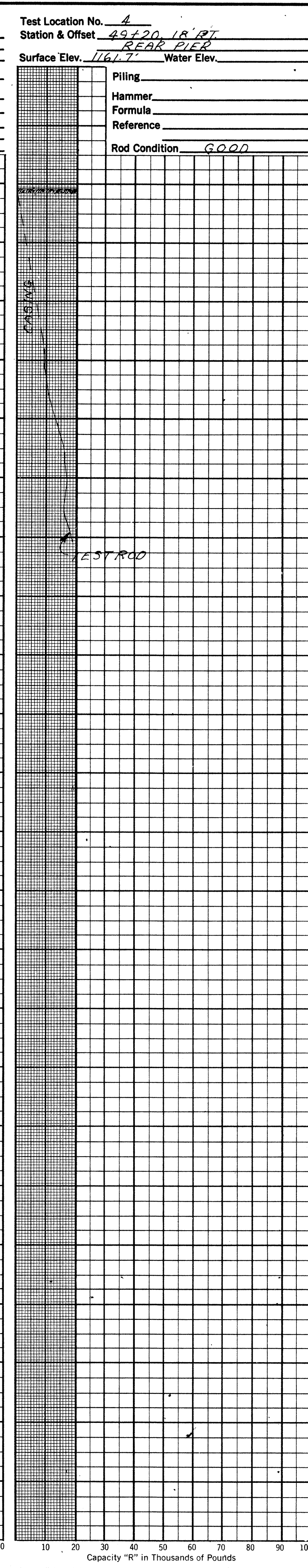
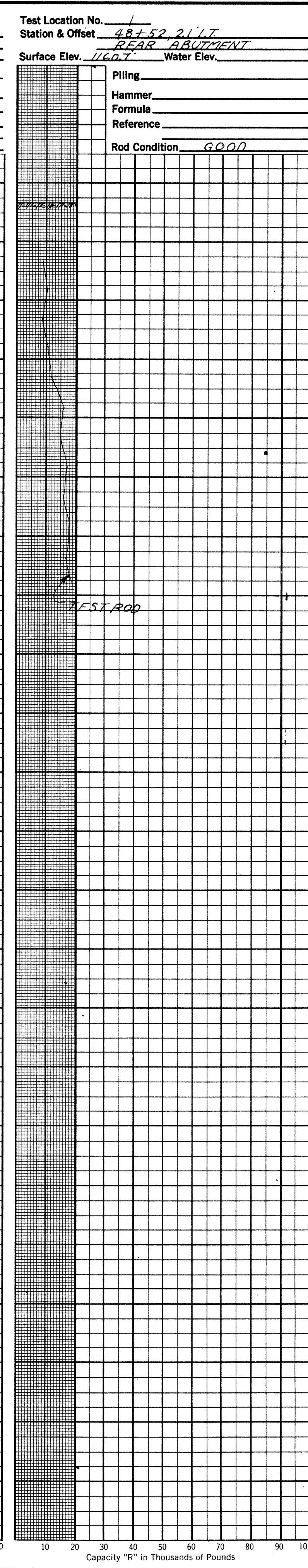
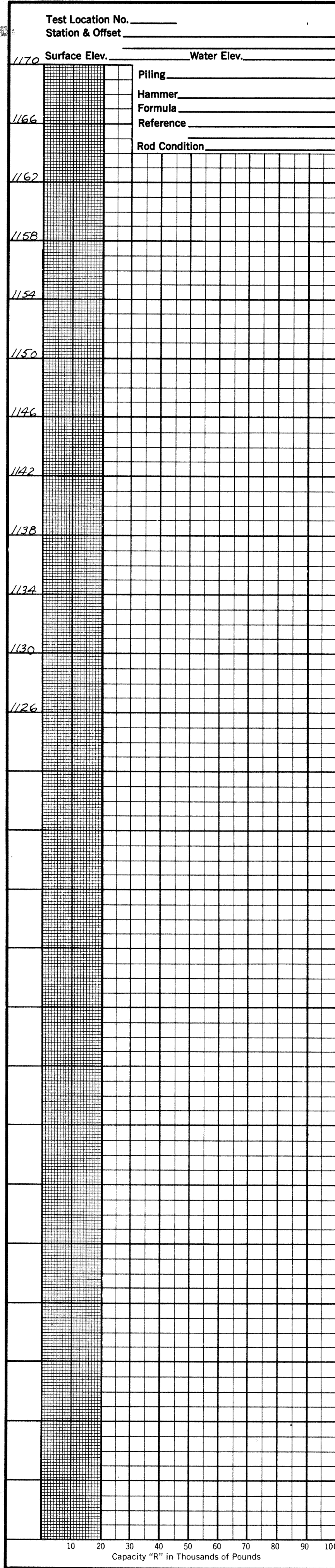
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SEC. MED-IR 271-0.00

PLAN AND PROFILE

DRAWN BY R.L.F.	CHECKED BY L.N.L.	REVIEWED BY D.E.M.	DATE 10/28/64
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SCALE: 1"=20'

78-114
1009-1-64
MICROFILMED
JUN 6 1986



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SEC.

DRIVE ROD PENETRATION RESISTANCE DATA

PLOTTED BY R.C. CHECKED BY L.N.L. REVIEWED BY D.E.M. DATE 10/28/64