CHIEF DRAFTSM.	LOCATING ENG'R.	DESIGN ENG'R.	BRIDGE ENG'R.	CONSTRUCTION ENG'R.	B. P. R.
FRB	G.H.S	S.E.B	W.C.T.	E.B.K	

Sub 4/.4/66

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35 2-(12)~~(13)~~091		1	259

REV. GPI STD. 4-26-67
REV GUARD RAIL STD. 4-28-67

STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

FEDERAL AID PROJECT NO. I-35-2(12)~~(13)~~091
INTERSTATE HIGHWAY NO. 35 AS BUILT 2-2-71

McCLAIN COUNTY

CONTROL SECTION NO. 44-05

INDEX OF SHEETS

SHEET NO.	
1	TITLE SHEET
2-3	TYPICAL SECTIONS
4-8	FUNCTIONAL SHEETS
9	SUMMARY SHEET
9A	SUMMARY SHEET
10	SUMMARY OF PAY QUANTITIES (ROADWAY)
10A	SUMMARY OF PAY QUANTITIES (BRIDGE)
11	STD. GCN-2-5
12	STD. CIS-1-1
13	STD. TCD-1-0
14	STD. TCD-2-0
15-31	PLAN & PROFILE SHEETS
32-34	GEOMETRIC LAYOUT SHEETS
35	DRAINAGE DETAIL SHEET
36	RAMP DETAILS
37	DELETED
38	STD. SHC-4-3
39	STD. DU-1-1
40	STD. GR-2-3
41	STD. MD-2-10
42	STD. DC-1-5
43	STD. SE-1-3
44	STD. RWF-1-8
45	STD. RWF-2-1
46	STD. SU-EL-2-0
47	STD. ASCD-2-2
48	STD. PUD-1-0
49	STD. VEC-5-0
50	STD. BC-5S_4 R.F.
51	STD. BC-5
52	STD. BC-5S_4 L.F.
53	STD. BC-6_2
54	STD. BC-6S_3 R.F.
55	STD. BC-6S_3 L.F.
56	STD. BC-6S_4 R.F.
56A	STD. BC-6S_4 L.F.
57	STD. MPA-1-2
58	STD. MPA-1A-0
59	STD. CP-2
60	STD. CP-2_1-0
61	STD. CP-2S_1-0
62	STD. CP-2S_2-0
63	STD. S[illegible] 1-0
64	STD. DELETED
65	STD. CEP-1_1-0
66-157	CROSS SECTIONS
158-167	DELETED

Sht. No. 10B Supplemental Detail of Curb Revisions

INDEX OF SHEETS - BRIDGE

SHEET NO.	
168	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #2
169	DETAILS OF SUPERSTR. & SLAB LAYOUT
170	DETAILS OF STRUCTURAL STEEL
171-173	DETAILS OF SLAB REINFORCING
174	DETAILS OF PIER & ABUT. LAYOUT
175	DETAILS OF ABUT. NO. 1
176	DETAILS OF ABUT. NO. 2
177	DETAILS OF ABUT. WING WALLS
178	DETAILS OF PIERS
179	DETAILS OF APPROACH SLABS
180	DETAILS OF 4" CONCRETE SLOPE WALLS
181	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #17

INDEX OF SHEETS - BRIDGE (CONT)

SHEET NO.	
182	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #18
183	DETAILS OF SUPERSTRUCTURE
184	DETAILS OF ABUTS. NO. 1 LT. & 2 RT.
185	DETAILS OF ABUTS. NO. 1 RT. & 2 LT.
186	DETAILS OF PIERS
187	DETAILS OF APPROACH SLABS
188	DETAILS OF 4" CONCRETE SLOPE WALLS
189	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #25
190	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #26
191	DETAILS OF SUPERSTRUCTURE
192	DETAILS OF ABUTS. NO. 1 LT. & 2 RT.
193	DETAILS OF ABUTS. NO. 1 RT. & 2 LT.
194	DETAILS OF PIERS
195	DETAILS OF APPROACH SLABS
196	DETAILS OF 4" CONCRETE SLOPE WALLS
197	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. # 38
198	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #39
199	DETAILS OF SUPERSTRUCTURE
200	DETAILS OF SLAB REINFORCING
201	DETAILS OF PLATE GIRDERS
202	DELETE
203	DETAILS OF STRUCTURAL STEEL
204	DETAILS OF SHOES & EXP. DEVICE
205	DETAILS OF ABUTMENT NO. 1 RT. & NO. 2 LT.
206	DETAILS OF ABUTMENT NO. 1 LT. & NO. 2 RT.
207	DELETE
208	DELETE
209	DETAILS OF PIERS
210	DELETE
211	DETAILS OF APPROACH SLABS
212	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #40 ALT. # 1
213	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #41 ALT. # 1
214	DETAILS OF SUPERSTRUCTURE
215	DETAILS OF SLAB REINFORCING
216	DETAILS OF ABUT. NO. 1 RT.
217	DETAILS OF ABUT. NO. 2 RT.
218	DETAILS OF ABUT. NO. 1 LT.
219	DETAILS OF ABUT. NO. 2 LT.
220	DETAILS OF PIERS
221	DETAILS OF APPROACH SLABS
222	DETAILS OF 4" CONCRETE SLOPE WALL
223	DETAILS OF CHANNEL CHANGE & BANK PROTECTION
224	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #40 ALT. # 2
225	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #41 ALT. # 2
226	DETAILS OF SUPERSTRUCTURE
227	DETAILS OF SLAB REINFORCING
228	DETAILS OF PRESTRESSED CONC. BEAMS
229	DETAILS OF ABUT. NO. 1 LT.
230	DETAILS OF ABUT. NO. 2 LT.
231	DETAILS OF ABUT. NO. 1 RT.
232	DETAILS OF ABUT. NO. 2 RT.
233	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #44
234	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #45
235	DETAILS OF SLAB & SUPERSTRUCTURE
236	DETAILS OF ABUT. NO. 1 RT. & 2 LT.
237	DETAILS OF ABUT. NO. 1 LT. & 2 RT.
238	DETAILS OF PIERS
239	DETAILS OF APPROACH SLABS
240	DETAILS OF 4" CONCRETE SLOPE WALLS
241	SPEC. DETAILS OF R.C. BOX - STR. #47
242	GEN. ELEV. PLAN & SUMM. OF QUANTS - STR. #55
243	DETAILS OF SUPERSTRUCTURE
244	DETAILS OF STRUCTURAL STEEL
245	DETAILS OF SLAB REINFORCING
246	DETAILS OF ABUTMENTS
247	DETAILS OF PIERS
248	DETAILS OF 4" CONCRETE SLOPE WALLS
249	GEN. ELEV. PLAN & SUMM. OF QUANTS. STR. #61 (LT)
249A	GEN. ELEV. PLAN & SUMM. OF QUANTS. STR. #62 (RT)
250	DETAILS OF SUPERSTRUCTURE
251	DETAILS OF STRUCTURAL STEEL
252	DETAILS OF SLAB REINF. (SIMPLE SPANS)
253	DETAILS OF SLAB REINF. (CONT. SPANS)
254	DETAILS OF ABUT. NO. 1 LT. STR.
254A	DETAILS OF ABUT. NO. 2 LT. STR.
255	DETAILS OF ABUT. NO. 1 RT. STR.
255A	DETAILS OF ABUT. NO. 2 RT. STR.
256	DETAILS OF PIER NO. 1 LT. STR.
256A	DETAILS OF PIER NO. 2 LT. STR.
257	DETAILS OF PIERS NO. 3 LT., 1 RT. & 3 RT. STR.
257A	DETAILS OF PIER NO. 2 RT. STR.
258	DETAILS OF APPROACH SLABS
259	DETAILS OF 4" CONC. SLOPE WALLS
259A	STD. ISAJ-[illegible]
259B	STD. PSAJ-5
259C	STD. PTR-1-14
259D	STD. P-1-10
259E	STD. SED_1-12
259F	STD. BC-13 S_3 R. F.-5

SCALES

PLAN 1" = 100'
PROFILE HOR. 1" = 100'
VER. 1" = 10'
LAYOUT MAP 1" = 3000'
LEVEL DATUM IS MEAN SEA LEVEL (U.S.C. & G.S.)
BEARINGS FROM OBSERVATION ON POLARIS

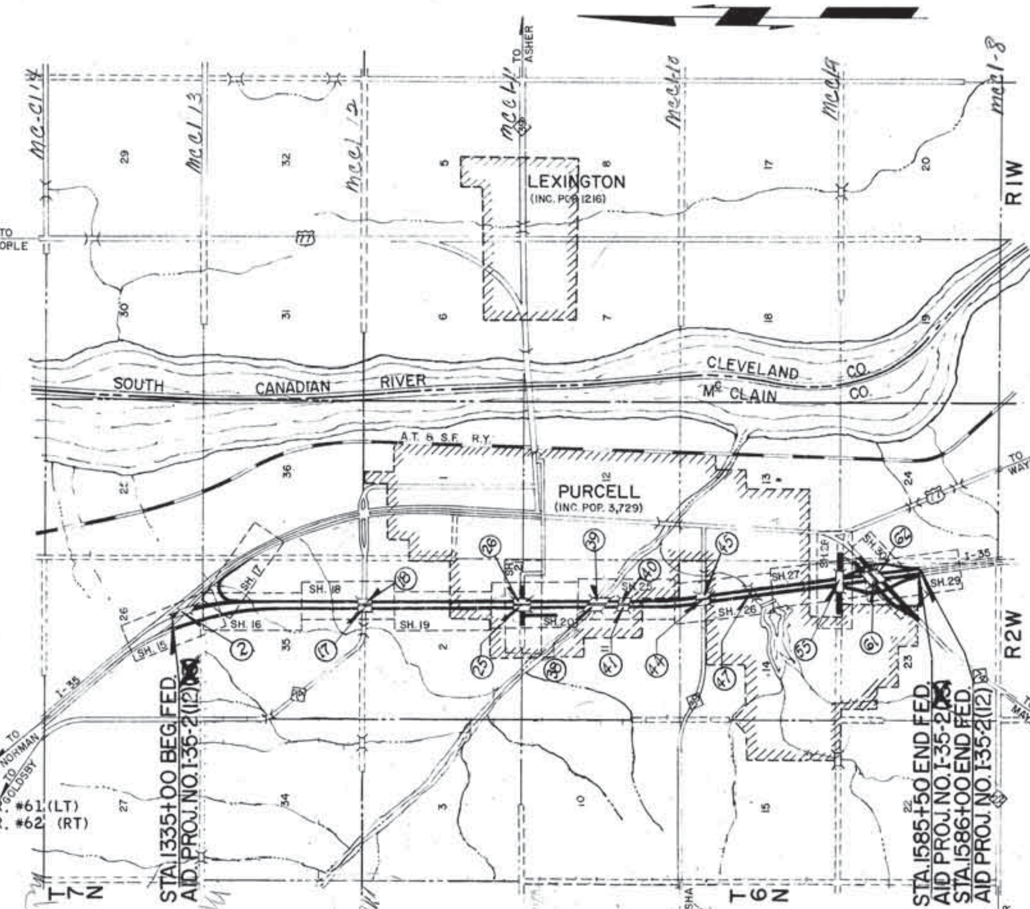
CONVENTIONAL SIGNS

- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP LINES
- SECTION LINES
- QUARTER-SECTION LINES
- FENCES
- BASE LINE
- RIGHT-OF-WAY LINES
- GROUND LINES
- +2% -2% GRADE LINES
- TRAVELED ROADS
- CULVERTS & BRIDGES
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- OIL WELLS
- RIGHT OF WAY MARKERS IN PLACE
- RIGHT OF WAY MARKERS — REMOVE & RESET
- RIGHT OF WAY MARKERS — NEW
- CONTROLLED ACCESS
- RIGHT-OF-WAY FENCE

1959 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION GOVERN, APPROVED BY BUREAU OF PUBLIC ROADS JANURARY 4, 1960. SUPPLEMENTAL SPECIFICATIONS TO 1959 STANDARD SPECIFICATIONS GOVERN OVER STANDARD SPECIFICATIONS. SPECIAL PROVISIONS GOVERN OVER STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS.

ENGINEER	CHECKER	SQUAD BOSS	DATE	REV.	CONST. DEPT.	GEOM. DESIGN	TRAFFIC DEPT.	DATE	REV.
	W. J. Criner	R.B. HANKINS				R.W.J.		4/6/66	

P.E. NO. I-35-2(23)091



PROJECT LENGTH BASED ON RIGHT LANE

	GRADING 2(12)		SURFACING 2~~(13)~~	
ROADWAY LENGTH	24,205.75 FT.	4.584 MI.	FT.	MI.
BRIDGE LENGTH	572.25 FT.	0.108 MI.	0.00 FT.	0.000 MI.
OVERPASS LENGTH (HWY)(HWY)	322.00 FT.	0.060 MI.	0.00 FT.	0.000 MI.
* OVERPASS LENGTH (HY-HY) LINE "D"	193.97 FT.	0.036 MI.	0.00 FT.	0.000 MI.
UNDERPASS LENGTH (HWY-HWY)	0.00 FT.	0.000 MI.	0.00 FT.	0.000 MI.
PROJECT LENGTH		4.752 MI.		MI.

EXCEPTIONS — NONE
EQUATIONS — NONE

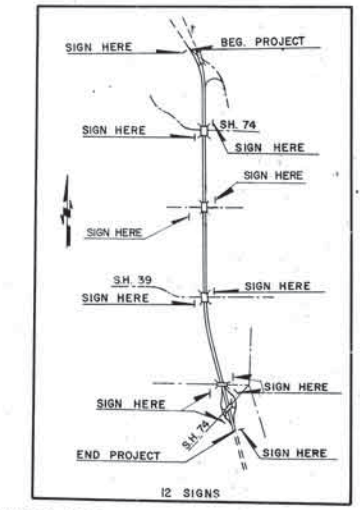
* NOT IN PROJECT LENGTH

Stru. No.		Station
Stru. No. 2	Begin Approach Slab	Sta. 1342+46.41
	Begin Bridge	Sta. 1342+75.99
	Bridge Length = 193.97	
	End Bridge	Sta. 1344+69.96
	End Approach Slab	Sta. 1344+99.33
Stru. No. 17	Begin Approach Slab	Sta. 1399+85.20
	Begin Bridge	Sta. 1400+05.20
	Bridge Length = 107.0'	
	End Bridge	Sta. 1401+12.20
	End Approach Slab	Sta. 1401+32.20
Stru. No. 18	Begin Approach Slab	Sta. 1399+85.20
	Begin Bridge	Sta. 1400+05.20
	Bridge Length = 107.0	
	End Bridge	Sta. 1401+12.20
	End Approach Slab	Sta. 1401+32.20
Stru. No. 25	Begin Approach Slab	Sta. 1452+58.31
	Begin Bridge	Sta. 1452+78.31
	Bridge Length = 107.0	
	End Bridge	Sta. 1453+85.31
	End Approach Slab	Sta. 1454+05.31
Stru. No. 26	Begin Approach Slab	Sta. 1452+58.31
	Begin Bridge	Sta. 1452+78.31
	Bridge Length = 107.0	
	End Bridge	Sta. 1453+85.31
	End Approach Slab	Sta. 1454+05.31
Stru. No. 38	Begin Approach Slab	Sta. 1475+64.92
	Begin Bridge	Sta. 1475+94.42
	Bridge Length = 403.17	
	End Bridge	Sta. 1479+97.58
	End Approach Slab	Sta. 1480+21.08
Stru. No. 39	Begin Approach Slab	Sta. 1476+34.92
	Begin Bridge	Sta. 1476+58.42
	Bridge Length = 403.17	
	End Bridge	Sta. 1480+61.58
	End Approach Slab	Sta. 1480+91.08
Stru. No. 40 Alt. No. 1 & 2	Begin Approach Slab	Sta. 1483+96.61
	Begin Bridge	Sta. 1484+17.97
	Bridge Length = 121.0	
	End Bridge	Sta. 1485+38.99
	End Approach Slab	Sta. 1485+63.81
Stru. No. 41 Alt. No. 1 & 2	Begin Approach Slab	Sta. 1483+56.19
	Begin Bridge	Sta. 1483+81.01
	Bridge Length = 121.0	
	End Bridge	Sta. 1485+02.03
	End Approach Slab	Sta. 1485+23.39
Stru. No. 44	Begin Approach Slab	Sta. 1512+77.85
	Begin Bridge	Sta. 1512+97.85
	Bridge Length = 108.0	
	End Bridge	Sta. 1514+05.85
	End Approach Slab	Sta. 1514+25.85
Stru. No. 45	Begin Approach Slab	Sta. 1512+85.93
	Begin Bridge	Sta. 1513+05.93
	Bridge Length = 108.0	
	End Bridge	Sta. 1514+13.93
	End Approach Slab	Sta. 1514+33.93
Stru. No. 47	Begin Bridge	Sta. 1529+39.96
	Bridge Length = 48.08'	
	End Bridge	Sta. 1529+88.04

Stru. No. 55	Under Pass	℄ Sta. 1559+63.81 (I-35)
Stru. No. 61	Under Pass	℄ Sta. 1572+16.13 (I-35)
Stru. No. 62	Under Pass	℄ Sta. 1572+96.21 (I-35)

For Sheets No. 15-21, 23-25, 27, 29, 30, 32, 34, & 36 This Project See Sheets No. 16-28, 30, 31 & 32 on F. A. P. No. I-35-2 (13) 091

GRADE CROSSINGS	0
GRADE CROSSINGS ELIMINATED	0
BY SEPARATION — OVERPASS	0
BY SEPARATION — UNDERPASS	0
BY RELOCATION	0
GRADE CROSSINGS REMAINING	0



LOCATION OF CONSTRUCTION IDENTIFICATION SIGNS
(BY GRADING CONTRACTOR SEE STD. CIS-1)

DESIGN DATA

ADT - 1966	= 9,725.
ADT - 1986	= 22,900.
(DHV)	= 2,748.
D	= 55 %
T(ADT)	= 13%
V	= 70 MPH

APPROVED
THIS [redacted] DAY OF [redacted]
[redacted]
CHIEF ENGINEER
OKLA. DEPARTMENT OF HIGHWAYS

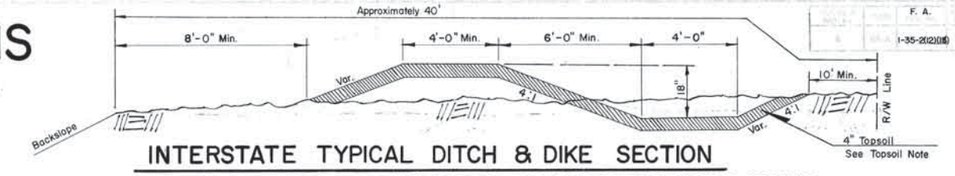
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED DATE [redacted]
[redacted]
DIVISION ENGINEER

S.W.O. NO. 2170 (1)

K+E 186 IMPERIAL TRACING CLOTH

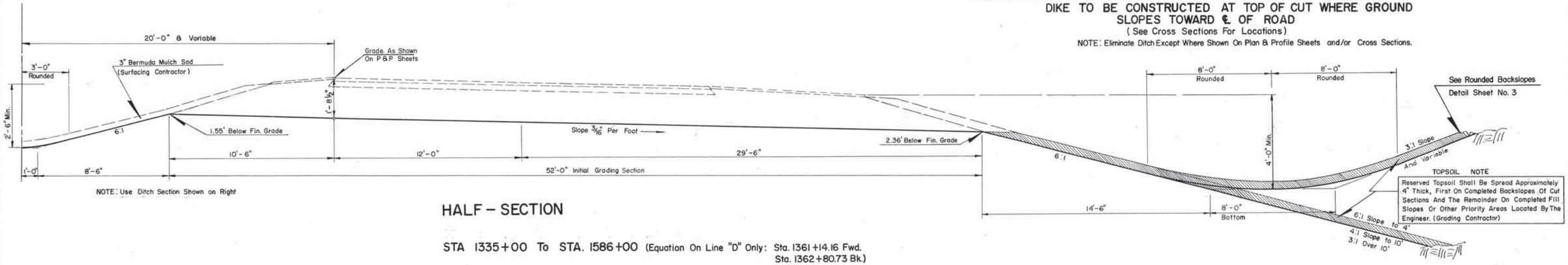
TYPICAL SECTIONS



INTERSTATE TYPICAL DITCH & DIKE SECTION

DIKE TO BE CONSTRUCTED AT TOP OF CUT WHERE GROUND SLOPES TOWARD ℄ OF ROAD
(See Cross Sections For Locations)

NOTE: Eliminate Ditch Except Where Shown On Plan & Profile Sheets and/or Cross Sections.

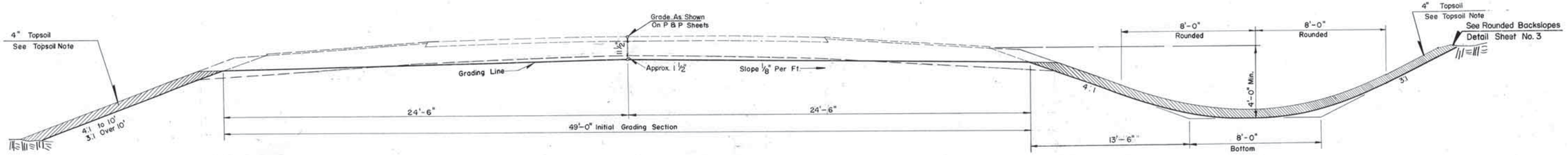


NOTE: Use Ditch Section Shown on Right

TOPSOIL NOTE
Reserved Topsoil Shall Be Spread Approximately 4" Thick, First On Completed Backslopes Of Cut Sections And The Remainder On Completed Fill Slopes Or Other Priority Areas Located By The Engineer. (Grading Contractor)

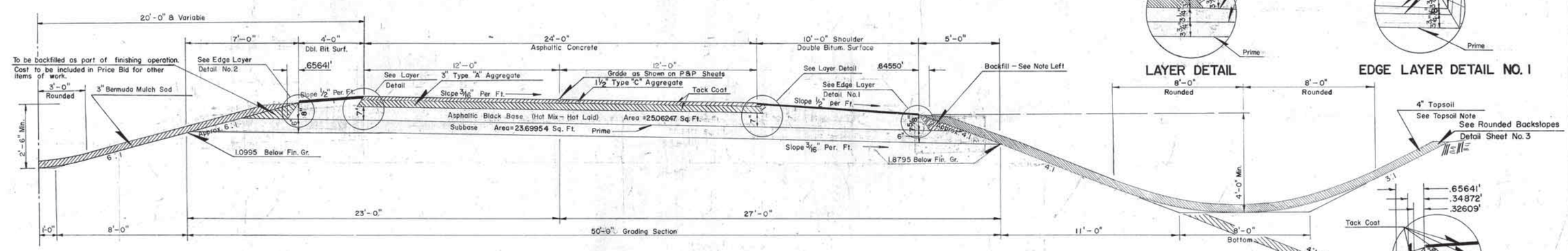
HALF – SECTION

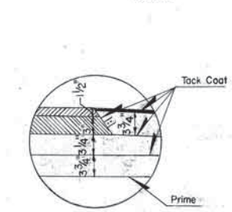
STA 1335+00 To STA. 1586+00 (Equation On Line "D" Only: Sta. 1361+14.16 Fwd. Sta. 1362+80.73 Bk.)



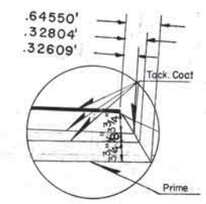
ADAMS STREET

I-35 Sta. 1559+63.81

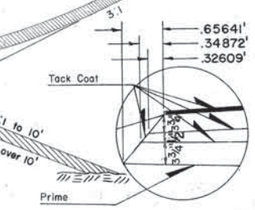




LAYER DETAIL



EDGE LAYER DETAIL NO. 1



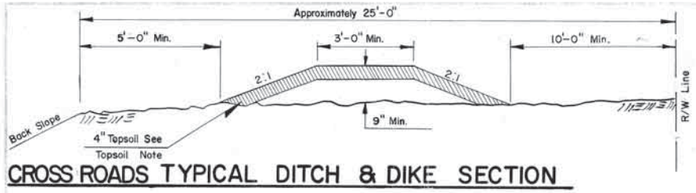
EDGE LAYER DETAIL NO. 2

SH 74 (SOUTH)

I-35 Sta. 1572+96.31
Grading and Surfacing To Be Done By Grading Contractor.

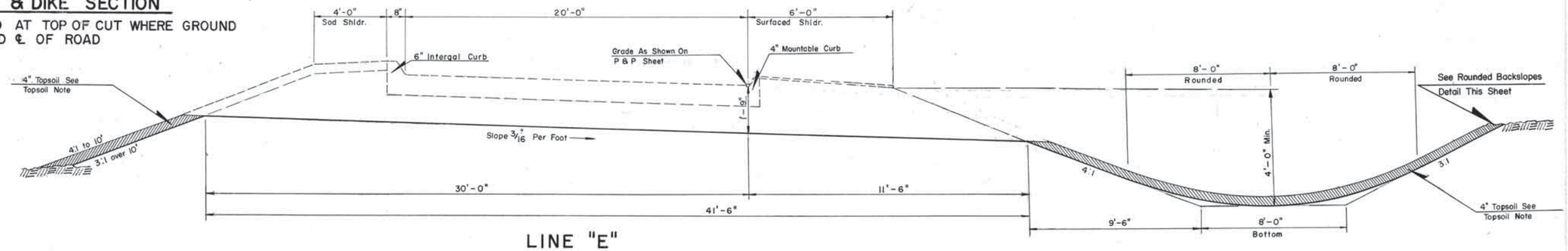
THICKNESS DIMENSIONS ARE APPROXIMATE: THE TOLERANCES OF THE GOVERNING SPECIFICATIONS WILL CONTROL.

TYPICAL SECTIONS



CROSS ROADS TYPICAL DITCH & DIKE SECTION

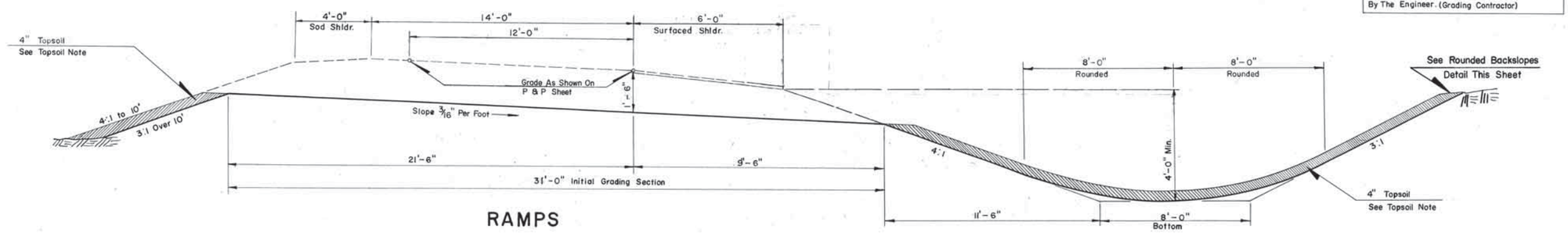
DIKE TO BE CONSTRUCTED AT TOP OF CUT WHERE GROUND SLOPES TOWARD ℄ OF ROAD



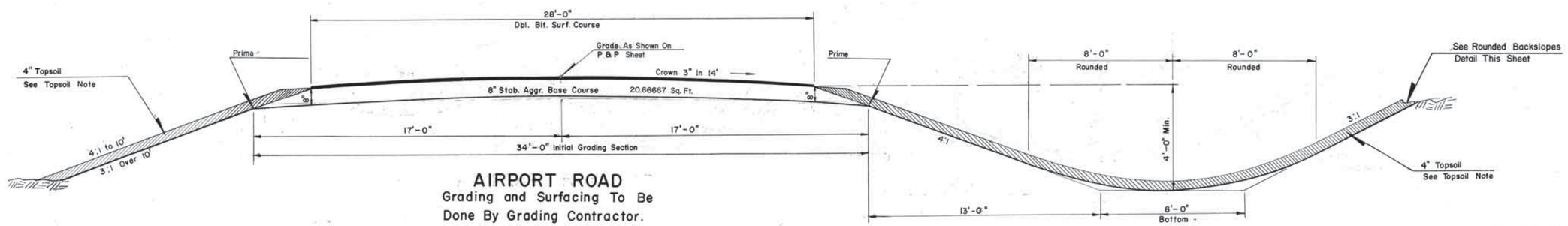
LINE "E"

TOPSOIL NOTE

Reserved Topsoil Shall Be Spread Approximately 4" Thick, First On Completed Backslopes Of Cut Sections And The Remainder On Completed Fill Slopes Or Other Priority Areas Located By The Engineer. (Grading Contractor)

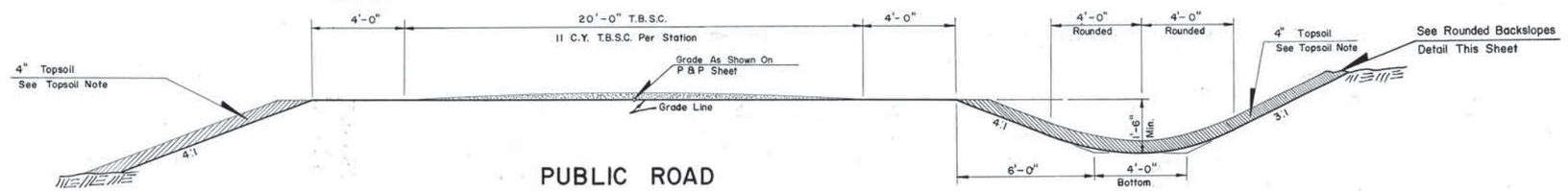


RAMPS

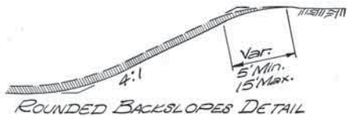


AIRPORT ROAD

Grading and Surfacing To Be Done By Grading Contractor.

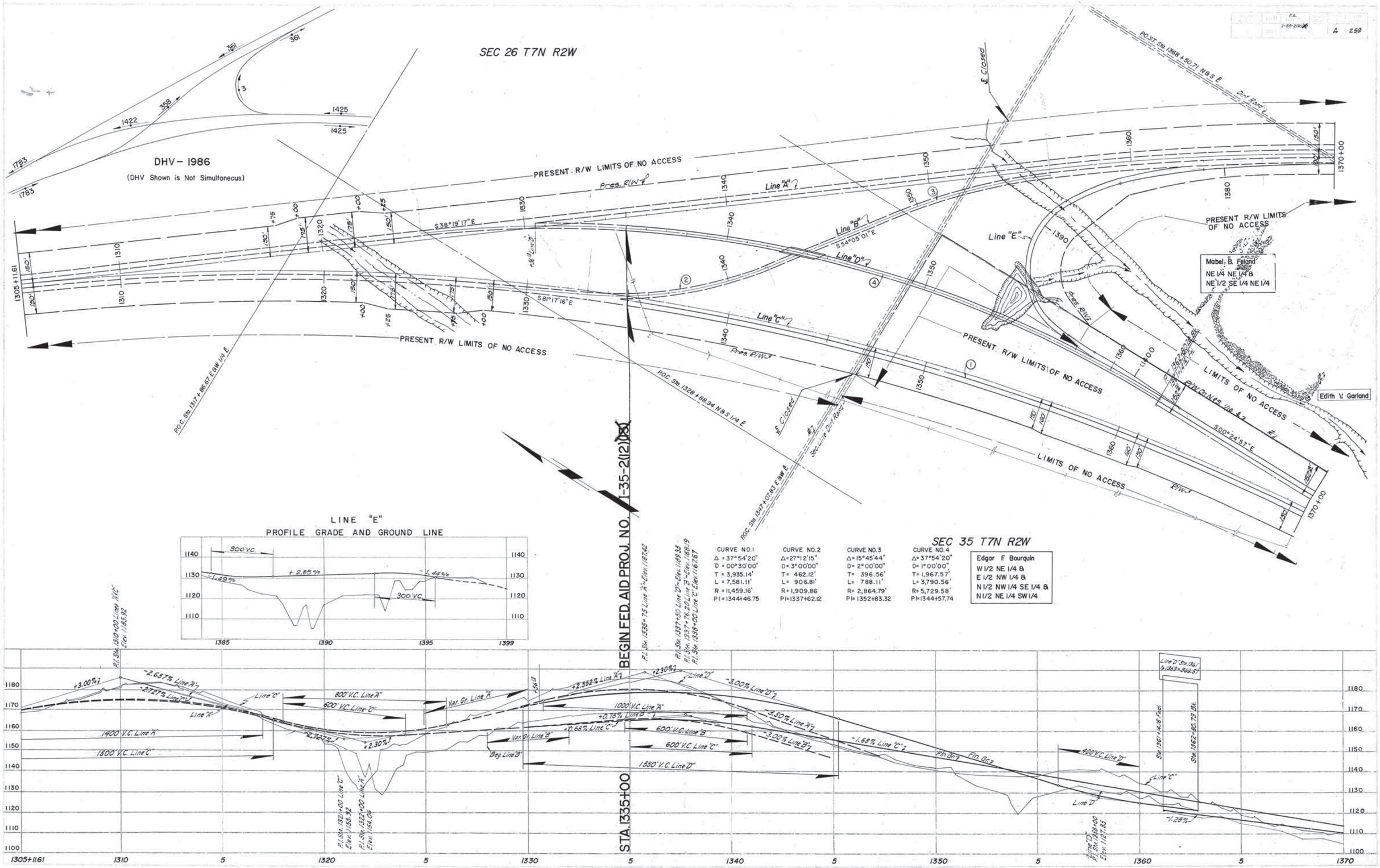


PUBLIC ROAD



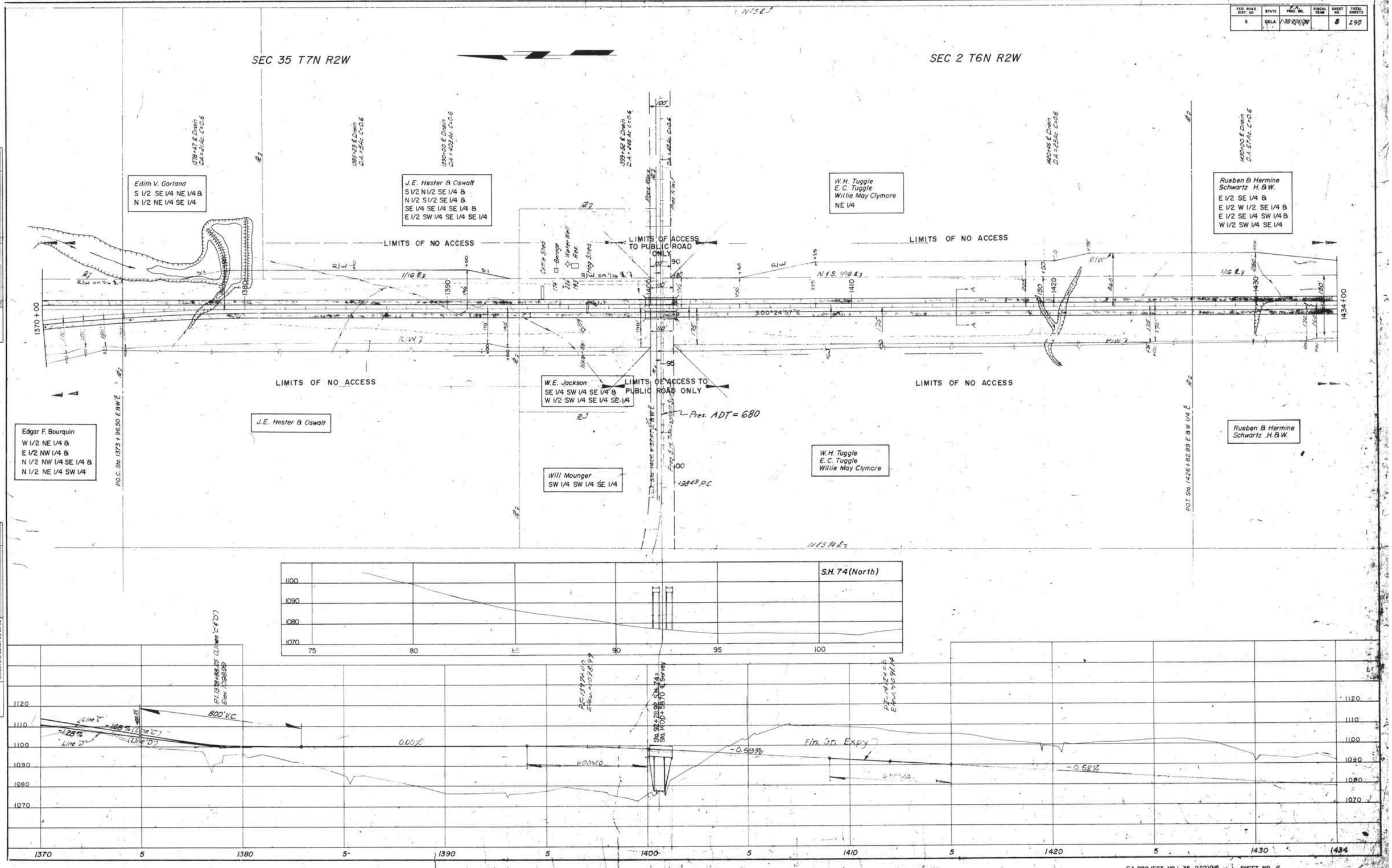
ROUNDED BACKSLOPES DETAIL

Intersection to be rounded as part of finishing operations. Cost to be included in other items of the work.



F.A. PROJECT NO. I-35-2(12)(X) SHEET NO. 4

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)(08)		8	259



PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED — NOTE BOOK — NO. — BY — DATE

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / B.M.'s NOTED / STRUCTURE NOTATIONS OK'D — NOTE BOOK — NO. — BY — DATE

F.A. PROJECT NO. I-35-2(12)(08) SHEET NO. 5

FED. ROAD DIST. NO.	STATE	FA. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)(126)		6	259

Revised R/W 1-6-65
Add'l R/W No. & So. of Adams St. East of I-35.
Add'l R/W No. of Adams St. W. of I-35
Rev. R/W Lt of Ramp A 1-20-65

SEC 2 T6N R2W

SEC 11 T6N R2W

SUNSET HEIGHTS ADDITION

Rueben & Hermine Schwartz H.&W.

LIMITS OF ACCESS TO PUBLIC ROAD ONLY

CORPORATE CITY LIMIT PURCELL as of July 20, 1957

James C. Nance
W 1/2 NE 1/4 NE 1/4 &
E 1/2 NW 1/4 NE 1/4

LIMITS OF NO ACCESS

Helen Hine & Loyd J. Hine

WALNUT CREEK

Temp R/W

Water Well & Electric Pump City of Purcell

R/W On 1/16 ℄

N.&S. 1/16 ℄

S00°24'57"E

Cattle Shed

Barn

Water Well

James C. Nance

LIMITS OF ACCESS TO PUBLIC ROAD ONLY

Ella C. Strassberger
NE 1/4 NW 1/4 SE 1/4
SE 1/4 SW 1/4 NE 1/4

Overflow Channel

Cobain Channel R/W

Rueben & Hermine Schwartz H.&W.
E 1/2 SE 1/4 &
E 1/2 W 1/2 SE 1/4 &
E 1/2 SE 1/4 SW 1/4 &
W 1/2 SW 1/4 SE 1/4

R.L. Harper
N 1/2 SW 1/4 NE 1/4 &
E 1/2 NE 1/4 NW 1/4 &
NE 1/4 SE 1/4 NW 1/4 &
W 1/2 NW 1/4 NE 1/4 &
NW 1/4 SE 1/4 NW 1/4

P.O.T. Sta. 1479+75.58 E BW 1/4 ℄

Helen Hine & Loyd J. Hine
SW 1/4 SW 1/4 NE 1/4 &
W 1/2 NW 1/4 SE 1/4 &
SE 1/4 NW 1/4 SE 1/4 &
W 1/2 SE 1/4 SE 1/4 &
SW 1/4 NE 1/4 SE 1/4 &
Part of NW 1/4 NE 1/4 SE 1/4

CURVE DATA
Δ = 6° 45' 15"
D = 0° 16' 00"
T = 1,267.87'
L = 2,532.81'
R = 21,485.92'
E = 37.36'

W.W. Ellis
F.G. Ellis
SW 1/4 SE 1/4

N.&S. 1/4 ℄

EAST WEST

℄ OVERPASS

-0.34% f

-0.80% f

P.C. Sta. 1457+00 Elev. = 1040.87

P.T. Sta. 1472+00 Elev. = 1052.56

-0.52%

-0.94 %

800' V.C.

200' V.C.

Public Road

-0.10%

Fin. Gr. Expy.

Extreme H.W. Elev. = 1041.99

Normal H.W. Elev. = 1031.60

400' V.C.

P.T. 1497+00 Elev. 1030.08

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
DATE
BY

PROFILE
SURVEYED
PLOTTED
GRADE
B.M.
STA.
CKED.
NOTES VS CH'KD.
NOTE BOOK
NO.

F.A. PROJECT NO. I-35-2(12)(126) SHEET NO. 6

PROJECT NO. SHEET NO.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(120)	1967	7	259

Revised ADT 4/24/67

SEC 11 T6N R2W

SEC 13 T6N R2W

SEC 14 T6N R2W

Helen Hine & Loyd J. Hine
SW 1/4 SW 1/4 NE 1/4 &
W 1/2 NW 1/4 SE 1/4 &
SE 1/4 NW 1/4 SE 1/4 &
W 1/2 SE 1/4 SE 1/4 &
SW 1/4 NE 1/4 SE 1/4 &
Part of NW 1/4 NE 1/4 SE 1/4

J.S. Aday
E 1/2 E 1/2 S &
W 1/2 SE 1/4 SW 1/4

C. W. Wantland
E 1/2 NE 1/4 & N 1/2 NW 1/4 NE 1/4 & SW 1/4 NW 1/4 NE 1/4 &
~~NE 1/4 SW 1/4 NE 1/4~~ & Part of SE 1/4 SW 1/4 NE &
NW 1/4 NW 1/4 NE 1/4 & ~~N 1/2 NE 1/4 NW 1/4~~ &
SW 1/4 NE 1/4 NW 1/4 & NW 1/4 SE 1/4 NW 1/4

W. W. Ellis & E. G. Ellis
SW 1/4 SE 1/4

City Of Purcell
Part of SE 1/4 SW 1/4 NE 1/4
SW 1/4 SW 1/4 NE 1/4
S 1/2 SE 1/4 NW 1/4
NW 1/4 NE 1/4 SW 1/4

E. D. & Jewel C. Pittman
NE 1/4 NE 1/4 &
W 1/2 SE 1/4 NE 1/4

Board Of County Commissioners
W 1/2 NE 1/4 &
N 1/2 NW 1/4 Except Easement for Golf Course City of Purcell.

LIMITS OF NO ACCESS

LIMITS OF ACCESS TO PUBLIC ROAD ONLY

Obtain 300' For Channel Change

Obtain Channel R/W

Pres. ADT-1020

ADT (1966) 200
(1986) 400

Purcell Cemetery

Barn
House
Silo
Corn Storage

PURCELL LAKE

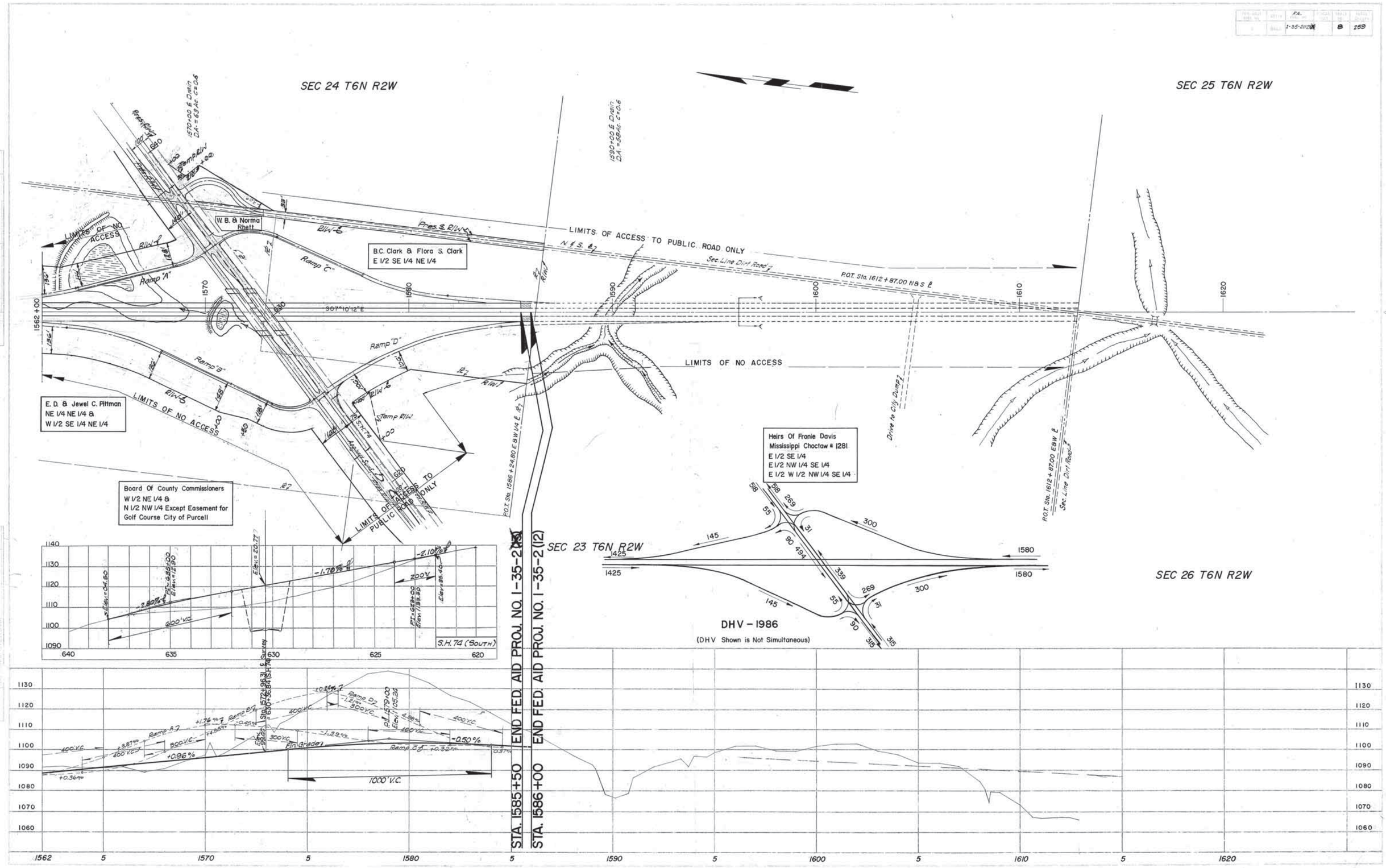
DETAIL OF ⅄ SEPARATION

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED — NOTE BOOK — NO.

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / B. M. NOTED / STRUCTURE NOTATIONS CHKD — NOTE BOOK — NO.

EAPROJECT NO. I-35-2(120)(N) SHEET NO. 7

PROJECT NO. SHEET NO.



FA. I-35-2(12)(13) SHEET NO. 8

Rev. CDI – 4-26-27

NON-PARTICIPATING

● Quantities Shown For Optional Pipe Arch Hdwls. Are Based On M.P.A. Design.

SUMMARY OF DRAINAGE STRUCTURES

STR. NO.	P&P SHEET NO.	STATION	DESCRIPTION	FILL HEIGHT FT.	DESIGN	DESIGN SHEET NO.	NUMBER & LOCATION OF CONST. JOINTS	CLASS A CONC. CU.YD. ●	REINF. STEEL LB. ●	REINFORCED CONCRETE PIPE LIN. FT. 18"	24"	30"	36"	42"	CORRUGATED GALVINIZED METAL PIPE LIN. FT. 24"	30"	36"	42"	48"	OPTIONAL ROUND PIPE LIN. FT. CROSS DRAINS 24"	30"	36"	42"	SIDE DRAINS 24"	30"	36"	42"	OPTIONAL PIPE ARCHES ● LIN. FT. SIDE DRAINS 29"x18"	36"x22"	43"x27"	50"x31"	REMARKS
1	15	1343+19	Const. 24" x 140'-0" Lg. R.C.P. W/45° Skewed Hdwl.	3'	CP-2S1-0	61		4.60	324		140																						
2	15	1343+72.97	See Bridge																														
3	15	1344+26	Const. 24" x 120'-0" Lg. R.C.P. W/45° Skewed Hdwl.	3'	CP-2S1-0	61		4.60	324		120																						
4	16	1352+70	Const. 36" x 82'-4" Rdy. R.C.P. W/45° Wings.	5'	CP-21-0	60		4.58	260				84																				
5	16	1354+00	Const. 42" x 98'-4" Rdy. R.C.P. W/45° Wings.	9.5'	CP-21-0	60		5.78	302					100																			
6	16	1368+45	Const. 42" x 64'-4" Rdy. R.C.P. W/45° Wings.	3'	CP-21-0	60		5.78	302					66																			
7	16	1368+39	Const. 3' x 3' x 55'-0" Cl. Rdy. R.C.B. Skewed 60° L.F.	1'	BC-5S4 L.F.	52	1@1/2 Pts.	24.53	2,119																								
8	17	1374+90	Const. 29" x 18" x 36'-8" Rdy. Pipe Arch S.D. Lt.	3'	CEP-11-0 or MPA-1-2	57,65		1.23	42																				38				Remove 30" R.C.P.
9	17	1374+54	Leave And Extend 24" R.C.P. Extend 12' Lg. Lt.	1.5'	CP-21-0	60		1.31	85		12																						Remove 5'x4' Conc. Drop Inlet
10	17	1389+42	Const. 8' x 8' x 133'-0' Rdy. R.C.B.	15'	BC-62	53	2@1/3 Pts.	200.47	16,887																								
11	18	1377+80	Const. Std. Conc. Median Drain. Use 20 Lin. Ft. Of 18" R.C.P. Stub Into Str. No. 12		GPI-1-0 Type 1	63		1.20	134	20																							
12	18	1378+00	Const. 4' x 2' x 149'-0" Rdy. R.C.B	4'	BC-62	53	3@1/4 Pts.	48.44	4,849																								
13	18	1385+50	Const. Std. Conc. Median Drain. Use 84 Lin. Ft. Of 24" C.G.M.P. W/45° Wings On Outlet Rt.	2'	GPI-1-0 Type 2 & CP-21-0	60,63		2.92	225						84																		
14	18	1392+50	Const. 10' x 8' x 206' Cl. Rdy. R.C.B. Skew 60° R.F.	15'	BC-6S4 R.F.	56	5@1/6 Pts.	421.87	38,092																								
15	18	1398+70	Const. Std. Conc. Median Drain. Use 52 Lin. Ft. Of 18" R.C.P. Stub Into Str. No. 16	16'	GPI-1-0 Type 2	63		1.61	170	52																							
16	18	1399+20	Const. 10' x 6' x 213'-0" Rdy. R.C.B.	16'	BC-62 & Sp.	10,53	4 As Shown	329.89	29,547																								Remove 24" x 14' Rdy. RCP 117' Lt.
17	18	1400+58.70	See Bridge																														
18	18	1400+58.70	See Bridge																														
19	18	1400+93	Const. 8' x 3' x 162'-0" Long R.C.B.	3'	BC-62 & BC-6S4 R.B.L.	53,54,55	3@1/4 Pts.	151.64	13,657																								
20	19	1411+00	Const. Std. Conc. Median Drain. Use 70 Lin. Ft. Of 18" R.C.P. W/45° Wings On Outlet Rt.	3'	GPI-1-0 Type 1 & CP-21-0	60,63		2.11	195	70																							
21	19	1421+00	Const. Std. Conc. Median Drain. Use 70 Lin. Ft. Of 18" R.C.P. W/45° Wings On Outlet. Rt.	3'	GPI-1-0 Type 1 & CP-21-0	60,63		2.11	195	70																							
22	19	1431+00	Const. Std. Conc. Median Drain. Use 70 Lin. Ft. Of 18" R.C.P. W/45° Wings On Outlet Rt.	3'	GPI-1-0 Type 1 & CP-21-0	60,63		2.11	195	70																							
23	20	1452+30	Const. Std. Conc. Median Drain. Use 90 Lin. Ft. Of 24" C.G.M.P. W/45° Wings On Outlet Lt.	2'	GPI-1-0 Type 1 CP-21-0	60,63		2.51	219						90																		
24	20		Deleted																														
25	20	1453+31.81	See Bridge																														
26	20	1453+31.81	See Bridge																														
27	20		Deleted																														
28	20	1465+00	Const. Std. Conc. Median Drain. Use 98' Lin. Ft. Of 24" C.G.M.P. W/45° Wings On Outlet Lt.	2'	GPI-1-0 Type 1 & CP-21-0	60,63		2.51	219						98																		
29	21	13+35	Const. 10' x 3' x 53'-0" Rdy. R.C.B. 25.5' Rt. & 27.5' Lt. No Hdwlls.	0.5'	BC-5	51		51.43	5,431																								
30	21		Deleted																														
31	21	17+40	Const. 24" x 62'-4" Rdy. R.C.P. W/45° Wings	2'	CP-21-0	60		2.62	170		64																						
32			Deleted																														
33			Deleted																														
34	22	5+00	Const. 29" x 18" x 28'-8" Rdy. Pipe Arch S.D. Rt.	3'	MPA-1-2 or CEP-11-0	57,65		1.23	42																				30				
35	22	5+90	Const. 24" x 58'-4" Rdy. Pipe W/45° Wings	4	CP-21-0	60		2.62	170													60											
36	22	14+50	Const. 3-29" x 18" x 34'-8" Rdy. Pipe Arches	1'	MPA-1A-0 or CEP-11-0	58,65		2.24	81																				108				
37	23	1476+00	Const. Std. Conc. Median Drain. Use 88 Lin. Ft. Of 24" C.G.M.P. W/45° Wings On Outlet Lt.	2.5'	GPI-1-0 Type 1 & CP-21-0	60,63		2.51	2.19						88																		
38	23	1477+96	See Bridge																														
39	23	1478+60	See Bridge																														
40	23	1484+78.48	See Bridge																														
41	23	1484+41.52	See Bridge																														
42	23	1495+70	Const. Std. Conc. Median Drain. Use 104 Lin. Ft. Of 24" C.G.M.P. W/45° Wings On Outlet Rt.	2.5'	GPI-1-0 Type 2 & CP-21-0	60,63		2.92	255						104																		
43	24	1513+92	Const. 5' x 4' x 176'-0" Lg. R.C.B. Skew W/Bridge	7'	BC-62 & BC-6S3 R.F. & L.F.	53,54,55	3@1/4 Pts.	104.41	8,762																								
44	24	1513+51.85	See Bridge																														
45	24	1513+59.93	See Bridge																														
46	24	1528+75	Const. Std. Conc. Median Drain. Use 66 Lin. Ft. Of 18" R.C.P. Stub Into Str. No. 47		GPI-1-0 Type 2	63		1.61	170	66																							
47	24	1529+64	See Bridge																														
48	25	1538+00	Const. Std. Conc. Median Drain. Use 66 Lin. Ft. Of 18" R.C.P. W/45° Wings On Outlet Rt.	2'	GPI-1-0 Type 1 CP-21-0	60,63		2.11	195	66																							
49	25	1553+50	Const. 36" x 177'-0" Cl. Rdy. R.C.P. Skew 60° R.F.	8'	CP-2S-0	62		7.22	454				208																				
50	25	1559+63.81	Const. 36" x 146'-8" Rdy. R.C.P. S.D. Rt. W/45° Wings on Outlet & Drop Inlet on Inlet	11'	CP-21-0 & GPI-1-0 Type 1	60,63		4.39	355				148																				
51	25	1565+90	Const. Std. Conc. Median Drain. Use 8 Lin. Ft. Of 18" R.C.P. Stub Into Str. No. 52		GPI-1-0 Type 1	63		1.20	134	8																							
52	25	1566+00	Const. 3' x 2' x 128'-0" Cl. Rdy. R.C.B. Skew 60° R.F.	1'	BC-5S4 R.F.	50	3@1/4 Pts.	38.77	3,754																								
53	26	28+20	Const. 29" x 18" x 40'-8" Rdy. Pipe Arch S.D. Rt.	4	MPA-1-2 or CEP-11-0	57,65		1.23	42																				42				Remove 18" x 20' GIP 17' Rt.
54	26	29+00	Const. 24" x 84'-0" Lg. C.G.M.P. For Flume Lt. W/45° Wings At Inlet		CP-2	59		1.12	28						84																		
55	26	30+65.75	See Bridge																														
56	26	35+80	Const. 4' x 4' x 149'-0" Cl. Rdy. R.C.B. Skew 60° L.F.	22'	BC-6S4 L.F. & Special	10,56A	3 As Shown	81.50	7,278																								Remove 24" x 28' Rdy. GIP
57	27	1572+40	Const. 24" x 198'-0" Lg. R.C.P. W/45° Wings As S.D. Lt.	10'	CP-21-0	60		2.62	170		198																						
58	27	1573+50	Const. 24" x 192'-0" Lg. R.C.P. W/45° Wings As S.D. Rt.	10'	CP-21-0	60		2.62	170		192																						
59	29	622+00	Const. 24" x 80'-0" Lg. C.G.M.P. Under Detour. No Hdwls. #												80																		Remove 24" x 24' Rdy. GIP 39' Lt.
60	29	628+75	Const. 30" x 50'-0" Lg. C.G.M.P. Under Detour. No Hdwls. #													50																	Remove 5' x 7' x 36' Rdy. RCB Lt
61	29	630+36.80	See Bridge																														
62	29		See Bridge																														
63	29	636+00	Const. 24" x 60'-0" Lg. C.G.M.P. Under Detour No Headwalls #												60																		
64	29	635+40	Const. 29" x 18" x 92'-0" Lg. C.G.M.P. Arch Under Ramp 210' Rt.	1'	MPA-1-2 or CEP-11-0	57,65		1.23	42																				92				
65	29	636+79	Const. 36" x 162'-0" Cl. Rdy. R.C.P. W/45° Wings	6'	CP-2S-0	61		8.16	556				232																				
66	31	1565+00	Const. 3' x 3' x 98'-0" Cl. Rdy. RCB Skew 60° R.F.	8.5'	BC-6S4 RF	56	2@1/3 Pt	36.20	3,346																								
67	31	1567+00	Const. 24" x 53'-0" Cl. Rdy. R.C.P. Skew 45° R.F.	3.5	CP-2S1-0	61		4.60	324		78																						
22A	19	1441+00	Const. Std. Conc. Median Drain. Use 70 Lin. Ft. of 18" R.C.P. W/45° Wings On Outlet Rt.	2'	GPI-1-0 Type 1 & CP-21-0	60,63		2.11	195	70																							
Sub Total								1,583.47	140,685	492	804		672	166	688	50						60							310				

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)082.091		9A	259

REVISIONS	
DESCRIPTION	DATE
C.D.I.	4-28-27

Form SODS-1-10-64

Form SODS-1-A-10-64

STR. NO.	P & P SHEET NO.	STATION	DESCRIPTION	FILL HEIGHT FT.	DESIGN	DESIGN SHEET NO.	NUMBER & LOCATION OF CONST. JOINTS	CLASS "A" CONCRETE CU.YD.	REINF. STEEL LB.	REINFORCED CONCRETE PIPE LIN. FT. 18"	24"	36"	42"		CORRUGATED GALVANIZED METAL PIPE LIN. FT. 24"	30"				OPTIONAL PIPE - SIDE DRAINS - LIN. FT. ARCHES 29"x18"				ROUND 24"				OPTIONAL PIPE - CROSS DRAINS - LIN. FT. ROUND				ARCHES		
68	29	624+50	Const. Std. Conc. Median Drain Use 66 L.F. 18" RCP w/45° Wings on Outlet Lt.	2	GPI-1-0 Type I & CP-2,-0	60-63		2.11	195	66																									
69	29	629+00	Const. Std. Conc. Median Drain Use 50 L.F. 18" RCP Stub into Str. No. 58	2	GPI-1-0 Type I	63		1.20	134	50																									
70	29	632+30	Const. Std. Conc. Median Drain Use 86 L.F. 18" RCP Stub into Str. No. 57	2	GPI-1-0 Type I	63		1.20	134	86																									
71	29	636+90	Const. Std. Conc. Median Drain Use 34 L.F. 18" RCP Stub into Str. No. 65	2	GPI-1-0 Type I	63		1.20	134	34																									
			SUB TOTAL					5.71	597	236																									
			SUB TOTAL SH. NO. 9					1588.47	140,685	492	804	672	166		688	50				310				60											
			GRAND TOTAL					1594.18	141,282	728	804	672	166		688	50				310				60											

Design		
Drawn		
Checked		
Approved		
Squad		

SUMMARY SHEET

F.A. Project No. I-35-2(12)082.091 Sheet No. 9A

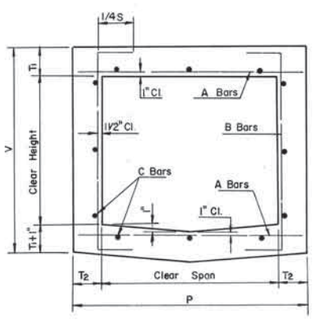
SUMMARY OF PAY QUANTITIES

Rev. Cl. "A" Concrete & Reinforcing Steel 4-26-67
Rev. Cl. "C" Concrete 4-28-67

SUMMARY OF SHEET ESTIMATES

P & P SHEET NO.	STATION — STATION	Embankment + 15 %	Class "D" Unclassified Excavation	Roadway Borrow	Borrow	Excess Excavation		Overhaul	Class "C" Concrete	Slab Sod	R/W Markers	T.B.S.C.	GUARD RAIL
		Cu. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Sec.Yds.	Cu. Yds.	Sq.Yds.	Each	Cu. Yds.	
16	Sta. 1335+00 to Sta. 1377+00 Line "C"	11,358	62,051			50,693		3,600	414.27	2,703.3			
16	Sta. 1335+00 to Sta. 1377+00 Line "D"	74,060	22,117	50,693	1,250			54,764	69.05	2,253.08			
17	Sta. 1372+50 to Sta. 1398+80 Line "E"	35,943	8,718		27,225			1,500	54.23	191.40		17.5	
19	Sta. 1377+00 to Sta. 1417+89.84	236,644	236,644					434,000	290.11	7,500.4	4		
20	Sta. 1417+89.84 to Sta. 1481+55.08	344,383	352,967			8,584		1,117,000	1,594.74	4,411.08	4		
21	Sta. 9+00 to Sta. 21+00 Adams St	0	16,021			16,021					8	300	
22	Sta. 1+22 to Sta. 20+20 60 Pub. Rd.	3,871	4,062			191		2,600			4	305	
24	Sta. 1481+55.08 to Sta. 1586+13	575,039	357,812	198,340	18,887			3,276,688	287.03	4,371.2	11	82.5	
26	Sta. 20+00 to Sta. 42+00 Airport Rd.	70,912	8,742	62,170				54,273		2,916.30	14	30	1175
29	Sta. 621+00 to Sta. 638+00 S.H. 74 So.	55,796	11,774	44,022				1,325	36.90	1,124.40	3		300
30	Sta. 1561+00 to Sta. 1570+94.84 Ramp "A"	42,705	1,776	40,929				30,661	50.93	87.0			
30	Sta. 1561+00 to Sta. 1576+98.53 Ramp "B"	4,646	79,842			75,196			187.25	1,050.0			
31	Sta. 1569+80 to Sta. 1581+00 Ramp "C"	566	162,161			161,593							
31	Sta. 1575+35.52 to Sta. 1586+13 Ramp "D"	1,683	77,419			75,736			73.94	520.20			
	TOTAL	1,457,608	1,410,246*	396,154	47,362	396,154*		4,976,421	3,058.45	27,128.36	48	735.0	1,475

* Includes 1,290 Cu. Yds. Class "D" Excavation From S.H. 39.
* Includes 6,850 Cu. Yds. Class "D" Excavation From Channel Change.



STR. NO.	Fill	Span	Height	Dimensions T1	T1+1"	T	V	P	BARS A Size	B Spac.	C Length	Quantities Per Lin. Ft. Of Barrel Steel	Conc.
16	16'	10'	6'	—	S16	B.C.	6_2	—	#7 @ 6" 11'-4"	— Std. B	C-6_2 —	133.87	1.415
56	22'	4'	4'	7-3/4"	8-3/4"	6"	5'-4 1/2"	5'-0"	#5 @ 6" 4'-8"	#4 @ 9" 6'-11 1/2"	#4 @ 18" 12 bars	39.88	0.403

DETAIL OF EXTRA STRENGTH STRUCTURES

MAINTENANCE OF TRAFFIC NOTE

This Project Shall Be Constructed Without Closing The Existing ℄ Roads, S.H. 39 & S.H. 74 to Local And Through Traffic See Standard Specifications For Maintenance Of Local And Through Traffic.

Structural Excavation As Required By The Standard Specifications And As Modified By The Standard Structural Excavation Drawing Will Not Be Paid For As A Separate Pay Item, But The Cost Of Same Will Be Included In Other Items Of Work On The Drainage Structures.

Topsoil (Approximate 5" Thickness) Shall Be Reserved In Embankment And Excavation Areas And Placed On Completed Cut And Fill Slopes As Shown On Plans Or As Directed By The Engineer. All Cost Including Overhaul Shall Be Included In Price Bid For Class "D" Unclassified Excavation. See Special Provisions For Salvaging Topsoil

See Special Provision No. 201-1 (a) For "Control Of Contractor's Operations In Areas Outside Of Construction Slopes."

Test Rolling (Section 203) Will Be Required on This Project.

GENERAL CONSTRUCTION NOTES

See Std. General Construction Notes, Sheet No. 11 Only The Following Notes Will Apply; 1, 6, 7, 8, 9, 10, 11, 12, 14, 16, 17, 19, 21, 22, , 25, 26, 27, 28, 30, 32

The Grading Contractor Shall Salvage all Pipe Drainage Structure Under Detour Road and Clean and Store on the R/W as Directed by the Engineer. Cost to be Included in Other Items of Work.

PAY QUANTITIES - ROADWAY

ITEM NUMBER	DESCRIPTION		UNIT	QUANTITIES	AS BUILT QUANTITIES
202.06d	Class "D" Unclassified Excavation	①	Cu. Yd.	1,415,246.	1,475,347.
202A.06a	Class "D" Unclassified Excavation (Borrow)	②	Cu. Yd.	106,375.	65,128
204.06	Overhaul		Sec. Yd.	4,976,421.	4,561,492.
303AA.06	Stabilized Aggregate Base Course Class I		Cu. Yd.	1,750.	2,282.3
403.06a	Prime Material	③	Gal.	5,307.	3,461.
Special	Remove And Relay Stabilized Aggregate Base Course	④	Cu. Yd.	733.	543.7
306A.06b	Subbase		Cu. Yd.	2,239.	2,284.
401.06a	Traffic Bound Surface Course Type "A"		Cu. Yd.	735.	602.
403.06b	Asphalt Binder	⑤	Gal.	10,882.	8,778.
403.06c	No. 1 Cover Material	⑥	Cu. Yd.	244.	193.8
403.06d	No. 2 Cover Material	⑦	Cu. Yd.	209.	249.9
411.06a	Aggregate (Type A)	⑧	Ton	555.	676.66
411.06b	Asphalt (85 To 100 Penetration)	⑨	Ton	47.	51.1
316S.06c	Tack Coat For Asphaltic Black Base (Hot Mix-Hot Laid)	⑩	Gal.	1,000.	1,160.
316S.06a	Aggregate For Asphaltic Black Base (Hot Mix-Hot Laid)	⑪	Ton	2,616.	2,226.27
316S.06b	Asphalt For Asphaltic Black Base (Hot Mix-Hot Laid)	⑫	Ton	123.	93.65
509.06a	Class "A" Concrete		Cu. Yd.	1,594.	1,602.51
509.06d	Class "C" Concrete		Cu. Yd.	3,059	2,683.7
511.06	Reinforcing Steel		Lb.	141,282	142,021.
Special	24" Pipe For Side Drain (0' To 20')	⑭	Lin. Ft.	60.	180.
513.06a	30" Corrugated Galvanized Metal Pipe	II	Lin. Ft.	50.	50.
Special	29" x 18" Pipe Arch For Side Drain (0" to 20')	⑭	Lin. Ft.	310.	394.
512.06a	18" Reinforced Concrete Culvert Pipe		Lin. Ft.	728.	762.
512.06a	24" Reinforced Concrete Culvert Pipe		Lin. Ft.	804.	1,042.
512.06a	36" Reinforced Concrete Culvert Pipe		Lin. Ft.	672.	666.
512.06a	42" Reinforced Concrete Culvert Pipe		Lin. Ft.	166.	196.
513.06a	24" Corrugated Galvanized Metal Pipe	㉓	Lin. Ft.	688.	608.
601.06a	Plain Rip Rap		Cu. Yd.	61.	0.
▲ 623A.06a 623A.06w	Right-Of-Way Fence (Design 1 Or Design 2)	⑮	Lin. Ft.	45,217.	42,525.
▲ 623A.06b 623A.06x	Right-Of-Way Fence Gates (54" High x 12') (Design 1 or Design 2)	⑯	Each	10.	8
▲ 623B.06	Remove And Reset Fence In Place		Lin. Ft.	1,655.	1,725.
625.06b	Right-Of-Way Markers		Each	48.	42.
626AR.06aSp.	Solid Slab Sodding		Sq. Yd.	27,128.	28,610.3
626ER.06a Sp.	Fertilizing	⑰	Ton	1.7	1.6
626AR.06gSp.	Watering	⑱	M-Gal.	407.	104.4
614R.06a	Perforated Pipe Underdrain	⑲	Lin. Ft.	4,650.	7,260.
614R.06b	Non-Peforated Pipe Underdrain	⑲	Lin. Ft.	1,550.	1,935.
614R.06c	Pipe Underdrain Cover Material	⑳	Cu. Yd.	1,860.	2,602.
623.06c 623.A06t	Guard Rail (Galv. Steel or Alum.)	㉑	Lin. Ft.	1,475.	1,462.5
640S.06a	Field Office & Laboratory		Each	1.	1.
626DR.06aSp.	Vegetative Mulching	㉒	Acre	87.8	0.
614R.06d	Add. VF Depth for Pipe Under Ditch SUPP. AGREE CHG. NO. 2		Lin. Ft.		279.
316S.06d	Prime Coat	③	Gal.	2,965.	2,370.
411.06a	Aggregate (Type C)	⑧	Ton	271.	330.17

① Includes 5,000 Cu. Yds. For Ramps, Dikes, & Miscellaneous Earthwork Where No Quantity Is Shown On P & P Sheets.
② Includes 59,013 Cu. Yds. For Replacement Of Material Used For Topsoil.
③ Est. At 0.40 Gal. Per. Sq. Yd.
④ Est. At 8333% Of Stabilized Aggregate Base Course On Detour Road.
⑤ Est. At 0.75 Gal. Per. Sq. Yd. Of Double Bituminous Surface.
⑥ Est. At 1 Cu. Yd. Per. 60 Sq. Yds. Of No. 1 Cover Area.
⑦ Est. At 1 Cu. Yd. Per. 70 Sq. Yds. Of NO. 2 Cover Area.
⑧ Type "A" Est. a 95% Of Asphaltic Concrete. Type "C" Est. a 94% Of Asphaltic Concrete. — Asphaltic Concrete Est. at 108 Lbs. Per. Sq. Yd. Per. 1" Thick
⑨ Est. @ 5% Of Asphaltic Concrete (Type A Aggregate) Est. @ 6% Of Asphaltic Concrete (Type C Aggregate)
⑩ Est. @ 0.05 Gal. Per. Sq. Yd. (Application May Be Obtained By Diluting AE-5 With An Equal Amount Of Water And Applying At The Rate Of 0.10 Gal. Per Sq. Yd. Payment Will Be Made On Gallonage Prior To Dilution.)
⑪ Est. @ 95.5% Of Asphaltic Black Base.
⑫ Est. @ 4.5% Of Asphaltic Black Base. — Asphaltic Black Base Est At 144 Lbs. Per Cu. Ft.
⑬
⑭ The Following AASHO Types May Be Used: Reinforced Concrete Pipe (M-170) - Corrugated Galvanized Metal Pipe (M-36) Corrugated Aluminum Alloy Pipe (M-196)
⑮ Includes 2% For Ground Measurement.
⑯ To Be Placed As Directed By The Engineer.
⑰ Est. @ 125 lbs. Per 1,000 Sq. Yds. of Sodding.
⑱ Est. @ 15 Gal. Per. Sq. Yd.
⑲ Design 1, 2 Or 3 Shall Be 8" Diameter; Design 4 Shall Be 5" x 2-5/16" Semi-Circular Pipe.
⑳ Est. At 40 Cu. Yds. Per. Station.
㉑ Includes 6 Type III Delineators to be Included in Other Items of Work.
㉒ The Area On Which Reserved Topsoil Has Been Placed Shall Be Covered With Vegetative Hay Mulch.
㉓ Includes 140 Lin. Ft. Non-Participating
▲ Standard Specification Item.
II Non Participating

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA	I-35-2(12)		10A	

DESCRIPTION	DATE
Rev. curb & Cl Rdy. dim.	4-28-67

	ITEM NUMBER	ITEM	UNIT	Stru. No. 2 ℄ Sta. 1343+72.97 63'-75.64'-53' Cont. I-Beam Spans 38'-0" Cl. Rdy. Skew 34° 36' 26" L.F.	Stru. No. 17 ℄ Sta. 1400+58.70 Rt. Stru. 30'-46.5'-30' I-Beam Spans 38'-0" Cl. Rdy.	Stru. No. 18 ℄ Sta. 1400+58.70 Lt. Stru. 30'-46.5'-30' I-Beam Spans 38'-0" Cl. Rdy.	Stru. No. 25 ℄ Sta. 1453+31.81 Rt. Stru. 30'-46.5'-30' I-Beam Spans 38'-0" Cl. Rdy.	Stru. No. 26 ℄ Sta. 1453+31.81 Lt. Stru. 30'-46.5'-30' I-Beam Spans 38'-0" Cl. Rdy.	Stru. No. 38 ℄ Sta. 1477+96.00 Rt. Stru. 4-100' Cont. & Girder Spans 37'-0" Cl. Rdy. Skew 45° L.F.	Stru. No. 39 ℄ Sta. 1478+60.00 Lt. Stru. 4-100' Cont. & Girder Spans 38'-0" Cl. Rdy. Skew 45° L.F.	Stru. No. 40 - Alt. #1 - Lt. Stru. ℄ Sta. 1484+78.48 3-40' I-Beam Spans 38'-0" Cl. Rdy. Skew 60° L.F.	Stru. No. 40 - Alt. #2 - Lt. Stru. ℄ Sta. 1484+78.48 3-40' P.C. Beam Spans 38'-0" Cl. Rdy.	Stru. No. 41 - Alt. #1 - Rt. Stru. ℄ Sta. 1484+41.52 3-40' I-Beam Spans 38'-0" Cl. Rdy. Skew 60° L.F.	Stru. No. 41 - Alt. #2 - Rt. Stru. ℄ Sta. 1484+41.52 3-40' P.C. Beam Spans 38'-0" Cl. Rdy. Skew 60° L.F.
	202.06d	Class "D" Unclassified Excavation	Cu. Yd.											
	501.06b	Substructure Excavation Common	Cu. Yd.	346.8	166.4	203.4	262.4	262.4	[illegible]	610.0	212.0	212.0	212.0	212.0
	501.06c	Substructure Excavation Rock	Cu. Yd.	28.0		4.5								
	506.06	Structural Steel	Lb.	161,630	67,850	67,850	67,850	67,850	392,500	392,500	81,570		81,570	
	509.06a	Class "A" Concrete	Cu. Yd.	188.0	100.4	103.0	100.4	100.4	293.1	293.9	122.2	125.6	122.2	125.6
	509.06a	Class "A" Concrete Pier & Abutment Bases	Cu. Yd.	26.6	18.6	15.8	27.0	27.0	71.4	71.4	31.8	31.8	31.8	31.8
	509.06b(ae)	Class "AA(AE)" Concrete	Cu. Yd.	207.6	113.8	113.8	113.8	113.8	426.2	426.2	129.0	146.1	129.0	146.1
	511.06	Reinforcing Steel	Lb.	83,480	42,680	42,870	42,960	42,960	169,690	169,690	56,040	58,610	56,040	58,610
	514.06a	Test Piles	Ea.				2	2	1	1	1	1	1	1
	514.06d	Reinforced Concrete Piling (16" Sq.)	L.F.				1,260	1,260	1,125.0	1,125.0	595	595	595	595
	514.06e Sp.	Steel Piling (10" B.P. at 42#) without tips	L.F.		711.0	669.0					680	680	695	688
	514.06e	Steel Piling (10" B.P. at 42#) with tips	L.F.		368.0	168.0								
⑥	514.06f	Steel Piling Splices	Ea.		20	15			7	7	15	15	15	15
⑦	Special	4" Concrete Slopewall	Sq. Yd.											
	Special	Approach Slab Base	Sq. Yd.											
	414.06c(ae)	Approach Slab (Air Entraining Agent)	Sq. Yd.											
	502B.06	Type II P.C. Beam	L.F.									585.94		585.94
	516S.06	30" Drilled Shafts	L.F.	175.0										
	516S.06	18" Drilled Shafts	L.F.	87.5										
	514.06e	Steel Piling (12" B.P. at 53) with tips	L.F.						1,440.0	1,404.0				
	601.06b	Special Plain Rip Rap	Ton						1,900	3,000				
⑤	505A.06	Aluminum Handrailing (1-Rail)	L.F.	387.06	214.0	214.0	214.0	214.0	806.3	806.3	241.5	241.5	241.5	241.5
⑤	505.06	Steel Handrailing (1-Rail)	L.F.	387.06	214.0	214.0	214.0	214.0	806.3	806.3	241.5	241.5	241.5	241.5

	ITEM NUMBER	ITEM	UNIT	Stru. No. 44 ℄ Sta. 1513+51.85 Rt. Stru. 30'-47.5'-30' I-Beam Spans 38'-0" Cl. Rdy. Skew 82° 48' 30" L.F.	Stru. No. 45 ℄ Sta. 1513+59.93 Lt. Stru. 30'-47.5'-30' I-Beam Spans 38'-0" Cl. Rdy. Skew 82° 48' 30" L.F.	Stru. No. 47 ℄ Sta. 1529+64.0 (℄ Survey) 3-10'x12'x155' Rdy. RCB Skew 45° R.F. 7'-6" Lt. & 7'-6" Rt. of ℄ Survey 3-additional Curb Walls both ends 4-Corner Lts. & Refs. Design BC-13 S3 R.F. & Special	Stru. No. 55 ℄ Sta. 1559+63.81 (I-35) 32'-66.0'-77.0' Cont.) 32' I-Beam Spans 28' Rdy. & 2/18" Curbs Skew 82° 55' R.F.	Stru. No. 61 ℄ Sta. 1572+16.13 Lt. Stru. (I-35) 45'(2-72.5' Cont.) 38' I-Beam Spans Skew 52° 57' 25" L.F.	Stru. No. 62 ℄ Sta. 1572+96.21 Rt. Stru. (I-35) 45'(2-72.5' Cont.) 38' I-Beam Spans Skew 52° 57' 25" L.F.	Roadway Section Bridge Contract Sta. 1342+46.41 to Sta. 1514+33.93
	202.06d	Class "D" Unclassified Excavation	Cu. Yd.			④ 7,900				③ 2,800
	501.06b	Substructure Excavation Common	Cu. Yd.	196.6	215.4		153.6	435.0	240.0	
	501.06c	Substructure Excavation Rock	Cu. Yd.				13.6	11.0	42.0	
	506.06	Structural Steel	L.b.	69,170	69,170		133,630	205,060	205,060	
	509.06a	Class "A" Concrete	Cu. Yd.	100.0	100.0	1,107.2	102.1	165.0	157.8	
	509.06a	Class "A" Concrete Pier & Abutment Bases	Cu. Yd.	27.0	27.0		18.9	36.2	28.7	
	509.06b(ae)	Class "AA(AE)" Concrete	Cu. Yd.	115.0	115.0		190.8	245.3	245.8	
	511.06	Reinforcing Steel	L.b.	44,260	44,260	100,240	61,200	108,370	106,760	
	514.06a	Test Piles	Ea.	2	2					
	514.06d	Reinforced Concrete Piling (16" Sq.)	L.F.	1,260	1,260					
	514.06e	Steel Piling (10" B.P. at 42#) with tips	L.F.					228.0		
	514.06e Sp.	Steel Piling (10" B.P. at 42#) without tips	L.F.				287.0			
⑥	514.06f	Steel Piling Splices	Ea.				5			
⑦	Special	4" Concrete Slopewall	Sq. Yd.							7,737.3
	Special	Approach Slab Base	Sq. Yd.							2,460.4
	414.06c(ae)	Approach Slab (Air Entraining Agent)	Sq. Yd.							2,460.4
	502B.06	Type III P.C. Beam	L.F.							
	640S.06(a)	Field Office & Laboratory	Ea.							1
	516S.06	30" Drilled Shafts	L.F.					155.0	87.0	
	516S.06	18" Drilled Shafts	L.F.					104.0	58.0	
⑤	505A.06	Aluminum Handrailing (1-Rail)	L.F.	216.0	216.0		417.0	458.5	458.5	
⑤	505.06	Steel Handrailing (1-Rail)	L.F.	216.0	216.0		417.0	458.5	458.5	

Non-Participating.

③ 200 Cu. Yds. Class "D" Unclassified Excavation (Non-participation) per structure is a min. pay quantity for shaping and cleaning up the fills around the abutments, approach slabs and slope walls. Any material moved in excess of 200 Cu. Yds. will be paid for at the unit price bid.

④ *The Bridge Contractor shall make channel excavation, as Class "D" Unclassified Excavation, sufficient to Construct Bridge Boxes.*

⑤ Note: Contractor may submit bids on both Steel and Aluminum Handrailing.
Type of rail used will be determined by bids received.
Aluminum Handrailing Types will be listed in the Proposal as Alternate No. 1.
Steel Handrailing Types will be listed in the Proposal as Alternate No. 2.

⑥ *No splices will be allowed on Steel Piling for plan length of up to 60' in length. When foreign piling is used, contractor shall furnish enough extra length out of each heat for testing purposes.*

⑦ Item "4" Concrete Slopewall": Concrete slope paving will be paid for at the unit price bid per Sq. Yd. This payment shall include all cost of materials, labor and all incidentals necessary to complete the work as shown on the plans. All materials and work shall conform to Sec. 610 of the Specifications for Concrete Sidewalls.

(See Special Provisions Included In The Proposal)

The Supplemental Specifications Dated July 1, 1965 Shall Govern over the Standard Specifications Unless Superceded by Special Provisions. Supplemental Specification Items Not Shown on Summary of Pay Quantities but which are Applicable to the Particular Type of Work of this Contract, Shall be in Force.

Water-Reducing and Set-Retarding Admixture will be required for Class AA(AE) Concrete only.

Structural Excavation as required by the Std. Specifications and modified by Std. Drawing SE-1-3, will not be paid for as a separate pay item, but cost of same will be included in other items of work on Bridge Boxes.

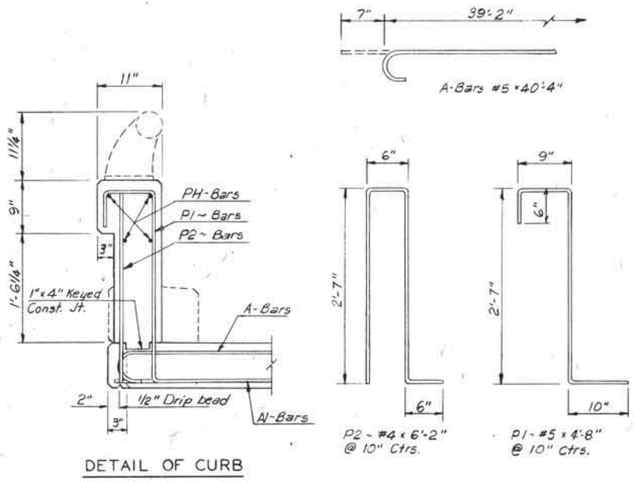
Design		
Drawn	PB	10-65
Checked	TW	10-65
Approved		
Squad	Watts	

SUMMARY OF PAY QUANTITIES

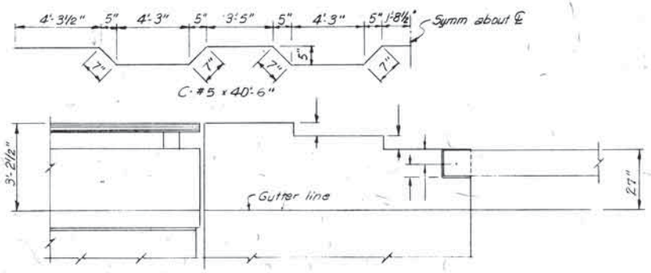
F.A. Project No. I-35-2 (12) Sheet No. 10A

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		10B	

REVISIONS		
DESCRIPTION		DATE
Added Exp. Device	D.P.H.	8-30-67

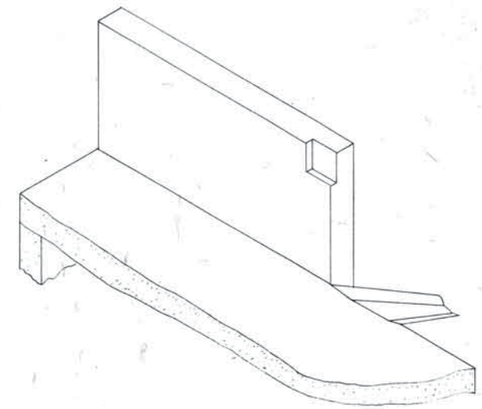


DETAIL OF CURB

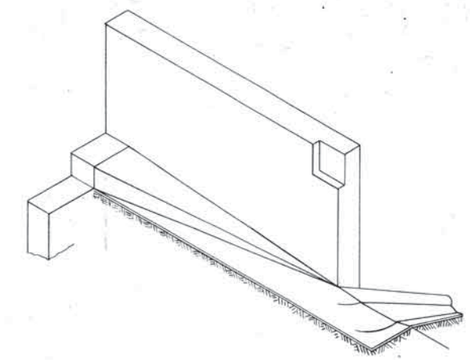


ELEVATION

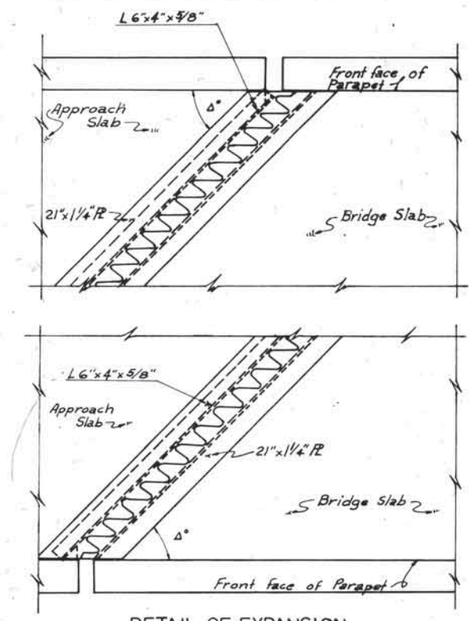
REVISION FOR 6" CURB



DETAIL OF APPROACH SLAB



18" CURB WITHOUT APPR. SLAB

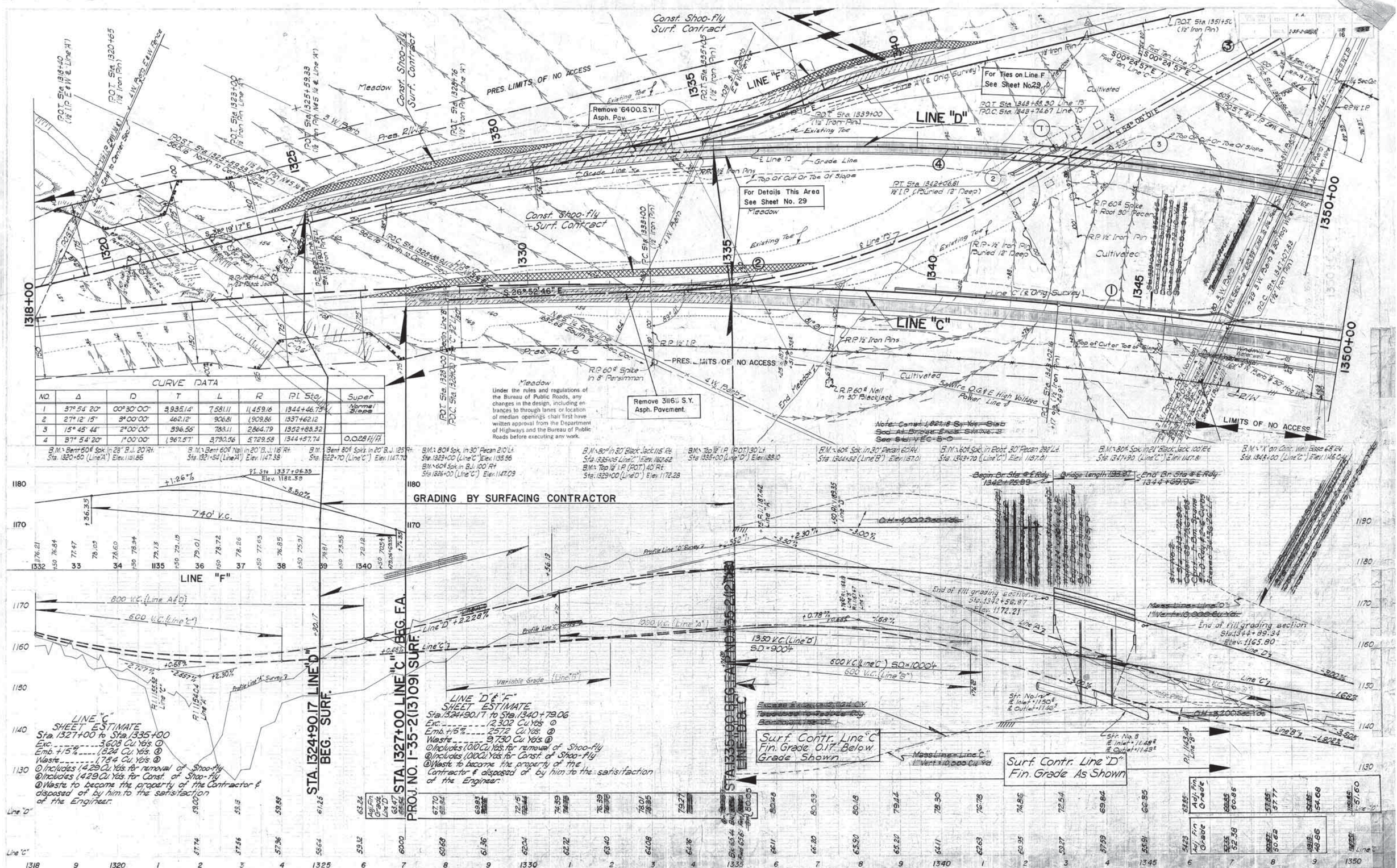


DETAIL OF EXPANSION DEVICE AT ABUT.
(TYPICAL)

Design		
Drawn	DAJ	4-67
Checked		
Approved		
Squad	AVANTS	

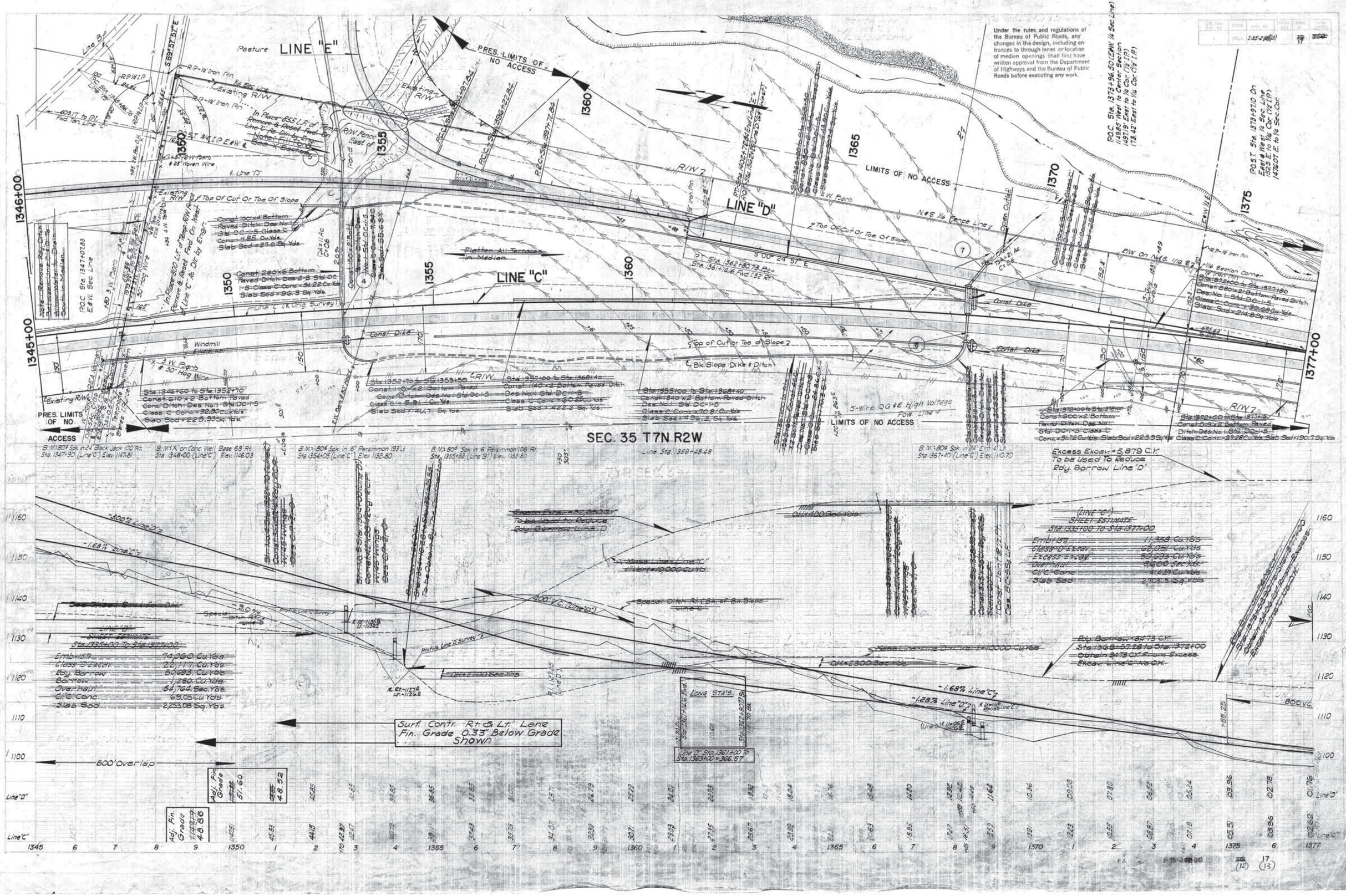
SUPPLEMENTAL DETAIL OF CURB REVISIONS

Project No. I-35-2(12) Sheet No. 10 B

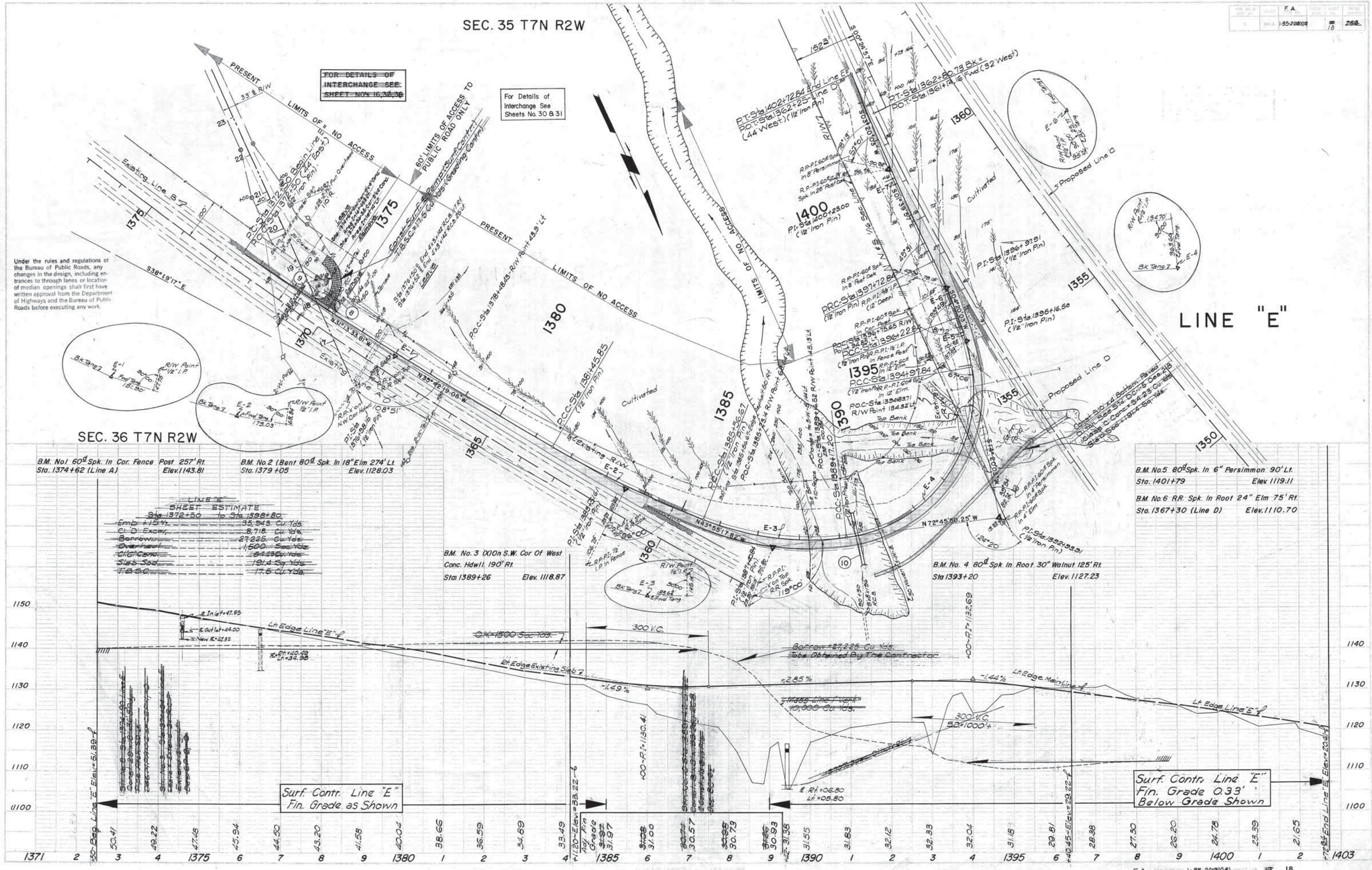


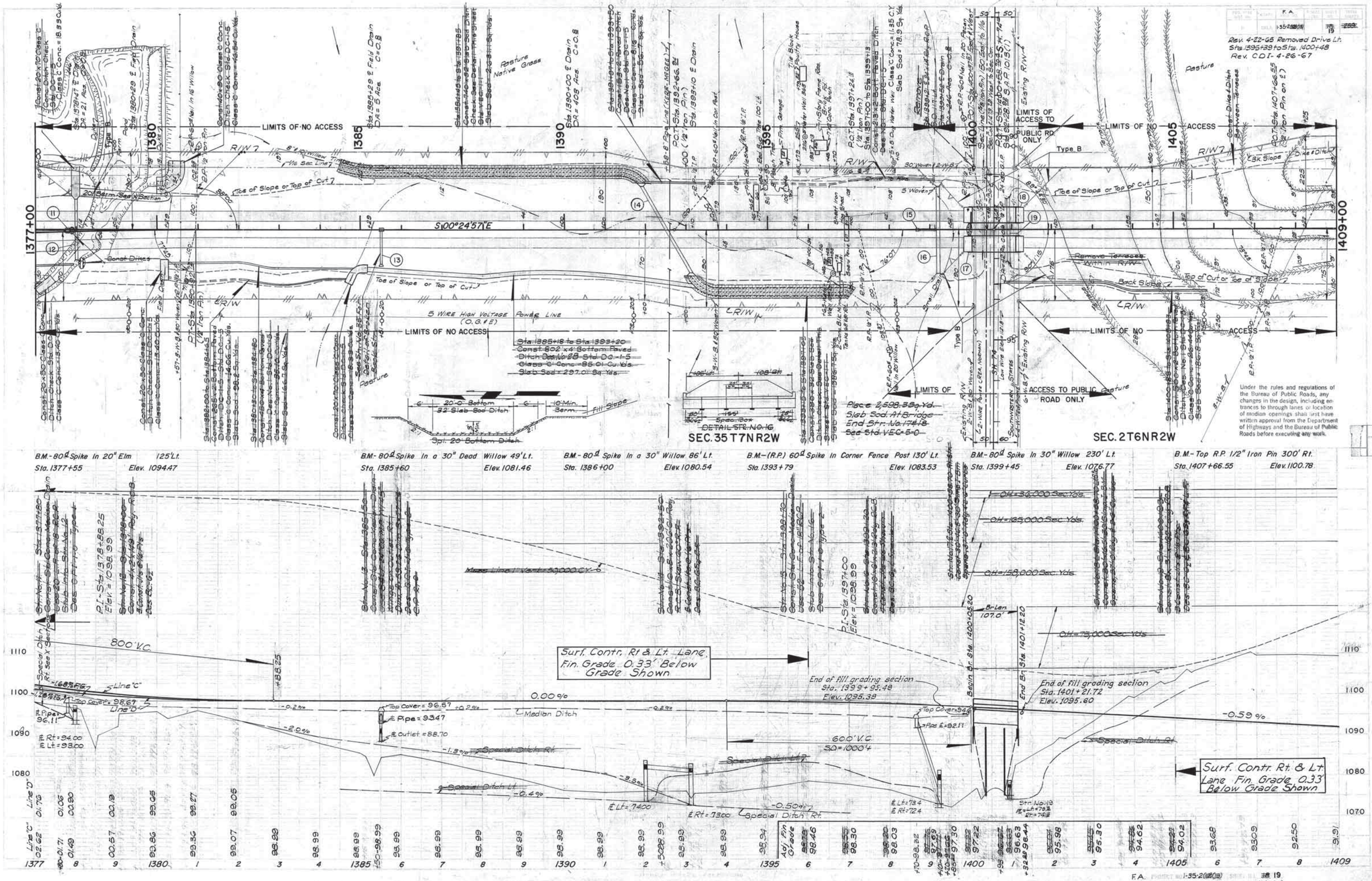
CURVE DATA

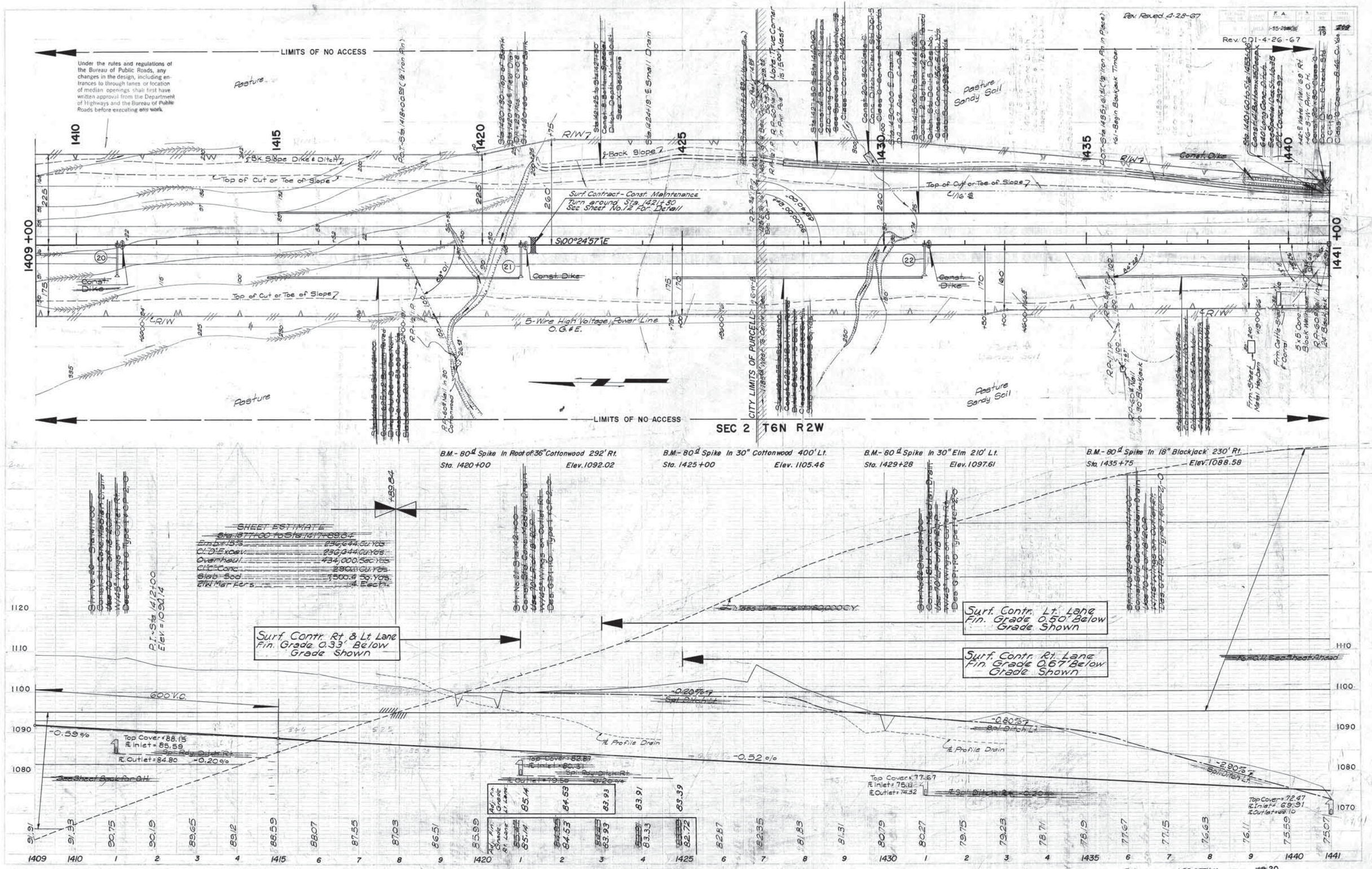
NO.	Δ	D	T	L	R	P.I. Sta.	Super
1	37° 54' 20"	00° 30' 00"	3,935.14'	7,581.11	11,459.16	1344+46.79	Normal Slope
2	27° 12' 15"	3° 00' 00"	462.12'	906.81	1,909.86	1337+62.12	
3	15° 45' 44"	2° 00' 00"	396.56'	788.11	2,864.79	1352+88.32	
4	37° 54' 20"	1° 00' 00"	1,967.57'	3,790.56	5,729.58	1344+57.74	0.028 ft/ft



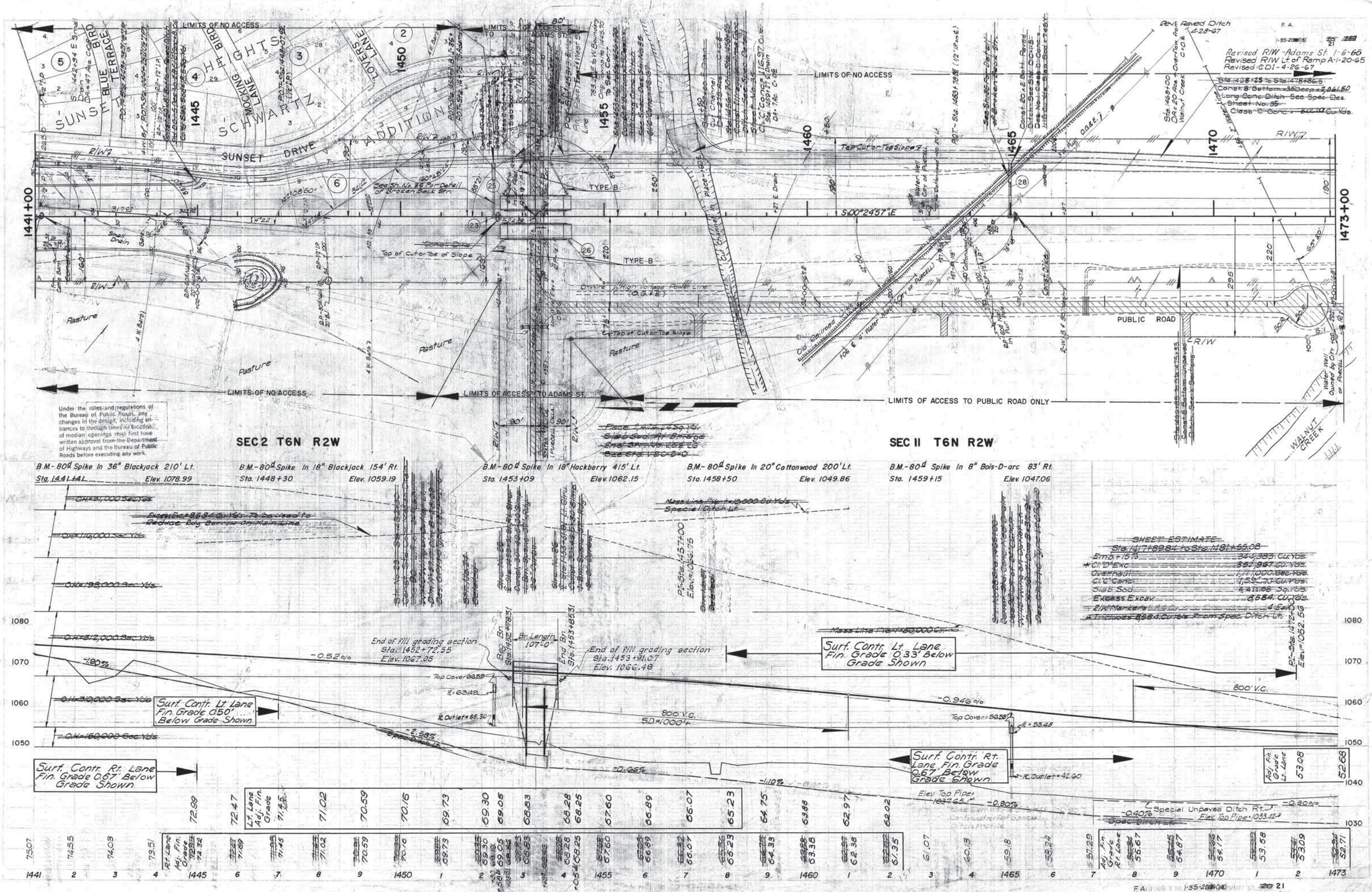
Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.
LINE "E"
LINE "D"
LINE "C"
PRES. LIMITS OF NO ACCESS
LIMITS OF NO ACCESS
SEC. 35 T7N R2W
Line Sta. 1359+48.48
Excess Excav. = 5,879 C.Y. To be Used To Reduce Rdy. Borrow Line "D"
Surf. Contr. Rt. & Lt. Lane Fin. Grade 0.33' Below Grade Shown
500' Overlap
Line "D" Sta. 1361+00 To Sta. 1363+00 = 366.57
Adj. Fin. Grade 51.60
Adj. Fin. Grade 48.52
Adj. Fin. Grade 48.86
Line "D"
Line "C"


SEC. 35 T7N R2W
SEC. 36 T7N R2W
LINE "E"
FOR DETAILS OF INTERCHANGE SEE SHEET NO's 16,32,38
For Details of Interchange See Sheets No. 30 & 31
Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.
PRESENT LIMITS OF NO ACCESS
60' LIMITS OF ACCESS TO PUBLIC ROAD ONLY
Existing Line B-7
Proposed Line C
Proposed Line D
Cultivated
B.M. No.1 60d Spk. In Cor. Fence Post 257' Rt. Sta. 1374+62 (Line A) Elev. 1143.81
B.M. No.2 (Bent 80d Spk. In 18" Elm 274' Lt. Sta. 1379+05 Elev. 1128.03
B.M. No.3 (X) On S.W. Cor Of West Conc. Hdwll. 190' Rt. Sta 1389+26 Elev. 1118.87
B.M. No.4 80d Spk. In Root 30" Walnut 125' Rt. Sta 1393+20 Elev. 1127.23
B.M. No.5 80d Spk. In 6" Persimmon 90' Lt. Sta. 1401+79 Elev. 1119.11
B.M. No.6 R.R. Spk. In Root 24" Elm 75' Rt. Sta. 1367+30 (Line D) Elev. 1110.70
LINE "E" SHEET ESTIMATE
Sta. 1372+50 to Sta. 1398+80
Emb. 115%
Cl. D Excav. 35,943 Cu. Yds.
Borrow 8,718 Cu. Yds.
Overhaul 27,225 Cu. Yds.
Clg. & Grub 1,500 Sta. Yds.
Slab Sod 191.4 Sq. Yds.
T.B.S.C. 17.6 Cu. Yds.
Borrow = 27,225 Cu. Yds. To be Obtained By The Contractor
Lt. Edge Line "E"
Lt. Edge Existing Slab
Lt. Edge Main Line
300' V.C.
Surf. Contr. Line "E" Fin. Grade as Shown
Surf. Contr. Line "E" Fin. Grade 0.33' Below Grade Shown
Beg. Line "E" Elev. = 51.39
End Line "E" Elev. = 20.41

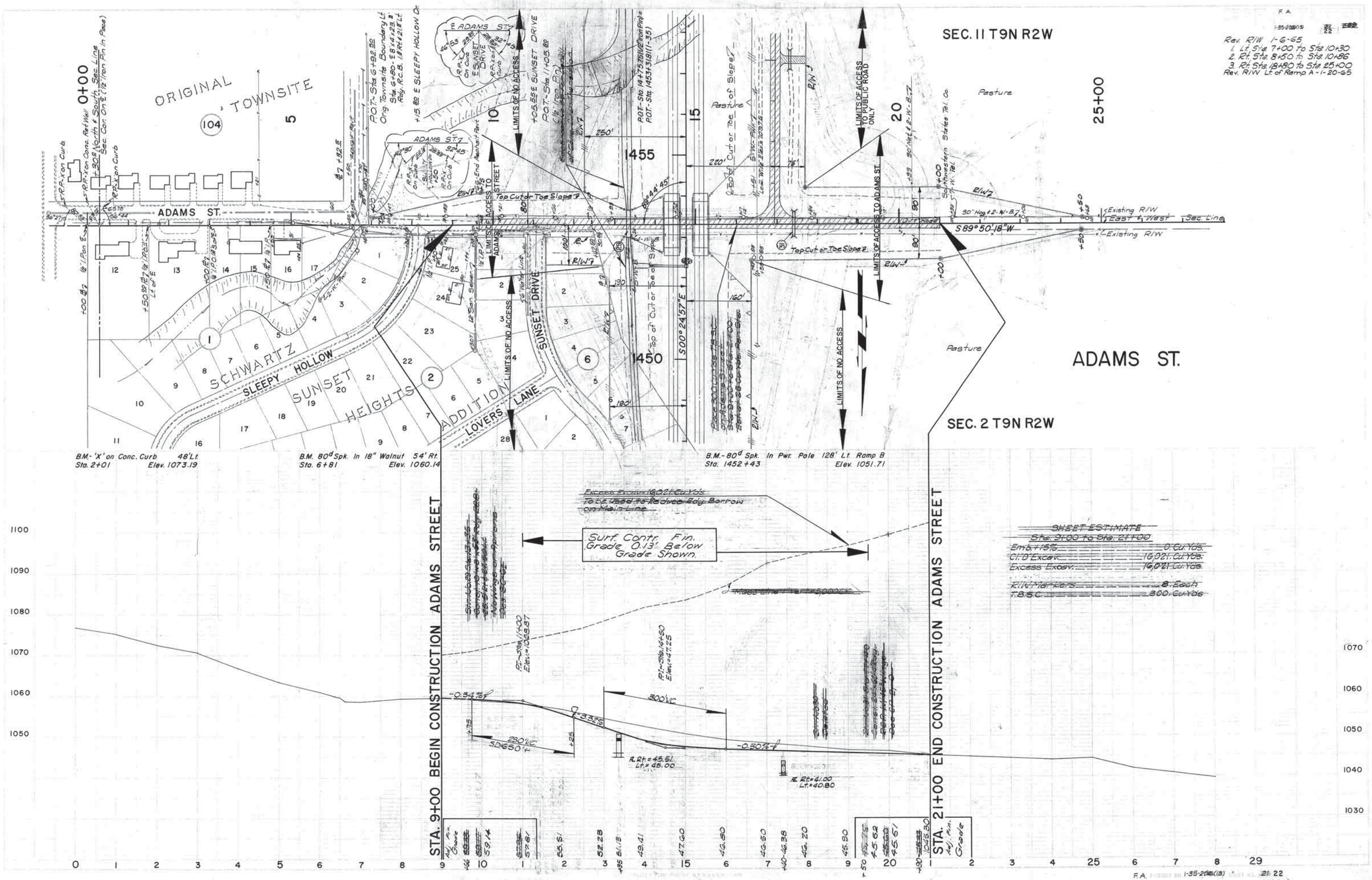

Rev. 4-22-65 Removed Drive Lt. Sta. 1395+39 to Sta. 1400+48
Rev. CDT-4-26-67
LIMITS OF NO ACCESS
LIMITS OF ACCESS TO PUBLIC RD. ONLY
LIMITS OF ACCESS TO PUBLIC ROAD ONLY
S100°24'57"E
5 WIRE HIGH VOLTAGE POWER LINE (O.G.&E.)
Toe of Slope or Top of Cut
Back Slope
Top of Cut or Toe of Slope
Type B
Pasture
Native Grass
Remove Terraces Within R/W
Sta. 1385+18 to Sta. 1393+20 Const. 802 x 4' Bottom Paved Ditch Des. No. 28 Std. DC-1-5 Class C Conc. = 85.0 Cu. Yds. Slab Sod = 297.0 Sq. Yds.
Place 2,598.3 Sq. Yd. Slab Sod At Bridge End Str. No. 17418 See Std. VEC-5-0
DETAIL STR. NO. 16
SEC. 35 T7N R2W
SEC. 2 T6N R2W
20'-0" Bottom 2:1 Slab Sod Ditch
Spl. 20' Bottom Ditch
B.M.-80d Spike In 20" Elm 125' Lt. Sta. 1377+55 Elev. 1094.47
B.M.-80d Spike In a 30" Dead Willow 49' Lt. Sta. 1385+60 Elev. 1081.46
B.M.-80d Spike In a 30" Willow 86' Lt. Sta. 1386+00 Elev. 1080.54
B.M.-(R.P.) 60d Spike In Corner Fence Post 130' Lt. Sta. 1393+79 Elev. 1083.53
B.M.-80d Spike In 30" Willow 230' Lt. Sta. 1399+45 Elev. 1076.77
B.M.-Top R.P. 1/2" Iron Pin 300' Rt. Sta. 1407+66.55 Elev. 1100.78
P.I.-Sta. 1378+88.25 Elev. = 1098.99
800' V.C.
Surf. Contr. Rt. & Lt. Lane Fin. Grade 0.33' Below Grade Shown
End of fill grading section Sta. 1399+95.48 Elev. 1095.38
End of fill grading section Sta. 1401+21.72 Elev. 1095.60
Begin Br. Sta. 1400+05.20
End Br. Sta. 1401+12.20
Br. Len. 107.0'
0.00 %
-0.59 %
600' V.C. SD = 1000'
Median Ditch
Special Ditch Rt.
Special Ditch Lt.
Line "C"
Line "D"
Top Cover = 98.67
Top Cover = 96.57
Top Cover = 94.
Pipe = 93.47
Outlet = 88.70
Pipe = 92.11
Rt = 94.00
Lt = 93.00
Lt = 74.00
Rt = 73.00
Lt = 78.4
Rt = 72.4
Str. No. 13
Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.
F.A. I-35-2(13) 19
(12) (13)



F.A. PROJECT NO. I-35-2(103) SHEET NO. 20 (12)(13)



LIMITS OF NO ACCESS
LIMITS OF ACCESS TO ADAMS ST.
LIMITS OF ACCESS TO PUBLIC ROAD ONLY
SUNSET HEIGHTS
SUNSET DRIVE ADDITION
BLUE BIRD TERRACE
MOCKING BIRD LANE
LOVERS LANE
SCHWARTZ
PUBLIC ROAD
WALNUT CREEK
Revised R/W - Adams St. 1-6-65
Revised R/W Lt. of Ramp A-1-20-65
Revised CDI - 4-26-67
Sta. 1458+25 to Sta. 1478+86.5
Const. 8' Bottom x 36 Deep x 2,061.50
Long Conc. Ditch See Spec. Des.
Sheet No. 35
Class C Conc. = 512.70 Cu. Yds.
Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.
SEC 2 T6N R2W
SEC 11 T6N R2W
B.M.-80d Spike In 36" Blackjack 210' Lt. Sta. 1441+41 Elev. 1078.99
B.M.-80d Spike In 18" Blackjack 154' Rt. Sta. 1448+30 Elev. 1059.19
B.M.-80d Spike In 18" Hackberry 415' Lt. Sta. 1453+09 Elev. 1062.15
B.M.-80d Spike In 20" Cottonwood 200' Lt. Sta. 1458+50 Elev. 1049.86
B.M.-80d Spike In 8" Bois-D-arc 83' Rt. Sta. 1459+15 Elev. 1047.06
SHEET ESTIMATE
Sta. 1417+89.84 to Sta. 1481+55.08
Emb. +15% 344,383 Cu. Yds.
Cl. "D" Exc. 352,967 Cu. Yds.
Overhaul 1,117,000 Sec. Yds.
Cl. "C" Conc. 1,591.71 Cu. Yds.
Slab Sod. 4,411.08 Sq. Yds.
Excess Excav. 8,584 Cu. Yds.
2 W Markers 4 Ea.
Includes 8,584 Cu. Yds. From Spec. Ditch Lt.
End of fill grading section Sta. 1452+72.55 Elev. 1067.05
End of fill grading section Sta. 1453+91.07 Elev. 1066.48
Br. Length 107'-0"
Surf. Contr. Lt. Lane Fin. Grade 0.33' Below Grade Shown
Surf. Contr. Lt. Lane Fin. Grade 0.50' Below Grade Shown
Surf. Contr. Rt. Lane Fin. Grade 0.67' Below Grade Shown
Surf. Contr. Rt. Lane Fin. Grade 0.67' Below Grade Shown
800' V.C.
Special Unpaved Ditch Rt.
Elev. Top Pipe = 1033.42
Elev. Top Pipe = 1037.65
Top Cover = 66.59
Top Cover = 56.58
Rt. Outlet = 55.30
Rt. Outlet = 42.60
Lt. Lane Adj. Fin. Grade
Rt. Lane Adj. Fin. Grade
Adj. Fin. Grade Lt. Lane
Adj. Fin. Grade Rt. Lane

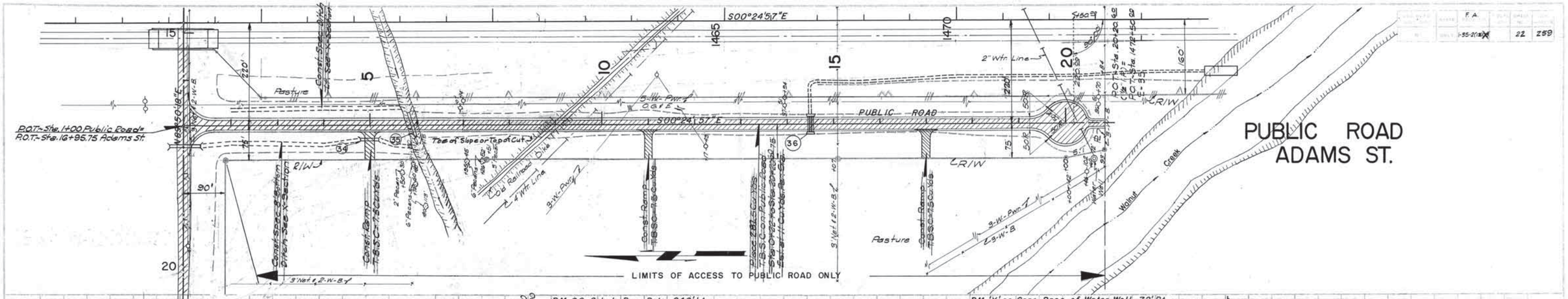


F.A. 1-35-2(12)(13) 21 22

Rev. R/W 1-6-65
1. Lt. Sta. 7+00 to Sta. 10+30
2. Rt. Sta. 8+50 to Sta. 10+86
3. Rt. Sta. 18+80 to Sta. 25+00
Rev. R/W Lt. of Ramp A - 1-20-65

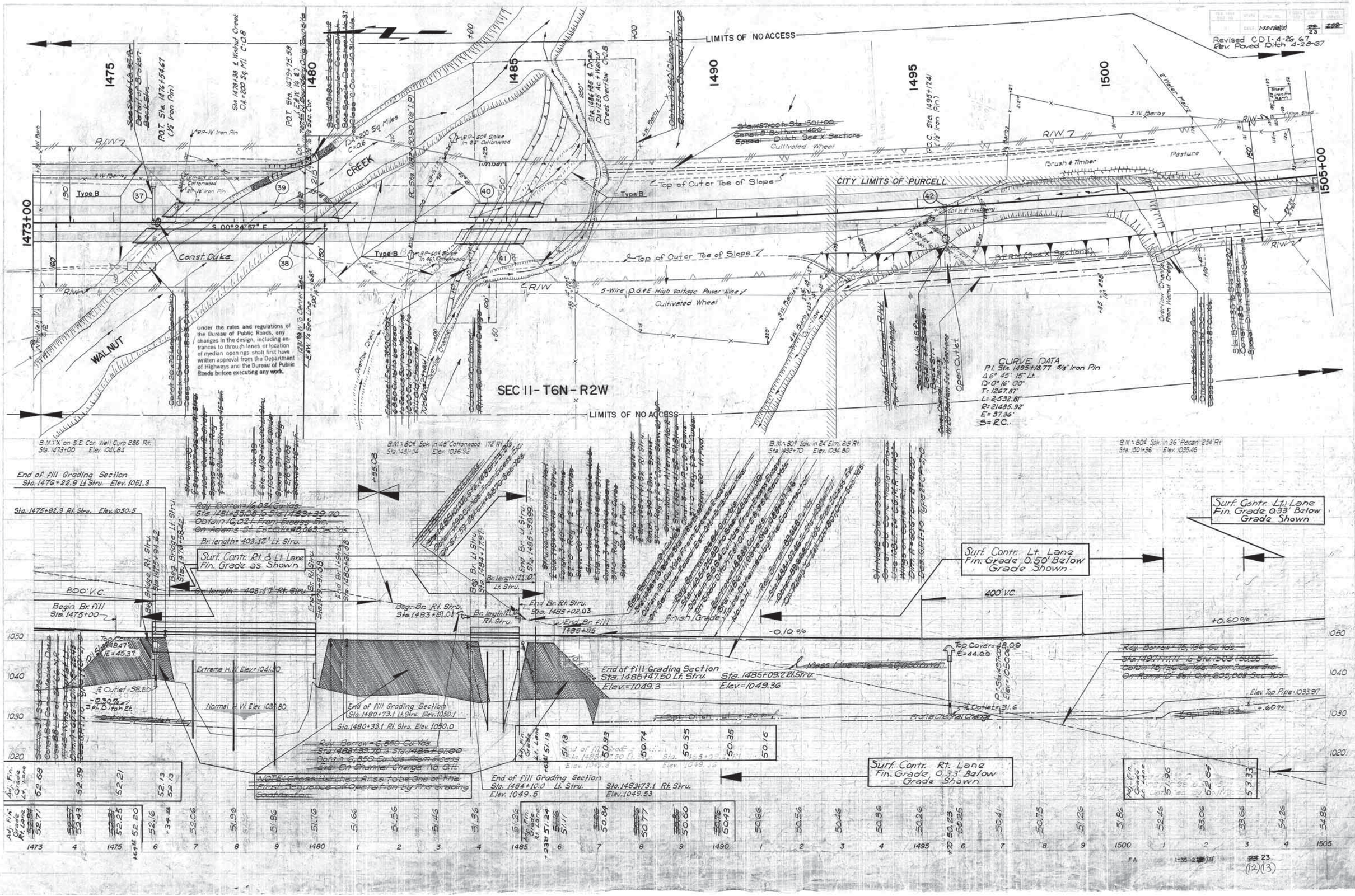
F.A. 1-35-2(12)(13) 21 22

(12)(13)

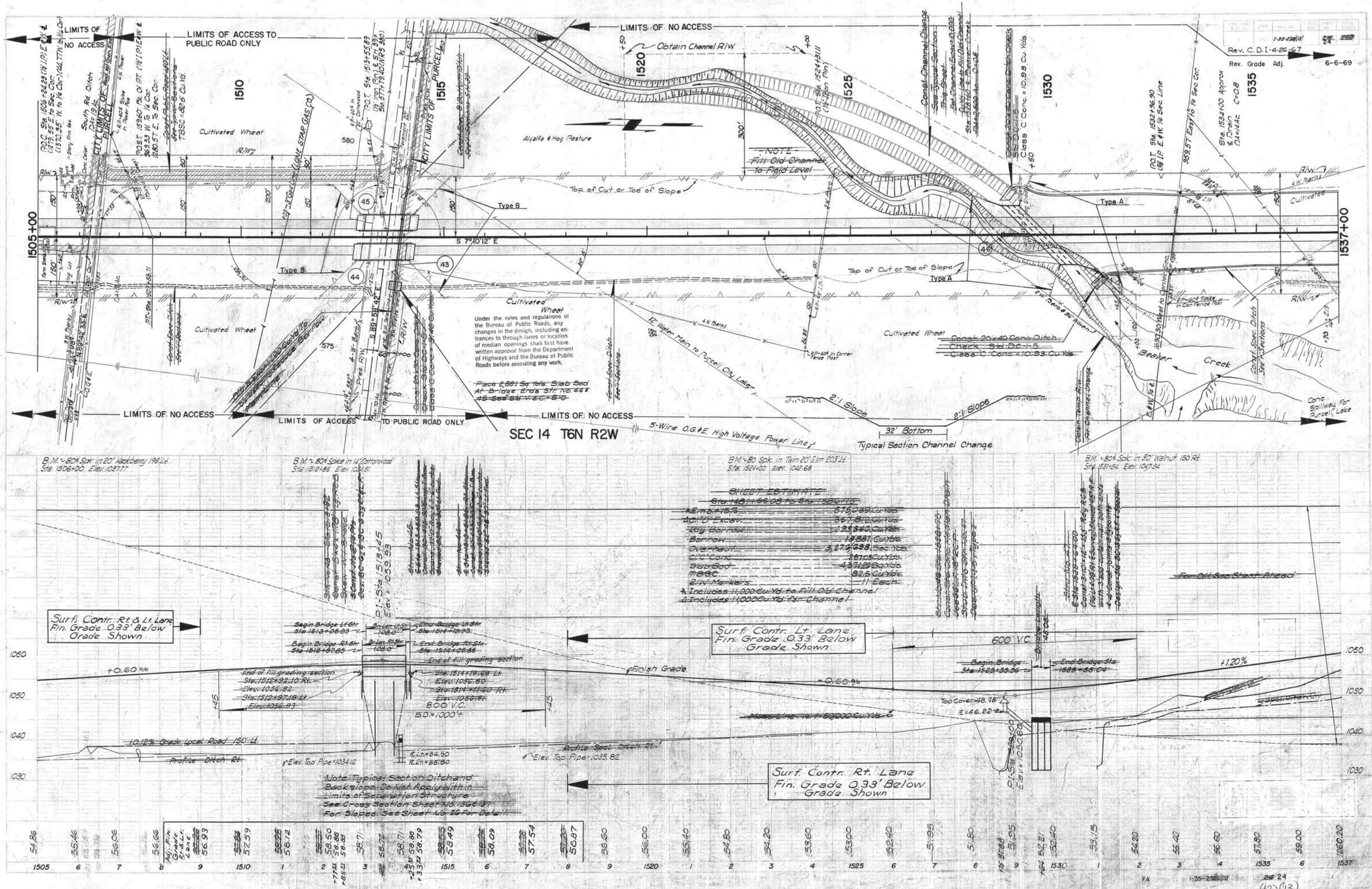


SHEET ESTIMATE
Sta. 1+22 to Sta. 20+20.62

Emb.+18%	3,871 Cu.Yds.
Cl. D Excav.	4062 Cu.Yds.
Excess Excav.	191 Cu.Yds.
Overhaul	7,600 Sec.Yds.
T.B.S.C.	305 Cu.Yds.
2 W Mar. Lo's	4 Each

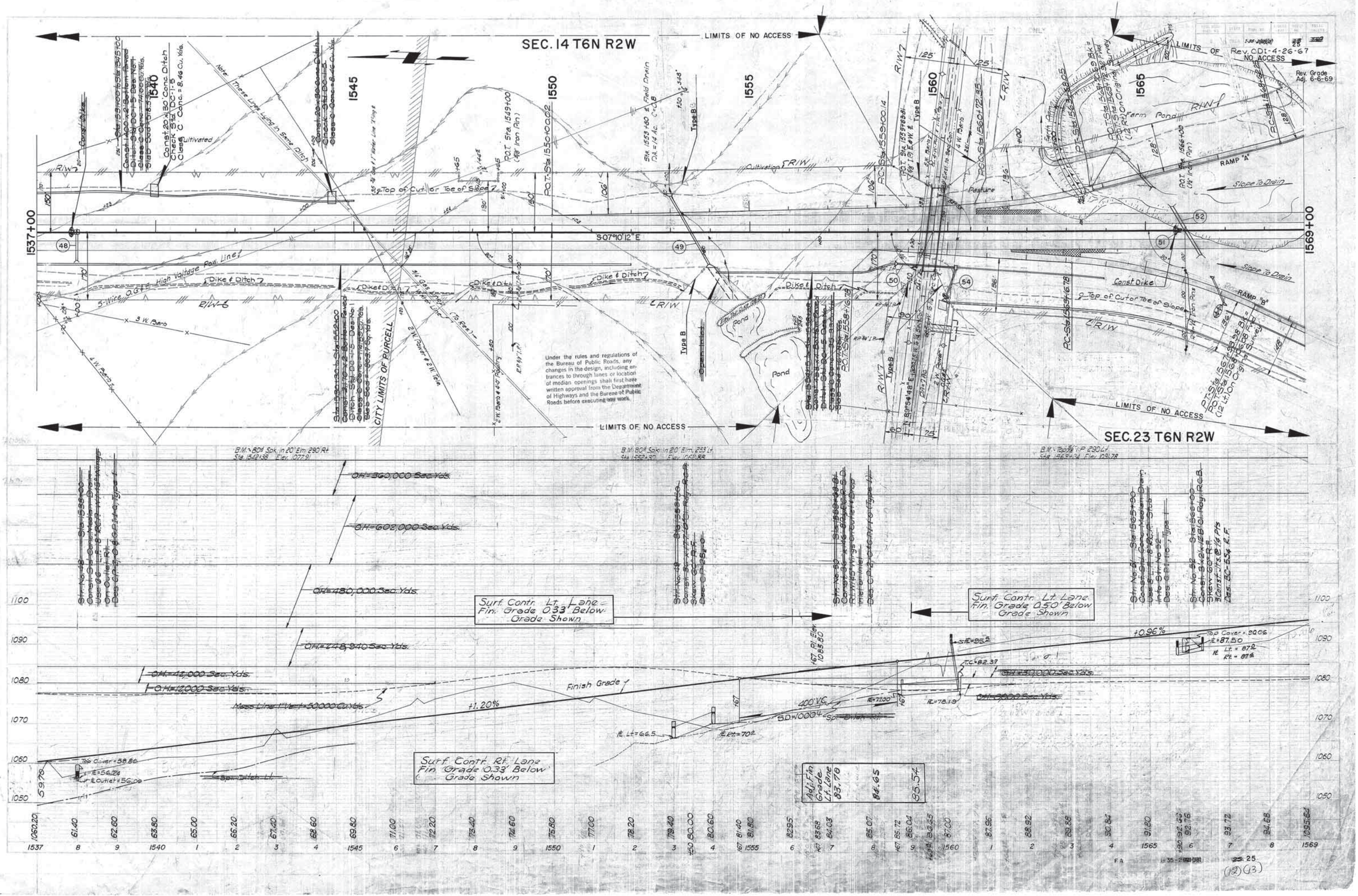


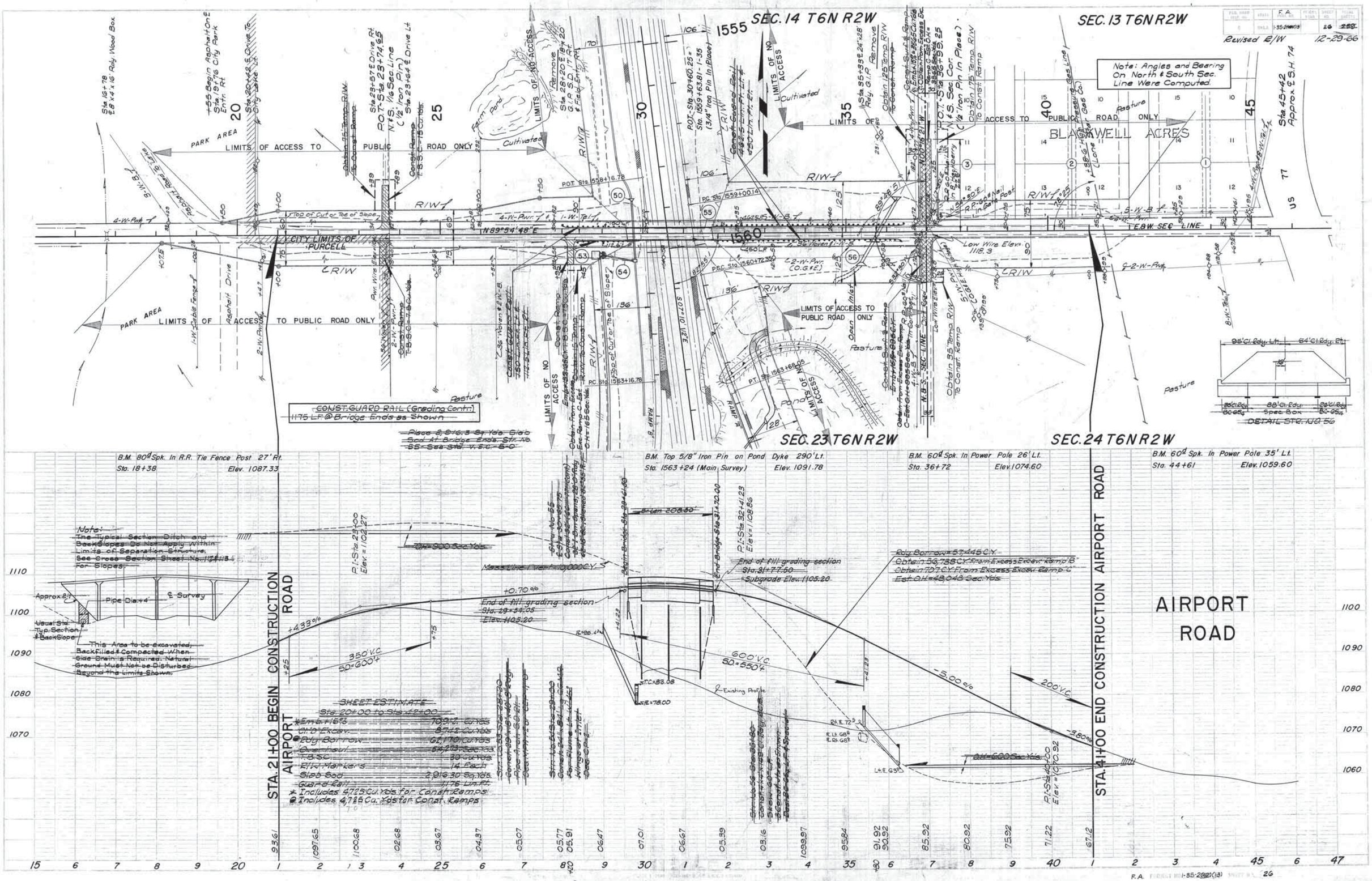
FA 1-35-2(13) 23 (12)(13)



LIMITS OF NO ACCESS
LIMITS OF ACCESS TO PUBLIC ROAD ONLY
Obtain Channel R/W
Alfalfa & Hog Pasture
Cultivated Wheat
Top of Cut or Toe of Slope
Type A
Type B
S 7°10'12" E
1505+00
1537+00
1510
1515
1520
1525
1530
1535
Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.
Place 2,881 Sq. Yds. Slab Sod At Bridge Ends Str. No. 44 & 45 See Std. V.S.C.-5-0
12" Water Main to Purcell City Lake
Const. 20'x40' Conc. Ditch Check Std. D.C.-1-5 Class 'C' Conc. = 10.93 Cu. Yds.
Beaver Creek
Conc. Spillway For Purcell Lake
2:1 Slope
32' Bottom
Typical Section Channel Change
5-Wire O.G.&E. High Voltage Power Line
SEC 14 T6N R2W
Rev. C.D.I.-4-26-67
Rev. Grade Adj. 6-6-69
B.M. ~ 80# Spk. in 20" Hackberry 196' Lt. Sta. 1506+00 Elev. 1037.77
B.M. ~ 80# Spike in 14" Cottonwood Sta. 1512+85 Elev. 1034.51
B.M. ~ 80 Spk. in Twin 20" Elm 203' Lt. Sta. 1524+00 Elev. 1042.68
B.M. ~ 80# Spk. in 30" Walnut 150' Rt. Sta. 1531+54 Elev. 1047.54
SHEET ESTIMATE
Sta. 1481+55.08 to Sta. 1586+13
Embk. 15% 575,039 Cu. Yds.
Δ Cl. "D" Excav. 357,812 Cu. Yds.
Rdy. Borrow 93,340 Cu. Yds.
Borrow 18,887 Cu. Yds.
Overhaul 3,272,698 Sec. Yds.
Cl. "C" Conc. 287.03 Cu. Yds.
Slab Sod 4,371.29 Sq. Yds.
T.B.S.C. 82.5 Cu. Yds.
R/W Markers 11 Each
* Includes 11,000 Cu. Yd. to Fill Old Channel
Δ Includes 11,000 Cu. Yd. for Channel
For Oil See Sheet Ahead
Surf. Contr. Rt. & Lt. Lane Fin. Grade 0.33' Below Grade Shown
Surf. Contr. Lt. Lane Fin. Grade 0.33' Below Grade Shown
Surf. Contr. Rt. Lane Fin. Grade 0.33' Below Grade Shown
600' V.C.
+0.60%
-0.60%
+1.20%
Finish Grade
800' V.C.
S.D. = 1000'+
Top Cover = 48.78
Elev. Top Pipe = 1034.12
Elev. Top Pipe = 1035.82
Profile Ditch Rt.
Profile Spcl. Ditch Rt.
Note: Typical Section Ditch and Backslope Do Not Apply Within Limits of Separation Structure See Cross Section Sheet No. 136 & 137 For Slopes. See Sheet No. 26 For Detail.
1060
1050
1040
1030
1505
1510
1515
1520
1525
1530
1535
1537

(12)(13)


SEC. 14 T6N R2W
LIMITS OF NO ACCESS
Rev. CDI-4-26-67
Rev. Grade Adj. 6-6-69
1537+00
1569+00
S 07°10'12" E
Dike & Ditch
Top of Cut or Toe of Slope
Cultivation
Farm Pond
RAMP "A"
RAMP "B"
Slope To Drain
Const. Dike
Pasture
Pond
CITY LIMITS OF PURCELL
Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.
SEC. 23 T6N R2W
O.H.=360,000 Sec. Yds.
O.H.=602,000 Sec. Yds.
O.H.=480,000 Sec. Yds.
O.H.=248,940 Sec. Yds.
O.H.=42,000 Sec. Yds.
O.H.=12,000 Sec. Yds.
Mass Line 1" Vert.=50,000 Cu. Yds.
Finish Grade
+1.20%
+0.96%
400' V.C.
Surf. Contr. Lt. Lane Fin. Grade 0.33' Below Grade Shown
Surf. Contr. Lt. Lane Fin. Grade 0.50' Below Grade Shown
Surf. Contr. Rt. Lane Fin. Grade 0.33' Below Grade Shown
Adj. Fin. Grade Lt. Lane 83.78 84.65 85.54
1537 8 9 1540 1 2 3 4 1545 6 7 8 9 1550 1 2 3 4 1555 6 7 8 9 1560 1 2 3 4 1565 6 7 8 1569



SEC. 14 T6N R2W
SEC. 13 T6N R2W
SEC. 23 T6N R2W
SEC. 24 T6N R2W
Revised R/W 12-29-66
Note: Angles and Bearing On North & South Sec. Line Were Computed.
BLACKWELL ACRES
LIMITS OF ACCESS TO PUBLIC ROAD ONLY
PARK AREA
CITY LIMITS OF PURCELL
N89°54'48"E
E.&W. SEC. LINE
CONST. GUARD RAIL (Grading Contr.)
1175 LF @ Bridge Ends as Shown
DETAIL STR. NO. 56
B.M. 80d Spk. In R.R. Tie Fence Post 27' Rt. Sta. 18+38 Elev. 1087.33
B.M. Top 5/8" Iron Pin on Pond Dyke 290' Lt. Sta. 1563+24 (Main Survey) Elev. 1091.78
B.M. 60d Spk. In Power Pole 26' Lt. Sta. 36+72 Elev. 1074.60
B.M. 60d Spk. In Power Pole 35' Lt. Sta. 44+61 Elev. 1059.60
AIRPORT ROAD
STA. 21+00 BEGIN CONSTRUCTION AIRPORT ROAD
STA. 41+00 END CONSTRUCTION AIRPORT ROAD
Note: The Typical Section Ditch and BackSlopes Do Not Apply Within Limits of Separation Structure. See Cross Section Sheet No. 117 & 118 for Slopes.
This Area to be excavated, Backfilled & Compacted When Side Drain is Required. Natural Ground Must Not be Disturbed Beyond the Limits Shown.
SHEET ESTIMATE
Sta. 20+00 to Sta. 42+00
Emb. +15% 70,912 Cu. Yds
Cl. D Excav. 8,742 Cu. Yds
Rdy. Borrow 62,170 Cu. Yds
Overhaul 64,273 Sec. Yds
T.B.S.C. 30 Cu. Yds
R/W Markers 14 Each
Slab Sod 2,916.30 Sq. Yds
Guard Rail 1175 Lin. Ft.
* Includes 4,725 Cu. Yds for Const. Ramps
@ Includes 4,725 Cu. Yds for Const. Ramps
Rdy. Borrow = 57,445 C.Y.
Obtain 56,788 C.Y. From Excess Excav. Ramp "B"
Obtain 707 C.Y. From Excess Excav. Ramp "C"
Est. O.H. = 48,048 Sec. Yds.
End of fill grading section Sta. 31+77.50 Subgrade Elev. 1105.20
End of fill grading section Sta. 29+54.05 Elev. 1105.20
Mass Line Diver. = 10,000 C.Y.
Existing Profile
350' V.C. SD = 600'±
600' V.C. SD = 550'±
200' V.C.
+4.33%
+0.70%
-5.00%
-3.80%

LIMITS OF ACCESS TO PUBLIC ROAD ONLY

SEC 23 T6N R2W

RAMP "C"

RAMP "D"

RAMP "B"

For Details of Interchange See Sheets 32,33,34.

FOR DETAILS OF INTERCHANGE SEE SHEET NO's 29, 30, 31, 33, 34.

S 07°10'12" E

Drain Back

Future Construction

Top of Cut or Toe of Slope

LIMITS OF NO ACCESS

SEC 23 T6N R2W

Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.

Excavation Plan For SH 74 Interchange Area.
Sta. 1555+00 to Sta. 1586+24.8

Ramps "A" & "C" | Variable | Typical Section A-A | Variable | Ramps "B" & "D"

B.M.-80# Spk. In Root 20" Elm. 190 Rt. Sta. 1572+37 Elev. 1107.46

B.M.-80# Spk. in 20" Black Locust 316 Lt. Sta. 1580+00 Elev. 1134.42

B.M.-80# Spk. in 10" Persimmon 170' Lt. Sta. 1586+25 Elev. 1108.86

B.M. 80# Spk. in 24" Elm. 175' Lt. Sta. 1591+70 Elev. 1082.83

B.M.-80# Spk. In Power Pole 220' Lt. Sta. 1598+80 Elev. 1094.59

Surf. Contr. Lt. Lane Fin. Grade 0.50' Below Grade Shown

Surf. Contr. Rt. Lane Fin. Grade 0.33' Below Grade Shown

Finish Grade

+0.96%

1000' V.C.

SD = 1000 +

STA. 1579+00 END FED. AID PROJECT NO. — I-35-2(13)09 SURF.

EQU. STA. 1585+50 BACK = STA. 4787 92.93 FWD.

STA. 1585+50 END FED. AID PROJ. NO. I-35-2(13)

STA. 1586+00 END FED. AID PROJ. NO. I-35-2(12)

Adj. Fin. Grade Lt. Lane 98.98 | 00.02 | 01.00 | 01.82 | 02.49 | 03.04 | 03.41

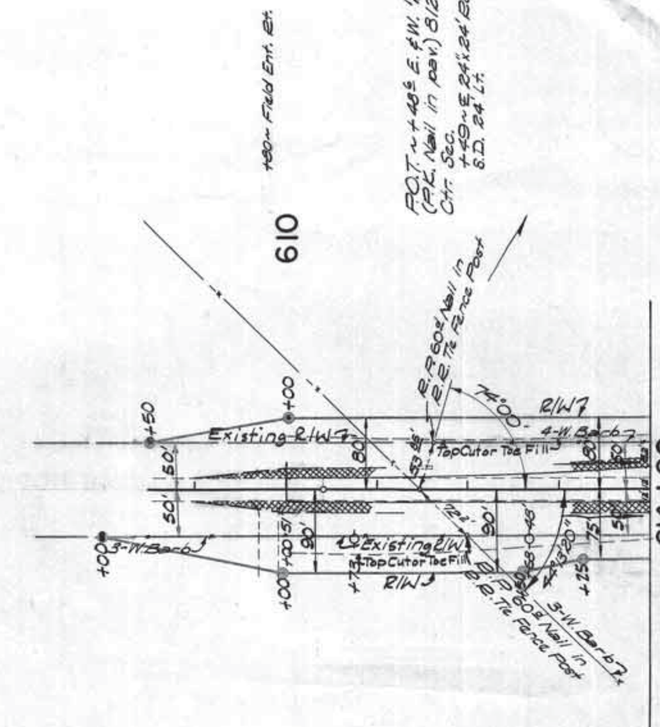
1095.64 | 96.60 | 97.56 | 98.52 | 98.90 | 99.48 | 100.44 | 99.96 | 03.58 | 03.58 | 03.45 | 03.17 | 02.74 | 02.24 | 01.74 | 01.24 | 00.74 | 00.24 | 99.74 | 99.24 | 98.74 | 98.24 | 97.74 | 97.24 | 97.10

1569 | 1570 | 1 | 2 | +40 | 3 | +50 | 4 | 1575 | 6 | 7 | 8 | 9 | 1580 | 1 | 2 | 3 | 4 | 1585 | 6 | 7 | 8 | 9 | 1590 | 1 | 2 | 3 | 4 | 1595 | 6 | 7 | 8 | 9 | 1600 | 1601

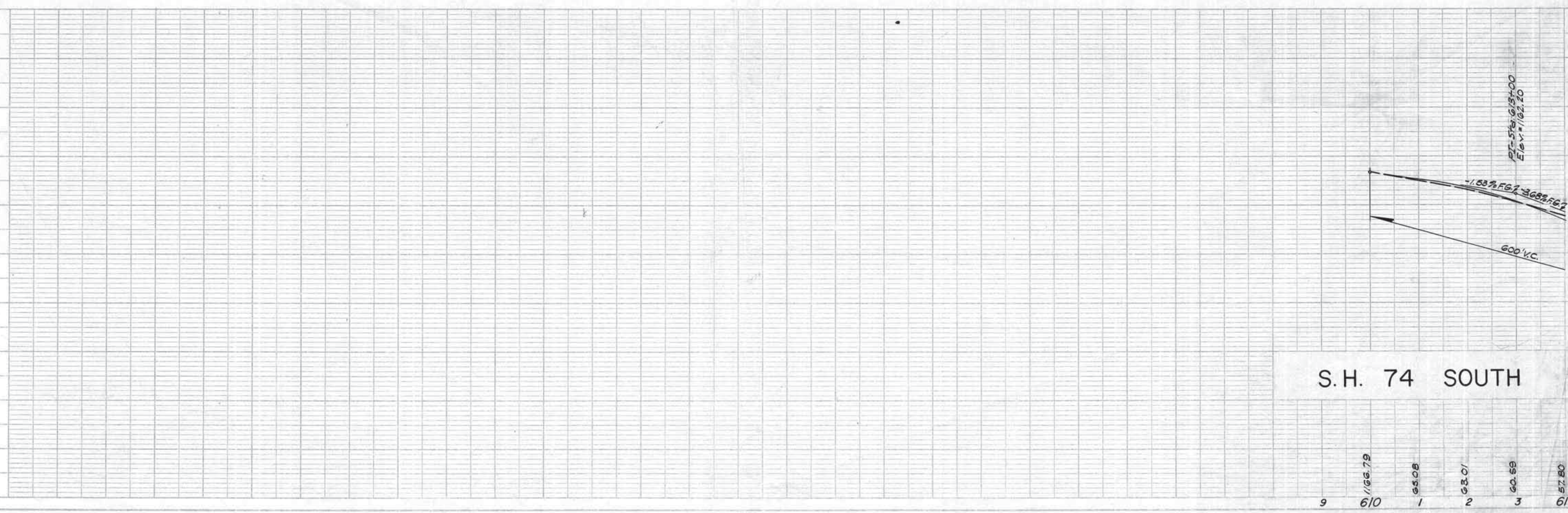
F.A. I-35-2(13) 27

(12) (13)

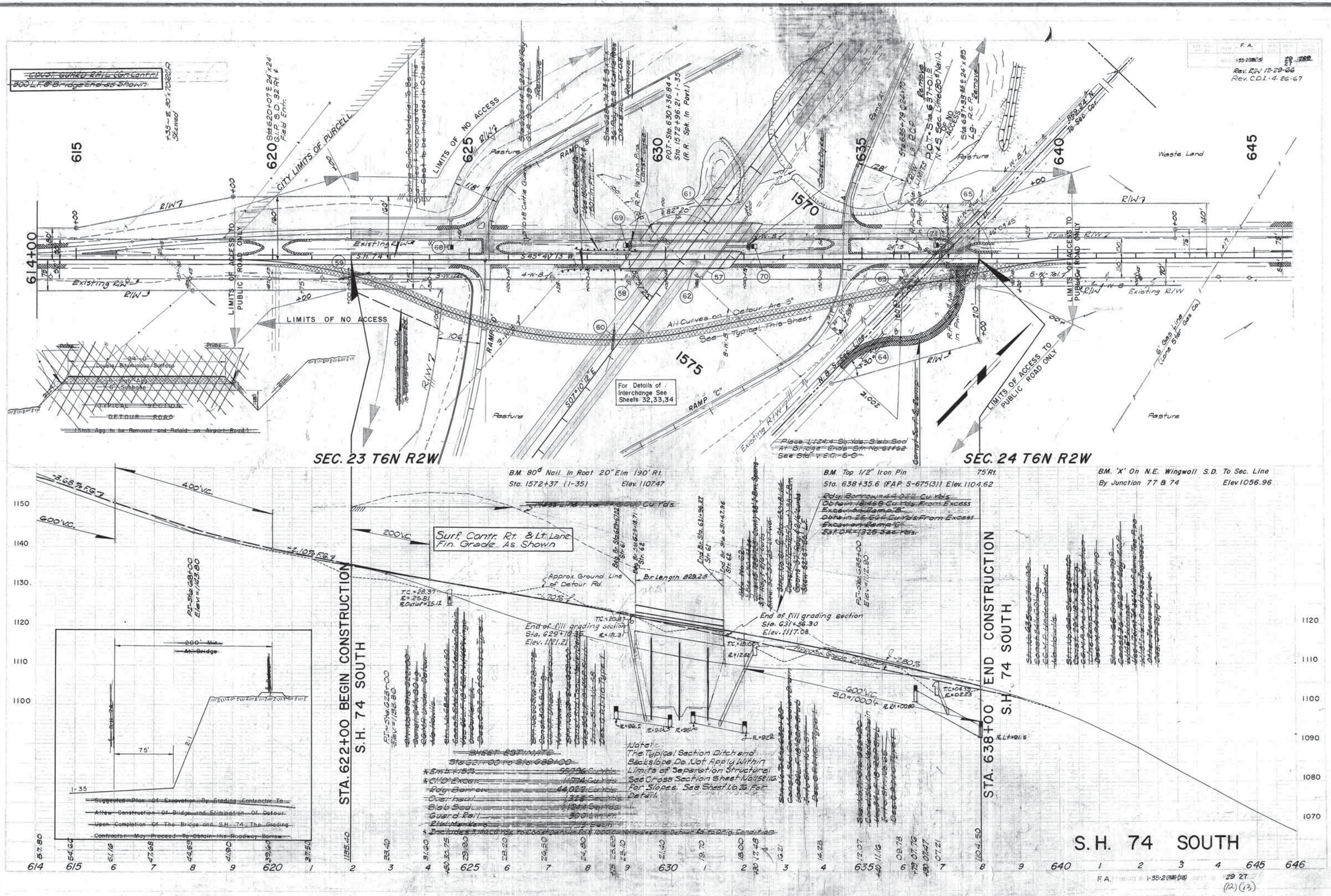
	STATE	F.A. PROJ. NO.		SHEET NO.	TOTAL SHEETS
		I-35-2		28	269



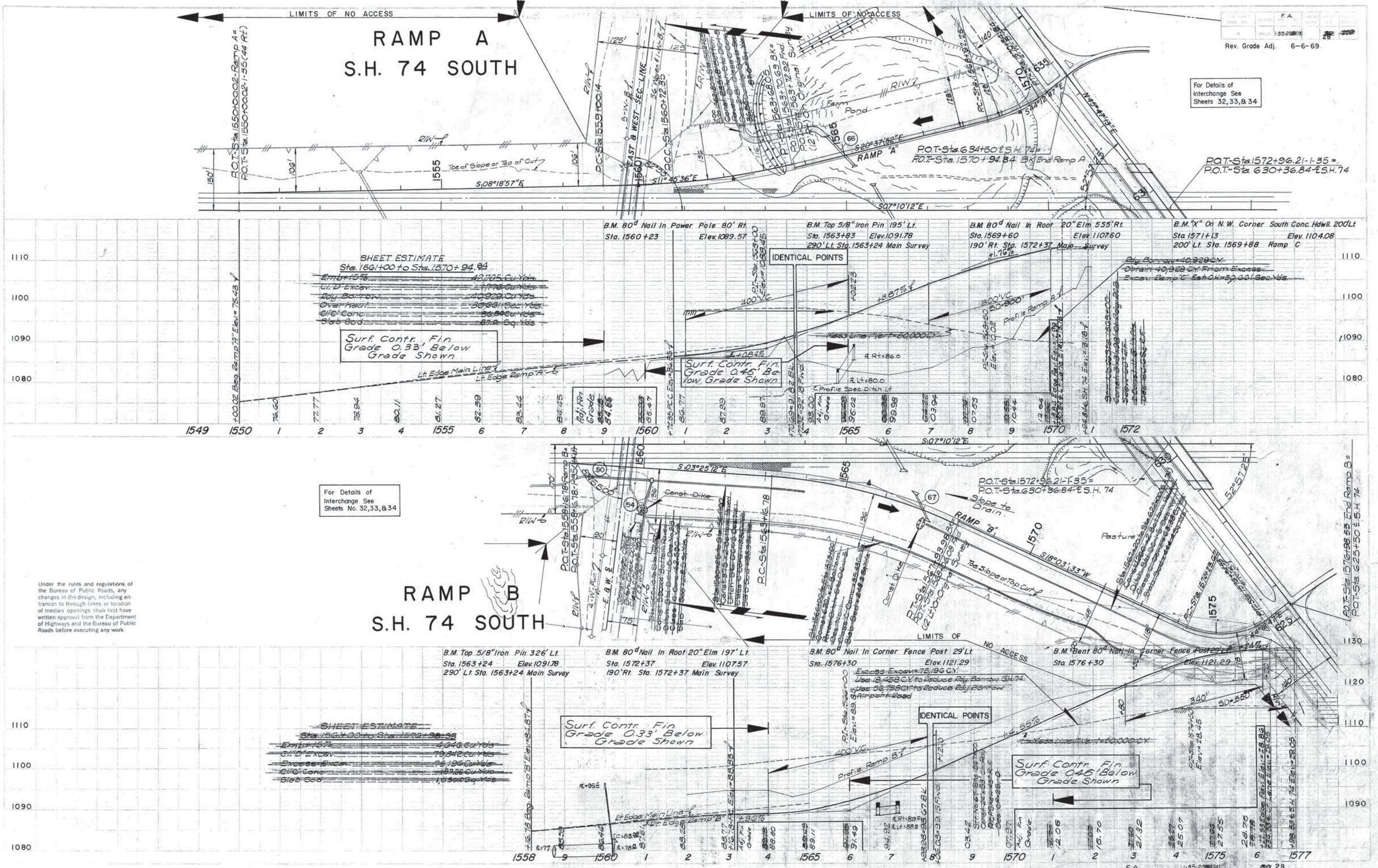
FOR R/W PURPOSES ONLY



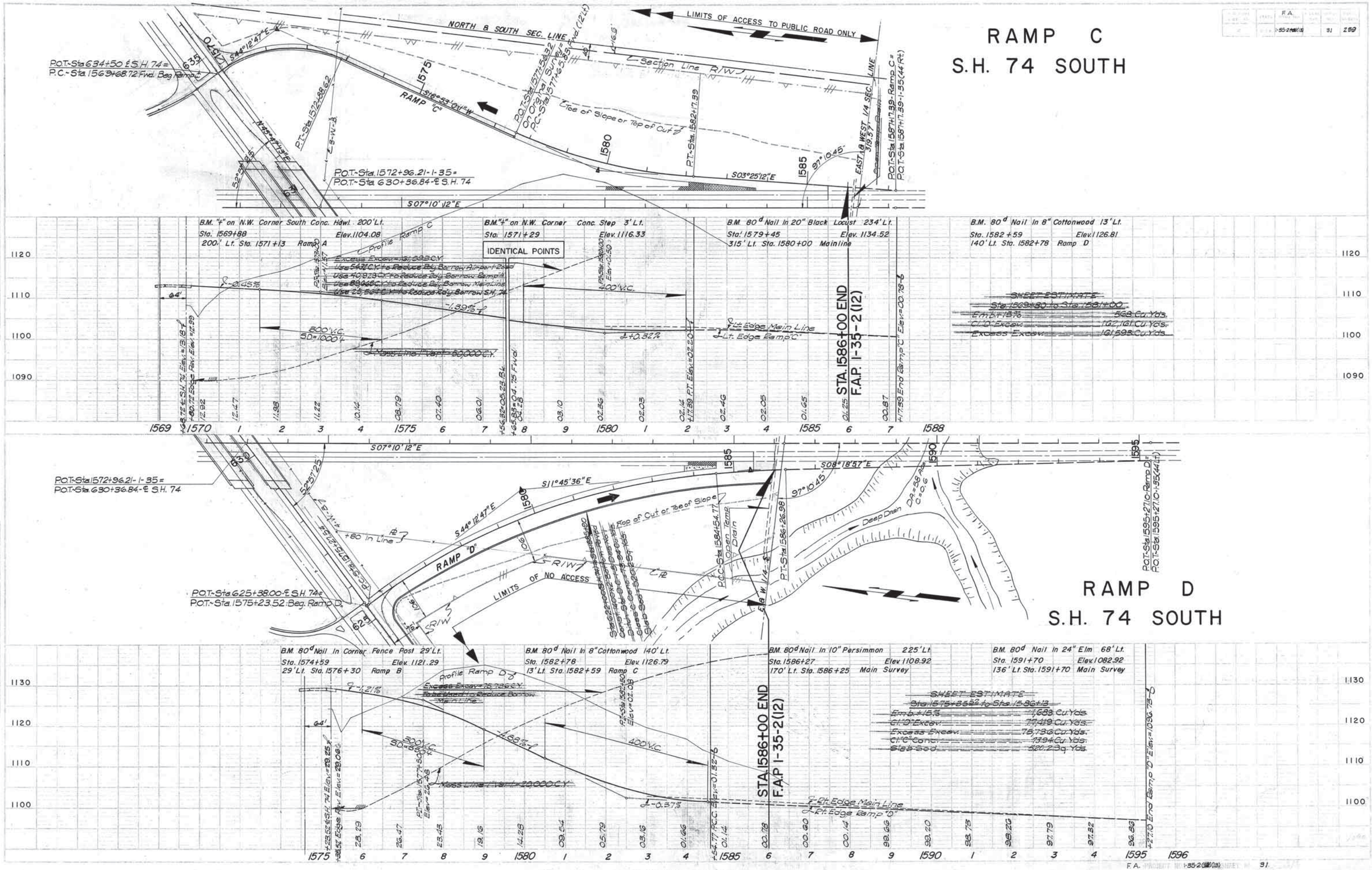
S.H. 74 SOUTH



Rev. R/W 12-29-66
Rev. C.D.I. 4-26-67
CITY LIMITS OF PURCELL
LIMITS OF NO ACCESS
LIMITS OF ACCESS TO PUBLIC ROAD ONLY
Waste Land
Pasture
Existing R/W
All Curves on Detour Are 5°
See Typical This Sheet
For Details of Interchange See Sheets 32,33,34
RAMP "C"
RAMP "D"
SEC. 23 T6N R2W
SEC. 24 T6N R2W
B.M. 80d Nail In Root 20" Elm 190' Rt.
Sta. 1572+37 (I-35) Elev. 1107.47
B.M. Top 1/2" Iron Pin 75' Rt.
Sta. 638+35.6 (FAP S-675(3)) Elev. 1104.62
B.M. 'X' On N.E. Wingwall S.D. To Sec. Line
By Junction 77 & 74 Elev. 1056.96
Surf. Contr. Rt. & Lt. Lane Fin. Grade As Shown
Approx. Ground Line of Detour Rd.
End of fill grading section Sta. 629+10.35 Elev. 1121.21
End of fill grading section Sta. 631+56.30 Elev. 1117.08
Approx. Grade Detour
STA. 622+00 BEGIN CONSTRUCTION S.H. 74 SOUTH
STA. 638+00 END CONSTRUCTION S.H. 74 SOUTH
Note: The Typical Section Ditch and Backslope Do Not Apply Within Limits of Separation Structure. See Cross Section Sheet No. 15 & 16 For Slopes. See Sheet No. 26 For Detail.
SHEET ESTIMATE
Suggested Plan Of Excavation By Grading Contractor To Allow Construction Of Bridge and Elimination Of Detour. Upon Completion Of The Bridge and S.H. 74 The Grading Contractor May Proceed To Obtain His Roadway Borrow
S.H. 74 SOUTH



LIMITS OF NO ACCESS
RAMP A
S.H. 74 SOUTH
Rev. Grade Adj. 6-6-69
For Details of Interchange See Sheets 32,33,& 34
P.O.T.-Sta.1550+00.02-Ramp A=
P.O.T.-Sta.1550+00.02-1-35(44 Rt.)
P.C.-Sta.1559+00.14
EAST & WEST SEC. LINE
P.C.C.-Sta.1560+72.35
Farm Pond
RAMP "A"
P.O.T.-Sta.634+50 ℄ S.H. 74=
P.O.T.-Sta.1570+94.84 BK End Ramp A
P.O.T.-Sta.1572+96.21-1-35=
P.O.T.-Sta.630+36.84-℄ S.H. 74
Toe of Slope or Top of Cut
S.08°18'57"E
S11°45'36"E
S20°37'52"E
S07°10'12"E
B.M. 80d Nail In Power Pole 80' Rt.
Sta. 1560+23 Elev. 1089.57
B.M. Top 5/8" Iron Pin 195' Lt.
Sta. 1563+83 Elev. 1091.78
290' Lt. Sta. 1563+24 Main Survey
B.M. 80d Nail In Root 20" Elm 555' Rt.
Sta. 1569+60 Elev. 1107.60
190' Rt. Sta. 1572+37 Main Survey
B.M. "X" On N.W. Corner South Conc. Hdwll. 200' Lt.
Sta. 1571+13 Elev. 1104.08
200' Lt. Sta. 1569+88 Ramp C
SHEET ESTIMATE
Sta. 1561+00 to Sta. 1570+94.84
Emb+15% 42,705 Cu. Yds.
Cl. D Excav. 1,776 Cu. Yds.
Rdy. Borrow 40,929 Cu. Yds.
Overhaul 30,661 Sec. Yds.
Cl. C Conc. 56.86 Cu. Yds.
Slab Sod 87.0 Sq. Yds.
IDENTICAL POINTS
Surf. Contr. Fin. Grade 0.33' Below Grade Shown
Surf. Contr. Fin. Grade 0.46' Below Grade Shown
Lt. Edge Main Line
Lt. Edge Ramp "A"
Profile Spec. Ditch Lt.
Profile Ramp A
Rdy. Borrow=40,929 C.Y.
Obtain 40,929 C.Y. From Excess
Excav. Ramp "C" Est. C.H.=30,661 Sec. Yds.
For Details of Interchange See Sheets No. 32,33,& 34
Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.
RAMP B
S.H. 74 SOUTH
S.03°25'12"E
P.O.T.-Sta.1572+96.21-1-35=
P.O.T.-Sta.630+36.84-℄ S.H. 74
Slope to Drain
RAMP "B"
S18°03'33"W
Pasture
Toe Slope or Top Cut
Const. Dike
LIMITS OF NO ACCESS
B.M. Top 5/8" Iron Pin 326' Lt.
Sta. 1563+24 Elev. 1091.78
290' Lt. Sta. 1563+24 Main Survey
B.M. 80d Nail In Root 20" Elm 197' Lt.
Sta. 1572+37 Elev. 1107.57
190' Rt. Sta. 1572+37 Main Survey
B.M. 80d Nail In Corner Fence Post 29' Lt.
Sta. 1576+30 Elev. 1121.29
B.M. Bent 80d Nail In Corner Fence Post 29' Lt.
Sta. 1576+30 Elev. 1121.29
Excess Excav.=75,196 C.Y.
Use 18,458 C.Y. to Reduce Rdy. Borrow S.H. 74
Use 56,738 C.Y. to Reduce Rdy. Borrow Airport Road
SHEET ESTIMATE
Sta. 1561+00 to Sta. 1576+98.53
Emb+15% 4,640 Cu. Yds.
Cl. D Excav. 79,842 Cu. Yds.
Excess Excav. 75,196 Cu. Yds.
Cl. C Conc. 187.26 Cu. Yds.
Slab Sod 1,650.0 Sq. Yds.
IDENTICAL POINTS
Surf. Contr. Fin. Grade 0.33' Below Grade Shown
Surf. Contr. Fin. Grade 0.46' Below Grade Shown
Profile Ramp B
Rt. Edge Main Line
Rt. Edge Ramp "B"
Mass Line Ave. 1=50,000 C.Y.


RAMP C
S.H. 74 SOUTH
LIMITS OF ACCESS TO PUBLIC ROAD ONLY
NORTH & SOUTH SEC. LINE
Section Line R/W
RAMP "C"
Toe of Slope or Top of Cut
P.O.T.-Sta.634+50 ℄ S.H. 74 =
P.C.-Sta.1569+68.72 Fwd. Beg. Ramp C
P.O.T.-Sta.1572+96.21-1-35 =
P.O.T.-Sta.630+36.84-℄ S.H. 74
S07°10'12"E
S03°25'12"E
EAST & WEST 1/4 SEC. LINE
B.M. "+" on N.W. Corner South Conc. Hdwl. 200' Lt.
Sta. 1569+88 Elev. 1104.08
200' Lt. Sta. 1571+13 Ramp A
B.M. "+" on N.W. Corner Conc. Step 3' Lt.
Sta. 1571+29 Elev. 1116.33
IDENTICAL POINTS
B.M. 80d Nail In 20" Black Locust 234' Lt.
Sta. 1579+45 Elev. 1134.52
315' Lt. Sta. 1580+00 Mainline
B.M. 80d Nail In 8" Cottonwood 13' Lt.
Sta. 1582+59 Elev. 1126.81
140' Lt. Sta. 1582+78 Ramp D
Profile Ramp C
400' V.C.
300' V.C.
Lt. Edge Main Line
Lt. Edge Ramp "C"
STA. 1586+00 END
F.A.P. 1-35-2(12)
SHEET ESTIMATE
Sta. 1569+80 to Sta. 1581+00
Emb. +15% 568 Cu. Yds.
Cl. "D" Excav. 162,161 Cu. Yds.
Excess Excav. 161,593 Cu. Yds.
RAMP D
S.H. 74 SOUTH
P.O.T.-Sta.1572+96.21-1-35 =
P.O.T.-Sta.630+36.84-℄ S.H. 74
P.O.T.-Sta.625+38.00-℄ S.H. 74 =
P.O.T.-Sta.1575+23.52 Beg. Ramp D
S07°10'12"E
S11°45'36"E
S08°18'57"E
S44°12'47"E
RAMP "D"
LIMITS OF NO ACCESS
Top of Cut or Toe of Slope
Deep Drain
B.M. 80d Nail In Corner Fence Post 29' Lt.
Sta. 1574+59 Elev. 1121.29
29' Lt. Sta. 1576+30 Ramp B
B.M. 80d Nail In 8" Cottonwood 140' Lt.
Sta. 1582+78 Elev. 1126.79
13' Lt. Sta. 1582+59 Ramp C
B.M. 80d Nail In 10" Persimmon 225' Lt.
Sta. 1586+27 Elev. 1108.92
170' Lt. Sta. 1586+25 Main Survey
B.M. 80d Nail In 24" Elm 68' Lt.
Sta. 1591+70 Elev. 1082.92
136' Lt. Sta. 1591+70 Main Survey
Profile Ramp D
400' V.C.
300' V.C.
Rt. Edge Main Line
Rt. Edge Ramp "D"
STA. 1586+00 END
F.A.P. 1-35-2(12)
SHEET ESTIMATE
Sta. 1575+35.52 to Sta. 1586+13
Emb. +15% 1,683 Cu. Yds.
Cl. "D" Excav. 77,419 Cu. Yds.
Excess Excav. 75,736 Cu. Yds.
Cl. "C" Conc. 73.94 Cu. Yds.
Slab Sod 520.2 Sq. Yds.
F.A. 1-35-2(12)(13) 31
(12)

NOTE: FOR DETAILS OF RAMP TERMINALS, SEE DETAIL SHEET NO. ~~36~~ 31

LINE "E" GEOMETRIC LAYOUT & SURVEY DATA

STA. 1372+50 TO STA. 1402+72.84

CURVE DATA										COORDINATES								
CURVE NO.	P.I. STA.	Δ	D	T	L	R	E	Des Speed	e(ft.per ft)	NORTH	P.I.	EAST	NORTH	P.C.	EAST	NORTH	P.T.	EAST
E-1	1376+98.15	4°28'45.24"	0°30'00"	448.15'	895.85'	11,459.16'	8.76'			10,361.183717		9,729.591095	9,977.956527		9,961.920014	10,725.096046		9,468.042591
E-2	1383+51.61	8°12'58.77"	2°00'00"	205.76'	410.82'	2,864.79'	7.38'	50	0.031	10,892.179937		9,347.957235	10,725.096046		9,468.042591	11,040.387291		9,205.226372
E-3	1387+40.84	28°50'32.43"	8°00'00"	184.17'	360.53'	716.20'	23.30	40	0.056	11,173.043209		9,077.472289	11,040.387291		9,205.226372	11,227.614505		8,901.572689
E-4	1392+93.91	92°54'06.75"	16°00'00"	376.71'	580.64'	358.10'	161.66	30	0.057	11,339.237214		8,541.779329	11,227.614505		8,901.572689	10,974.254247		8,448.514516
E-5	1395+60.50	10°00'00"	8°00'00"	62.66'	125.00'	716.20'	2.74'	35	0.050	10,913.545804		8,443.001568	10,974.254247		8,448.514516	10,851.065865		8,428.266207
E-6	1396+97.91	6°00'00"	4°00'00"	75.07'	150.00'	1,432.39'	1.97'	40	0.039	10,776.211933		8,422.593020	10,851.065865		8,428.266207	10,701.175049		8,424.775278
E-7	1400+23.00	5°00'00"	1°00'00"	250.16'	500.00'	5,729.58'	5.46'	50		10,451.122014		8,432.047438	10,701.175049		8,424.775278	10,201.386695		8,417.498367

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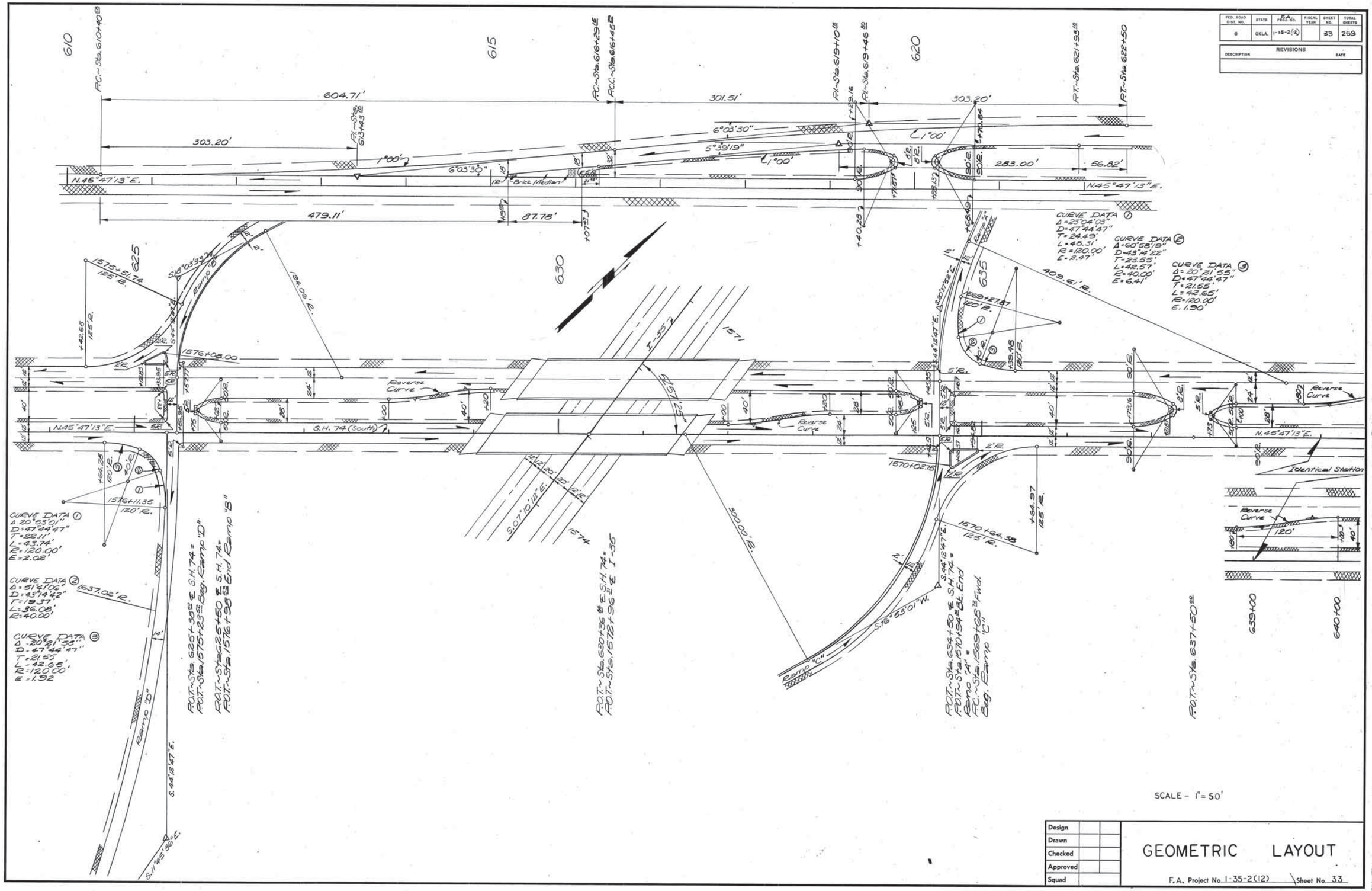
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		33	259

REVISIONS

DESCRIPTION	DATE



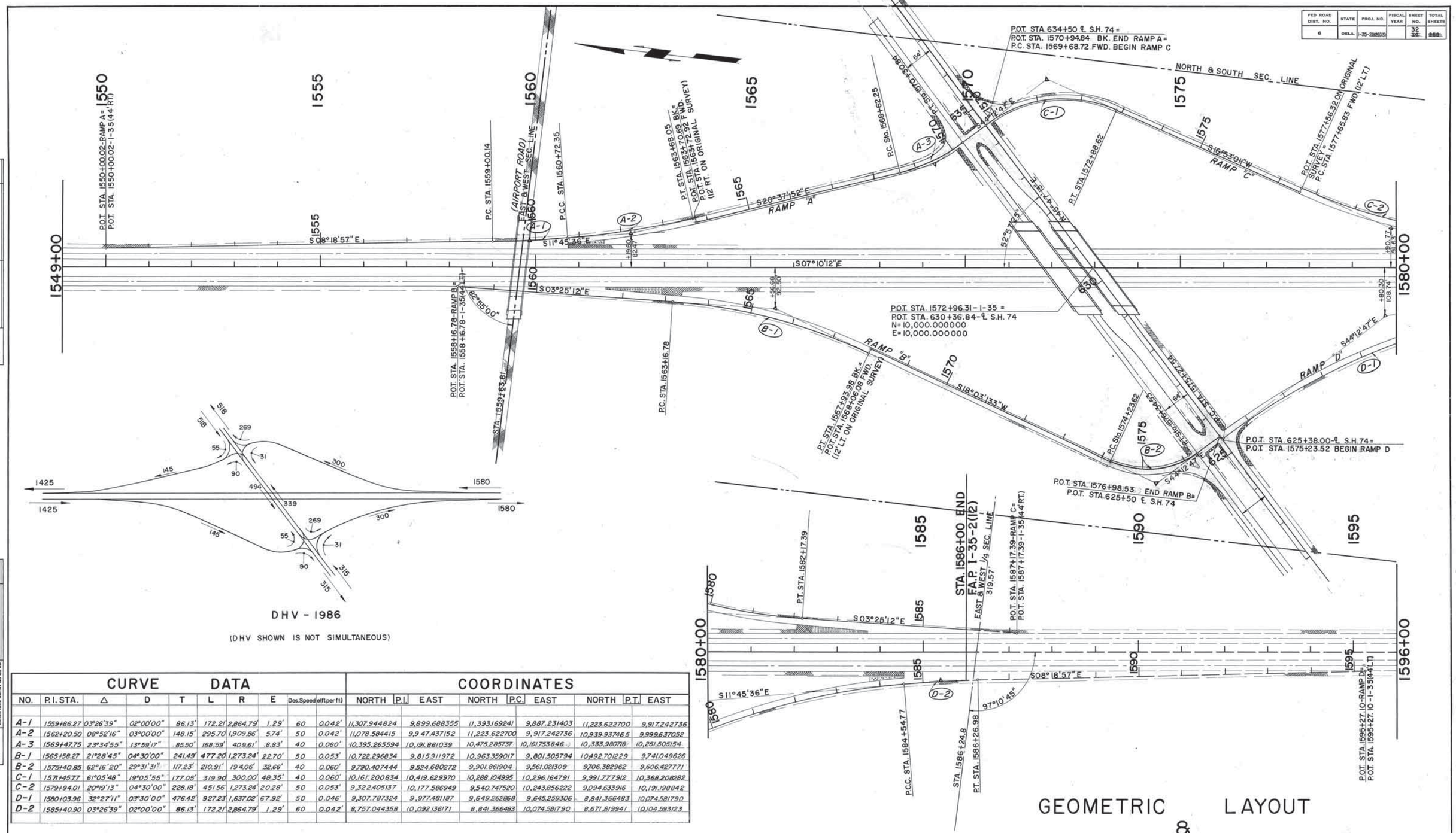
SCALE - 1" = 50'

Design		
Drawn		
Checked		
Approved		
Squad		

GEOMETRIC LAYOUT

F.A. Project No. I-35-2(12) Sheet No. 33

FED ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)(13)		32	269



CURVE DATA										COORDINATES								
NO.	P.I. STA.	Δ	D	T	L	R	E	Des. Speed	e(ft per ft)	NORTH	P.I.	EAST	NORTH	P.C.	EAST	NORTH	P.T.	EAST
A-1	1559+86.27	03°26'39"	02°00'00"	86.13'	172.21'	2,864.79'	1.29'	60	0.042'	11,307.944824		9,899.688355	11,393.169241		9,887.231403	11,223.622700		9,917.242736
A-2	1562+20.50	08°52'16"	03°00'00"	148.15'	295.70'	1,909.86'	5.74'	50	0.042'	11,078.584415		9,947.437152	11,223.622700		9,917.242736	10,939.937465		9,999.637052
A-3	1569+47.75	23°34'55"	13°59'17"	85.50'	168.59'	409.61'	8.83'	40	0.060'	10,395.265594		10,191.881039	10,475.285737		10,161.753846	10,333.980718		10,251.505154
B-1	1565+58.27	21°28'45"	04°30'00"	241.49'	477.20'	1,273.24'	22.70'	50	0.053'	10,722.296834		9,815.911972	10,963.359017		9,801.505794	10,492.701229		9,741.049626
B-2	1575+40.85	62°16'20"	29°31'31"	117.23'	210.91'	194.06'	32.66'	40	0.060'	9,790.407444		9,524.680272	9,901.861904		9,561.021309	9,706.382962		9,606.427771
C-1	1571+45.77	61°05'48"	19°05'55"	177.05'	319.90'	300.00'	48.35'	40	0.060'	10,161.200834		10,419.629970	10,288.104995		10,296.164791	9,991.777912		10,368.208282
C-2	1579+94.01	20°19'13"	04°30'00"	228.18'	451.56'	1,273.24'	20.28'	50	0.053'	9,324.405137		10,177.586949	9,540.747520		10,243.856222	9,094.633916		10,191.198842
D-1	1580+03.96	32°27'11"	03°30'00"	476.42'	927.23'	1,637.02'	67.92'	50	0.046'	9,307.787324		9,977.481187	9,649.262868		9,645.259306	8,841.366483		10,074.581790
D-2	1585+40.90	03°26'39"	02°00'00"	86.13'	172.21'	2,864.79'	1.29'	60	0.042'	8,757.044358		10,092.136171	8,841.366483		10,074.581790	8,671.819941		10,104.593123

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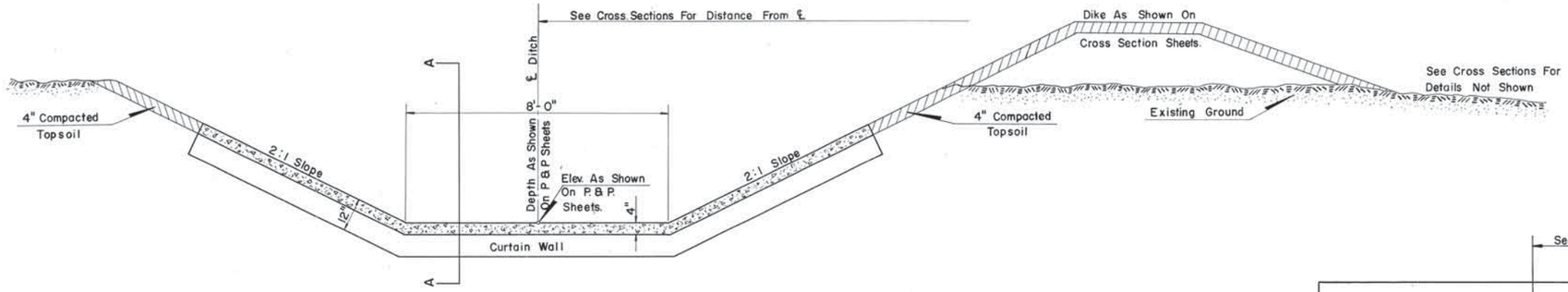
GEOMETRIC LAYOUT & SURVEY DATA

STA. 1549+00 TO STA. 1596+00

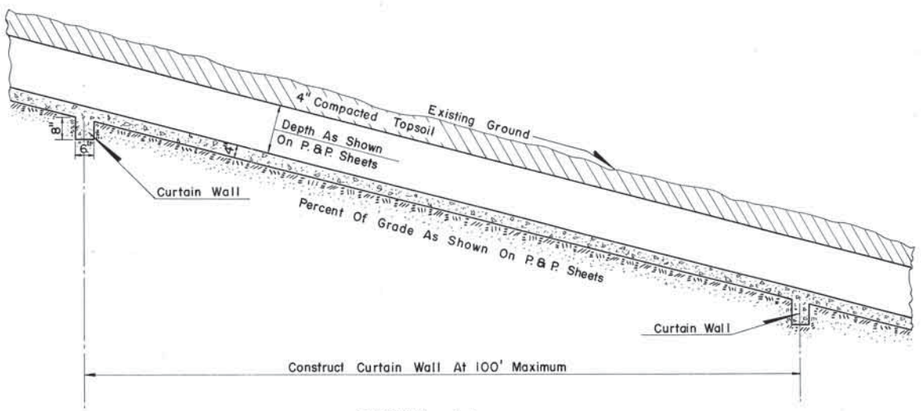
F.A. PROJECT NO. I-35-2(12)(13) SHEET NO. ~~34~~ 32 (12)(13)

DRAINAGE DETAIL

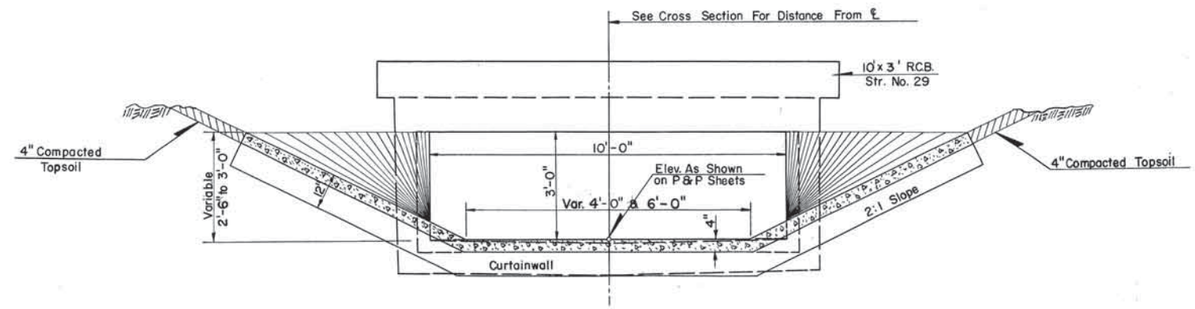
Rev. 4-28-67



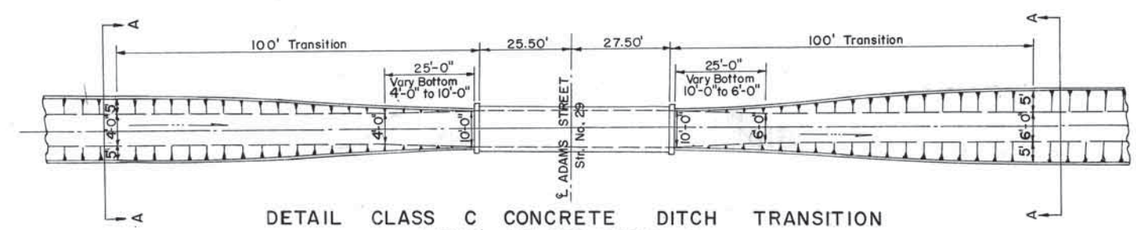
DETAIL CLASS C CONCRETE DITCH



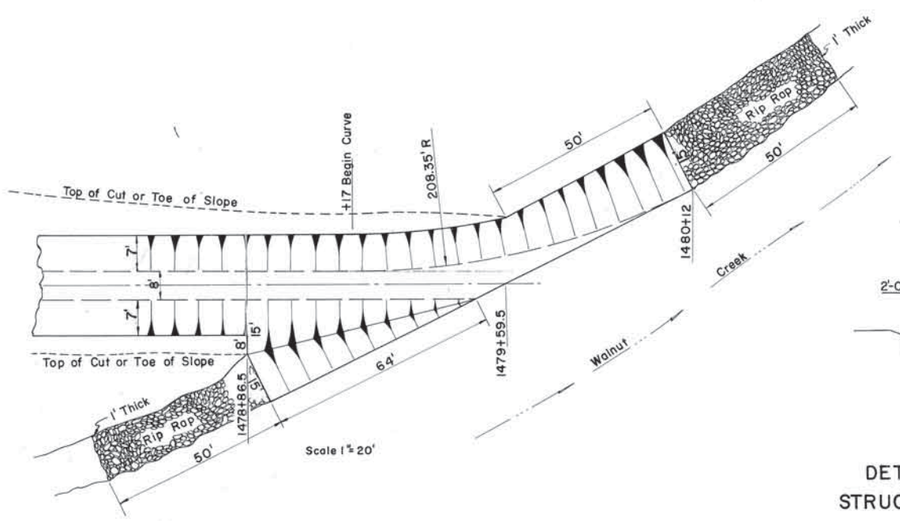
SECTION A-A



SECTION A-A

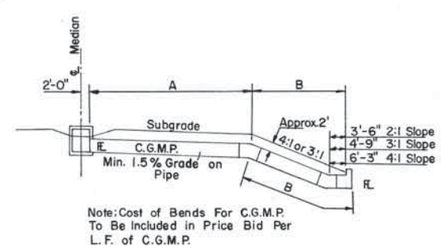


DETAIL CLASS C CONCRETE DITCH TRANSITION LEFT OF STA. 1453+31.81

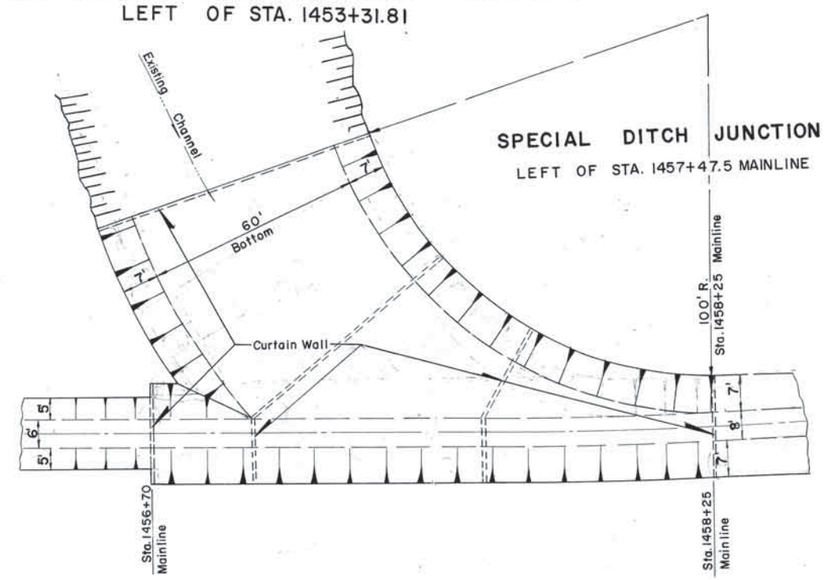


SPECIAL DITCH OUTLET DETAIL

LEFT OF STA. 1479+00



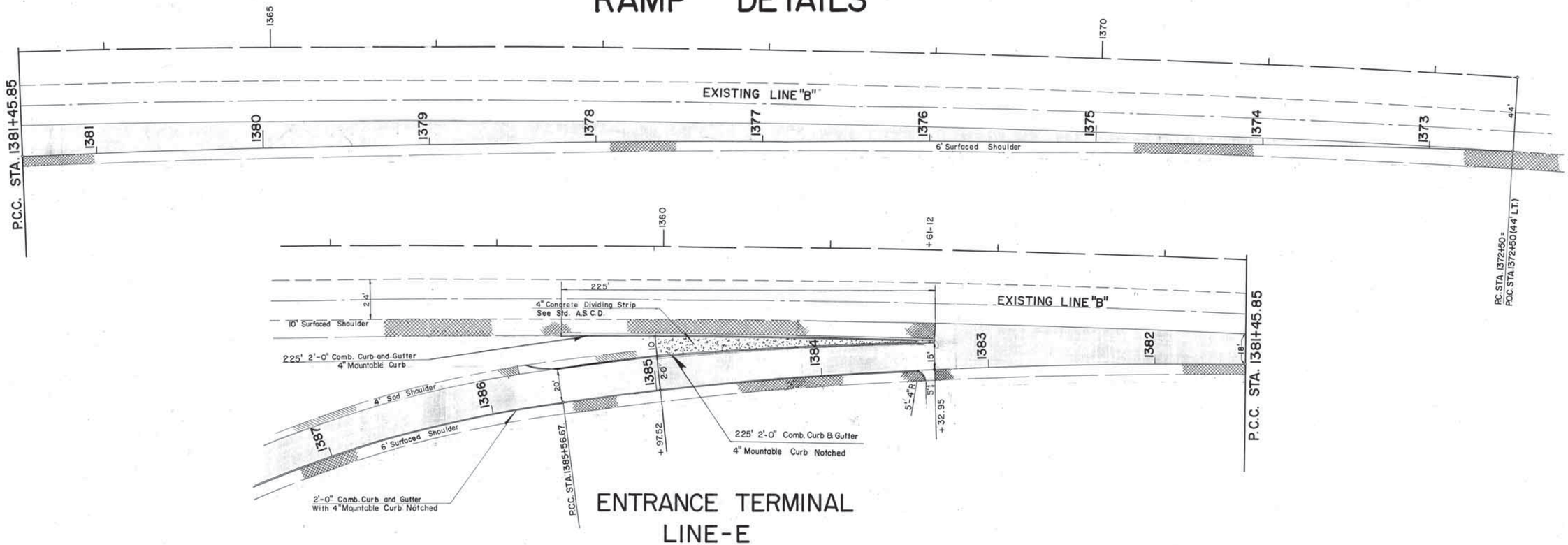
DETAIL OF BROKEN BACK STRUCTURES FOR MEDIAN DRAIN



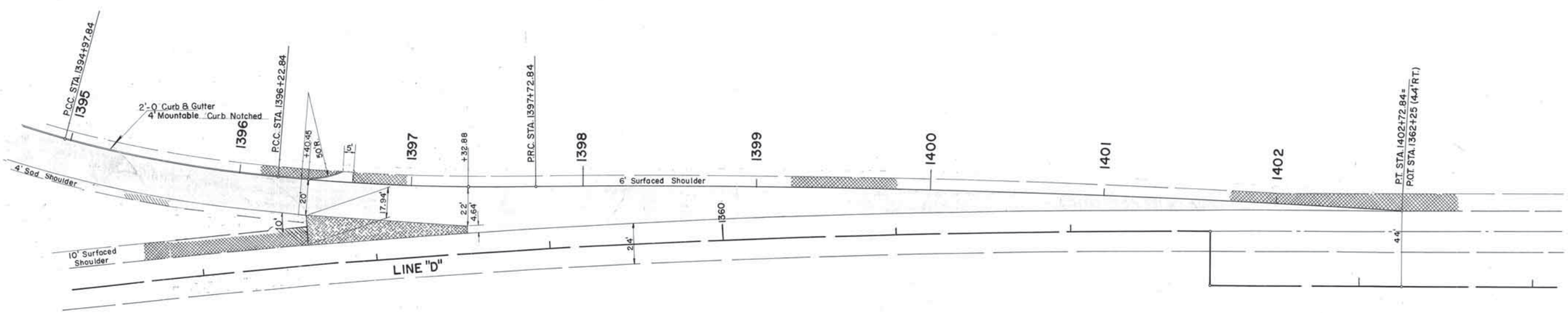
SPECIAL DITCH JUNCTION

LEFT OF STA. 1457+47.5 MAINLINE

RAMP DETAILS



ENTRANCE TERMINAL
LINE-E



EXIT TERMINAL
LINE-E

Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrances to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.

Scale 1"=30'

FA PROJECT NO. I-35-2(103) SHEET NO. ~~36~~ 31 (12)(13)

Rev. Cl. Rdy. Dim & Curb 9/28/67

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		168	

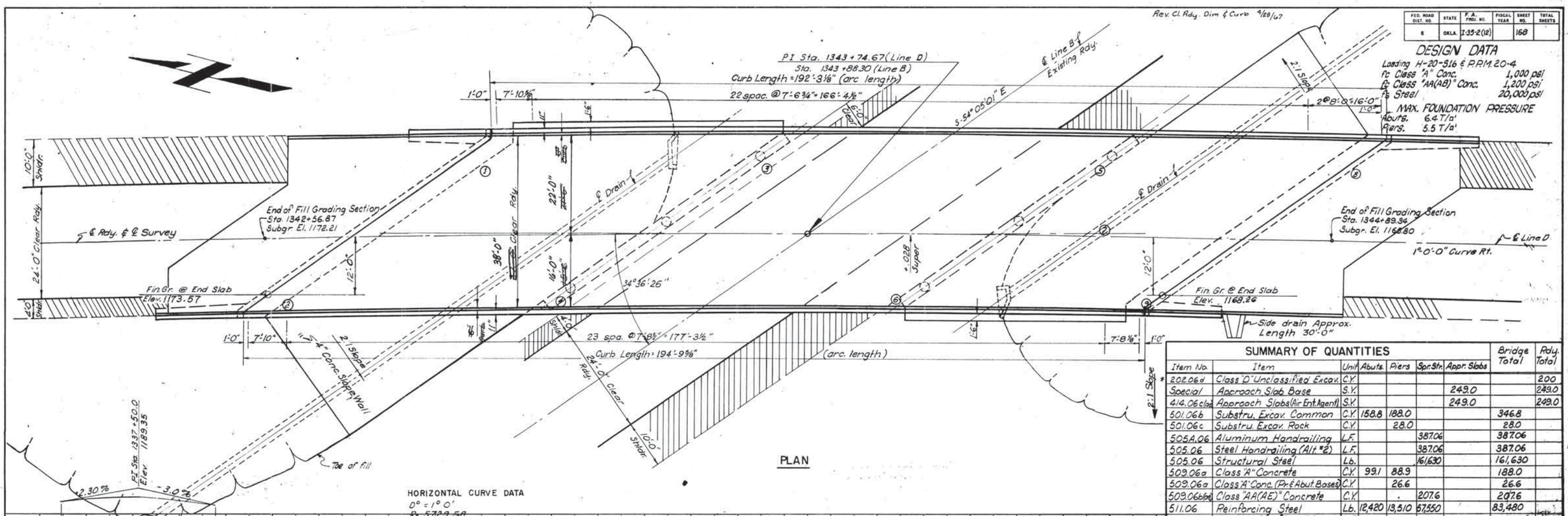
DESIGN DATA

Loading H-20-S16 & P.P.M. 20-4

f'_c	Class "A" Conc.	1,000 psi
f'_c	Class "AA(AE)" Conc.	1,200 psi
f_s	Steel	20,000 psi

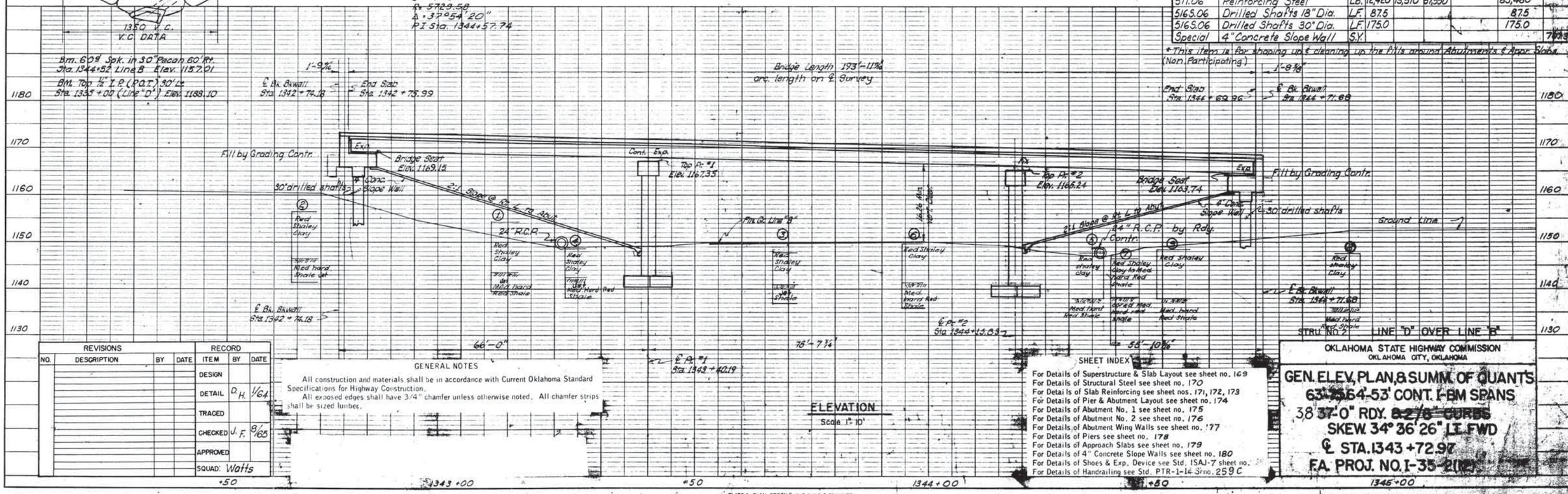
MAX. FOUNDATION PRESSURE

Abut's.	6.4 T/□'
Piers.	5.5 T/□'



PLAN

HORIZONTAL CURVE DATA
D° = 1° 0'
R = 5729.58
Δ = 37°54'20"
PI Sta. 1344+57.74



ELEVATION
Scale 1" = 10'

SUMMARY OF QUANTITIES

Item No.	Item	Unit	Abuts.	Piers	Spr. Str.	Appr. Slabs	Bridge Total	Rdy. Total
* 202.06d	Class "D" Unclassified Excav.	C.Y.						200
Special	Approach Slab Base	S.Y.				249.0		249.0
414.06c(1)a	Approach Slabs (Air Ent. Agent)	S.Y.				249.0		249.0
501.06b	Substru. Excav. Common	C.Y.	158.8	188.0			346.8	
501.06c	Substru. Excav. Rock	C.Y.		28.0			28.0	
505A.06	Aluminum Handrailing	L.F.			387.06		387.06	
505.06	Steel Handrailing (Alt. #2)	L.F.			387.06		387.06	
505.06	Structural Steel	Lb.			161,630		161,630	
509.06a	Class "A" Concrete	C.Y.	99.1	88.9			188.0	
509.06a	Class "A" Conc. (Pr. & Abut. Bases)	C.Y.		26.6			26.6	
509.06b(6)	Class "AA(AE)" Concrete	C.Y.			207.6		207.6	
511.06	Reinforcing Steel	Lb.	12,420	13,510	67,550		83,480	
516S.06	Drilled Shafts 18" Dia.	L.F.	87.5				87.5	
516S.06	Drilled Shafts 30" Dia.	L.F.	175.0				175.0	
Special	4" Concrete Slope Wall	S.Y.						793.3

* This item is for shaping up & cleaning up the fills around Abutments & Appr. Slabs. (Non Participating)

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	D. H.	1/64
				TRACED		
				CHECKED	J. F.	8/65
				APPROVED		
				SQUAD:	Watts	

GENERAL NOTES

All construction and materials shall be in accordance with Current Oklahoma Standard Specifications for Highway Construction.

All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

SHEET INDEX

For Details of Superstructure & Slab Layout see sheet no. 169
For Details of Structural Steel see sheet no. 170
For Details of Slab Reinforcing see sheet nos. 171, 172, 173
For Details of Pier & Abutment Layout see sheet no. 174
For Details of Abutment No. 1 see sheet no. 175
For Details of Abutment No. 2 see sheet no. 176
For Details of Abutment Wing Walls see sheet no. 177
For Details of Piers see sheet no. 178
For Details of Approach Slabs see sheet no. 179
For Details of 4" Concrete Slope Walls see sheet no. 180
For Details of Shoes & Exp. Device see Std. ISAJ-7 sheet no.
For Details of Handrailing see Std. PTR-1-14 Sno. 259 C

STRU. NO. 2 LINE "D" OVER LINE "B"

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

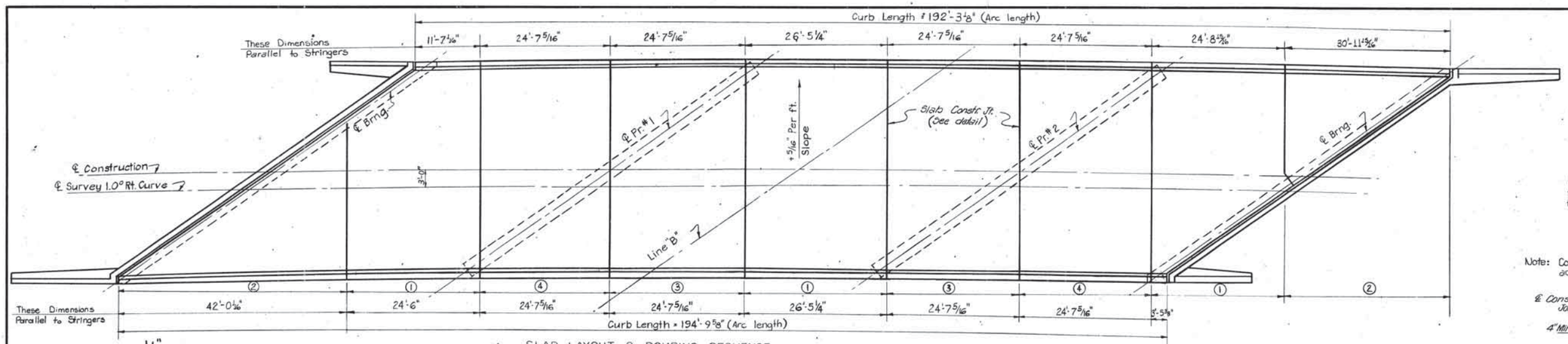
GEN. ELEV., PLAN, & SUMM. OF QUANT'S
63'-3, 64'-53' CONT. I-BM SPANS
38'-37'-0" RDY. ~~8-2/8" CURBS~~
SKEW. 34°36'26" LT. FWD
℄ STA. 1343+72.97
F.A. PROJ. NO. I-35-2(12)

PLAN — SURVEYED / PLOTTED / NOTE BOOK / ALIGNMENT CHECKED / RT. OF WAY CHECKED / NO.

PROFILE — SURVEYED / PLOTTED / NOTE BOOK / GRADES CHECKED / NO. / B. M. NOTED / STRUCTURE NOTATIONS CHECKED

PLATE 1 - PLAN - PROFILE O. P. = & R. E. STANDARD, KEUFFEL & ESSER CO., NEW YORK

FED. ROAD DIST. NO.	STATE	F.AP.PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	169	

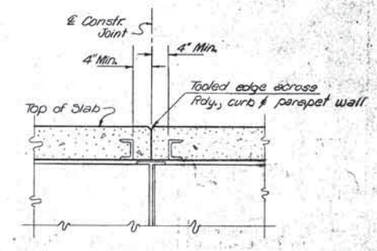


38' SLAB LAYOUT & POURING SEQUENCE

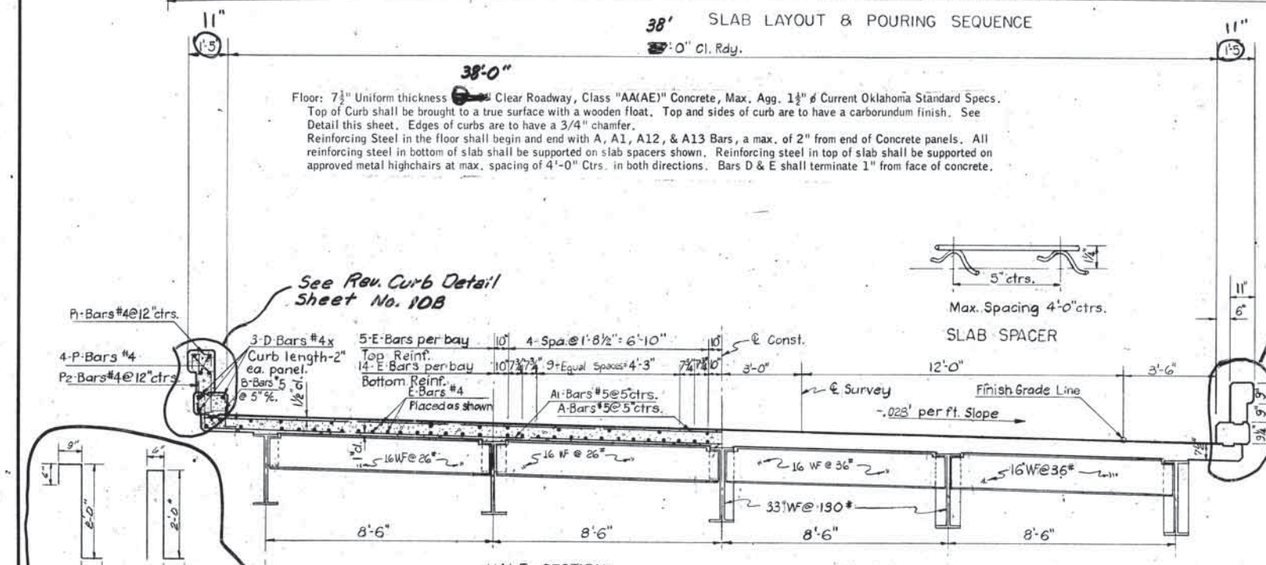
DESIGN DATA

Loading H20 SIG, P.P.M. 20-4
fc Class "AA(AE)" Concrete 1,200 psi
fc Class "A" Concrete 1,000 psi
fs Steel 20,000 psi.

Note: Contractor shall vary shear conn. spacing to accomodate shear conn. location @ constr. Jt.

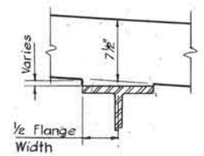


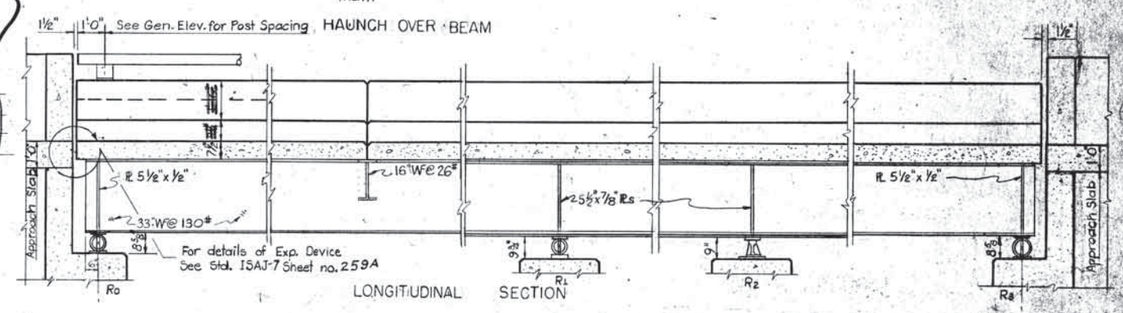
CONSTR. JT. DETAIL AT PANEL POINTS



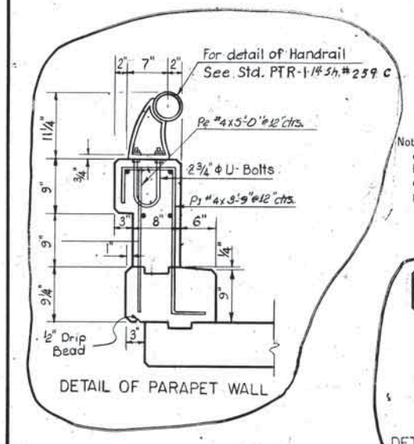
Max. Spacing 4'-0" ctrs.

SLAB SPACER

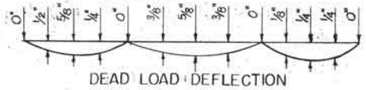




LONGITUDINAL SECTION



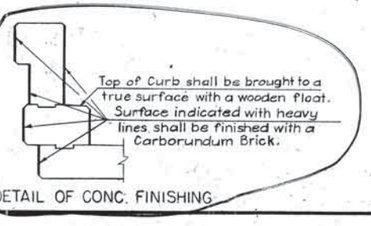
DETAIL OF PARAPET WALL



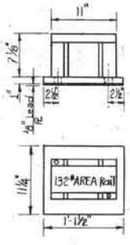
DEAD LOAD DEFLECTION

Conc. D.L. Deflection = 84% of D.L.
(P.P. Wall included in Conc. D.L.)

Note: The floor and curb forms shall be built to allow for an assumed parabolic deflection at the center of the span as shown. The contractor may furnish the beams cambered the amount of deflection or form haunches as shown. Additional concrete in the haunches to provide for D.L. Deflection has been added to the pay quantities of Class "AA(AE)" Concrete.

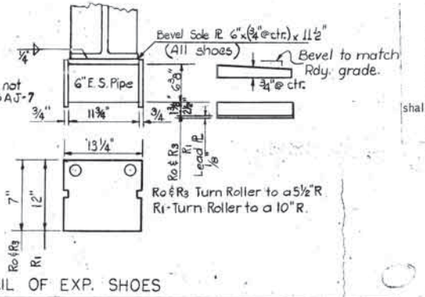


DETAIL OF CONC. FINISHING



DETAIL OF FIXED SHOES

Note: For details of shoes not shown, see Std. ISAJ-7 sheet no. 259 A



DETAIL OF EXP. SHOES

GENERAL NOTE

All construction shall be in accordance with the current Okla. Std. Specifications and Special Provisions.
All Reinf. Steel bars shall conform to A.S.T.M. Specifications A305-53.
All Bar Bend dimensions are out to out.
All exposed Concrete Corners shall have a 3/4" chamfer unless otherwise noted.
All chamfer strips shall be sized lumber.
Transverse Reinf. Steel in floor Slab shall begin with A & A1 Bars and end with A12 and A13 Bars and these bars shall be a maximum of 2" from the end of the concrete panels.

Quantities for Reinforcing Steel computed on basis of weight approved by the A.A.S.H.O. & C.R.S.I.

All Structural Steel except Shear Connectors shall be A-36.

QUANTITIES

Item	Unit	Total
Class "AA(AE)" Concrete	C.Y.	207.6
Reinforcing Steel	Lbs.	57,550
Structural Steel	Lbs.	161,630
Parapet Handrail	L.F.	387.06

STR. NO.

McClain Co. LINE "D" OVER LINE "B"

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	REV. GEN. NOTES	DAJ	4-63

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	D.P.H	12-64
TRACED	R.B.R	5-65
CHECKED	J.F.	7-65
APPROVED		
SQUAD: Watts		

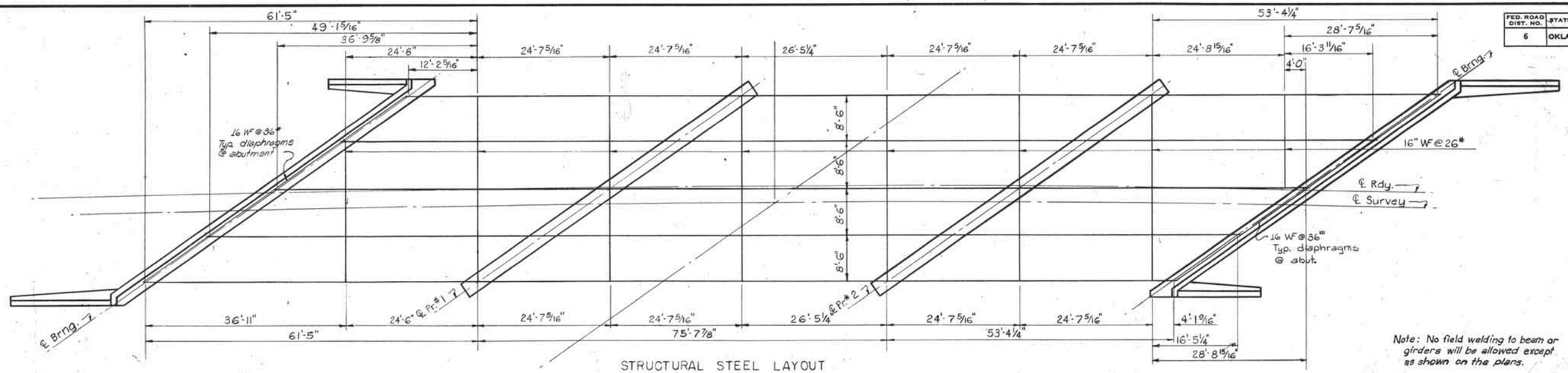
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF SUPERSTRUCTURE & 38' SLAB LAYOUT
38'-0" RDY. ~~& 2-6" CURBS~~
SKEW 34°-36'-26" LT. FWD
F.A. PROJ. NO. I-35-2 (12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 169

DIETZGEN NO. 196 IMPERIAL

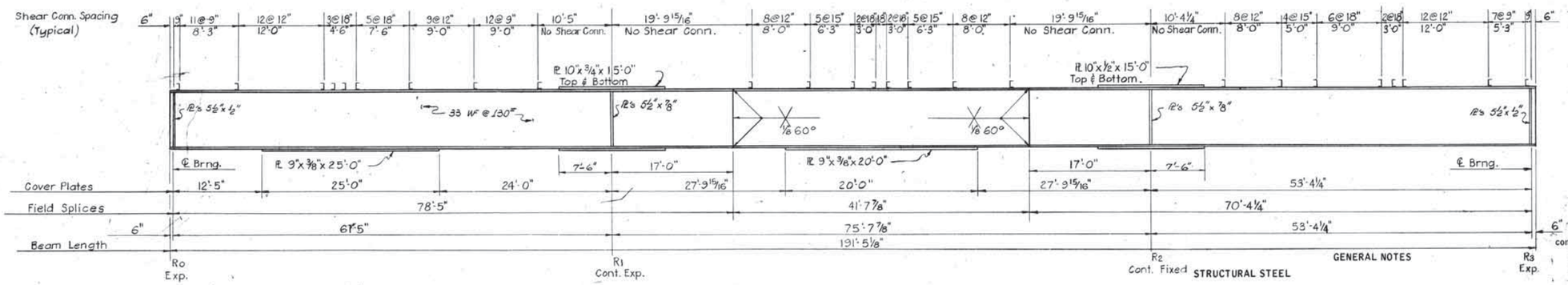
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	170	



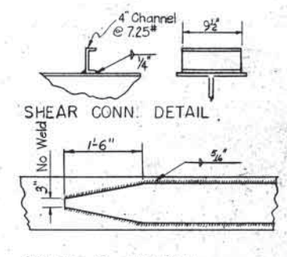
STRUCTURAL STEEL LAYOUT

Note: No field welding to beam or girders will be allowed except as shown on the plans.

Note: Pay weight of Shear Connectors *will be* based on *materials used.*

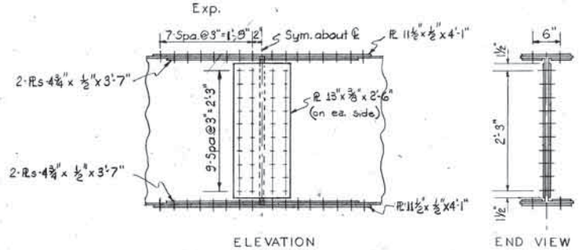


TYPICAL SECTION OF BEAMS



SHEAR CONN. DETAIL

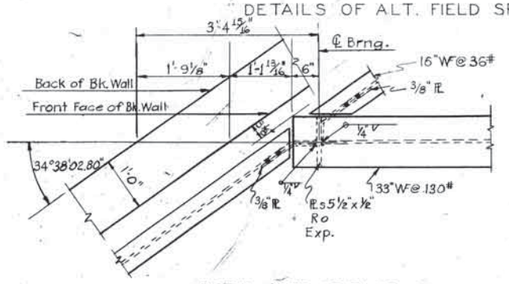
COVER PL WELDING



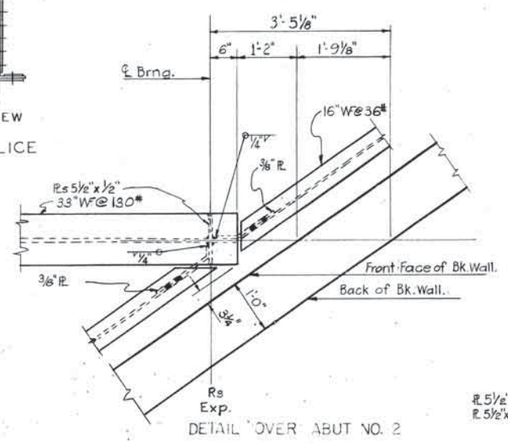
ELEVATION

END VIEW

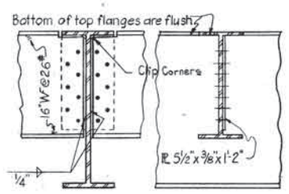
DETAILS OF ALT. FIELD SPLICE



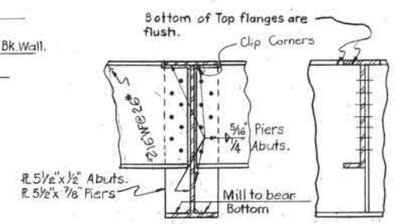
DETAIL OVER ABUT. NO. 1



DETAIL OVER ABUT. NO. 2



INTERIOR DIAPHRAGM



DIAPHRAGM AT PIERS

GENERAL NOTES

STRUCTURAL STEEL

Welding and lead plates will be paid for by weight at the unit price bid for Structural Steel.

All welding shall conform to the current edition of the Okla. Standard Specifications and the Supplemental Specifications and the American Welding Society *and Special Provisions.*

Radiographic and Magnetic Particle Inspection will be required.

All Structural Steel shall conform to ASTM A-36.

Field Splice: Bolted field splices may be used in place of welded splices. Pay weight for splice will be based on material used.

High Strength Steel Bolts *shall be used for all field* connections.

FABRICATION

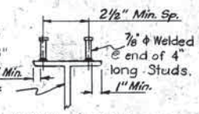
Extension bars shall be used in making the butt welds in the flanges according to the A.W.S. Specification

End of Beams to be spliced shall be prepared in the shop, taking into account the relative positions the adjacent section will take in the structure due to the roadway grade and alignment. For the purpose of shop inspection, the fabricator shall assemble the beams and splices in groups of at least three consecutive beam sections and two splices with beams supported only at bearing points in the correct vertical position. All parts shall be completely match marked and a match marking diagram furnished as part of the structural steel details.

Contractor may use stud shear connectors as follows:

1" of 4" channel @ 7.25# = .56 = 3/4

1" of 4" channel @ 7.25# = .41 = 7/8"



ALT. SHEAR CONN. DETAIL

ERECTION

The Engineer will check the elevations at all bearing points before any steel is erected, and the Contractor will be required to correct any points that are more than .02' off from planned elevation. Steel may be erected without the use of falsework provided all splice points are within .02' of the planned elevation after the steel is erected and before splices are welded or bolted. The Resident Engineer will check these elevations before any welding is started or any bolts are tightened and, if any splice point is off more than .02' in elevation, the Contractor will be required to adjust the elevations as directed by the Engineer.

After all Structural Steel has been erected the Resident Engineer will furnish the State Bridge Engineer with the profile of the tops of the beams with the elevations taken at the Panel Points. The Bridge Engineer will determine the thickening of the haunches that will be necessary to provide for Dead Load Deflection and furnish this information to the Resident Engineer.

Alternate Field Splice: Alternate field splices may be made before erection provided the beams are supported at the bearing points and splice points to the same relative elevations as they will have in the finished structure.

LINE D OVER B

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	REV. NOTES & ALT. SHEAR CONN. DET.	DAW.	4-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	D.P.H.	
TRACED	R.B.R.	6-1-65
CHECKED	J.F.	7-65
APPROVED		
SQUAD: Watts		

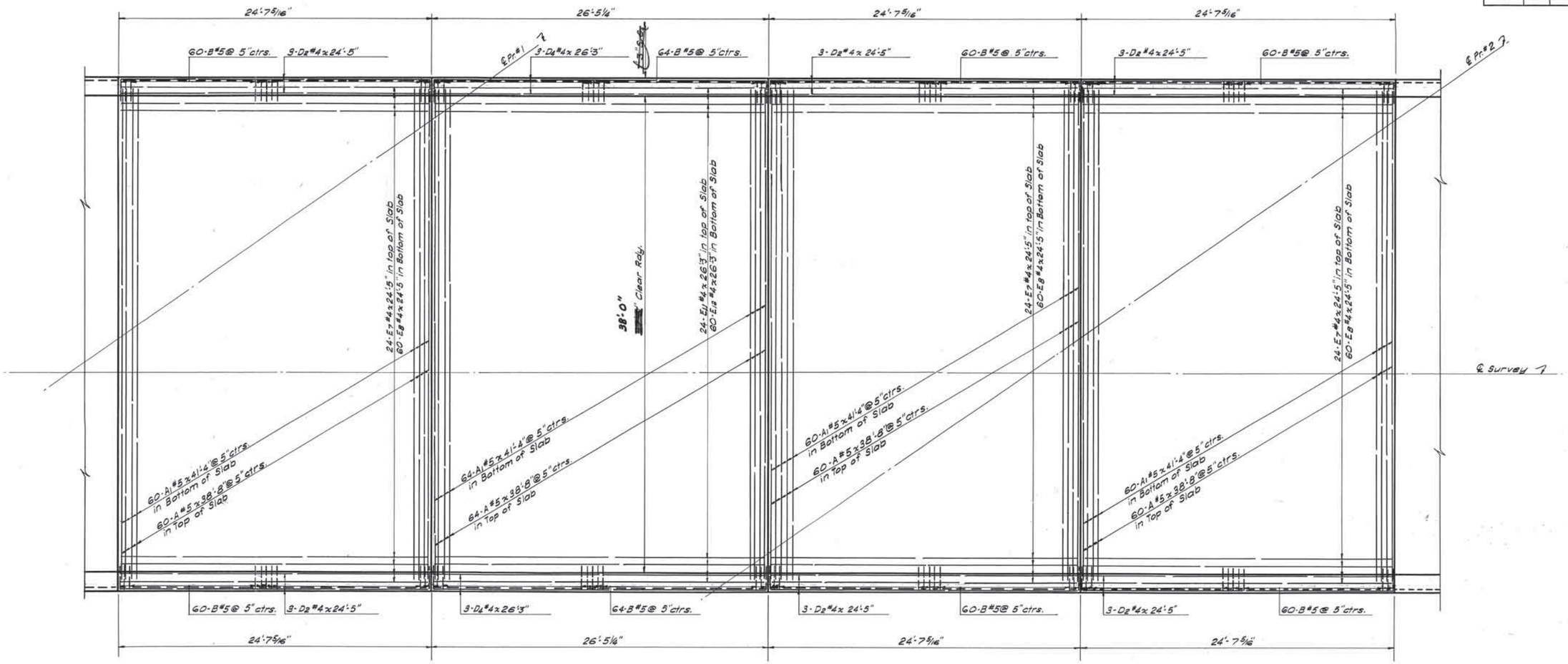
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF STRU. STEEL
CONTINUOUS I-BM. SPAN
38' RDY.
SKEW 34° 36' 26" LT. F.W.D.
F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 170

DIETZGEN NO. 128 IMPERIAL

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	171	



Note: All transverse Reinforcing Steel shall be placed @ right angles to the stringers.
Note: Reinforcing shall be securely tied to shear connectors to prevent movement.

Note: For details of bent bars see Sht. No. 169 & 173

LINE D OVER B

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
1	Rev. Curb Dim.		4/28/67	DESIGN		
				DETAIL	D.P.H.	11-64
				TRACED	R.B.R.	11-64
				CHECKED	J.F.	8-65
				APPROVED		
				SQUAD: Watts		

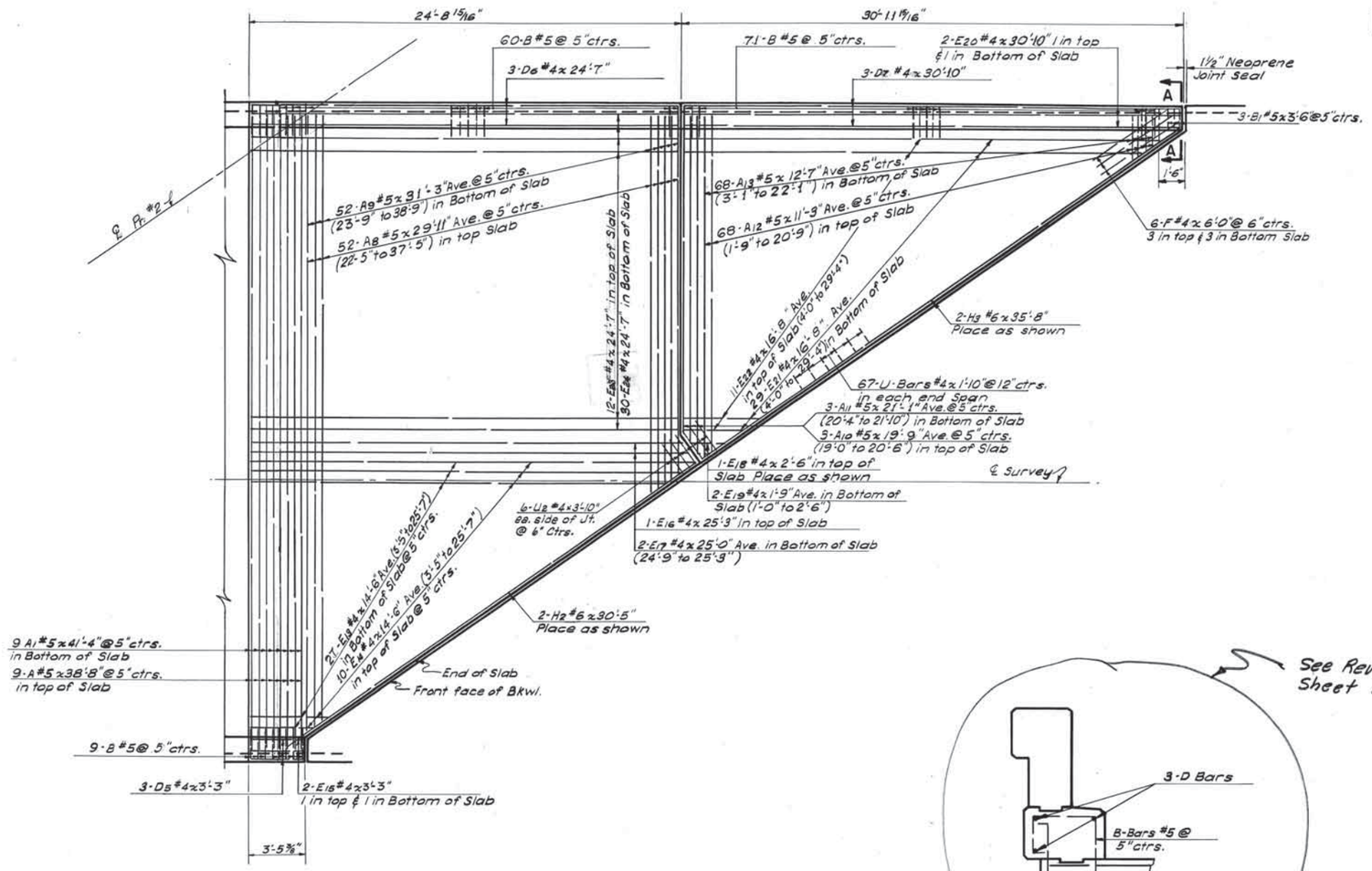
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

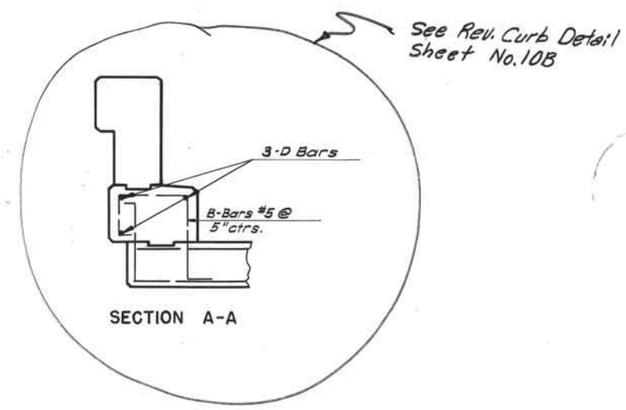
DETAIL OF REINFORCING
℄ STA. 1343+72.97
F. A. PROJ. NO. I-35-2(12)

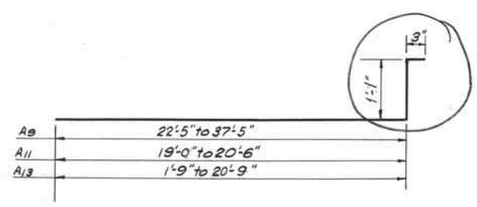
F.A. PROJECT NO. I-35-2(12) SHEET NO. 171

DIETZGEN NO. 155 IMPERIAL

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	172	







A8-Bars #5 x 30'-9" Ave. (22'-9" to 38'-9")
A11-Bars #5 x 21'-1" Ave. (20'-4" to 21'-10")
A13-Bars #5 x 12'-7" Ave. (3'-1" to 22'-1")

Note: For bent bars not shown see sheet No. 169 & 173

LINE "D" OVER "B"

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
1	Added U2 Bars	D.H.	4-21-67	DESIGN		
				DETAIL	D.P.H.	10-64
				TRACED	R.B.R.	1-65
				CHECKED	J.F.	7-65
				APPROVED		
				SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

REINFORCING DETAIL

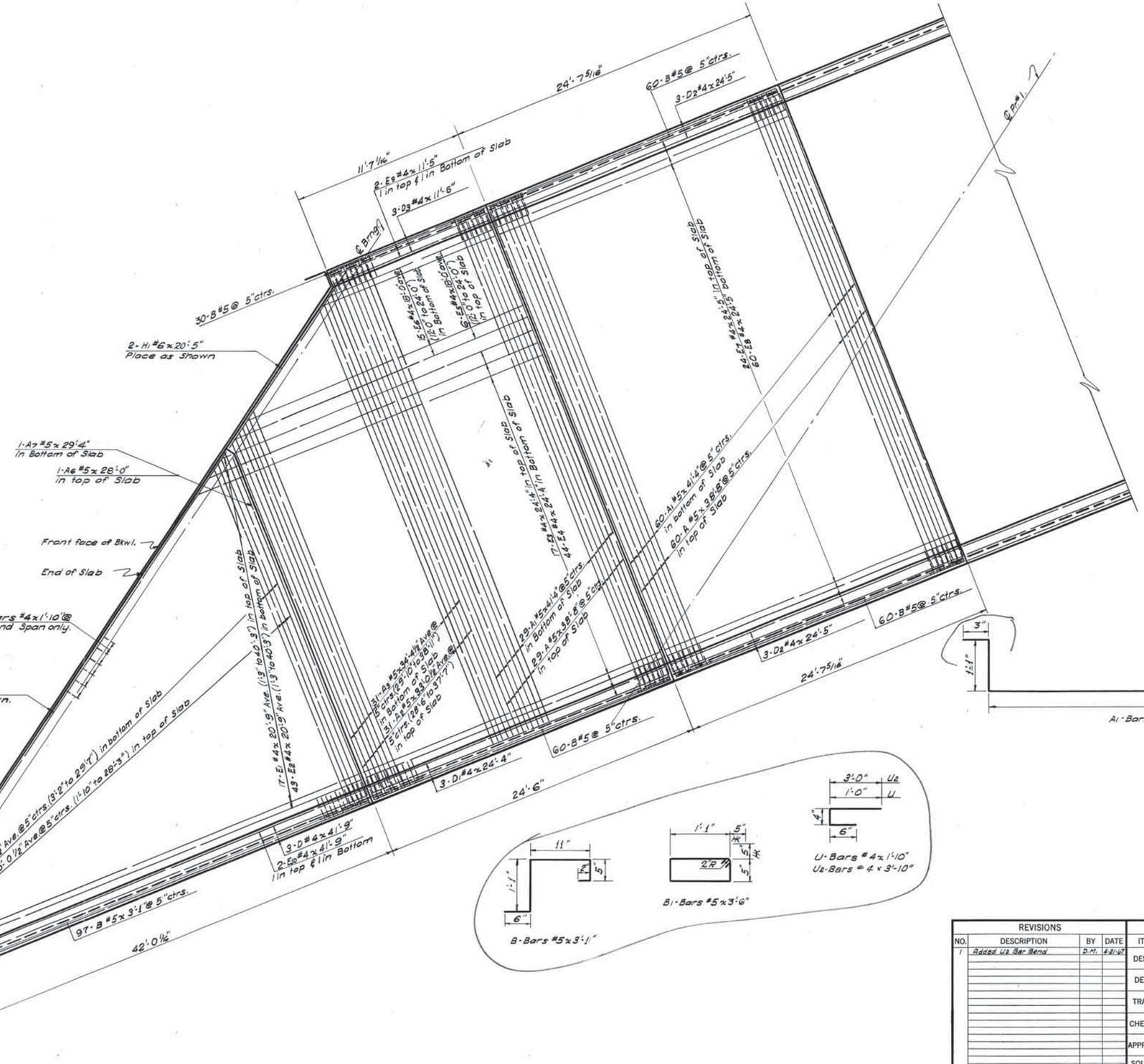
℄ STA. 1343 + 72.97

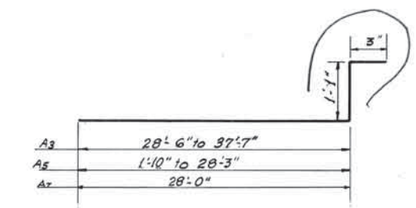
F. A. PROJ. I-35-2(12)

F. A. PROJECT NO. I-35-2(12) SHEET NO. 172

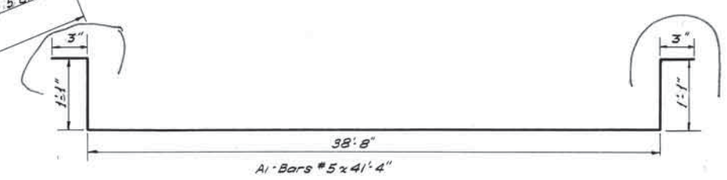
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	173	

Note: For Quantities see Sheet No. 169





A3-Bars #5 x 34'-4 1/2" Ave. (29'-10" to 38'-11")
A5-Bars #5 x 16'-4 1/2" Ave. (3'-2" to 29'-7")
A7-Bars #5 x 29'-4"



LINE "D" OVER LINE "B"

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Added U2 Bar Bend	D.H.	4-21-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	D.P.H.	10-64
TRACED	P.B.R.	10-64
CHECKED	J.F.	8-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF SLAB REINF.

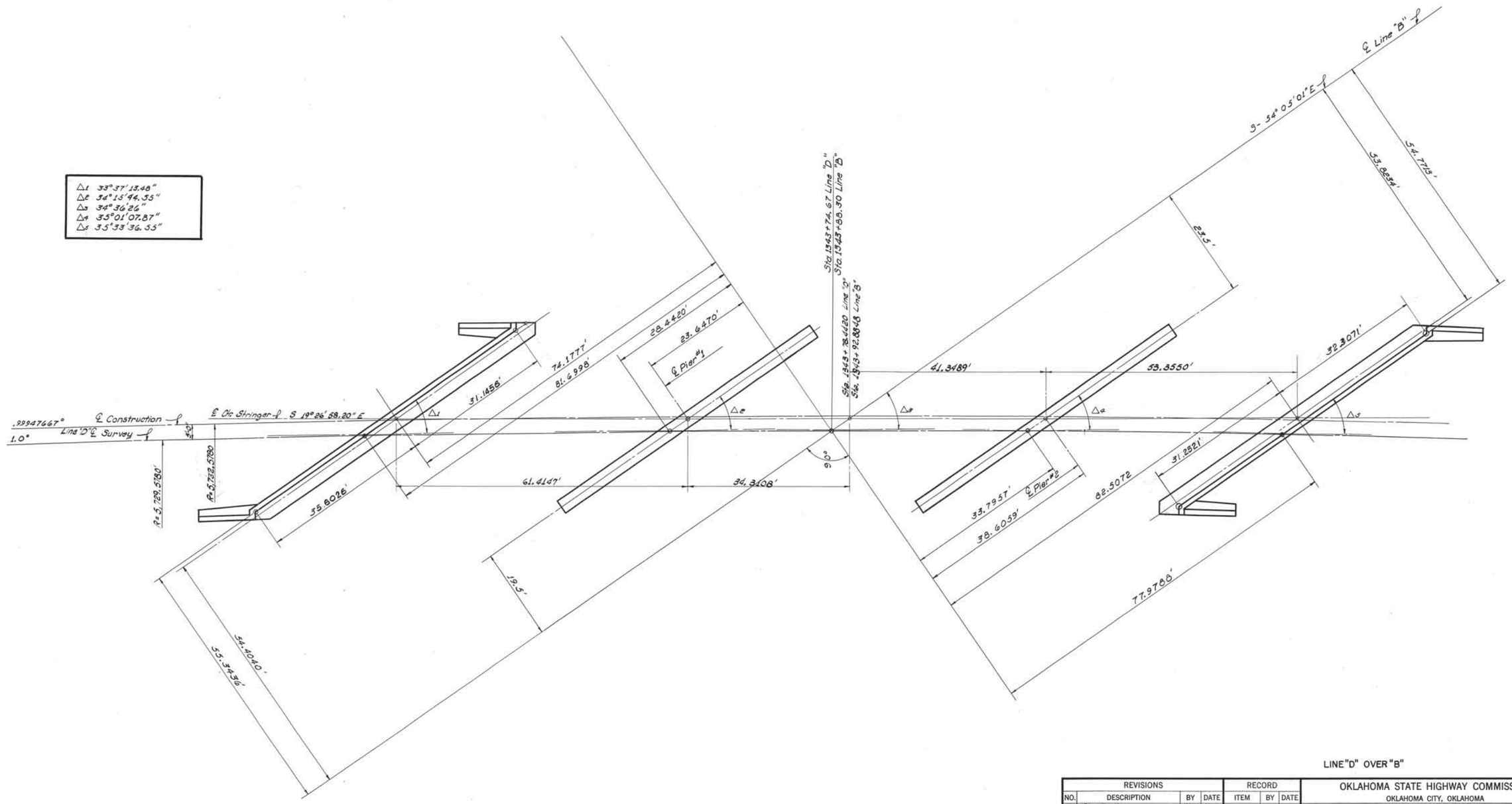
℄ STA. 1343+72.97

F. A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 173

HETTGEN NO. 155 IMPERIAL

FED. ROAD DIST. NO.	STATE	F.A.PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	174	



LINE "D" OVER "B"

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Radius	RM.A.	4/24/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	T.W	8-64
TRACED	P.B.	8-64
CHECKED	D.H.	5-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF PIERS & ABUTMENT LAYOUT

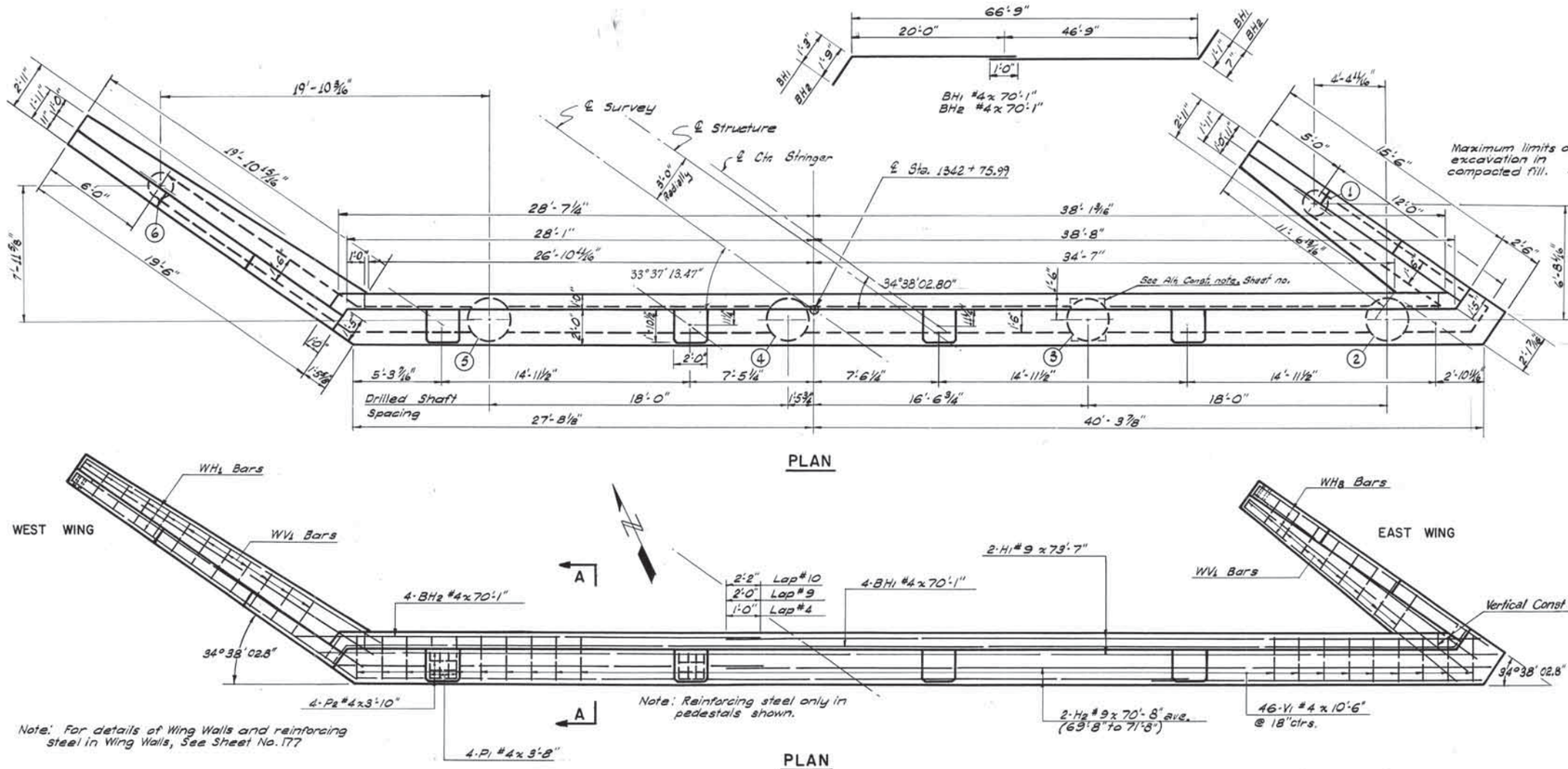
℄ STA. 1343+72.97

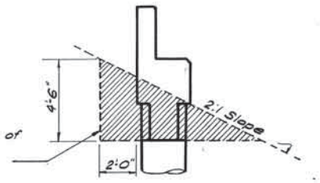
F.A. PROJ. NO. I-35-2-(12)

F. A. PROJECT NO. I-35-2(12) SHEET NO. 174

HEYDEN NO. 100 IMPERIAL

FED. ROAD DIST. NO.	STATE	F.A.PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	175	

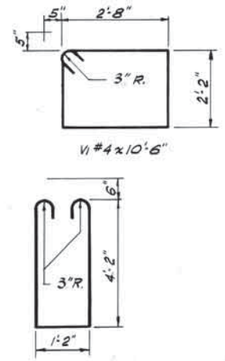




EXCAVATION DIAGRAM

Contractor may excavate to the neat lines of the abutment and, if in satisfactory condition to the Resident Engineer, he may pour the concrete against the compacted fill. If necessary the contractor shall use forms for the abutment and remove the same after concrete is set.

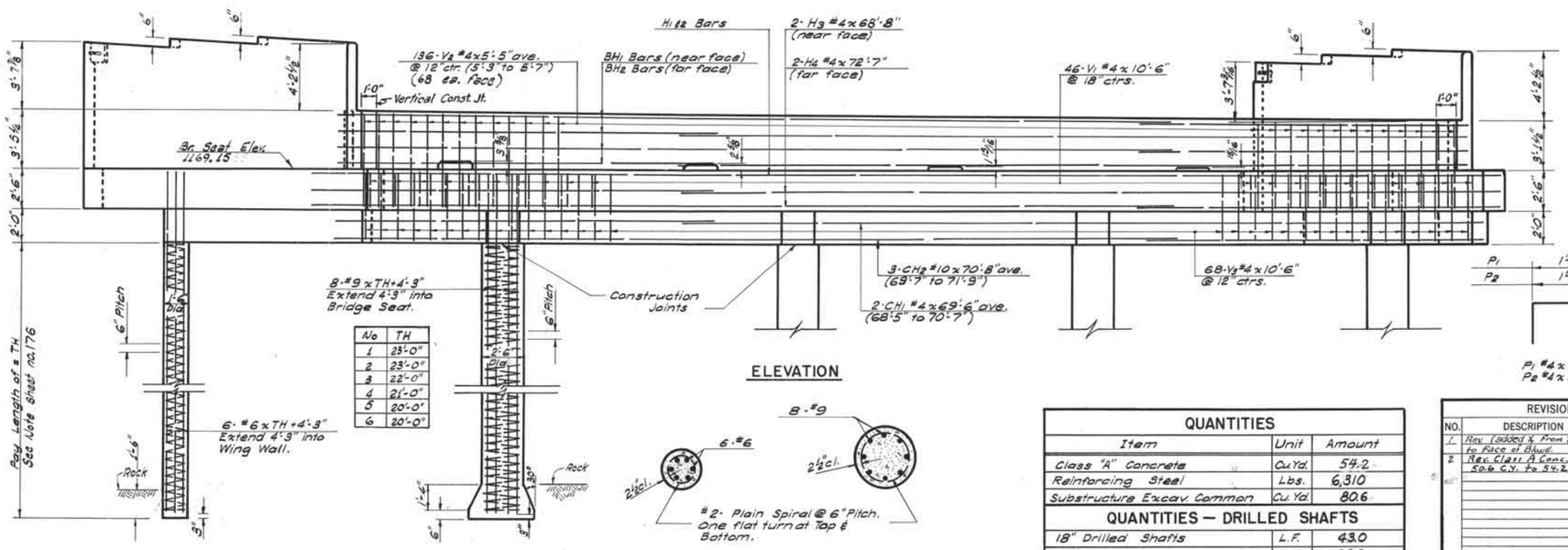
The abutment shall be backfilled and tamped with a mechanical tamper to 100% Proctor density by Bridge Contractor after abutment is completed. All cost of Backfill shall be included in the unit price bid per Cubic Yard for Substructure Excavation Common.



BAR LIST

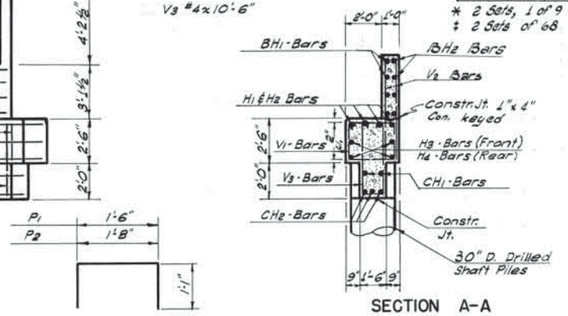
Mark	Size	Form	No.	Length
H1	#9	Str.	2	73'-7"
H2	#9	Str.	2	70'-8" ave.
H3	#4	Str.	2	68'-8"
H4	#4	Str.	2	72'-7"
BH1	#4	Bnt.	4	70'-1"
BH2	#4	Bnt.	4	70'-1"
CH1	#4	Str.	2	69'-6" ave.
CH2	#10	Str.	3	70'-8" ave.
V1	#4	Bnt.	46	10'-6"
V2	#4	Str.	136	5'-5" ave.
V3	#4	Bnt.	92	10'-6"
WH1	#9	Str.	4	20'-6"
WH2	#4	Str.	4	20'-6"
WH3	#4	Str.	14	19'-2"
WH4	#4	Str.	2	12'-8"
WH5	#4	Str.	2	6'-2"
WH6	#4	Str.	2	15'-1" ave.
WH7	#10	Str.	2	15'-1" ave.
WH8	#9	Str.	4	16'-10"
WH9	#4	Str.	4	16'-10"
WH10	#4	Str.	14	15'-2"
WH11	#4	Str.	2	10'-0"
WH12	#4	Str.	2	4'-10"
WH13	#4	Str.	2	11'-10"
WH14	#10	Str.	2	11'-10"
WV1	#4	Bnt.	21	9'-4" ave.
WV2	#4	Str.	10	9'-10"
WV3	#5	Str.	10	9'-10"
WV4	#4	Str.	10	9'-5"
WV5	#5	Str.	10	9'-5"
WV6	#4	Str.	10	9'-4"
WV7	#5	Str.	8	9'-4"
WV8	#5	Str.	2	7'-9"
WV9	#5	Str.	2	7'-4"
WV10	#4	Str.	8	8'-9"
WV11	#5	Str.	6	8'-9"
WV12	#4	Str.	8	9'-2"
WV13	#5	Str.	8	9'-2"
WV14	#4	Str.	8	9'-6"
WV15	#5	Str.	8	9'-6"
P1	#4	Bnt.	8	3'-8"
P2	#4	Bnt.	8	3'-10"
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-6"

* 2 Sets, 1 of 9 & 1 of 12
‡ 2 Sets of 68



No	TH
1	23'-0"
2	23'-0"
3	22'-0"
4	21'-0"
5	20'-0"
6	20'-0"

SECTION THRU 18" & 30" DRILLED SHAFTS



SECTION A-A

LINE D OVER B

QUANTITIES		
Item	Unit	Amount
Class "A" Concrete	Cu.Yd.	54.2
Reinforcing Steel	Lbs.	6,310
Substructure Excav. Common	Cu. Yd.	80.6
QUANTITIES — DRILLED SHAFTS		
18" Drilled Shafts	L.F.	43.0
30" Drilled Shafts	L.F.	86.0

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. (added ℄ from ℄ Survey to Face of Abutt.)		4/26/62
2	Rev. Class A Conc. from 50.6 C.Y. to 54.2 C.Y.	T.W.	8/14/63

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	W.H.K.	11-64
TRACED	R.B.R.	11-64
CHECKED	J.F.	8-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF ABUTMENT
ABUTMENT NO. 1.
℄ STA. 1343 + 72.97
F.A. PROJ. NO. I-35-2(12)

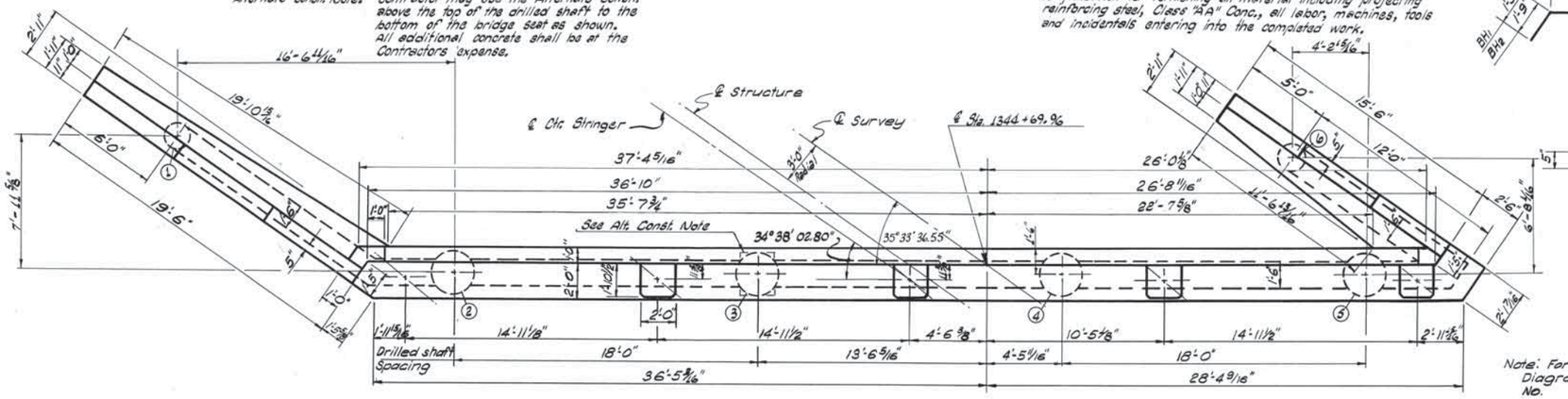
F.A. PROJECT NO. I-35-2(12) SHEET NO. 175

DIETZGEN NO. 158 IMPERIAL

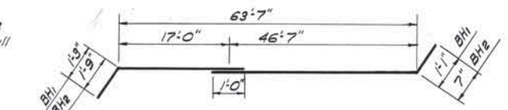
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	176	

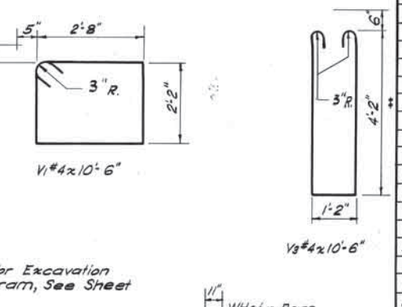
Alternate Const. Notes: Contractor may use the Alternate Const. above the top of the drilled shaft to the bottom of the bridge seat as shown. All additional concrete shall be at the Contractors expense.

Note: 18" Dia. Drilled Shaft and 30" Dia. Drilled Shaft, measured as provided for in the Special Provisions, shall be paid for at the contract unit price bid per linear foot, which price shall be full compensation for furnishing all material including projecting reinforcing steel, Class "AA" Conc., all labor, machines, tools and incidentals entering into the completed work.

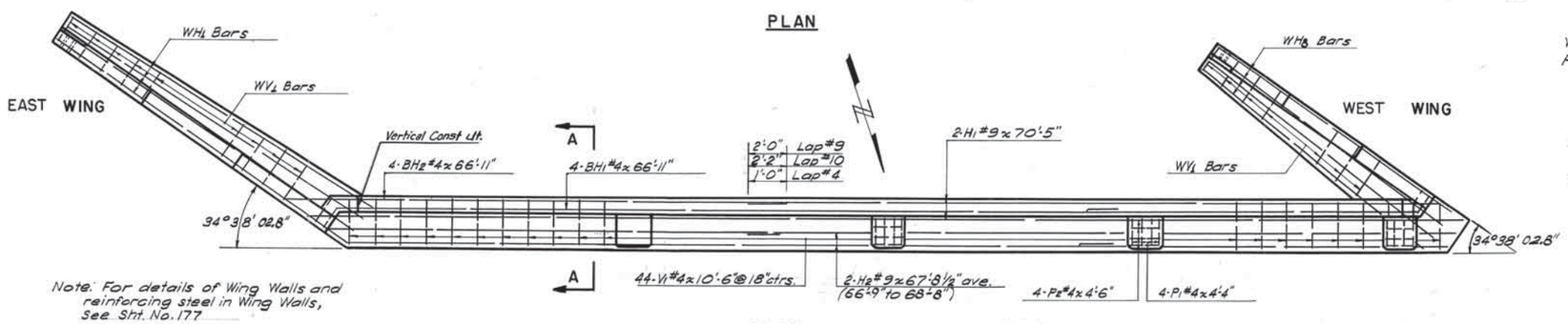


PLAN





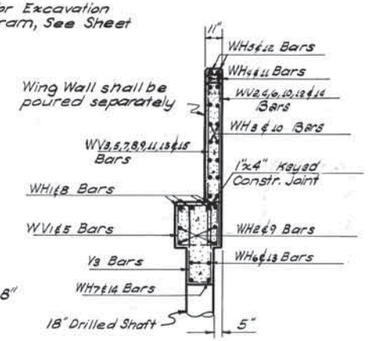
Note: For Excavation Diagram, See Sheet No.



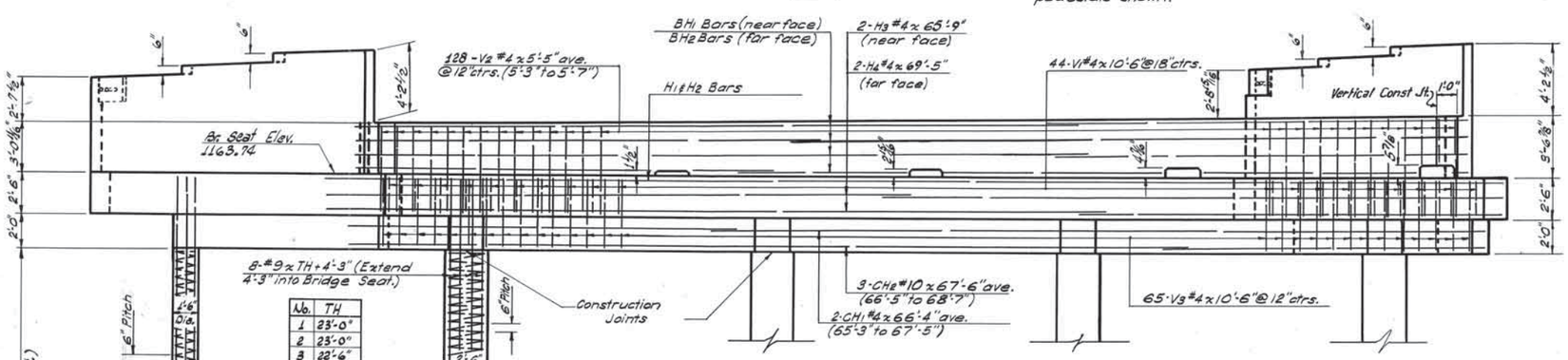
Note: For details of Wing Walls and reinforcing steel in Wing Walls, See Sht. No. 177

PLAN

Note: Reinforcing only in pedestals shown.

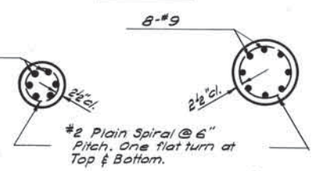


TYPICAL WING SECTION

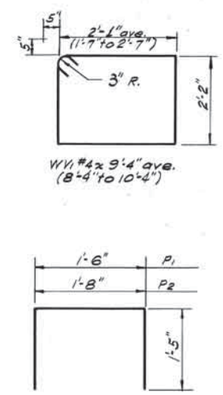


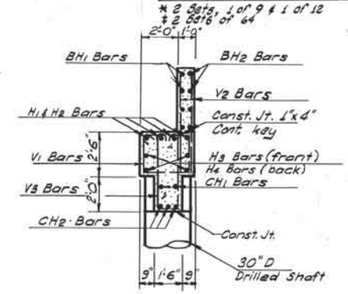
No.	TH
1	23'-0"
2	23'-0"
3	22'-6"
4	22'-0"
5	21'-6"
6	21'-6"

ELEVATION



SECTION THRU 18" & 30" DRILLED SHAFT





SECTION A-A

LINE "D" OVER "B"

BAR LIST

MARK	SIZE	FORM	NO.	LENGTH
H1	#9	Str.	2	70'-5"
H2	#9	Str.	2	68'-8 1/2" ave.
H3	#4	Str.	2	65'-9"
H4	#4	Str.	2	69'-5"
BH1	#4	Bnt.	4	66'-11"
BH2	#4	Bnt.	4	66'-11"
CH1	#4	Str.	2	66'-4" ave.
CH2	#10	Str.	3	67'-6" ave.
V1	#4	Bnt.	44	10'-6"
V2	#4	Str.	128	5'-5" ave.
V3	#4	Bnt.	89	10'-6"
WH1	#9	Str.	4	20'-6"
WH2	#4	Str.	4	20'-6"
WH3	#4	Str.	12	19'-2"
WH4	#4	Str.	2	12'-8"
WH5	#4	Str.	2	6'-2"
WH6	#4	Str.	2	15'-1" ave.
WH7	#10	Str.	2	15'-1" ave.
WH8	#9	Str.	4	16'-10"
WH9	#4	Str.	4	16'-10"
WH10	#4	Str.	14	15'-2"
WH11	#4	Str.	2	10'-0"
WH12	#4	Str.	2	4'-10"
WH13	#4	Str.	2	11'-10"
WH14	#10	Str.	2	11'-10"
WV1	#4	Bnt.	21	9'-4" ave.
WV2	#4	Str.	10	9'-3"
WV3	#5	Str.	10	9'-3"
WV4	#4	Str.	10	8'-7"
WV5	#5	Str.	10	8'-7"
WV6	#4	Str.	10	7'-10"
WV7	#5	Str.	8	7'-10"
WV8	#5	Str.	2	6'-2"
WV9	#5	Str.	2	7'-0"
WV10	#4	Str.	8	8'-7"
WV11	#5	Str.	6	8'-7"
WV12	#4	Str.	8	9'-2"
WV13	#5	Str.	8	9'-2"
WV14	#4	Str.	8	9'-10"
WV15	#5	Str.	8	9'-10"
P1	#4	Bnt.	12	4'-4"
P2	#4	Bnt.	12	4'-6"
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-6"

* 2 Sets, 1 of 9 & 1 of 12
* 2 Sets of 64

QUANTITIES

Item	Unit	Amount
Class "A" Concrete	Cu. Yd.	51.7
Reinforcing Steel	Lbs.	6,110
Substructure Excav., Common	Cu. Yd.	78.2
QUANTITIES — DRILLED SHAFTS		
18" Drilled Shafts	L.F.	44.5
30" Drilled Shafts	L.F.	89.0

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Logged & from ℄ Survey to face of Wall.		4/2662
2	Rev. Class A Conc. from 48.5 C.Y. to 51.7 C.Y.	T.W.	8/14/68

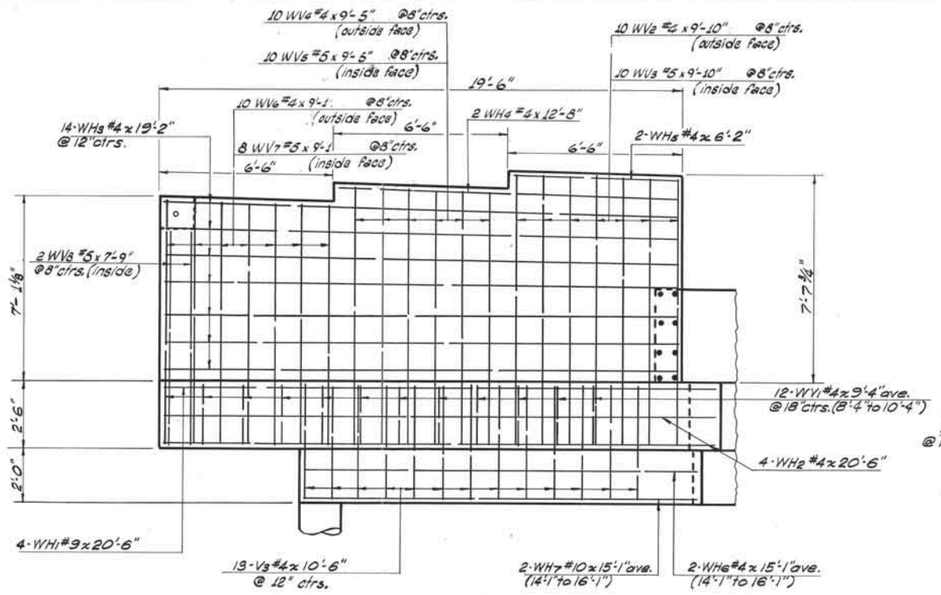
RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	B.K.	12-64
TRACED	R.R.	1-65
CHECKED	J.F.	8-65
APPROVED		
SQUAD: WATTS		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

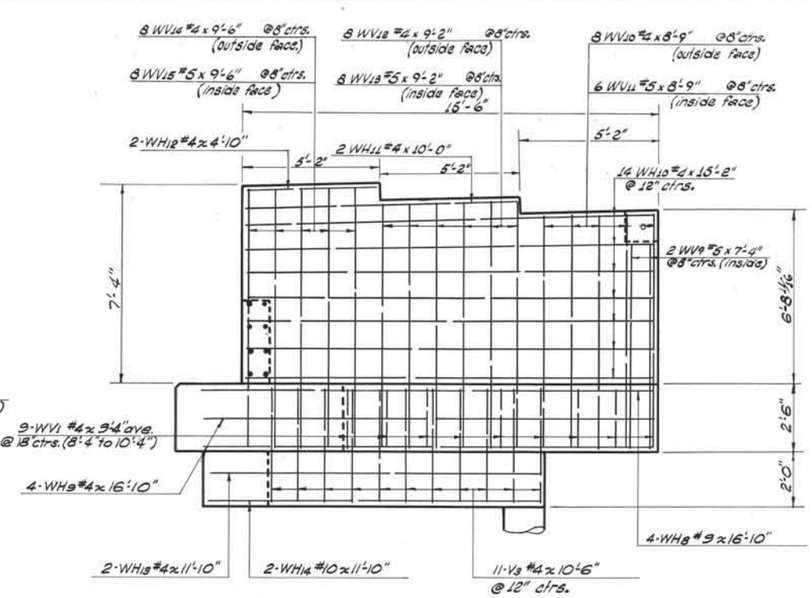
DETAIL OF ABUTMENT
ABUTMENT NO. 2
℄ STA. 1343+72.97
F.A. PROJ. NO. I-35-2(12)

F. A. PROJECT NO. I-35-2(12) SHEET NO. 176

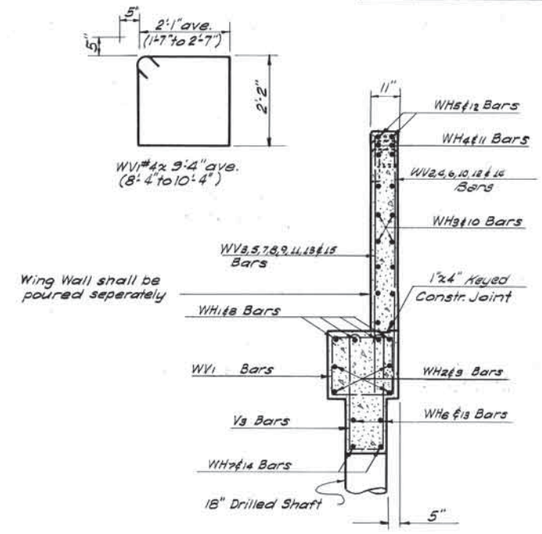
FED. ROAD DIST. NO.	STATE	F.A.PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	177	



WEST WING

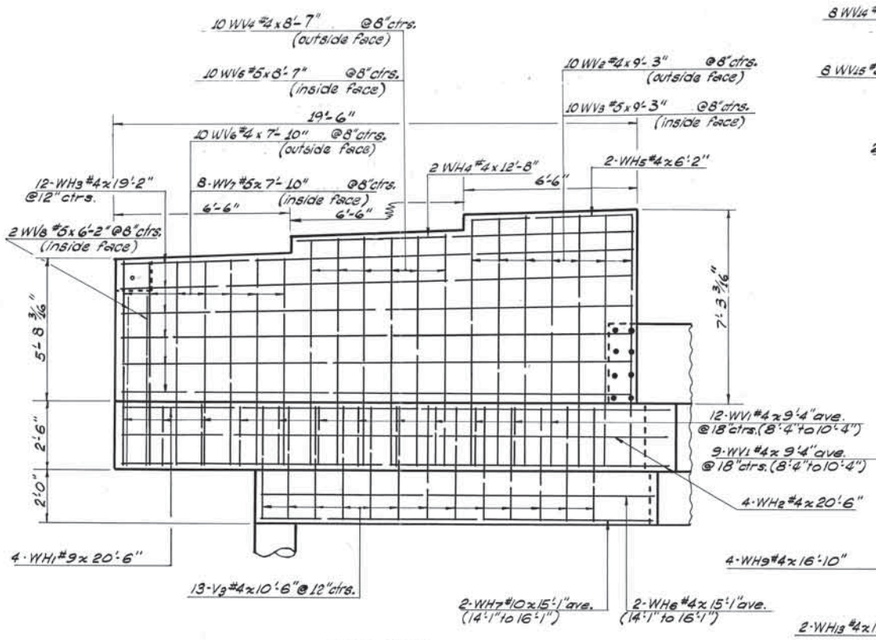


EAST WING

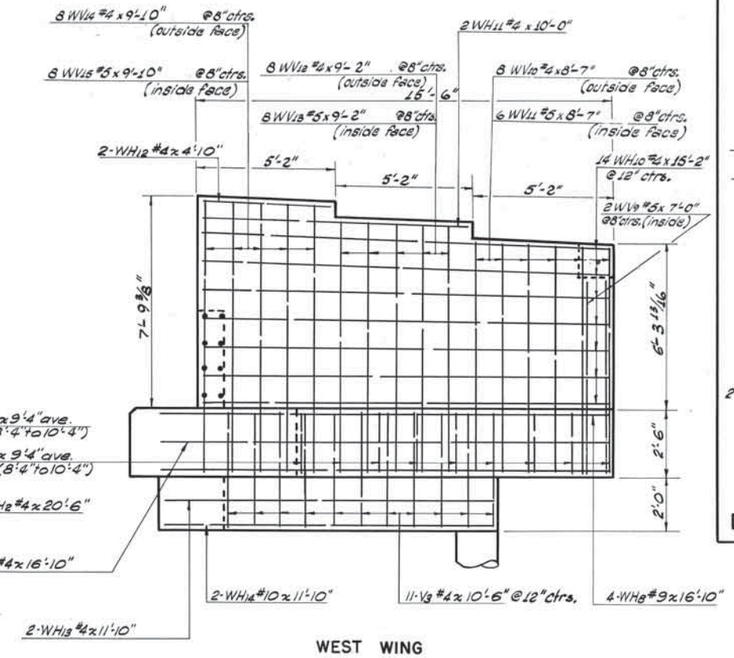


TYPICAL WING SECTION

ABUTMENT NO. 1

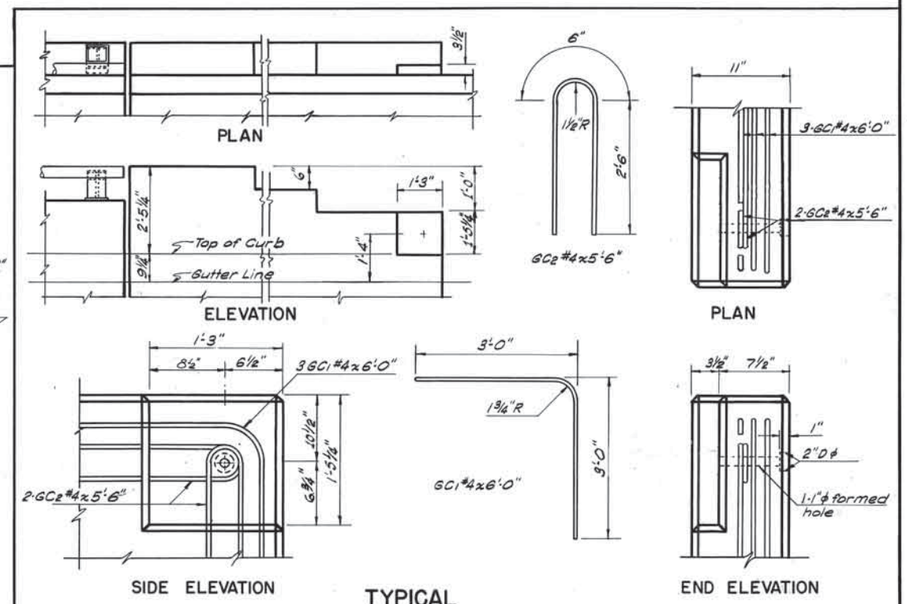


EAST WING



WEST WING

ABUTMENT NO. 2



TYPICAL
DETAILS FOR METAL PLATE GUARDRAIL CONNECTION TO ABUTMENT WINGS

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	W.K.K.	11/64
				TRACED	R.B.R.	12/64
				CHECKED	J.F.	8/65
				APPROVED		
				SQUAD: Watts		

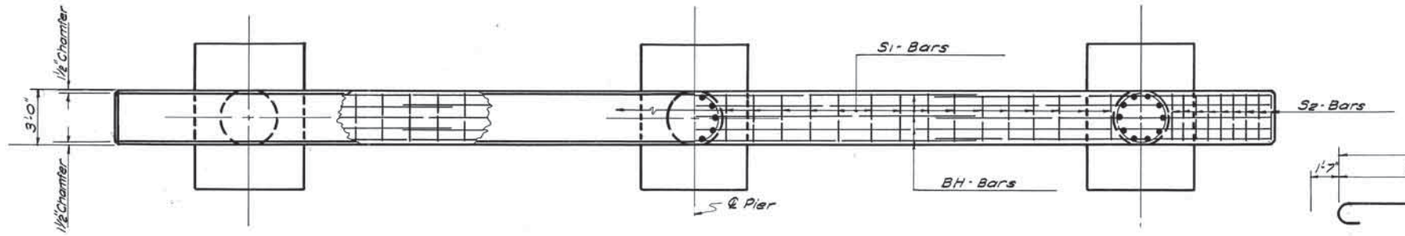
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF WING WALLS
ABUT. NO. 1 & 2
℄ STA. 1343 + 72.97
F. A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 177

KEUFFEL & ESSER CO. 358 IMPERIAL

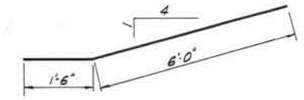
FED. ROAD DIST. NO.	STATE	F.A.PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	178	



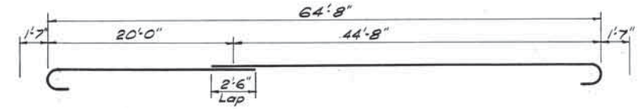
Note: All exposed edges shall have a ¾" Chamfer unless otherwise noted.

PLAN

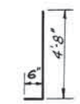
Note: All Bar Bend dimensions are out to out.



CH #5 x 7'-6"

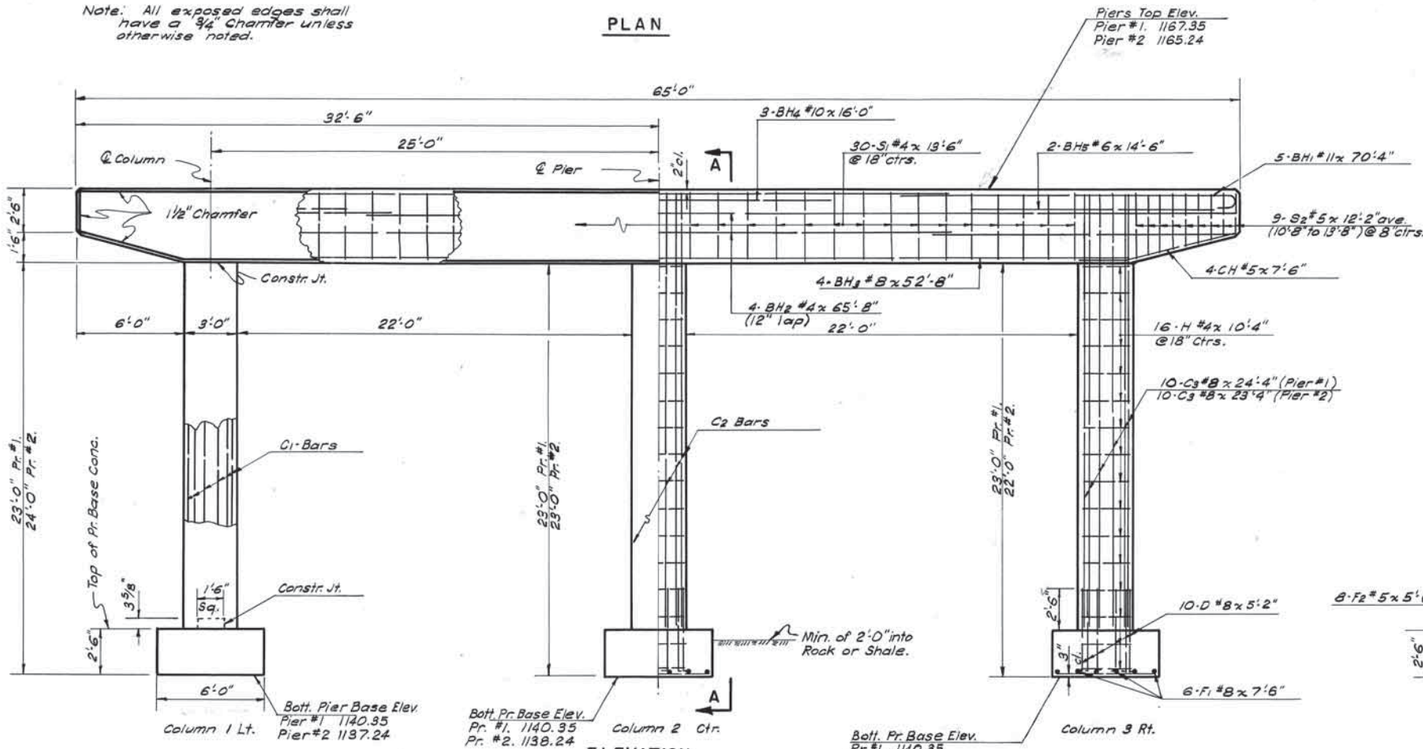


BH1 #11 x 70'-4"

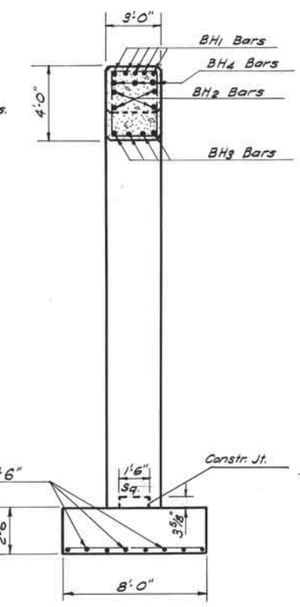


D-Bars #8 x 5'-2"

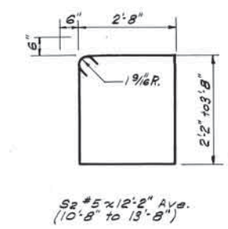
BAR LIST					
Mark	Size	Form	No.	Pier No. 1 Length	Pier No. 2 Length
BH1	#11	Bnt.	5	70'-4"	70'-4"
BH2	#4	Str.	4	65'-8"	65'-8"
BH3	#8	Str.	4	52'-8"	52'-8"
BH4	#10	Str.	3	16'-0"	16'-0"
BH5	#6	Str.	4	14'-6"	14'-6"
CH	#5	Bnt.	8	7'-6"	7'-6"
S1	#4	Bnt.	30	13'-6"	13'-6"
S2	#5	Bnt.	18	12'-2" ave.	12'-2" ave.
C1	#8	Str.	10	24'-4"	25'-4"
C2	#8	Str.	10	24'-4"	24'-4"
C3	#8	Str.	10	24'-4"	23'-4"
D	#8	Bnt.	30	5'-2"	5'-2"
H(Pr.#1)	#4	Bnt.	48	10'-4"	
H(Pr.#2)	#4	Bnt.	49		10'-4"
F1	#8	Str.	18	7'-6"	7'-6"
F2	#5	Str.	24	5'-6"	5'-6"
P1	#4	Bnt.	11	5'-9"	5'-9"
P2	#4	Bnt.	11	7'-0"	7'-0"
P3	#4	Bnt.	1	4'-9"	4'-9"
P4	#4	Bnt.	1	5'-11"	5'-11"



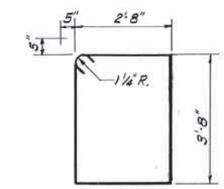
ELEVATION



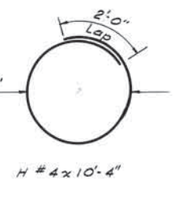
SECTION A-A



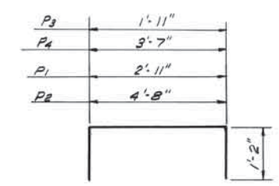
S2 #5 x 12'-2" Ave. (10'-8" to 13'-8")



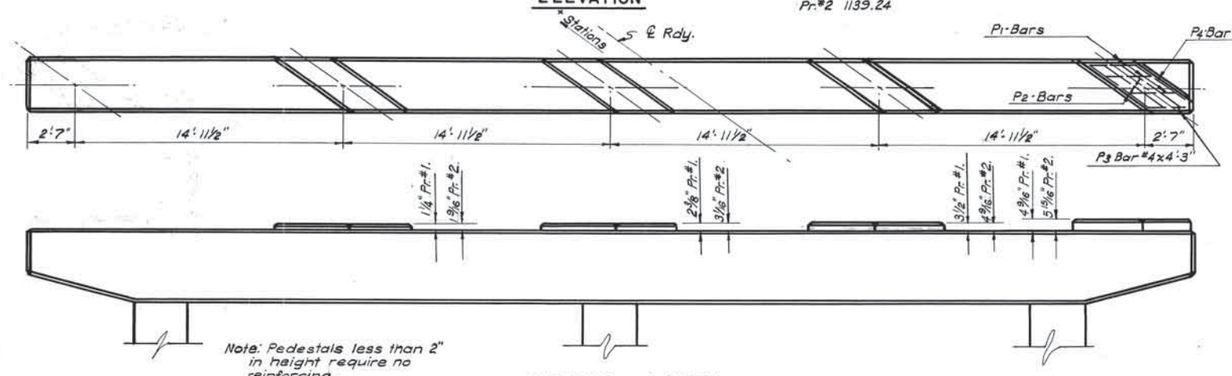
S1 #4 x 13'-6"



H #4 x 10'-4"

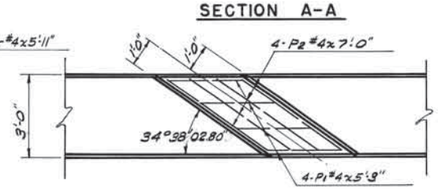


P1 #4 x 5'-9"
P2 #4 x 7'-0"
P3 #4 x 4'-9"
P4 #4 x 5'-11"



Note: Pedestals less than 2" in height require no reinforcing.

PEDESTAL LAYOUT



DETAIL OF PEDESTAL

Note: Reinforcing Steel in footing shall be supported on Conc. blocks or metal chairs.

QUANTITIES			
Item	Unit	Pier No. 1.	Pier No. 2.
Class "A" Concrete	Cu.Yd.	44.4	44.5
Class "A" Concrete Pier Bases	Cu.Yd.	13.3	13.3
Reinforcing Steel	Lbs.	6,750	6,760
Substr. Excav., Common	Cu.Yd.	87.0	101.0
Substr. Excav., Rock	Cu.Yd.	12.0	16.0

LINE "D" OVER LINE "B"

REVISIONS			
NO.	DESCRIPTION	BY	DATE

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	W.H.K.	10-64
TRACED	R.B.R.	10-64
CHECKED	J.F.	8-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF PIERS

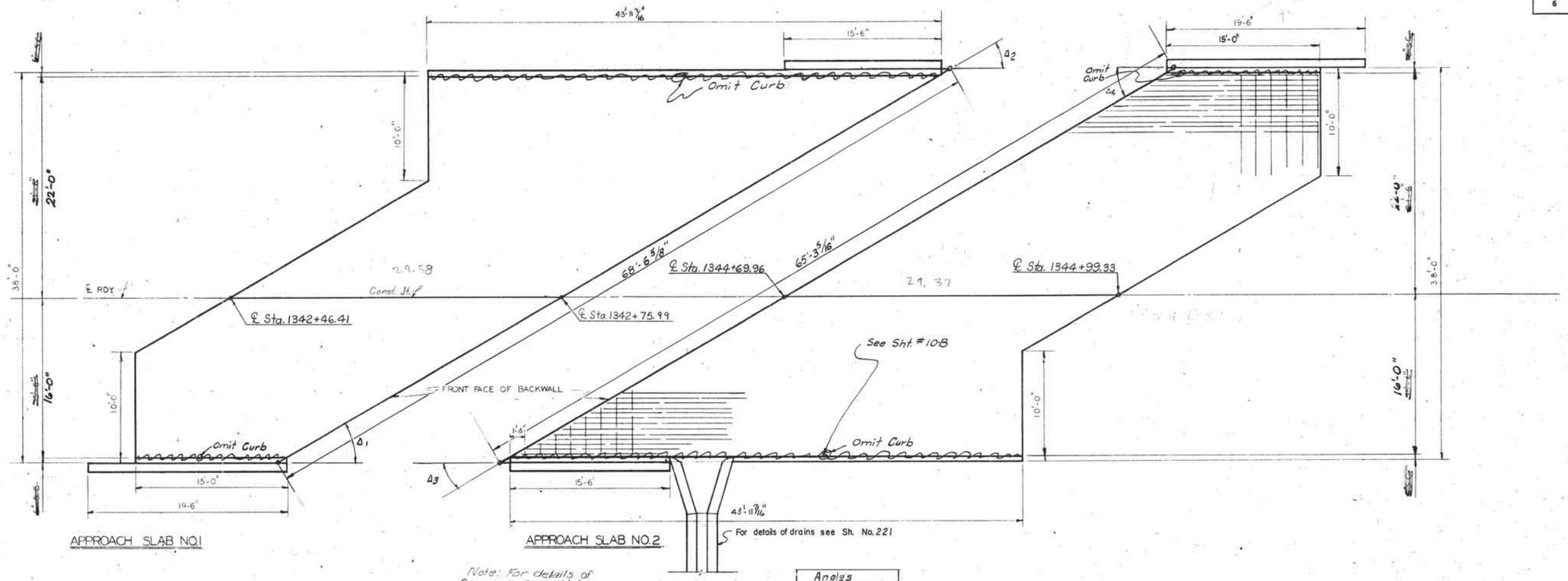
℄ STA. 1343 + 72.97

F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 178

KEUFFEL & ESSER CO. 135 IMPERIAL

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	179	



Note: For details of Approach Slab Not Shown See Sheet No. 221

Note: Longitudinal Steel #6 Bars @ 6" ctrs.
Traverse Steel #4 Bars @ 18" ctrs.

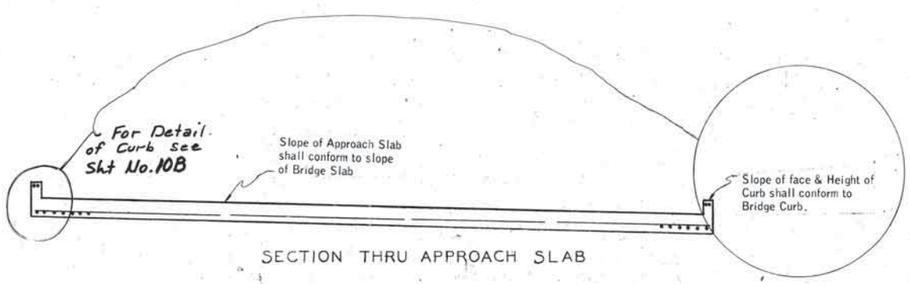
Angles	
Δ1	33°22'42"
Δ2	33°56'54.97"
Δ3	35°20'06.34"
Δ4	35°51'56.10"

Note: Cost of all items in Concrete Slope Drains including wire mesh shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All materials and work shall be in accordance with that part of Section 610 covering Concrete Side walks.

* Note: Cost of Reinforcing Steel in Approach Slab shall be included in price bid per Sq. Yd. of Approach Slab.

Note: Cost of Curbs on Approach Slab shall be included in price bid per Sq. Yd. for Approach Slab.

Note: When Bridge Approach Slabs are to be constructed in Bridge Contract they shall be constructed using Class "AA(AE)" Concrete Materials.
When Bridge Approach Slabs are to be constructed in Roadway Contract they shall be constructed with either Class "AA(AE)" Concrete Materials or P.C. Concrete Paving Materials, including an Air-Entraining Admixture.



SECTION THRU APPROACH SLAB

QUANTITIES-ONE-APPROACH SLAB		
ITEM	UNIT	TOTAL
APPROACH SLAB	SQ. YD.	124.5
* REINFORCING STEEL	LBS.	3,960

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1.	Rev. Curb dim		4/28/67
2.	Add dim. of Approach Slabs	D.P.H.	8/29/67
3.	Add Δ Angles	R.B.R.	8-30-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	PB	5-65
TRACED		
CHECKED	JF	10-65
APPROVED		
SQUAD: Watts		

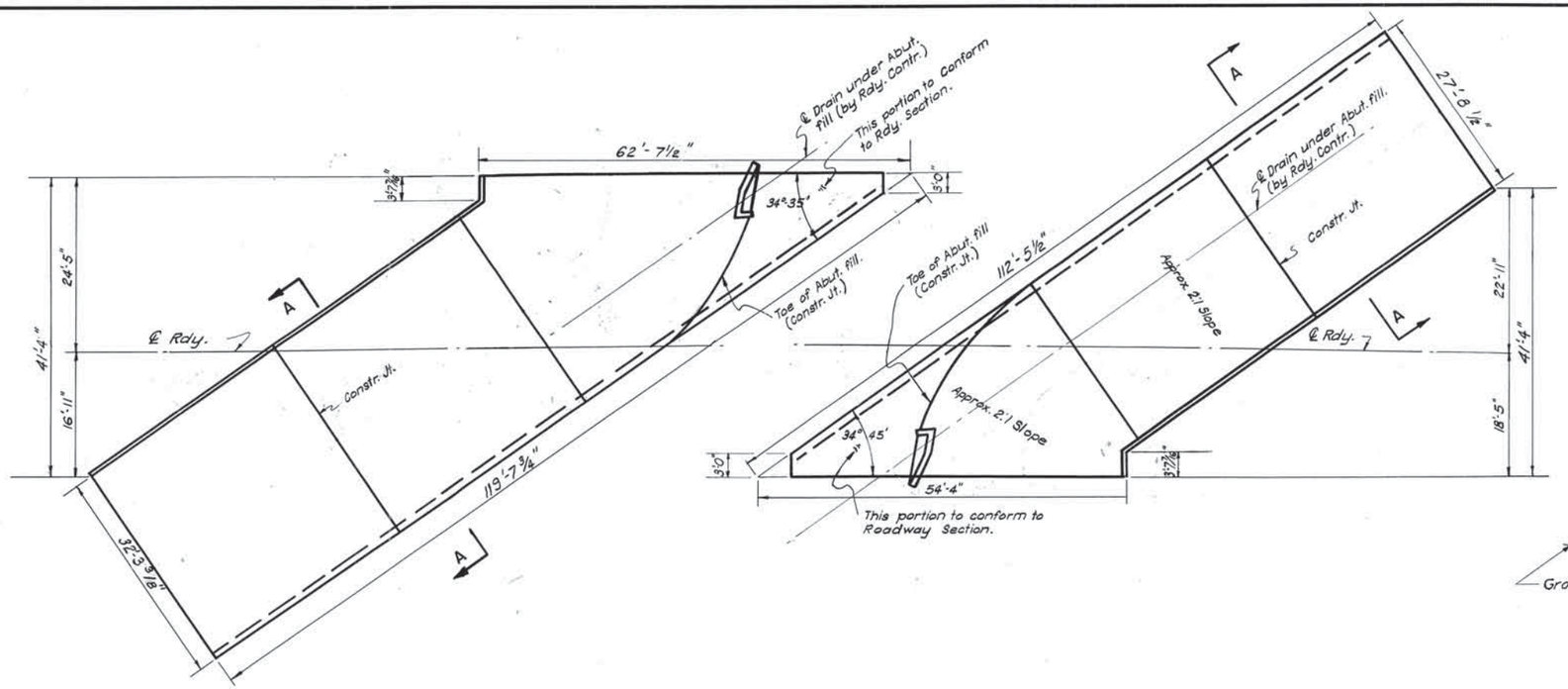
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF APPROACH SLABS

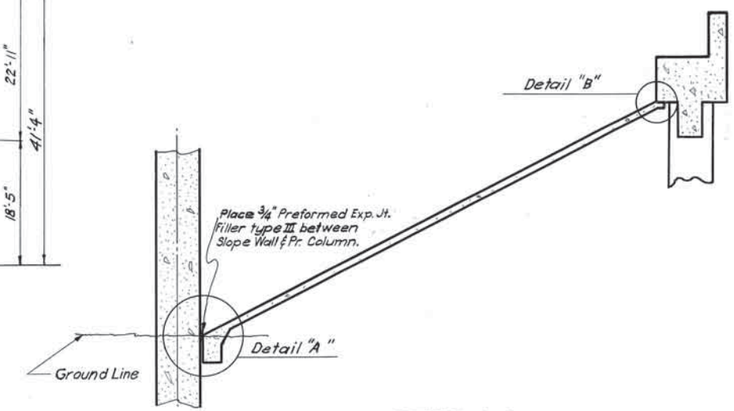
℄ STA. 1343+72.97

F.A. PROJ. NO. I-35-2(12)

FED. ROAD DIST. NO.	STATE	FAPROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	180	



DETAILS OF SLOPE WALLS

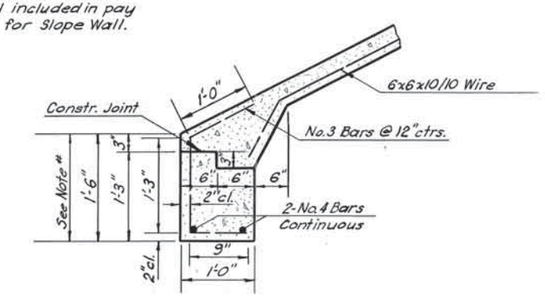


SECTION A-A

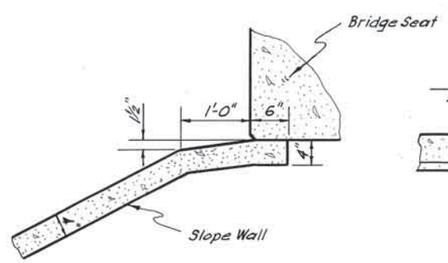
Note: Cost of all items in Conc. Slope Walls including wire mesh, reinf. steel, and exp. joint filler shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All material and work shall be in accordance with that part of Sec. 610 of the Okla. Std. Specs. governing Concrete Sidewalks.

QUANTITIES — SLOPE WALLS				
Location	Unit	Slope Walls	Drains	
Abut. #1.	S.Y.	375.8	—	
Abut. #2	S.Y.	321.5	10.0	

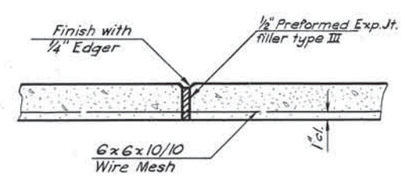
Note: Surface area of toe of Slope Wall included in pay quantity for Slope Wall.



DETAIL "A"



DETAIL "B"



DETAIL OF CONSTR. JT.

LINE "D" OVER "B"

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Constr. Joints	ALD	4/25/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	8-64
TRACED	R.B.R.	8-64
CHECKED	J.F.	8-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF SLOPE WALLS

℄ STA. 1343+72.97

F. A. PROJ. NO. I-35-2(12)

F. A. PROJECT NO. I-35-2(12) SHEET NO. 180

HETZOEN NO. 199 IMPERIAL

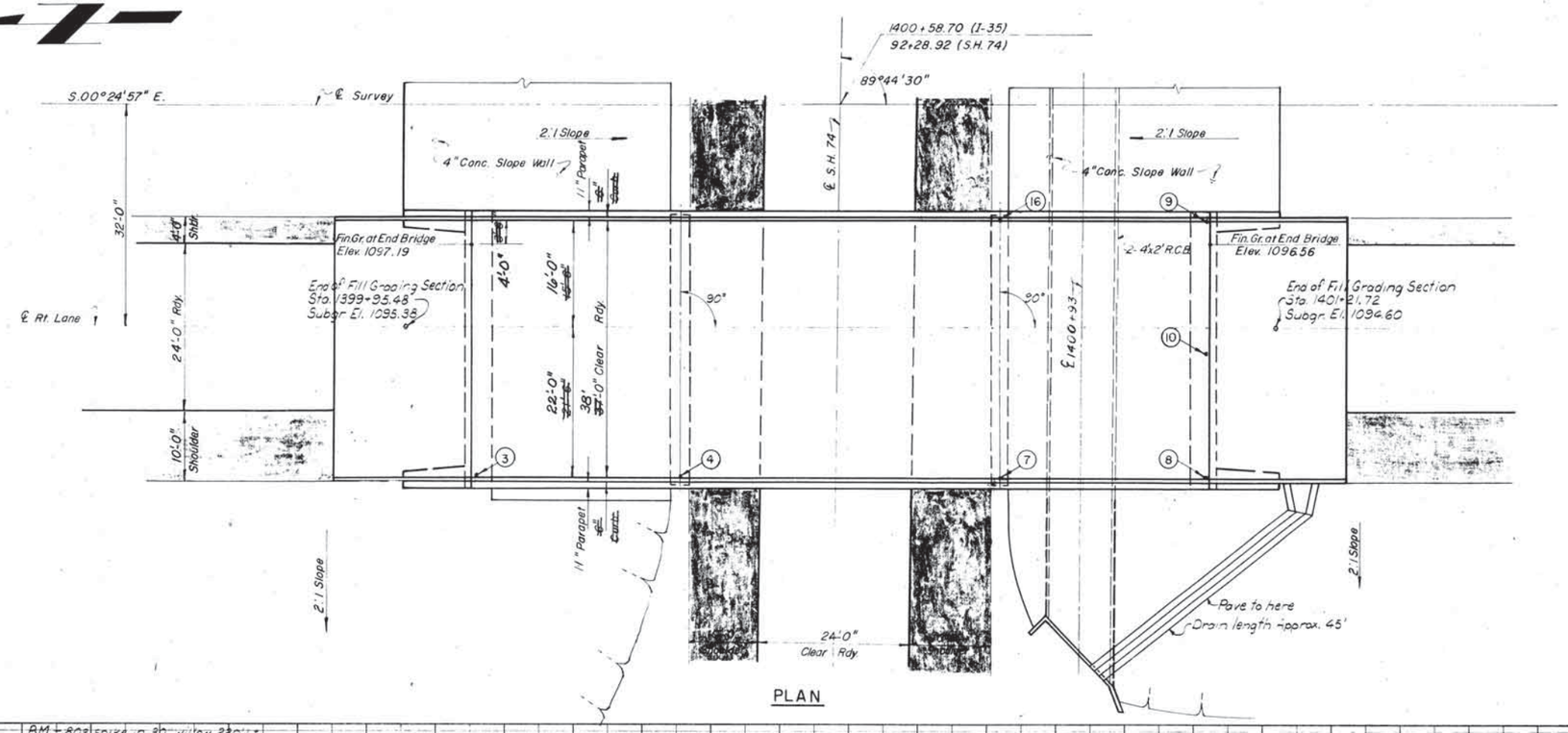
REVISIONS
Revised Piling Notes 4-25-67

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	F-2 I-35-2(12)		181	

DESIGN DATA

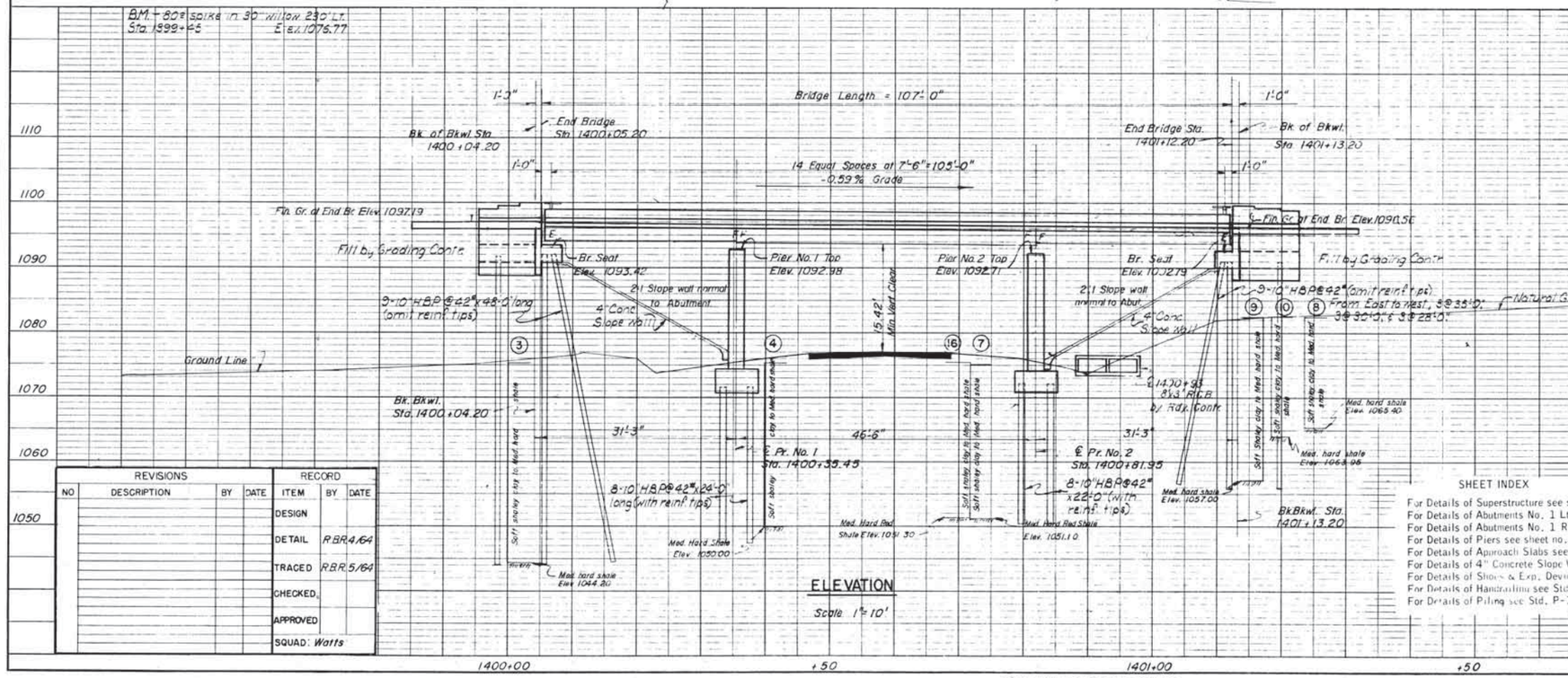
Loading H20-S16 P.P.M. 20-4
fc Class "A" Conc 1000 psi
fc Class "AA (AE)" Conc 1200 psi
fs Reinf. Steel 20,000 psi
fs Structural Steel 20000 psi

Max. Foundation Pressures
Abuts 18.6 T/pile
Piers 44 T/pile



SUMMARY OF QUANTITIES						Bridge	Rdy.
Item No.	Item	Unit	Abut.	Piers	Superstr.	Total	Total
* 202.06a	Class C Unc. Excav.	C.Y.					200
Special	Approach Slab Base	S.Y.					168.8
4.406(6)e	Approach Slabs (Air Ent. Agent)	S.Y.					168.8
301.06b	Substru. Excav. Common	C.Y.	92.4	74.0		166.4	
505A.06	Alum. Handrailing (Alt. #1)	L.F.			214.0	214.0	
505.06	Steel Handrailing (Alt #2)	L.F.			214.0	214.0	
505.06	Structural Steel	Lb.			67,850	67,850	
509.06a	Class A Concrete	C.Y.	63.4	37.0		100.4	
509.06a	Class M Conc. (Prefout Bases)	C.Y.		18.6		18.6	
509.06b(pt)	Class AA (AE) Concrete	C.Y.			113.8	113.8	
511.06	Reinforcing Steel	Lb.	9,000	7,360	26,320	42,680	
514.06e	10" H.B.P. @ 42# (with reinf. tips)	L.F.		368.0		368.0	
514.06e3a	10" H.B.P. @ 42# (omit reinf. tips)	L.F.	711.0			711.0	
514.06f	Steel Piling Splices	Ea.	13	7		20	
Special	4" Concrete Slope wall	S.Y.					537.5

* This item is for shaping up & cleaning up the Fills around the Abuts. & Appr. Slabs.



GENERAL NOTES

All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.

No splices will be allowed on Steel Piling for plan length of up to 60' in length. When foreign piling are used, Contractor shall furnish enough extra lengths cut of each heat for testing purposes.

All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

Steel Piling shall be driven to point bearing on solid foundation material at the approx. elev. shown on the plans. Steel Piling shall be driven to practical refusal (16" in ten blows) and no cut-offs of more than two feet will be allowed unless approved by the Bridge Engineer.

Piling at Piers shall have tip reinf. as shown on Std. P-1. Omit tip reinf. on Piling at Abutments.

SHEET INDEX

For Details of Superstructure see sheet no. 183
For Details of Abutments No. 1 Lt. & 2 Rt. see sheet no. 184
For Details of Abutments No. 1 Rt. & 2 Lt. see sheet no. 185
For Details of Piers see sheet no. 186
For Details of Approach Slabs see sheet no. 187
For Details of 4" Concrete Slope Walls see sheet no. 188
For Details of Shoes & Exp. Device see Std. I-SAJ-7 sheet no. 259A
For Details of Handrailing see Std. PTR-1-14 sh. no. 259C
For Details of Piling see Std. P-1-10 sh. no. 259D

REVISIONS				RECORD		
NO	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	R.B.R.	4/64
				TRACED	R.B.R.	5/64
				CHECKED		
				APPROVED		
				SQUAD: Watts		

STRU. NO. 17 RT. STRU. OVER S. H. 74

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GEN. ELEV. PLAN & SUMM. OF QUANT'S.
30'-46.5'-30' SIMP. I-BM SPANS
38' ~~37'~~-0" RDY. ~~8-2/6" CURBS~~
℄ STA. 14,00+58.70
F. A. PROJ. NO. I-35-2(12)

PLATE I. PLAN PROFILE G.P.R. & R.F. STANDARD
REGITER & FISHER CO., NEW YORK

FA PROJECT NO. I-35-2-(12) SHEET NO. 181

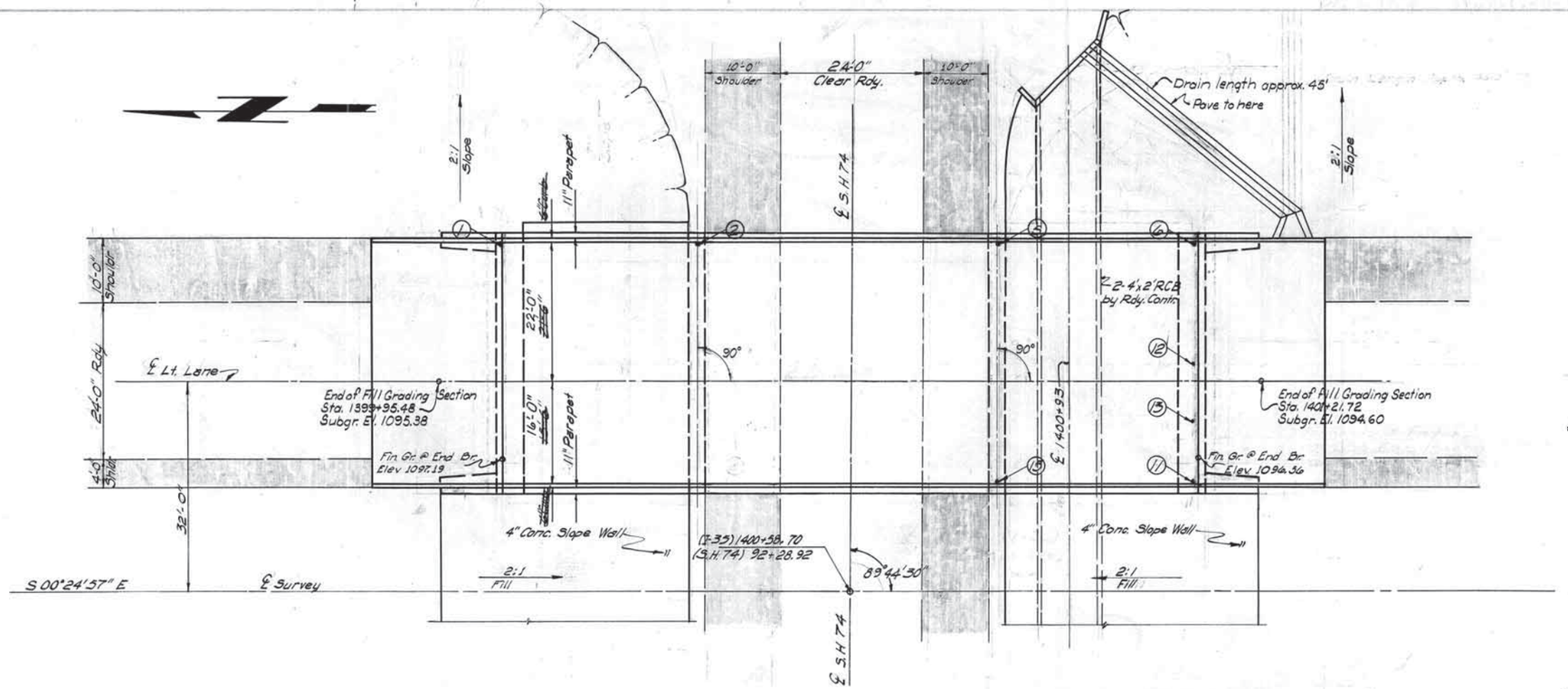
Rev. Curb & Cl. Rdy. Dim. 4/19/67

FED. ROAD DIST. NO.	STATE	FED. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	F.A. I-35-2(12)		182	

DESIGN DATA

Loading H20-S16 PPM 20-4
f'c Class "A" Conc. 1,000 psi.
f'c Class "AA (AE)" Conc. 1,200 psi.
fs Reinf. Steel 20,000 psi.
fs Structural Steel 20,000 psi

Max. Foundation Pressures
Abuts 18.6 T/pile
Pier #1 44 T/pile
Pier #2 5.6 T/ft²



PLAN

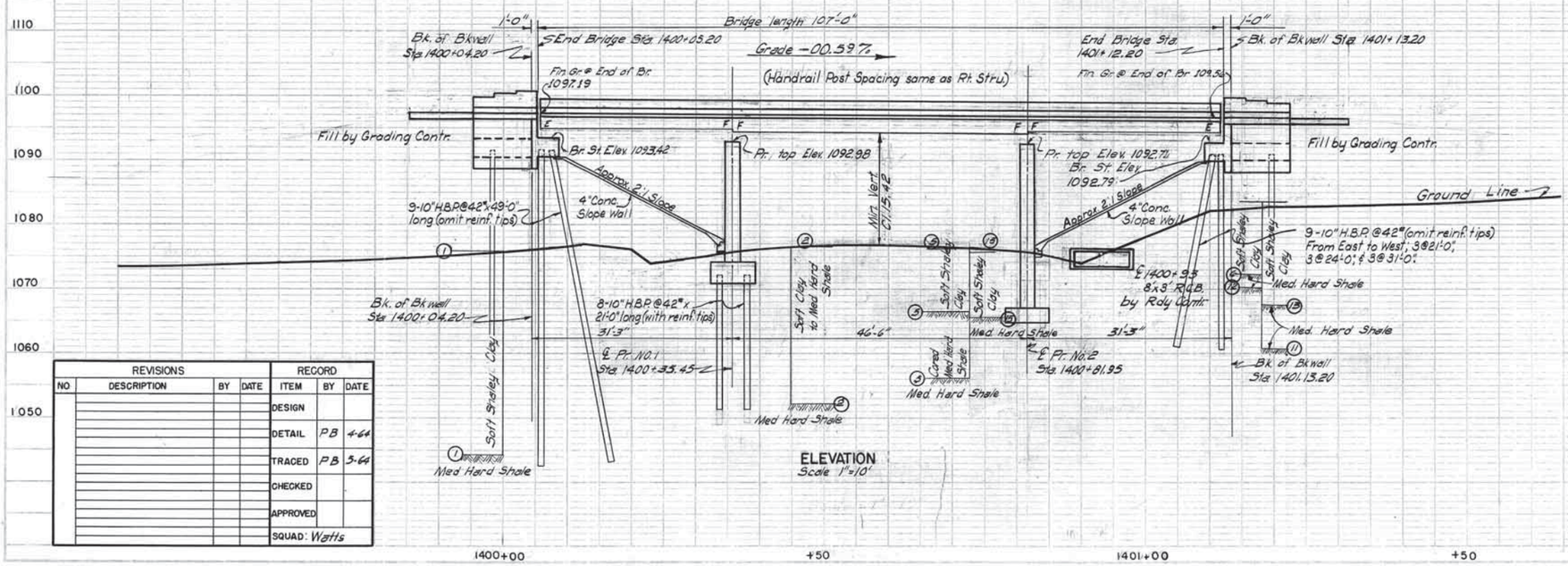
SUMMARY OF QUANTITIES						Bridge	Rdy.
Item No.	Item	Unit	Abut.	Piers	Superstr.	Total	Total
* 202.06d	Class "D" Uncl. Excav.	C.Y.					200
Special	Approach Slab Base	S.Y.					168.8
414.06c(2a)	Approach Slabs (Air Ent. Agent)	S.Y.					168.8
501.06b	Substru. Excav. Common	C.Y.	92.4	111.0		203.4	
505A.06	Alum. Handrailing (Alt. #1)	L.F.			214.0	214.0	
505.06	Steel Handrailing (Alt. #2)	L.F.			214.0	214.0	
505.06	Structural Steel	Lb.			67,850	67,850	
509.06a	Class "A" Concrete	C.Y.	63.4	39.6		103.0	
509.06a	Class "A" Conc. (Pr. & Abut. Bases)	C.Y.		15.8		15.8	
509.06b(2)	Class "AA (AE)" Concrete	C.Y.			113.8	113.8	
511.06	Reinforcing Steel	Lb.	9,000	7,550	26,320	42,870	
514.06e	10" H.B.P. @ 42# (with reinf. tips)	L.F.		168.0		168.0	
514.06e5p	10" H.B.P. @ 42# (omit reinf. tips)	L.F.	669.0			669.0	
514.06f	Steel Piling Splices	Ea.	12	3		15	
Special	4" Concrete Slope Wall	S.Y.					537.5
501.06c	Substru. Excav. Rock	S.Y.		4.5		4.5	

* This item is for shaping up & cleaning up the fills around the Abutments & Appr. Slabs.

Note: Omit tips on Abutment Piling.

Note: For General Note, Special Provisions, and Index Sheet see sheet no. 181

B.M. - 30" spike in 30" willow 230' Lt. Sta. 1399+45 Elev. 1076.77



ELEVATION
Scale 1"=10'

REVISIONS				RECORD		
NO	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	PB	4-64
				TRACED	PB	5-64
				CHECKED		
				APPROVED		
				SQUAD: Watts		

STRU. NO. 18 LT. STRU. OVER S. H. 74

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

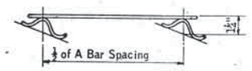
GEN. ELEV., PLAN & SUMM. OF QUANT'S
30'-46.5'-30' SIMPLE I-BM SPANS
38 ~~32'~~-0" RDY. ~~& 2'-6" CURBS~~
℄ STA. 1400+58.70
F.A. PROJ. NO. I-35-2(12)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)		183	

REVISIONS	
DESCRIPTION	DATE
Rev. & added notes.	4-67

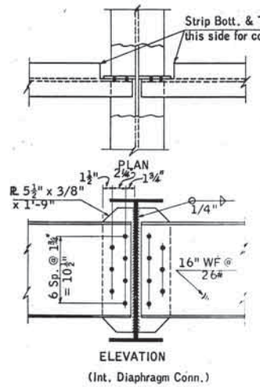
Floor: 7½" Uniform thickness 38'-0" Cl. Rdy., Class "AA(AE)" Concrete, Max. Agg. 1½" ø Current Okla. Std. Specs. Top of Curb shall be brought to a true surface with a wooden float. Top and sides of curb are to have a carborundum finish. See Detail this sheet. Edges of curb are to have a 3/4" chamfer.

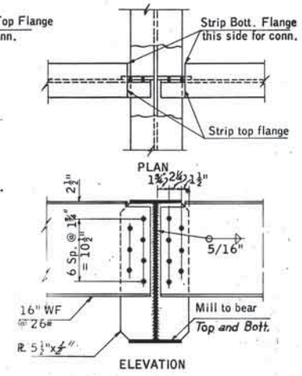
Reinf: Bars "A" #5 @ 10" Ctrs. across the rdy., 1½" clearance below top of slab 38'-8" long.
Bars "A1" #5 @ 10" Ctrs. across the rdy., 1" clearance above bottom of slab, bent as shown.
Bars "B" #5 @ 5" Ctrs. in curbs, bent as shown.
Bars "C" #5 @ 10" Ctrs. across the rdy., top and bottom of slab, bent as shown.
Bars "D" #4 - 3 in each curb, placed as shown.
Bars "E" #4 - 84 parallel to ℄ Roadway, placed as shown.
Bars "PH" #4 - 4 in each parapet wall, placed as shown.
Bars "P1" #4 @ 12" Ctrs. in parapet walls, placed as shown.
Bars "P2" #4 @ 12" Ctrs. in parapet wall, placed as shown.
Reinf. Steel in the floor shall begin and end with A & A1 Bars, a max. of 2" from end of Conc. panels. All reinf. steel in bottom of slab shall be supported on slab spacers shown. Reinf. steel in top of slab shall be supported on approved metal highchairs at Max. spacing of 4'-0" Ctrs. in both directions. Bars D & E shall terminate 1" from face of concrete.



SLAB SPACER

Spacing = ½ beam spacing ctr. to ctr.
Max. Spacing = 4'-3"

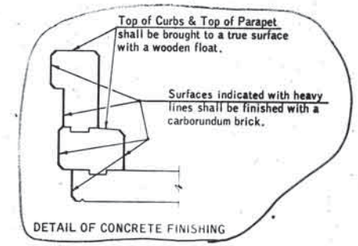


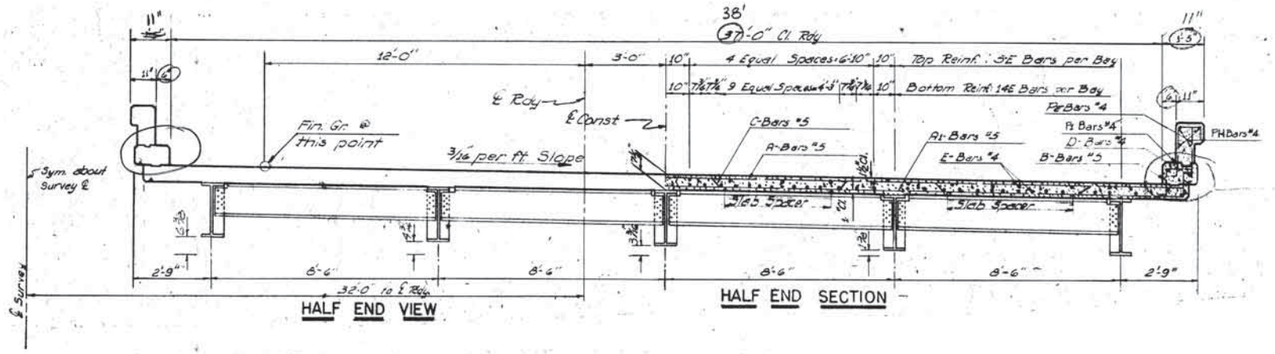


Note diaphragms to be Spaced Max. 25'

DESIGN DATA

Loading H20-S16, P.P.M. 20-4
fc Class "AA(AE)" Concrete 1,200 P.S.I.
fc Class "A" Concrete 1,000 P.S.I.
fs Steel 20,000 P.S.I.

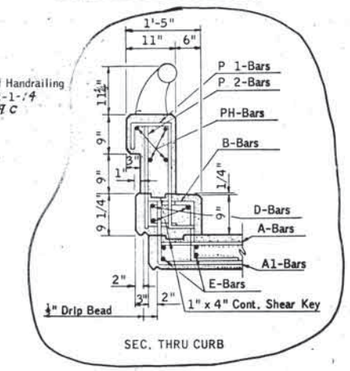


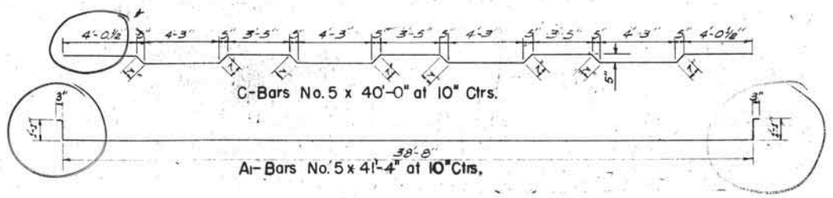


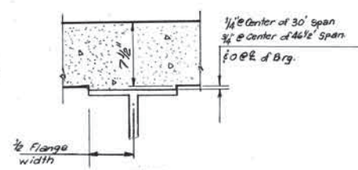
Note: No field welding to beam or girders will be allowed except as shown on the plans.

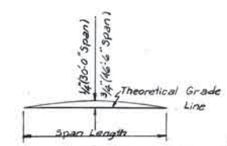
See Revised Curb Detail Sheet No 108

For details of Handrailing See Std. PTR-1-74 Sheet No. 259 C

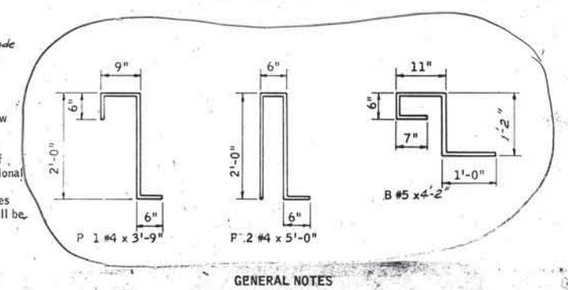




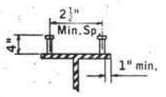




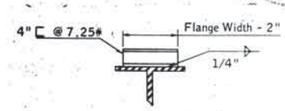
Note: The floor and curb forms shall be built to allow for an assumed parabolic deflection at the center of the span as shown. The contractor may furnish the beams cambered the amount of deflection or form haunches as shown. Additional concrete in the haunches to provide for D.L. Deflection has been added to the pay quantities of Class "AA(AE)" Concrete. Deflection shall be measured from the theoretical grade line.



Contractor may use stud shear connectors as follows:
1" of 4" ⊏ @ 7.25# = .56 = 3/4" Stud
1" of 4" ⊏ @ 7.25# = .41 = 7/8" Stud

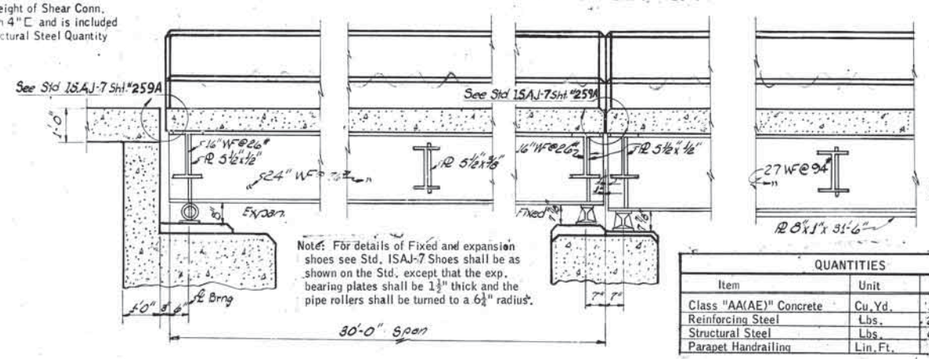


STUD SHEAR CONNECTOR (TYP.)



CHANNEL SHEAR CONNECTOR

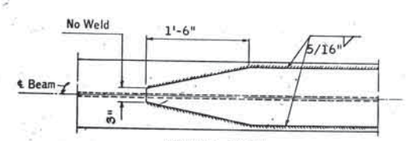
Note: Weight of Shear Conn. is based on 4" ⊏ and is included in the Structural Steel Quantity shown.

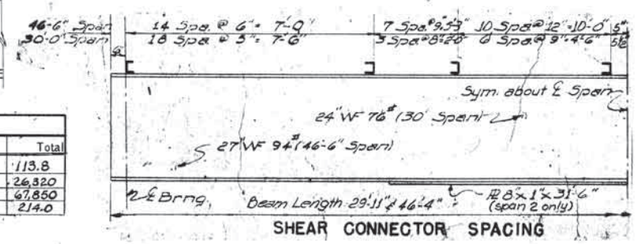


Note: For details of Fixed and expansion shoes see Std. ISAJ-7 Shoes shall be as shown on the Std. except that the exp. bearing plates shall be 1½" thick and the pipe rollers shall be turned to a 6½" radius.

LONGITUDINAL SECTION

QUANTITIES		
Item	Unit	Total
Class "AA(AE)" Concrete	Cu. Yd.	113.8
Reinforcing Steel	Lbs.	26,320
Structural Steel	Lbs.	67,850
Parapet Handrailing	Lin. Ft.	214.0





SHEAR CONNECTOR SPACING

GENERAL NOTES

All construction shall be in accordance with the current Okla. Std. Specifications and Special Provisions.
All Reinf. Steel bars shall conform to A.S.T.M. Specifications A305-53.
All Bar Bend dimensions are out to out.
All exposed concrete corners shall have a 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.
Transverse Reinf. Steel in floor slab shall begin and end with A and A1 Bars and these bars shall be a maximum of 2" from the ends of the concrete panels.
High strength bolts [illegible] for field connections.
Quantities for Reinforcing Steel computed on basis of weight approved by the A.A.S.H.O. & C.R.S.I.

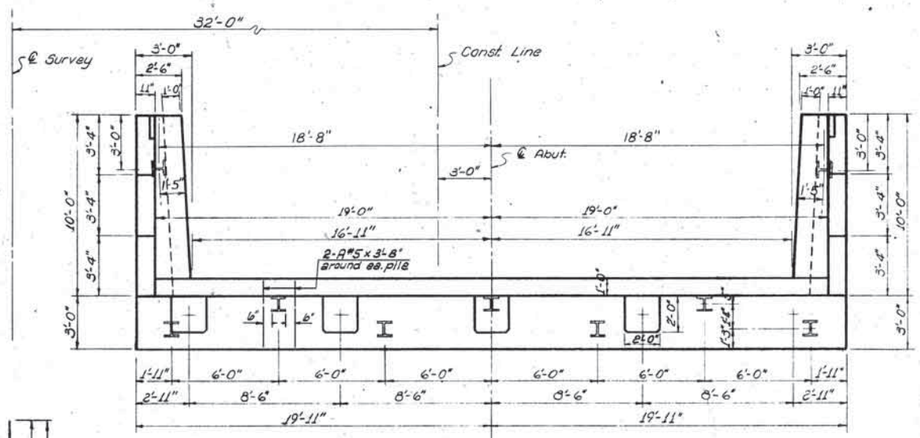
I-35 OVER SH 74

Design		
Drawn	PLB	8/65
Checked	D H	8/65
Approved		
Squad	Welle	

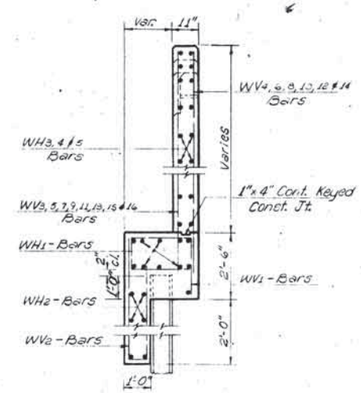
DETAILS OF SUPERSTRUCTURE
30'-46.5'-30' I-BM. SPANS
38' (37) RDY. ~~& 24' CURBS~~
F.A. PROJ. NO. I-35-2 (12)
Project No. Sheet No. 183

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA-I-35(202)		184	

REVISIONS	
DESCRIPTION	DATE
Revised, Reinf around piling	4-25-67



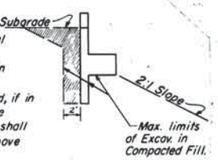
PLAN



TYPICAL SEC. THRU WING

Shaded area to be back filled and tamped with a mechanical tamper to 100 % Proctor Density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the price bid per C.Y. for Substructure Excavation Common.

Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer he may pour the concrete against the compacted fill. If necessary, Contractor shall use forms on the back vertical face of the Abutment and remove same after concrete is set.



ABUTMENT EXCAV. DIAGRAM

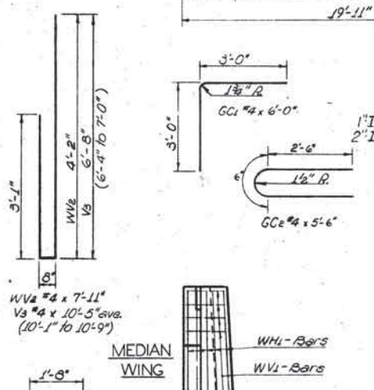
All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.

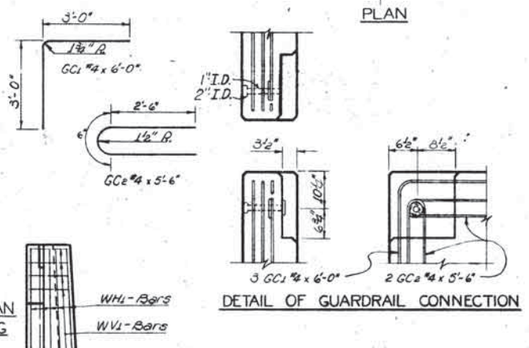
All Abutment Piling shall be driven through the compacted fill. All Piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 Tons.

All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

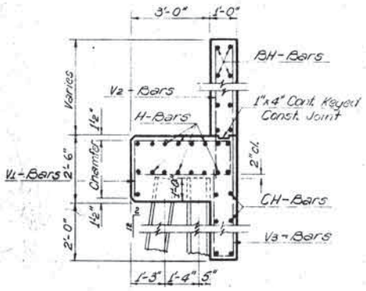
For details of H-Bearing Piling, see Std. P-1-10 sheet no. 259 D

BAR LIST — ONE ABUT.				
MARK	SIZE	FORM	NO	LENGTH
H	#7	Str.	17	39'-6"
BH	#4	Str.	6	39'-6"
CH	#4	Str.	6	35'-8"
V1	#5	Bnt.	54	10'-8"
V2	#4	Str.	37	3'-8" ave.
V3	#4	Bnt.	37	10'-5" ave.
V4	#4	Str.	2	4'-4"
V5	#4	Str.	2	5'-0"
WH1	#7	Str.	22	12'-8"
WH2	#4	Str.	12	9'-8"
WH3	#4	Str.	26	9'-8"
WH4	#4	Str.	4	6'-4"
WH5	#4	Str.	4	3'-0"
WV1	#5	Bnt.	26	8'-2" ave.
WV2	#4	Bnt.	20	7'-11"
WV3	#5	Str.	2	5'-2"
WV4	#4	Str.	5	6'-7"
WV5	#5	Str.	3	6'-7"
WV6	#4	Str.	5	7'-1"
WV7	#5	Str.	5	7'-1"
WV8	#4	Str.	5	7'-7"
WV9	#5	Str.	5	7'-7"
WV10	#4	Str.	5	8'-2"
WV11	#5	Str.	5	8'-2"
WV12	#4	Str.	5	7'-8"
WV13	#5	Str.	5	7'-8"
WV14	#4	Str.	5	7'-2"
WV15	#5	Str.	3	7'-2"
WV16	#5	Str.	2	5'-9"
P	#4	Bnt.	29	4'-4"
A	#5	Str.	14	3'-8"
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-2"

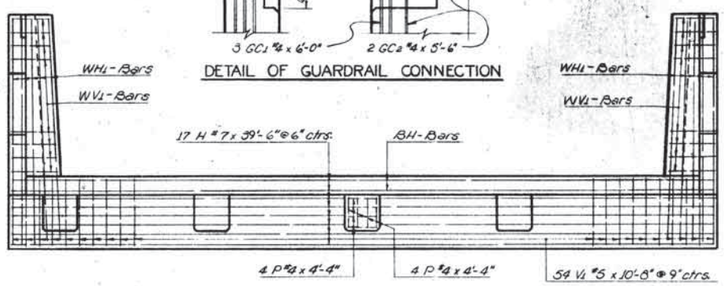




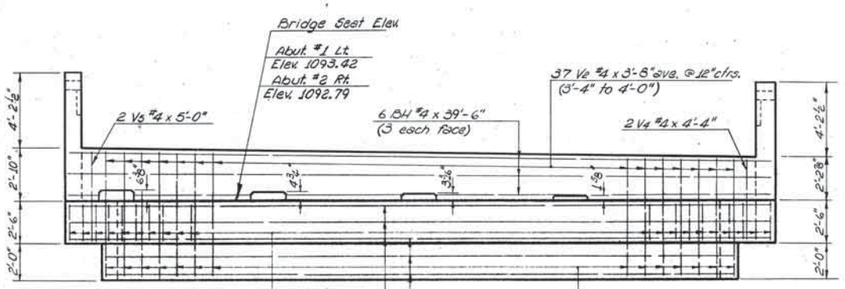
DETAIL OF GUARDRAIL CONNECTION



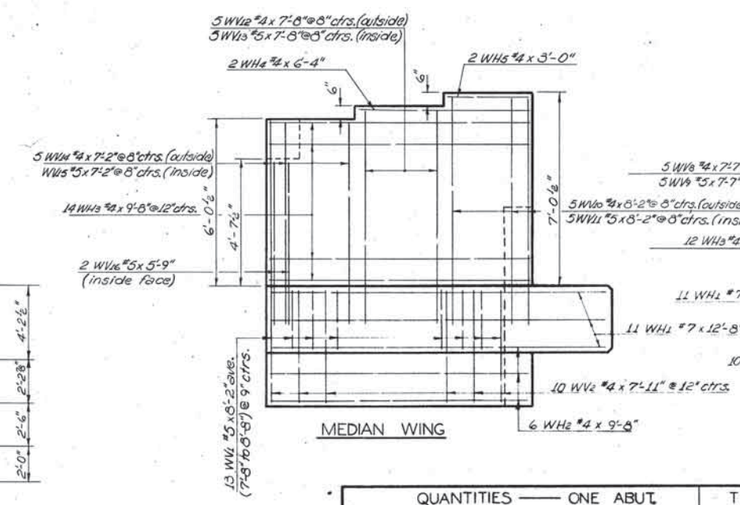
TYPICAL SEC. THRU ABUT.



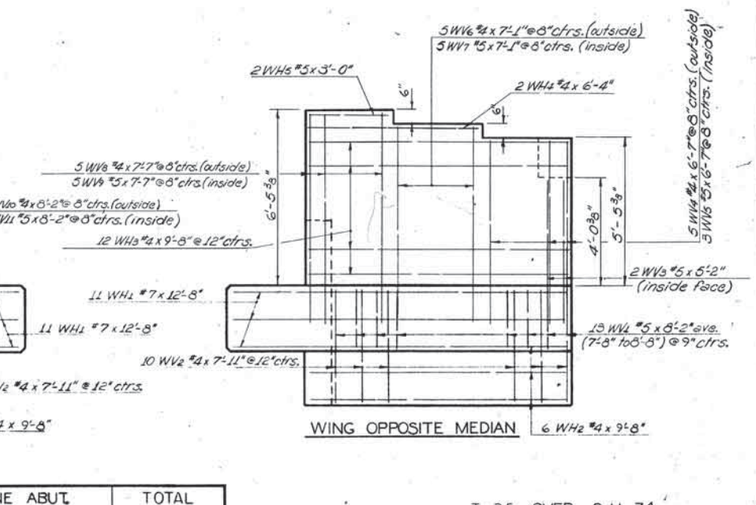
PLAN



ELEVATION



MEDIAN WING



WING OPPOSITE MEDIAN

QUANTITIES — ONE ABUT.		TOTAL	
ITEM	UNIT	NO. 1 LT	NO. 2 RT
Class "A" Concrete	C.Y.	31.7	31.7
Reinforcing Steel	LB.	4,500	4,500
Substructure Excav., Common	C.Y.	46.2	46.2
10" H-Bearing Piling @ 42# (omit reinf. tips)	L.F.	441.0	279.0

Design		
Drawn	B.H.	6-65
Checked	D.H.	9-65
Approved		
Squad	WATTS	

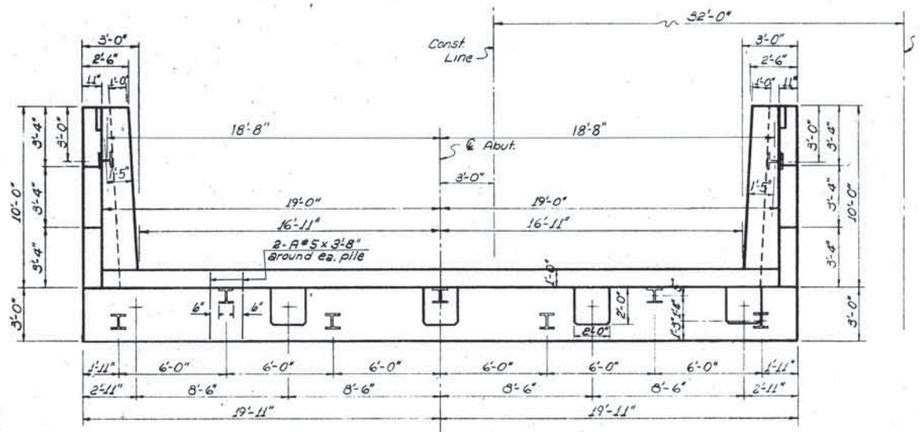
I-35 OVER S.H. 74

DETAIL OF ABUTMENTS
ABUT. NO. 1 LT. & ABUT. NO. 2 RT.
38' (37) 0" RDY. ~~27'-0" S.C.~~
℄ STA. 1400 + 58.70

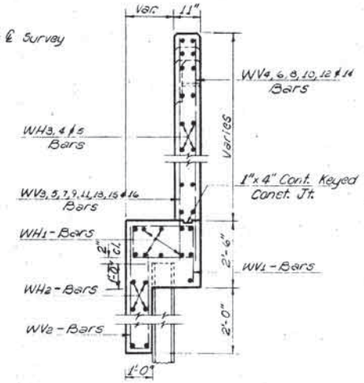
F. A. Project No. I-35-2(12) Sheet No. 184

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA-3352(12)		188	

REVISIONS	
DESCRIPTION	DATE
Revised Reinf around piling	4-26-67



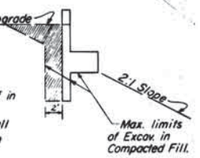
PLAN



TYPICAL SEC. THRU WING

Shaded area to be back filled and tamped with a mechanical tamper to 100 % Proctor Density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the price bid per C.Y. for Substructure Excavation Common.

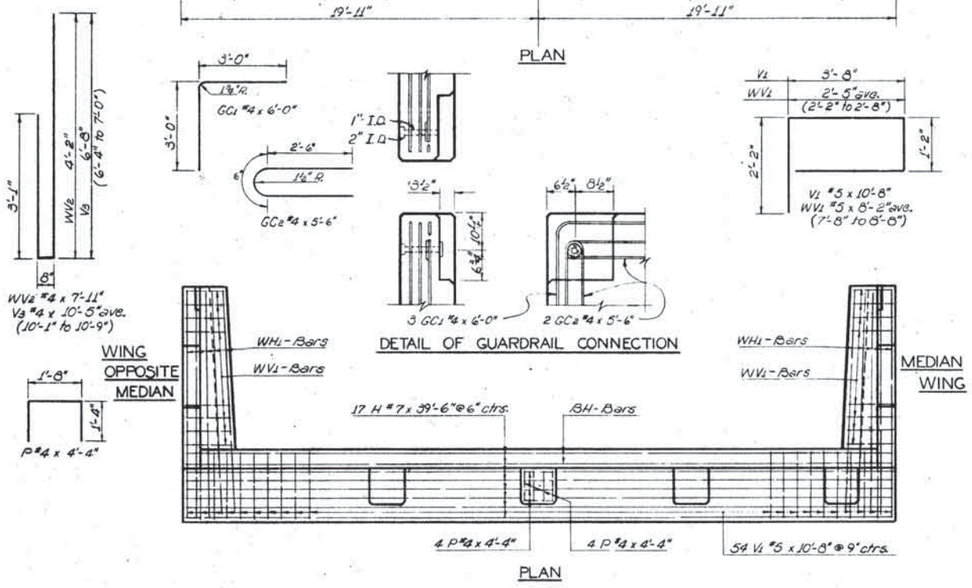
Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer he may pour the concrete against the compacted fill. If necessary, Contractor shall use forms on the back vertical face of the Abutment and remove same after concrete is set.



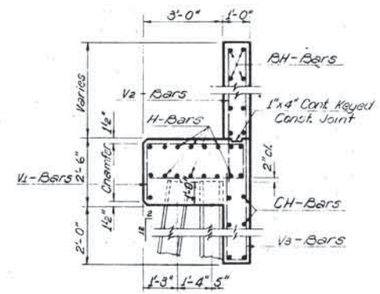
ABUTMENT EXCAV. DIAGRAM

All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.
All Abutment Piling shall be driven through the compacted fill.
All Piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 Tons.
All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.
For details of H-Bearing Piling, see Std. P-1-10 sheet no. 259 D

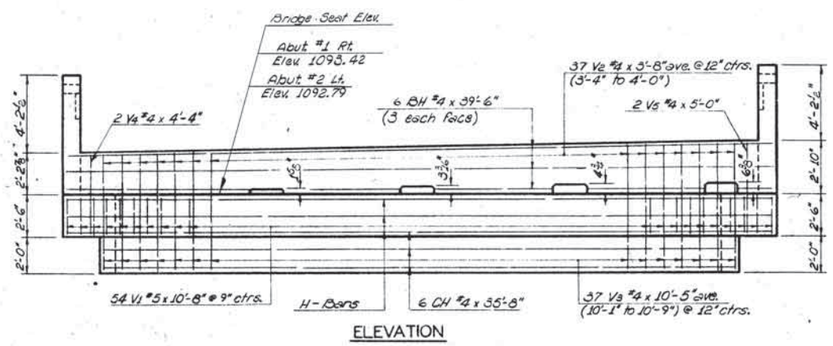
BAR LIST — ONE ABUT.				
MARK	SIZE	FORM	NO.	LENGTH
H	#7	Str.	17	39'-6"
BH	#4	Str.	6	39'-6"
CH	#4	Str.	6	35'-8"
V1	#5	Bnt.	54	10'-8"
V2	#4	Str.	37	3'-8" ave
V3	#4	Bnt.	37	10'-5" ave.
V4	#4	Str.	2	4'-4"
V5	#4	Str.	2	5'-0"
WH1	#7	Str.	22	12'-8"
WH2	#4	Str.	12	9'-8"
WH3	#4	Str.	26	9'-8"
WH4	#4	Str.	4	6'-4"
WH5	#4	Str.	4	3'-0"
WV1	#5	Bnt.	26	8'-2" ave.
WV2	#4	Bnt.	20	7'-11"
WV3	#5	Str.	2	5'-2"
WV4	#4	Str.	3	6'-7"
WV5	#5	Str.	3	6'-7"
WV6	#4	Str.	5	7'-1"
WV7	#5	Str.	5	7'-1"
WV8	#4	Str.	5	7'-7"
WV9	#5	Str.	5	7'-7"
WV10	#4	Str.	5	8'-2"
WV11	#5	Str.	5	8'-2"
WV12	#4	Str.	5	7'-8"
WV13	#5	Str.	5	7'-8"
WV14	#4	Str.	5	7'-2"
WV15	#5	Str.	3	7'-2"
WV16	#5	Str.	2	5'-9"
P	#4	Bnt.	24	4'-4"
A	#5	Str.	14	3'-8"
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-2"



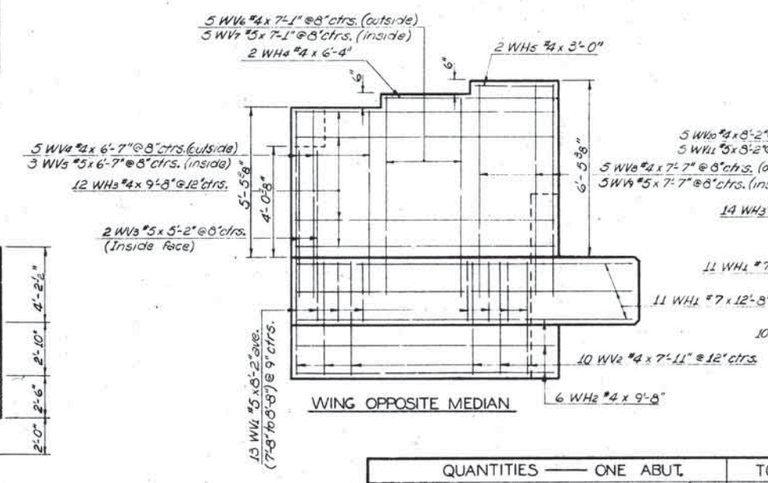
PLAN



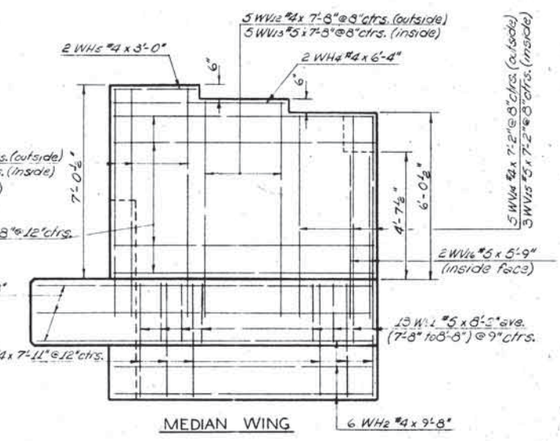
TYPICAL SEC. THRU ABUT.



ELEVATION



WING OPPOSITE MEDIAN



MEDIAN WING

QUANTITIES — ONE ABUT.		TOTAL	
ITEM	UNIT	NO. 1 RT.	NO. 2 LT.
Class "A" Concrete	C.Y.	31.7	31.7
Reinforcing Steel	Lb.	4,500	4,500
Substructure Excav., Common	C.Y.	46.2	46.2
10" H-Bearing Piling @ 42# (omit reinf. tips)	L.F.	432.0	228.0

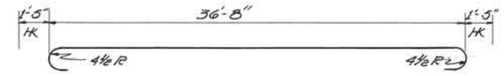
Design		
Drawn	B.K.	6-65
Checked	D.H.	9-65
Approved		
Squad	WATTS	

I - 35 OVER S.H. 74

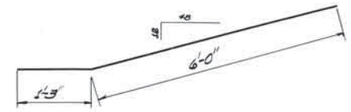
DETAIL OF ABUTMENTS
ABUT. NO. 1 RT. & ABUT. NO. 2 LT.
38' (37') 0" RDY. ~~5-27-6 S.C.~~
℄ STA. 1400+58.70

F. A. Project No. I-35-2(12) Sheet No. 188

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA I-35-2(12)	186	



BH1 No. 10 x 39'-6"

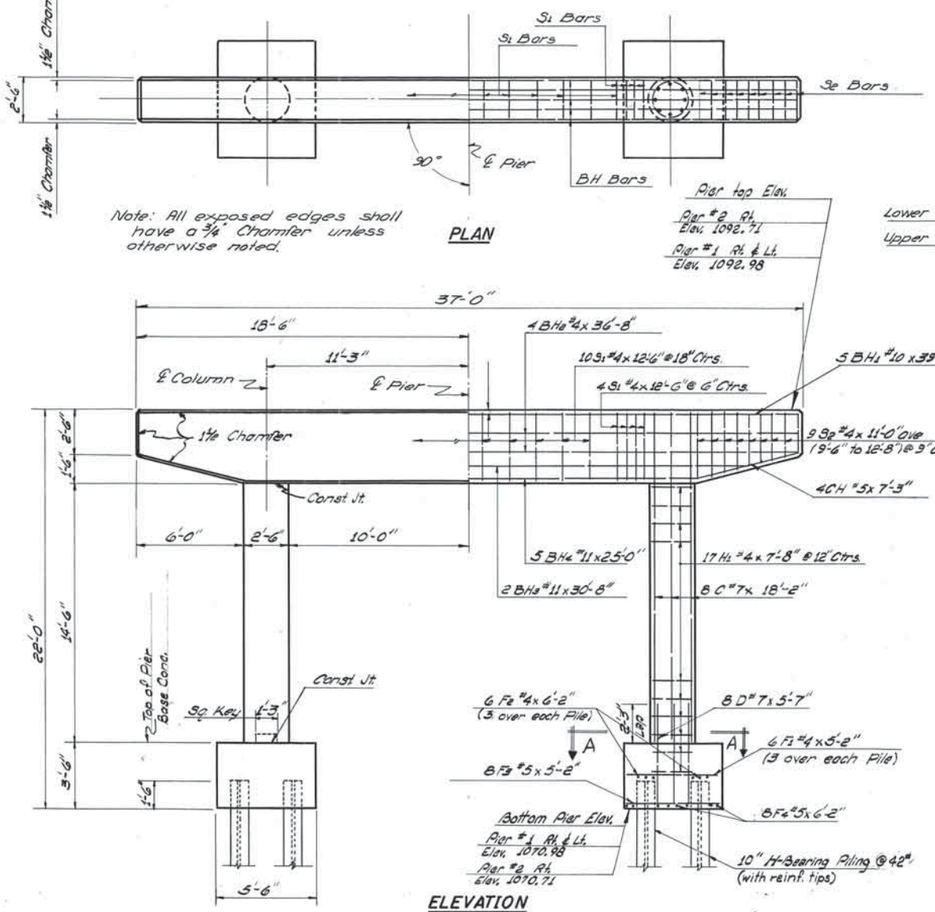


CH No. 5 x 7'-3"

Note: All bar bend dimensions are out to out.

H1 No. 4 x 7'-8"
H2 No. 4 x 7'-8"

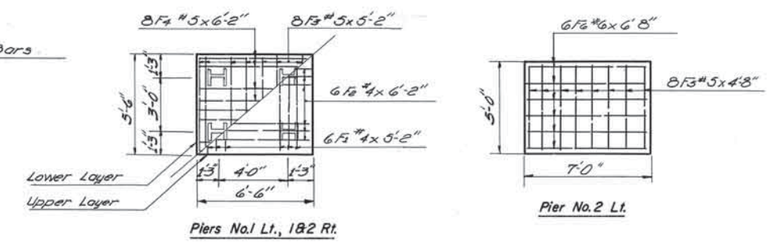
BAR LIST — ONE PIER					
				Pr. No. 1 Lt., 1 & 2 Rt.	No. 2 Lt.
MARK	SIZE	FORM	NO.	LENGTH	LENGTH
BH1	#10	Bnt	5	39'-6"	39'-6"
BH2	#4	Str	4	36'-8"	36'-8"
BH3	#11	Str	2	30'-8"	30'-8"
BH4	#11	Str	5	25'-0"	25'-0"
CH	#5	Bnt	8	7'-3"	7'-3"
S1	#4	Bnt	18	12'-6"	12'-6"
S2	#4	Bnt	18	11'-0" ave	11'-0" ave
C	#7	Str	16	18'-2"	25'-2"
D	#7	Str	16	5'-7"	4'-7"
H1	#4	Bnt	34	7'-8"	
H2	#4	Bnt	48		7'-8"
F1	#4	Str	12	5'-2"	
F2	#4	Str	12	6'-2"	
F3	#5	Str	16	5'-2"	
F4	#5	Str	16	6'-2"	
F5	#5	Str	16		4'-8"
F6	#6	Str	12		6'-8"
P1	#4	Bnt.	27	4'-3"	4'-3"
P2	#4	Bnt	27	5'-0"	5'-0"



PLAN

Note: All exposed edges shall have a ¾" Chamfer unless otherwise noted.

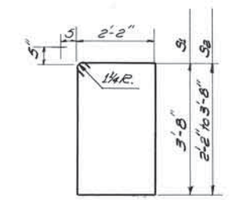
ELEVATION
Piers No. 1 Lt., 1 & 2 Rt.



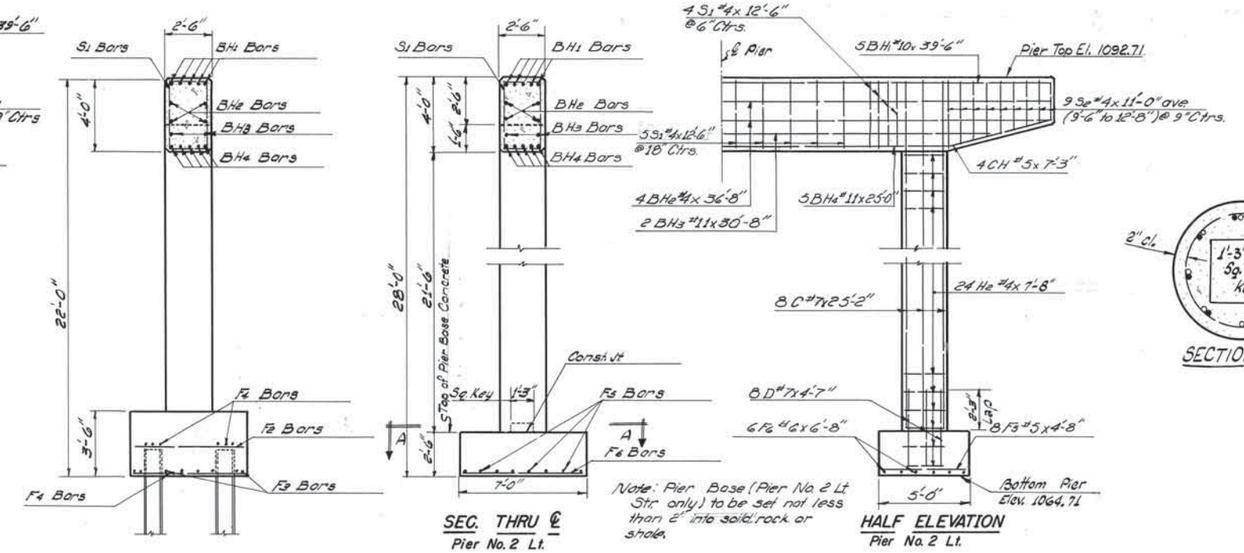
Piers No. 1 Lt., 1 & 2 Rt.

Pier No. 2 Lt.

PLAN OF PIER FOOTING



S1 No. 4 x 12'-6"
S2 No. 4 x 11'-0 ave (9'-6" to 12'-6")



SEC. THRU ℄
Pier No. 2 Lt.

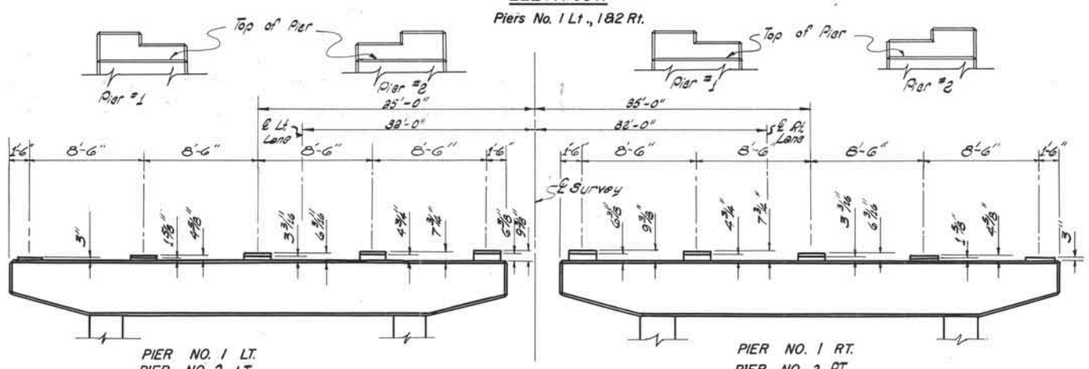
Note: Pier Base (Pier No. 2 Lt. Str. only) to be set not less than 2" into solid rock or shale.

HALF ELEVATION
Pier No. 2 Lt.

SECTION A-A

QUANTITIES					
ITEM	UNIT	PIER NO. 1 RT.	PIER NO. 2 RT.	PIER NO. 1 LT.	PIER NO. 2 LT.
Class "A" Concrete	Cu. Yd.	18.5	18.5	18.5	21.1
Class "A" Concrete Pier Base	Cu. Yd.	9.3	9.3	9.3	6.5
Reinforcing Steel	LBS.	3,680	3,680	3,680	3,870
Substn. Excav. Common	Cu. Yd.	37.0	37.0	37.0	74.0
Substr. Excav. Rock	Cu. Yd.	—	—	—	4.5
* 10" H-Bearing Piling @ 42#	Lin. Ft.	192	176	168	—

* (with reinf. tips)



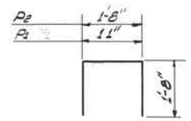
PIER NO. 1 LT.
PIER NO. 2 LT.

PEDESTAL LAYOUT

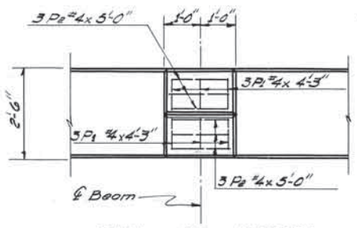
PIER NO. 1 RT.
PIER NO. 2 RT.

SEC. THRU ℄
Piers No. 1 Lt., 1 & 2 Rt.

Note: For details of piling, See Std. P-1-10 Sht. no. 2 of 2



P1 No. 4 x 4'-3"
P2 No. 4 x 5'-0"



DETAIL OF PEDESTAL

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Ped. Detail	ALD	4/20/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	WHK	8/64
TRACED	PLB	8/64
CHECKED	QH	9/65
APPROVED		
SQUAD: WATTS		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

I-35 OVER S.H. 74

DETAIL OF PIERS

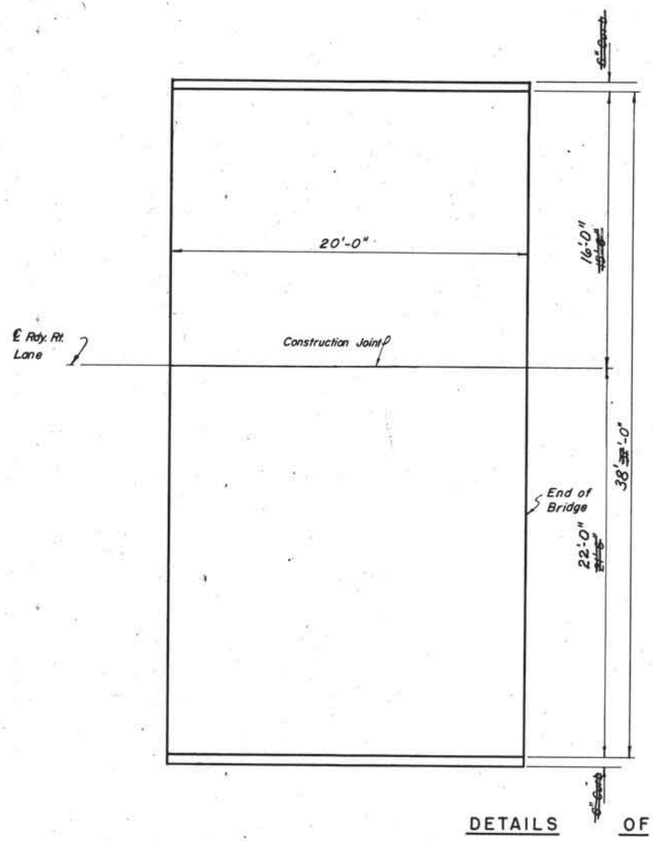
℄ STA. 1400 + 58.70

F.A. PROJ. NO. I-35-2(12)

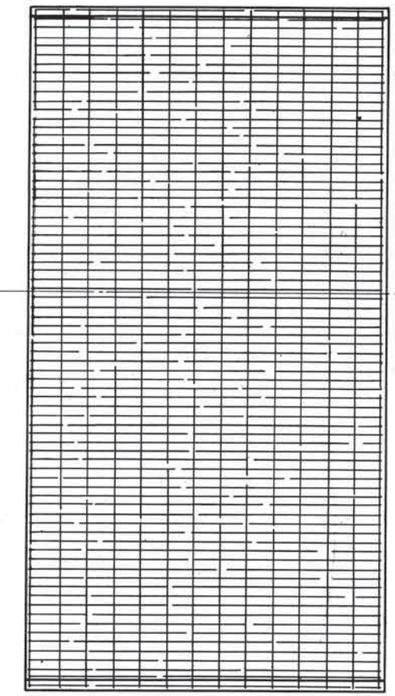
FA PROJECT NO. I-35-2(12) SHEET NO. 186

HETZDER NO. 135 IMPERIAL

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)	187	

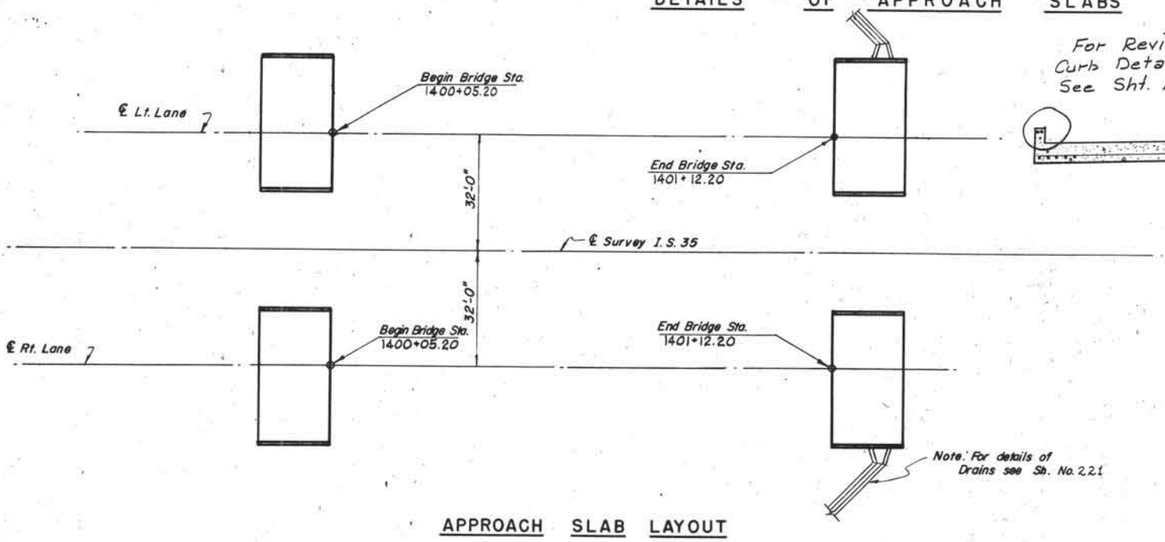


Note: For details of Approach Slab not shown See Sht. No. 221



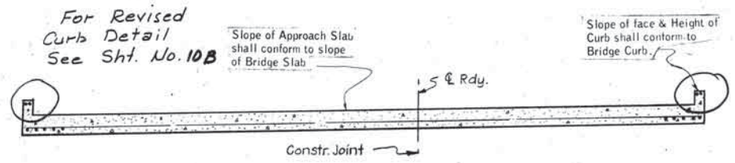
Longitudinal Steel No. 6 Bars at 6" ctrs.
Transverse Steel No. 4 Bars at 18" ctrs.

DETAILS OF APPROACH SLABS



APPROACH SLAB LAYOUT

For Revised Curb Detail See Sht. No. 10B



SECTION THRU APPROACH SLAB

QUANTITIES - ONE APPROACH SLAB		
Item	Unit	Total
Approach Slab	Sq. Yd.	84.4
* Reinforcing Steel	Lbs.	2,740.0

* Note: Cost of Reinforcing Steel in Approach Slabs shall be included in the Unit Price Bid per Sq. Yd. for Approach Slabs.

Cost of curbs on Approach Slabs shall be included in the price bid per Sq. Yd. for Approach Slabs.

Note: Cost of all items in Concrete Slope Drains including wire mesh shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All materials and work shall be in accordance with that part of Section 610 covering Concrete Side walks.

Note: When Bridge Approach Slabs are to be constructed in Bridge Contract they shall be constructed using Class "AA(AE)" Concrete Materials.

When Bridge Approach Slabs are to be constructed in Roadway Contract they shall be constructed with either Class "AA(AE)" Concrete Materials or P.C. Concrete Paving Materials, including an Air-Entraining Admixture.

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Curb & Cl Rdy. dim.		9/28/67

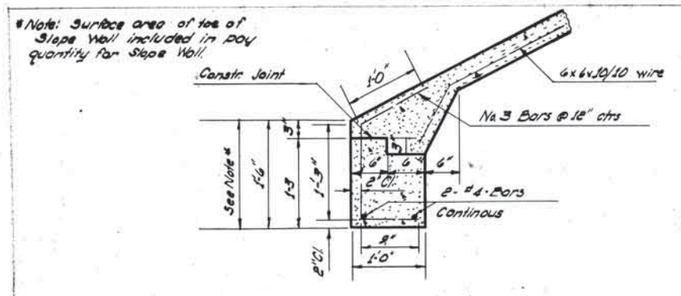
RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	6-64
TRACED	R.B.R.	6-64
CHECKED	D.H.	8-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

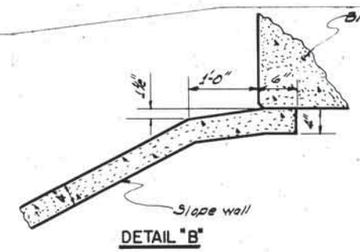
DETAILS OF APPROACH SLABS
I-35 OVER S.H. 74

F. A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 187



DETAIL "A"



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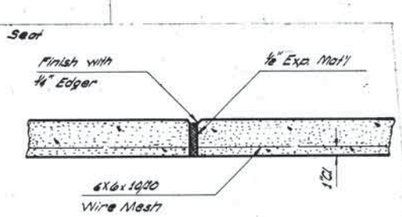
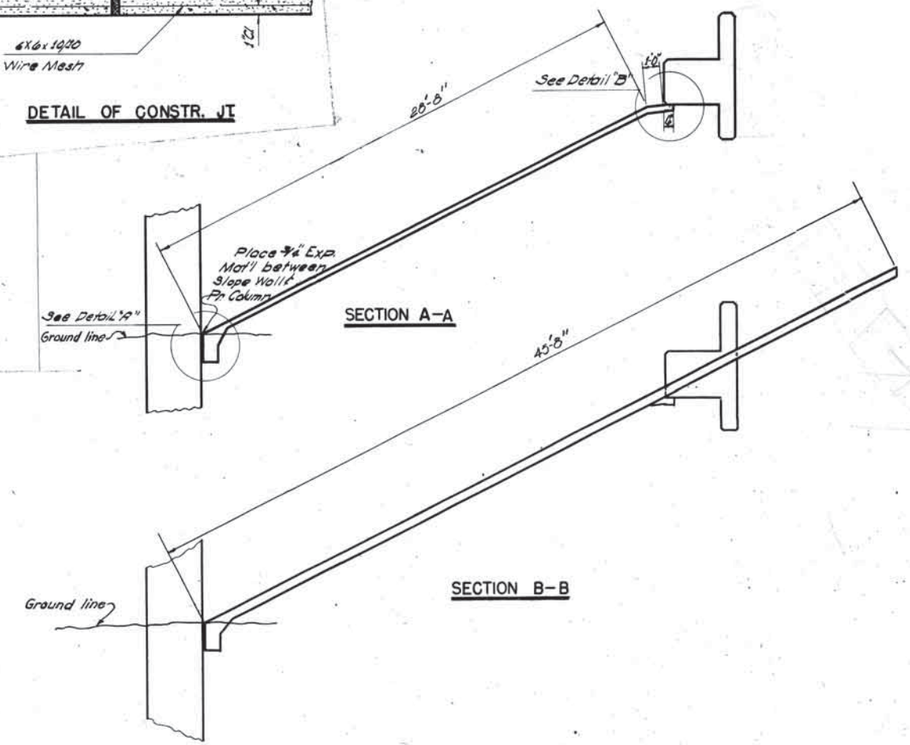
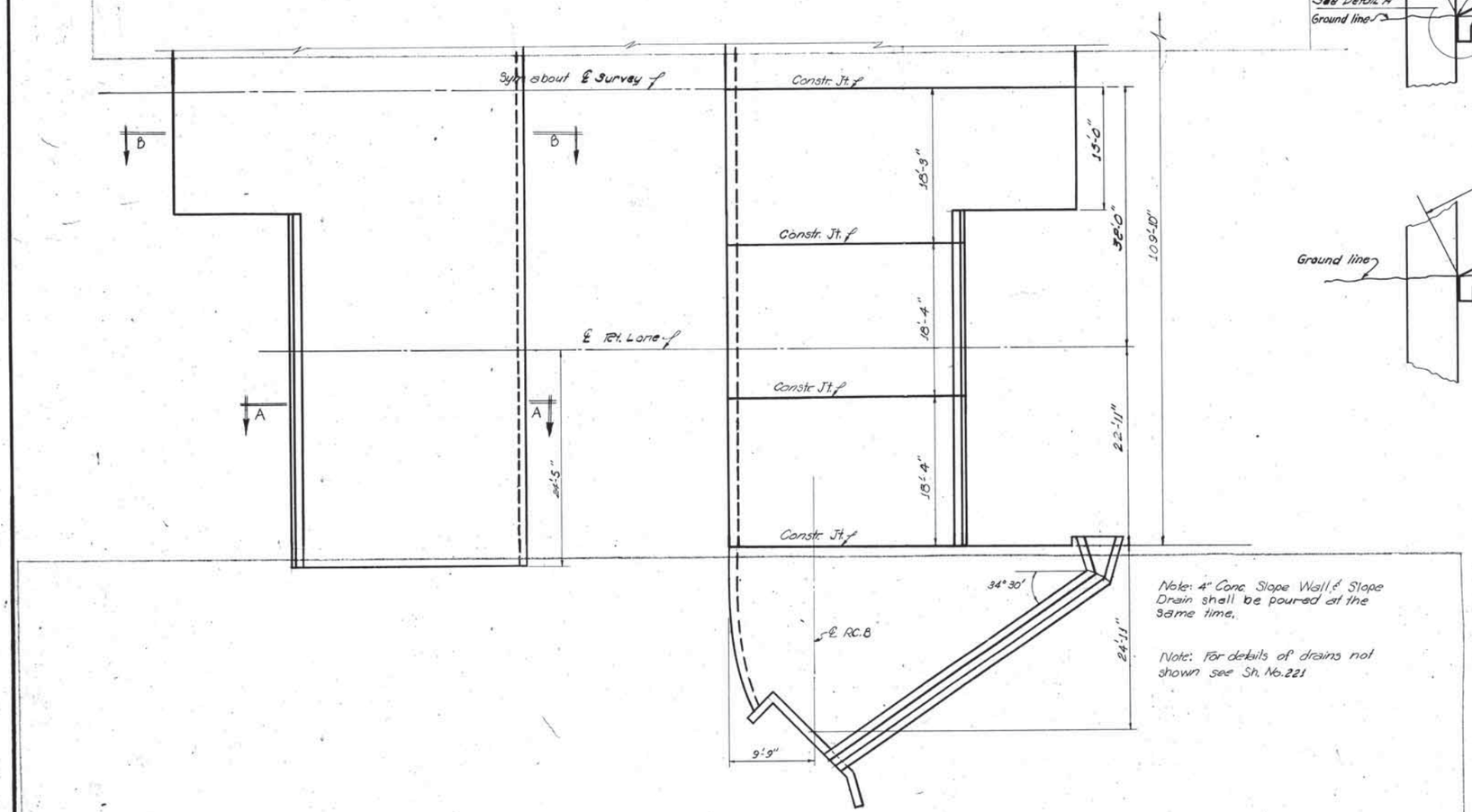


DETAIL OF CONSTR. JT.





DETAILS OF SLOPE WALLS

Note: 4" Conc. Slope Wall & Slope Drain shall be poured at the same time.

Note: For details of drains not shown see Sh. No. 221

Note: Cost of all items in conc. Slope Walls including wire mesh, Reinf. steel and exp. joint filler shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All material and work shall be in accordance with that part of Sec. 610 of the Okla. Std. Specs. governing Concrete Sidewalks

QUANTITIES — SLOPE WALLS				
	Unit	Slope Walls	Drains	Total
Abut. # 1	S.Y.	448.6	—	448.6
Abut. #2	S.Y.	593.2	33.2	626.4

I-35 OVER S.H. 74

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Constr. Jt. Loc.		4/26/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	PLB	10-66
TRACED	PLB	10-66
CHECKED	J.E.	10-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSIO
OKLAHOMA CITY, OKLAHOMA

DETAILS OF SLOPE WALL

℄ STA. 1400+58.70

F.A. PROJ. NO. I-35-2(12)

FA PROJECT NO. I-35-2(12) SHEET NO. 180

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	OKLA.	I-35-2(12)		189	

Rev. Vertical cl. Dim. 4/24/6

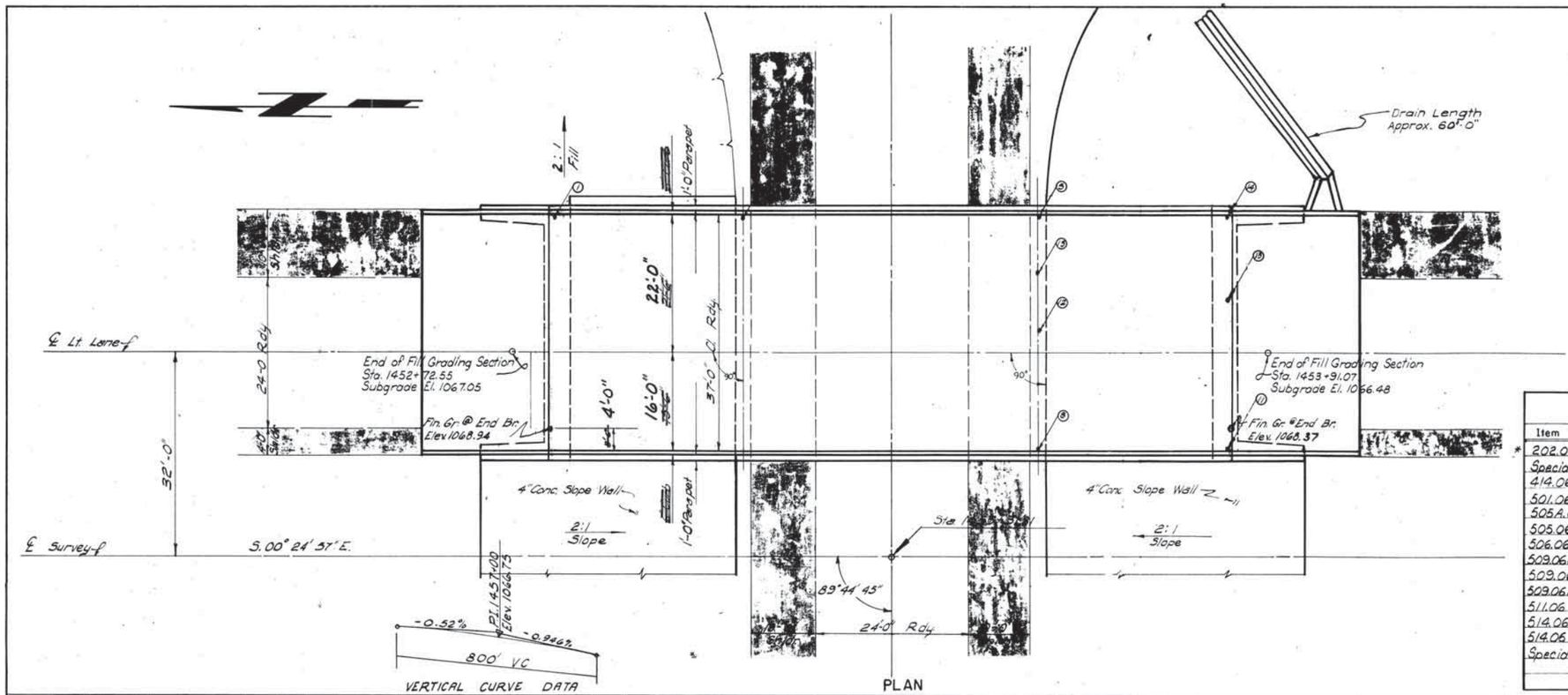
DESIGN DATA

fc Class "A" Conc.	1,000 psi
fc Class "AA(AE)" Conc.	1,200 psi
fs Reinf. Steel	20,000 psi
fs Structural Steel	20,000 psi

Loading H20-S16 and PPM 20-4

MAXIMUM FOUNDATION PRESSURE

Abuts.	18.6 T/pile
Piers	33T/pile

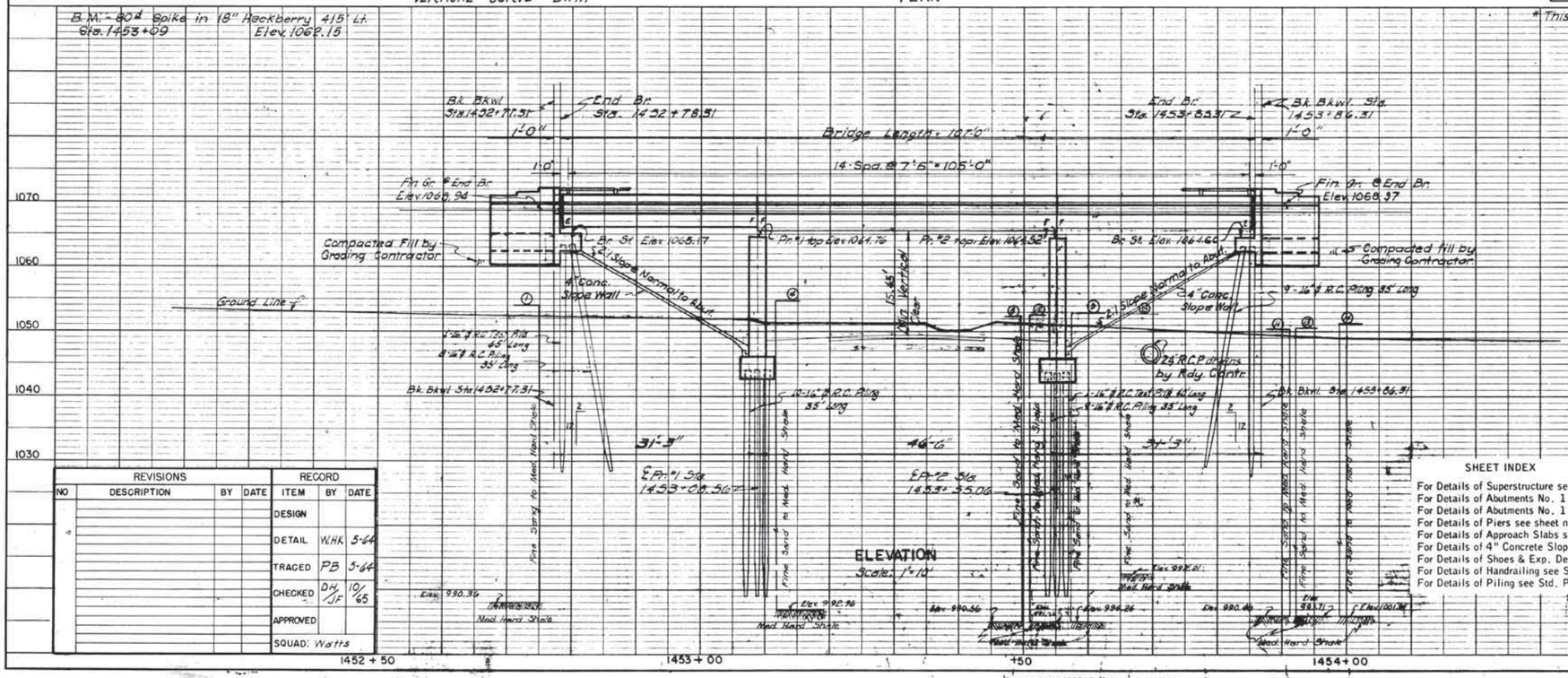


SUMMARY OF QUANTITIES

Item No.	Item	Unit	Abut.	Pier	Superstr.	Bridge Total	Rdy. Total
* 202.06d	Class "D" Unclassified Excavation	C.Y.					200
Special	Approach Slab Base	S.Y.					168.8
414.06c(ae)	Approach Slabs (Alt. Ent. Agent.)	S.Y.					168.8
501.06b	Substru. Excavation Common	C.Y.	92.4	170.0		262.4	
505A.06	Alum. Handrailing (Alt. No. 1)	L.F.			214.0	214.0	
505.06	Steel Handrailing (Alt. No. 2)	L.F.			214.0	214.0	
506.06	Structural Steel	Lb.			67,850	67,850	
509.06a	Class "A" Concrete	C.Y.	63.4	37.0		100.4	
509.06a	Class "A" Concrete (Pier Bases)	C.Y.		27.0		27.0	
509.06b(ae)	Class "AA(AE)" Concrete	C.Y.			113.8	113.8	
511.06	Reinforcing Steel	Lb.	9,120	7,520	26,320	42,960	
514.06a	Test Piles	Ea.	1	1		2	
514.06	16" sq. R.C. Piling	L.F.	595.0	665.0		1,260.0	
Special	4" Concrete Slope Wall	S.Y.					546.2

* This item is for shaping up and cleaning up the Fill around the Abutments & Appr. Slabs.

B.M. - 80d Spike in 18" Hackberry 415' Lt. Sta. 1453+09 Elev. 1062.15



GENERAL NOTES

All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.

Note: For concrete piling & test pile notes see sheet no. 206

All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

SHEET INDEX

For Details of Superstructure see sheet no. 191
For Details of Abutments No. 1 Lt. & 2 Rt. see sheet no. 192
For Details of Abutments No. 1 Rt. & 2 Lt. see sheet no. 193
For Details of Piers see sheet no. 194
For Details of Approach Slabs see sheet no.
For Details of 4" Concrete Slope Walls see sheet no. 195
For Details of Shoes & Exp. Device see Std. ISAJ-7 sheet no. 259A
For Details of Handrailing see Std. PTR-1-15 Sheet no. 259C
For Details of Piling see Std. P-1-10 sheet no. 259D

REVISIONS				RECORD		
NO	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	W.H.K.	5-64
				TRACED	PB	5-64
				CHECKED	DH/JF	10/65
				APPROVED		
				SQUAD: Watts		

STRU. NO. 26 Lt. Lane I-35 Over Adams St.

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GEN. ELEV., PLAN & SUMM. OF QUANTS
30'-46.5'-30' SIMP. I BM. SPANS
~~37'-0"~~ RDY. & ~~2'-6"~~ CURBS
38'-0" ℄ STA. 1453+31.81
F.A. PROJ. NO. I-35-2(12)

PLATE 1 - PLAN - PROFILE & P. R. & R. C. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

F.A. PROJECT NO. I-35-2(12) SHEET NO. 189

Rev. Curb & Cl. Rdy. dim 4/28/67

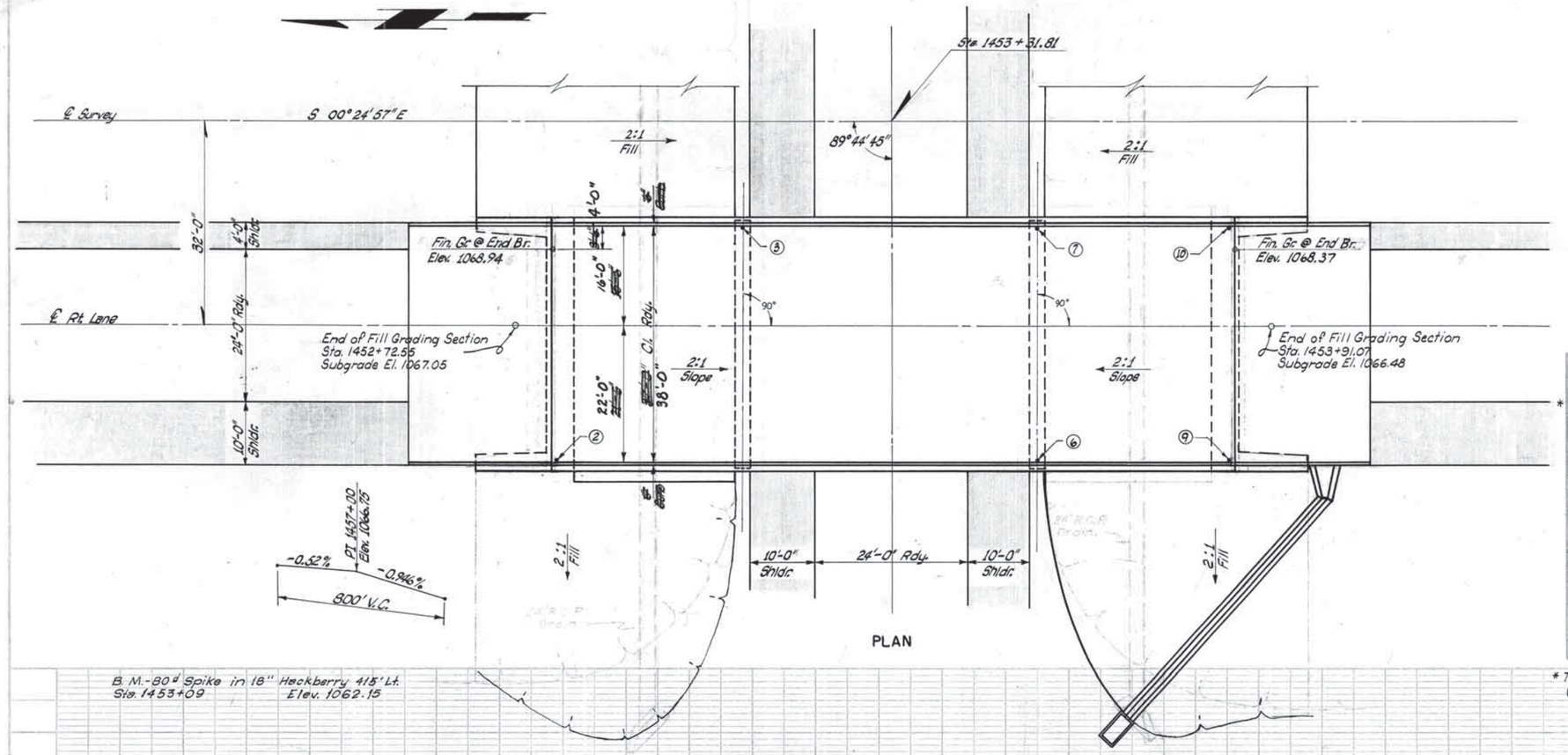
FED. AID PROJ. NO.	STATE	FED. NO.	FINAL SHT.	SHEET NO.	TOTAL SHEETS
	OKLA.	I-35-2(12)		190	

DESIGN DATA

Loading H-20-S16 & PPM 20-4

fc Class "A" Conc. 1,000 psi
fc Class "AA(AE)" Conc. 1,200 psi
fs Steel 20,000 psi

MAX. FOUNDATION PRESSURE
Abuts. 18.6 T/pile
Piers 33 T/pile



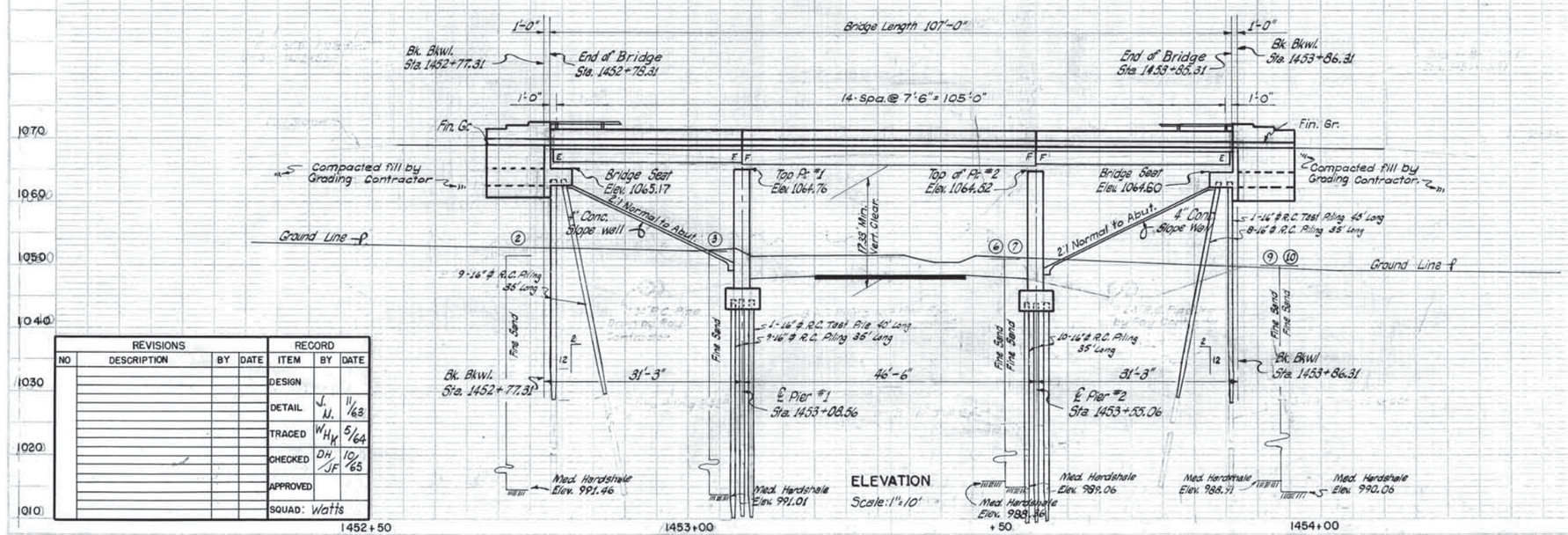
PLAN

SUMMARY OF QUANTITIES						Bridge	Rdy.
Item. No.	Item	Unit	Abuts.	Piers	Superstru.	Total	Total
* 202.06d	Class "D" Uncl. Excavation	C.Y.					200
Special	Approach Slab Base	S.Y.					168.8
414.06(pb)	Approach Slabs (Fr. Est. Agent)	S.Y.					168.8
501.06b	Substru. Excavation Common	C.Y.	92.4	170.0		262.4	
505A.06	Alum. Handrailing (Alt. No.1)	L.F.			214.0	214.0	
505.06	Steel Handrailing (Alt. No.2)	L.F.			214.0	214.0	
506.06	Structural Steel	Lb.			67,850	67,850	
509.06a	Class "A" Concrete	C.Y.	63.4	37.0		100.4	
509.06a	Class "A" Concrete (Pier Bases)	C.Y.		27.0		27.0	
509.06b(pb)	Class "AA(AE)" Concrete	C.Y.			113.8	113.8	
511.06	Reinforcing Steel	Lb.	9,120	7,520	26,320	42,960	
514.06a	Test Piles	Ea.	1	1		2	
514.06	16" sq. R.C. Piling	L.F.	595.0	665.0		1,260.0	
Special	4" Concrete Slope Wall	S.Y.					546.2

* This item is for shaping up & cleaning up the fill around the Abuts. & Appr. Slabs. (Non Participating)

Note: For General Note, and Sheet Index see sheet no. 189

B.M.-80d Spike in 18" Hackberry 415' Lt. Sta. 1453+09 Elev. 1062.15



ELEVATION
Scale: 1" = 10'

REVISIONS				RECORD		
NO	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	J. N.	11/63
				TRACED	WH/WK	5/64
				CHECKED	DH/JF	10/65
				APPROVED		
				SQUAD: Watts		

STRU. NO. 25 Rt. Lane I-35 Over Adams St.

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GEN. ELEV. PLAN & SUMM. OF QUANT.
30'-46.5'-30 S IMP. I-BM. SPANS
38'-0" ~~37'-0"~~ RDY. ~~& 2'-6" CURBS~~
℄ STA. 1453+31.81
F.A. PROJ. NO. I-35-2(12)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)		191	

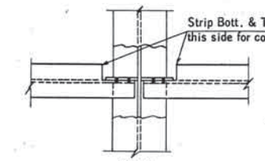
REVISIONS	
DESCRIPTION	DATE
Rev. Notes	4-67

Floor: 7½" Uniform thickness 37'-0" Cl. Rdy., Class "AA(AE)" Concrete, Max. Agg. 1½" ø Current Okla. Std. Specs. Top of Curb shall be brought to a true surface with a wooden float. Top and sides of curb are to have a carborundum finish. See Detail this sheet. Edges of curb are to have a 3/4" chamfer.

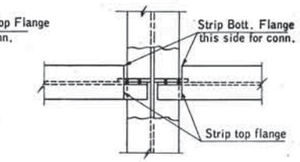
Reinf: Bars "A" #5 @ 10" Ctrs. across the rdy., 1½" clearance below top of slab 38'-8" long.
Bars "A1" #5 @ 10" Ctrs. across the rdy., 1" clearance above bottom of slab, bent as shown.
Bars "B" #5 @ 5" Ctrs. in curbs, bent as shown.
Bars "C" #5 @ 10" Ctrs. across the rdy., top and bottom of slab, bent as shown.
Bars "D" #4 - 3 in each curb, placed as shown.
Bars "E" #4 - 84 parallel to ℄ Roadway, placed as shown.
Bars "PH" #4 - 4 in each parapet wall, placed as shown.
Bars "P1" #4 @ 12" Ctrs. in parapet walls, placed as shown.
Bars "P2" #4 @ 12" Ctrs. in parapet wall, placed as shown.
Reinf. Steel in the floor shall begin and end with A & A1 Bars, a max. of 2" from end of Conc. panels. All reinf. steel in bottom of slab shall be supported on slab spacers shown. Reinf. steel in top of slab shall be supported on approved metal highchairs at Max. spacing of 4'-3" Ctrs. in both directions. Bars D & E shall terminate 1" from face of concrete.

SLAB SPACER

Spacing = ½ beam spacing ctr. to ctr.
Max. Spacing = 4'-0"



ELEVATION
(Int. Diaphragm Conn.)

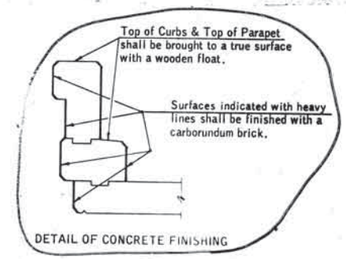


ELEVATION
(Diaphragm At Brg)

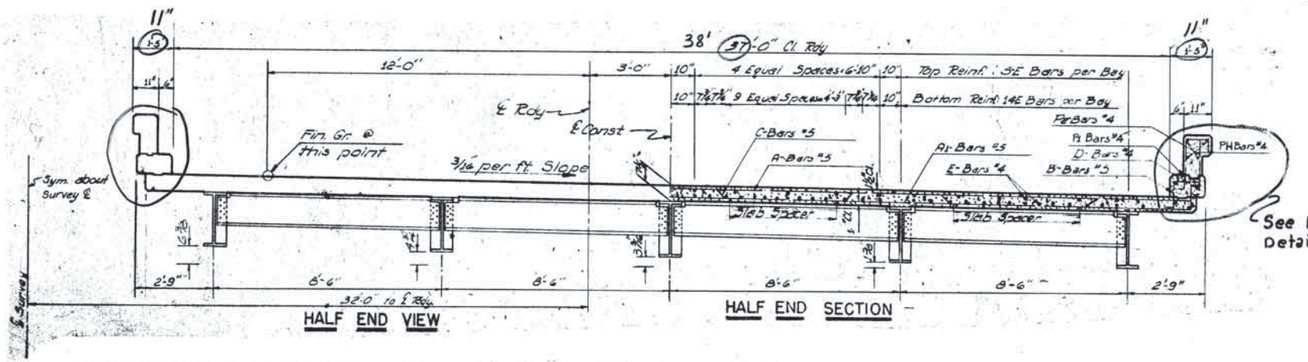
Note diaphragms to be Spaced Max. 25'

DESIGN DATA

Loading	H20-S16, P.P.M. 20-4
fc Class "AA(AE)" Concrete	1,200 P.S.I.
fc Class "A" Concrete	1,000 P.S.I.
fs Steel	20,000 P.S.I.

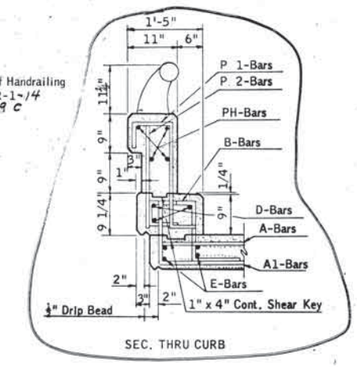


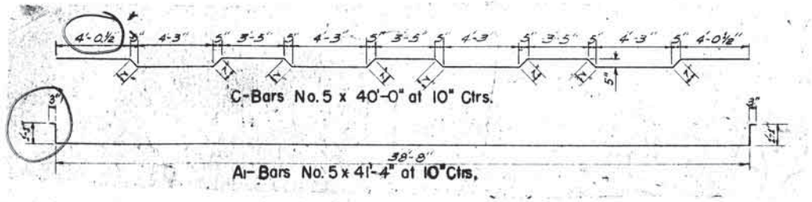
DETAIL OF CONCRETE FINISHING

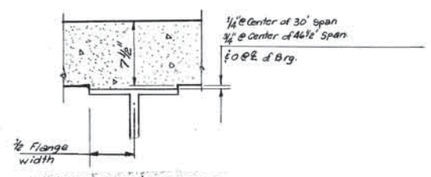


Note: No field welding to beams or girders will be allowed except as shown on the plans.

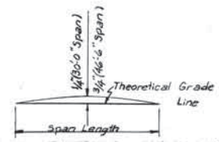
For details of Handrailing See Std. PTR-1-14 Sheet No. 259 C





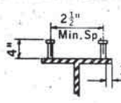


HAUNCH OVER BEAM

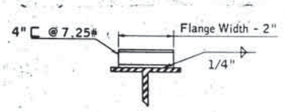


Note: The floor and curb forms shall be built to allow for an assumed parabolic deflection at the center of the span as shown. The contractor may furnish the beams cambered the amount of deflection or form haunches as shown. Additional concrete in the haunches to provide for D.L. Deflection has been added to the pay quantities of Class "AA(AE)" Concrete. Deflection shall be measured from the theoretical grade line.

Contractor may use stud shear connectors as follows:
1" of 4" ⊏ @ 7.25# = .56 = 3/4" Stud
1" of 4" ⊏ @ 7.25# = .41 = 7/8" Stud

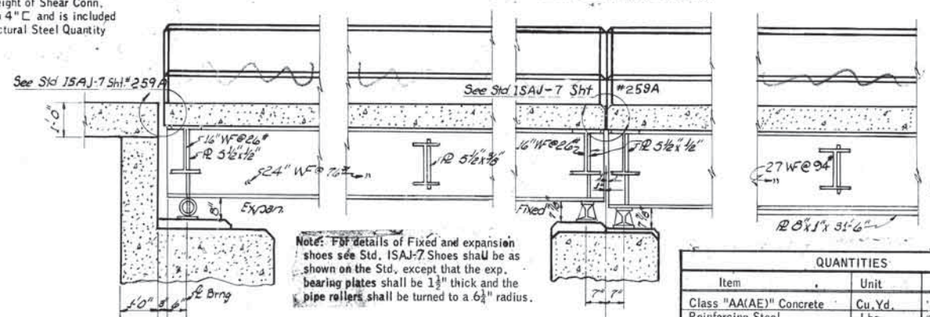


STUD SHEAR CONNECTOR (TYP.)



CHANNEL SHEAR CONNECTOR

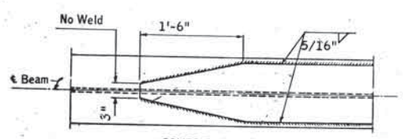
Note: Weight of Shear Conn. is based on 4" ⊏ and is included in the Structural Steel Quantity shown.



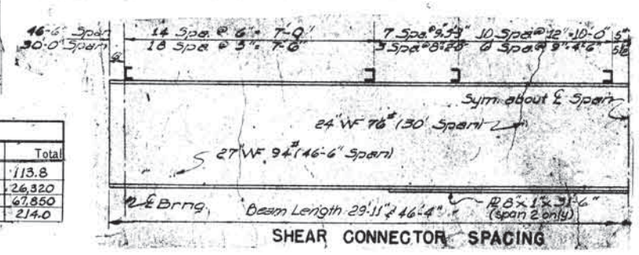
Note: For details of Fixed and expansion shoes see Std. ISAJ-7 Shoes shall be as shown on the Std. except that the exp. bearing plates shall be 1½" thick and the pipe rollers shall be turned to a 6½" radius.

LONGITUDINAL SECTION

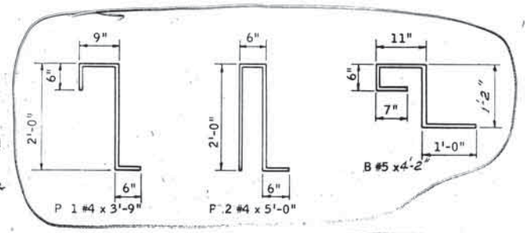
QUANTITIES		
Item	Unit	Total
Class "AA(AE)" Concrete	Cu. Yd.	113.8
Reinforcing Steel	Lbs.	26,320
Structural Steel	Lbs.	67,850
Parapet Handrailing	Lin. Ft.	214.0



COVER PL DETAIL



SHEAR CONNECTOR SPACING



GENERAL NOTES

All construction shall be in accordance with the current Okla. Std. Specifications and Special Provisions.
All Reinf. Steel bars shall conform to A.S.T.M. Specifications A305-53.
All Bar Bend dimensions are out to out.
All exposed concrete corners shall have a 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.
Transverse Reinf. Steel in floor slab shall begin and end with A and A1 Bars and these bars shall be a maximum of 2" from the ends of the concrete panels.
High strength bolts *shall be used for field conn.*
Quantities for Reinforcing Steel computed on basis of weight approved by the A.S.H.O. & C.R.S.I.

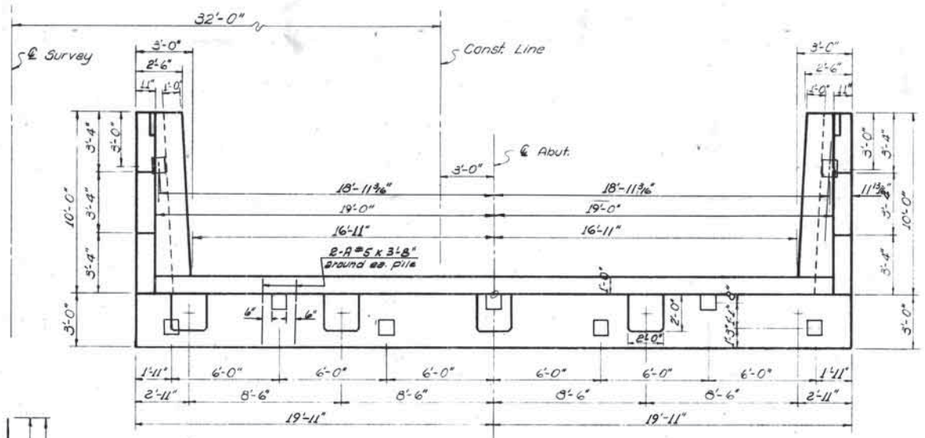
I-35 OVER ADAMS ST.

Design		
Drawn	PLB	8/65
Checked	D H	8/65
Approved		
Squad		

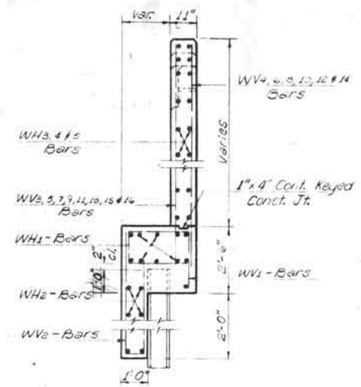
DETAILS OF SUPERSTRUCTURE
30'-46.5'-30' I-BM. SPANS
38' 37' RDY. ~~4-7½" CURBS~~
F.A. PROJ. NO. I-35-2 (12)
Project No. _____ Sheet No. 191

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)		192	

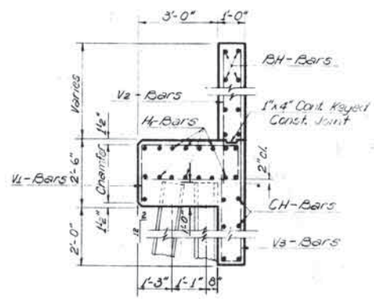
REVISIONS	
DESCRIPTION	DATE
Revised Reinf. around piling	4-24-67



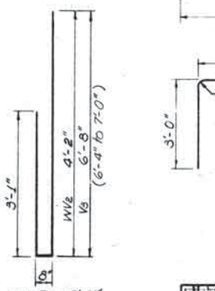
PLAN

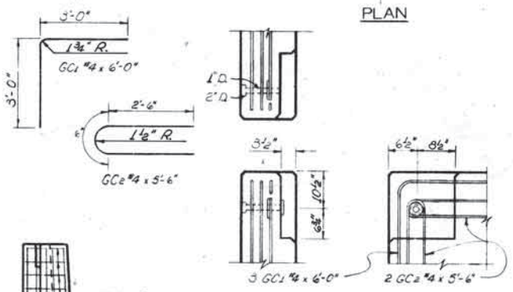


TYPICAL SEC. THRU WING

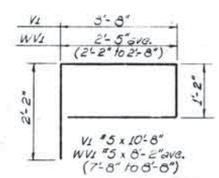


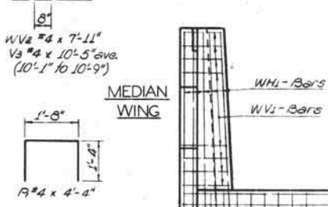
TYPICAL SEC. THRU ABUT.



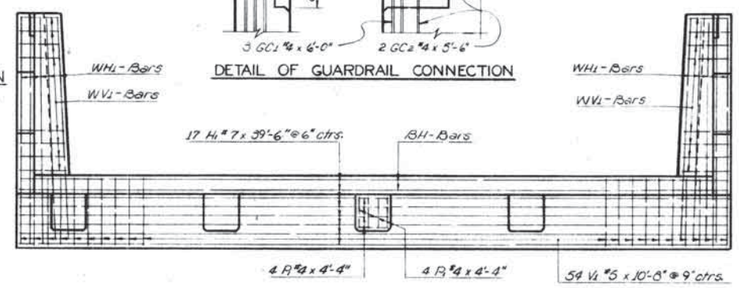


DETAIL OF GUARDRAIL CONNECTION



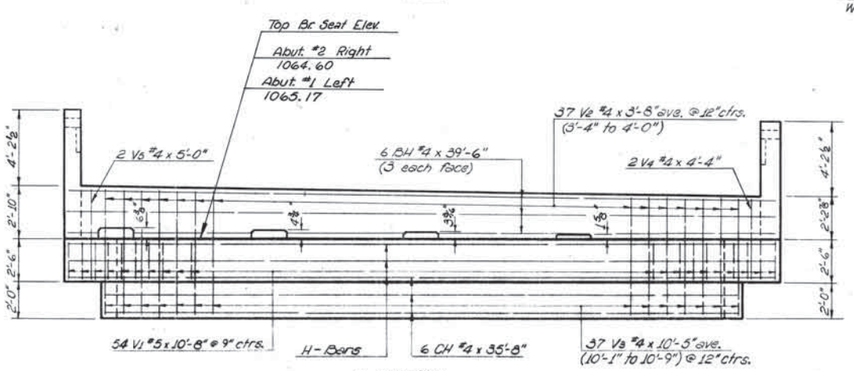


MEDIAN WING

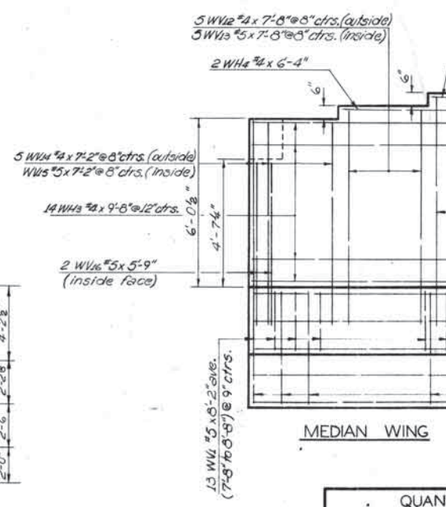


PLAN

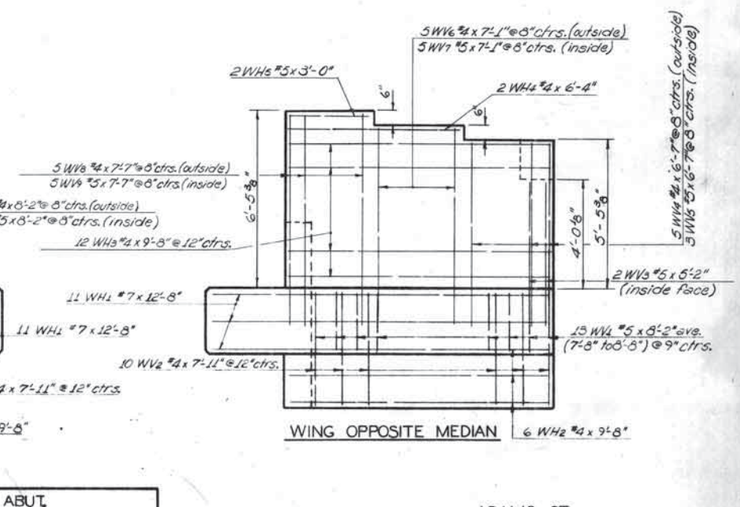
WING OPPOSITE MEDIAN



ELEVATION



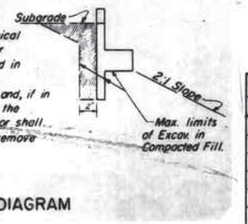
MEDIAN WING



WING OPPOSITE MEDIAN

Shaded area to be back filled and tamped with a mechanical tamper to 100 % Proctor Density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the price bid per C.Y. for Substructure Excavation Common.

Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer he may pour the concrete against the compacted fill. If necessary, Contractor shall use forms on the back vertical face of the Abutment and remove same after concrete is set.



ABUTMENT EXCAV. DIAGRAM

GENERAL NOTES

All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.

All Abutment Piling shall be driven through the compacted fill. All Piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 Tons.

All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

For details of 16" P.R.C. Piling, see Std. P-1-10 sheet no. 259 D

BAR LIST — ONE ABUT.

MARK	SIZE	FORM	NO.	LENGTH
H1	#7	Str.	17	39'-6"
BH	#4	Str.	6	39'-6"
CH	#4	Str.	6	35'-8"
V1	#5	Bnt.	54	10'-8"
V2	#4	Str.	37	3'-8" ave.
V3	#4	Bnt.	37	10'-5" ave.
V4	#4	Str.	2	4'-4"
V5	#4	Str.	2	5'-0"
WH1	#7	Str.	22	12'-8"
WH2	#4	Str.	12	9'-8"
WH3	#4	Str.	26	9'-8"
WH4	#4	Str.	4	6'-4"
WH5	#4	Str.	4	3'-0"
WV1	#5	Bnt.	26	8'-2" ave.
WV2	#4	Bnt.	20	7'-11"
WV3	#5	Str.	2	5'-2"
WV4	#4	Str.	5	6'-7"
WV5	#5	Str.	3	6'-7"
WV6	#4	Str.	5	7'-1"
WV7	#5	Str.	5	7'-1"
WV8	#4	Str.	5	7'-7"
WV9	#5	Str.	5	7'-7"
WV10	#4	Str.	5	8'-2"
WV11	#5	Str.	5	8'-2"
WV12	#4	Str.	5	7'-8"
WV13	#5	Str.	5	7'-8"
WV14	#4	Str.	5	7'-2"
WV15	#5	Str.	3	7'-2"
WV16	#5	Str.	2	5'-9"
R	#4	Bnt.	24	4'-4"
A	#5	Str.	14	3'-8"
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-2"

QUANTITIES — ONE ABUT.

ITEM	UNIT	TOTAL
Class "A" Concrete	C.Y.	31.7
Reinforcing Steel	Lb.	4,560
Substructure Excav., Common	C.Y.	46.2
16" ϕ R.C. Piling	L.F.	280.0

ADAMS ST.

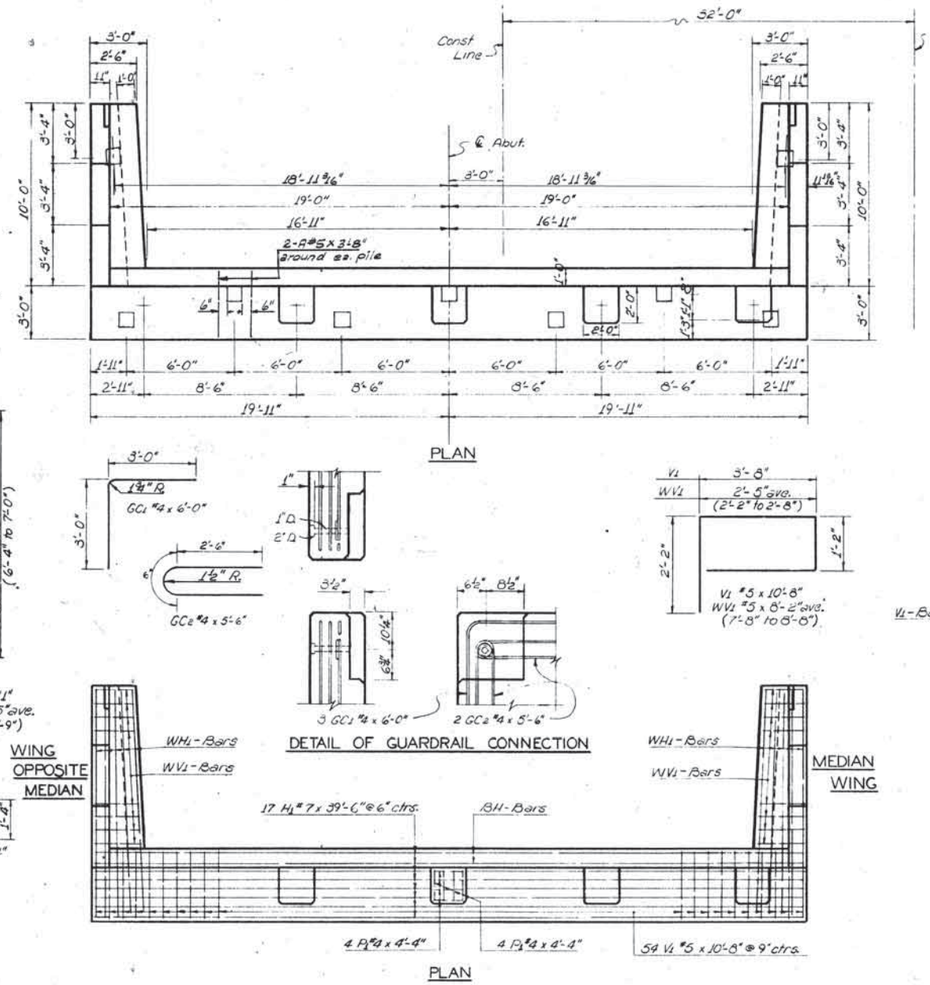
Design		
Drawn	B.K.	6-65
Checked	D.H.	9-65
Approved		
Squad	WATTS	

DETAIL OF ABUTMENTS
ABUT. NO. 1 LT. & ABUT. NO. 2 RT.
38'-0" 37'-0" RDY. & 2/6" S.C.
℄ STA. 1453 + 31.81

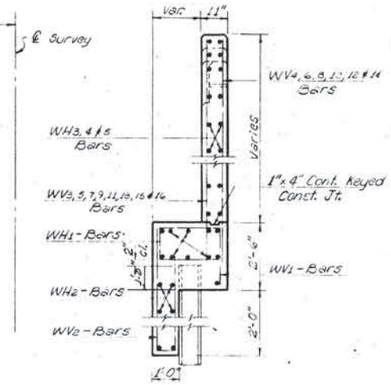
F. A. Project No. I-35-2(12) Sheet No. 192

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		193	

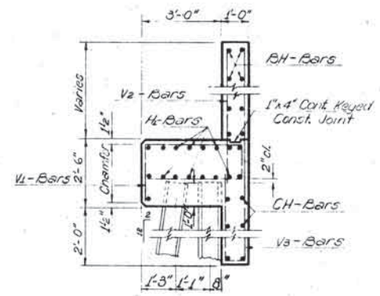
REVISIONS	
DESCRIPTION	DATE
Revised Relief around piling	6-26-67



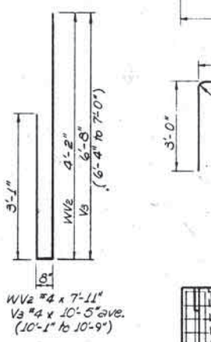
PLAN



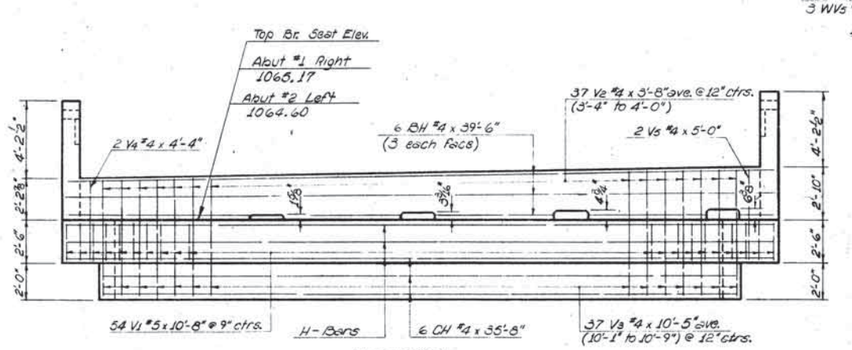
TYPICAL SEC. THRU WING



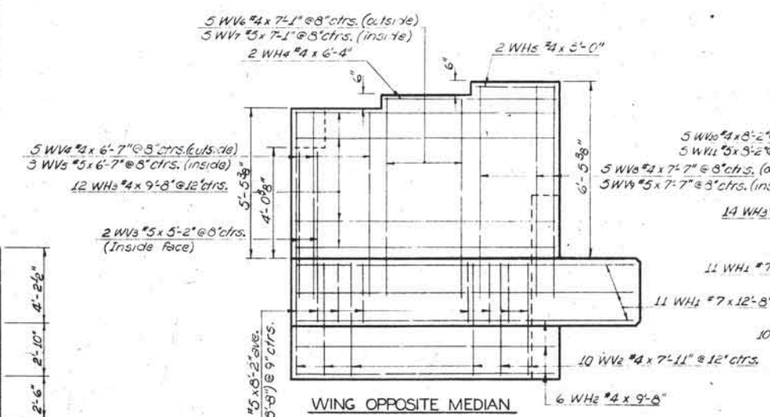
TYPICAL SEC. THRU ABUT.



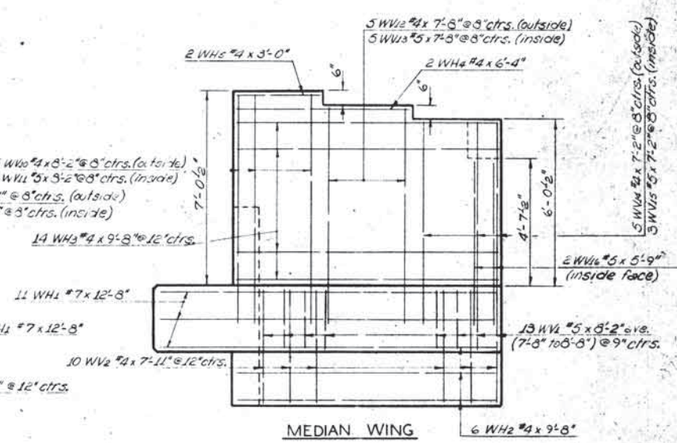
DETAIL OF GUARDRAIL CONNECTION



ELEVATION



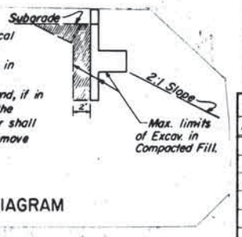
WING OPPOSITE MEDIAN



MEDIAN WING

Shaded area to be back filled and tamped with a mechanical tamper to 100 % Proctor Density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the price bid per C.Y. for Substructure Excavation Common.

Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer he may pour the concrete against the compacted fill. If necessary, Contractor shall use forms on the back vertical face of the Abutment and remove same after concrete is set.



ABUTMENT EXCAV. DIAGRAM

All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.

All Abutment Piling shall be driven through the compacted fill. All Piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 Tons.

All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

For details of 16" ϕ R.C. Piling, see Std. P-1-10 sheet no. 259 D

BAR LIST — ONE ABUT.

MARK	SIZE	FORM	NO.	LENGTH
H1	#7	Str.	17	39'-6"
BH	#4	Str.	6	39'-6"
CH	#4	Str.	6	35'-8"
V1	#5	Bnt.	54	10'-8"
V2	#4	Str.	37	3'-8" ave.
V3	#4	Bnt.	37	10'-5" ave.
V4	#4	Str.	2	4'-4"
V5	#4	Str.	2	5'-0"
WH1	#7	Str.	22	12'-8"
WH2	#4	Str.	12	9'-8"
WH3	#4	Str.	26	9'-8"
WH4	#4	Str.	4	6'-4"
WH5	#4	Str.	4	3'-0"
WV1	#5	Bnt.	26	8'-2" ave.
WV2	#4	Bnt.	20	7'-11"
WV3	#5	Str.	2	5'-2"
WV4	#4	Str.	3	6'-7"
WV5	#5	Str.	3	6'-7"
WV6	#4	Str.	3	7'-1"
WV7	#5	Str.	3	7'-1"
WV8	#4	Str.	3	7'-7"
WV9	#5	Str.	3	7'-7"
WV10	#4	Str.	3	8'-2"
WV11	#5	Str.	3	8'-2"
WV12	#4	Str.	3	7'-8"
WV13	#5	Str.	3	7'-8"
WV14	#4	Str.	3	7'-2"
WV15	#5	Str.	3	7'-2"
WV16	#5	Str.	2	5'-9"
P1	#4	Bnt.	24	4'-4"
A	#6	Str.	14	3'-8"
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-2"

QUANTITIES — ONE ABUT.

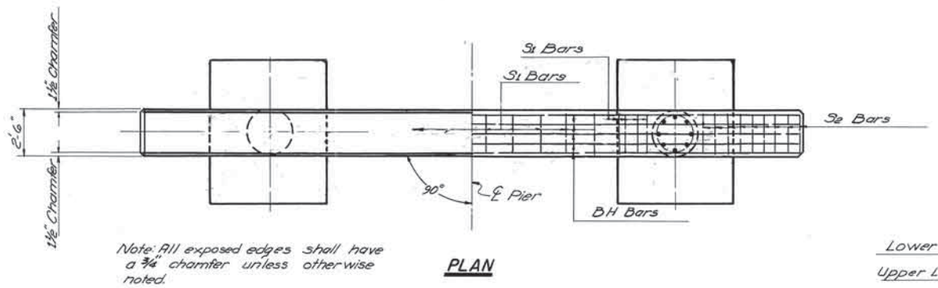
ITEM	UNIT	TOTAL
Class "A" Concrete	C.Y.	31.7
Reinforcing Steel	Lb.	4,560
Substructure Excav., Common	C.Y.	46.2
16" ϕ R.C. Piling	L.F.	315.0

ADAMS ST.

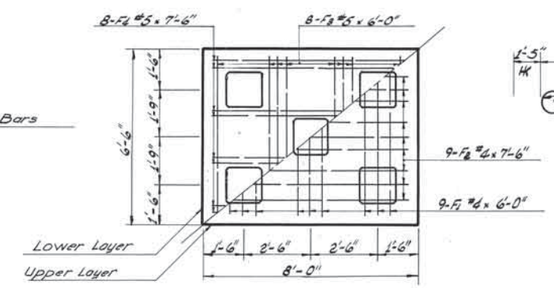
Design		
Drawn	B.H.	6-65
Checked	D.H.	9-65
Approved		
Squad	WATTS	

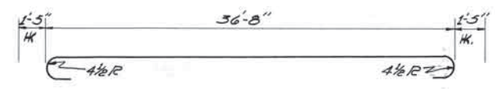
DETAIL OF ABUTMENTS
ABUT. NO. 1 RT. & ABUT. NO. 2 LT.
38'-0" ~~27'-0~~" RDY. & ~~2'-6" S.E.~~
℄ STA. 1453+31.81
F. A. Project No. I-35-2(12) Sheet No. 193

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA.P.I-35-2(12)	194	

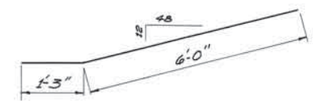


PLAN



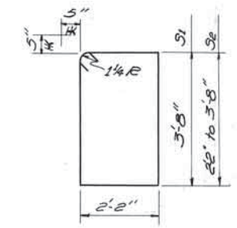


BH1 No.10x 39'-6"

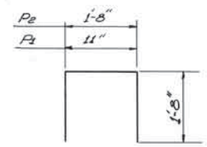


CH No.5x 7'-3"

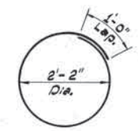
BAR LIST — ONE PIER				
MARK	SIZE	FORM	NO	LENGTH
BH1	#10	Bnt.	5	39'-6"
BH2	#4	Str.	4	36'-8"
BH3	#11	Str.	2	30'-8"
BH4	#11	Str.	5	25'-0"
CH	#5	Bnt	8	7'-3"
S1	#4	Bnt	18	12'-6"
S2	#4	Bnt.	18	11'-0 ave.
C	#7	Str.	16	18'-2"
D	#7	Str.	16	4'-7"
H	#4	Bnt.	36	7'-8"
F1	#4	Str.	18	6'-0"
F2	#4	Str.	18	7'-6"
F3	#5	Str.	16	6'-0"
F4	#5	Str.	16	7'-6"
P1	#4	Bnt.	27	4'-3"
P2	#4	Bnt.	27	5'-0"



S1 No.4 x 12'-6"
S2 No.4 11'-0" AVE. (9'-6" to 12'-6")

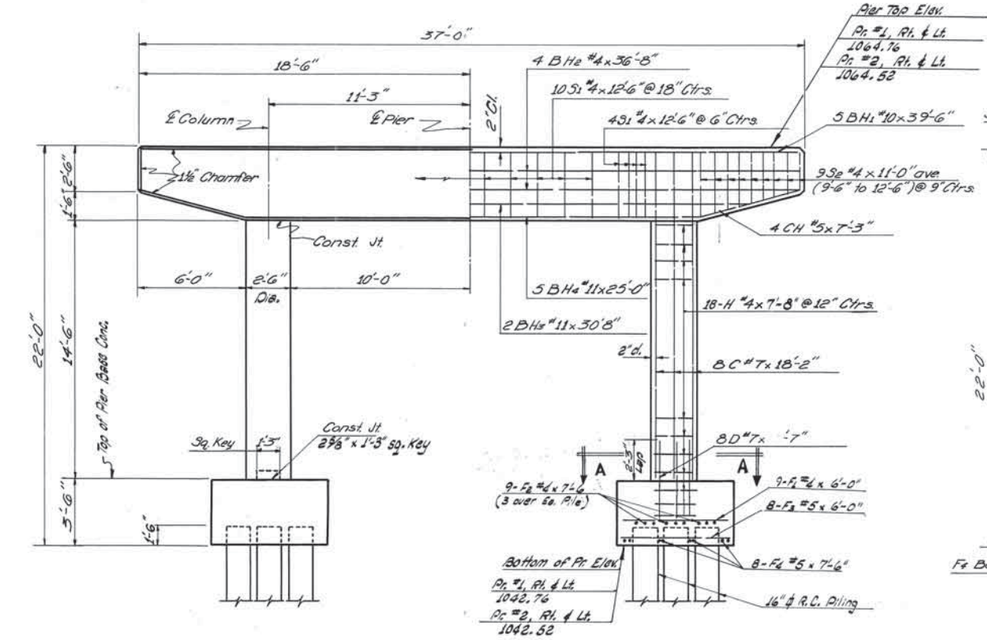


P1 No.4 x 4'-3"
P2 No.4 x 5'-0"



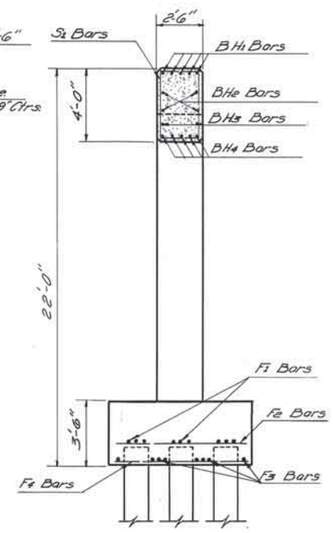
H - No.4 x 7'-8"

Note: All bar bend dimensions are out to out

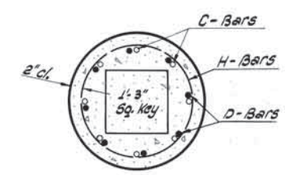


ELEVATION

FOOTING PLAN

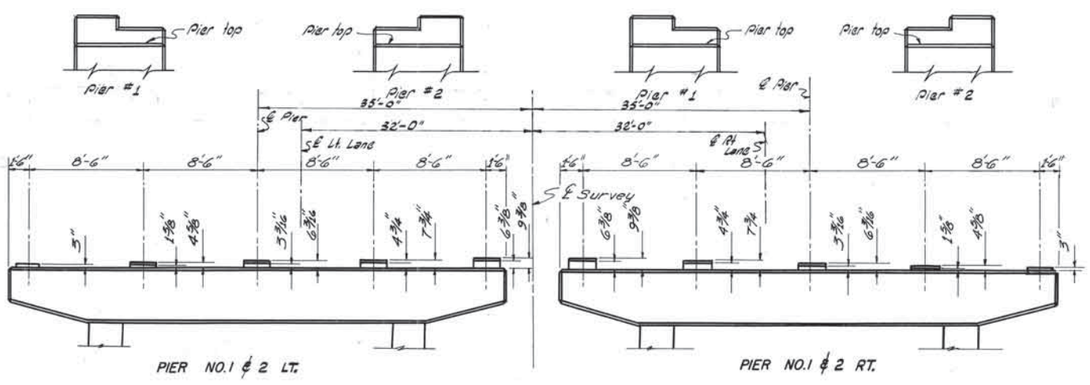


SECTION THRU ℄



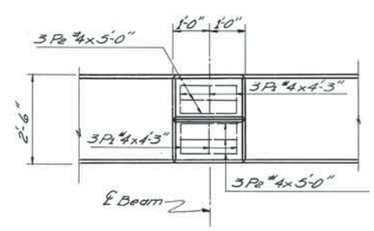
SECTION A-A

Note: For details of piling, see Std P-1-10 Sheet no. 259 D



PIER NO.1 ϕ 2 LT. PIER NO.1 ϕ 2 RT.

PEDESTAL LAYOUT



DETAIL OF PEDESTAL

QUANTITIES					
ITEM	UNIT	PIER NO.1 RT.	PIER NO.2 RT.	PIER NO.1 LT.	PIER NO.2 LT.
Class "A" Concrete	Cu. Yd.	18.5	18.5	18.5	18.5
Class "A" Concrete Pier Base	Cu. Yd.	13.5	13.5	13.5	13.5
Reinforcing Steel	Lbs.	3,760	3,760	3,760	3,760
Substr. Excavation Common	Cu. Yd.	85.0	85.0	85.0	85.0
16" ϕ R.C. Piling	Lin. Ft.	315	350	350	315

I-35 OVER ADAMS ST.

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	REV. PED. DETAIL	DAV	4-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	BWK	8/64
TRACED	PLB	8/64
CHECKED	DH	8/65
APPROVED		
SQUAD: WATTS		

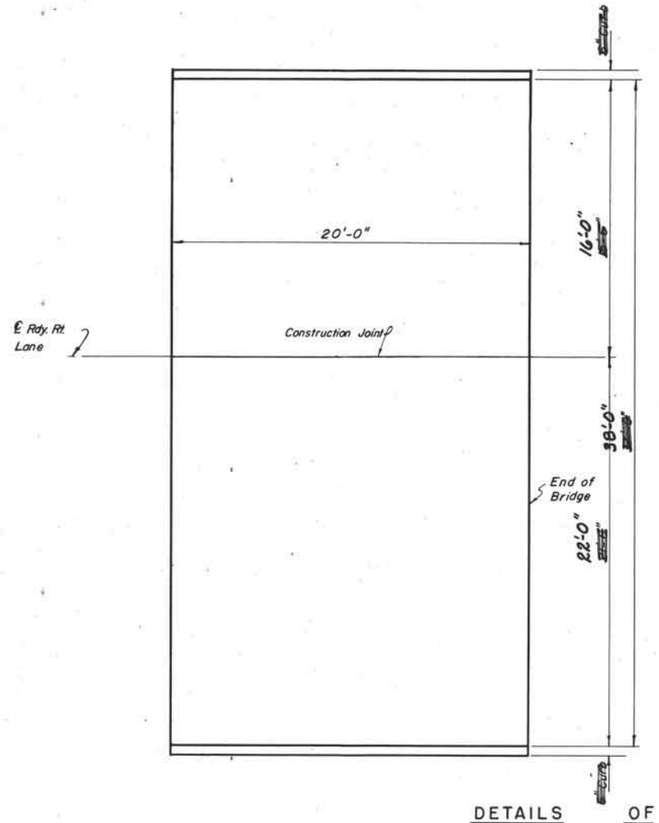
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF PIERS
℄ STA. 1453+31.81
F.A. PROJ. NO. I-35-2 (12)

FA PROJECT NO. I-35-2(12) SHEET NO. 194

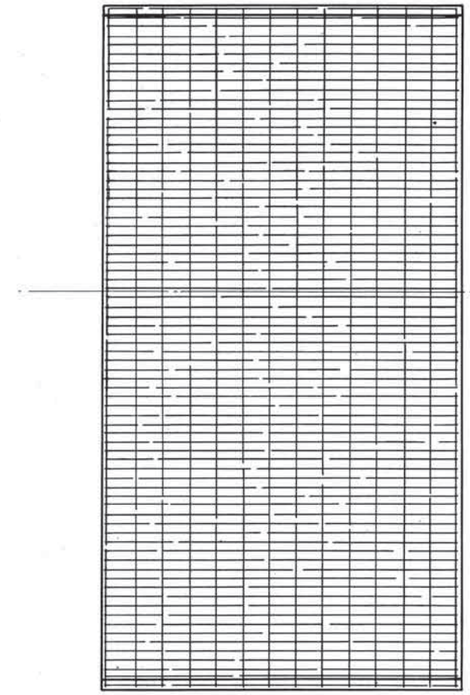
HETZGEN NO. 193 IMPERIAL

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)	195	

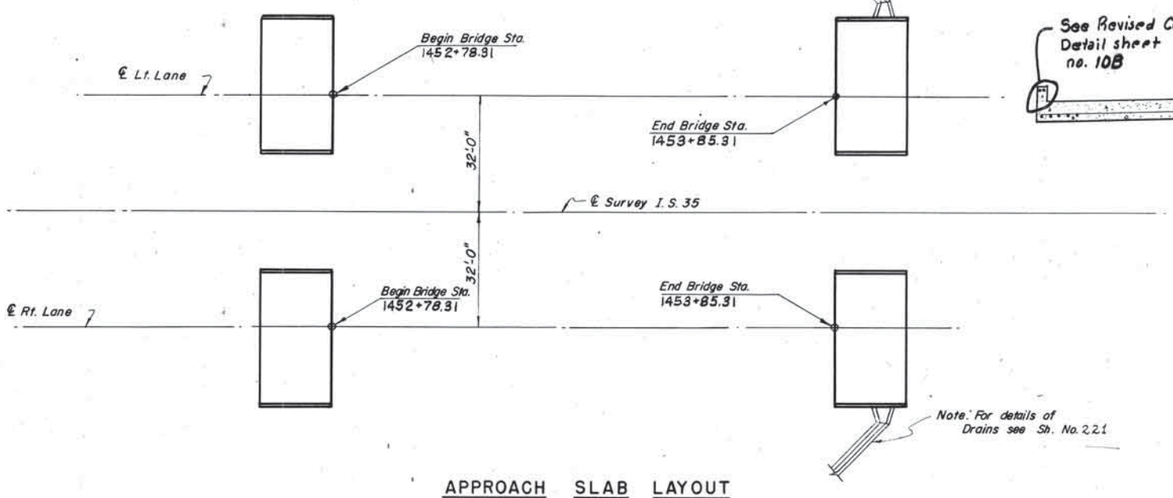


DETAILS OF APPROACH SLABS

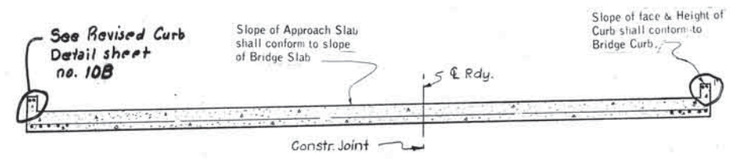
Note: For details of Approach Slab not shown See Sht. No. 221



Longitudinal Steel No. 6 Bars at 6" ctrs.
Transverse Steel No. 4 Bars at 18" ctrs.



APPROACH SLAB LAYOUT



SECTION THRU APPROACH SLAB

QUANTITIES - ONE APPROACH SLAB		
Item	Unit	Total
Approach Slab	Sq. Yd.	84.4
* Reinforcing Steel	Lbs.	2,740.0

* Note: Cost of Reinforcing Steel in Approach Slabs shall be included in the Unit Price Bid per Sq. Yd. for Approach Slabs.
Cost of curbs on Approach Slabs shall be included in the price bid per Sq. Yd. for Approach Slabs.

Note: Cost of all items in Concrete Slope Drains including wire mesh shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All materials and work shall be in accordance with that part of Section 610 covering Concrete Side walks.

Note: When Bridge Approach Slabs are to be constructed in Bridge Contract they shall be constructed using Class "AA(AE)" Concrete Materials.
When Bridge Approach Slabs are to be constructed in Roadway Contract they shall be constructed with either Class "AA(AE)" Concrete Materials or P.C. Concrete Paving Materials, including an Air-Entraining Admixture.

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Curb & Cl. Rdy. dim.		4/28/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	6-64
TRACED	R.B.R.	6-64
CHECKED	D.H.	8-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF APPROACH SLABS
I-35 OVER ADAMS ST.

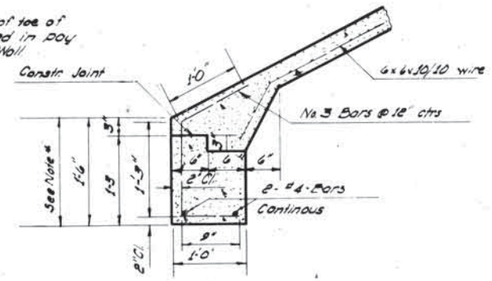
F. A. PROJ. NO. I-35-2(12)

F. A. PROJECT NO. I-35-2 (12) SHEET NO. 195

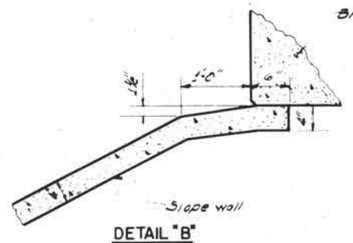
DIETZGEN NO. 199 IMPERIAL

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)	196	

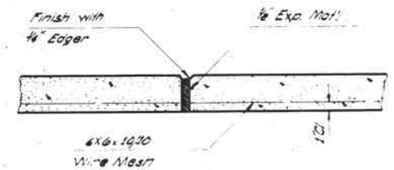
*Note: Surface area of toe of Slope Wall included in pay quantity for Slope Wall



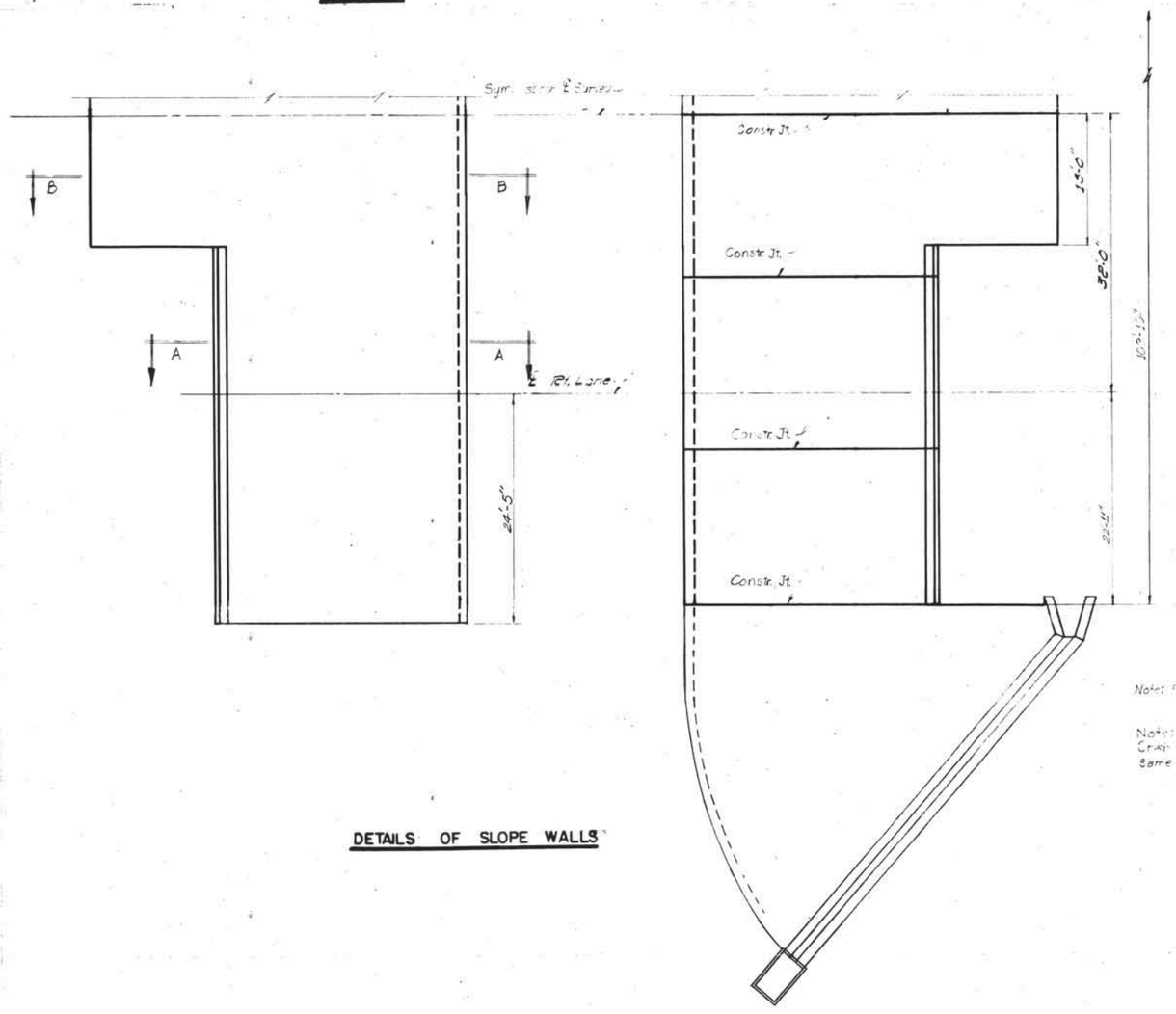
DETAIL "A"



DETAIL "B"



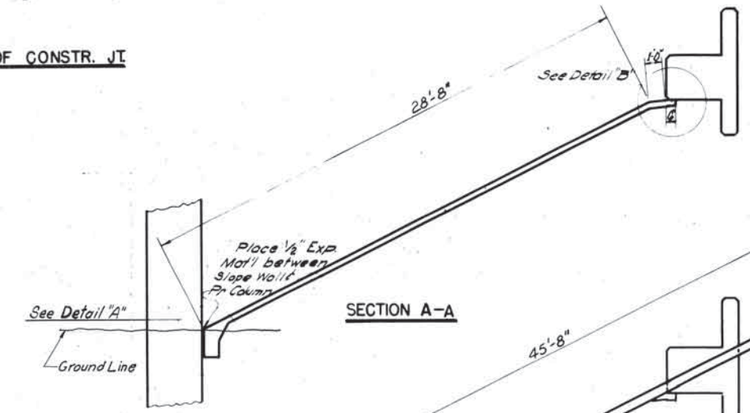
DETAIL OF CONSTR. JT



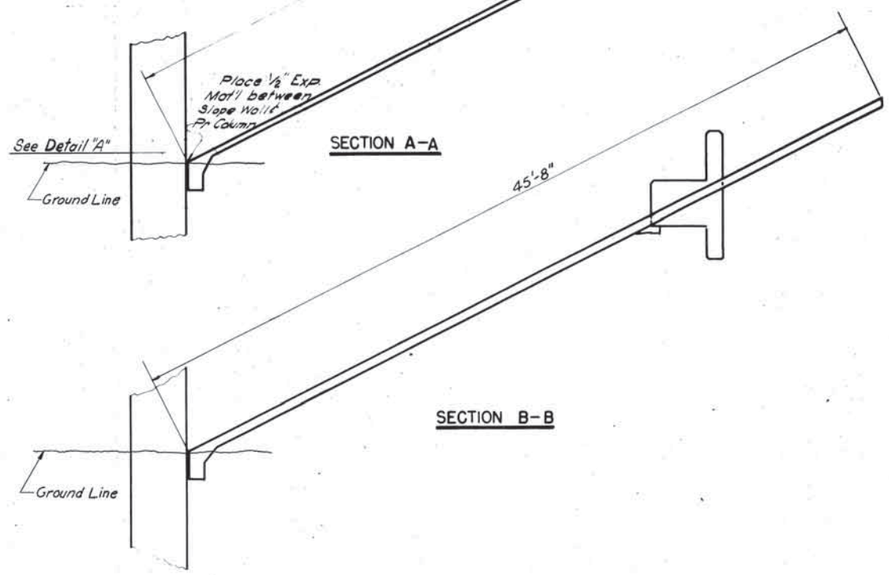
Note: For details of drain see Dr. No. 221

Note: 4" Conc. Slope Wall & Slope Drain should be poured at the same time.

DETAILS OF SLOPE WALLS



SECTION A-A



SECTION B-B

Note Cost of all items in conc. Slope Walls including wire mesh, Reinf. steel and exp. joint filler shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All material and work shall be in accordance with that part of Sec. 610 of the Okla. Std. Specs. governing Concrete Sidewalks

QUANTITIES — SLOPE WALLS				
	Unit	Slope Walls	Drains	Total
Abut. # 1	S.Y.	456.0	—	456.0
Abut. #2	S.Y.	621.4	15.0	636.4

I-35 OVER ADAMS ST.

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Constr. Joint Location	ALD	4/24/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	PLB	10-66
TRACED	PLB	10-66
CHECKED	JF	10-66
APPROVED		
SQUAD: Walls		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF SLOPE WALLS

℄ STA. 1453+31.81

F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2 (12) SHEET NO. 196

- REVISIONS -
Removed Curb Drains 4-24-67

FED. AID PROJ. NO.	STATE	PROJ. NO.	TOTAL PRJS.	SHEET NO.	TOTAL SHEETS
G	OKLA.	F.A. I-35-2 (12)		197	

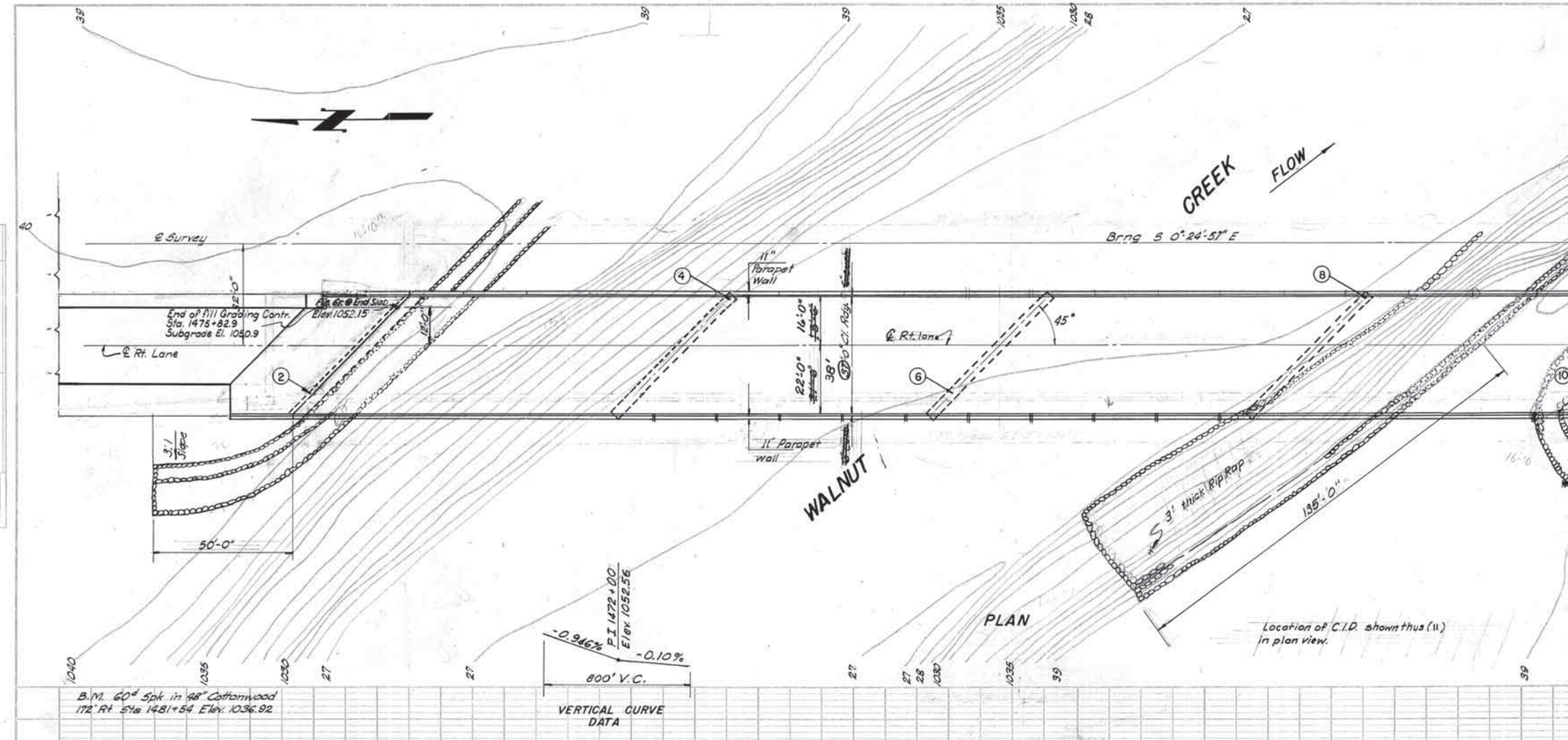
DESIGN DATA

Loading H20-S16 & PPM 20-4

fc Class "A" Conc.	1,000 psi
fc Class "AA(AE)" Conc.	1,200 psi
fs Steel	20,000 psi

MAX. FOUNDATION PRESSURES

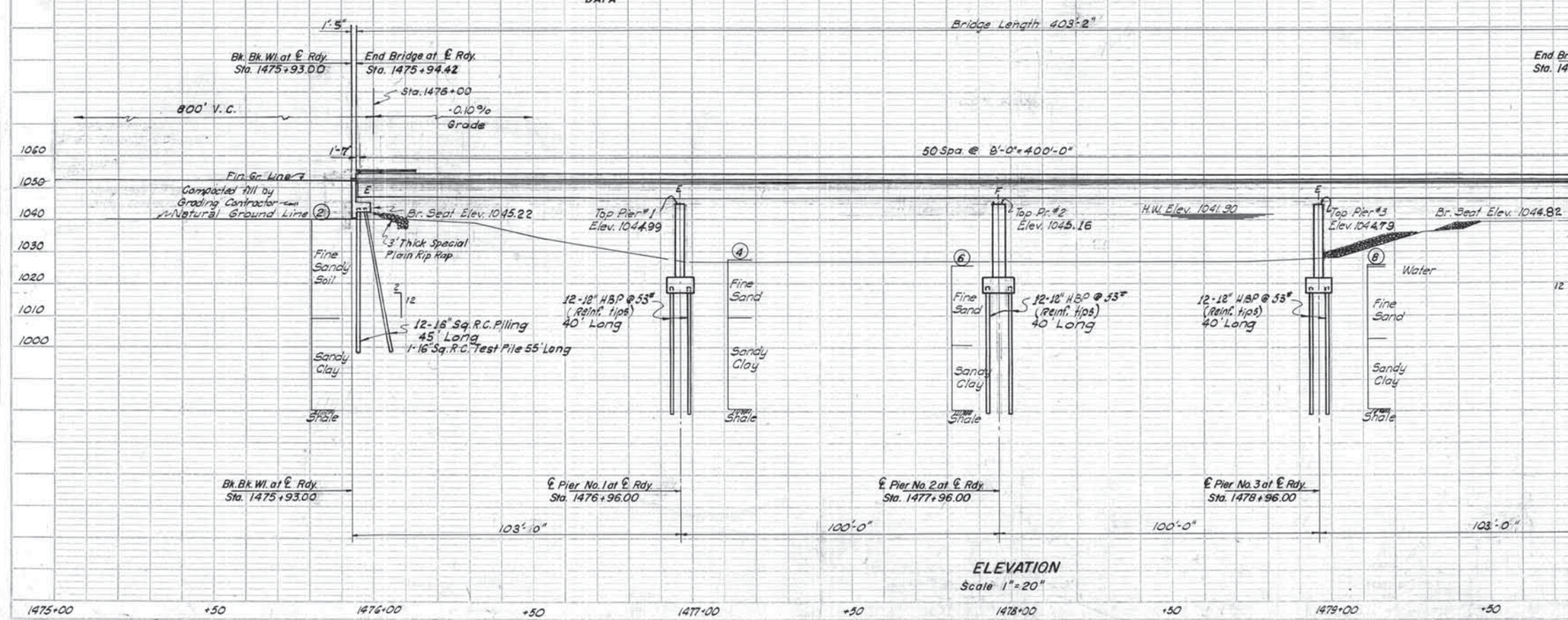
Abuts.	27.0 T/pile
Piers	59.0 T/pile
Area Under H.W.	2,920.0 ac
D.A. =	200.0 Sq. Mi.



SUMMARY OF QUANTITIES						Bridge Total	Rdy. Total
Item No.	Item	Unit	Abuts.	Piers	Superstru.		
202.06d	Class "D" Unclassified Excavation	Cu. Yd.					200.
Special	Approach-Slab Base	Sq. Yd.					223.8
414.06c(ae)	Approach Slabs (Air Ent. Agent)	Sq. Yd.					223.8
501.06b	Substructure Excavation Common	Cu. Yd.	220.0	340.0		560.0	
505A.06	Aluminum Hand Railing (Alt #1)	Lin. Ft.			806.3	806.3	
505.06	Steel Hand Railing (Alt #2)	Lin. Ft.			806.3	806.3	
506.06	Structural Steel	Lbs.			392,500	392,500	
509.06a	Class "A" Concrete	Cu. Yd.	130.5	162.6		293.1	
509.06a	Class "A" Concrete (Pier Bases)	Cu. Yd.		71.4		71.4	
509.06b(ae)	Class "AA(AE)" Concrete	Cu. Yd.			426.2	426.2	
511.06	Reinforcing Steel	Lbs.	16,110	33,300	120,280	169,690	
514.06	16" Sq. R.C. Piling	Lin. Ft.	1,125.0			1,125.0	
514.06e	12" H.P. Piling @ 53# (with tips)	Lin. Ft.		1,440.0		1,440.0	
514.06f	Steel Piling Splices	each		7		7	
601.06b	Special Plain Rip Rap	Ton				1,900.0	
Special	4" Concrete Slope Wall	Sq. Yd.					7.3
514.06a	Test Piles	Ea.	1			1	

* This item is for shaping up and cleaning up the fills around Abuts & Apprs.

Note: For General note, Special Provisions and Sheet Index see sheet no. 198



STRU. NO. 38 WALNUT CREEK RT. STRUCTURE

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	E.M.	7/69
TRACED	E.M.	7/69
CHECKED	J.E.	11/65
APPROVED		
SQUAD: Watts		

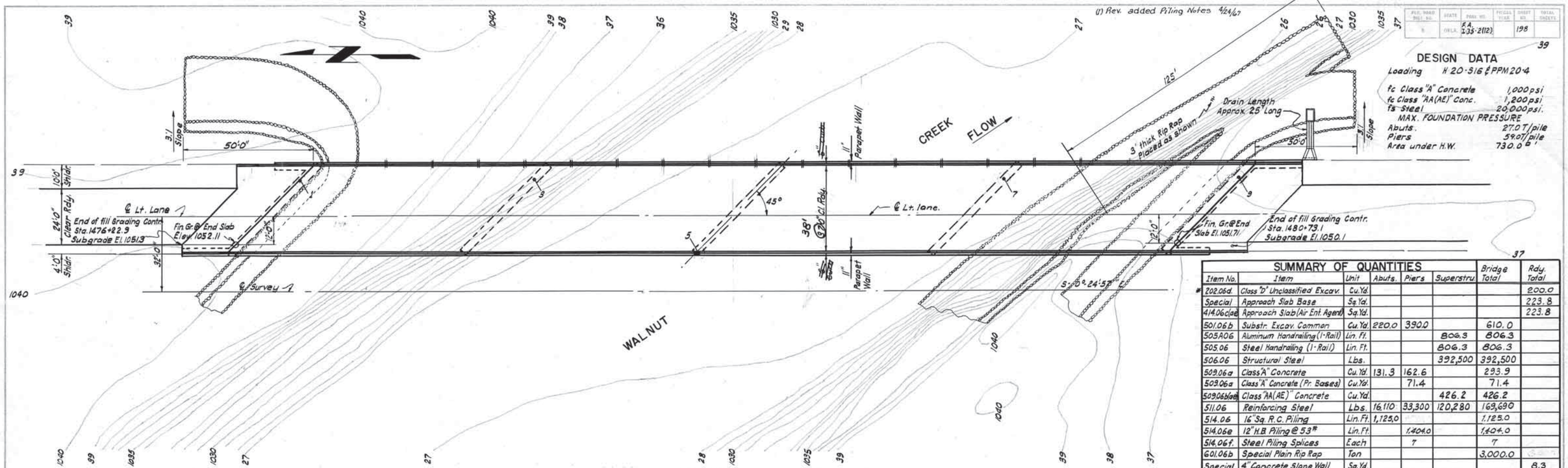
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GENERAL ELEV., PLAN & SUMMARY OF QUANTITIES
4-100' CONT. ℙ GIRDER SPANS
37' RDY. SKEWED 45° L.F.
℄ STA. 1477+96.00
F. A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2 (12) SHEET NO. 197

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	F.A. I-35-2(12)		198	

(1) Rev. added Piling Notes 4/24/67



PLAN

Location of Curb Drains shown thus (11) in Plan.

DESIGN DATA

Loading H 20-S16 & PPM 20-4

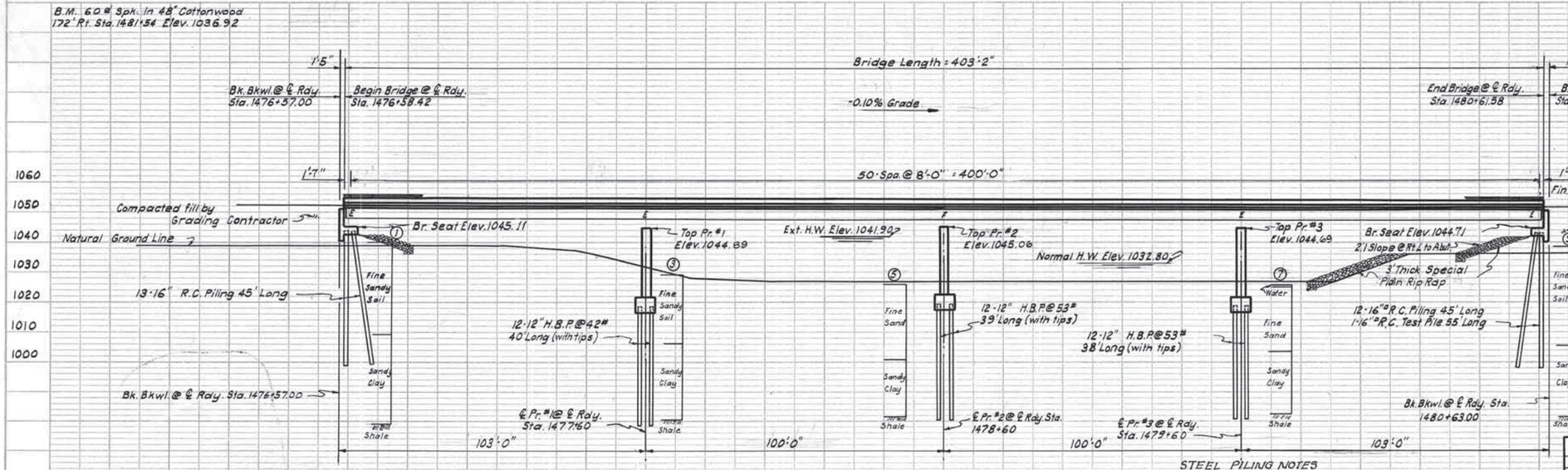
fc Class "A" Concrete	1,000 psi
fc Class "AA(AE)" Conc.	1,200 psi
fs Steel	20,000 psi.
MAX. FOUNDATION PRESSURE	
Abuts.	27.0 T/pile
Piers	59.0 T/pile
Area under H.W.	730.0 □'

SUMMARY OF QUANTITIES

Item No.	Item	Unit	Abuts.	Piers	Superstru.	Bridge Total	Rdy. Total
* 202.06d.	Class "D" Unclassified Excav.	Cu.Yd.					200.0
Special	Approach Slab Base	Sq.Yd.					223.8
414.06(ae)	Approach Slab (Air Ent. Agent)	Sq.Yd.					223.8
501.06b	Substr. Excav. Common	Cu.Yd.	220.0	390.0		610.0	
505A06	Aluminum Handrailing (1-Rail)	Lin. Ft.			806.3	806.3	
505.06	Steel Handrailing (1-Rail)	Lin. Ft.			806.3	806.3	
506.06	Structural Steel	Lbs.			392,500	392,500	
509.06a	Class "A" Concrete	Cu.Yd.	131.3	162.6		293.9	
509.06a	Class "A" Concrete (Pr. Bases)	Cu.Yd.		71.4		71.4	
509.06b(ae)	Class "AA(AE)" Concrete	Cu.Yd.			426.2	426.2	
511.06	Reinforcing Steel	Lbs.	16,110	33,300	120,280	169,690	
514.06	16" Sq. R.C. Piling	Lin. Ft.	1,125.0			1,125.0	
514.06e	12" H.B. Piling @ 53#	Lin. Ft.		1,404.0		1,404.0	
514.06f.	Steel Piling Splices	Each		7		7	
601.06b	Special Plain Rip Rap	Ton				3,000.0	
Special	4" Concrete Slope Wall	Sq.Yd.					8.3
514.06a	Test Piles	Ea.	1			1	

* This item is for shaping up and cleaning up the fills around the Abuts. and Approach Slabs.

B.M. 60 ¢ Spk. in 48" Cottonwood 172' Rt. Sta. 1481+54 Elev. 1036.92



ELEVATION

Scale 1" = 20'

GENERAL NOTES

All Construction and Materials shall be in accordance with the Current Okla. Standard Specifications for Highway Construction and Special Provisions included in the proposals.

Note: For concrete piling & test pile notes see sheet no. 206

SHEET INDEX

For Details of Superstructure see sheet No. 199
For Details of Slab Reinforcing see sheet No. 200
For Details of Plate Girders see sheet No. 201
For Details of Structural Steel see Sht. No. 203
For Details of Shoes & Exp. Device see sheet No. 204
For Details of Abutment No. 1 Rt. & 2 Lt. see sheet No. 205
For Details of Abutment No. 1 Lt. & 2 Rt. see sheet No. 206
For Details of Piers #1, 2, and 3 see sheet No. 209
For Details of Approach Slab see sheet No. 211
For Details of Handrailing see Std. PTR-1-14 sheet No. 259C
For Details of Piling see Std. P-1-10 sht. # 259D

STEEL PILING NOTES

Steel Piling shall be driven to point bearing on solid foundation material at the approximate elevation shown on the plans.
All Steel Piling shall be driven to practical refusal (1/4" in ten blows) and no cut-offs of more than two feet will be allowed unless approved by the Bridge Engineer.
Piling at Piers shall have tip reinforcing as shown on Std. P-1.
No splices will be allowed on Steel Piling for plan length of up to 60' in length.
When foreign piling are used, Contractor shall furnish enough extra length out of each heat for testing purposes.

STR. NO. 39 LT. STRUCTURE WALNUT CREEK

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	9-66
TRACED	R.B.R.	9-66
CHECKED		
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GENERAL ELEV, PLAN & SUMMARY OF QUANTITIES
4-100' CONT. PL GIRDER SPANS
37' RDY. [redacted] SK. 45° L. F.
38' ℄ STA. 1478+60.00
F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 198

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		199	

REVISIONS	
DESCRIPTION	DATE
Rev. Drain Detail	4/24/67

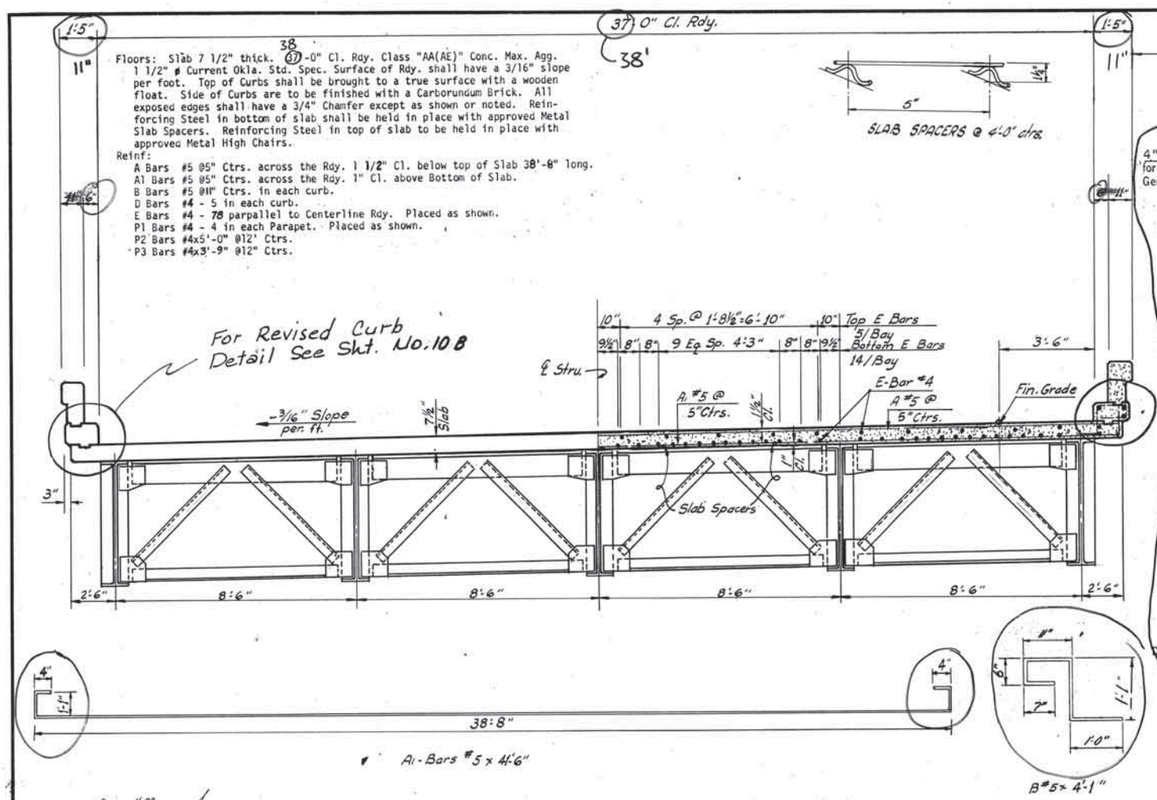
DESIGN DATA

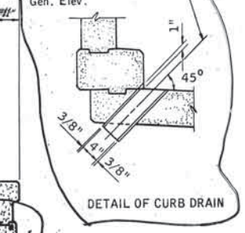
Loading H-20 S16 & P.P.M. 20-4

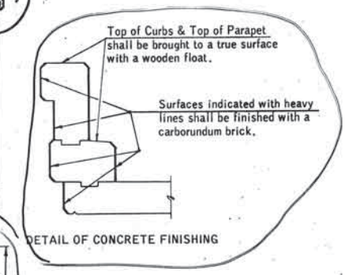
Class "AA(AE)" Concrete 4,000 psi
Reinf. Steel 20,000 psi
Structural Steel 20,000 psi

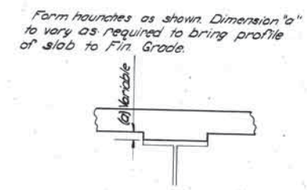
Floors: Slab 7 1/2" thick. (37)-0" Cl. Rdy. Class "AA(AE)" Conc. Max. Agg. 1 1/2" # Current Okla. Std. Spec. Surface of Rdy. shall have a 3/16" slope per foot. Top of Curbs shall be brought to a true surface with a wooden float. Side of Curbs are to be finished with a Carborundum Brick. All exposed edges shall have a 3/4" Chamfer except as shown or noted. Reinforcing Steel in bottom of slab shall be held in place with approved Metal Slab Spacers. Reinforcing Steel in top of slab to be held in place with approved Metal High Chairs.

Reinf:
- A Bars #5 @5" Ctrs. across the Rdy. 1 1/2" Cl. below top of Slab 38'-8" long.
- A1 Bars #5 @5" Ctrs. across the Rdy. 1" Cl. above Bottom of Slab.
- B Bars #5 @11" Ctrs. in each curb.
- D Bars #4 - 5 in each curb.
- E Bars #4 - 78 parpallel to Centerline Rdy. Placed as shown.
- P1 Bars #4 - 4 in each Parapet. Placed as shown.
- P2 Bars #4x5'-0" @12" Ctrs.
- P3 Bars #4x3'-9" @12" Ctrs.

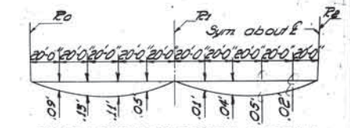






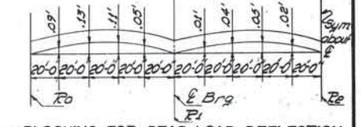


DETAIL OF HAUNCH OVER GIRDER



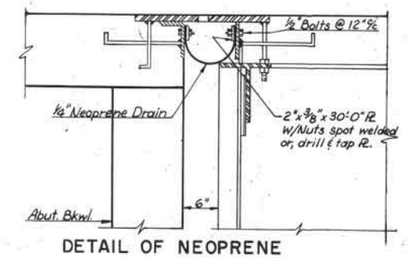
DEAD LOAD DEFLECTION DIAGRAM

Note: The deflection due to the weight of the concrete alone is 88% of the total deflection.

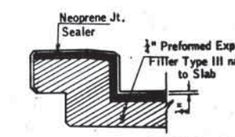


BLOCKING FOR DEAD LOAD DEFLECTION

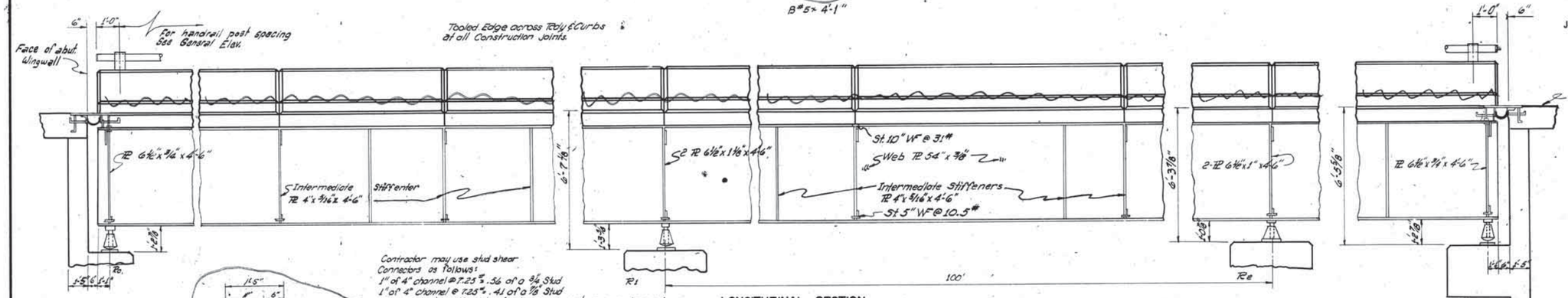
Note: The web Plates of the Girders shall be fabricated with camber for Dead Load Deflection as shown above.



DETAIL OF NEOPRENE DRAIN AT ABUTMENTS



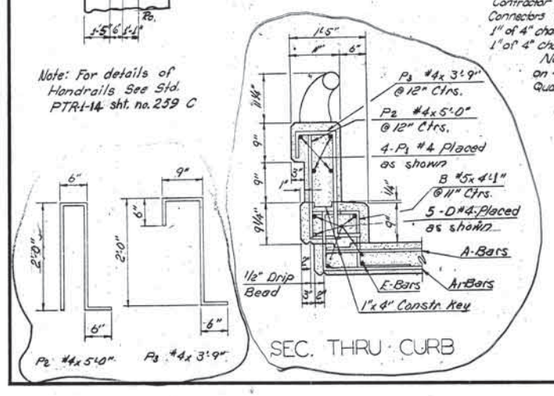
PLACEMENT OF NEOPRENE JT. SEALER AND EXP. MATERIAL

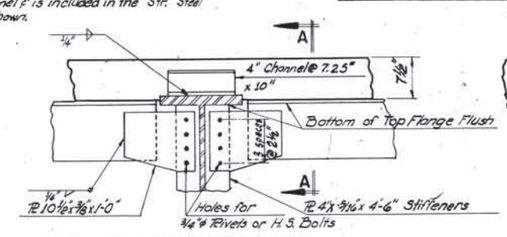


LONGITUDINAL SECTION

Note: For details of Handrails See Std. PTR-1-14 sht. no. 259 C

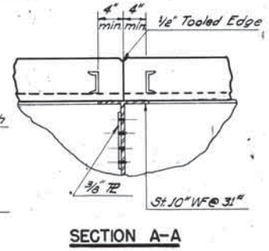
Contractor may use stud shear Connectors as follows:
1" of 4" channel @ 7.25# = .56 of a ¾" Stud
1" of 4" channel @ 7.25# = .41 of a ⅞" Stud
Note: Weight of shear connectors are based on 4" channel is included in the Str. Steel Quantity shown.





DETAIL AT CONSTRUCTION JOINT

Note: For typical Shear Conn. Spacing See Sheet No. 201
Contractor shall vary shear Conn. Spacing to accommodate Shear Conn. locations @ Const. Joint.



SECTION A-A

QUANTITIES (one stru.)		
STRUCTURAL STEEL - Lbs.	CLASS "AA(AE)" CONCRETE C.Y.	REINF. STEEL Lbs.
392,500	426.2	120,280.

Note: The Quantity shown for Stru. Steel includes the weight of Bolted Splices, the pay weight will be based on actual material used for Bolted or welded splices.

℄ STA. RT. STRU. 1477 + 96.00
℄ STA. LT. STRU. 1478 + 60.00

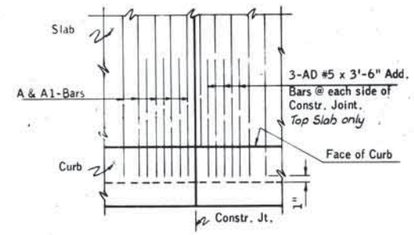
Design		
Drawn	D.R.H.	8-66
Checked	T.W.	8-66
Approved		
Squad	Watts	

DETAILS OF SUPERSTRUCTURE
4-100' PL GIRDER SPANS
38'(37)'-0" RDY. ~~& 2'-6" CURBS~~

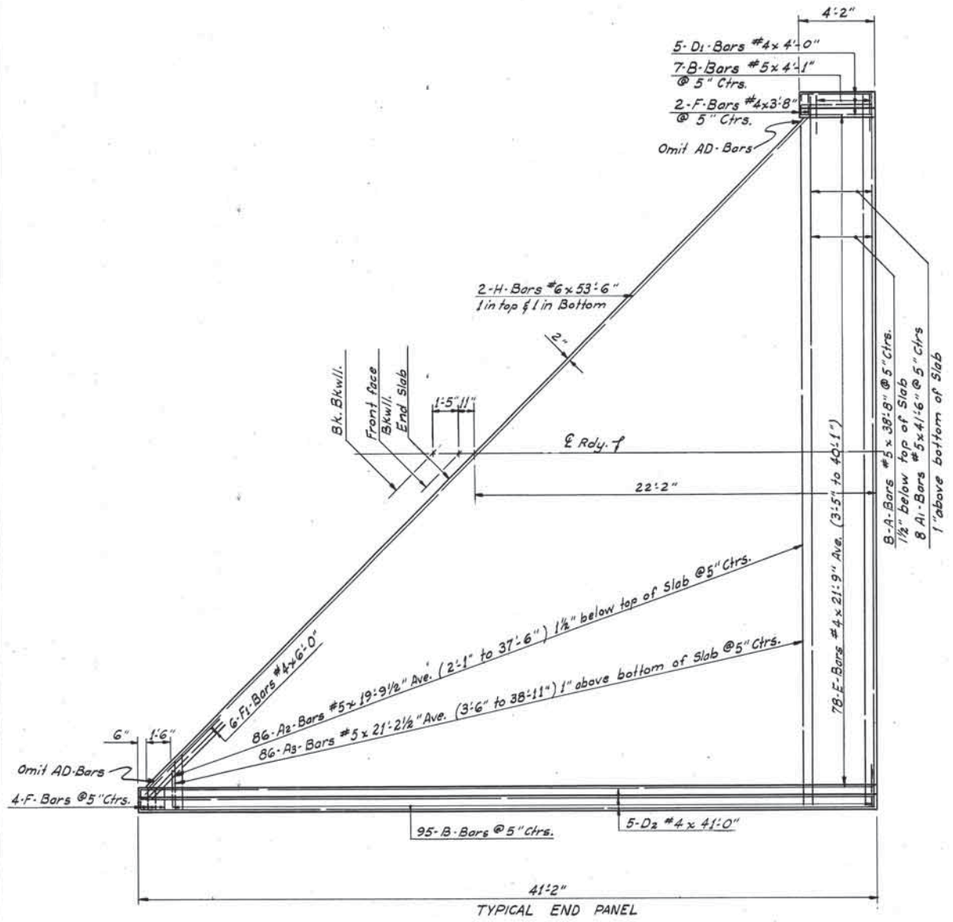
Project No. F.A. I-35-2(12) Sheet No. 199

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		200	

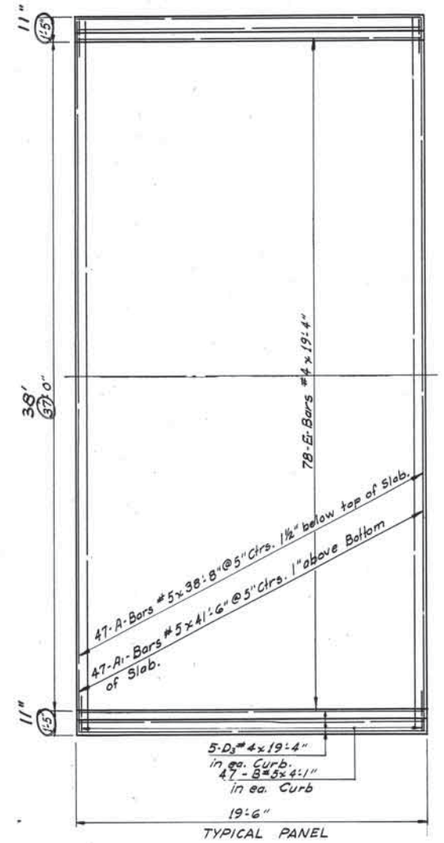
REVISIONS	
DESCRIPTION	DATE
Revised Curb & Cl. Rdy. Dim	4-28-67



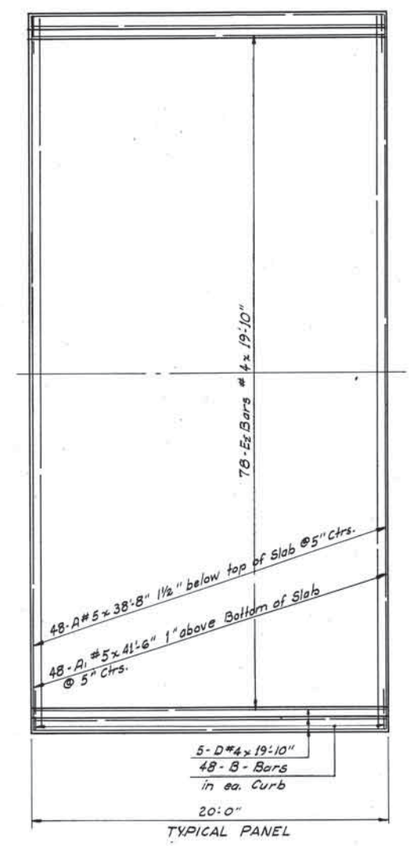
ADDITIONAL SLAB REINF.



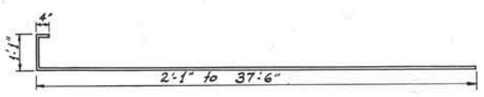
TYPICAL END PANEL



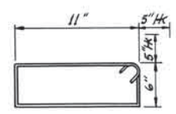
TYPICAL PANEL



TYPICAL PANEL



A3-Bars #5 x 21'-2½" Ave. (3'-6" to 38'-11")



F-Bars #4 x 3'-8"

Note: For details not shown see Sheet No. 199

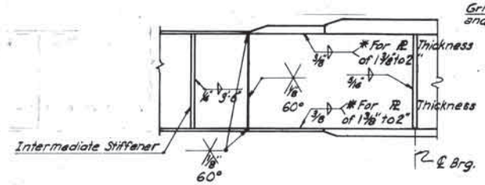
Design		
Drawn	DPH	9-66
Checked	T.W.	9-66
Approved		
Squad	Watts	

REINFORCING DETAILS
℄ STA. RT. STRU. 1477+96.00
℄ STA. LT. STRU. 1478+60.00

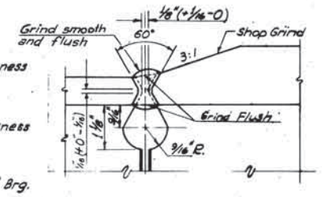
F.A. Project No. I-35-2(12) Sheet No. 200

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		201	

REVISIONS	
DESCRIPTION	DATE
Revised Splices	4-67



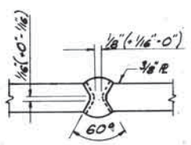
SHOP WEB SPLICE FIELD SPLICE



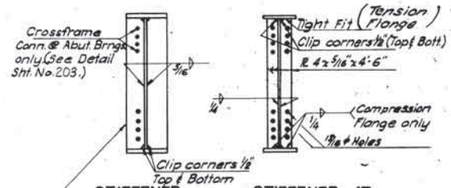
FLANGE FIELD SPLICE

All shop butt welded Splices shall be ground smooth.

Shop butt welded splices shall conform with the current AWS Specifications. Detail of splices shall be shown on shop detail drawing for approval of the Bridge Engineer. The weld shall be finished smooth and flush with the base metal on all surfaces by grinding in the direction of the applied stress (longitudinal axis of the grinder) leaving the surface free from depression.

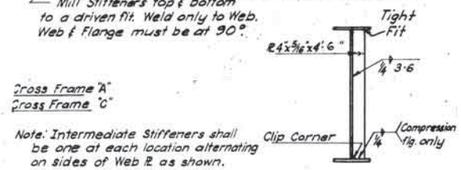


WEB FIELD SPLICE



STIFFENER AT BEARING STIFFENER AT CROSSFRAME LOCATION

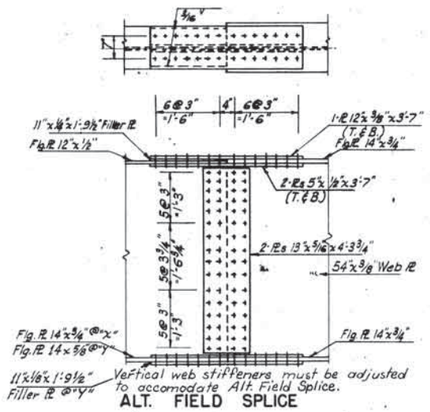
Mill Stiffeners top & bottom to a driven fit. Weld only to Web. Web & Flange must be at 90°.



Note: Intermediate Stiffeners shall be one at each location alternating on sides of Web PL as shown.

INTERMEDIATE STIFFENER (STAGGERED)

Bearing stiff. on both sides of girders.
Intermediate Stiff.:
a - Int. Girders - Staggered
b - Ext. Girders - Inside face only



ALT. FIELD SPLICE

(All 3/4" Rivets or High Strength Bolts)

GENERAL NOTES

STRUCTURAL STEEL

Welding and lead plates will be paid for by weight at the unit price bid for Structural Steel.

All welding shall conform to the current edition of the Okla. Standard Specifications and the Supplemental Specifications and the American Welding Society.

Radiographic and Magnetic Particle Inspection will be required.

All Structural Steel shall conform to ASTM A-36.

Field Splice: Riveted or bolted field splices may be used in place of welded splices. Pay weight for splice will be based on material used.

High Strength Steel Bolts shall be used for all field connections. Bolted Field Splices are to have 3/4" High Strength Steel Bolts.

FABRICATION

All shop splices of the flange plates and the web plates shall be made before such component parts are welded in any one section.

Extension bars shall be used in making the butt welds in the flanges according to the A.W.S. Specification

Ends of Girders to be spliced shall be prepared in the shop, taking into account the relative positions the adjacent section will take in the structure due to the roadway grade and alignment. For the purpose of shop inspection, the fabricator shall assemble the girders and splices in groups of at least three consecutive girder sections and two splices. All parts shall be completely match marked and a match marking diagram furnished as part of the structural steel details.

ERECTION

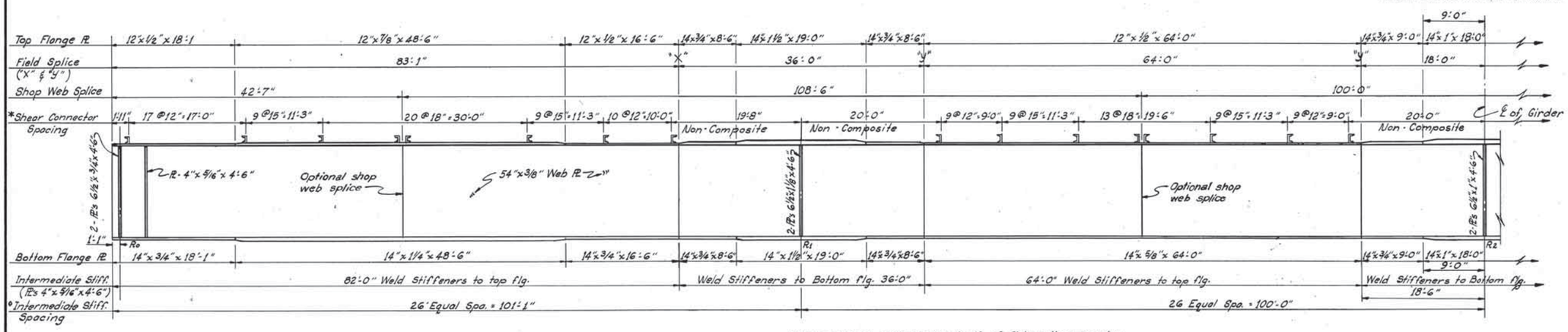
Before any steel is erected, the Engineer will check the elevations of all bridge seats and, if any elevation is off more than .02 feet, the Contractor will be required to correct the bridge seat elevations under the direction of the Engineer.

Structural steel in continuous girder spans may be erected without the use of falsework. Alternate field splices may be made on the ground, if the girders are supported at the bearing points to the same relative elevations as they will have in the finished structure.

After a complete line of the stringers has been set in place and before any welding or permanent bolting has been started, except those splices made on the ground, the Engineer will check the elevations of all splice points; and, if any elevation is off more than .02 feet from the position as shown by the blocking diagram, the Contractor will be required to adjust all splice points as nearly as practicable to the correct elevation, and if any additional bearing plates are necessary in making these adjustments, the Contractor will be required to furnish them at his expense.

After all Structural Steel has been erected the Resident Engineer will furnish the State Bridge Engineer with the profile of the tops of the girders with the elevations taken at the Panel Points. The Bridge Engineer will determine the thickening of the haunches that will be necessary to provide for Dead Load Deflection and furnish this information to the Resident Engineer.

Alternate Field Splice: Alternate field splices may be made before erection provided the beams are supported at the bearing points and splice points to the same relative elevations as they will have in the finished structure.



* Note: The Contractor shall vary Shear Conn. Spa. to accomodate Shear Conn. location @ Constr. Jt. See detail on sht. No. 203

° Note: Adjust Spacing @ Field Splice and Diaphragms as required (Max. Spa. = 4'-0")

Alternate Field Splices: One half of field splices may be made on the ground provided the girders are supported at the bearing points and splice points to the same relative elevations as they will have in the finished structure. Before any splices are made in the air the entire line of Beams of one unit shall be erected. The Engineer will then check the elevations of the splice points and if the elevation of any splice point is more than .02' off of the planned elevation the Contractor will be required to furnish at his expense any additional bearing plates necessary to adjust the splice points, as nearly as practical to the correct elevation.

WALNUT CREEK

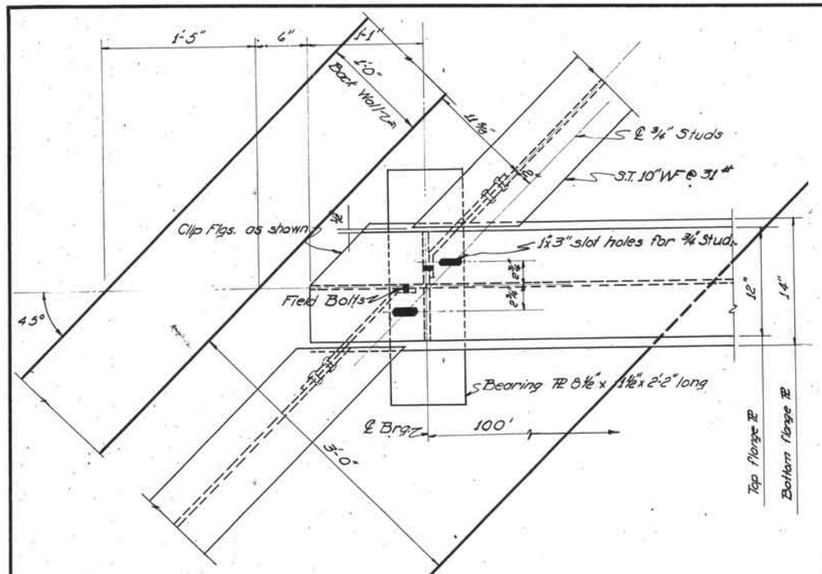
Design		
Drawn	D.P.H.	9-66
Checked	T.W.	9-66
Approved		
Squad	Watts	

DETAILS OF PLATE GIRDERS

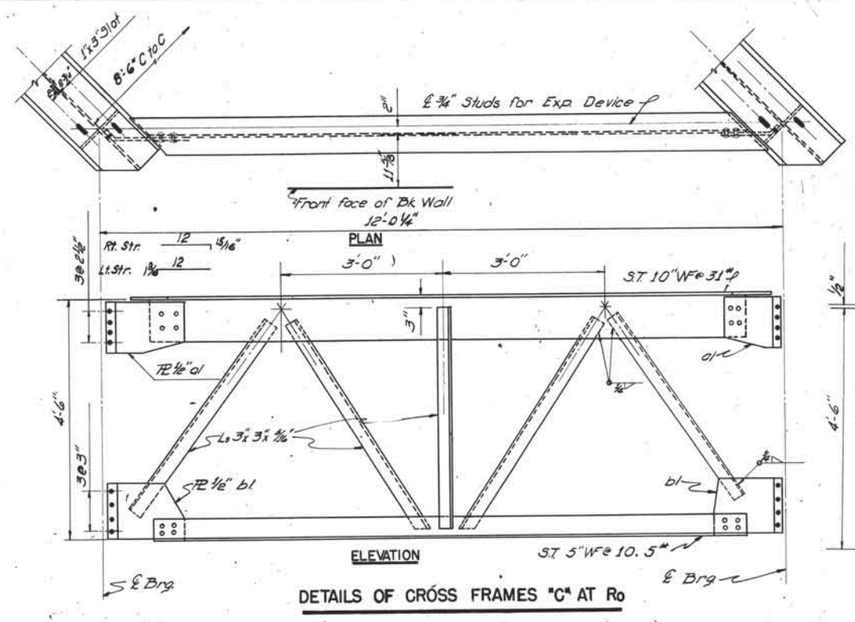
F.A. Project No. I-35-2 (12) Sheet No. 201

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		203	

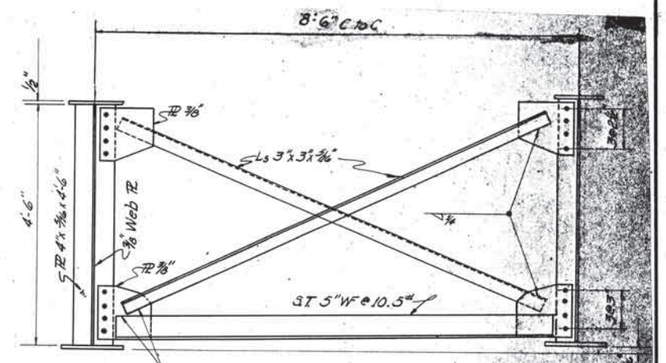
REVISIONS	
DESCRIPTION	DATE



CROSS FRAME CONN. AT ABUT.



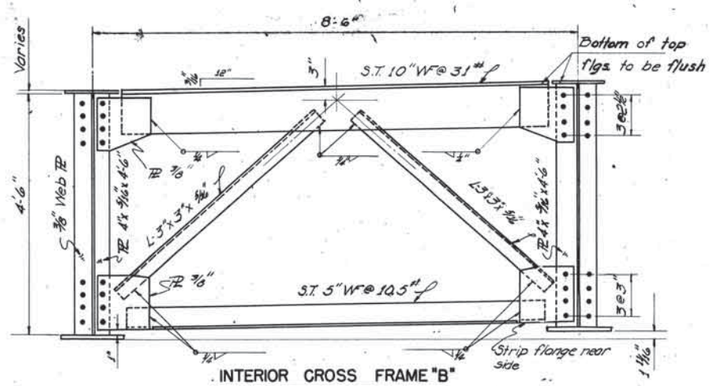
DETAILS OF CROSS FRAMES "C" AT Ro



INTERMEDIATE CROSS FRAME "A"

(Cross Frame for Lt. Stru. Shown Rt. Stru. Opposite Hand)

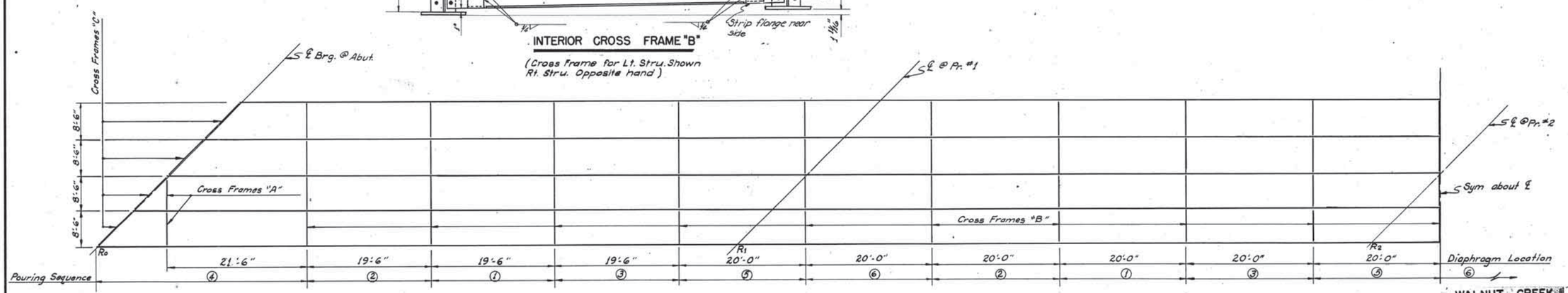
Note: Use 3/4" rivets or 3/4" H.S. Bolts. 13/16" holes.



INTERIOR CROSS FRAME "B"

(Cross frame for Lt. Stru. Shown Rt. Stru. Opposite hand)

Note, Slab Pouring Order: All panels bearing the same number will be considered a "Group" and should be poured in numerical sequence in the same days pouring. More than one group may be poured in one day but no group should be started until pouring is completed for the preceding group. (The purpose of these restrictions is to insure that loads and deflections of the entire series may be symmetrically balanced about the center line of the series during any protracted interval between pours.)



STRUCTURAL LAYOUT

Design		
Drawn	DPH	9-66
Checked	T.W.	9-66
Approved		
Squad	Watts	

WALNUT CREEK

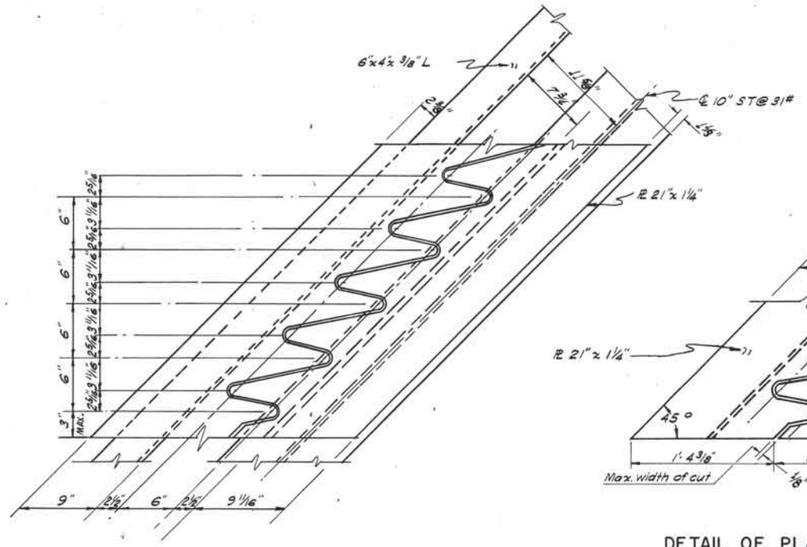
STRUCTURAL DETAILS

℄ STA. RT. STRU. 1477+96.0

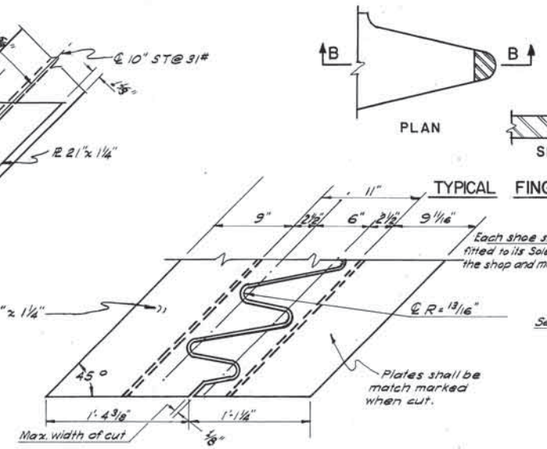
℄ STA. LT. STRU. 1478+80.0

F.A. Project No. I-35-2(12) Sheet No. 203

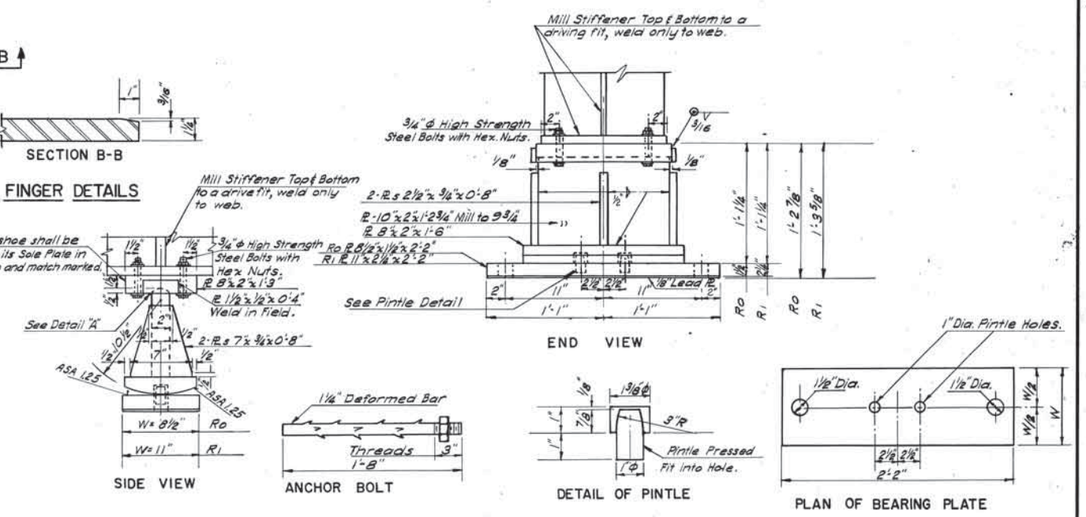
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	204	



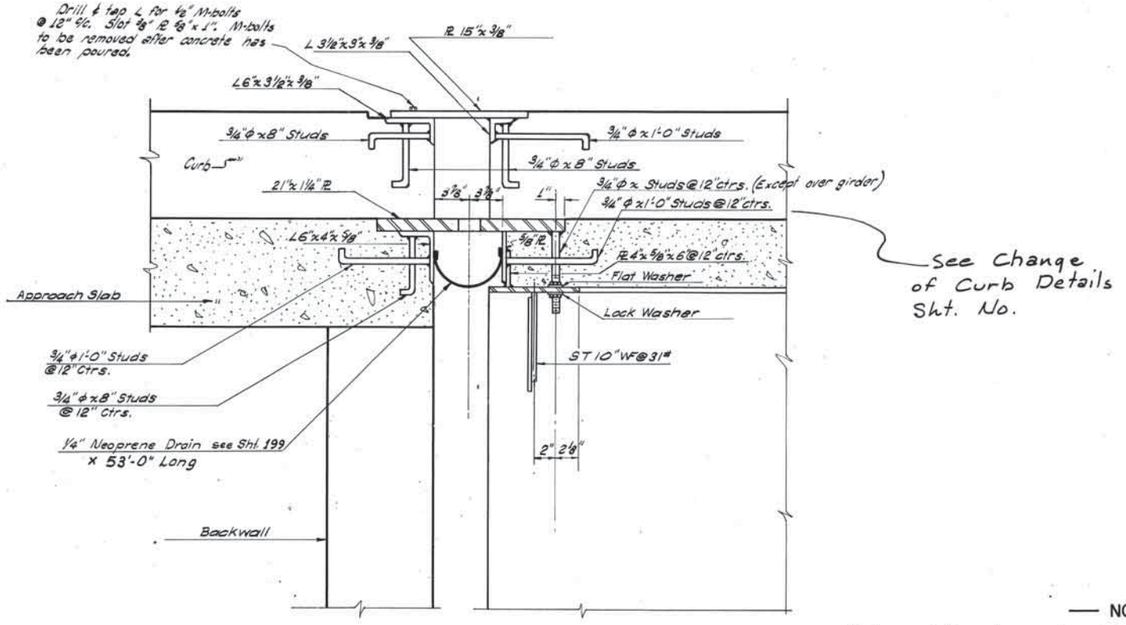
PARTIAL PLAN OF PLATE 45°



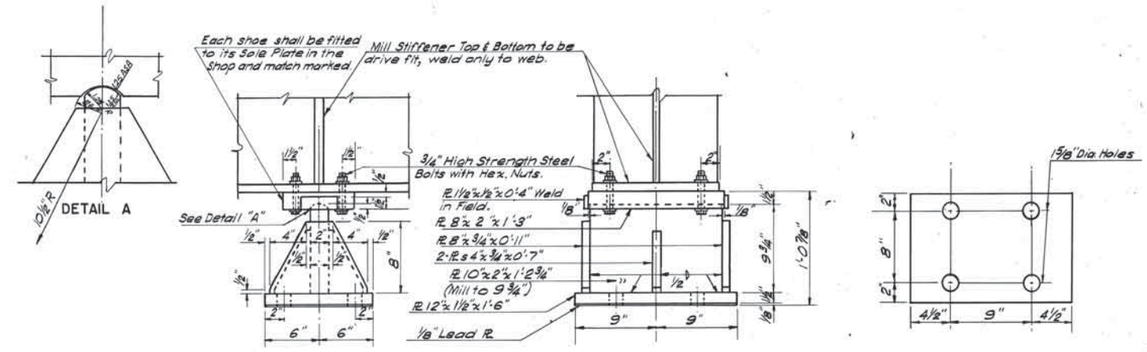
DETAIL OF PLATE



DETAIL OF EXP. SHOES



DETAIL OF EXPANSION DEVICE AT ABUT.



DETAIL OF FIXED SHOES

— NOTES —

All shoes shall be stress relieved after Welding as per A.W.S. All finishing shall be done after welding and stress reliving has been done.

Finish symbols ( ) are according to American Standard Assn. (A.S.A.).

Bottom Plate of fixed shoes shall be finished to a true surface.

Expansion device shall be set with an opening of 2 1/2" based on a temperature of 60° Fahrenheit. For each 100' of expansion to be provided for, the setting of the opening shall be increased 1/8" for each 15° the temperature is below 60° and decreased 1/8" for each 15° the temperature is above 60°.

Where 1/8" lead Plates are called for under the bearing plates, these plates maybe either 1/8" lead Kon-X pads as manufactured by Keasebey and Mattison Co., or 1/8" thick Fabco SA 47 pads as manufactured by Fabreeka Products Co. Inc. or approved equal.

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Added Length of Neo Drain	DM	4-28-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	11-64
TRACED	R.B.R.	11-64
CHECKED	J.F.	9-65
APPROVED		
SQUAD: Watts		

WALNUT CREEK

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF SHOES, DRAIN & EXPANSION DEVICE

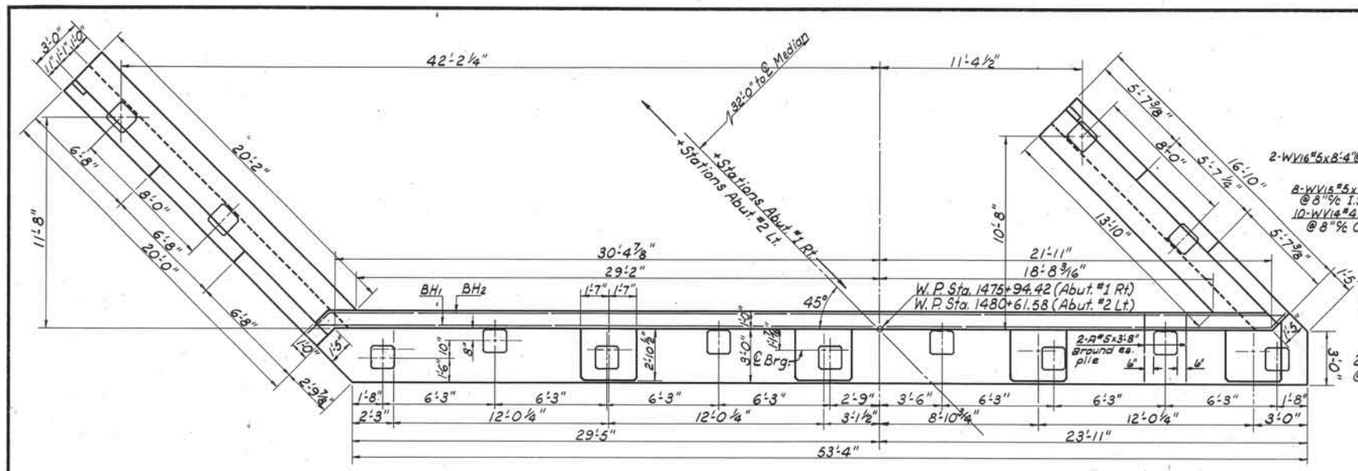
F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 204

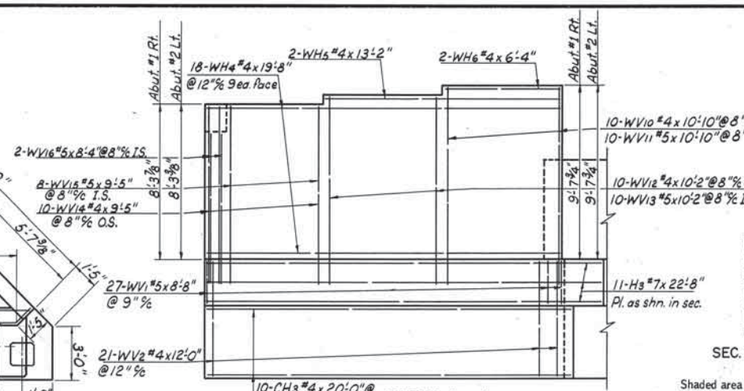
DIETZGEN NO. 138 IMPERIAL

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		205	

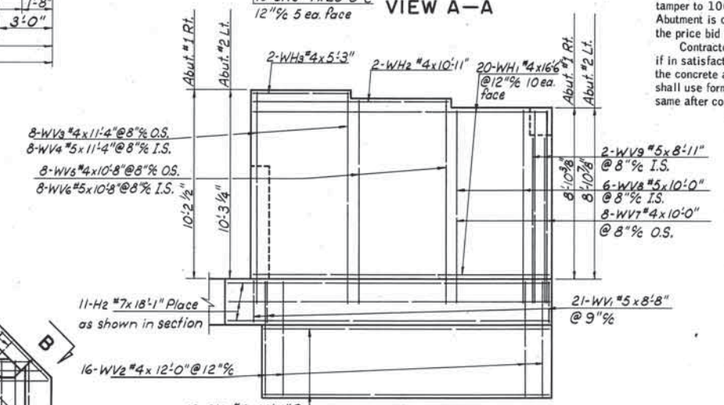
REVISIONS	
DESCRIPTION	DATE
Revised Reinf in piling	4-24-67



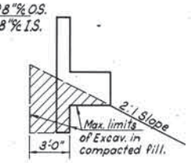
PLAN LAYOUT



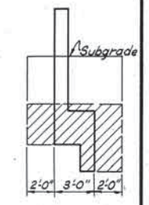
VIEW A—A



VIEW B—B



SEC. THRU BRIDGE SEAT

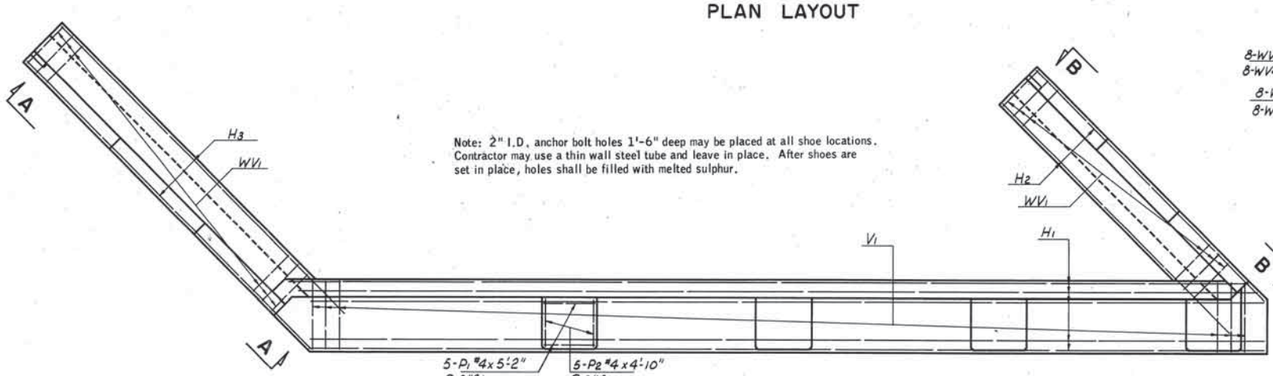


SEC. THRU. WING

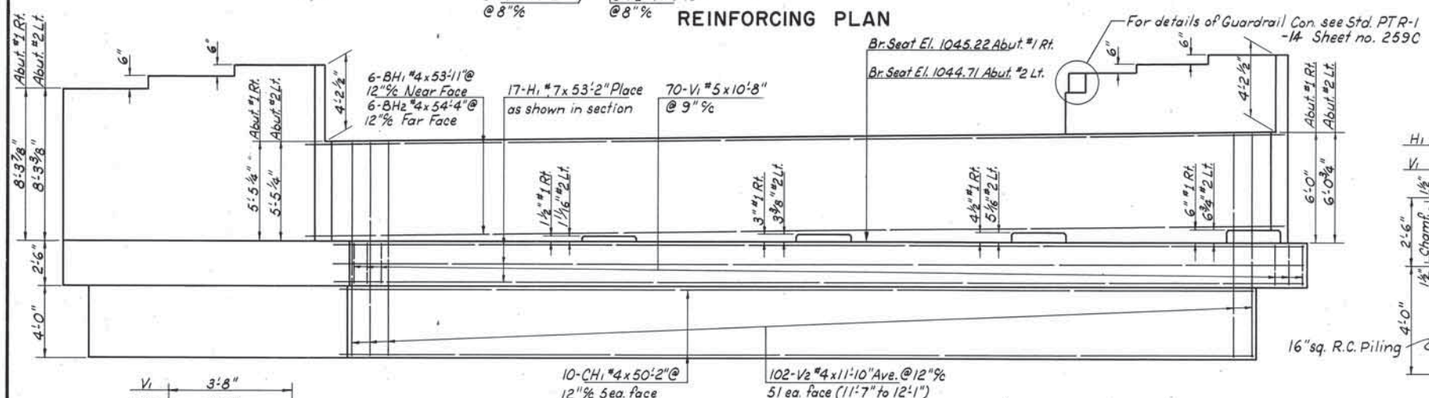
Shaded area to be back filled and tamped with a mechanical tamper to 100% Proctor Density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the price bid per C.Y. for Substructure Excavation Common.

Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer, he may pour the concrete against the compacted fill. If necessary, Contractor shall use forms on the back vertical face of the Abutment and remove same after concrete is set.

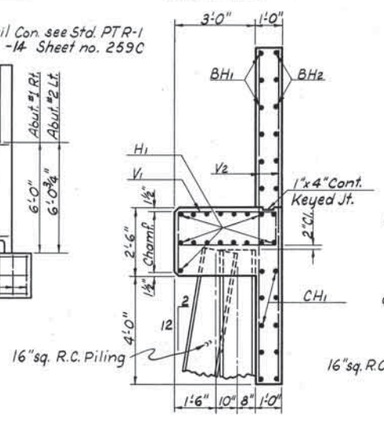
Note: 2" I.D. anchor bolt holes 1'-6" deep may be placed at all shoe locations. Contractor may use a thin wall steel tube and leave in place. After shoes are set in place, holes shall be filled with melted sulphur.



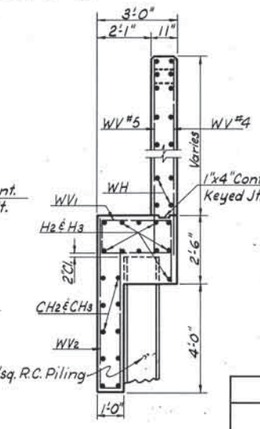
REINFORCING PLAN



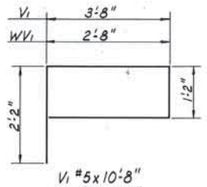
ELEVATION



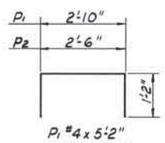
SECTION THRU ABUT.



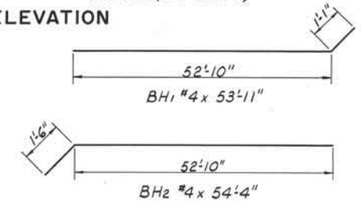
SEC. THRU WING

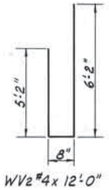


V1 #5x10'-8"
WV1 #5x8'-8"



P1 #4x5'-2"
P2 #4x4'-10"





BAR LIST-ABUT 1RT 2 LT.
* AVE. LENGTH

MARK	NO.	SIZE	FORM	LENGTH
BH1	6	4	BNT.	53- 11
BH2	6	4	BNT.	54- 4
H1	17	7	STR.	53- 2
H2	11	7	STR.	18- 1
H3	11	7	STR.	22- 8
V1	70	5	BNT.	10- 8
V2	102	4	STR.	11- 10*
CH1	10	4	STR.	50- 2
CH2	10	4	STR.	14- 7
CH3	10	4	STR.	20- 0
P1	20	4	BNT.	5- 2
P2	20	4	BNT.	4- 10
WV1	48	5	BNT.	8- 8
WV2	37	4	BNT.	12- 0
WV3	8	4	STR.	11- 4
WV4	8	5	STR.	11- 4
WV5	8	4	STR.	10- 8
WV6	8	5	STR.	10- 8
WV7	8	4	STR.	10- 0
WV8	6	5	STR.	10- 0
WV9	2	5	STR.	8- 11
WV10	10	4	STR.	10- 10
WV11	10	5	STR.	10- 10
WV12	10	4	STR.	10- 2
WV13	10	5	STR.	10- 2
WV14	10	4	STR.	9- 5
WV15	8	5	STR.	9- 5
WV16	2	5	STR.	8- 4
WH1	20	4	STR.	16- 6
WH2	2	4	STR.	10- 11
WH3	2	4	STR.	5- 3
WH4	18	4	STR.	19- 8
WH5	2	4	STR.	13- 2
WH6	2	4	STR.	6- 4
L	6	4	BNT.	6- 0
U	4	4	BNT.	5- 6
A	18	8	STR.	3'- 8

GENERAL NOTES

All construction and materials shall be in accordance with the Current Oklahoma Standard Specifications and Special Provisions included in the Proposal.

For details of 16" Sq. R.C. Piling see Std. P-1-10 skt. No. 259D

For Piling Notes see Sheet No. 206

For details of Guardrail Connection and Reinforcing at connection (L & U) see Std. PTR-1-14 skt. No. 259C

QUANTITIES ONE ABUT.

Item	Unit	Total Abut. #1 Rt.	Total Abut. #2 Lt.
Class "A" Concrete	C.Y.	65.2	65.6
Reinforcing Steel	Lb.	8,060	8,060
Substr. Excav. Com.	C.Y.	110.0	110.0
16" Sq. R.C. Piling	L.F.	540.0	540.0
Test Piles	ea.	1	1

WALNUT CREEK

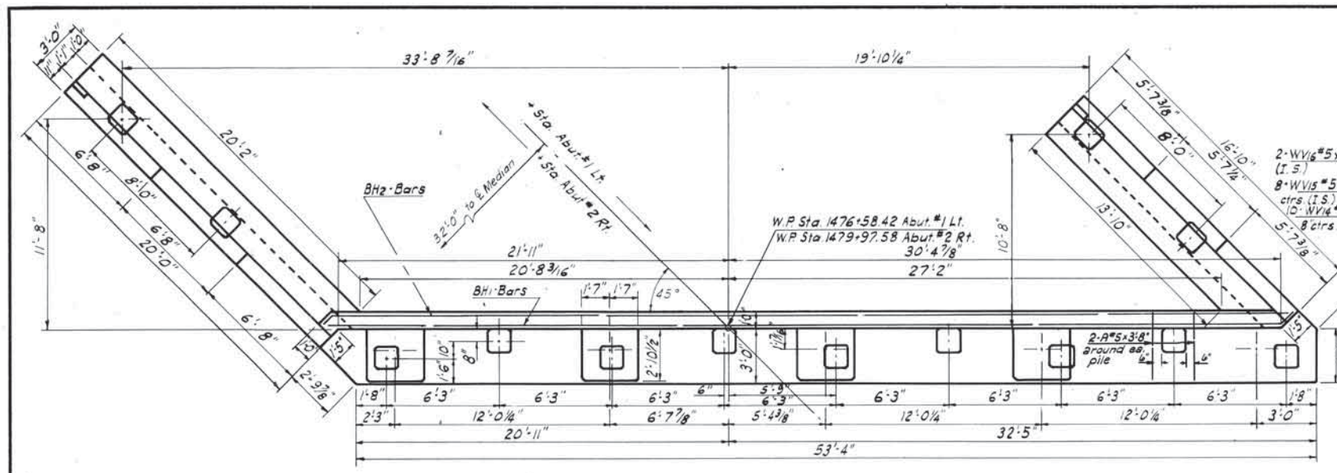
Design		
Drawn	J.F.	9-66
Checked	T.W.	9-66
Approved		
Squad	Watts	

DETAIL OF ABUT. NO. 1 RT. & NO. 2 LT.
℄ STA. 1478+60.00 LT. STR.
℄ STA. 1477+96.00 RT. STR.

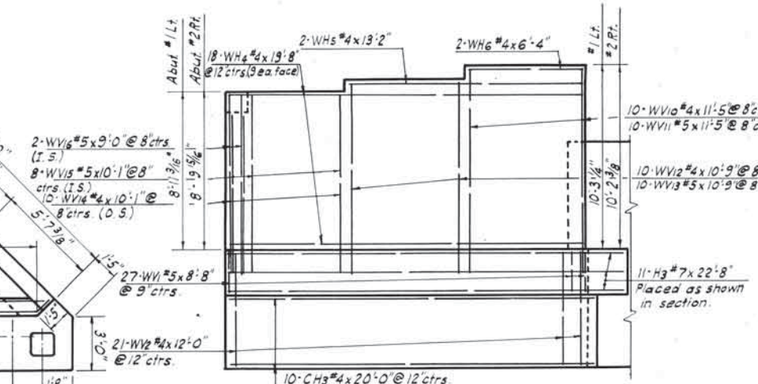
F.A. Project No. I-35-2(12) Sheet No. 205

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA I-35-2(12)		206	

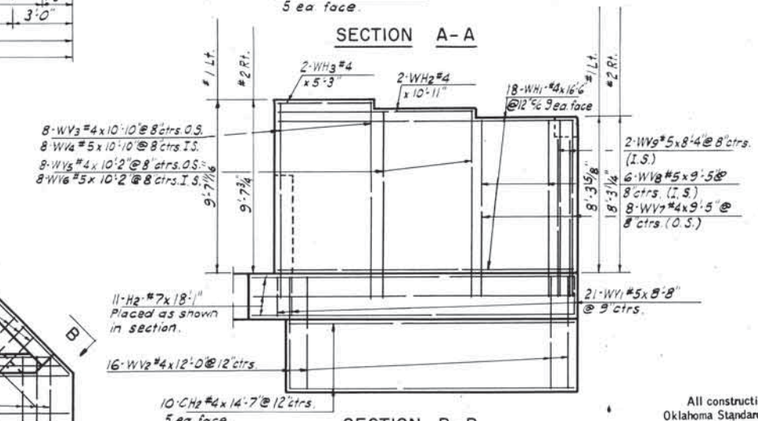
REVISIONS	
DESCRIPTION	DATE
Revised Reinf around piling	4-25-67



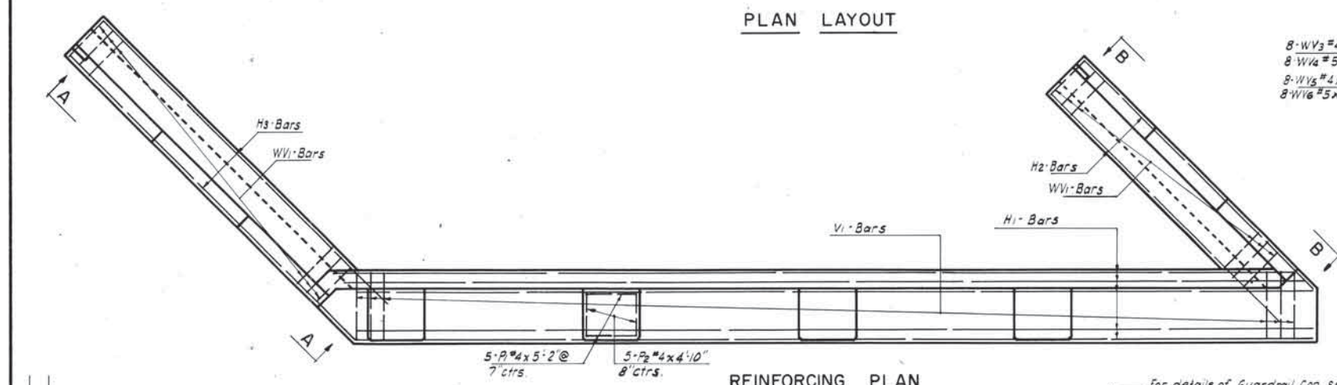
PLAN LAYOUT



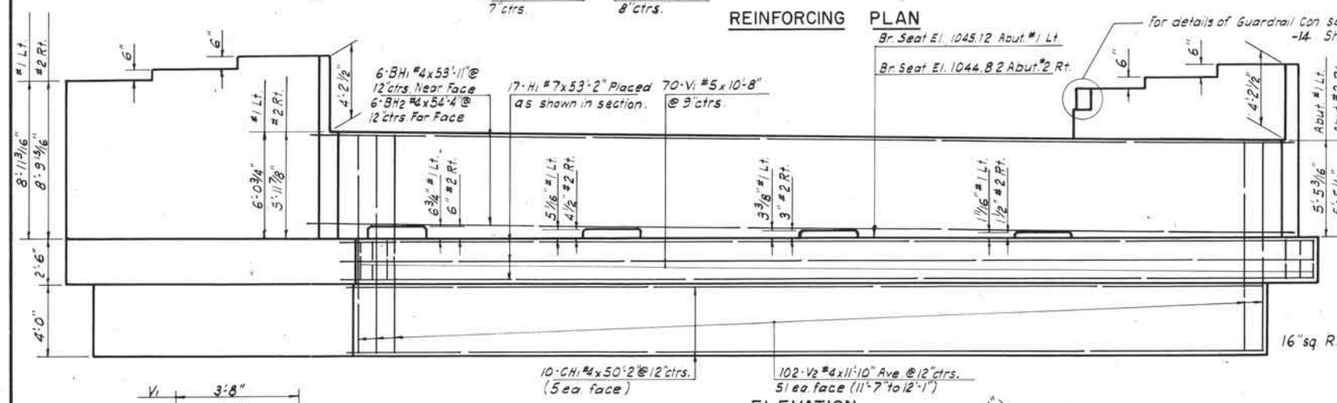
SECTION A-A



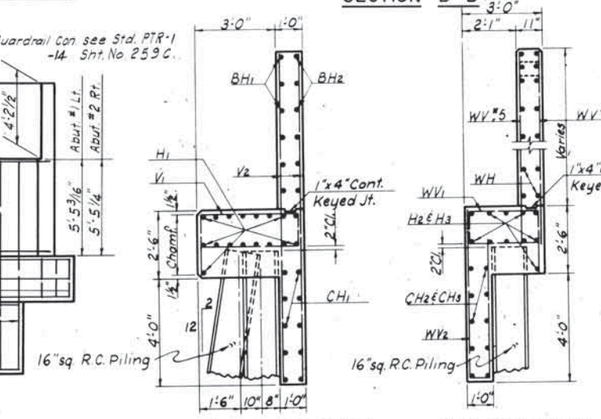
SECTION B-B



REINFORCING PLAN

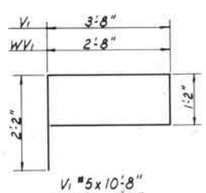


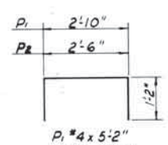
ELEVATION

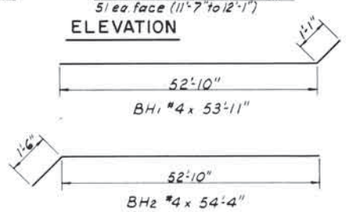


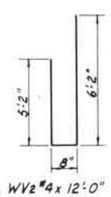
SECTION THRU ABUT.

SEC. THRU WING









BAR LIST-ABUT. 1LT.2 RT.
* AVE. LENGTH

MARK	NO.	SIZE	FORM	LENGTH
BH1	6	4	BNT.	53- 11
BH2	6	4	BNT.	54- 4
H1	17	7	STR.	53- 2
H2	11	7	STR.	18- 1
H3	11	7	STR.	22- 8
V1	70	5	BNT.	10- 8
V2	102	4	STR.	11- 10*
CH1	10	4	STR.	50- 2
P1	20	4	BNT.	5- 2
P2	20	4	BNT.	4- 10
WV1	48	5	BNT.	8- 8
CH2	10	4	STR.	14- 7
CH3	10	4	STR.	20- 0
WV2	37	4	BNT.	12- 0
WH1	18	4	STR.	16- 6
WH2	2	4	STR.	10- 11
WH3	2	4	STR.	5- 3
WH4	18	4	STR.	19- 8
WH5	2	4	STR.	13- 2
WH6	2	4	STR.	6- 4
WV3	8	4	STR.	10- 10
WV4	8	5	STR.	10- 10
WV5	8	4	STR.	10- 2
WV6	8	5	STR.	10- 2
WV7	8	4	STR.	9- 5
WV8	6	5	STR.	9- 5
WV9	2	5	STR.	8- 4
WV10	10	4	STR.	11- 5
WV11	10	5	STR.	11- 5
WV12	10	4	STR.	10- 9
WV13	10	5	STR.	10- 9
WV14	10	4	STR.	10- 1
WV15	8	5	STR.	10- 1
WV16	2	5	STR.	9- 0
L	6	4	BNT.	6- 0
U	4	4	BNT.	5- 6
A	18	5	STR.	3- 8

GENERAL NOTES

All construction and materials shall be in accordance with the Current Oklahoma Standard Specifications and Special Provisions included in the Proposal.

For details of 16" Sq. R.C. Piling see Std. P-1-10 sht. #259 D.

For Excavation Diagram see sheet no. 205.

For details of Guardrail Connection and reinforcing at connection (L & U) see Std. PTR-1-14 sht. #259 C.

CONCRETE PILE NOTES

Test Piles: If the minimum bearing capacity is not obtained at the planned depth of 45', driving shall be stopped for at least 12 hours. After 12 hours, driving shall be re-started and readings carefully taken for the remaining length of the pile. The pile shall be driven to grade or practical refusal. If the required bearing is not obtained at plan grade, the Bridge Division shall be contacted for further driving instructions.

All Abutment Piling shall be driven through the compacted fill. All piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 tons at Abutments and 60 tons at the Piers at or below grade.

In driving the regular piling, if the minimum bearing capacity is not being obtained at one foot above grade, driving shall be stopped for at least 12 hours. Driving shall then be resumed and bearing capacity determined as specified for Test Piles. If minimum bearing capacity is obtained by this method, drive all piles in the bent or abutment to grade and show the bearing capacity as determined above for all piles.

It is intended that permanent concrete pile shall be driven to the approved length as determined by the test pile data. Cut-offs of more than two feet in length shall not be made unless approved by the Bridge Division.

Additional length pilot holes and/or jetting may be needed to obtain the required penetration.

Note: 2" I.D. anchor bolt holes 1'-6" deep may be placed at all shoe locations. Contractor may use a thin wall steel tube and leave in place. After shoes are set in place, holes shall be filled with melted sulphur.

QUANTITIES ONE ABUT.

Item	Unit	Total Abut. #1 Lt.	Total Abut. #2 Rt.
Class "A" Concrete	C.Y.	65.7	66.3
Reinforcing Steel	Lb.	8,050	8,050
Substr. Excav. Com.	C.Y.	110.0	110.0
16" Sq. R.C. Piling	L.F.	585.0	585.0

WALNUT CREEK

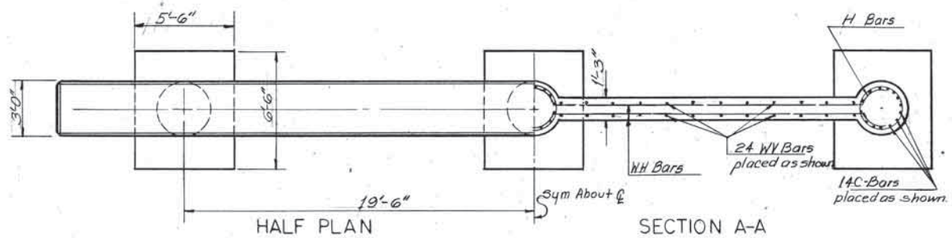
Design		
Drawn	R.B.R.	9-66
Checked	J.F.	9-66
Approved		
Squad	Watts	

DETAIL OF ABUT. NO. 1 LT. & NO. 2 RT.
℄ STA. 1478+60.00 LT. STR.
℄ STA. 1477+96.00 RT. STR.

Project No. I-35-2(12) Sheet No. 206

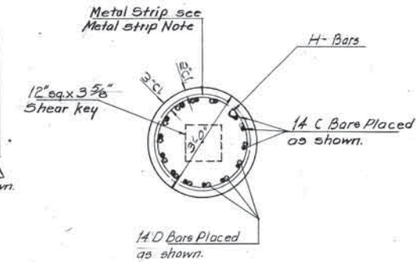
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA I-35-2(12)		209	

REVISIONS	
DESCRIPTION	DATE
Rev metal strip & BH1 & WH1 Bars	4-67

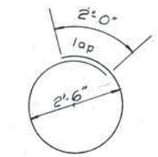


HALF PLAN

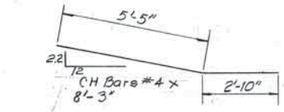
SECTION A-A

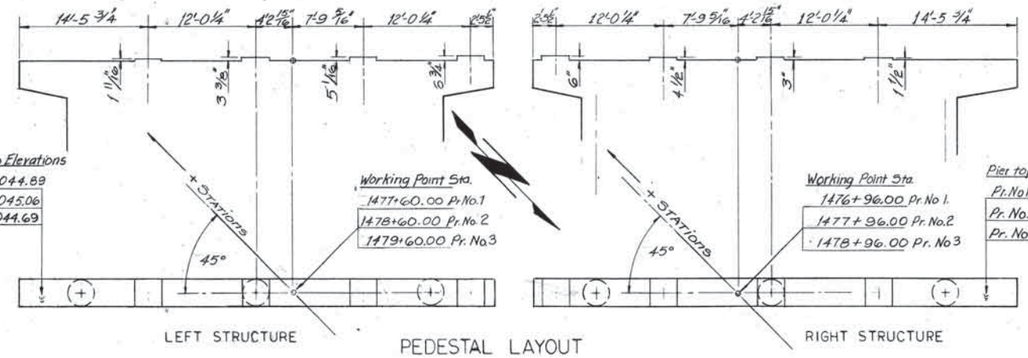


SECTION B-B



H Bars #4 x 9'-6"



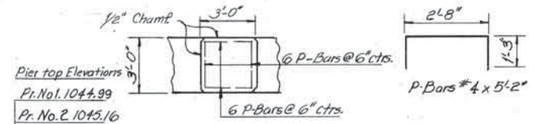


LEFT STRUCTURE

PEDESTAL LAYOUT

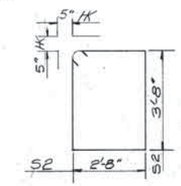
RIGHT STRUCTURE

Note; Pedestals less than 2" in height Require no reinforcing.

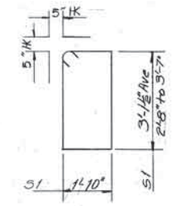


Pedestal Detail

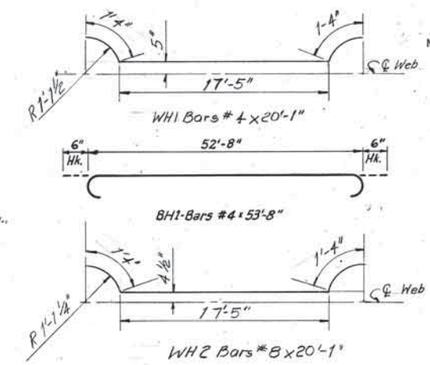
P-Bars #4 x 5'-2"



S2 Bars #4 x 13'-6"



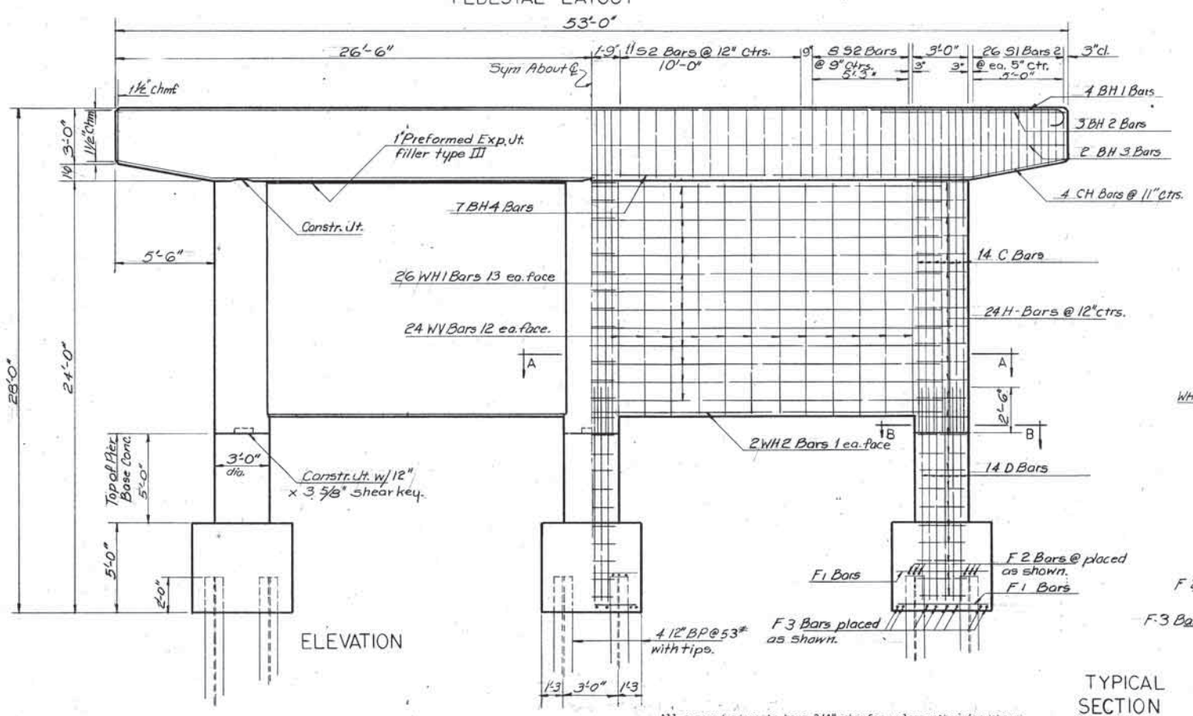
S1 Bars #4 x 10'-9" Ave 9'-10" to 11'-8"



Note: All bar bend dimensions are out to out.

BAR LIST-1 PR (TYP)

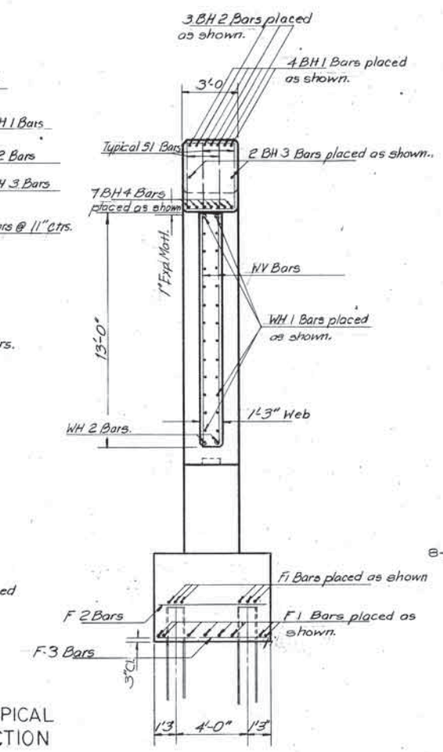
MARK	NO.	SIZE	FORM	* AVE. LENGTH LENGTH
BH1	4	11	BNT.	59- 8
BH2	6	11	STR.	10- 0
BH3	2	4	STR.	52- 8
BH4	7	10	STR.	41- 4
CH	8	4	BNT.	8- 3
S1	52	4	BNT.	10- 9
S2	38	4	BNT.	13- 6
C	42	9	STR.	17- 10
H	72	4	BNT.	9- 10
D	42	11	STR.	12- 0
WV	48	4	BNT.	13- 7
WH1	52	4	BNT.	20- 1
WH2	4	8	BNT.	20- 1
F1	42	4	STR.	5- 0
F2	18	4	STR.	6- 0
F3	24	6	STR.	6- 0
P	32	4	BNT.	5- 2



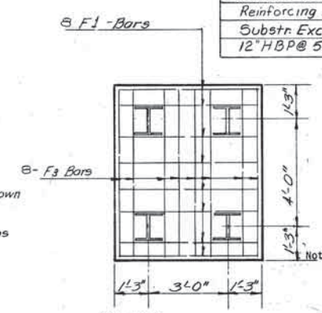
ELEVATION

All exposed edges to have 3/4" chamfer unless otherwise shown or noted. All chamfer strips shall be sized lumber.

All reinforcing steel shall have 2" clearance unless otherwise shown or noted.



TYPICAL SECTION



PILING DIAGRAM

Note: Reinforcing Steel in footings shall be supported on concrete blocks or Metal Chairs.

QUANTITIES		LEFT STRU.			RIGHT STRU.		
ITEM	UNIT	Pr. No.1	Pr. No.2	Pr. No.3	Pr. No.1	Pr. No.2	Pr. No.3
Class "A" Conc.	C.Y.	54.2	54.2	54.2	54.2	54.2	54.2
Class "A" Conc. Pr. Base	C.Y.	23.8	23.8	23.8	23.8	23.8	23.8
Reinforcing Steel	Lbs.	11,100	11,100	11,100	11,100	11,100	11,100
Substr. Excav. Com.	C.Y.	170.0	110.0	110.0	110.0	110.0	120.0
12" HBP @ 53# w/ Tips	L.F.	480.0	468.0	456.0	480.0	480.0	480.0

WALNUT CREEK

Design		
Drawn	DJH	9/1/66
Checked	J.F.	9/66
Approved		
Squad	Watts	

DETAILS OF PIERS 1 2 + 3

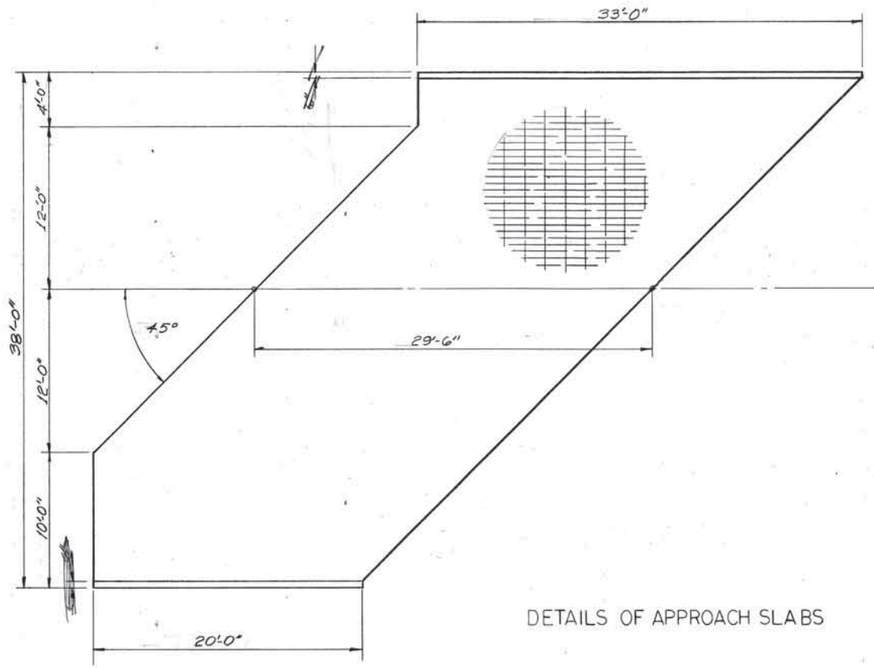
℄ STA. 1478+60.00 LT. STRU.

℄ STA. 1477+96.00 RT. STRU.

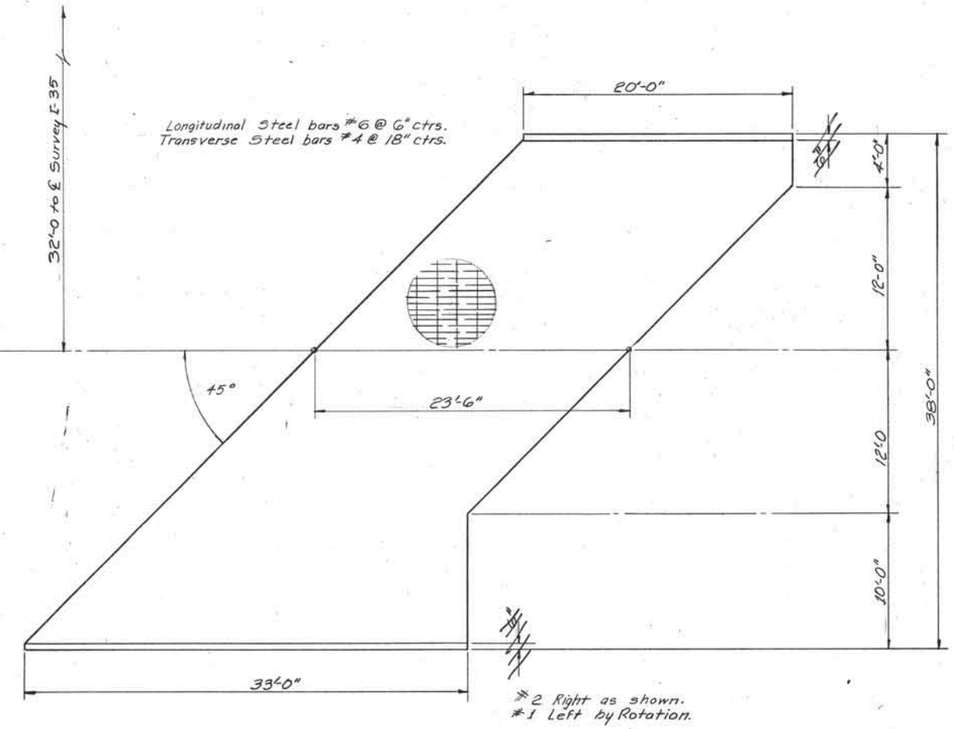
F.A. Project No. I-35-2(12) Sheet No. 209

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA. I-35-2(12)		211	

REVISIONS	
DESCRIPTION	DATE
(1) Rev. Curb & Cl. Rdy dim.	4/28/67



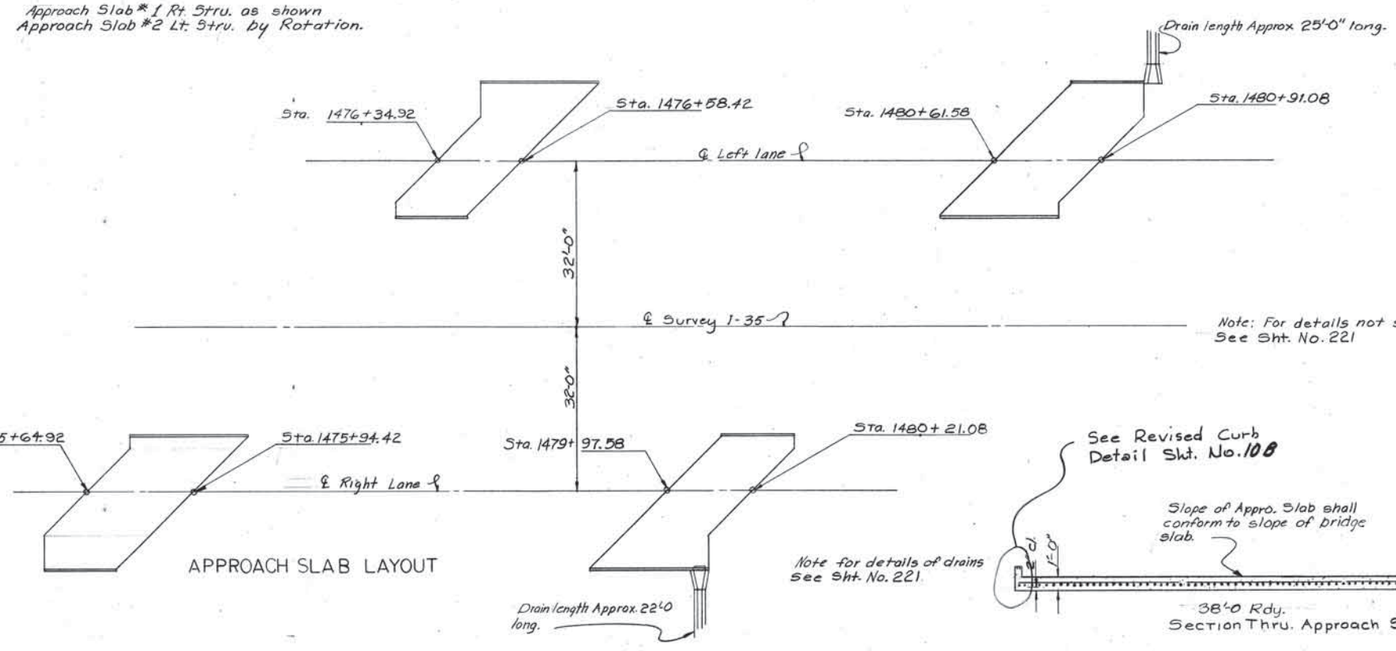
DETAILS OF APPROACH SLABS



#2 Right as shown.
#1 Left by Rotation.

Approach Slab #1 Rt. Stru. as shown
Approach Slab #2 Lt. Stru. by Rotation.

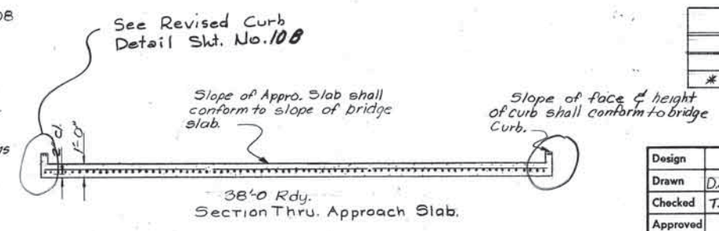
Actual length and location of slope drains shall be determined in field by Resident Engineer.



Note: For details not shown See Sht. No. 221

APPROACH SLAB LAYOUT

Note for details of drains See Sht. No. 221.



Section Thru. Approach Slab.

Note: Cost of all items in Concrete Slope Drains including wire mesh shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All materials and work shall be in accordance with that part of Section 610 covering Concrete Side walks.

* Note: Cost of Reinforcing Steel in Approach Slabs shall be included in the Unit Price Bid per Sq. Yd. for Approach Slabs.
Cost of curbs on Approach Slabs shall be included in the price bid per Sq. Yd. for Approach Slabs.

Note: When Bridge Approach Slabs are to be constructed in Bridge Contract they shall be constructed using Class "AA(AE)" Concrete Materials.
When Bridge Approach Slabs are to be constructed in Roadway Contract they shall be constructed with either Class "A (AE)" Concrete Materials or P.C. Concrete Paving Materials, including an Air-Entraining Admixture.

QUANTITIES — ONE APPROACH SLAB

ITEM	Sq Yd.	1 RT. 2 LT.	1 LT. 2 RT.
Approach Slab	S.Y.	119.9	103.9
* Reinforcing Steel.	Lbs.	3,730	3,230

WALNUT CREEK

Design		
Drawn	D.J.H	9-66
Checked	T.W.	9-66
Approved		
Squad	Watts	

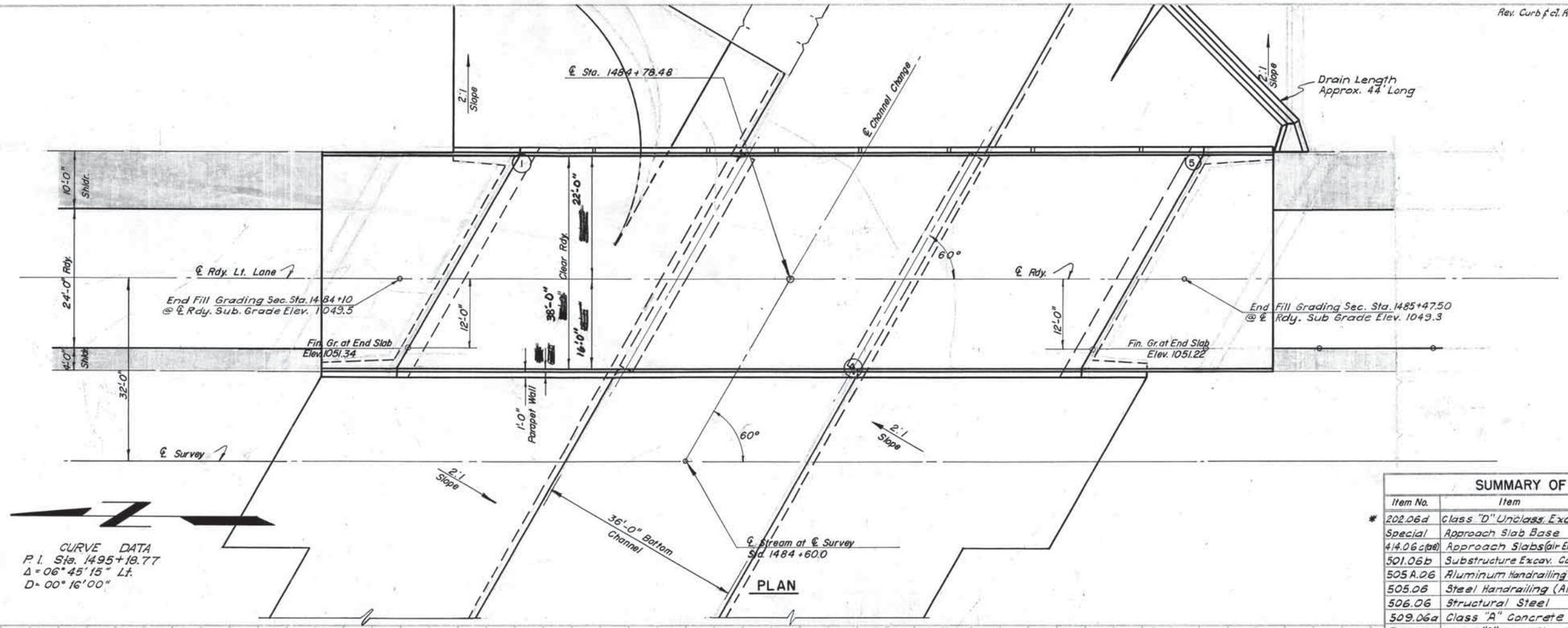
DETAILS OF APPROACH SLAB
℄ STA. 1478+60.00 LT. STRU.
℄ STA. 1477+96.00 RT. STRU.
F.A. PROJ. NO. I-35-2 (12)

Project No. I-35-2 (12) Sheet No. 211

Rev. Curb & cl. Rdy. dim 4/28/67

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	TOTAL STAS.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		212	

Rev. Conc. Quants. R.B.R. 1-29-68



PLAN

CURVE DATA
P.I. Sta. 1495+19.77
Δ = 06° 45' 15" Lt.
D = 00° 16' 00"

DESIGN DATA

fc Class "A" Conc.	1,000 psi
fc Class "AA(AE)" Conc.	1,200 psi
fs Reinf. Steel	20,000 psi
fs Structural Steel	20,000 psi

Loading H20-S16 & PPM 20-4

MAXIMUM FOUNDATION PRESSURES

Abuts.	23.6 T/pile
Piers	47.0 T/pile
D.A. = 1235 Ac.+ Walnut Creek O'Flow	
Area Under H.W.	880 □'

SUMMARY OF QUANTITIES

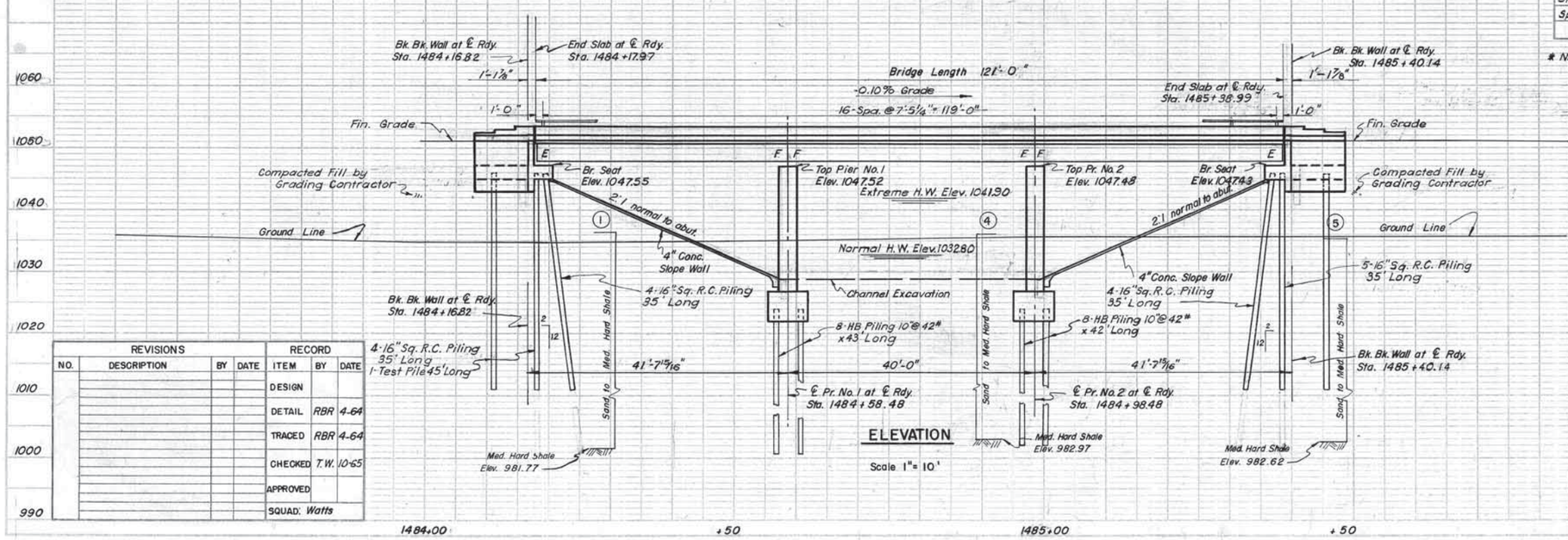
	Item No.	Item	Unit	Abuts.	Piers	Superstru.	Bridge Total	Rdy. Total
*	202.06d	Class "D" Unclass. Excav.	C.Y.					200
	Special	Approach Slab Base	Sq. Yd.					195.0
	414.06c(pe)	Approach Slabs (air Entr. Agent)	Sq. Yd.					195.0
	501.06b	Substructure Excav. Common	C.Y.	180.0	32.0		212.0	
	505A.06	Aluminum Handrailing (Alt. #1)	L.F.			241.5	241.5	
	505.06	Steel Handrailing (Alt. # 2)	L.F.			241.5	241.5	
	506.06	Structural Steel	Lb.			81,570.	81,570	
	509.06a	Class "A" Concrete	C.Y.	81.0	65.2		146.2	
	509.06a	Class "A" Conc. Pier Bases	C.Y.		31.8		31.8	
	509.06b(ae)	Class "AA(AE)" Concrete	C.Y.			1230	1230	
	511.06	Reinforcing Steel	Lb.	10,980	11,040	34,020	56,040	
	514.06a	Test Piles	Each	1			1	
	514.06	16" R.C. Piling	L.F.	595			595	
	514.06e	10" H.B. @ 42# Piling	L.F.		680		680	
	514.06f.	Steel Piling Splices	Each		15		15	
	Special	4" Conc. Slope Wall	Sq. Yd.					844.6

* Note: This Item is for Shaping up & Cleaning up the fills around the Abutments & Approach Slabs. (Non Participating)

For General Note see Gen. Elev. Sht. No. 213.

B.M. 80d Spike in 48" Cottonwood 172' Rt. Sta. 1481+54 Elev. 1036.92

Location of Curb Drains as shown thus (11) (East Curb only)



ELEVATION

Scale 1" = 10'

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	RBR	4-64
				TRACED	RBR	4-64
				CHECKED	T.W.	10-65
				APPROVED		
				SQUAD: Watts		

SHEET INDEX

For details of Handrailing see Std. PTR-1-16 sht. # 259C
For details of Fixed & Exp. Devices see Std. I.S.A.J.-7 Sht. # 259A
For details of Guardrail Connection see sht. No. 177.
For details of Reinf. of Piling see Std. P-1-10 sht. # 259 D
For details of Superstructure see sheet No. 214.
For details of Slab Reinforcing see sheet No. 215.
For details of Abutment No. 1 see sheet No. 218
For details of Abutment No. 2 see sheet No. 219
For details of Piers see sheet No. 220.
For details of Approach Slabs see sheet No. 221.
For details of Slope Walls see sheet No. 222.

STRU. NO. 40 LT. STRU. WALNUT CREEK O. FLOW

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

ALTERNATE NO. 1
GEN. ELEV., PLAN & SUMM. OF QUANT.
3-40' I-BM. SPANS
38' [redacted]'-0" RDY. [redacted]
℄ STA. 1484+78.48
SKEW 60° LT. FWD.
F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 212

(1) Rev. Piling Notes 4/24/67

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		213	

REV. Bent Quants. R.B.R. 1-29-68

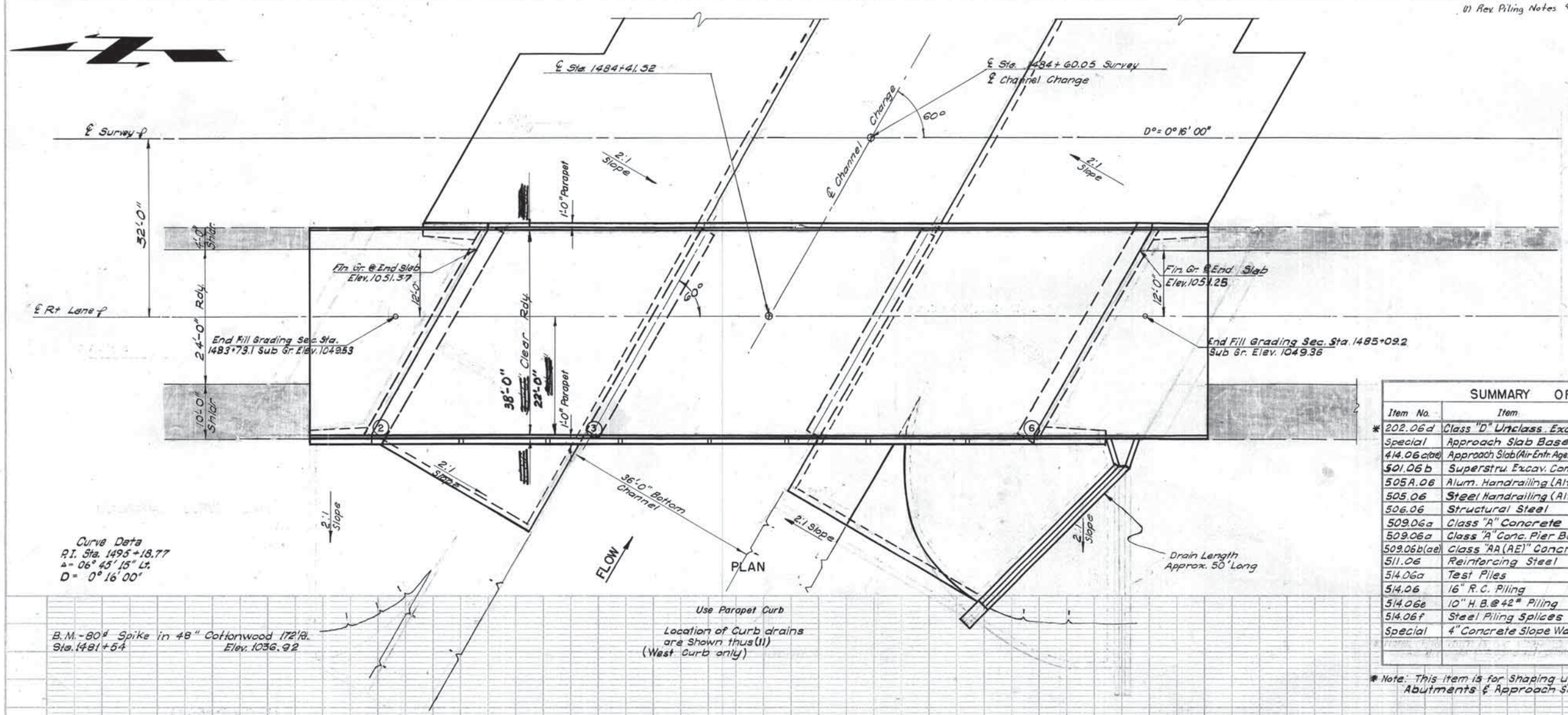
DESIGN DATA

f'c Class "A" Conc. 1,000 psi
f'c Class "AA (AE)" Conc. 1,200 psi
f's Reinf. Steel 20,000 psi
fs Structural Steel 20,000 psi

Loading H20-S16 and PPM 20-4

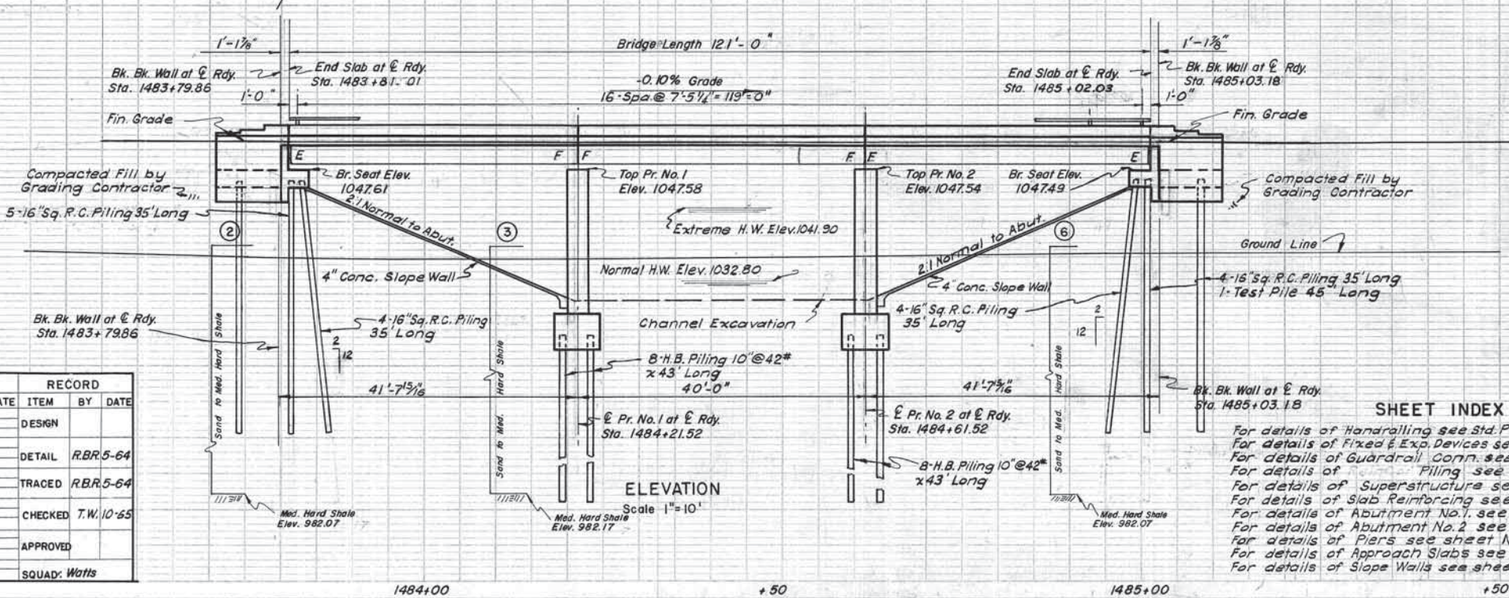
Maximum Foundation Pressure

Abuts. 23.6 T/pile
Piers 47.0 T/pile
D.A. = 1235 Ac. + Walnut Creek O'Flow
Area Under H.W. 830 □'



Item No.	Item	Unit	Abuts.	Piers.	Superstru.	Bridge Total	Rdy. Total
* 202.06d	Class "D" Unclass. Excav.	C.Y.					200
Special	Approach Slab Base	Sq. Yd.					195.0
414.06c(de)	Approach Slab (Air Entr. Agent)	Sq. Yd.					195.0
501.06b	Superstru. Excav. Common	C.Y.	180.0	32.0		212.0	
505A.06	Alum. Handrailing (Alt. #1)	L.F.			241.5	241.5	
505.06	Steel Handrailing (Alt. #2)	L.F.			241.5	241.5	
506.06	Structural Steel	Lb.			81,570	81,570	
509.06a	Class "A" Concrete	C.Y.	81.0	65.2		146.2	
509.06a	Class "A" Conc. Pier Bases	C.Y.		31.8		31.8	
509.06b(ae)	Class "AA (AE)" Concrete	C.Y.			129.0	129.0	
511.06	Reinforcing Steel	Lb.	10,980	11,040	34,020	56,040	
514.06a	Test Piles	Each	1			1	
514.06	16" R.C. Piling	L.F.	595			595	
514.06e	10" H.B. @ 42# Piling	L.F.		688		688	
514.06f	Steel Piling Splices	Each		15		15	
Special	4" Concrete Slope Walls	Sq. Yd.					742.5

* Note: This item is for Shaping up & Cleaning up the fills around the Abutments & Approach Slabs. (Non Participating)



ELEVATION
Scale 1" = 10'

GENERAL NOTES:

All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.

Note: For concrete piling & test pile notes see sheet no. 206.

All exposed edges shall have ¾" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

STEEL PILING NOTES

Steel Piling shall be driven to point bearing on solid foundation material at the approximate elevation shown on the plans.

Piling at piers shall have tip reinforcing as shown on Std. P-1.

No splices will be allowed on Steel Piling for length of up to 60' in length.

When foreign piling are used, Contractor shall furnish enough extra length out of each heat for testing purposes.

All steel Piling shall be driven to practical refusal (1/4" in ten blows) and no cut-offs of more than two feet will be allowed unless approved by the Bridge Engineer.

SHEET INDEX

For details of Handrailing see Std. PTR-1-14 sht. # 259 C
For details of Fixed & Exp. Devices see Std. J.S.A.J.-7 Sht. # 259 A
For details of Guardrail Conn. see sheet No. 177.
For details of Piling see Std. P-1-10 sht. # 259 D
For details of Superstructure see sheet No. 214.
For details of Slab Reinforcing see sheet No. 215.
For details of Abutment No. 1 see sheet No. 216.
For details of Abutment No. 2 see sheet No. 217.
For details of Piers see sheet No. 220.
For details of Approach Slabs see sheet No. 221.
For details of Slope Walls see sheet No. 222.

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	R.B.R.	5-64
				TRACED	R.B.R.	5-64
				CHECKED	T.W.	10-65
				APPROVED		
				SQUAD: Watts		

STRU. NO. 41 Rt. Stru. Walnut Creek Over-Flow

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

ALTERNATE NO. 1
GEN. ELEV. PLAN & SUMM. OF QUANT'S
3-40' I BM. SPANS
38' ~~37'-0"~~ RDY. ~~[illegible]~~
℄-STA. 1484+41.52 RT. LANE
SKEWED 60° LT. F. W. D.
F.A. PROJ. NO. I-35-2(12)

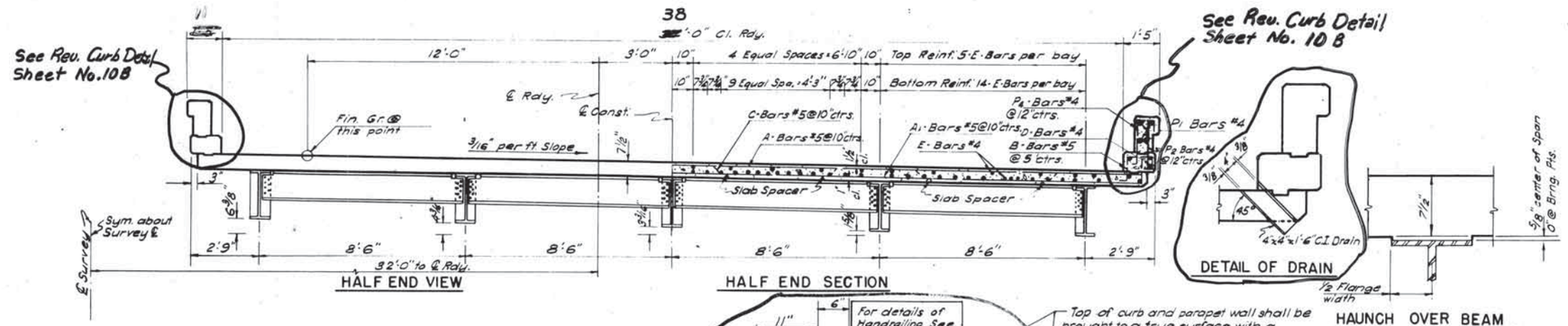
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	214	

Floor: 7 1/8" Uniform thickness 37'-0" Cl. Rdy., Class "AA(AE)" Concrete, Max. Agg. 1 1/2" ϕ Current Okla. Std. Specs. Top of Curb shall be brought to a true surface with a wooden float. Top and sides of curb are to have a carborundum finish. See Detail this sheet. Edges of curb are to have a 3/4" chamfer.

Reinf: Bars "A" #5@10" Ctrs. across the rdy., 1 1/2" clearance below top of slab 38'-8" long.
Bars "A1" #5@10" Ctrs. across the rdy. 1" clearance above bottom of Slab, bent as shown.
Bars "B" #5@5" Ctrs. in curbs, bent as shown.
Bars "C" #5@10" Ctrs. across the rdy., top and bottom of slab, bent as shown.
Bars "D" #4-3 in each curb.
Bars "E" #4-84 parallel to ℄ Roadway, placed as shown.
Bars "P1" #4-4 in parapet wall, placed as shown.
Bars "P2" #4@12" Ctrs. in parapet walls, placed as shown.
Reinf. Steel in the floor shall begin and end with A & A1 Bars, a max. of 2" from end of Conc. panels.
All reinf. steel in bottom of slab shall be supported on slab spacers shown. Reinf. steel in top of slab shall be supported on approved metal-highchairs at Max. spacing of 4'-0" Ctrs. in both directions.
Bars D & E shall terminate 1" from face of Conc.
Bars P4 #4@12" ctrs in Parapet Wall placed as shown.

Loading H20-S16, P.R.M. 20-4
f'c Class "AA(AE)" Conc. 4,200 psi.
f'c Class "A" Conc. 1,000 psi
fs Steel 20,000 psi

Max. Spacing 4'-0" c/c
SLAB SPACER

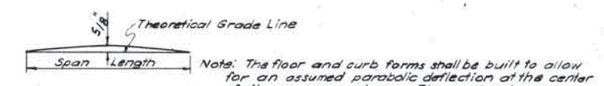


HALF END VIEW

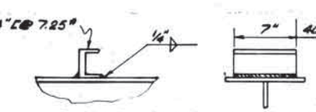
HALF END SECTION

DETAIL OF DRAIN

HAUNCH OVER BEAM



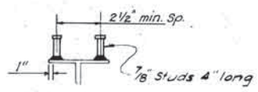
Note: The floor and curb forms shall be built to allow for an assumed parabolic deflection at the center of the span as shown. The contractor may furnish the beams cambered the amount of deflection or form haunches as shown. Additional concrete in the haunches to provide for DL deflection has been added to the pay quantities of Class "AA(AE)" Conc. Deflection shall be measured from the theoretical grade line.



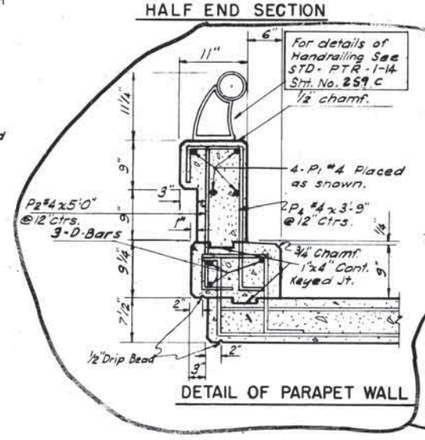
CHANNEL SHEAR CONNECTOR

Note: Weight of Shear Conn. is based on 4" C and is included in the Structural Steel Quantity Shown.

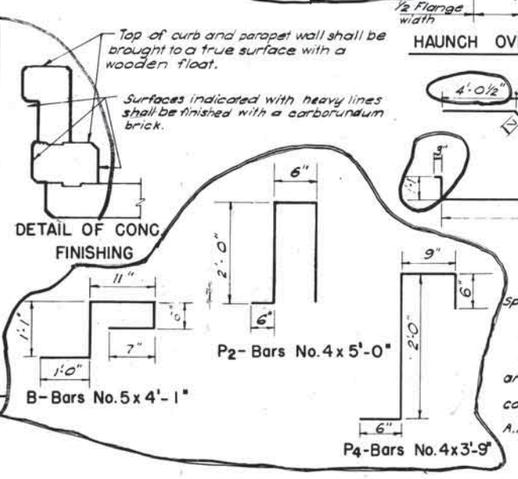
Contractor may use stud shear connectors as follows:
1" of 4" C @ 7.25# = .56 of a 3/4" Stud
1" of 4" C @ 7.25# = .41 of a 7/8" Stud



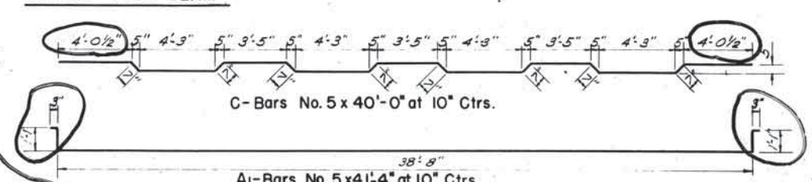
ALT. SHEAR CONNECTOR



DETAIL OF PARAPET WALL

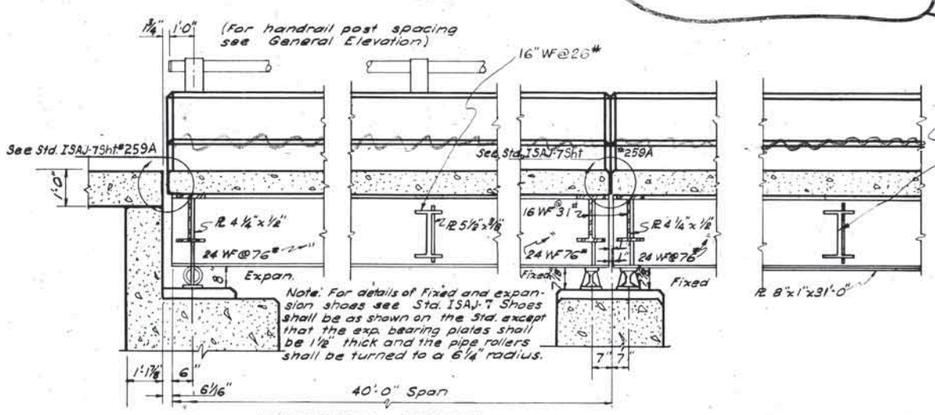


DETAIL OF CONC. FINISHING

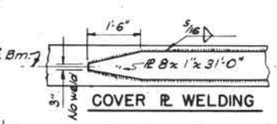


GENERAL NOTE

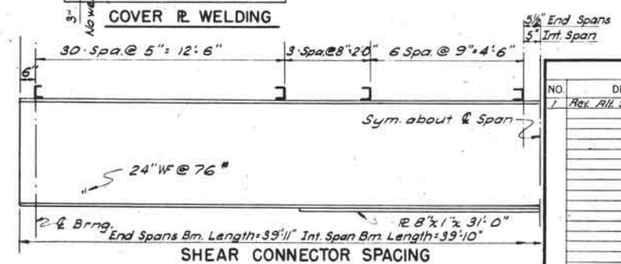
All construction shall be in accordance with the current Oklahoma Standard Specifications and Special Provisions.
All Reinf. Steel bars shall conform to A.S.T.M. Specifications A-305-53.
All Bar Bend dimensions are out to out.
All exposed concrete corners shall have a 3/4" chamfer unless otherwise noted.
All chamfer strips shall be sized lumber.
Transverse Reinf. Steel in floor Slab shall begin and end with A and A1 Bars and these bars shall be a maximum of 2" from the ends of the concrete panels.
High strength bolts shall be used for field connections.
Quantities for Reinforcing Steel computed on basis of weight approved by the A.F.S.H.O. & C.R.S.I.



LONGITUDINAL SECTION



COVER PL WELDING



SHEAR CONNECTOR SPACING

QUANTITIES

Item	Unit	Total
Class "AA(AE)" Concrete	Cu. Yd.	129.0
Reinforcing Steel	Lbs.	34,020.
Structural Steel	Lbs.	81,570.
Parapet Handrailing	Lin. Ft.	241.5

WALNUT CREEK O'FLOW

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. All Shear Conn.		4/26/67

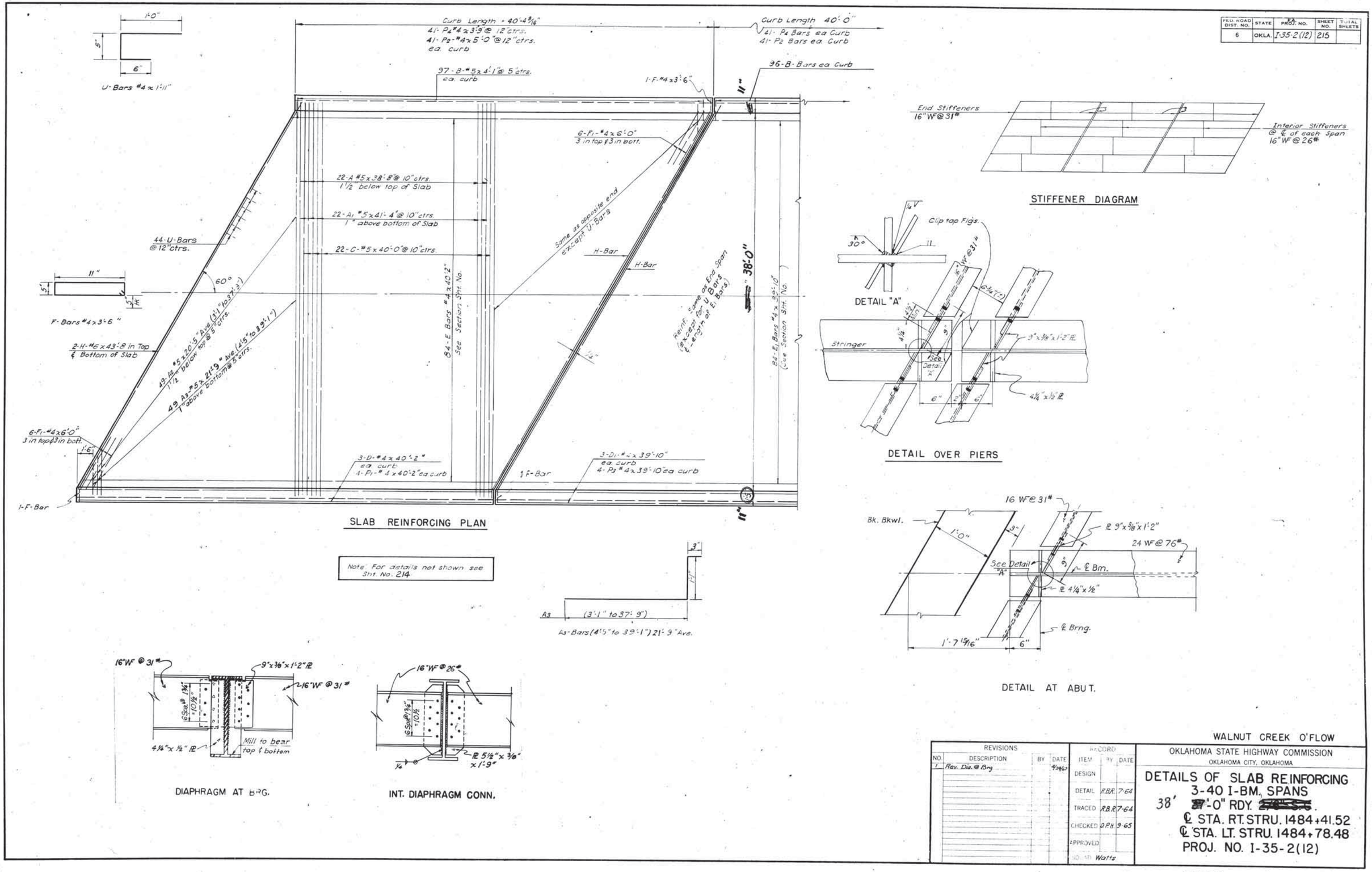
RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	10-64
TRACED	R.B.R.	10-64
CHECKED	D.P.H.	9-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF SUPERSTRUCTURE
3-40'-0" I-BM. SPANS
38' ~~37'~~ RDY. ~~8-2'6" CURBS~~
F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 214

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	215	



SLAB REINFORCING PLAN

STIFFENER DIAGRAM

DETAIL OVER PIERS

Note: For details not shown see Sht. No. 214

DETAIL AT ABUT.

DIAPHRAGM AT BRG.

INT. DIAPHRAGM CONN.

WALNUT CREEK O'FLOW

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Dia. @ Brg		4/24/67

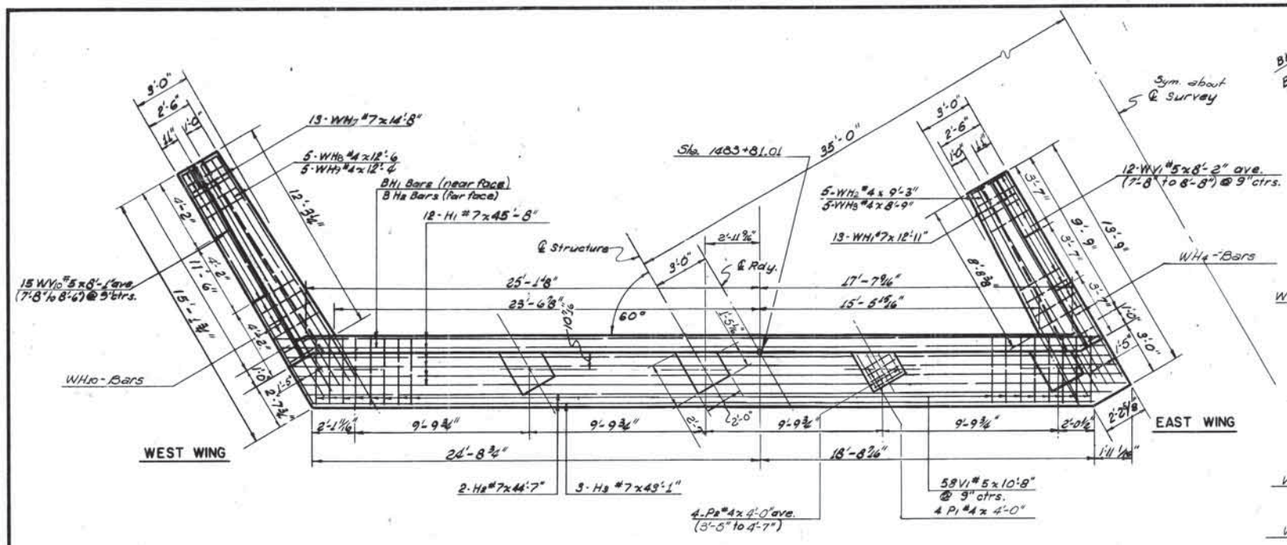
RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	7-64
TRACED	R.B.R.	7-64
CHECKED	D.P.H.	9-65
APPROVED		
SQUAD	Watts	

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

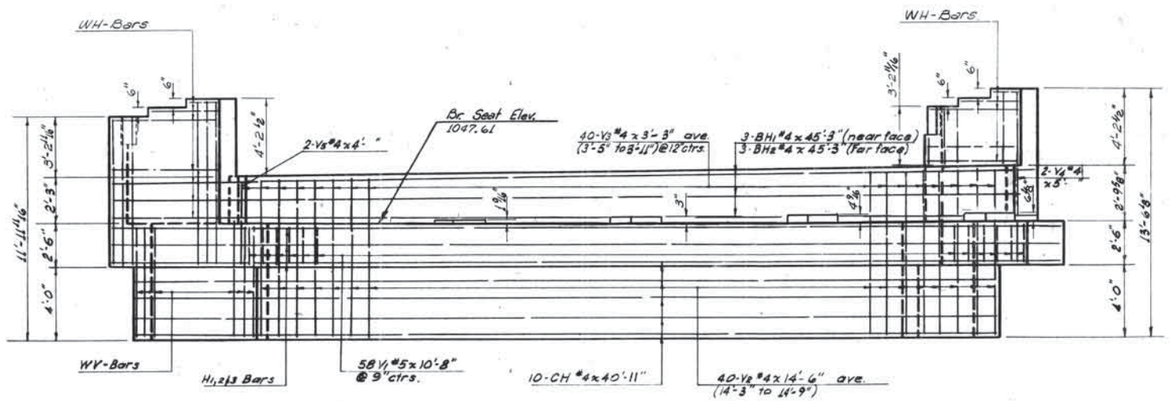
DETAILS OF SLAB REINFORCING
3-40 I-BM. SPANS
38' ~~37~~'-0" RDY. ~~[illegible]~~.
℄ STA. RT. STRU. 1484+41.52
℄ STA. LT. STRU. 1484+78.48
PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 215

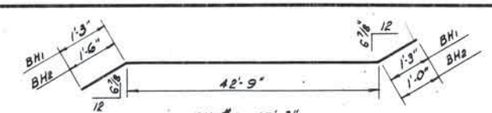
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	216	

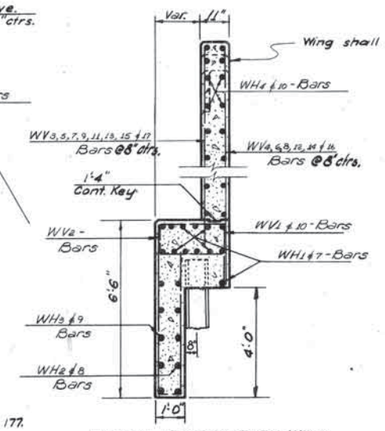


PLAN

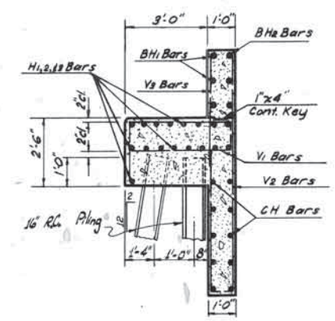


ELEVATION



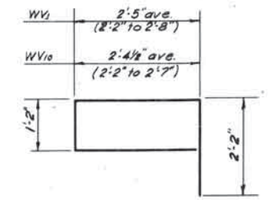


TYPICAL SECTION THRU WING

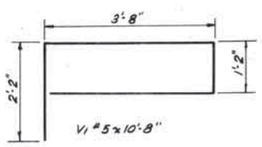


TYPICAL SECTION THRU ABUT.

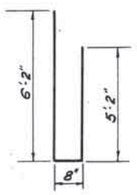
Note: For Abutment Excav. Diagram and note, see sheet no. 232.



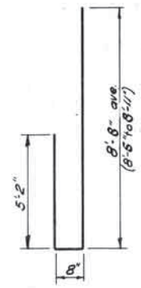
WV1 #5x8'-2" ave. (7'-8" to 8'-8")
WV10 #5x8'-1" ave. (7'-8" to 8'-6")



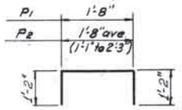
V1 #5x10'-8"



WV2 #4x12'-0"



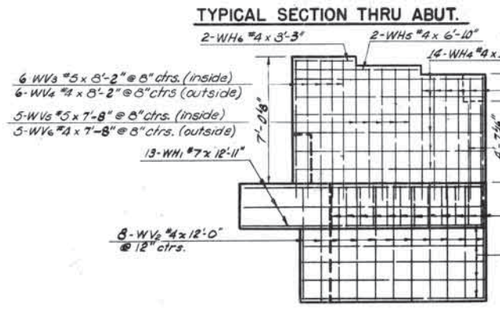
V2 #4x14'-6" ave. (14'-3" to 14'-9")



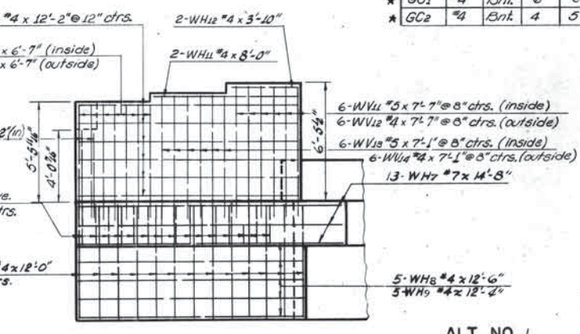
P1 #4x4'-0"
P2 #4x4'-0" ave. (3'-5" to 4'-7")

BAR LIST

Mark	Size	Form	No.	Length
H1	#7	Str.	12	45'-8"
H2	#7	Str.	2	44'-7"
H3	#7	Str.	3	43'-1"
BH1	#4	Bnt.	3	45'-3"
BH2	#4	Bnt.	3	45'-3"
CH	#4	Str.	10	40'-11"
V1	#5	Bnt.	58	10'-8"
V2	#4	Bnt.	40	14'-6" ave.
V3	#4	Str.	40	3'-8" ave.
V4	#4	Str.	2	4'-11"
V5	#4	Str.	2	4'-5"
WH1	#7	Str.	13	12'-11"
WH2	#4	Str.	5	9'-3"
WH3	#4	Str.	5	8'-9"
WH4	#4	Str.	14	10'-5"
WH5	#4	Str.	2	6'-10"
WH6	#4	Str.	2	5'-3"
WH7	#7	Str.	13	14'-8"
WH8	#4	Str.	5	12'-6"
WH9	#4	Str.	5	12'-4"
WH10	#4	Str.	12	12'-2"
WH11	#4	Str.	2	8'-0"
WH12	#4	Str.	2	5'-10"
WV1	#5	Bnt.	12	8'-8" ave.
WV2	#4	Bnt.	21	12'-0"
WV3	#5	Str.	6	8'-2"
WV4	#4	Str.	6	8'-2"
WV5	#5	Str.	5	8'-2"
WV6	#4	Str.	5	8'-2"
WV7	#5	Str.	4	7'-2"
WV8	#4	Str.	6	7'-2"
WV9	#5	Str.	2	5'-8"
WV10	#5	Bnt.	15	8'-1" ave.
WV11	#5	Str.	6	7'-7"
WV12	#4	Str.	6	7'-7"
WV13	#5	Str.	6	7'-1"
WV14	#4	Str.	6	7'-1"
WV15	#5	Str.	5	6'-7"
WV16	#4	Str.	7	6'-7"
WV17	#5	Str.	2	5'-2"
P1	#4	Bnt.	16	4'-0"
P2	#4	Bnt.	16	4'-0" ave.
A	#5	Str.	14	3'-8"
★ GC1	#4	Bnt.	6	6'-0"
★ GC2	#4	Bnt.	4	5'-6"

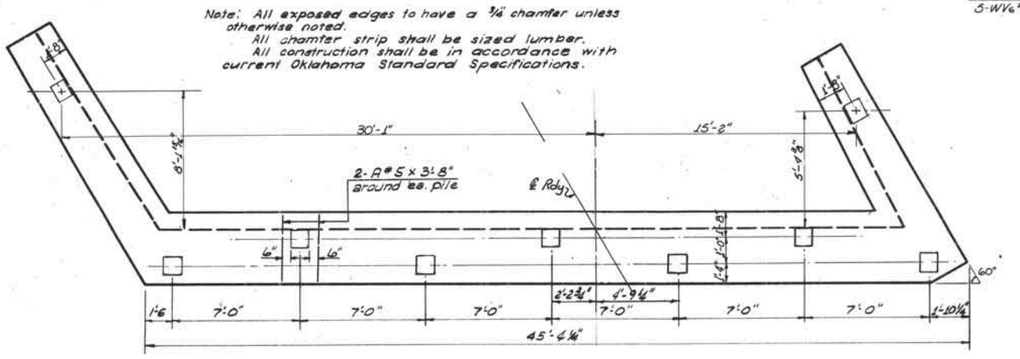


EAST WING



WEST WING

Note: All exposed edges to have a ¾" chamfer unless otherwise noted.
All chamfer strip shall be sized lumber.
All construction shall be in accordance with current Oklahoma Standard Specifications.



PILE SPACING DIAGRAM

QUANTITIES		
ITEMS	UNIT	TOTAL
Class "A" Concrete	C.Y.	40.5
Reinforcing Steel	Lbs.	5490.
Substructure Excav., Common	C.Y.	90.
16" R.C. Piling	L.F.	315

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Reinf. around piling	D.M.	4-26-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	W.H.K.	6-64
TRACED	R.B.R.	8-64
CHECKED	D.H.	10-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

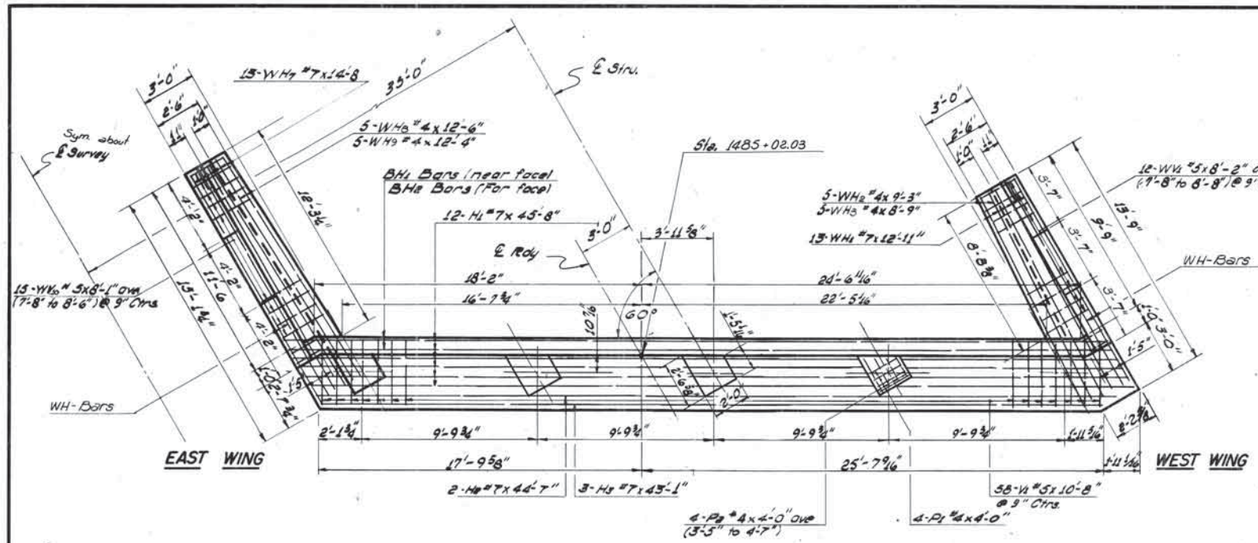
DETAIL OF ABUTMENTS
ABUT. NO. 1 RT.
℄ STA. 1484 + 41.52
F. A. PROJ. NO. I-35-2(12)

ALT. NO. 1
RT. STR. WALNUT CREEK O'FLOW.

F.A. PROJECT NO. I-35-2(12) SHEET NO. 216

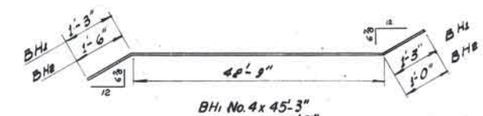
ETZGEN NO. 130 IMPERIAL

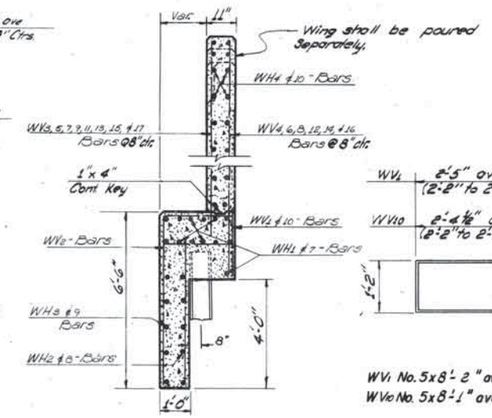
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	217	



PLAN

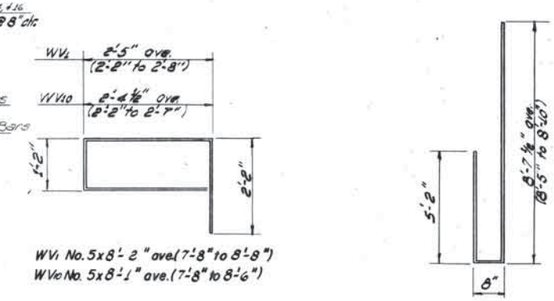
★ Note: For details of Guardrail Connection, See sheet no. 177.



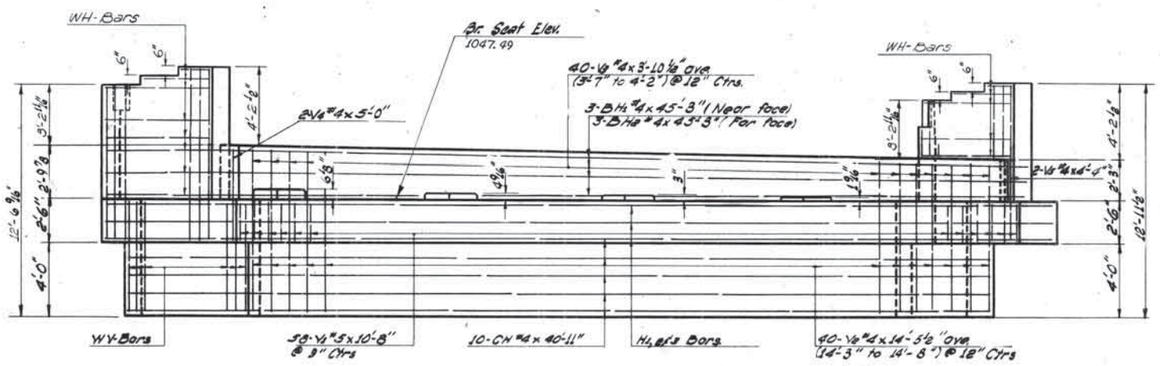


TYPICAL SECTION THRU WING

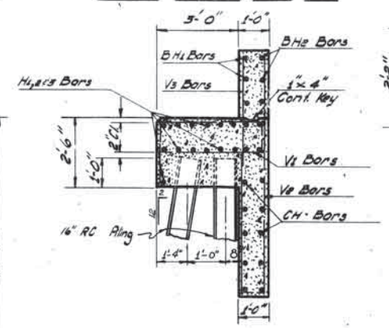
Note: For Abutment Excav. Diagram and note, see sheet no. 232.



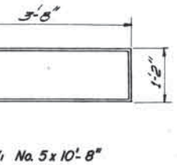
BAR — LIST				
Mark	Size	Form	No.	Length
H1	#7	Str.	12	45'-8"
H2	#7	Str.	2	44'-7"
H3	#7	Str.	3	43'-1"
BH1	#4	Bnt.	3	45'-3"
BH2	#4	Bnt.	3	45'-3"
CH	#4	Str.	10	40'-11"
V1	#5	Bnt.	58	10'-8"
V2	#4	Bnt.	40	14'-5⅛" ave.
V3	#4	Str.	40	3'-10⅛" ave.
V4	#4	Str.	2	5'-0"
V5	#4	Str.	2	4'-4"
WH1	#7	Str.	13	12'-11"
WH2	#8	Str.	5	9'-3"
WH3	#4	Str.	5	8'-9"
WH4	#4	Str.	12	10'-5"
WH5	#4	Str.	2	6'-10"
WH6	#4	Str.	2	3'-3"
WH7	#7	Str.	13	14'-8"
WH8	#4	Str.	5	12'-6"
WH9	#4	Str.	5	12'-4"
WH10	#4	Str.	14	12'-2"
WH11	#4	Str.	2	8'-0"
WH12	#4	Str.	2	8'-10"
WV1	#5	Bnt.	12	8'-2" ave
WV2	#4	Bnt.	21	12'-0"
WV3	#5	Str.	6	7'-7"
WV4	#4	Str.	6	7'-7"
WV5	#5	Str.	5	7'-1"
WV6	#4	Str.	5	7'-1"
WV7	#5	Str.	4	6'-7"
WV8	#4	Str.	6	6'-7"
WV9	#5	Str.	2	5'-2"
WV10	#5	Bnt.	15	8'-1" ave.
WV11	#5	Str.	6	8'-2"
WV12	#4	Str.	6	8'-2"
WV13	#5	Str.	6	7'-8"
WV14	#4	Str.	6	7'-8"
WV15	#5	Str.	5	7'-2"
WV16	#4	Str.	7	7'-2"
WV17	#5	Str.	2	5'-9"
P1	#4	Bnt.	16	4'-0"
P2	#4	Bnt.	16	4'-0" ave.
A	#5	Str.	14	3'-8"
* GC1	#4	Bnt.	6	6'-0"
* GC2	#4	Bnt.	4	5'-6"

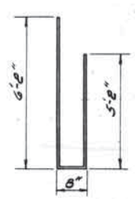


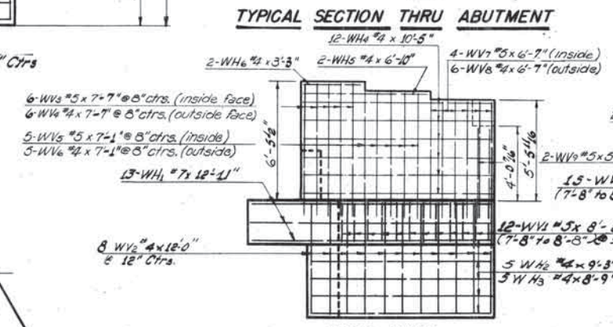
ELEVATION



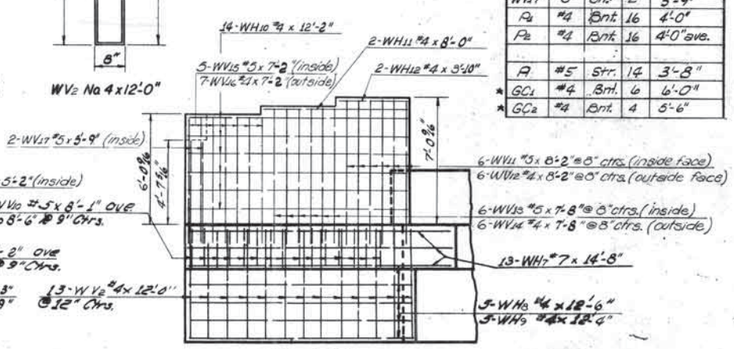
TYPICAL SECTION THRU ABUTMENT





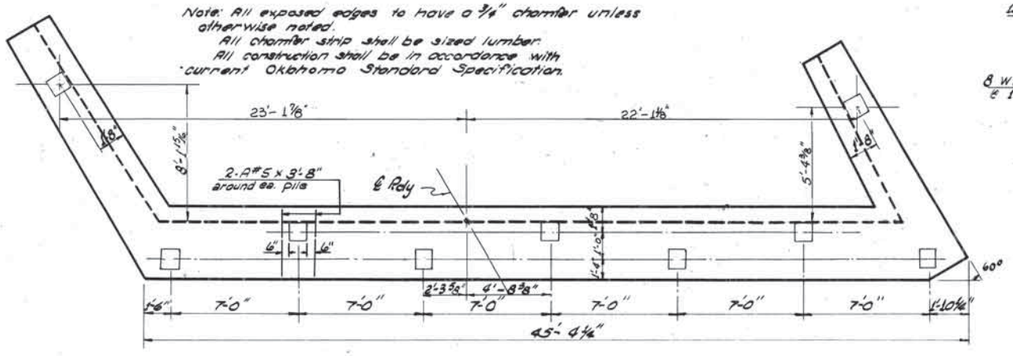


WEST WING



EAST WING

Note: All exposed edges to have a ¾" chamfer unless otherwise noted.
All chamfer strip shall be sized lumber.
All construction shall be in accordance with current Oklahoma Standard Specification.



PILE SPACING DIAGRAM

QUANTITIES		
ITEM	UNIT	TOTAL
Class "A" Concrete	C.Y.	40.5
Reinforcing Steel	Lbs.	5490.
Substructure Excav., Common	C.Y.	90.
16" R.C. Piling	L.F.	280

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Reinf. around piling.	D.H.	4-28-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	W.H.K.	8/64
TRACED	P.L.B.	8/64
CHECKED	D.H.	10-65
APPROVED		
SQUAD: WATTS		

ALT. NO. 1

RT. STR. WALNUT CREEK O'FLOW

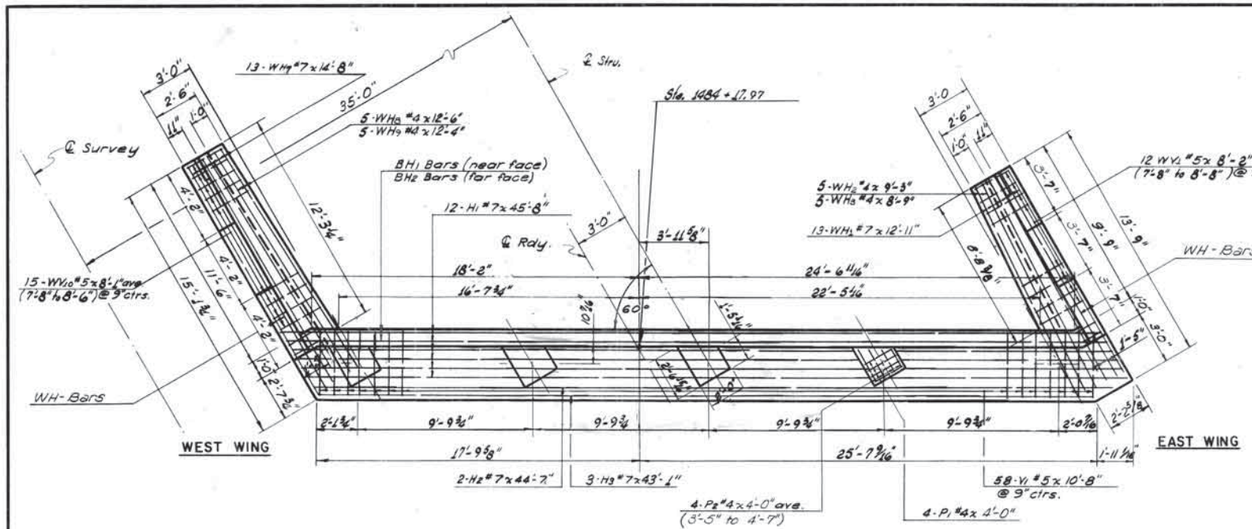
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF ABUTMENTS
ABUT. NO. 2 RT.
℄ STA. 1484+41.52
F.A. PROJ. NO. I-35-2(12)

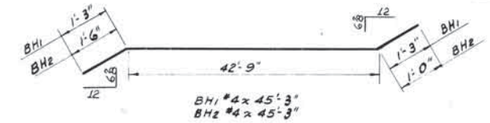
F.A. PROJECT NO. I-35-2(12) SHEET NO. 217

DIETZGEN NO. 144 IMPERIAL

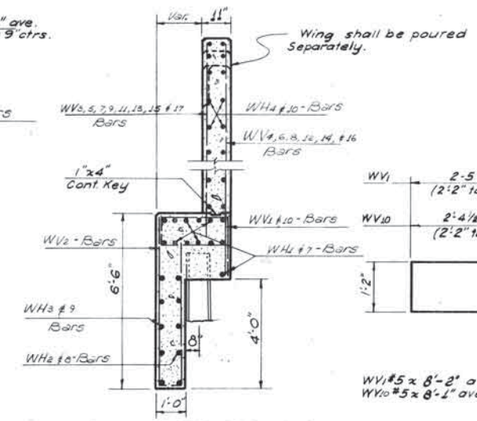
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	218	



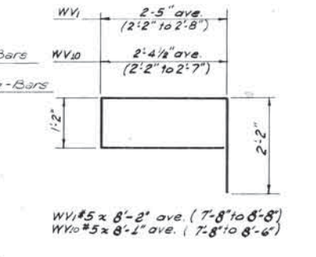
PLAN

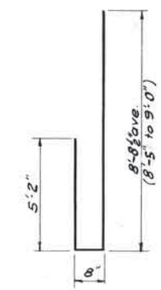


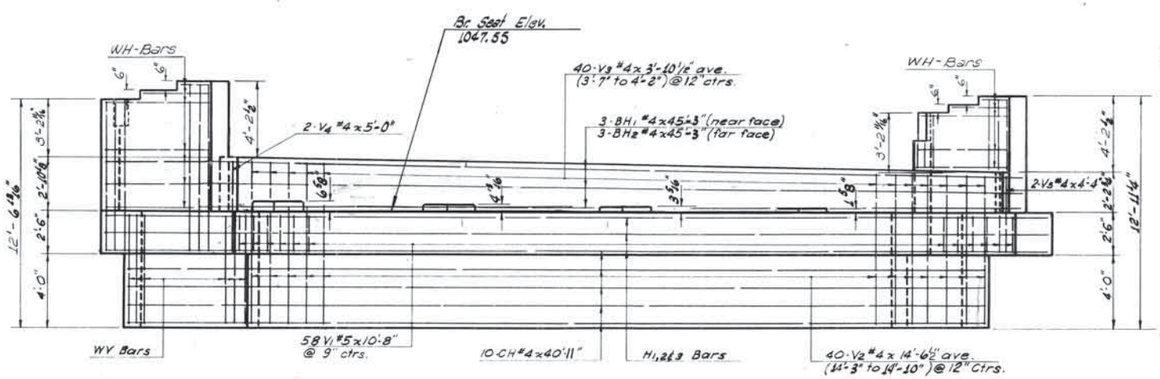
Note: For Abutment Excav. Diagram and note, see sheet no. 232.



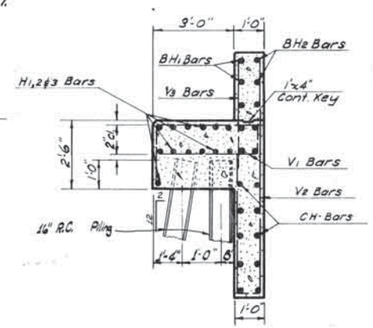
TYPICAL SECTION THRU WING



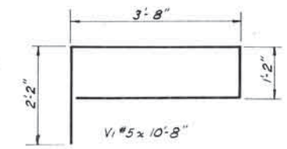


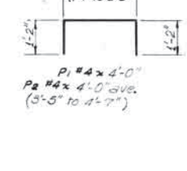


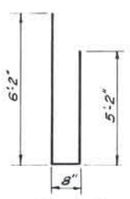
ELEVATION



TYPICAL SECTION THRU ABUTMENT

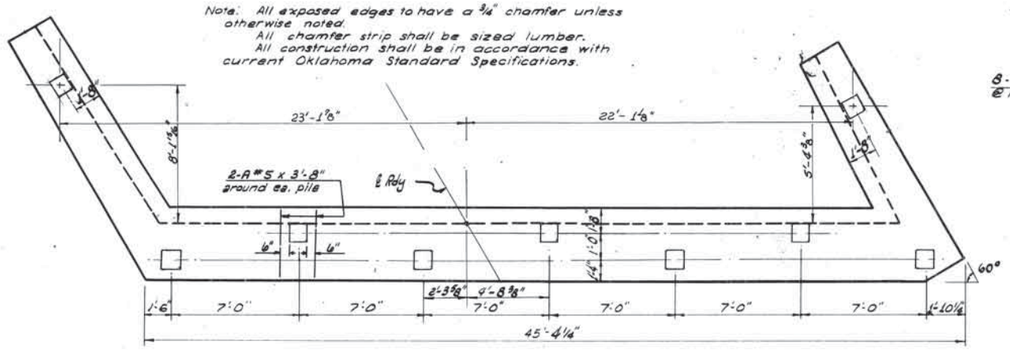




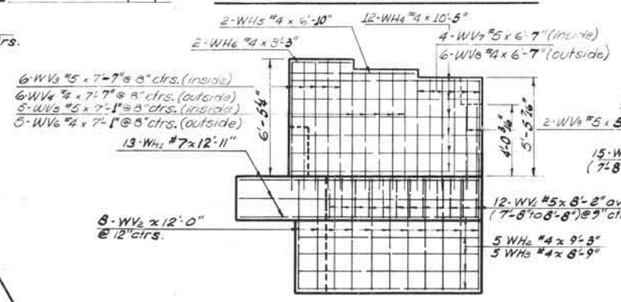


BAR LIST				
Mark	Size	Form	No.	Length
H1	#7	Str.	12	45'-8"
H2	#7	Str.	2	44'-7"
H3	#7	Str.	3	43'-1"
BH1	#4	Bnt.	3	45'-3"
BH2	#4	Bnt.	3	45'-3"
CH	#4	Str.	10	40'-11"
V1	#5	Bnt.	58	10'-8"
V2	#4	Bnt.	40	14'-6½" ave.
V3	#4	Str.	40	3'-10½" ave.
V4	#4	Str.	2	5'-0"
V5	#4	Str.	2	4'-4"
WH1	#7	Str.	13	12'-11"
WH2	#4	Str.	5	9'-3"
WH3	#4	Str.	5	8'-9"
WH4	#4	Str.	12	10'-5"
WH5	#4	Str.	2	6'-10"
WH6	#4	Str.	2	5'-3"
WH7	#7	Str.	13	14'-8"
WH8	#4	Str.	5	12'-6"
WH9	#4	Str.	5	12'-4"
WH10	#4	Str.	14	12'-2"
WH11	#4	Str.	2	8'-0"
WH12	#4	Str.	2	5'-10"
WV1	#5	Bnt.	12	8'-2" ave.
WV2	#4	Bnt.	21	12'-0"
WV3	#5	Str.	6	7'-7"
WV4	#4	Str.	6	7'-7"
WV5	#5	Str.	5	7'-1"
WV6	#4	Str.	5	7'-1"
WV7	#5	Str.	4	6'-7"
WV8	#4	Str.	6	6'-7"
WV9	#5	Str.	2	5'-2"
WV10	#5	Bnt.	15	8'-1" ave.
WV11	#5	Str.	6	8'-2"
WV12	#4	Str.	6	8'-2"
WV13	#5	Str.	6	7'-8"
WV14	#4	Str.	6	7'-8"
WV15	#5	Str.	5	7'-2"
WV16	#4	Str.	7	7'-2"
WV17	#5	Str.	2	5'-9"
P1	#4	Bnt.	16	4'-0"
P2	#4	Bnt.	16	4'-0" ave.
A	#5	Str.	14	3'-8"
★ GC1	#4	Bnt.	6	6'-0"
★ GC2	#4	Bnt.	4	5'-6"

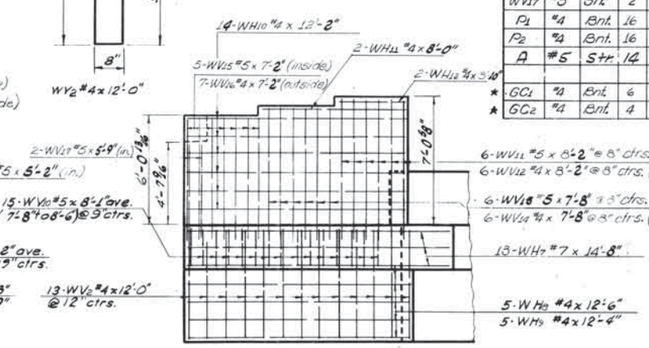
Note: All exposed edges to have a ¾" chamfer unless otherwise noted.
All chamfer strip shall be sized lumber.
All construction shall be in accordance with current Oklahoma Standard Specifications.



PILE SPACING DIAGRAM



EAST WING



WEST WING

QUANTITIES		
ITEM	UNIT	TOTAL
Class "A" Concrete	C.Y.	40.5
Reinforcing Steel	Lbs.	5490.
Substructure Excav., Common	C.Y.	90.
16" R.C. Piling	L.F.	280

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Rein'f around piling	DM	6-26-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	W.H.K.	8-64
TRACED	P.B.R.	8-64
CHECKED	D.H.	10-65
APPROVED		
SQUAD: Watts		

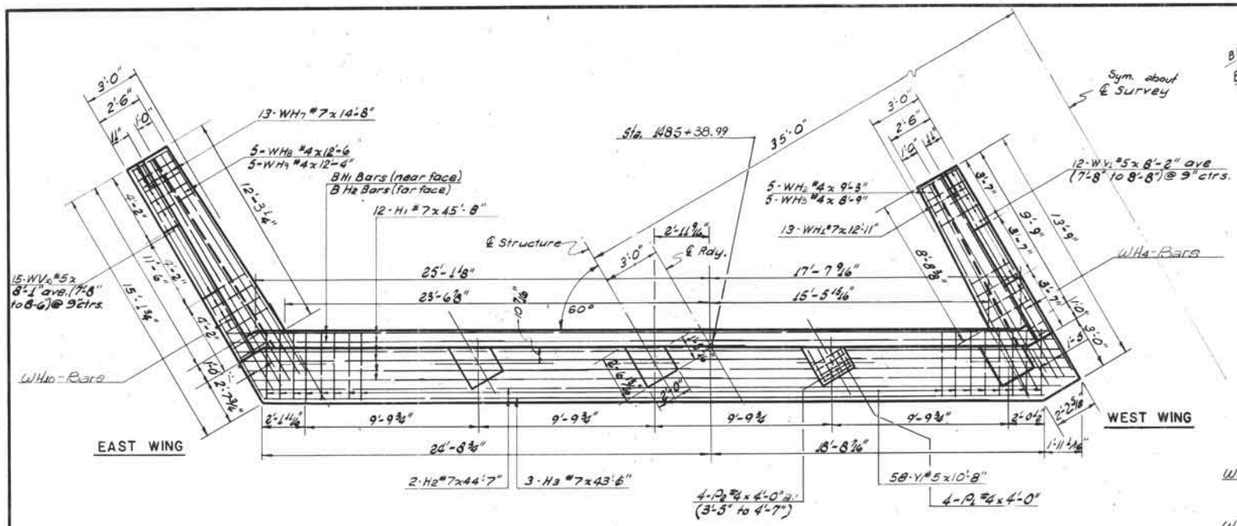
ALT. NO. 1

LT. STR. WALNUT CREEK O'FLOW

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

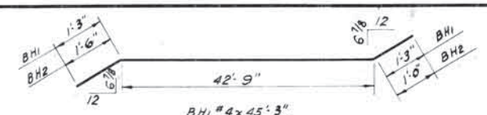
DETAIL OF ABUTMENTS
ABUT. NO. 1 LT.
℄ STA. 1484+78.48
F. A. PROJ. NO. I-35-2(12)

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	219	

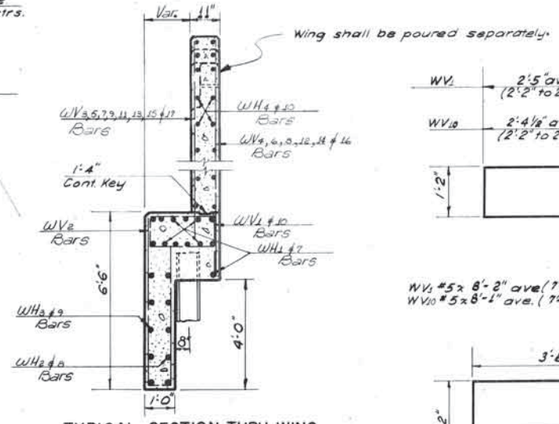


PLAN

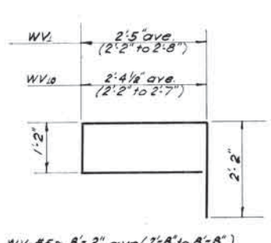
* Note: For details of Guardrail Connection, see sheet no. 177.



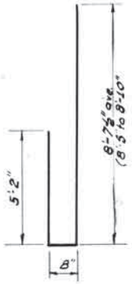
Note: For Abutment Excav. Diagram and note, see sheet no. 232.



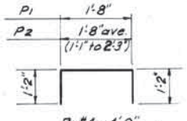
TYPICAL SECTION THRU WING



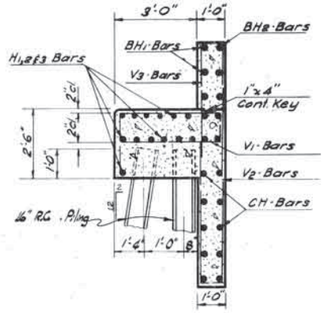
WV1 #5 x 8'-2" ave. (7'-8" to 8'-8")
WV18 #5 x 8'-1" ave. (7'-8" to 8'-6")



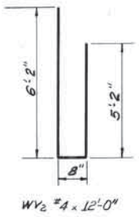
V2 #4 x 14'-5½" ave. (14'-3" to 14'-8")



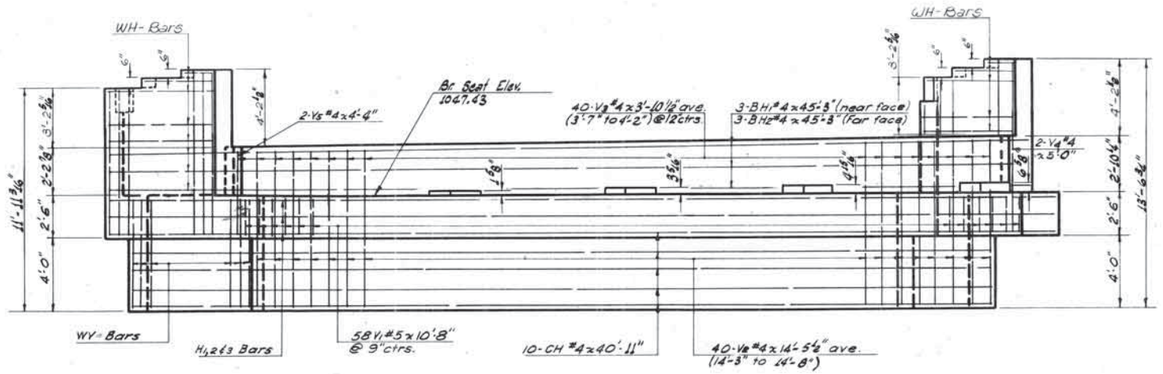
P1 #4 x 4'-0"
P2 #4 x 4'-0" ave. (3'-5" to 4'-7")



TYPICAL SECTION THRU ABUT.

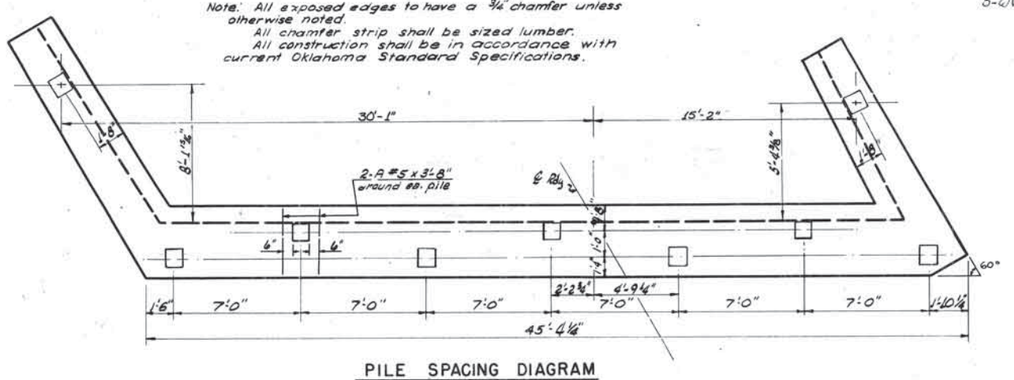


WV2 #4 x 12'-0"

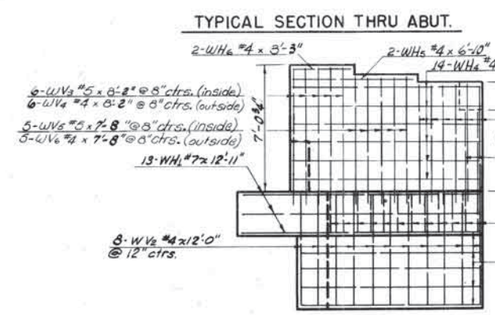


ELEVATION

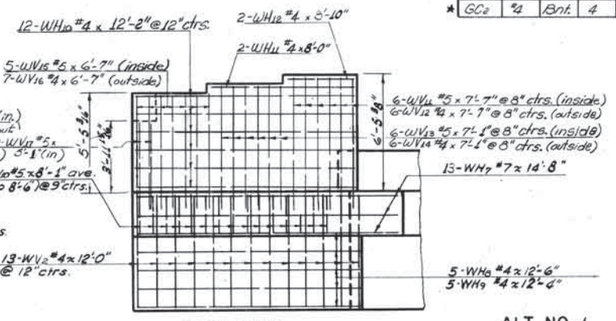
Note: All exposed edges to have a ¾" chamfer unless otherwise noted.
All chamfer strip shall be sized lumber.
All construction shall be in accordance with current Oklahoma Standard Specifications.



PILE SPACING DIAGRAM



WEST WING



EAST WING

BAR LIST				
Mark	Size	Form	No.	Length
H1	#7	Str.	12	45'-8"
H2	#7	Str.	2	44'-7
H3	#7	Str.	3	43'-1"
BH1	#4	Bnt.	3	45'-3"
BH2	#4	Bnt.	3	45'-3"
CH	#4	Str.	10	40'-11"
V1	#5	Bnt.	58	10'-8"
V2	#4	Bnt.	40	14'-5½" ave.
V3	#4	Str.	40	3'-10½" ave.
V4	#4	Str.	2	5'-0
V5	#4	Str.	2	4'-4"
WH1	#7	Str.	13	12'-11"
WH2	#4	Str.	5	9'-3"
WH3	#4	Str.	5	8'-9"
WH4	#4	Str.	14	10'-5"
WH5	#4	Str.	2	6'-10"
WH6	#4	Str.	2	3'-3"
WH7	#7	Str.	13	14'-8"
WH8	#4	Str.	5	12'-6"
WH9	#4	Str.	5	12'-4"
WH10	#4	Str.	12	12'-2"
WH11	#4	Str.	2	8'-0"
WH12	#4	Str.	2	3'-10"
WV1	#5	Bnt.	12	8'-2" ave.
WV2	#4	Bnt.	21	12'-0"
WV3	#5	Str.	6	8'-2"
WV4	#4	Str.	6	8'-2"
WV5	#5	Str.	5	7'-8"
WV6	#4	Str.	5	7'-8"
WV7	#5	Str.	4	7'-2"
WV8	#4	Str.	6	7'-2"
WV9	#5	Str.	2	5'-8"
WV10	#5	Bnt.	15	8'-1" ave.
WV11	#5	Str.	6	7'-7"
WV12	#4	Str.	6	7'-7"
WV13	#5	Str.	6	7'-1"
WV14	#4	Str.	6	7'-1"
WV15	#5	Str.	5	6'-7"
WV16	#4	Str.	7	6'-7"
WV17	#5	Str.	2	5'-1"
P1	#4	Bnt.	16	4'-0"
P2	#4	Bnt.	16	4'-0" ave.
A	#5	Str.	12	3'-8"
* GC1	#4	Bnt.	6	6'-0"
* GC2	#4	Bnt.	4	5'-6"

QUANTITIES		
ITEM	UNIT	TOTAL
Class "A" Concrete	C. Y.	40.5
Reinforcing Steel	Lbs.	5490.
Substructure Excav., Common	C. Y.	90.
16" R.C. Piling	L. F.	315

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Reinf around piling	D.H.	4-2-64

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	W.K.K.	6-64
TRACED	R.B.R.	9-64
CHECKED	D.H.	10-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF ABUTMENTS
ABUT. NO. 2 LT.
℄ STA. 1484 + 78.48
F. A. PROJ. NO. I-35-2(12)

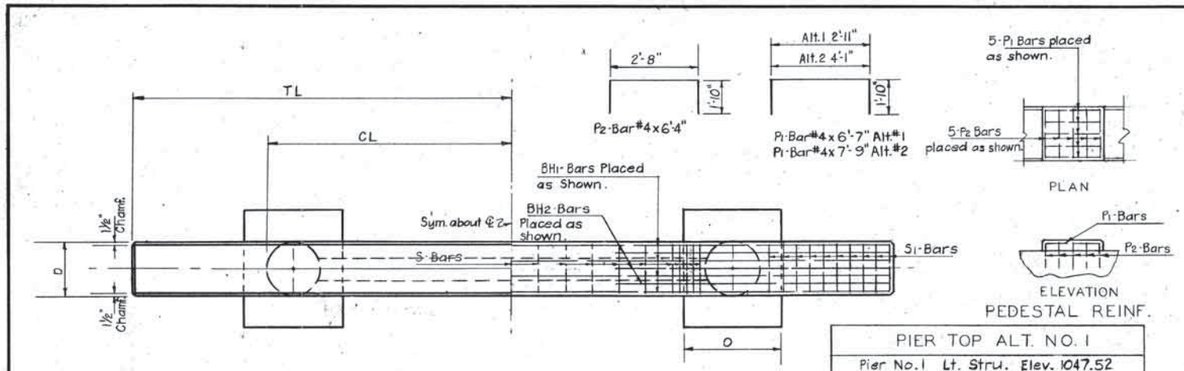
ALT. NO. 1
LT. STR. WALNUT CREEK O'FLOW

F.A. PROJECT NO. I-35-2(12) SHEET NO. 219

DIETZGEN NO. 135 IMPERIAL

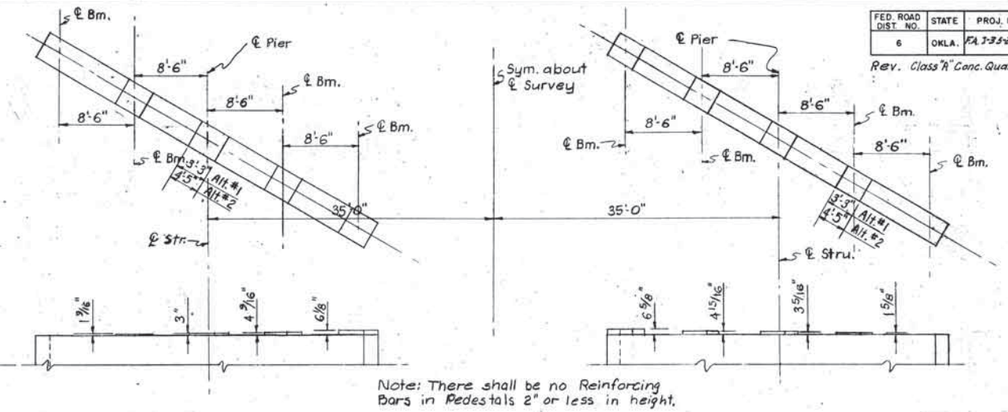
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA 1-35-2 (12)	220	

Rev. Class "A" Conc. Quants. R.B.R. 1-29-68



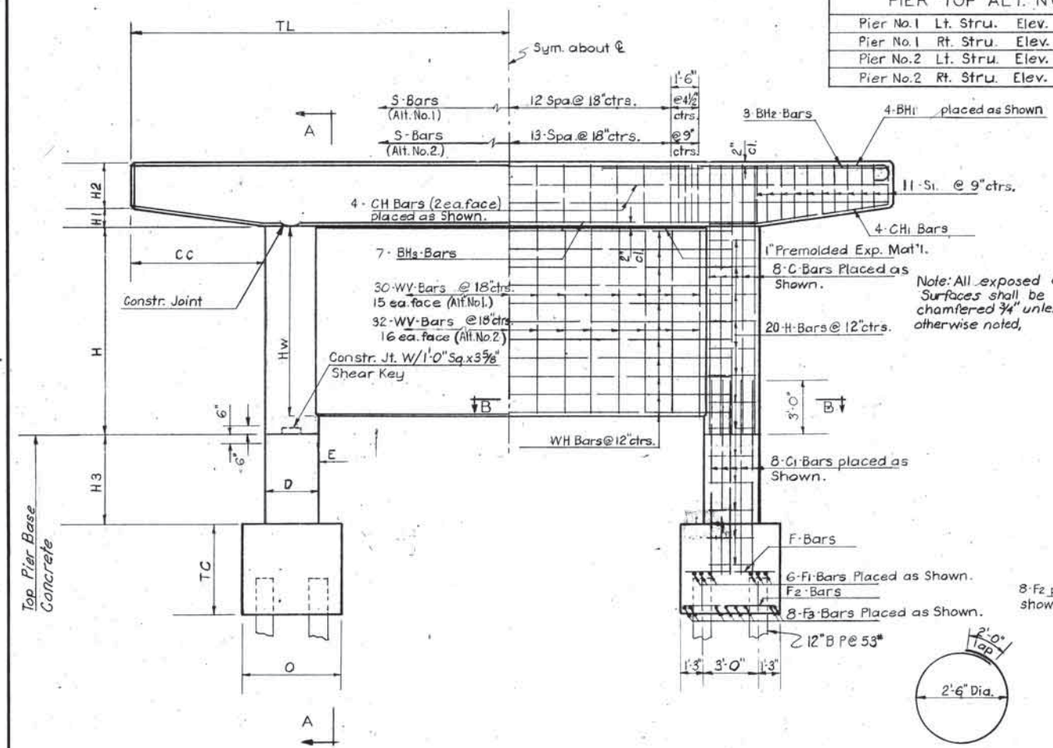
PLAN

PIER TOP ALT. NO. 1		
Pier No. 1	Lt. Stru.	Elev. 1047.52
Pier No. 1	Rt. Stru.	Elev. 1047.58
Pier No. 2	Lt. Stru.	Elev. 1047.48
Pier No. 2	Rt. Stru.	Elev. 1047.54
PIER TOP ALT. NO. 2		
Pier No. 1	Lt. Stru.	Elev. 1047.17
Pier No. 1	Rt. Stru.	Elev. 1047.23
Pier No. 2	Lt. Stru.	Elev. 1047.13
Pier No. 2	Rt. Stru.	Elev. 1046.99

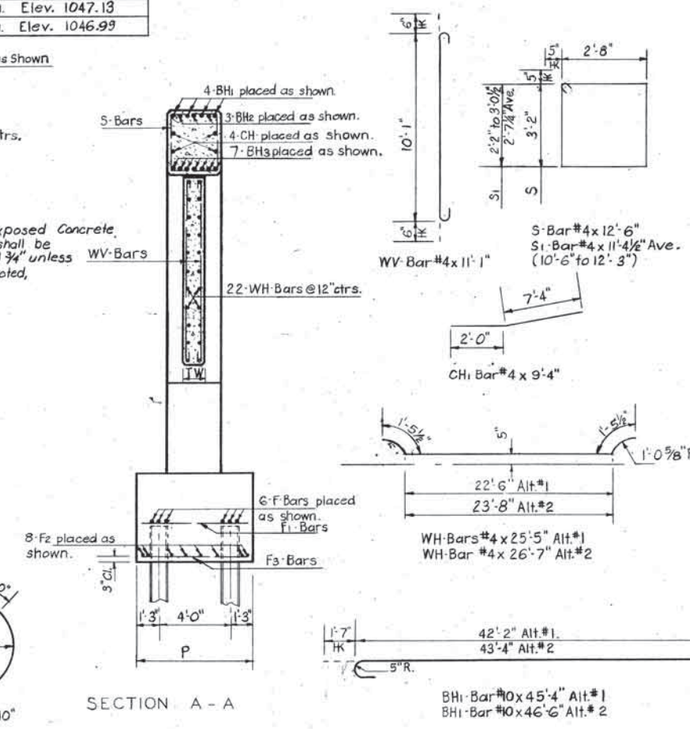


Note: There shall be no Reinforcing Bars in Pedestals 2" or less in height.

PEDESTAL LAYOUT



Note: All exposed Concrete Surfaces shall be chamfered ¾" unless otherwise noted.



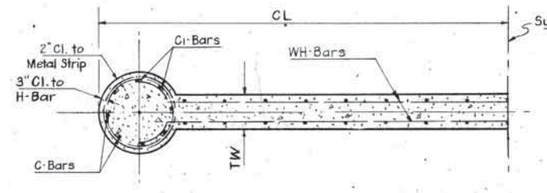
BAR LIST - ONE PIER ALT. 1				
MARK	NO.	SIZE	* AVE. LENGTH FORM	LENGTH
BH1	4	10	BNT.	45- 4
BH2	6	11	STR.	15- 3
BH3	7	11	STR.	27- 2
C	16	9	STR.	14- 10
C1	16	11	STR.	10- 10
CH	4	4	STR.	42- 2
CH1	8	4	BNT.	9- 4
F	12	4	STR.	5- 0
F1	12	4	STR.	6- 0
F2	16	5	STR.	5- 0
F3	16	5	STR.	6- 0
H	40	4	BNT.	1- 0
P1	15	4	BNT.	6- 7
P2	15	4	BNT.	6- 4
S	21	4	BNT.	12- 6
S1	22	4	BNT.	11- 5*
WH	22	4	BNT.	25- 5
WV	30	4	BNT.	11- 1

BAR LIST - ONE PIER ALT. 2				
MARK	NO.	SIZE	* AVE. LENGTH FORM	LENGTH
BH1	4	10	BNT.	46- 6
BH2	6	10	STR.	14- 6
BH3	7	11	STR.	28- 4
C	16	9	STR.	14- 10
C1	16	11	STR.	10- 10
CH	4	4	STR.	43- 4
CH1	8	4	BNT.	9- 4
F	12	4	STR.	5- 0
F1	12	4	STR.	6- 0
F2	16	5	STR.	5- 0
F3	16	5	STR.	6- 0
H	40	4	BNT.	9- 10
P1	15	4	BNT.	7- 9
P2	15	4	BNT.	6- 4
S	20	4	BNT.	12- 6
S1	22	4	BNT.	11- 5*
WH	22	4	BNT.	26- 7
WV	32	4	BNT.	11- 1

Note: For Pile length see Gen. Elev. sheet. 213

QUANTITIES FOR ONE PIER			
Item	Unit	Alt. #1	Alt. #2
Class "A" Concrete	C.Y.	32.6	32.6
Class "A" Concrete Pier Base	C.Y.	15.9	15.9
Reinforcing Steel	Lbs.	5,520	5,670
Substru. Excav. Common	C.Y.	16.0	16.0

DIMENSIONS															
	NP	TL	D	H1	CC	H2	CL	TC	O	P	H	H3	E	TW	HW
Alt. 1	Pier #1	21'-3"	3'-0"	1'-0"	7'-6"	2'-6"	13'-9"	5'-0"	5'-6"	6'-6"	11'-6"	5'-0"	0'-0½"	1'-3"	10'-5"
	Pier #2	21'-3"	3'-0"	1'-0"	7'-6"	2'-6"	13'-9"	5'-0"	5'-6"	6'-6"	11'-6"	5'-0"	0'-0½"	1'-3"	10'-5"
Alt. 2	Pier #1	21'-10"	3'-0"	1'-0"	7'-6"	2'-6"	14'-4"	5'-0"	5'-6"	6'-6"	11'-6"	5'-0"	0'-0½"	1'-3"	10'-5"
	Pier #2	21'-10"	3'-0"	1'-0"	7'-6"	2'-6"	14'-4"	5'-0"	5'-6"	6'-6"	11'-6"	5'-0"	0'-0½"	1'-3"	10'-5"



WALNUT CREEK O'FLOW

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised H-Bar Spacing	DM	4-24-67

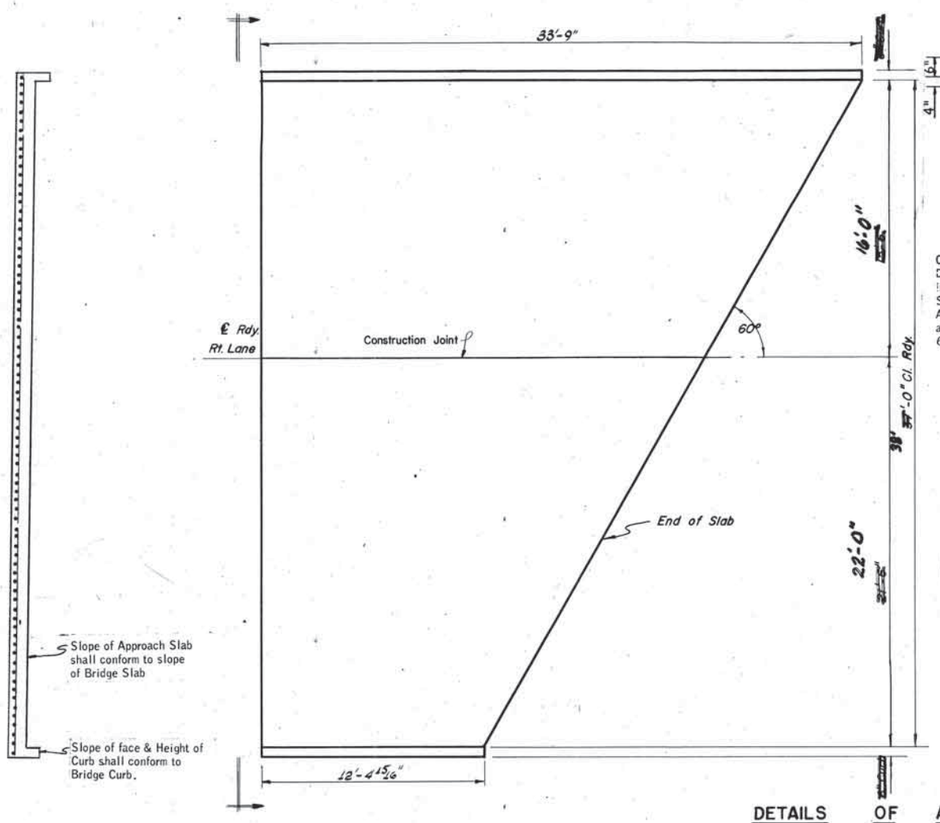
RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	6-65
TRACED		
CHECKED	D.H.	10-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

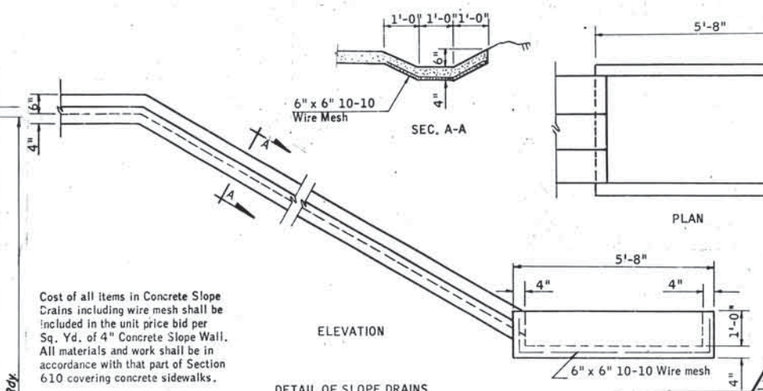
DETAIL OF PIERS
ALT. NO. 1 & 2 LT. & RT. STRU.
PROJ. NO. I-35-2 (12)

FA PROJECT NO. 1-35-2 (12) SHEET NO. 220

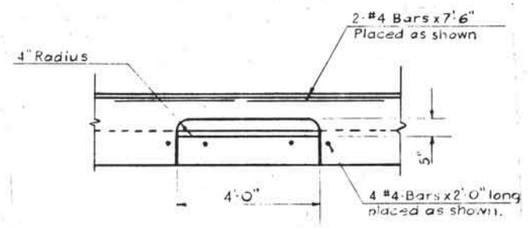
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	221	



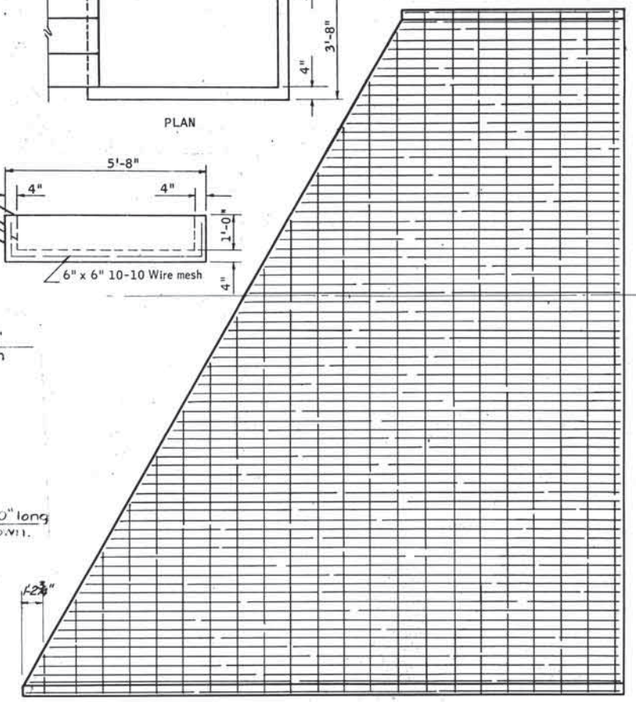
DETAILS OF APPROACH SLAB

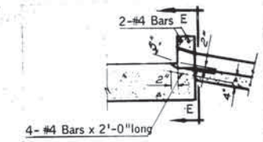


Cost of all items in Concrete Slope Drains including wire mesh shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All materials and work shall be in accordance with that part of Section 610 covering concrete sidewalks.

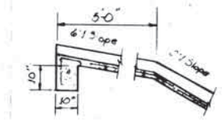


SECTION E-E



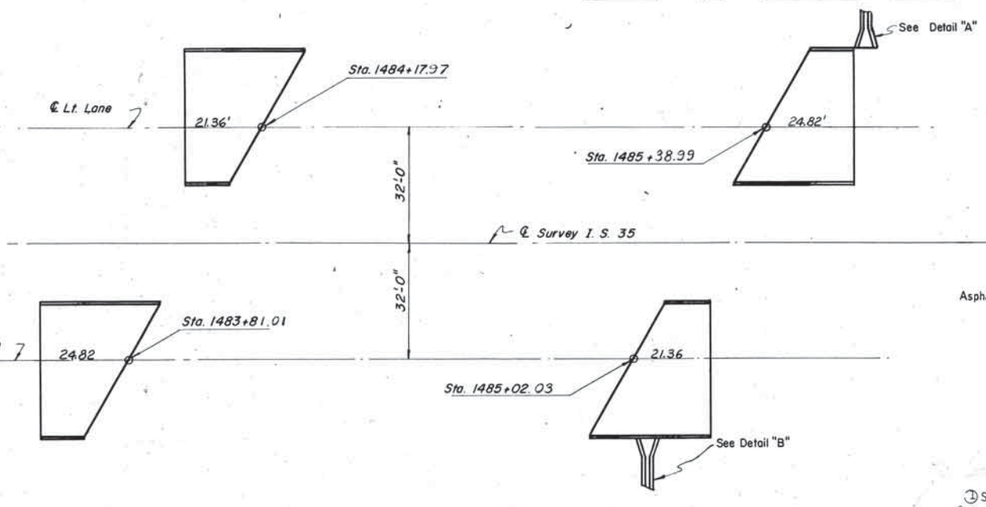


DETAIL "B"

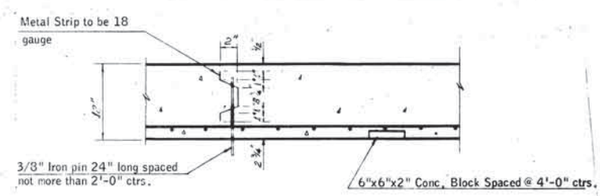


DETAIL "A"

No. 6 Bars at 6" ctrs. (Longitudinal)
No. 4 Bars at 18" ctrs. (Transverse)



APPROACH SLAB LAYOUT



Note: Metal Strip shall be installed full length of Construction Joint down Center Line of Rdy. All cost of Metal Strip & 3/8" ϕ Iron pins shall be included in the unit price bid per Sq.Yd. of Appr. Slab.

DETAIL OF CONSTRUCTION JOINT AND BAR CHAIR

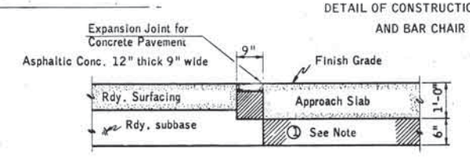
QUANTITIES - ONE APPROACH SLAB		
Item	Unit	Total
	Sq Yd	97.5
* Reinforcing Steel	Lbs.	3030.

* Note: Cost of Reinforcing Steel in Approach Slabs shall be included in the Unit Price Bid per Sq. Yd. for Approach Slabs.

Cost of curbs on Approach Slabs shall be included in the price bid per Sq. Yd. for Approach Slabs.

Note: When Bridge Approach Slabs are to be constructed in Bridge Contract they shall be constructed using Class "AA(AE)" Concrete Materials.

When Bridge Approach Slabs are to be constructed in Roadway Contract they shall be constructed with either Class "AA(AE)" Concrete Materials or P.C. Concrete Paving Materials, including an Air-Entraining Admixture.



APPROACH SLAB BASE DETAIL

③ Subgrade under Approach Slabs shall be treated with lime in accordance with Sec. 315 S of the Supplement to 1959 Standard Specifications, to a compacted depth of a minimum of 6 inches.

The base material under Approach Slabs shall be a minimum of 6" thick in accordance with Sec. 312 and Sec. 312 A or Sec. 313 and Sec. 313 A or a minimum of 4" thick in accordance with Sec. 407, at the option of the Contractor.

All cost of materials and labor for lime treatment of Subgrade and for the construction of base under Approach Slabs shall be included in the price bid per square yard for "Approach Slab Base".

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
1	Rev. Curb & Cl. Rdy. dim		4/28/67	DESIGN		
				DETAIL	R.B.R.	6-64
				TRACED	R.B.R.	6-64
				CHECKED	D.H.	10-65
				APPROVED		
				SQUAD:	Watts	

WALNUT CREEK O'FLOW

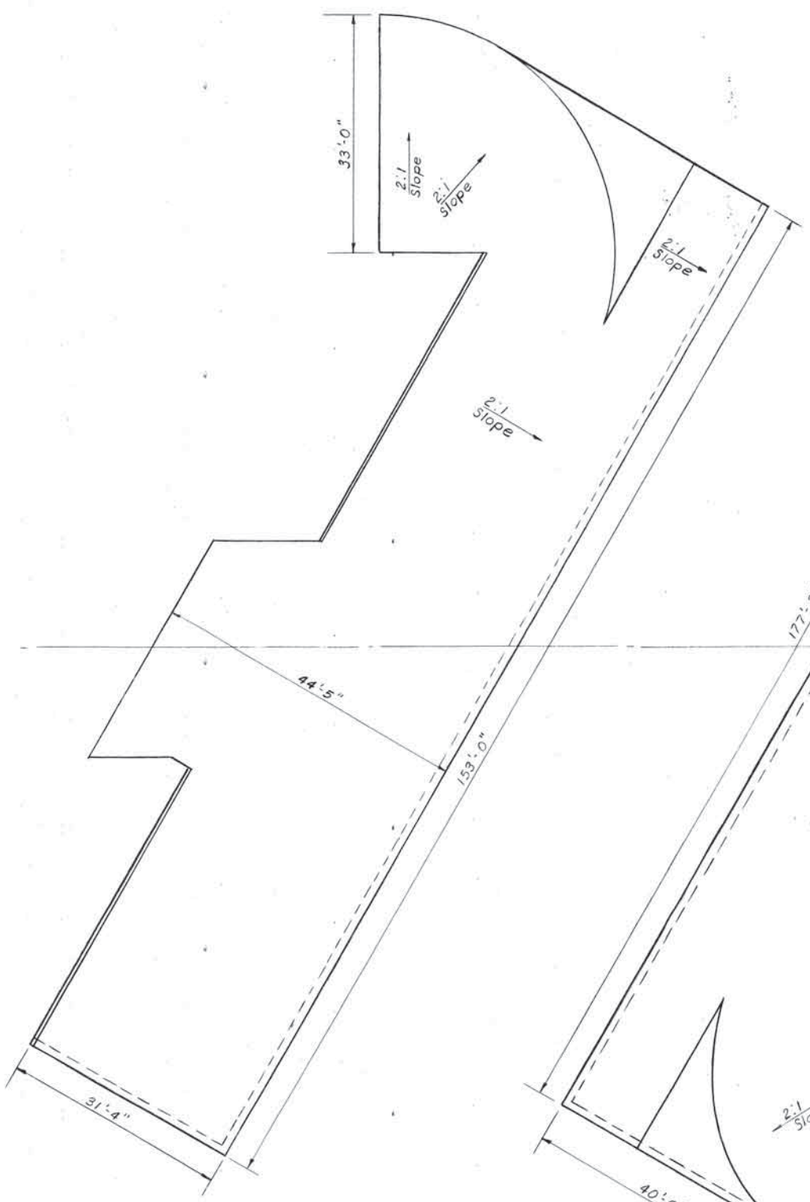
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF APPROACH SLAB
℄ STA. 1484+78.48 LT. STRU.
℄ STA. 1484+41.52 RT. STRU.
F. A. PROJ. NO. I-35-2(12)

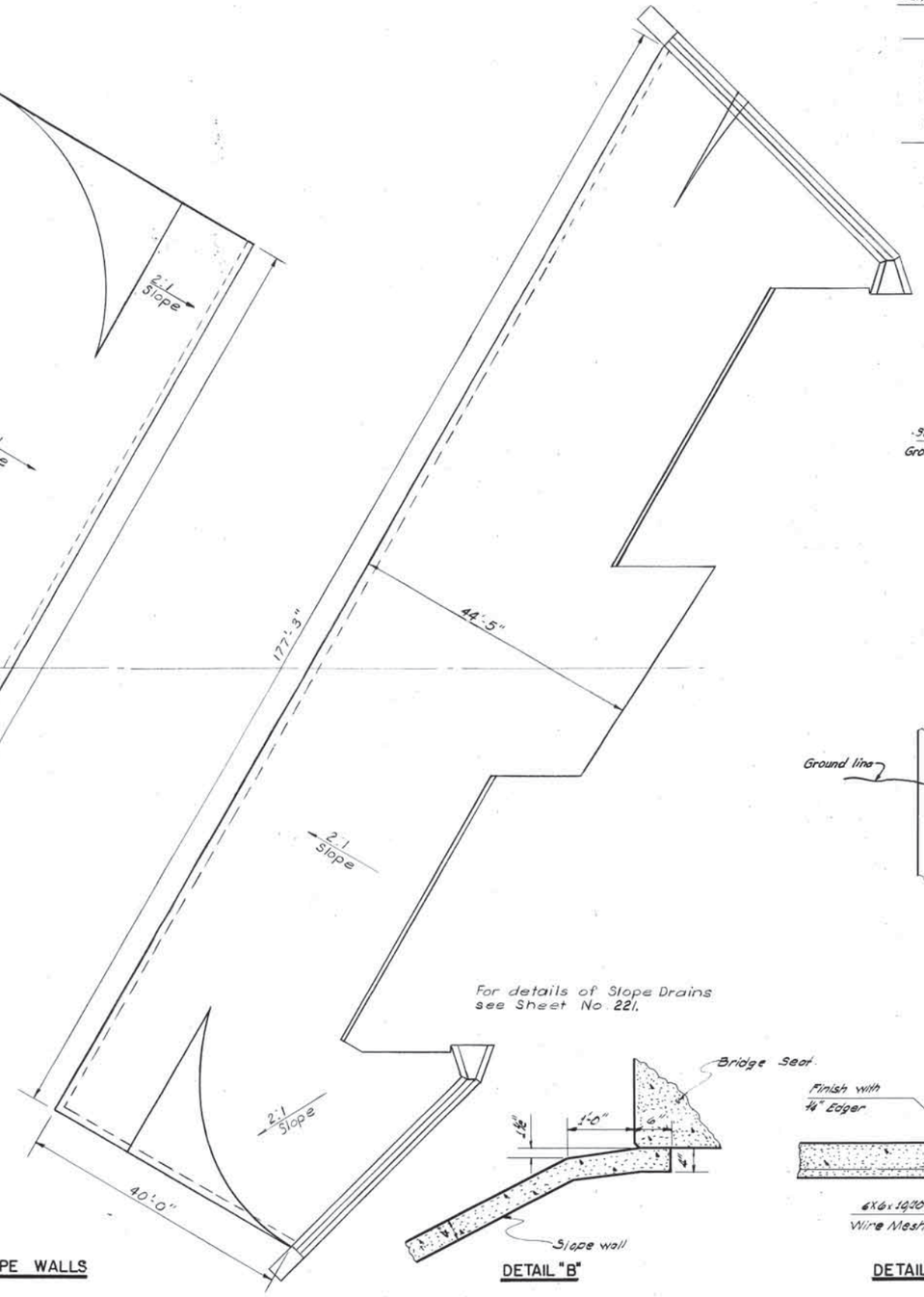
F. A. PROJECT NO. I-35-2(12) SHEET NO. 221

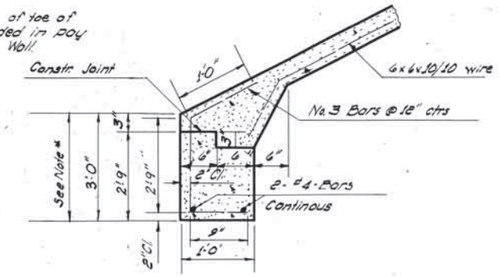
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		222	

REVISIONS	
DESCRIPTION	DATE
Rev. Detail "A" 4/24/67	

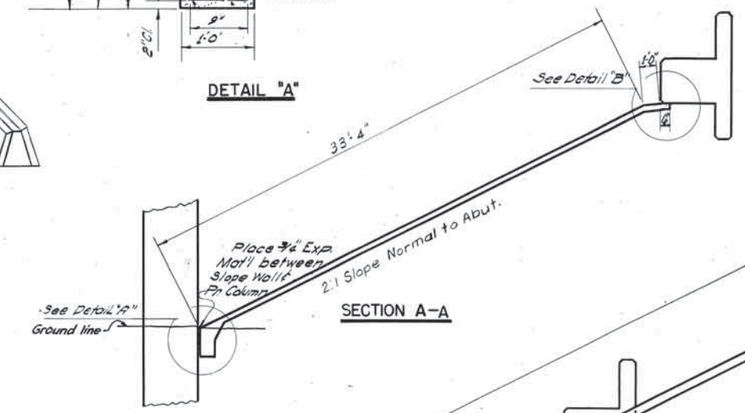


DETAILS OF SLOPE WALLS

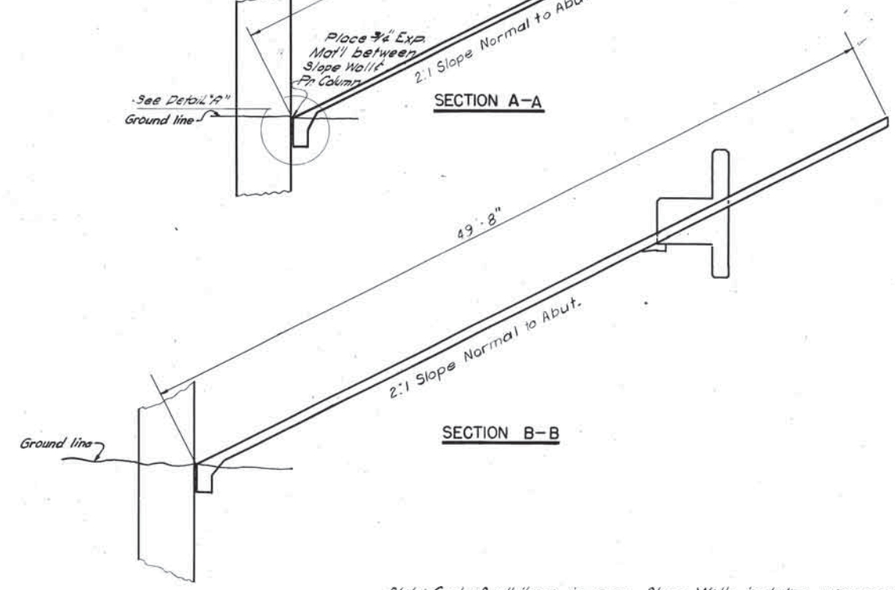




DETAIL "A"



SECTION A–A

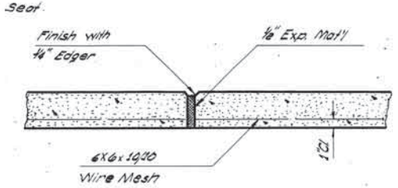


SECTION B–B

Note: Cost of all items in conc. Slope Walls including wire mesh, reinf. steel and exp. joint filler shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All material and work shall be in accordance with that part of Sec. 610 of the Okla. Std. Specs. governing Concrete Sidewalks.

QUANTITIES — SLOPE WALLS				
	Unit	Slope Walls	Drains	Total
Abut. # 1	Sq. Yd.	744.1		744.1
Abut. #2	Sq. Yd.	806.5	37.5	844.0

DETAIL "B"



DETAIL OF CONSTR. JT.

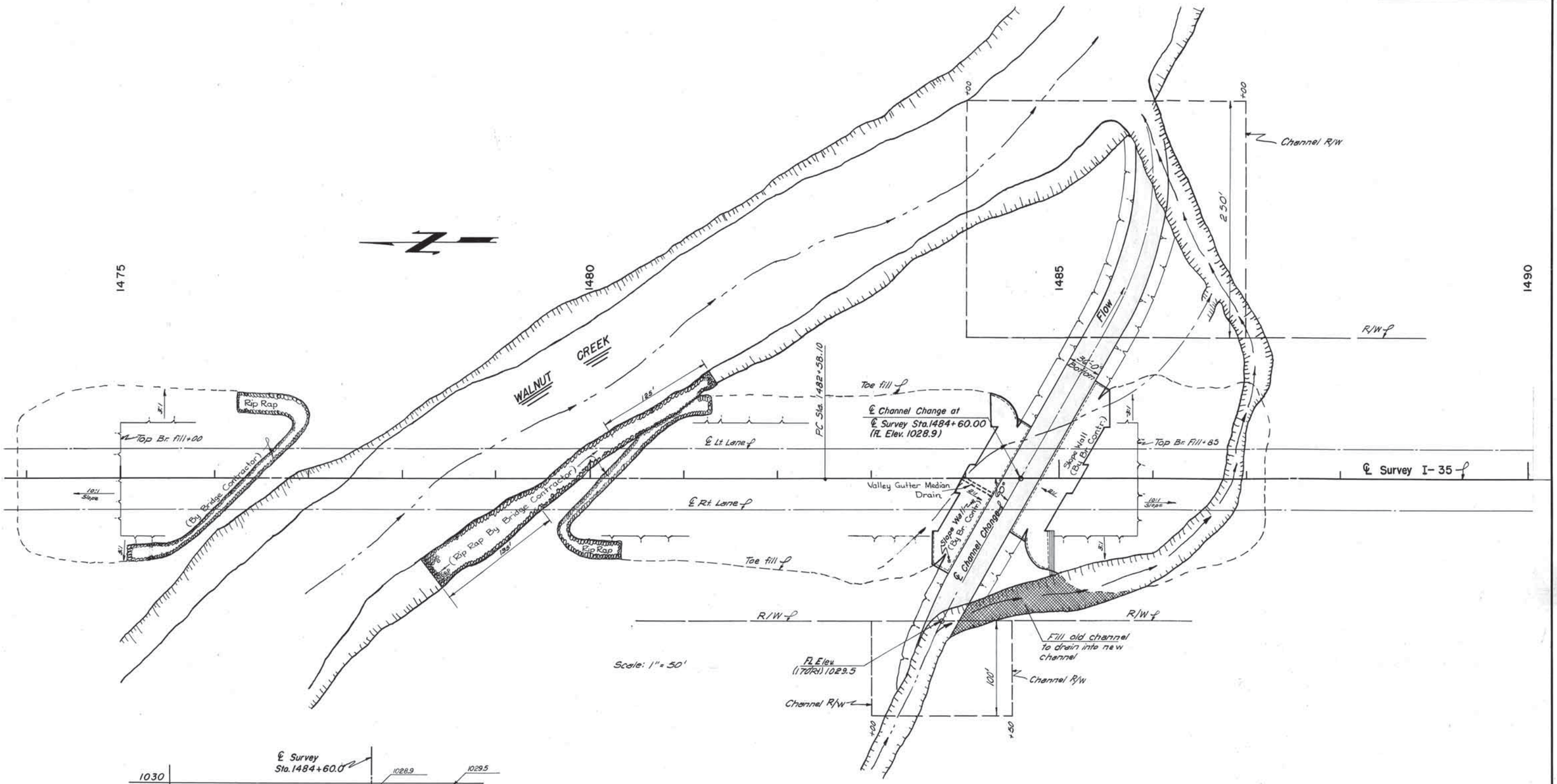
WALNUT CREEK O'FLOW

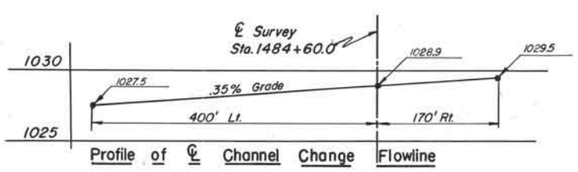
Design		
Drawn	R.B.R.	10-65
Checked		
Approved		
Squad	Watts	

DETAILS OF SLOPE WALLS
℄ SURVEY STA. 1484+60.00

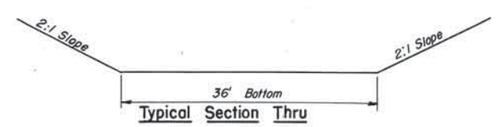
F. A. Project No. I-35-2(12) Sheet No. 222

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	223	





Profile of ℄ Channel Change Flowline



Typical Section Thru Channel Change

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF CHANNEL CHANGE & BANK PROTECTION
I.S. 35 OVER WALNUT CREEK
STA. 1475 + 00 TO STA. 1486+00
F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 223

ITEGEN NO. 133 IMPERIAL

Rev. Index of sheets 4/24/67

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEARS	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA I-35-2(12)		224	

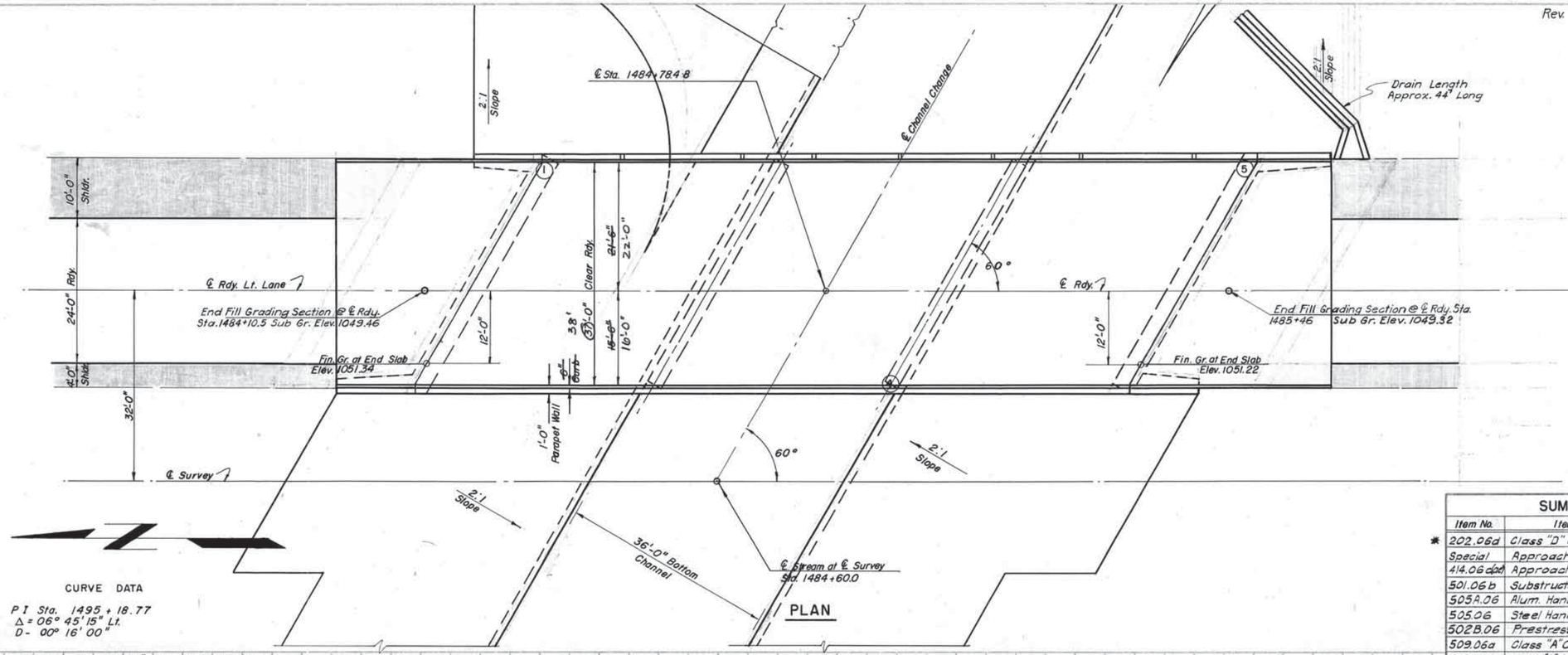
DESIGN DATA

f'c Class "A" Conc. 1,000 psi
f'c Class "AA(AE)" Conc. 1,200 psi
fs Reinf. Steel 20,000 psi
fs Structural Steel 20,000 psi

Loading H20-S16 & PPM 20-4

MAXIMUM FOUNDATION PRESSURES

Abuts. 26.1 T/pile
Piers. 51.3 T/pile
D.A. = 1235 Ac. + Walnut Creek O'Flow
Area Under H.W. 830 □'



CURVE DATA

P.I. Sta. 1495 + 18.77
Δ = 06° 45' 15" Lt.
D - 00° 16' 00"

BM-80d - Spike in 48" Cottonwood 172' Rt.
Sta. 1481+54 Elev. 1036.92

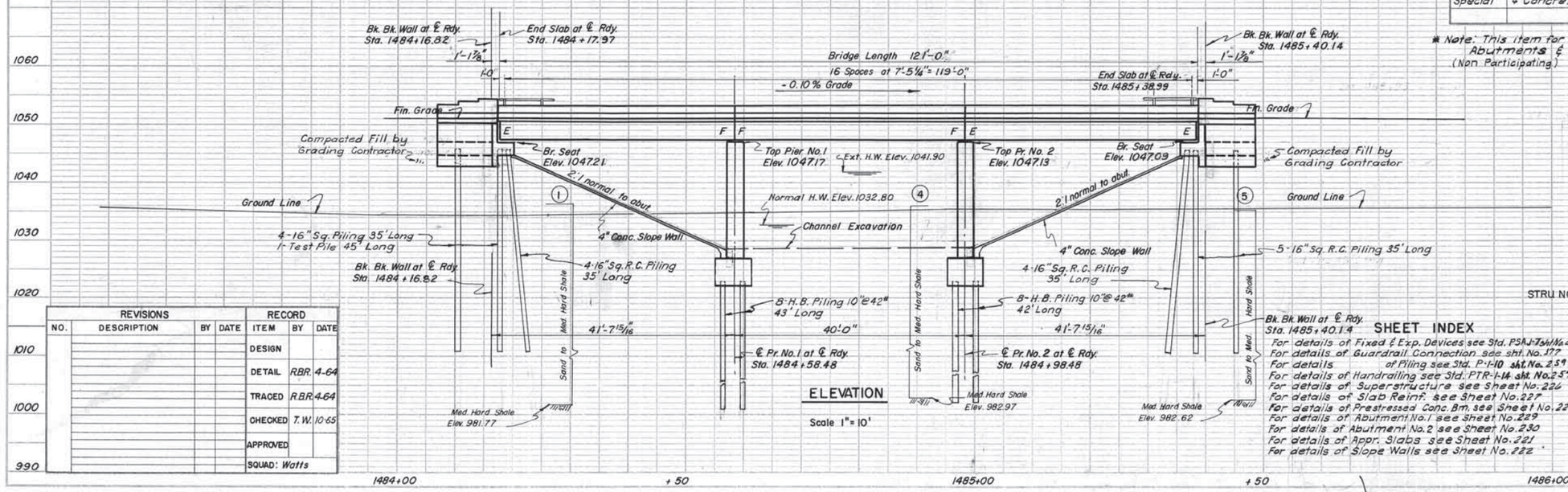
Location of Curb Drains as shown Thus (II) (East Curb only)

SUMMARY OF QUANTITIES

Item No.	Item	Unit	Abuts.	Piers	Superstru.	Bridge Total	Rdy. Total
* 202.06d	Class "D" Unclass. Excav.	C.Y.					2.00
Special	Approach Slab Base	S.Y.					195.0
414.06(a)d	Approach Slabs (Alt. Ent. Payment)	S.Y.					195.0
501.06b	Substructure Excav. Common	C.Y.	180.0	32.0		212.0	
505A.06	Alum. Handrailing (Alt. #1)	L.F.			241.5	241.5	
505.06	Steel Handrailing (Alt. #2)	L.F.			241.5	241.5	
502B.06	Prestressed Conc. Bm. Type II	L.F.			585.94	585.94	
509.06a	Class "A" Concrete	C.Y.	83.0	42.6		125.6	
509.06a	Class "A" Concrete Pier Bases	C.Y.		31.8		31.8	
509.06b(a)d	Class "AA(AE)" Concrete	C.Y.			146.1	146.1	
511.06	Reinforcing Steel	Lb.	11,060	11,340	36,210	58,610	
514.06a	Test Piles	Each	1			1	
514.06	16" R.C. Piling	L.F.	595			595	
514.06e	10" H.B. @ 42# Piling	L.F.		680		680	
514.06f	Steel Piling Splices	Each		15		15	
Special	4" Concrete Slope Wall	S.Y.					844.6

* Note: This item for shaping up & cleaning up fills around the Abutments & Approach slabs. (Non Participating)

For General Note see General Elev. Sht. No. 213



REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	R.B.R.	4-64
				TRACED	R.B.R.	4-64
				CHECKED	T.W.	10-65
				APPROVED		
				SQUAD: Watts		

SHEET INDEX

For details of Fixed & Exp. Devices see Std. PSM J-T&H No. 259 B
For details of Guardrail Connection see sht. No. 227
For details of Piling see Std. P-1-10 sht. No. 259 D
For details of Handrailing see Std. PTR-1-14 sht. No. 259 C
For details of Superstructure see Sheet No. 226
For details of Slab Reinf. see Sheet No. 227
For details of Prestressed Conc. Bm. see Sheet No. 228
For details of Abutment No. 1 see Sheet No. 229
For details of Abutment No. 2 see Sheet No. 230
For details of Appr. Slabs see Sheet No. 221
For details of Slope Walls see Sheet No. 222

STRU NO. 40 LT. STRU. WALNUT CREEK O. FLOW

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

ALTERNATE NO. 2
GEN. ELEV., PLAN & SUMM. OF QUANT.
3-40' P.C.B. SPANS
38' ~~32'~~-0" RDY. ~~0 2.0" CURBS~~
℄ STA. 1484+78.48
SKEW 60° LT. F.W.D.
FA PROJ. NO. I-35-2(12)

FA PROJECT NO. I-35-2(12) SHEET NO. 224

Rev. Index of sheets 4/24/67

FED. ROAD DIST. NO.	STATE	FEDL. NO.	FISCAL YEARS	SHEET NO.	TOTAL SHEETS
6	OKLA.	BL 396(20)		225	

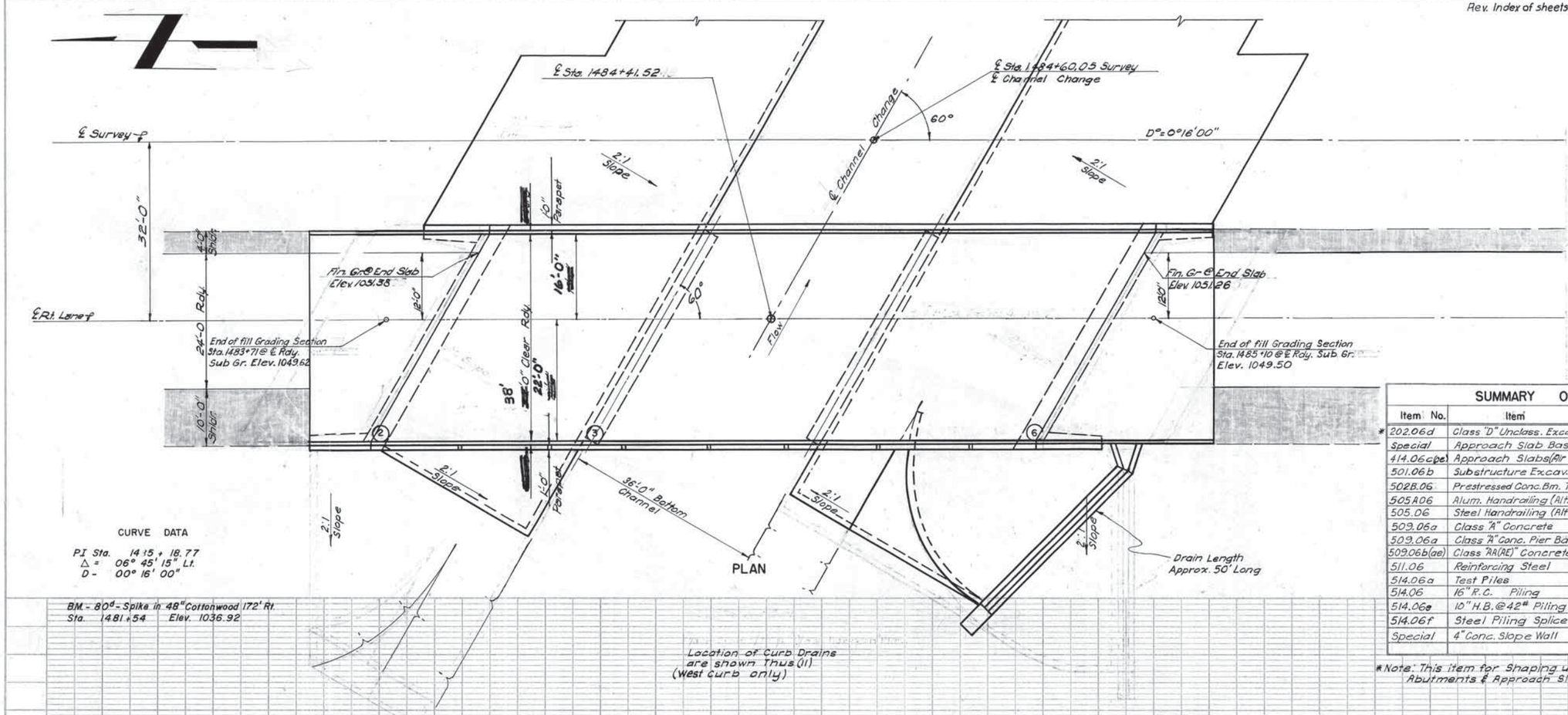
DESIGN DATA

f'c Class "A" Conc. 1,000 psi
f'c Class AA"RE" Conc. 1,200 psi
fs Reinf. Steel 20,000 psi
fs Structural Steel 20,000 psi

Loading H20-S16 & PPM 20-4

Maximum Foundation Pressure

Abutment 26.1 T/pile
Piers 51.3 T/pile
D. A. = 1235 Ac + Walnut Creek O'Flow
Area under H.W. 830 ac'



CURVE DATA

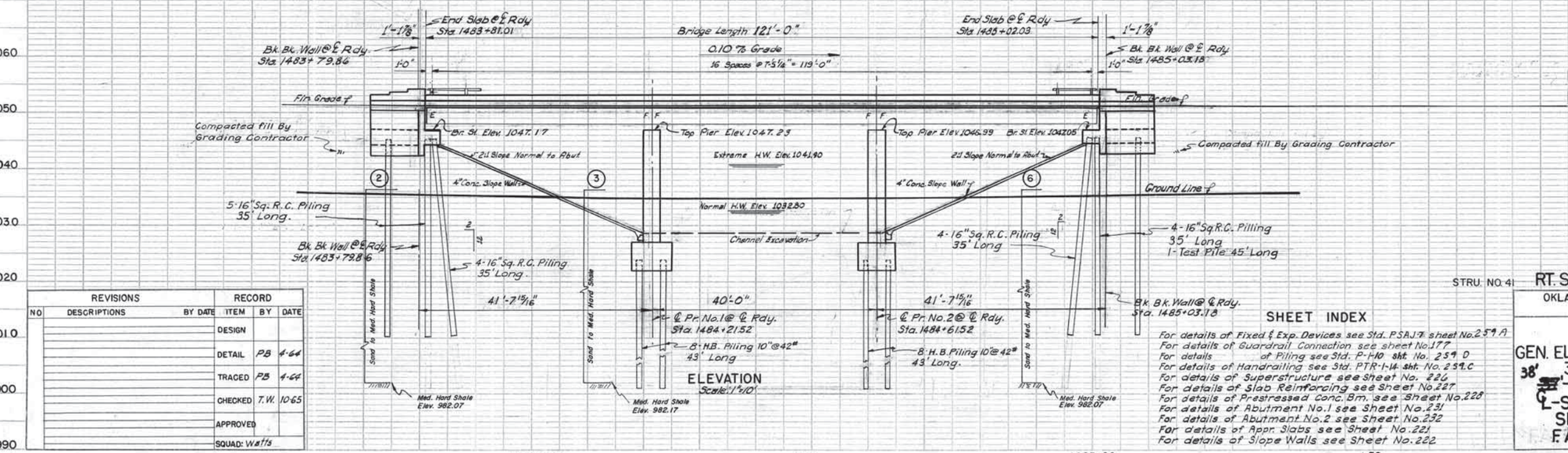
PI Sta. 14+15 + 18.77
Δ = 06° 45' 15" Lt.
D = 00° 16' 00"

BM - 80d - Spike in 48" Cottonwood 172' Rt.
Sta. 1481+54 Elev. 1036.92

Location of Curb Drains are shown Thus (II) (West curb only)

Item No.	Item	Unit	Abut.	Pr.	Superstr.	Bridge Total	Rdy. Total
* 202.06d	Class "D" Unclass. Excav.	C.Y.					200
Special	Approach Slab Base	S.Y.					195.0
414.06c(ae)	Approach Slabs (Air Ent. Agent)	S.Y.					195.0
501.06b	Substructure Excav. Common	C.Y.	180.0	32.0		212.0	
502B.06	Prestressed Conc. Bm. Type III	L.F.			583.94	583.94	
505A.06	Alum. Handrailing (Alt. #1)	L.F.			241.5	241.5	
505.06	Steel Handrailing (Alt #2)	L.F.			241.5	241.5	
509.06a	Class "A" Concrete	C.Y.	83.0	42.6		125.6	
509.06a	Class "A" Conc. Pier Bases	C.Y.		31.8		31.8	
509.06b(ae)	Class "AA(RE)" Concrete	C.Y.			146.1	146.1	
511.06	Reinforcing Steel	Lb.	11,060	11,340	36,210	58,610	
514.06a	Test Piles	Each	1			1	
514.06	16" R.C. Piling	L.F.	595			595	
514.06e	10" H.B. @ 42# Piling	L.F.		688		688	
514.06f	Steel Piling Splices	Each		15		15	
Special	4" Conc. Slope Wall	S.Y.					743.5

* Note: This item for Shaping up & Cleaning up fills around the Abutments & Approach Slabs. (Non Participating)



For General Note see Sht. No. 219

REVISIONS			RECORD		
NO	DESCRIPTIONS	BY DATE	ITEM	BY	DATE
			DESIGN		
			DETAIL	PB	4-64
			TRACED	PB	4-64
			CHECKED	T.W.	10-65
			APPROVED		
			SQUAD: Watts		

SHEET INDEX

For details of Fixed & Exp. Devices see Std. PSAJ-7 sheet No. 259 A
For details of Guardrail Connection see sheet No. 177
For details of Piling see Std. P-1-10 sht. No. 259 D
For details of Handrailing see Std. PTR-1-14 sht. No. 259 C
For details of Superstructure see Sheet No. 226
For details of Slab Reinforcing see Sheet No. 227
For details of Prestressed Conc. Bm. see Sheet No. 228
For details of Abutment No. 1 see Sheet No. 231
For details of Abutment No. 2 see Sheet No. 232
For details of Appr. Slabs see Sheet No. 221
For details of Slope Walls see Sheet No. 222

STRU. NO. 41 RT. STR. WALNUT CREEK O. FLOW

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

ALTERNATE NO. 2
GEN. ELEV., PLAN & SUMM. OF QUANT'S
38' 3-40' P.C.B. SPANS
38'-0" RDY. ~~[illegible]~~
℄-STA. 1484+41.52 RT. LANE
SKEWED 60° LT. F.W.D.
F.A. PROJ. NO. I-35-2(12)

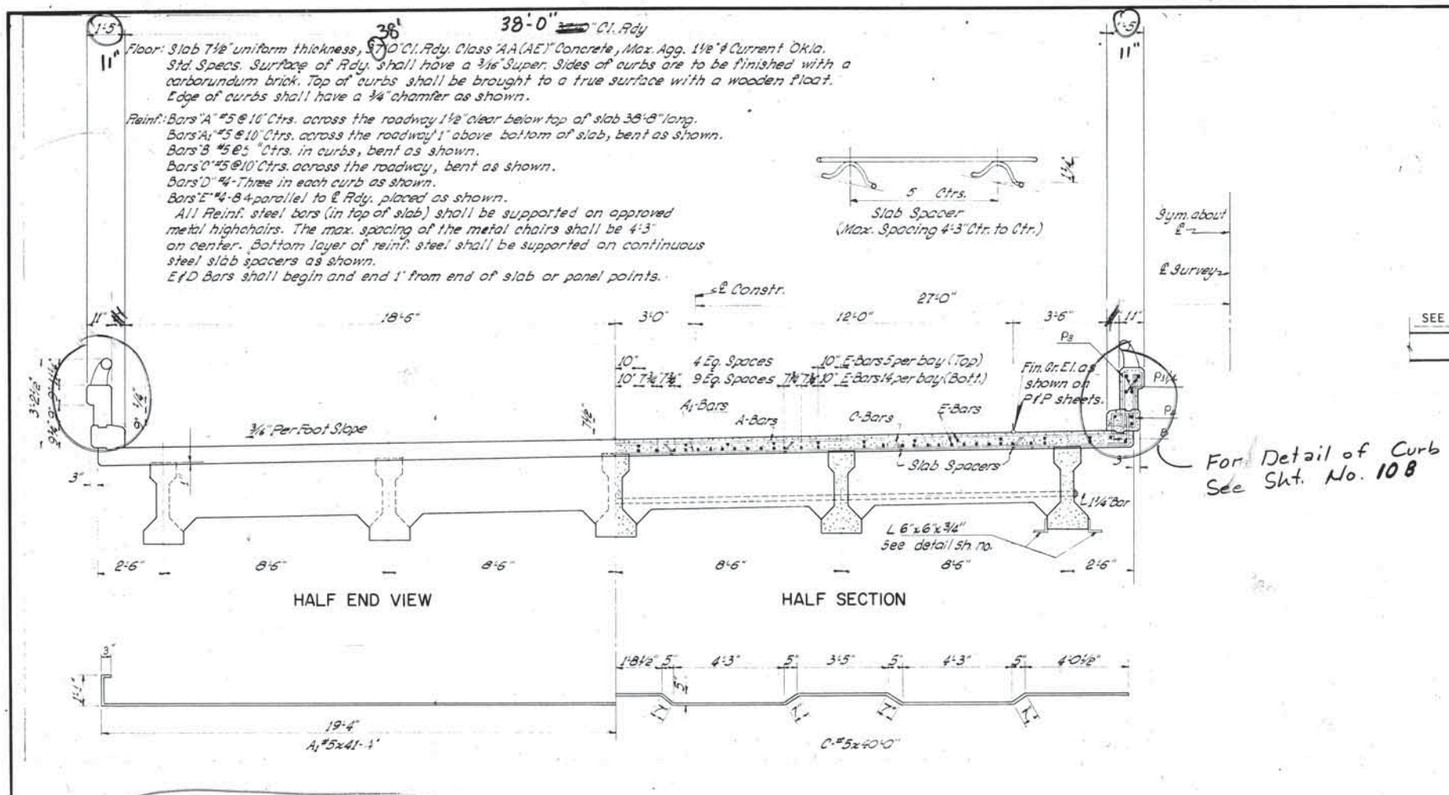
F.A. PROJECT NO. I-35-2(12) SHEET NO. 225

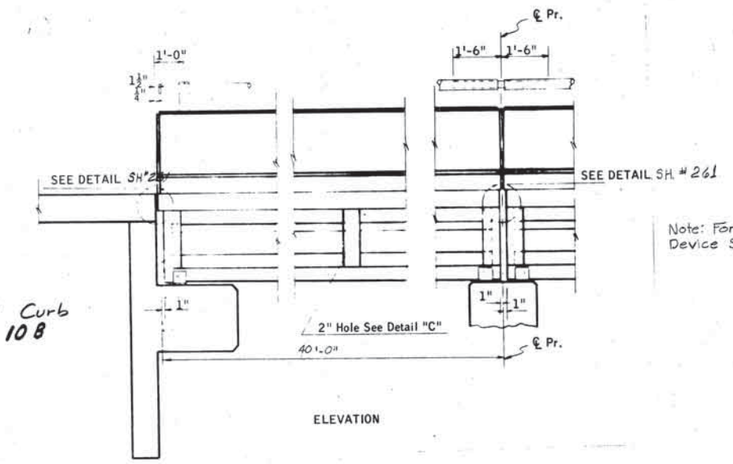
Rev. Curb & Cl. Rdy. dim. 1/28/67

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA I-35-2(12)	226	

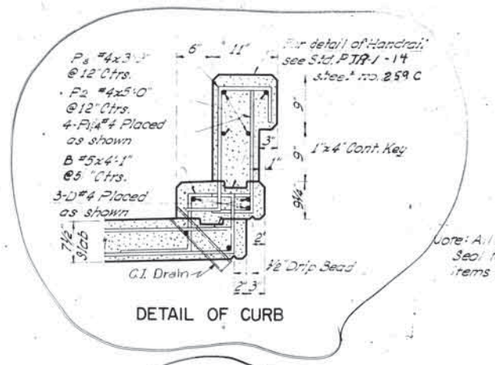
Floor: Slab 7½" uniform thickness, 38'-0" Cl. Rdy. Class A A(AE) Concrete, Max. Agg. 1½" & Current Okla. Std. Specs. Surface of Rdy. shall have a 3/16" Super. Sides of curbs are to be finished with a carborundum brick. Top of curbs shall be brought to a true surface with a wooden float. Edge of curbs shall have a ¾" chamfer as shown.

Reinf: Bars "A" #5 @ 10" Ctrs. across the roadway 1½" clear below top of slab 38'-8" long.
Bars "A₁" #5 @ 10" Ctrs. across the roadway 1" above bottom of slab, bent as shown.
Bars "B" #5 @ 5" Ctrs. in curbs, bent as shown.
Bars "C" #5 @ 10" Ctrs. across the roadway, bent as shown.
Bars "D" #4 - Three in each curb as shown.
Bars "E" #4 - 8 - parallel to ℄ Rdy. placed as shown.
All Reinf. steel bars (in top of slab) shall be supported on approved metal highchairs. The max. spacing of the metal chairs shall be 4'-3" on center. Bottom layer of reinf. steel shall be supported on continuous steel slab spacers as shown.
E & D Bars shall begin and end 1" from end of slab or panel points.

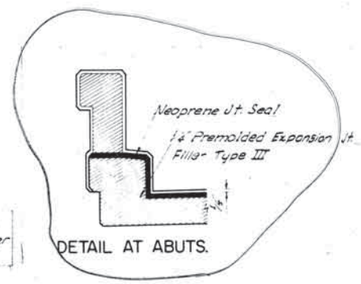


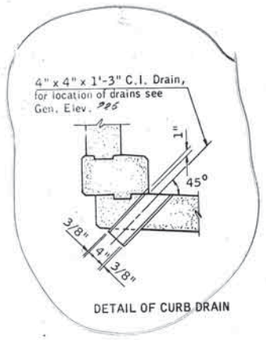


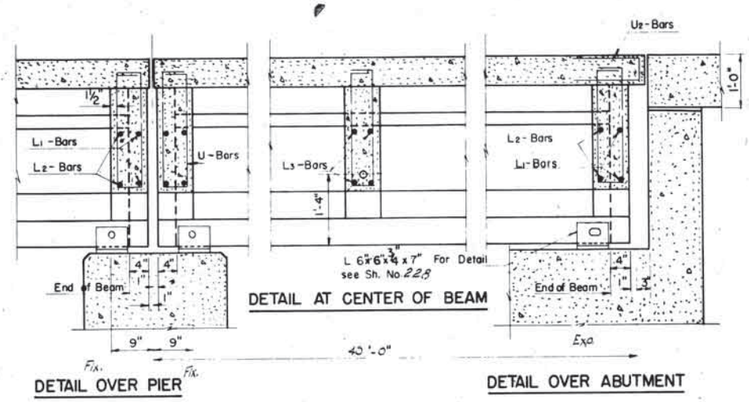
Note: For details of Exp. Device See P.S.A.J.-8 Sh. #259 B

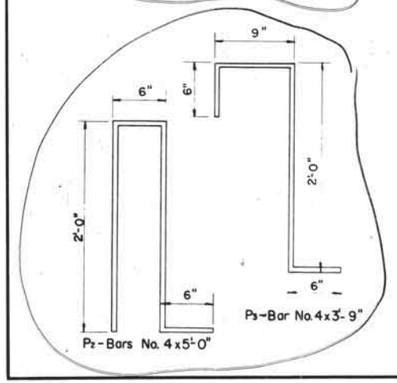


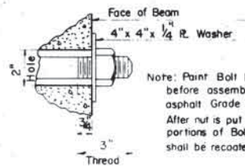
Note: All cost of Neoprene Jt. Seal to be included in other items of work.



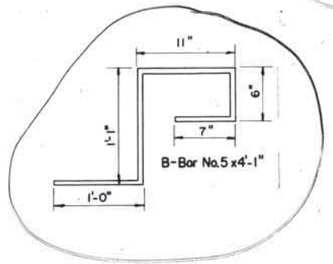








Note: Paint Bolt End, Nut, & Washer before assembly with cutback asphalt Grade R.C.-1.S. modified. After nut is put on, all exposed portions of Bolts, Washer, & Nut shall be recoated.



Note: 2" I.D. anchor bolt holes 1'-0" deep may be placed at all shoe locations. Contractor may use a thin wall steel tube and sleeve in place. After shoes are set in place, holes shall be filled with melted sulphur.

Note: All diaphragms to be cast at least 2 hours before slab is poured. Tighten nut of #10 bar firmly after concrete in diaphragms is 24 hours old. Interior Diaphragms may be precast.

Note: All cost of C.I. Drains, Armored Joint, Beam Anchor, Neoprene Pads, Bolts for diaphragms, and Preformed Exp. Jt. Filler shall be included in the price bid for other items of work.

Note: All exposed edges to have 3/4" chamfer unless otherwise noted. All Chamfer Strips shall be sized lumber. All construction shall be in accordance with current Okla. Std. Specs.

Walnut Creek O'Flow Alt. No. 2

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	PB	9-65
TRACED		
CHECKED	TW	10-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

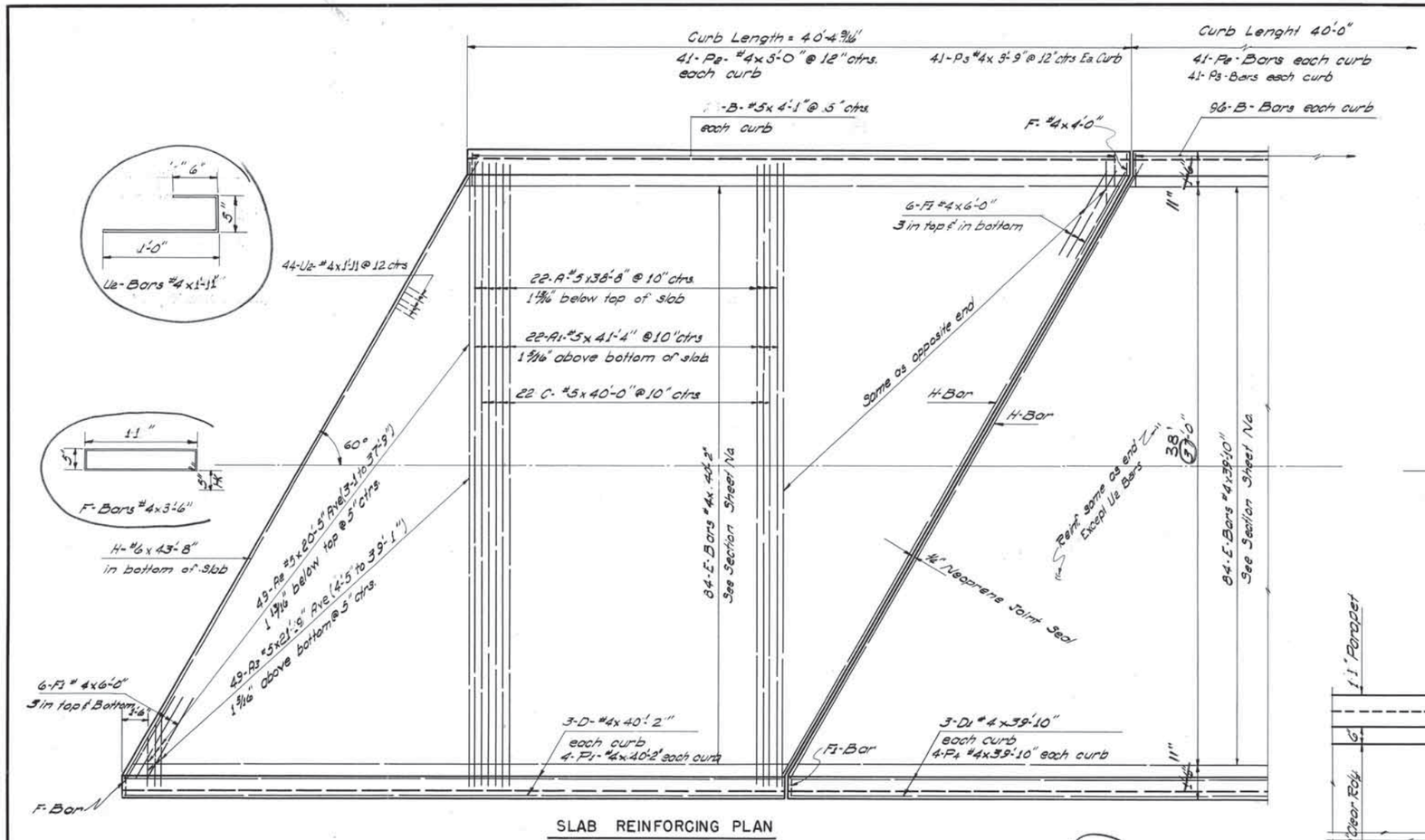
DETAILS OF SUPERSTRUCTURE
3-40' P.C.B. SPANS
38' (37') RDY. ~~2-6" CURBS~~
F.A. PROJ. NO. I-35-2 (12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 226

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	227	

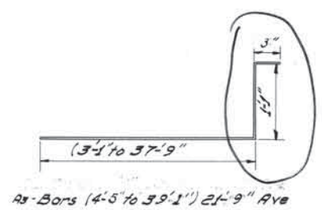
DESIGN DATA

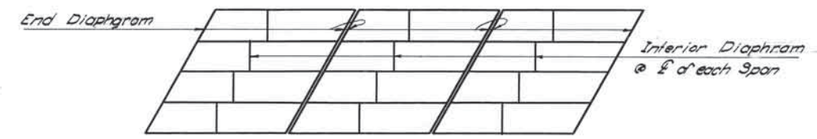
Loading H20-S16, P.P.N. 20-4
fc Class "A A(AE)" Concrete 1,200 psi.
fc Class "A A" Concrete 1,000 psi.
fs Steel 20,000 psi.



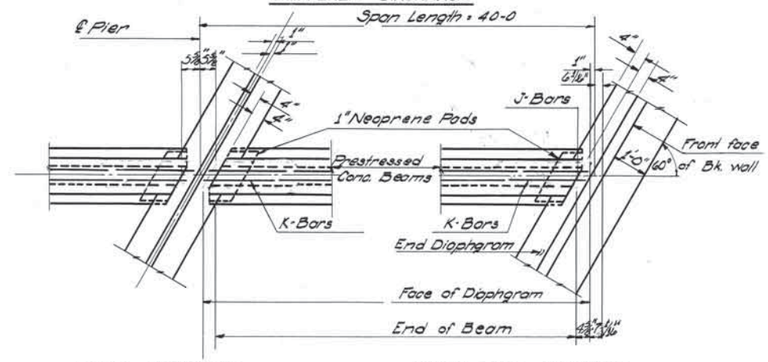
SLAB REINFORCING PLAN

Note: For details not shown See Sh. No. 226



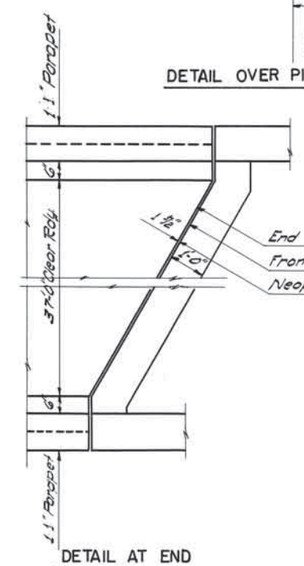


STIFFENER DIAPHRAGM

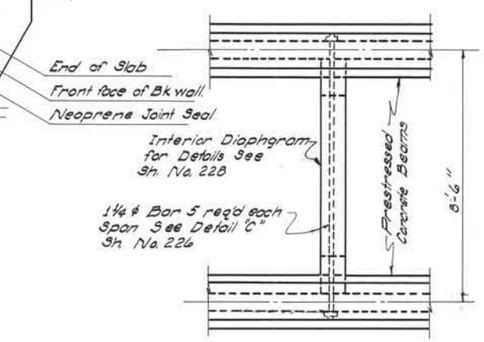


DETAIL OVER PIER

DETAIL OVER ABUTMENT



DETAIL AT END OF BRIDGE



DETAIL OF INTERIOR DIAPHRAGM

Walnut Creek O'Flow Alt. No. 2

QUANTITIES

Item	Unit	Total
Class "A A(AE)" Concrete	Cu. Yd	146.1
Reinforcing Steel	Lbs.	36,210.
Parapet Handrailing	Lin. Ft.	241.5
Concrete Beams	Lin. Ft.	585.94

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Curb & Cl. Rdy. dim.		4/29/64

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	P.L.B.	10/64
TRACED	P.L.B.	4/64
CHECKED	T.W.	10-63
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF SLAB REINFORCING

3-40' P.C.BM. SPANS (37') 38' RDY.

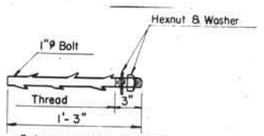
SKEW 60° L.F.

F.A. PROJ. NO. I-35-2(12)

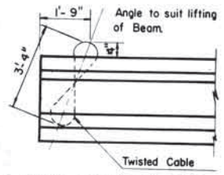
FA PROJECT NO. I-35-2(12) SHEET NO. 227

ITEGEN NO. 139 IMPERIAL

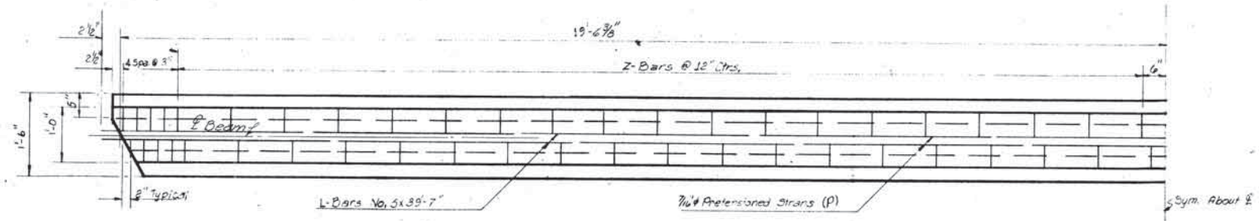
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	FA I-35-2(12)	228	



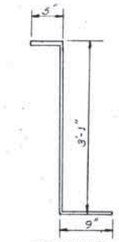
1"ø ANCHOR BOLT



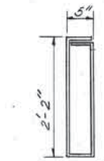
DETAIL OF LIFTING EYE



HALF PLAN VIEW

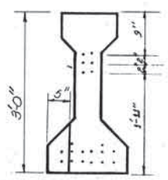


Z-BAR NO. 4 x 4'-3"

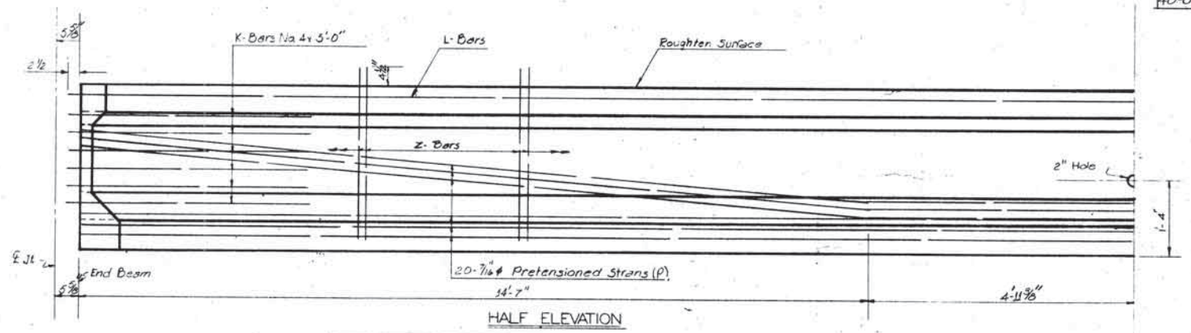


U1-Bars #4 x 5'-7"

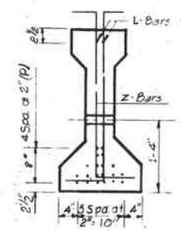
BEAM LENGTH TYPE II		WEIGHT 1 BEAM
Span	Beam	
40'-0"	39'-0 3/4"	15.6 K



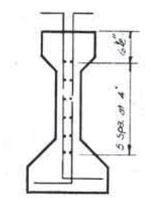
END VIEW
(SHOWING 7/16 ø PRETENSIONED STRANS ONLY)



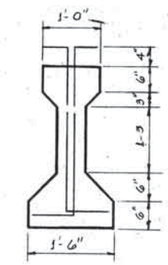
HALF ELEVATION



SECTION AT ℄

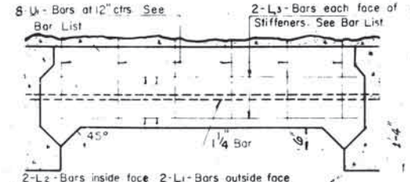


SECTION "A-A"
(SHOWING "K" BARS ONLY)

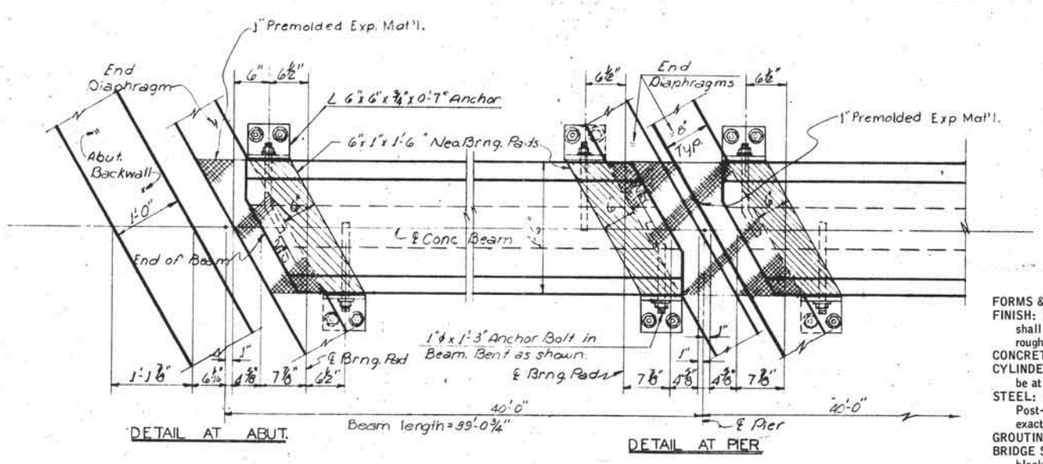


BAR LIST STIFFENER DIAPHRAGM		
MARK	SIZE	LENGTH
U1	#4	5'-7"
L1	4	39'-5"
L2	4	8'-10"
L3	4	7'-8"

Note: All Stiffener Diaphragms shall be cast in place.

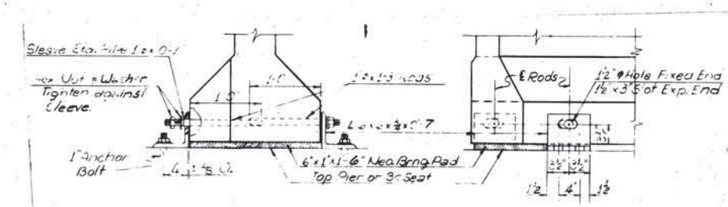


STIFFENER DIAPHRAG.



DETAIL AT ABUT.

DETAIL AT PIER



ANCHOR DETAILS

GENERAL NOTES

FORMS & PALLETS: All beams shall be cast in concrete floored pallets and metal forms.
FINISH: Tops of beams to be rough floated. At approximately the time of initial set, entire top of beams shall be scrubbed transversely with coarse wire brush to remove all laitance and to produce a roughened surface for bonding slab.
CONCRETE: Concrete for beams shall have a min. 5,000 p.s.i. @ 28 days.
CYLINDER STRENGTH: At transfer of the tensioning load, the cylinder strength of the concrete shall be at least 4,000 p.s.i.
STEEL: All strands shall be 7/16" unless otherwise noted. Initial load per strand shall be 18,900#. Post-tensioned bars shall be 1 1/8" ø, stressed to 101,000 p.s.i. End anchorages shall be set exactly normal to the bar.
GROUTING: Post-tensioned bars shall be pressure grouted.
BRIDGE SEAT: Bridge seats shall be finished to a true horizontal surface by rubbing with a carborundum block.
CABLE EXTENSIONS: All pretensioning strands shall be cut off 2 1/2" beyond the ends of beams.

PREMOLDED EXPANSION MATERIAL & NEOPRENE PAD: Cost of 1" Neoprene Pad & Premolded Expansion Material shall be included in the price bid for other items of work.

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Notes	ALD	4/26/67

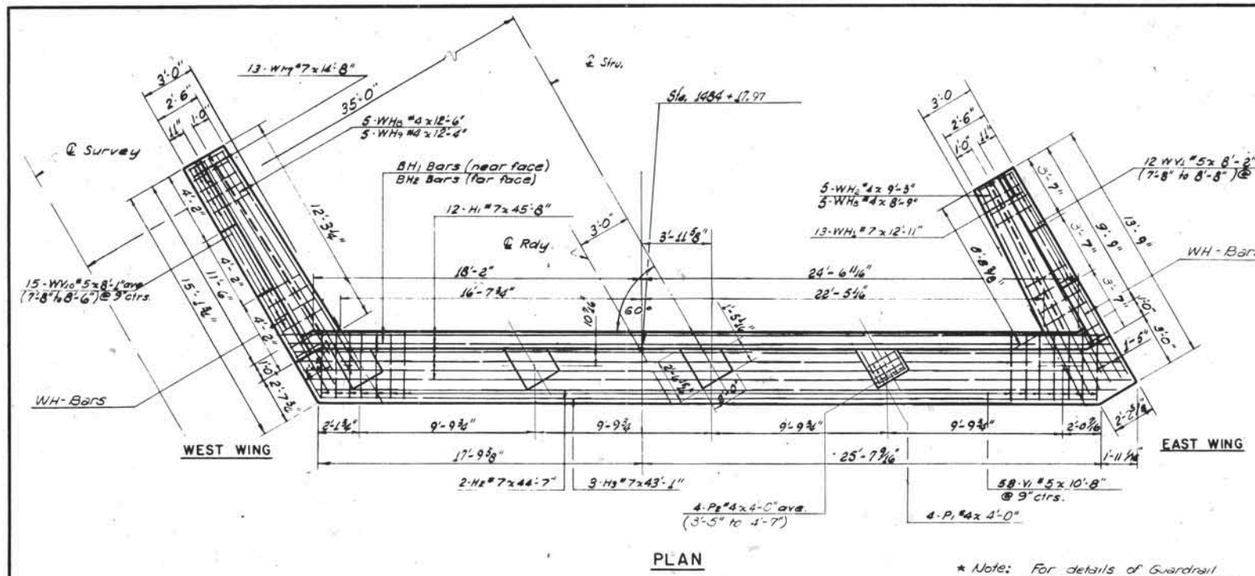
RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	FLB	5-65
TRACED		
CHECKED	TW	10-65
APPROVED		
SQUAD: Wallis		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

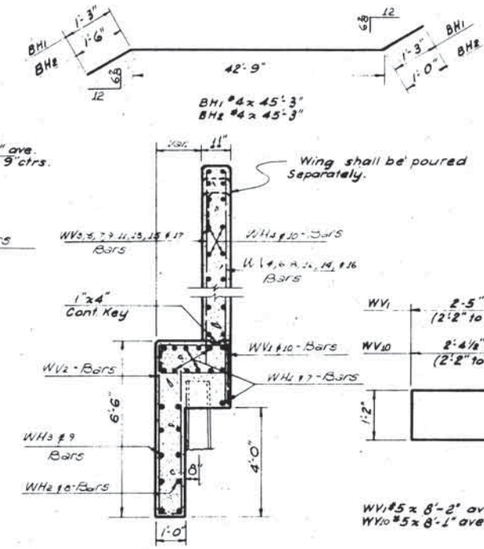
PRESTRESSED CONC. BEAM
3-40' P.C.B. SPANS
F.A. PROJ. NO. I-35-2(12)

FA PROJECT NO. I-35-2(12) SHEET NO. 228

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	229	

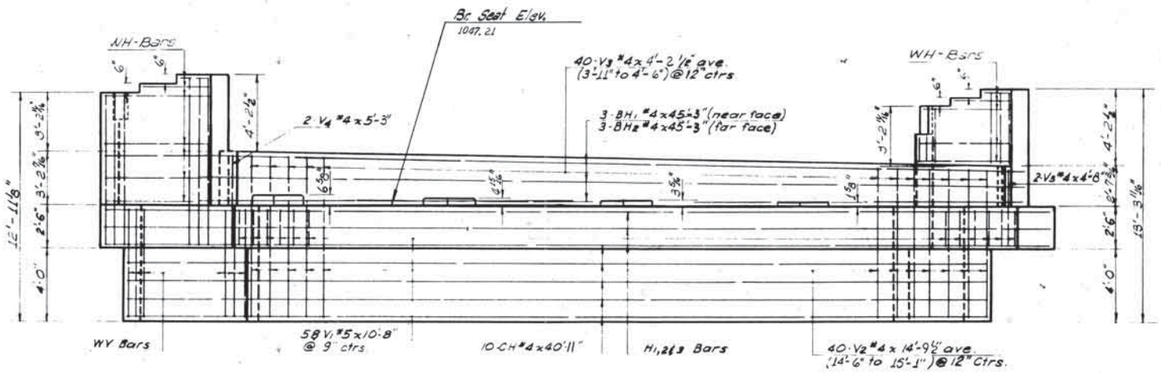


PLAN

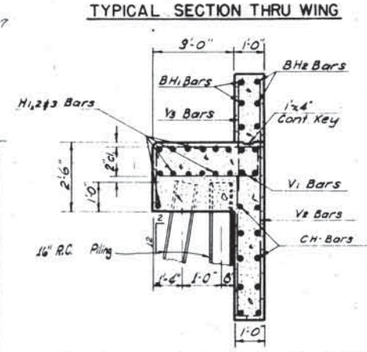


TYPICAL SECTION THRU WING

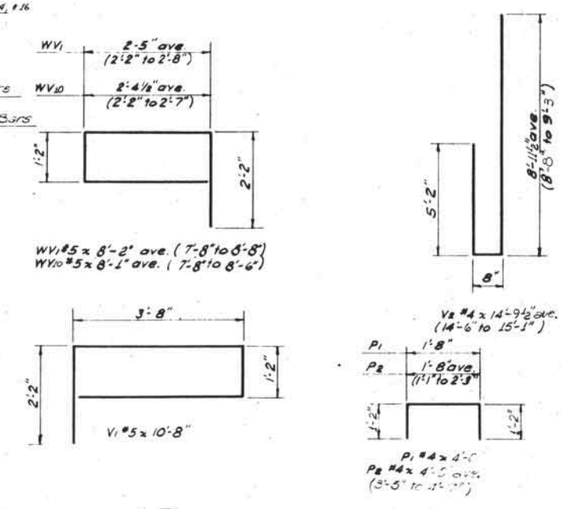
Note: For Abutment Excav. Diagram and note, see sheet no. 232.



ELEVATION

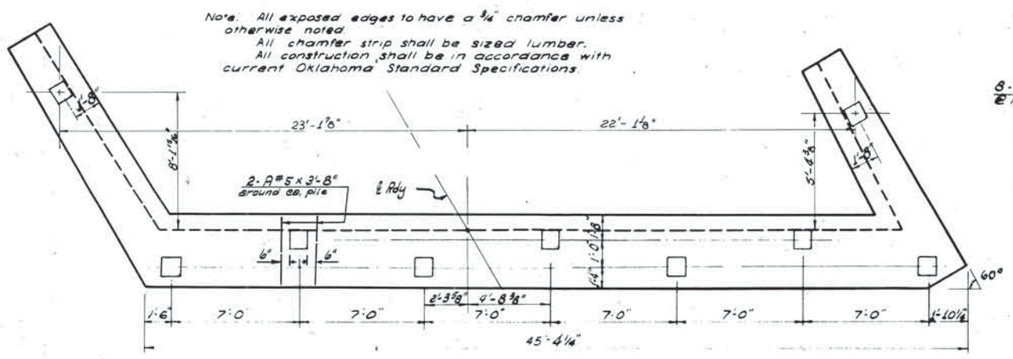


TYPICAL SECTION THRU ABUTMENT

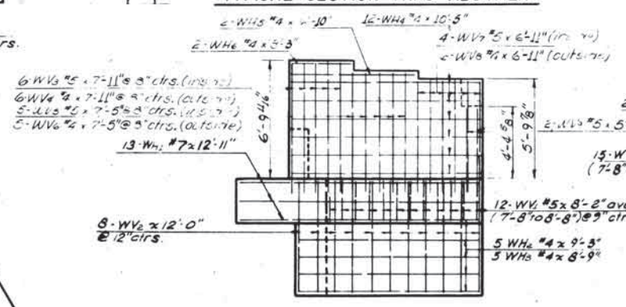


BAR LIST				
Mark	Size	Form	No.	Length
H1	#7	Str.	12	45'-8"
H2	#7	Str.	2	44'-7"
H3	#7	Str.	3	43'-1"
BH1	#4	Bnt.	3	45'-3"
BH2	#4	Bnt.	3	45'-3"
CH	#4	Str.	10	40'-11"
V1	#5	Bnt.	58	10'-8"
V2	#4	Bnt.	40	14'-9½" ave.
V3	#4	Str.	40	4'-2½" ave.
V4	#4	Str.	2	5'-3"
V5	#4	Str.	2	4'-8"
WH1	#7	Str.	13	12'-11"
WH2	#4	Str.	5	9'-3"
WH3	#4	Str.	5	8'-9"
WH4	#4	Str.	12	10'-5"
WH5	#4	Str.	2	6'-10"
WH6	#4	Str.	2	5'-3"
WH7	#7	Str.	13	14'-8"
WH8	#4	Str.	5	12'-6"
WH9	#4	Str.	5	12'-4"
WH10	#4	Str.	14	12'-2"
WH11	#4	Str.	2	8'-0"
WH12	#4	Str.	2	3'-10"
WV1	#5	Bnt.	12	8'-2" ave.
WV2	#4	Bnt.	21	12'-0"
WV3	#5	Str.	6	7'-11"
WV4	#4	Str.	6	7'-11"
WV5	#5	Str.	5	7'-5"
WV6	#4	Str.	5	7'-5"
WV7	#5	Str.	4	6'-11"
WV8	#4	Str.	6	6'-11"
WV9	#5	Str.	2	5'-6"
WV10	#5	Bnt.	15	8'-1" ave.
WV11	#5	Str.	6	8'-6"
WV12	#4	Str.	6	8'-6"
WV13	#5	Str.	6	8'-0"
WV14	#4	Str.	6	8'-0"
WV15	#5	Str.	5	7'-6"
WV16	#4	Str.	7	7'-6"
WV17	#5	Str.	2	6'-1"
P1	#4	Bnt.	16	4'-0"
P2	#4	Bnt.	16	4'-0" ave.
A	#5	Str.	14	3'-8"
* GC1	#4	Bnt.	6	6'-0"
* GC2	#4	Bnt.	4	5'-6"

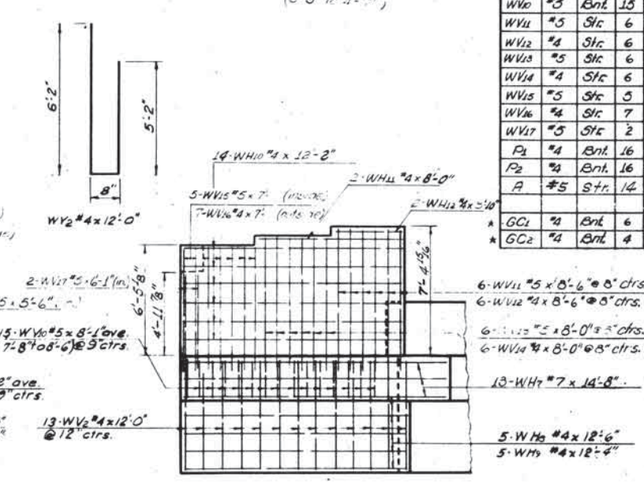
* Note: For details of Guardrail Connection, see sheet no. 177



PILE SPACING DIAGRAM



EAST WING



WEST WING

QUANTITIES		
ITEM	UNIT	TOTAL
Class "A" Concrete	C.Y.	41.5
Reinforcing Steel	Lbs.	5530.
Substructure Excav., Common	C.Y.	90.
16" R.C. Piling	L.F.	280

ALT. NO. 2
LT. STR. WALNUT CREEK O'FLOW

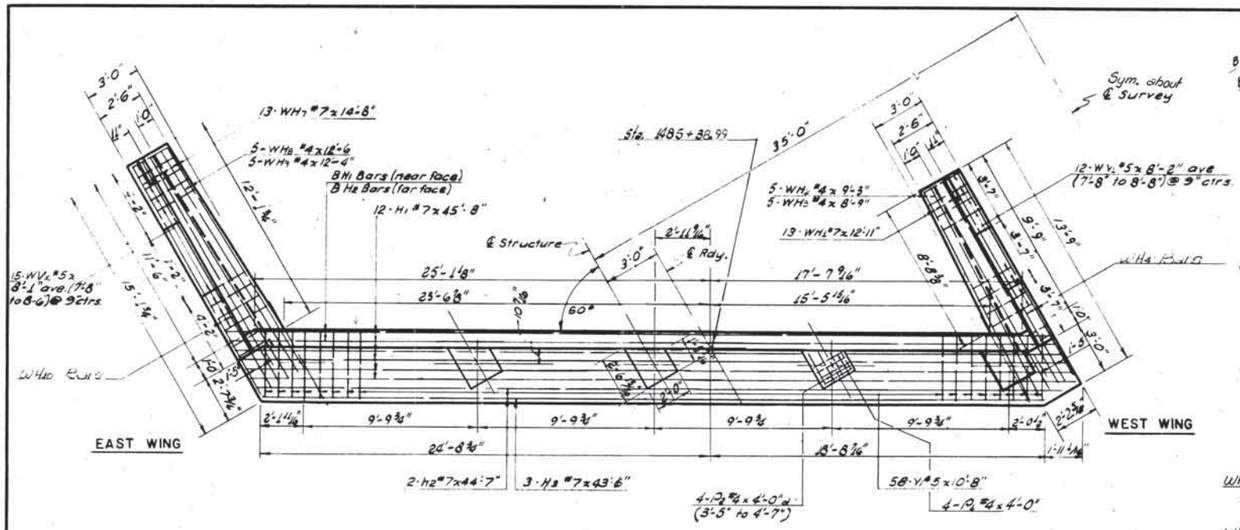
REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Reinf. around piling	J.M.	6-28-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	W.H.K.	8-64
TRACED	R.B.R.	8-64
CHECKED	Q.H.	10-66
APPROVED		
SQUAD Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

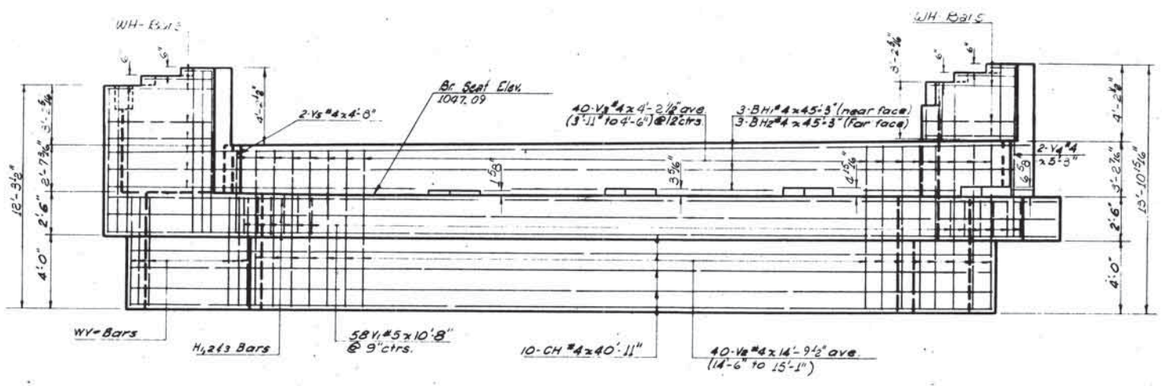
DETAIL OF ABUTMENTS
ABUT. NO. 1 LT.
℄ STA. 1484+78.48
F. A. PROJ. NO. I-35-2(12)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	230	

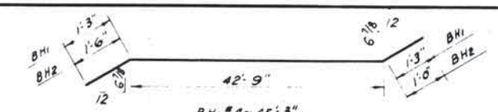


PLAN

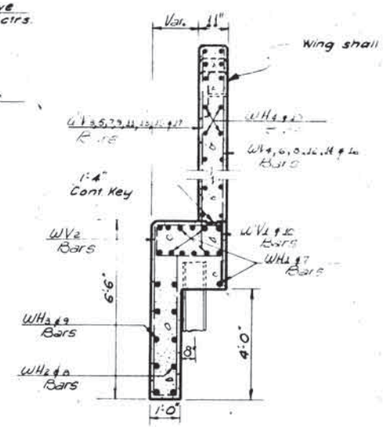
* Note: For details of Guardrail Connection, see sheet no. 177



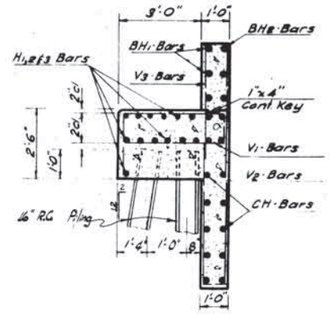
ELEVATION



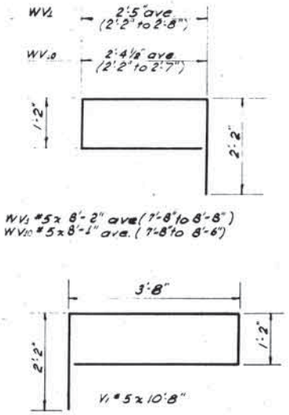
Note: For Abutment Excav. Diagram and note, see sheet no. 232

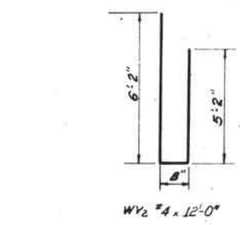


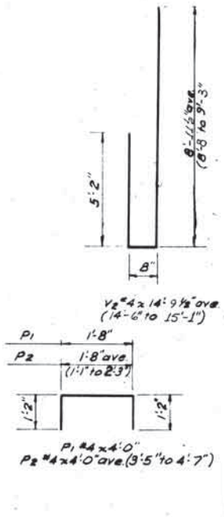
TYPICAL SECTION THRU WING



TYPICAL SECTION THRU ABUT.

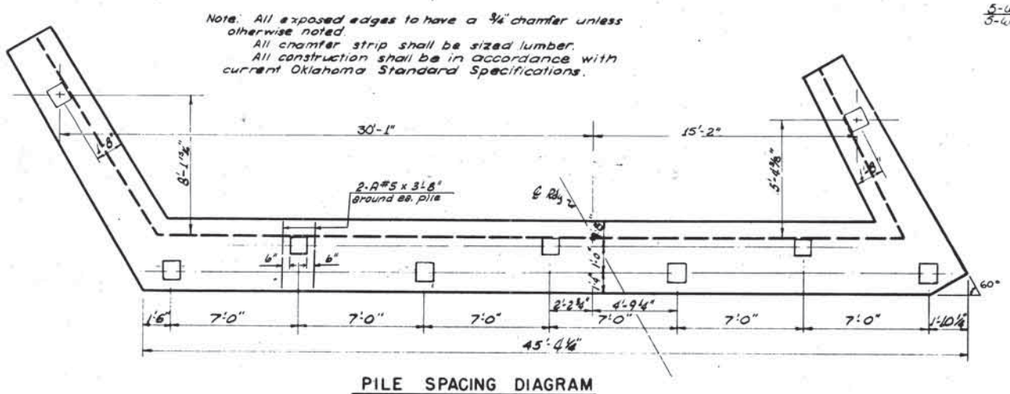




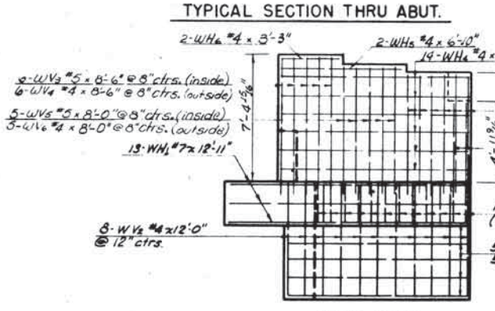


BAR LIST

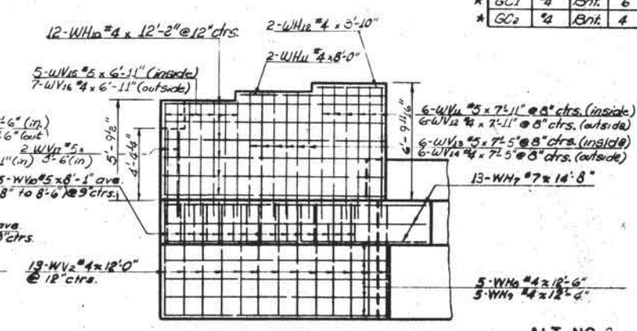
Mark	Size	Form	No.	Length
H1	#7	Str.	12	45'-8"
H2	#7	Str.	2	44'-7
H3	#7	Str.	3	43'-1"
BH1	#4	Bnt.	3	45'-3"
BH2	#4	Bnt.	3	45'-3"
CH	#4	Str.	10	40'-11"
V1	#5	Bnt.	58	10'-8"
V2	#4	Bnt.	40	14'-9½" ave.
V3	#4	Str.	40	4'-2⅛" ave.
V4	#4	Str.	2	5'-3"
V5	#4	Str.	2	6'-8"
WH1	#7	Str.	13	12'-11"
WH2	#4	Str.	5	9'-3"
WH3	#4	Str.	5	8'-9"
WH4	#4	Str.	14	10'-5"
WH5	#4	Str.	2	6'-10"
WH6	#4	Str.	2	9'-3"
WH7	#7	Str.	13	14'-8"
WH8	#4	Str.	5	12'-6"
WH9	#4	Str.	5	12'-4"
WH10	#4	Str.	12	12'-2"
WH11	#4	Str.	2	8'-0"
WH12	#4	Str.	2	8'-10"
WV1	#5	Bnt.	12	8'-2" ave.
WV2	#4	Bnt.	21	12'-0"
WV3	#5	Str.	6	8'-6"
WV4	#4	Str.	6	8'-6"
WV5	#5	Str.	5	8'-0"
WV6	#4	Str.	5	8'-0"
WV7	#5	Str.	4	7'-6"
WV8	#4	Str.	6	7'-6"
WV9	#5	Str.	2	6'-1"
WV10	#5	Bnt.	15	8'-1" ave.
WV11	#5	Str.	6	7'-11"
WV12	#4	Str.	6	7'-11"
WV13	#5	Str.	6	7'-5"
WV14	#4	Str.	6	7'-5"
WV15	#5	Str.	5	6'-11"
WV16	#4	Str.	7	6'-11"
WV17	#5	Str.	2	5'-6"
P1	#4	Bnt.	16	4'-0"
P2	#4	Bnt.	16	4'-0" ave.
A	#5	Str.	14	3'-8"
* GC1	#4	Bnt.	6	6'-0"
* GC2	#4	Bnt.	4	5'-6"



PILE SPACING DIAGRAM



WEST WING



EAST WING

ALT. NO. 2
LT. STR. WALNUT CREEK O'FLOW

QUANTITIES

ITEM	UNIT	TOTAL
Class "A" Concrete	C. Y.	41.5
Reinforcing Steel	Lbs.	5530.
Substructure Excav., Common	C. Y.	90.
16" R.C. Piling	L. F.	315

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Reinf around piling	DM	6-26-67

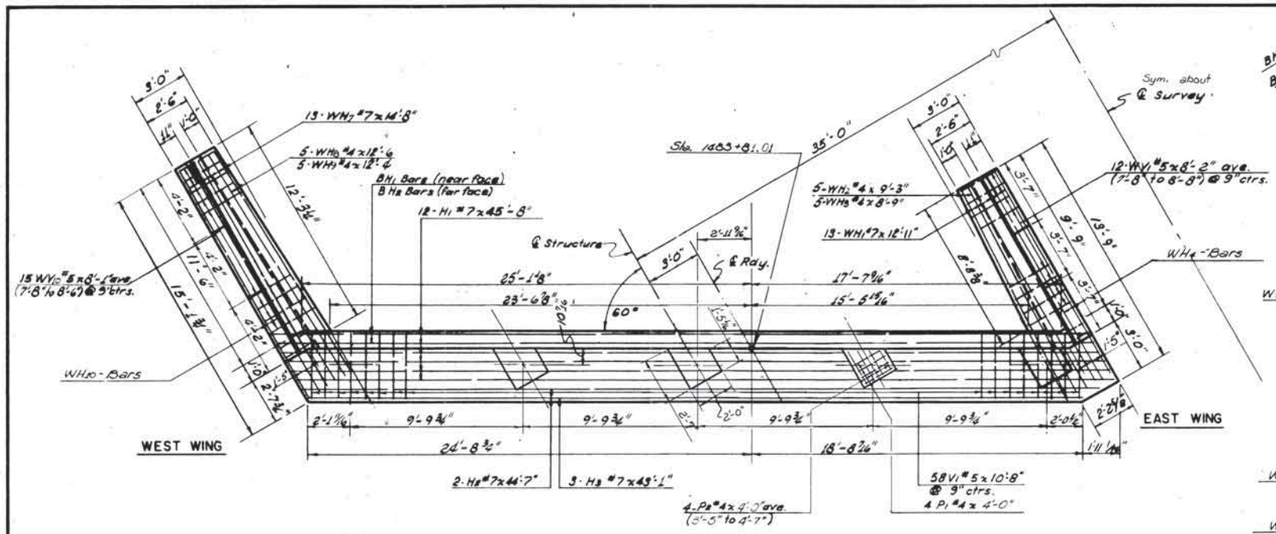
RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	WKK	6-64
TRACED	R.B.R.	9-64
CHECKED	D.H.	10-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF ABUTMENTS
ABUT. NO. 2 LT.
℄ STA. 1484 + 78.48
F. A. PROJ. NO. I-35-2(12)

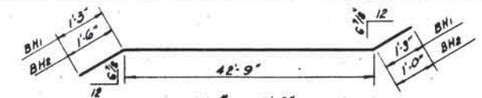
F.A. PROJECT NO. I-35-2(12) SHEET NO. 230

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	231	

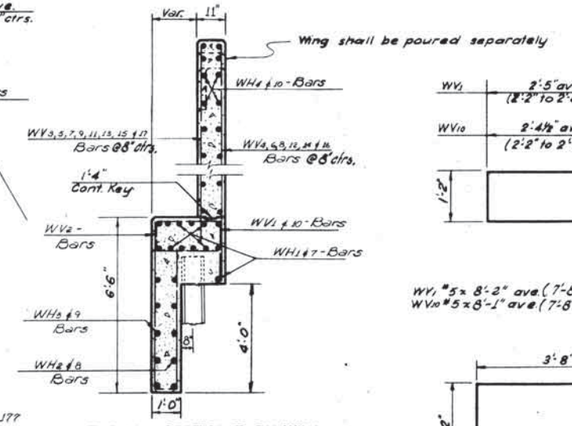


PLAN

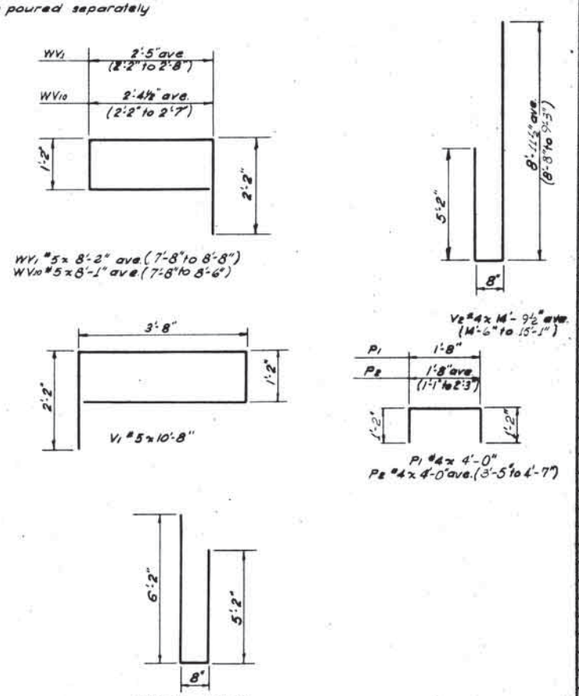
★ Note: For details of Guardrail Connection, see sheet no. 177

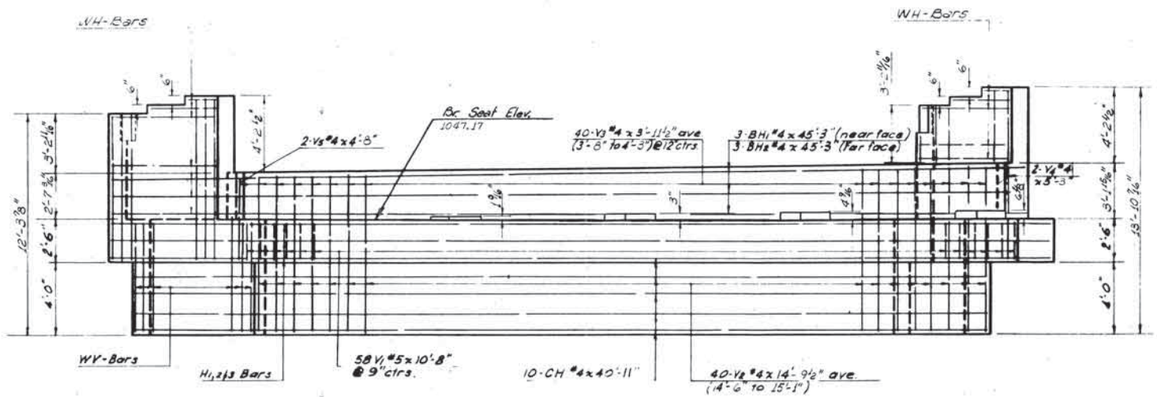


Note: For Abutment Excav. Diagram and note, see sheet no. 232

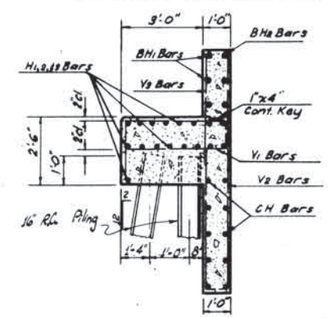


TYPICAL SECTION THRU WING

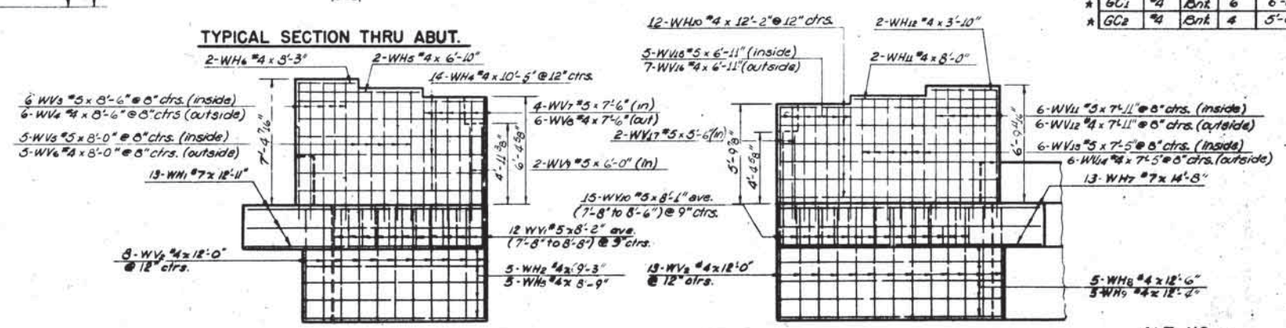




ELEVATION

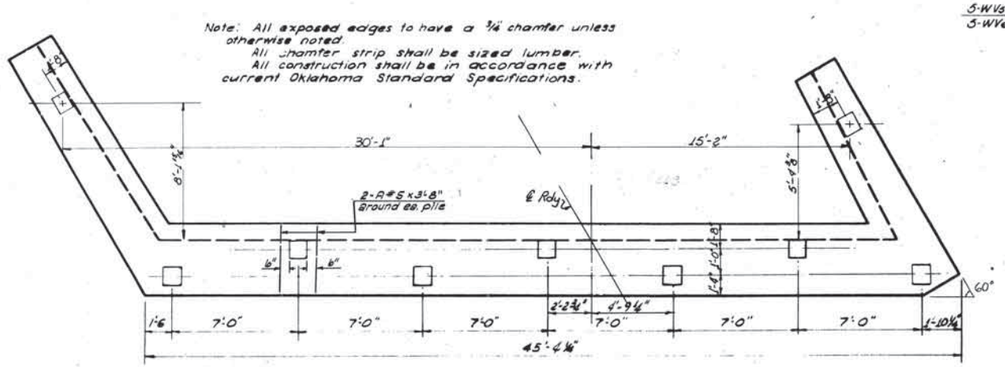


TYPICAL SECTION THRU ABUT.



EAST WING

WEST WING



PILE SPACING DIAGRAM

BAR LIST

Mark	Size	Form	No.	Length
H1	#7	Str.	12	45'-8"
H2	#7	Str.	2	44'-7"
H3	#7	Str.	3	49'-1"
BH1	#4	Bnt.	3	45'-3"
BH2	#4	Bnt.	3	45'-3"
CH	#4	Str.	10	40'-11"
V1	#5	Bnt.	58	10'-8"
V2	#4	Bnt.	40	14'-9½" ave.
V3	#4	Str.	40	3'-11½" ave.
V4	#4	Str.	2	3'-3"
V5	#4	Str.	2	4'-8"
WH1	#7	Str.	18	12'-11"
WH2	#4	Str.	5	9'-3"
WH3	#4	Str.	5	8'-9"
WH4	#4	Str.	14	10'-5"
WH5	#4	Str.	2	6'-10"
WH6	#4	Str.	2	5'-3"
WH7	#7	Str.	10	14'-8"
WH8	#4	Str.	5	12'-6"
WH9	#4	Str.	5	12'-4"
WH10	#4	Str.	12	12'-2"
WH11	#4	Str.	2	8'-0"
WH12	#4	Str.	2	8'-10"
WV1	#5	Bnt.	12	8'-2" ave.
WV2	#4	Bnt.	21	12'-0"
WV3	#5	Str.	6	8'-6"
WV4	#4	Str.	6	8'-6"
WV5	#5	Str.	5	8'-0"
WV6	#4	Str.	5	8'-0"
WV7	#5	Str.	4	7'-6"
WV8	#4	Str.	6	7'-6"
WV9	#5	Str.	2	6'-0"
WV10	#5	Bnt.	15	8'-1" ave.
WV11	#5	Str.	6	7'-11"
WV12	#4	Str.	6	7'-11"
WV13	#5	Str.	6	7'-5"
WV14	#4	Str.	6	7'-5"
WV15	#5	Str.	3	6'-11"
WV16	#4	Str.	7	6'-11"
WV17	#5	Str.	2	5'-6"
P1	#4	Bnt.	16	4'-0"
P2	#4	Bnt.	16	4'-0" ave.
A	#5	Str.	14	3'-8"
★ GC1	#4	Bnt.	6	6'-0"
★ GC2	#4	Bnt.	4	5'-6"

QUANTITIES

ITEMS	UNIT	TOTAL
Class "A" Concrete	C.Y.	41.5
Reinforcing Steel	Lbs.	5530.
Substructure Excav., Common	C.Y.	90.
16" R.C. Piling	L.F.	315

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
1	Revised Reinf. around piling	D.M.	6-26-67	DESIGN		
				DETAIL	W.H.K.	6-64
				TRACED	R.B.R.	8-64
				CHECKED	Q.H.	10-65
				APPROVED		
				SQUAD: Watts		

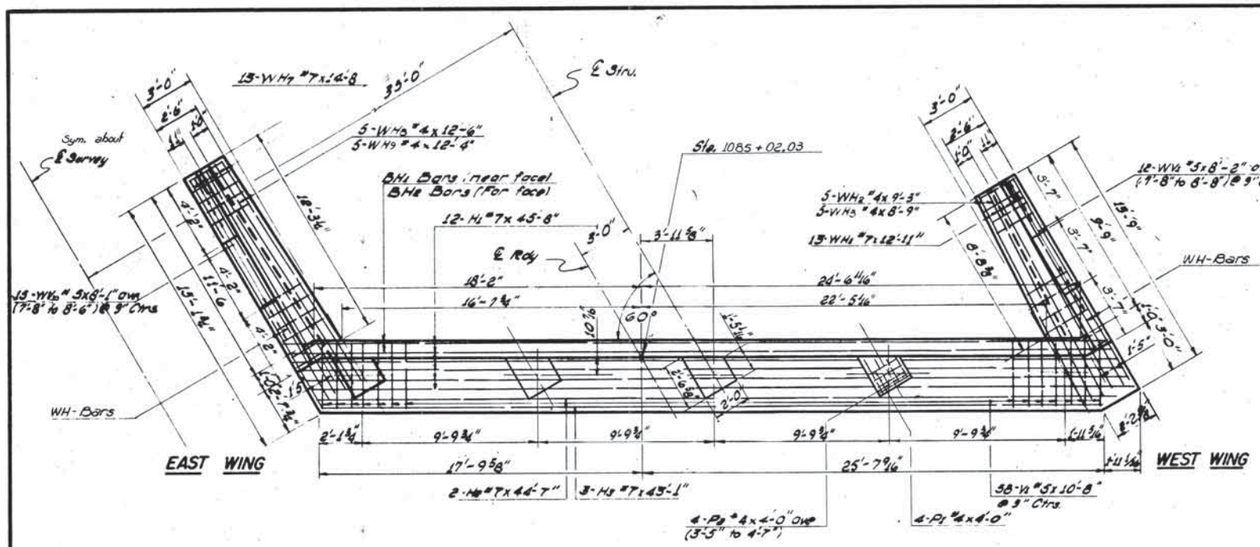
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

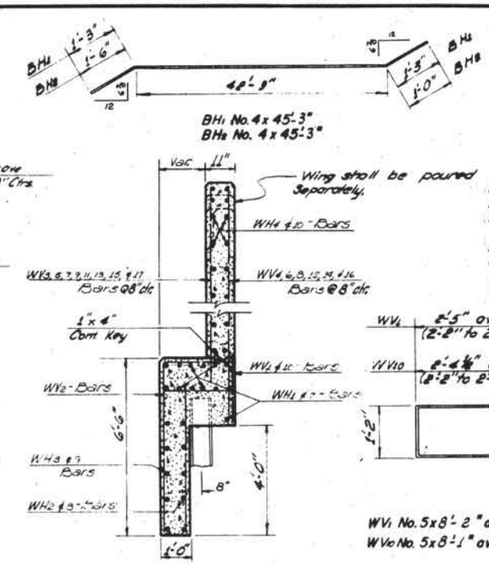
DETAIL OF ABUTMENTS
ABUT. NO. 1 RT.
℄ STA. 1484 + 41.52
F. A. PROJ. NO. I-35-2(12)

ALT. NO. 2
RT. STR. WALNUT CREEK O'FLOW

F.A. PROJECT NO. I-35-2(12) SHEET NO. 231

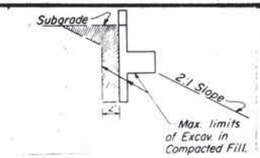
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	232	



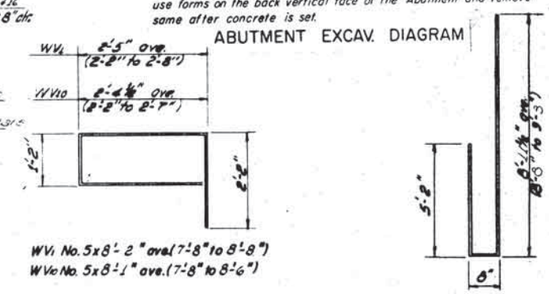


Shaded area to be back filled and tamped with a mechanical tamper to 100% Proctor Density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the price bid per C.Y. for Substructure Excavation Common.

Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer he may pour the concrete against the compacted fill. If necessary, Contractor shall use forms on the back vertical face of the Abutment and remove same after concrete is set.

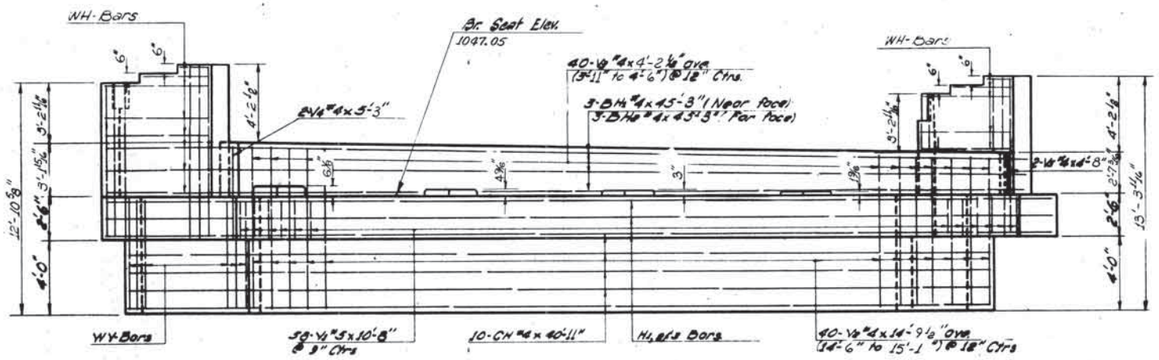


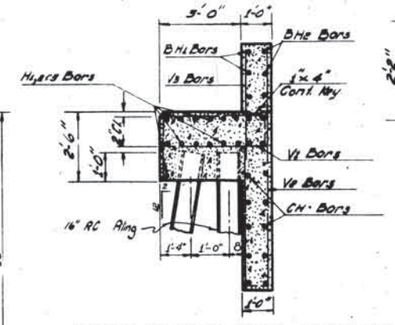
ABUTMENT EXCAV. DIAGRAM

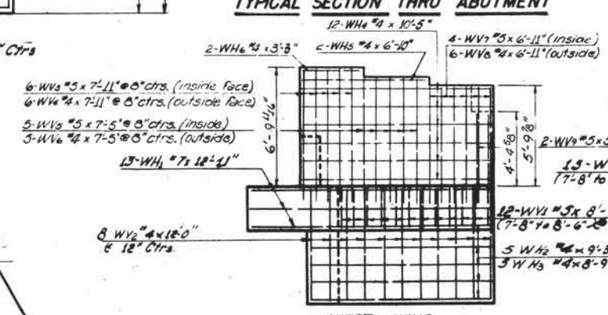


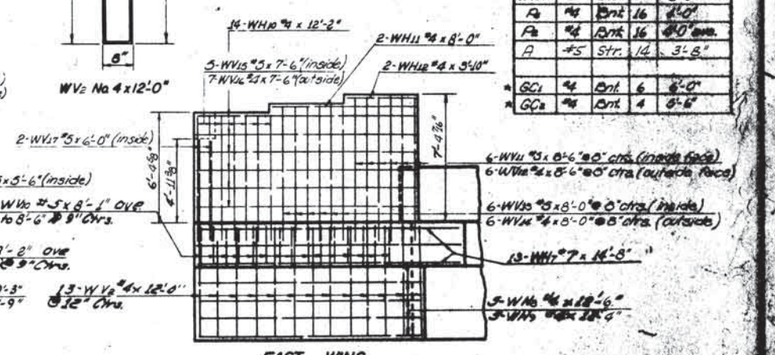
BAR — LIST

Mark	Size	Form	No.	Length
H1	#7	Str	18	43'-8"
H2	#7	Str	6	44'-7"
H3	#7	Str	3	43'-1"
BH1	#4	Bnt	8	45'-3"
BH2	#4	Bnt	3	45'-3"
CH	#4	Str	10	40'-11"
V1	#5	Bnt	38	10'-8"
V2	#4	Bnt	40	14'-9 1/2" ave
V3	#4	Str	40	4'-2 1/2" ave
V4	#4	Str	8	5'-3"
V5	#4	Str	8	4'-8"
WH1	#7	Str	19	18'-11"
WH2	#4	Str	5	9'-3"
WH3	#4	Str	5	8'-9"
WH4	#4	Str	12	10'-5"
WH5	#4	Str	2	6'-10"
WH6	#4	Str	2	3'-3"
WH7	#7	Str	13	14'-8"
WH8	#4	Str	5	12'-6"
WH9	#4	Str	5	12'-4"
WH10	#4	Str	14	12'-2"
WH11	#4	Str	2	8'-0"
WH12	#4	Str	2	3'-10"
WV1	#5	Bnt	12	8'-2" ave
WV2	#4	Bnt	21	12'-0"
WV3	#5	Str	6	7'-11"
WV4	#4	Str	6	7'-11"
WV5	#5	Str	5	7'-5"
WV6	#4	Str	5	7'-5"
WV7	#5	Str	4	6'-11"
WV8	#4	Str	6	6'-11"
WV9	#5	Str	2	5'-6"
WV10	#5	Bnt	15	8'-1" ave.
WV11	#5	Str	6	8'-6"
WV12	#4	Str	6	8'-6"
WV13	#5	Str	6	8'-0"
WV14	#4	Str	6	8'-0"
WV15	#5	Str	5	7'-6"
WV16	#4	Str	7	7'-6"
WV17	#5	Str	2	6'-0"
P1	#4	Bnt	16	4'-0"
P2	#4	Bnt	16	4'-0" ave.
A	#5	Str	14	3'-8"
* GC1	#4	Bnt	6	6'-0"
* GC2	#4	Bnt	4	6'-6"

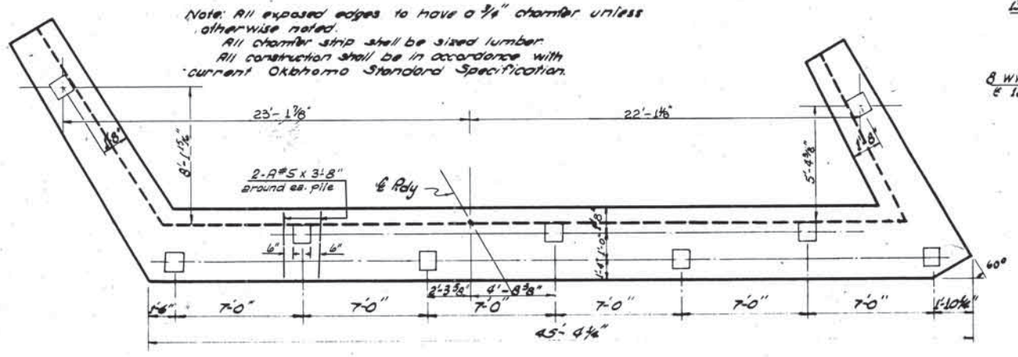








Note: All exposed edges to have a 3/4" chamfer unless otherwise noted.
All chamfer strip shall be sized lumber.
All construction shall be in accordance with current Oklahoma Standard Specification.



QUANTITIES		
ITEM	UNIT	TOTAL
Class "A" Concrete	C.Y.	41.5
Reinforcing Steel	Lbs.	5530
Substructure Excav., Common	C.Y.	90.
16" R.C. Piling	L.F.	280

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Reinf around piling	DM	6-8-62

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	WHK	8/64
TRACED	PLB	8/64
CHECKED	O.H.	10-65
APPROVED		
SQUAD: WATTS		

ALT. NO. 2

RT. STR. WALNUT CREEK O'FLOW

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF ABUTMENTS

ABUT. NO. 2 RT.

℄ STA. 1484+41.52

F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 232

Rev. Notes - 4-67

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		233	

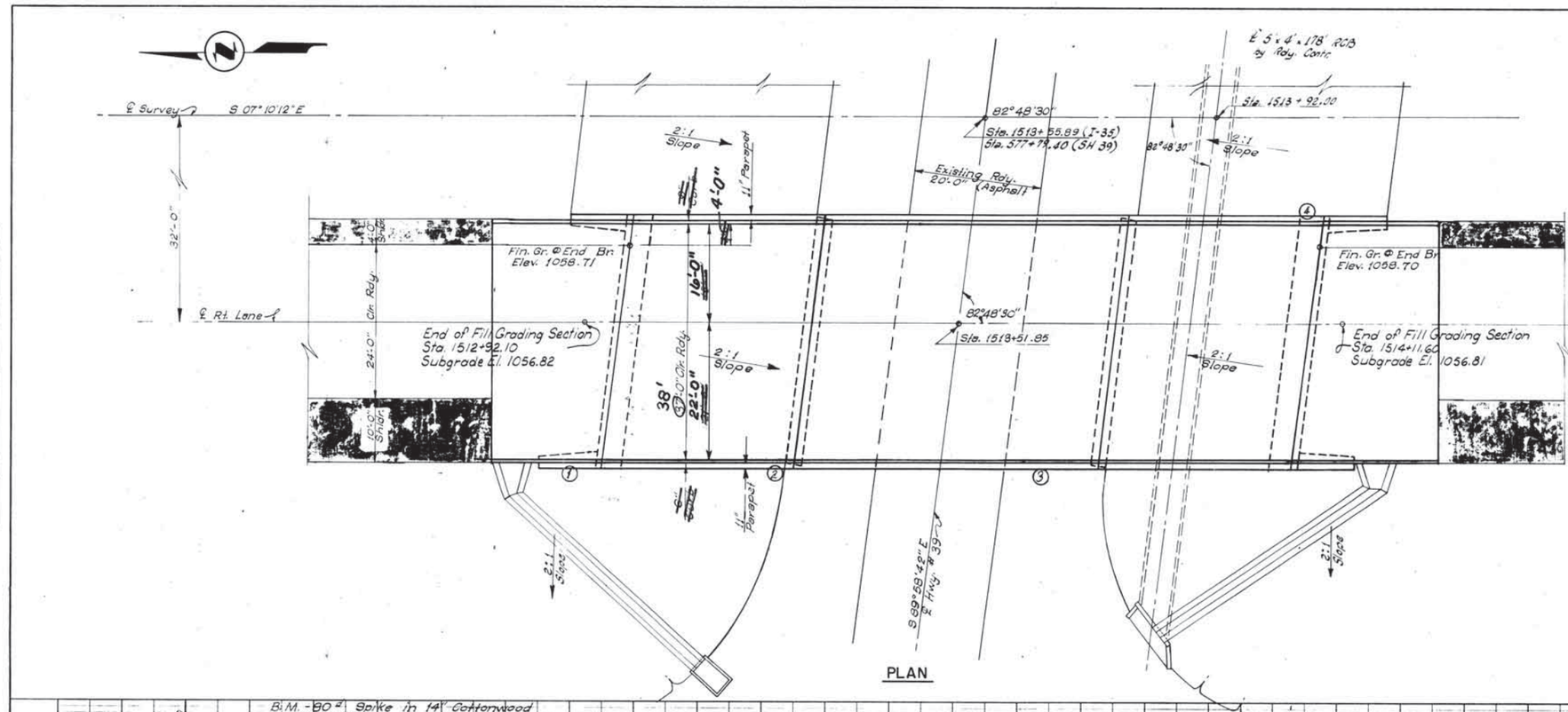
DESIGN DATA

f'c. Class "A" Conc. 1,000 psi.
f'c. Class "AA(AE)" Conc. 1,200 psi.
fs. Reinf. Steel 20,000 psi.
fs. Structural Steel 20,000 psi.

Loading H20-S16 & PPM 20-4

MAXIMUM FOUNDATION PRESSURE

Abutment 18.6 T/pile
Pier 33.07 T/pile



SUMMARY OF QUANTITIES

Item No.	Item	Unit	Abuts	Piers	Super Str.	Bridge	Rdy.
202.06d	Class "D" Unclassified Excavation	C.Y.					200
Special	Approach Slab Base	S.Y.					168.9
414.06(aae)	Approach Slabs (Air Ent. Agent)	S.Y.					168.9
301.06 b	Substru. Excavation, Common	C.Y.	94.0	102.6		196.6	
505A.06	Alum. Handrailing (Alt. No. 1)	L.F.			216.0	216.0	
505.06	Steel Handrailing (Alt. No. 2)	L.F.			216.0	216.0	
506.06	Structural Steel	Lb.			69,170	69,170	
509.06a	Class "A" Concrete	C.Y.	63.0	37.0		100.0	
509.06a	Class "A" Concrete (Pier Base)	C.Y.		27.0		27.0	
509.06(aae)	Class "AA(AE)" Concrete	C.Y.			115.0	115.0	
511.06	Reinforcing Steel	Lb.	8,820	7,500	27,940	44,260	
514.06a	Test Piles	Ea.	1	1		2	
514.06	16" Sq. R.C. Piling	L.F.	595.0	665.0		1,260.0	
Special	4" Concrete Slope Wall	S.Y.					617.5

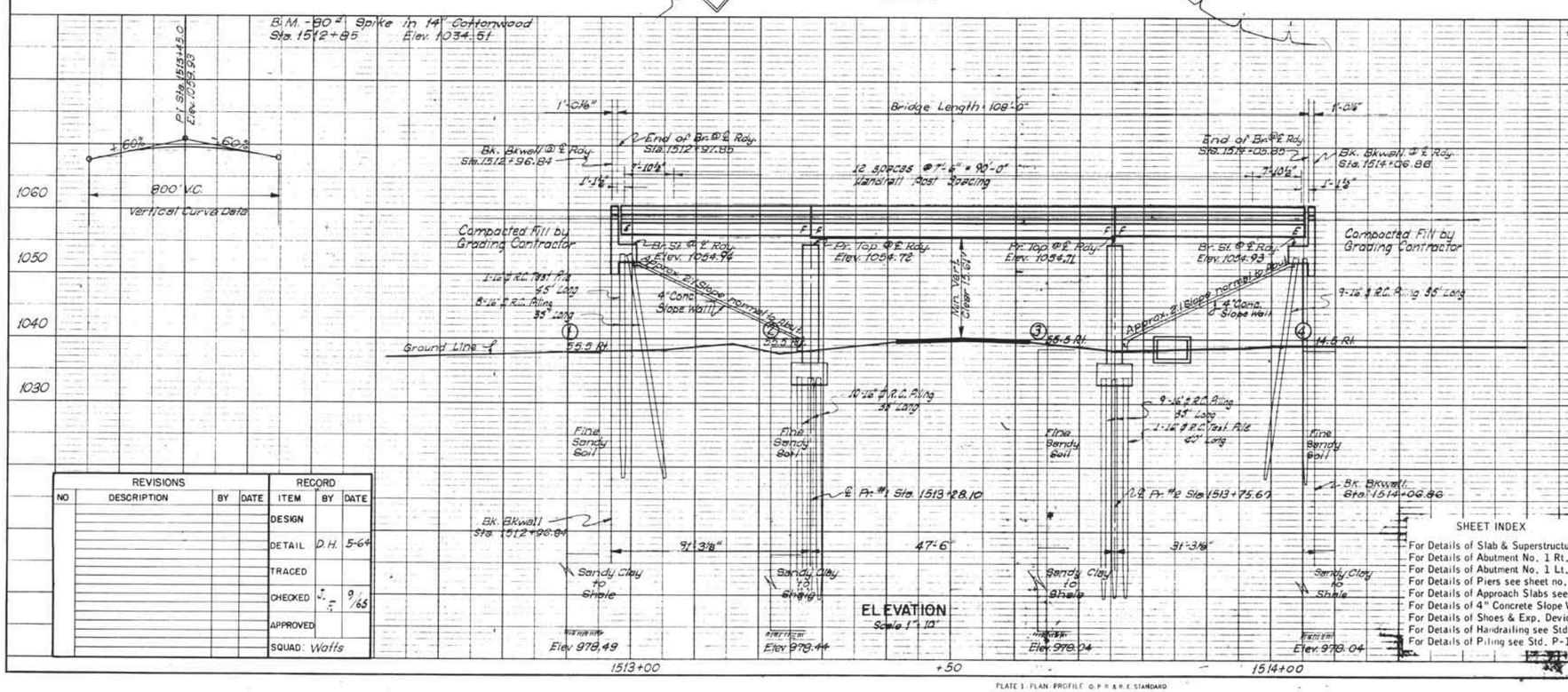
* This item is for shaping up & cleaning up the fills around the Abuts. & Appr. Slabs. (Non Participating)

GENERAL NOTES

All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.

Note: For conc. piling & test pile note see sheet no. 206

All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.



SHEET INDEX

For Details of Slab & Superstructure see sheet no. 235
For Details of Abutment No. 1 Rt. & No. 2 Lt. see sheet no. 236
For Details of Abutment No. 1 Lt. & No. 2 Rt. see sheet no. 237
For Details of Piers see sheet no. 238
For Details of Approach Slabs see sheet no. 239
For Details of 4" Concrete Slope Walls see sheet no. 240
For Details of Shoes & Exp. Device see Std. ISAJ-7 sheet no. 259 A
For Details of Handrailing see Std. PTR-1-14 sht. # 259 C
For Details of Piling see Std. P-1-10 sht. # 259 D

REVISIONS				RECORD		
NO	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	D.H.	5-64
				TRACED		
				CHECKED	J.E.	9/65
				APPROVED		
				SQUAD: Watts		

STRU. NO. 44 RT. STRU. OVER S. H. 39

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GEN. ELEV., PLAN & SUMM. OF QUANT.

30'-47.5'-30' S. I-BM. SPANS
38' ~~37'~~-0" RDY. ~~82/6" CURBS~~
℄ STA. 1513+51.85 RT. STRU.
SKEW 82°48'30" LT. FWD.
F.A. PROJ. NO. I-35-2(12)

PLATE 1 - PLAN - PROFILE O.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK

F.A. PROJECT NO. I-35-2(12) SHEET NO. 233

Rev. Curb & cl. Rdy. dim. 4/26/67

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FED. ROAD DIV.	SHEET NO.	TOTAL SHEETS
5	OKLA.	I-352(12)		234	

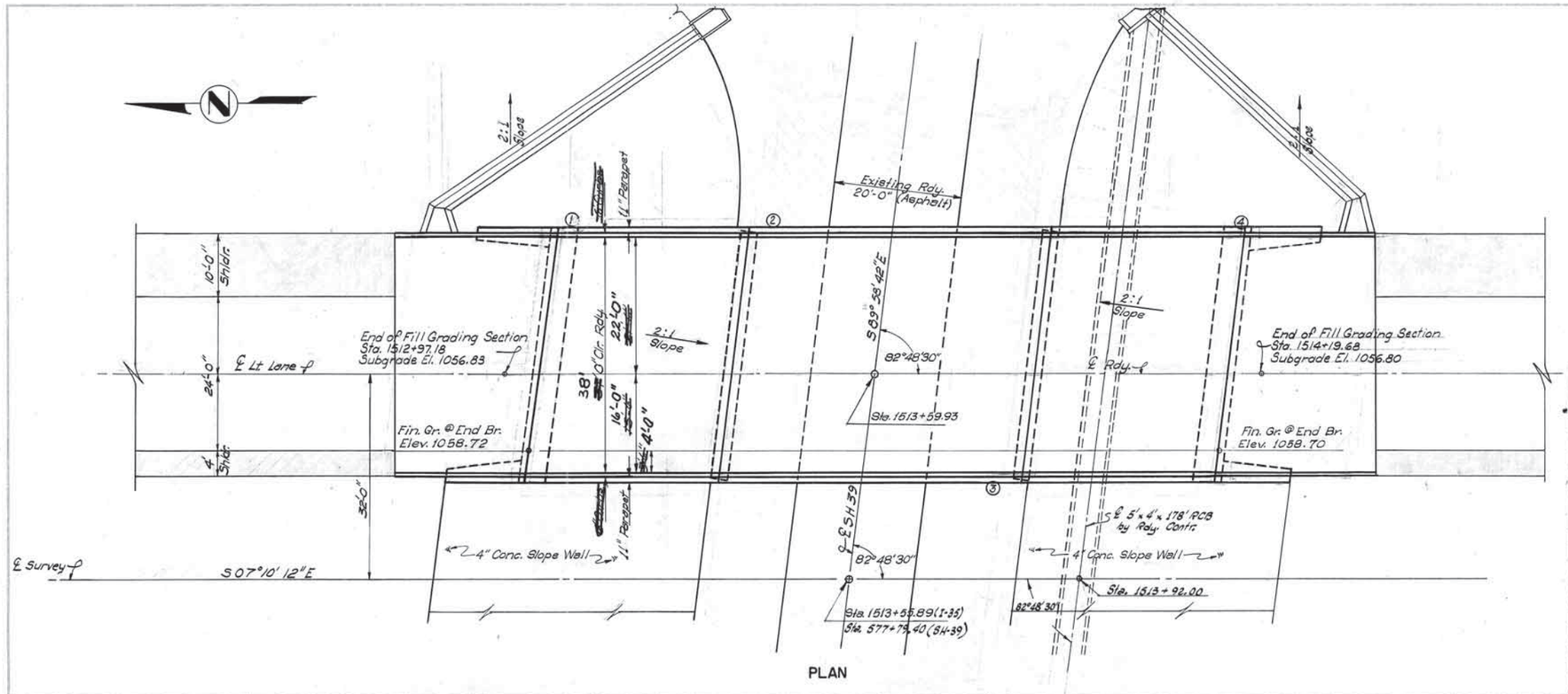
DESIGN DATA

fc. Class "A" Conc.	1,000 psi.
fc. Class "AA(AE)" Conc.	1,200 psi.
fs. Reinf. Steel	20,000 psi.
fs. Structural Steel	20,000 psi.

Loading H20-S16 & PPM 20-4

Maximum Foundation Pressure

Abutment	18.6 T/pile
Piers	33.0 T/pile

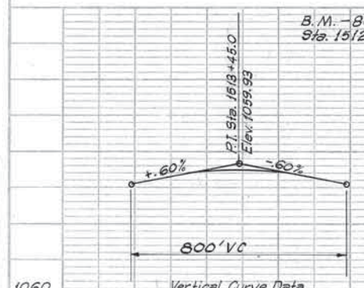


PLAN

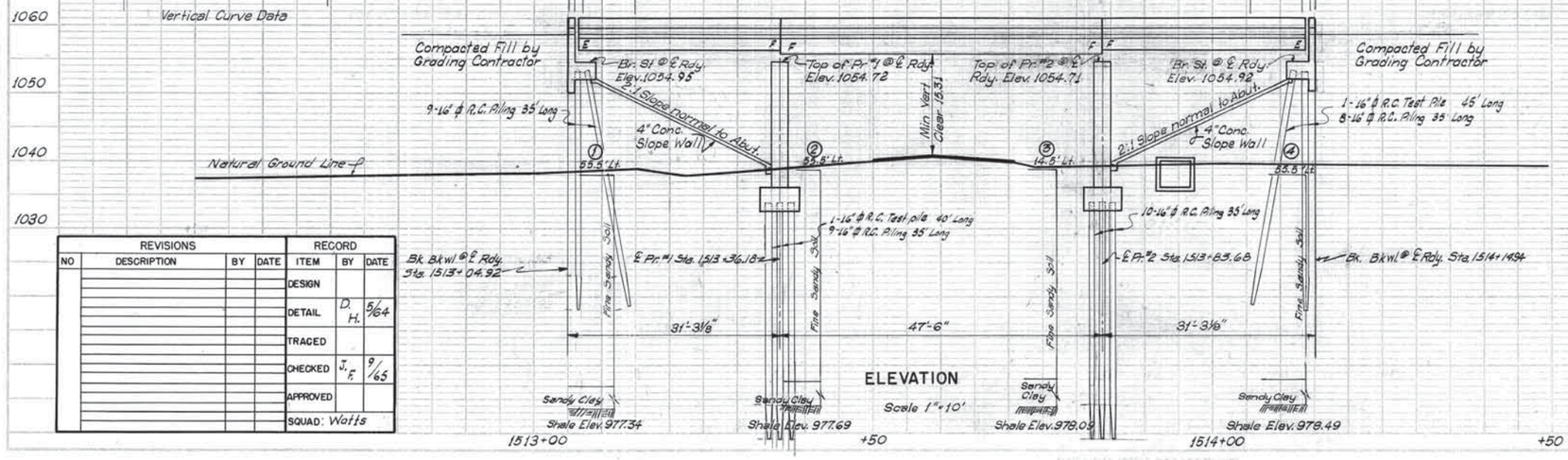
Item No.	Item	Unit	Abuts.	Piers	Super. Str	Bridge	Rdy.
* 202.06d	Class "D" Unclassified Excavation	C.Y.					200
Special	Approach Slab Base	S.Y.					168.9
414.06 clad	Approach Slabs (Air Ent. Agent)	S.Y.					168.9
501.06b	Substru. Excavation, Common	C.Y.	94.0	121.4		215.4	
505A.06	Alum. Handrailing (Alt. No. 1)	L.F.			216.0	216.0	
505.06	Steel Handrailing (Alt. No. 2)	L.F.			216.0	216.0	
506.06	Structural Steel	Lb.			69,170	69,170	
509.06a	Class "A" Concrete	C.Y.	63.0	37.0		100.0	
509.06a	Class "A" Concrete (Pier Bases)	C.Y.		27.0		27.0	
509.06b(2d)	Class "AA(AE)" Concrete	C.Y.			115.0	115.0	
511.06	Reinforcing Steel	Lb.	8,820	7,500	27,940	44,260	
514.06a	Test Piles	Ea.	1	1		2	
514.06a	16" Sq. R.C. Piling	L.F.	595.0	665.0		1,260.0	
Special	4" Concrete Slope Wall	S.Y.					655.0

* This item is for shaping up & cleaning up the fills around the Abuts & Appr. Slabs. (Non Participating)

Note: For General Note, and Sheet Index see sheet no. 233



Vertical Curve Data



ELEVATION

Scale 1" = 10'

REVISIONS				RECORD		
NO	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	D. H.	5/64
				TRACED		
				CHECKED	J. F.	9/65
				APPROVED		
				SQUAD: Watts		

STRU. NO. 45

LT. STRU. OVER S. H. 39

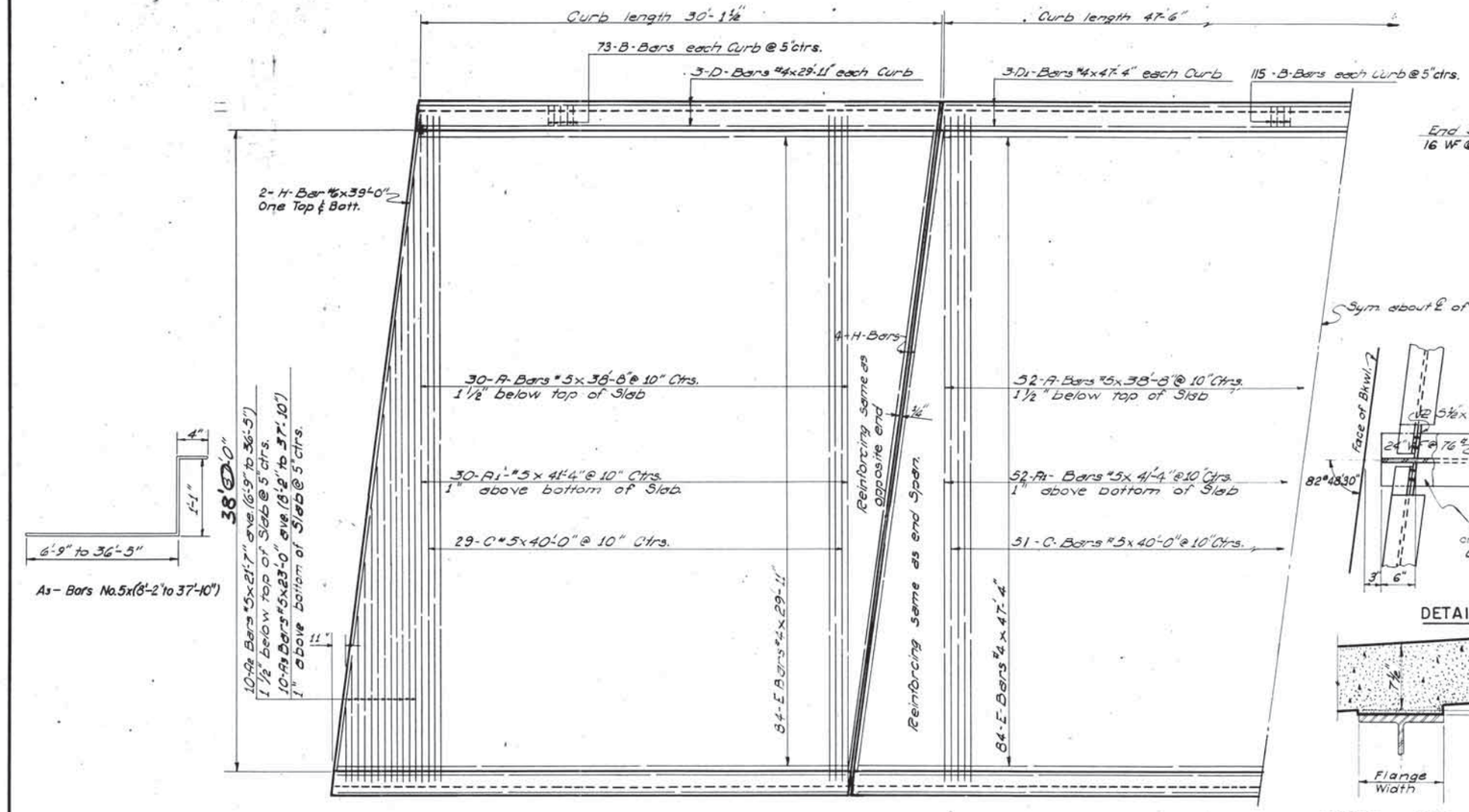
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GEN. ELEV, PLAN & SUMM. OF QUANT.
30'-47.5'-30' S. I-BM. SPANS
38 ~~37'~~-0" RDY. ~~8 2/6" CURBS~~
℄ STA. 1513+59.93 LT. STRU.
SKEW. 82°48'30" LT. FWD.
F.A. PROJ. NO. I-35-2(12)

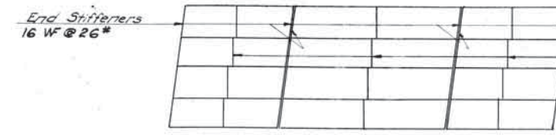
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	235	

DESIGN DATA

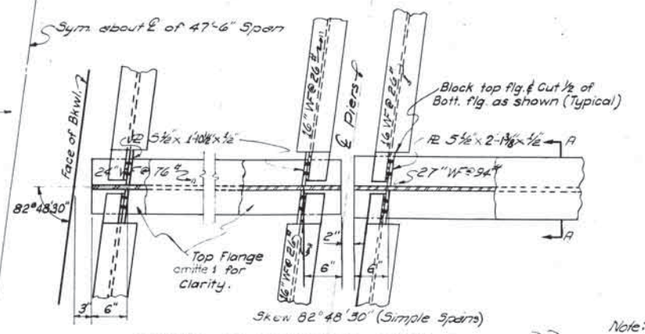
Loading H20-S16, R.P.M. 20-4
f'c Class "AA(AE)" Conc. ~ 4,200 psi
f'c Class "A" Conc. ~ 4,000 psi
fs Steel ~ 20,000 psi



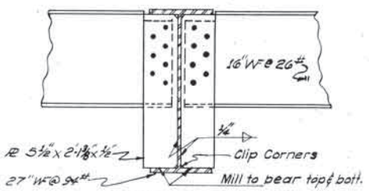
REINFORCING PLAN



STRUCTURAL STEEL LAYOUT

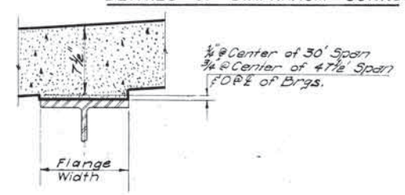


DETAILS OF DIAPHRAGM CONNS.

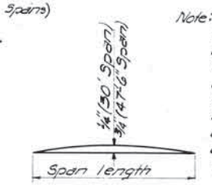


SECTION "A-A"

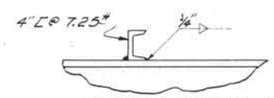
Note: The floor and curb forms shall be built to allow for an assumed parabolic deflection at the center of the span as shown. The contractor may furnish the beams cambered the amount of deflection or form haunches as shown. Additional concrete in the haunches to provide for D.L. deflection has been added to the pay quantities of Class "AA(AE)" conc. Deflection shall be measured from the theorical grade line.



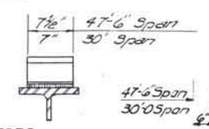
HAUNCH OVER BEAM

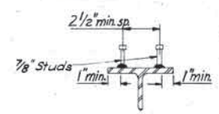


DEAD LOAD CORRECTION



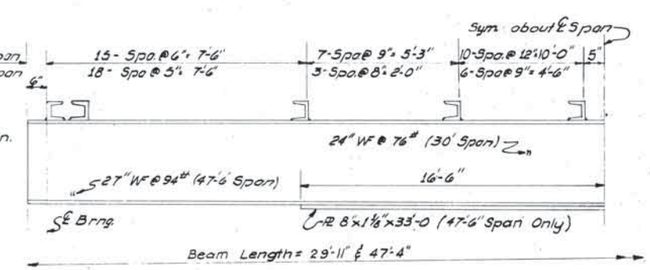
CHANNEL SHEAR CONNECTORS



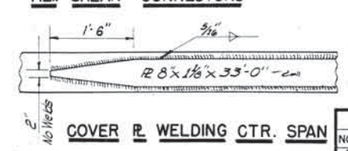


Contractor may use Stud Conn. as follows:
1" of Channel = .56 x ¾" stud.
1" of Channel = .41 x ⅞" stud.

ALT. SHEAR CONNECTORS



SHEAR CONNECTOR SPACING



COVER PL WELDING CTR. SPAN

For Details not shown see sheet no. 183

QUANTITIES

Class "AA(AE)" Concrete	Cu. Yd.	115.0
Reinforcing Steel	Lbs.	27,940
Structural Steel	Lbs.	69,170
Parapet Handrailing	Lin. Ft.	216.0

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Alt. Shear Connectors	Dwg. ALD	4/24/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	PB	7-64
TRACED	PB	7-64
CHECKED	J.F.	9-65
APPROVED		
SQUAD: Watts		

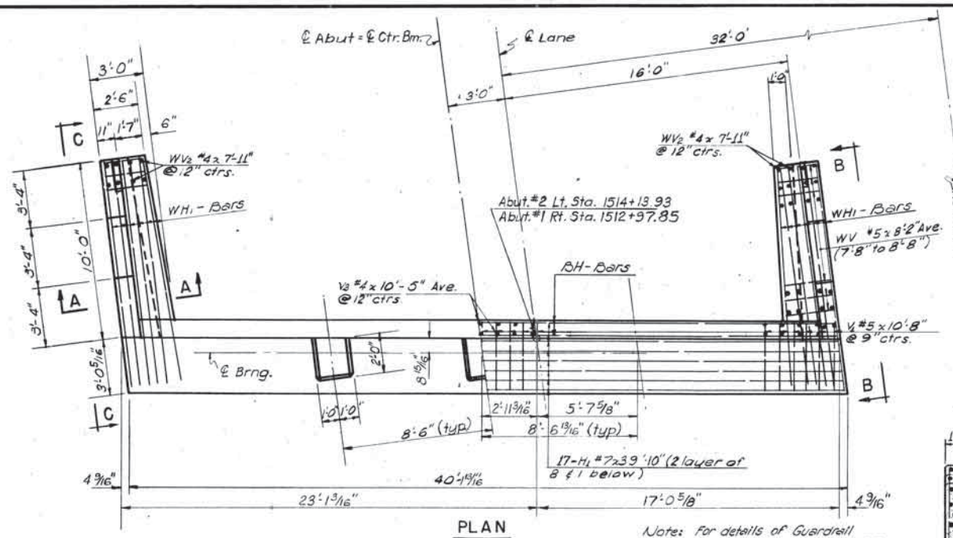
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

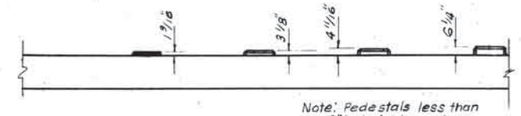
I-35 OVER S.H. 39

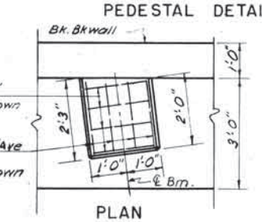
SLAB & SUPERSTRU. DETAILS 38'
30'-47.5'-30' I-BM. SPANS 37' RDY.
SKEW 82° 48' 30" LT. FWD.
℄ STA. 1513 + 59.93 LT. STRU.
℄ STA. 1513 + 51.85 RT. STRU.
F.A. PROJ. NO. I-35-2(12)

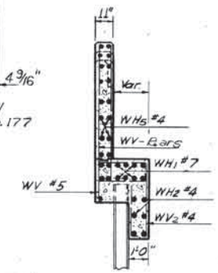
F.A. PROJECT NO. I-35-2(12) SHEET NO. 235

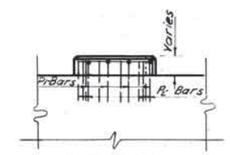
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	236	

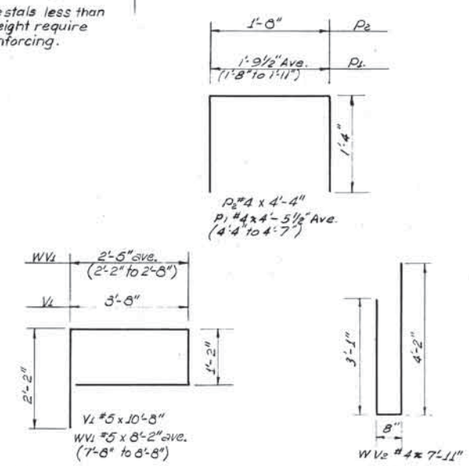










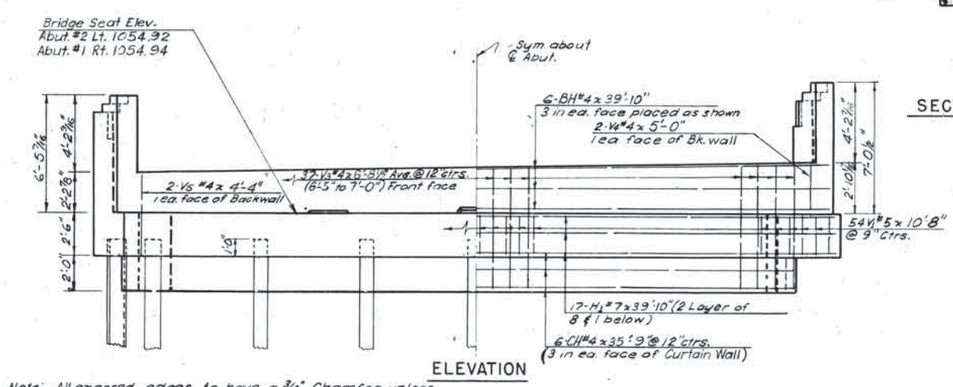


For Excav. Diagram See Def. of Abut. 1 Lt. & 2 Rt. Sht. No. 237

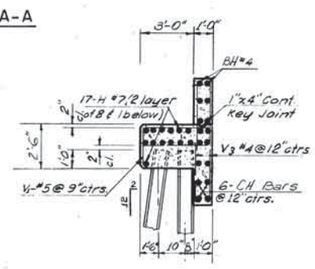
QUANTITIES — ONE ABUT.		
Item	Unit	Total
Class "A" Concrete	C.Y.	31.5
Reinforcing Steel	Lbs.	4,410
Substructure Excav. Common	C.Y.	47.0
16" ⌀ R.C. Piling	L.F.	315.0

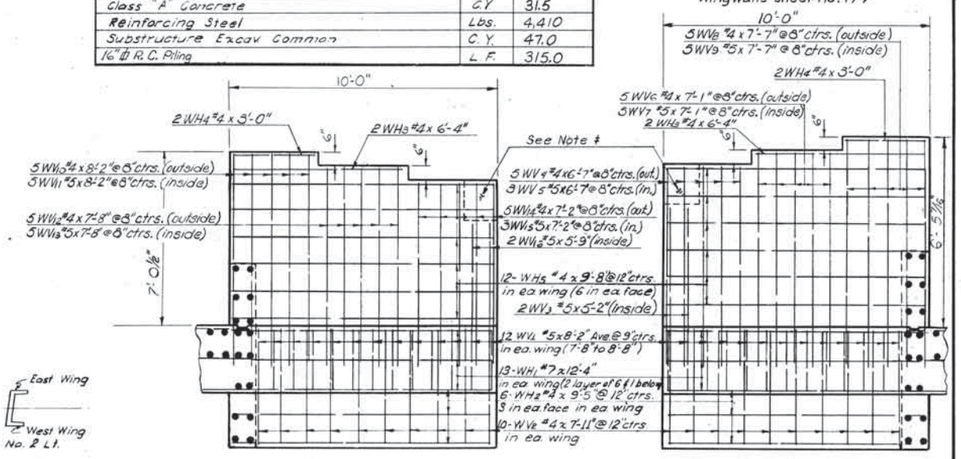
BAR LIST - ONE ABUT.				
MARK	SIZE	FORM	NO.	LENGTH
H1	#7	Str.	17	39'-10"
BH	#4	Str.	6	39'-10"
CH	#4	Str.	6	35'-9"
V1	#5	Bnt.	54	10'-8"
WH5	#4	Str.	24	9'-8" ave.
V3	#4	Str.	37	6'-8 1/2" ave.
V4	#4	Str.	2	5'-0"
V5	#4	Str.	2	4'-4"
WH1	#7	Str.	26	12'-4"
WH2	#4	Str.	12	9'-5"
WH3	#4	Str.	4	6'-4"
WH4	#4	Str.	4	3'-0"
WV1	#5	Bnt.	24	8'-2" ave.
WV2	#4	Bnt.	20	7'-11"
WV3	#5	Str.	2	5'-2"
WV4	#4	Str.	5	6'-7"
WV5	#5	Str.	3	6'-7"
WV6	#4	Str.	5	7'-1"
WV7	#5	Str.	5	7'-1"
WV8	#4	Str.	5	7'-7"
WV9	#5	Str.	5	7'-7"
WV10	#4	Str.	5	8'-2"
WV11	#5	Str.	5	8'-2"
WV12	#4	Str.	5	7'-8"
WV13	#5	Str.	5	7'-8"
WV14	#4	Str.	5	7'-2"
WV15	#5	Str.	3	7'-2"
WV16	#5	Str.	2	5'-9"
P2	#4	Bnt.	12	4'-4"
P1	#4	Bnt.	12	4'-5 1/2" ave.
A	#5	Str.	14	3'-8"
‡ GC1	#4	Bnt.	6	6'-0"
‡ GC2	#4	Bnt.	4	5'-2"

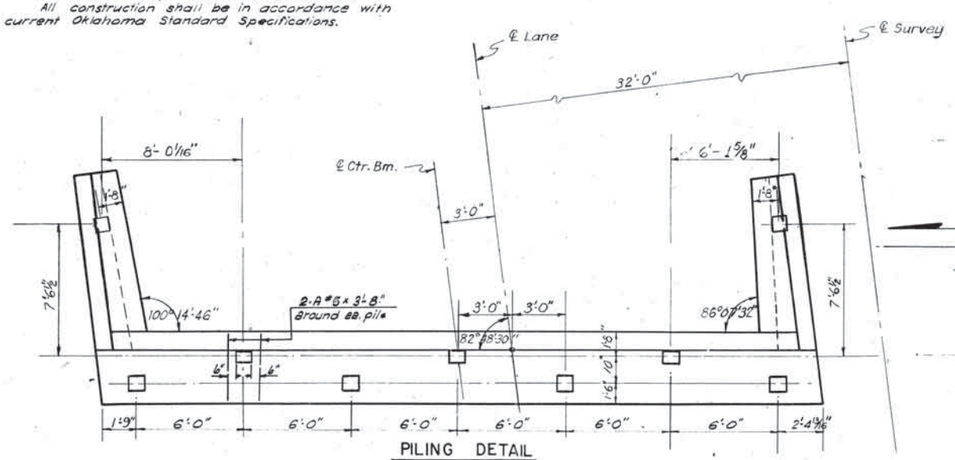
‡ For details of Guardrail Connection & Bars GC1 & GC2 see Details of Wingwalls sheet no. 177

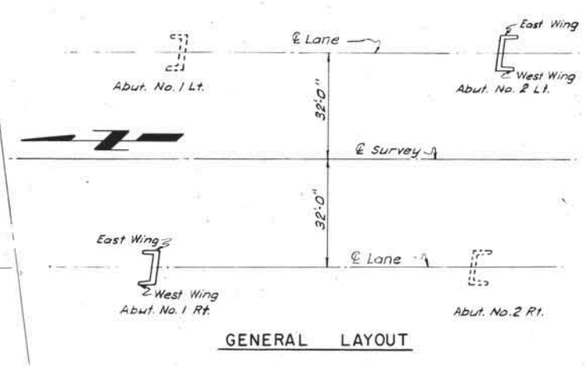


Note: All exposed edges to have a 3/4" Chamfer unless otherwise noted.
All chamfer strip shall be sized lumber.
All construction shall be in accordance with current Oklahoma Standard Specifications.









REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Reinf around Piling	DM	4-2-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	D.P.H.	8-64
TRACED	R.B.R.	9-64
CHECKED	J.F.	9-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

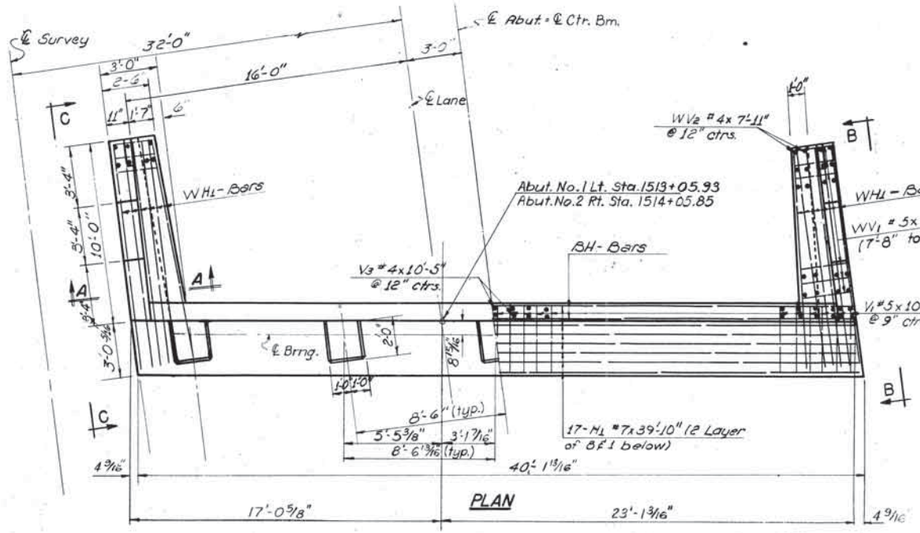
DETAIL OF ABUTMENTS
ABUT. NO. 1 RT. ℄ STA. 1512 + 97.85
ABUT. NO. 2 LT. ℄ STA. 1514 + 13.93
SKEWED 82° 48' 30" LT. FWD.
F.A. PROJ. NO. I-35-2(12)

I-35 OVER S.H.-39

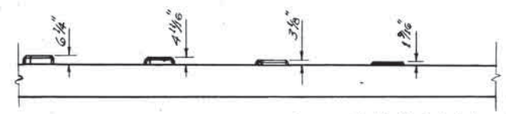
F.A. PROJECT NO. I-35-2(12) SHEET NO. 236

DIETZGEN NO. 128 IMPERIAL

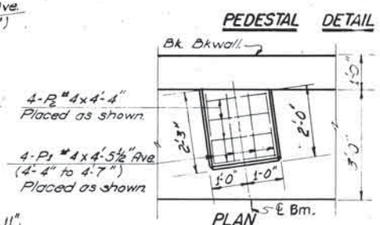
FED. ROAD DIST. NO.	STATE	FAPROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	237	

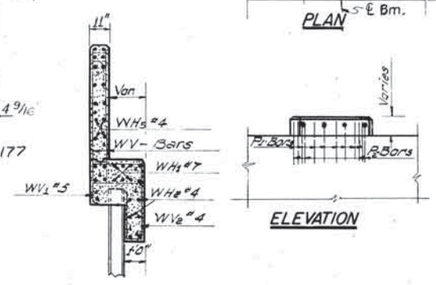


Note: For details of Guardrail Connection, see sheet no. 177

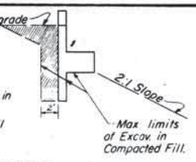


Note: Pedestals less than 2" in height require no reinforcing.





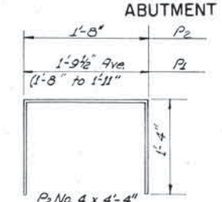
SEC. A-A

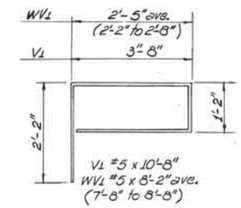


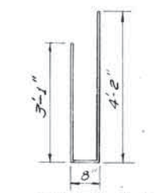
Shaded area to be back filled and tamped with a mechanical tamper to 100 % Proctor Density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the price bid per C.Y. for Substructure Excavation Common.

Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer he may pour the concrete against the compacted fill. If necessary, Contractor shall use forms on the back vertical face of the Abutment and remove same after concrete is set.

ABUTMENT EXCAV. DIAGRAM



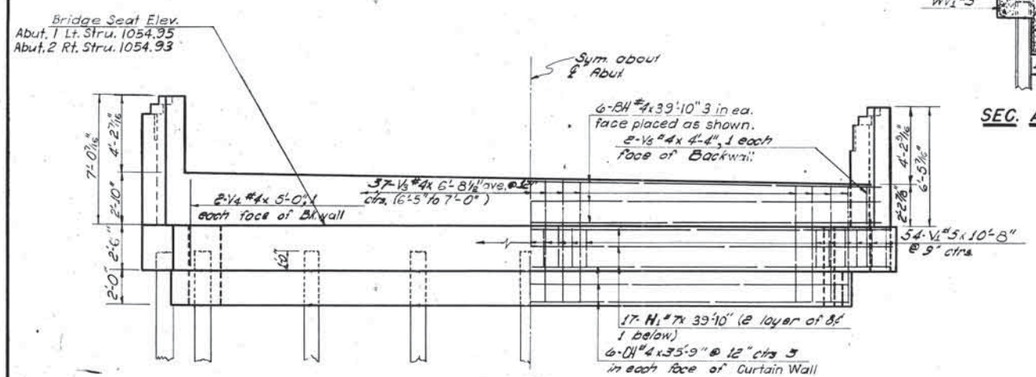


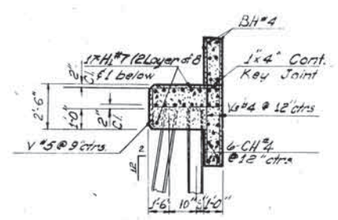


WV2 No. 4 x 7'-11"

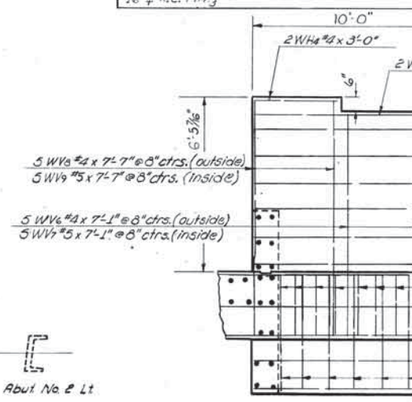
BAR LIST — ONE ABUT.				
MARK	SIZE	FORM	NO.	LENGTH
H	#7	Str.	17	39'-10"
BH	#4	Str.	6	39'-10"
CH	#4	Str.	6	35'-9"
V1	#5	Bnt.	54	10'-8"
WH5	#4	Str.	24	9'-8" ave.
V3	#4	Str.	37	6'-8 1/2" ave.
V4	#4	Str.	2	5'-0"
V5	#4	Str.	2	4'-4"
WH1	#7	Str.	26	12'-4"
WH2	#4	Str.	12	9'-5"
WH3	#4	Str.	4	6'-4"
WH4	#4	Str.	4	3'-0"
WV1	#5	Bnt.	24	8'-2" ave.
WV2	#4	Bnt.	20	7'-11"
WV3	#5	Str.	2	5'-2"
WV4	#4	Str.	5	6'-7"
WV5	#5	Str.	3	6'-7"
WV6	#4	Str.	5	7'-1"
WV7	#5	Str.	5	7'-1"
WV8	#4	Str.	5	7'-7"
WV9	#5	Str.	5	7'-7"
WV10	#4	Str.	5	8'-2"
WV11	#5	Str.	5	8'-2"
WV12	#4	Str.	5	7'-8"
WV13	#5	Str.	5	7'-8"
WV14	#4	Str.	5	7'-2"
WV15	#5	Str.	3	7'-2"
WV16	#5	Str.	2	5'-9"
P2	#4	Bnt.	12	4'-4"
P1	#4	Bnt.	12	4'-5 1/2" ave.
A	#5	Str.	14	3'-8"
‡ GC1	#4	Bnt.	6	6'-0"
‡ GC2	#4	Bnt.	4	5'-2"

‡ Note: For details of Guardrail connection & Bars GC1 & GC2 See Details of Wingwalls Sht. No. 177

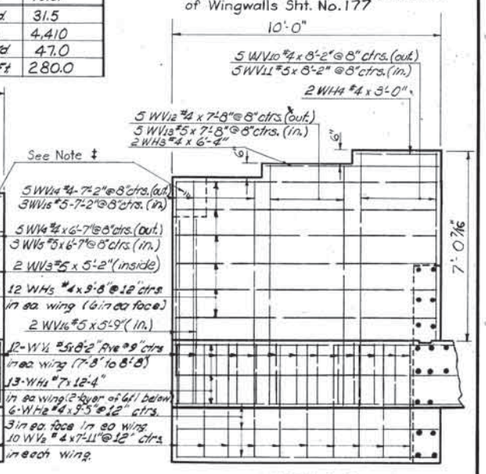




QUANTITIES — ONE ABUT.		
Item	Unit	Total
Class "A" Concrete	Cu. Yd.	31.5
Reinforcing Steel	Lbs.	4,410
Substructure Excav. Common	Cu. Yd.	47.0
16" ϕ R.C. Piling	Lin. Ft.	280.0

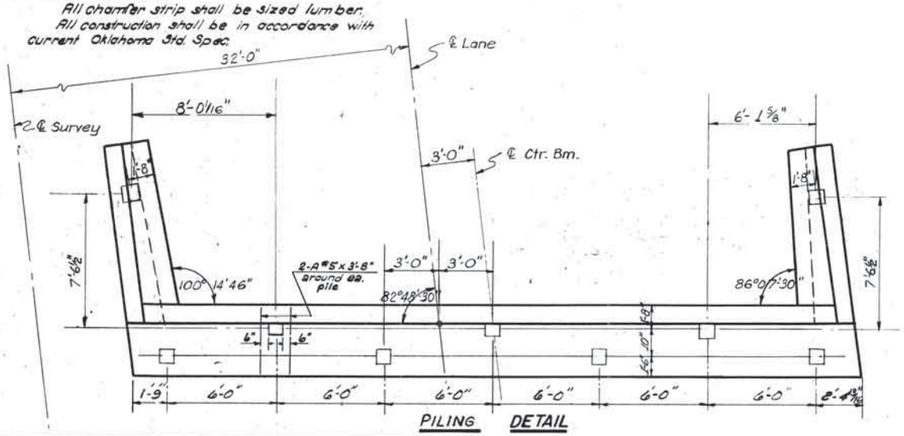


VIEW B-B

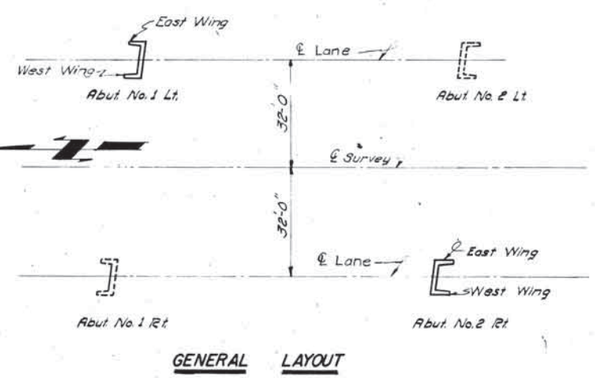


VIEW C-C

Note: All exposed edges to have a 3/4" Chamfer unless otherwise noted.
All chamfer strip shall be sized lumber.
All construction shall be in accordance with current Oklahoma Std. Spec.



PILING DETAIL



GENERAL LAYOUT

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Revised Reinf. around Piling	DM	4-2-64

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	DPH	8/5/64
TRACED	PLB	10/64
CHECKED	J.F.	9-65
APPROVED		
SQUAD: Watts		

I-35 OVER S.H. 39

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF ABUTMENTS

NO. 1 LT. ℄ STA. 1513+05.93

NO. 2 RT. ℄ STA. 1514+05.85

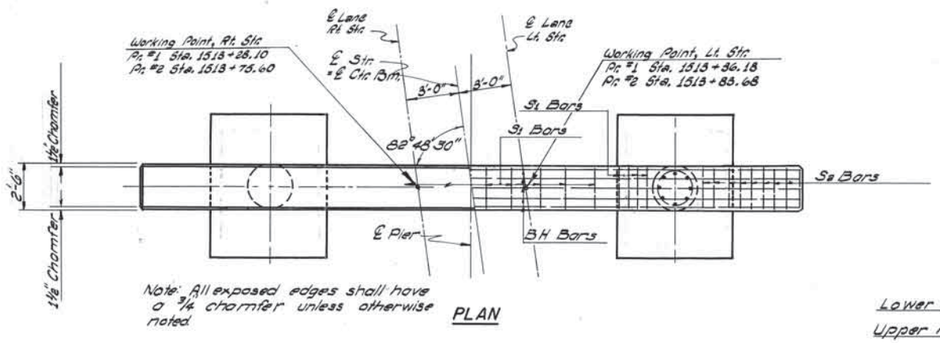
SKEW 82° 48' 30" LT. FWD.

F.A. PROJ. NO. I-35-2 (12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 237

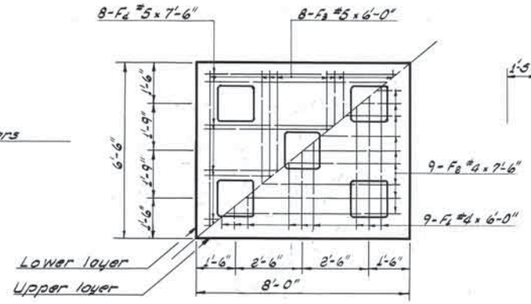
45395

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	238	

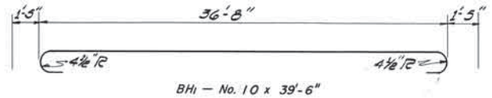


Note: All exposed edges shall have a ¾" chamfer unless otherwise noted.

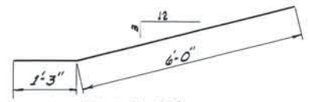
PLAN



FOOTING PLAN



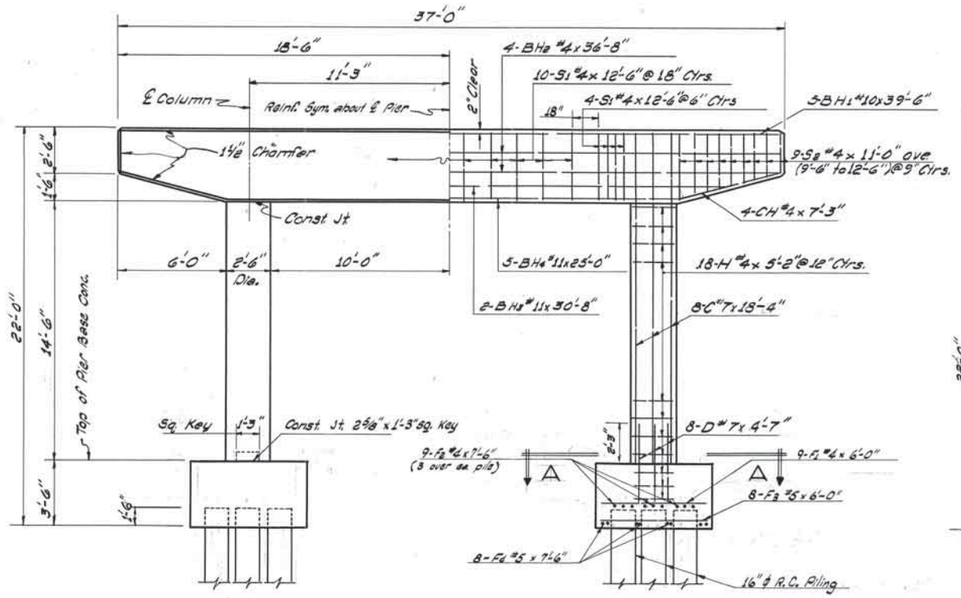
BH1 — No. 10 x 39'-6"



CH — No. 4 x 7'-3"

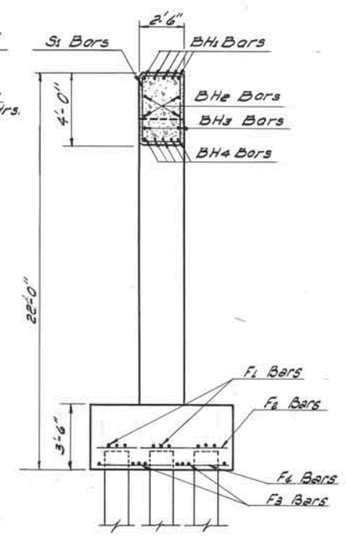
BAR LIST - ONE PIER				
MARK	SIZE	FORM	NO.	LENGTH
BH1	#10	Bnt	5	39'-6"
BH2	#4	Str	4	36'-8"
BH3	#11	Str	2	30'-8"
BH4	#11	Str	5	25'-0"
CH	#4	Bnt	8	7'-3"
S1	#4	Bnt	18	12'-6"
‡ S2	#4	Bnt	18	11'-0" ave.
C	#7	Str	16	18'-4"
D	#7	Str	16	6'-7"
H	#4	Bnt	36	7'-8"
F1	#4	Str	18	6'-0"
F2	#4	Str	18	7'-6"
F3	#5	Str	16	6'-0"
F4	#5	Str	16	7'-6"
P1	#4	Bnt	27	5'-0"
* P2	#4	Bnt.	27	4'-3 7/16" ave.

* 9 sets of 3 ea.
‡ 2 sets of 9 ea.

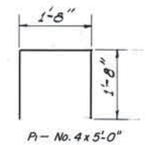


ELEVATION

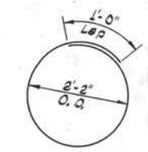
See General Elevation for piling lengths.
For details of piling, see Std. P-1-10 sht. no. 259 D



SECTION THRU ℄

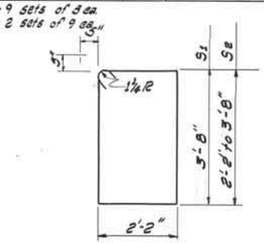


P1 — No. 4 x 5'-0"

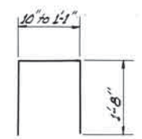


H — No. 4 x 7'-8"

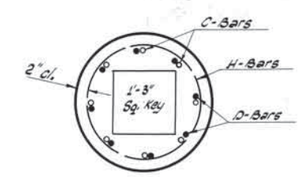
Note: All bar bend dimensions are out to out.



S1 — No. 4 x 12'-6"
S2 — No. 4 x 11'-0" ave
(9'-6" to 12'-6")

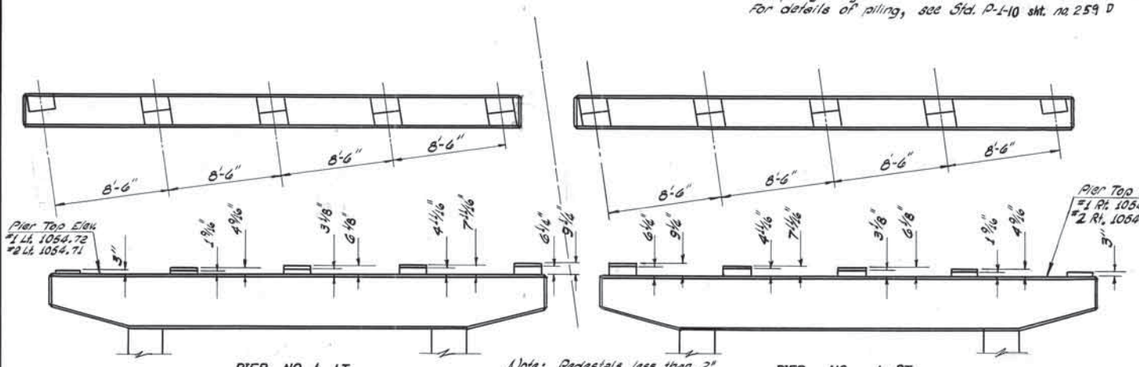


P2 No. 4 x 4'-3½" ave
(4'-2" to 4'-5")



SECTION A-A

QUANTITIES					
ITEM	UNIT	PIER NO.1 RT.	PIER NO.2 RT.	PIER NO.1 LT.	PIER NO.2 LT.
Class "A" Concrete	Cu. Yd.	18.5	18.5	18.5	18.5
Class "A" Concrete Pier Base	Cu. Yd.	13.5	13.5	13.5	13.5
Reinforcing Steel	Lbs.	3,750	3,750	3,750	3,750
Substr. Excavation Common	Cu. Yd.	51.3	51.3	60.7	60.7
16" ø R.C. Piling	Lin. Ft.	350.0	315.0	315.0	350.0

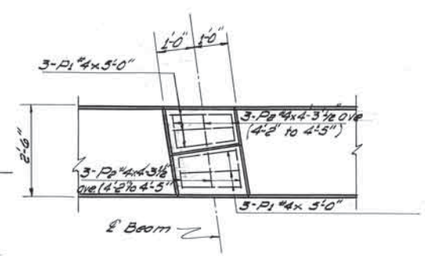


PIER NO. 1 LT.
PIER NO. 2 LT.

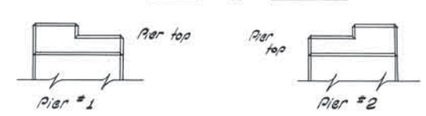
Note: Pedestals less than 2" in height require no reinf.

PIER NO. 1 RT.
PIER NO. 2 RT.

PEDESTAL LAYOUT



DETAIL OF PEDESTAL



I-35 OVER S.H. 39

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	REV. PED. DETAIL & PIER CL.	DAW	4-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	WH K	8/64
TRACED	PL B	8/64
CHECKED	J.F.	9/65
APPROVED		
SQUAD: WATTS		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF PIERS

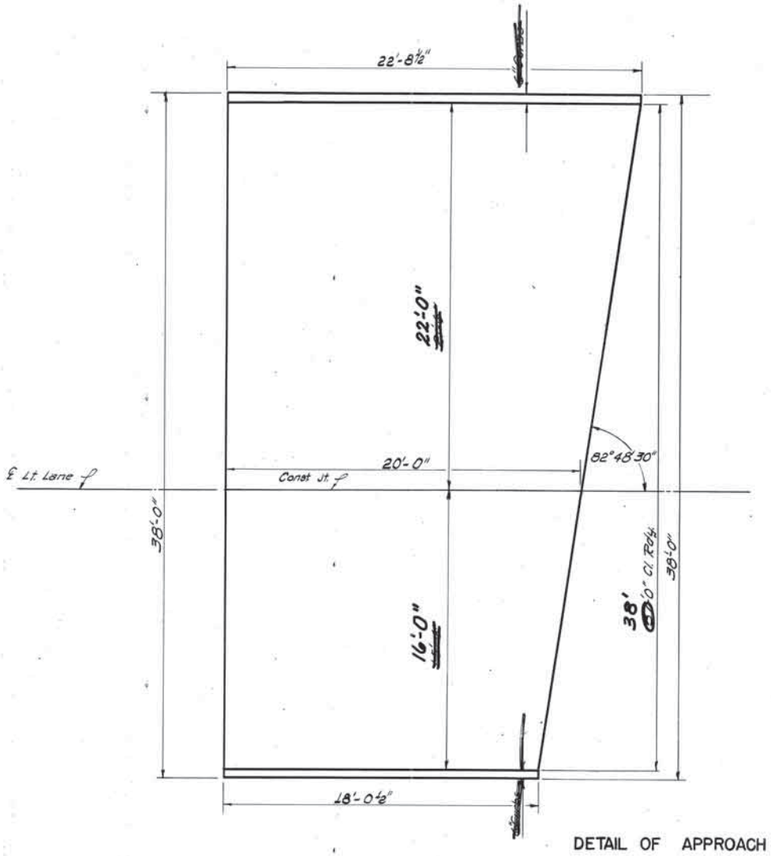
℄ STA. 1513 + 55.89

F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 238

DIETZGEN NO. 150 IMPERIAL

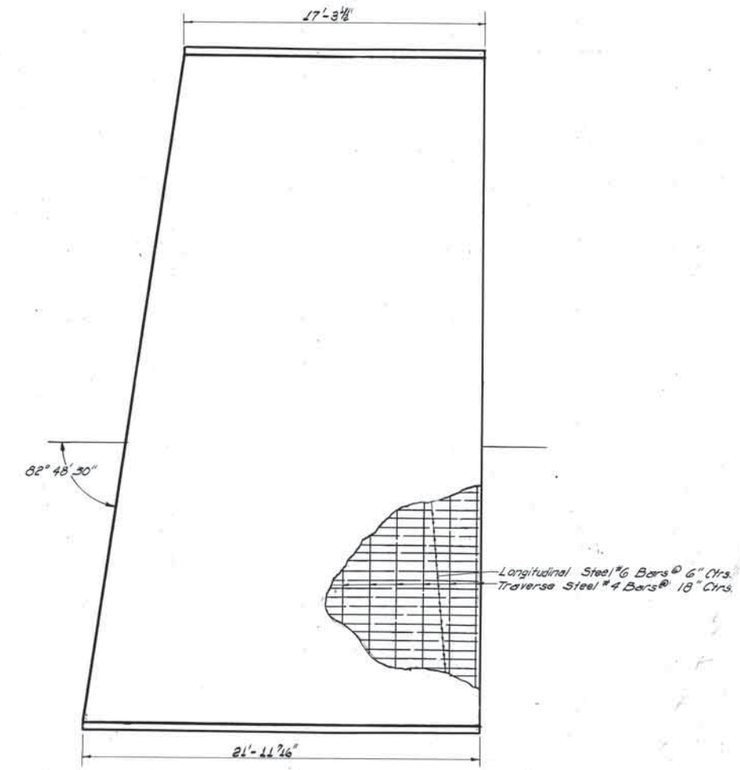
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	239	

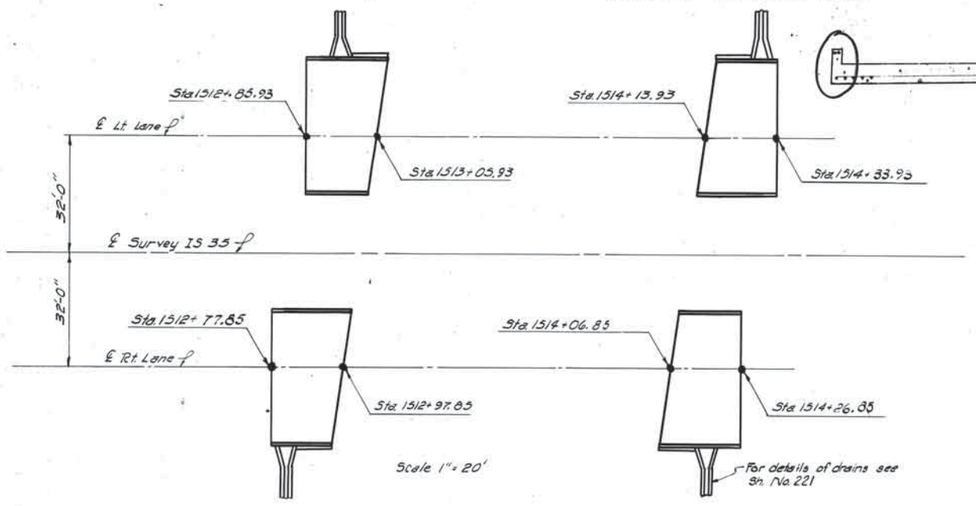


DETAIL OF APPROACH SLABS

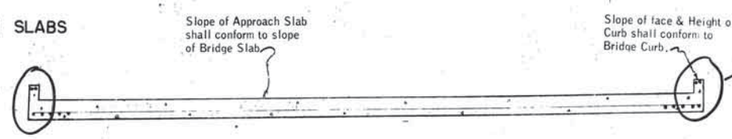
Note: For details not shown see Sh. # 221

Scale ¼" = 1'





APPROACH SLABS LAYOUTS



For Revised Detail of Curb See Sht. No. 10B

SECTION THRU APPROACH SLAB

QUANTITIES — APPROACH SLABS			
Item	Unit	1 Rt or 2 Lt	1 Lt or 2 Rt
Approach Slab	Sq. Yd.	82.9	86.0
Reinforcing Steel	Lbs.	2,650.0	2,750.0

Note: Cost of all items in Concrete Slope Drains including wire mesh shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All materials and work shall be in accordance with that part of Section 610 covering Concrete Side walks.

* Note: Cost of Reinforcing Steel in Approach Slab shall be included in price bid per Sq. Yd. of Approach Slab.

Note: Cost of Curbs on Approach Slab shall be included in price bid per Sq. Yd. for Approach Slab.

Note: When Bridge Approach Slabs are to be constructed in Bridge Contract they shall be constructed using Class "AA(AE)" Concrete Materials.
When Bridge Approach Slabs are to be constructed in Roadway Contract they shall be constructed with either Class "AA(AE)" Concrete Materials or P.C. Concrete Paving Materials, including an Air-Entraining Admixture.

I-35 Over SH. 39

REVISIONS			
NO.	DESCRIPTION	BY	DATE
	Rev. Curb & Cl. Rdg. dim.		1/28/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	PB	3/64
TRACED	PB	6/64
CHECKED	JF	9/65
APPROVED		
SQUAD:		

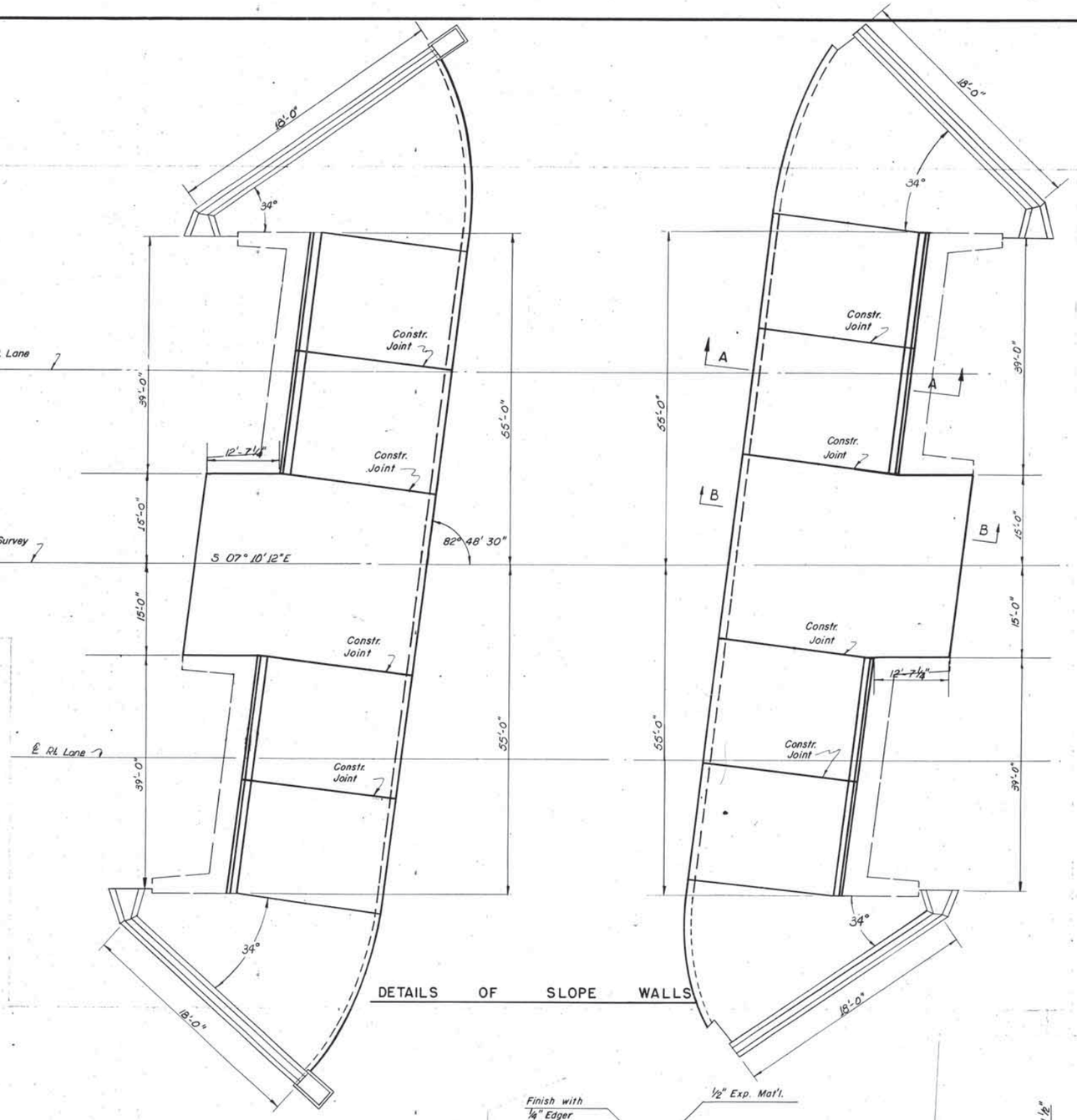
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF APPROACH SLABS
℄ STA. 1513+59.93 LT. STRU.
℄ STA. 1513+51.85 RT. STRU.
F.A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 239

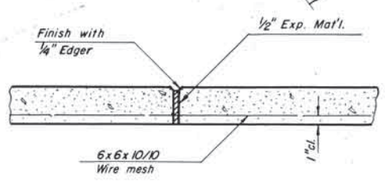
DIETZGEN NO. 135 IMPERIAL

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	240	

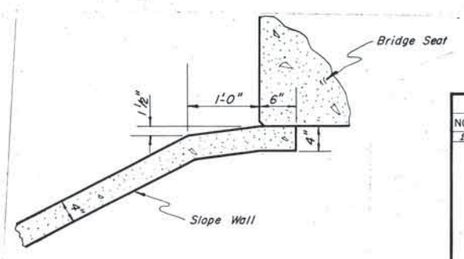


DETAILS OF SLOPE WALLS

Note: Surface area of toe of Slope Wall included in pay quantity for Slope Wall.

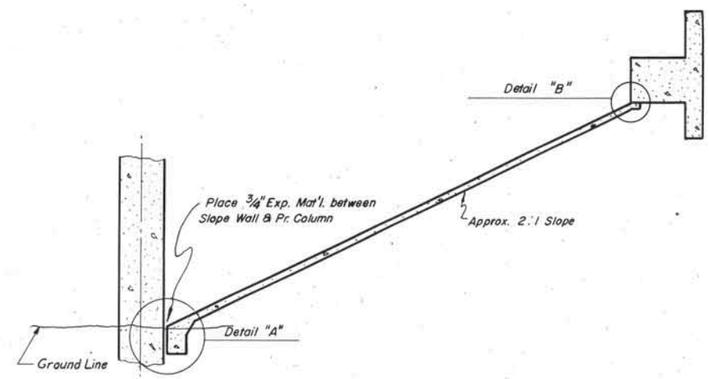


DETAIL OF CONSTR. JT.



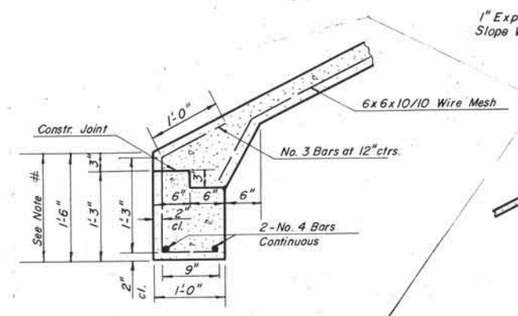
DETAIL "B"

Note: Cost of all items in Conc. Slope Walls including wire mesh, reinf. steel, and exp. joint filler shall be included in the unit price bid per Sq. Yd. of 4" Conc. Slope Wall. All material and work shall be in accordance with that part of Sec. 610 of the Oklahoma Standard Specs. Governing Concrete Sidewalks.

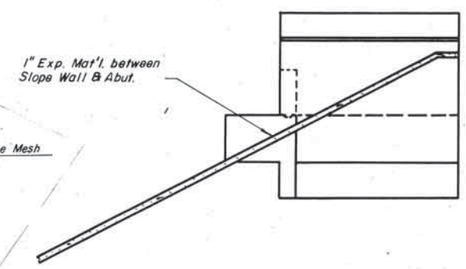


SECTION "A-A"

For details of Slope Drains see Sht. No. 221



DETAIL "A"



SECTION "B-B"

QUANTITIES —— SLOPE WALLS					
Structure	Abut.	Unit	Slope Walls	Drains	Total
Left Structure	Abut. No. 1	S.Y.	298.7	19.8	318.5
	Abut. No. 2	S.Y.	316.7	19.8	336.5
Right Structure	Abut. No. 1	S.Y.	296.1	19.1	315.2
	Abut. No. 2	S.Y.	283.2	19.1	302.3

I-35 OVER S. H. 39

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Constr. Joint Location	ALD	4/24/70

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	R.B.R.	6-64
TRACED	R.B.R.	6-64
CHECKED	J.F.	11-65
APPROVED		
SQUAD: Watts.		

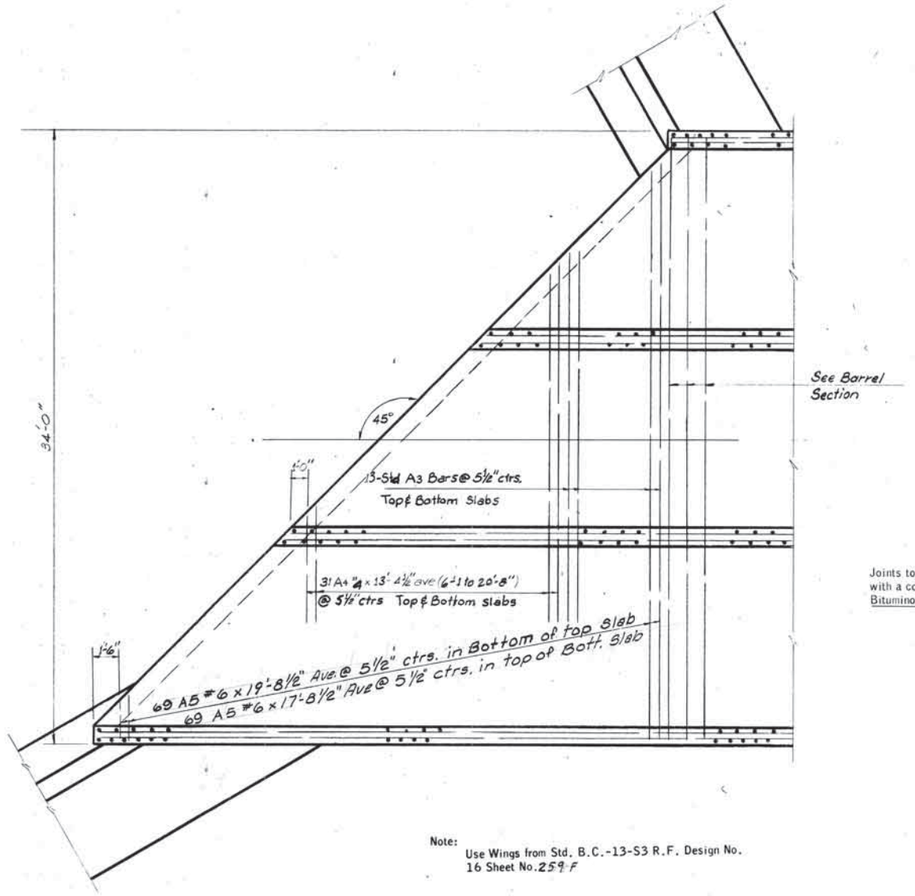
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF SLOPE WALLS
℄ STA. 1513+59.93 LT. STRU.
℄ STA. 1513+51.85 RT. STRU.
F.A. PROJ. NO. I-35-2(12)

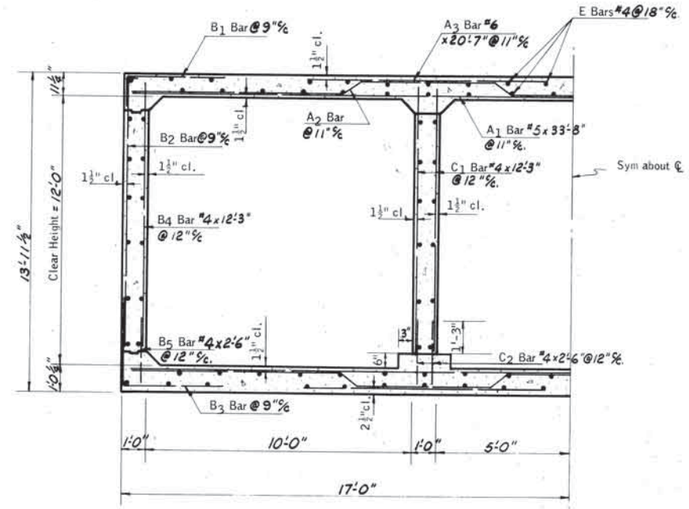
F.A. PROJECT NO. I-35-2(12) SHEET NO. 240

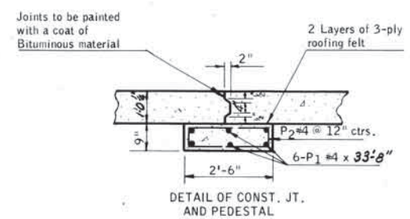
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

REVISIONS	
DESCRIPTION	DATE
1-Rev. (added bar bend Note & Sh.) 2-Rev. (Revised Reinforcing Steel) D.J.H.	8-8-67

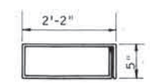


Note: Use Wings from Std. B.C.-13-S3 R.F. Design No. 16 Sheet No. 259 F

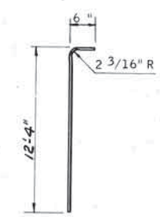




DETAIL OF CONST. JT. AND PEDESTAL



P2 Bar



B2 Bar #6 x 12'-10"

Design Data:

Class "A" Concrete	1,000 psi.
Reinforcing Steel	20,000 psi.
Loading - H20-S16 and PPM 20-4	

NOTES:

All construction and material shall be in accordance with the current Oklahoma Standard Specifications and Special Provisions.

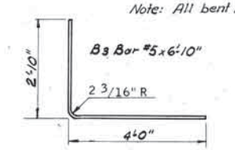
Reinforcing steel in bottom slab shall be supported on bar chairs. Chairs shall be supported on timber plank or Class "C" Concrete strips spaced at 4' center to center. The top of chair supports, shall be at the elevation of the bottom of footing.

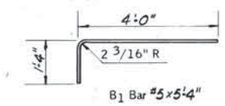
Reinforcing steel in top slab shall be supported on slab spacers.

Reinforcing steel in the walls shall be held in place by metal chairs. Maximum spacing of chairs shall be 6' center to center.

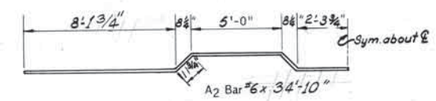
Cost of metal chairs, wood plank or concrete strips shall be included on other items of work.

Note: All bent bars shall shop bent.

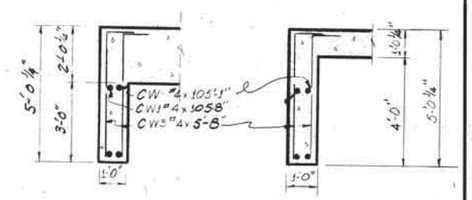




B1 Bar #5 x 5'-4"

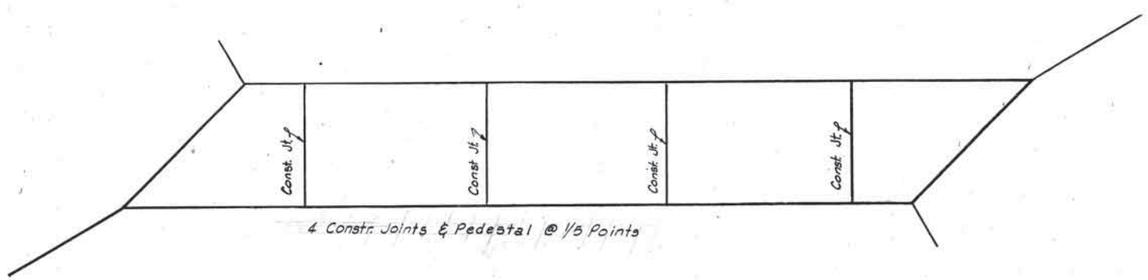


A2 Bar #6 x 34'-10"



SEC THRU WING

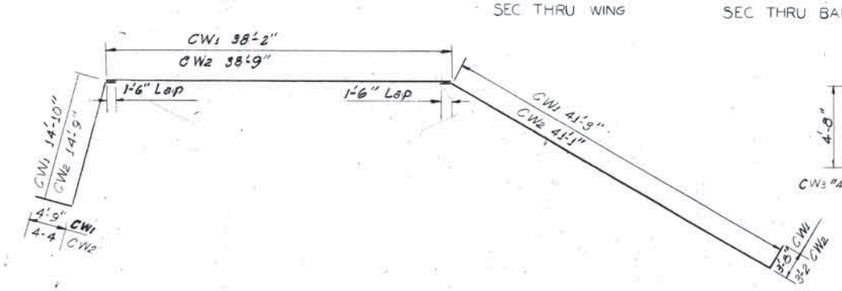
SEC THRU BARREL



LAYOUT OF PEDESTALS

CURB DETAIL

Note: Use Curbs from Std. B.C.-13-S3 R.F. Sheet No. 259F except as shown.



3- 10'x12'x155' RDY. R.C.B. SKEW 45° R.F.

QUANTITIES		
Item	Unit	Total
Class "A" Concrete	Cu.Yd.	1,107.2
Reinforcing Steel	Lbs.	117,369.
Class "D" Unclassified Excav.	Cu.Yd.	7,900

STRU. NO. 47

Design		
Drawn	PB	10-65
Checked	TW	10-65
Approved		
Squad	TW, HS	

SPECIAL DETAILS OF R.C.B.
℄ STA. 1529+64.00
SKEW 45° RT. FWD.

F.A. Project No. I-35-2 (12) Sheet No. 241

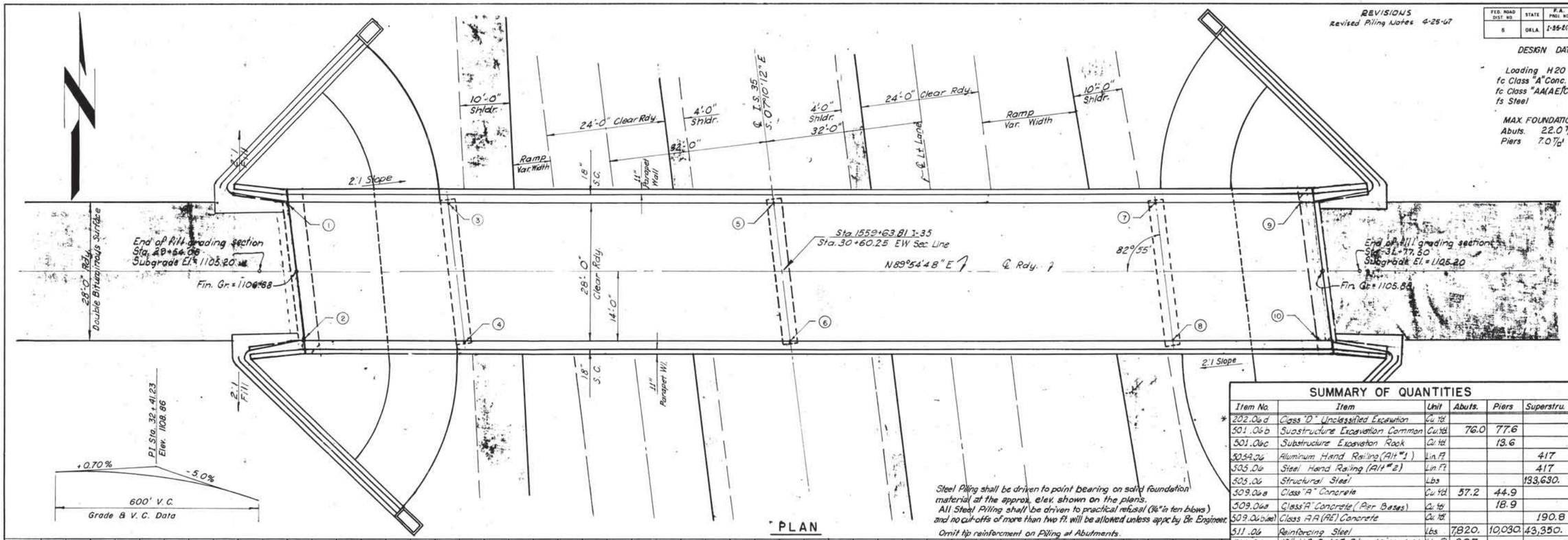
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		242	

REVISIONS
Revised Piling Notes 4-25-67

DESIGN DATA

Loading H20
fc Class "A" Conc. 1,000 psi
fc Class "AA(AE)" Conc. 1,200 psi
fs Steel 20,000 psi

MAX. FOUNDATION PRESSURES
Abuts. 22.0 T/pile
Piers 7.0 T/□'



PLAN

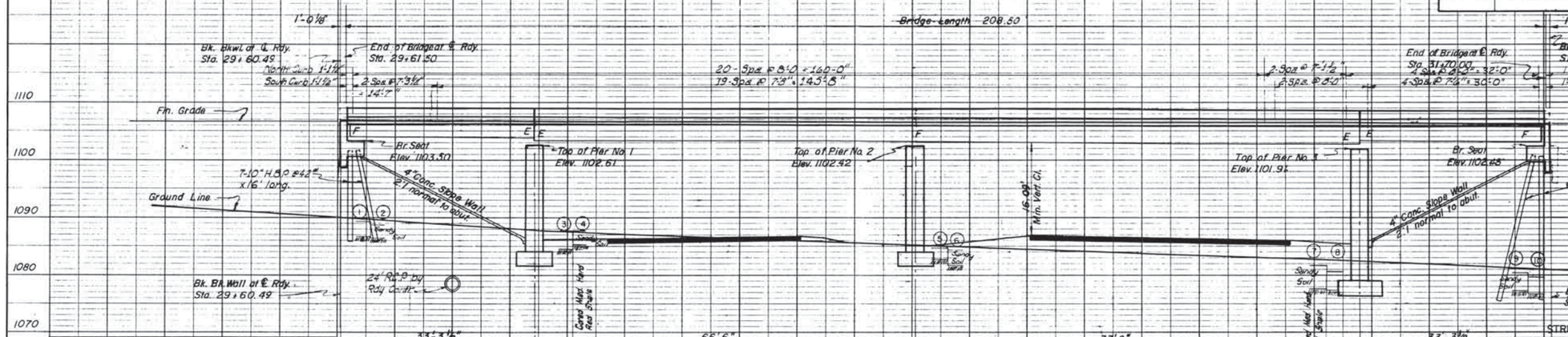
Steel Piling shall be driven to point bearing on solid foundation material at the approx. elev. shown on the plans.
All Steel Piling shall be driven to practical refusal (1/16" in ten blows) and no cut-offs of more than two ft. will be allowed unless appr. by Br. Engineer.
Omit tip reinforcement on Piling at Abutments.
No splices will be allowed on Steel Piling for plan length of up to 60' in length. When foreign piling are used, Contractor shall furnish extra length out of each heat for testing purposes.

SUMMARY OF QUANTITIES

Item No.	Item	Unit	Abuts.	Piers	Superstru.	Bridge Total	Rdy. Total
* 202.06d	Class "D" Unclassified Excavation	Cu. Yd.					200
501.06b	Substructure Excavation Common	Cu. Yd.	76.0	77.6		153.6	
501.06c	Substructure Excavation Rock	Cu. Yd.		13.6		13.6	
503A.06	Aluminum Hand Railing (Alt. #1)	Lin. Ft.			417	417	
505.06	Steel Hand Railing (Alt. #2)	Lin. Ft.			417	417	
505.06	Structural Steel	Lbs			133,630.	133,630.	
509.06a	Class "A" Concrete	Cu. Yd.	57.2	44.9		102.1	
509.06a	Class "A" Concrete (Pier Bases)	Cu. Yd.		18.9		18.9	
509.06b(ae)	Class AA (AE) Concrete	Cu. Yd.			190.8	190.8	
511.06	Reinforcing Steel	Lbs	7,820.	10,030.	43,350.	61,200.	
514.06e sp.	10" H.B. @ 42# Piling (Omit reinf. tip)	Lin. Ft.	287.			287.	
514.06	Steel Piling Splices	Each	5			5	
Special	4" Concrete Slope Wall	Sq. Yd.					7006

* Note: The item is for shaping up & cleaning up the fills around the Abutment & Approach Slabs. (Non Participating.)

B.M. Top 5/8" Iron Pin on Pond Dyke 290' L.T. Sta. 1563+24 (Main Survey) Elev. 1091.78



ELEVATION
Scale 1" = 10'

Omit 1103 on Abutment Piling

REVISIONS				RECORD		
NO	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	D.H.	1-64
				TRACED	R.B.R.	4-64
				CHECKED		
				APPROVED		
				SQUAD	Watts	

GENERAL NOTE

All Construction and Materials shall be in accordance with the Current Oklahoma Standard Specifications for Highway Construction.
All Abutment Piling shall be driven through the compacted fill.
All Piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 Tons.
All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

Special Provisions
Curing Concrete Surfaces
Paints for Steel Bridges Second Field Paint (Lacquer Type)
Special Provisions for Portland Cement 10-8-65
Water Reducing and Set Retarding admixture will be used for Class "AA(AE)" Concrete

SHEET INDEX

For Details of Superstructure see sheet no. 243.
For Details of Structural Steel see sheet no. 244.
For Details of Slab Reinforcing see sheet no. 245.
For Details of Abutments see sheet no. 246.
For Details of Piers see sheet no. 247.
For Details of 4" Concrete Slope Walls see sheet no. 248.
For Details of Shoes & Exp. Device see Std. ISAJ-7 sheet no. 259 B.
For Details of Handrailing see Std. PTR-1-14 sht. # 259 C.
For Details of Piling see Std. P-1-10 sht. # 259 D.

STRU. NO. 55 AIRPORT ROAD OVER I.S. 35

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GENERAL ELEV. & PLAN & SUMMARY OF QUANTITIES
32'-(66'-77' CONT.)-32' I-BM. SPANS
28'-0" RDY. & 2-18" S.C.
℄ STA. 1559+63.81 I-35
SKEWED 82° 55' RT. FWD.
F.A. PROJ. NO. I-35-2(12)

PLAN | PROFILE | SURVEYED | PLOTTED | DESIGNED | CHECKED | B.M. | STRUCTURE INVENTORY & APPRAISAL | NOTE BOOK | NO. | DATE | BY

PLATE I - PLAN - PROFILE - O.P.R.&R.E. STANDARD
REUFFEL & ESSER CO. NEW YORK

F.A. PROJECT NO. I-35-2(12) SHEET NO. 242

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(112)		243	

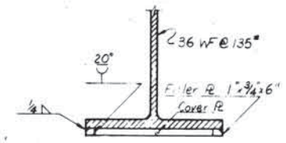
REVISIONS	
DESCRIPTION	DATE
Rev. Notes	4-67

Floor: 7½" Uniform thickness 28'-0" Cl. Rdy., Class "AA(AE)" Concrete, Max. Agg. 1½" ø Current Okla. Std. Specs.
Top of curb shall be brought to a true surface with a wooden float. Top and sides of curbs are to have a carborundum finish. Edges of curbs are to have a 3/4" chamfer.

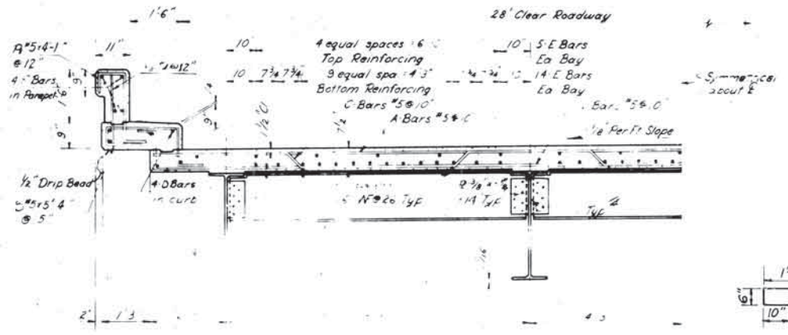
Reinf: Bars "A" #5 @ 10" Ctrs. across the Rdy., 1½" cl. below top of Slab 29'-8" long.
Bars "A₁" #5 @ 10" Ctrs. across the Rdy., 1" cl. above bottom of slab bent as shown.
Bars "B" #5 @ 5" Ctrs. in curbs, bent as shown.
Bars "C" #5 @ 10" Ctrs. across the Rdy. as shown.
Bars "D" #4 - 4 in each curb.
Bars "E" #4 - 63 parallel to ℄ Rdy., placed as shown.
Bars "P" #4 - 4 in parapet wall, placed as shown.
Bars "P₁" #5 @ 1'-0" Ctrs. in parapet walls placed as shown.
Bars "P₂" #4 @ 1'-0" Ctrs. in parapet walls placed as shown.
Reinf. Steel in the floor shall begin and end with A & A₁ Bars, a Max. of 2" from end of Conc. Panels. All reinf. steel in bottom of slab shall be supported on slab spacers as shown. Reinf. steel in top of slab shall be supported on approved metal highchairs at Max. spacing of 4'-3" Ctrs. in both directions.
Bars D & E shall terminate 1" from face of Concrete.
For Bars in skewed portion not noted see Reinforcing Details Sheet No. 245

Note: For details of Handrailing see PTR-1-14 Sh. No. 259 C
For spacing see General Elevation

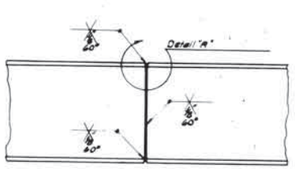
SLAB SPACER



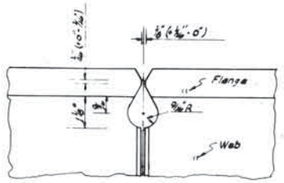
DETAIL AT PIER NO. 2



HALF SECTION TYPICAL

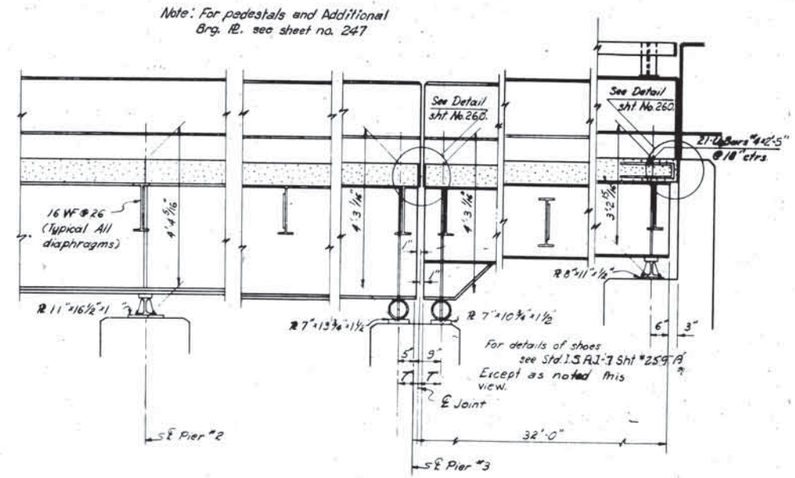


FIELD SPLICE DETAIL

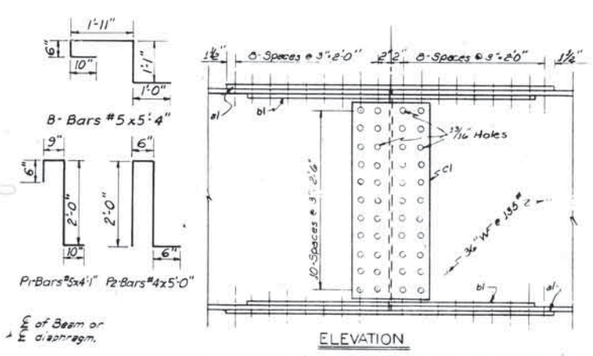


DETAIL "A"

Note: For pedestals and Additional Brg. Pl. see sheet no. 247



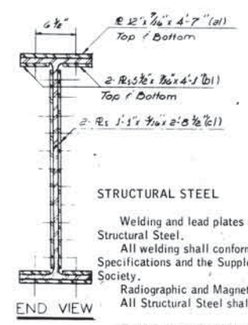
LONGITUDINAL SECTION AT LOW BEARING



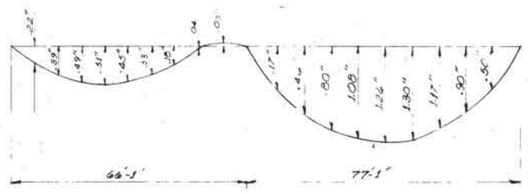
ELEVATION

Note: Use ¾" Rivets or High Strength steel Bolts

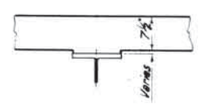
DETAILS OF FIELD SPLICE



END VIEW



DEAD LOAD DEFLECTION AT 1/10 POINTS

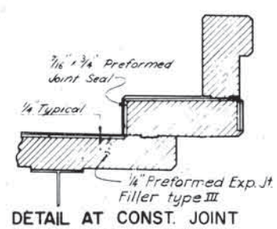


DETAIL OF HAUNCH FOR DEAD LOAD DEFL.

Note: The floor and curbs forms shall be built to allow for an assumed Parabolic deflection 3/8" at the center of End Spans. The Contractor shall form haunches as shown. Additional Concrete in the haunches to provide for dead load deflection has been added to the Pay Quantities of Class "AA(AE)" Concrete.

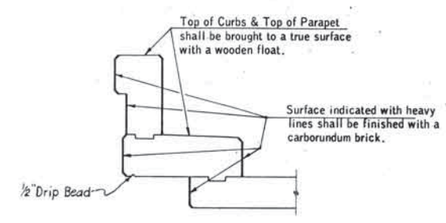
QUANTITIES

Item	Unit	Total
Class AA(AE) Concrete	Cu. Yd.	190.8
Reinforcing Steel	Lb.	43,350.0
Structural Steel	Lb.	133,630.0
Handrailing	L.F.	417.0



DETAIL AT CONST. JOINT OVER PIER NO. 2 ONLY

Note: All other slab const. joints shall have 1/4" Preformed Exp. Jt. Filler Type III between curbs & parapets only



DETAIL OF CONCRETE FINISHING

GENERAL NOTES

STRUCTURAL STEEL

Welding and lead plates will be paid for by weight at the unit price bid for Structural Steel.

All welding shall conform to the current edition of the Okla. Standard Specifications and the Supplemental Specifications and the American Welding Society.

Radiographic and Magnetic Particle Inspection will be required.

All Structural Steel shall conform to ASTM A-36.

Field Splice: Riveted or bolted field splices may be used in place of welded splices. Pay weight for splice will be based on material used.

High Strength Steel Bolts *shall be used for field* connections. Bolted Field Splices are to have *High Strength Steel Bolts*

FABRICATION

Extension bars shall be used in making the butt welds in the flanges according to the A.W.S. Specification

End of Beams to be spliced shall be prepared in the shop, taking into account the relative positions the adjacent section will take in the structure due to the roadway grade and alignment. For the purpose of shop inspection, the fabricator shall assemble the beams and splices in groups of at least three consecutive beam sections and two splices with beams supported only at bearing points in the correct vertical position. All parts shall be completely match marked and a match marking diagram furnished as part of the structural steel details.

ERECTION

The Engineer will check the elevations at all bearing points before any steel is erected, and the Contractor will be required to correct any points that are more than .02' off from planned elevation. Steel may be erected without the use of falsework provided all splice points are within .02' of the planned elevation after the steel is erected and before splices are welded or bolted. The Resident Engineer will check these elevations before any welding is started or any bolts are tightened and, if any splice point is off more than .02' in elevation, the Contractor will be required to adjust the elevations as directed by the Engineer.

After all Structural Steel has been erected the Resident Engineer will furnish the State Bridge Engineer with the profile of the tops of the beams with the elevations taken at the Panel Points. The Bridge Engineer will determine the thickening of the haunches that will be necessary to provide for Dead Load Deflection and furnish this information to the Resident Engineer.

Alternate Field Splice: Alternate field splices may be made before erection provided the beams are supported at the bearing points and splice points to the same relative elevations as they will have in the finished structure.

Design		
Drawn	P.L.B.	2-64
Checked	J.F.	10-65
Approved		
Squad	Watts	

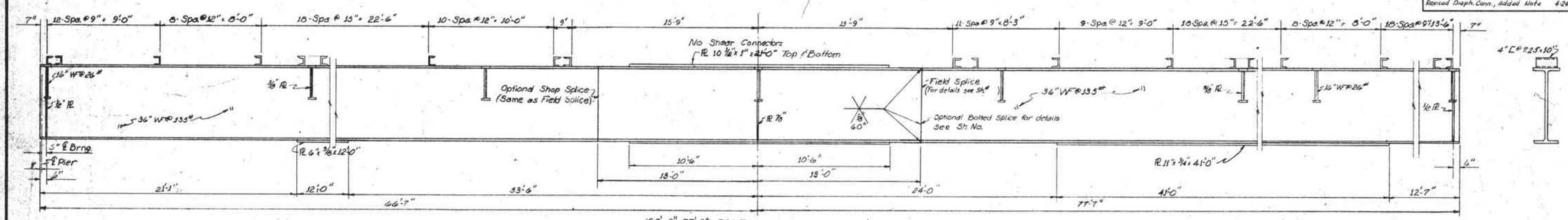
AIRPORT ROAD

SUPERSTRUCTURE DETAILS
32'(66.5'-77.5' CONT.) 32' I-BM. SPANS
28' RDY. AND 2 -18" S.C.
℄ STA. 30 + 65.75

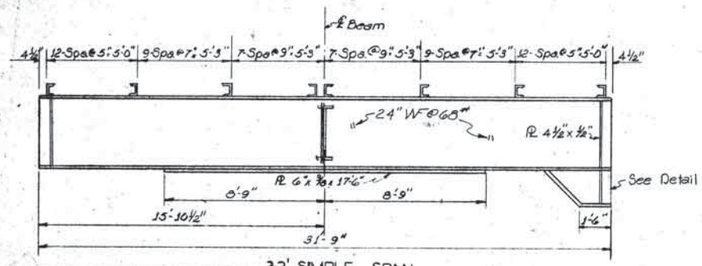
F.A. Project No. I-35-2(112) Sheet No. 243

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		244	

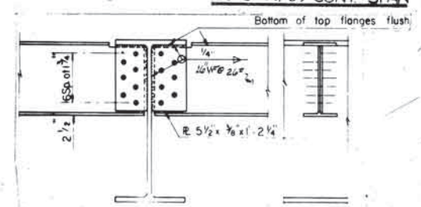
REVISIONS	
DESCRIPTION	DATE
Revised Diaph. Conn., Added Note	4-24-67



(66'-6"-77'-6") CONT. SPAN

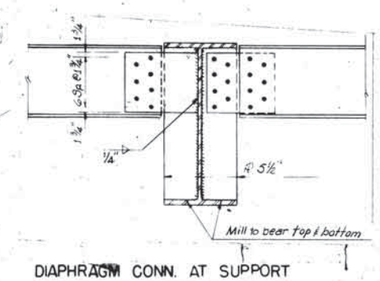


32' SIMPLE SPAN

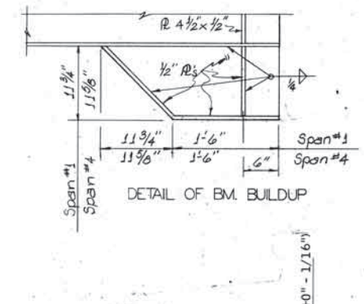


DIAPHRAGM CONN. AT INTERIOR (Cont. Spans)

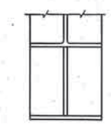
Note: Use 3/4" ø Rivets or High Strength Steel Bolts.



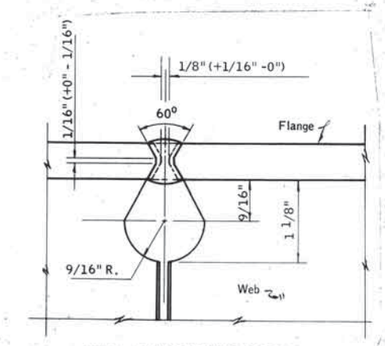
DIAPHRAGM CONN. AT SUPPORT



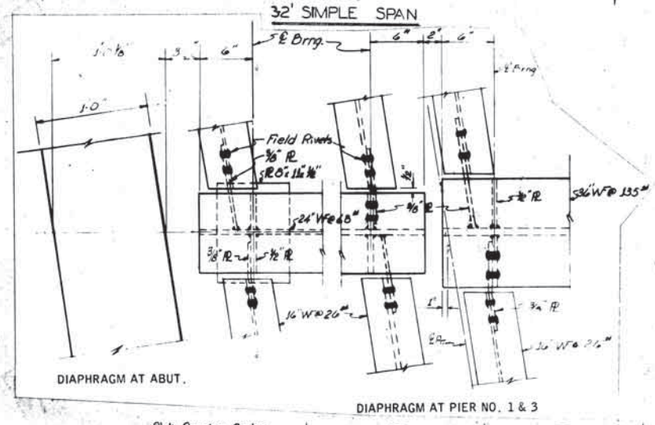
DETAIL OF BM. BUILDUP



END VIEW

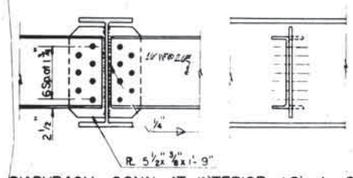


DETAIL OF WELDED FIELD SPLICE

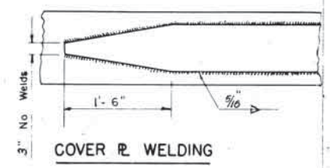


DIAPHRAGM AT ABUT.

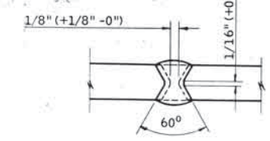
DIAPHRAGM AT PIER NO. 1 & 3



DIAPHRAGM CONN. AT INTERIOR (Simple Spans)

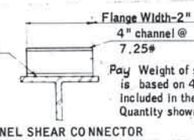


COVER PL WELDING



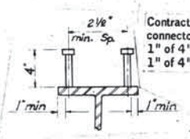
SECTION THRU WEB

Slab Pouring Order: All panels bearing the same number will be considered a "Group" and shall be poured in the same days pouring. More than one group may be poured in one day, but no group shall be started until pouring is completed for the preceding group and any group started must be completed before the pouring is stopped. (The purpose of these restrictions is to insure that loads and deflections of the entire series may be kept symmetrical about the ℄ of the series during the interval between pours.



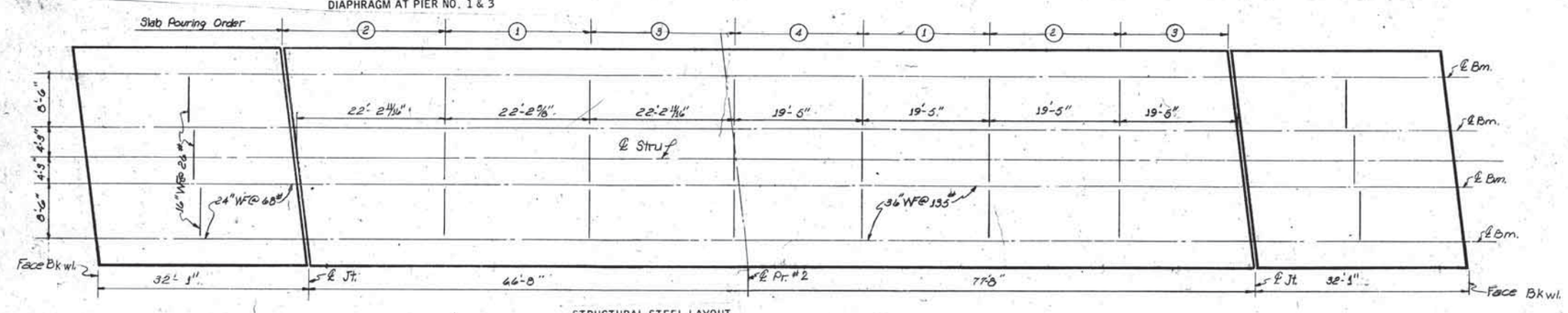
Pay Weight of shear connectors is based on 4" channel and is included in the Str. Steel Quantity shown.

CHANNEL SHEAR CONNECTOR



Contractor may use stud shear - connectors as follows:
1" of 4" [@ 7.25# = .56 of a 3/4" Stud
1" of 4" [@ 7.25# = .41 of a 7/8" Stud

Note: No field welding to beams or girders will be allowed except as shown on the plans.



STRUCTURAL STEEL LAYOUT

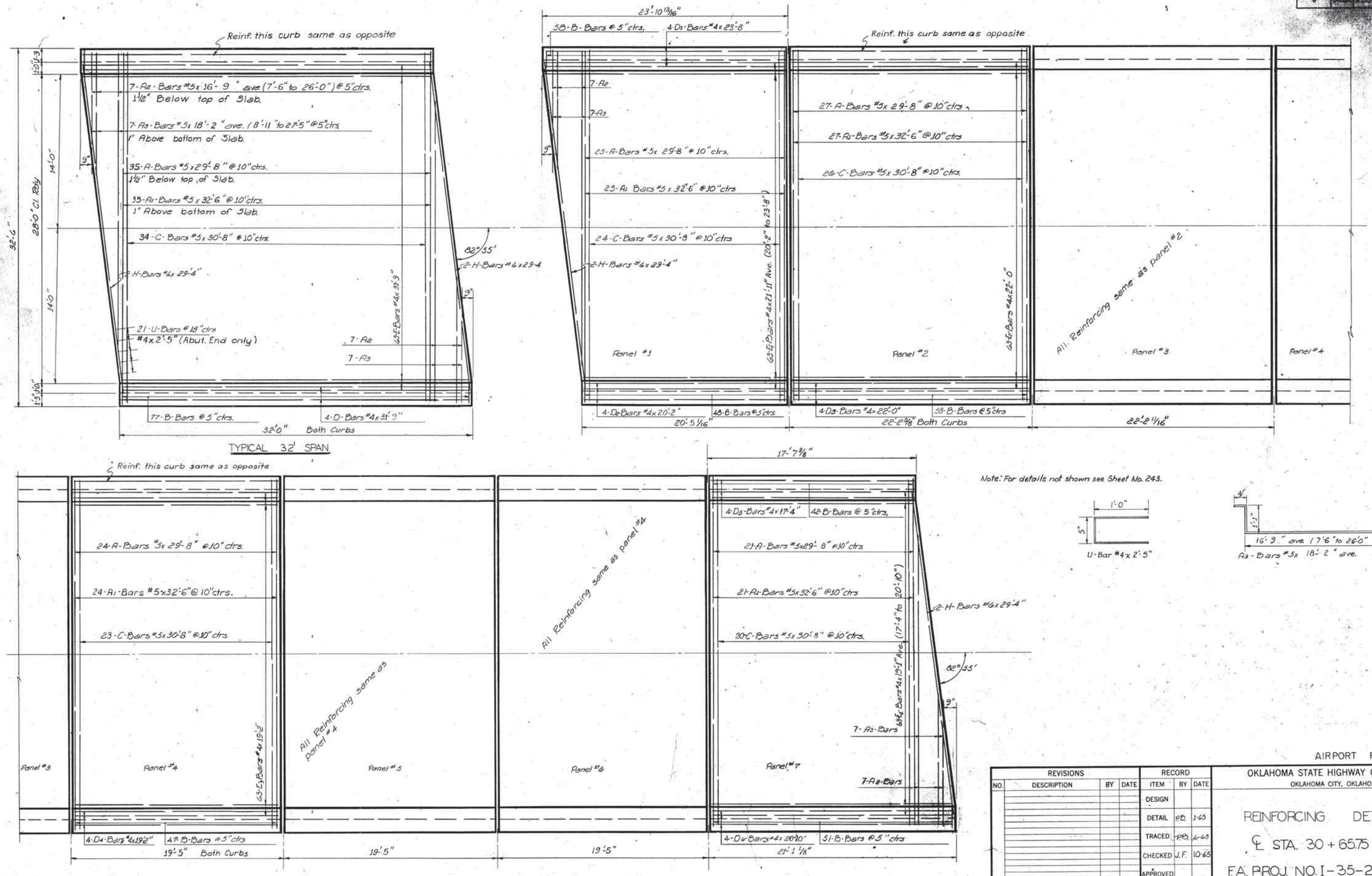
AIRPORT ROAD

Design		
Drawn	P.L.B.	5-64
Checked	JF	10-65
Approved		
Squad	Watts	

STRUCTURAL STEEL DETAIL
℄ STA. 30 + 60.75

F.A.S. Project No. I-35-2(12) Sheet No. 244

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	OKLA.	I-35-2(12)	245	



AIRPORT ROAD

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	P.R.	1-65
				TRACED	P.R.	6-65
				CHECKED	J.F.	10-65
				APPROVED		
				SQUAD: Walb		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

REINFORCING DETAILS

℄ STA. 30 + 65.75

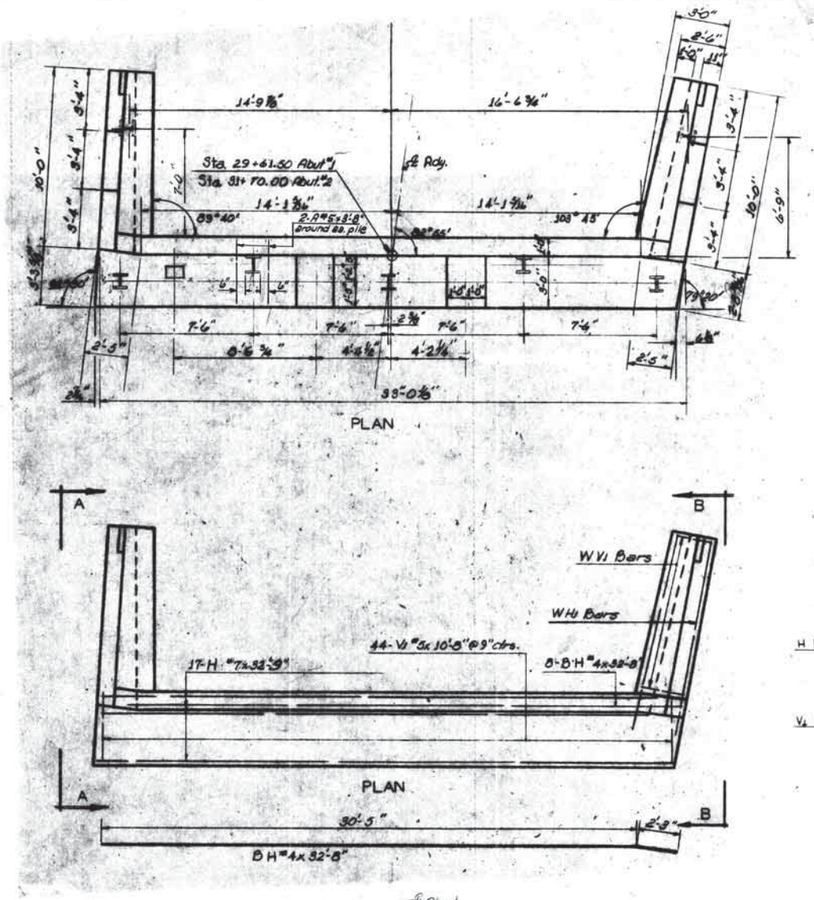
F.A. PROJ. NO. I-35-2 (12)

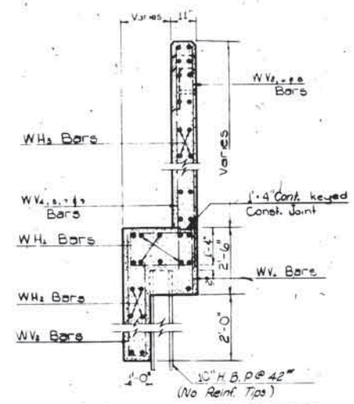
F.A. PROJECT NO. I-35-2 (12) · SHEET NO. 245

DIETZGEN NO. 135 IMPERIAL

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		246	

REVISIONS	
DESCRIPTION	DATE
Revised Reinf. around Piling	4-26-67



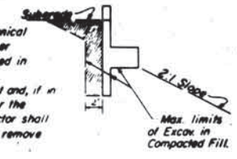


TYPICAL WING SECTION

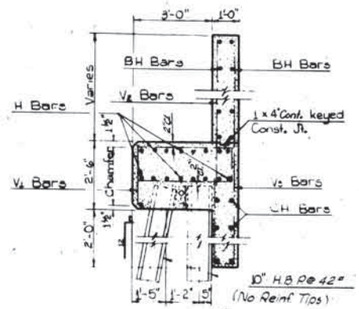
BAR LIST - ONE ABUT.				
Mark	Size	No.	Length	Form
CH	#4	6	28'-8"	Str.
H	#7	17	32'-9	Str.
BH	#4	6	32'-8"	Bnt.
GC1	#4	6	6'-0"	Bnt.
GC2	#4	4	5'-6"	Bnt.
V1	#5	44	10'-8"	Bnt.
V2	#4	29	5'-0"	Str.
V3	#4	29	11'-8"	Bnt.
V4	#4	4	5'-5"	Str.
WH1	#7	22	12'-9"	Str.
WH2	#4	12	9'-8"	Str.
WH3	#4	84	9'-8"	Str.
WH4	#4	4	6'-4"	Str.
WH5	#4	4	3'-0"	Str.
WV1	#5	24	8'-2" ave.	Bnt.
WV2	#4	22	8'-8"	Bnt.
WV3	#5	4	5'-3"	Str.
WV4	#4	10	7'-9"	Str.
WV5	#5	10	7'-9"	Str.
WV6	#4	10	5'-8"	Str.
WV7	#5	10	7'-3"	Str.
WV8	#4	10	6'-8"	Str.
WV9	#5	6	6'-5"	Str.
A	#5	10	3'-8"	Str.

Shaded area to be back filled and tamped with a mechanical tamper to 100 % Proctor Density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the price bid per C.Y. for Substructure Excavation Common.

Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer he may pour the concrete against the compacted fill. If necessary, Contractor shall use forms on the back vertical face of the Abutment and remove same after concrete is set.

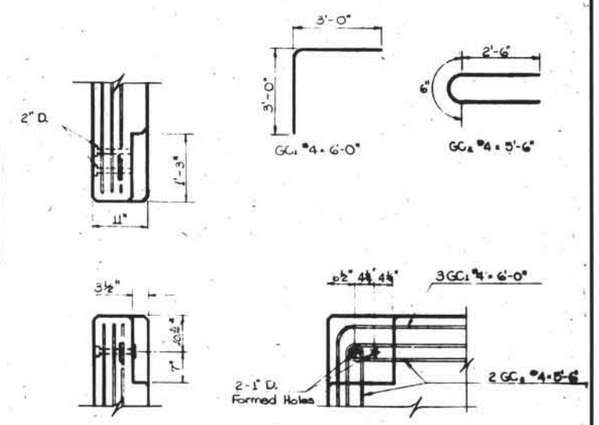


ABUTMENT EXCAV. DIAGRAM



TYPICAL ABUT. SECTION

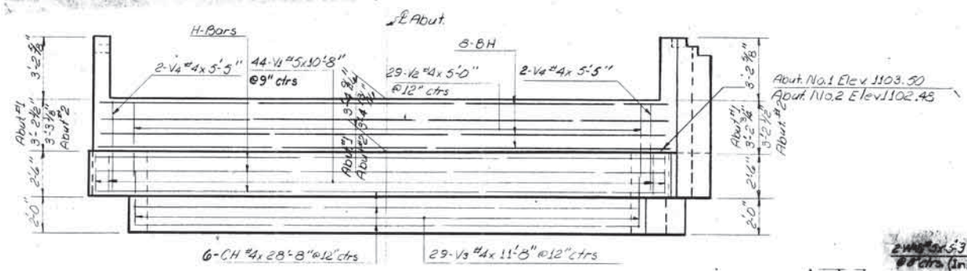
QUANTITIES (ONE ABUTMENT)		
ITEM	UNIT	TOTAL
Class "A" Concrete	Cu. Yd.	28.6
Reinforcing Steel	Lb.	3910.
Substructure Excavation Common	Cu. Yd.	38.0



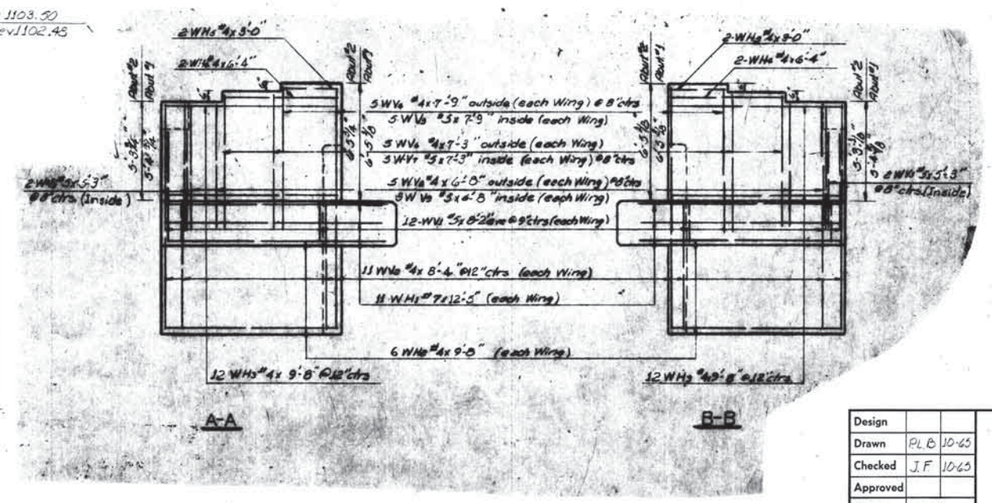
DETAIL OF GUARDRAIL CONNECTION

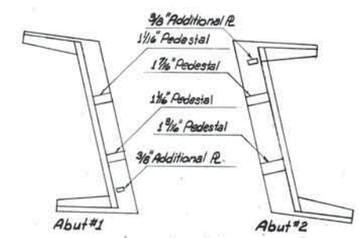
Note: Omit tip reinforcing on piling used in the Abuts.

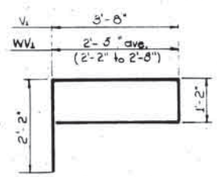
Note: For details of piling see Std. P-1-10 sht. # 259 D



ELEVATION



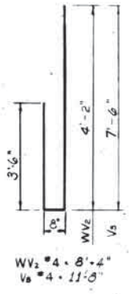




V1 = 5 - 10'-8"
WV1 = 5 - 8'-2 ave. (7'-8" to 8'-3")

Note: 2" I.D. anchor bolt holes 1'-0" deep may be placed at all shoe locations. Contractor may use a thin wall steel tube and leave in place. After shoes are set in place, holes shall be filled with melted sulphur.

Note: All exposed edges to have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber. All construction shall be in accordance with current Okla. Std. Specs.



WV2 = 4 - 8'-4"
V3 = 4 - 11'-8"

GENERAL NOTES

All Construction and materials shall be in accordance with the current Oklahoma Standard Specifications for Highway Construction and Special Provisions shown on Summary of Pay Quantities - Bridges -

All Abutment Piling shall be driven through the compacted fill. All Piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 Tons at Abutments.

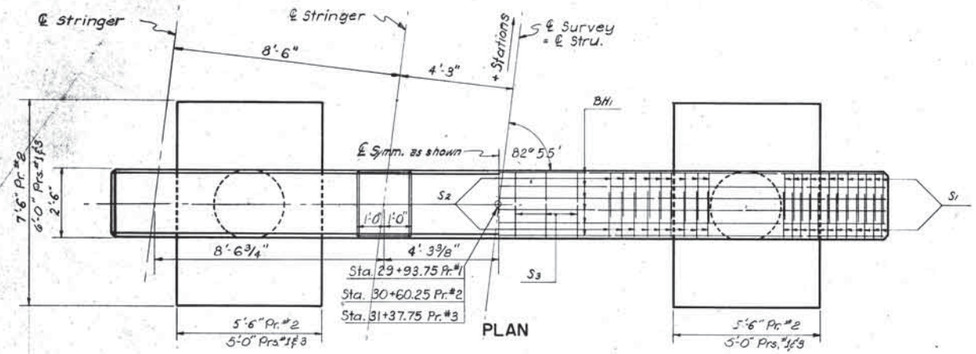
AIRPORT ROAD

Design		
Drawn	P.L.B.	10-65
Checked	J.F.	10-65
Approved		
Squad	Watts	

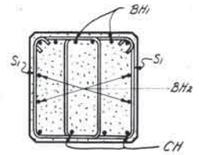
DETAILS OF ABUTMENTS
℄ STA. 30+65.75
SKEWED 82° 32' 30"

F.A. Project No. I-35-2(12) Sheet No. 246

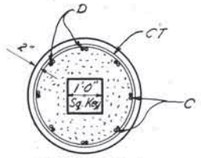
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	247	



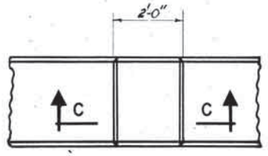
PLAN



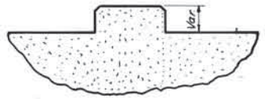
SECTION A-A
(Pier #2 Shown)



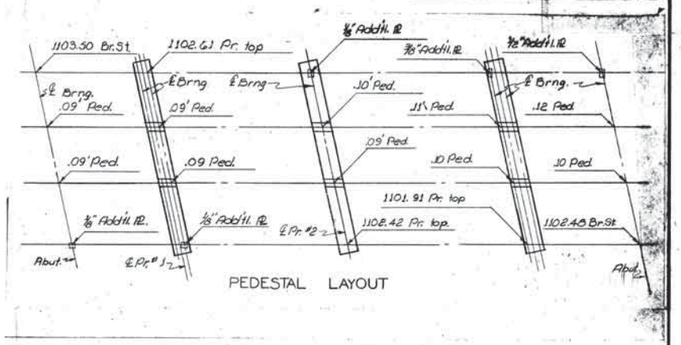
SECTION B-B



PLAN

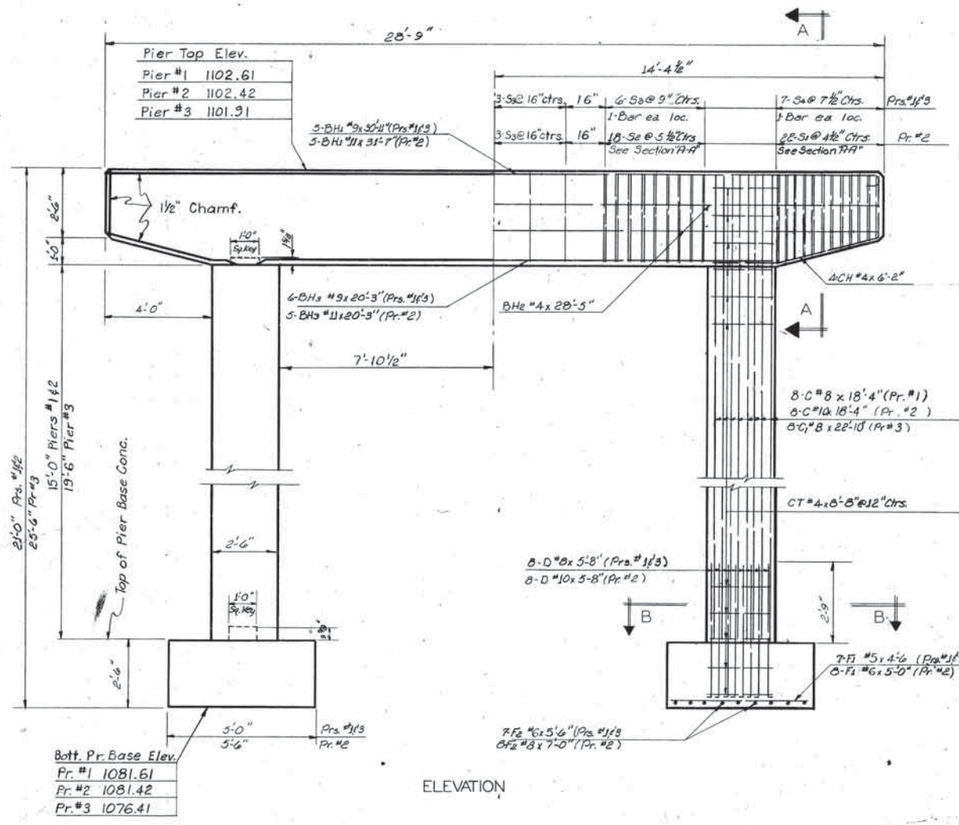


SECTION C-C
ELEVATION

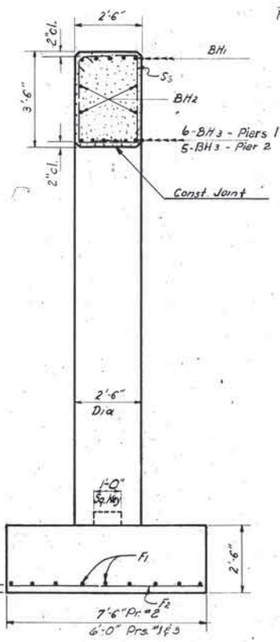


PEDESTAL LAYOUT

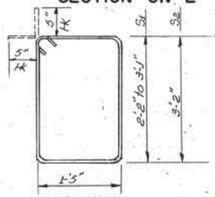
BAR LIST FOR PR. NO. 2				
Mark	No.	Size	Form	Length
BH1	5	#11	Bnt.	31'-7"
BH2	4	#4	Str.	28'-5"
BH3	5	#11	Str.	20'-3"
C	16	#10	Str.	18'-4"
CH	8	#4	Bnt.	6'-2"
CT	42	#4	Bnt.	8'-8"
D	16	#10	Bnt.	5'-8"
F1	16	#6	Str.	5'-0"
F2	16	#8	Str.	7'-0"
S1	44	#4	Bnt.	8'-11" ave
S2	36	#4	Bnt.	10'-0"
S3	5	#4	Bnt.	11'-6"



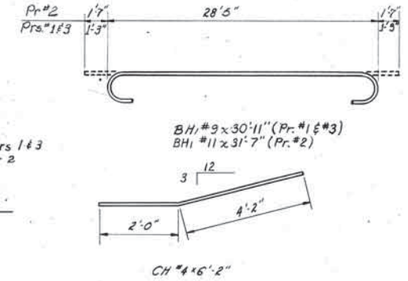
ELEVATION

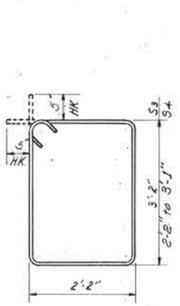


SECTION ON ℄



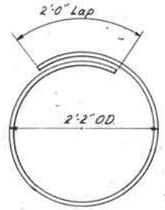
S1 #4 x 8'-11" ave
(8'-0" to 9'-10")
S2 #4 x 10'-0"





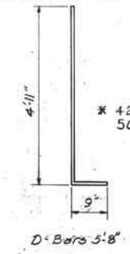
CH #4 x 6'-2"

S3 #4 x 11'-6"
S4 #4 x 10'-3" ave
(9'-6" to 11'-4")



CT #4 x 8'-8"

Note: All Bar Bend dimensions are out to out.



D Bars 5'-8"

* 42 Pr. No. 1
50 Pr. No. 3

BAR LIST FOR PR. 1 OR PR. 3					
Mark	No.	Size	Form	Length	
BH1	5	#9	Bnt.	30'-11"	
BH2	4	#4	Str.	28'-5"	
BH3	6	#9	Str.	20'-3"	Pr. 1 only
C	16	#8	Str.	18'-4"	
CH	8	#4	Bnt.	6'-2"	
CT	*	#4	Bnt.	8'-8"	
D	16	#8	Bnt.	5'-8"	
F1	14	#5	Str.	4'-6"	
F2	14	#6	Str.	5'-6"	
S3	17	#4	Bnt.	11'-6"	
S4	14	#4	Bnt.	10'-5" ave	
C1	16	#8	Str.	22'-10"	Pr. 3 only

QUANTITIES		*Pr. No. 1	Pr. No. 2	Pr. No. 3
Item	Unit	Total	Total	Total
Class "A" Concrete	C.Y.	14.4	14.4	16.1
Class "A" Conc. Pier Bases	C.Y.	5.6	7.7	5.6
Reinforcing Steel	Lb.	2730.	4340.	2960.
Substr. Excav. Common	C.Y.	20.	24.3	33.3
Substr. Excav. Rock	C.Y.	7.2	3.1	3.3

All concrete shall be poured in the dry.

Concrete in the footing of the pier shall be poured against the rock foundation. The quantity of Class "A" Concrete in Pier Base and Substructure Excavation Rock, paid for under these items shall be the amount within the neat lines of the footing as shown on these plans. Any variation in the elevation of Pier Base shall be taken care of in the column and any additional concrete of such variation shall be included in the unit price bid per cubic yard for Class "A" Concrete in Pier Base and Substructure Excavation Rock.

Note: All exposed edges to have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber. All construction shall be in accordance with current Oklahoma Std. Specs.

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Added Key & Revised Bars	P.M.	6-26-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	P.A.B.	6-65
TRACED		
CHECKED	J.F.	10-65
APPROVED		
SQUAD: Wehrs		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

AIRPORT ROAD

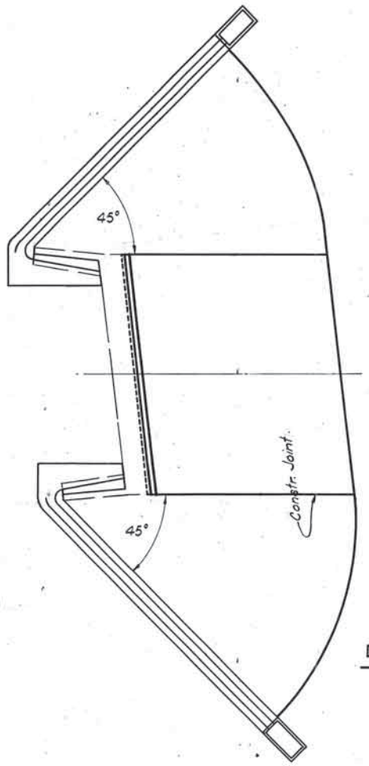
DETAILS OF PIERS

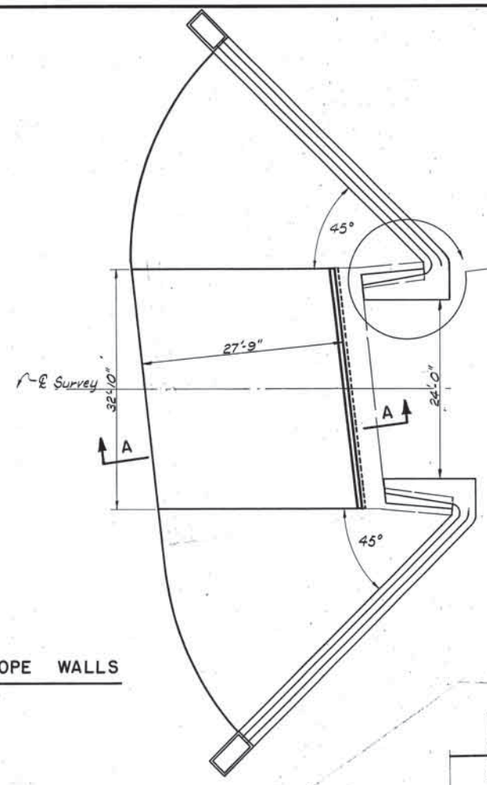
℄ STA. 30+65.75

F.A. PROJ. NO. I-35-2-(12)

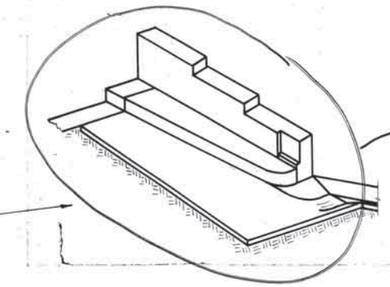
F.A. PROJECT NO. I-35-2(12) SHEET NO. 247

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)	248	

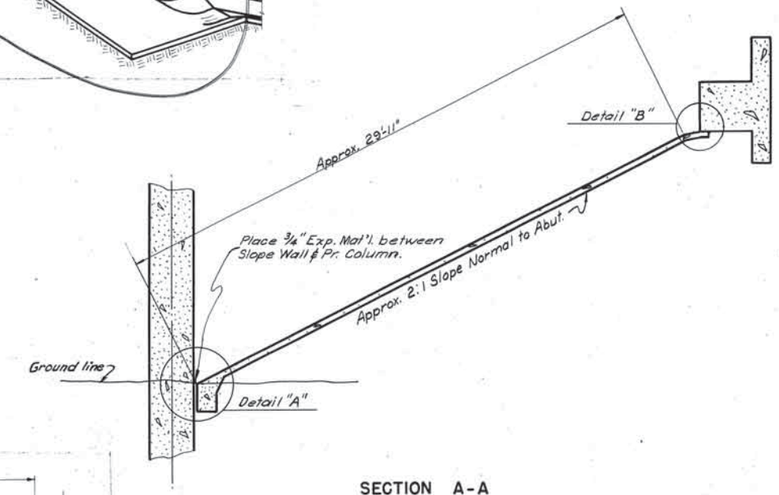




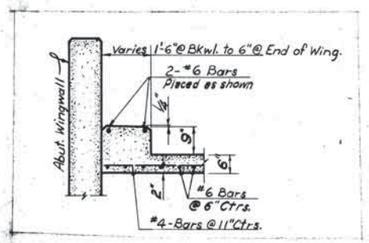
DETAILS OF SLOPE WALLS



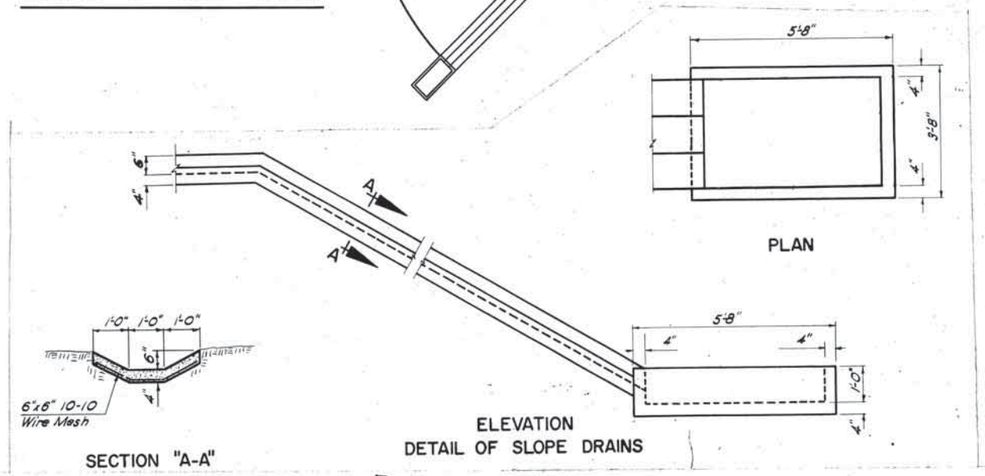
See Revised Curb Detail Sheet. No.



SECTION A-A



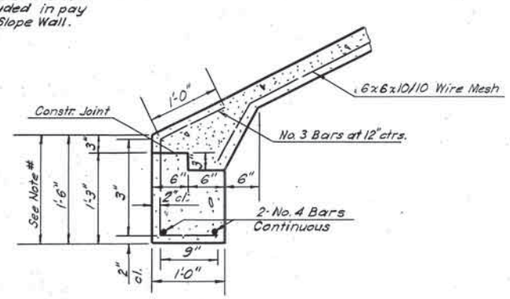
SECTION THRU APPROACH DRAIN



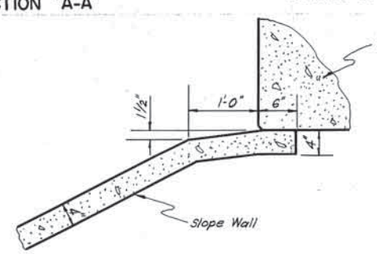
Note: Cost of all items in Conc. Slope Walls including wire mesh, reinf. steel, and exp. joint filler shall be included in the unit price bid per Sq. Yd. of 4" Concrete Slope Wall. All material and work shall be in accordance with that part of Sec. 610 of the Oklahoma Std. Specs. governing Concrete Sidewalks.

QUANTITIES — SLOPE WALLS				
Abuts.	Unit	Slope Walls	Drains	Total
Abut. #1	S.Y.	309.	41.3	350.3
Abut. #2	S.Y.	309.	41.3	350.3

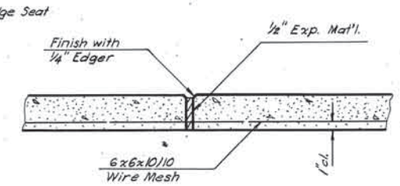
Note: Surface area of toe of Slope Wall included in pay quantity for Slope Wall.



DETAIL "A"



DETAIL "B"



DETAIL OF CONSTR. JT.

AIRPORT ROAD

REVISIONS				RECORD		
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE
1	Rev. Constr. Joint Location	A.L.D.	4/26/67	DESIGN		
				DETAIL	R.B.R.	7-64
				TRACED	R.B.R.	7-64
				CHECKED	J.F.	10/65
				APPROVED		
				SQUAD: Watts		

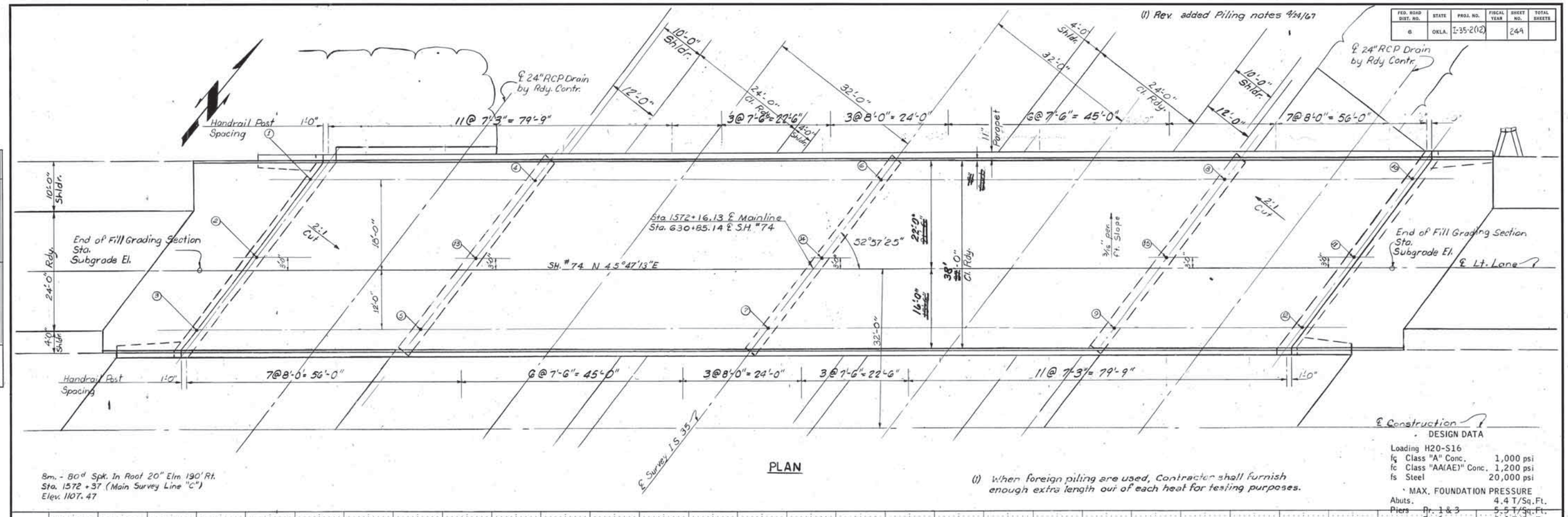
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF SLOPE WALLS
28'-0" RDY. SKEWED 82°55'
℄ STA. NO. 30+65.75
F. A. PROJ. NO. I-35-2(12)

F.A. PROJECT NO. I-35-2(12) SHEET NO. 248

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		249	

(1) Rev. added Piling notes 4/24/67



Bm. - 80d Spk. In Root 20" Elm 190' Rt.
Sta. 1572 + 37 (Main Survey Line "C")
Elev. 1107.47

PLAN

(1) When foreign piling are used, Contractor shall furnish enough extra length out of each heat for testing purposes.

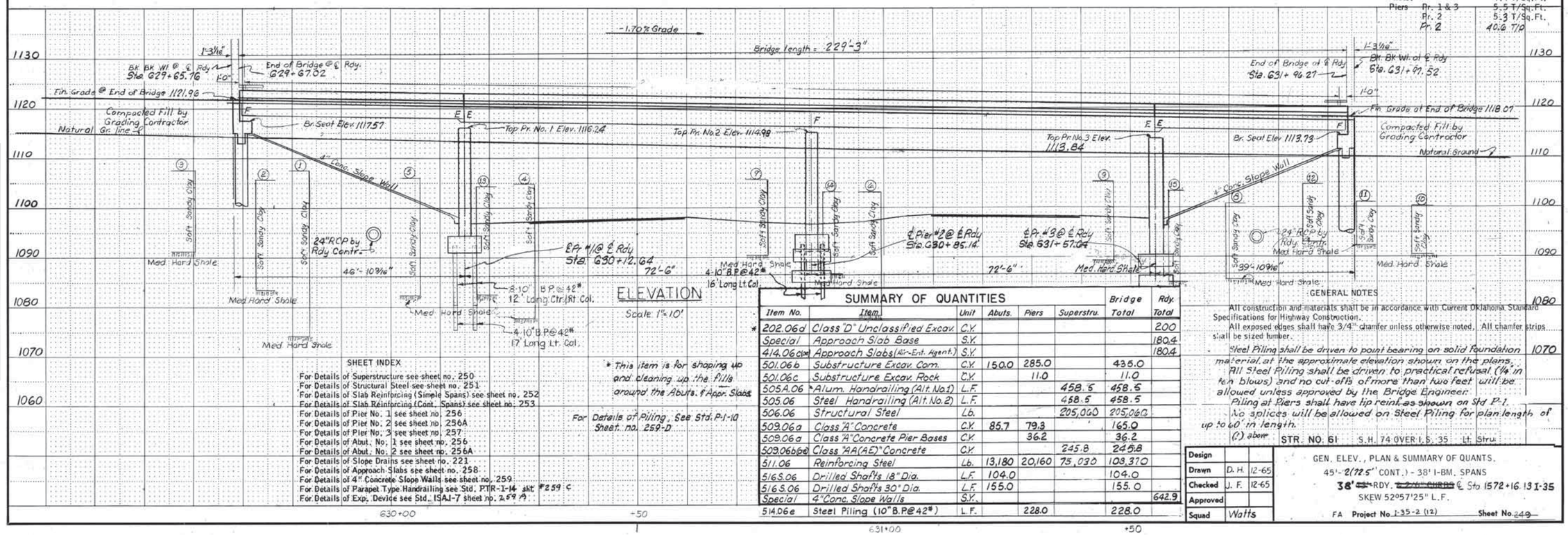
DESIGN DATA

Loading H20-S16

fc	Class "A" Conc.	1,000 psi
fc	Class "AA(AE)" Conc.	1,200 psi
fs	Steel	20,000 psi

MAX. FOUNDATION PRESSURE

Abuts.		4.4 T/Sq.Ft.
Piers	Pr. 1 & 3	5.5 T/Sq.Ft.
	Pr. 2	5.3 T/Sq.Ft.
	Pr. 2	40.6 T/P



ELEVATION

Scale 1" = 10'

SHEET INDEX

For Details of Superstructure see sheet no. 250
For Details of Structural Steel see sheet no. 251
For Details of Slab Reinforcing (Simple Spans) see sheet no. 252
For Details of Slab Reinforcing (Cont. Spans) see sheet no. 253
For Details of Pier No. 1 see sheet no. 256
For Details of Pier No. 2 see sheet no. 256A
For Details of Pier No. 3 see sheet no. 257
For Details of Abut. No. 1 see sheet no. 256
For Details of Abut. No. 2 see sheet no. 256A
For Details of Slope Drains see sheet no. 221
For Details of Approach Slabs see sheet no. 258
For Details of 4" Concrete Slope Walls see sheet no. 259
For Details of Parapet Type Handrailing see Std. PTR-I-14 sht. #259 C
For Details of Exp. Device see Std. ISAJ-7 sheet no. 259 A

* This item is for shaping up and cleaning up the Fills around the Abuts. & Appr. Slabs

For Details of Piling, See Std. P-1-10 Sheet no. 259-D

SUMMARY OF QUANTITIES

	Item No.	Item	Unit	Abuts.	Piers	Superstru.	Bridge Total	Rdy. Total
*	202.06d	Class "D" Unclassified Excav.	C.Y.					200
	Special	Approach Slab Base	S.Y.					180.4
	414.06(a)	Approach Slabs (Air-Ent. Agent.)	S.Y.					180.4
	501.06b	Substructure Excav. Com.	C.Y.	150.0	285.0		435.0	
	501.06c	Substructure Excav. Rock	C.Y.		11.0		11.0	
	505A.06	*Alum. Handrailing (Alt. No. 1)	L.F.			458.5	458.5	
	505.06	Steel Handrailing (Alt. No. 2)	L.F.			458.5	458.5	
	506.06	Structural Steel	Lb.			205,060	205,060	
	509.06a	Class "A" Concrete	C.Y.	85.7	79.3		165.0	
	509.06a	Class "A" Concrete Pier Bases	C.Y.		36.2		36.2	
	509.06b(2)	Class "AA(AE)" Concrete	C.Y.			245.8	245.8	
	511.06	Reinforcing Steel	Lb.	13,180	20,160	75,030	108,370	
	516S.06	Drilled Shafts 18" Dia.	L.F.	104.0			104.0	
	516S.06	Drilled Shafts 30" Dia.	L.F.	155.0			155.0	
	Special	4" Conc. Slope Walls	S.Y.					642.9
	514.06e	Steel Piling (10" B.P. @ 42#)	L.F.		228.0		228.0	

GENERAL NOTES

All construction and materials shall be in accordance with Current Oklahoma Standard Specifications for Highway Construction.

All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

Steel Piling shall be driven to point bearing on solid foundation material at the approximate elevation shown on the plans. All Steel Piling shall be driven to practical refusal (1/4" in ten blows) and no cut-offs of more than two feet will be allowed unless approved by the Bridge Engineer.

Piling at Piers shall have tip reinf. as shown on Std P-1.

No splices will be allowed on Steel Piling for plan length of up to 60' in length.

(1) above

STR. NO. 61 S.H. 74 OVER I.S. 35 Lt. Stru.

Design		
Drawn	D. H.	12-65
Checked	J. F.	12-65
Approved		
Squad	Watts	

GEN. ELEV., PLAN & SUMMARY OF QUANTS.
45'-2(72.5' CONT.) - 38' I-BM. SPANS
38' ~~45'~~ RDY. ~~2-24' CURBS~~ ℄ Sta. 1572+16.13 I-35
SKEW 52°57'25" L.F.

FA Project No. I-35-2 (12) Sheet No. 249

PLAN — SURVEYED, PLOTTED, NOTE BOOK, ALIGNMENT CHECKED, RT. OF WAY CHECKED, NO., DATE, BY

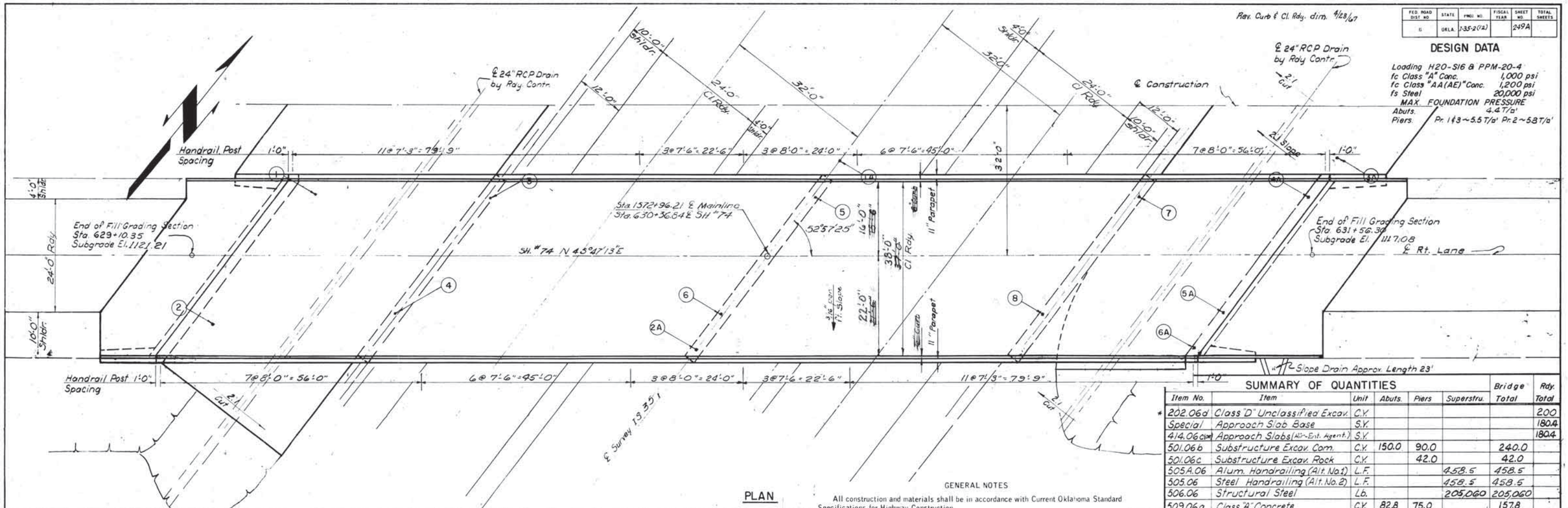
PROFILE — SURVEYED, PLOTTED, NOTE BOOK, GRADES CHECKED, B. M. & NOTED, STRUCTURE NOTATIONS CH'ED, NO., DATE, BY

FED. ROAD DIST. NO.	STATE	FNDI NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		249A	

Rev. Curb & Cl. Rdy. dim. 4/28/67

DESIGN DATA

Loading H20-S16 & PPM-20-4
fc Class "A" Conc. 1,000 psi
fc Class "AA(AE)" Conc. 1,200 psi
fs Steel 20,000 psi
MAX. FOUNDATION PRESSURE
Abuts. 4.4 T/□'
Piers. Pr. 1 & 3 ~ 5.5 T/□' Pr. 2 ~ 5.8 T/□'



PLAN

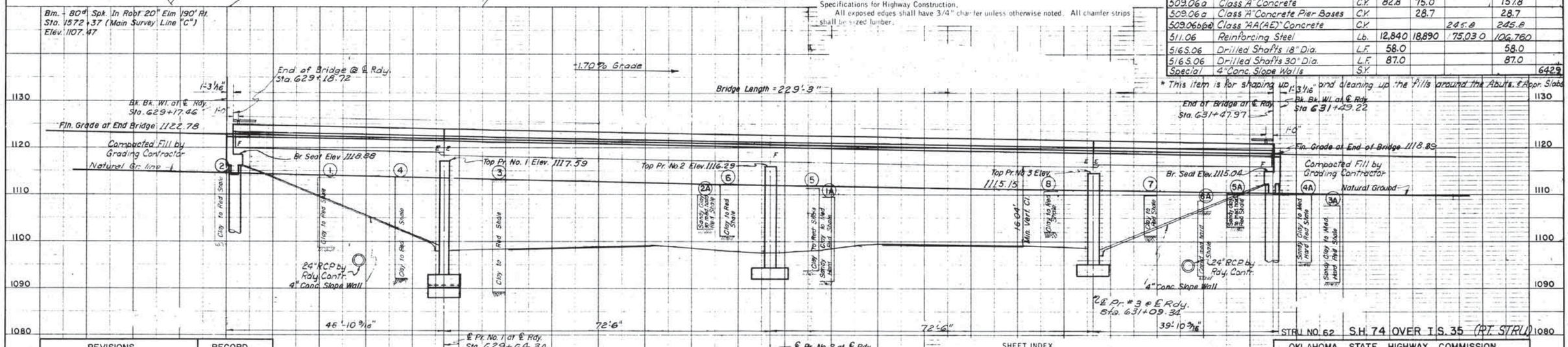
GENERAL NOTES

All construction and materials shall be in accordance with Current Oklahoma Standard Specifications for Highway Construction.
All exposed edges shall have 3/4" chamfer unless otherwise noted. All chamfer strips shall be sized lumber.

SUMMARY OF QUANTITIES

Item No.	Item	Unit	Abuts.	Piers	Superstru.	Bridge Total	Rdy. Total
* 202.06d	Class "D" Unclassified Excav.	C.Y.					200
Special	Approach Slab Base	S.Y.					180.4
414.06c(2)	Approach Slabs (Alt-Est. Agent.)	S.Y.					180.4
501.06b	Substructure Excav. Com.	C.Y.	150.0	90.0		240.0	
501.06c	Substructure Excav. Rock	C.Y.		42.0		42.0	
505A.06	Alum. Handrailing (Alt. No. 1)	L.F.			458.5	458.5	
505.06	Steel Handrailing (Alt. No. 2)	L.F.			458.5	458.5	
506.06	Structural Steel	Lb.			205,060	205,060	
509.06a	Class "A" Concrete	C.Y.	82.8	75.0		157.8	
509.06a	Class "A" Concrete Pier Bases	C.Y.		28.7		28.7	
509.06b(2)	Class "AA(AE)" Concrete	C.Y.			245.8	245.8	
511.06	Reinforcing Steel	Lb.	12,840	18,890	75,030	106,760	
516S.06	Drilled Shafts 18" Dia.	L.F.	58.0			58.0	
516S.06	Drilled Shafts 30" Dia.	L.F.	87.0			87.0	
Special	4" Conc. Slope Walls	S.Y.					642.9

* This item is for shaping up 1'-3 1/16" and cleaning up the fills around the Abuts. & Appr. Slabs



ELEVATION
Scale 1" = 10"

REVISIONS				RECORD		
NO	DESCRIPTION	BY	DATE	ITEM	BY	DATE
				DESIGN		
				DETAIL	D. H.	1-63
				TRACED		
				CHECKED	VF	11/65
				APPROVED		
				SQUAD:	WATTS	

SHEET INDEX

For Details of Superstructure see sheet no. 250
For Details of Structural Steel see sheet no. 251
For Details of Slab Reinforcing (Simple Spans) see sheet no. 252
For Details of Slab Reinforcing (Cont. Spans) see sheet no. 253
For Details of Piers No. 1 & 3 see sheet no. 257
For Details of Pier No. 2 see sheet no. 257A
For Details of Abut. No. 1 see sheet no. 255
For Details of Abut. No. 2 see sheet no. 255A
For Details of Slope Drains see sheet no. 221
For Details of Approach Slabs see sheet no. 258
For Details of 4" Concrete Slope Walls see sheet no. 259
For Details of Parapet Type Handrailing see Std. PTR-1-14 sht. 259 C
For Details of Exp. Device see Std. ISAJ-7 sheet no. 259 A

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

GEN. ELEV., PLAN & SUM. OF QUANTS.
45'(2-72.5 CONT.)-38 I-BM. SPANS
38 ~~37~~'-RDY. ~~& 2'-6" CURBS~~
SKEW 52°57'25" L.F.
℄ STA. 1572+96.21 I-35
F.A. PROJ. NO. I-35-2(12)

STRU. NO. 62 S.H. 74 OVER I.S. 35 (PT. STRU.)

FA PROJECT NO I-35-2 (12) SHEET NO. 249 A

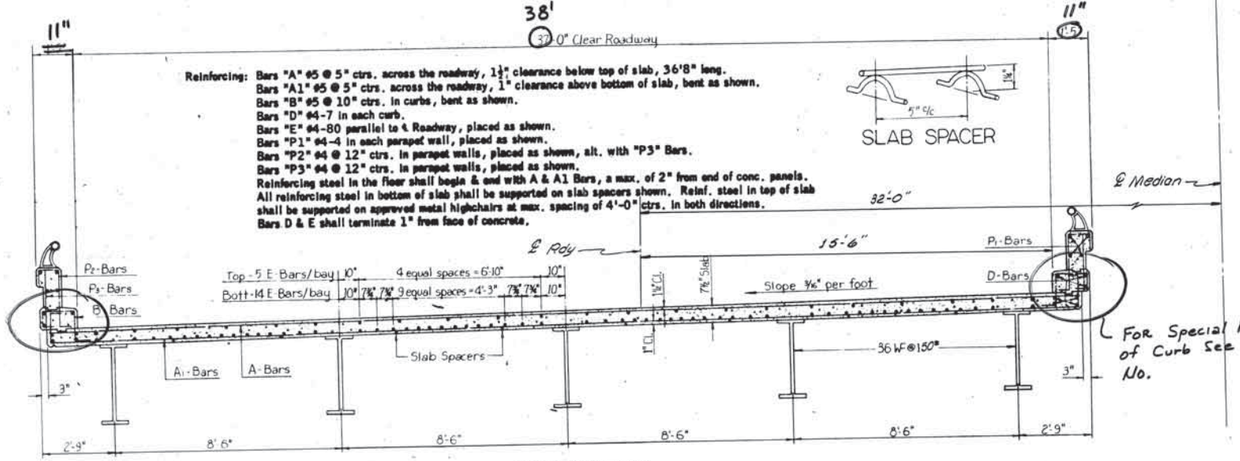
PLAN — NOTE BOOK — NO.

PROFILE — NOTE BOOK — NO.

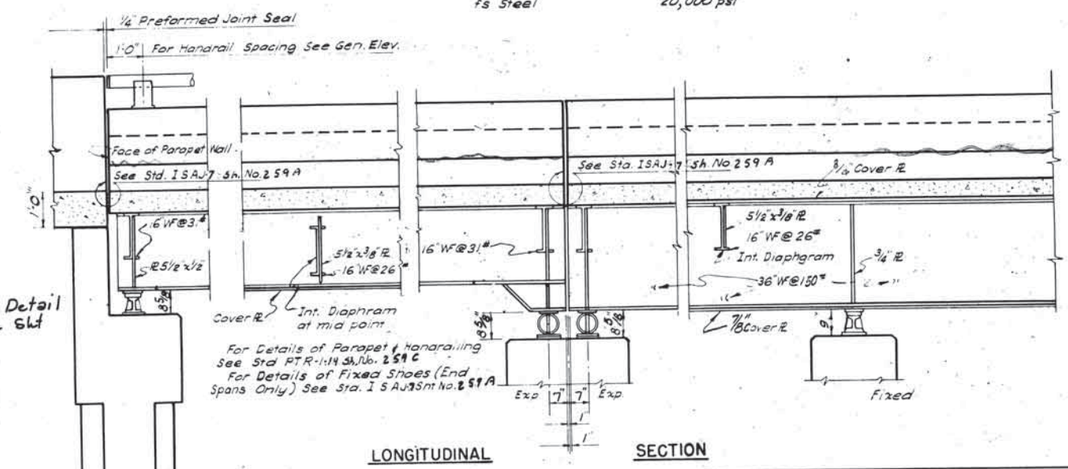
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)	250	

DESIGN DATA

Loading H20-S16.
fc Class "AA(AE)" Conc. 4,200 psi
fs Steel 20,000 psi

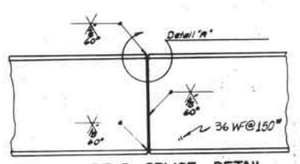


RDY. SECTION

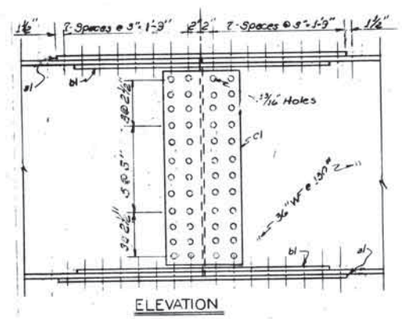


LONGITUDINAL SECTION

SUPERSTRUCTURE QUANTITIES		
Item	Unit	Total
Structural Steel	Lbs.	205,060
Class "AA(AE)" Concrete	Cu. Yd.	245.8
Reinforcing Steel	Lbs.	75030
Parapet Type Handrailing	Lin. Ft.	458.5

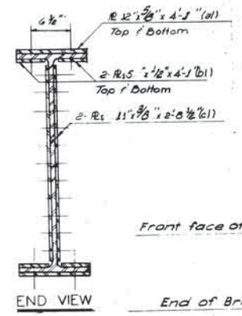


FIELD SPLICE DETAIL



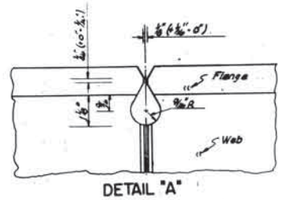
ELEVATION

Note: Use ¾" Rivets or High Strength Bolts.

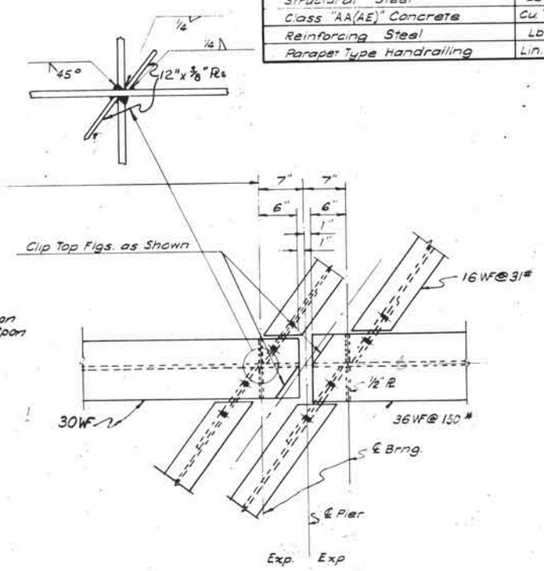


END VIEW

DETAILS OF FIELD SPLICE (ALT.)

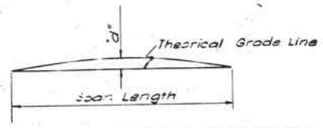


DETAIL "A"



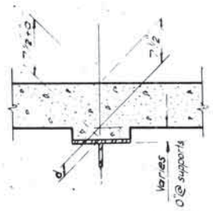
DIAPHRAGM CONNECTION AT ABUT.

DIAPHRAGM CONNECTION OVER PIER 1 OR 3



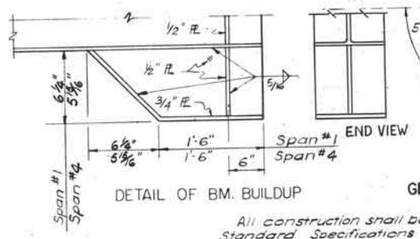
DEAD LOAD CORRECTION FOR SIMPLE SPANS

Span	d
45'	¼
38'	½



DETAIL OF HAUNCHES

Note: The floor and curb forms shall be built to allow for an assumed Parabolic deflection d at the center of the Span as shown in the table. The Contractor shall form haunches as shown. Additional Concrete in haunches to provide for dead load deflection has been added to the Pay Quantities of Class AA(AE) Concrete



DETAIL OF BM. BUILDUP

GENERAL NOTES

All construction shall be in accordance with the current Oklahoma Standard Specifications and Special Provisions.
All Reinforcing Steel Bars shall conform to A.S.T.M. Specifications A-305.

Transverse Reinforcing Steel in floor slab shall begin and end with a straight bar and these bars shall be a Maximum of 2" from the end of Concrete panels.

Slab, Curbs, and Parapet Walls shall be poured separately using the Continuous Keyed Joint shown.
Reinforcing Steel shall be supported on approved metal Slab Spacers and High Chairs, at a Max. spacing of 5'-0" ctrs.

SH 74 OVER I-35

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Added End View - Bm Buildup	Dn	6-24-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	P.B.	12/64
TRACED	R.B.R.	1/65
CHECKED	J.F.	1/66
APPROVED		
SQUAD Watts		

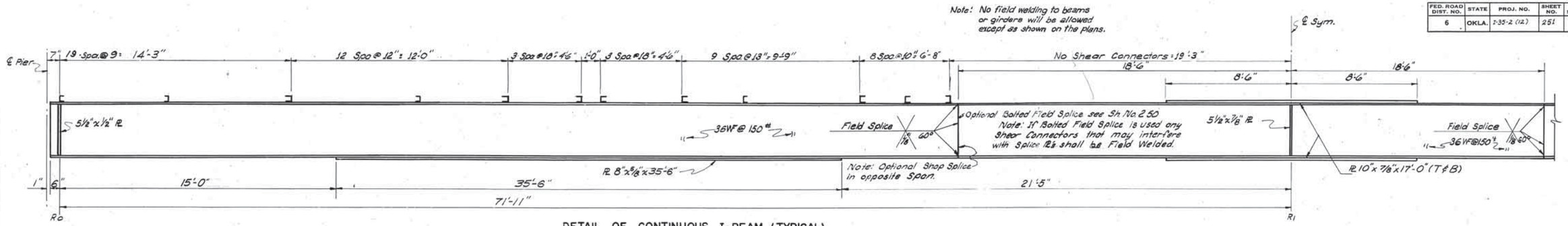
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAIL OF SUPERSTRUCTURE
℄ STA. 630 + 33.34 RT. STRU.
℄ STA. 630 + 81.64 LT. STRU.
F. A. PROJ. NO. I-35-2(12)

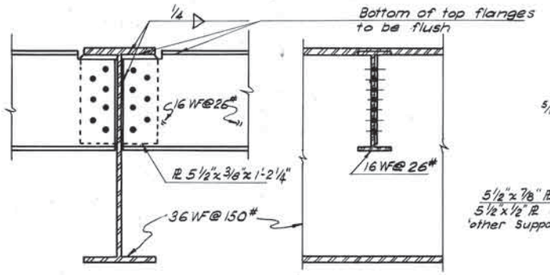
F.A. PROJECT NO. I-35-2 (12) SHEET NO. 250

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)	251	

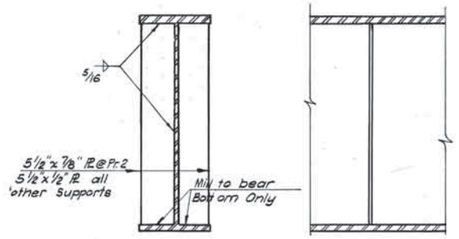
Note: No field welding to beams or girders will be allowed except as shown on the plans.



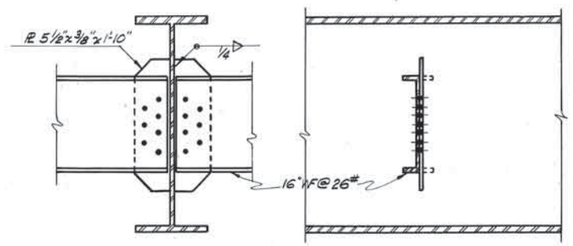
DETAIL OF CONTINUOUS I-BEAM (TYPICAL)



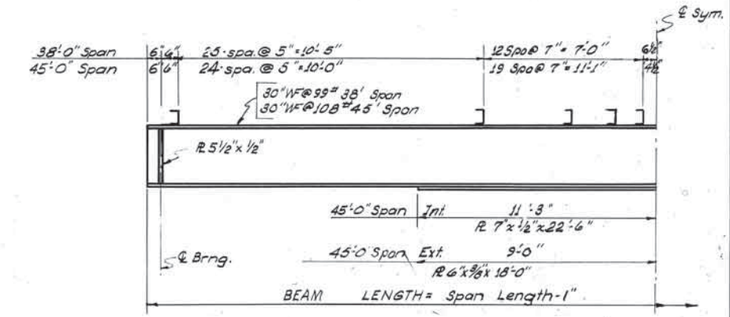
DIAPHRAGM CONNECTION AT INTERIOR (CONT. SPAN)



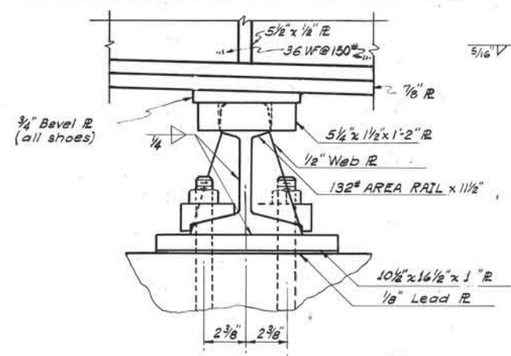
STIFFENERS AT SUPPORT



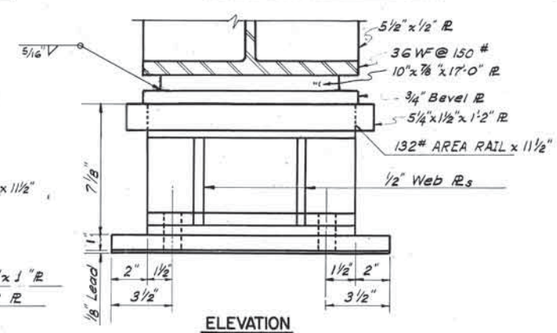
DIAPHRAGM CONNECTION AT INTERIOR (SIMPLE SPANS)



SHEAR CONNECTOR SPACING (SIMPLE SPANS)

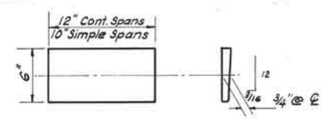


END VIEW

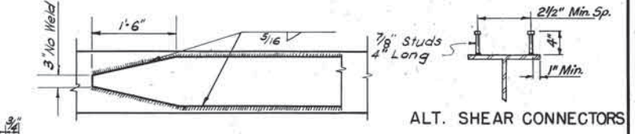


ELEVATION

DETAIL OF SHOE AT PIER NO. 2

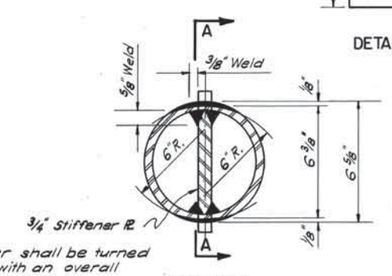


DETAIL OF BEVEL PL. (TYP. ALL SHOES)



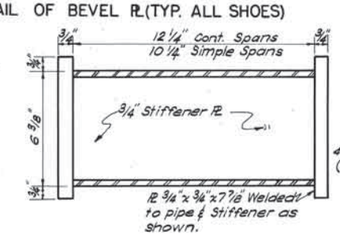
COVER PL. WELDING

ALT. SHEAR CONNECTORS

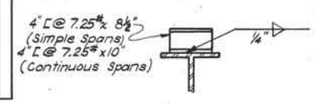


END VIEW

Note: Pipe Roller shall be turned to a 6" Radius with an overall height at 6⅜" as shown.

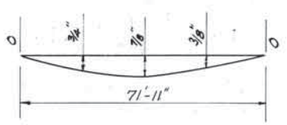


SECTION A-A

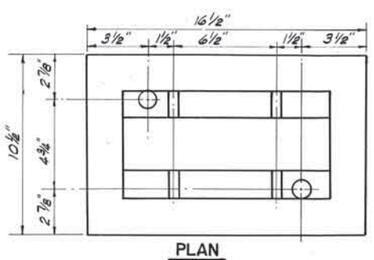


SHEAR CONNECTOR

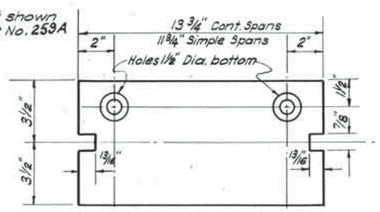
Note: For details not shown see Std. 1SA5-7 Sheet No. 259A



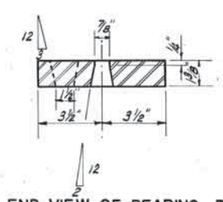
DEAD LOAD DEFLECTION



PLAN



PLAN OF BEARING PL.



END VIEW OF BEARING PL.

Note: Pay Weight of Shear Connectors are based on 4" Channel and is included in Structural Steel Quantity shown.

The Contractor shall vary Shear Conn. Spacing to accomodate Shear Conn. Location @ Constr. Joints. Contractor may use Stud Shear Connectors as follows:

1"x4" Channel @ 7.25# = .56 three-quarter Stud
1"x4" Channel @ 7.25# = .46 seven-eighth Stud

FABRICATION - All shop splices of the flange plates and the web plates shall be made before such component parts are welded together in any one section.

Extension bars shall be used in making the butt welds in the flanges according to the A.W.S. Specification

Ends of Girders to be spliced shall be prepared in the shop, taking into account the relative positions the adjacent section will take in the structure due to the roadway grade and alignment. For the purpose of shop inspection, the fabricator shall assemble the girders and splices in groups of at least three consecutive girder sections and two splices with girders supported only at bearing points in the correct vertical position. All parts shall be completely match marked and a match marking diagram furnished as part of the structural steel details.

ERECTION - The Engineer will check the elevations at all bearing points before any steel is erected, and the Contractor will be required to correct any points that are more than .02' off from planned elevation. Steel may be erected without the use of falsework provided all splice points are within .02' of the planned elevation after the steel is erected and before splices are welded. The Resident Engineer will check these elevations before any welding is started and, if any splice point is off more than .02' in elevation, the Contractor will be required to adjust the elevations as directed by the Engineer.

All welding shall conform to the Current Oklahoma Standard Specifications and the Current Specification of A.W.S.

Welding and lead plates will be paid for by weight of the unit price bid for Structural Steel.

High strength steel bolts shall be used on all field connections

Radiographic and magnetic particle inspection will be required.

All shoes shall be stress relieved after welding. All finishing shall be done after welding and stress relieving has been done.

Bottom plate of fixed shoes shall be finished to a true surface.

All structural steel except shear connectors shall be A36.

S.H. 74 OVER I-35

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	REV. NOTES & INT. SHEAR CONN.	CAU	4-67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	P.B.	12-64
TRACED	R.B.R.	1-65
CHECKED	J.F.	8-65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

DETAILS OF STRUCTURAL STEEL

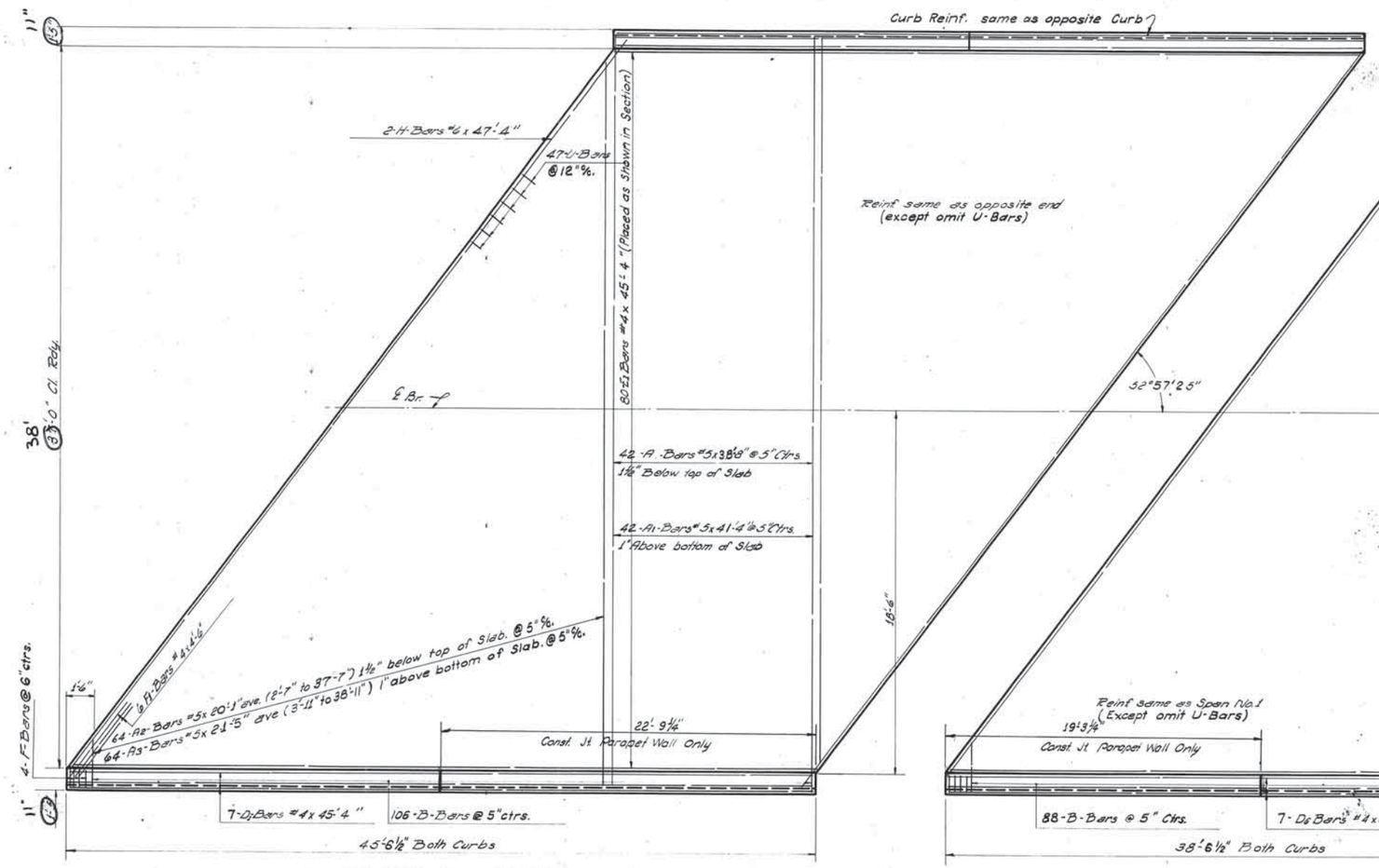
℄ STA. 630+33.34 RT. STRU.
℄ STA 630+81.64 LT. STRU.

F.A. PROJ. I-35-2(12)

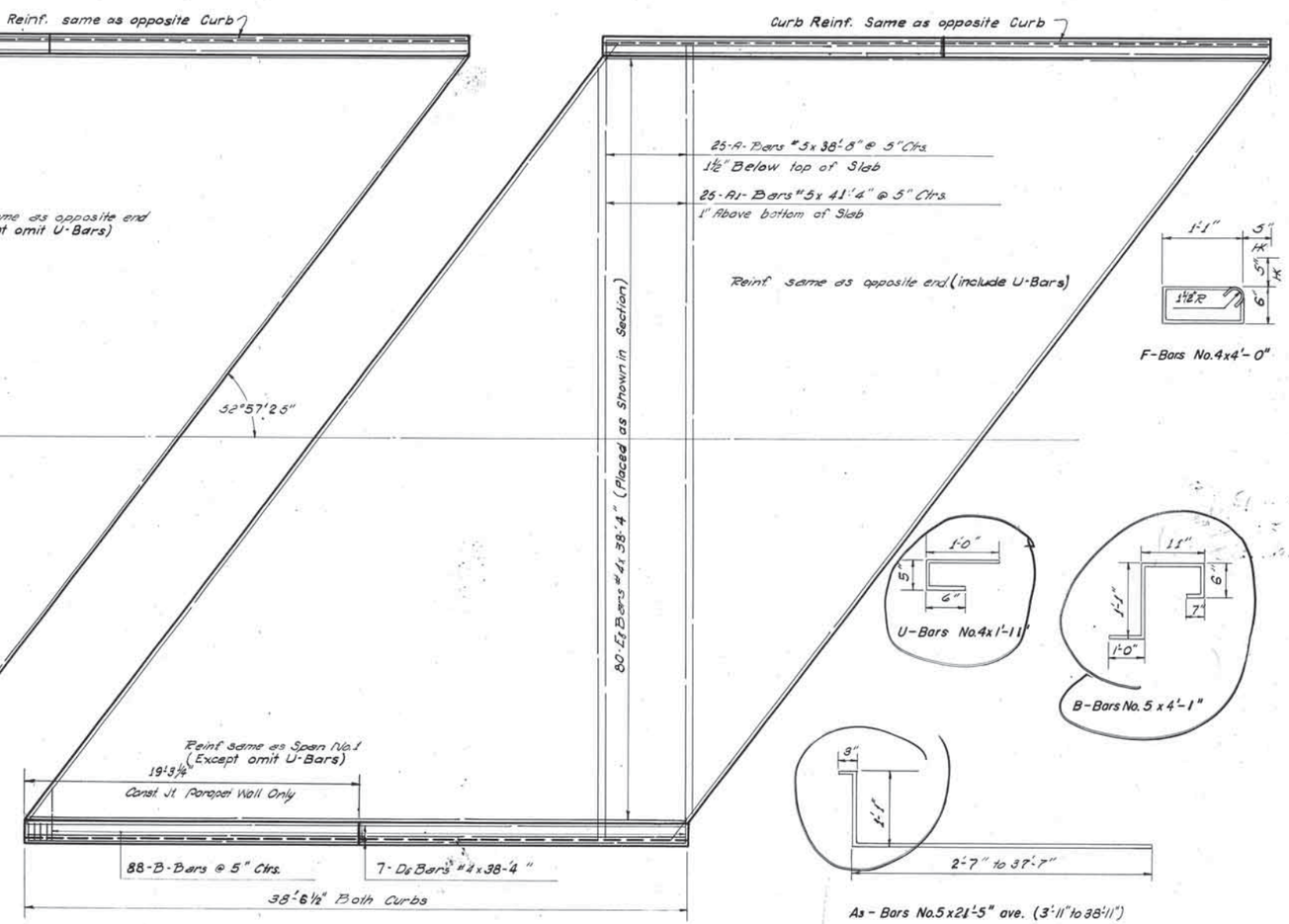
F.A. PROJECT NO. I-35-2 (12) SHEET NO. 251

DIETZGEN NO. 120 IMPERIAL

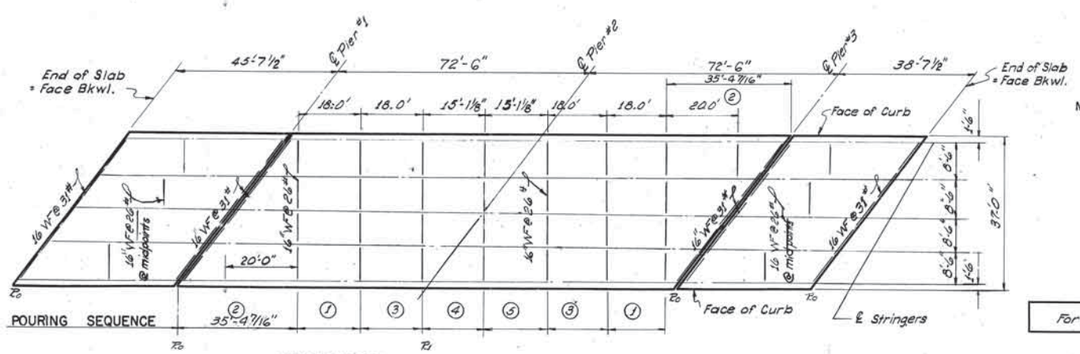
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)	252	



45' SPAN NO. 1 (END SPAN)



38' SPAN NO. 3 (END SPAN)



STRUCTURAL

Note, Slab Pouring Order: All panels bearing the same number will be considered a "Group" and should be poured in numerical sequence in the same days pouring. More than one group may be poured in one day but no group should be started until pouring is completed for the preceding group. (The purpose of these restrictions is to insure that loads and deflections of the entire series may be symmetrically balanced about the ℄ of the series during any protracted interval between pours.)

For details not shown See Sheet No. 250

SH 74 OVER I-35

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	Rev. Curb & Cl. Rdy. dim		4/28/67

RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	P.B.	12-64
TRACED	P.B.P.	1-65
CHECKED	J.F.	12-65
APPROVED		
SQUAD: Watts		

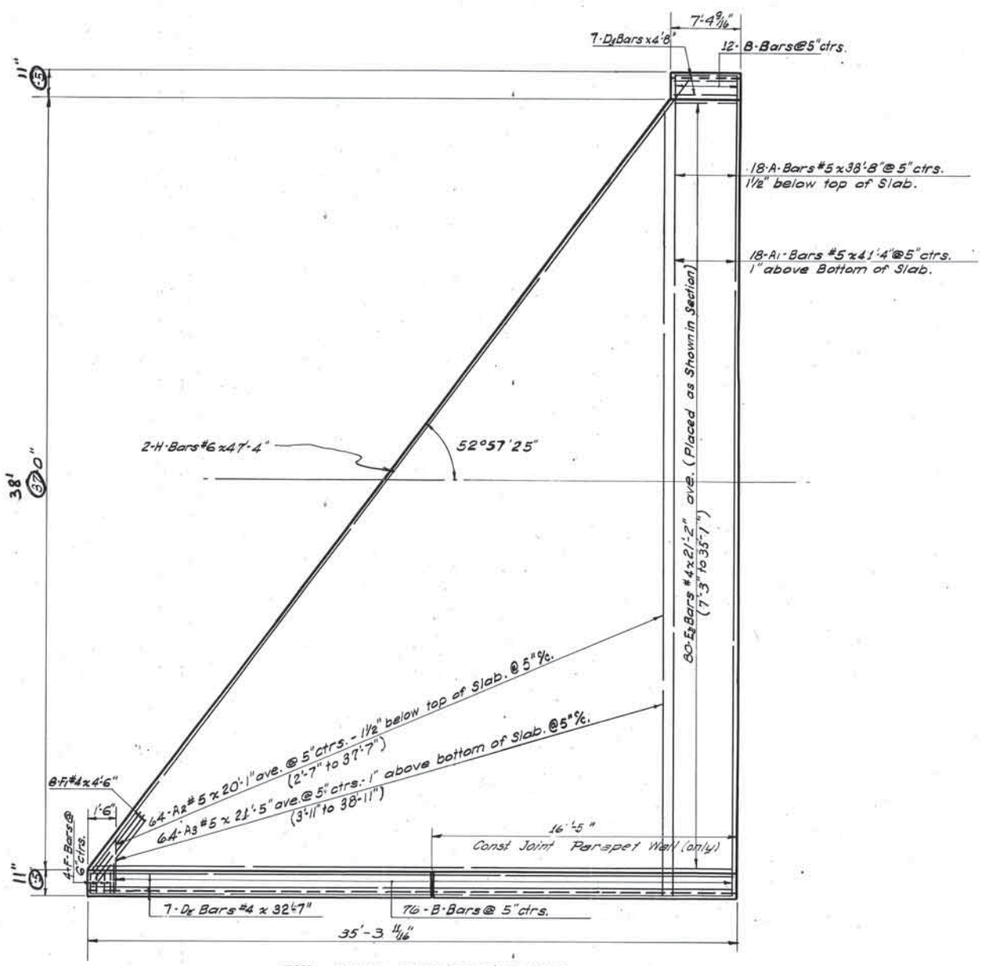
OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

REINFORCING DETAIL
℄ STA. 630+81.64 LT.
℄ STA. 630+33.34 RT.
F.A. PROJ. NO. I-35-2(12)

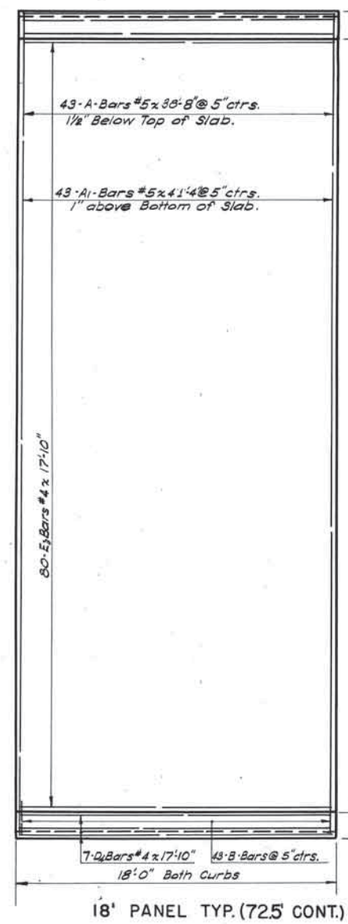
F.A. PROJECT NO. I-35-2 (12) SHEET NO. 252

DIETZGEN NO. 135 IMPERIAL

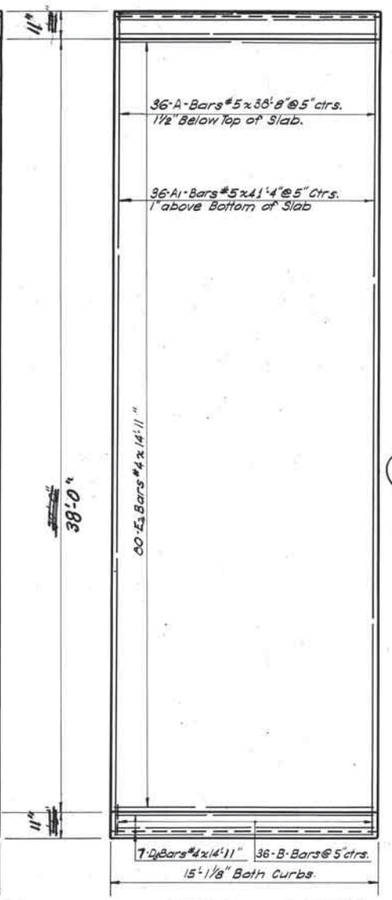
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2 (12)	253	



END PANEL TYP. (72.5' CONT.)

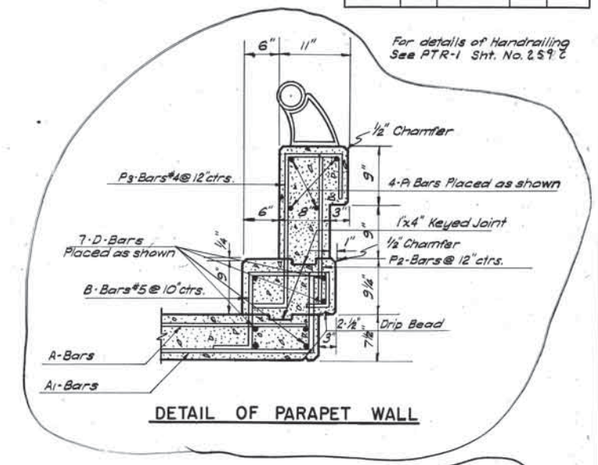


18' PANEL TYP. (72.5' CONT.)

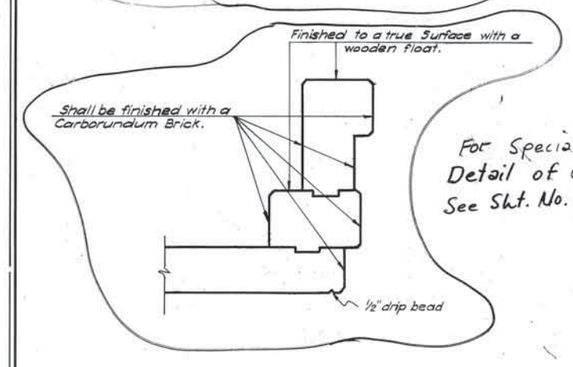


15.09' PANEL TYP. (72.5' CONT.)

For details not shown
See Sht. No. 250.

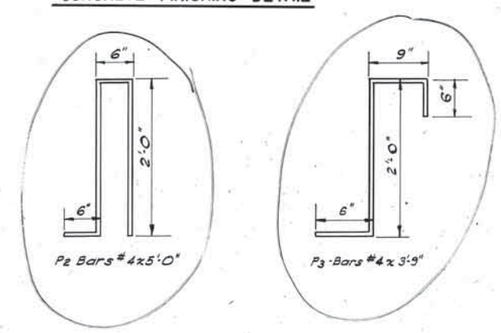


DETAIL OF PARAPET WALL



For Special
Detail of Curb
See Sht. No. 10B

CONCRETE FINISHING DETAIL



SH. 74 OVER I-35

REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	REV. CURB & CL. RDY. DIM.	DAJ	4-28-67

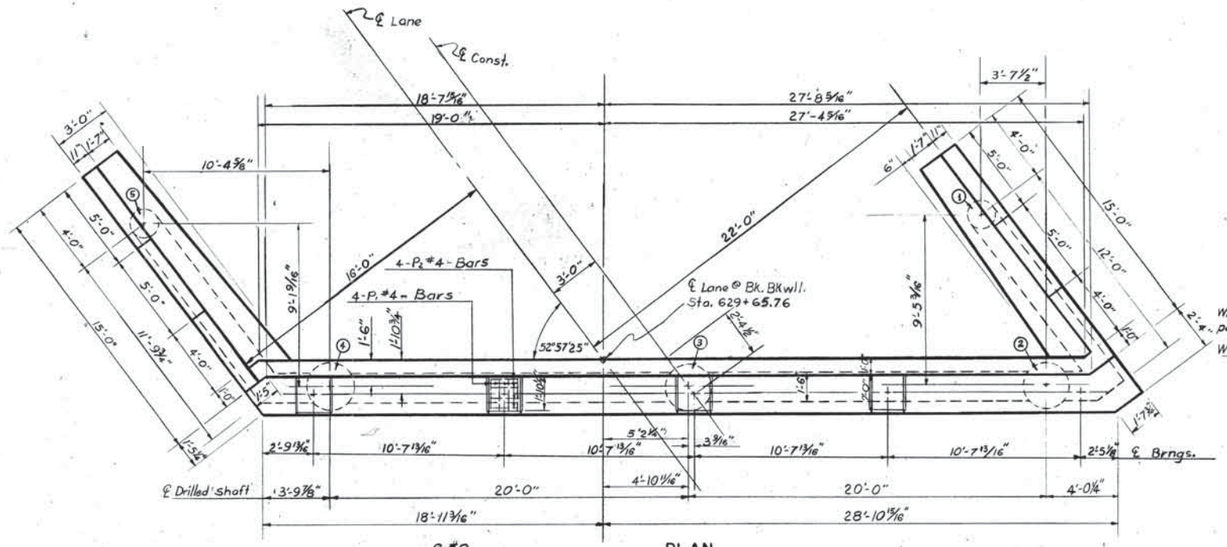
RECORD		
ITEM	BY	DATE
DESIGN		
DETAIL	P.B.	11-64
TRACED	R.B.R.	1-65
CHECKED	J.F.	12/65
APPROVED		
SQUAD: Watts		

OKLAHOMA STATE HIGHWAY COMMISSION
OKLAHOMA CITY, OKLAHOMA

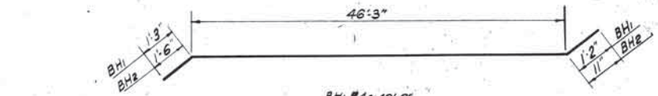
REINFORCING DETAIL
℄ STA. LT. 630+81.64
℄ STA. RT. 630+33.34
F. A. PROJ. NO. I-35-2(12)

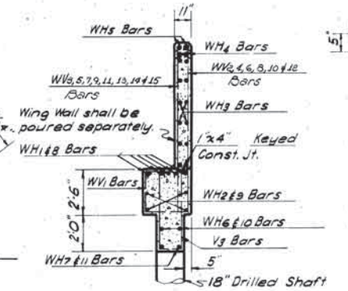
F.A. PROJECT NO. I-35-2 (12) SHEET NO. 253

DIETZGEN NO. 132 IMPERIAL

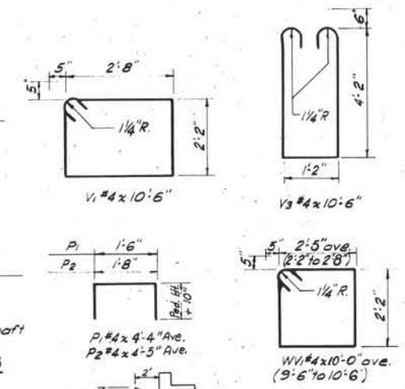


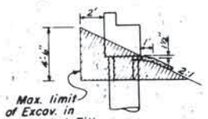
PLAN





TYPICAL SECT. THRU WING



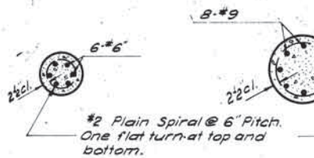


Max. limit of Excav. in Compacted Fill.

Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer, he may pour the concrete against the compacted fill. If necessary, the contractor shall use forms for the Abutment and remove the same after concrete is set.

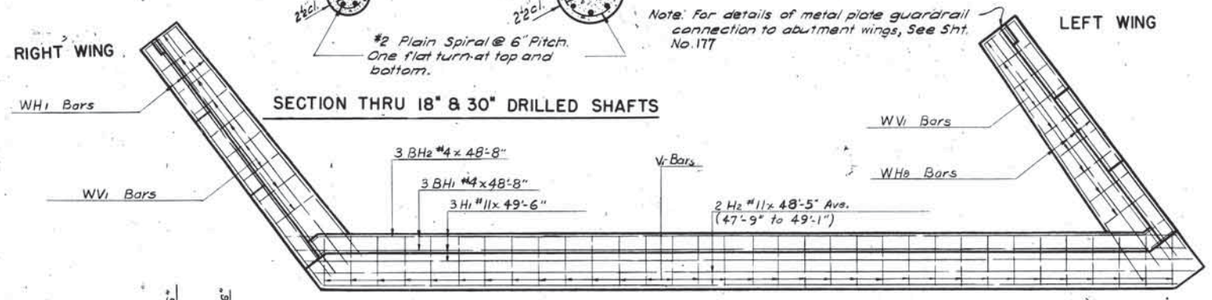
Abutment shall be back filled and tamped with a mechanical tamper to 100% Proctor density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the unit price bid per cubic yard for Substructure Excavation, Common.

EXCAV. DIAG. FOR DRILLED SHAFT ABUTS.

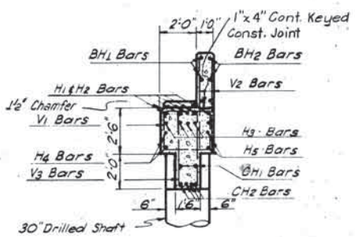


SECTION THRU 18" & 30" DRILLED SHAFTS

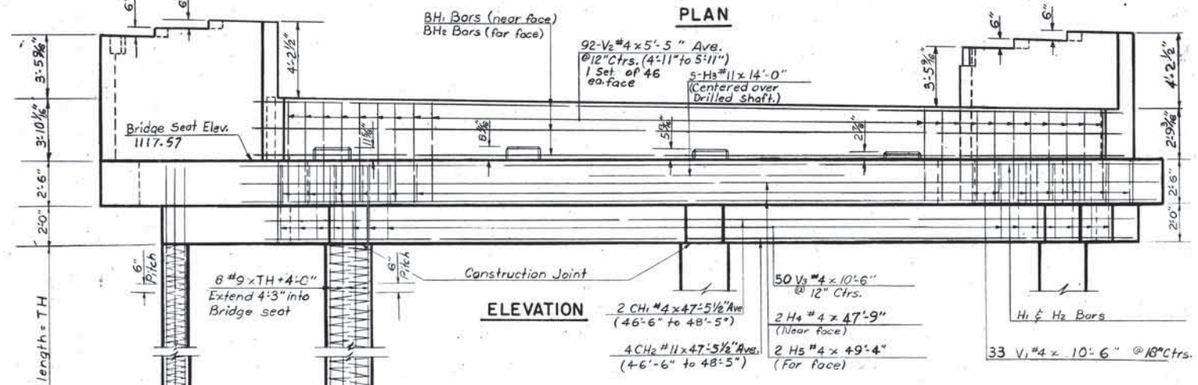
Note: For details of metal plate guardrail connection to abutment wings, See Sht. No. 177



PLAN

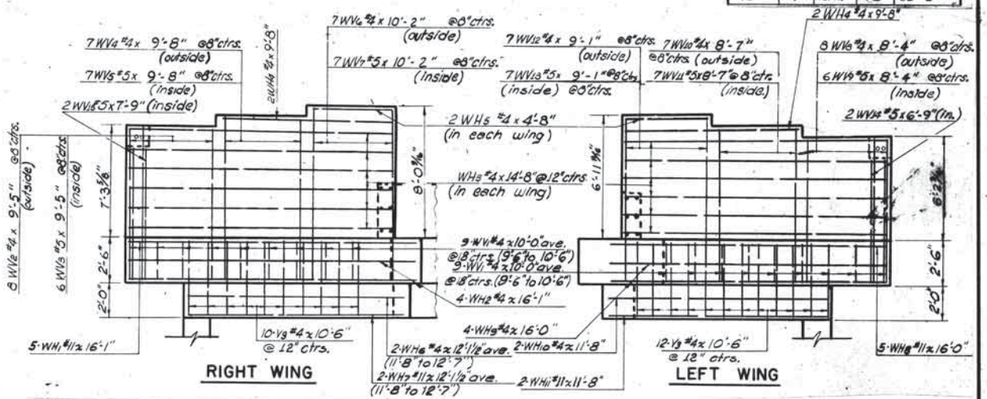


TYPICAL SECT. THRU ABUT.



ELEVATION

No.	TH
1	41'-0"
2	41'-0"
3	31'-0"
4	23'-0"
5	23'-0"



QUANTITIES		
Item	Unit	Amount
Class "A" Concrete	Cu. Yd.	43.0
Reinforcing Steel	Lbs.	6,600
Substructure Excav., Common	Cu. Yd.	75.0
QUANTITIES — DRILLED SHAFTS		
18" Drilled Shafts	L.F.	64.0
30" Drilled Shafts	L.F.	95.0

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		254	

REVISIONS	
DESCRIPTION	DATE

BAR LIST

Mark	Size	Form	No.	Length
H1	#11	Str.	3	49'-6"
H2	#11	Str.	2	48'-3" ave.
H3	#11	Str.	5	14'-0"
H4	#4	Str.	2	47'-9"
H5	#4	Str.	2	49'-4"
BH1	#4	Bnt.	3	48'-8"
BH2	#4	Bnt.	3	48'-8"
CH1	#4	Str.	2	47'-5 1/2" ave.
CH2	#11	Str.	4	47'-5 1/2" ave.
V1	#4	Bnt.	33	10'-6"
V2	#4	Str.	92	5'-5" ave.
WH1	#11	Str.	5	16'-1"
WH2	#4	Str.	4	16'-1"
WH3	#4	Str.	24	14'-8"
WH4	#4	Str.	4	9'-8"
WH5	#4	Str.	4	4'-8"
WH6	#4	Str.	2	12'-1 1/2" ave.
WH7	#11	Str.	2	12'-1 1/2" ave.
WH8	#11	Str.	5	16'-0"
WH9	#4	Str.	4	16'-0"
WH10	#4	Str.	2	11'-8"
WH11	#11	Str.	2	11'-8"
WV1	#4	Bnt.	18	10'-0" ave.
WV2	#4	Str.	8	9'-5"
WV3	#5	Str.	6	9'-5"
WV4	#4	Str.	7	9'-8"
WV5	#5	Str.	7	9'-8"
WV6	#4	Str.	7	10'-2"
WV7	#5	Str.	7	10'-2"
WV8	#4	Str.	8	8'-4"
WV9	#5	Str.	6	8'-4"
WV10	#4	Str.	7	8'-7"
WV11	#5	Str.	7	8'-7"
WV12	#4	Str.	7	9'-1"
WV13	#5	Str.	7	9'-1"
WV14	#5	Str.	2	6'-9"
WV15	#5	Str.	2	7'-9"
P1	#4	Bnt.	20	4'-4" Ave.
P2	#4	Bnt.	20	4'-5" Ave.
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-6"
V3	#4	Bnt.	72	10'-6"

Design		
Drawn	D.H.	12-65
Checked	J.F.	1-66
Approved		
Squad	Watts	

S.H. 74 OVER I-35

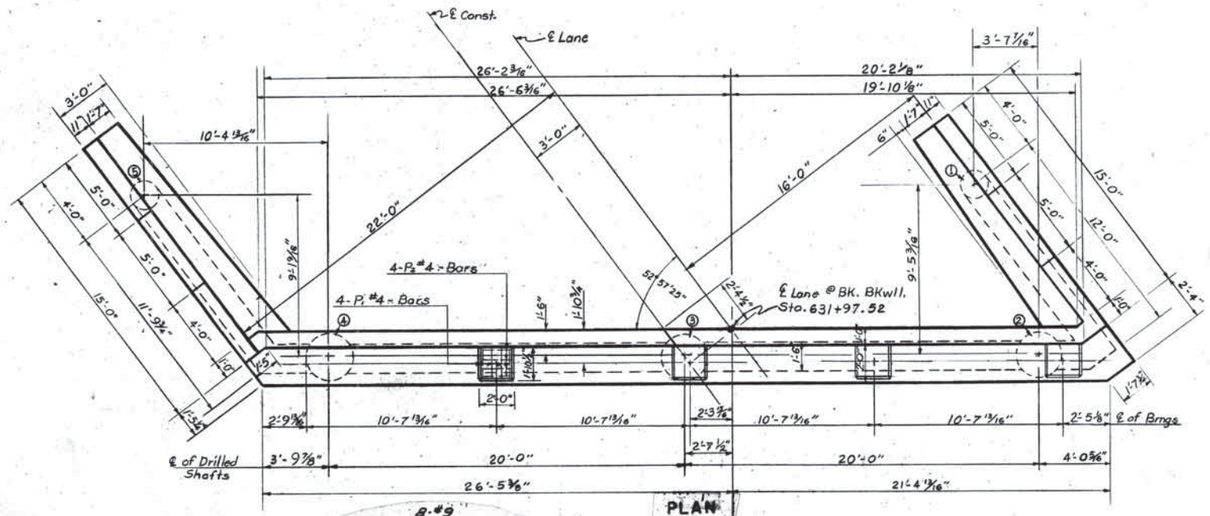
DETAIL OF ABUTMENT ABUTMENT NO. 1. LT.

F.A. Project No. I-35-2 (12) Sheet No. 254

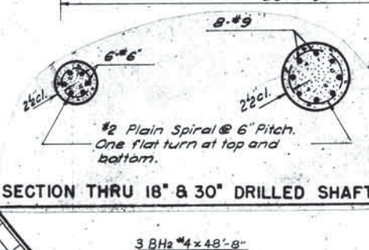
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		254A	

REVISIONS

DESCRIPTION	DATE

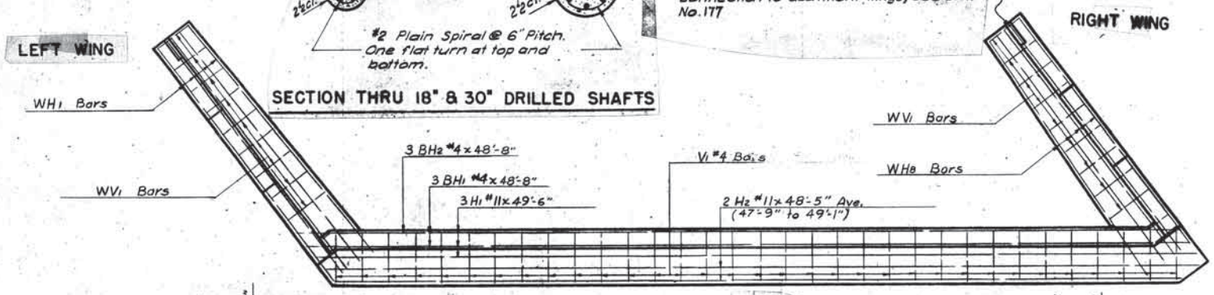


PLAN

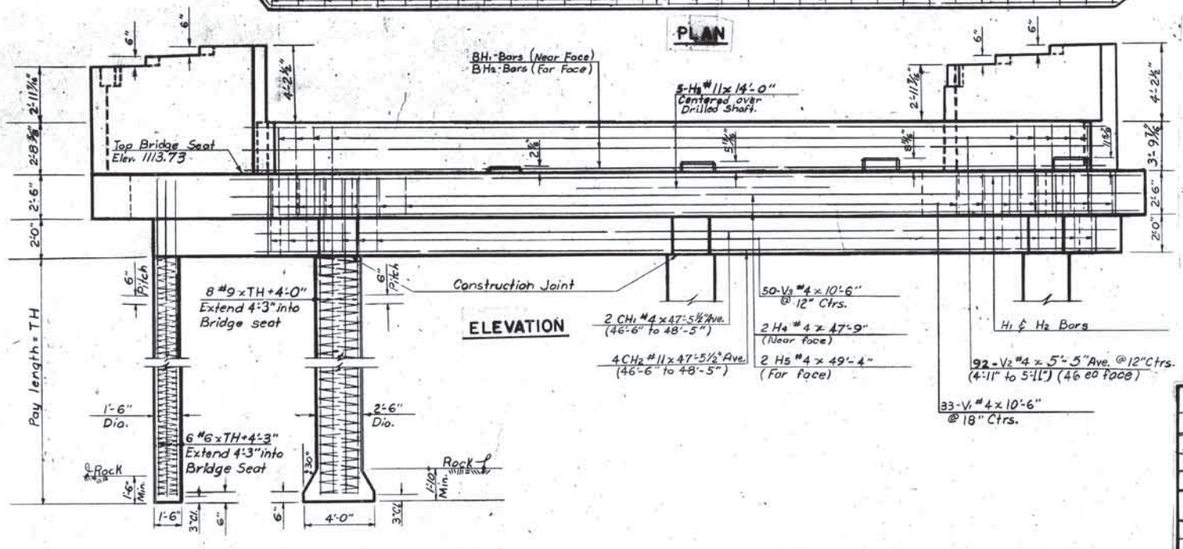


SECTION THRU 18" & 30" DRILLED SHAFTS

Note: For details of metal plate guardrail connection to abutment wings, See Sht. No. 177

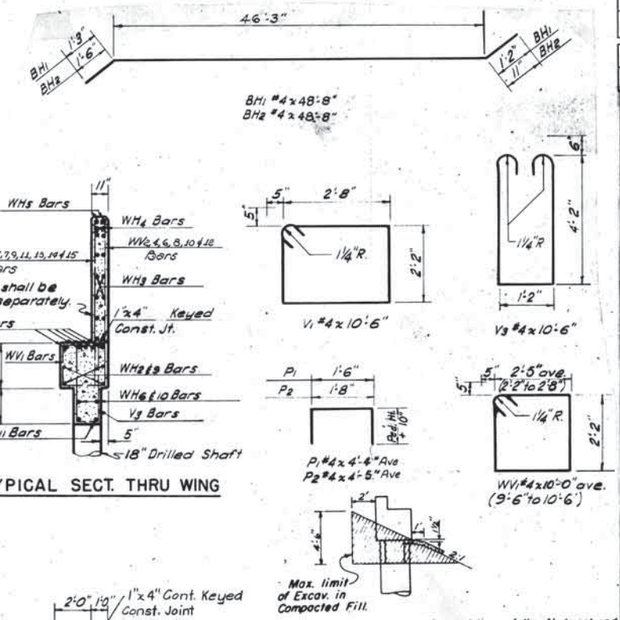


PLAN

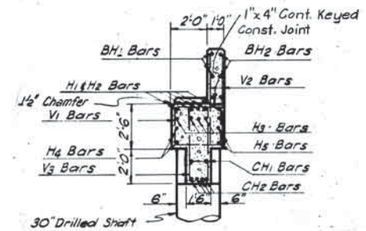


ELEVATION

No.	TH
1	19'-0"
2	19'-0"
3	20'-0"
4	21'-0"
5	21'-0"



TYPICAL SECT. THRU WING



TYPICAL SECT. THRU ABUT.

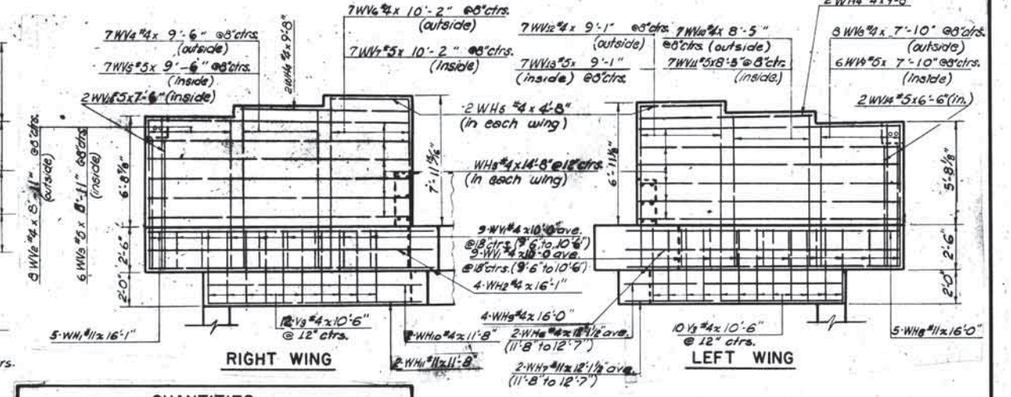
Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer, he may pour the concrete against the compacted fill. If necessary, the contractor shall use forms for the Abutment and remove the same after concrete is set.

Abutment shall be back filled and tamped with a mechanical tamper to 100% Proctor density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the unit price bid per cubic yard for Substructure Excavation Common.

EXCAV. DIAG. FOR DRILLED SHAFT ABUTS.

BAR LIST

Mark	Size	Form	No.	Length
H1	#11	Str.	3	49'-6"
H2	#11	Str.	2	48'-5" ave
H3	#11	Str.	5	14'-0"
H4	#4	Str.	2	47'-9"
H5	#4	Str.	2	49'-4"
BH1	#4	Bnt.	3	48'-8"
BH2	#4	Bnt.	3	48'-8"
CH1	#4	Str.	2	47'-5½" ave.
CH2	#11	Str.	4	47'-5½" ave.
V1	#4	Bnt.	33	10'-6"
V2	#4	Str.	92	5'-5" ave.
WH1	#11	Str.	5	16'-1"
WH2	#4	Str.	4	16'-1"
WH3	#4	Str.	24	14'-8"
WH4	#4	Str.	4	9'-8"
WH5	#4	Str.	4	4'-8"
WH6	#4	Str.	2	12'-11½" ave.
WH7	#11	Str.	2	12'-11½" ave.
WH8	#11	Str.	5	16'-0"
WH9	#4	Str.	4	16'-0"
WH10	#4	Str.	2	11'-8"
WH11	#11	Str.	2	11'-8"
WV1	#4	Bnt.	18	10'-0" ave.
WV2	#4	Str.	8	8'-11"
WV3	#5	Str.	6	8'-11"
WV4	#4	Str.	7	9'-6"
WV5	#5	Str.	7	9'-6"
WV6	#4	Str.	7	10'-2"
WV7	#5	Str.	7	10'-2"
WV8	#4	Str.	6	7'-10"
WV9	#5	Str.	6	7'-10"
WV10	#4	Str.	7	8'-5"
WV11	#5	Str.	7	8'-5"
WV12	#4	Str.	7	9'-1"
WV13	#5	Str.	7	9'-1"
WV14	#5	Str.	2	6'-6"
WV15	#5	Str.	2	7'-6"
P1	#4	Bnt.	20	4'-4" Ave
P2	#4	Bnt.	20	4'-5" Ave
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-6"
V3	#4	Bnt.	72	10'-6"



QUANTITIES

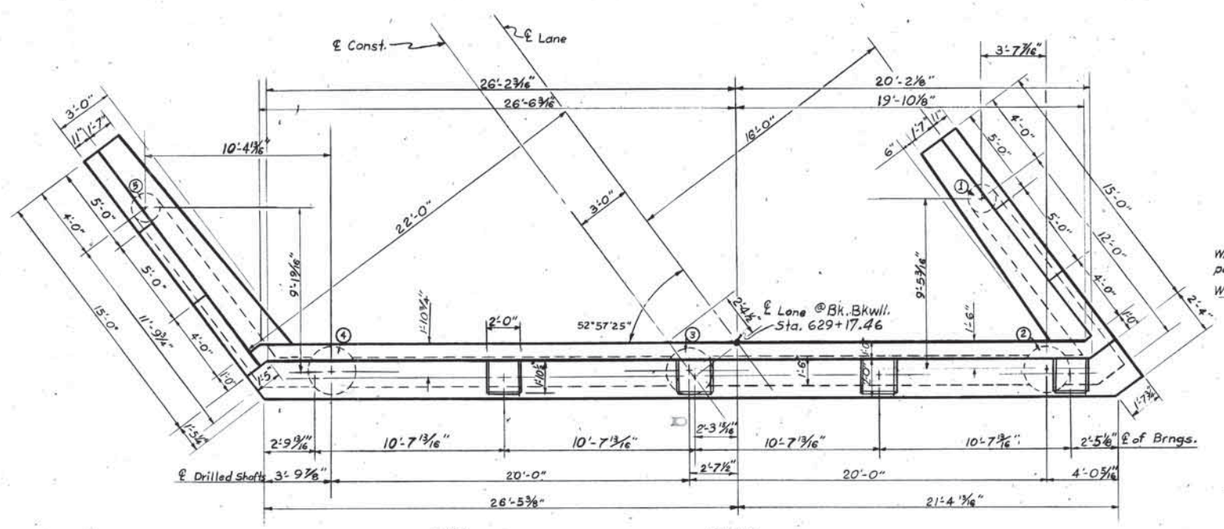
Item	Unit	Amount
Class "A" Concrete	Cu. Yd.	42.7
Reinforcing Steel	Lbs.	6,580
Substructure Excav., Common	Cu. Yd.	75.0
QUANTITIES — DRILLED SHAFTS		
18" Drilled Shafts	L.F.	40.0
30" Drilled Shafts	L.F.	60.0

S.H. 74 OVER I-35

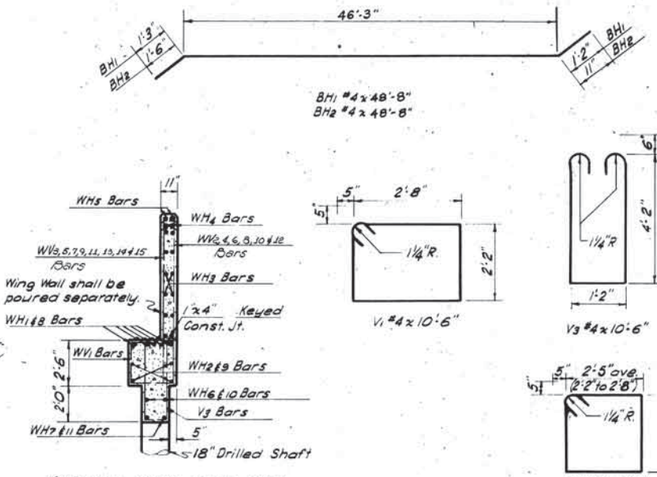
Design		
Drawn	D.H.	12-65
Checked	J.F.	1-66
Approved		
Squad	Watts	

DETAIL OF ABUTMENT ABUTMENT NO. 2 LT.

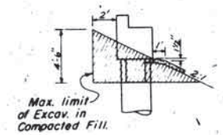
F.A. Project No. I-35-2 (12) Sheet No. 254A



PLAN



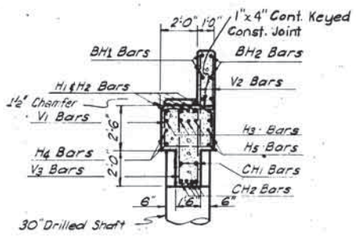
TYPICAL SECT. THRU WING



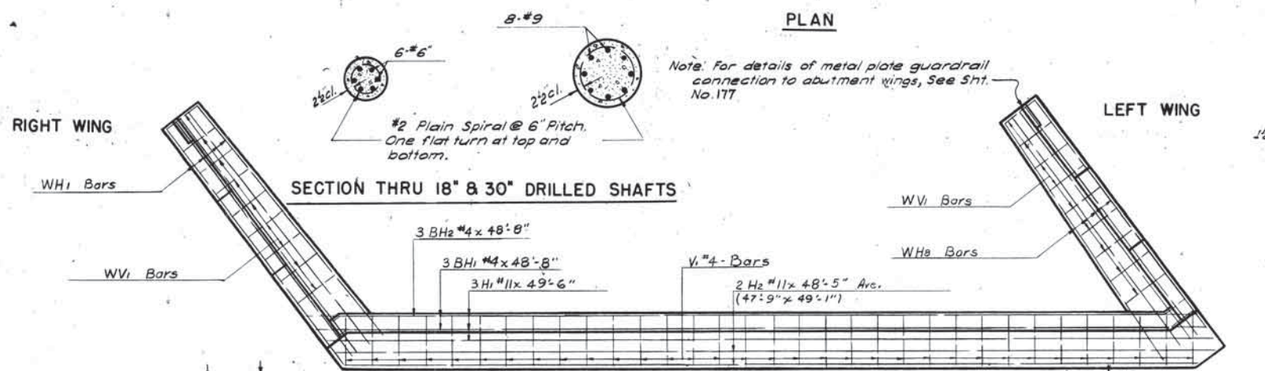
Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer, he may pour the concrete against the compacted fill. If necessary, the contractor shall use forms for the Abutment and remove the same after concrete is set.

Abutment shall be back filled and tamped with a mechanical tamper to 100% Proctor density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the unit price bid per cubic yard for Substructure Excavation Common.

EXCAV. DIAG. FOR DRILLED SHAFT ABUTS.

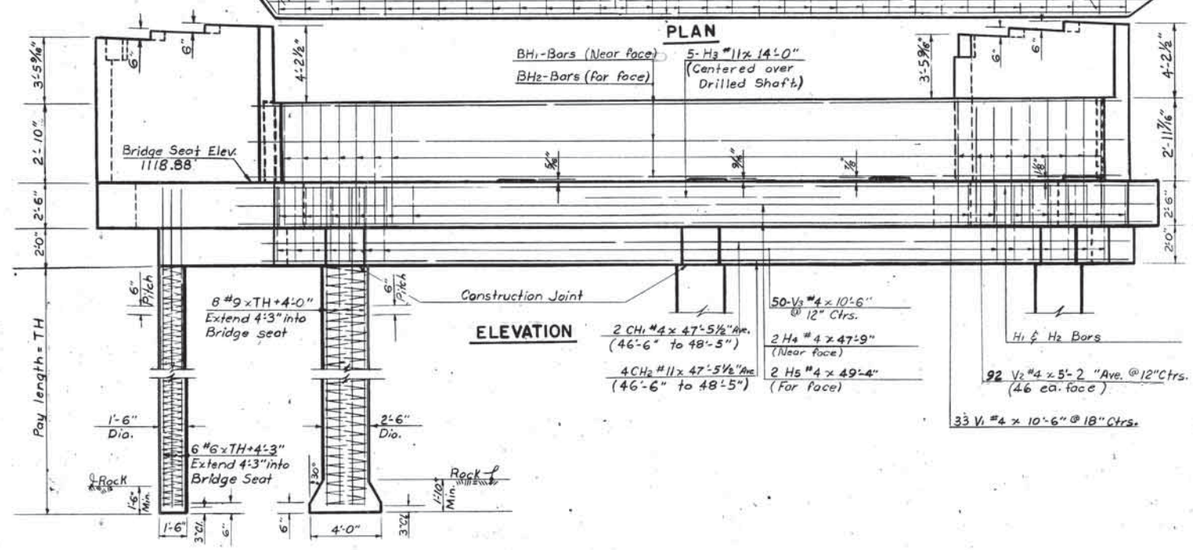


TYPICAL SECT. THRU ABUT.



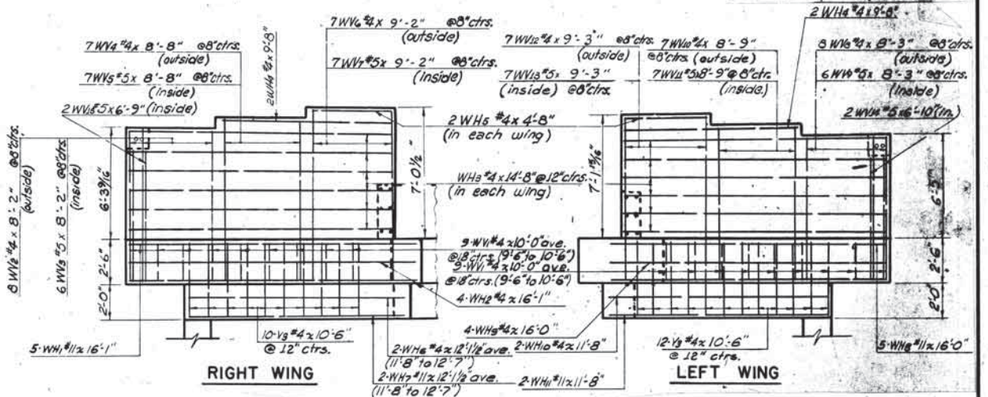
SECTION THRU 18" & 30" DRILLED SHAFTS

PLAN



ELEVATION

No.	TH
1	17'-0"
2	17'-0"
3	17'-0"
4	17'-0"
5	17'-0"



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		255	

REVISIONS

DESCRIPTION	DATE

BAR LIST

Mark	Size	Form	No.	Length
H1	#11	Str.	3	49'-6"
H2	#11	Str.	2	48'-5" ave.
H3	#11	Str.	5	14'-0"
H4	#4	Str.	2	47'-9"
H5	#4	Str.	2	49'-4"
BH1	#4	Bnt.	3	48'-8"
BH2	#4	Bnt.	3	48'-8"
CH1	#4	Str.	2	47'-5 1/2" ave.
CH2	#11	Str.	4	47'-5 1/2" ave.
V1	#4	Bnt.	53	10'-6"
V2	#4	Str.	92	5'-2"
WH1	#11	Str.	5	16'-1"
WH2	#4	Str.	4	16'-1"
WH3	#4	Str.	24	14'-8"
WH4	#4	Str.	4	9'-8"
WH5	#4	Str.	4	4'-8"
WH6	#4	Str.	2	12'-1 1/2" ave.
WH7	#11	Str.	2	12'-1 1/2" ave.
WH8	#11	Str.	5	16'-0"
WH9	#4	Str.	4	16'-0"
WH10	#4	Str.	2	11'-8"
WH11	#11	Str.	2	11'-8"
WV1	#4	Bnt.	18	10'-0" ave.
WV2	#4	Str.	8	8'-2"
WV3	#5	Str.	6	8'-2"
WV4	#4	Str.	7	8'-8"
WV5	#5	Str.	7	8'-8"
WV6	#4	Str.	7	9'-2"
WV7	#5	Str.	7	9'-2"
WV8	#4	Str.	8	8'-9"
WV9	#5	Str.	6	8'-9"
WV10	#4	Str.	7	8'-9"
WV11	#5	Str.	7	8'-9"
WV12	#4	Str.	7	9'-3"
WV13	#5	Str.	7	9'-3"
WV14	#5	Str.	2	6'-10"
WV15	#5	Str.	2	6'-10"
GC1	#4	Bnt.	6	5'-0"
GC2	#4	Bnt.	4	5'-6"
V3	#4	Bnt.	72	10'-6"

QUANTITIES

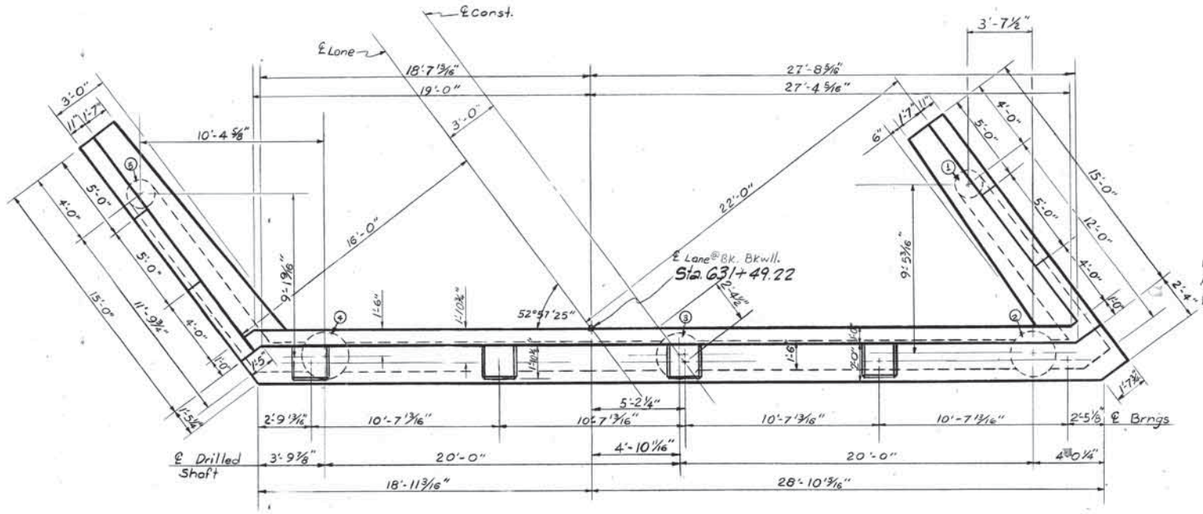
Item	Unit	Amount
Class "A" Concrete	Cu. Yd.	41.6
Reinforcing Steel	Lbs.	6,430
Substructure Excav., Common	Cu. Yd.	75.0
QUANTITIES — DRILLED SHAFTS		
18" Drilled Shafts	L.F.	34.0
30" Drilled Shafts	L.F.	51.0

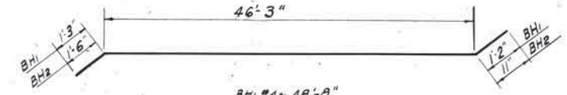
S.H. 74 OVER I-35

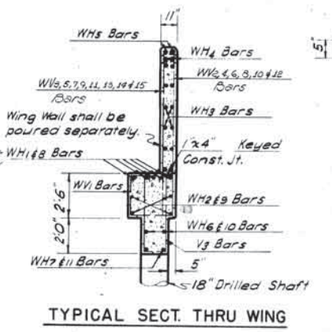
Design		
Drawn	D.H.	12-65
Checked	J.F.	1-66
Approved		
Squad	Watts	

DETAIL OF ABUTMENT ABUTMENT NO. 1, RT.

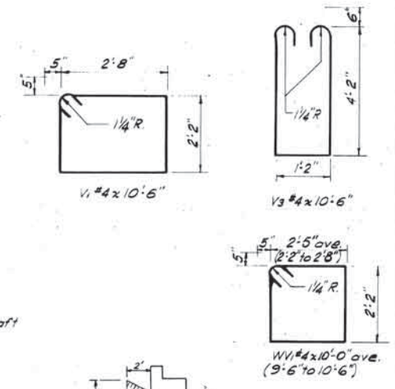
F.A. Project No. I-35-2 (12) Sheet No. 255

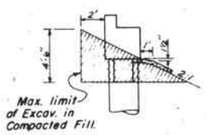






TYPICAL SECT. THRU WING

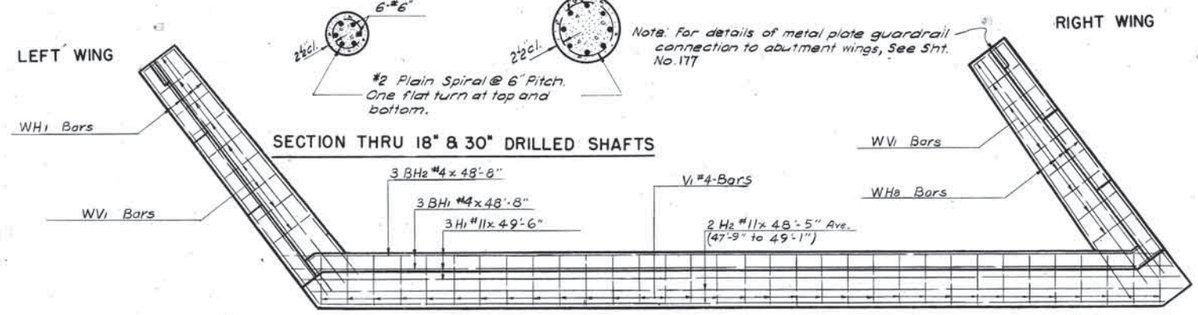


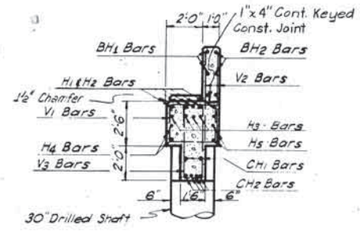


Contractor may excavate to the neat lines of the Abutment and, if in satisfactory condition to the Resident Engineer, he may pour the concrete against the compacted fill. If necessary, the contractor shall use forms for the Abutment and remove the same after concrete is set.

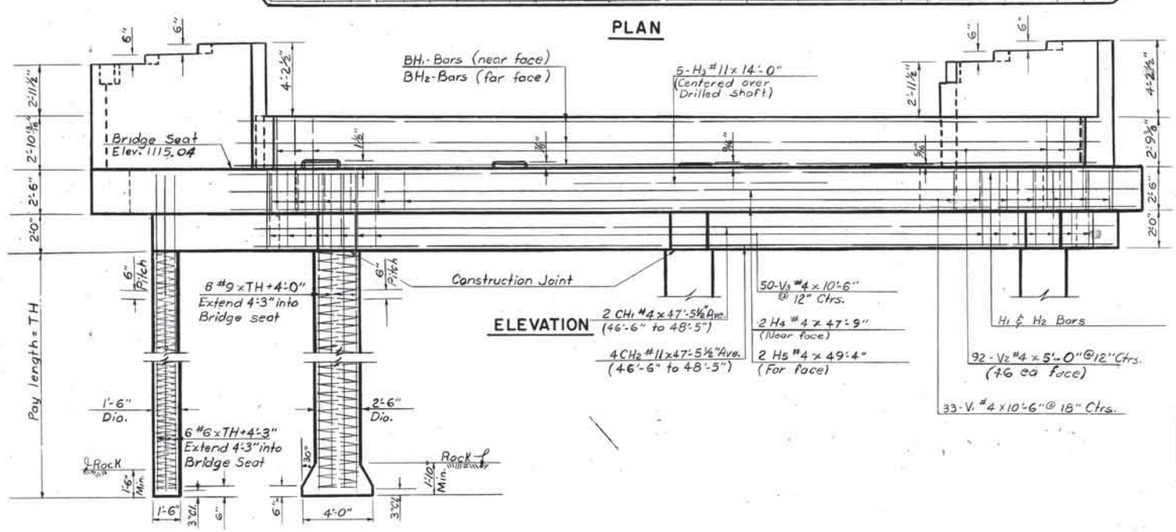
Abutment shall be back filled and tamped with a mechanical tamper to 100% Proctor density by Bridge Contractor after Abutment is completed. All cost of backfill shall be included in the unit price bid per cubic yard for Substructure Excavation Common.

EXCAV. DIAG. FOR DRILLED SHAFT ABUTS.

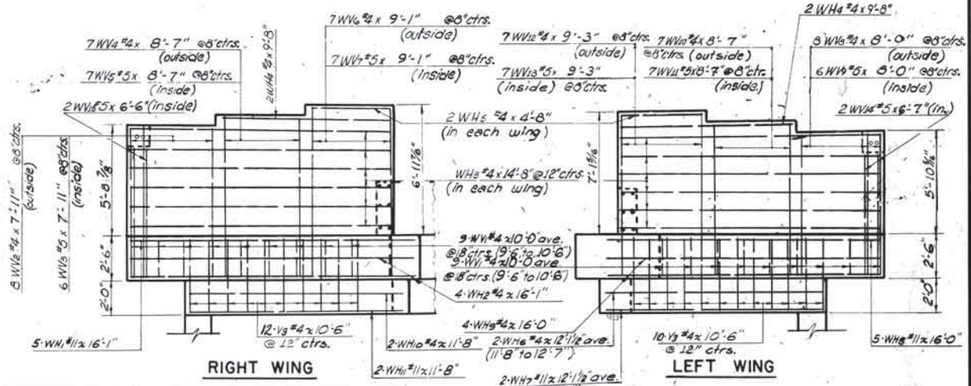




TYPICAL SECT. THRU ABUT.



No.	TH
1	6'-0"
2	6'-0"
3	13'-0"
4	17'-0"
5	18'-0"



QUANTITIES		
Item	Unit	Amount
Class "A" Concrete	Cu. Yd.	41.2
Reinforcing Steel	Lbs.	6410
Substructure Excav., Common	Cu. Yd.	75.0
QUANTITIES — DRILLED SHAFTS		
18" Drilled Shafts	L.F.	24.0
30" Drilled Shafts	L.F.	36.0

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.
6	OKLA.	I-35-2(12)		255A

REVISIONS

DESCRIPTION

BAR LIST

Mark	Size	Form	No.	Length
H1	#11	Str.	3	45
H2	#11	Str.	2	48'-5"
H3	#11	Str.	5	14'-0"
H4	#4	Str.	2	47'-9"
H5	#4	Str.	2	49'-4"
BH1	#4	Bnt.	3	48'-8"
BH2	#4	Bnt.	3	48'-8"
CH1	#4	Str.	2	47'-5½" ave.
CH2	#11	Str.	4	47'-5½" ave.
V1	#4	Bnt.	33	10'-6"
V2	#4	Str.	92	5'-0"
WH1	#11	Str.	5	16'-1"
WH2	#4	Str.	4	16'-1"
WH3	#4	Str.	24	14'-8"
WH4	#4	Str.	4	9'-8"
WH5	#4	Str.	4	4'-8"
WH6	#4	Str.	2	12'-1½" ave.
WH7	#11	Str.	2	12'-1½" ave.
WH8	#11	Str.	5	16'-0"
WH9	#4	Str.	4	16'-0"
WH10	#4	Str.	2	11'-8"
WH11	#11	Str.	2	11'-8"
WV1	#4	Bnt.	18	10'-0" ave.
WV2	#4	Str.	8	17'-11"
WV3	#5	Str.	6	17'-11"
WV4	#4	Str.	7	8'-7"
WV5	#5	Str.	7	8'-7"
WV6	#4	Str.	7	9'-1"
WV7	#5	Str.	7	9'-1"
WV8	#4	Str.	8	8'-0"
WV9	#5	Str.	6	8'-0"
WV10	#4	Str.	7	8'-7"
WV11	#5	Str.	7	8'-7"
WV12	#4	Str.	7	9'-3"
WV13	#5	Str.	7	9'-3"
WV14	#5	Str.	2	6'-7"
WV15	#5	Str.	2	6'-6"
GC1	#4	Bnt.	6	6'-0"
GC2	#4	Bnt.	4	5'-6"
V3	#4	Bnt.	72	10'-6"

S.H. 74 OVER I-35

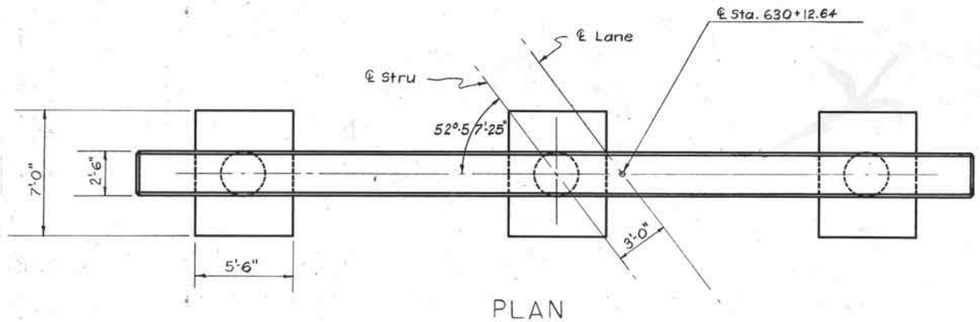
Design		
Drawn	D.H.	12-65
Checked	J.F.	1-66
Approved		
Squad	Watts	

DETAIL OF ABUTMENT
ABUTMENT NO. 2 RT.

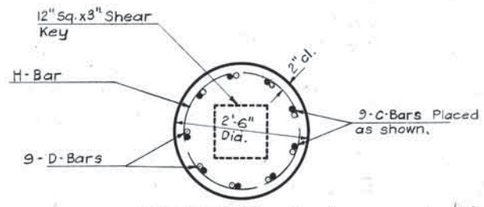
F.A. Project No. I-35-2 (12) Sheet No. 255A

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-352(12)		256	

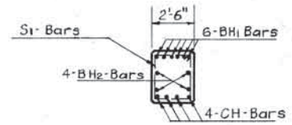
REVISIONS	
DESCRIPTION	DATE



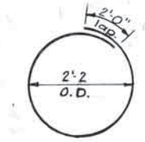
PLAN



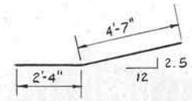
SECTION A-A



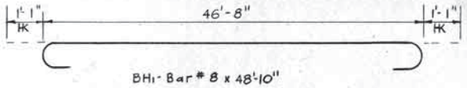
SECTION B-B



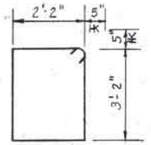
H-Bar #4 x 8'-10"



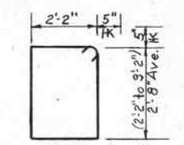
CH-Bar #4 x 6'-11"



BH1-Bar #8 x 48'-10"

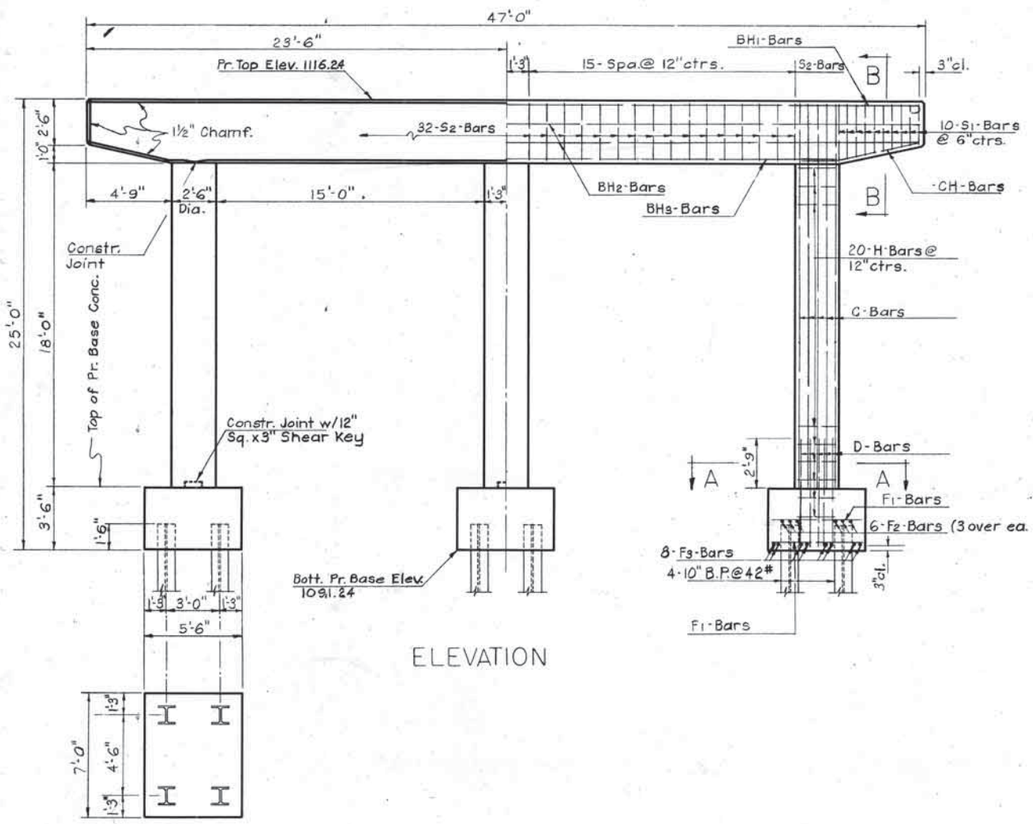


S2-Bar #4 x 11'-6"



S1-Bars #4 x 10'-6" Ave. (9'-6" to 11'-6")

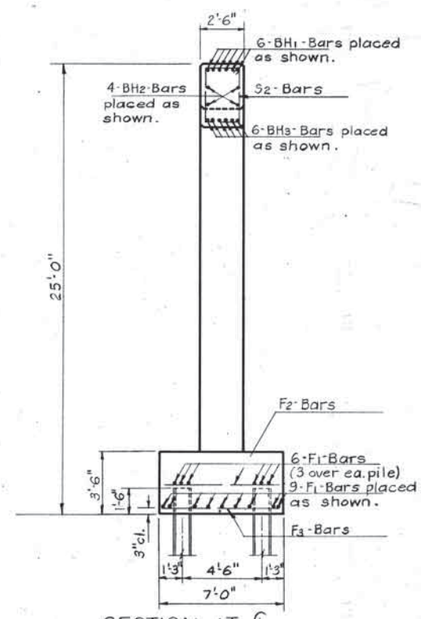
Note: For details of Pedestals, Pedestal Reinf. (P-Bar), and Pedestal layout see Sheet No. 256A.



ELEVATION

PILING DIAGRAM

For details of Piling
See Std P-1-10 sht. # 259. D



SECTION AT ℄

BAR LIST-PR 1 LT ST				
MARK	NO.	SIZE	FORM	* AVE. LENGTH LENGTH
BH1	6	8	BNT.	48- 10
BH2	4	4	STR.	46- 8
BH3	6	9	STR.	37- 2
S1	20	4	BNT.	10- 6*
S2	32	4	BNT.	11- 6
CH	8	4	BNT.	6- 11
H	60	4	BNT.	8- 10
C	27	10	STR.	21- 4
D	27	10	STR.	5- 6
F1	45	4	STR.	5- 0
F2	18	4	STR.	6- 6
F3	24	6	STR.	6- 6
P	40	4	BNT.	5- 0*

QUANTITIES		
Item	Unit	Total
Class "A" Concrete	Cu. Yd.	25.2
Reinforcing Steel	Lbs.	6,160
Substr. Excav. Common	Cu. Yd.	80.0
Class "A" Conc. Pr. Bases	Cu. Yd.	15.0

Design		
Drawn	R.B.R.	1-66
Checked	J.F.	1-66
Approved		
Squad	Watts	

S.H. 74 OVER I-35

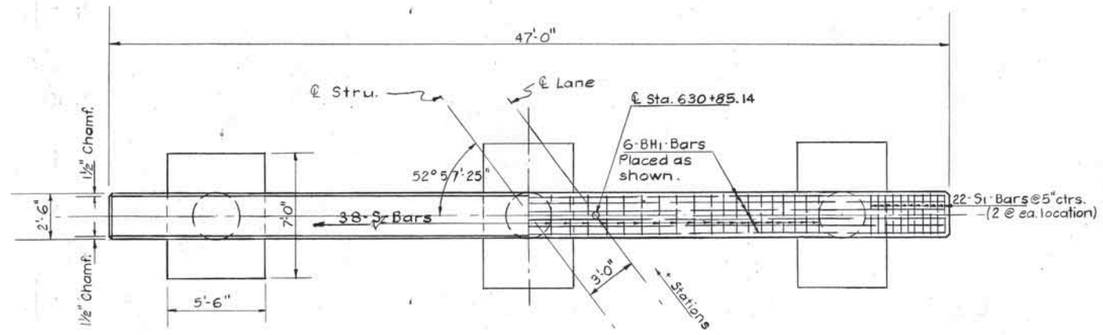
DETAIL OF PIER NO. 1 LT. STR.

℄ STA. 630+81.64

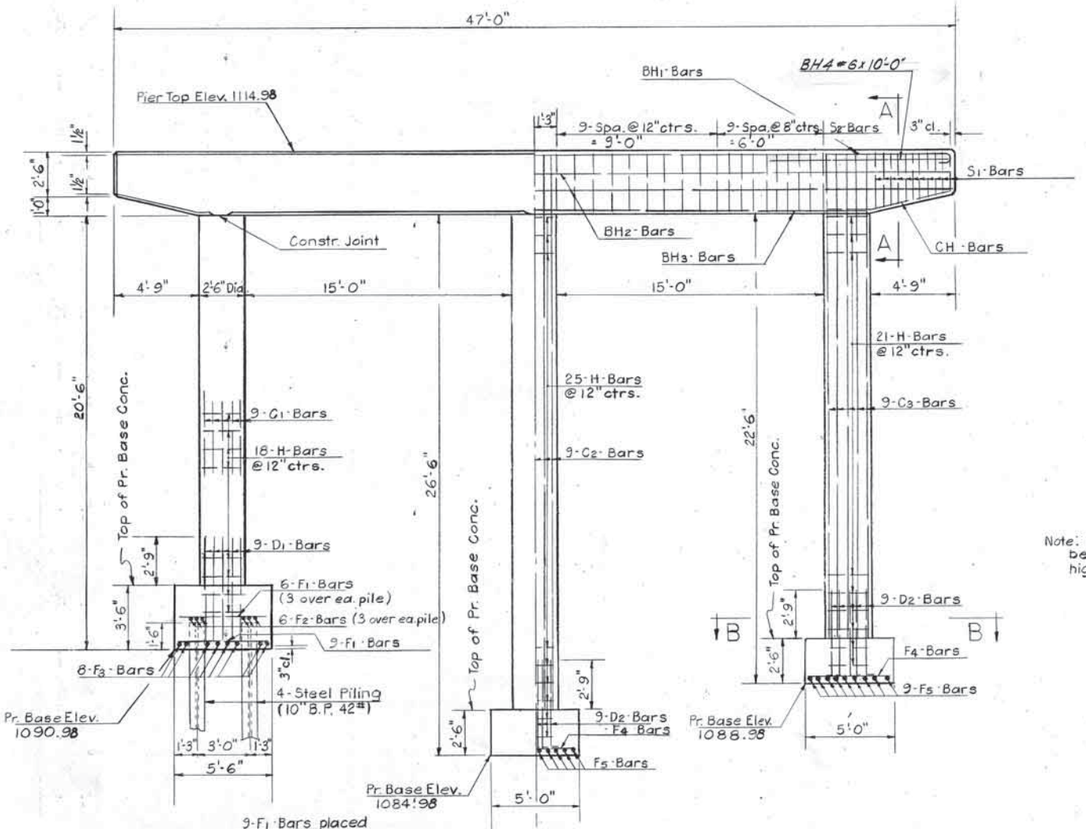
F. A. Project No. I-35-2(12) Sheet No. 256

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-352(12)		256A	

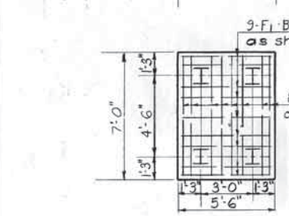
REVISIONS	
DESCRIPTION	DATE



PLAN

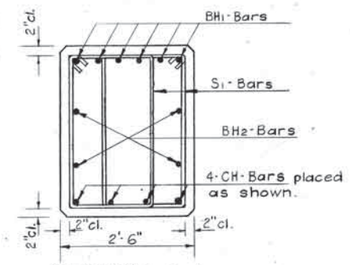


ELEVATION

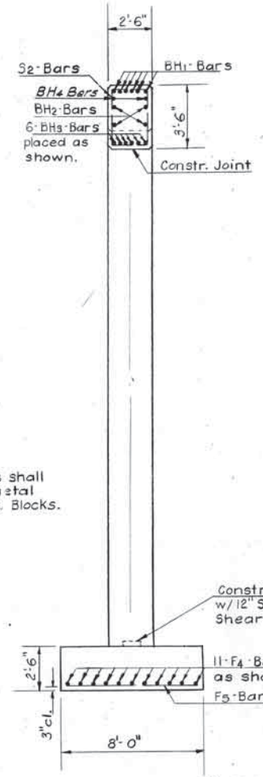


PILE DIAGRAM

For details of Piling see Std. P-1-10 sht # 2.59. D

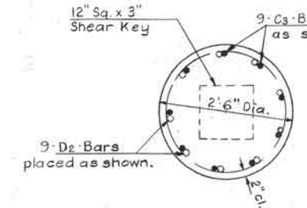


SECTION A-A

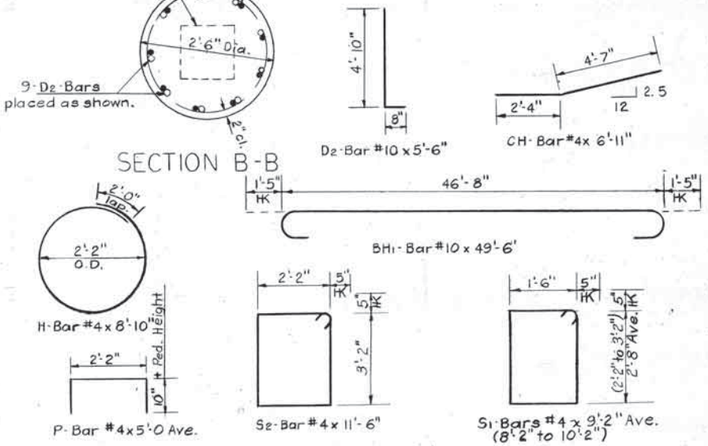


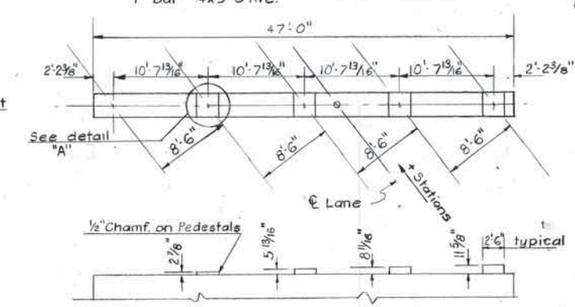
TYP. SECTION CTR. & RT. COL.

Note: Reinf. in footings shall be supported on metal high chairs or Conc. Blocks.



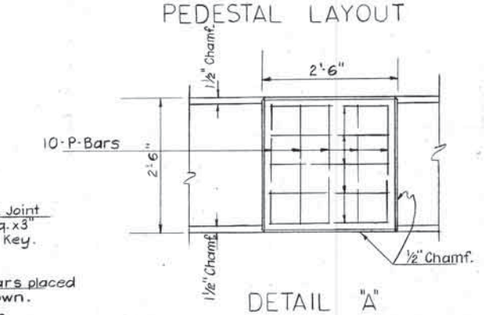
SECTION B-B





PEDESTAL LAYOUT

Note: All bar bend dimensions are out to out.



DETAIL "A"

BAR LIST-PR 2 LT ST

MARK	NO.	* AVE. LENGTH SIZE	FORM	LENGTH
BH1	6	10	BNT.	49- 6
BH2	4	4	STR.	46- 8
BH3	6	10	STR.	37- 2
S1	44	4	BNT.	9- 2*
S2	38	4	BNT.	11- 6
CH	8	4	BNT.	6- 11
P	40	4	BNT.	5- 0*
H	64	4	BNT.	8- 10
C1	9	10	STR.	20- 4
C2	9	10	STR.	27- 4
C3	9	10	STR.	23- 4
D1	9	10	STR.	6- 0
D2	18	10	BNT.	5- 6
F1	15	4	STR.	5- 0
F2	6	4	STR.	6- 6
F3	8	6	STR.	6- 6
F4	22	4	STR.	4- 6
F5	18	7	STR.	7- 6
BH4	4	6	STR.	10- 0

QUANTITIES

Item	Unit	Total
Class "A" Concrete	Cu. Yd.	26.4
Reinforcing Steel	Lbs.	7,380
Substr. Excav. Common	Cu. Yd.	90.0
Substr. Excav. Rock	Cu. Yd.	5.2
Class "A" Conc. Pr. Bases	Cu. Yd.	12.4

S.H. 74 OVER I-35

Design		
Drawn	R.B.R.	1-66
Checked	J.F.	1-66
Approved		
Squad	Watts	

DETAIL OF PIER NO. 2 LT. STR.

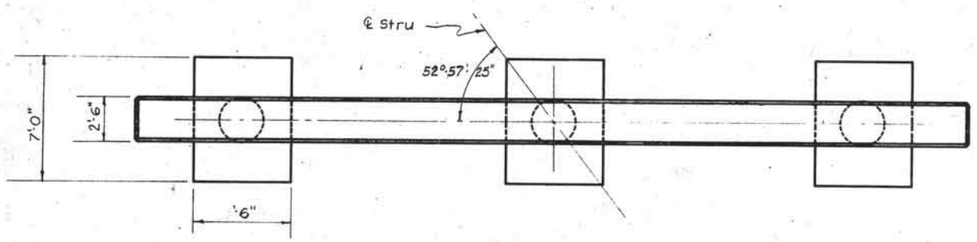
℄ STA. 630+81.64

F. A. Project No. I-35-2(12) Sheet No. 256A

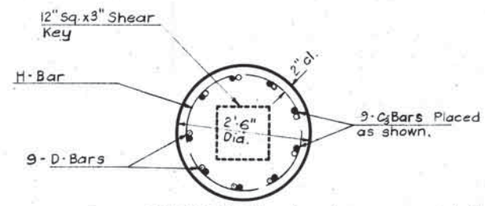
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I35-2(12)		257	

REVISIONS

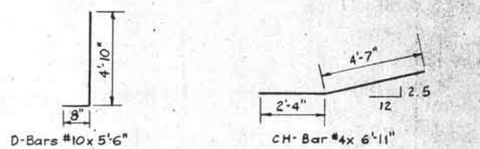
DESCRIPTION	DATE

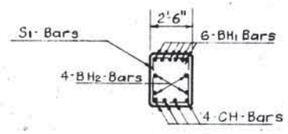


PLAN

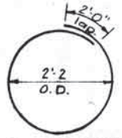


SECTION A-A

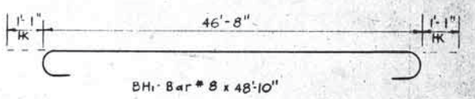




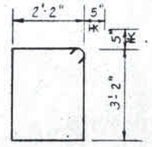
SECTION B-B



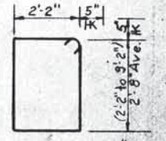
H-Bar #4 x 8'-10"



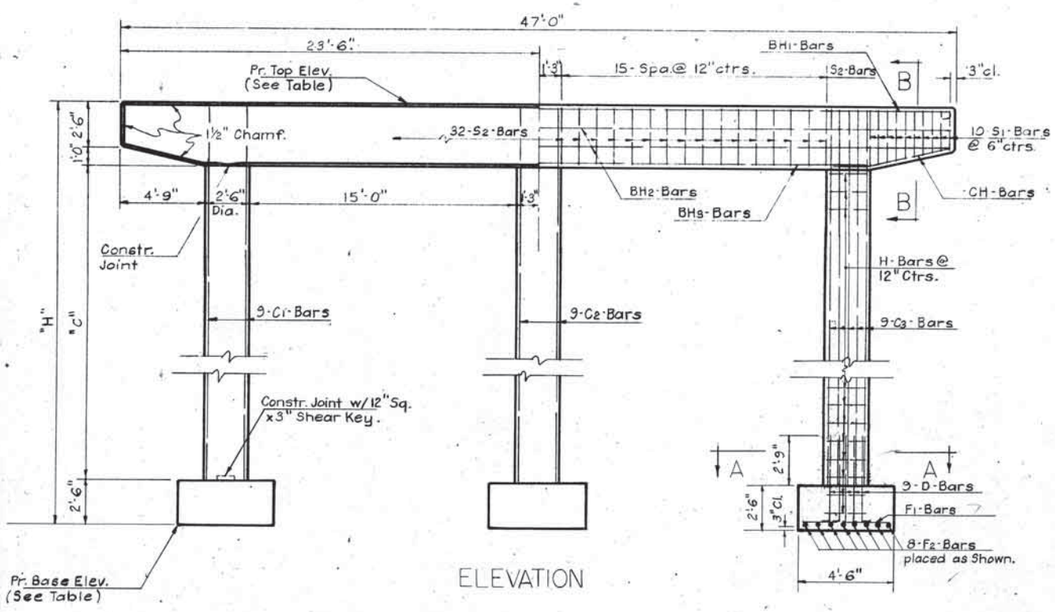
BH1-Bar #8 x 48'-10"



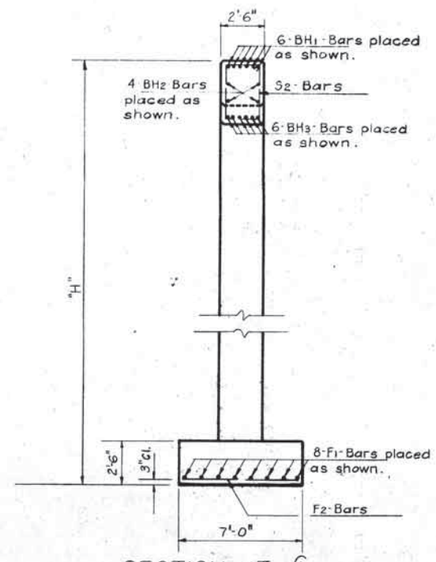
S2-Bar #4 x 11'-6"



S1-Bars #4 x 10'-6" Ave. (9'-6" to 11'-6")



ELEVATION



SECTION AT ℄

Item	Unit	Pr. #3 Lt.	Pr. #1 Rt.	Pr. #3 Rt.
Class "A" Concrete	Cu. Yd.	27.7	26.7	23.6
Class "A" Concrete Pr. Bases	Cu. Yd.	8.8	8.8	8.8
Reinforcing Steel	Lbs.	6,620	6,350	5,590
Substr. Excav. Common	Cu. Yd.	115.0	65.0	—
Substr. Excav. Rock	Cu. Yd.	5.8	8.2	17.5

Note: For details of Pedestals, Pedestal Reinf. (P-Bar), and Pedestal layout see Sheet No. 256A for Pier 3 Lt. Stru.

Note: For details of Pedestals and Pedestal Layout see sheet No. 257A for Piers 1 & 3 Rt. Stru.

BAR LIST-PR. 3 LT. S
* AVE. LENGTH

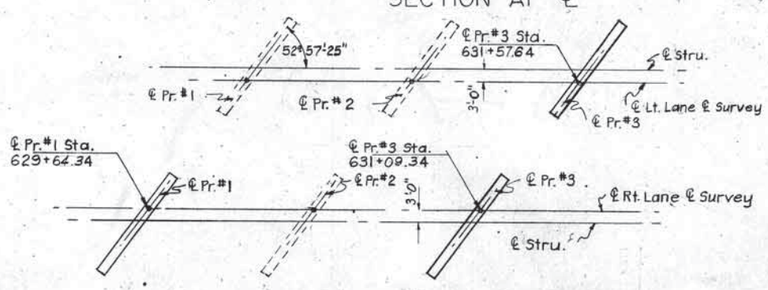
MARK	NO.	SIZE	FORM	LENGTH
BH1	6	8	BNT.	48- 10
BH2	4	4	STR.	46- 8
BH3	6	9	STR.	37- 2
S1	20	4	BNT.	10- 6*
S2	32	4	BNT.	11- 6
CH	8	4	BNT.	6- 11
H	74	4	BNT.	8- 10
C1	9	10	STR.	27- 4
C2	9	10	STR.	27- 4
C3	9	10	STR.	23- 4
D	27	10	BNT.	5- 6
F1	24	4	STR.	4- 0
F2	24	6	STR.	6- 6
P	40	4	BNT.	5- 0*

BAR LIST-PR. 1 RT S
* AVE. LENGTH

MARK	NO.	SIZE	FORM	LENGTH
BH1	6	8	BNT.	48- 10
BH2	4	4	STR.	46- 8
BH3	6	9	STR.	37- 2
S1	20	4	BNT.	10- 6*
S2	32	4	BNT.	11- 6
CH	8	4	BNT.	6- 11
H	71	4	BNT.	8- 10
C1	9	10	STR.	26- 4
C2	9	10	STR.	24- 4
C3	9	10	STR.	24- 4
D	27	10	BNT.	5- 6
F1	24	4	STR.	4- 0
F2	24	6	STR.	6- 6

BAR LIST-PR. 3 RT. S
* AVE. LENGTH

MARK	NO.	SIZE	FORM	LENGTH
BH1	6	8	BNT.	48- 10
BH2	4	4	STR.	46- 8
BH3	6	9	STR.	37- 2
S1	20	4	BNT.	10- 6*
S2	32	4	BNT.	11- 6
CH	8	4	BNT.	6- 11
H	54	4	BNT.	8- 10
C1	9	10	STR.	19- 4
C2	9	10	STR.	19- 4
C3	9	10	STR.	19- 4
D	27	10	BNT.	5- 6
F1	24	4	STR.	4- 0
F2	24	6	STR.	6- 6



PIER LAYOUT

PIER	COL.	"H"	"C"	PR. TOP.	PR. BASE
1 Rt.	Lt.	29'-0"	23'-0"	1117.59	1088.59
	Ctr.	27'-0"	21'-0"	" "	1090.59
	Rt.	27'-0"	21'-0"	" "	1090.59
3 Lt.	Lt.	30'-0"	24'-0"	1113.84	1083.84
	Ctr.	30'-0"	24'-0"	" "	1083.84
	Rt.	26'-0"	20'-0"	" "	1087.84
3 Rt.	Lt.	22'-0"	16'-0"	1115.15	1093.15
	Ctr.	22'-0"	16'-0"	" "	" "
	Rt.	22'-0"	16'-0"	" "	" "

S.H. 74 OVER I-35

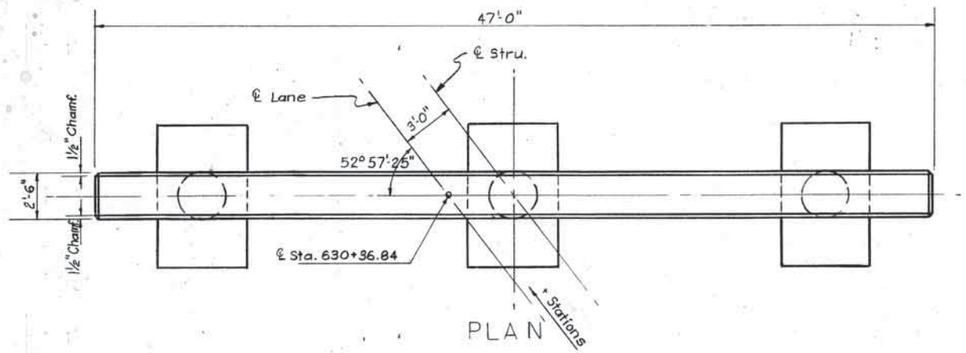
Design		
Drawn	R.B.R.	1-66
Checked	J.F.	1-66
Approved		
Squad	Watts	

DETAILS OF PIERS #3 LT., #1 RT., #3 RT.
℄ STA. 630+81.64 LT. STRU.
℄ STA. 630+33.34 RT. STRU.

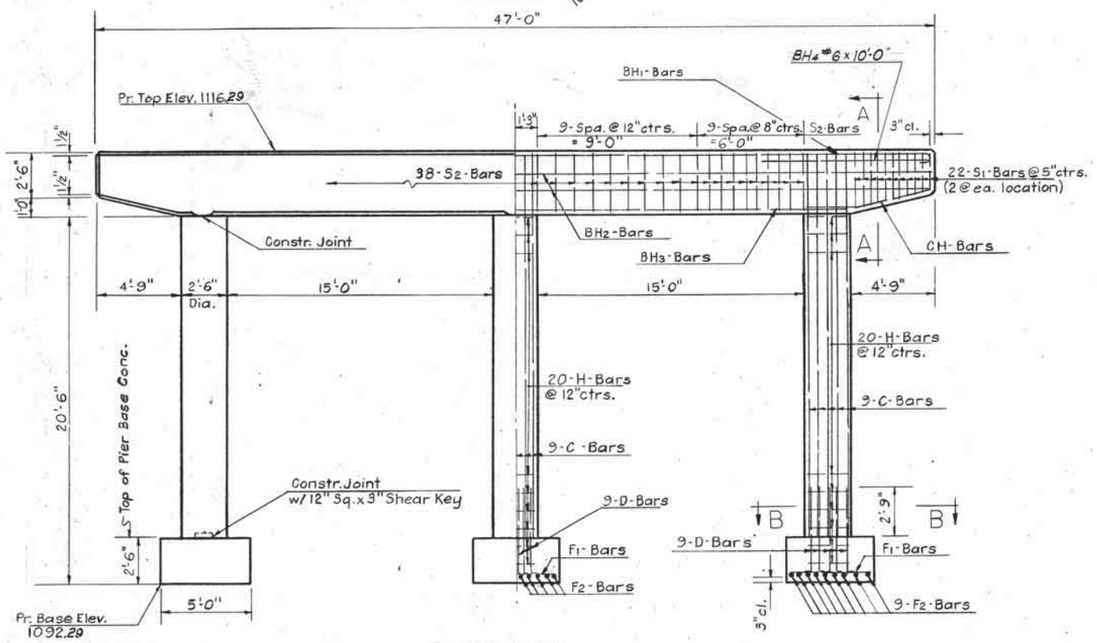
F. A. Project No. I-35-2(12) Sheet No. 257

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I35-2(12)		257A	

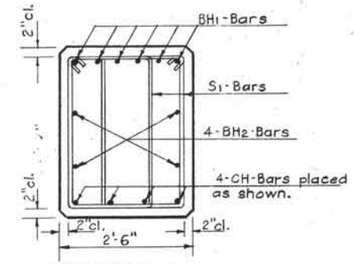
REVISIONS	
DESCRIPTION	DATE



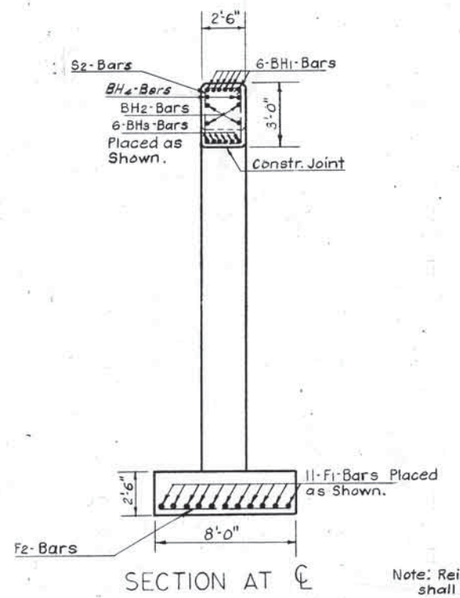
PLAN



ELEVATION

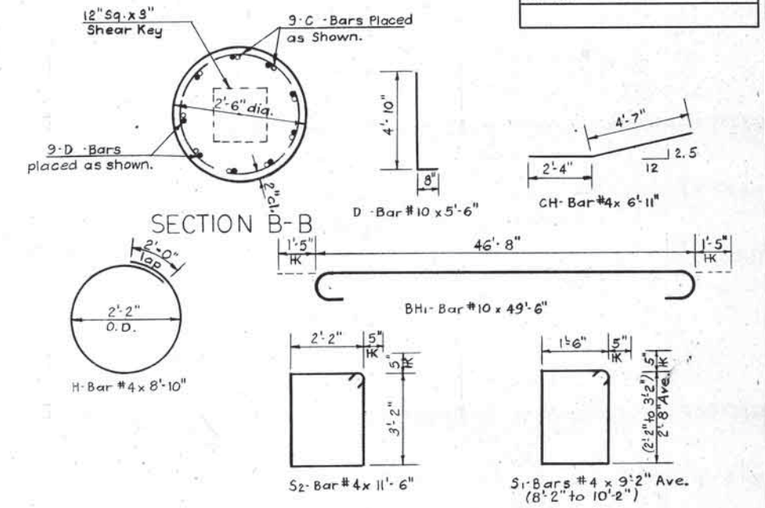


SECTION A-A



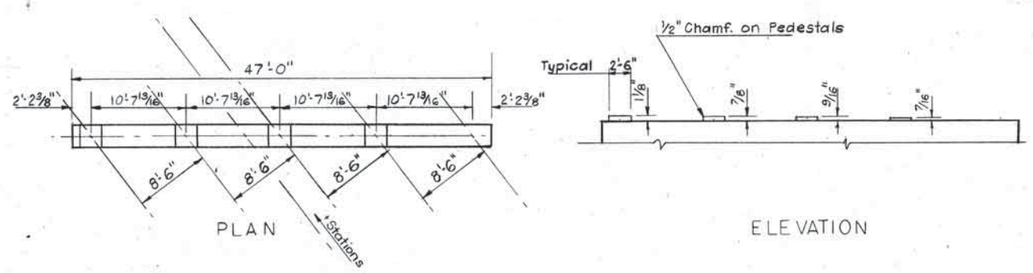
SECTION AT ℄

Note: Reinf. in footings shall be supported on metal high chairs or Conc. Blocks.



All bar Bend dimensions are out to out.

BAR LIST-PR 2 RT ST * AVE. LENGTH				
MARK	NO.	SIZE	FORM	LENGTH
BH1	6	10	BNT.	49- 6
BH2	4	4	STR.	46- 10
BH3	6	10	STR.	37- 2
S1	44	4	BNT.	9- 2*
S2	38	4	BNT.	11- 6
CH	8	4	BNT.	6- 11
H	60	4	BNT.	8- 10
C	27	10	STR.	21- 4
D	27	10	BNT.	5- 6
F1	33	4	STR.	4- 6
F2	27	7	STR.	7- 6
BH4	4	6	STR.	10'- 0"



PLAN

ELEVATION

PEDESTAL LAYOUT

QUANTITIES		
Item	Unit	Total
Class "A" Concrete	Cu. Yd.	24.7
Reinforcing Steel	Lbs.	6,950
Substr. Excav. Common	Cu. Yd.	25.0
Substr. Excav. Rock	Cu. Yd.	16.3
Class "A" Conc. Pr. Bases	Cu. Yd.	11.1

S.H. 74 OVER I-35

Design		
Drawn	R.B.R.	1-66
Checked	J.F.	1-66
Approved		
Squad	Watts	

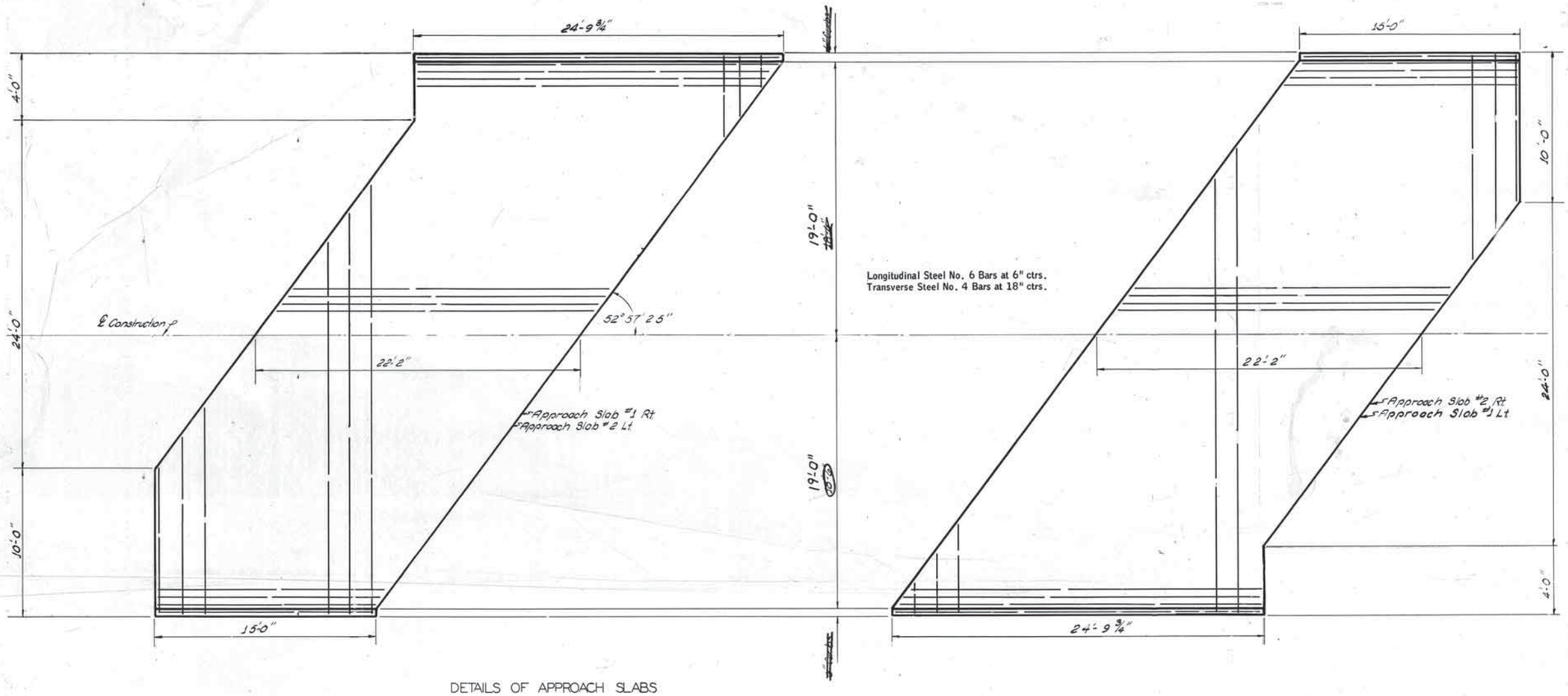
DETAIL OF PIER NO. 2 RT. STR.

℄ STA. 630+33.34

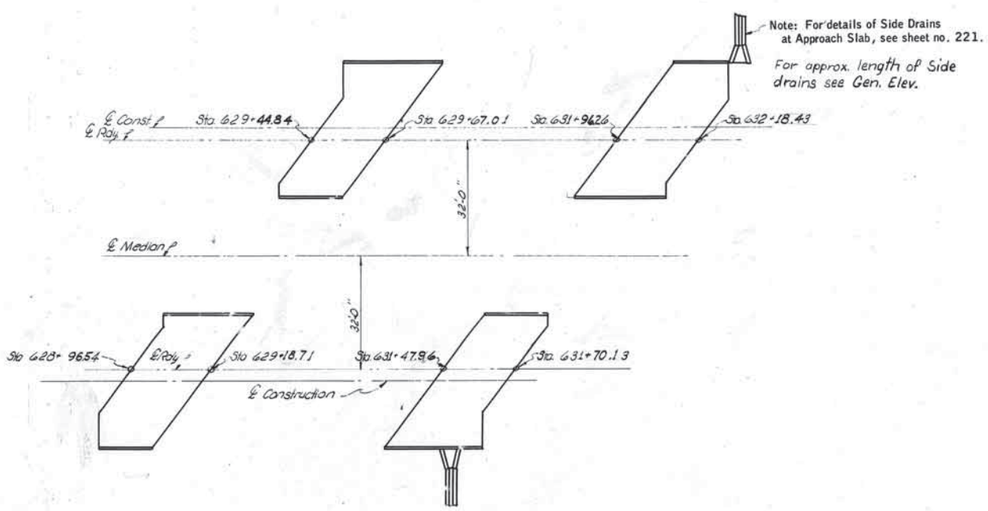
F. A. Project No. I-35-2(12) Sheet No. 257A

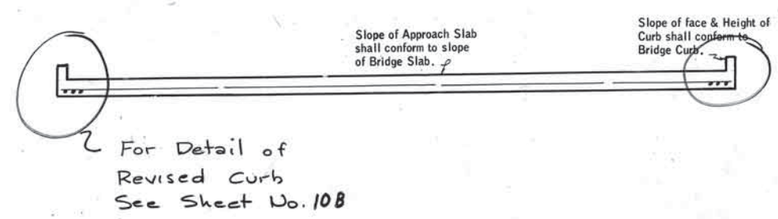
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I35-2(12)		258	

REVISIONS	
DESCRIPTION	DATE
Rev. curb & Cl. Rdy. dim.	4-28-67



DETAILS OF APPROACH SLABS





QUANTITIES - ONE APPROACH SLAB		
Item	Unit	Total
Approach Slab	Sq.Yd.	90.2
*Reinforcing Steel	Lbs.	2,930

For details not shown see sheet no. 221.

*Note: Cost of Reinforcing Steel in Approach Slabs shall be included in the Unit Price Bid per Sq.Yd. for Approach Slabs.

Cost of curbs on Approach Slabs shall be included in the price bid per Sq.Yd. for Approach Slabs.

Note: When Bridge Approach Slabs are to be constructed in Bridge Contract they shall be constructed using Class "AA(AE)" Concrete Materials.

When Bridge Approach Slabs are to be constructed in Roadway Contract they shall be constructed with either Class "AA(AE)" Concrete Materials or P.C. Concrete Paving Materials, including an Air-Entraining Admixture.

Design		
Drawn	P.L.B.	12-65
Checked	J.F.	12-65
Approved		
Squad	Watts	

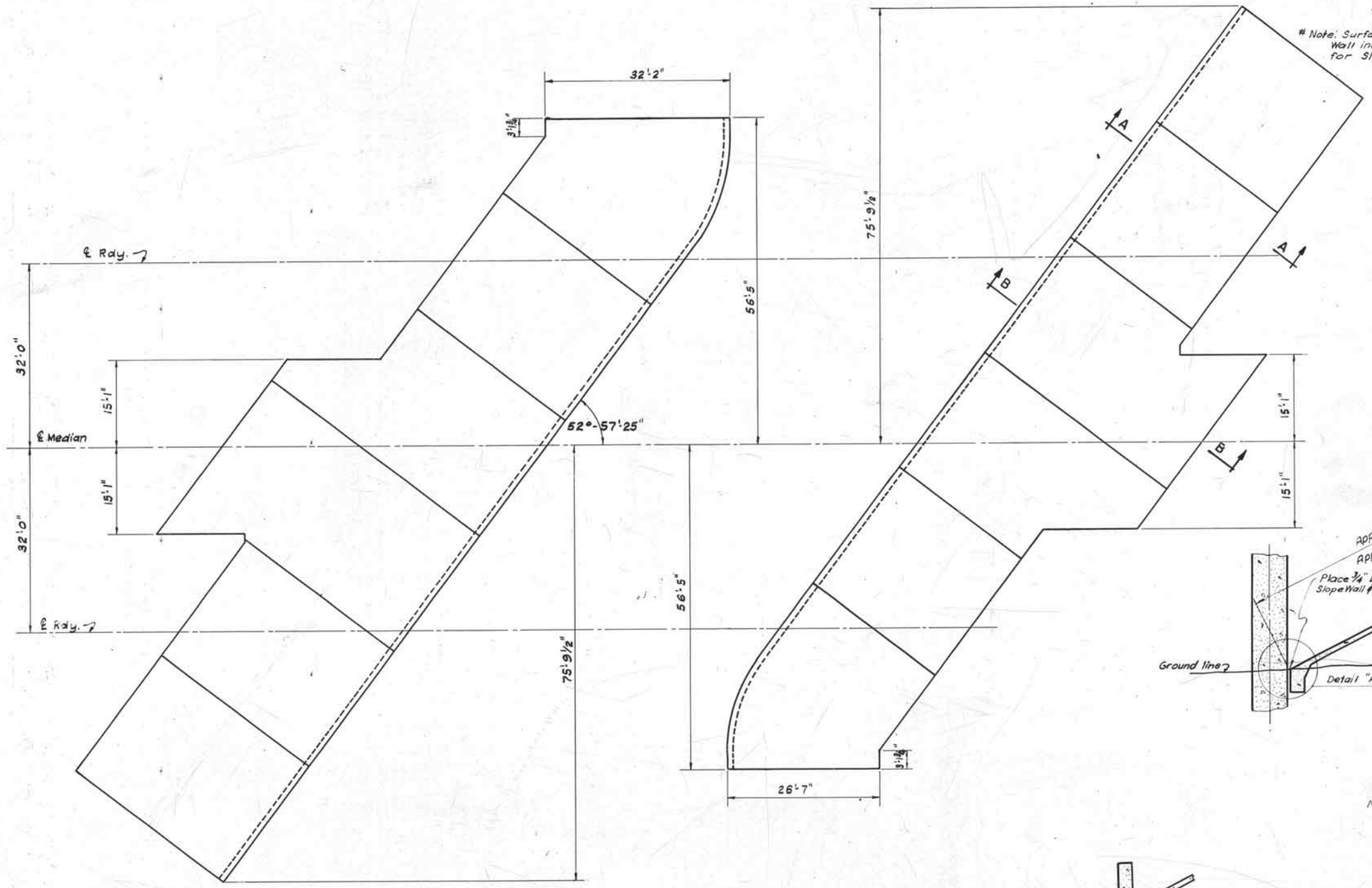
DETAILS OF APPROACH SLABS
℄ STA. 630+33.34 RT. STRU.
℄ STA. 630+81.64 LT. STRU.

Project No. I-35-2(12) Sheet No. 258

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-35-2(12)		259	

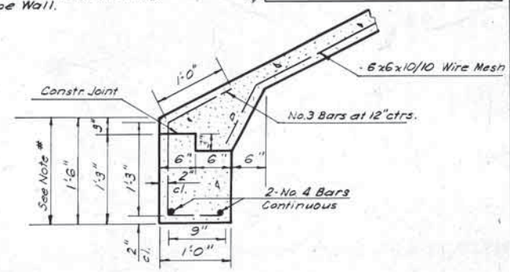
REVISIONS

DESCRIPTION	DATE
REV. CONSTR. JT.	4-67

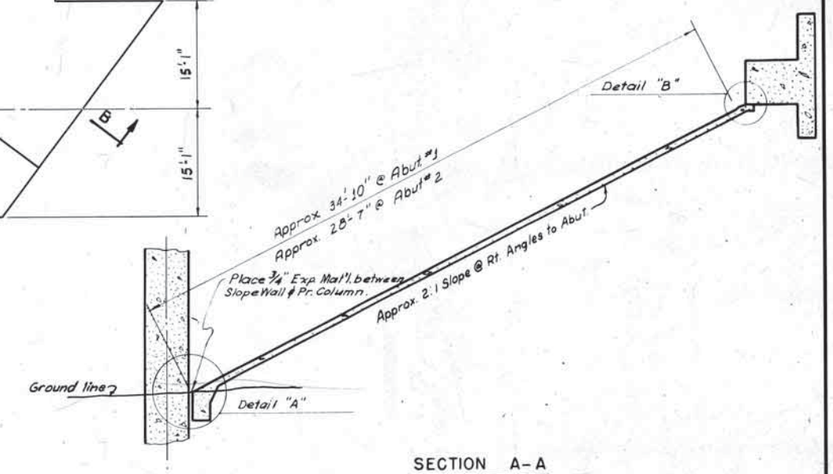


Note: Surface area at toe of Slope Wall included in pay quantity for Slope Wall.

DETAILS OF SLOPE WALLS



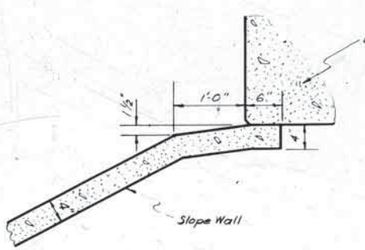
DETAIL "A"



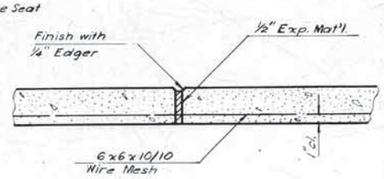
SECTION A-A

Note: Cost of all items in Conc. Slope Walls including wire mesh, reinf. steel, and exp. joint filler shall be included in the unit price bid per Sq. Yd. of 4" Conc. Slope Wall. All material and work shall be in accordance with that part of Sec. 610 of the Oklahoma Standard Specs. governing Concrete Sidewalks.

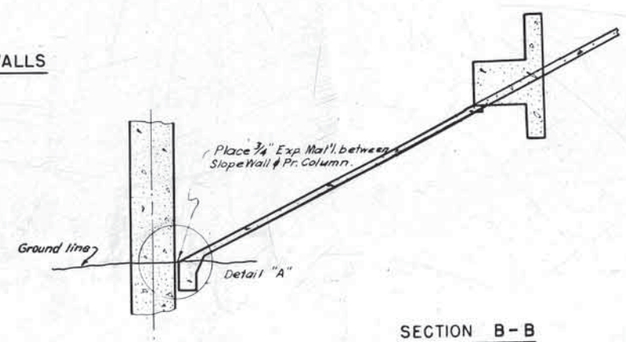
QUANTITIES — SLOPE WALLS				
Abut.	Unit	Slope Walls	Drains	Total
Abut No. 1	S.Y.	680	—	680
Abut No. 2	S.Y.	590	15.8	605.8



DETAIL "B"



DETAIL OF CONSTR. JT.



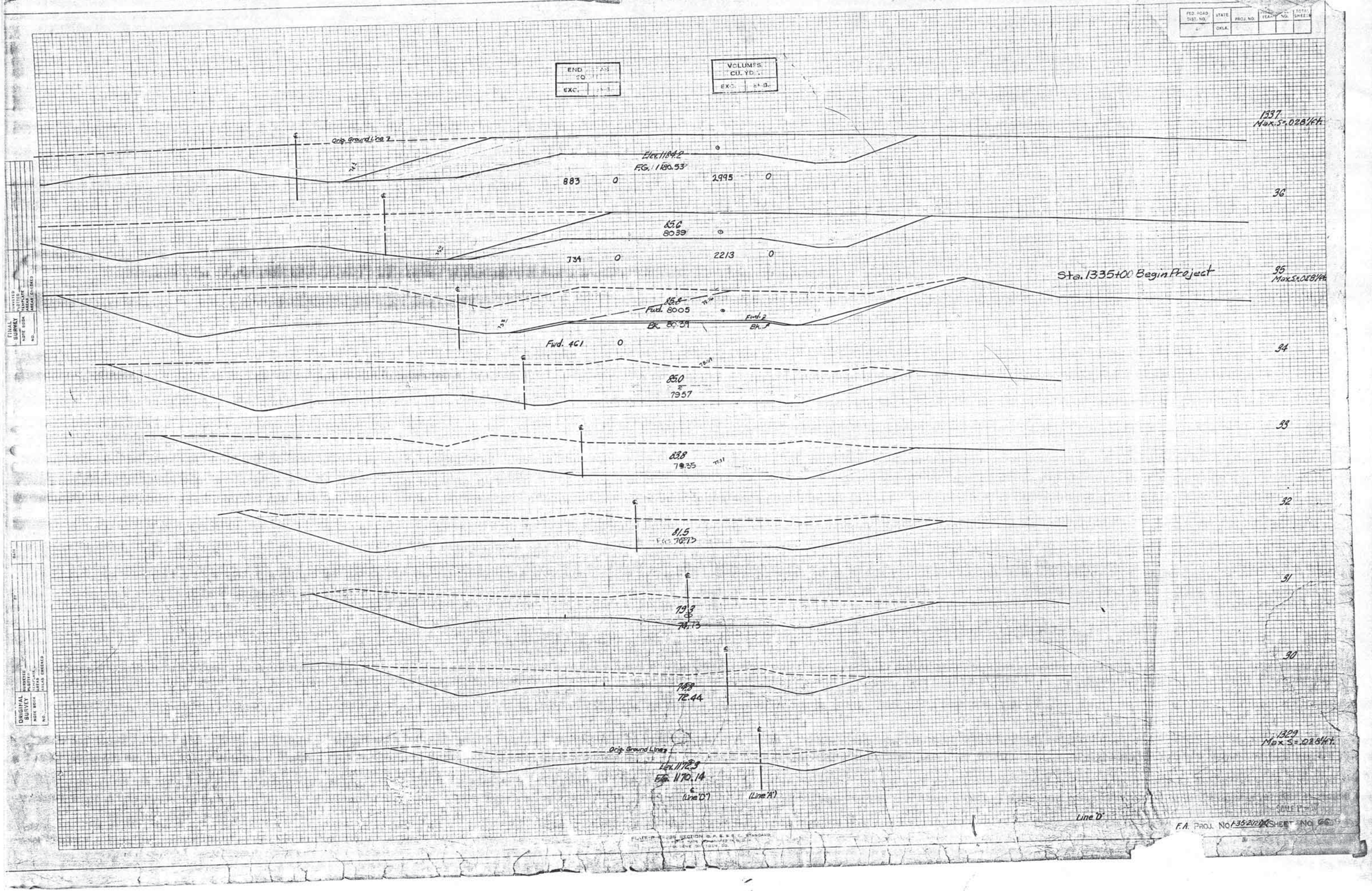
SECTION B-B

SH-74 OVER IS-35

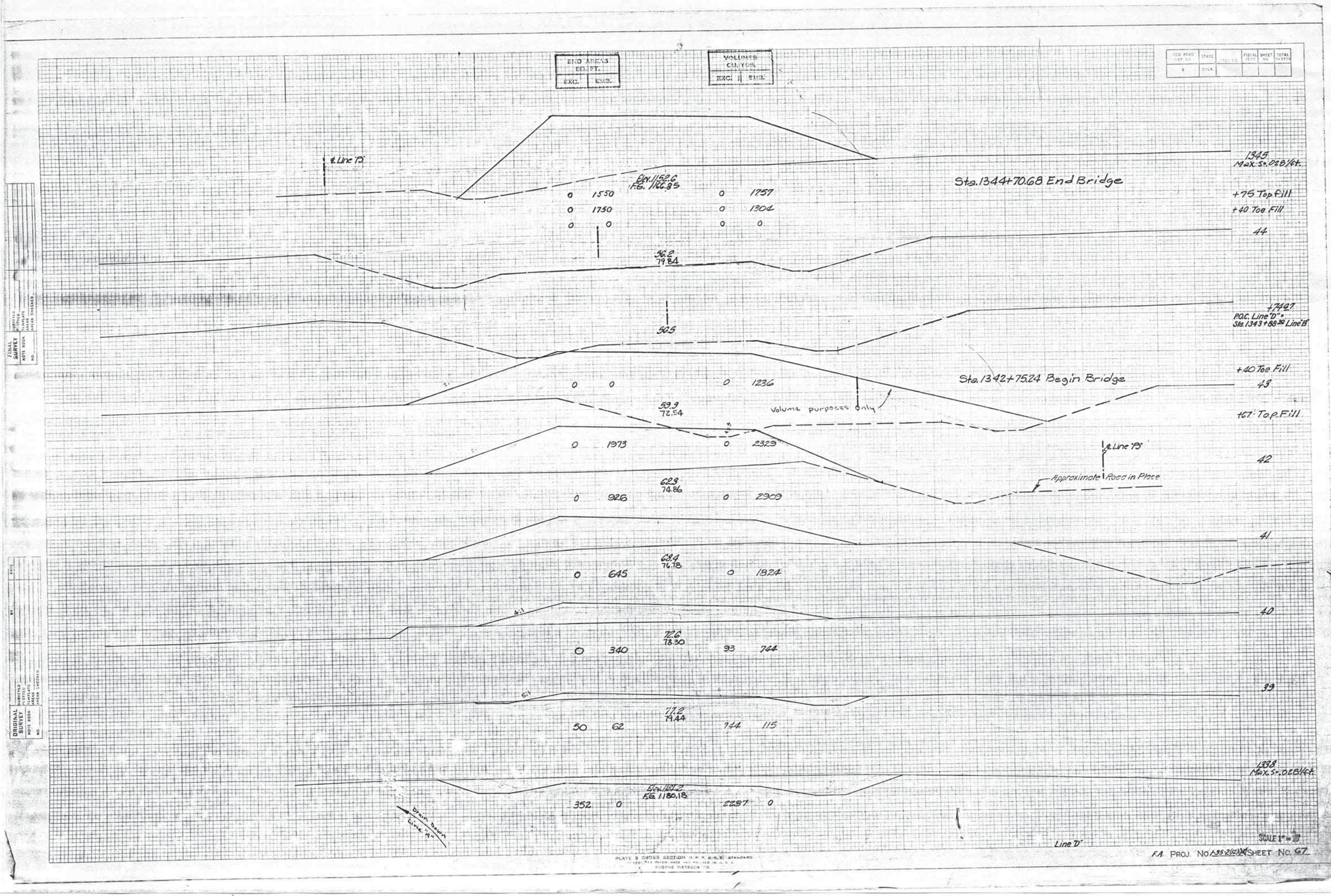
Design		
Drawn	R.B.R.	12-65
Checked		
Approved		
Squad	Watts	

DETAILS OF SLOPE WALLS
℄ STA. 630 + 33.34 RT. STRU.
℄ STA. 630 + 81.64 LT. STRU.

F.A. Project No. I-35-2(12) Sheet No. 259



FED. ROAD DIST. NO.
STATE
OKLA.
PROJ. NO.
YEAR
NO.
TOTAL SHEETS
END
EXC.
VOLUMES CU. YD.
EXC.
1337
Max. S=.028'/ft.
Orig. Ground Line 7
Elev. 1184.2
F.G. 1180.53
883
0
2995
0
36
85.6
8039
734
0
2213
0
Sta. 1335+00 Begin Project
35
Max. S=.028'/ft.
85.8
Fwd. 8005
Bk. 80.39
Fwd. 2
Bk. 7
Fwd. 461
0
34
85.0
7957
33
83.8
79.35
32
81.5
31
79.3
74.13
30
74.8
72.44
1329
Max. S=.028'/ft.
Orig. Ground Line 2
Elev. 1172.3
F.G. 1170.14
(Line 'D')
(Line 'A')
Line 'D'
FINAL SURVEY
NOTE BOOK
NO.
UNITED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
DATE
F.A. PROJ. NO. 1-35-2(12)
SHEET NO. 66



END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO. 6
STATE CYLA.
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
℄ Line "D"
Elev. 1152.6
F.G. 1166.85
Sta. 1344+70.68 End Bridge
1345
Max. S=.028'/ft.
+75 Top Fill
+40 Toe Fill
44
0 1550
0 1750
0 0
0 1757
0 1304
0 0
56.2
79.84
+74.97
P.O.C. Line "D" = Sta. 1343+88.30 Line "B"
56.5
+40 Toe Fill
43
Sta. 1342+75.24 Begin Bridge
0 0
0 1236
59.9
72.54
Volume purposes only
+67 Top Fill
0 1973
0 2329
℄ Line "B"
42
Approximate Road in Place
62.3
74.86
0 926
0 2909
41
68.4
76.78
0 645
0 1824
40
72.6
78.30
0 340
93 744
39
77.2
79.44
50 62
744 115
1338
Max. S=.028'/ft.
Elev. 1187.2
F.G. 1180.18
352 0
2287 0
Drain Down Line "A"
Line "D"
SCALE 1" = 10'
F.A. PROJ. NO. 1-35-2(12)(2)
SHEET NO. 67
FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
PLATE 3 CROSS SECTION
EUGENE DIETZGEN CO.

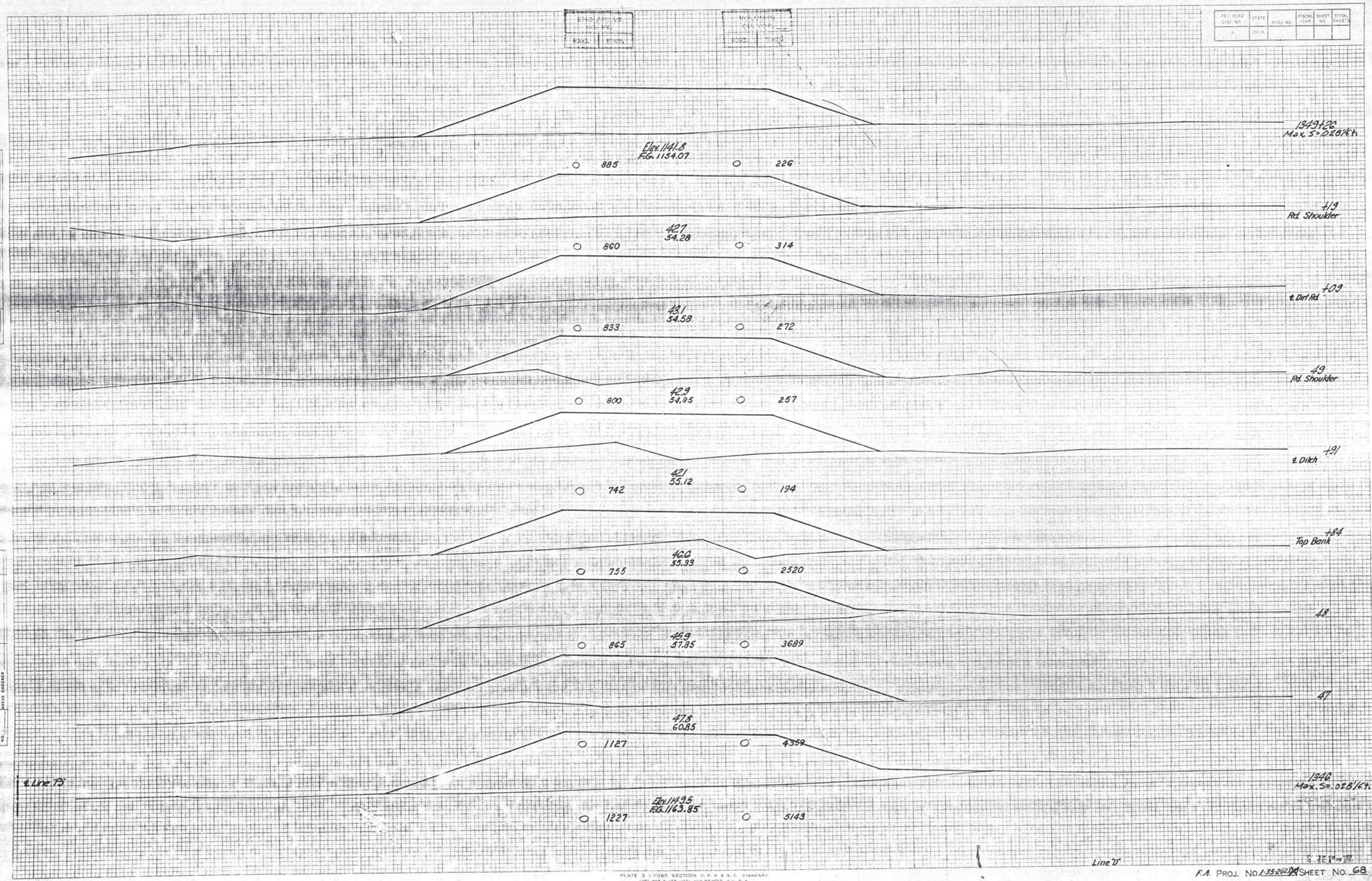
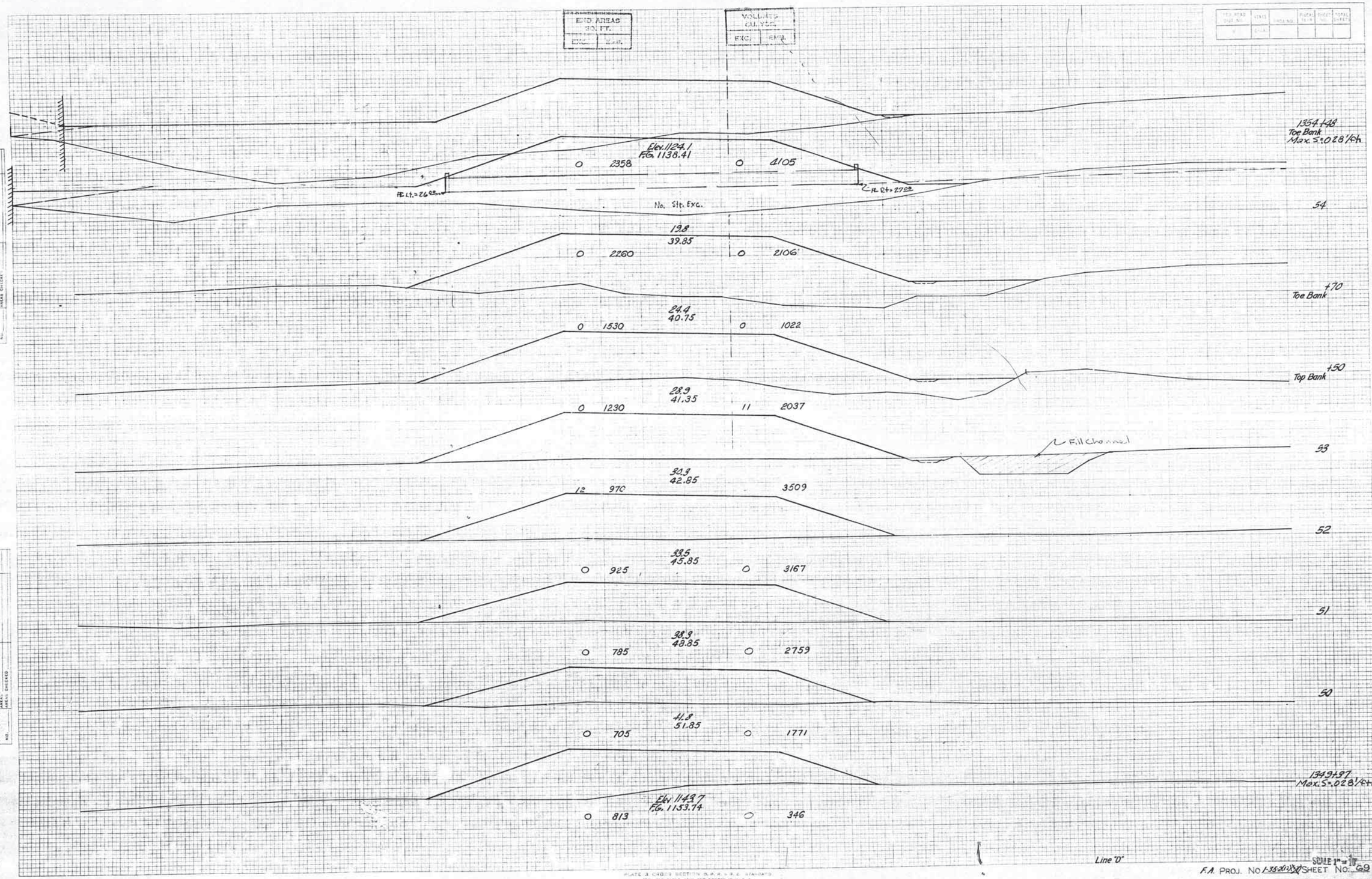


PLATE 3 CROSS SECTION S. P. R. & R. C. STANDARD
1937 HAS PUPER-HAS AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 1-35-2(12) SHEET NO. 68


END AREAS
CU. YDS.
EXC.
EMB.
VOLUMES
CU. YDS.
EXC.
EMB.
1354+48
Toe Bank
Max. S=.028'/ft.
Elev. 1124.1
F.G. 1138.41
0 2358
0 4105
No. Str. Exc.
54
19.8
39.85
0 2260
0 2106
+70
Toe Bank
24.4
40.75
0 1530
0 1022
+50
Top Bank
28.9
41.35
0 1230
11 2037
Fill Channel
53
30.3
42.85
12 970
3509
52
33.5
45.85
0 925
0 3167
51
38.3
48.85
0 785
0 2759
50
41.8
51.85
0 705
0 1771
1349+87
Max. S=.028'/ft.
Elev. 1149.7
F.G. 1153.74
0 813
0 346
Line "D"
FINAL SURVEY
ORIGINAL SURVEY
SCALE 1" = 10'
F.A. PROJ. NO. I-352(1)X SHEET NO. 69

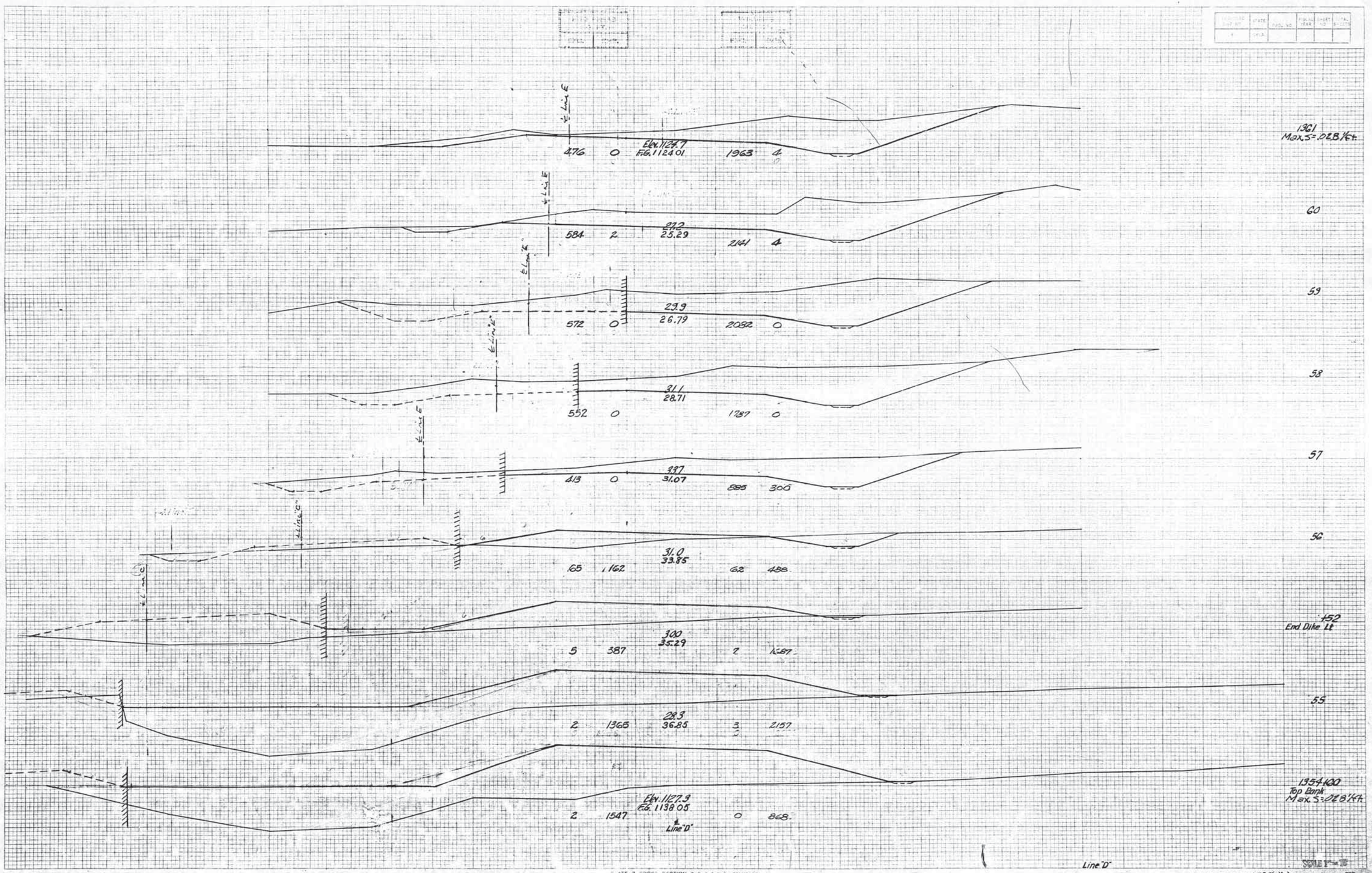
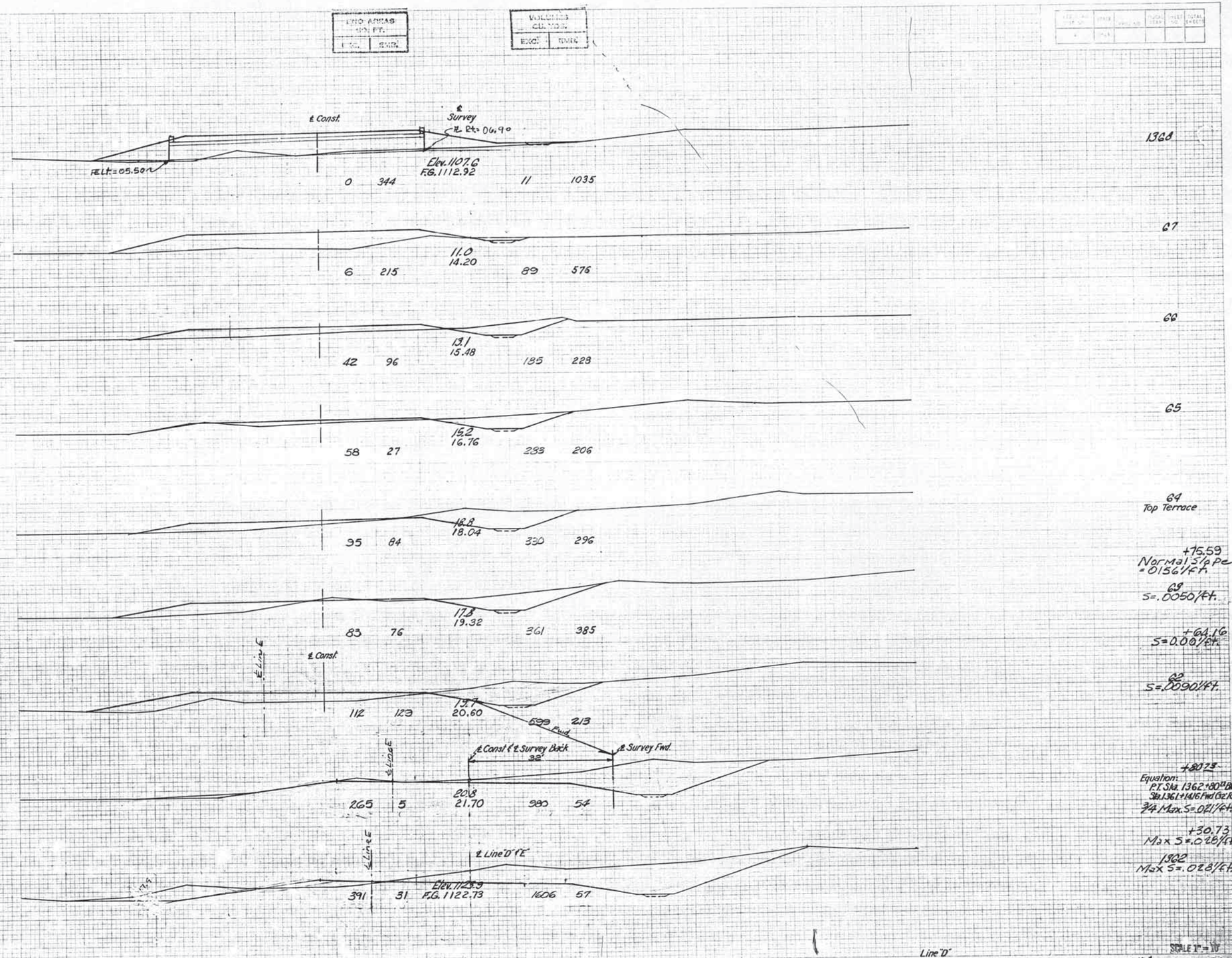


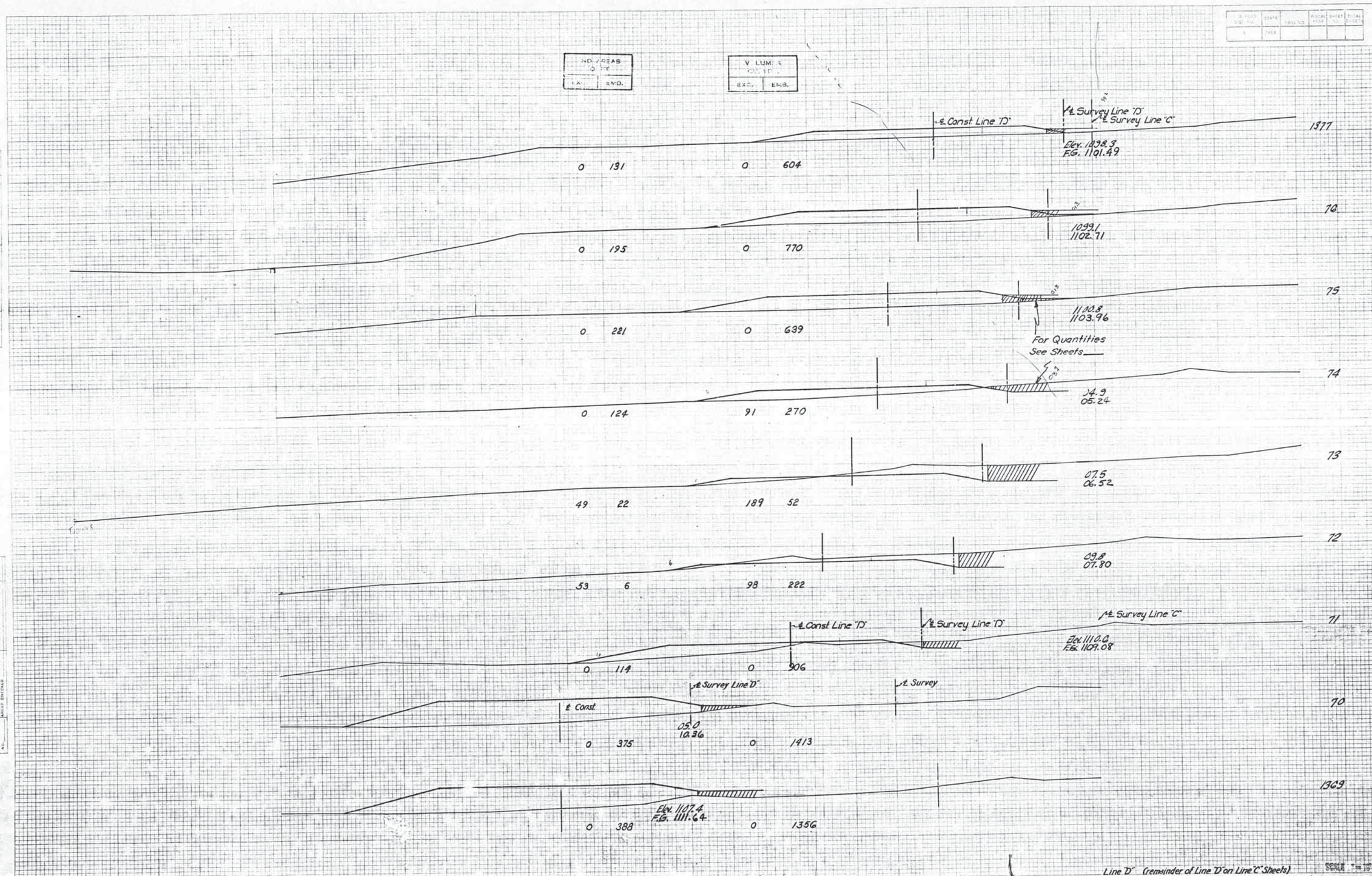
PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
FOR RAW PAPER-TRACE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

F.A. PROJ. No. 1-35-2(12)(2) SHEET No. 70



SCALE 1" = 10'

F.A. PROJ. NO. 1-35-2(13) SHEET NO. 71



Line "D" (remainder of Line "D" on Line "C" Sheets)

F.A. PROJ. NO. 1-35-2(12) SHEET NO. 72

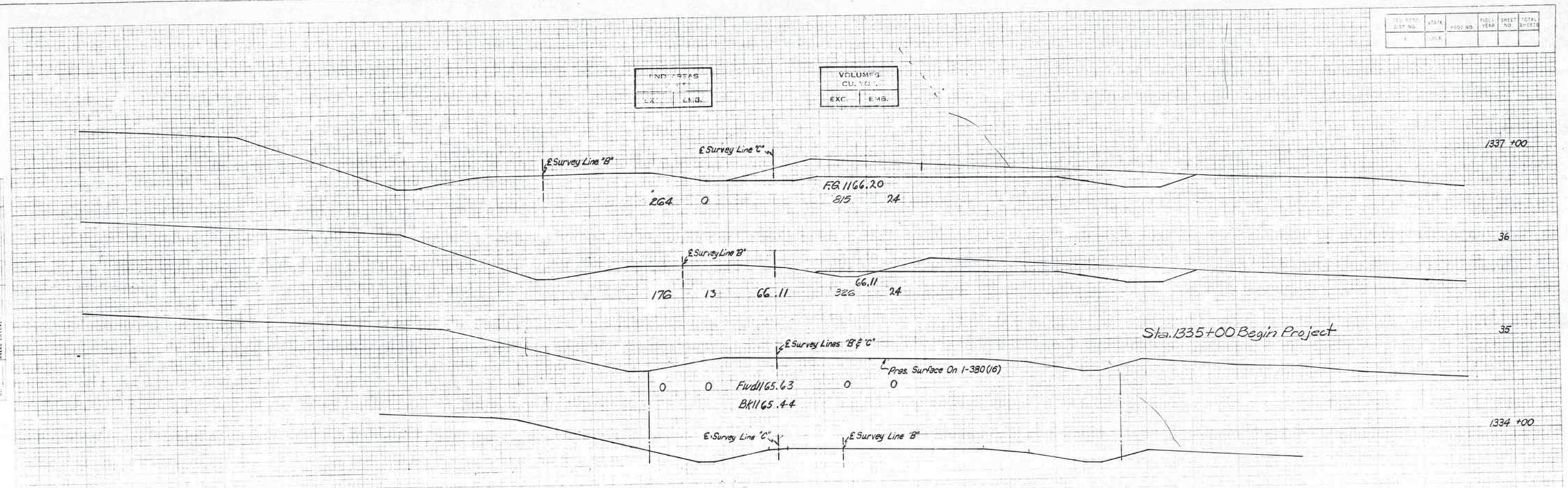


PLATE 3 CROSS SECTION G. P. R. & R. C. STANDARD
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 1-35-2(12)(24) SHEET NO. 73
℄ Purcell By Pass

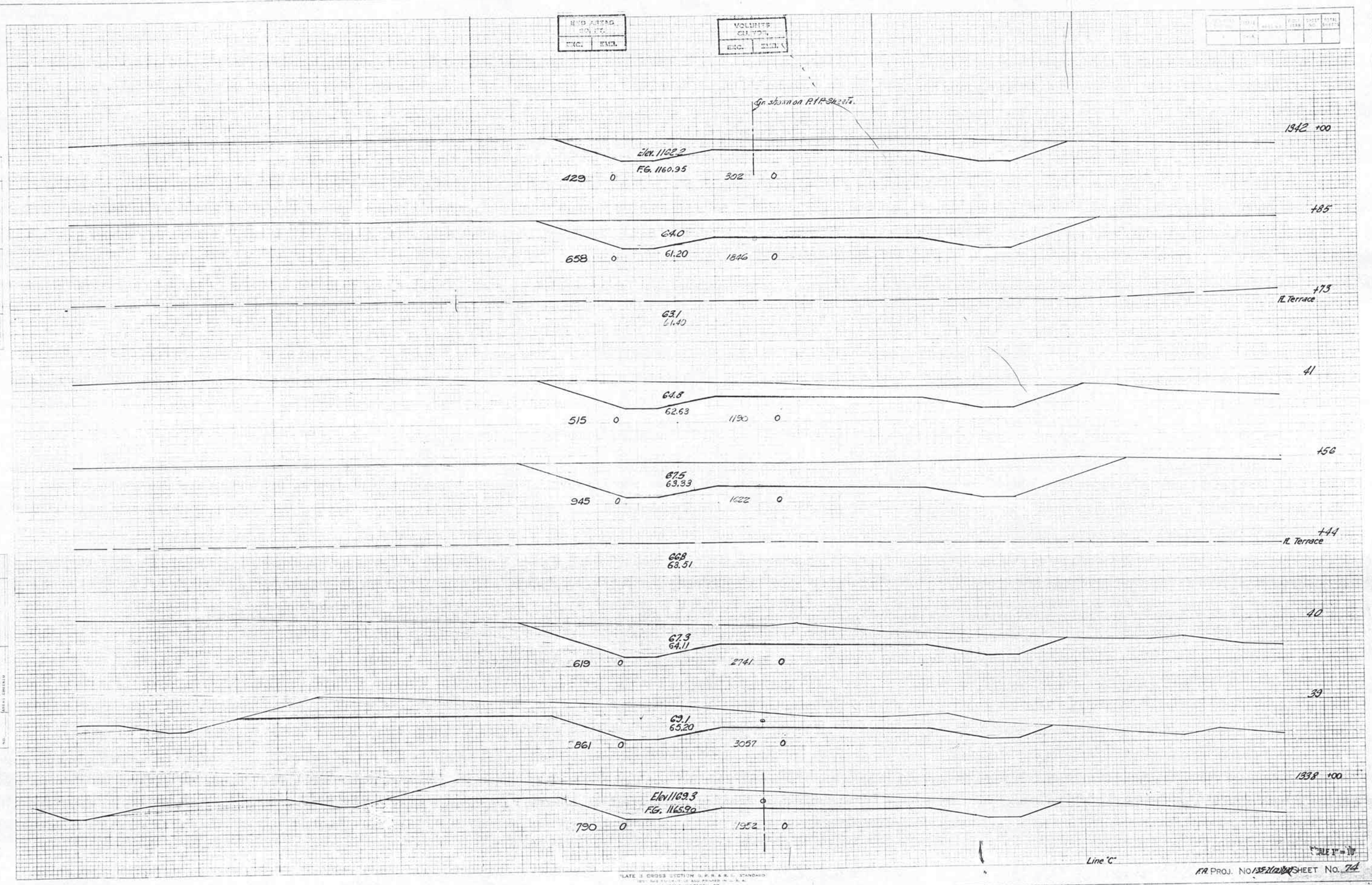


PLATE 3 CROSS SECTION G. P. R. & R. S. STANDARD
1937 RAS REVISION 10 AND PRINTED IN U.S.A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 135-2(12)(13) SHEET No. 74

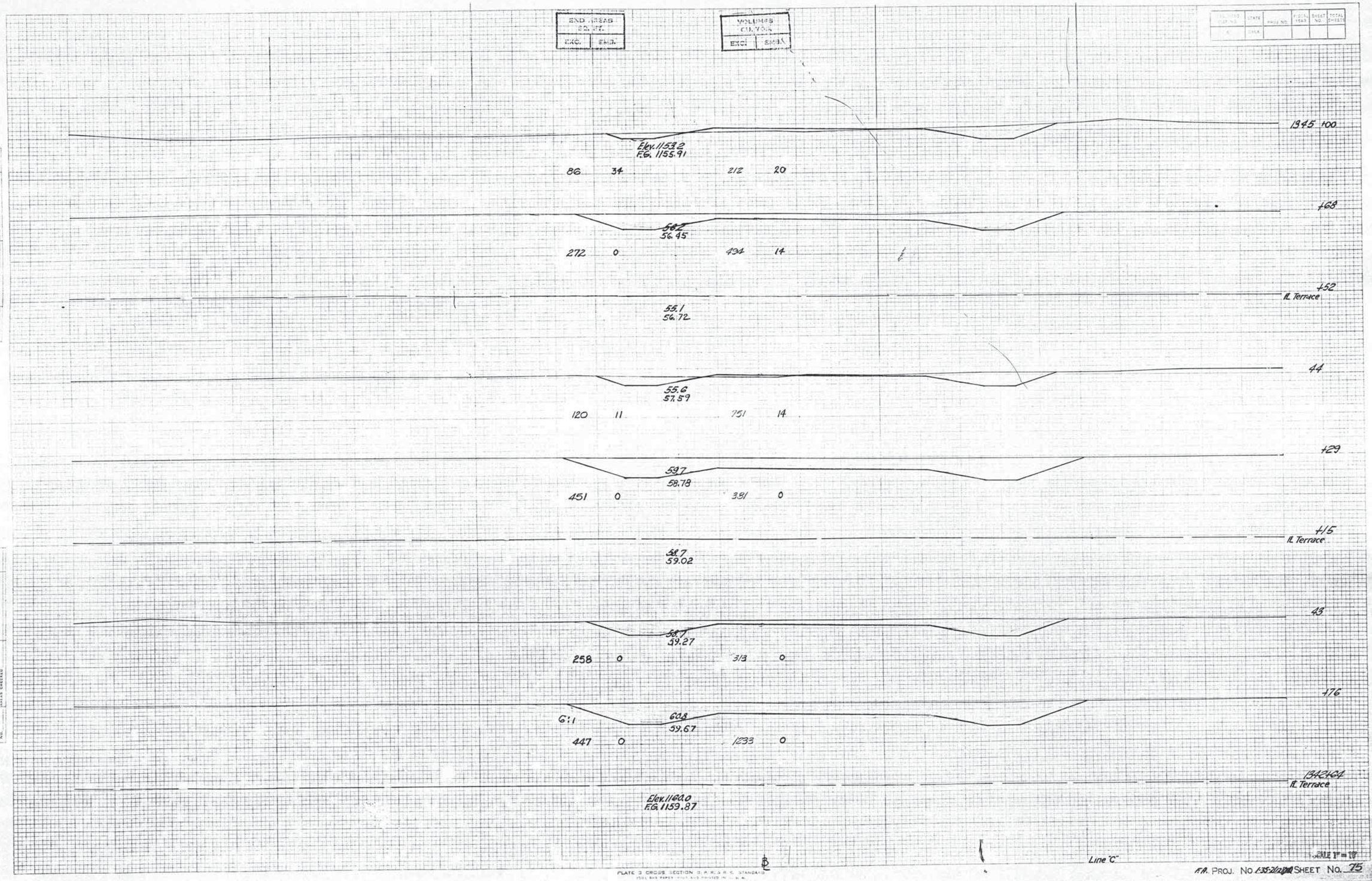


PLATE 3 CROSS SECTION B.P.R. & R.C. STANDARD
1951 AND PAPER PRINT AND PRINTED IN U.S.A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 1-35-2(12)(20) SHEET NO. 75

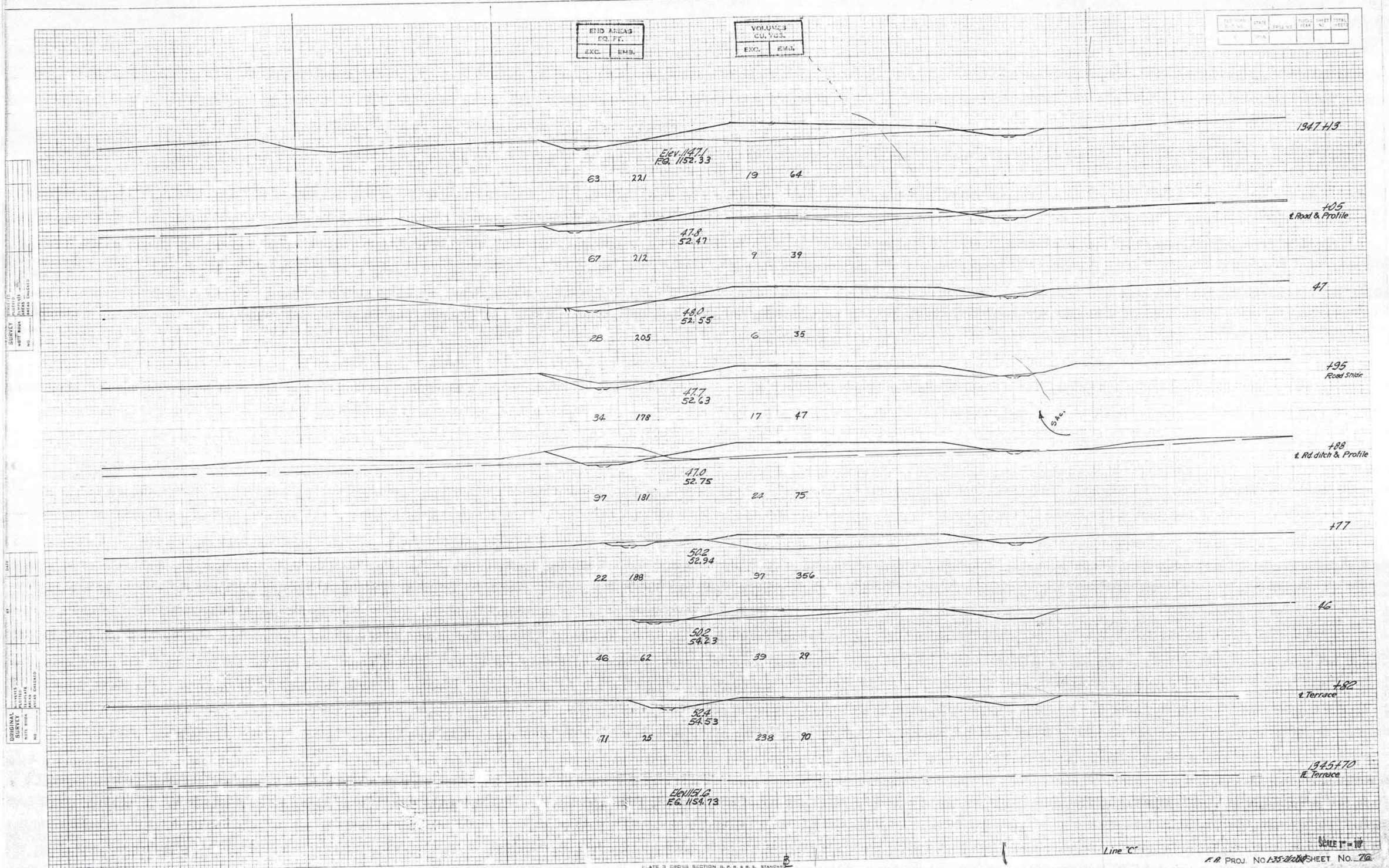
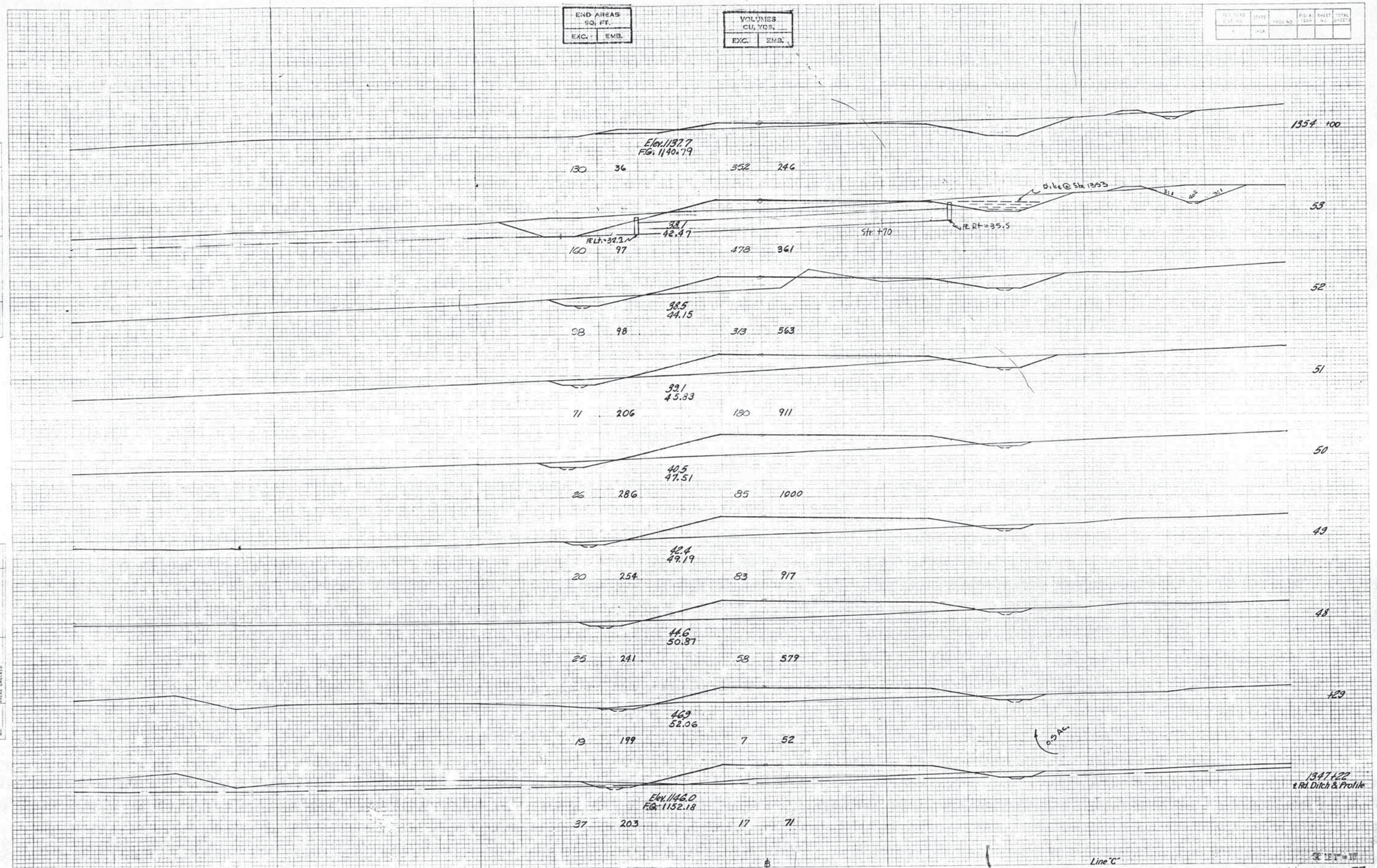
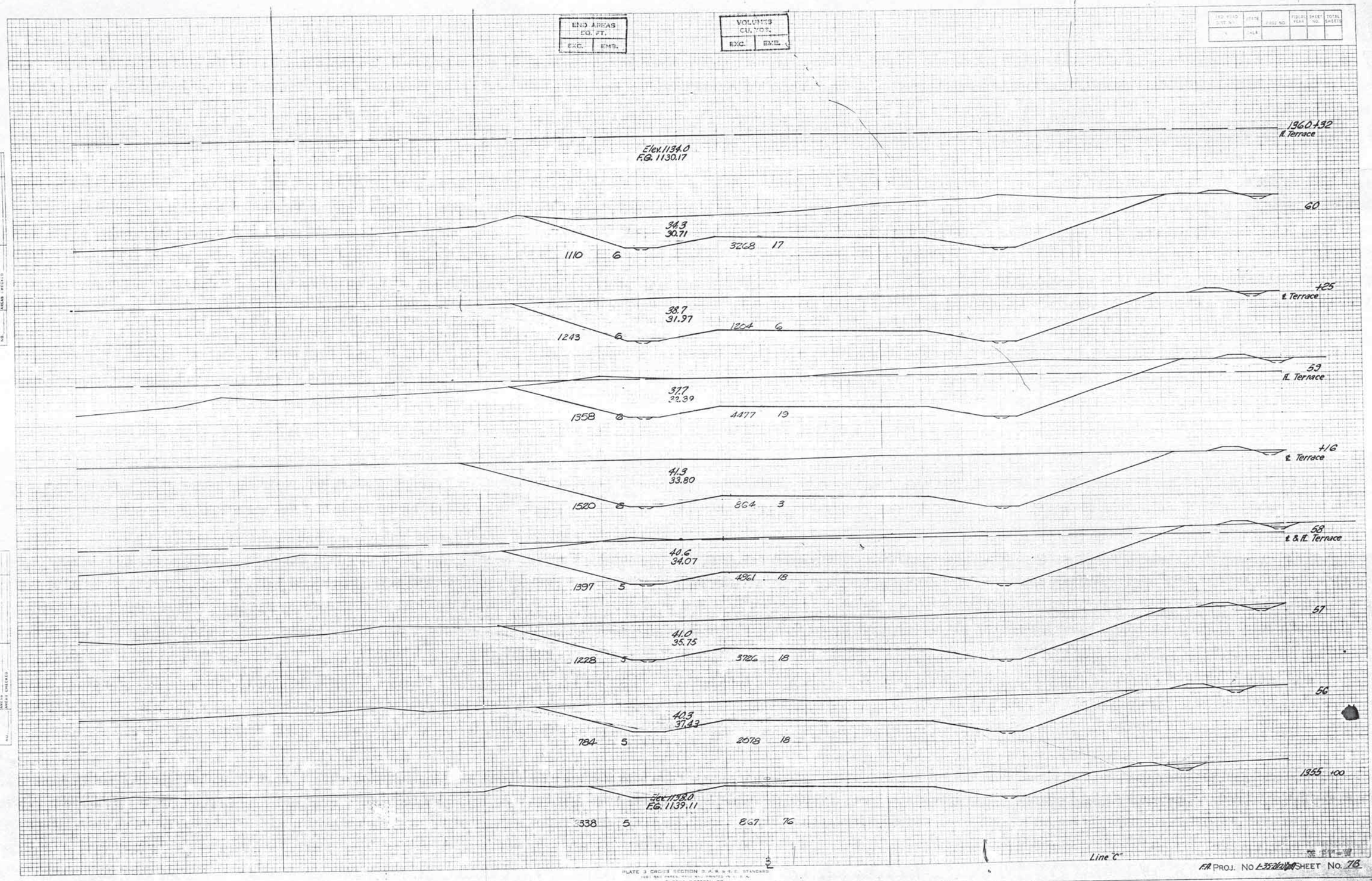
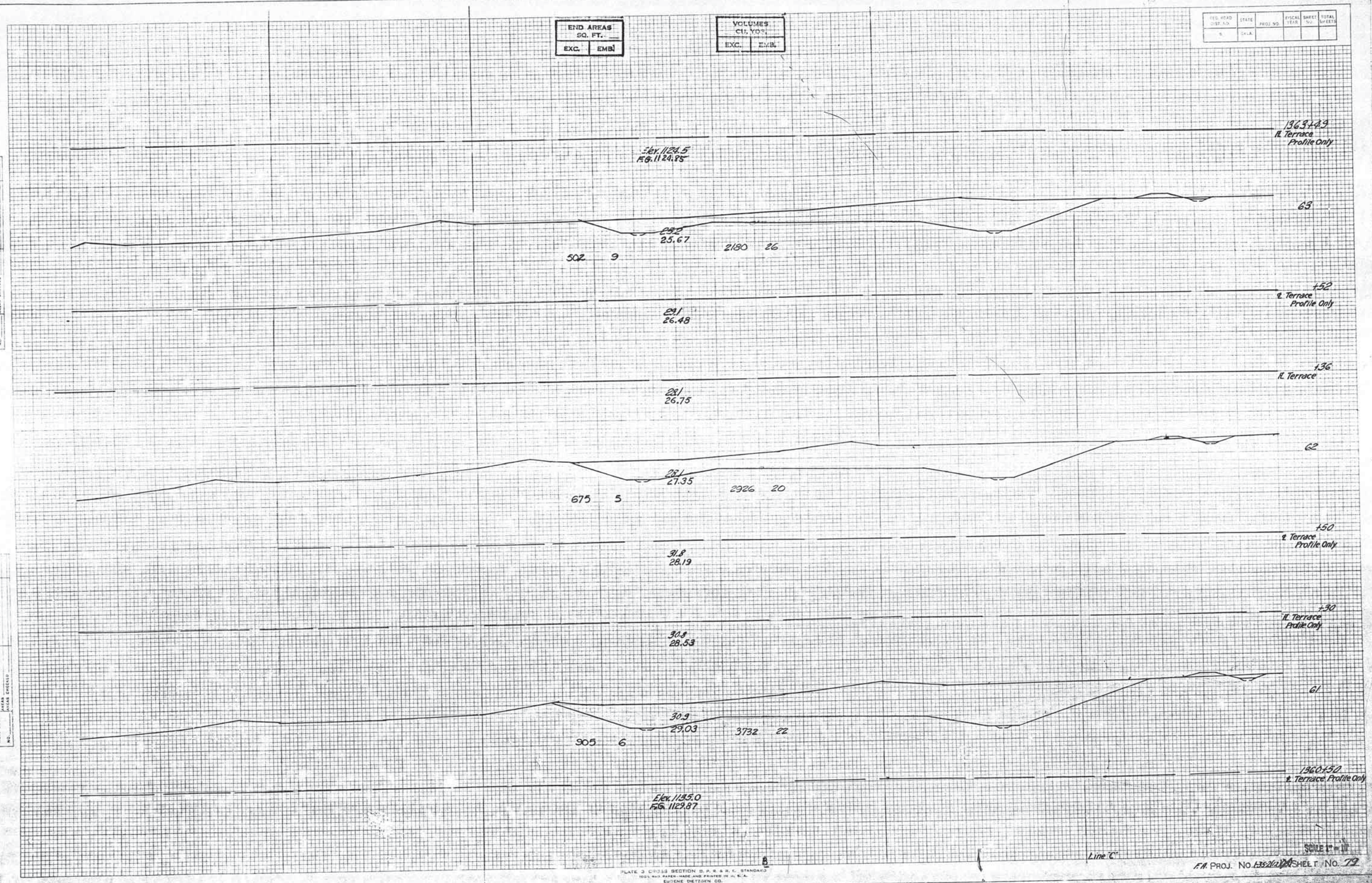


PLATE 3 CROSS SECTION D. P. R. & R. E. STANDARD
1000 RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
1354 100
Elev. 1137.7
F.G. 1140.79
130 36 352 246
Dike @ Sta 1353
53
38.1
42.47
Sta. +70
F.E. Rt. = 35.5
F.E. Lt. = 32.2
160 97 478 361
52
38.5
44.15
98 98 313 563
51
39.1
45.83
71 206 180 911
50
40.5
47.51
26 286 85 1000
49
42.4
49.19
20 254 83 917
48
44.6
50.87
25 241 58 579
47
46.9
52.06
19 199 7 52
0.9 Ac.
1347+22
Rd. Ditch & Profile
Elev. 1146.0
F.G. 1152.18
37 203 17 71
Line "C"
1" = 10'
PLATE 3 CROSS SECTION D. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO.
F.A. PROJ. NO. SHEET NO. 77


END AREAS SQ. FT.
EXC.
EMB.
VOLUMES CU. YDS.
EXC.
EMB.
1960+32
℄ Terrace
Elev. 1134.0
F.G. 1130.17
60
34.3
30.71
1110
6
3268
17
+25
℄ Terrace
38.7
31.97
1243
6
1204
6
59
℄ Terrace
37.7
32.39
1358
6
4477
19
+16
℄ Terrace
41.3
33.80
1520
6
864
3
58
℄ & ℄ Terrace
40.6
34.07
1397
5
4861
18
57
41.0
35.75
1228
5
3726
18
56
40.3
37.43
784
5
2078
18
1355 +00
Elev. 1138.0
F.G. 1139.11
338
5
867
76
Line "C"
FINAL SURVEY
ORIGINAL SURVEY
PLATE 3 CROSS SECTION
F.A. PROJ. NO
SHEET NO. 78


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO.
STATE
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
1363+49
℄ Terrace Profile Only
Elev. 1124.5
F.G. 1124.85
63
25.67
2180 26
502 9
+52
℄ Terrace Profile Only
26.48
+36
℄ Terrace
26.75
62
27.35
2926 20
675 5
+50
℄ Terrace Profile Only
31.8
28.19
+30
℄ Terrace Profile Only
30.8
28.53
61
30.9
29.03
3732 22
905 6
1360+50
℄ Terrace Profile Only
Elev. 1135.0
F.G. 1129.87
Line "C"
SCALE 1" = 10'
F.A. PROJ. NO. 1352(2)
SHEET NO. 79
FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
DATE
BY
DATE
PLATE 3 CROSS SECTION D. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

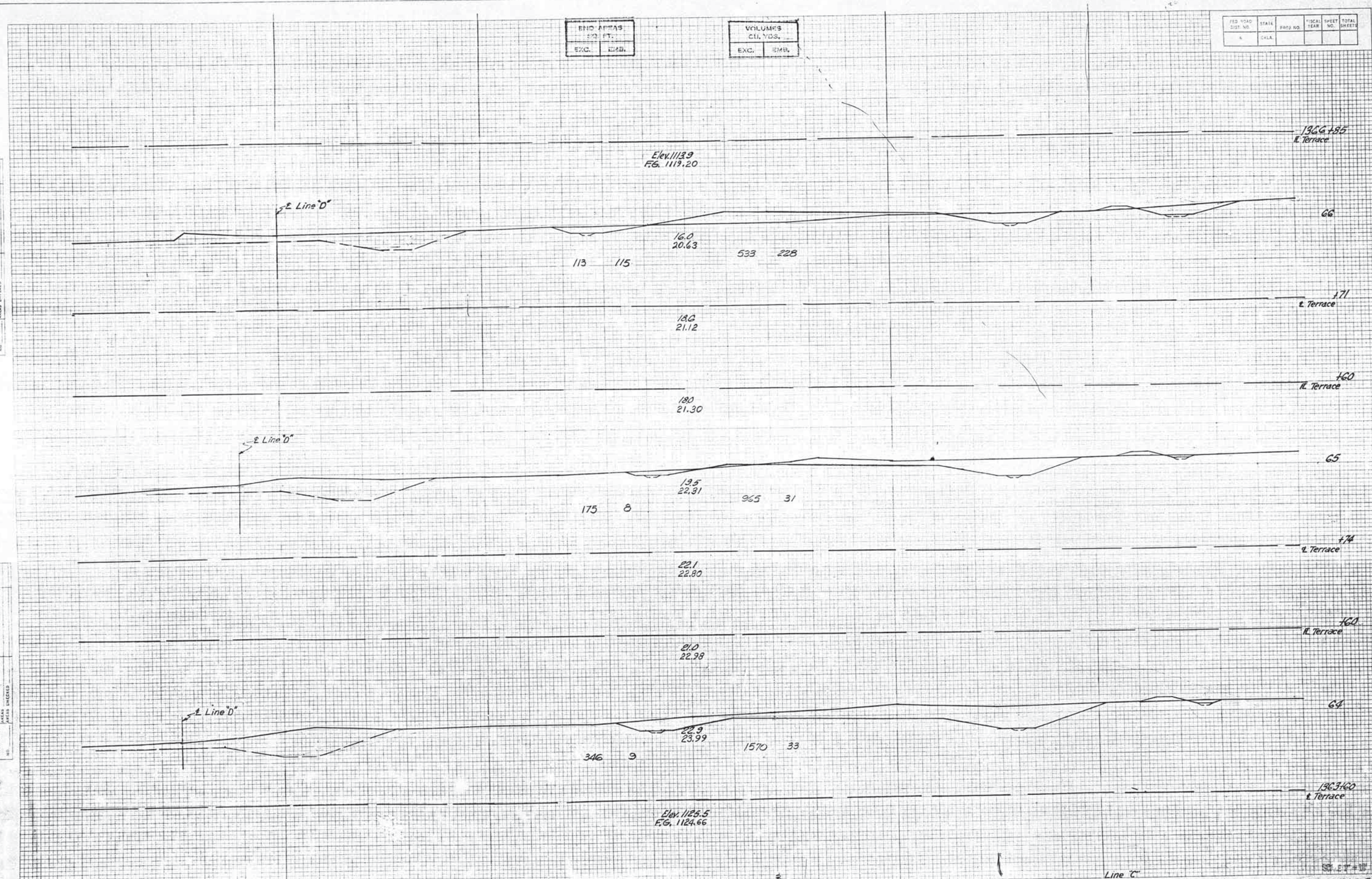


PLATE 3 CROSS SECTION G. P. R. & R. L. STANDARD
EUGENE DIETZGEN CO.

F.A. PROJ. NO. I-35-2(2)(4) SHEET NO. 80

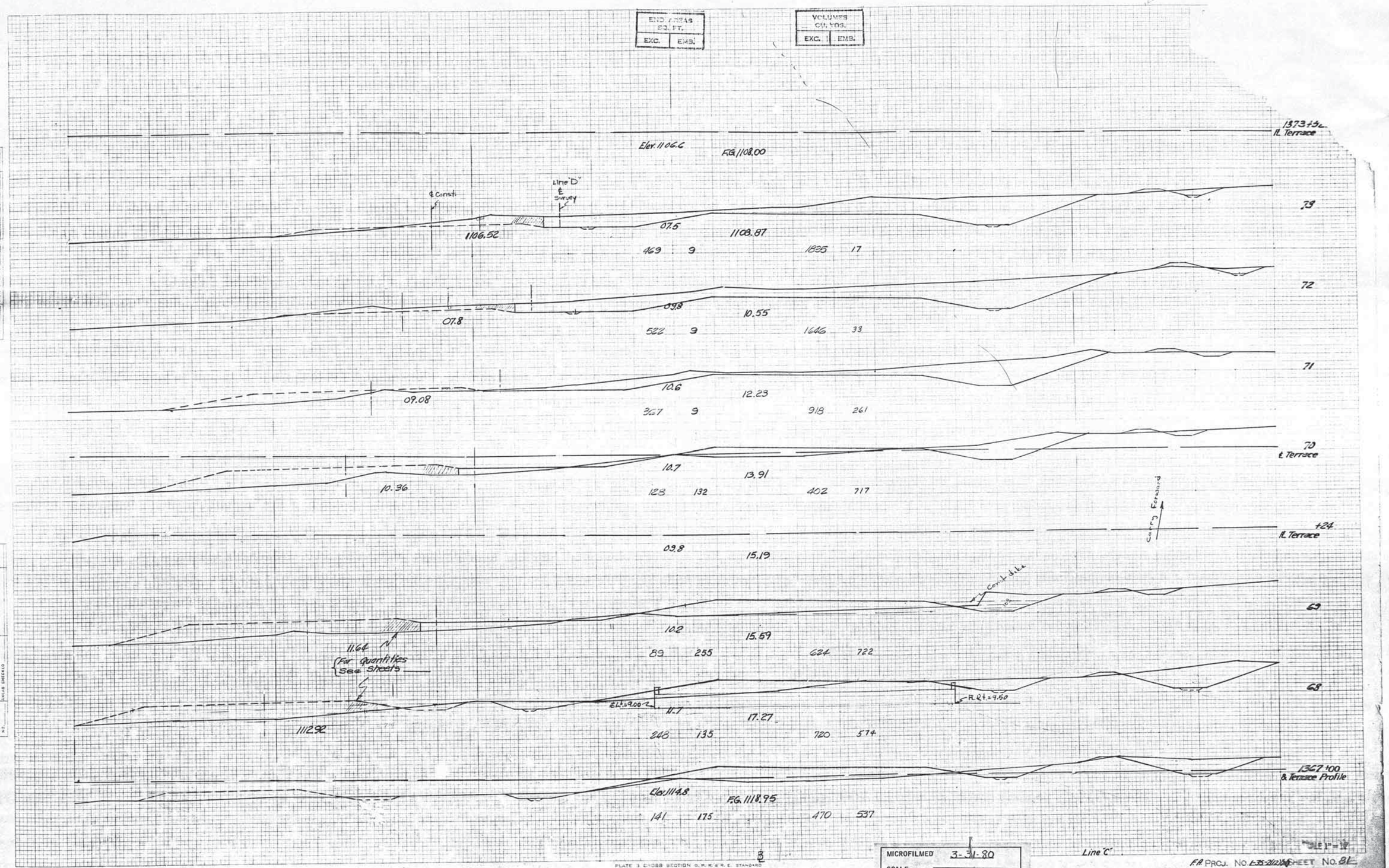


PLATE 3 CROSS SECTION D. R. R. & R. E. STANDARD

F.A. PROJ. NO. 1-35-2(12)(6) SHEET NO. 81

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	OKLA.				

CUBIC YDS.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.

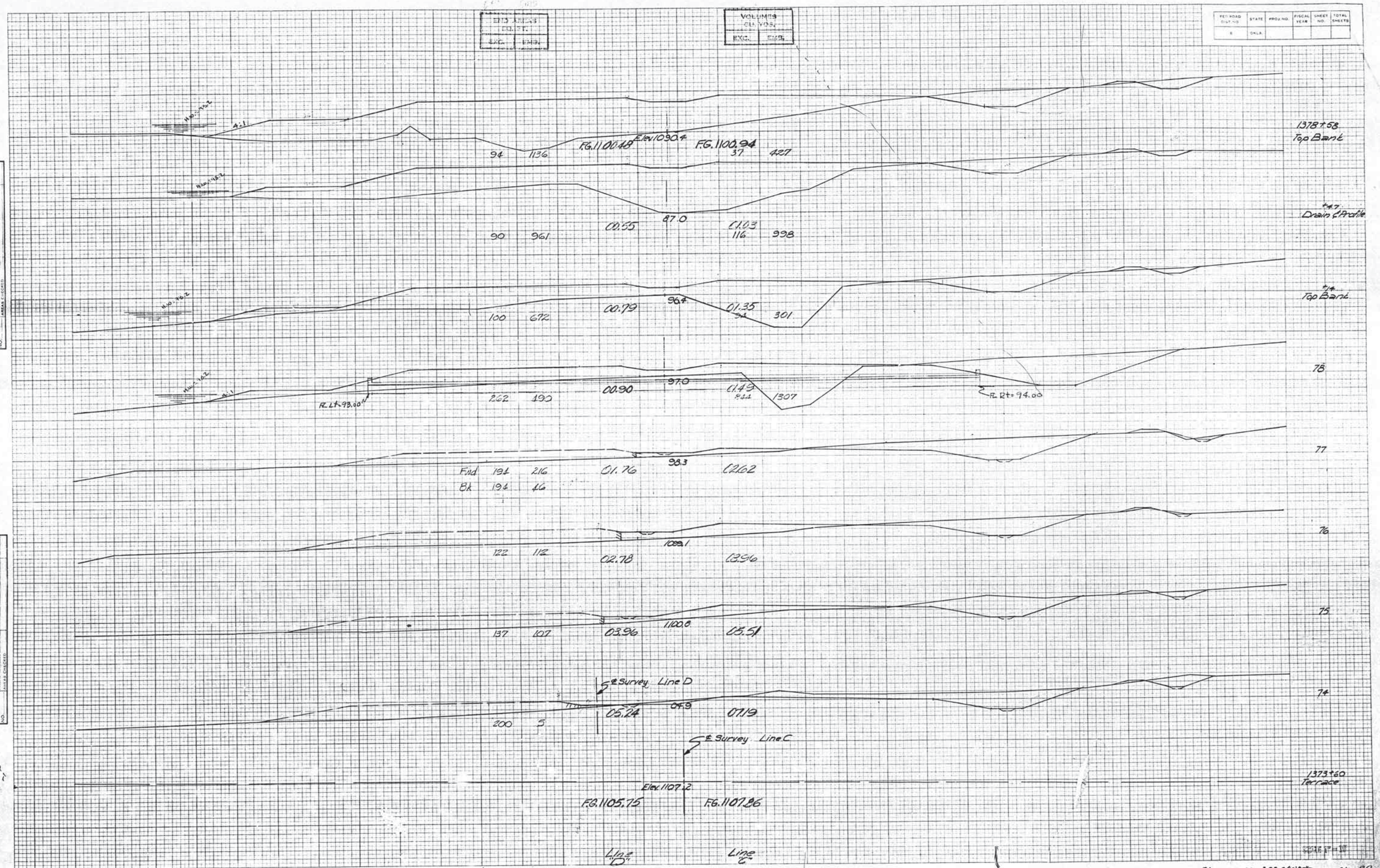
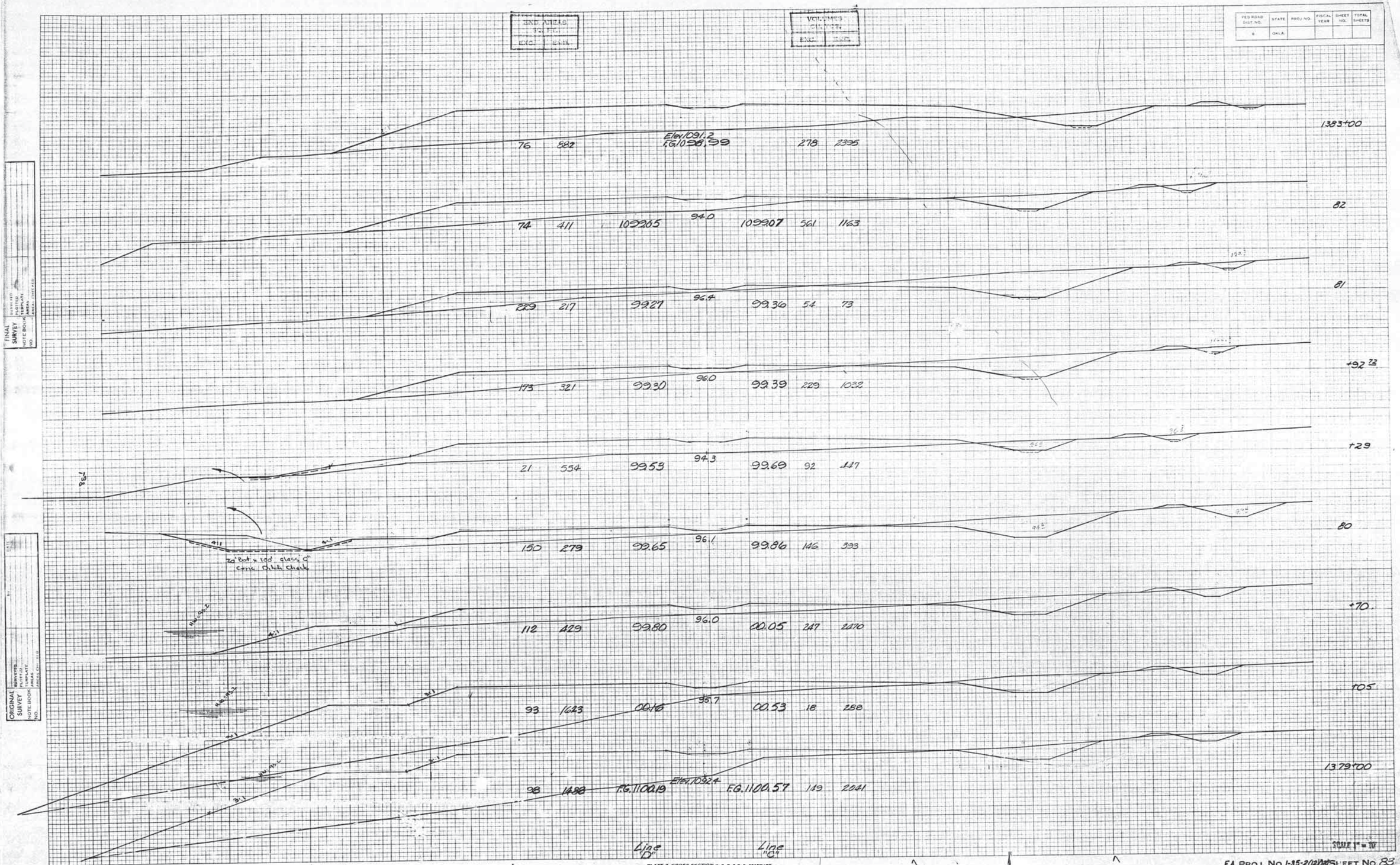


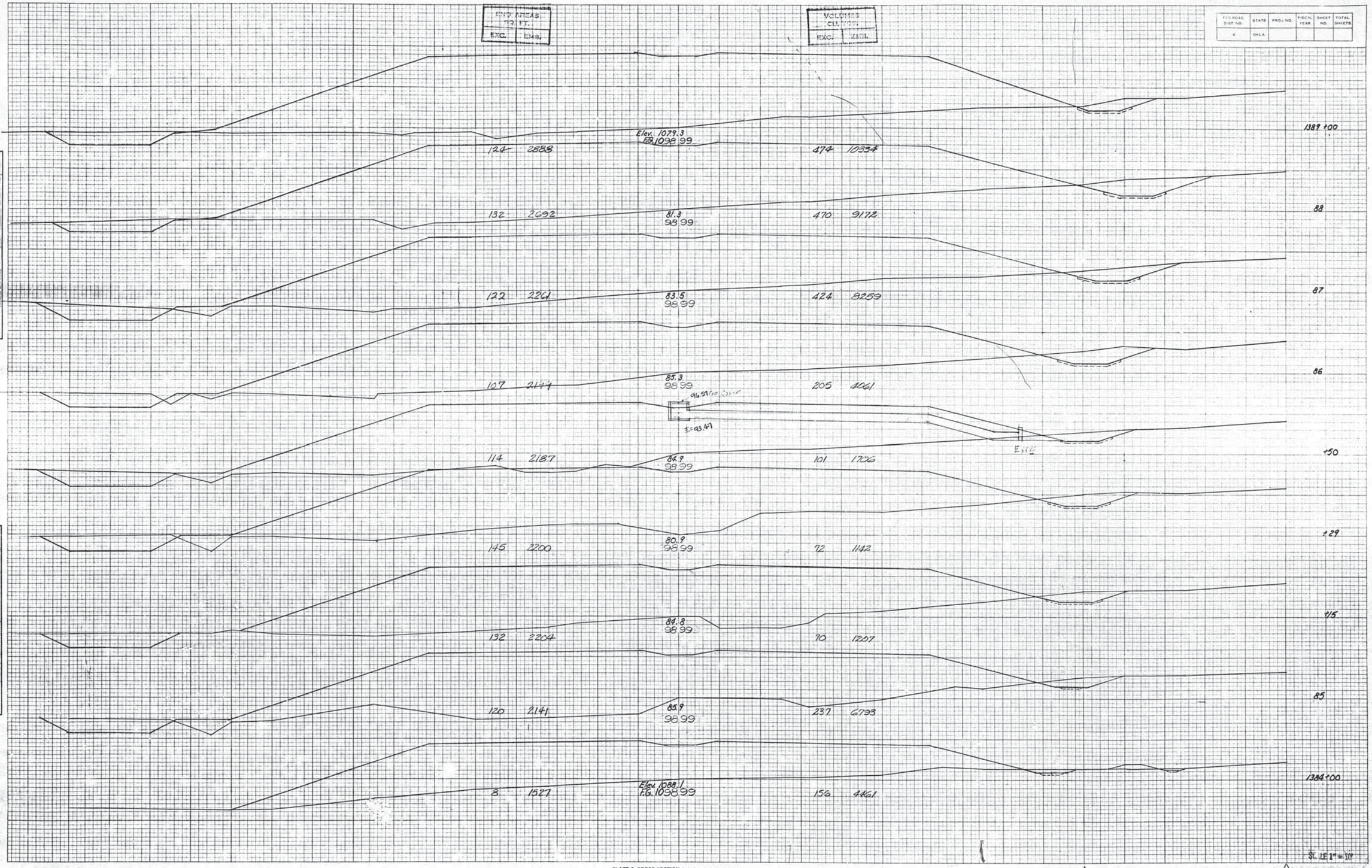
PLATE 3-CROSS SECTION © P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. I-35-2(12)[illegible] SHEET No. 82



END AREAS
VOLUMES
FED ROAD DIST. NO.
STATE
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
6
OKLA.
1383+00
76 882 Elev. 1091.2 F.G. 1098.99 278 2395
82
74 411 1099.05 94.0 1099.07 561 1163
81
229 217 99.27 96.4 99.36 54 73
+92.72
173 321 99.30 96.0 99.39 229 1032
+29
21 554 99.53 94.3 99.69 92 447
80
150 279 99.65 96.1 99.86 146 393
20' Bot x 100' class "C" Conc. Ditch Check
+70
112 429 99.80 96.0 00.05 247 2470
+05
93 1623 00.16 95.7 00.53 18 288
1379+00
98 1488 F.G. 1100.19 Elev. 1092.4 F.G. 1100.57 149 2041
Line "D"
Line "C"
FINAL SURVEY
ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK NO.
PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO
SCALE 1" = 10'
F.A. PROJ. No. 1-35-2(12)(3) SHEET No. 83

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				



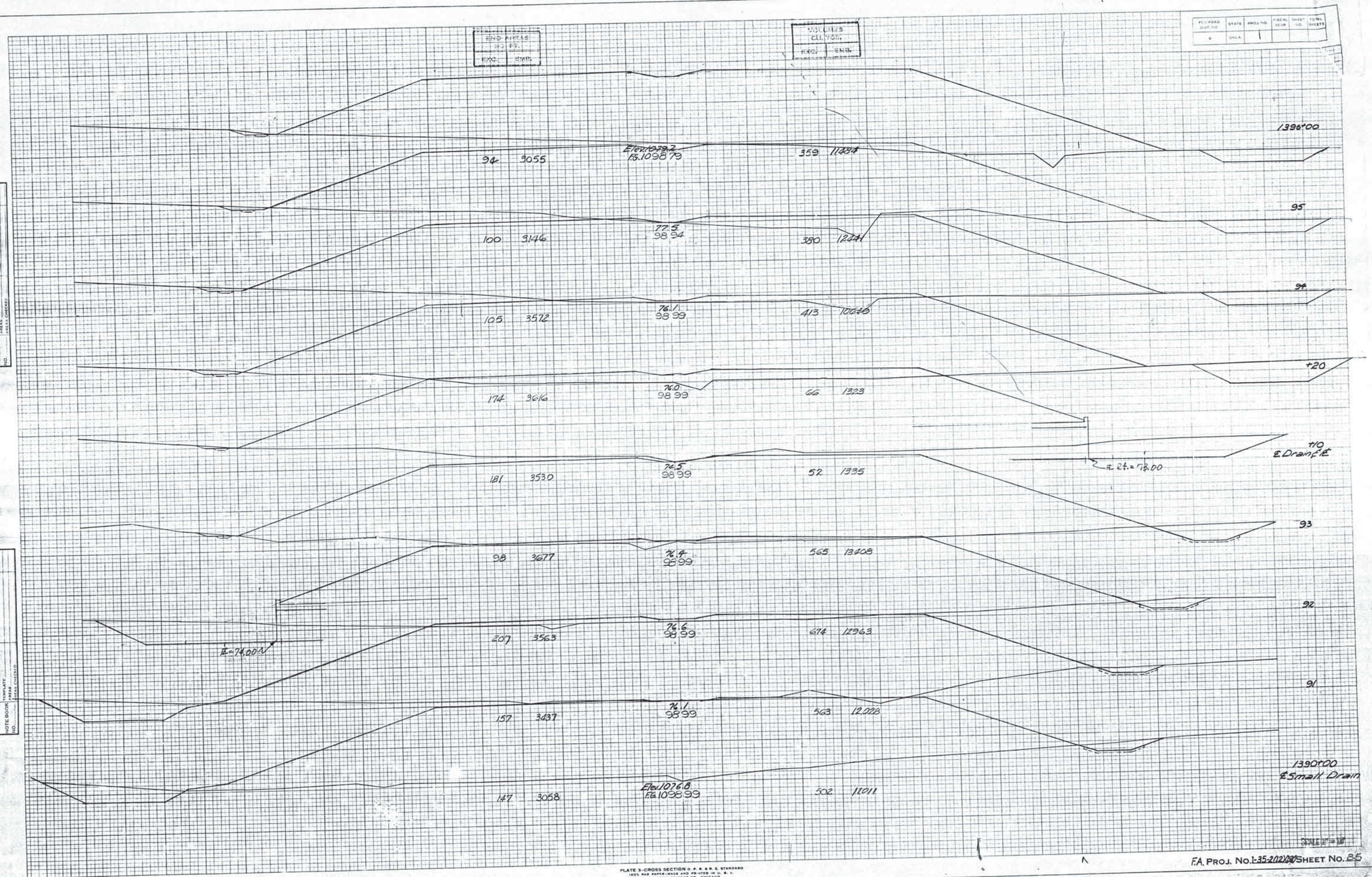
FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED, NOTE BOOK, NO. — BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED, NOTE BOOK, NO. — BY, DATE

PLATE 3-CROSS SECTION C. R. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. I-35-2(12)[illegible] SHEET No. 84

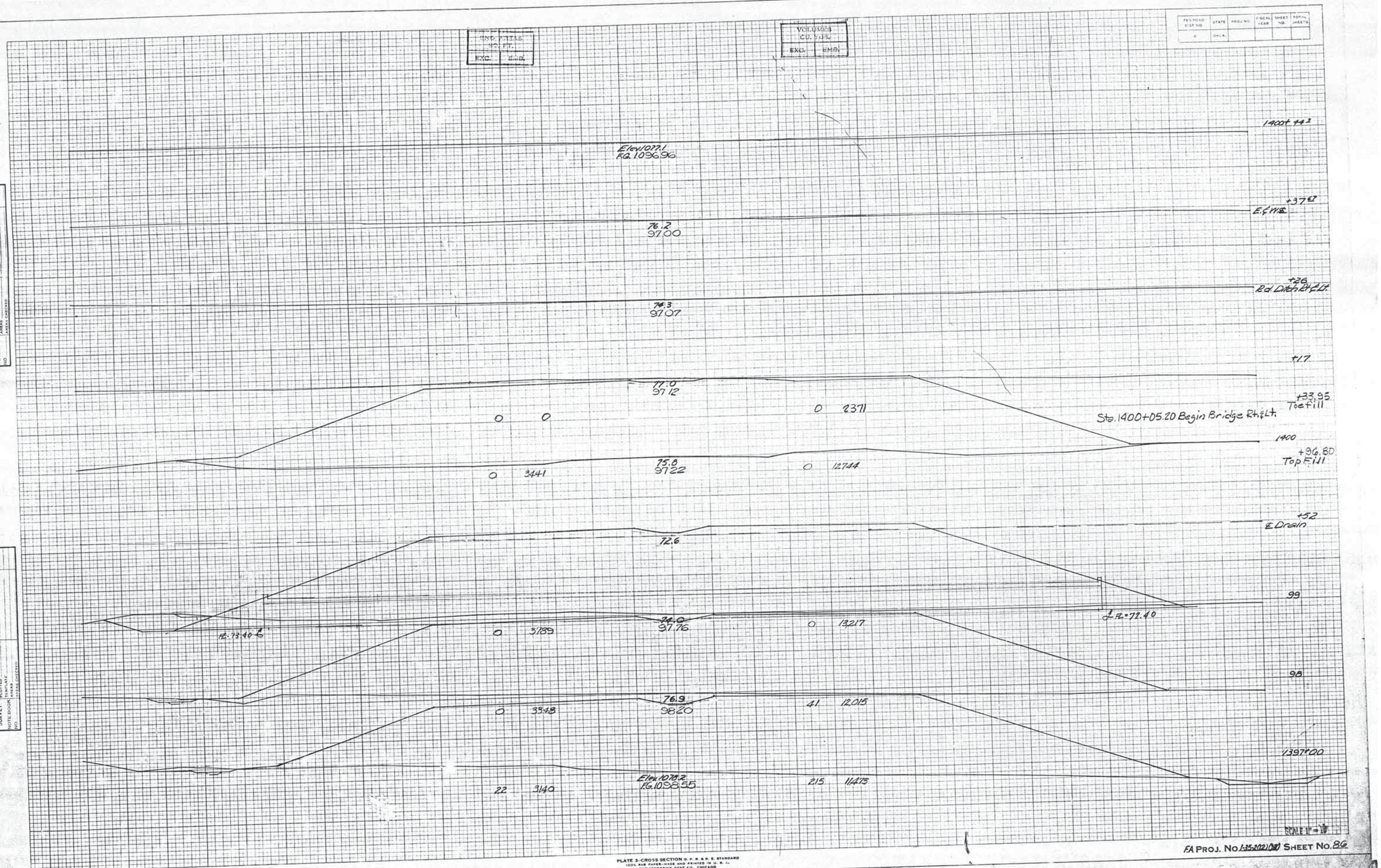
FEDERAL DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	1			



FINAL SURVEY — SURVEYED, PLOTTED, VOLUMES, AREAS, AREAS CHECKED, NOTE BOOK, NO.

ORIGINAL SURVEY — SURVEYED, PLOTTED, VOLUMES, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

PLATE 3-CROSS SECTION O. P. R. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO



FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. 1-35-2(021)(30) SHEET NO. 86

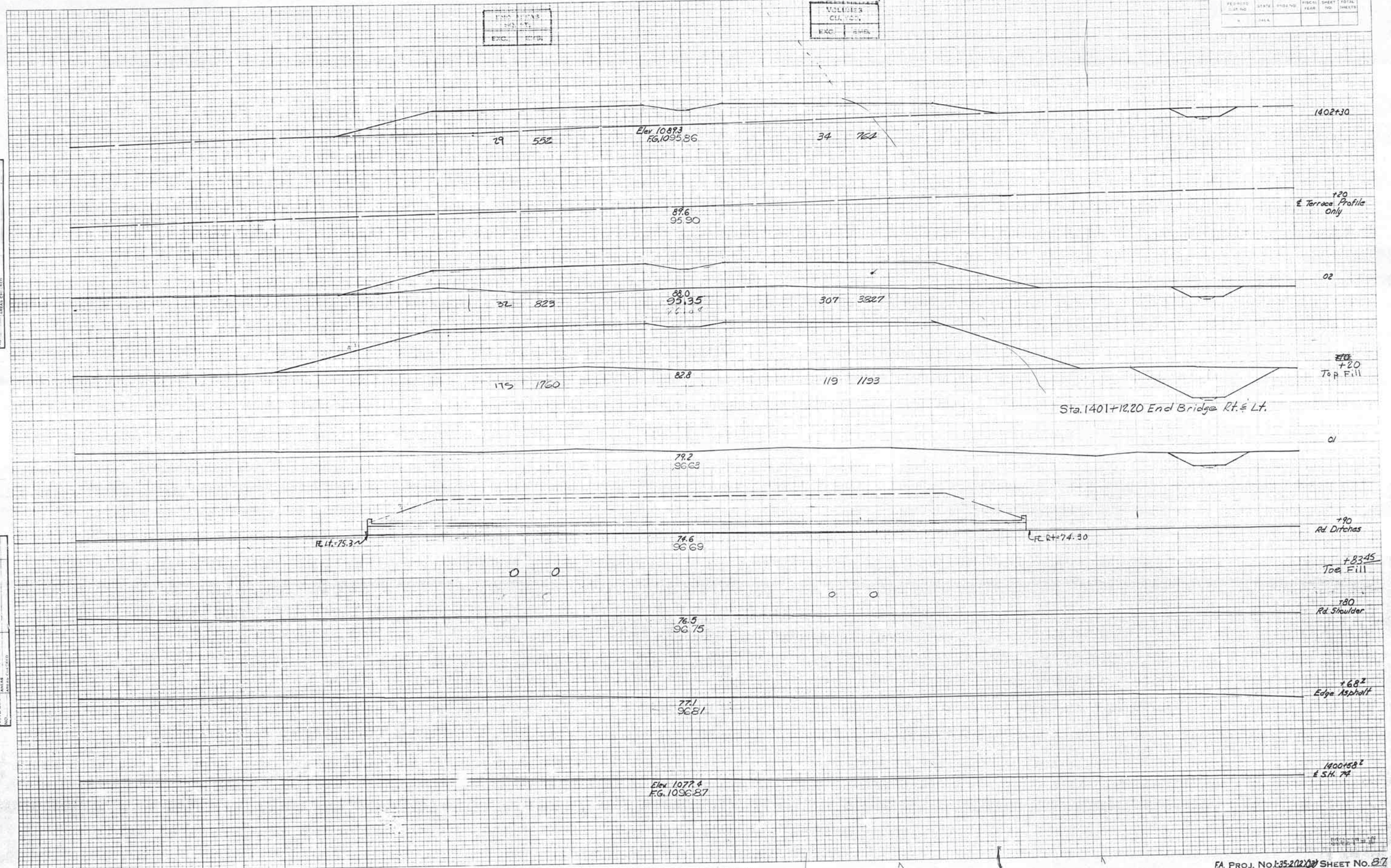
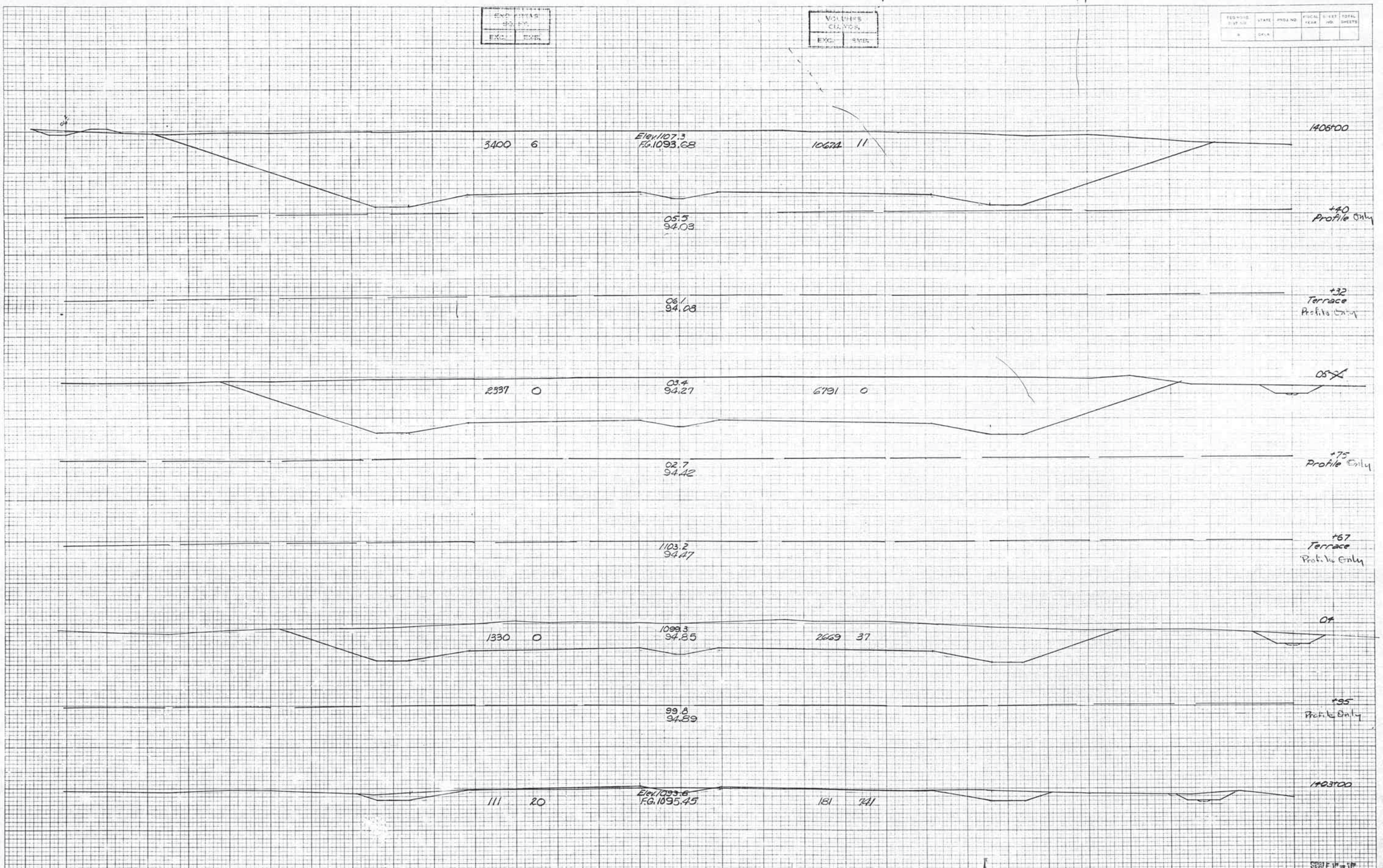


PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. 1-35-2(12)(32) SHEET No. 87

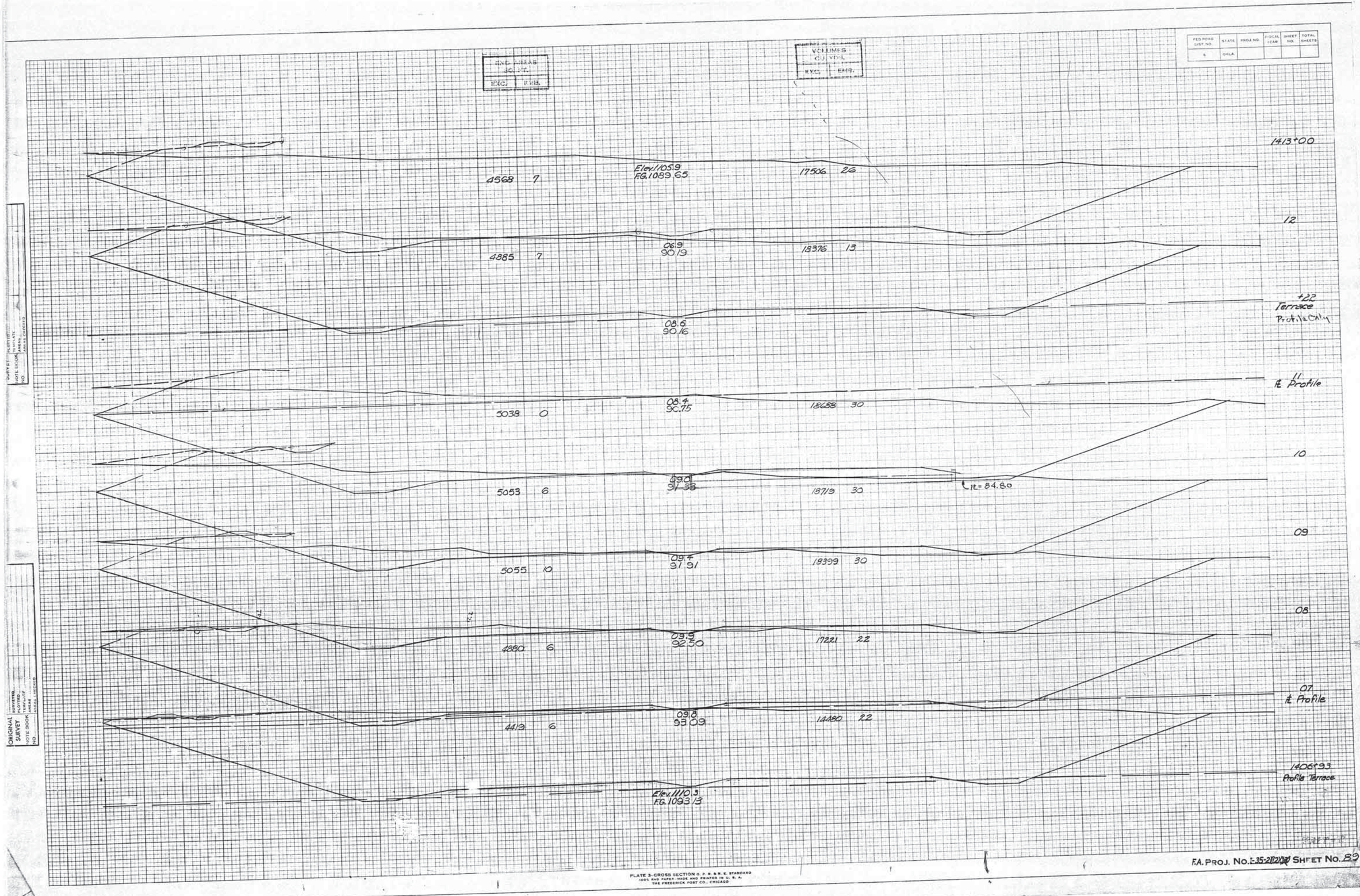


FINAL SURVEY — NOTE BOOK NO. — SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. 1-35-2(02)(3) SHEET No. 88



F.A. PROJ. No. I-35-2(12)(3) SHEET No. 89

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

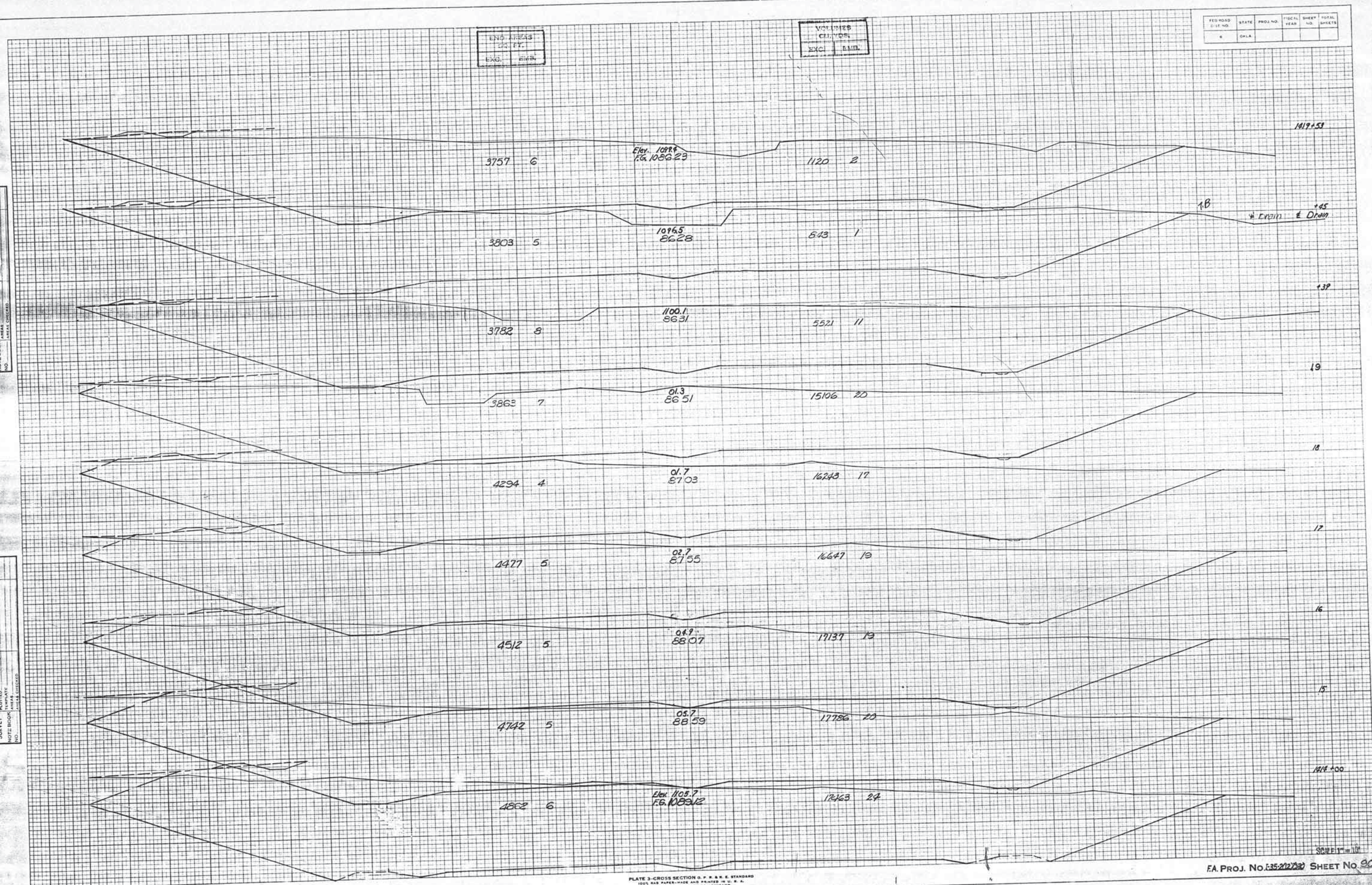
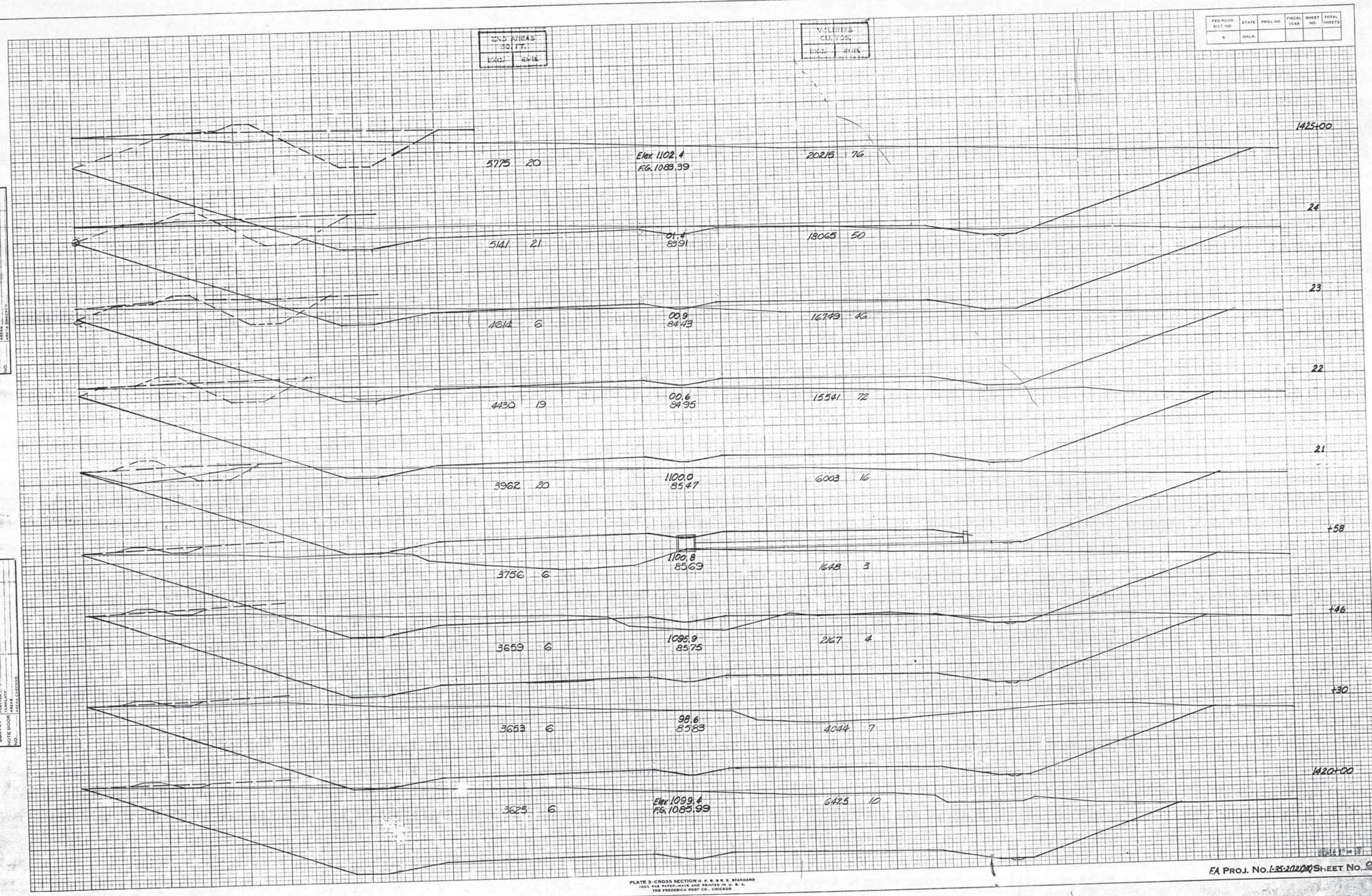
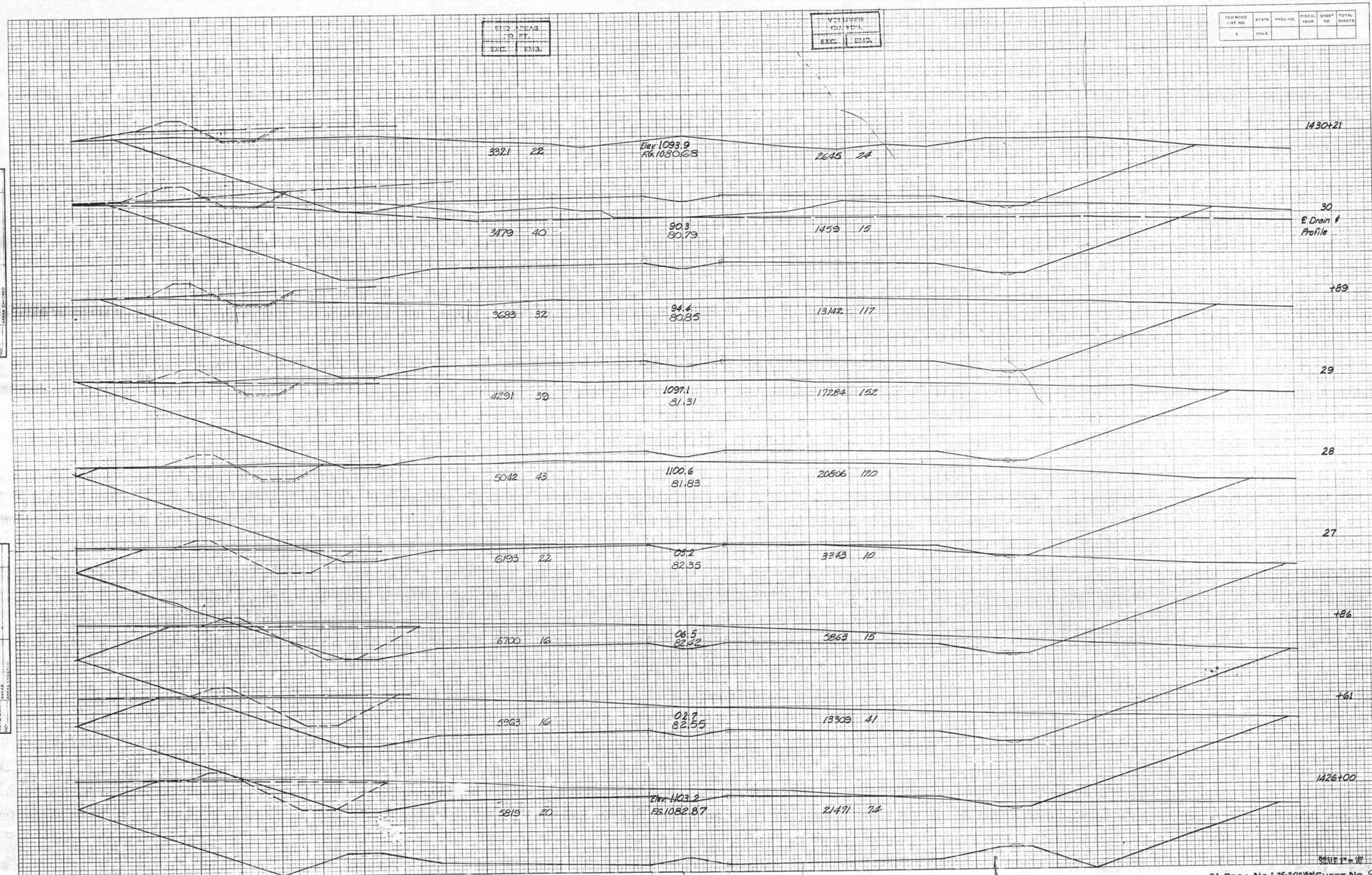


PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. F-35-202(30) SHEET NO. 90

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				





FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

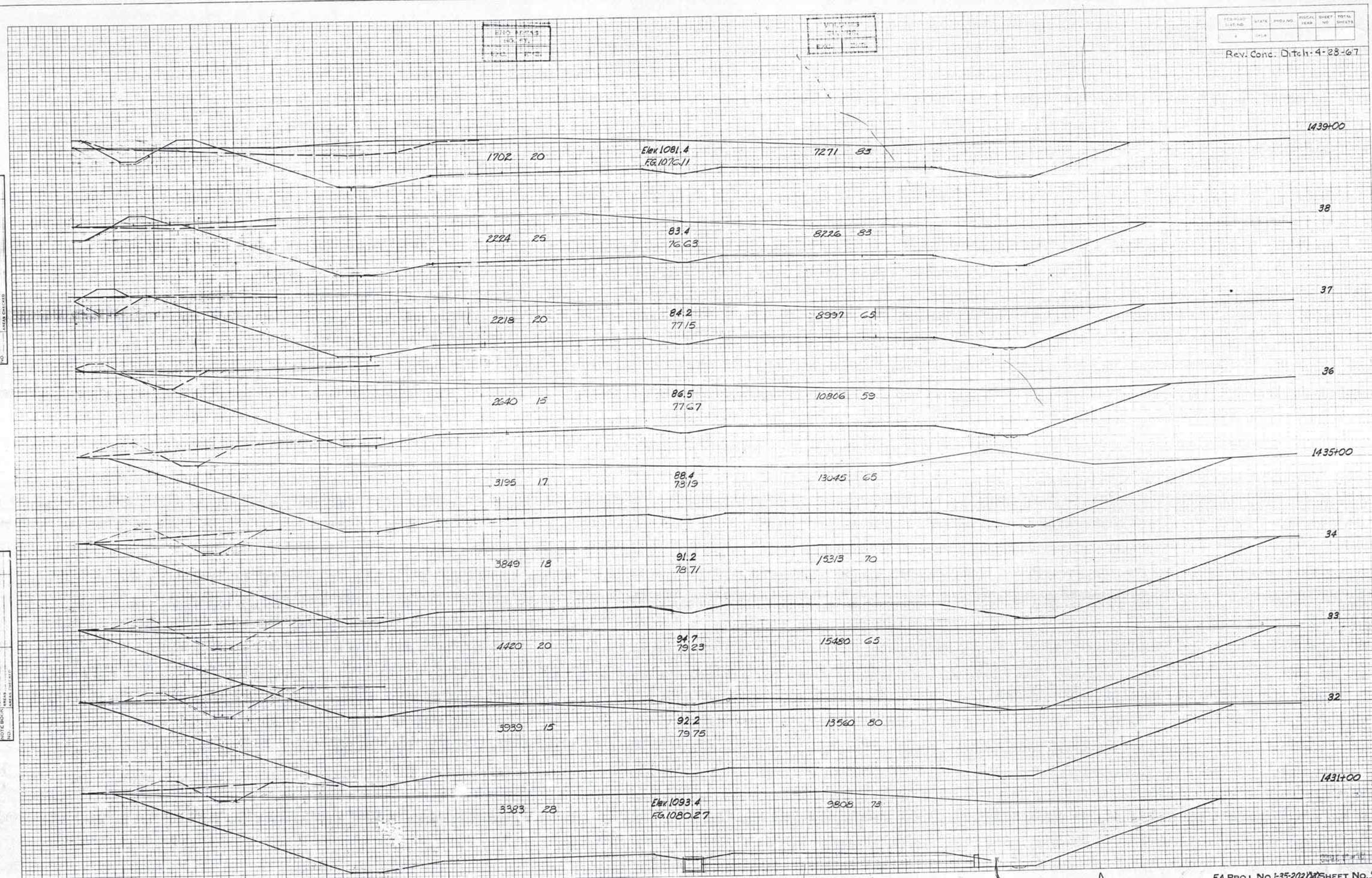
ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

PLATE 3—CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. I-35-2(12)(32) SHEET No. 92

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ILL.				

Rev. Conc. Ditch - 4-28-67

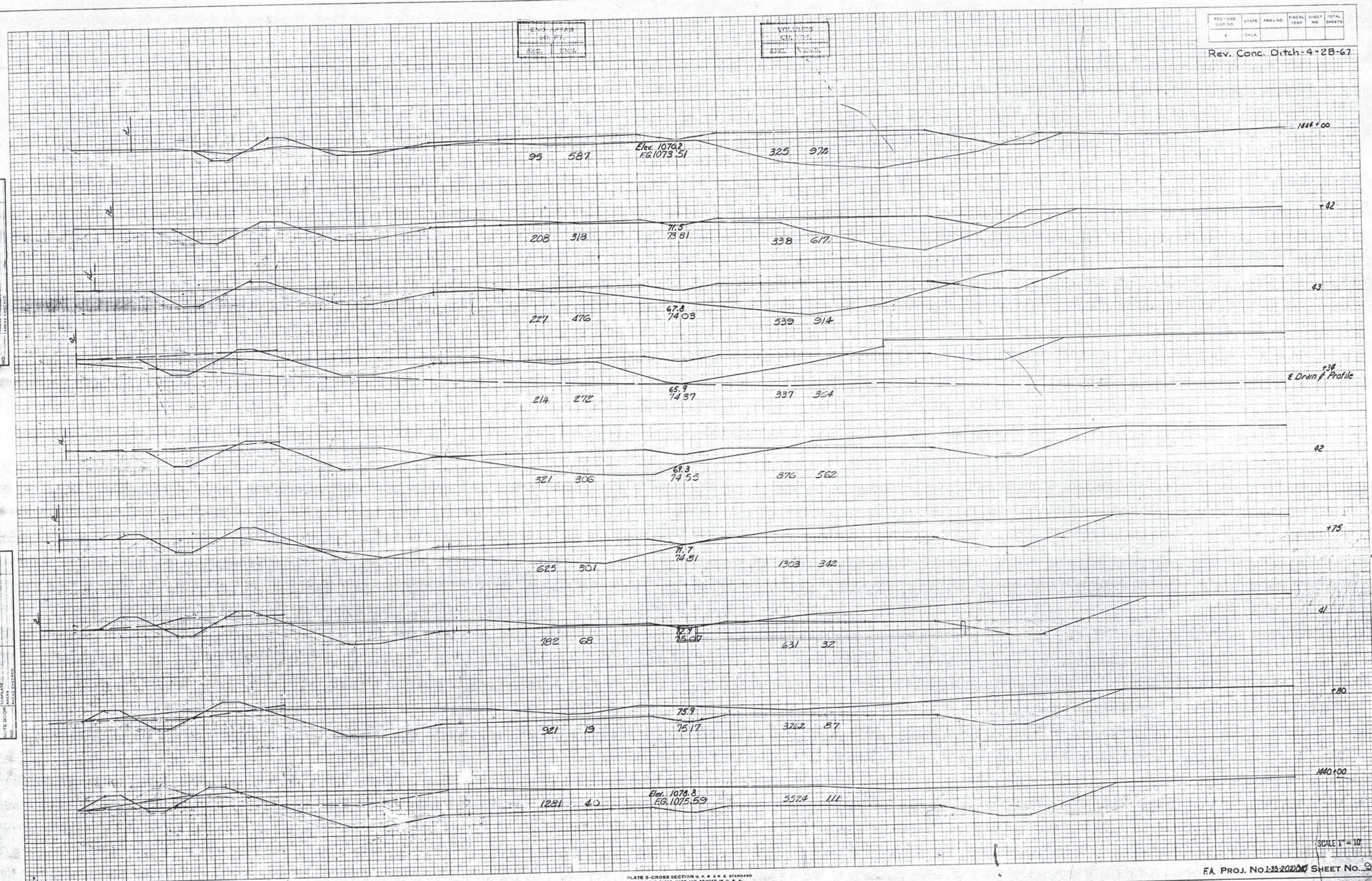


FINAL SURVEY NOTEBOOK NO. SURVEYED PLOTTED TRACED AREAS CHECKED

ORIGINAL SURVEY NOTEBOOK NO. SURVEYED PLOTTED TRACED AREAS CHECKED DATE BY

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
1005 RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. I-35-202(37) SHEET No. 93

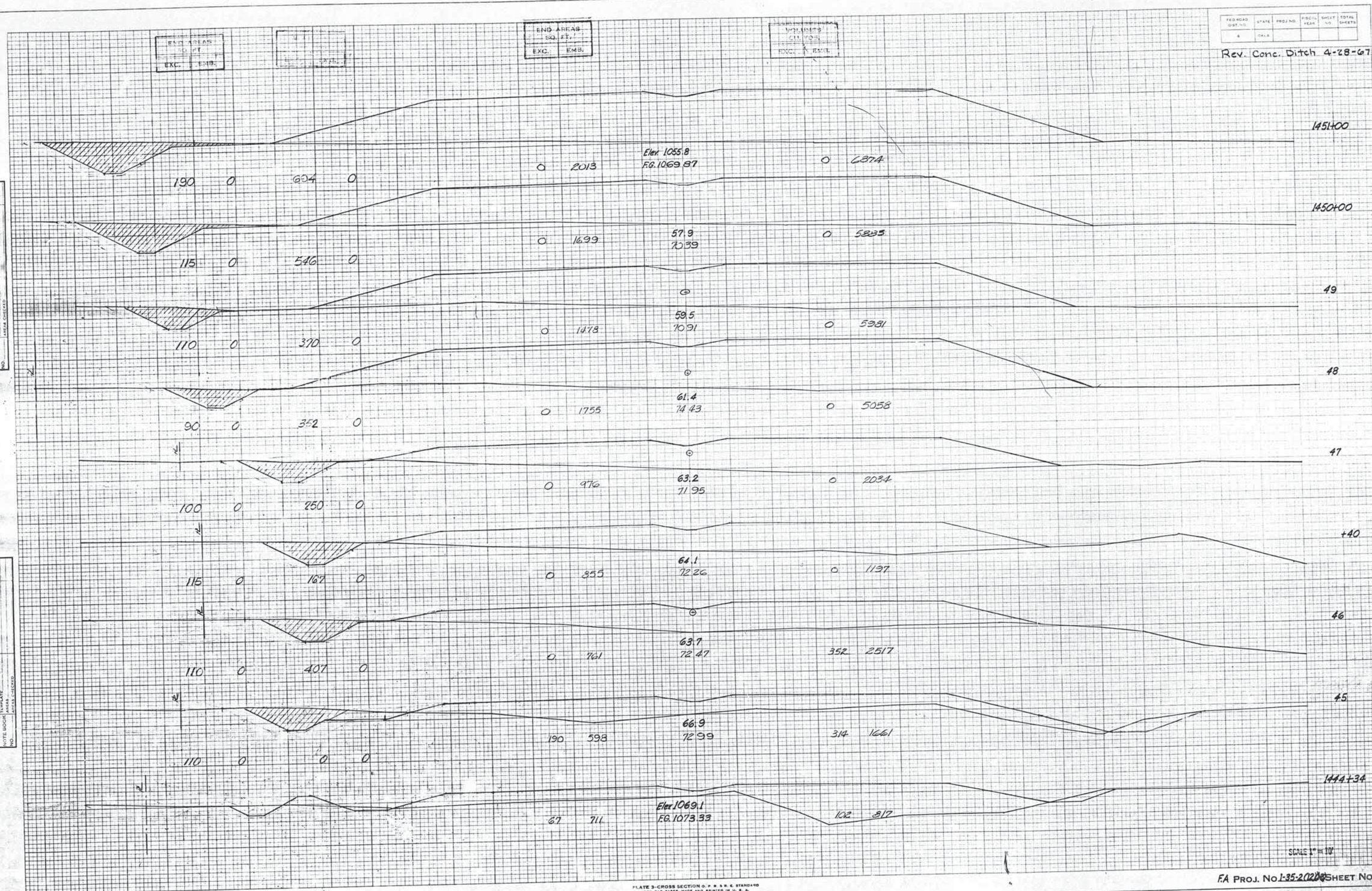


F.A. PROJ. NO. 1-35-202(00) SHEET NO. 94

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ILL.				

Rev. Conc. Ditch 4-28-67

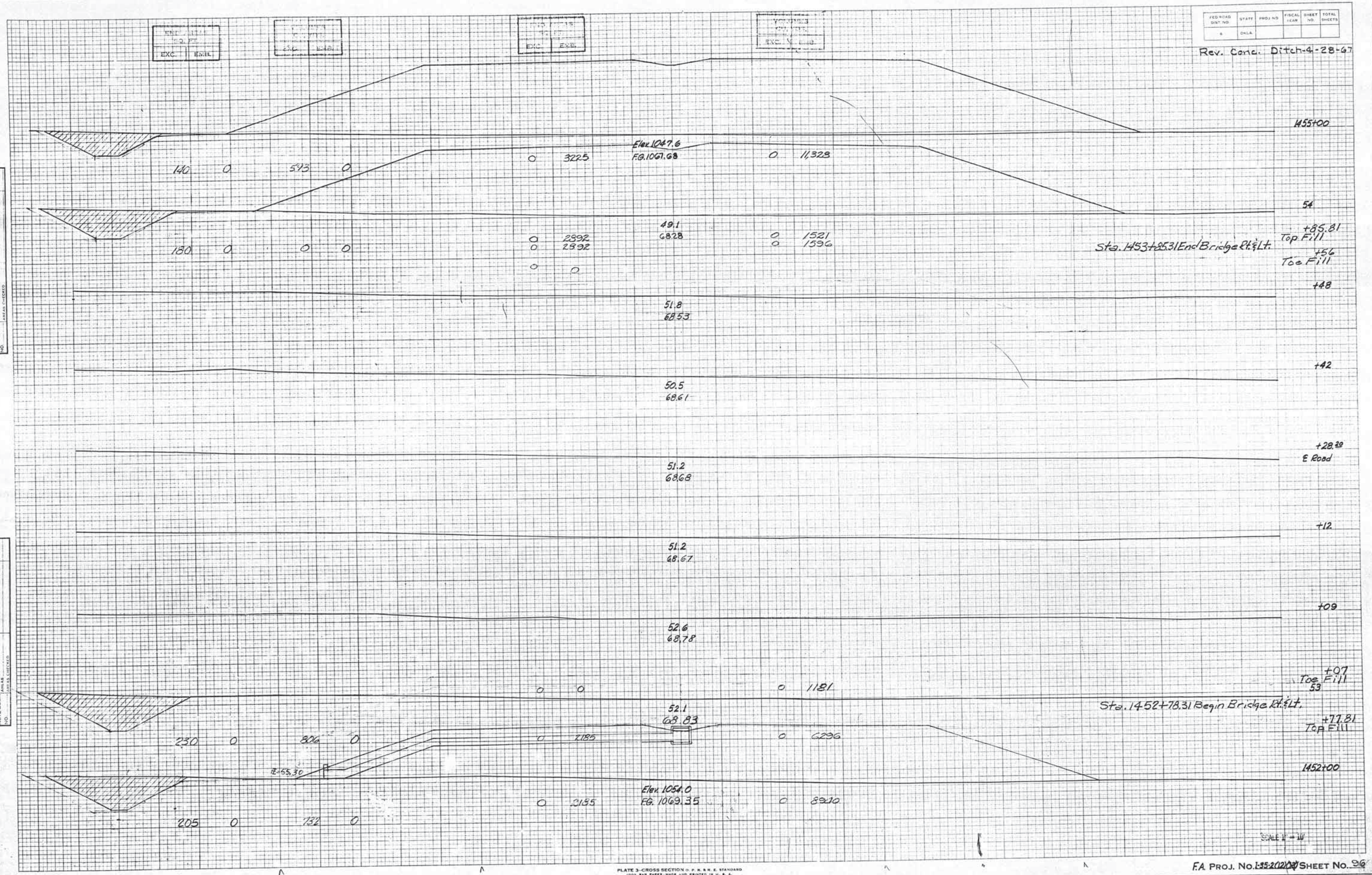


ORIGINAL SURVEY: SURVEYED, PLOTTED, DATE, NOTE BOOK, AREAS CHECKED, NO.

SURVEY: PLOTTED, DATE, NOTE BOOK, AREAS CHECKED, NO.

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. I-35-2(128) SHEET NO. 96



FINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
1005 RAG PAPER MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. 1-35-2(12)(38) SHEET No. 96

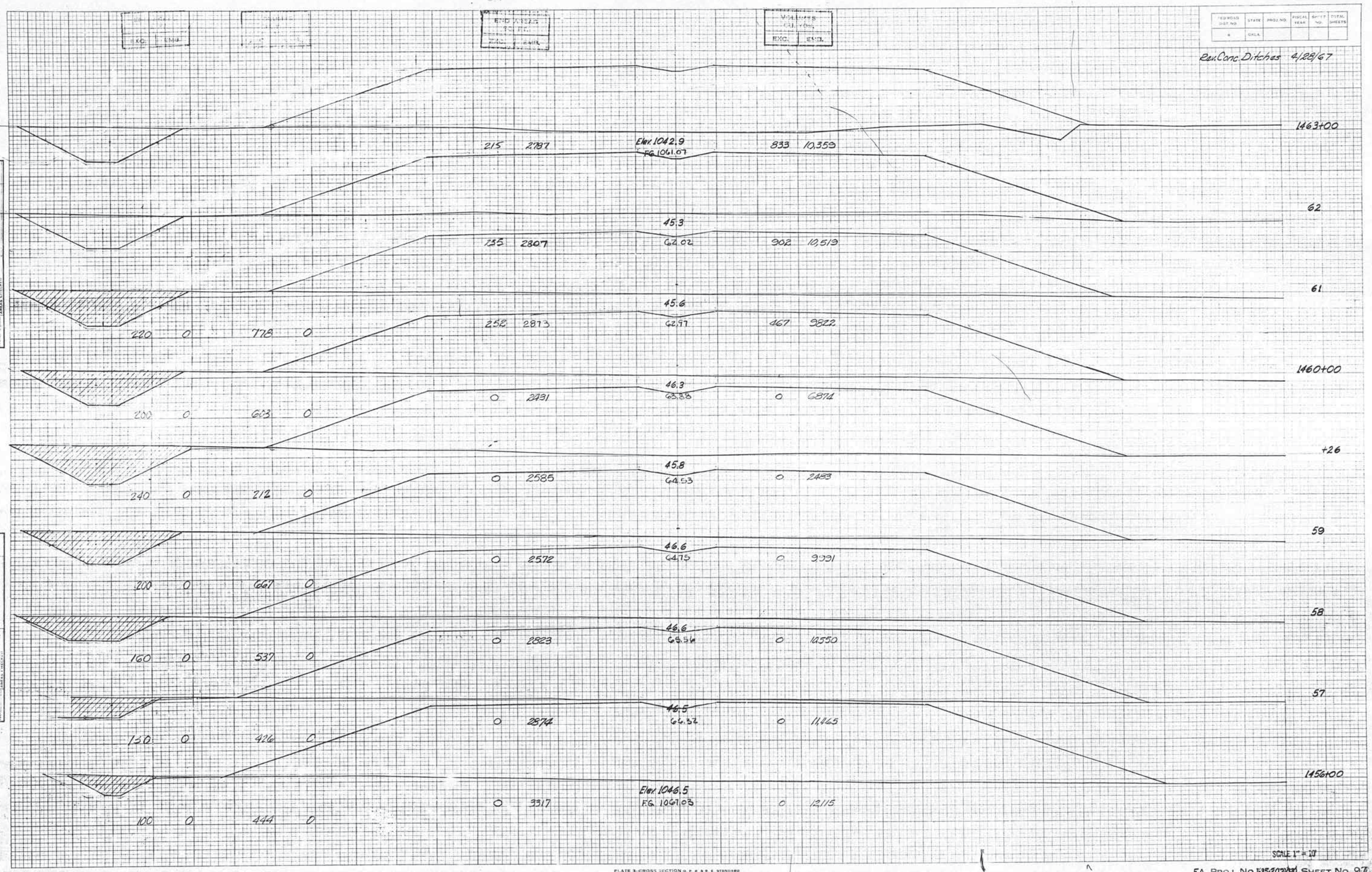


PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. 1-35-2(12)(13) SHEET NO. 97

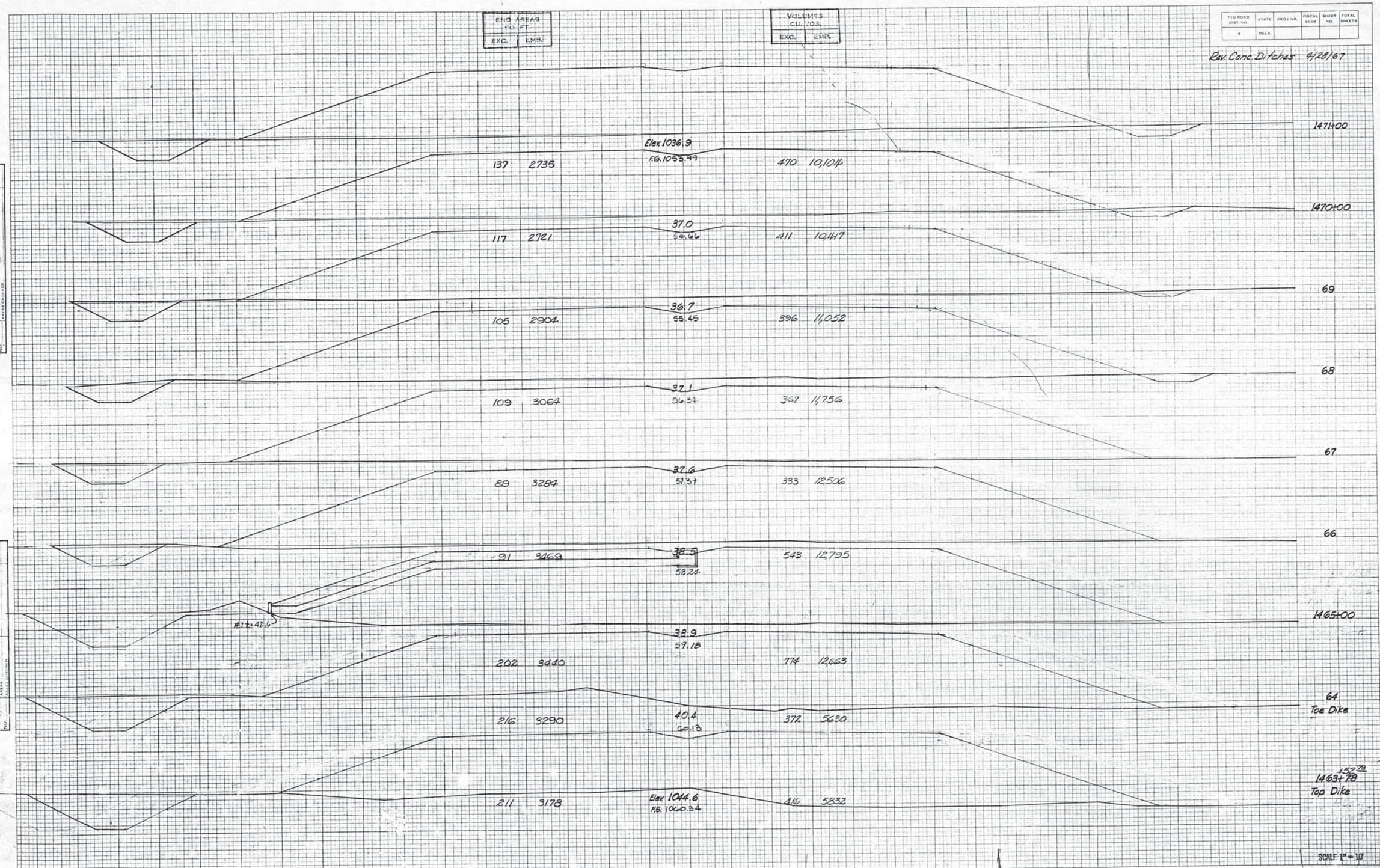
0. 21

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

Rev. Conc. Ditches 4/28/67

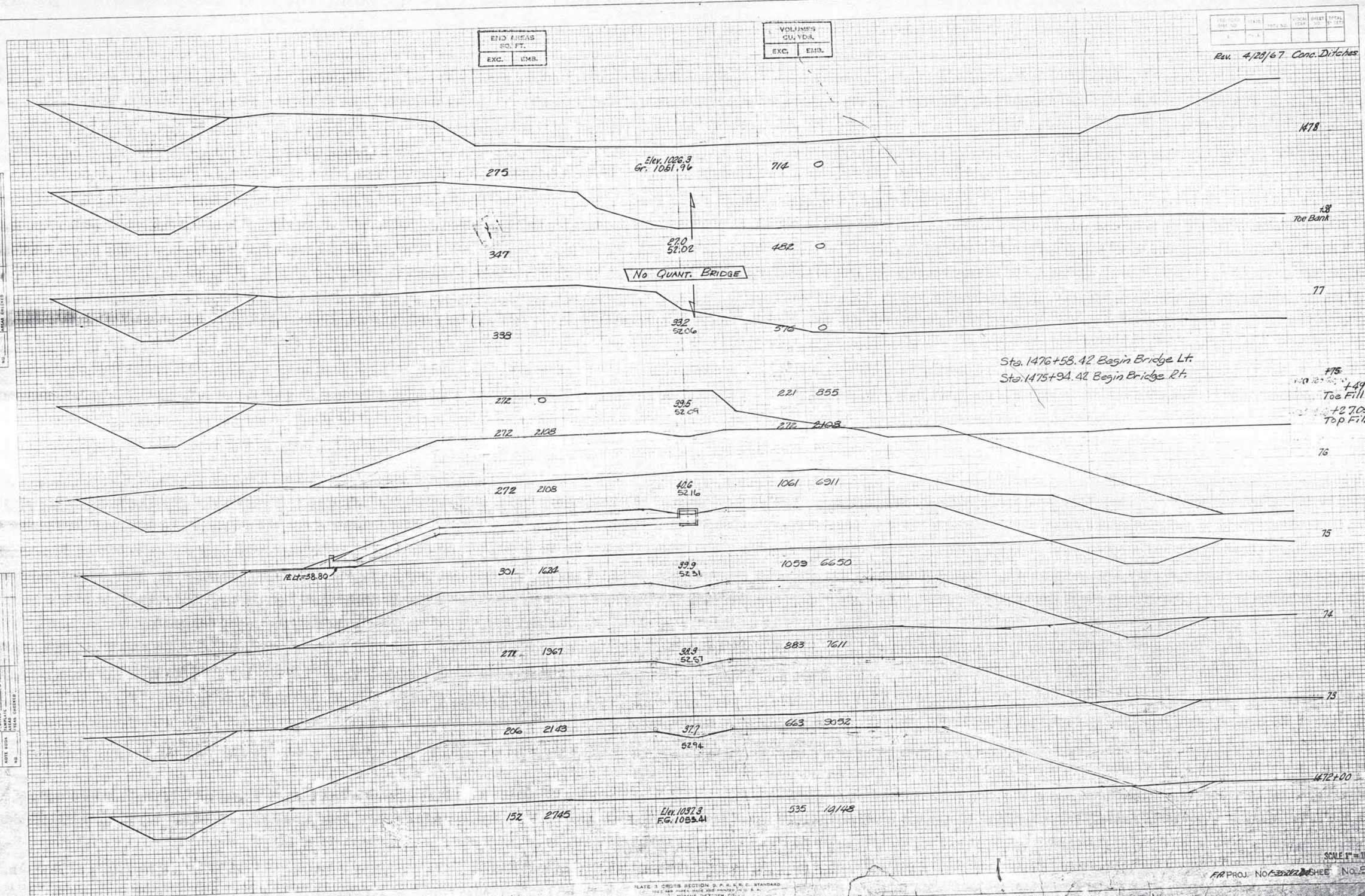


SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS COMPUTED, NOTE BOOK NO.

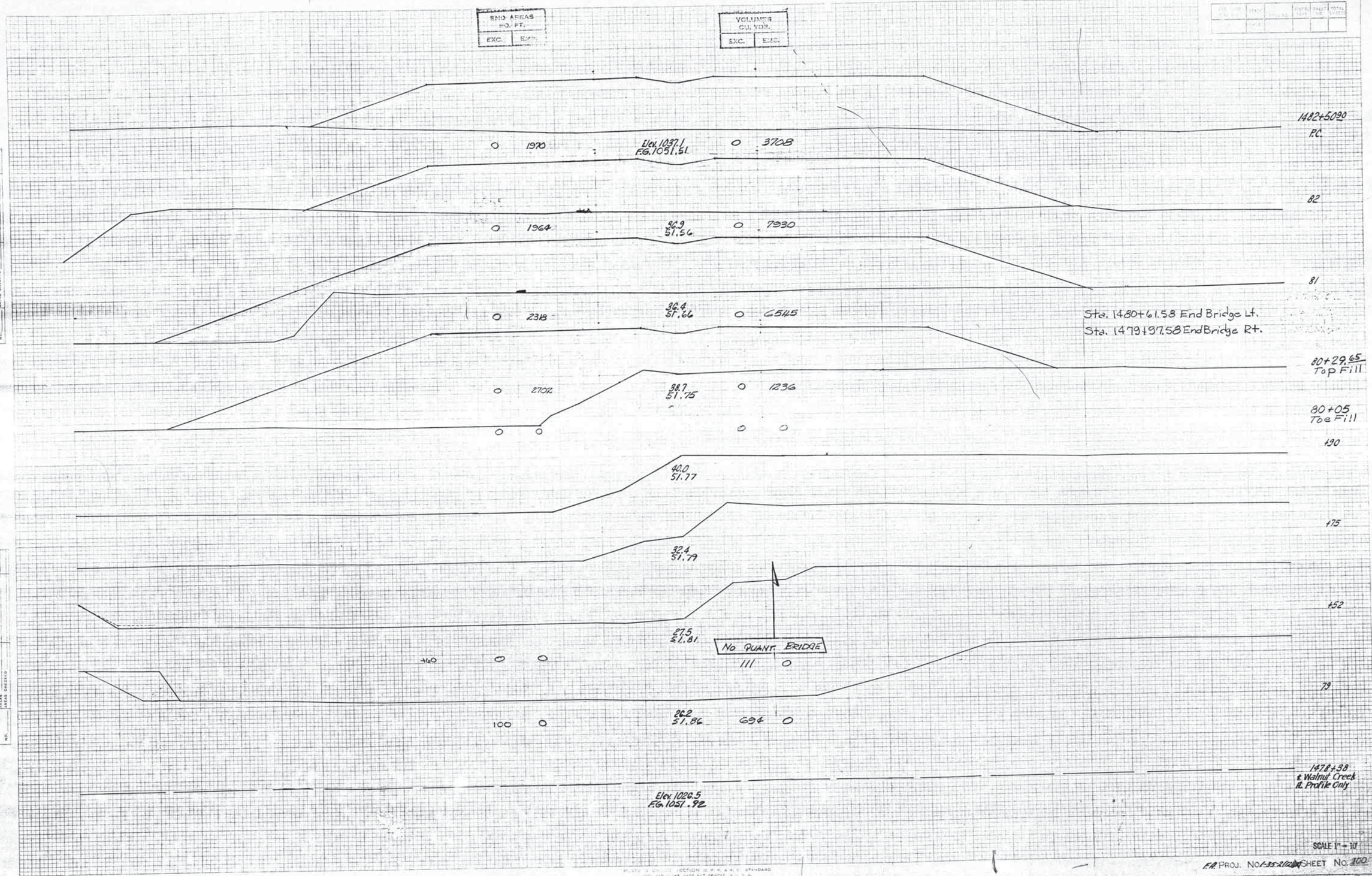
ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS COMPUTED, NOTE BOOK NO.

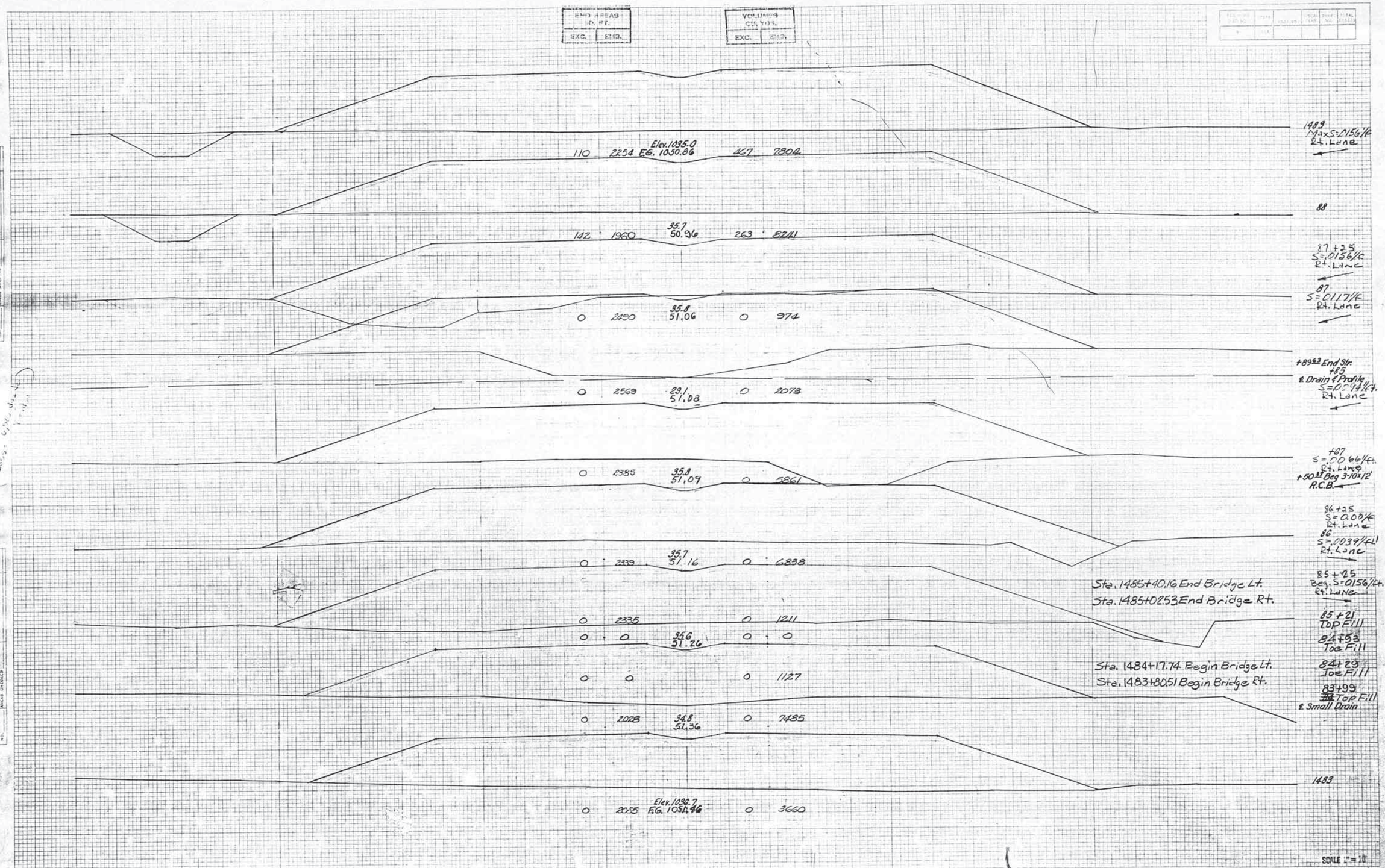
PLATE 3—CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. I-35-2(12)(38) SHEET NO. 93

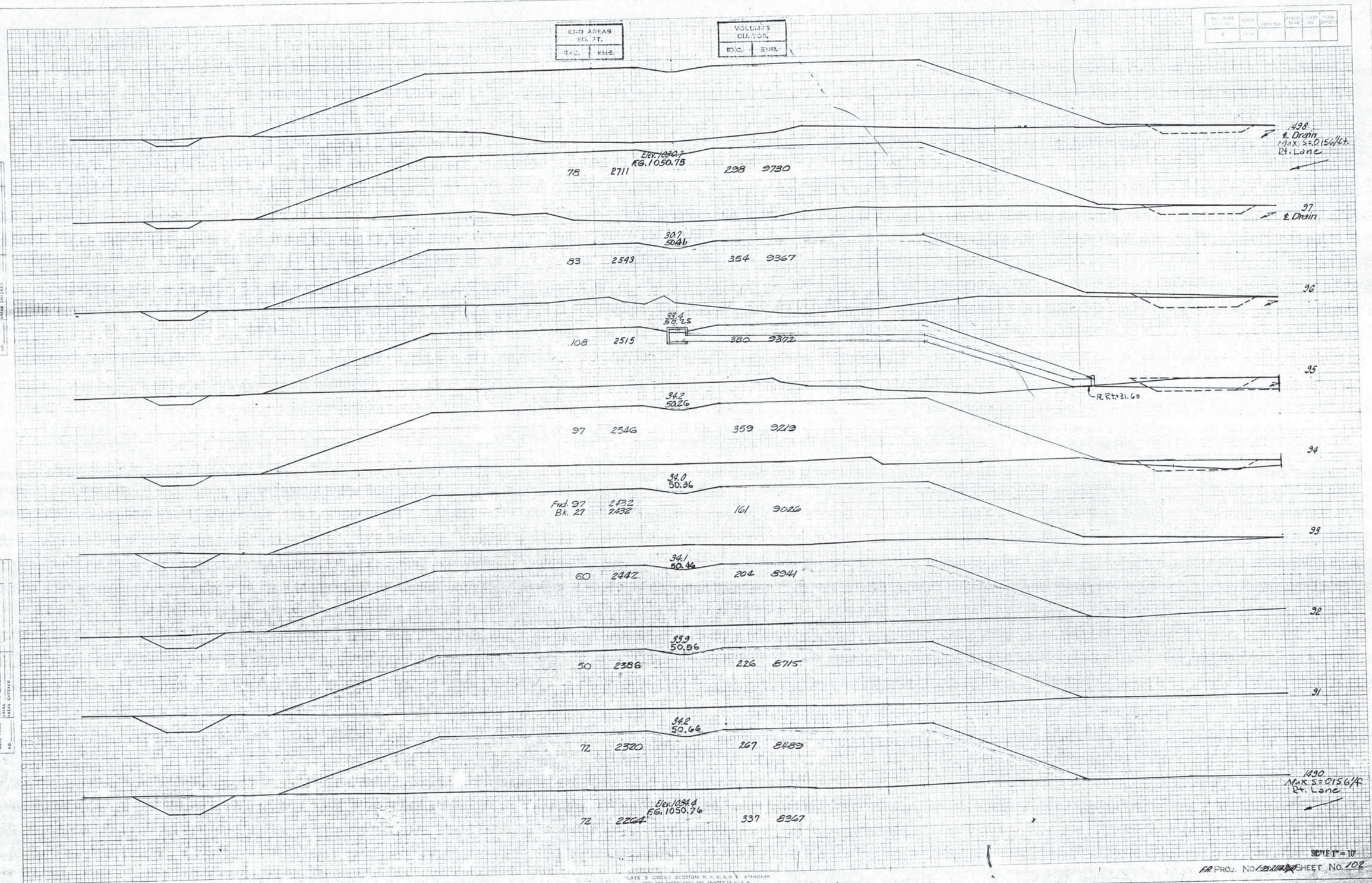


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
Rev. 4/28/67 Conc. Ditches
1478
275
Elev. 1026.3
Gr. 1061.96
714 0
+38
Toe Bank
347
27.0
52.02
482 0
No Quant. Bridge
77
338
33.2
52.06
576 0
Sta. 1476+58.42 Begin Bridge Lt.
Sta. 1475+94.42 Begin Bridge Rt.
+75
+49
Toe Fill
+27.05
Top Fill
272 0
39.5
52.09
221 855
272 2108
272 2108
76
272 2108
40.6
52.16
1061 6911
75
℄ Lt.=38.80
301 1624
39.9
52.31
1059 6650
74
271 1967
38.9
52.57
883 7611
73
206 2143
37.7
52.94
663 9052
1472+00
152 2745
Elev. 1037.3
F.G. 1053.41
535 10148
SCALE 1" = 10'
F.A. PROJ. No. SHEET No. 99
PLATE 3 CROSS SECTION D. P. R. & R. C. STANDARD
EUGENE DIETZGEN CO.


END AREAS SQ. FT.
EXC.
EMB.
VOLUMES CU. YDS.
EXC.
EMB.
1482+50.20 P.C.
1970
Elev. 1037.1 F.G. 1051.51
3708
82
1964
36.9 51.56
7930
81
2318
36.4 51.66
6545
Sta. 1480+61.58 End Bridge Lt.
Sta. 1479+97.58 End Bridge Rt.
80+29.65 Top Fill
2702
38.7 51.75
1236
80+05 Toe Fill
490
40.0 51.77
475
32.4 51.79
452
27.5 51.81
NO QUANT. BRIDGE
460
111
79
26.2 51.86
100
634
1478+38 ℄ Walnut Creek ℞ Profile Only
Elev. 1029.5 F.G. 1051.92
SCALE 1" = 10'
F.A. PROJ. NO. I-35-2(100) SHEET No. 100



END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
1489
Max S=.0156'/ft
Rt. Lane
110 2254 Elev. 1035.0 E.G. 1050.86 467 7804
88
142 1960 35.7 50.96 263 8241
87+25
S=.0156'/ft
Rt. Lane
87
S=.0117'/ft
Rt. Lane
0 2490 35.8 51.06 0 974
+89.63 End Str.
+85
℄ Drain & Profile
S=.0094'/ft.
Rt. Lane
0 2569 29.1 51.08 0 2073
+67
S=.0066'/ft.
Rt. Lane
+50.37 Beg 3-10x12'
R.C.B.
0 2385 35.8 51.09 0 5861
86+25
S=0.00'/ft
Rt. Lane
86
S=.0039'/ft
Rt. Lane
0 2339 35.7 51.16 0 6838
85+25
Beg. S=.0156'/ft.
Rt. Lane
Sta. 1485+40.16 End Bridge Lt.
Sta. 1485+02.53 End Bridge Rt.
0 2335 0 1211
85+21
Top Fill
0 0 35.6 51.26 0 0
84+93
Toe Fill
Sta. 1484+17.74 Begin Bridge Lt.
Sta. 1483+80.51 Begin Bridge Rt.
84+29
Toe Fill
0 0 0 1127
83+99
Top Fill
℄ Small Drain
0 2028 34.8 51.36 0 7485
1483
0 2055 Elev. 1036.7 E.G. 1051.46 0 3660
SCALE 1" = 10'
F.A. PROJ. NO. 1-35-2(12)
SHEET NO. 101



F.A. PROJ. NO. 1-35-2(12)(2) SHEET NO. 102

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9					

1506
MAX S=.0156/ft
Rt. Lane

Elev. 1056.8
F.G. 1055.46

112 2680 74 10,506

05

95.5
54.86

20 2993 93 11,150

04

95.5
54.26

30 3028 172 10856

03

35.1
53.66

63 2834 256 10,304

02

35.0
53.06

75 2730 139 10,610

01

34.4
52.46

56 2999 28 2395

+75

32.0
52.30

72 3160 226 8351

1500

40.8
51.86

95 3017 319 10,815

1499
Max S=.0156/ft
Rt. Lane

Elev. 1031.0
F.G. 1051.26

77 2823 287 10,248

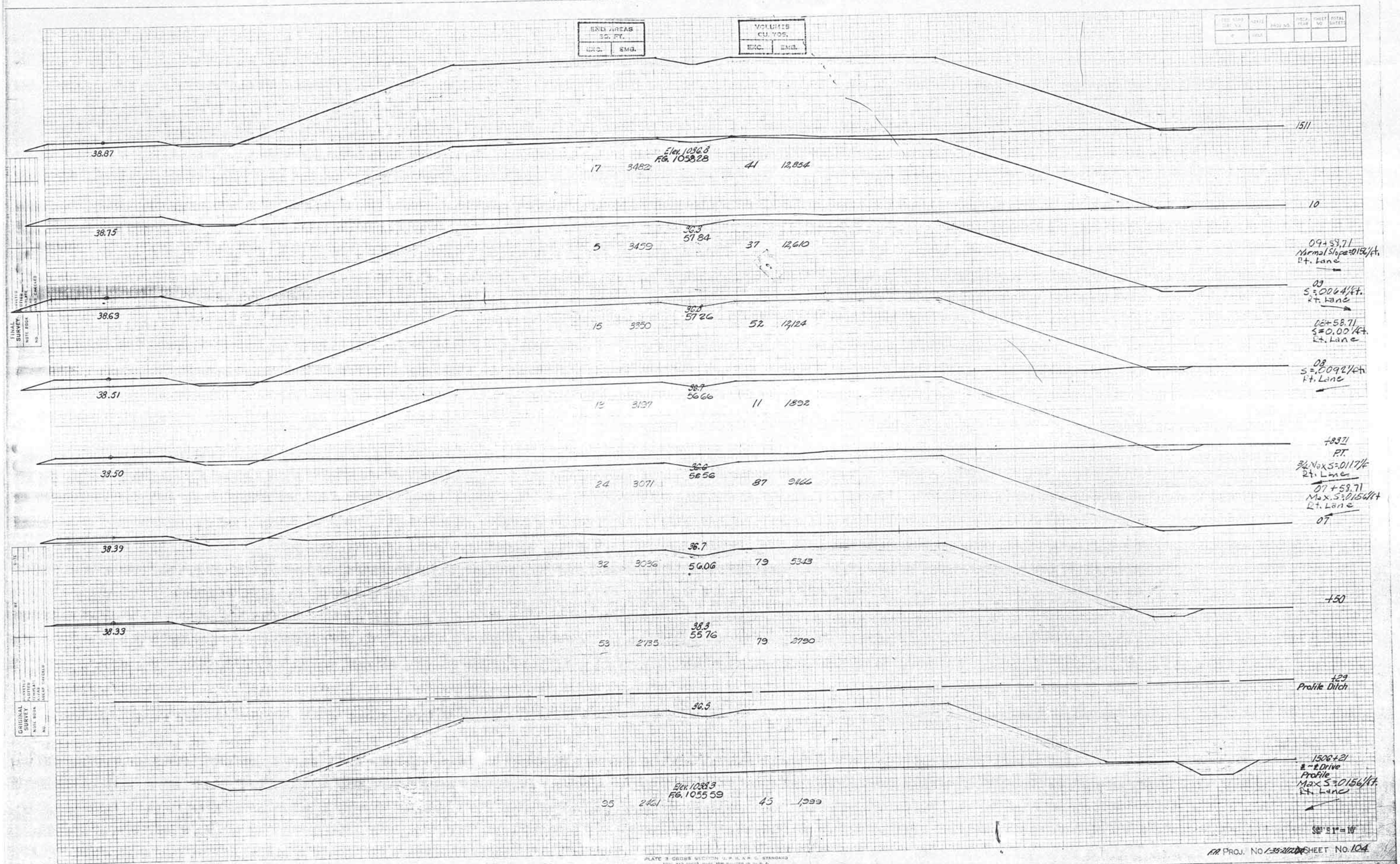
SCALE 1" = 10'

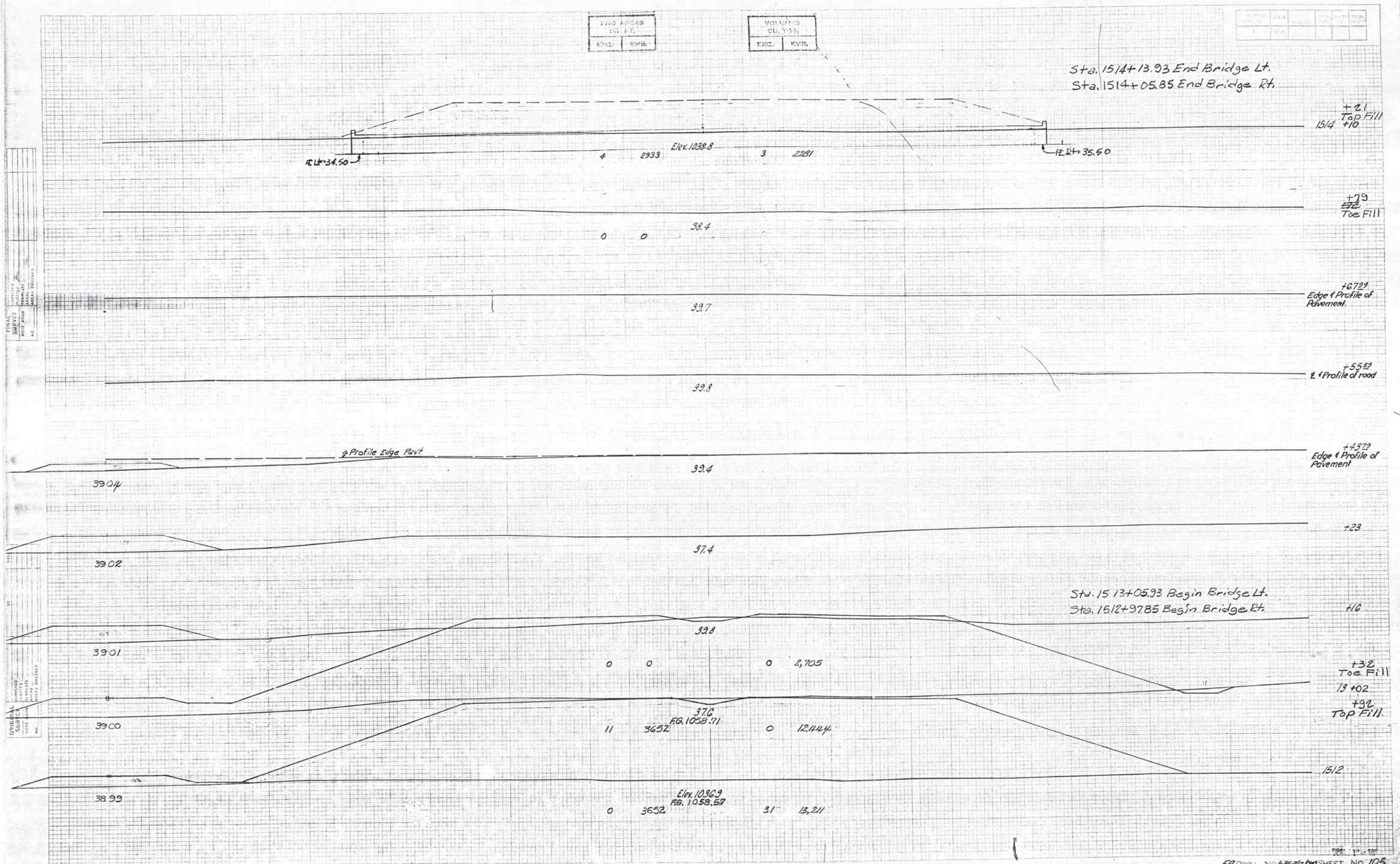
PLATE 3 CROSS SECTION C. R. I. & P. STANDARD
1921 PATTERN (SHALLOW DITCH) (MODIFIED)
EUGENE DIETZGEN CO.

F.A. PROJ. NO. ~~[illegible]~~ SHEET NO. 103

FINAL SURVEY — COMPUTED, PLOTTED, TRACED, AREAS CHECKED — NOTE BOOK — NO.

ORIGINAL SURVEY — SURVEYED, PLOTTED, TRACED, AREAS CHECKED — NOTE BOOK — NO.


END AREAS
SQ. FT.
EXC.
EMB.
VOLUMES
CU. YDS.
EXC.
EMB.
1511
38.87
Elev. 1038.8
F.G. 1058.28
17 3482
41 12,854
10
38.75
30.3
57.84
5 3459
37 12,610
09+58.71
Normal Slope=.0156/ft.
Rt. Lane
09
S=.0064/ft.
Rt. Lane
38.63
30.8
57.26
16 3350
52 12,124
08+58.71
S=0.00'/ft.
Rt. Lane
08
S=.0092/ft
Rt. Lane
38.51
38.9
56.66
13 3137
11 1892
+83.71
P.T.
3/4 Max S=.0117/ft
Rt. Lane
38.50
32.6
56.56
24 3071
87 2466
07+58.71
Max S=.0156/ft
Rt. Lane
07
38.39
36.7
56.06
32 3036
79 5343
+50
38.33
38.3
55.76
53 2785
79 2790
+29
Profile Ditch
36.5
1506+21
2-2 Drive
Profile
Max S=.0156/ft.
Rt. Lane
Elev. 1028.3
F.G. 1055.59
35 2461
45 1,999
SCALE 1"=10'
FINAL SURVEY
NOTE BOOK
NO.
ORIGINAL SURVEY
NOTE BOOK
NO.
PLATE 3 CROSS SECTION U.P.R.R.R.C. STANDARD
FR PROJ. NO. I-35-2(122)
SHEET NO. 104

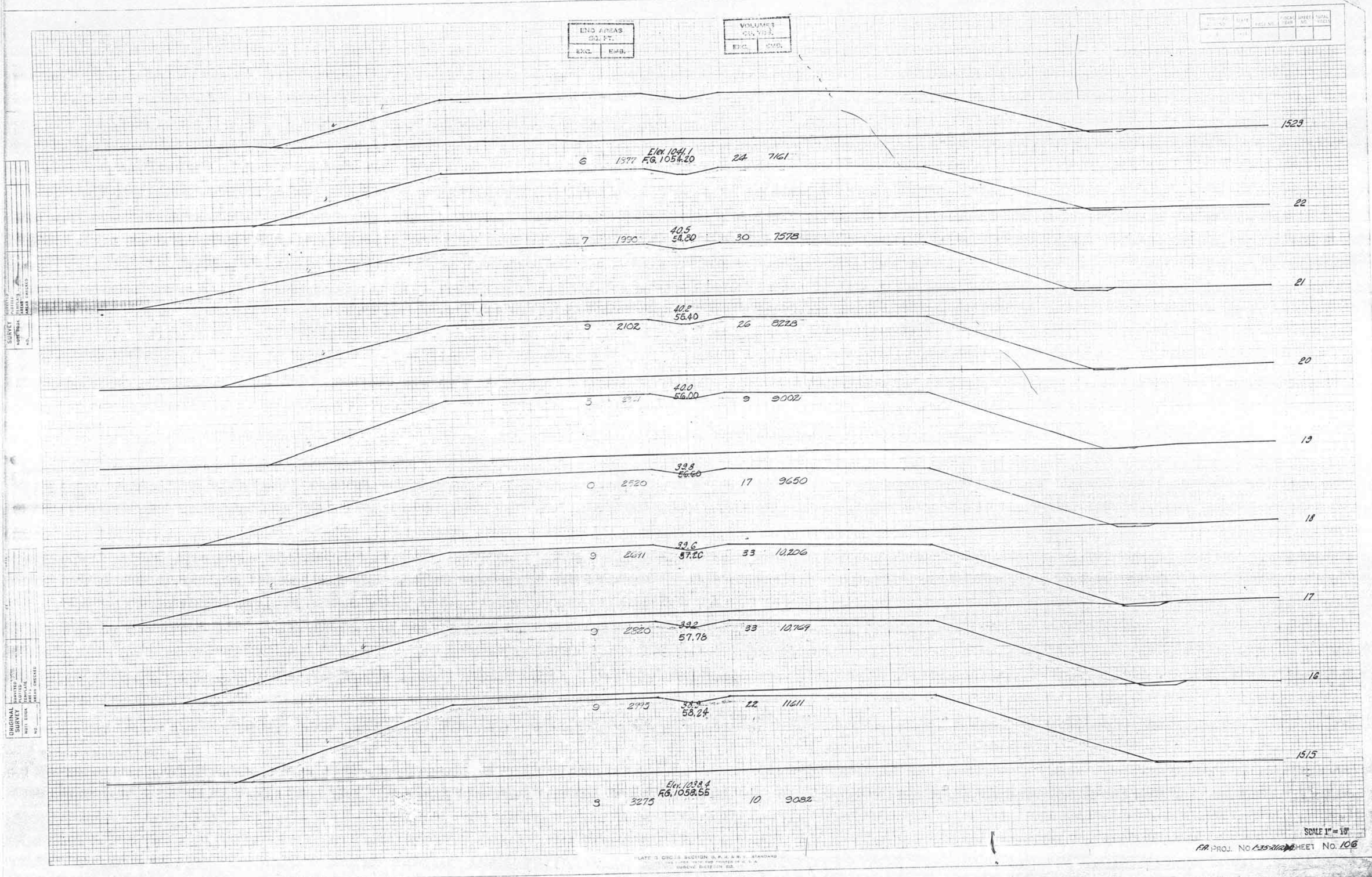


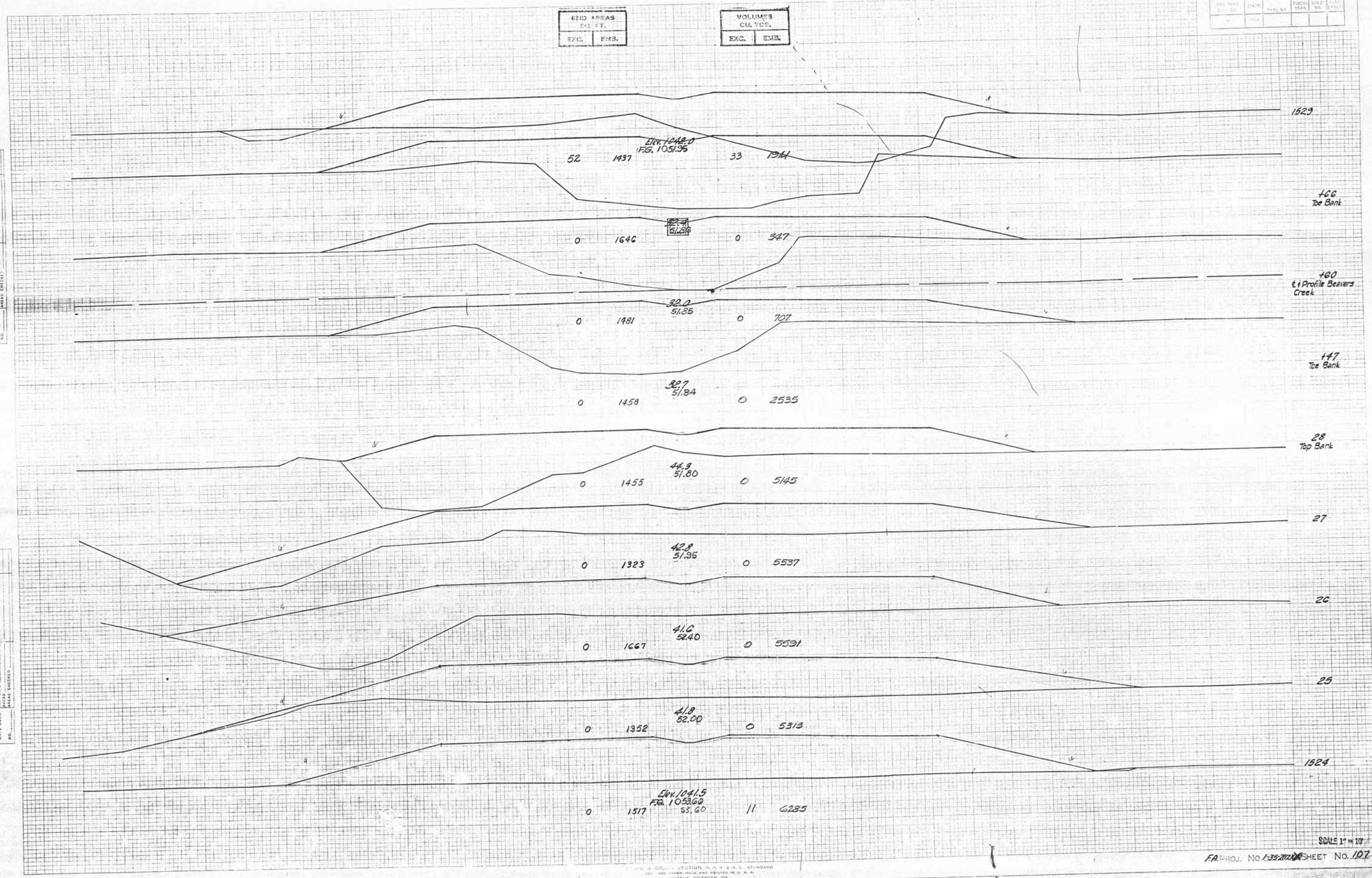
FINAL SURVEY

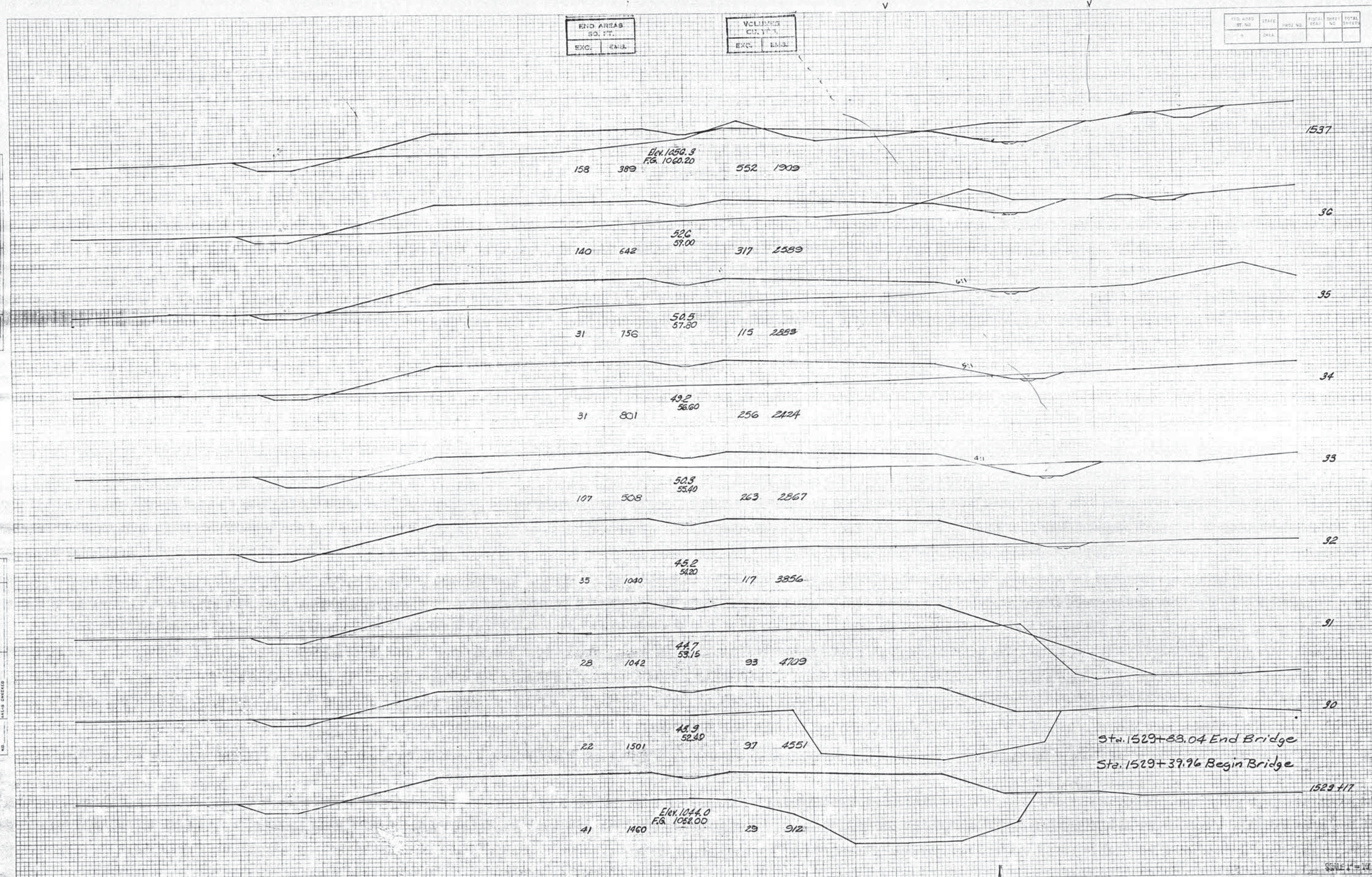
ORIGINAL SURVEY

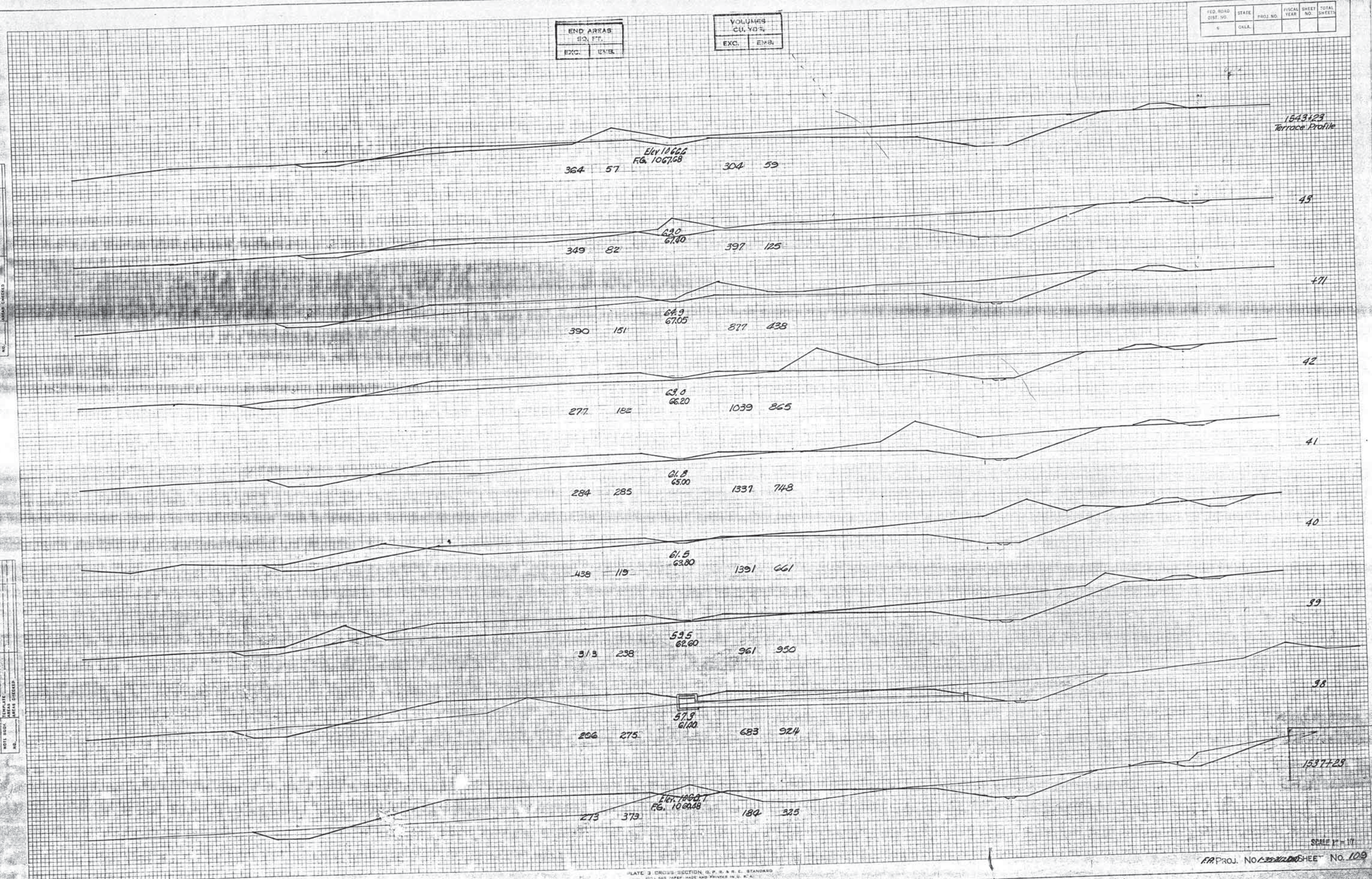
PLATE 3 CROSS SECTION

F.A. PROJ. NO. SHEET No. 105

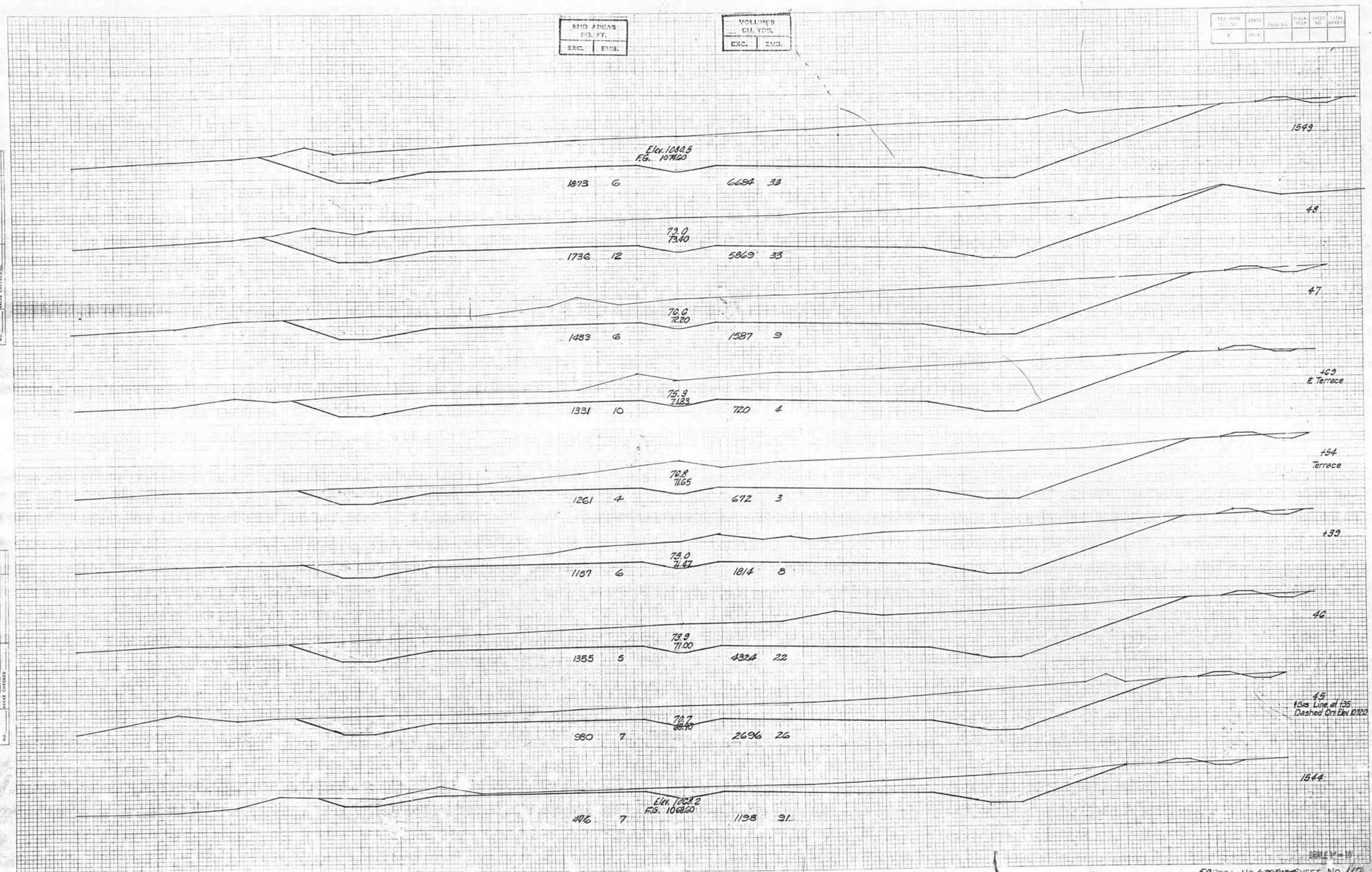

END AREAS SQ. FT.
EXC.
EMB.
VOLUMES CU. YDS.
EXC.
EMB.
1523
6 1377 Elev. 1041.1 F.G. 1054.20 24 7161
22
7 1990 40.5 54.80 30 7578
21
9 2102 40.2 55.40 26 8228
20
5 40.0 56.00 9 9002
19
0 2520 39.8 56.60 17 9650
18
9 2641 39.6 57.20 33 10,206
17
9 2820 39.2 57.78 33 10,769
16
9 2995 38.9 58.24 22 11611
1515
3 3275 Elev. 1038.4 F.G. 1058.55 10 9082
SCALE 1" = 10'
F.A. PROJ. NO 1-35-2(12)
SHEET NO. 106

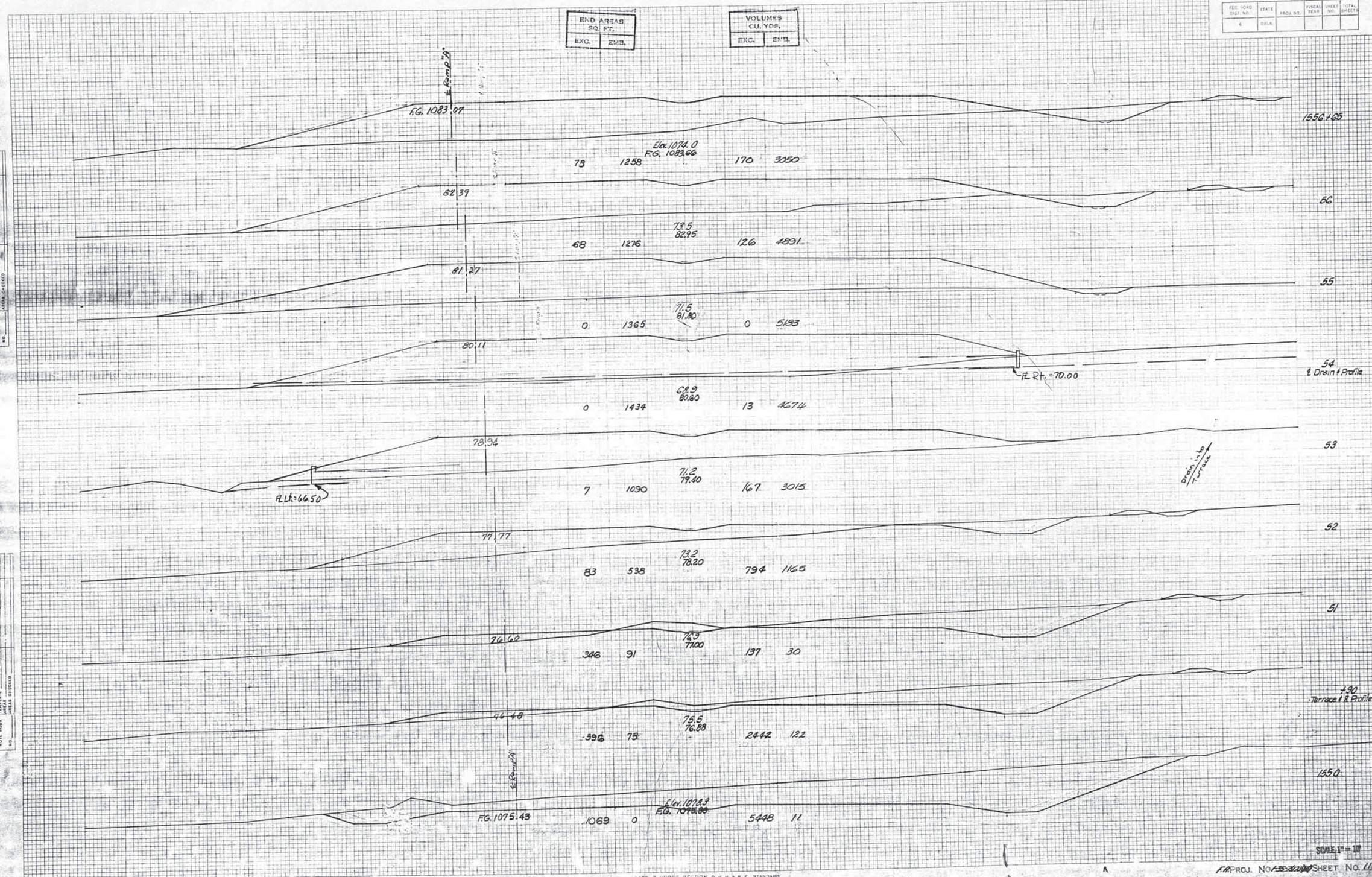

END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
1529
Elev. 1042.0
F.G. 1051.95
52 1437 33 1941
+66
Toe Bank
32.4
51.86
0 1646 0 347
+60
℄ & Profile Beavers Creek
32.0
51.85
0 1481 0 707
+47
Toe Bank
32.7
51.84
0 1458 0 2535
28
Top Bank
44.3
51.80
0 1455 0 5145
27
42.8
51.95
0 1323 0 5537
26
41.6
52.40
0 1667 0 5591
25
41.8
52.00
0 1352 0 5313
1524
Elev. 1041.5
F.G. 1053.60
53.60
0 1517 11 6285
SCALE 1" = 10'
F.A. PROJ. No. 1-35-2(12)(2) SHEET No. 107

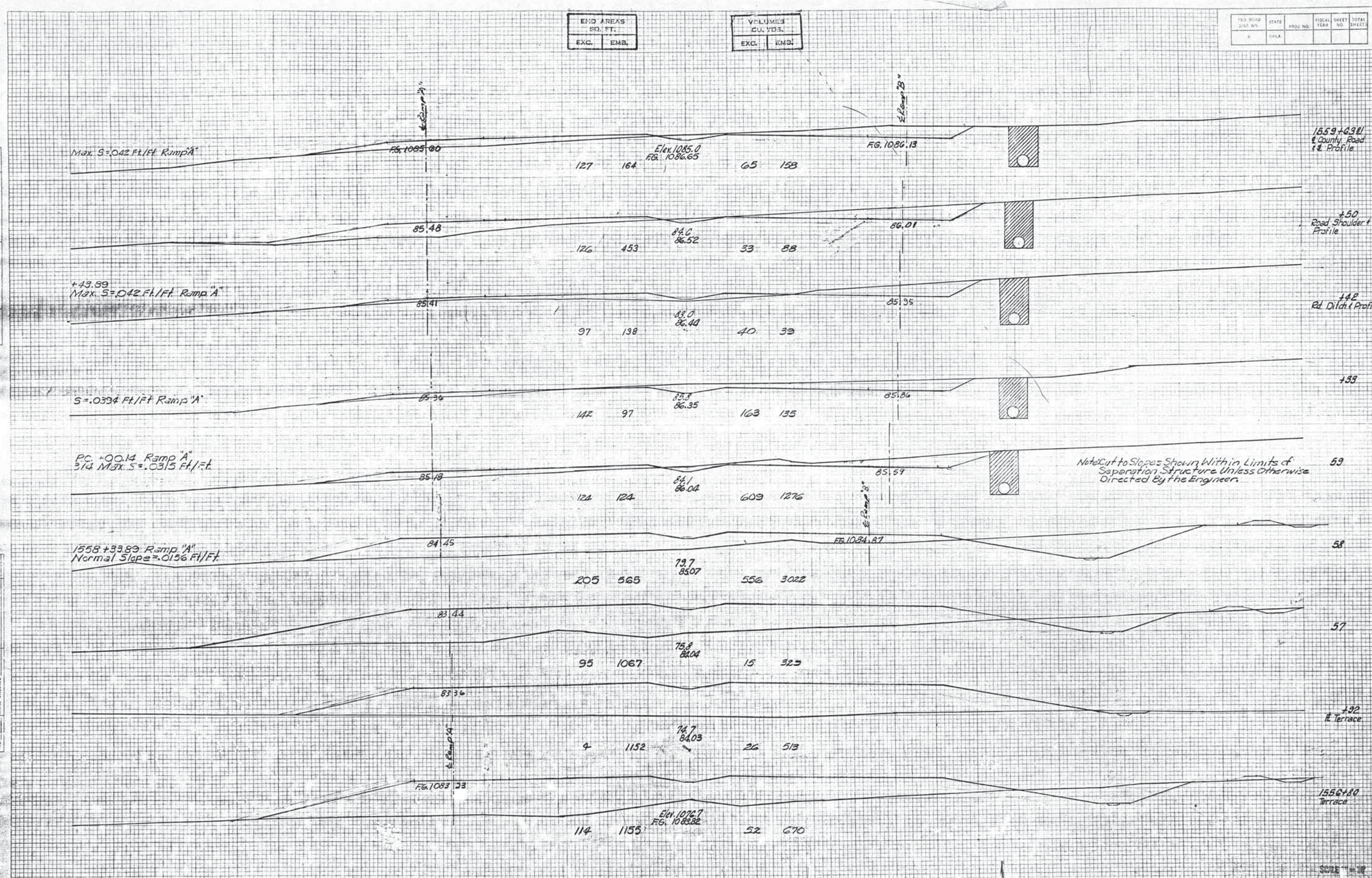

END AREAS
SQ. FT.
EXC. EMB.
VOLUMES
CU. YDS.
EXC. EMB.
1537
Elev. 1050.3
F.G. 1060.20
158 389 552 1909
36
52.6
59.00
140 642 317 2589
35
50.5
57.80
31 756 115 2883
34
49.2
56.60
31 801 256 2424
33
50.3
55.40
107 508 263 2867
32
45.2
54.20
35 1040 117 3856
31
44.7
53.15
28 1042 93 4709
30
48.9
52.40
22 1501 97 4551
Sta. 1529+33.04 End Bridge
Sta. 1529+39.96 Begin Bridge
1529+17
Elev. 1044.0
F.G. 1052.00
41 1460 29 912
SCALE 1" = 10'
F.A. PROJ. NO. SHEET NO. 108



END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO. 6
STATE OKLA.
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
1543+23 Terrace Profile
Elev 1066.6
F.G. 1067.68
364 57
304 59
43
63.0
67.40
349 82
397 125
+71
64.9
67.05
390 151
877 438
42
63.0
66.20
277 182
1039 865
41
61.8
65.00
284 285
1337 748
40
61.5
63.80
438 119
1391 661
39
59.5
62.60
313 238
961 950
38
57.3
61.40
206 275
683 924
1537+23
Elev. 1060.7
F.G. 1060.48
273 373
184 325
SCALE 1" = 10'
F.A. PROJ. NO. 1-35-2(12)(20) SHEET No. 109
PLATE 3 CROSS SECTION G. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO.
SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
Elev. 1080.5
F.G. 1074.60
1873 6
6684 33
1549
79.0
73.40
1736 12
5869 33
48
76.6
72.20
1483 6
1587 9
47
75.3
71.83
1331 10
720 4
+69
℄ Terrace
76.8
71.65
1261 4
672 3
+54
Terrace
75.0
71.47
1157 6
1814 8
+39
73.9
71.00
1355 5
4324 22
46
70.7
68.70
980 7
2696 26
45
℄ Gas Line at +35
Dashed On Elev. 1072.0
Elev. 1068.2
F.G. 1068.60
476 7
1198 91
1544
SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100 LINES PAPER, MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.
SCALE 1" = 10'
F.A. PROJ. NO 1-35 SHEET NO. 110


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO. 6
STATE OKLA.
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
℄ Ramp "A"
F.G. 1083.07
1556+65
Elev. 1074.0
F.G. 1083.66
73 1258 170 3050
82.39
56
73.5
82.95
68 1276 126 4891
81.27
55
71.5
81.80
0 1365 0 5183
80.11
54
℄ Drain & Profile
Ft. Rt. = 70.00
68.9
80.60
0 1434 13 4674
78.94
53
71.2
79.40
7 1090 167 3015
Ft. Lt. = 66.50
Drain into Terrace
77.77
52
73.2
78.20
83 538 794 1165
51
76.60
76.9
77.00
346 91 137 30
+90
Terrace & ℄ Profile
46.48
75.5
76.88
396 73 2442 122
℄ Ramp "A"
1550
Elev. 1078.3
F.G. 1075.43
1069 0 5448 11
SCALE 1" = 10'
F.A. PROJ. NO. 1-35-2(10)(10) SHEET NO. 111
LATE 3 CROSS SECTION O. P. H. & W. E. STANDARD
1000 PAD PAPER MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.
SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO.
STATE
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
Max. S=.042 Ft./Ft. Ramp "A"
F.G. 1085.60
Elev. 1085.0
F.G. 1086.65
F.G. 1086.13
127 164 65 158
1559+63.81
℄ County Road
℄ Profile
85.48
84.6
86.52
86.01
126 453 33 88
+50
Road Shoulder &
Profile
+43.89
Max. S=.042 Ft./Ft. Ramp "A"
85.41
83.0
86.44
85.95
97 138 40 39
+42
Rd. Ditch & Profile
S=.0394 Ft./Ft. Ramp "A"
85.36
85.8
86.35
85.86
142 97 163 135
+33
P.C. +00.14 Ramp "A"
314 Max. S=.0315 Ft./Ft.
85.18
84.1
86.04
85.59
124 124 609 1276
Note: Cut to Slopes Shown Within Limits of Separation Structure Unless Otherwise Directed By the Engineer.
59
1558+33.89 Ramp "A"
Normal Slope=.0156 Ft./Ft.
84.45
F.G. 1084.87
79.7
85.07
205 565 556 3022
58
83.44
75.8
82.04
95 1067 15 323
57
83.36
74.7
84.03
4 1152 26 513
+92
℄ Terrace
F.G. 1083.23
Elev. 1076.7
F.G. 1083.82
114 1155 52 670
1556+80
Terrace
℄ Ramp "A"
℄ Ramp "B"
FINAL SURVEY
ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
DATE
BY
PLATE 3 CROSS SECTION O.P.R. & R.E. STANDARD
EUGENE DIETZGEN CO.
F.A. PROJ. NO. 1-35-2(12)
SHEET NO. 112

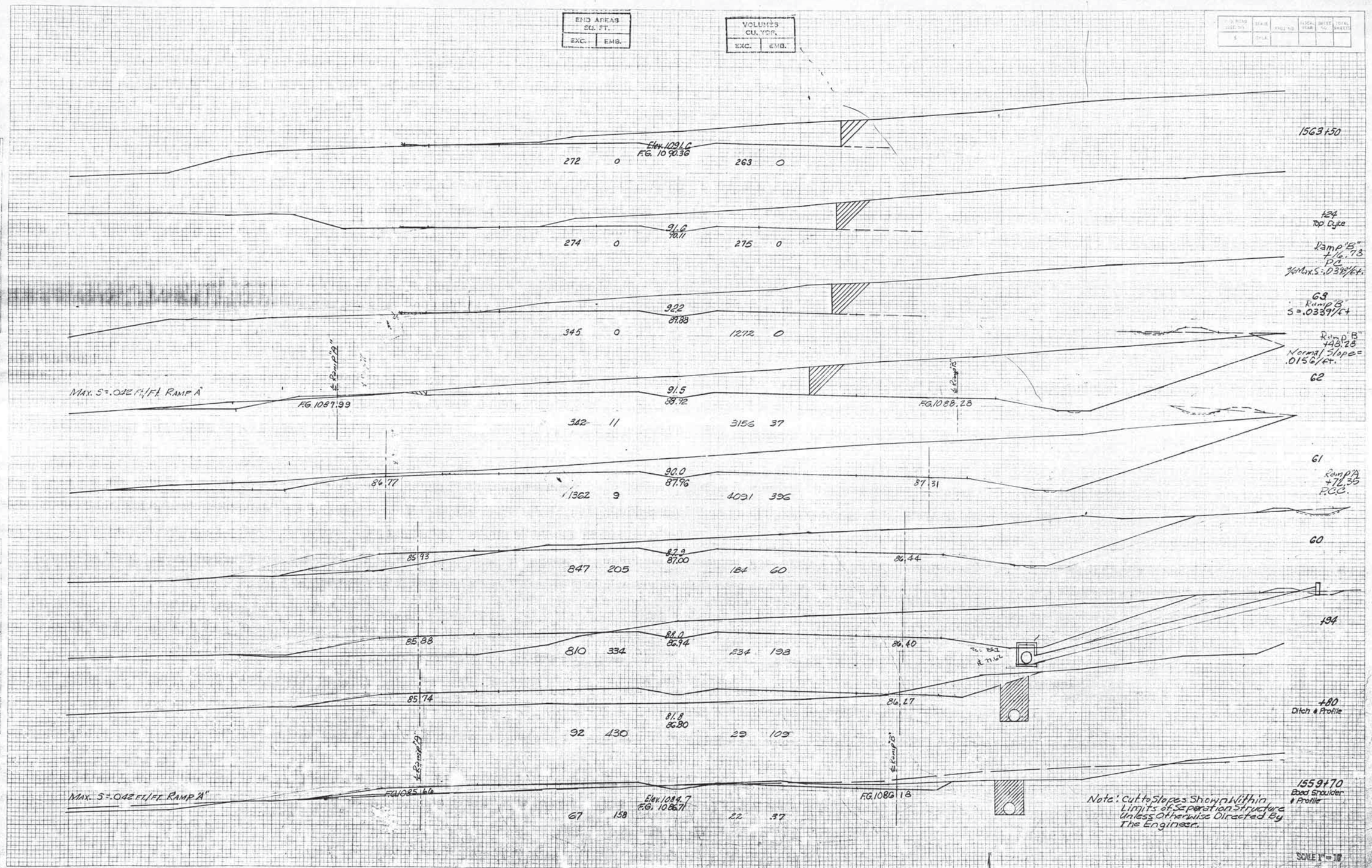
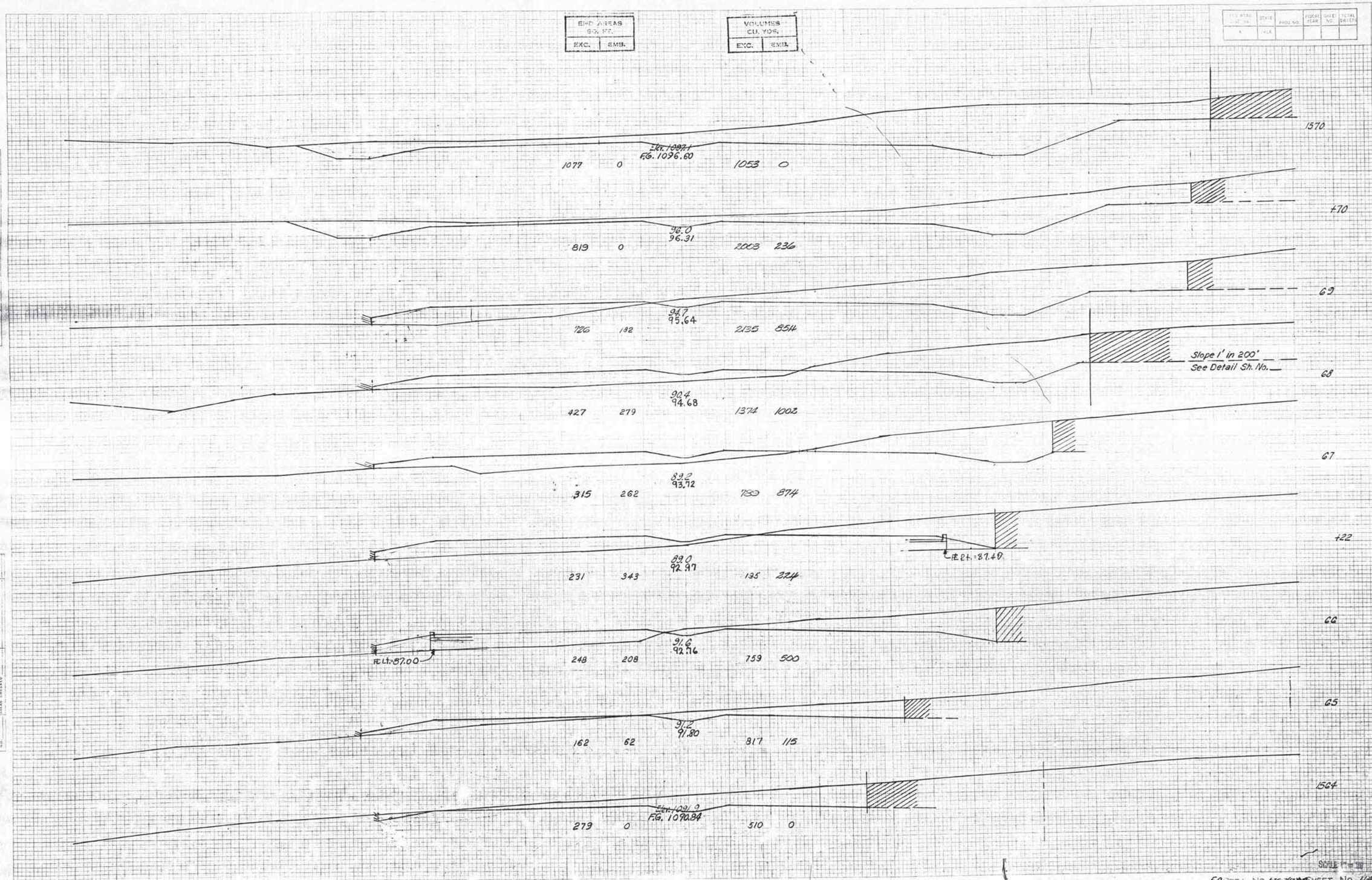
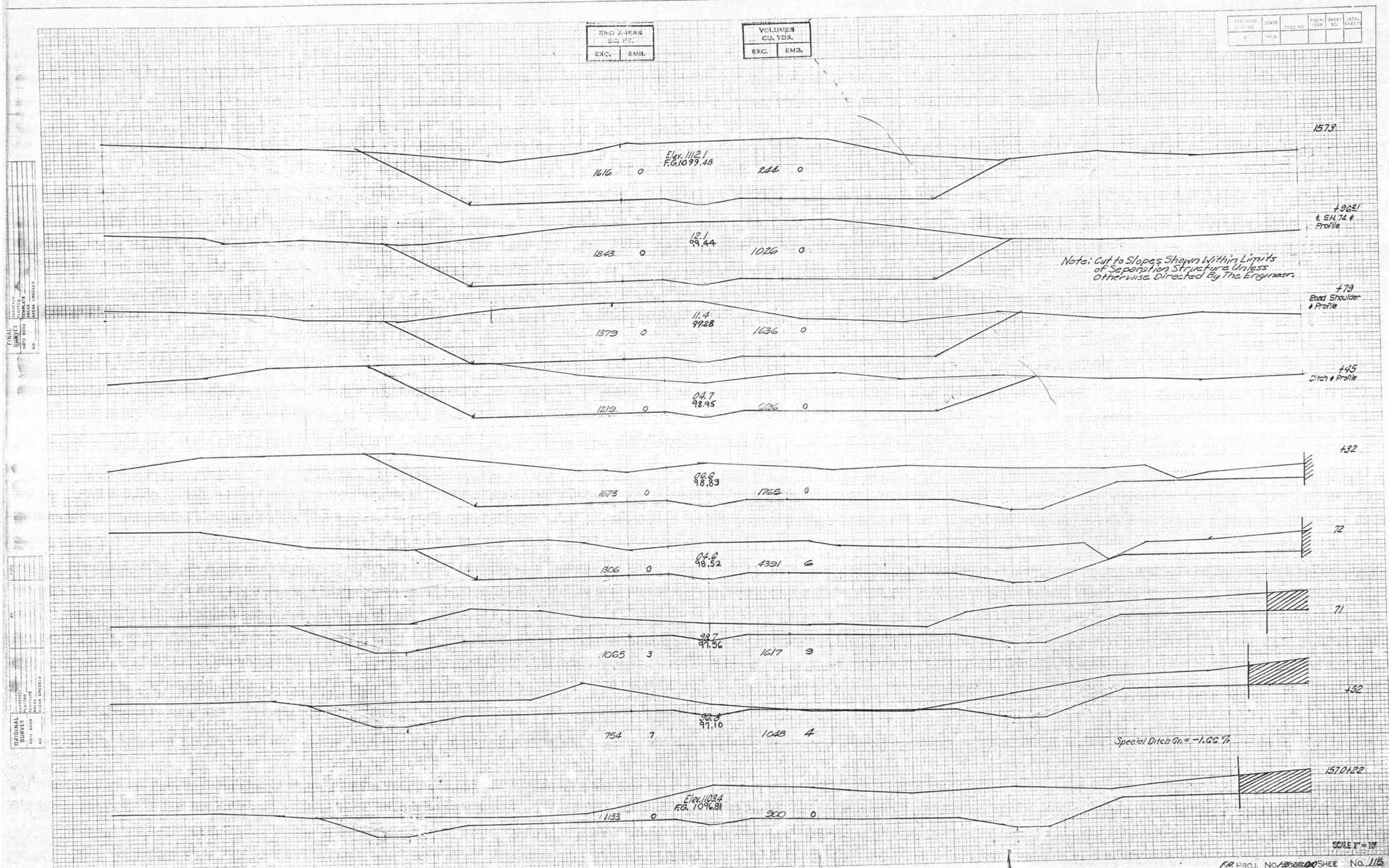


PLATE 3 CROSS SECTION G. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO.

F.A. PROJ. NO. SHEET NO. 113


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
1570
Elev. 1097.1
F.G. 1096.60
1077 0 1053 0
+70
96.0
96.31
819 0 2003 236
69
94.7
95.64
726 182 2135 854
Slope 1' in 200'
See Detail Sh. No.
68
90.4
94.68
427 279 1374 1002
67
89.2
93.72
315 262 789 874
+22
89.0
92.97
231 343 135 224
66
91.6
92.76
248 208 759 500
65
91.2
91.80
162 62 817 115
1564
Elev. 1091.9
F.G. 1090.84
279 0 510 0
F.A. PROJ. NO. SHEET NO. 114


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO.
STATE
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
1573
Elev. 1112.1
F.G. 1099.48
1616 0
244 0
+96.21
℄ SH. 74 ℄ Profile
12.1
99.44
1843 0
1026 0
Note: Cut to Slopes Shown Within Limits of Separation Structure Unless Otherwise Directed By The Engineer.
+79
Road Shoulder ℄ Profile
11.4
99.28
1379 0
1636 0
+45
Ditch ℄ Profile
04.7
98.95
1219 0
696 0
+32
06.6
98.83
1673 0
1765 0
72
04.6
98.52
1306 0
4391 6
71
98.7
97.56
1065 3
1617 9
+52
96.8
97.10
754 7
1048 4
Special Ditch Gr. = -1.66 %
1570+22
Elev. 1103.4
F.G. 1096.81
1133 0
900 0
SCALE 1" = 10'
F.A. PROJ. NO. SHEET NO. 115
FINAL SURVEY
ORIGINAL SURVEY

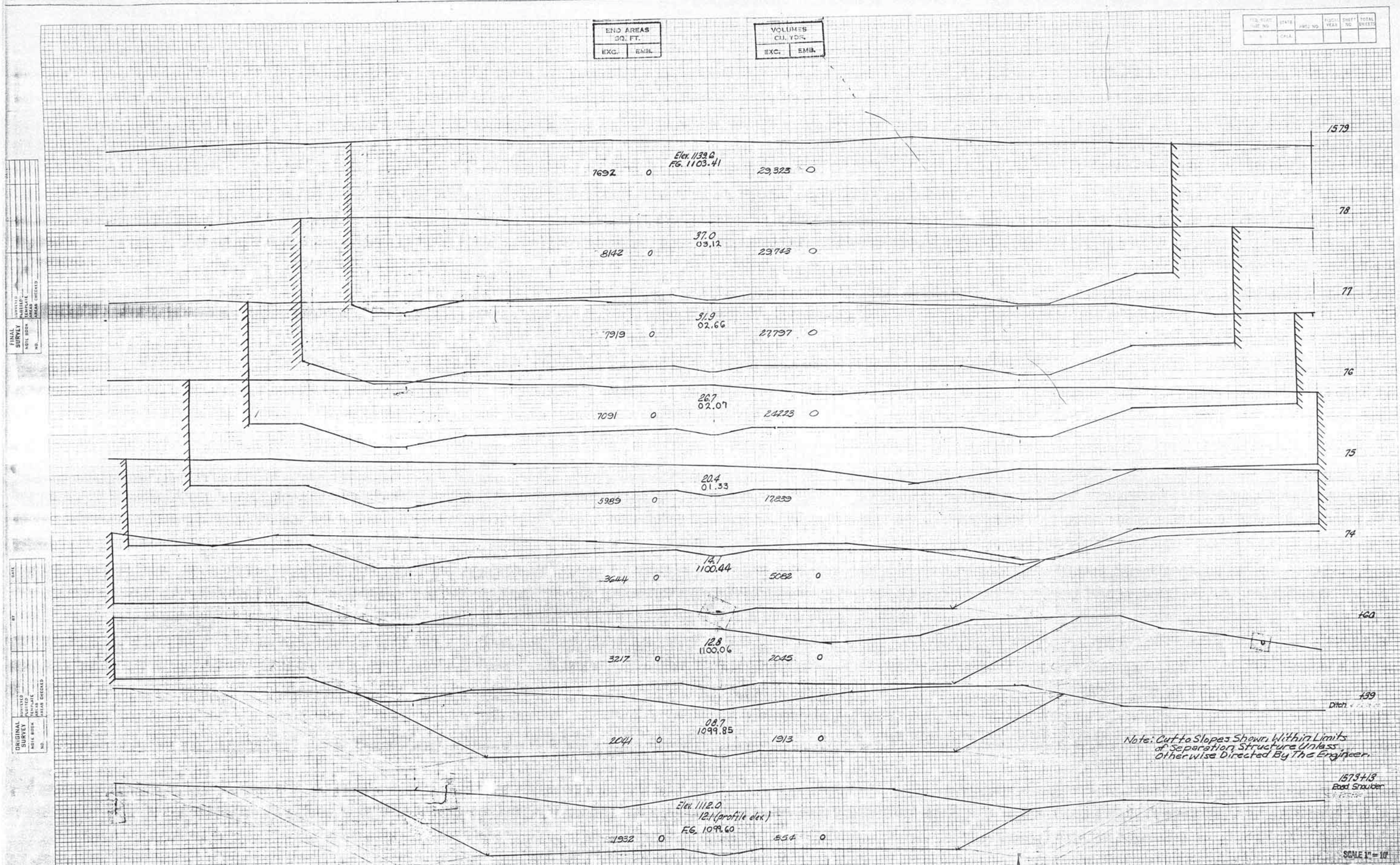


PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 1-35-2012 SHEET NO. 116

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

1588

Elev. 1097.5
Gr. 1100.74

D. / REAS.
RO. / LT.
EXC. EMB.

VERTICES
CURVE
EXC. EMB.

87

1103.0
01.24

0 0 365 0 +13 (Top Slope)

Ramp "D"
S=.038'/ft.
86

Sta. 1586+00 End Project

Ramp "D"

089
01.74

1517 0 7,100 0

F.G. 1101.25

F.G. 1100.78

85
Ramp "D"
S=.042'/ft.

12.4
02.24

2317 0 10,574 0

01.65

01.15

Ramp "D"
+54.03
P.O.C.
S=.042'/ft.

84

18.5
02.74

3383 0 12,971 0

83

02.05

01.66

1582+85.88
Normal Slope
=.0156'/Ft

23.8
03.17

3611 0 18,376 0

Ramp "C"
+17.39
P.T.

+17.39
3/4 Max S=.0398'/ft.

82

S=.0459'/Ft

02.46

27.0
03.45

6312 0 25,460 0

03.16

1581+80.03
Max. S=.053'/Ft

81

Ramp "D"

92.5
03.58

05.79

02.14

7436 0 24,567 0

1580

Max. S=.053'/Ft

02.36

Elev. 1102.7
Gr. 1103.58

F.G. 1109.54

5830 0 28,001 0

F.G. 1102.03

SCALE 1" = 10'

FAP PROJ. NO. [illegible] SHEET NO. 117

LATE 3 CROSS SECTION C. R. I. & P. R. R. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
EUGENE DITMAR CO.

FINAL SURVEY
BOOKED
PLOTTED
TEMPLATE
AREAS CHECKED
NOTE BOOK
NO.

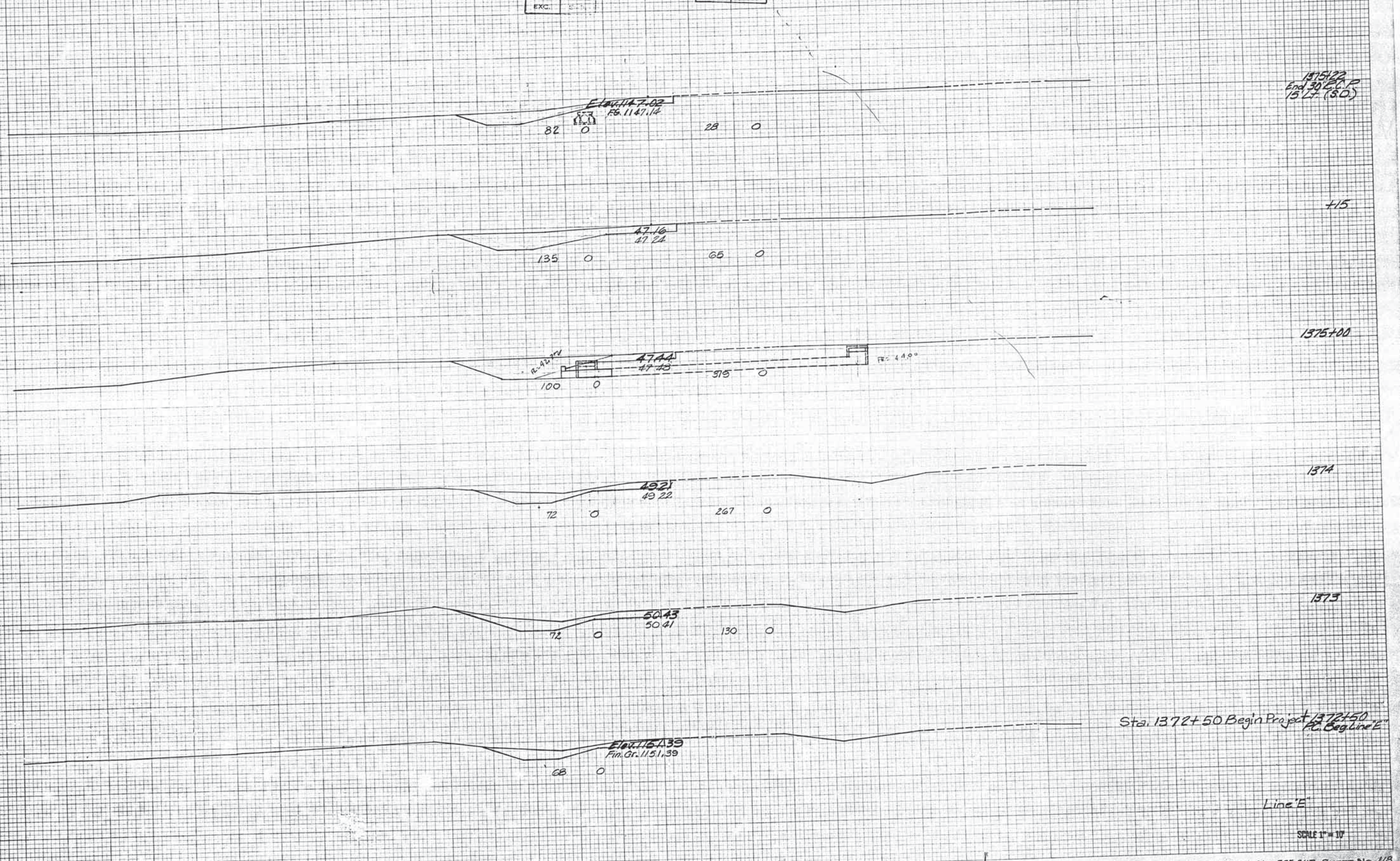
ORIGINAL SURVEY
BOOKED
PLOTTED
TEMPLATE
AREAS CHECKED
NOTE BOOK
NO.

DATE
BY

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

END AREAS SQ. FT.	
EXC.	

VOLUMES CU. YDS.	
EXC.	EMB.



SURVEY NOTE BOOK NO. — PLOTTED, TEMPLATE, AREAS, AREAS CHECKED

ORIGINAL SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED

F.A. PROJ. No. E35-2(12) SHEET No. 118

PLATE 3-CROSS SECTION G. P. W. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

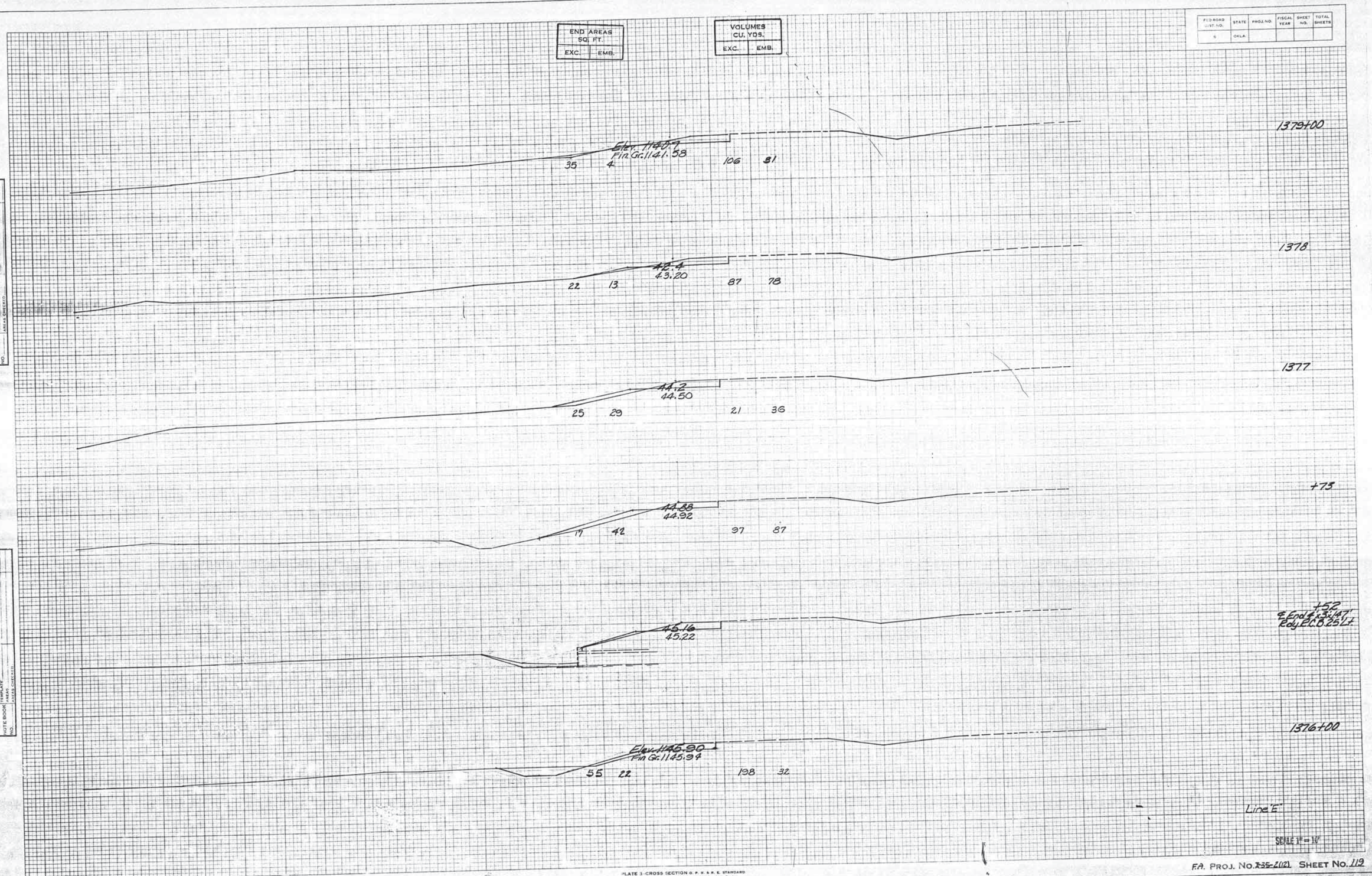


PLATE 3-CROSS SECTION G. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. 235-2(12) SHEET No. 119

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

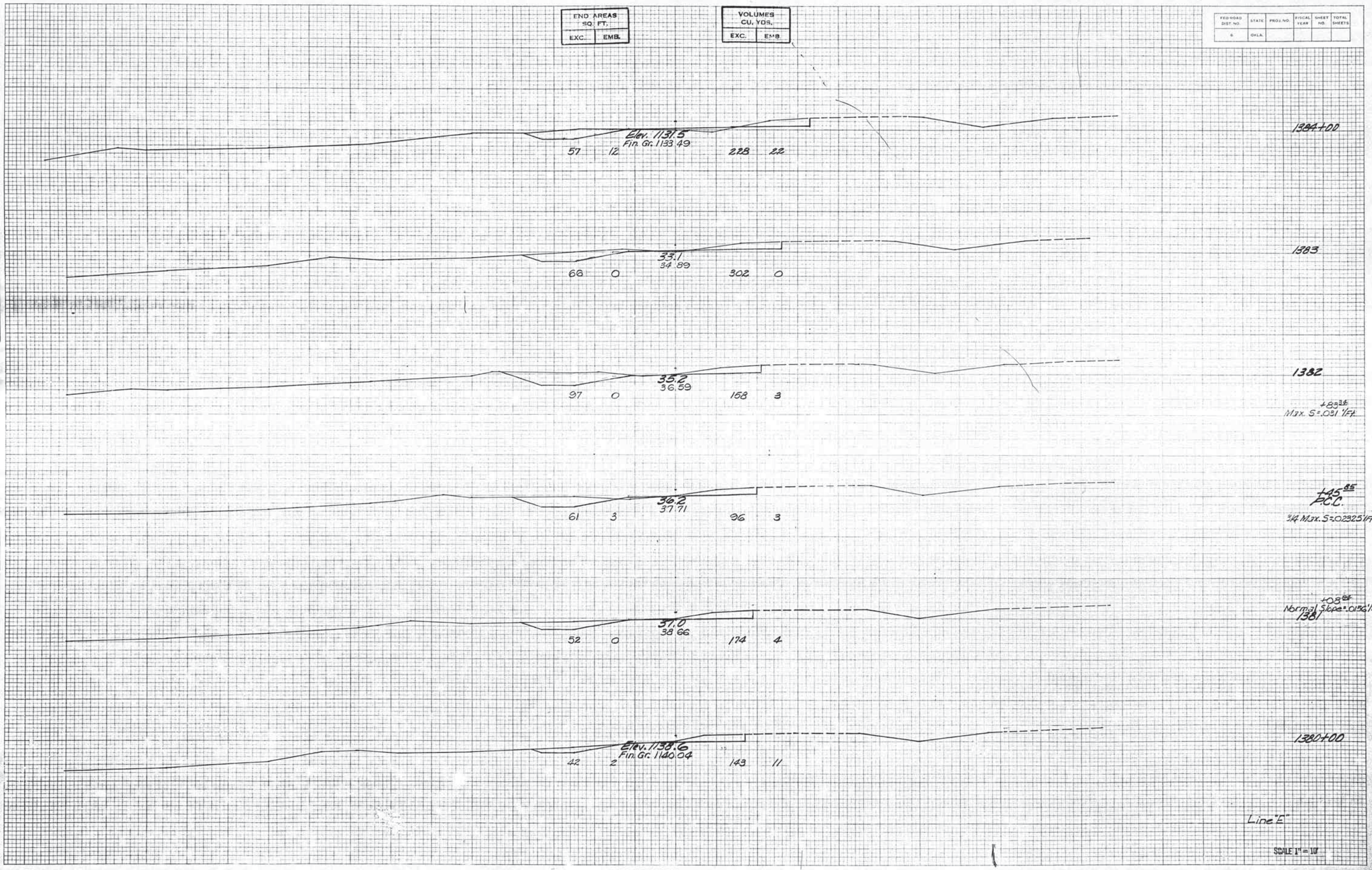


PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

FA. PROJ. NO. I-35-2(12) SHEET NO. 120

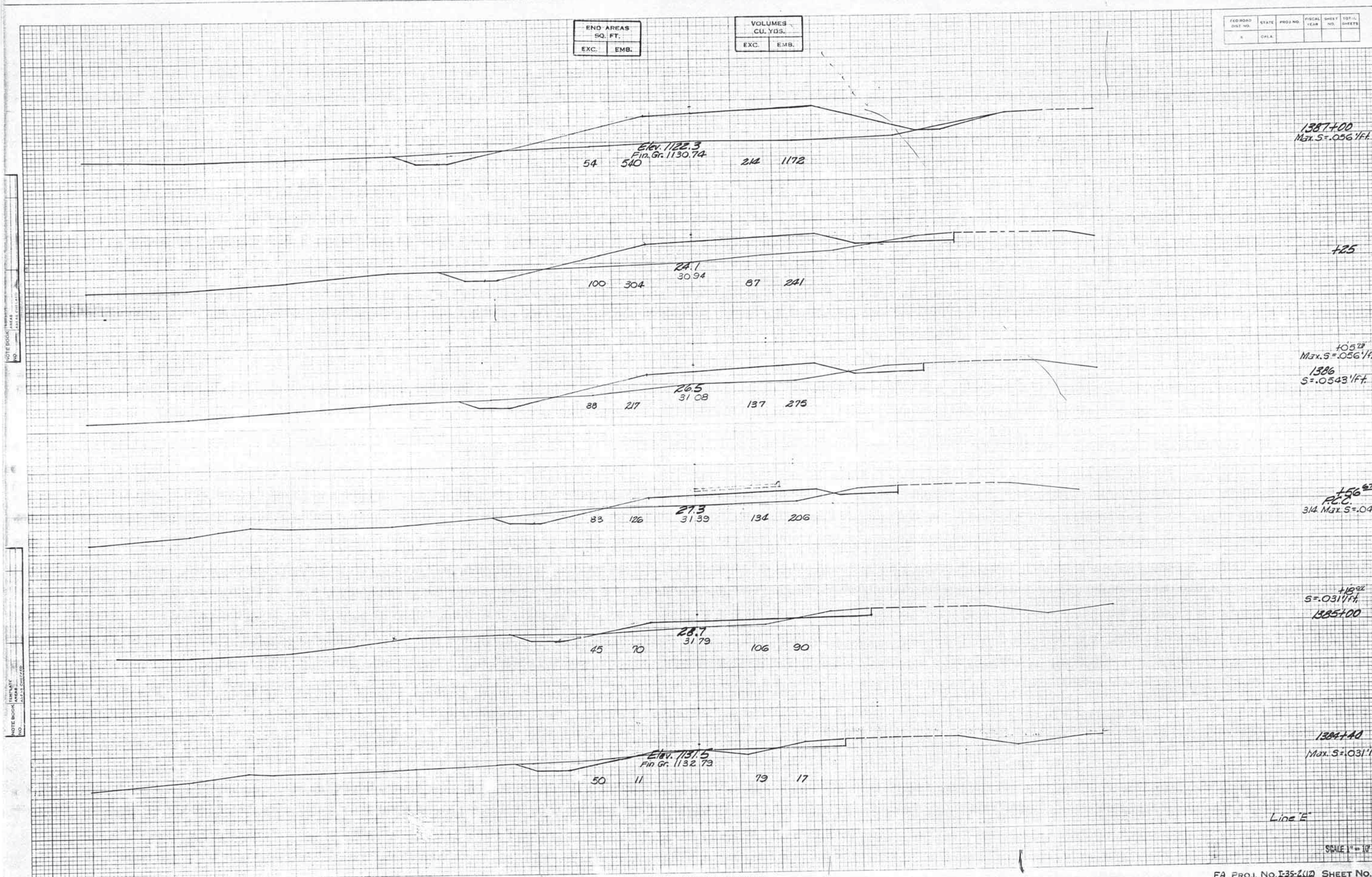


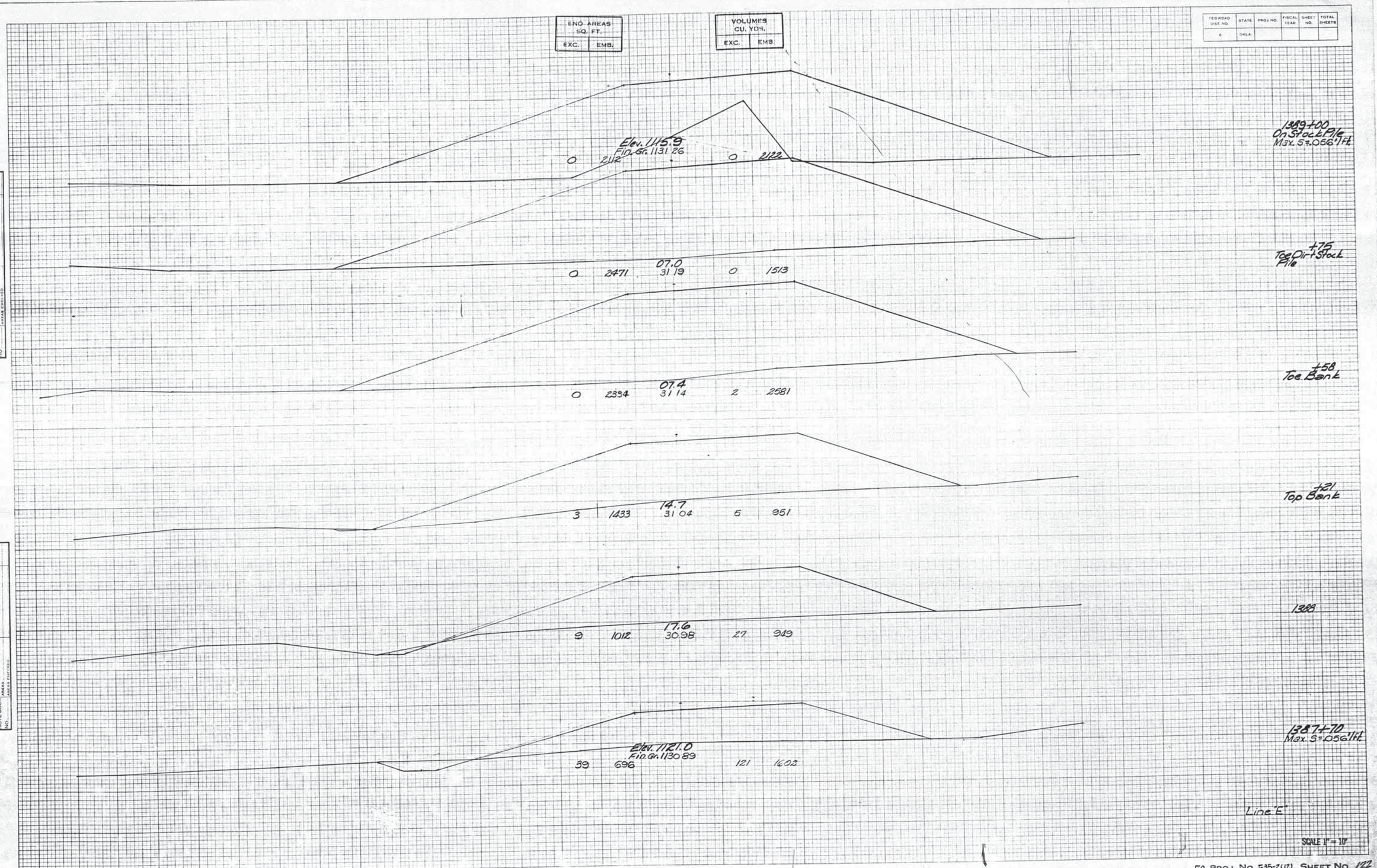
PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
1001 RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. I-35-2(12) SHEET NO. 121

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				



FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK NO.

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK NO. — BY — DATE

PLATE 3-CROSS SECTION O. P. R. & N. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. I-35-2(17) SHEET NO. 122

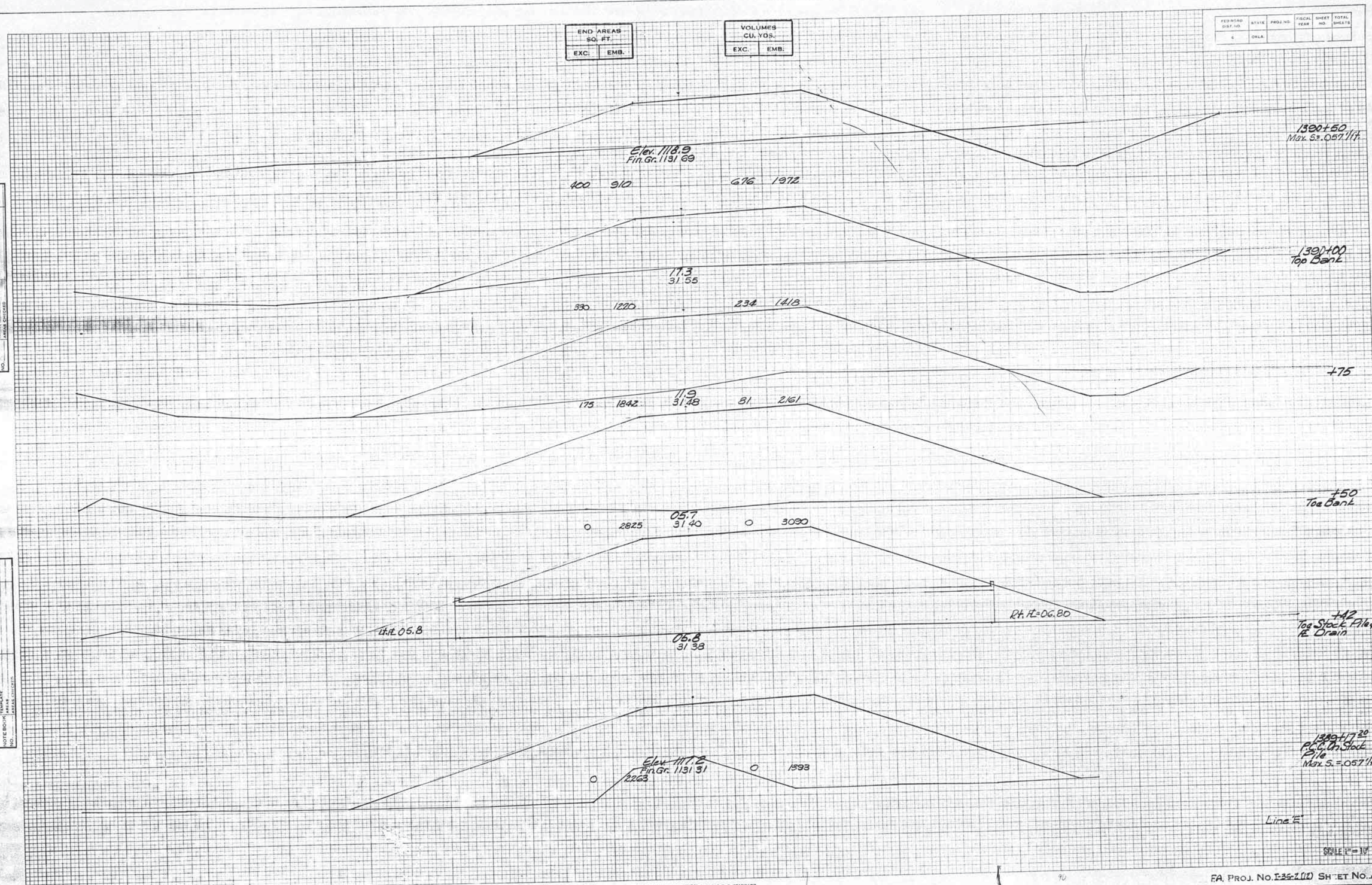
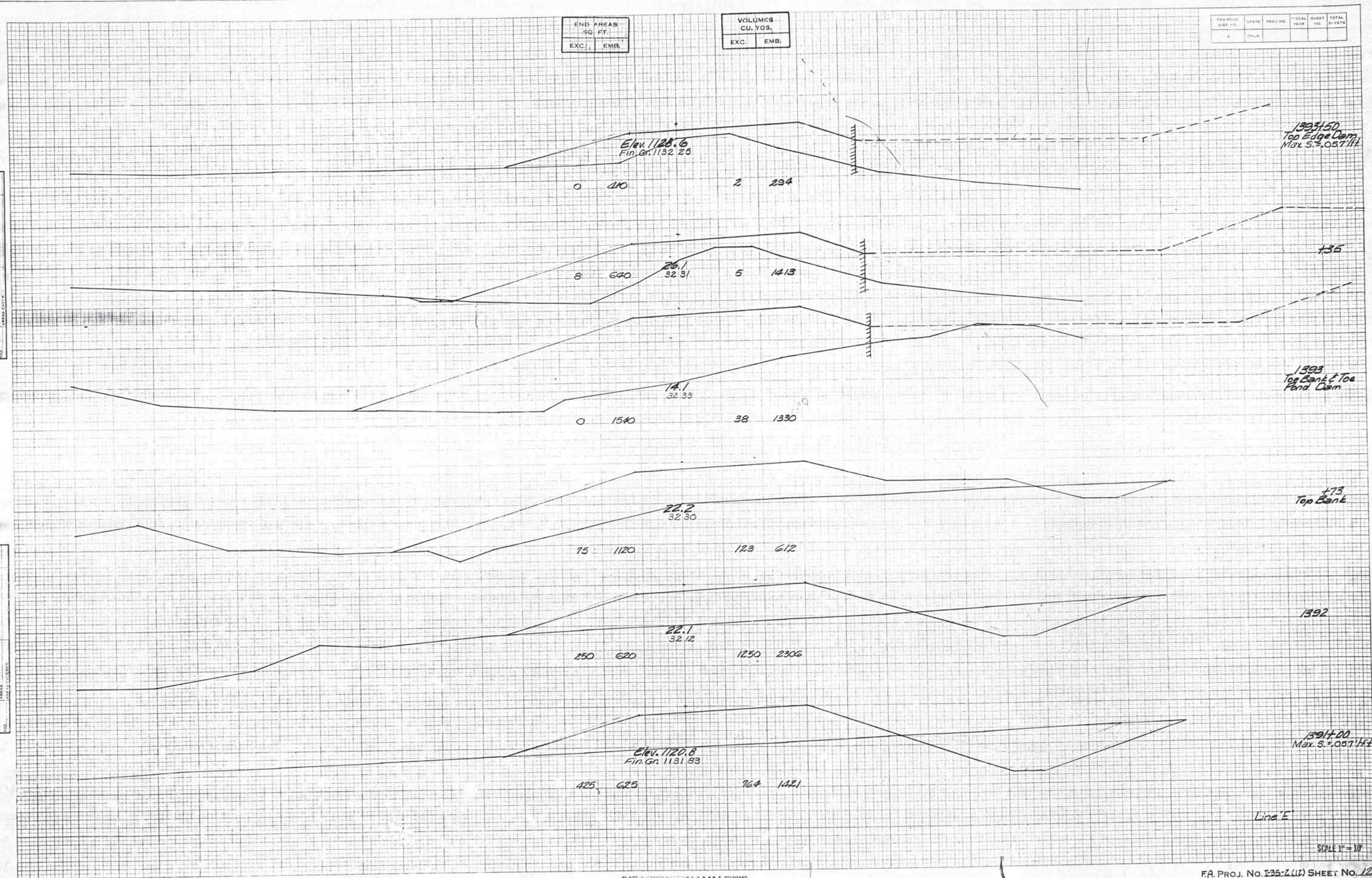
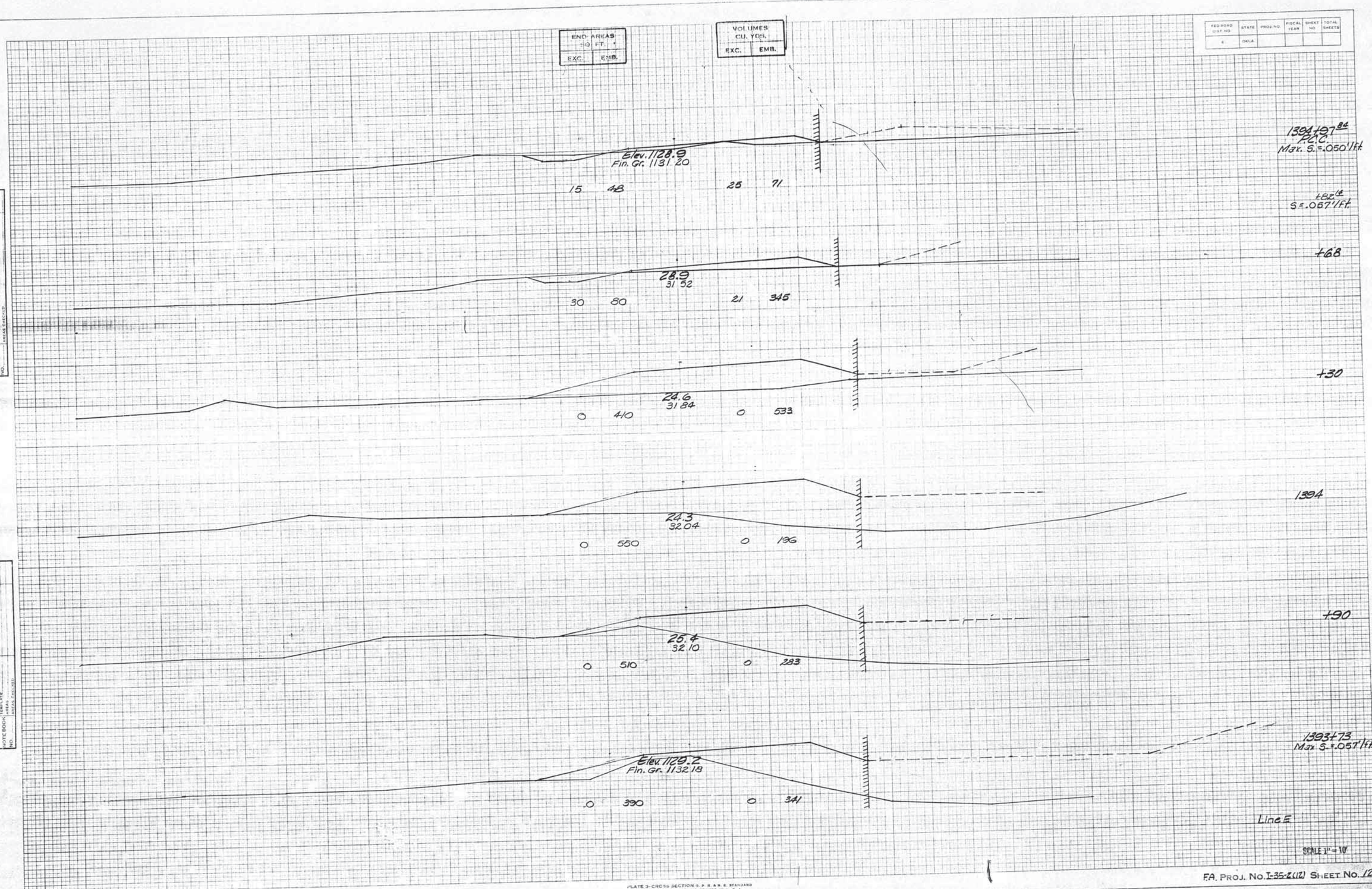


PLATE 3-CROSS SECTION U. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. I-35-2(12) SHEET NO. 123



F.A. PROJ. No. I-35-2(12) SHEET No. 124



FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

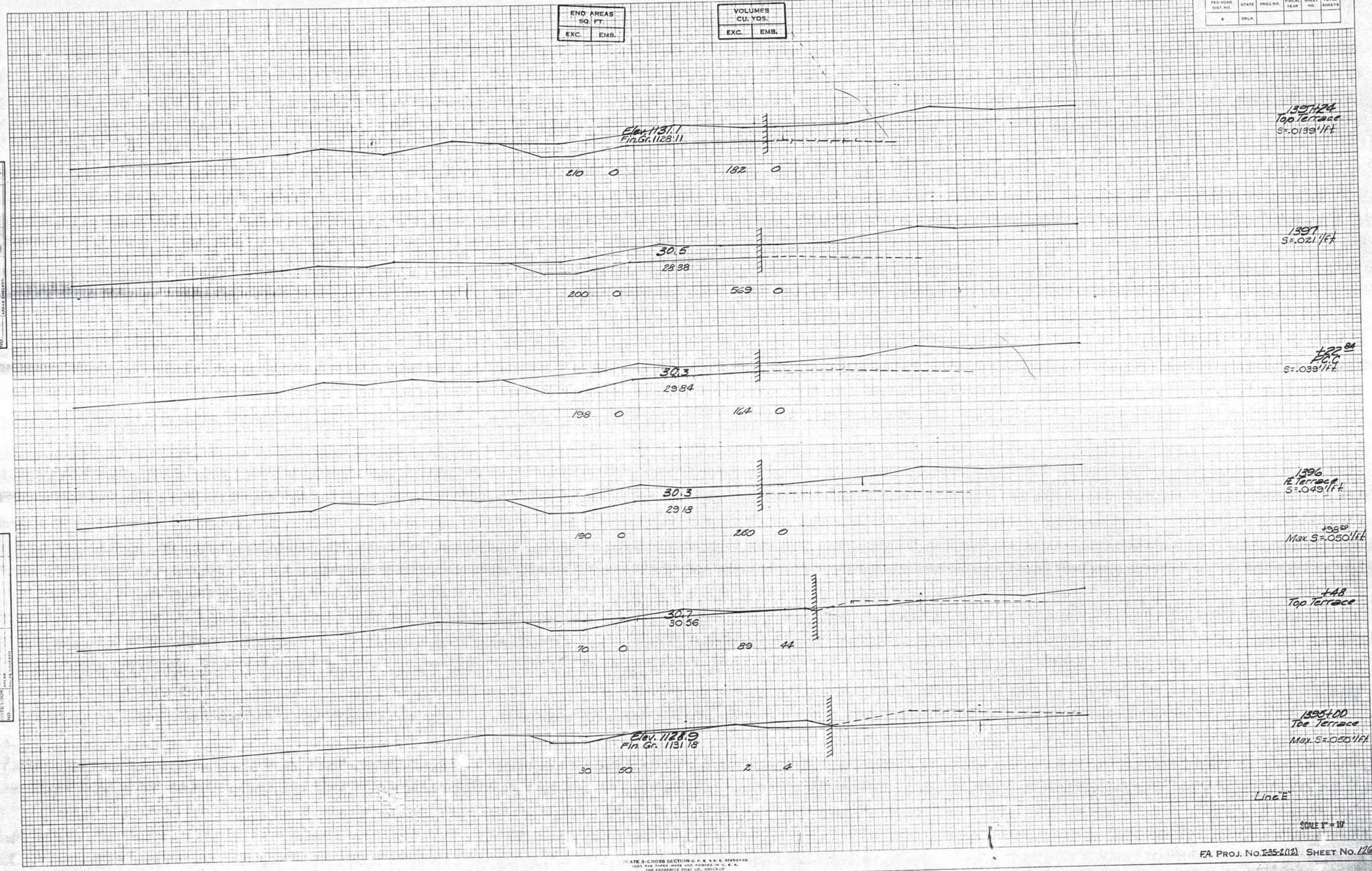
F.A. PROJ. NO. I-35-2(12) SHEET NO. 125

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
1000 NAS PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO. CHICAGO

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.



SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED

ORIGINAL SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. I-35-2(12) SHEET NO. 126

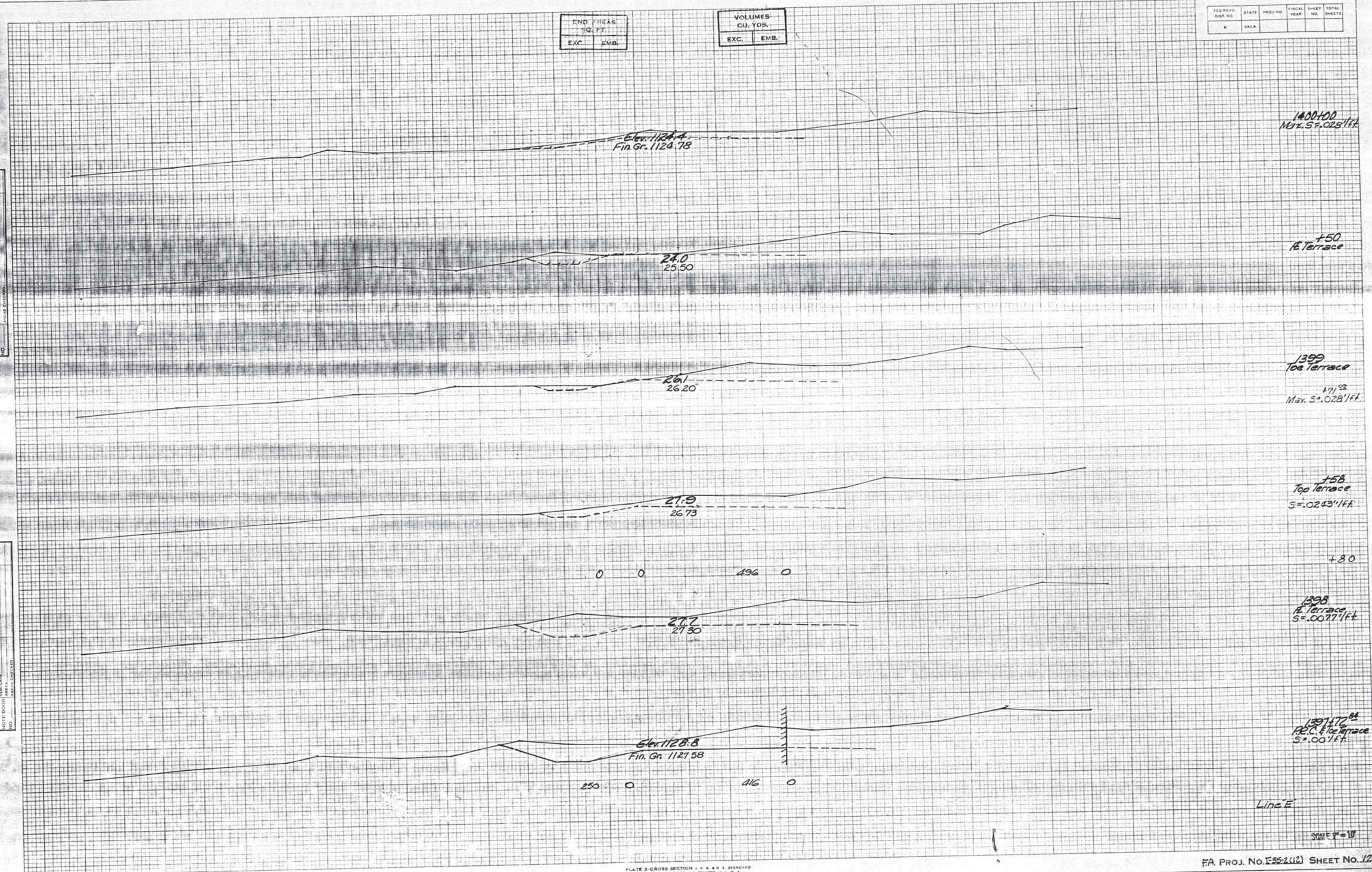


PLATE 3-CROSS SECTION U. P. R. & R. E. STANDARD
1936 RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. F-35-2(12) SHEET No. 127

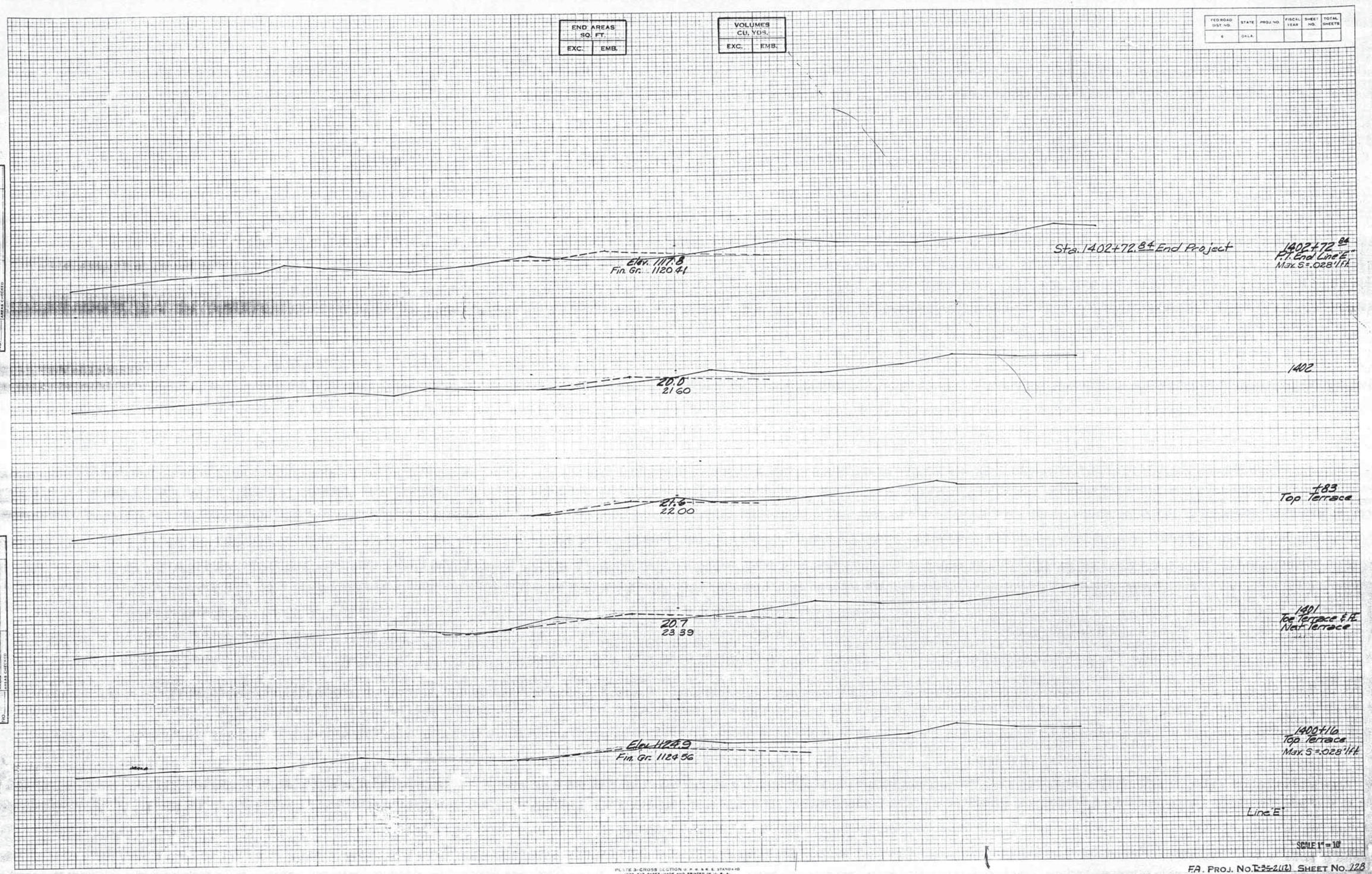


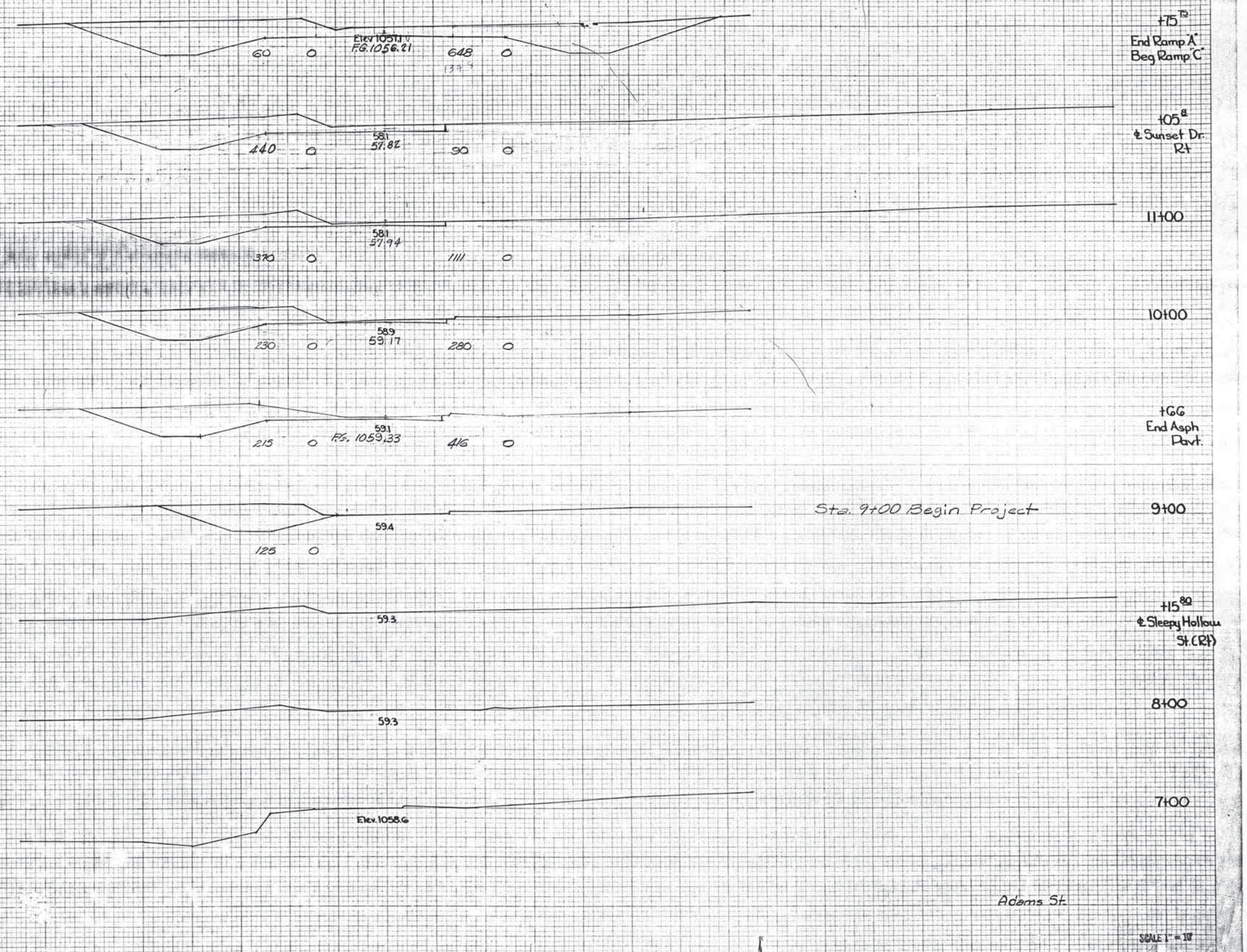
PLATE 3-CROSS SECTION U. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. T-35-2(12) SHEET NO. 128

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	OKLA.				

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.



SCALE 1" = 10'

PLATE 3—CROSS SECTION D. P. W. A. R. E. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

FINAL SURVEY: SURVEYED / PLOTTED / AREAS / AREAS CHECKED / NOTE BOOK NO.

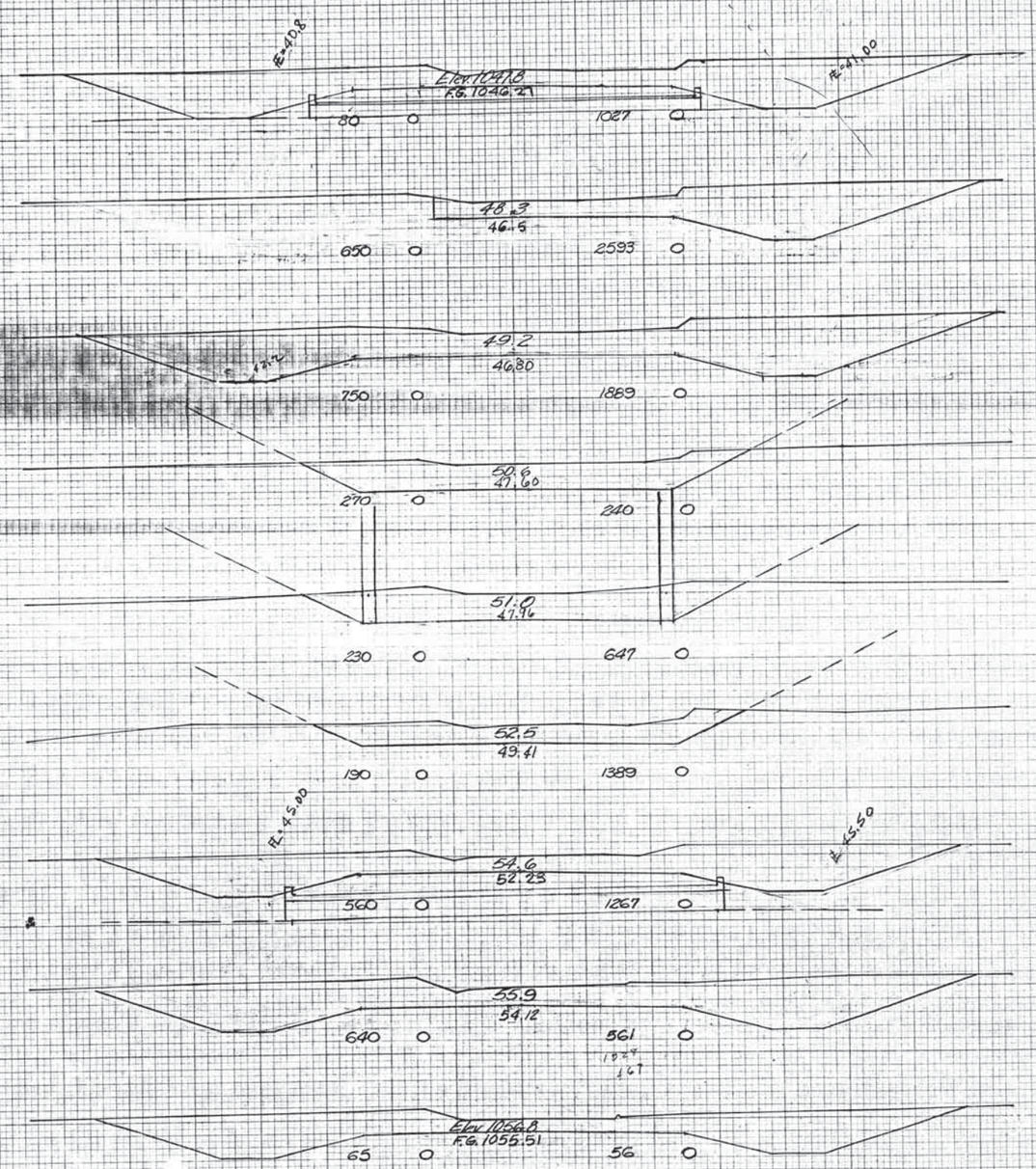
ORIGINAL SURVEY: SURVEYED / PLOTTED / AREAS / AREAS CHECKED / NOTE BOOK NO.

F.A. PROJ. NO. I-35-2(10) SHEET NO. 129

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				



17+75.75
End Ramp D
Begin Ramp D

17

16

15+00

17+75.75
℄ Median I-35

14

13

17+43
End Conc. Curb & P.

12+00

Adams St.

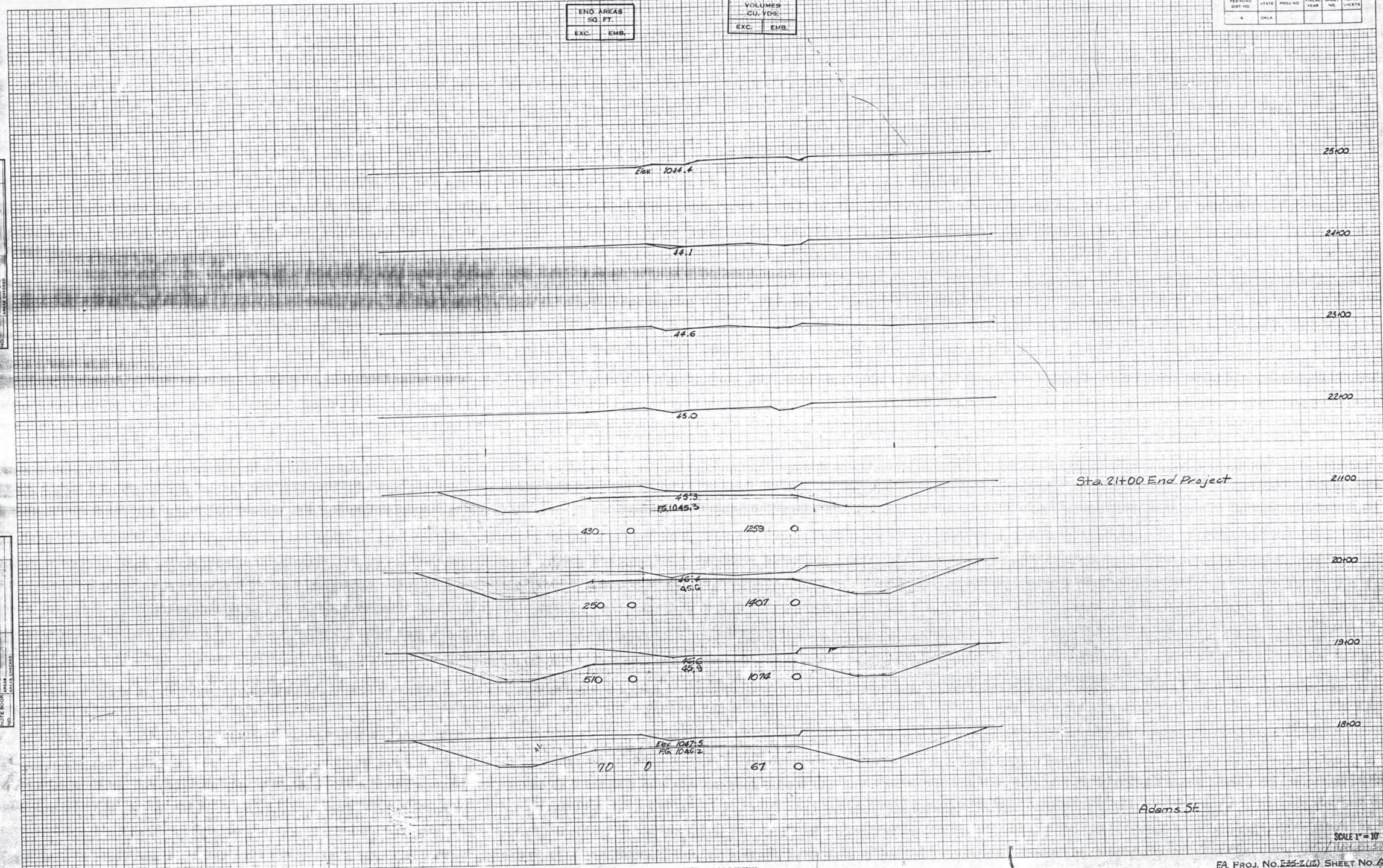
SCALE 1" = 10'

SURVEY NOTE BOOK NO. PLOTTED TEMPLATE AREAS AREAS CHECKED

NOTE BOOK NO. TEMPLATE AREAS AREAS CHECKED

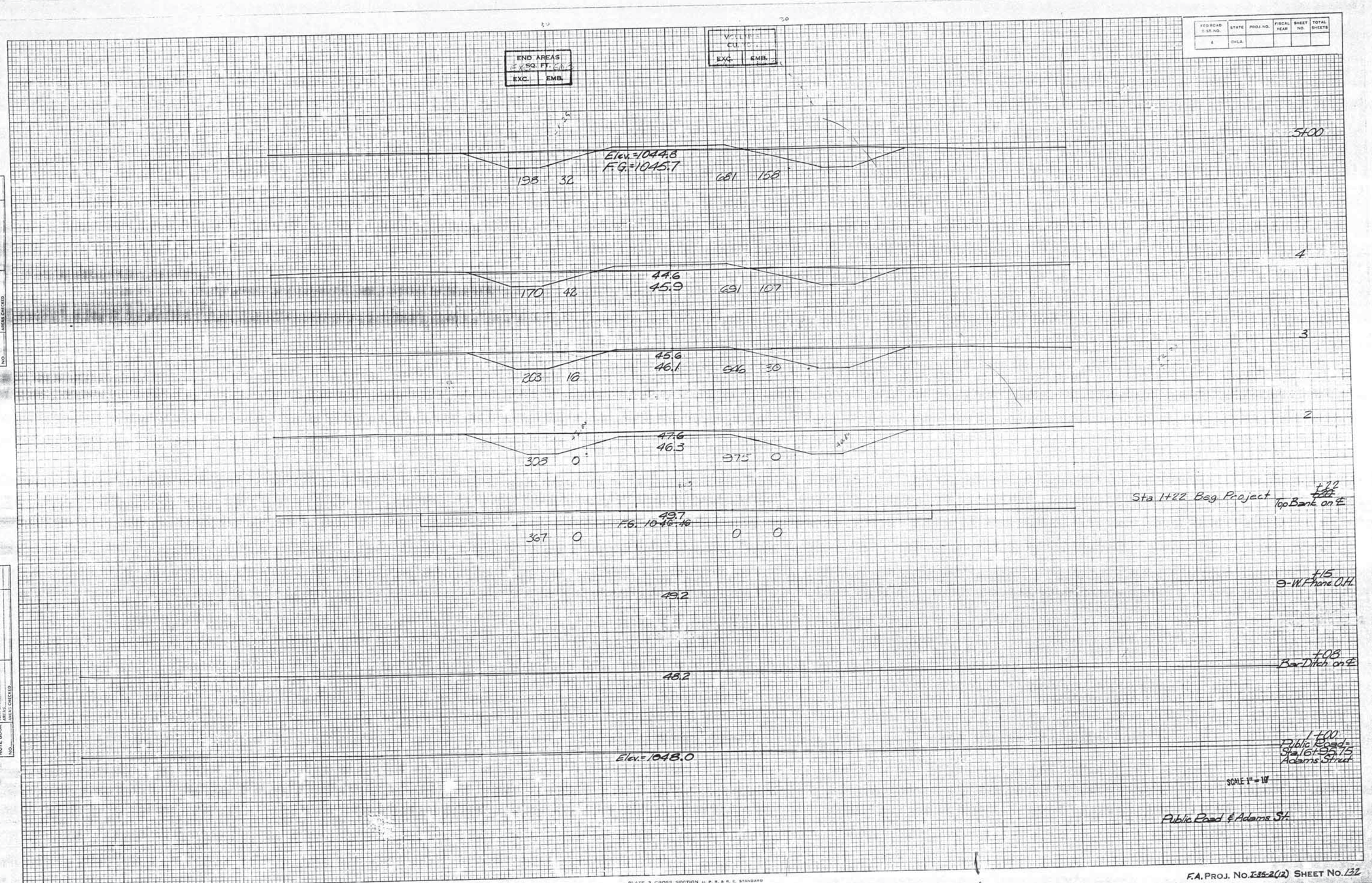
PLATE 3-CROSS SECTION O. P. R. & W. C. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. I-35-2(12) SHEET No. 130



F.A. PROJ. NO. I-35-2(12) SHEET NO. 131

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

FINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED

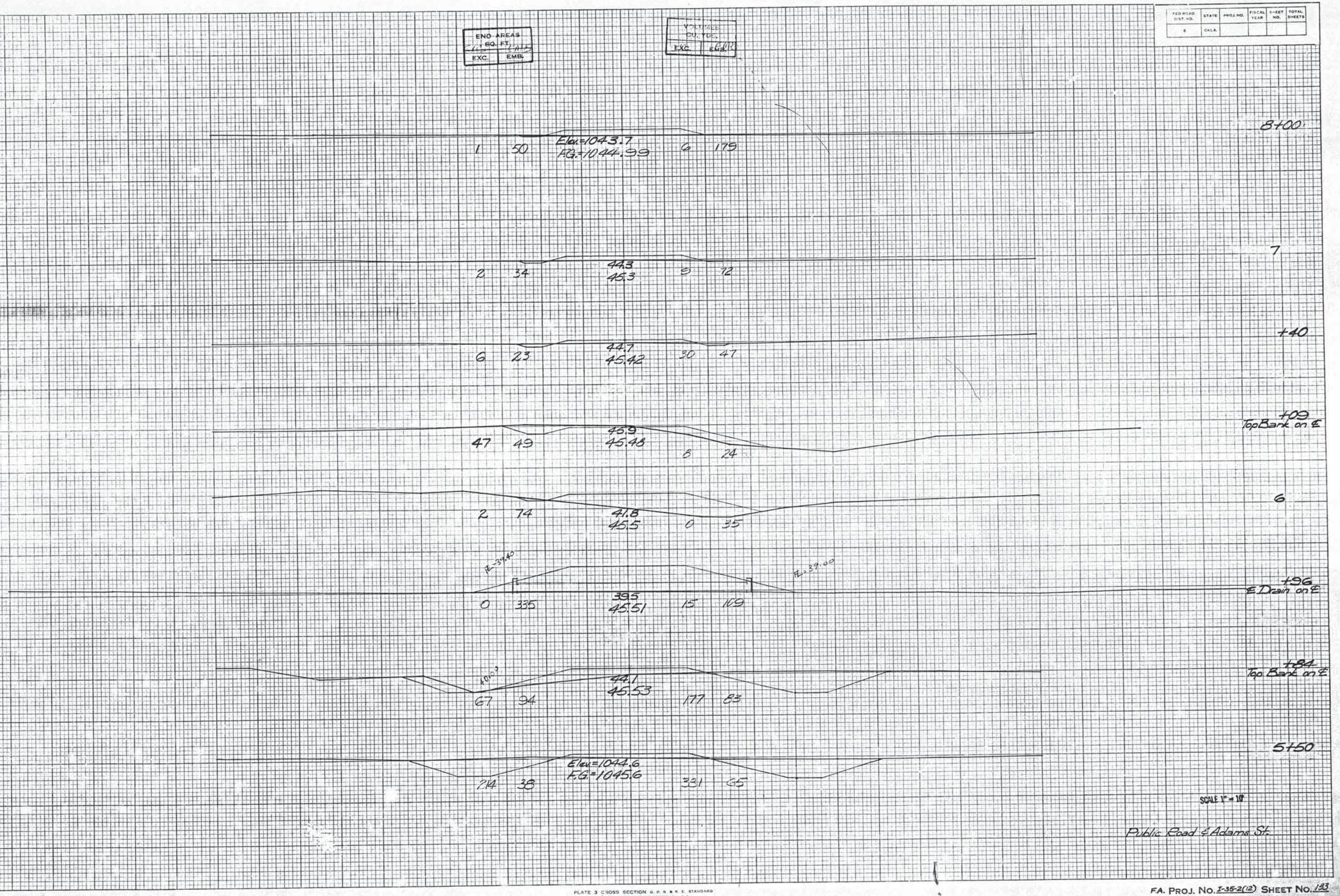
ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

PLATE 3 CROSS SECTION U. P. R. & R. E. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY

42-143

F.A. PROJ. NO. I-35-2(12) SHEET NO. 132

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				



FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

42-143

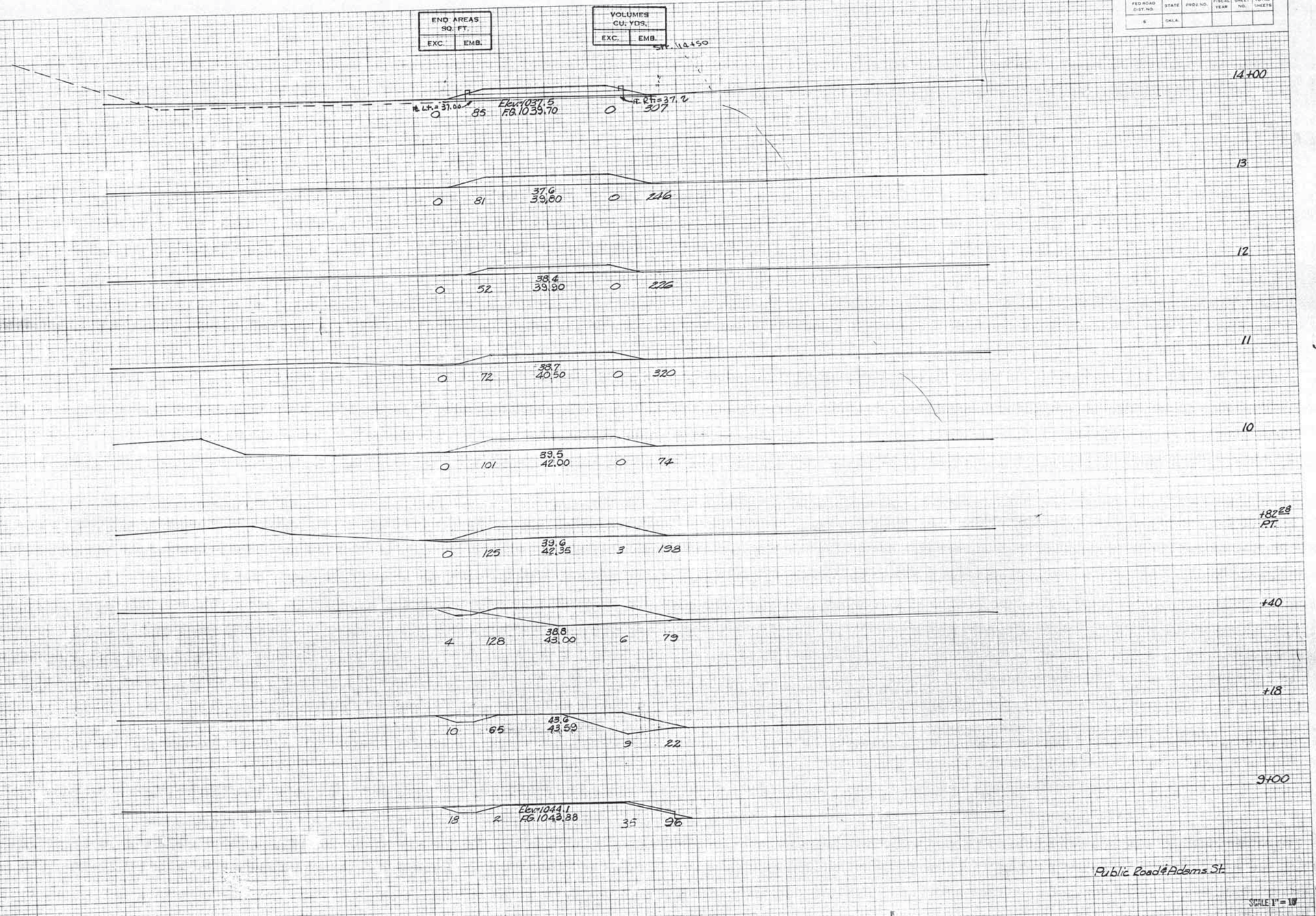
PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
CHARLES BRUNING COMPANY

F.A. PROJ. NO. I-35-2(12) SHEET NO. 133

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	CALIF.				

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.



Public Road & Adams St.

SCALE 1" = 10'

FA. PROJ. NO. ~~I-35-2(17)~~ SHEET NO. 134

SURVEY NOTEBOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED

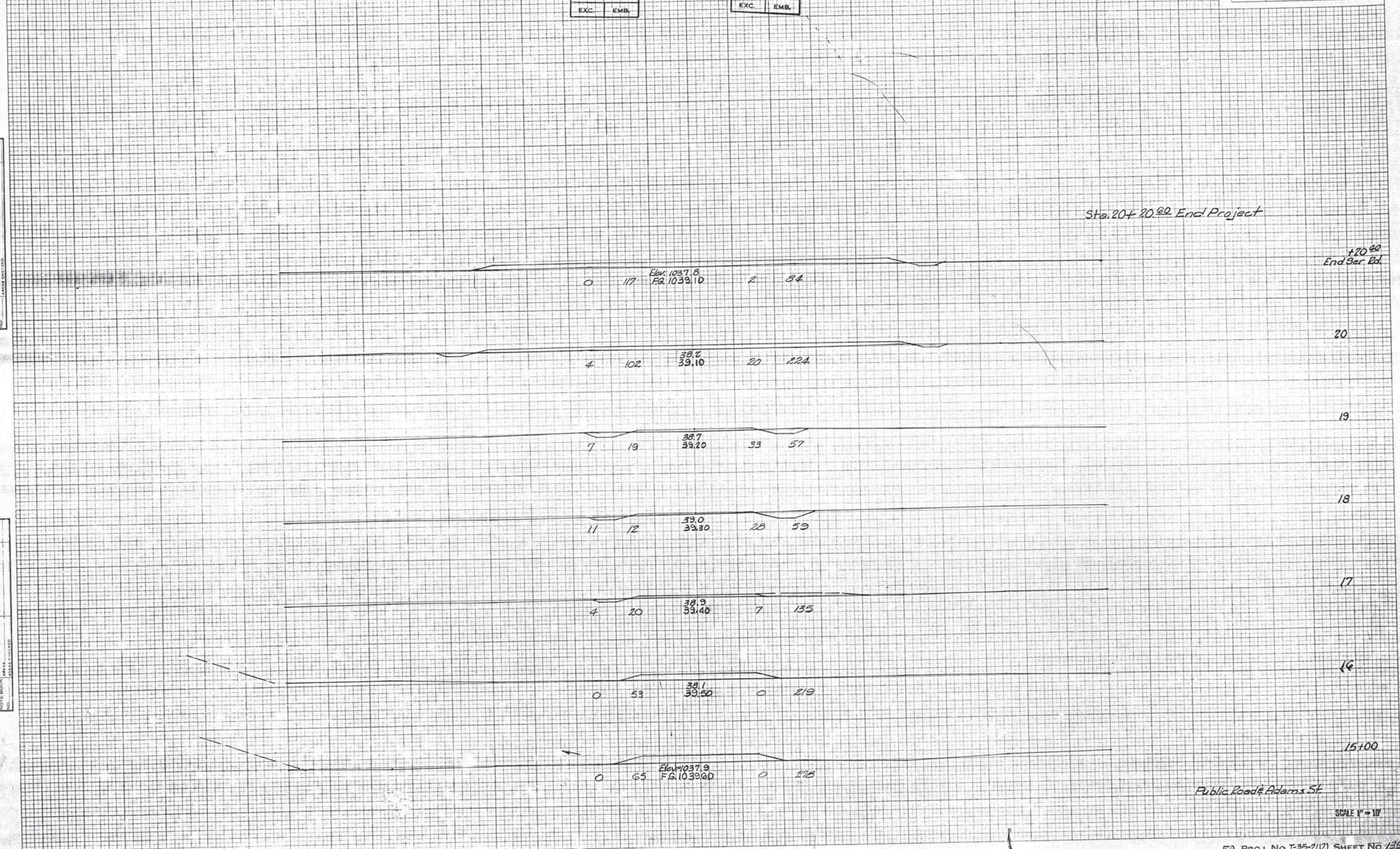
ORIGINAL SURVEY NOTE EDITOR NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED

PLATE 3-CROSS SECTION C. P. R. R. & S. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.

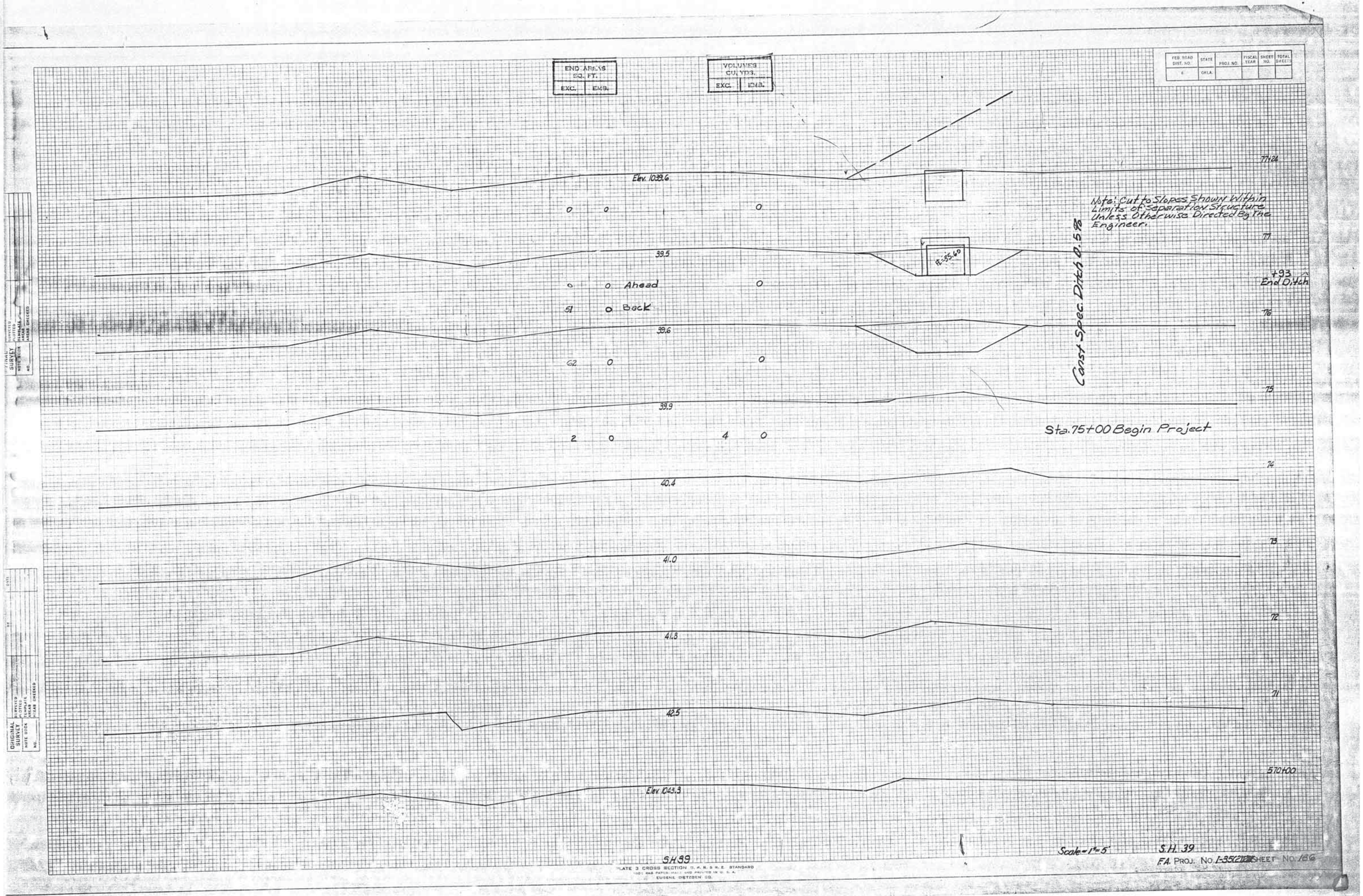


FINAL SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED

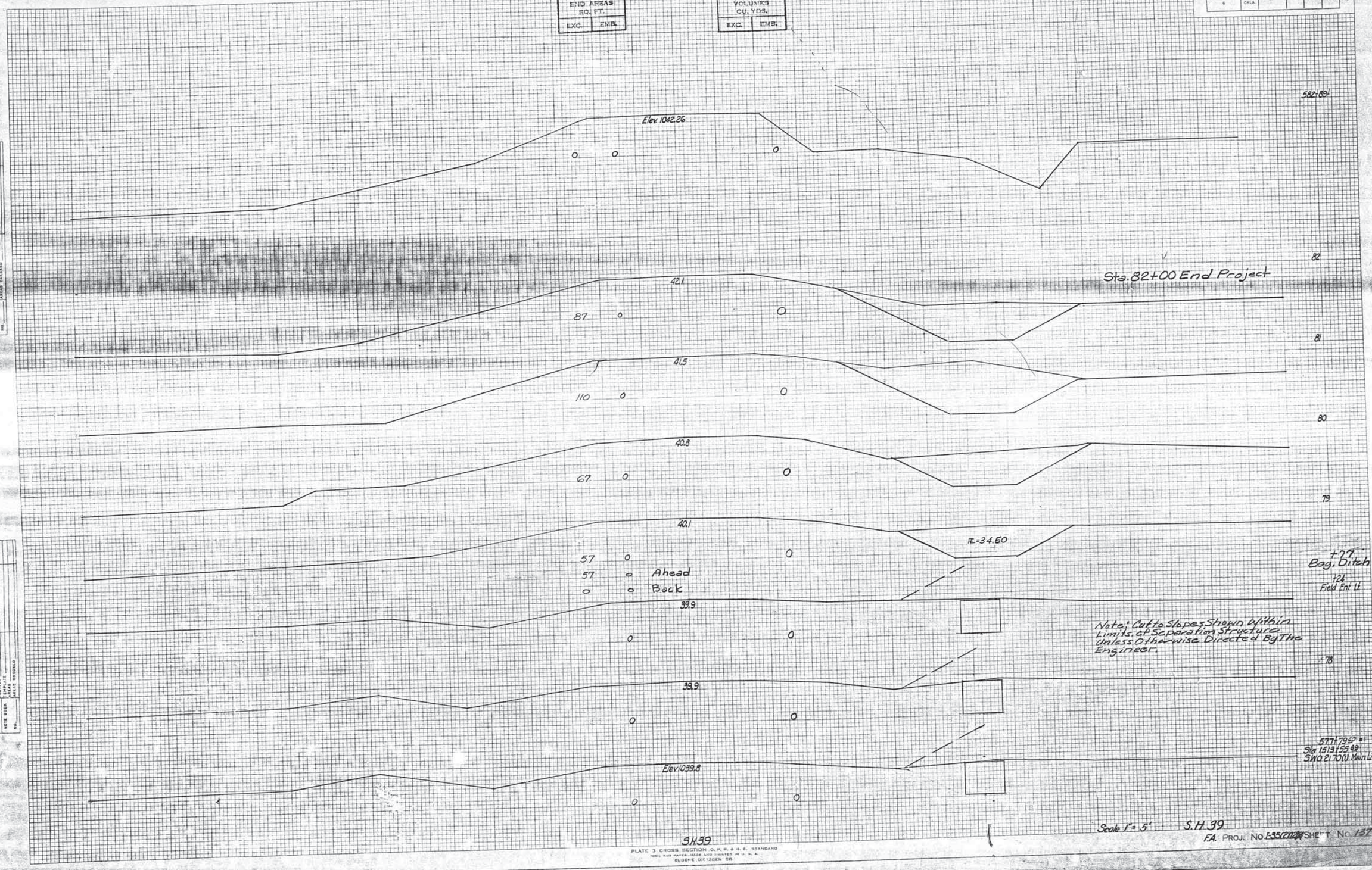
ORIGINAL SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

PLATE 3—CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. I-35-2(12) SHEET NO. 135



END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO. 6
STATE ORLA.
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
Elev. 1039.6
0 0 0
39.5
0 0 Ahead 0
51 0 Back
39.6
62 0 0
39.9
2 0 4 0
40.4
41.0
41.8
42.5
Elev 1043.3
Note: Cut to Slopes Shown Within Limits of Separation Structure Unless Otherwise Directed By The Engineer.
Const Spec. Ditch 0.5%
Sta. 75+00 Begin Project
77+24
77
+93 End Ditch
76
75
74
73
72
71
570+00
Scale = 1" = 5'
S.H. 39
F.A. PROJ. No. I-35(21)
SHEET No. 186
SH 39
PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO.
ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

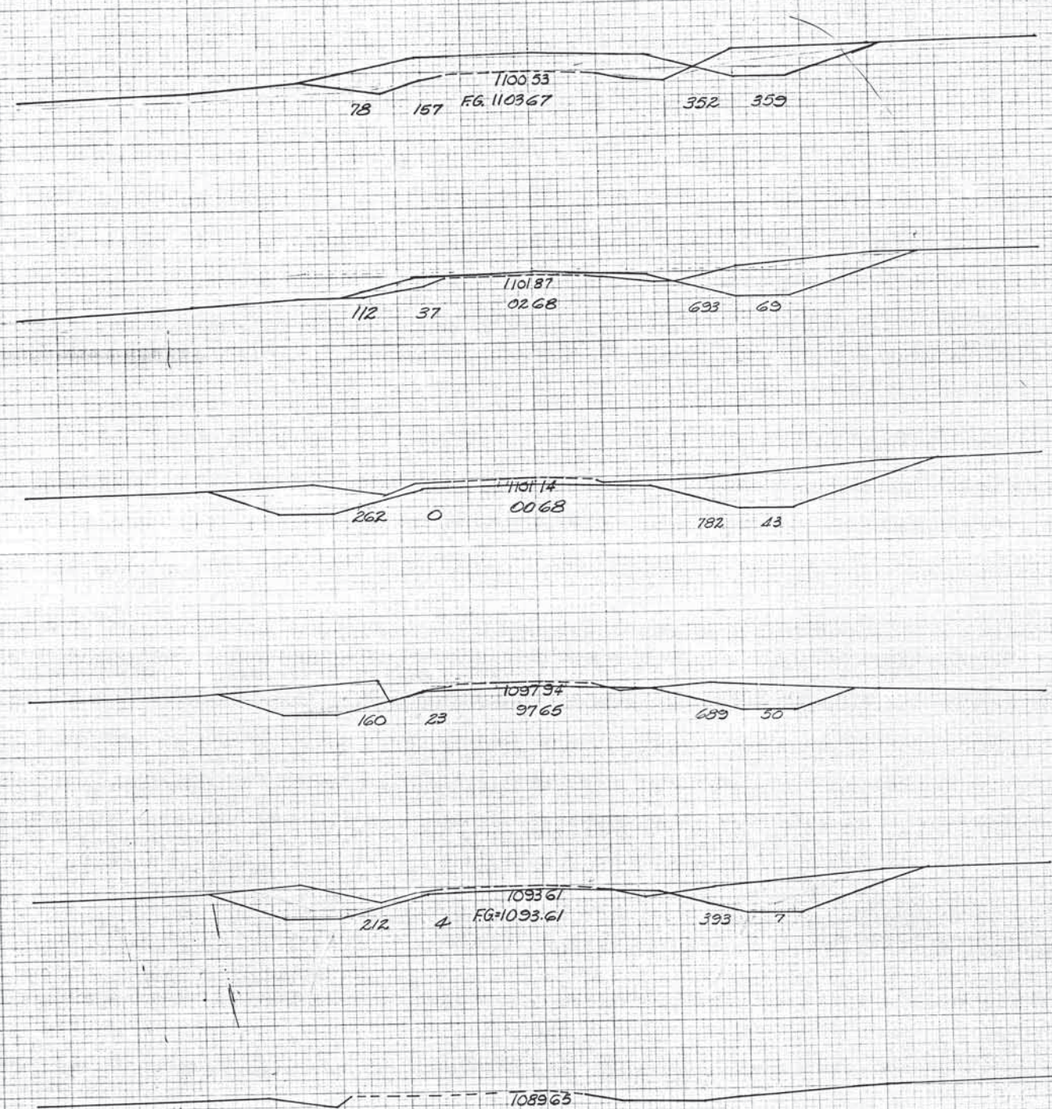


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO. 6
STATE OKLA.
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
Elev. 1042.26
0 0 0
582+89
82
Sta. 82+00 End Project
42.1
87 0 0
81
41.5
110 0 0
80
40.8
67 0 0
79
40.1
FL=34.60
57 0 0
57 0 Ahead
0 0 Back
+77
Bag. Ditch
+24
Field Ent. Lt.
39.9
0 0
Note: Cut to Slopes Shown Within Limits of Separation Structure Unless Otherwise Directed By The Engineer.
78
39.9
0 0
577+79.50 =
Sta. 1513+55.89
SWO 2170(1) Main Line
Elev. 1039.8
0 0
S.H. 39
Scale 1" = 5'
S.H. 39
F.A. PROJ. NO. I-35(2)(2)(2) SHEET NO. 137
PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.
FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TIMEWALL
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TIMEWALL
AREAS
AREAS CHECKED
BY
DATE

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.



Sta. 21+00 Begin Project

Airport Road

SCALE 1" = 10'

FA. PROJ. NO. I-35-2(12) SHEET NO. 138

FINAL SURVEY: SURVEYED, PLOTTED, TEMPLATE, AREAS, CHECKED; NOTE BOOK NO.

ORIGINAL SURVEY: SURVEYED, PLOTTED, TEMPLATE, AREAS, CHECKED; NOTE BOOK NO.; BY; DATE

PLATE 3-CROSS SECTION D. P. W. S. R. E. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
THE FREDERICK HELF CO., CHICAGO

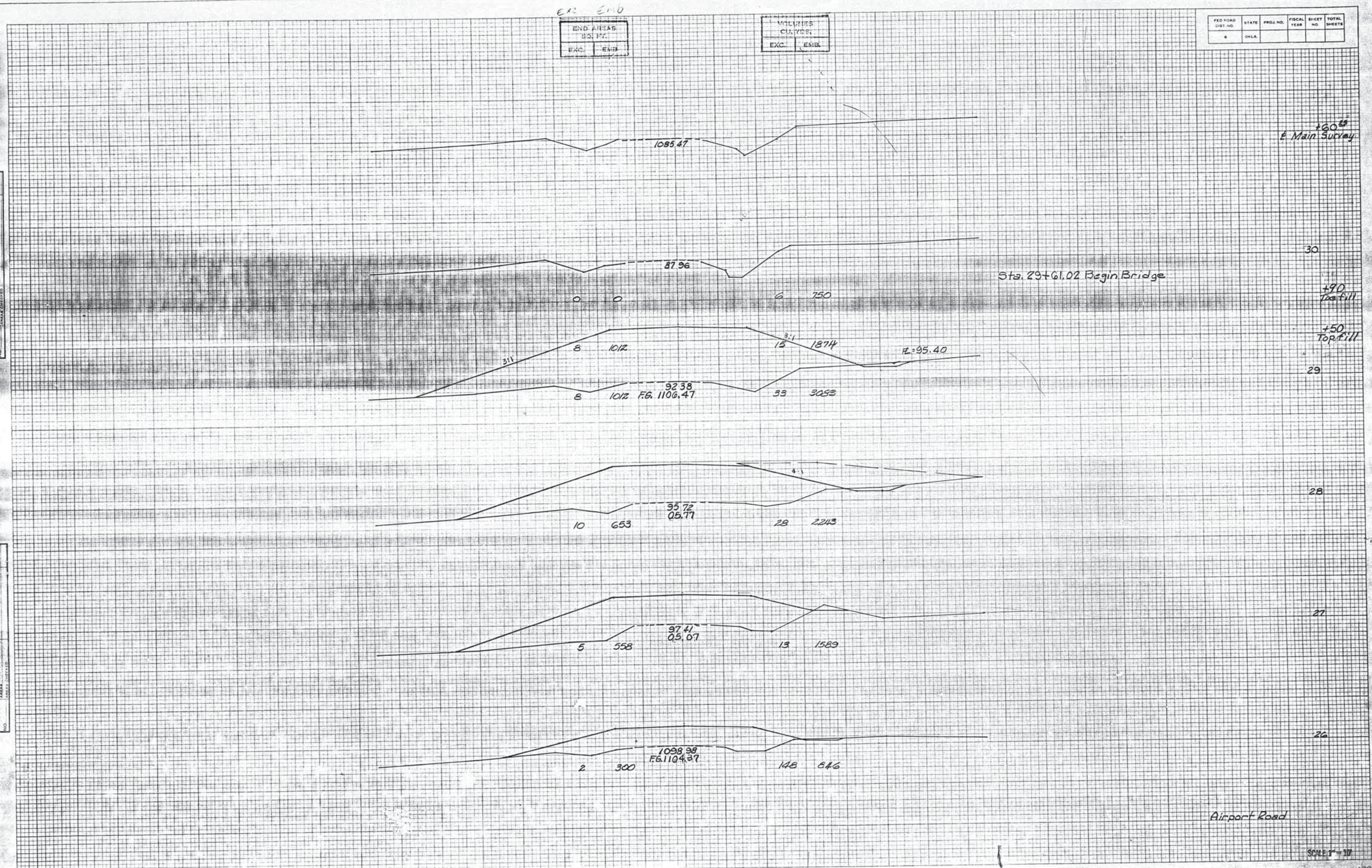
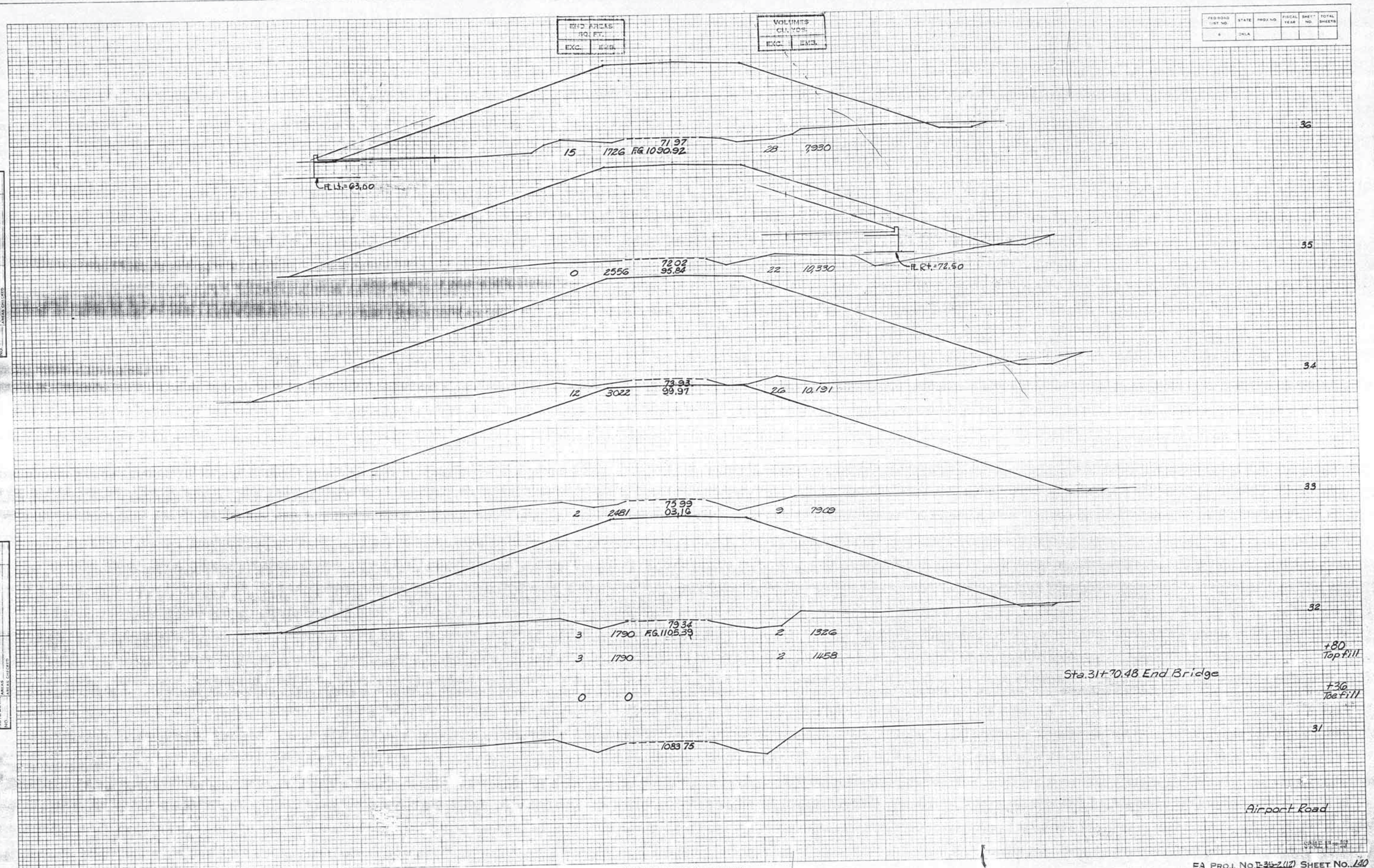


PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
THE FREDERICK POST CO. CHICAGO

FA PROJ. NO. I-35-2(12) SHEET NO. 139



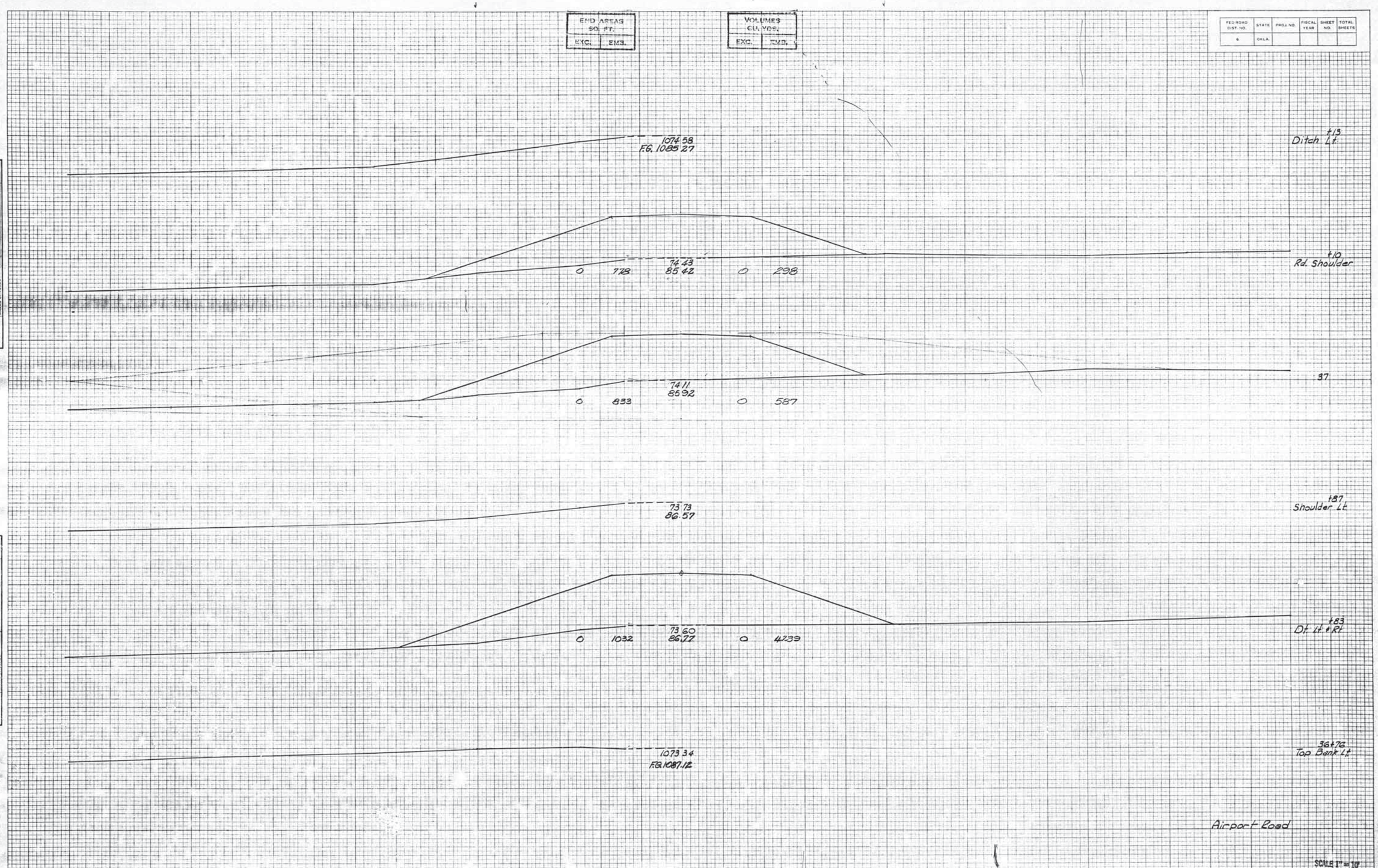
LATE 3-CROSS SECTION G. P. R. & R. E. STANDARD
1005 PAR PAPER MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

FA PROJ. NO. T-35-2(12) SHEET NO. 140

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.



SURVEY NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

SURVEY NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

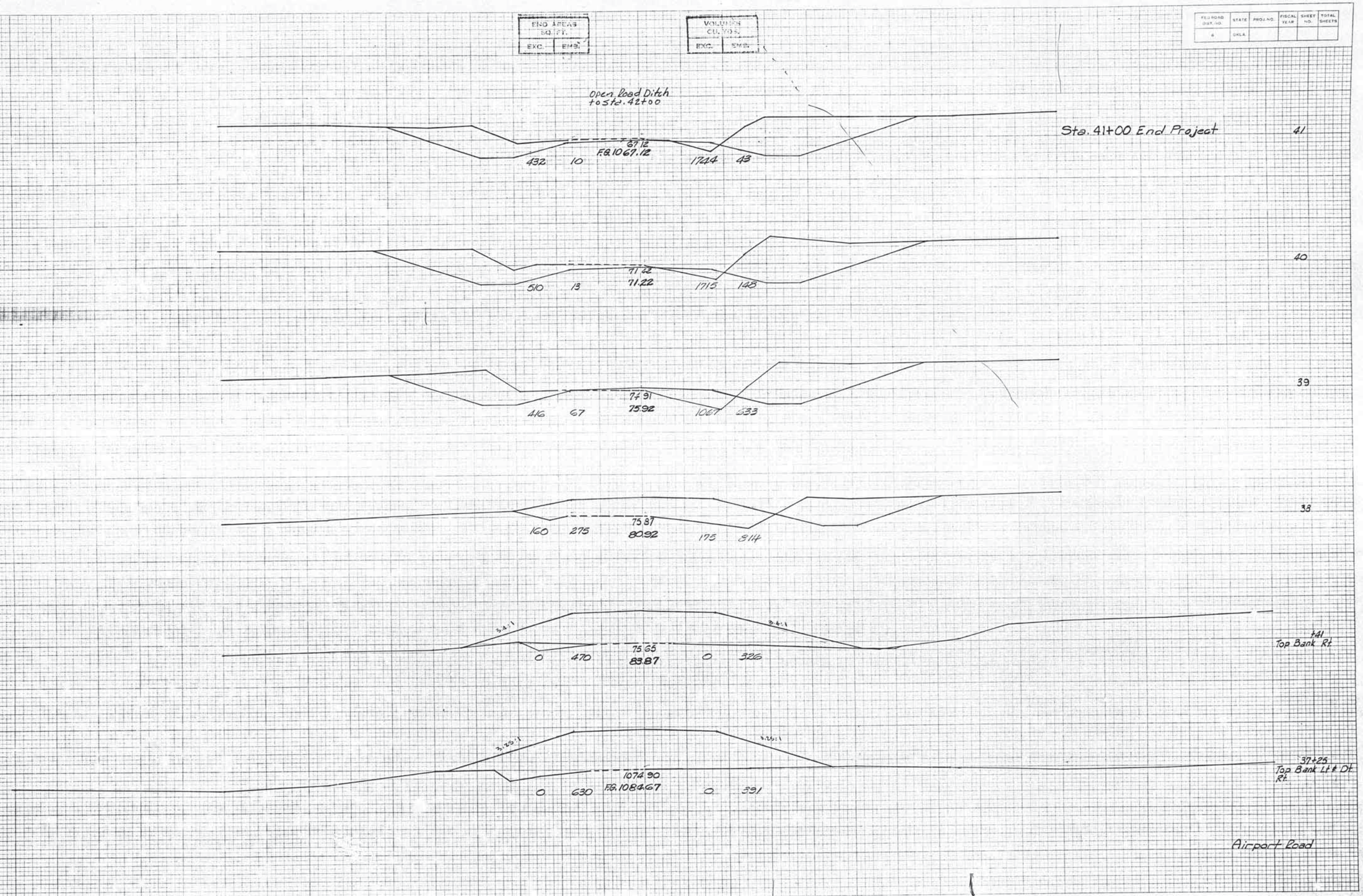
PLATE 3-CROSS SECTION G. P. R. & R. E. STANDARD
195 RUB PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. ~~F-BS-202~~ SHEET NO. 141

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				



SURVEY NOTE BOOK NO. | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED

SURVEY NOTE BOOK NO. | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED

PLATE 3-CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. No. ~~I-35-2(17)~~ SHEET No. 142

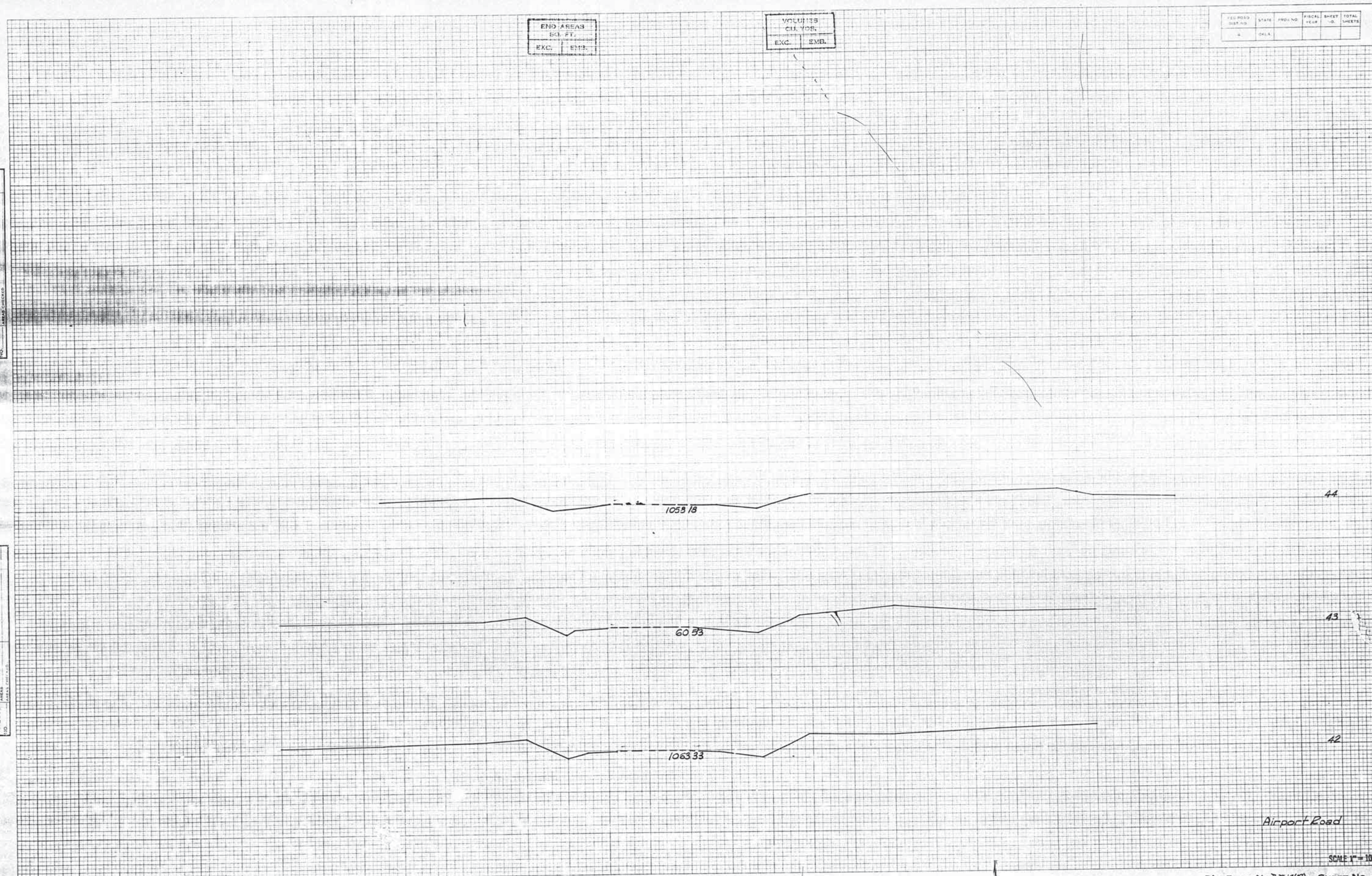
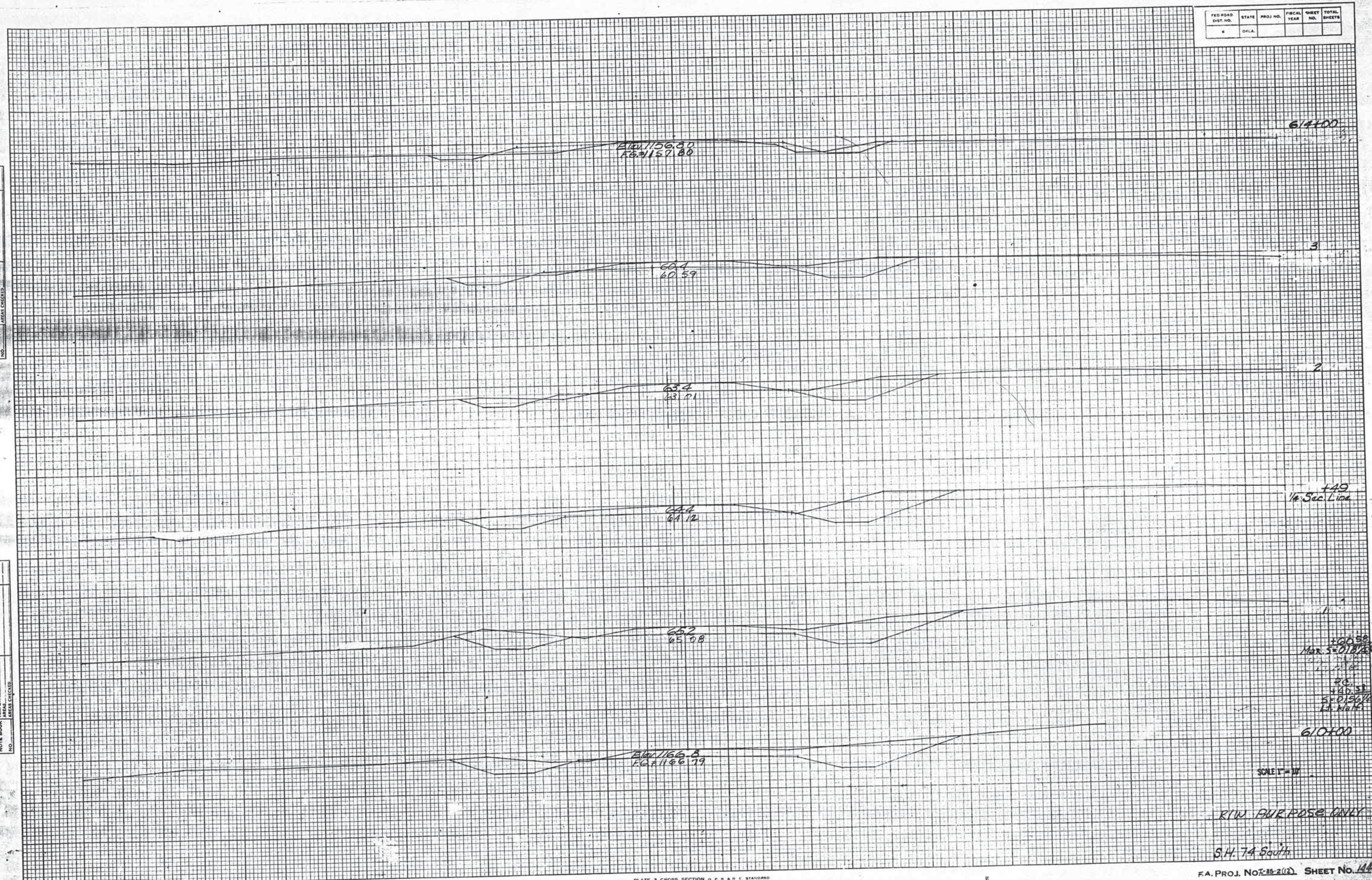


PLATE 3 CROSS SECTION G. P. R. & R. C. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
THE FREDERICK POST CO., CHICAGO

F.A. PROJ. NO. F-35-2(12) SHEET NO. 143

FED ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				



FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
AREAS
AREAS CHECKED
NO.

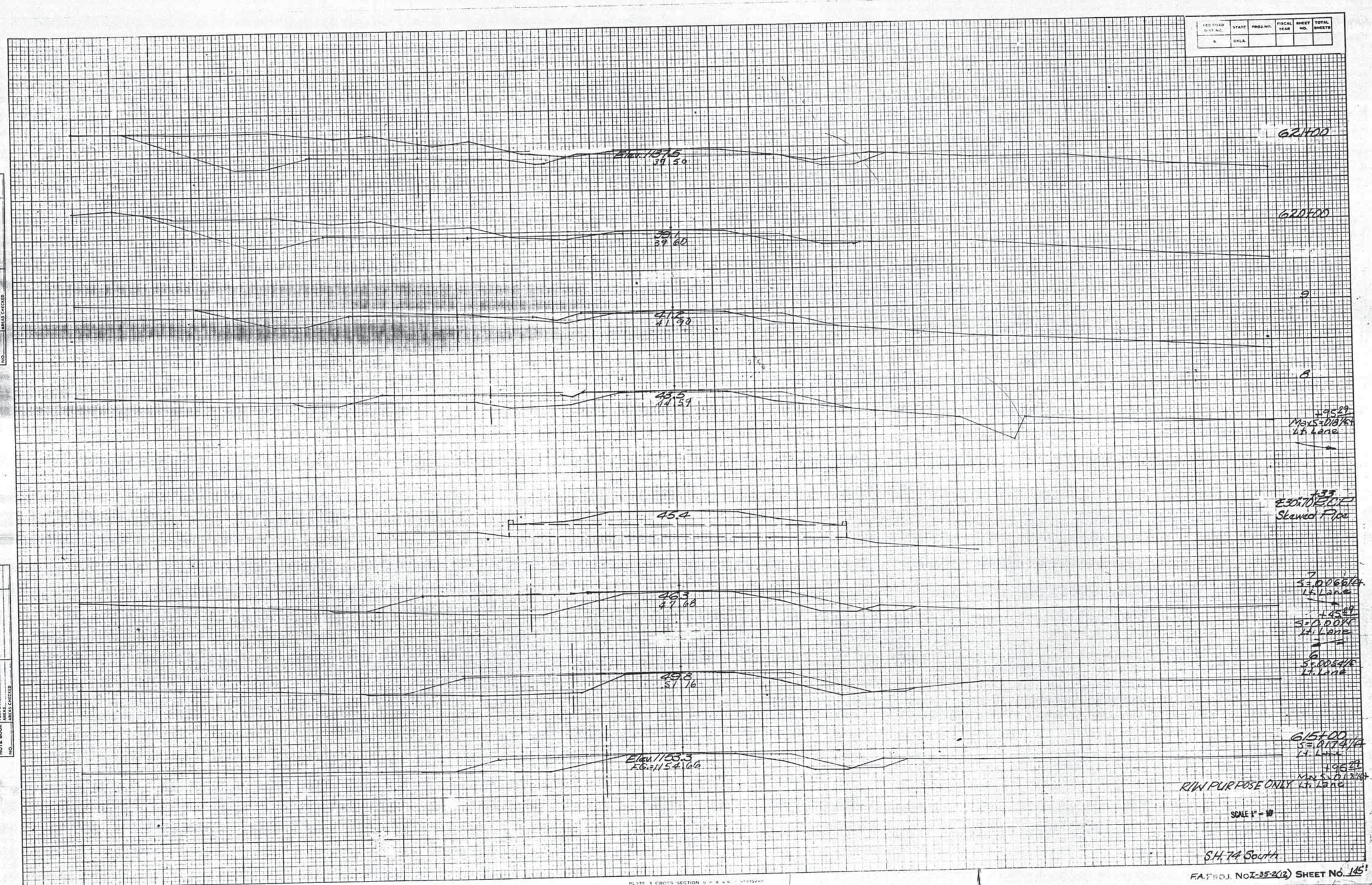
ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
AREAS
AREAS CHECKED
NO.
BY
DATE

PLATE 3 CROSS SECTION O. P. H. & R. C. STANDARD
100% RAG PAPER - MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY

42-143

F.A. PROJ. NO. I-35-2(12) SHEET No. 144

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

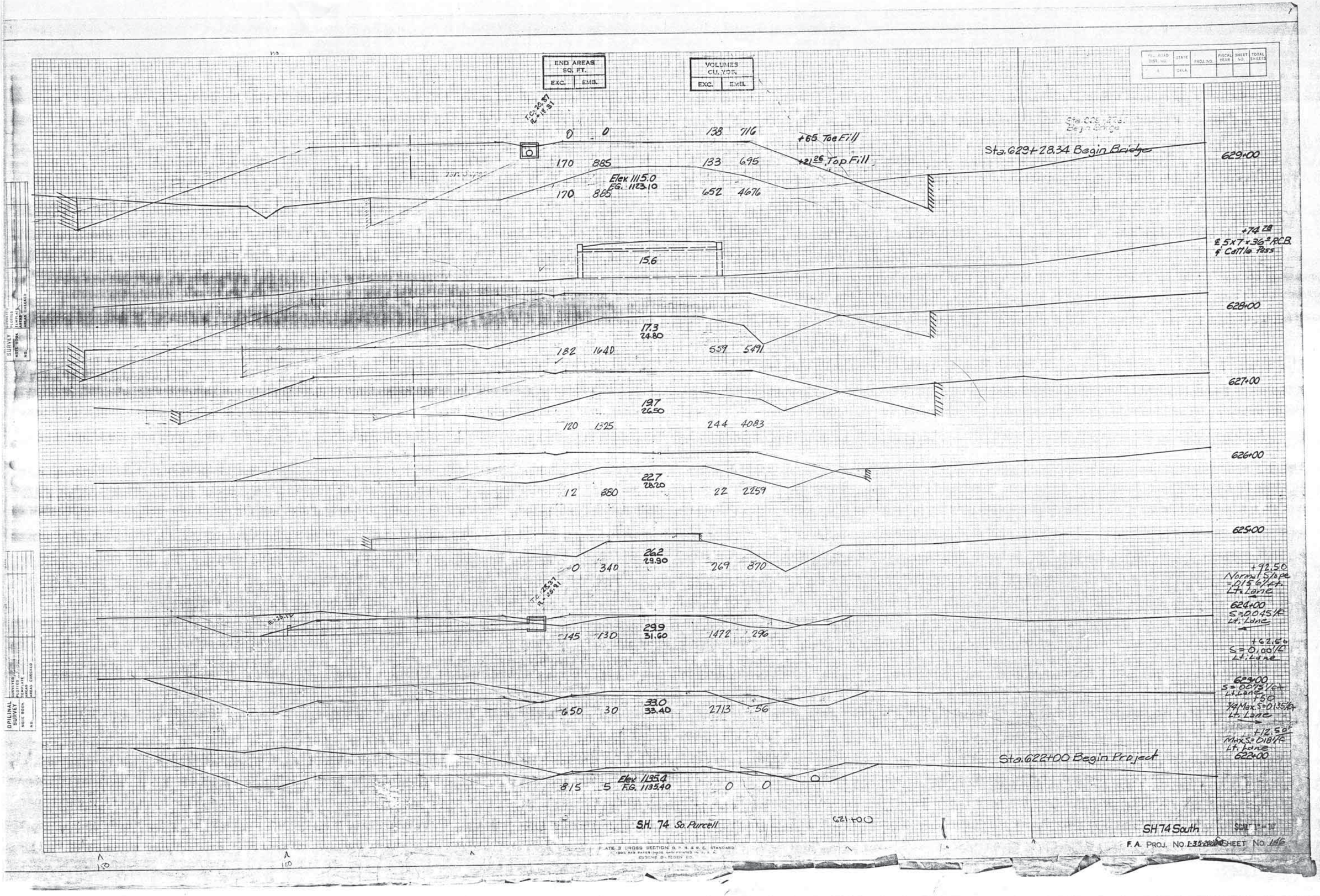


FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

PLATE 1 CROSS SECTION

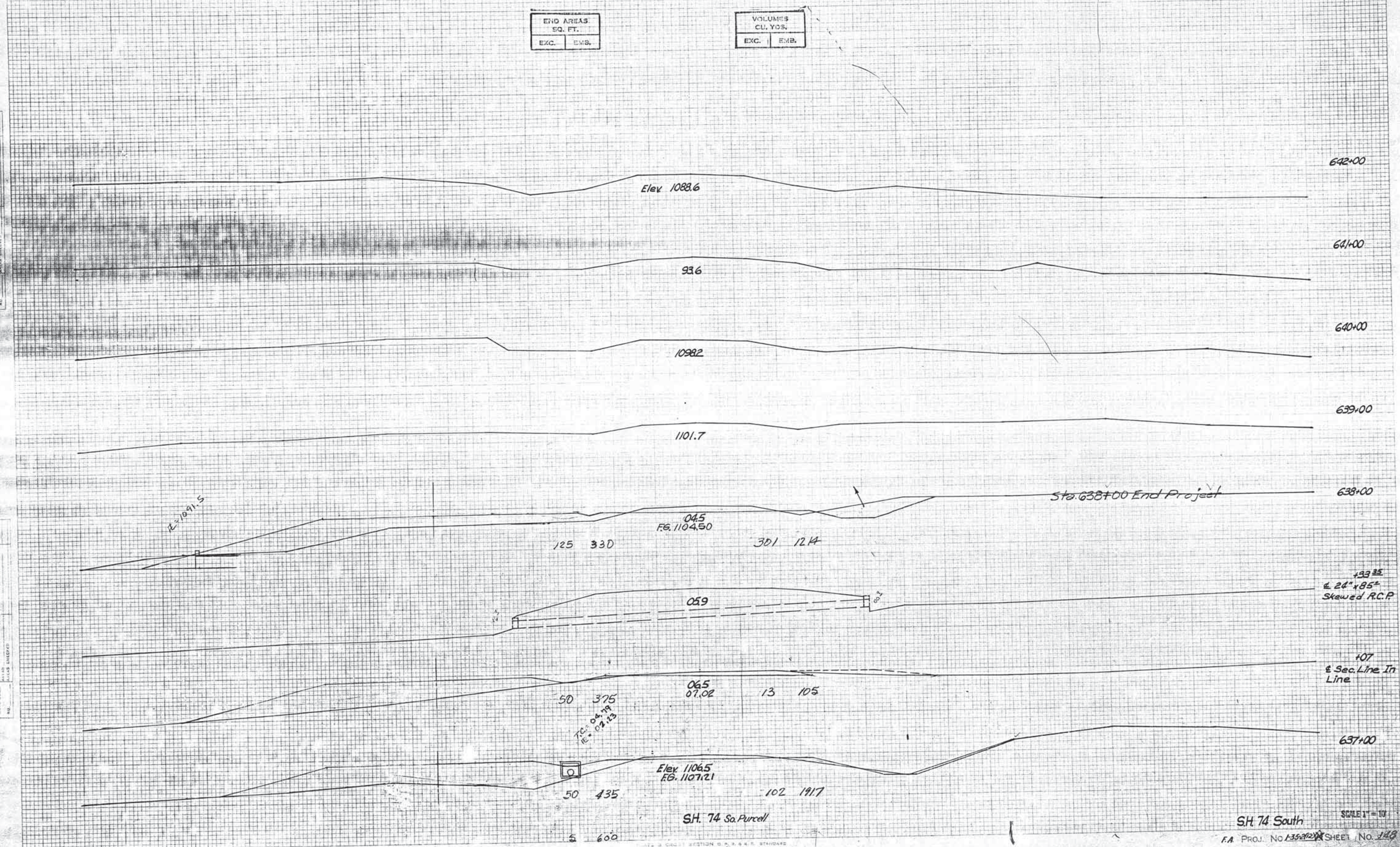
F.A. PROJ. NO. I-35-2(12) SHEET NO. 145



END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
0 0 138 716
+65 Toe Fill
170 885 133 695
+21.26 Top Fill
Sta. 629+28.34 Begin Bridge
Elev 1115.0
F.G. 1123.10
170 885 652 4676
629+00
+74.78
℄ 5x7x36' R.C.B.
& Cattle Pass
15.6
628+00
17.3
24.80
182 1640 559 5491
627+00
19.7
26.50
120 1325 244 4083
626+00
22.7
28.20
12 880 22 2259
625+00
26.2
29.90
0 340 269 870
+92.50
Normal Slope
=.0156'/ft.
Lt. Lane
624+00
S=.0045'/ft
Lt. Lane
29.9
31.60
145 130 1472 296
+62.50
S=0.00'/ft
Lt. Lane
623+00
S=.0075'/ft
Lt. Lane
+50
3/4 Max. S=.0135'/ft
Lt. Lane
33.0
33.40
650 30 2713 56
+12.50
Max. S=.0181'/ft
Lt. Lane
622+00
Sta. 622+00 Begin Project
Elev 1135.4
F.G. 1135.40
815 5 0 0 0
S.H. 74 So. Purcell
621+00
SH 74 South
SCALE 1" = 10'
F.A. PROJ. NO. 1-35-2(20)
SHEET NO. 146

X-SEC SHT 147

THIS SHT @ THIS TIME IS NOT AVAILABLE. WHEN IT WAS SCANNED THE MACHINE FOULED IT UP. SO WHEN A MICROFILM SCANNER CAN BE PURCHASED IT CAN BE SCANNED FROM MICROFILM TO BE ADDED TO THIS SET.


END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
642+00
Elev. 1088.6
641+00
93.6
640+00
1098.2
639+00
1101.7
Sta. 638+00 End Project
638+00
℄=1091.5
04.5
F.G. 1104.50
125 330
301 1214
+33.35
℄ 24"x85' Skewed R.C.P.
05.9
+07
℄ Sec. Line In Line
06.5
07.02
50 375
13 105
T.C.= 04.79
℄= 02.23
637+00
Elev. 1106.5
F.G. 1107.21
50 435
102 1917
S.H. 74 So. Purcell
5 600
S.H. 74 South
SCALE 1" = 10'
F.A. PROJ. NO. 1-35-2(12) SHEET NO. 148

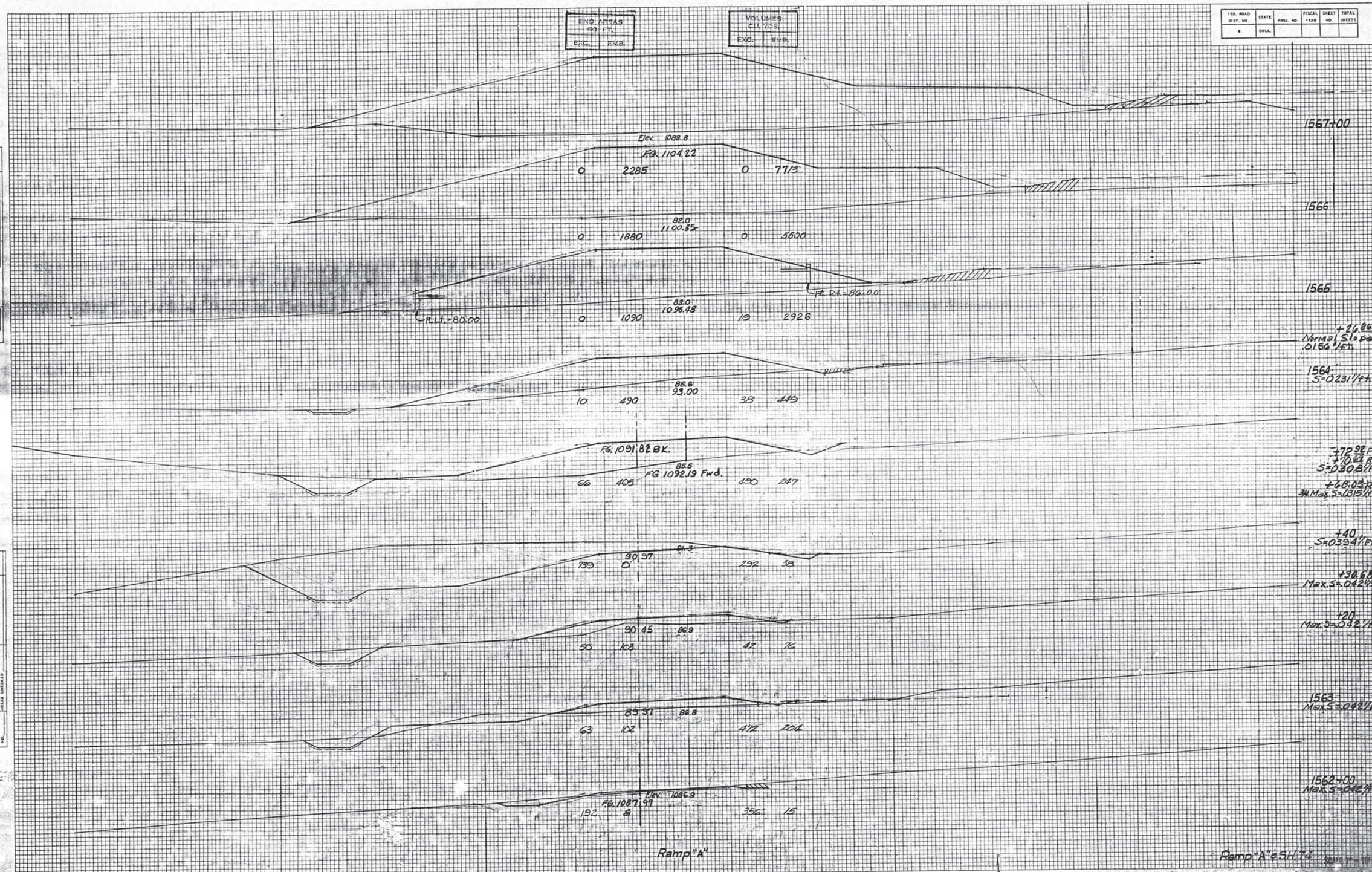
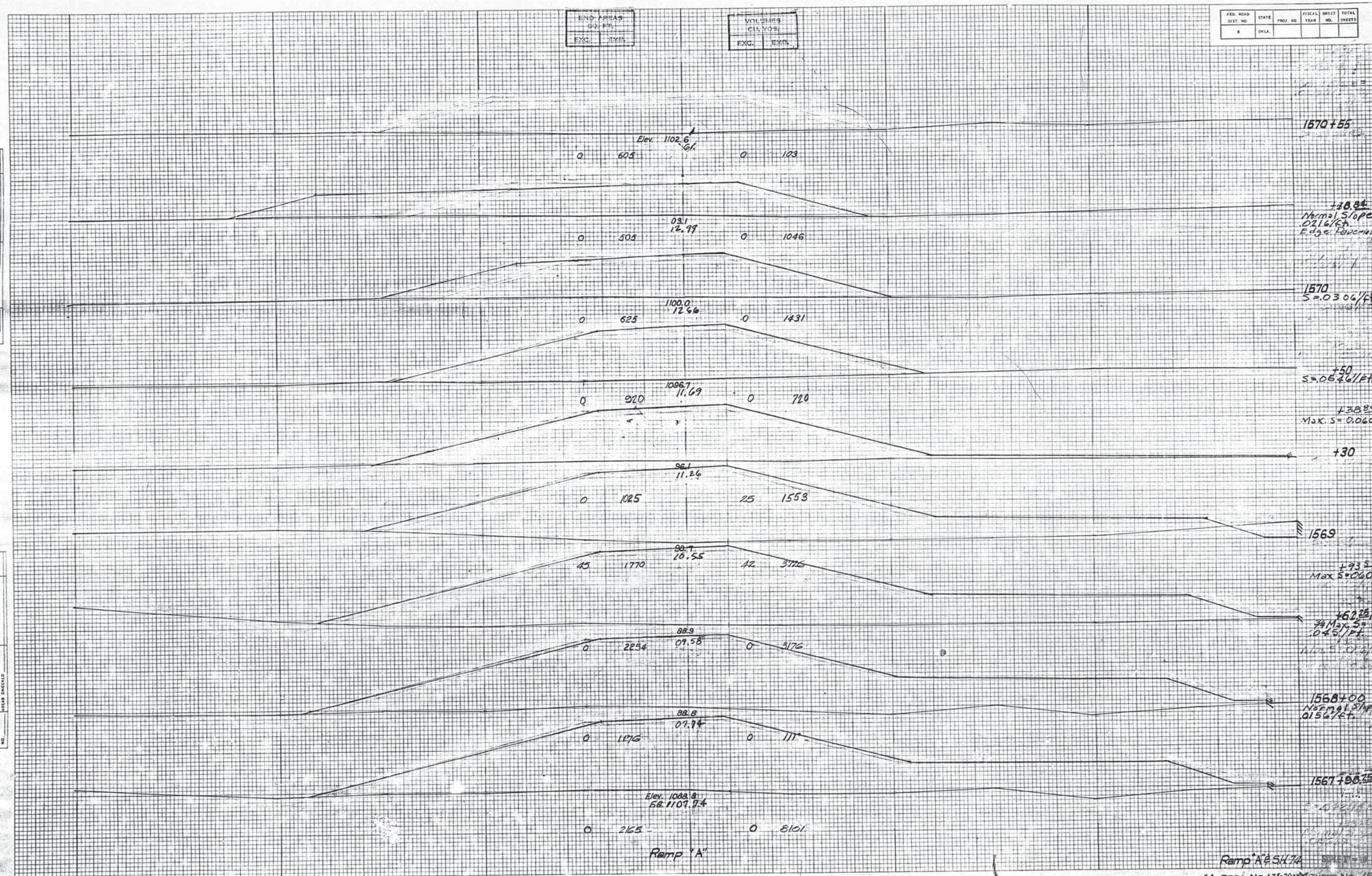


PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 1-35-2(12)(24) SHEET NO. 149

FED. ROAD DIST. NO	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				



FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

PLATE 3 CROSS SECTION O. P. R. & R. C. STANDARD
DODGE RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 1-35-202(1)(4) SHEET NO. 150

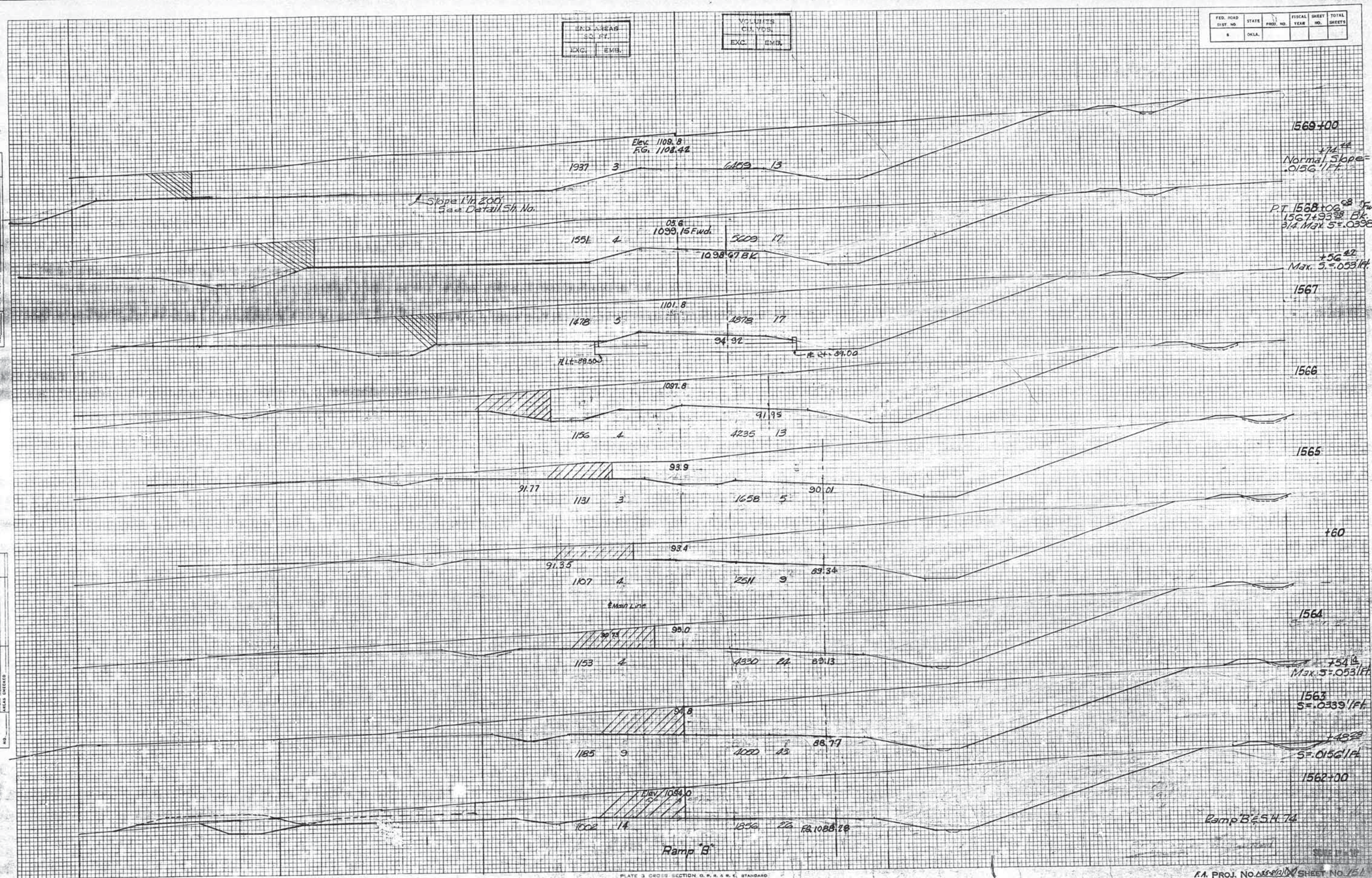


PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 1-35-8(12)(2) SHEET NO. 151

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

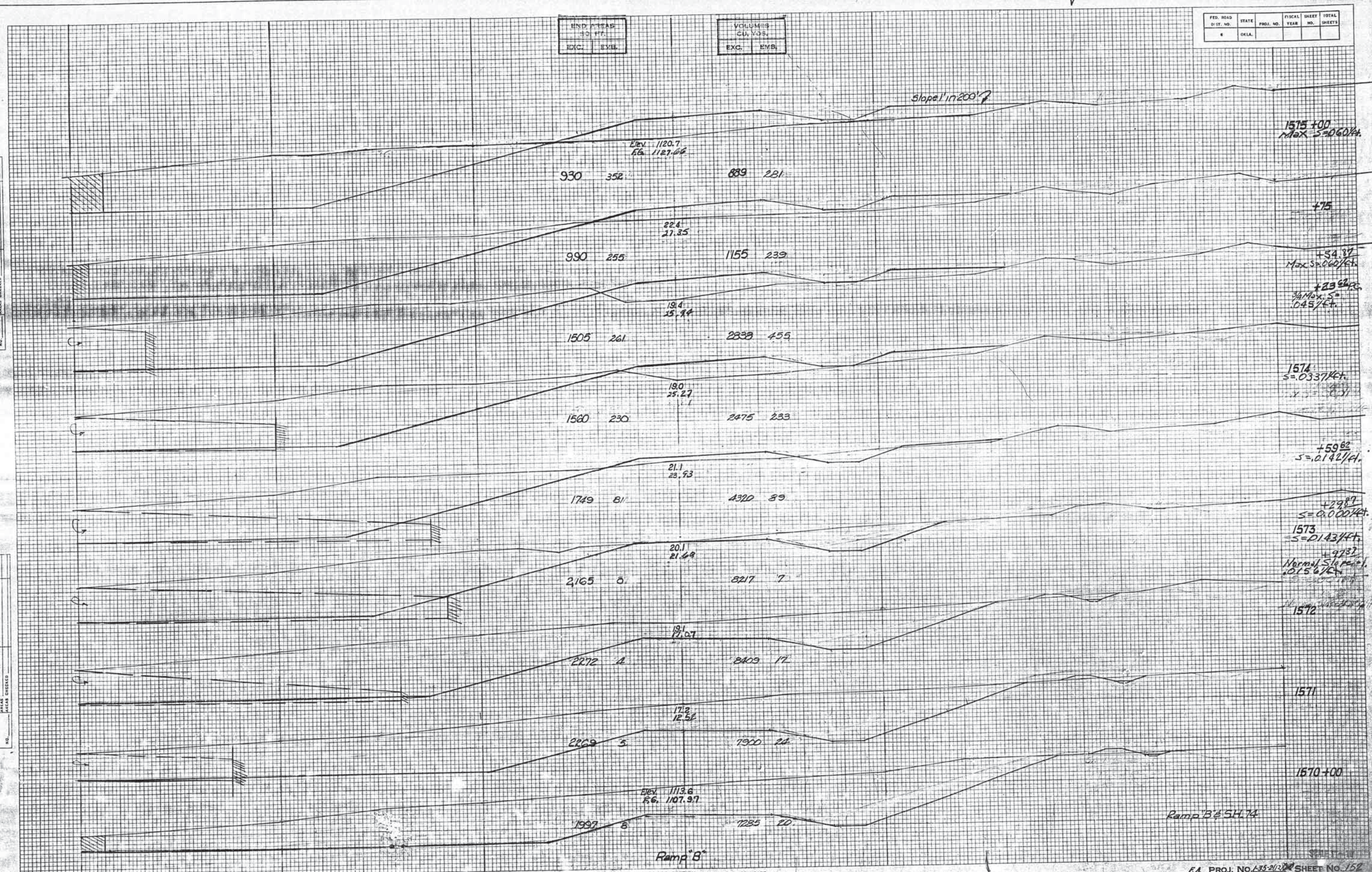
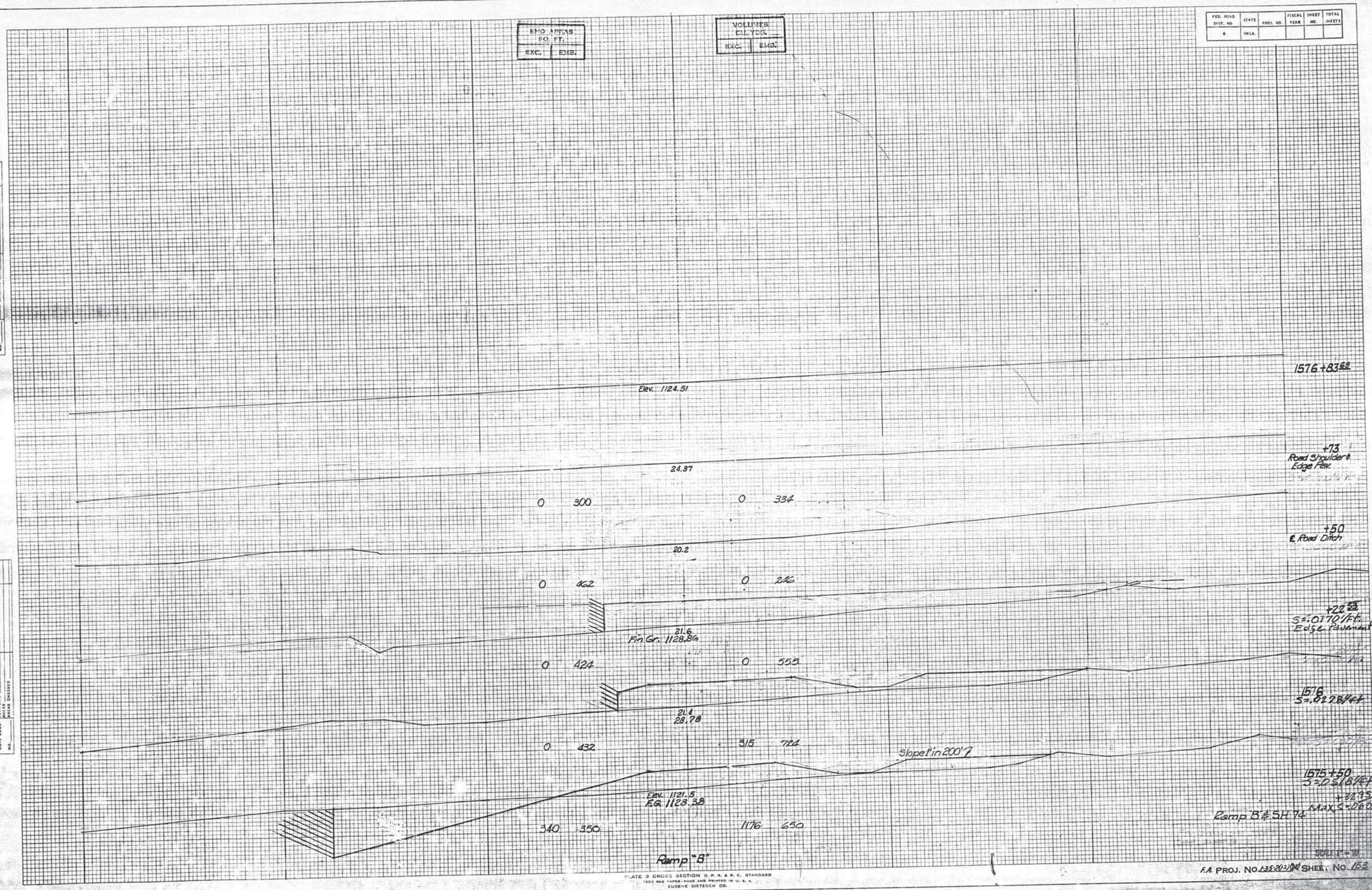


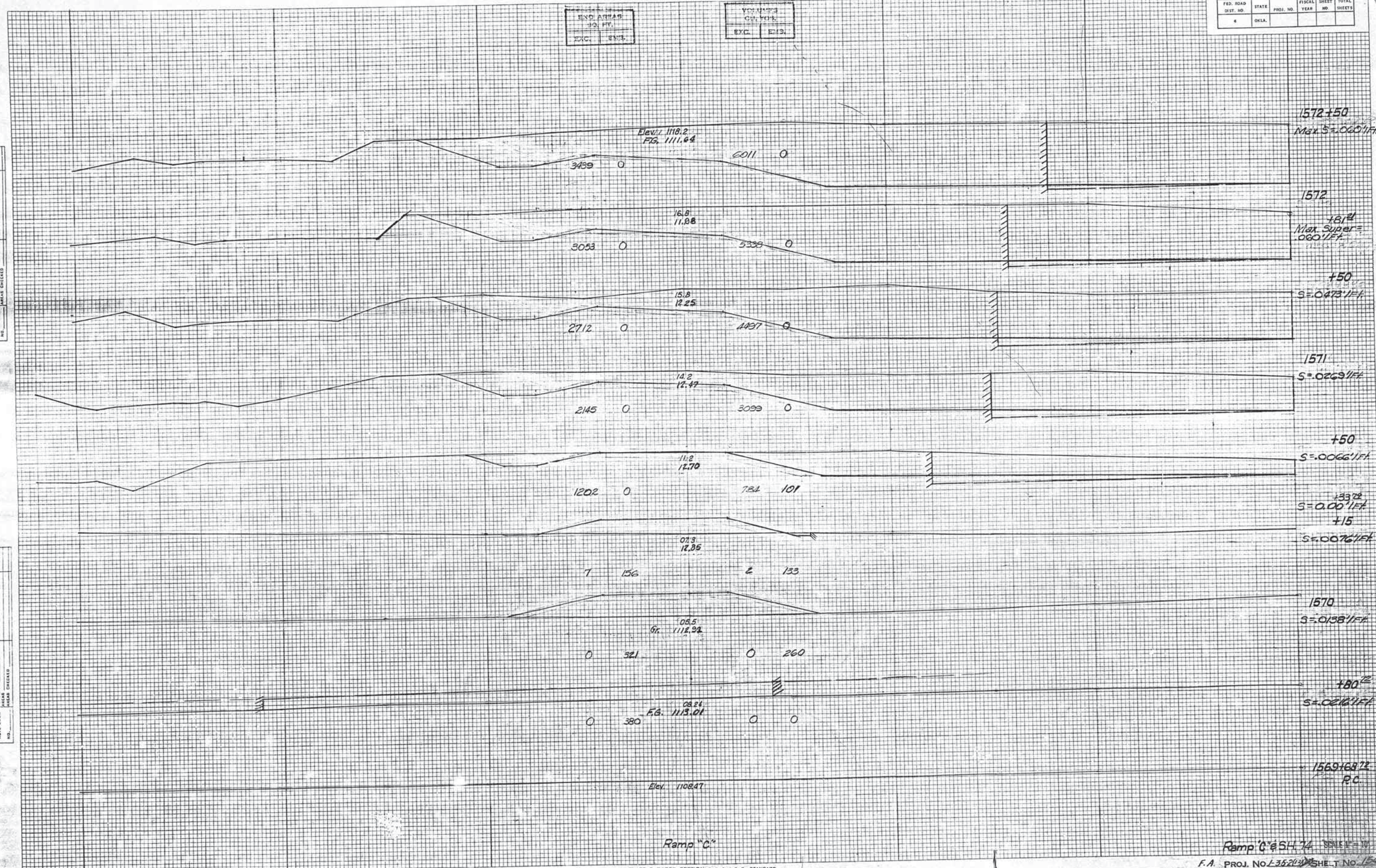
PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. 1-35-2(12) SHEET NO. 152



END AREAS SQ. FT.
EXC.
EMB.
VOLUMES CU. YDS.
EXC.
EMB.
FED. ROAD DIST. NO.
STATE
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
8
OKLA.
FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
1576+83.68
Elev. 1124.51
+73
Road Shoulder & Edge Pav.
24.37
0 300
0 334
+50
℄ Road Ditch
20.2
0 462
0 246
+22.53
S=.0170'/Ft.
Edge Pavement
21.6
Fin Gr. 1128.86
0 424
0 555
1576
S=.0228'/ft
21.4
28.78
0 432
315 724
Slope 1' in 200'
1575+50
S=.0518'/ft.
+32.95
Max S=.060'/ft.
Elev. 1121.5
F.G. 1128.38
340 350
1176 650
Ramp "B" & SH 74
Ramp "B"
SCALE 1" = 10'
PLATE 3 CROSS SECTION O. P. R. & R. C. STANDARD
1000 RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.
F.A. PROJ. NO. 135-2(12)
SHEET NO. 153

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				



Ramp "C" & SH. 74 SCALE 1" = 10'

F.A. PROJ. NO. I-35-2(13) SHEET NO. 154

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

END AREAS SQ. FT.	
EXC.	EMB.

VOLUMES CU. YDS.	
EXC.	EMB.

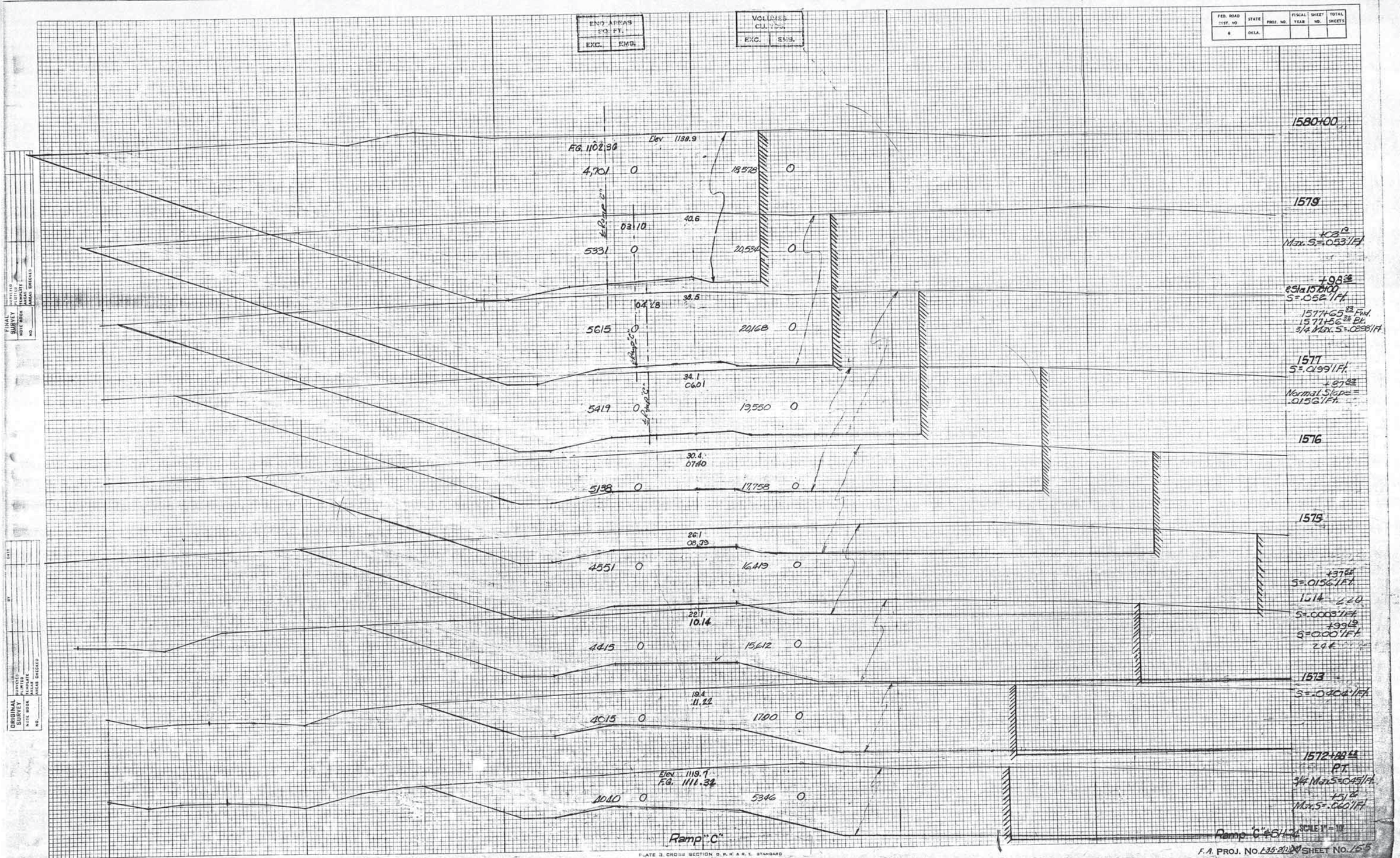


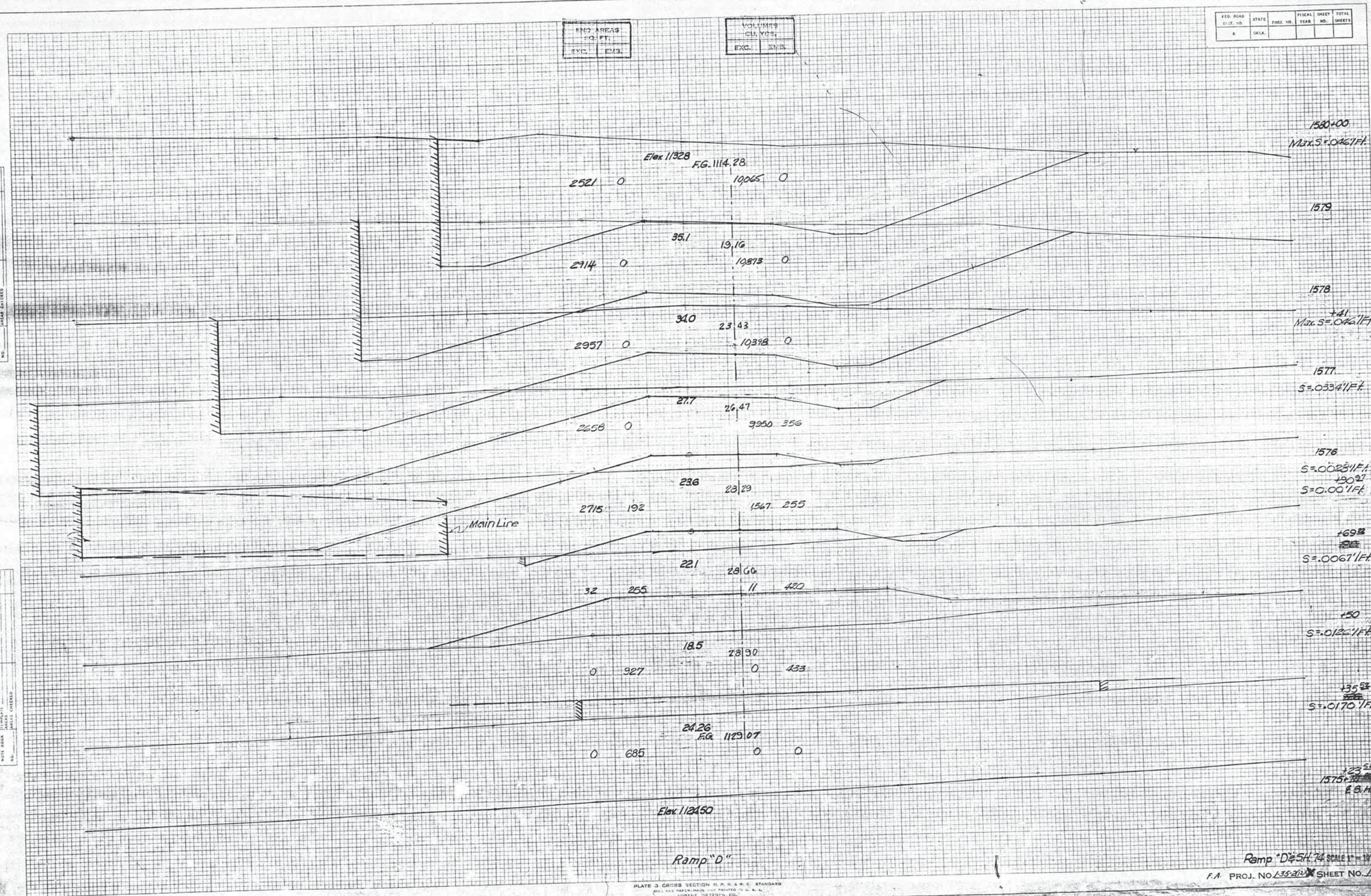
PLATE 3. CROSS SECTION. O. P. W. A. R. S. STANDARD
HAS PAPER MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

F.A. PROJ. NO. L35-2(12) SHEET NO. 165

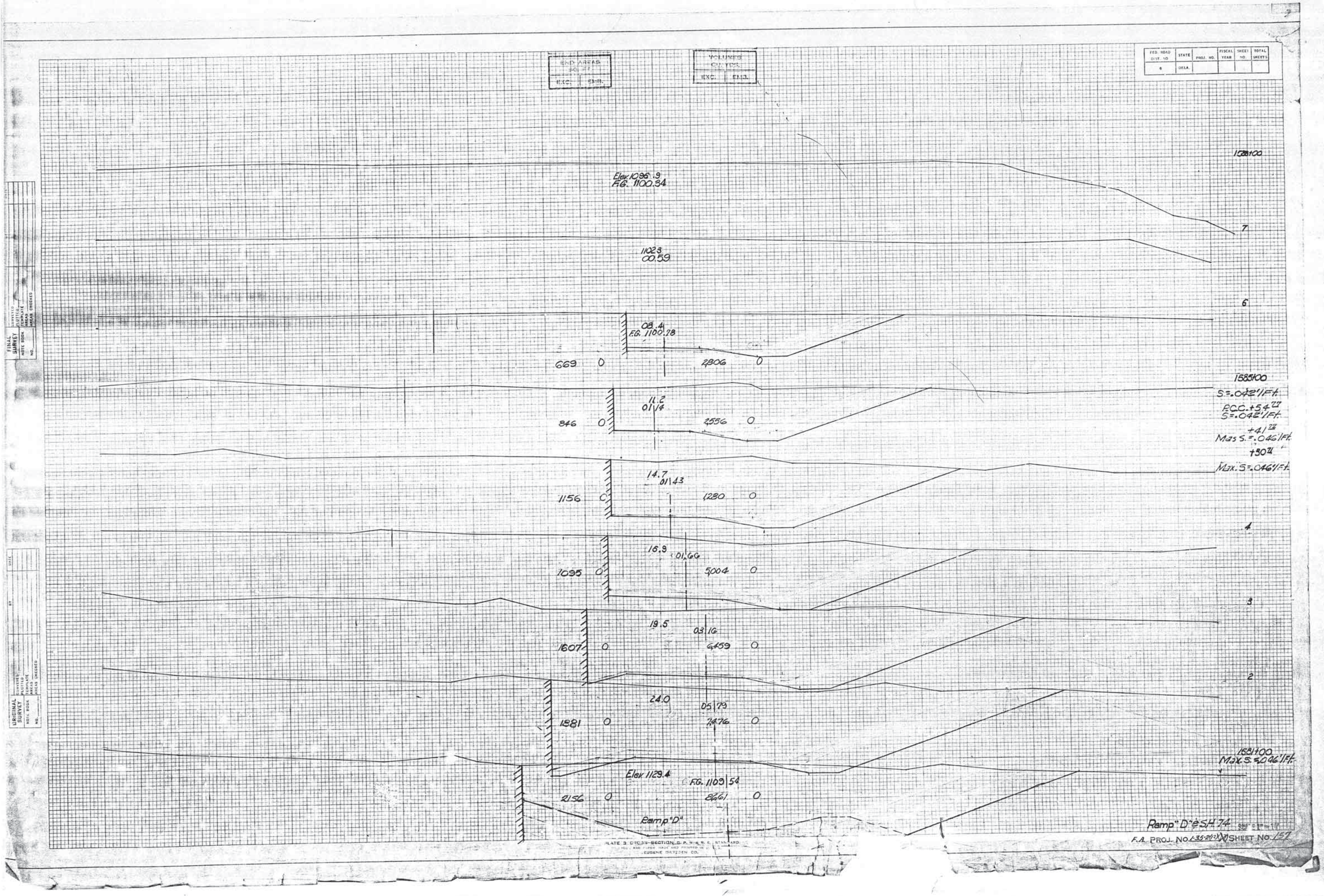
FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

DATE
BY



END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO. 6
STATE OKLA.
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
1580+00
Max. S=.046'/Ft.
Elev. 1132.8
F.G. 1114.28
2521 0
10,065 0
1579
35.1
19.16
2914 0
10,873 0
1578
+41
Max. S=.046'/Ft.
34.0
23.43
2957 0
10,398 0
1577
S=.0334'/Ft.
27.7
26.47
2658 0
9,950 356
1576
S=.0028'/Ft.
+90.97
S=0.00'/Ft.
23.6
28.29
2715 192
1,567 255
Main Line
+69.22
S=.0067'/Ft.
22.1
28.66
32 255
11 420
+50
S=.0126'/Ft.
18.5
28.90
0 927
0 433
+35.52
S=.0170'/Ft.
24.26
F.G. 1129.07
0 685
0 0
+23.52
1575+
℄ S.H. 74
Elev. 1124.50
Ramp "D"
Ramp "D" & S.H. 74 SCALE 1" = 10'
F.A. PROJ. NO. 1-35-2(2) SHEET NO. 156
PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
EUGENE DIETZGEN CO.
FINAL SURVEY
NOTE BOOK
NO.
DRAWN
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE



END AREAS SQ. FT.
EXC. EMB.
VOLUMES CU. YDS.
EXC. EMB.
FED. ROAD DIST. NO. 6
STATE OKLA.
PROJ. NO.
FISCAL YEAR
SHEET NO.
TOTAL SHEETS
1588+00
Elev. 1096.9
F.G. 1100.34
7
1102.3
00.59
6
08.4
F.G. 1100.78
669 0
2806 0
1585+00
S=.042'/Ft.
11.2
01.14
846 0
2556 0
P.C.C. +54.77
S=.042'/Ft.
+41.72
Max S.=.046'/Ft.
+30.71
Max. S=.046'/Ft.
14.7
01.43
1156 0
1280 0
4
16.9
01.66
1095 0
5004 0
3
19.5
03.16
1607 0
6459 0
2
24.0
05.79
1881 0
7476 0
1581+00
Max. S=.046'/Ft.
Elev. 1129.4
F.G. 1109.54
2156 0
8661 0
Ramp "D"
Ramp "D" & SH 74
F.A. PROJ. NO. 1-35-2(12)
SHEET NO. 157
FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED