

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

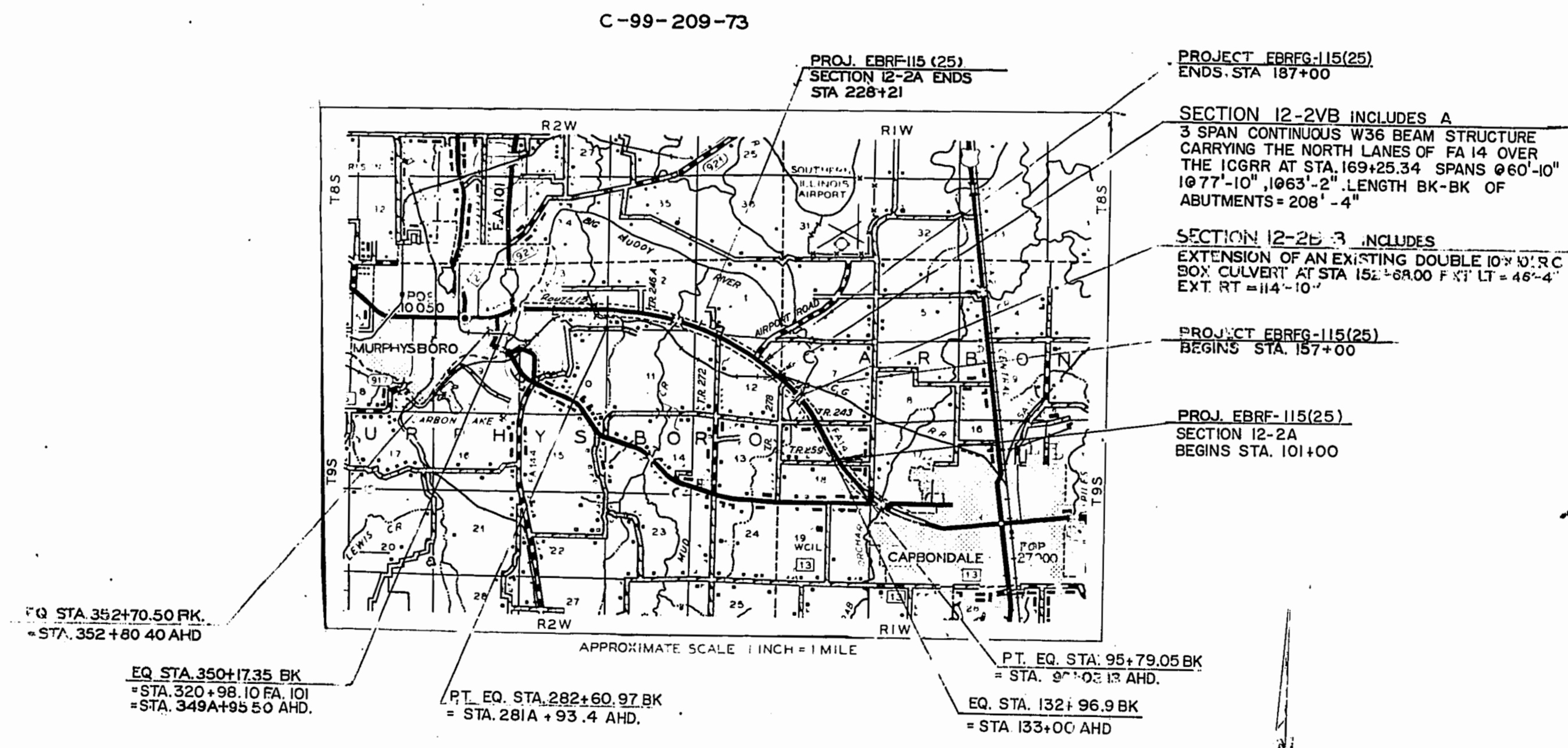
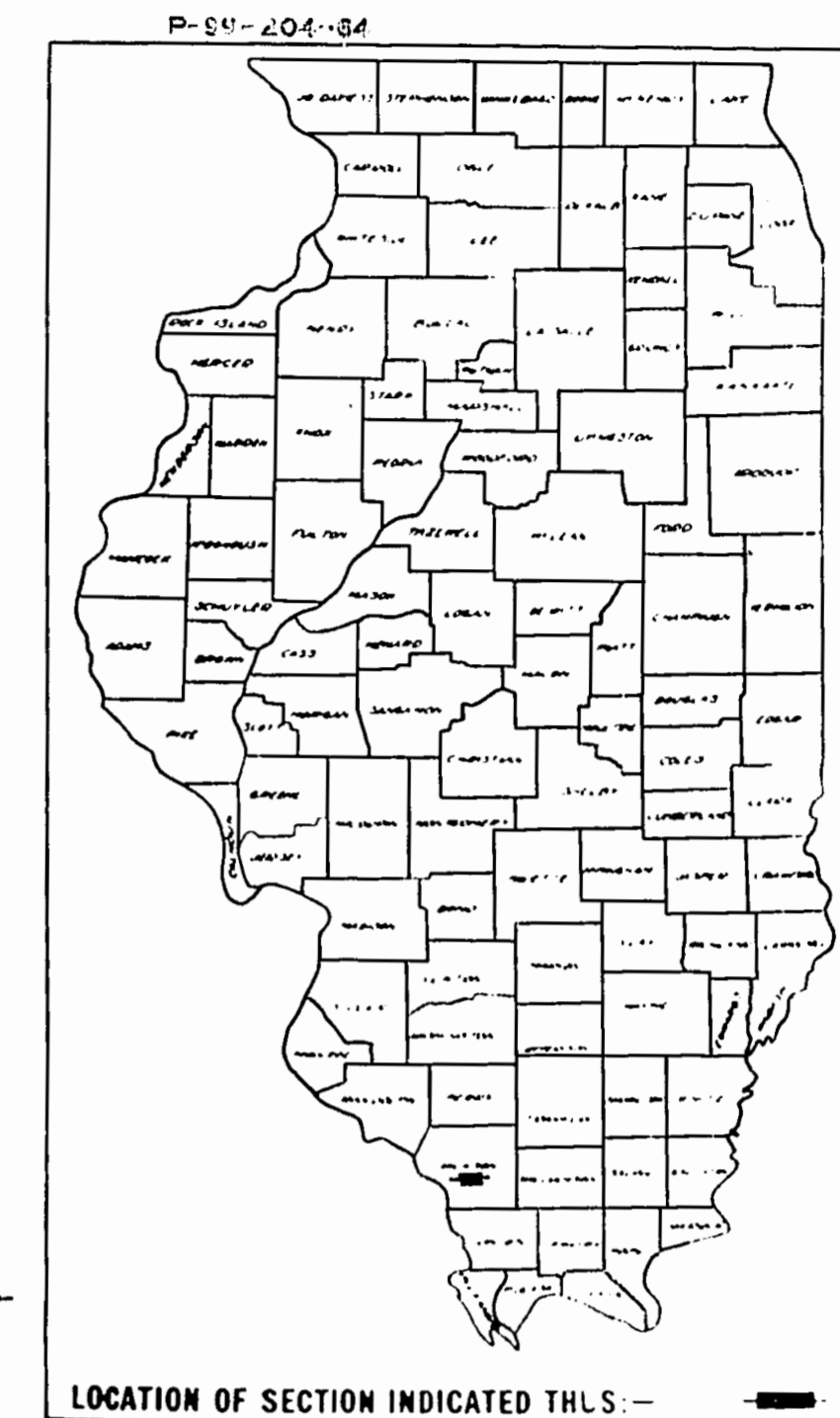
INDEX OF SHEETS SHEET NO. 4
SUMMARY OF QUANTITIES SHEET NO. 5

PLAN 1 INCH = 100 FT
PROFILE VIEW 1 INCH = 10 FT
CROSS-SECTIONS 1 INCH = 10 FT

F.A. ROUTE 14 SECTION 12-2A, 12-2B-3, 12-2VB
ROUTE 13
JACKSON COUNTY

PROJECT EBRF-EBRFG-115(25)

FILE	SHEET	COUNTY	SECTION
12-2A, 12-2B-3, 12-2VB		JACKSON	115



PROJECTS	SECTION	NET LENGTHS	MILES
EBRF	12-2A	12,511.02	2.370
EBRFG	12-2VB	206.88	0.568
NET LENGTH OF PROJECT		12,717.90 LIN. FT.	2.409 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

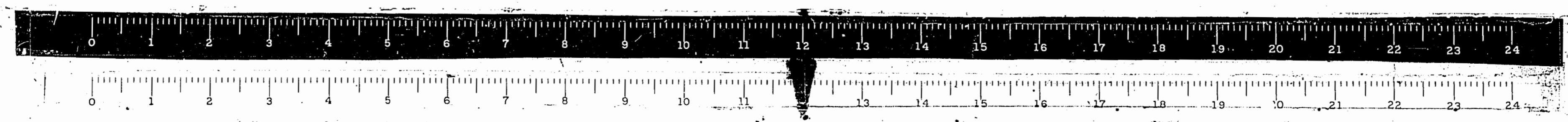
Nov 2 1973
J. J. Hunter
Jan 30 1974
Jan 30 1974
Nov 2 1974
Director of Highways

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ENGINEER DATE

CONTRACT NO. 9880
JACKSON COUNTY SECTION # F A ROUTE 14

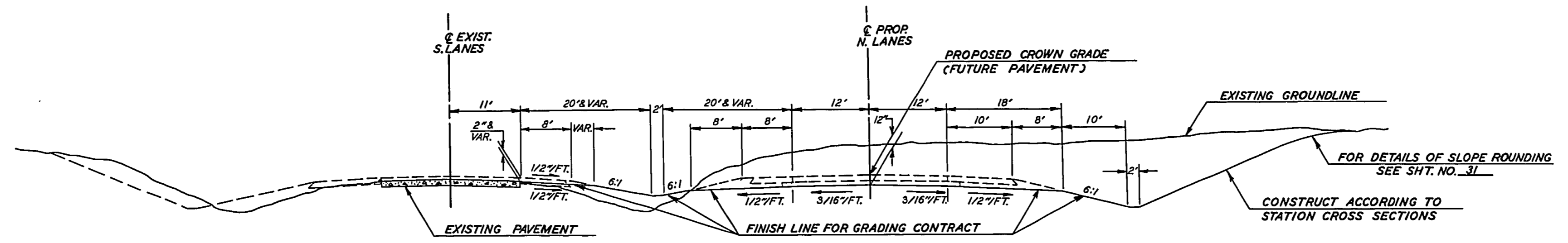


FOR INFORMATION ONLY

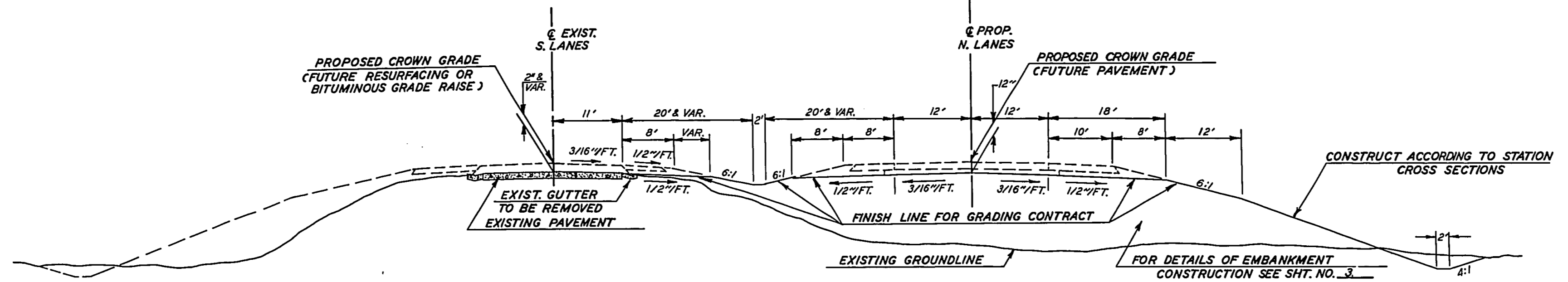
TYPICAL SECTIONS

DESIGN DESIGNATION 1285 (95), MAJOR L.36 (P.C.C.20)

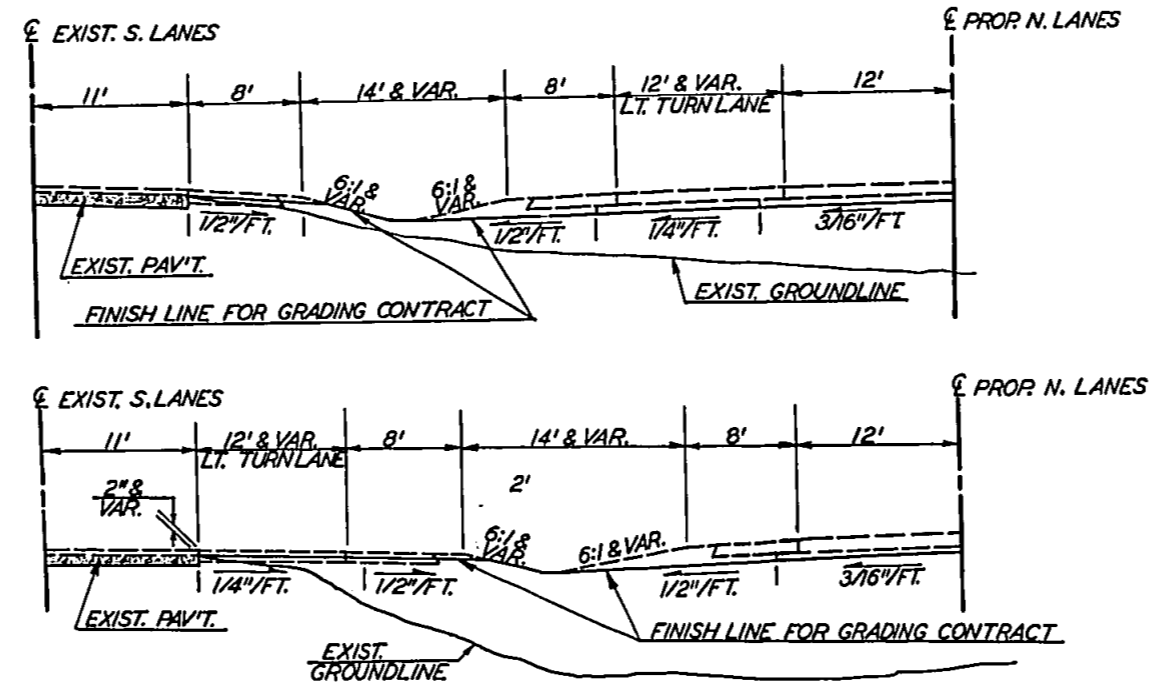
Project No.	12-2A	County	JACKSON	Total Sheets	113	Sheet No.	2
F.A. 14							
Ill. Road Dist. No. 7		Ill. No. 8		Project			



TYPICAL GRADING SECTION IN CUT

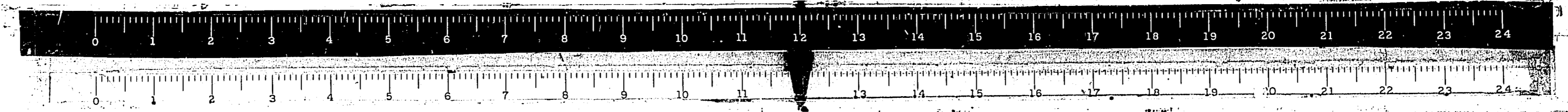


TYPICAL GRADING SECTION IN FILL



TYPICAL GRADING SECTIONS FOR TURNING LANES

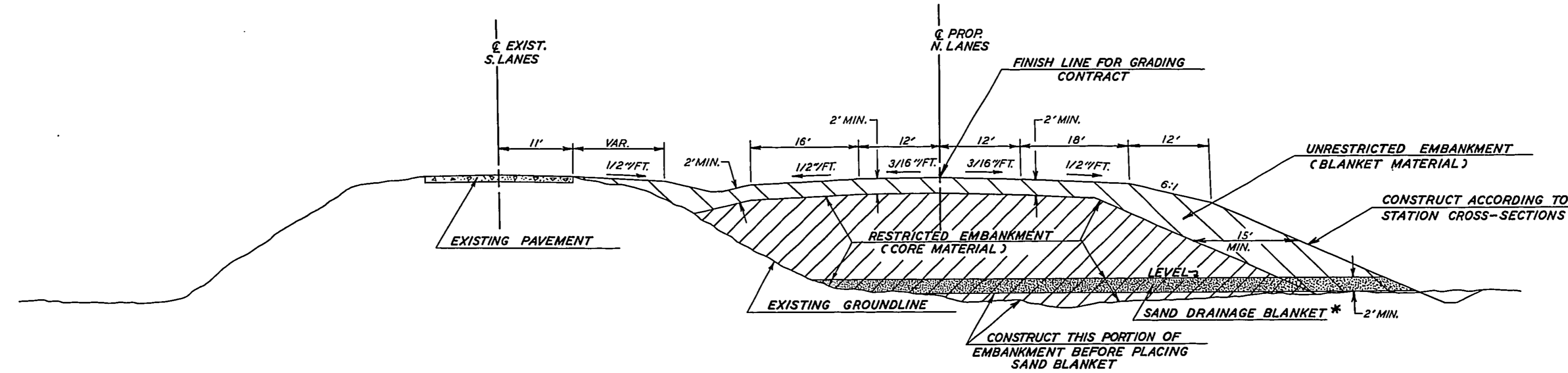
F. A. ROUTE 14 SECTION 12-2A JACKSON COUNTY TYPICAL SECTIONS



FOR INFORMATION ONLY

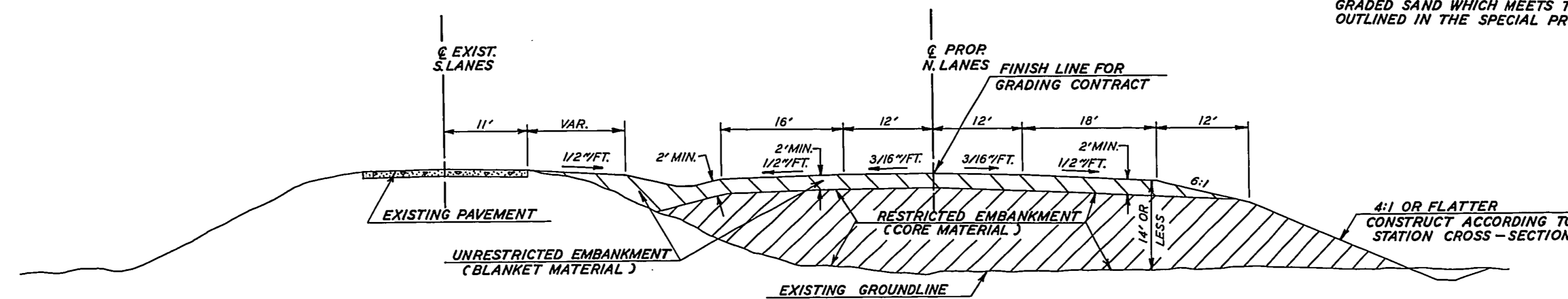
TYPICAL SECTIONS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2A	JACKSON	113	3
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

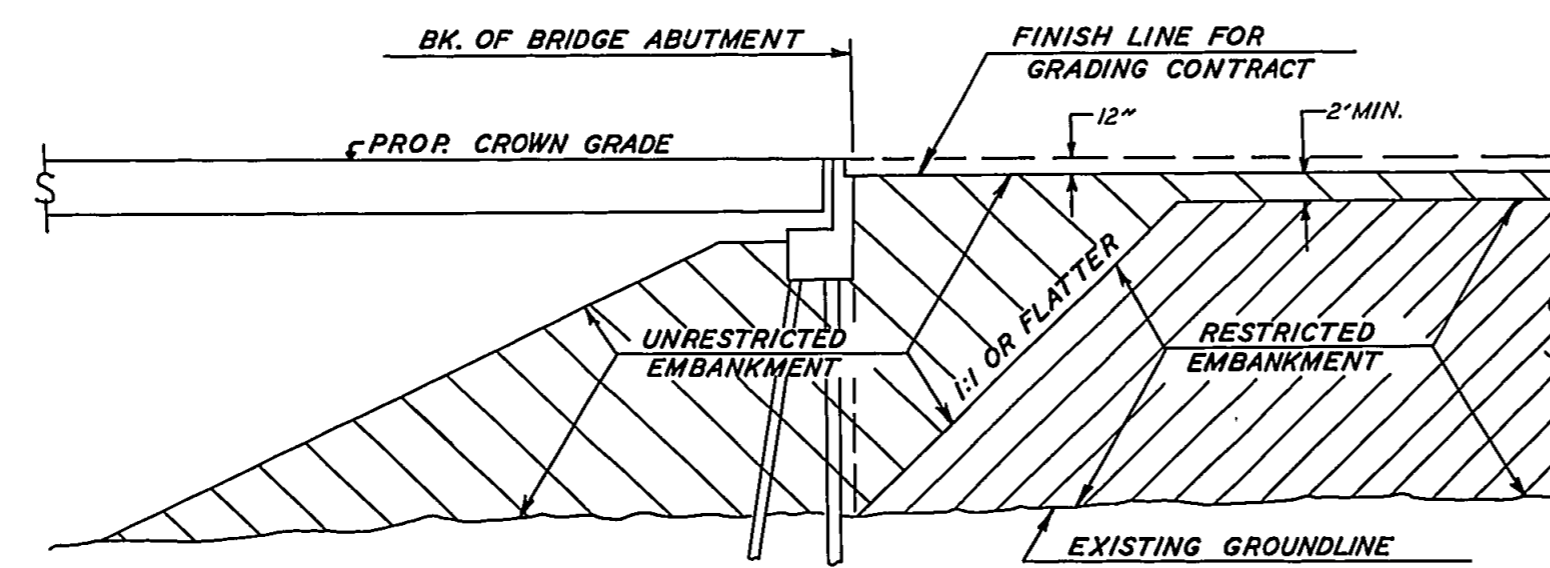


TYPICAL EMBANKMENT CONSTRUCTION

* SAND DRAINAGE BLANKET TO BE CONSTRUCTED FROM STA. 149+00 TO STA. 156+00 USING A COMMERCIAL GRADED SAND WHICH MEETS THE REQUIREMENTS OUTLINED IN THE SPECIAL PROVISIONS.



ALTERNATE EMBANKMENT CONSTRUCTION
MAY BE USED WHEN FILL $\leq 14'$ & SIDESLOPES ARE 4:1 OR FLATTER

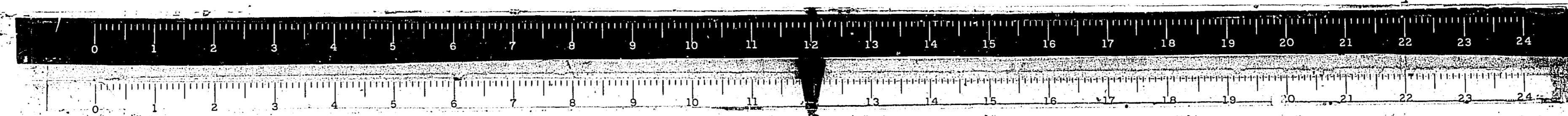


EMBANKMENT CONSTRUCTION AT BRIDGE ABUTMENT (SECTION 12-2VB)

UNRESTRICTED EMBANKMENT MATERIAL SHALL HAVE MORE THAN 35% OF THE TOTAL SAMPLE PASSING THE NO. 200 SIEVE. THE SOIL MUST ALSO HAVE A LIQUID LIMIT VALUE OF 40.0 OR LESS AND A PLASTICITY INDEX VALUE OF 5.0 OR MORE AS DEFINED BY THE A.A.S.H.O. CLASSIFICATION SYSTEM. THESE SOILS WILL FALL IN THE A-4 OR A-6 SUBGRADE GROUPS.

ANY SOIL WHICH DOES NOT MEET THE ABOVE REQUIREMENTS: HIGH INDEX CLAY, EROSION SANDY SOIL, ETC.; WILL BE CLASSIFIED AS RESTRICTED EMBANKMENT AND CONFINED TO USE IN THE EMBANKMENT CORE IN ACCORDANCE WITH THE TYPICAL SECTIONS.

FOR INFORMATION ONLY



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2A	JACKSON	113	12
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

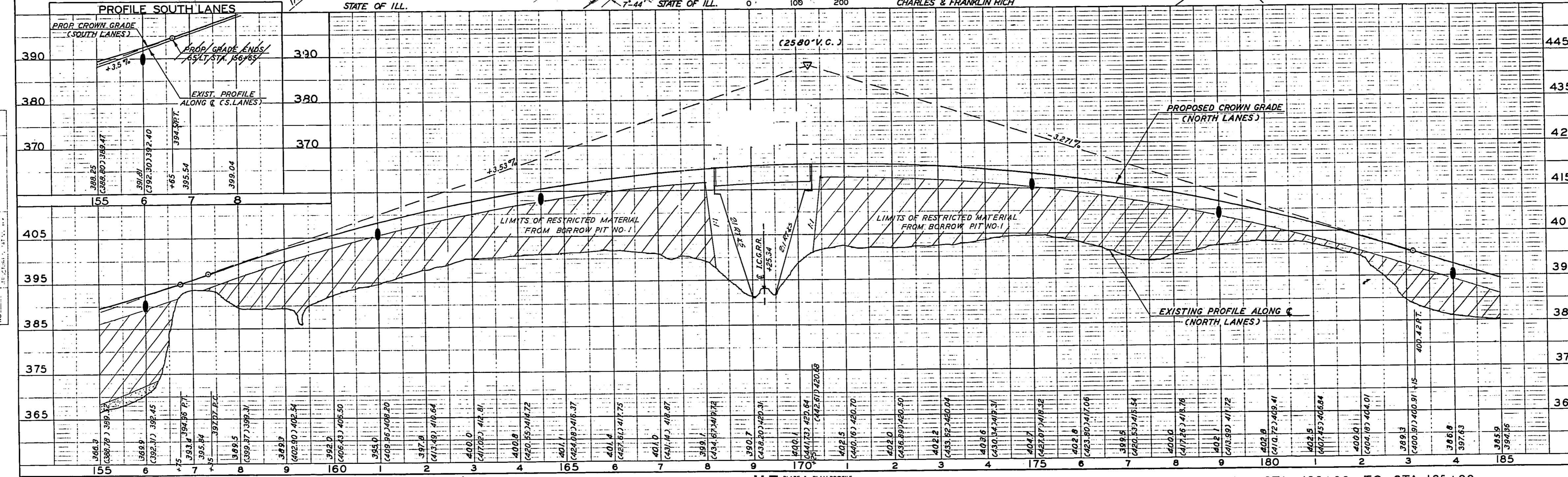
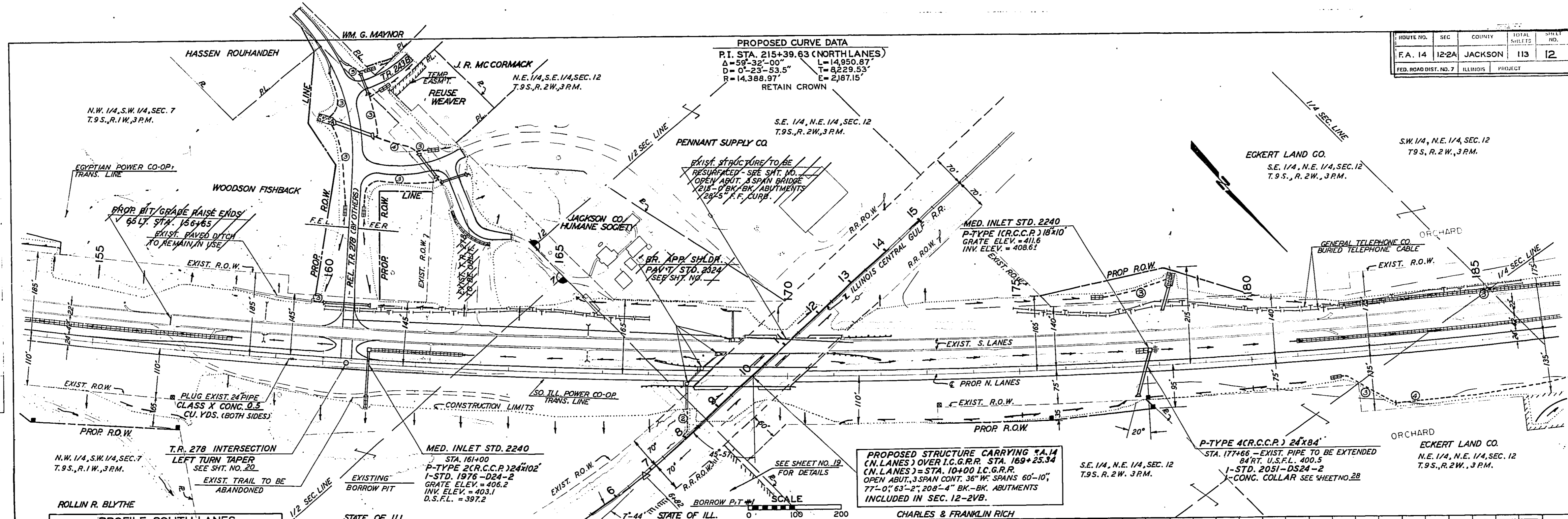
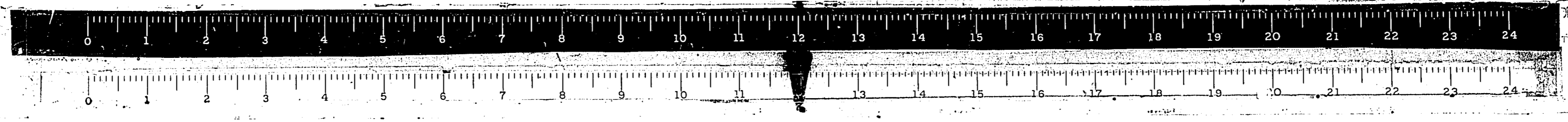
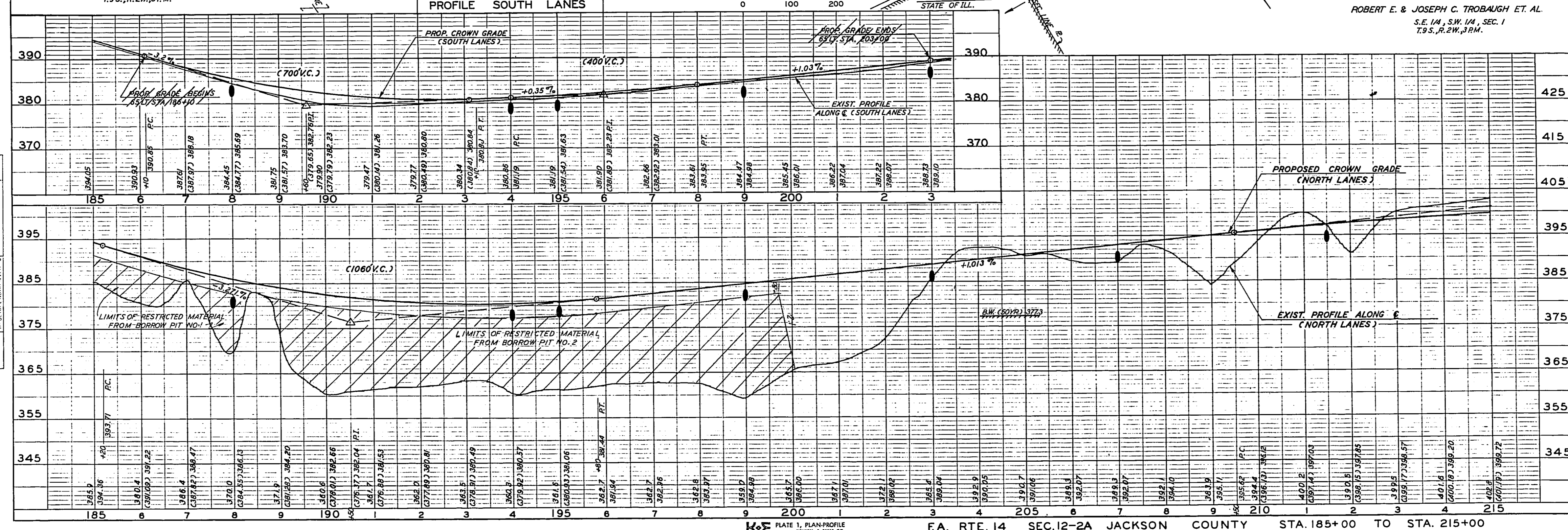
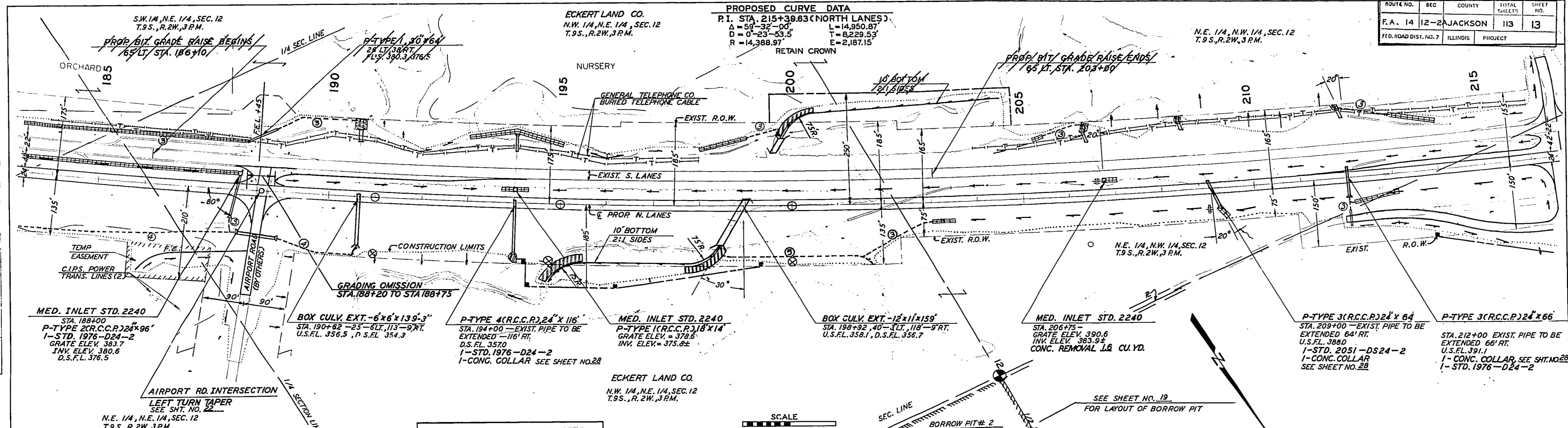


PLATE 1, PLAN PROFILE
 F.A. RTE. 14 SEC. 12-2A JACKSON COUNTY STA. 155+00 TO STA. 185+00



FOR INFORMATION ONLY

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2A	JACKSON	113	13
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

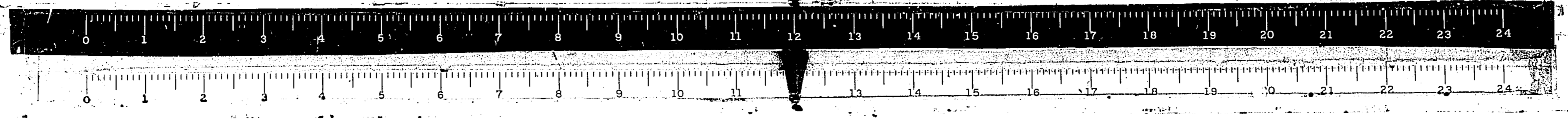


PLAN
NOTE BOOK NO.

PROFILE
NOTE BOOK NO.

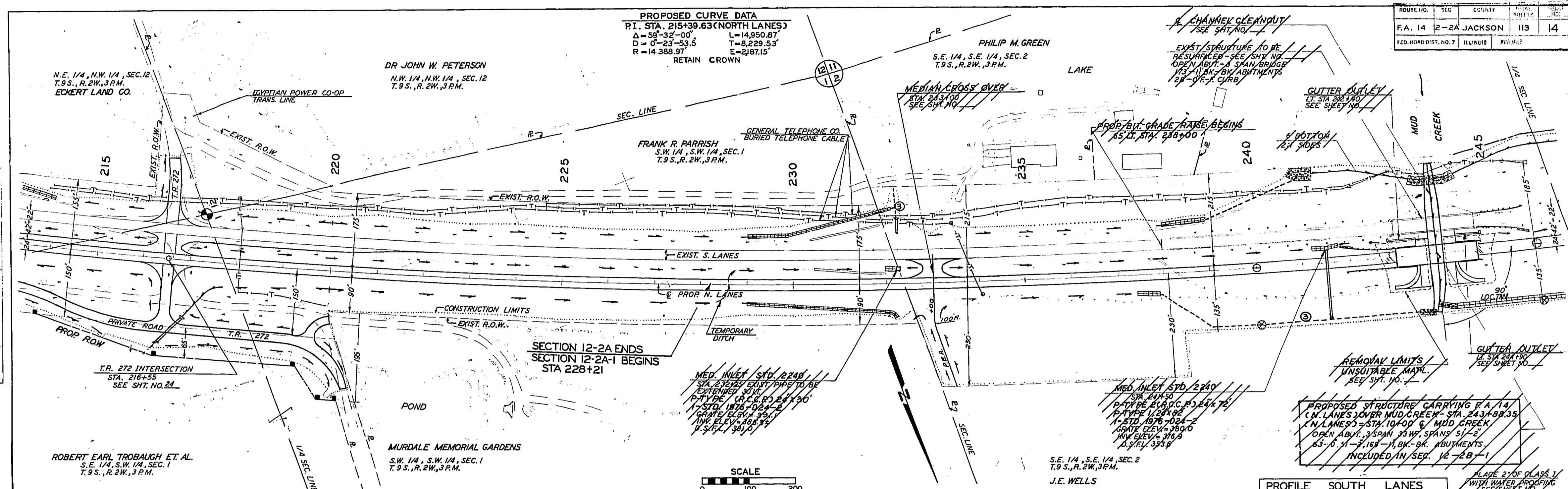
K&E PLATE 1, PLAN-PROFILE
HUFFEL & EISEN CO.
48 7012 IMPERIAL

F.A. RTE. 14 SEC. 12-2A JACKSON COUNTY STA. 185+00 TO STA. 215+00



FOR INFORMATION ONLY

ROBERT E. & JOSEPH C. TROBAUGH ET AL.
S.E. 1/4, S.W. 1/4, SEC. 1
T.9S., R.2W., 3.R.M.



ROUTE NO.	SEC.	COUNTY	INT. NO.	PL. NO.
F.A. 14	2-2A	JACKSON	113	14
FED. ROAD DIST. NO. 7 ILLINOIS				

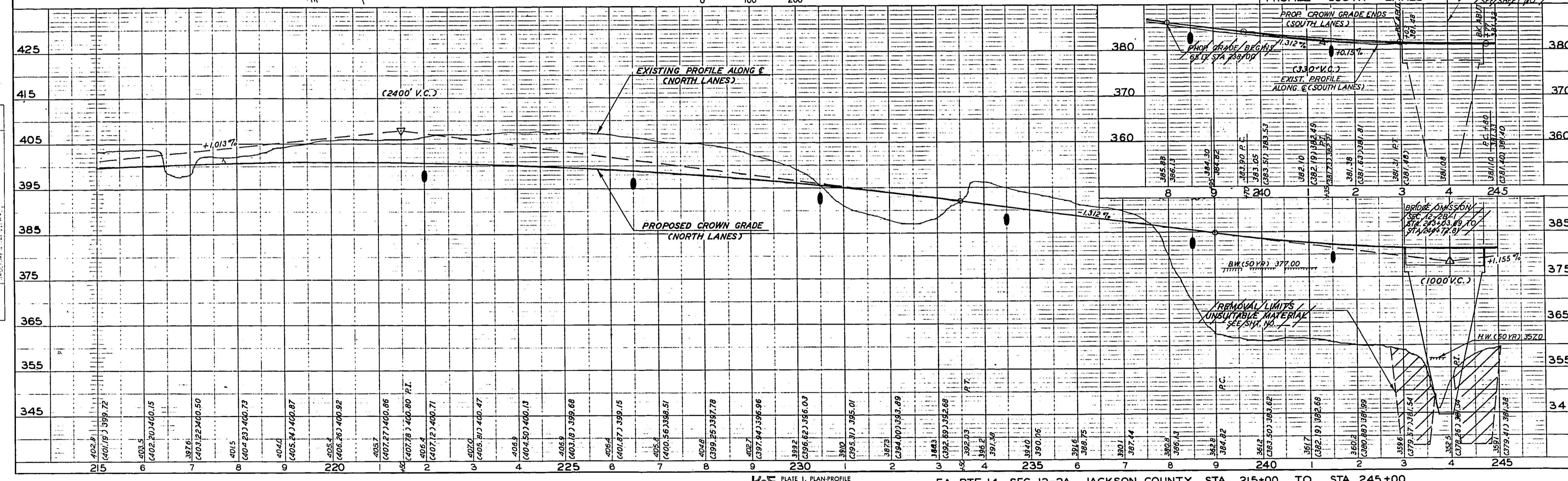
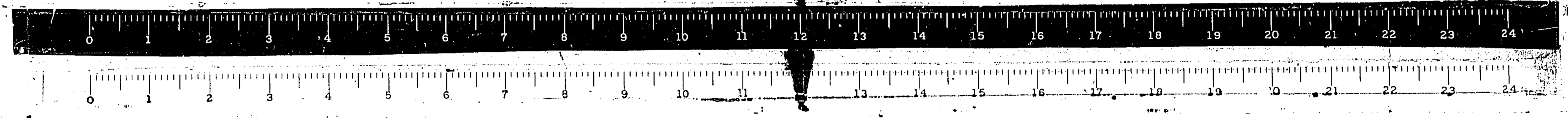


PLATE 1, PLAN-PROFILE
 REUFEL & ESSER CO.
 FA. RTE. 14 SEC. 12-2A JACKSON COUNTY STA. 215+00 TO STA. 245+00



FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

* 12-24

SHEET NO. 26
SHEETS

REINFORCING BARS:
 BAR n: 2#4 bars at 24" cts.
 BAR d: 2#4 bars at 24" cts.
 BARS b & b₁: 2#4 bars at 24" cts.

SECTION THRU BARREL:
 Dimensions: 6'-0" width, 7'-5" height.
 Features: 3" Fillet, Const. Jt.

REINFORCEMENT PLAN:
 Dimensions: 25'-6" length, 11'-9" width.
 Features: 2#4 bars at 12" cts., 2#4 bars at 15" cts. top, 2#4 bars at 15" cts. bottom.

GENERAL NOTES:
 Class X Concrete shall be used throughout.
 Exposed edges shall be beveled 3/4".
 For backfilling and embankment see S'rd. Spec's.
 All bars shall be lapped 2d diameters unless otherwise specified.
 The top of the culvert, the backs of the sidewalls above the lower construction joint and backs of the wings above the tops of the footings shall be waterproofed in accordance with Art. 503.11 of the S'rd. Spec's.
 Nonmetallic water seal used in the wingwall joints shall extend from the top of the footing to within 6" of the top of the headwall.

DESIGNED: _____
CHECKED: _____
DRAWN: _____
CHECKED: _____

EXAMINED: _____
PASSED: _____
APPROVED: _____

DATE: DEC 11, 1973

Rev. Reinf. from 19,865# to 20,690# 12-11-73 L.W.

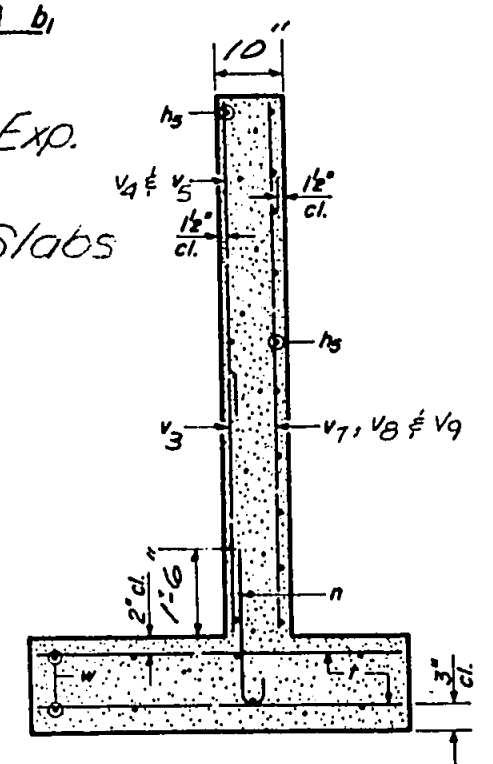
LOADING HS20-44

BILL OF MATERIAL

Bar	No.	Size	Length
a	518	#6	6'-11"
a ₂	40	#4	2'-0"
b	420	#5	4'-0"
b ₁	170	#5	8'-3"
d	22	#4	5'-6"
HL	8	#6	25'-3"
HL	32	#6	27'-6"
DLL	12	#6	25'-3"
D1L	12	#6	29'-6"
D2L	12	#6	25'-3"
D2L	12	#6	29'-6"
D4L	12	#6	7'-0"
D5	32	#4	8'-6"
D7	44	#7	3'-6"
r	80	#4	6'-0"
v ₁	28	#5	3'-0"
v ₂	20	#4	7'-6"
v ₃	16	#4	6'-0"
v ₄	2	#4	9'-3"
v ₅	2	#4	8'-0"
v ₆	2	#4	8'-6"
v ₇	2	#5	8'-6"
w	32	#5	8'-6"
Class X Concrete			Cu. Yds. 117.7
Reinforcement Bars			Lbs. 20,690
Exp. Bolts			Each 32

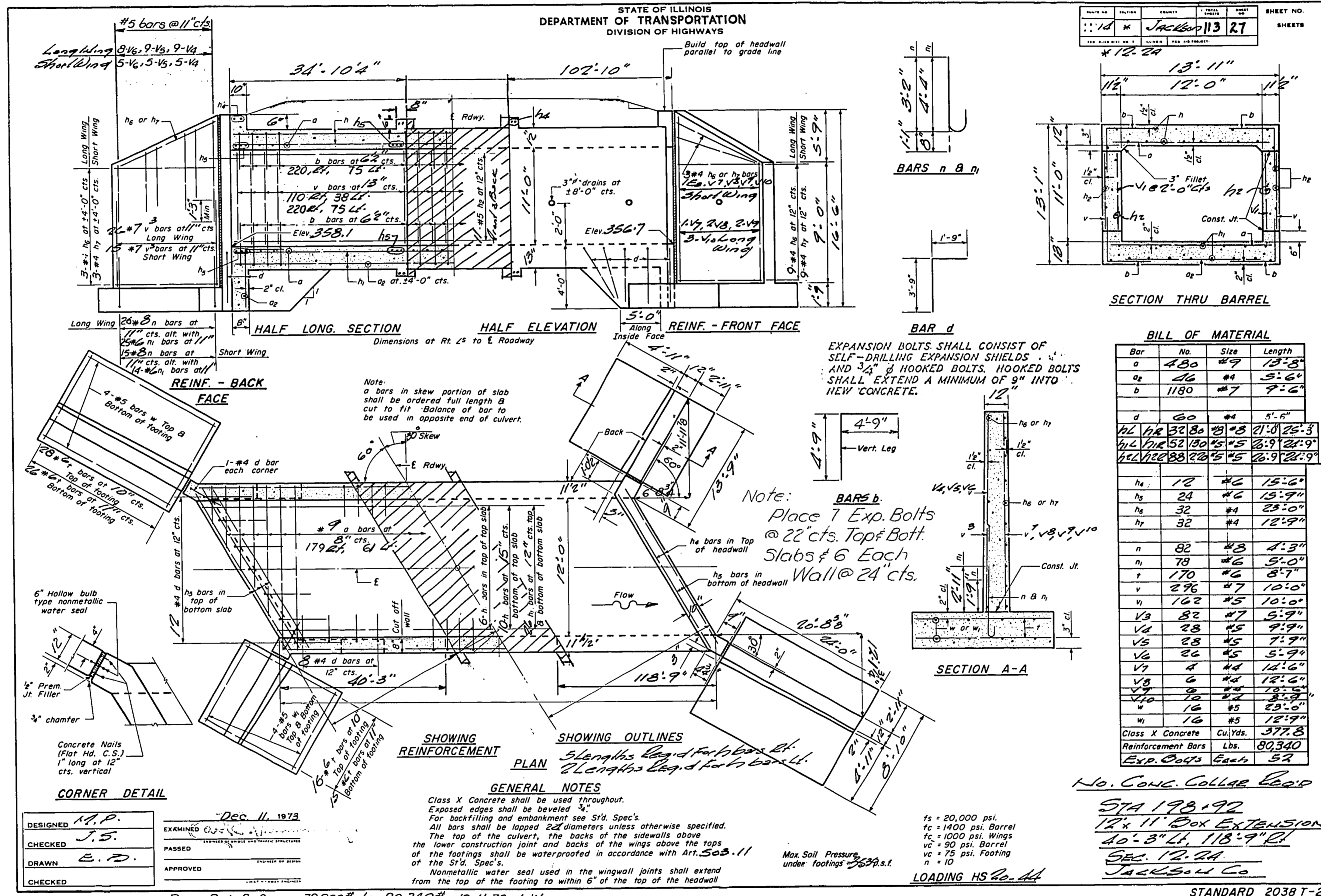
* Quantity for Conc. Collar and total quantities of Box Extension.

STA 190162
 6'-6" Box Extension
 25'-6" Lt. 113'-9" Rt.
 Sec. 12-24
 JACKSON CO.



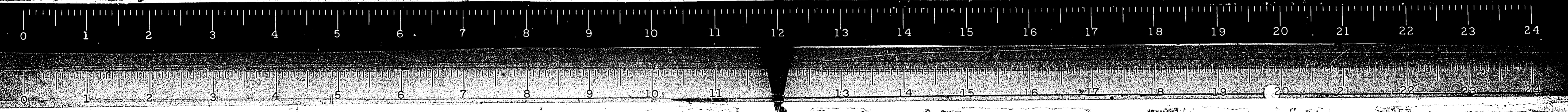
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	113	27
SHEET NO.	27	



FOR INFORMATION ONLY

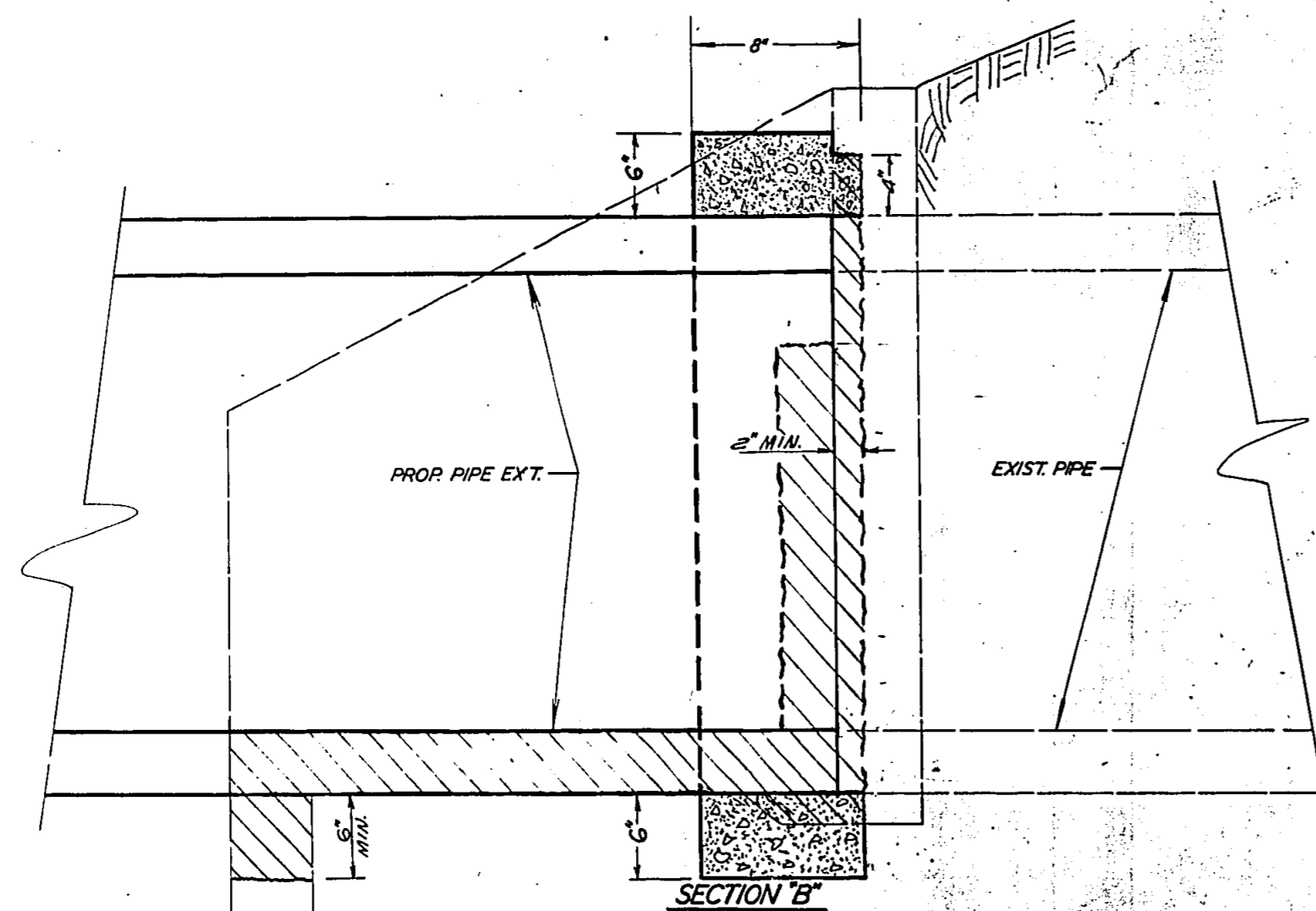
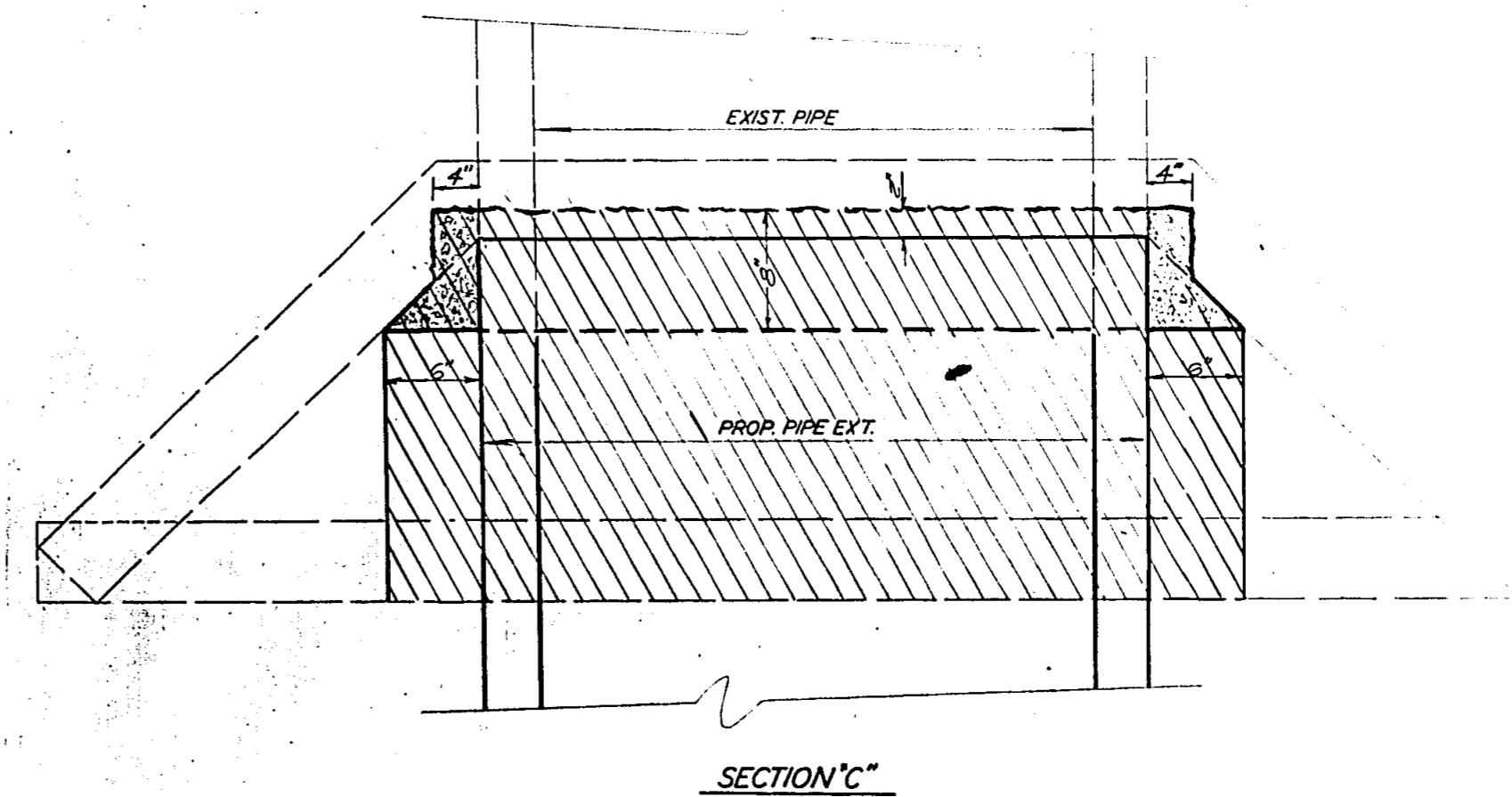
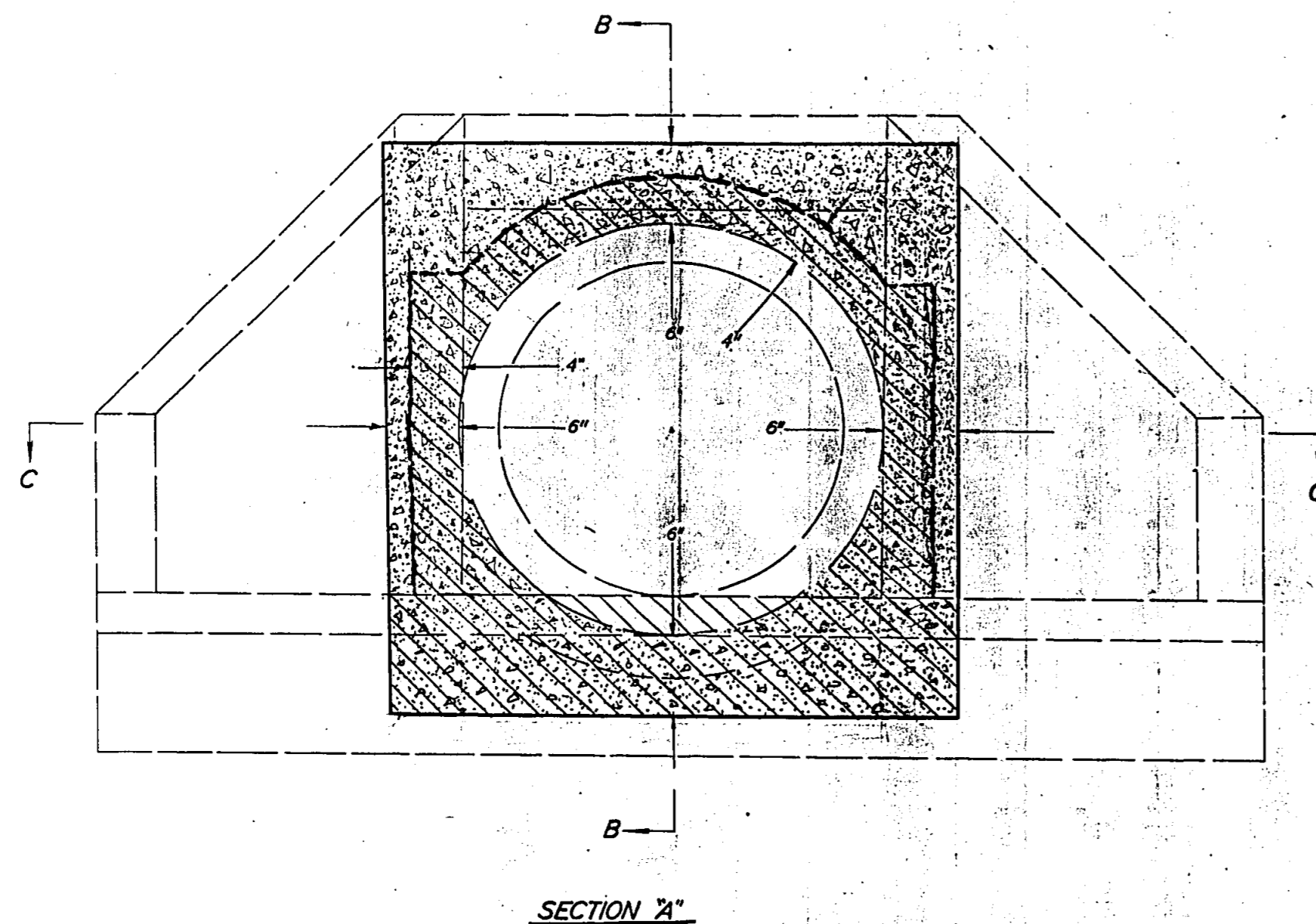
Revised 12-7-65 Rev. Reinf. from 19,900# to 80,340# 12-11-73 L.W.



DETAILS OF CONCRETE REMOVAL ON EXISTING HEADWALLS FOR PROPOSED PIPE EXTENSIONS

14 12-2A JACKSON 113 28

- TO BE USED:**
- STA. 102+42 24" 20° SKEW
 - STA. 122+74 24" RT. LS
 - STA. 126+62 24" RT. LS
 - STA. 136+30 24" RT. LS
 - STA. 177+66 24" 20° SKEW
 - STA. 194+00 24" RT. LS
 - STA. 209+00 24" 20° SKEW
 - STA. 212+00 24" RT. LS



NOTE:
CONCRETE REMOVED TO EXTEND PIPE SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROPOSED PIPE EXTENSION. THE CONCRETE COLLAR SHALL BE PAID FOR AS "CLASS X CONCRETE HEADWALL."

LEGEND

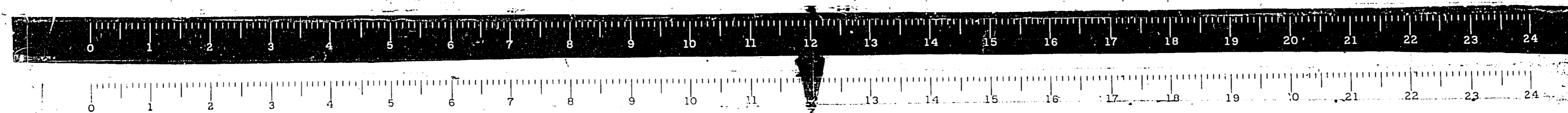
- INDICATES PORTION OF EXIST. HDWL. TO BE REMOVED
- INDICATES PROP. CONC. COLLAR
- INDICATES EXISTING

CONCRETE COLLAR

PIPE SIZE	PIPE @ RT. Δ CU. YD.	PIPE SKEWED CU. YD.
18"	0.2	0.3
24"	0.2	0.3
30"	0.2	0.3
36"	0.3	0.5
42"	0.3	0.5
48"	0.4	0.6
54"	0.4	0.6
60"	0.5	0.8
72"	0.7	1.1
12"	0.1	0.2

F.A. RTE. 14 SEC. 12-2A JACKSON COUNTY

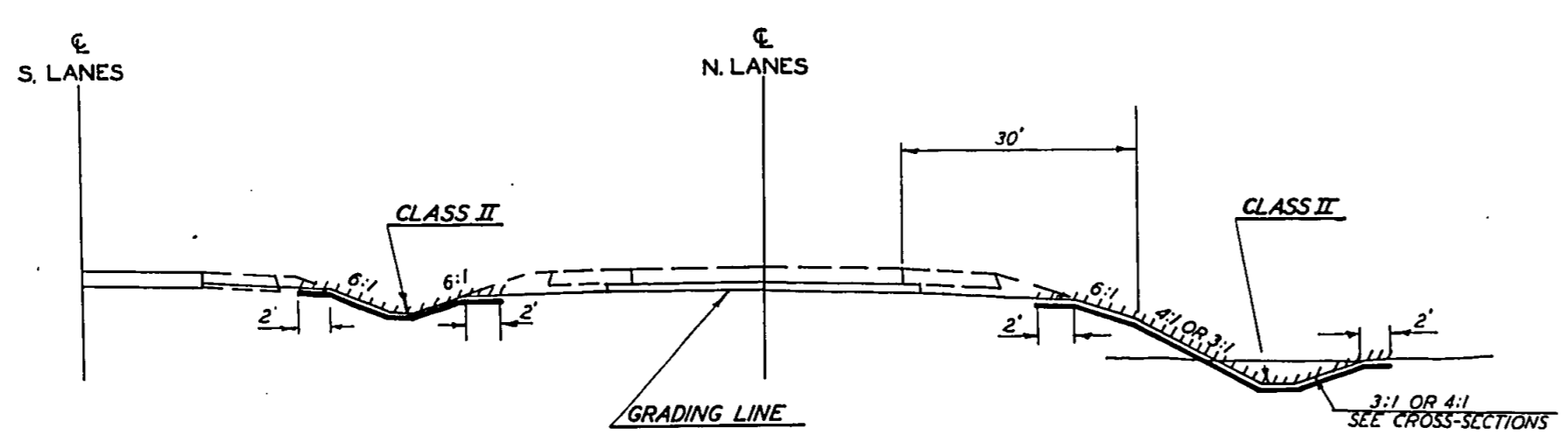
DETAILS FOR CONCRETE REMOVAL & COLLAR (EXISTING HEADWALL)



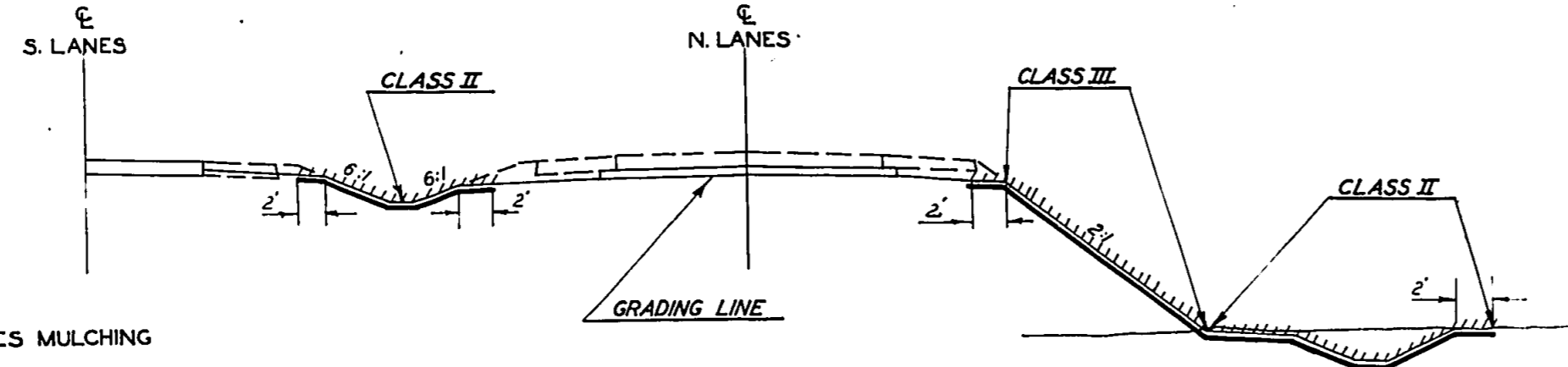
FOR INFORMATION ONLY

PROJECT NO.	SEC.	COUNTY	TOTAL SHEET NO.	SHEET NO.
FA.14	12-2A	JACKSON	113	30
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

TYPICAL CROSS SECTION
SHOWING AREAS TO BE COVERED WITH
SEEDING & MULCH



TYPICAL SECTION
(LIMITS OF CLASS II SEEDING)



TYPICAL SECTION
(LIMITS OF CLASS III SEEDING)

———— INDICATES MULCHING
 //////////////// INDICATES SEEDING

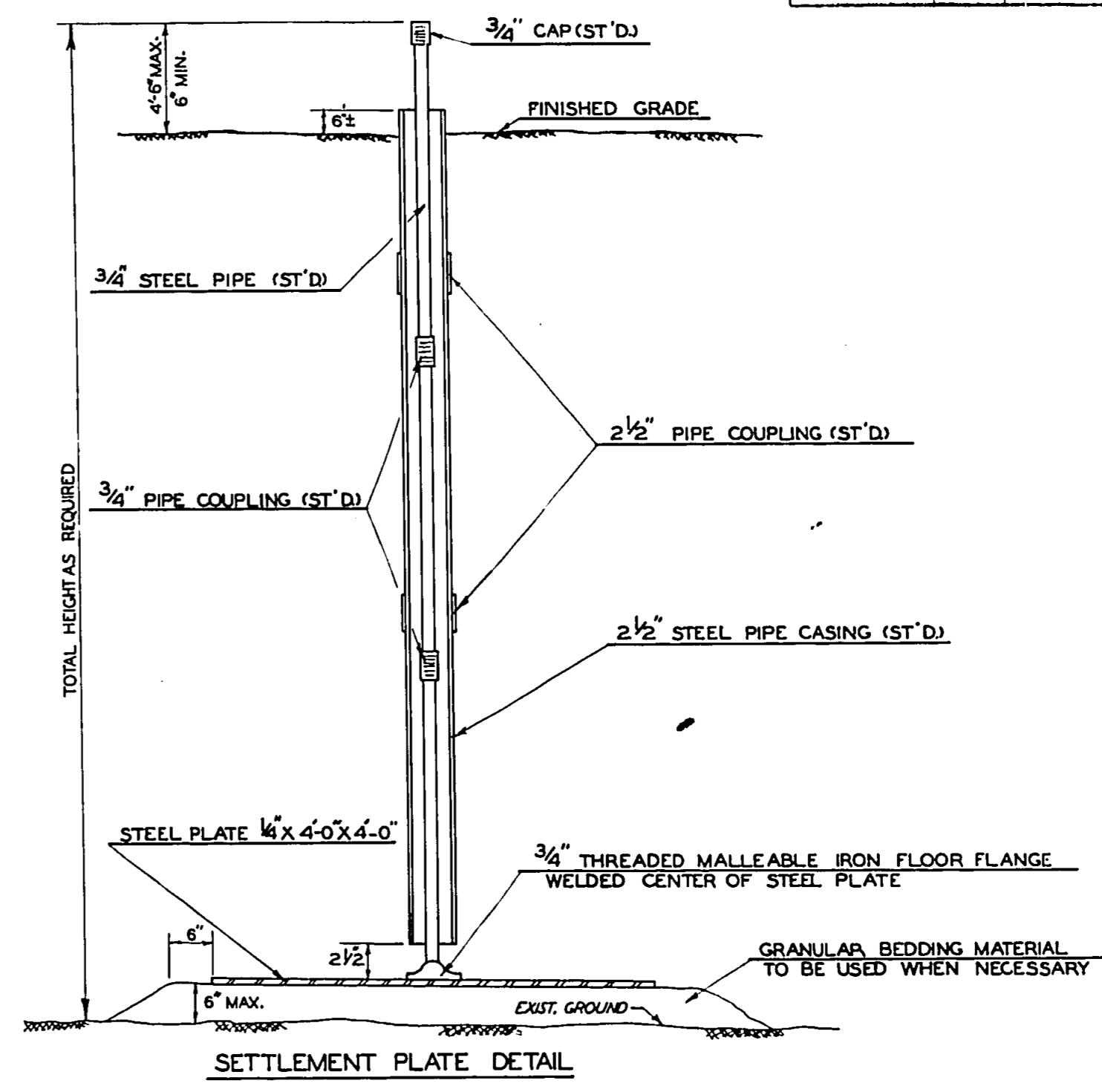
NOTE: QUANTITIES FOR SEEDING HAVE BEEN COMPUTED FROM THE ABOVE TYPICAL SECTION, EXCEPT THAT 10% OF THE TOTAL AMOUNT OF CLASS II SEEDING HAS BEEN REPLACED WITH CLASS III SEEDING TO BE USED IN LIEU OF CLASS II AT VARIOUS LOCATIONS AS DIRECTED BY THE ENGINEER.

GENERAL NOTES

IN GENERAL THE ENTIRE SURFACE WITHIN THE CONSTRUCTION LIMITS SHALL BE SEEDED EXCEPT THE AREAS SHOWN ABOVE.
 FERTILIZER AND AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ALL SEEDED AREAS.
 QUANTITIES OF STRAW
 SEEDED AREAS CLASS II — 2 TONS PER ACRE
 SEEDED AREAS CLASS III — 3 TONS PER ACRE
 CLASS III SHALL BE USED ON ALL BRIDGE CONES
 BORROW PITS NO. 1 & NO. 2
 THE ENTIRE AREA WITHIN CONSTRUCTION LIMITS, INCLUDING THE HAUL-AGEWAYS HAVE BEEN COMPUTED USING CLASS II SEEDING, THE BACKSLOPES ONLY ARE TO BE MULCHED

SEQUENCE OF OPERATION FOR SEEDING AND MULCHING ON CLASS II & III SEEDING

1. SPREAD FERTILIZER AND AGRICULTURAL GROUND LIMESTONE.
2. PERFORM THE OPERATION OF GROUND PREPARATION.
3. PERFORM THE OPERATION OF SEEDING, THE SEED SHALL BE SOWN ON THE SURFACE OF THE PREPARED GROUND.
4. THE OPERATION FOR COVERING THE SEED BY HARROWING OR OTHER MEANS SHALL BE PERFORMED ONLY IF SO DIRECTED BY THE ENGINEER AND SHALL BE INCIDENTAL TO THE ITEM FOR SEEDING.
5. SECTION 642 AND 643 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK, EXCEPT AS NOTED HEREIN.

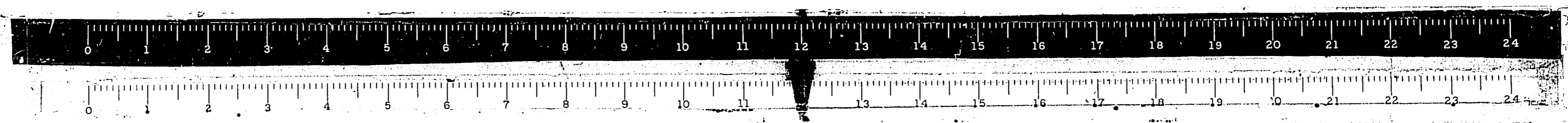


SETTLEMENT PLATE DETAIL

LOCATION OF SETTLEMENT PLATFORMS

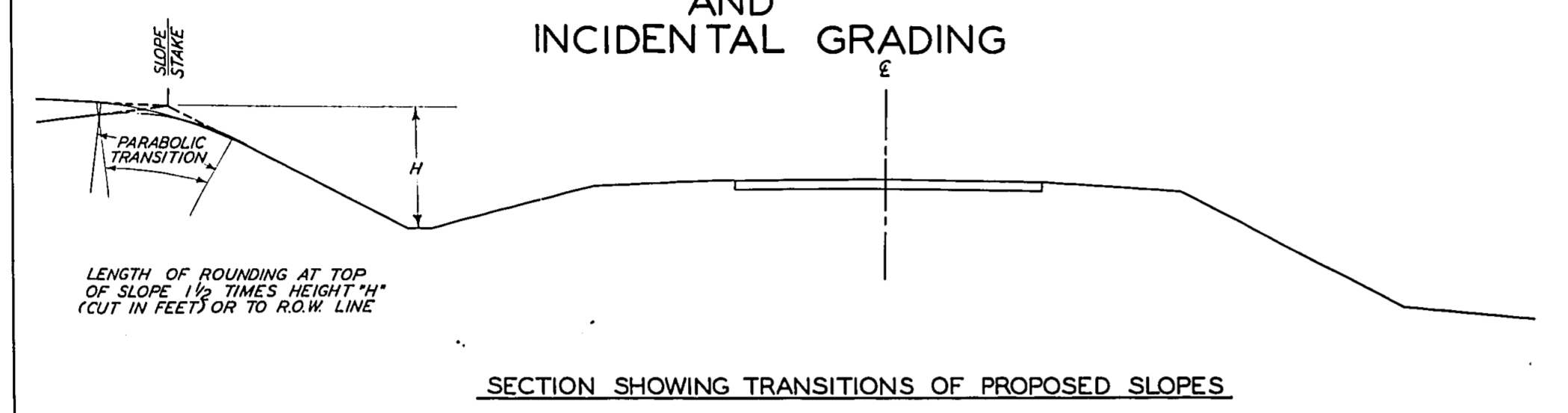
STATION	RIGHT OUTSIDE SHOULDER BREAK
151 + 50	X
155 + 10	X
191 + 50	X
197 + 80	X

FOR INFORMATION ONLY

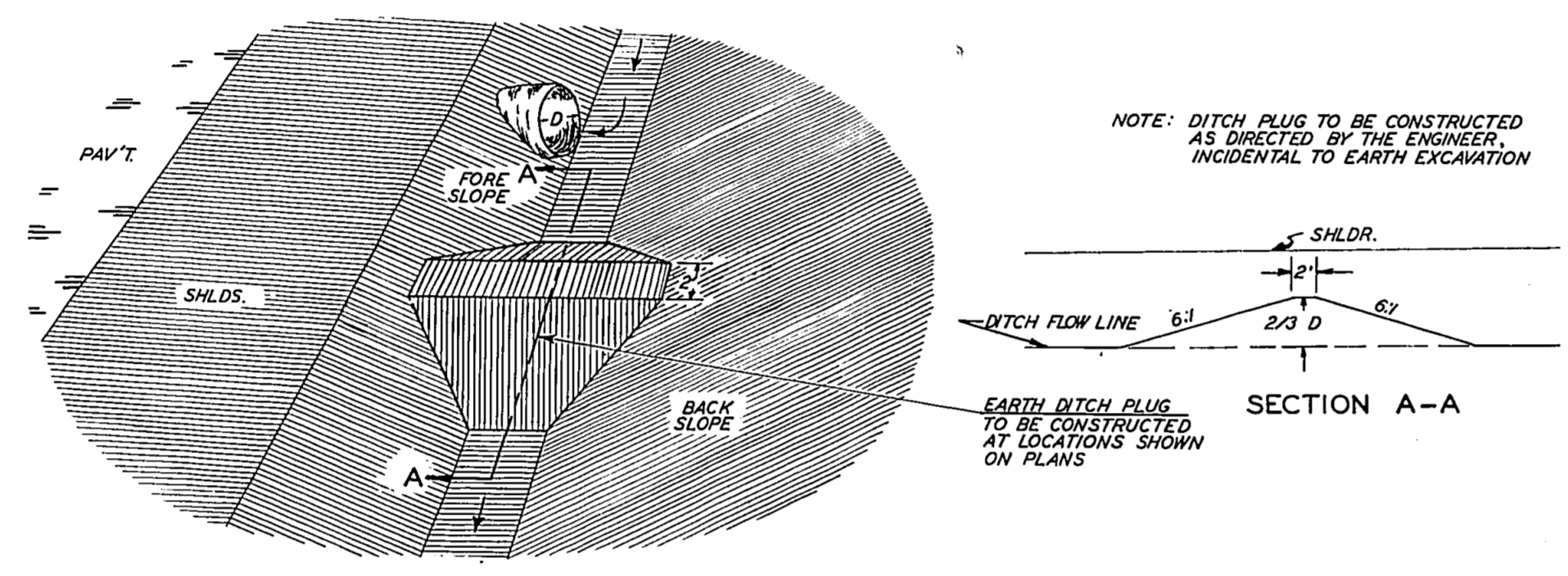


ROUTE NO.	SEG.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 14	12-2A	JACKSON	113	31
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

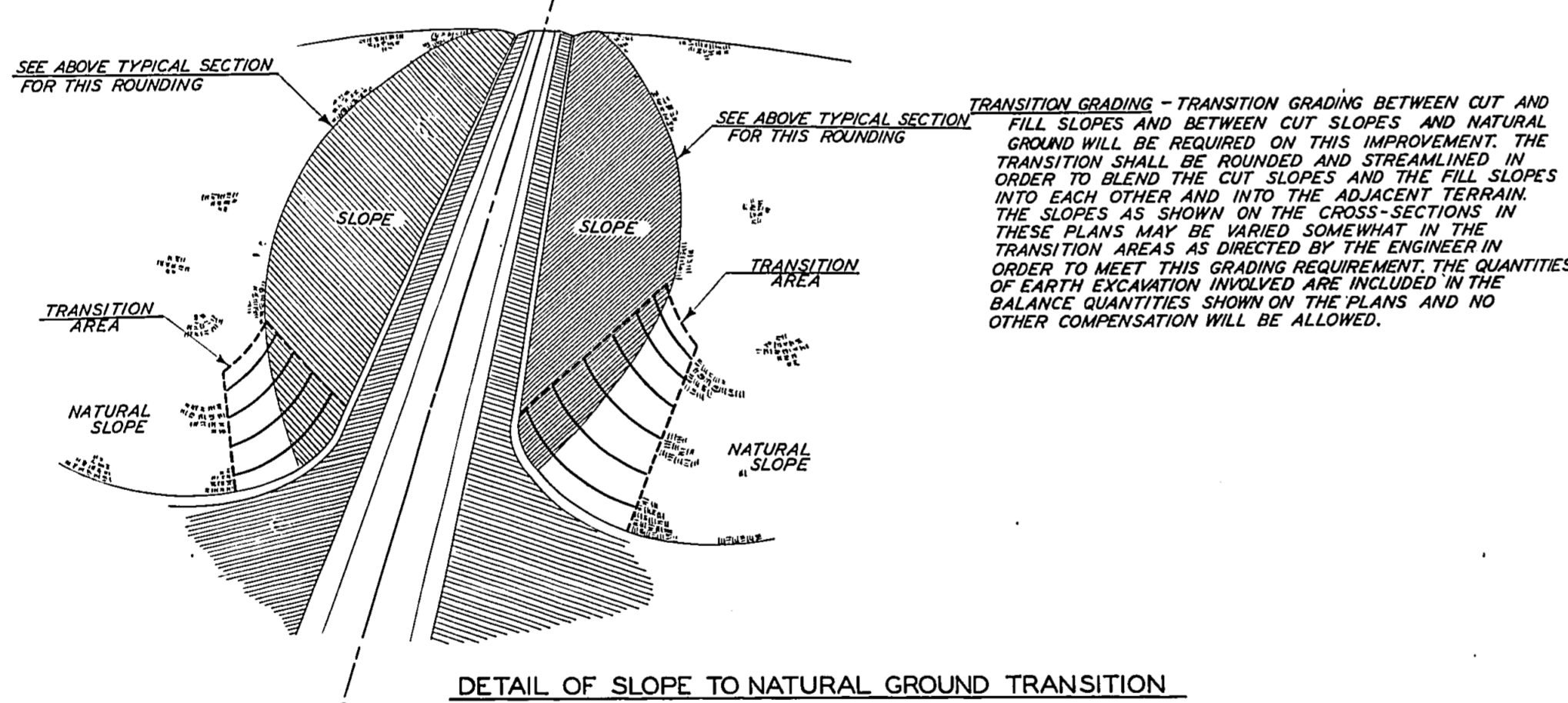
TYPICAL SECTIONS OF TRANSITIONS OF SLOPES AND INCIDENTAL GRADING



SECTION SHOWING TRANSITIONS OF PROPOSED SLOPES



DITCH PLUG DETAIL



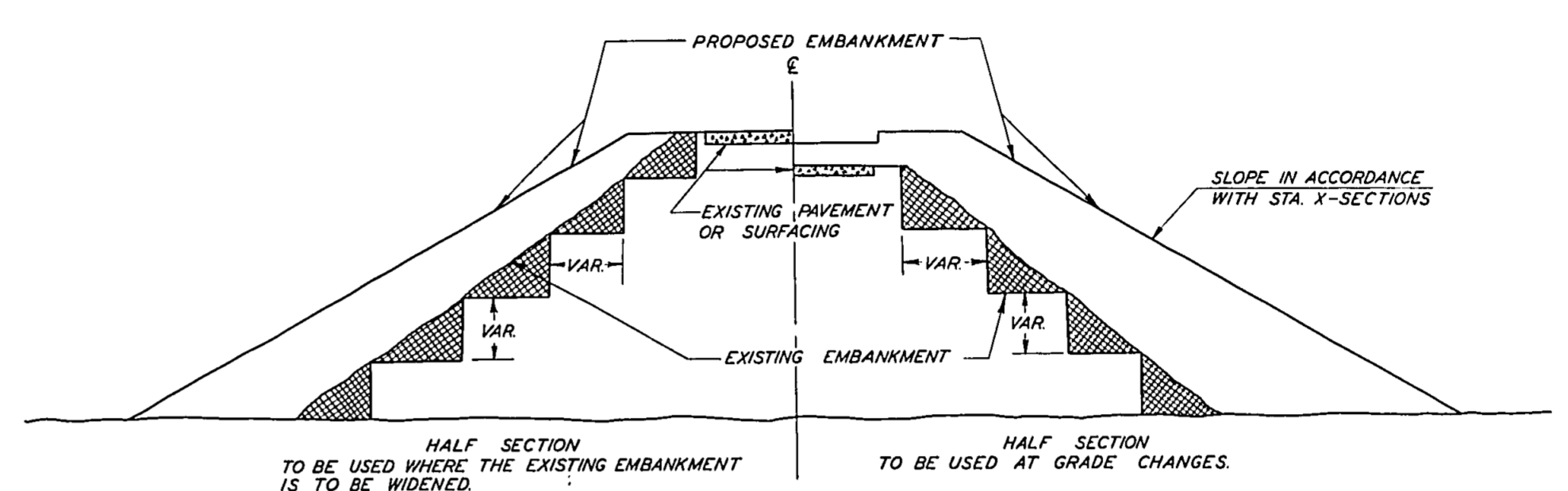
DETAIL OF SLOPE TO NATURAL GROUND TRANSITION

REVISIONS

STD. 9-36

(TO BE USED ON ROAD CLASSES A-1 TO D)

TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL

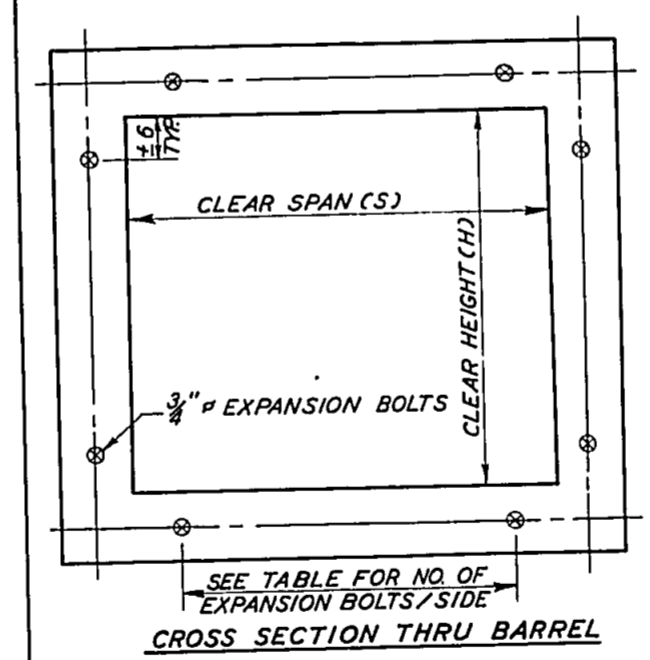


MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 20703 OF THE STANDARD SPECIFICATIONS MUST BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

REVISIONS

STD. 9-35

EXPANSION BOLTS REQUIRED FOR CULVERT EXTENSIONS



EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 8" INTO NEW CONCRETE.

H OR S	NO EXPANSION BOLTS REQD./SIDE EXTENSION IS 15'		EXTENSION IS 15'	
	NO.	SPACING	NO.	SPACING
2.0	2	18"	2	18"
2.5	2	24"	2	24"
3.0	3	18"	3	18"
4.0	3	18"	3	18"
5.0	4	16"	3	24"
6.0	5	15"	4	20"
7.0	5	18"	4	24"
8.0	6	15"	5	21"
9.0	6	19"	5	24"
10.0	7	18"	6	21"
11.0	8	17"	6	24"
12.0	8	19"	7	22"

EXAMPLE: 6' x 4' BOX CULVERT TO BE EXTENDED 18' AT ONE END ONLY. FROM TABLE FIND 6' SIDE REQUIRES 4-3/4" EXPANSION BOLTS AT 20" CENTERS. 4' SIDE REQUIRES 3-3/4" EXPANSION BOLTS AT 18" CENTERS.

TOTAL NO. REQUIRED (4+3)2 = 14-3/4" EXPAN. BOLTS

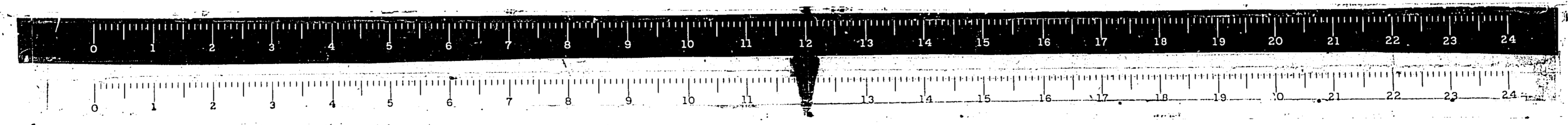
* NOTE: USE MINIMUM OF 1" EXPANSION BOLT AT EACH CORNER.

LOCATION:
DBLE 10' x 10' BOX CULV. STA. 152+68
6' x 6' BOX CULV. STA. 190+62
12' x 11' BOX CULV. STA. 198+92

FOR ANCHOR BOLT REQUIREMENTS, SEE ARTICLE 710.12 OF THE STANDARD SPECIFICATIONS.

REVISIONS
L.B.M. 7-8-71

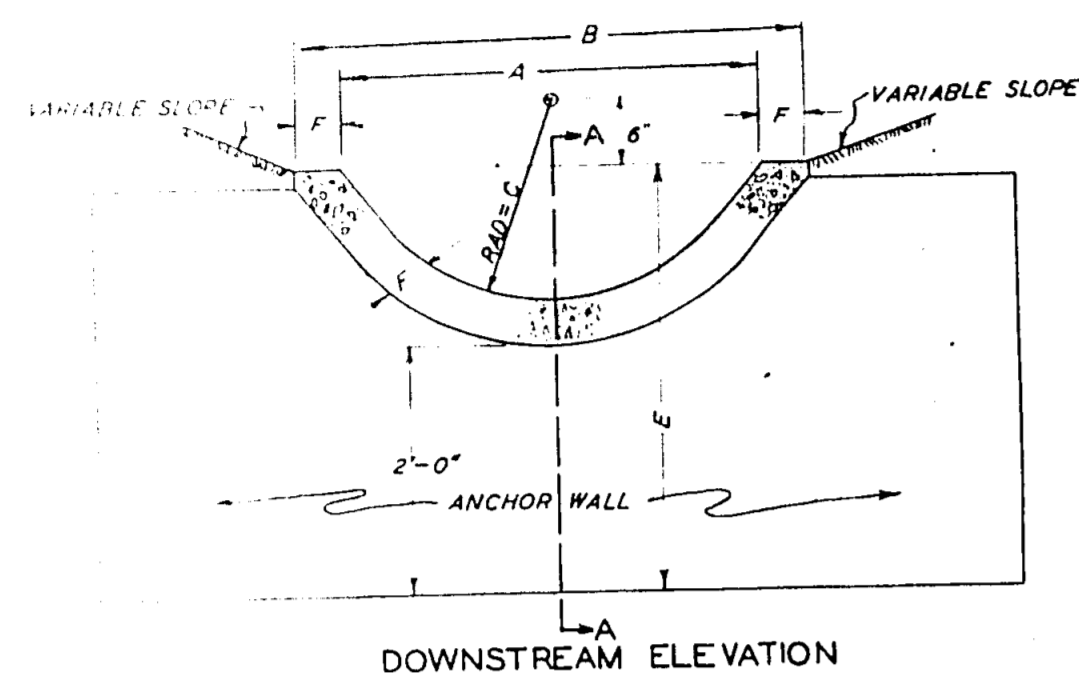
STD. 9-20



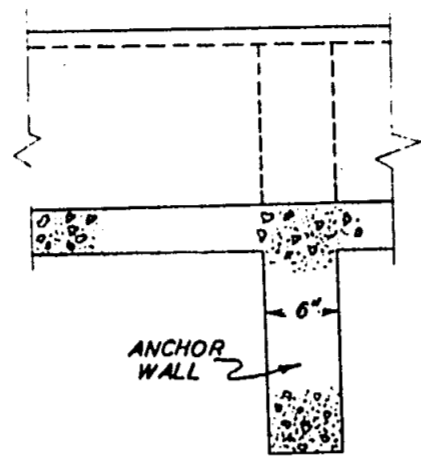
FOR INFORMATION ONLY

PAVED DITCH DETAILS

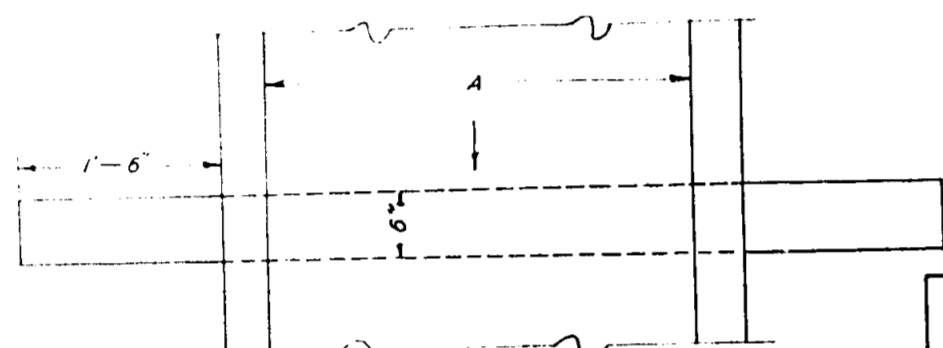
PROJECT NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
FA. 14	12-2A	JACKSON	113	32



DOWNSTREAM ELEVATION



SEC. A-A

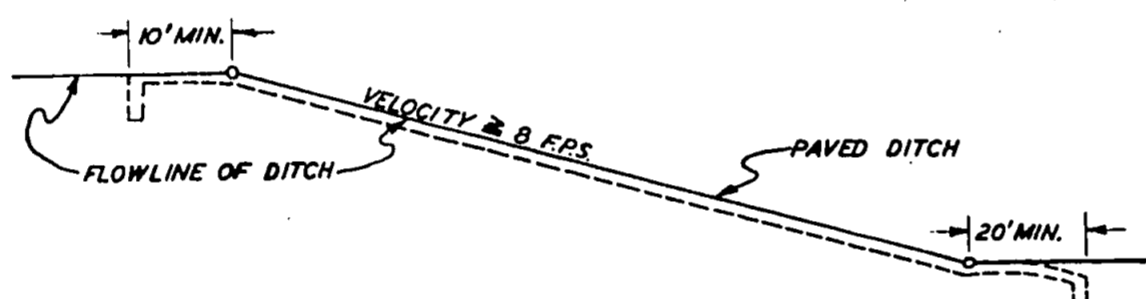


PLAN

PAVED DITCH SIZE	A	B	C	E	F	WELDED WIRE FABRIC
2 FEET	2'-0"	2'-6"	1'-1"	2'-11"	4"	NONE
3 FEET	3'-0"	3'-6"	1'-5"	3'-3"	4"	NONE
4 FEET	4'-0"	4'-6"	1'-9"	3'-7"	4"	NONE
5 FEET	5'-0"	5'-6"	2'-1"	3'-11"	4"	YES
6 FEET	6'-0"	6'-6"	2'-5"	4'-4"	5"	YES
7 FEET	7'-0"	8'-0"	2'-9"	4'-8"	6"	YES

4" 6"x6" MESH #4 GAGE 58 LBS. PER 100 SQ. FT. SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAVED DITCH 5 FT., 6 FT., & 7 FT.

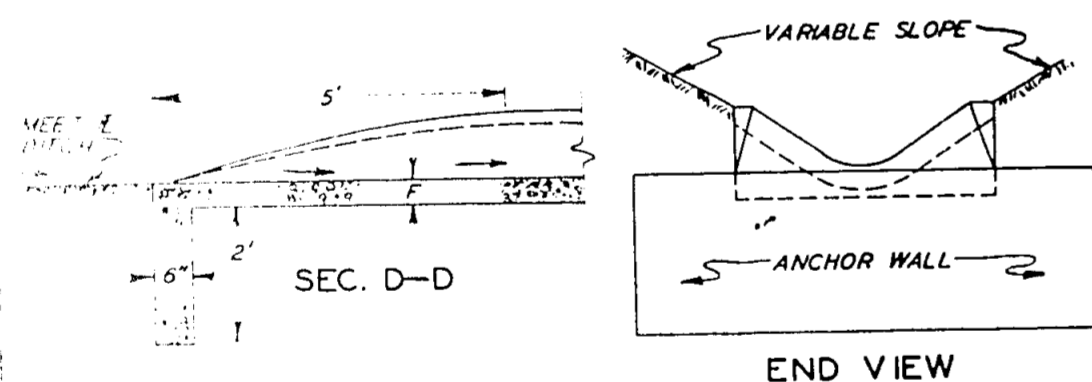
LOCATION & LIMITS FOR PAVED DITCH



NOTE: PAVED DITCH SHALL EXTEND FOR A MINIMUM DISTANCE OF 10' BACK AND 20' AHEAD AT POINTS OF ABRUPT GRADE CHANGE.

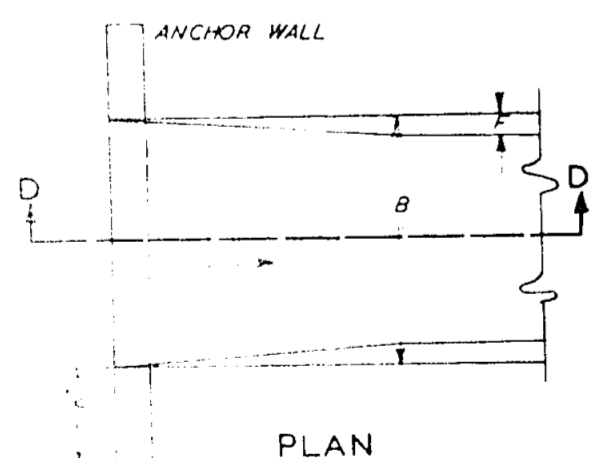
NOTE
CLASS X CONCRETE SHALL BE USED THROUGHOUT
ANCHOR WALLS SHALL BE PROVIDED AT THE UPPER END OF THE PAVED DITCH AND AT 200 FOOT INTERVALS. ANCHOR WALLS AND TOE WALLS SHALL BE CONSTRUCTED MONOLITHICALLY WITH THE DITCH.
ONE-HALF INCH PREMOULDED JOINT FILLER SHALL BE INSTALLED AT JUNCTION OF PAVED DITCH WITH ANY OTHER STRUCTURE AND 2 INCH PREMOULDED JOINT FILLER SHALL BE INSTALLED AT THE CENTER OF EACH 200 FOOT UNIT.
COST OF ANCHOR WALLS AND JOINT FILLER SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR PAVED DITCHES.

DETAIL OF INLET



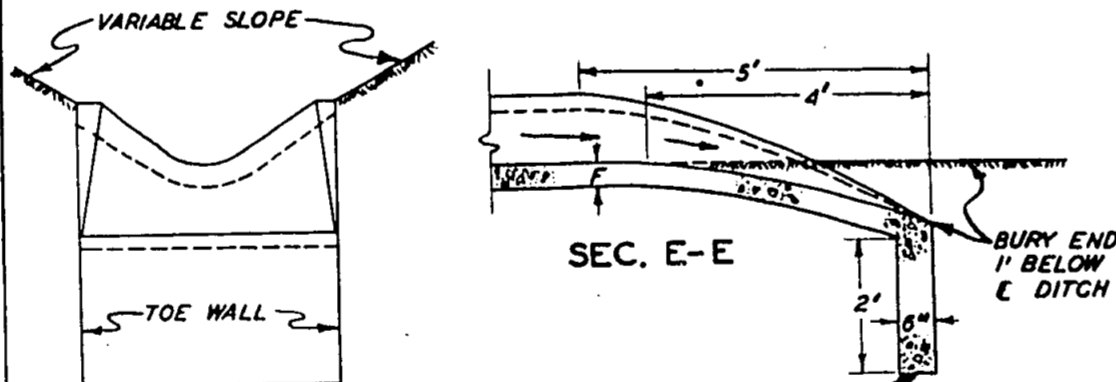
SEC. D-D

END VIEW



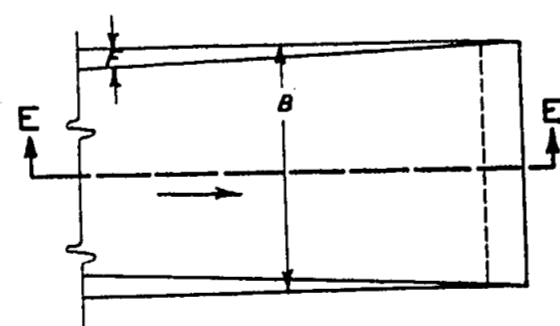
PLAN

DETAIL OF OUTLET



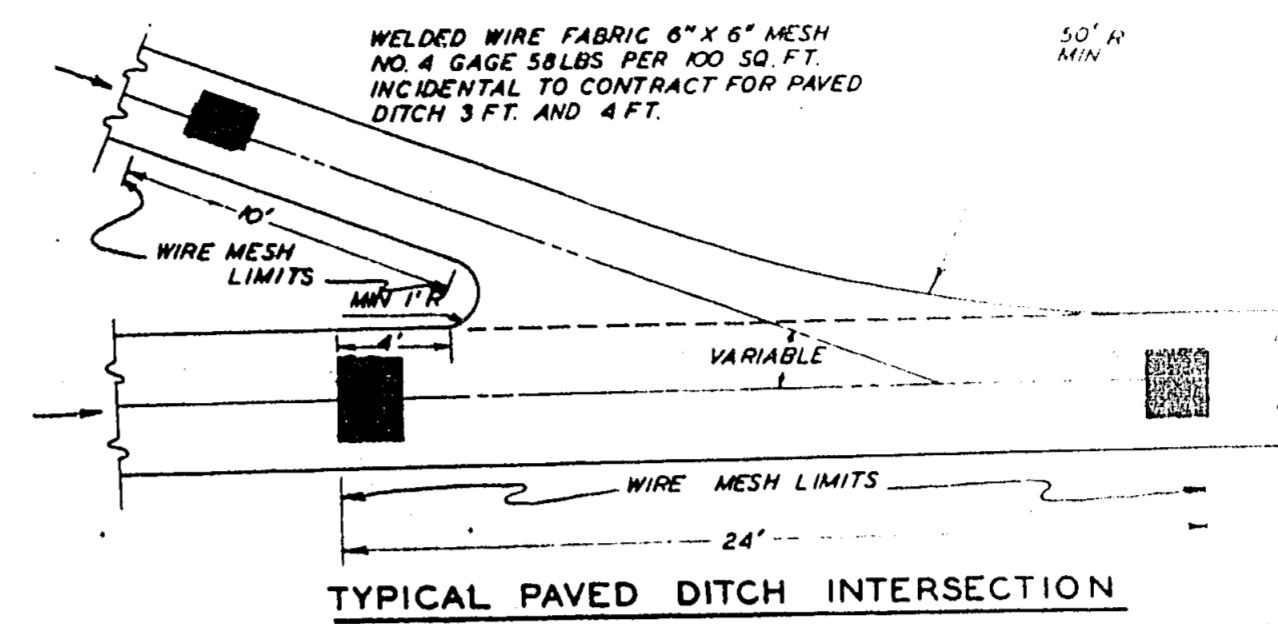
SEC. E-E

END VIEW



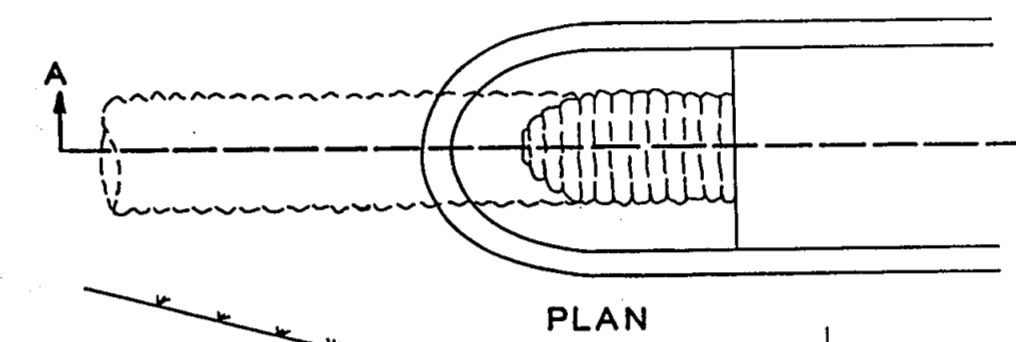
PLAN

NOTE:
CLASS X CONCRETE SHALL BE USED THROUGHOUT.
INLETS AND OUTLETS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR PAVED DITCHES, WHICH PRICE SHALL INCLUDE THE COST OF TOE WALLS AND ANCHOR WALLS.

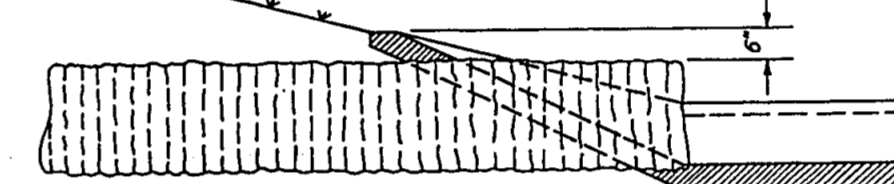


TYPICAL PAVED DITCH INTERSECTION

PAVED DITCH CONNECTIONS AT ENDS OF PIPES



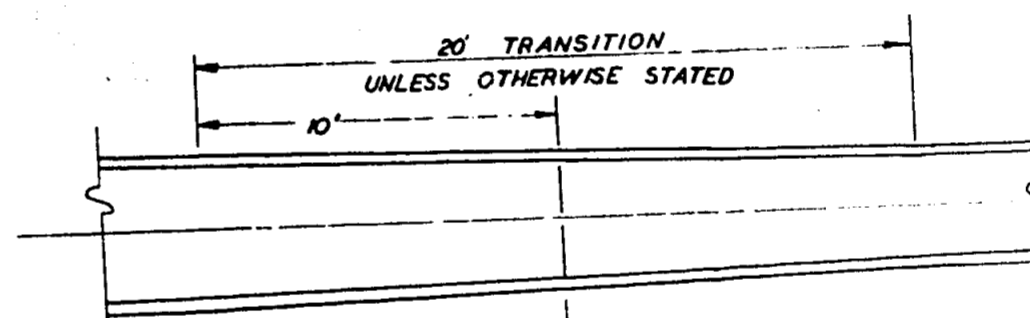
PLAN



SEC. A-A

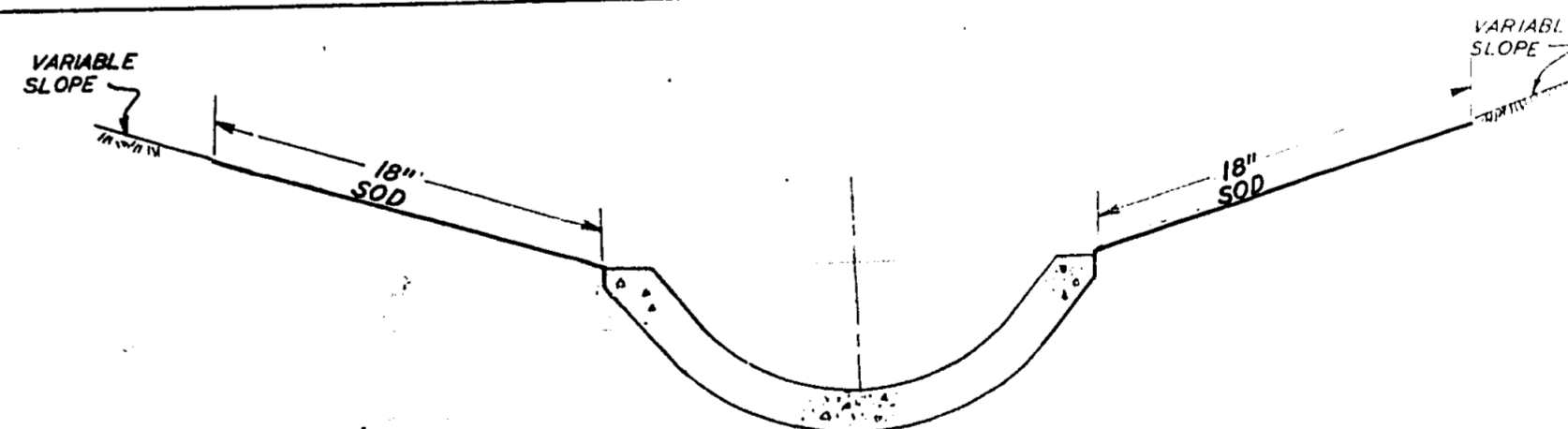
NOTE: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PAVED DITCH IN LIN. FT.

TYPICAL TRANSITION



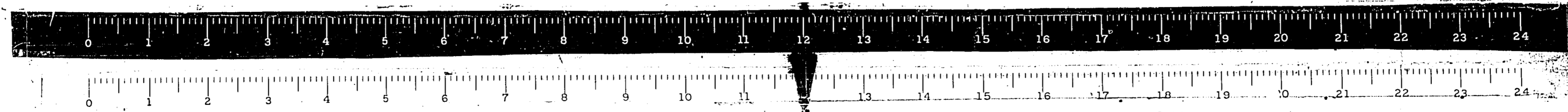
LIMITS OF WELDED WIRE FABRIC IF REQUIRED FOR THE LARGER PAVED DITCH

NOTE: TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PAVED DITCH OF THE LARGER SIZE

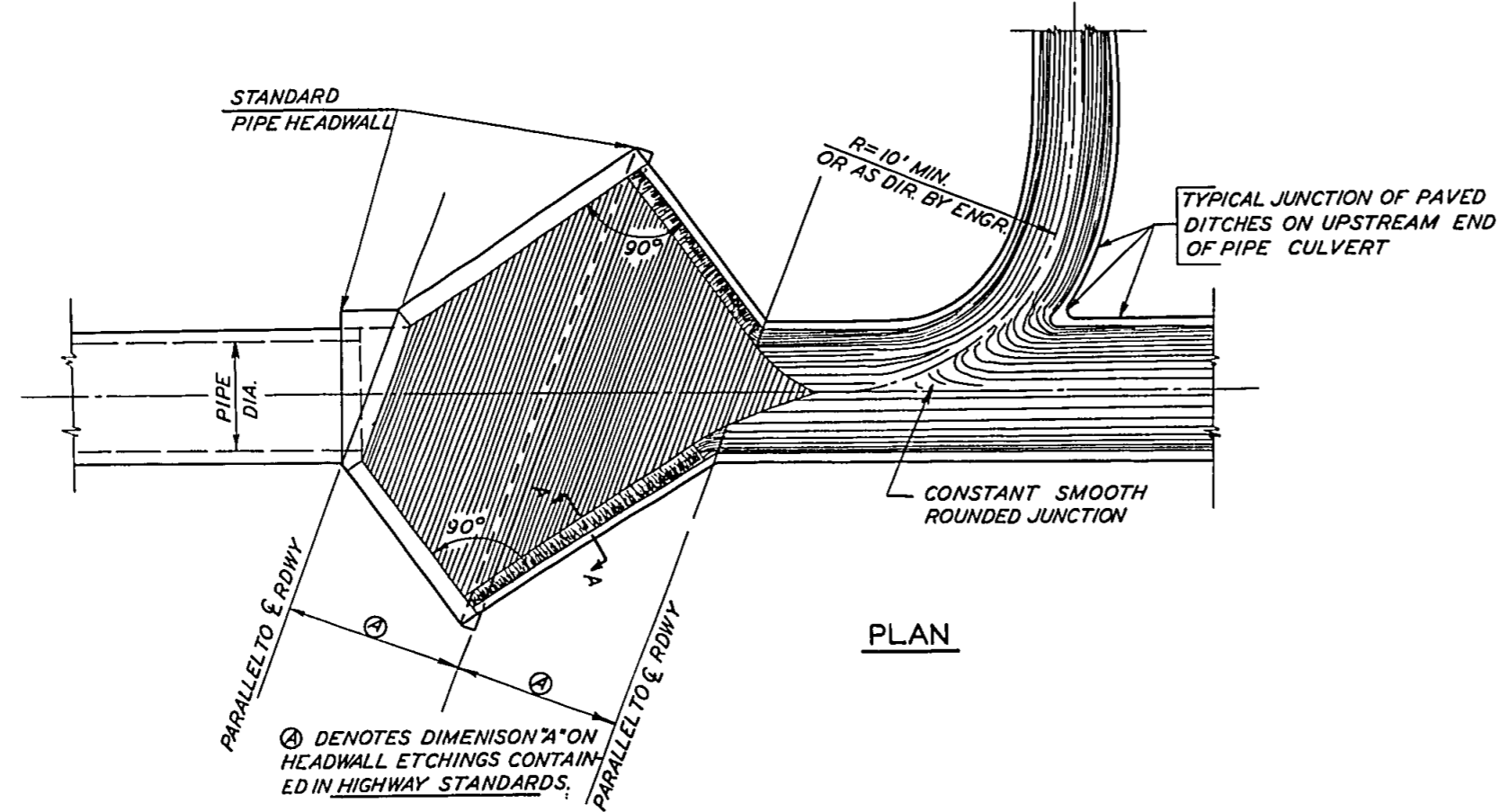


SOD INSTALLATION AT EACH SIDE OF PAVED DITCH

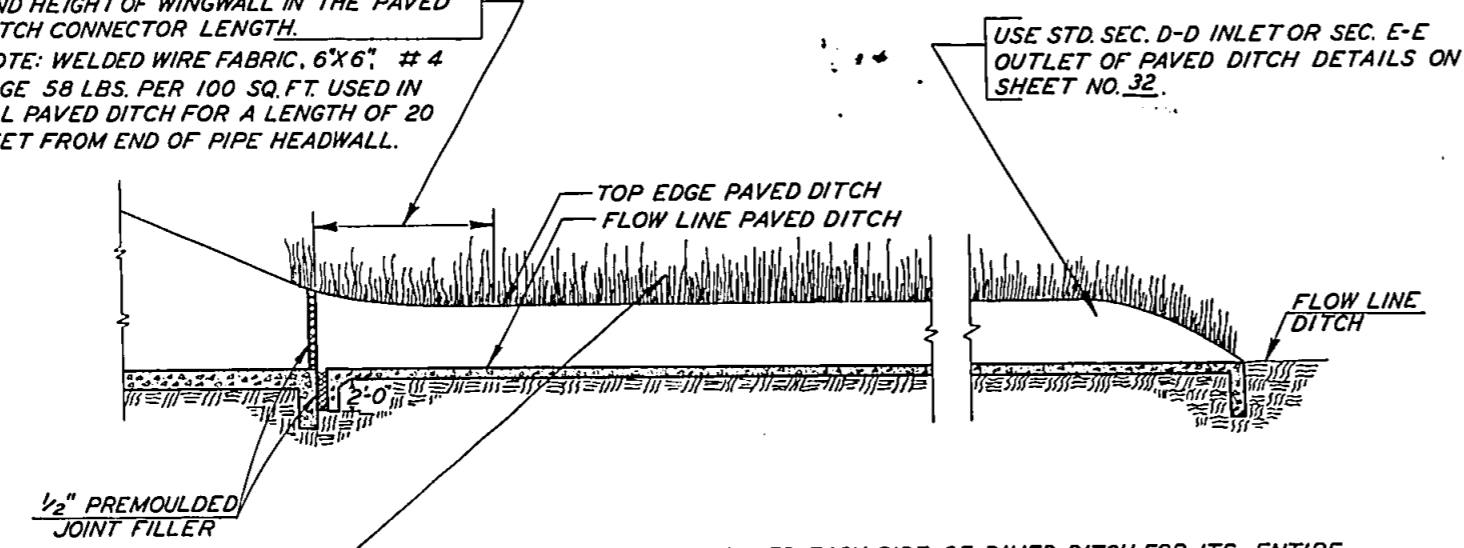
FOR INFORMATION ONLY



PAVED DITCH CONNECTION TO PIPE HEADWALL

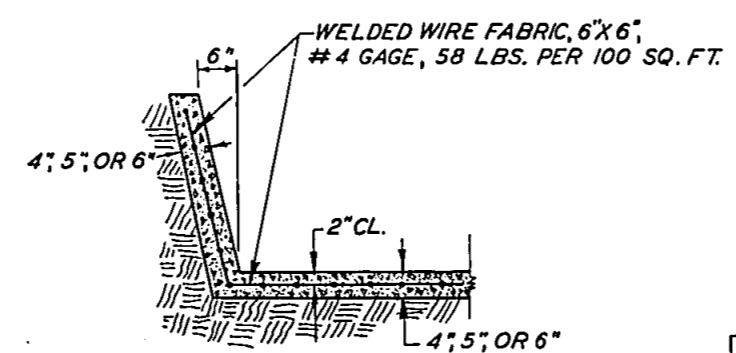
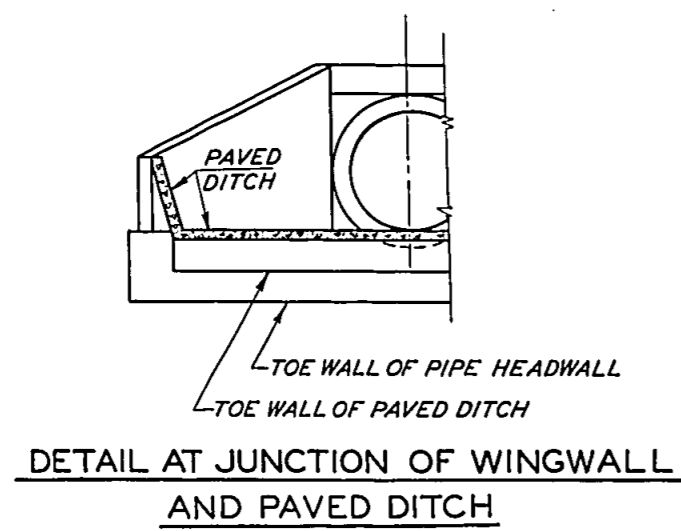


TRANSITION PAVED DITCH DEPTH TO MEET END HEIGHT OF WINGWALL IN THE PAVED DITCH CONNECTOR LENGTH.
NOTE: WELDED WIRE FABRIC, 6"x6", #4 GAGE, 58 LBS. PER 100 SQ. FT. USED IN ALL PAVED DITCH FOR A LENGTH OF 20 FEET FROM END OF PIPE HEADWALL.



SODDING SHALL BE PLACED EACH SIDE OF PAVED DITCH FOR ITS ENTIRE LENGTH IN ACCORDANCE WITH DETAIL SOD INSTALLATION AT EACH SIDE OF PAVED DITCH SHOWN ON SHEET NO. 32.

LONGITUDINAL CROSS SECTION



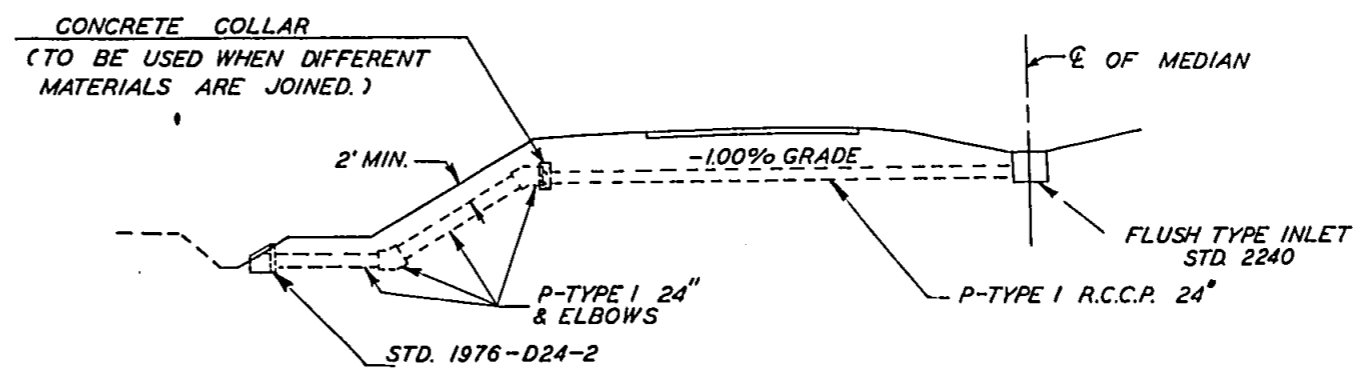
SECTION A-A

REVISIONS	

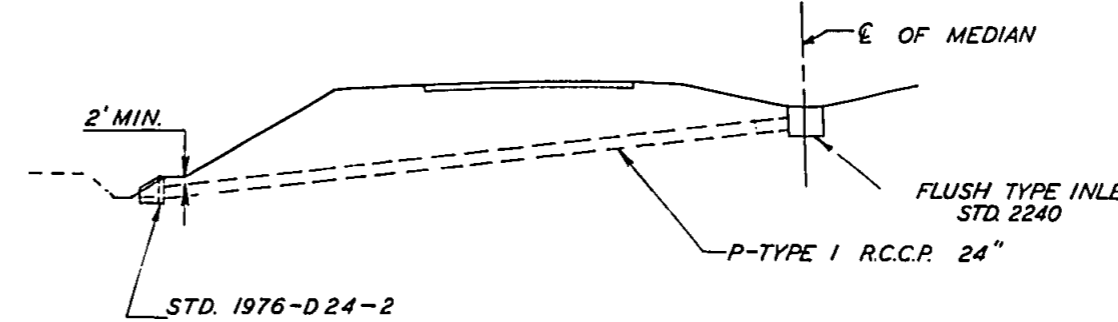
NOTE: THE COST OF THE PAVED DITCH CONNECTION TO THE PIPE HEADWALL, INCLUDING 6"x6", #4 GA. 58 LBS. PER 100 SQ. FT. WELDED WIRE FABRIC, ONE HALF INCH PREMOLDED JOINT FILLER, TOE WALLS AND ANY AND ALL EARTH EXCAV. SHALL BE INCIDENTAL TO THE ITEM OF PAVED DITCH (LINEAL FEET) OF THE SIZE AND QUAN. SHOWN ON THE TABULATION OF QUANTITIES, THE PLAN SHEETS, OR THE STATION CROSS SECTIONS.

DETAILS SHOWING METHOD OF DRAINING PROPOSED MEDIAN INLETS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.14	12-2A	JACKSON	113	33
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



TYPICAL SECTION FOR FILLS CASE I

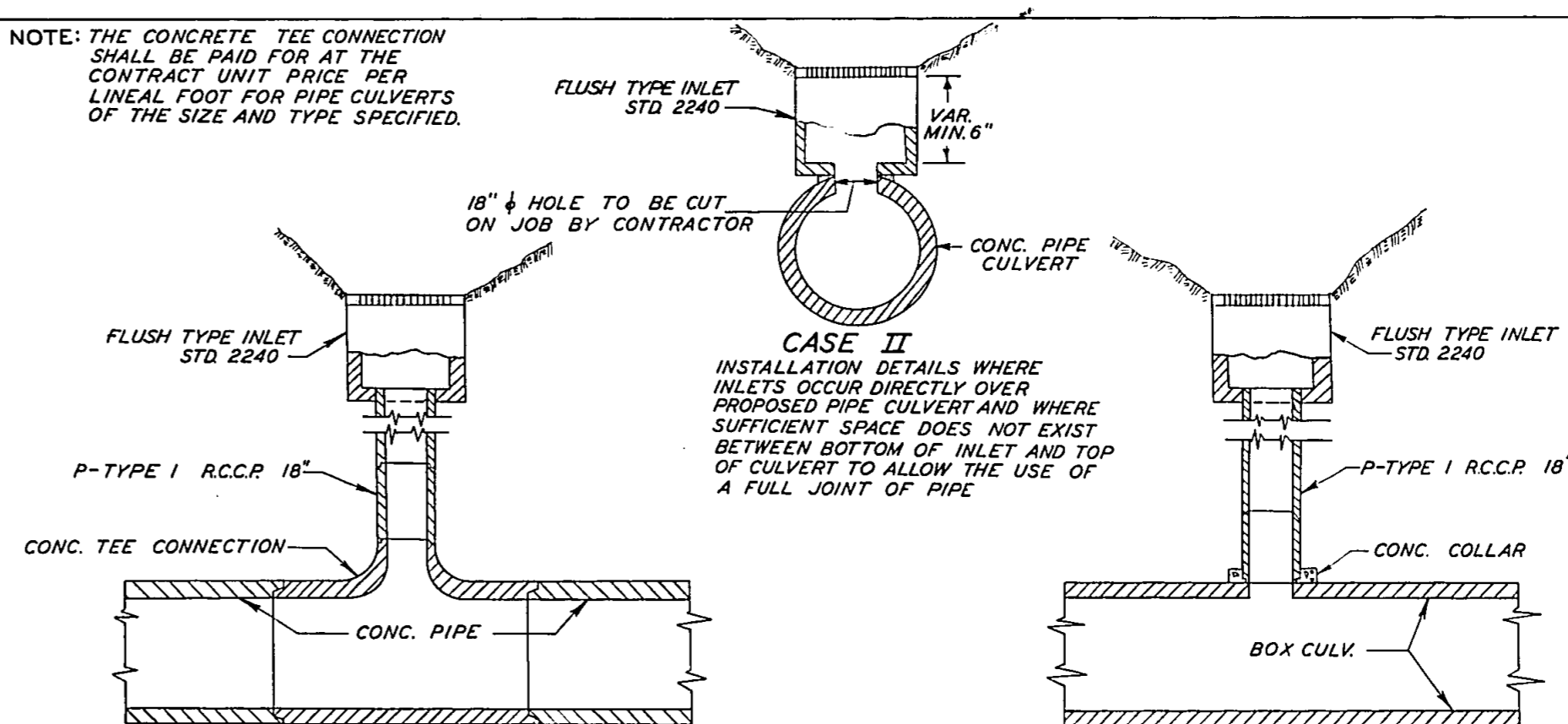


TYPICAL SECTION FOR FILLS CASE II

NOTE: THE ELBOW CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR PIPE CULVERT OF THE SIZE AND TYPE SPECIFIED.

SEE PLAN SHEET OR CROSS SECTIONS FOR TYPE OF INSTALLATION (CASE I OR CASE II)

NOTE: THE CONCRETE TEE CONNECTION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR PIPE CULVERTS OF THE SIZE AND TYPE SPECIFIED.



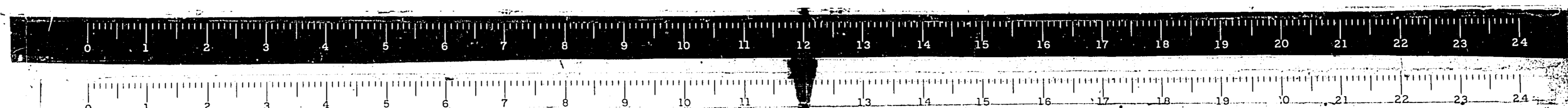
CASE I
INSTALLATION DETAILS WHERE INLETS OCCUR DIRECTLY OVER PROPOSED PIPE CULVERT AND WHERE SUFFICIENT SPACE EXISTS BETWEEN BOTTOM OF INLET AND TOP OF CULVERT TO ALLOW THE USE OF ONE OR MORE JOINTS OF PIPE.

CASE II
INSTALLATION DETAILS WHERE INLETS OCCUR DIRECTLY OVER PROPOSED BOX CULVERT.

REVISIONS	
11-68	

STD 9-43

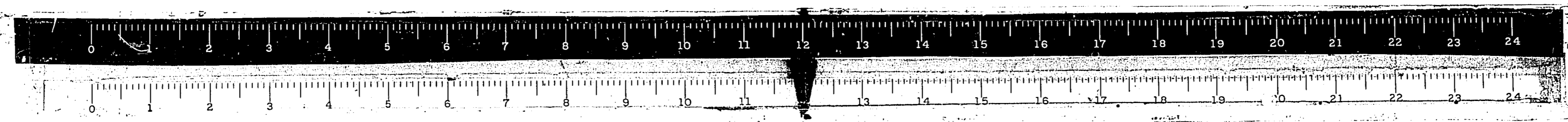
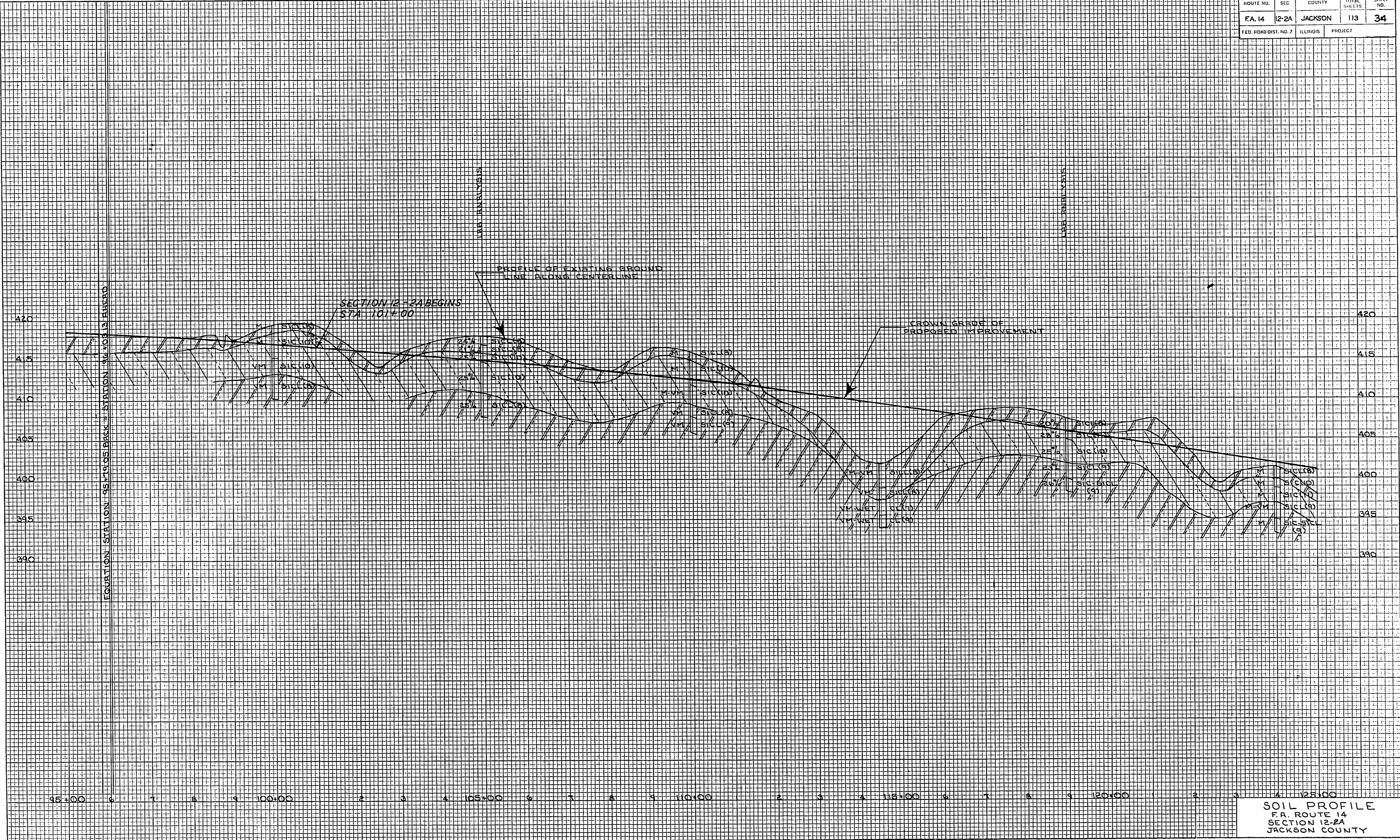
FOR INFORMATION ONLY



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
EA. 14	12-2A	JACKSON	113	34
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

DATE	BY	REVISION

DATE	BY	REVISION

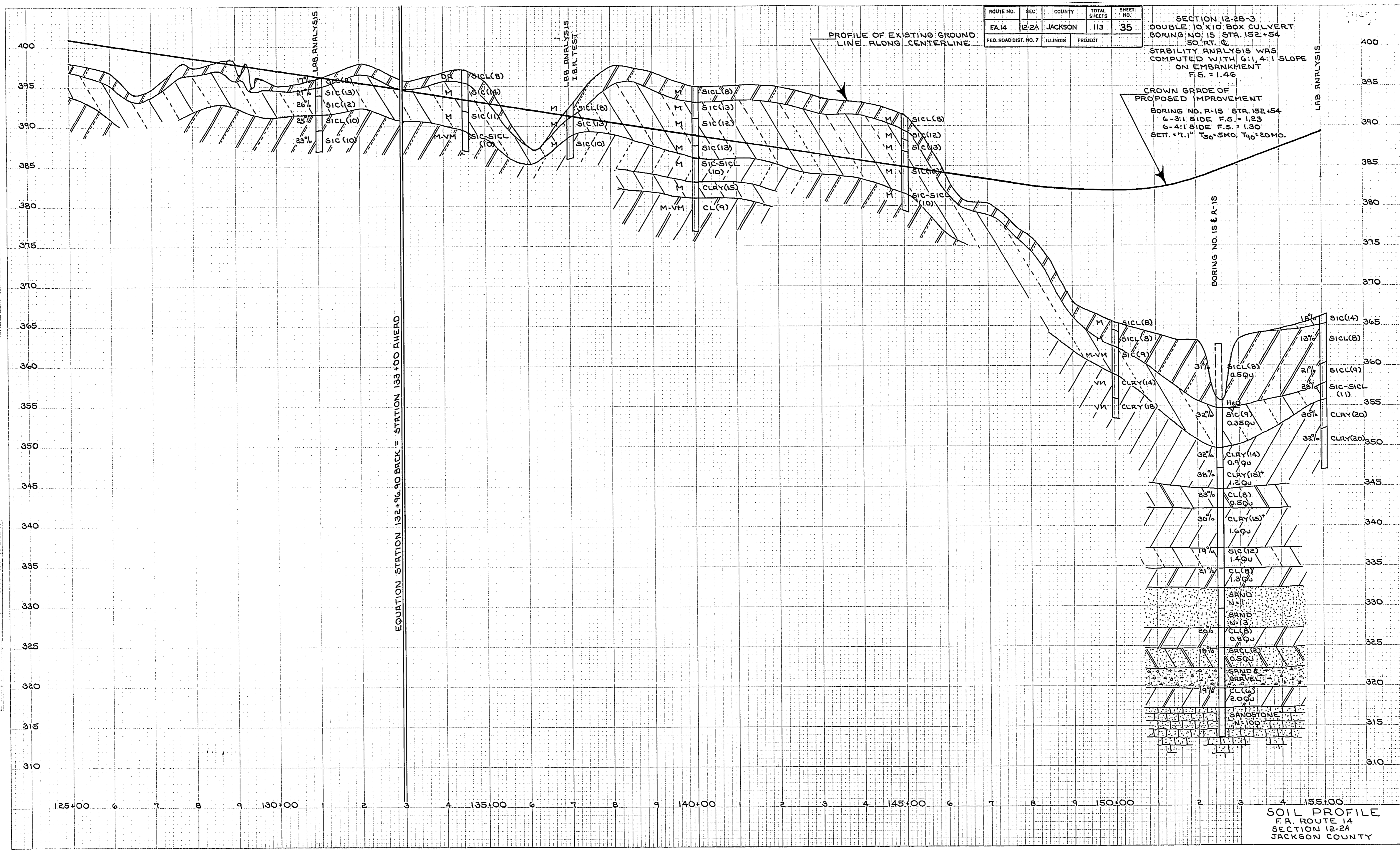


FOR INFORMATION ONLY

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 14	12-2A	JACKSON	113	35
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

SECTION 12-2B-3
 DOUBLE 10' X 10' BOX CULVERT
 BORING NO. 15 STR. 152+54
 50' RT. C.
 STABILITY ANALYSIS WAS
 COMPUTED WITH 6:1, 4:1 SLOPE
 ON EMBANKMENT
 F.S. = 1.46

CROWN GRADE OF
 PROPOSED IMPROVEMENT
 BORING NO. 15 STR. 152+54
 6-3:1 SIDE F.S. = 1.23
 6-4:1 SIDE F.S. = 1.30
 SETT. = 7.1" T₅₀ = 5MO T₉₀ = 20MO.



TEST NO.	TEST TYPE	TEST RESULT

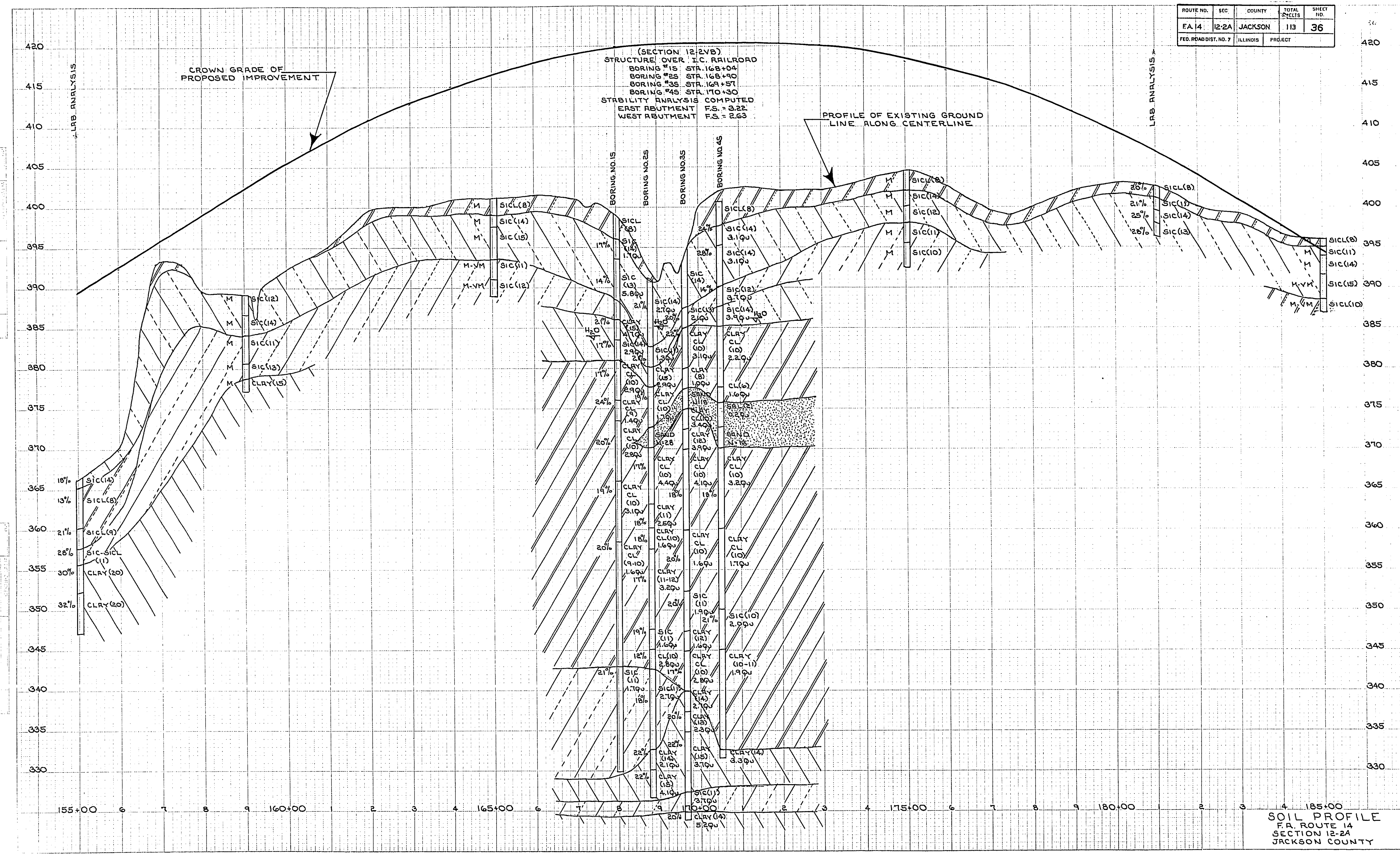
TEST NO.	TEST TYPE	TEST RESULT

SOIL PROFILE
 F.A. ROUTE 14
 SECTION 12-2A
 JACKSON COUNTY

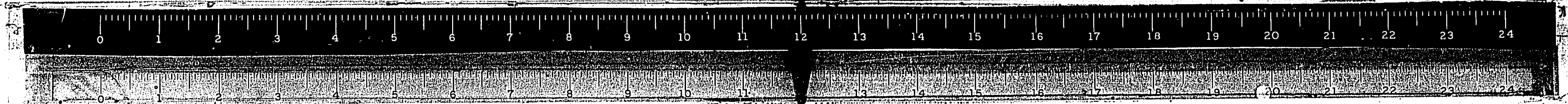


FOR INFORMATION ONLY

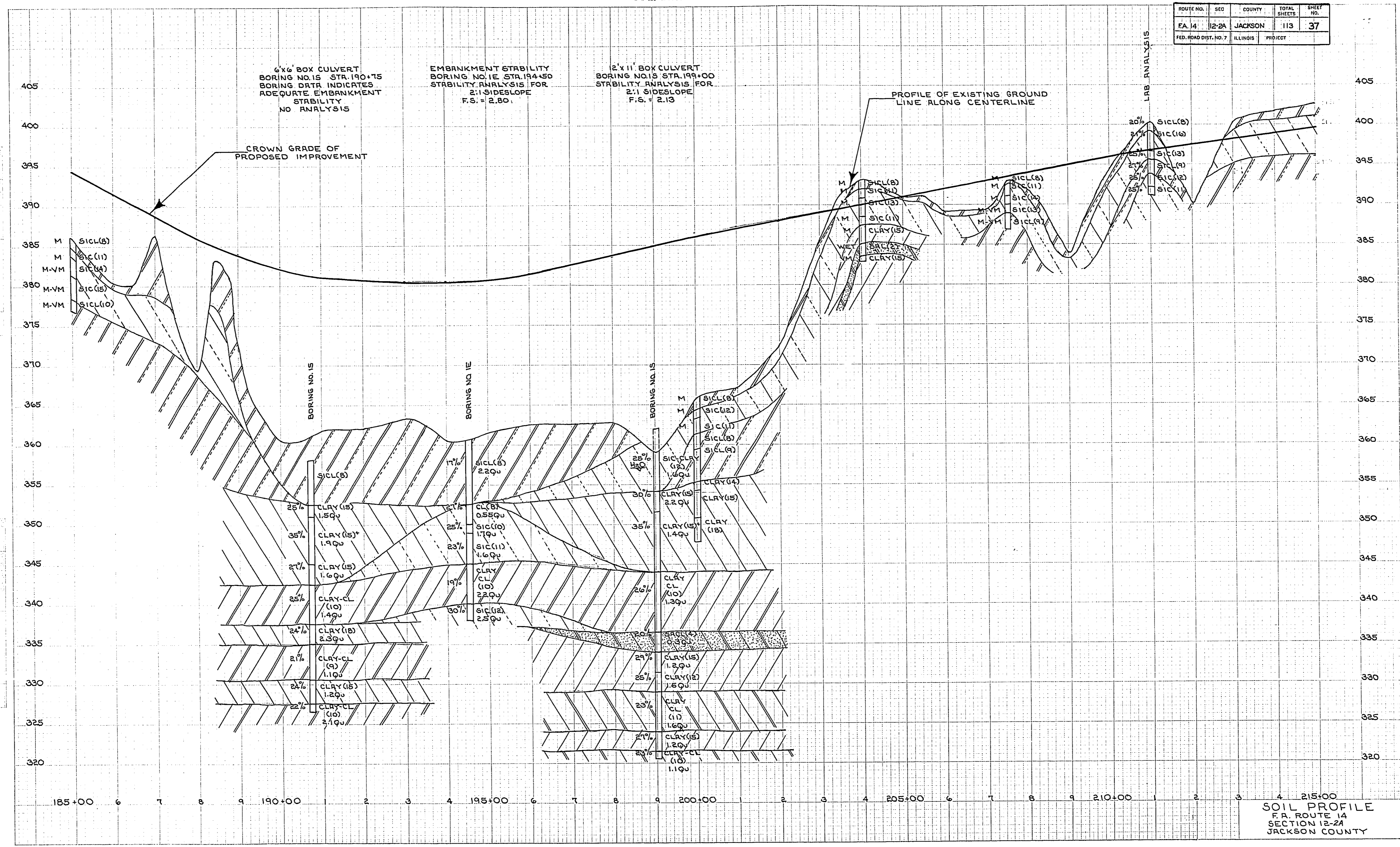
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 14	12-2A	JACKSON	113	36
FED. ROAD DIST. NO. 7		ILLINOIS		PROJECT



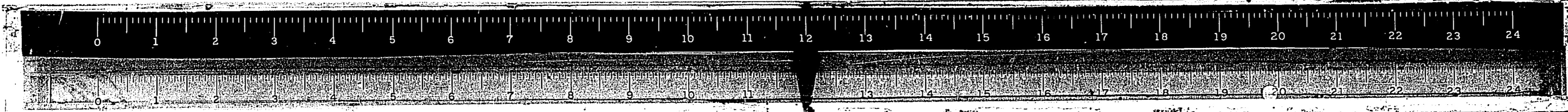
FOR INFORMATION ONLY



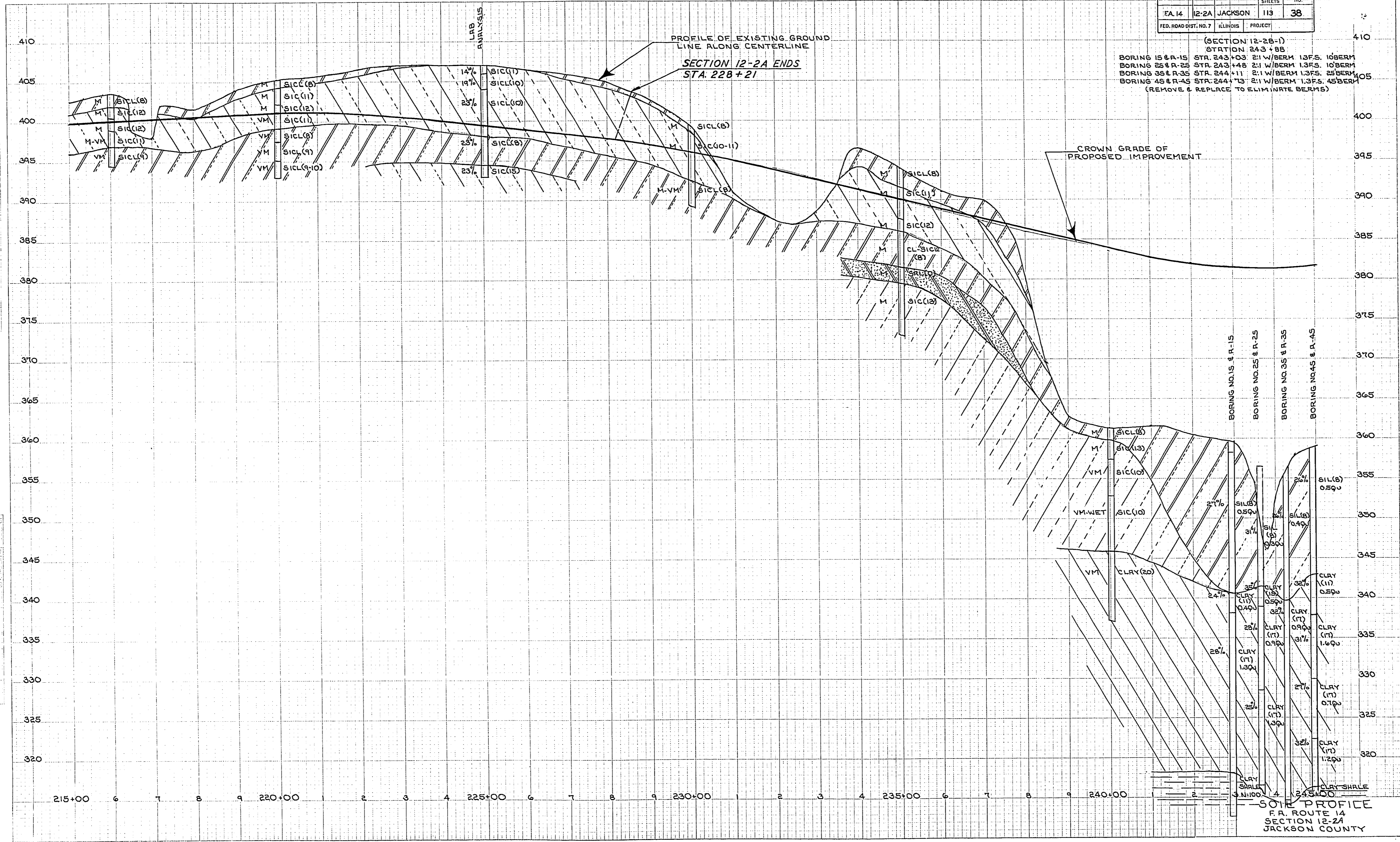
ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
EA. 14	12-24	JACKSON	113	37
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



FOR INFORMATION ONLY

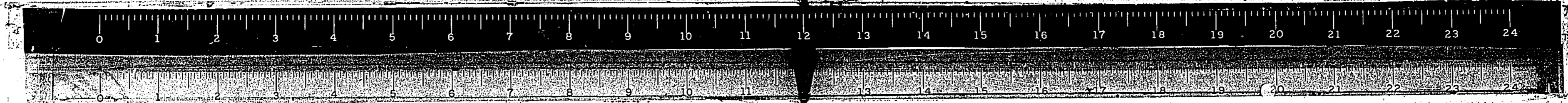


ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
EA 14	12-2A	JACKSON	113	38
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



(SECTION 12-28-1)
 STATION 243+88
 BORING 15 & R-15 STA. 243+03 2:1 W/BERM 13FS. 10BERM
 BORING 25 & R-25 STA. 243+48 2:1 W/BERM 13FS. 10BERM
 BORING 35 & R-35 STA. 244+11 2:1 W/BERM 13FS. 25BERM
 BORING 45 & R-45 STA. 244+13 2:1 W/BERM 13FS. 45BERM
 (REMOVE & REPLACE TO ELIMINATE BERMS)

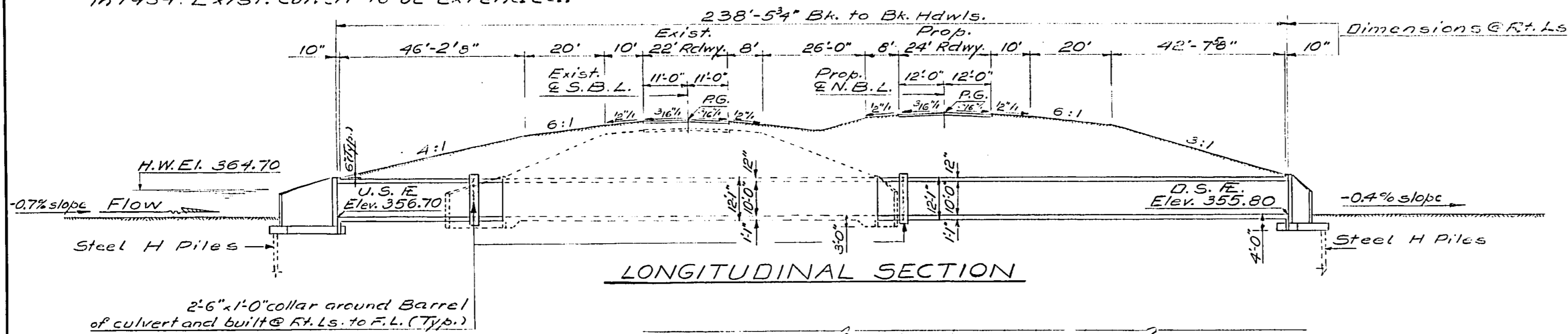
FOR INFORMATION ONLY



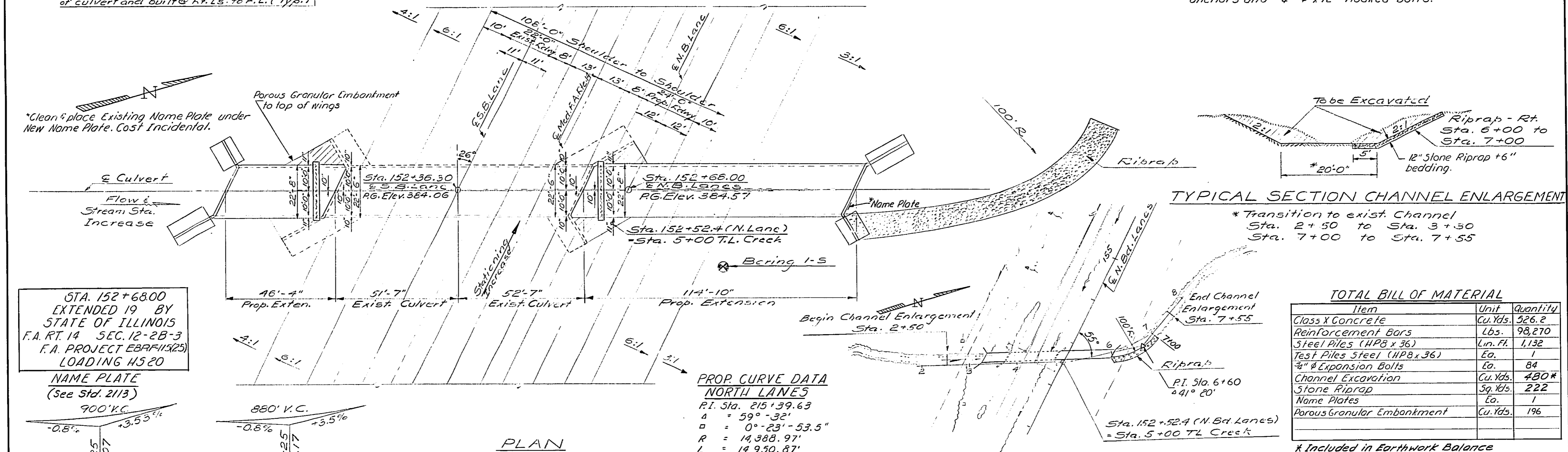
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A. RT. 14	#	Jackson	113	39	4 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

B.M.: R.R. Spike in 30' OAK 13' Rt. Sta. 156+60
Elev. 393.50
Existing structure - R.C. Double Box Culvert
built as F.A. 14, Sec. 12-1V-B, at Sta. 152+26
in 1954. Exist. culvert to be extended.



GENERAL NOTES
All reinforcement bars shall be lapped 24 Dia. unless otherwise shown.
The following surfaces of the culvert shall be waterproofed, the top of the top slab, the backs of the exterior walls above the lower construction joint and the backs of the wings above the tops of the footings.
Non-metallic water seal used in the wingwall joints shall extend from the top of the footing to within 6" of the top of the headwall.
All exposed edges shall be beveled 3/4".
Class X Concrete shall be used throughout.
For backfilling & embankment see 5th Specs.
The Contractor shall drive one steel HP 8x36 test pile in a permanent location at the Northwest wing as directed by the Engineer before ordering the remainder of piles.
It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.
Expansion bolts shall consist of self drilling expansion anchors and 3/4" x 12" hooked bolts.



STA. 152+68.00
EXTENDED 19 BY
STATE OF ILLINOIS
F.A. RT. 14 SEC. 12-2B-3
F.A. PROJECT EBRF-115(25)
LOADING H520
NAME PLATE
(See Sta. 2113)
900' K.C.
-0.8% +3.55%

Sta. 152+25
Elev. 379.07
-0.8% +3.55%

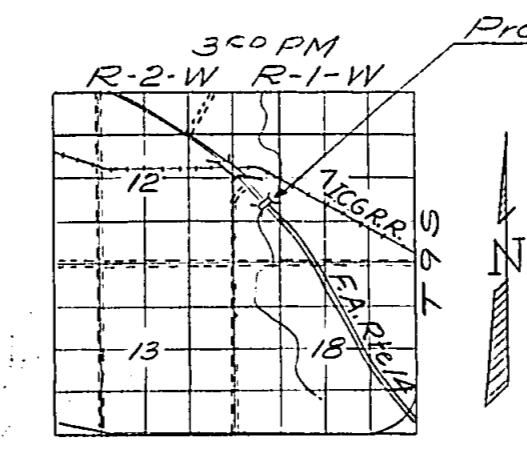
Sta. 152+25
Elev. 379.17
-0.8% +3.55%

**PROP. CURVE DATA
NORTH LANES**
P.I. Sta. 215+39.63
Δ = 59°-32'
α = 0°-23'-53.5"
R = 14,388.97'
L = 14,950.87'
T = 8,229.53'
E = 2,187.15'
SE = 0.00
Retain Crown

WATERWAY INFORMATION
Drainage area 2125 Acres
Character: rolling, clay, wooded, cultivated F.A. RT. 14
Required Opening (50 yr. Pl.) 160 Sq. Ft.
Present Opening 160 Sq. Ft.
Proposed Opening 160 Sq. Ft.

Low Water El. 356.7
Ordinary Water El. 357.5
H.W. El. 364.70
Q₁₀₀ = 1854 cfs

DESIGN STRESSES
f_c = 1700 p.s.i. (Barrel)
f_c = 1000 p.s.i. (Wings)
f_s = 20000 p.s.i. (Rebar)
f_s = 75 p.s.i. (Figs)
n = 10
V_c = 90 p.s.i. (Barrel)
Loading H520-44
Design Specifications: (New Const.)
AASHTO, 1969, as applicable.



TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Class X Concrete	Cu. Yds.	526.2
Reinforcement Bars	Lbs.	98,270
Steel Piles (HP8 x 36)	Lin. Ft.	1,132
Test Piles Steel (HP8 x 36)	Co.	1
4" Expansion Bolts	Co.	84
Channel Excavation	Cu. Yds.	480*
Stone Riprap	Sq. Yds.	222
Name Plates	Co.	1
Porous Granular Embankment	Cu. Yds.	196

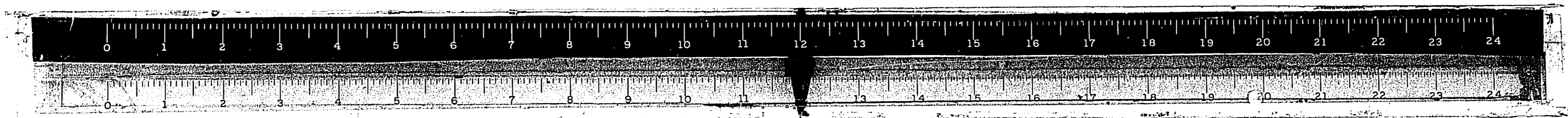
* Included in Earthwork Balance

GENERAL PLAN & ELEVATION
PROJECT: EBRF-115(25)
F.A. RT. 14 OVER TRIBUTARY OF
BIG MUDDY RIVER
F.A. RT. 14 SECTION 12-2B-3
JACKSON CO.
STA. 152+68.00 @ E.N.B. LANE

DESIGNED J. J. Houch
CHECKED Kenneth Wang
DRAWN V. F.
CHECKED Kenneth Wang

EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]

MAY 1 1973

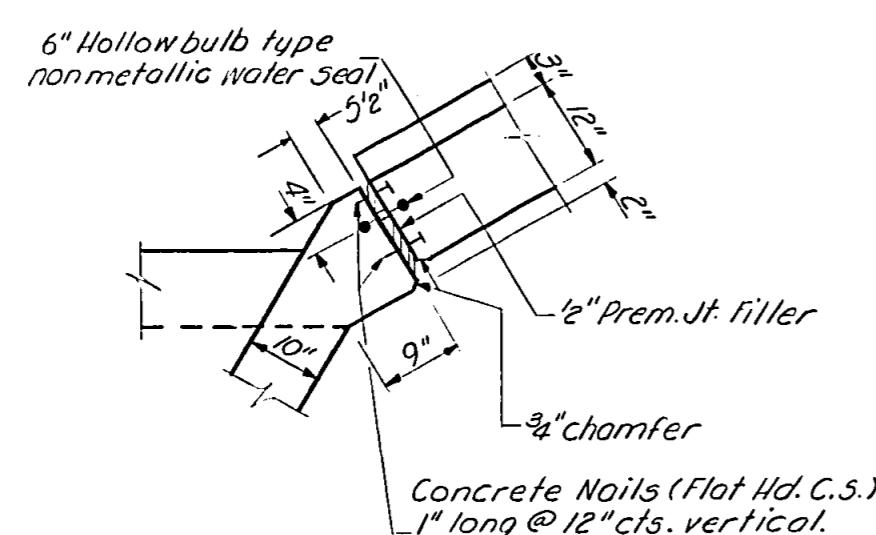


FOR INFORMATION ONLY

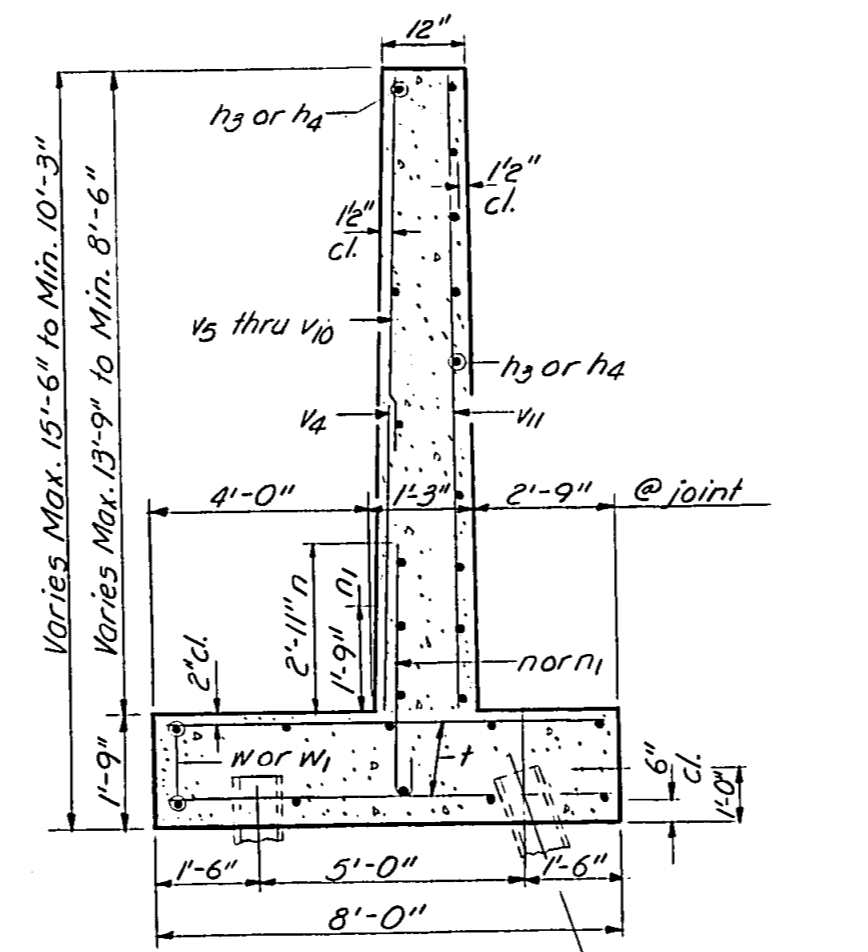
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
P.A. 14	*	Jackson	113	41	4 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	
* 12-2B-3					

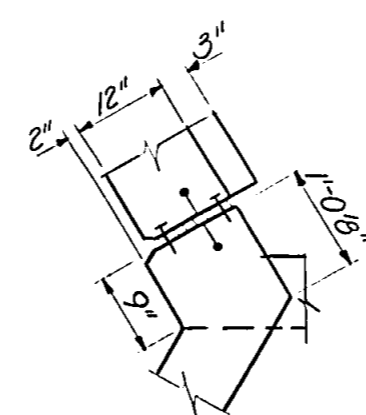
PILE DATA
Type: Steel (HP 8x36)
Capacity: Drive to refusal
Est. Length: 37'-0" South Extension
36'-0" North Extension
No. Req'd.: 32 including 1 test pile



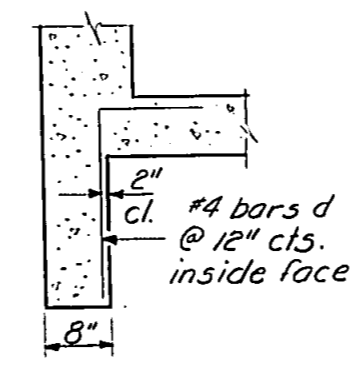
CORNER DETAIL B



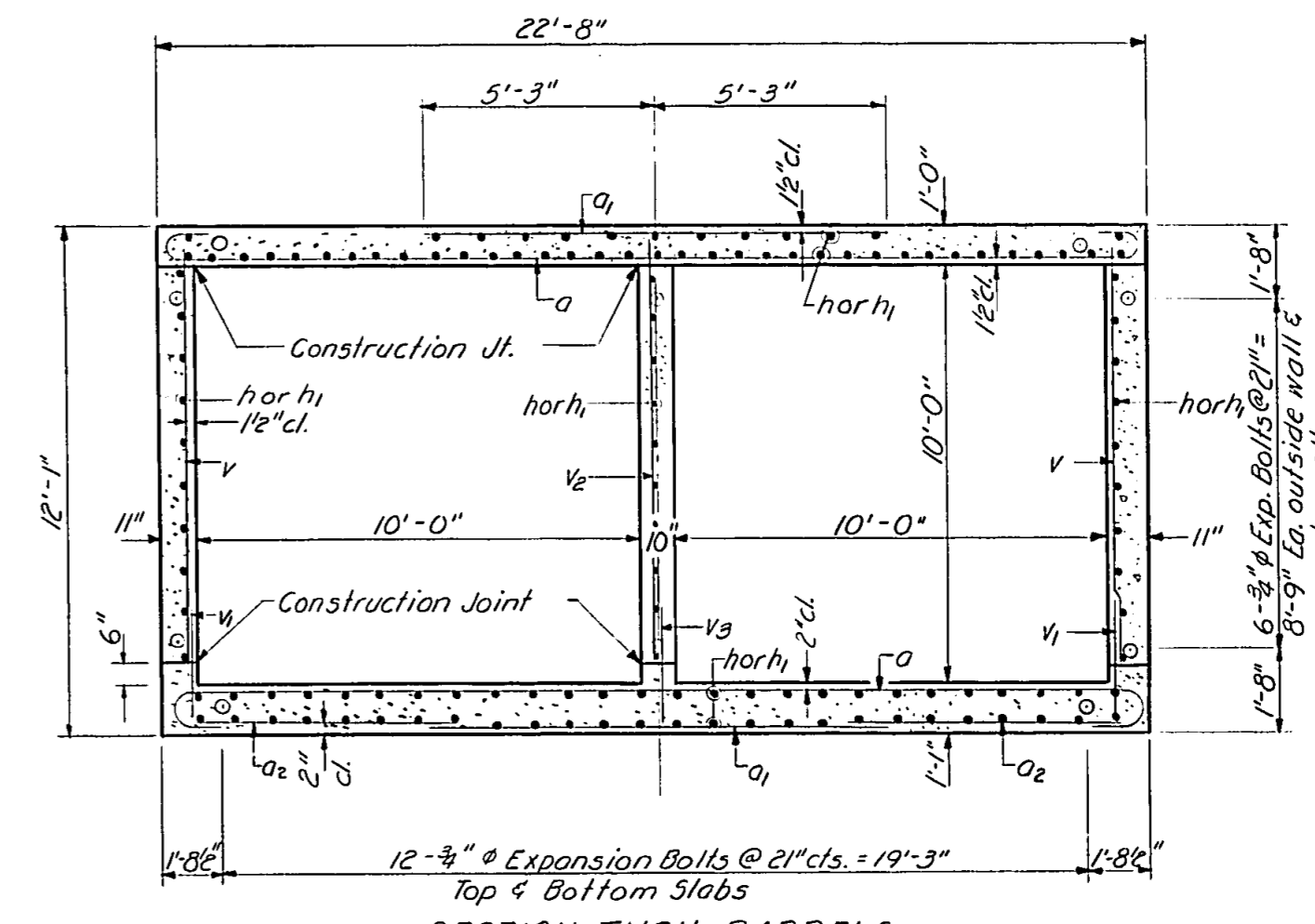
SECTION A-A



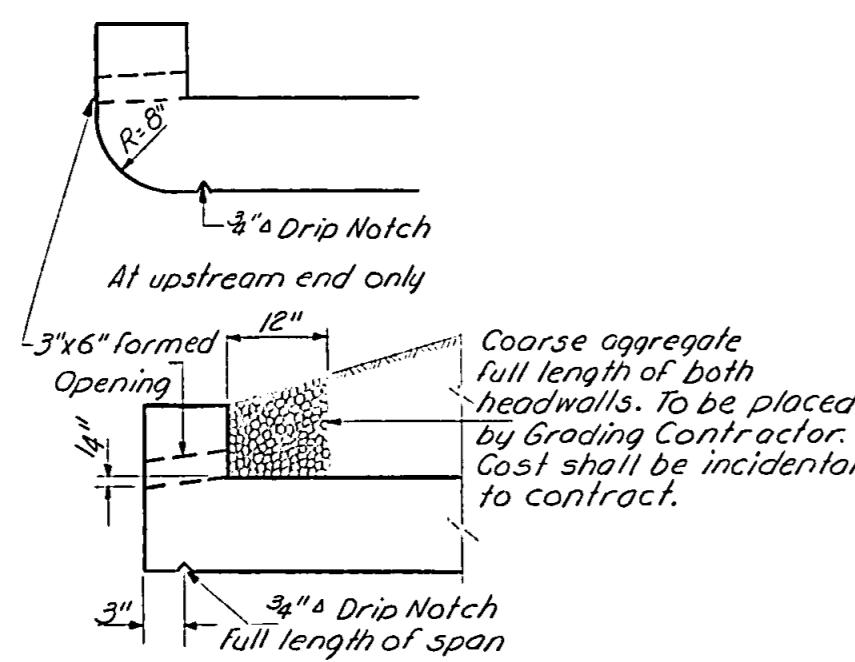
CORNER DETAIL A



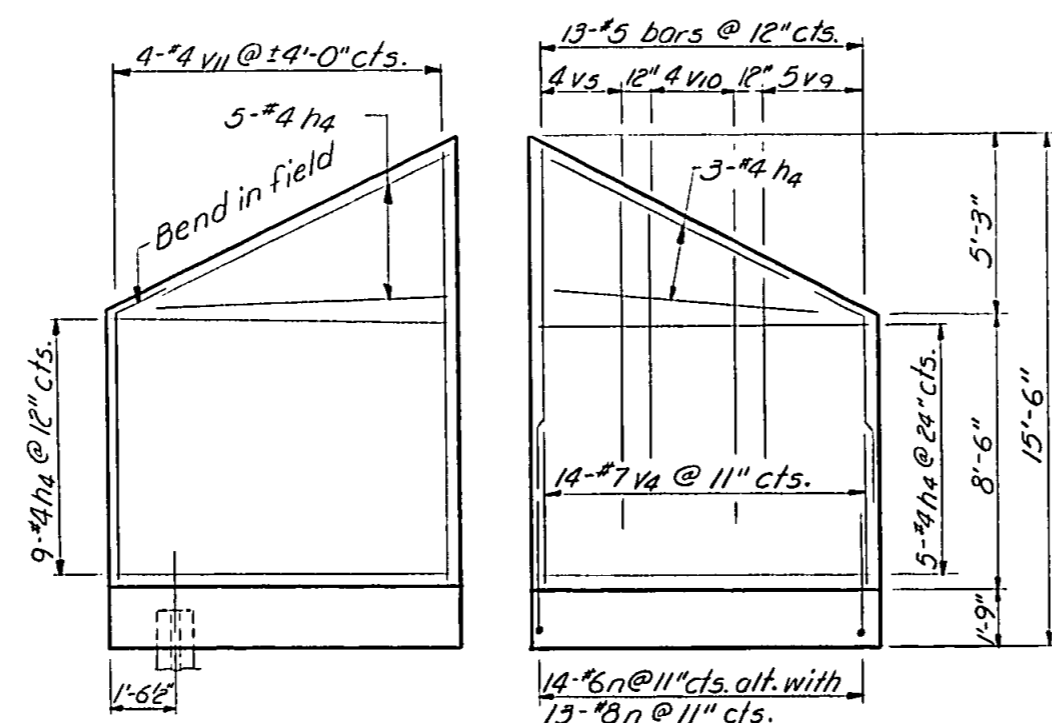
SEC. B-B



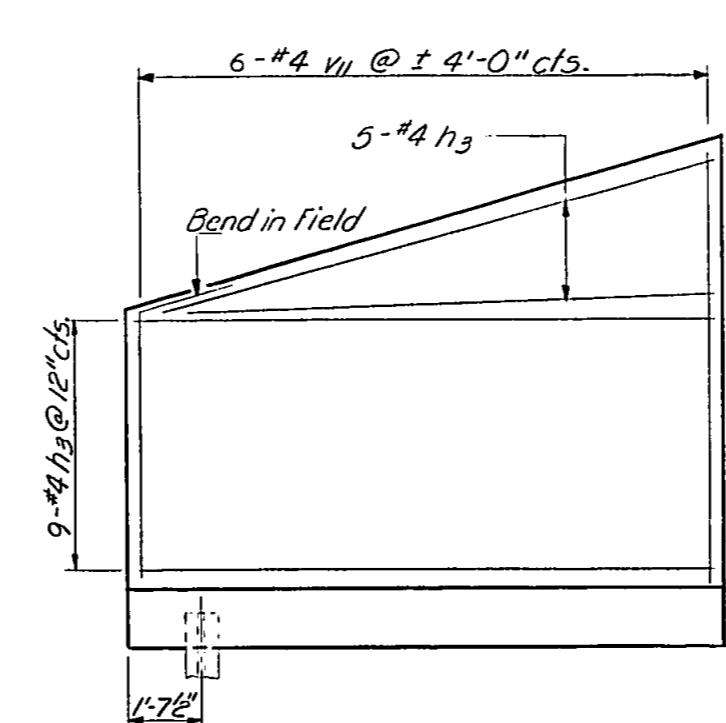
SECTION THRU BARRELS



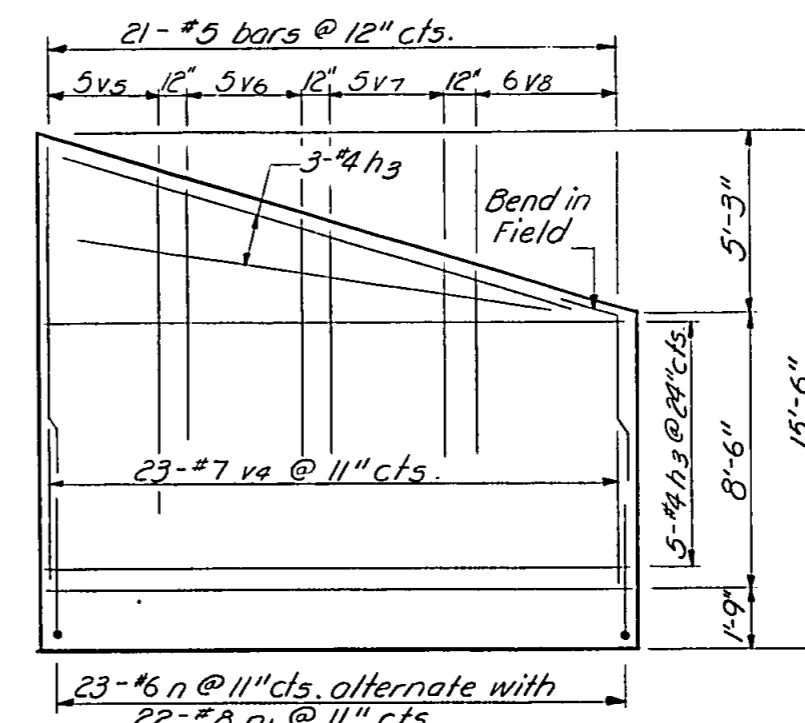
DRAIN DETAIL



REINFORCING DETAILS FOR SHORT WING WALL



REINFORCING DETAILS FOR LONG WING WALL (FRONT FACE)



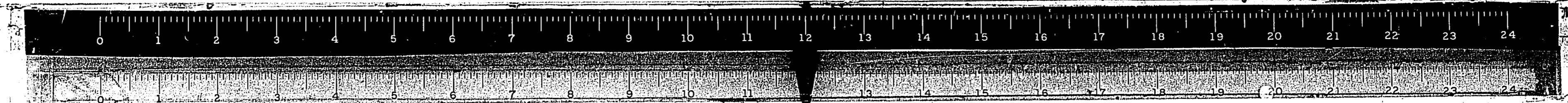
REINFORCING DETAILS FOR LONG WING WALL (BACK FACE)

DESIGNED: I. L. Hensch
CHECKED: Kai-tai Wang
DRAWN: Bev Robinson
CHECKED: Kai-tai Wang

EXAMINED: [Signature]
PASSED: W. C. Bauman
APPROVED: F. H. Huesmann

May 1 1973

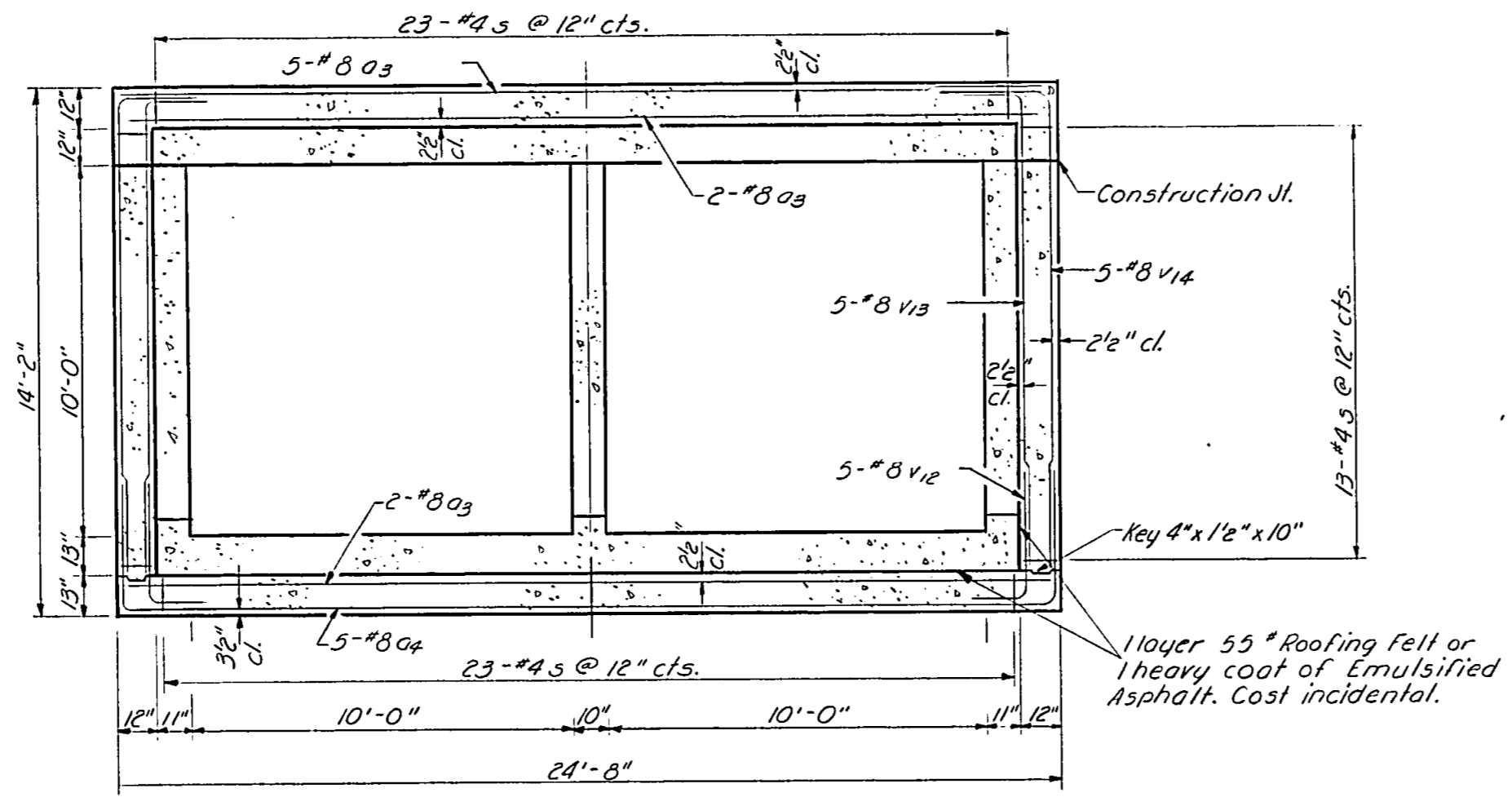
CULVERT DETAILS
F.A. RT. 14 SEC. 12-2B-3
JACKSON COUNTY
STA. 152 + 68.00



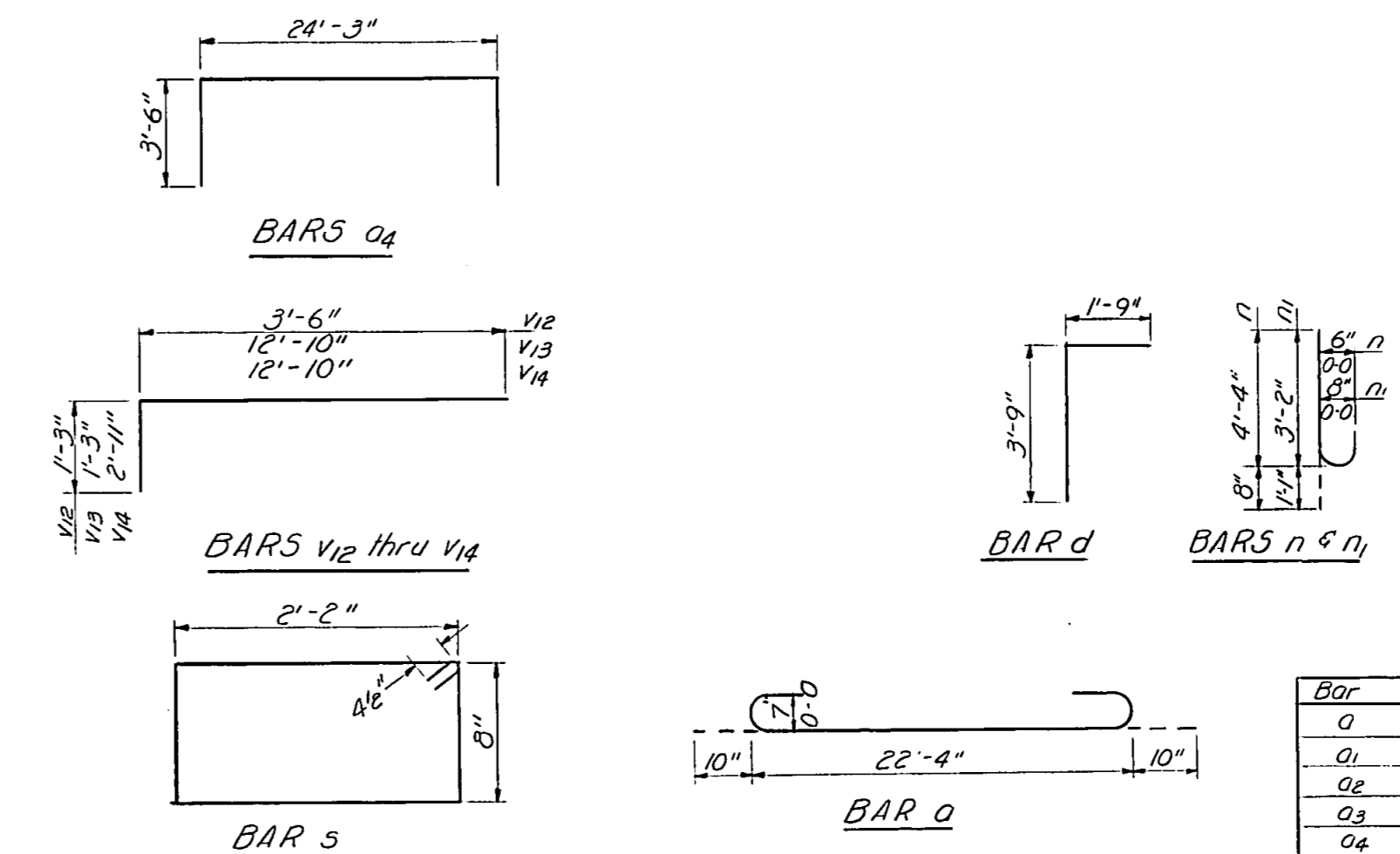
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4
14	*	JACKSON	113	42	4 SHEETS
* 12-2B-3					

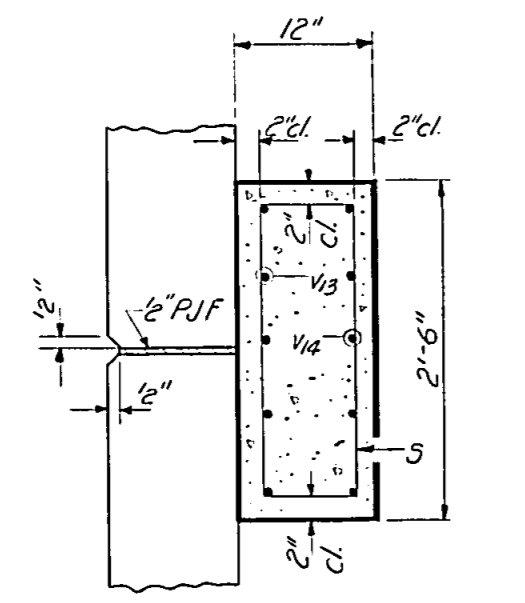


SECTION THRU BOX AT COLLAR

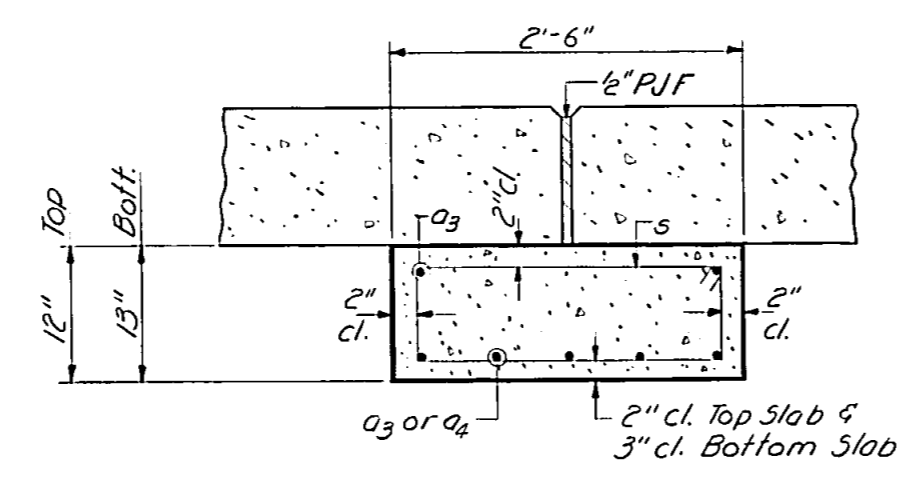


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
o	546	#7	24'-0"	U
o1	642	#8	10'-6"	U
o2	82	#4	7'-6"	U
o3	18	#8	24'-3"	U
o4	10	#8	31'-3"	U
d	74	#4	5'-6"	L
n	520	#5	29'-5"	U
n1	260	#5	23'-6"	U
he	42	#6	28'-9"	U
h3	44	#4	20'-0"	U
h4	44	#4	12'-0"	U
n	82	#6	5'-0"	U
n1	70	#8	4'-3"	U
s	144	#4	6'-5"	U
t	168	#6	7'-9"	U
v	492	#8	10'-4"	U
v1	484	#7	3'-0"	U
v2	162	#4	10'-4"	U
v3	162	#4	2'-3"	U
va	74	#7	5'-6"	U
vs	18	#5	9'-9"	U
v6	10	#5	8'-8"	U
v7	10	#5	7'-4"	U
v8	12	#5	6'-0"	U
v9	10	#5	6'-6"	U
v10	8	#5	8'-3"	U
v11	20	#4	13'-6"	U
v12	20	#8	4'-9"	U
v13	20	#8	14'-1"	U
v14	20	#8	15'-9"	U
w	20	#5	12'-0"	U
w1	20	#5	20'-0"	U
Class X Concrete			Cu. Yds	526.2
Reinforcement Bars			Lbs.	98,270



SECTION THRU SIDEWALL



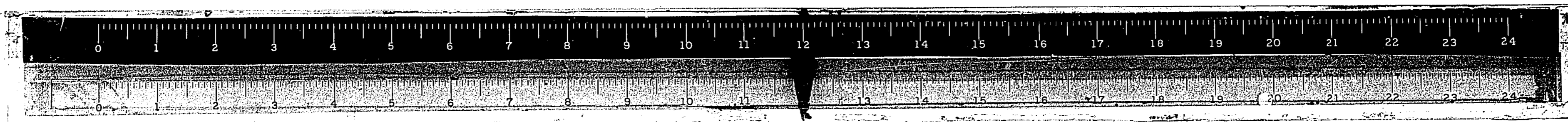
SECTION THRU TOP & BOTTOM SLAB

Station	Depth	Penetration	Remarks	Surface Water El.	Groupwater El. at Completion	Elevation	N	Q _u /A.L.	w	P
152+6.0	0		Ground Surface							
152+6.0	6	1.00	STIFF MOIST TO VERY MOIST GREY CLAY A-7(15)	353.6						
152+6.0	6	1.00	MEDIUM MOIST BROWN MOTTLED GREY SILTY CLAY LOAM A-6(10)							
152+6.0	8	1.40	STIFF MOIST GREY TO BROWN SILTY CLAY TO CLAY A-6(12) TO A-7(13)							
152+6.0	8	1.40	STIFF VERY MOIST GREY CLAY LOAM A-4(8) WITH SAND SEAMS							
152+6.0	10	1.30	SOFT TO VERY SOFT VERY MOIST TO MEDIUM MOIST BOTTLED GREY AND BLACK SILTY CLAY LOAM TO SILTY CLAY A-6(9)							
152+6.0	10	1.30	VERY LOOSE MEDIUM GREY FINE SAND							
152+6.0	13		MEDIUM MEDIUM GREY COARSE SAND WITH CLAY LOAM SEAMS							
152+6.0	13		MEDIUM VERY MOIST TO MEDIUM MOIST BROWN CLAY A-6(14)							
152+6.0	13		MEDIUM VERY MOIST TO MEDIUM MOIST GREY CLAY LOAM A-4(8) WITH COARSE SAND SEAMS							
152+6.0	18	2.55	STIFF VERY MOIST GREY CLAY A-7(16)							
152+6.0	18	2.55	MEDIUM MEDIUM GREY SANDY CLAY LOAM A-4(2) WITH SOME GRAVEL							
152+6.0	20		MEDIUM VERY MOIST TO MEDIUM MOIST GREY CLAY LOAM A-4(8) WITH SAND SEAMS							
152+6.0	20		MEDIUM VERY MOIST TO MEDIUM MOIST COARSE SAND AND GRAVEL							
152+6.0	25	2.05	VERY STIFF VERY MOIST GREY MOTTLED BROWN CLAY LOAM A-6(16) WITH CLAY SHALE LAYERS							
152+6.0	25	2.05	HARD MEDIUM GREY MOTTLED SANDSTONE							
152+6.0	25	2.05	REGUL OF ANGERS AT 48.5 FEET							
152+6.0	25	2.05	BOTTOM OF HOLE = 48.5 FEET							
152+6.0	25	2.05	DURING DRILLING OPERATIONS IT APPEARED THAT FREE WATER WAS ENCOUNTERED AT 13.0 FEET							

N-Standard Penetration Test- Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140 # hammer falling 30".
 Qu-Unconfined Compressive Strength-1/2t
 w-Water Content-percentage of oven dry weight-%.
 P-Penetrometer
 Type failure
 Q-Dulge Failure
 S-Shear Failure
 E-Estimated Value

BORINGS
COLLAR DETAIL
FA. RT. 14 SEC. 12-2B-3
JACKSON COUNTY
STA. 152+68.00

DESIGNED: *Lin Sherrill Hand*
 CHECKED: *Kenneth Wang*
 DRAWN: *Ben Robinson*
 CHECKED: *Kenneth Wang*
 EXAMINED: *May 1 1973*
 PASSED: *W. G. Baumann*
 APPROVED: *W. G. Baumann*
 CHIEF ENGINEER, ILLINOIS DEPARTMENT OF TRANSPORTATION

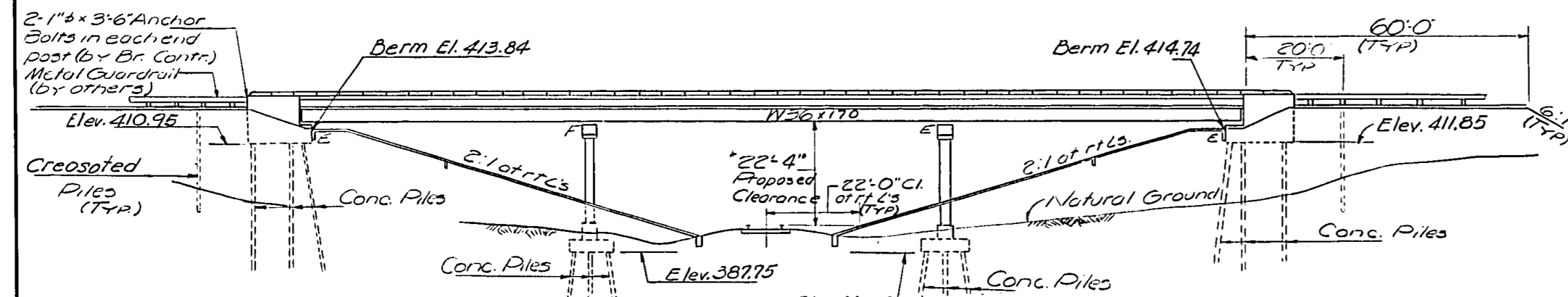


FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO. /
113	12-2	JACKSON	113	43
113	12-2	JACKSON	113	43

B.M. USC & G.S. Bronze Disk Stamped A-149 1928
44' ft Sta. 168+12 - Elev. 392.07
Exist. Structure: Three span continuous I-beam with concrete deck, RC piers, RC open abuts. Built as FA 14, Sec. 12-218 Sta. 169+76 in 1924. Existing bridge to remain as S. Bd. Lanes.



APPR. PILE DATA
Type Creosoted
Length - 20' So. Appr.
18' No. Appr.
No. Req'd - 8 Ea. Appr.

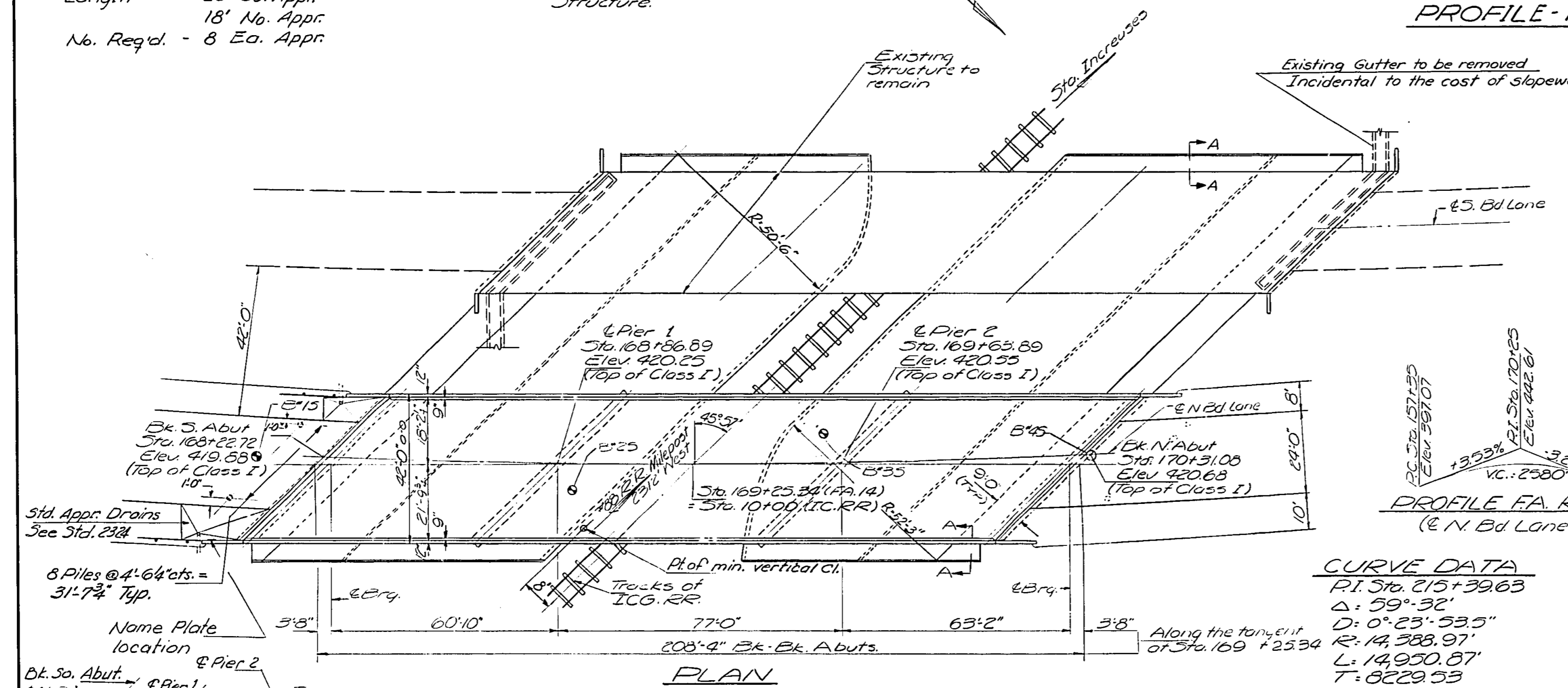
ELEVATION
22'-2" Clearance on existing Structure.

PROFILE - SOUTH RAIL

Sta. 8+00
Elev. 393.48
Sta. 8+47
Elev. 393.53
Sta. 8+60
Elev. 393.55
Sta. 9+00
Elev. 393.64
Sta. 10+00
Elev. 393.64
Sta. 10+50
Elev. 393.67
Sta. 11+00
Elev. 393.67
Sta. 11+40
Elev. 393.67
Sta. 12+00
Elev. 393.69

PROFILE - NORTH RAIL

Sta. 8+00
Elev. 393.63
Sta. 8+47
Elev. 393.66
Sta. 8+60
Elev. 393.67
Sta. 9+00
Elev. 393.71
Sta. 10+00
Elev. 393.66
Sta. 10+50
Elev. 393.67
Sta. 11+00
Elev. 393.66
Sta. 11+40
Elev. 393.66
Sta. 12+00
Elev. 393.70

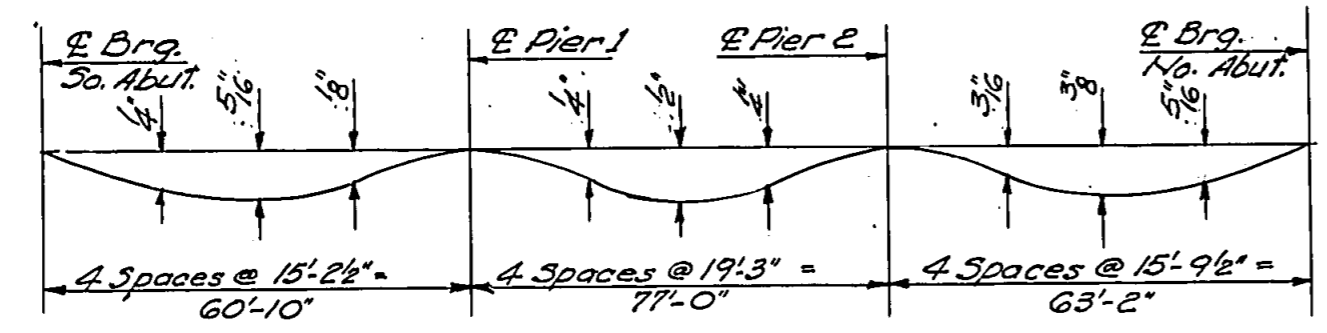


PROFILE FA. RTE. 14
(E N Bd Lanes)

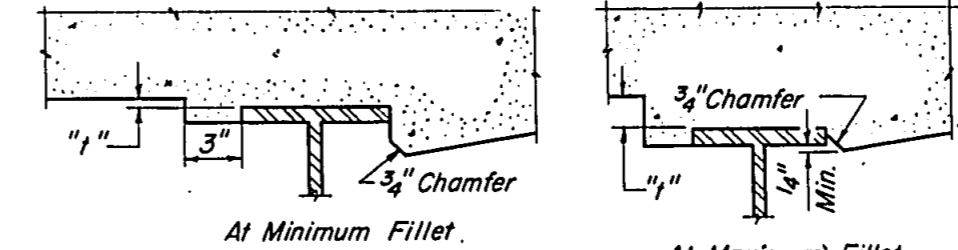
Sta. 168+12
Elev. 392.07
Sta. 169+25.34
Elev. 420.25
Sta. 170+31.08
Elev. 420.68
Sta. 171+37.82
Elev. 421.11
Sta. 172+44.56
Elev. 421.54
Sta. 173+51.30
Elev. 421.97
Sta. 174+58.04
Elev. 422.40
Sta. 175+64.78
Elev. 422.83
Sta. 176+71.52
Elev. 423.26
Sta. 177+78.26
Elev. 423.69
Sta. 178+85.00
Elev. 424.12
Sta. 179+91.74
Elev. 424.55
Sta. 180+98.48
Elev. 424.98
Sta. 181+05.22
Elev. 425.41
Sta. 182+11.96
Elev. 425.84
Sta. 183+18.70
Elev. 426.27
Sta. 184+25.44
Elev. 426.70
Sta. 185+32.18
Elev. 427.13
Sta. 186+38.92
Elev. 427.56
Sta. 187+45.66
Elev. 427.99
Sta. 188+52.40
Elev. 428.42
Sta. 189+59.14
Elev. 428.85
Sta. 190+65.88
Elev. 429.28
Sta. 191+72.62
Elev. 429.71
Sta. 192+79.36
Elev. 430.14
Sta. 193+86.10
Elev. 430.57
Sta. 194+92.84
Elev. 431.00
Sta. 195+99.58
Elev. 431.43
Sta. 196+06.32
Elev. 431.86
Sta. 197+13.06
Elev. 432.29
Sta. 198+19.80
Elev. 432.72
Sta. 199+26.54
Elev. 433.15
Sta. 200+33.28
Elev. 433.58
Sta. 201+40.02
Elev. 434.01
Sta. 202+46.76
Elev. 434.44
Sta. 203+53.50
Elev. 434.87
Sta. 204+60.24
Elev. 435.30
Sta. 205+66.98
Elev. 435.73
Sta. 206+73.72
Elev. 436.16
Sta. 207+80.46
Elev. 436.59
Sta. 208+87.20
Elev. 437.02
Sta. 209+93.94
Elev. 437.45
Sta. 210+00.68
Elev. 437.88
Sta. 211+07.42
Elev. 438.31
Sta. 212+14.16
Elev. 438.74
Sta. 213+20.90
Elev. 439.17
Sta. 214+27.64
Elev. 439.60
Sta. 215+34.38
Elev. 440.03
Sta. 216+41.12
Elev. 440.46
Sta. 217+47.86
Elev. 440.89
Sta. 218+54.60
Elev. 441.32
Sta. 219+61.34
Elev. 441.75
Sta. 220+68.08
Elev. 442.18
Sta. 221+74.82
Elev. 442.61
Sta. 222+81.56
Elev. 443.04
Sta. 223+88.30
Elev. 443.47
Sta. 224+95.04
Elev. 443.90
Sta. 225+01.78
Elev. 444.33
Sta. 226+08.52
Elev. 444.76
Sta. 227+15.26
Elev. 445.19
Sta. 228+22.00
Elev. 445.62
Sta. 229+28.74
Elev. 446.05
Sta. 230+35.48
Elev. 446.48
Sta. 231+42.22
Elev. 446.91
Sta. 232+48.96
Elev. 447.34
Sta. 233+55.70
Elev. 447.77
Sta. 234+62.44
Elev. 448.20
Sta. 235+69.18
Elev. 448.63
Sta. 236+75.92
Elev. 449.06
Sta. 237+82.66
Elev. 449.49
Sta. 238+89.40
Elev. 449.92
Sta. 239+96.14
Elev. 450.35
Sta. 240+02.88
Elev. 450.78
Sta. 241+09.62
Elev. 451.21
Sta. 242+16.36
Elev. 451.64
Sta. 243+23.10
Elev. 452.07
Sta. 244+29.84
Elev. 452.50
Sta. 245+36.58
Elev. 452.93
Sta. 246+43.32
Elev. 453.36
Sta. 247+50.06
Elev. 453.79
Sta. 248+56.80
Elev. 454.22
Sta. 249+63.54
Elev. 454.65
Sta. 250+70.28
Elev. 455.08
Sta. 251+77.02
Elev. 455.51
Sta. 252+83.76
Elev. 455.94
Sta. 253+90.50
Elev. 456.37
Sta. 254+97.24
Elev. 456.80
Sta. 255+03.98
Elev. 457.23
Sta. 256+10.72
Elev. 457.66
Sta. 257+17.46
Elev. 458.09
Sta. 258+24.20
Elev. 458.52
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Elev. 458.95
Sta. 260+37.68
Elev. 459.38
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Elev. 466.26
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Elev. 467.12
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Elev. 467.55
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Elev. 468.84
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Elev. 469.27
Sta. 284+99.44
Elev. 469.70
Sta. 285+06.18
Elev. 470.13
Sta. 286+12.92
Elev. 470.56
Sta. 287+19.66
Elev. 470.99
Sta. 288+26.40
Elev. 471.42
Sta. 289+33.14
Elev. 471.85
Sta. 290+39.88
Elev. 472.28
Sta. 291+46.62
Elev. 472.71
Sta. 292+53.36
Elev. 473.14
Sta. 293+60.10
Elev. 473.57
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Sta. 296+80.32
Elev. 474.86
Sta. 297+87.06
Elev. 475.29
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Elev. 475.72
Sta. 299+00.54
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Elev. 477.01
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Sta. 303+27.50
Elev. 477.87
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Elev. 478.30
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Sta. 306+47.72
Elev. 479.16
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Elev. 480.88
Sta. 311+81.42
Elev. 481.31
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Elev. 481.74
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Elev. 482.17
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Elev. 482.60
Sta. 315+08.38
Elev. 483.03
Sta. 316+15.12
Elev. 483.46
Sta. 317+21.86
Elev. 483.89
Sta. 318+28.60
Elev. 484.32
Sta. 319+35.34
Elev. 484.75
Sta. 320+42.08
Elev. 485.18
Sta. 321+48.82
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Elev. 486.04
Sta. 323+62.30
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Sta. 425+49.82
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Sta. 426+56.56
Elev. 530.76
Sta. 427+63.30
Elev. 531.19
Sta. 428+70.04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
14	12-2	JACKSON	113	45
SHEET NO. 3 15 SHEETS				



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete & initial deck surfacing only)
Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "f": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "f" above top flange of beams.

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16638.977	-15.929	419.586	419.586
E Brg. So. Abut.	16642.648	-15.950	419.608	419.608
a	16652.659	-16.004	419.666	419.681
b	16662.670	-16.051	419.722	419.746
c	16672.681	-16.091	419.776	419.802
d	16682.693	-16.124	419.821	419.845
e	16692.704	-16.151	419.870	419.884
E Brg. Pier 1	16503.569	-16.171	419.926	419.926
f	16513.560	-16.183	419.959	419.980
g	16523.571	-16.187	420.010	420.032
h	16533.583	-16.185	420.049	420.079
i	16543.594	-16.176	420.085	420.121
j	16553.605	-16.160	420.118	420.146
k	16563.616	-16.137	420.149	420.167
l	16573.628	-16.107	420.178	420.185
E Brg. Pier 2	16580.635	-16.081	420.196	420.196
m	16590.646	-16.039	420.220	420.230
n	17000.657	-15.991	420.242	420.261
o	17010.668	-15.935	420.261	420.292
p	17020.679	-15.872	420.278	420.307
q	17030.690	-15.802	420.292	420.315
E Brg. N. Abut.	17043.871	-15.700	420.307	420.307
Bk. N. Abut.	17047.542	-15.669	420.310	420.310

WEST LONGITUDINAL JT.

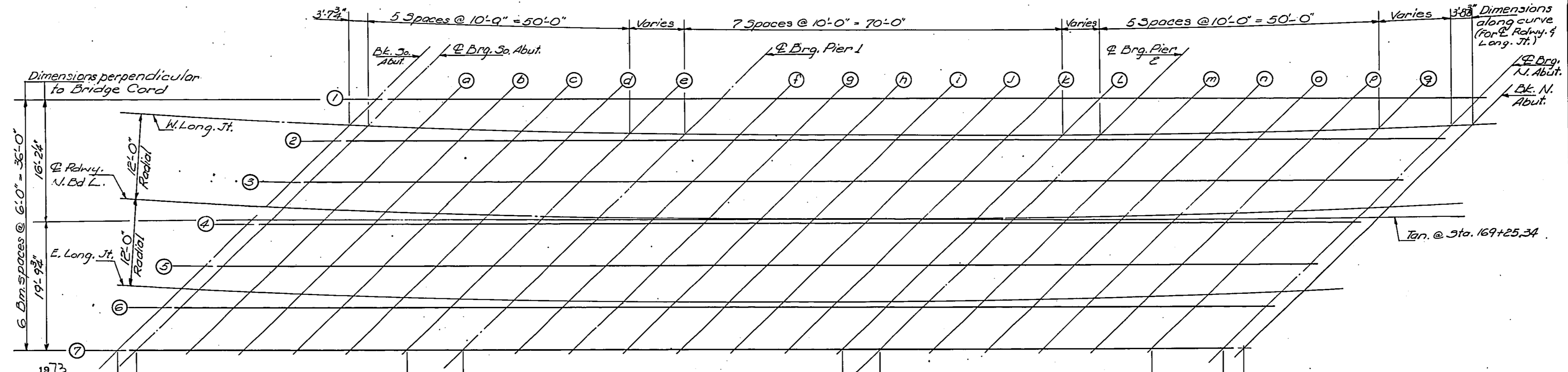
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16634.962	-12.000	419.642	419.642
E Brg. So. Abut.	16638.609	-12.000	419.665	419.665
a	16648.617	-12.000	419.726	419.740
b	16658.625	-12.000	419.784	419.807
c	16668.634	-12.000	419.840	419.866
d	16678.642	-12.000	419.892	419.910
e	16688.651	-12.000	419.943	419.951
E Brg. Pier 1	16499.247	-12.000	419.993	419.993
f	16509.256	-12.000	420.038	420.049
g	16519.264	-12.000	420.080	420.102
h	16529.272	-12.000	420.120	420.150
i	16539.281	-12.000	420.156	420.192
j	16549.289	-12.000	420.191	420.218
k	16559.297	-12.000	420.222	420.241
l	16569.306	-12.000	420.251	420.259
E Brg. Pier 2	16576.381	-12.000	420.270	420.270
m	16586.389	-12.000	420.295	420.304
n	16596.398	-12.000	420.316	420.336
o	17006.406	-12.000	420.336	420.366
p	17016.414	-12.000	420.352	420.382
q	17026.423	-12.000	420.366	420.389
E Brg. N. Abut.	17034.980	-12.000	420.381	420.381
Bk. N. Abut.	17043.681	-12.000	420.384	420.384

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16632.807	-5.890	419.662	419.662
E Brg. So. Abut.	16636.476	-9.913	419.684	419.684
a	16646.483	-9.972	419.745	419.759
b	16656.490	-10.023	419.803	419.826
c	16666.497	-10.067	419.858	419.884
d	16676.504	-10.105	419.911	419.928
e	16686.511	-10.135	419.961	419.970
E Brg. Pier 1	16857.351	-10.160	420.013	420.013
f	16907.358	-10.176	420.058	420.069
g	16917.365	-10.185	420.101	420.123
h	16927.372	-10.187	420.141	420.171
i	16937.380	-10.182	420.178	420.214
j	16947.387	-10.171	420.213	420.240
k	16957.394	-10.152	420.245	420.264
l	16967.401	-10.126	420.275	420.283
E Brg. Pier 2	16974.406	-10.104	420.295	420.295
m	16984.413	-10.066	420.320	420.330
n	16994.419	-10.022	420.343	420.363
o	17004.426	-9.970	420.364	420.393
p	17014.433	-9.912	420.382	420.411
q	17024.440	-9.846	420.397	420.420
E Brg. N. Abut.	17037.615	-9.750	420.414	420.414
Bk. N. Abut.	17041.285	-9.721	420.411	420.417

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16826.642	-3.849	419.716	419.716
E Brg. So. Abut.	16830.309	-3.874	419.740	419.740
a	16840.312	-3.926	419.802	419.816
b	16850.315	-3.992	419.861	419.884
c	16860.317	-4.041	419.918	419.944
d	16870.320	-4.082	419.972	419.990
e	16880.323	-4.117	420.024	420.033
E Brg. Pier 1	16891.159	-4.147	420.076	420.078
f	16901.162	-4.167	420.124	420.135
g	16911.165	-4.181	420.168	420.190
h	16921.168	-4.187	420.210	420.240
i	16931.170	-4.186	420.249	420.285
j	16941.173	-4.179	420.285	420.313
k	16951.176	-4.165	420.319	420.338
l	16961.179	-4.143	420.351	420.358
E Brg. Pier 2	16968.181	-4.124	420.371	420.371
m	16978.184	-4.090	420.398	420.408
n	16988.187	-4.050	420.423	420.442
o	16998.189	-4.003	420.445	420.475
p	17008.192	-3.949	420.465	420.494
q	17018.194	-3.888	420.482	420.504
E Brg. N. Abut.	17031.365	-3.797	420.500	420.500
Bk. N. Abut.	17035.033	-3.769	420.505	420.505



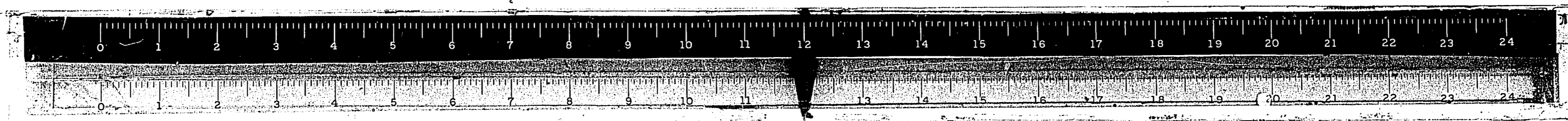
DESIGNED *Stanley S. Linn*
CHECKED *Ran Chulov*
DRAWN *A. Barroza*
CHECKED *E.S.B.*
E-S

EXAMINED *R.F. Linn*
PASSED *W.C. Bauman*
APPROVED *Roger F. Neumann*

PLAN

TOP SLAB ELEVATIONS
FA. RTE. 14 SEC. 12-2VB
JACKSON COUNTY
STA. 169+25.34

FOR INFORMATION ONLY



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
169	12-1	JACKSON	113	115
FEB. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SHEET NO. 4
15 SHEETS

E RDWY. N. BD. LANES

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16822.717	0.0	419.751	419.751
E Brg. So. Abut.	16826.358	0.0	419.774	419.774
	16836.358	0.0	419.838	419.823
	16846.358	0.0	419.900	419.923
	16856.358	0.0	419.959	419.985
	16866.358	0.0	420.015	420.032
	16876.358	0.0	420.068	420.076
	16886.358	0.0	420.118	420.122
E Brg. Pier 1	16886.893	0.0	420.122	420.122
	16896.893	0.0	420.170	420.181
	16906.893	0.0	420.215	420.237
	16916.893	0.0	420.258	420.288
	16926.893	0.0	420.298	420.334
	16936.893	0.0	420.335	420.363
	16946.893	0.0	420.370	420.389
	16956.893	0.0	420.402	420.410
E Brg. Pier 2	16963.893	0.0	420.423	420.423
	16973.893	0.0	420.451	420.461
	16983.893	0.0	420.476	420.496
	16993.893	0.0	420.499	420.529
	17003.893	0.0	420.519	420.558
	17013.893	0.0	420.536	420.559
	17023.893	0.0	420.550	420.558
E Brg. N. Abut.	17027.342	0.0	420.555	420.555
Bk. N. Abut.	17031.077	0.0	420.559	420.559

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16820.481	2.195	419.701	419.701
E Brg. So. Abut.	16824.148	2.168	419.726	419.726
	16834.144	2.102	419.792	419.806
	16844.144	2.042	419.855	419.878
	16854.143	1.989	419.915	419.941
	16864.141	1.943	419.972	419.999
	16874.140	1.904	420.027	420.035
	16884.140	1.871	420.079	420.074
E Brg. Pier 1	16884.972	1.869	420.083	420.083
	16894.970	1.855	420.132	420.143
	16904.969	1.827	420.178	420.200
	16914.968	1.816	420.221	420.252
	16924.966	1.813	420.262	420.298
	16934.965	1.816	420.300	420.327
	16944.964	1.826	420.335	420.353
	16954.963	1.843	420.368	420.375
E Brg. Pier 2	16961.962	1.859	420.389	420.389
	16971.960	1.888	420.417	420.426
	16981.959	1.924	420.442	420.461
	16991.958	1.967	420.466	420.494
	17001.956	2.017	420.483	420.513
	17011.954	2.073	420.500	420.523
	17021.952	2.134	420.514	420.529
E Brg. N. Abut.	17025.119	2.159	420.518	420.518
Bk. N. Abut.	17028.786	2.184	420.522	420.522

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16814.327	8.261	419.565	419.565
E Brg. So. Abut.	16817.991	8.213	419.591	419.591
	16827.985	8.142	419.658	419.672
	16837.980	8.078	419.722	419.746
	16847.974	8.021	419.784	419.810
	16857.968	7.970	419.843	419.869
	16867.962	7.927	419.900	419.908
	16877.957	7.891	419.954	419.959
E Brg. Pier 1	16878.789	7.888	419.957	419.957
	16888.784	7.859	420.008	420.019
	16898.778	7.837	420.056	420.078
	16908.773	7.822	420.101	420.131
	16918.768	7.816	420.143	420.179
	16928.762	7.813	420.183	420.210
	16938.757	7.819	420.220	420.258
	16948.751	7.832	420.254	420.292
E Brg. Pier 2	16955.747	7.855	420.276	420.276
	16965.742	7.869	420.306	420.315
	16975.736	7.901	420.333	420.352
	16985.731	7.939	420.357	420.387
	16995.725	7.985	420.376	420.407
	17005.720	8.037	420.396	420.419
	17015.714	8.096	420.412	420.424
E Brg. N. Abut.	17018.819	8.117	420.417	420.417
Bk. N. Abut.	17022.544	8.141	420.421	420.421

EAST LONG. JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16810.504	12.000	419.480	419.480
E Brg. So. Abut.	16814.139	12.000	419.505	419.505
	16824.130	12.000	419.572	419.587
	16834.122	12.000	419.637	419.660
	16844.114	12.000	419.699	419.725
	16854.105	12.000	419.758	419.775
	16864.097	12.000	419.815	419.823
	16874.088	12.000	419.869	419.876
E Brg. Pier 1	16874.570	12.000	419.871	419.871
	16884.562	12.000	419.922	419.934
	16894.554	12.000	419.971	419.993
	16904.545	12.000	420.017	420.047
	16914.537	12.000	420.060	420.096
	16924.529	12.000	420.101	420.129
	16934.520	12.000	420.139	420.157
	16944.512	12.000	420.175	420.182
E Brg. Pier 2	16951.438	12.000	420.198	420.198
	16961.430	12.000	420.229	420.238
	16971.421	12.000	420.257	420.276
	16981.413	12.000	420.283	420.313
	16991.405	12.000	420.306	420.335
	17001.398	12.000	420.326	420.349
	17011.390	12.000	420.343	420.366
E Brg. N. Abut.	17014.816	12.000	420.350	420.350
Bk. N. Abut.	17018.504	12.000	420.355	420.355

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16808.177	14.290	419.416	419.416
E Brg. So. Abut.	16811.840	14.261	419.442	419.442
	16821.830	14.185	419.512	419.526
	16831.820	14.117	419.578	419.602
	16841.810	14.055	419.642	419.668
	16851.800	14.001	419.703	419.720
	16861.790	13.953	419.761	419.770
	16871.780	13.912	419.817	419.823
E Brg. Pier 1	16872.613	13.909	419.821	419.821
	16882.603	13.876	419.874	419.885
	16892.593	13.850	419.923	419.945
	16902.584	13.831	419.970	420.000
	16912.574	13.818	420.014	420.050
	16922.564	13.813	420.056	420.083
	16932.555	13.816	420.094	420.113
	16942.545	13.823	420.130	420.138
E Brg. Pier 2	16949.538	13.833	420.153	420.153
	16959.529	13.853	420.184	420.194
	16969.519	13.880	420.213	420.222
	16979.509	13.915	420.238	420.269
	16989.500	13.956	420.261	420.290
	16999.490	14.004	420.281	420.303
	17009.480	14.058	420.298	420.308
E Brg. N. Abut.	17012.644	14.078	420.303	420.303
Bk. N. Abut.	17016.307	14.100	420.308	420.308

BEAM 7

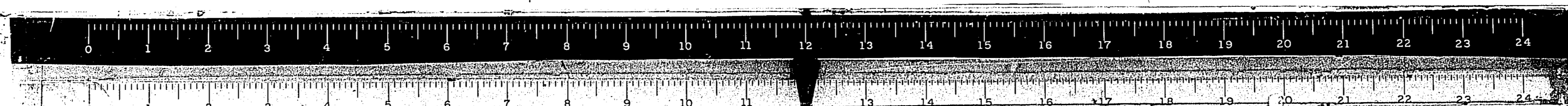
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. So. Abut.	16802.032	20.342	419.247	419.247
E Brg. So. Abut.	16805.694	20.311	419.274	419.274
	16815.679	20.231	419.345	419.359
	16825.669	20.158	419.413	419.436
	16835.651	20.092	419.478	419.504
	16845.637	20.034	419.541	419.568
	16855.623	19.982	419.601	419.609
	16865.607	19.937	419.658	419.666
E Brg. Pier 1	16866.441	19.933	419.663	419.663
	16876.427	19.896	419.717	419.728
	16886.413	19.865	419.768	419.790
	16896.399	19.842	419.817	419.847
	16906.385	19.825	419.862	419.899
	16916.372	19.815	419.906	419.935
	16926.358	19.813	419.946	419.964
	16936.344	19.817	419.983	419.991
E Brg. Pier 2	16943.335	19.824	420.008	420.008
	16953.321	19.840	420.041	420.050
	16963.307	19.865	420.071	420.090
	16973.293	19.893	420.098	420.128
	16983.279	19.929	420.122	420.152
	16993.265	19.973	420.144	420.166
	17003.251	20.024	420.163	420.185
E Brg. N. Abut.	17006.414	20.041	420.168	420.168
Bk. N. Abut.	17010.076	20.062	420.174	420.174

Note: Work this sheet with sheet #3

TOP SLAB
ELEVATIONS
FA. RTE. 14 SEC. 12-2VB
JACKSON COUNTY
STA. 169+25.34

DESIGNED Stanley S. Lutz
CHECKED Dan Challa
DRAWN A. Barroza
CHECKED D.S.B.
E-S 8-1-65

EXAMINED [Signature] 1973
PASSED [Signature]
APPROVED [Signature]

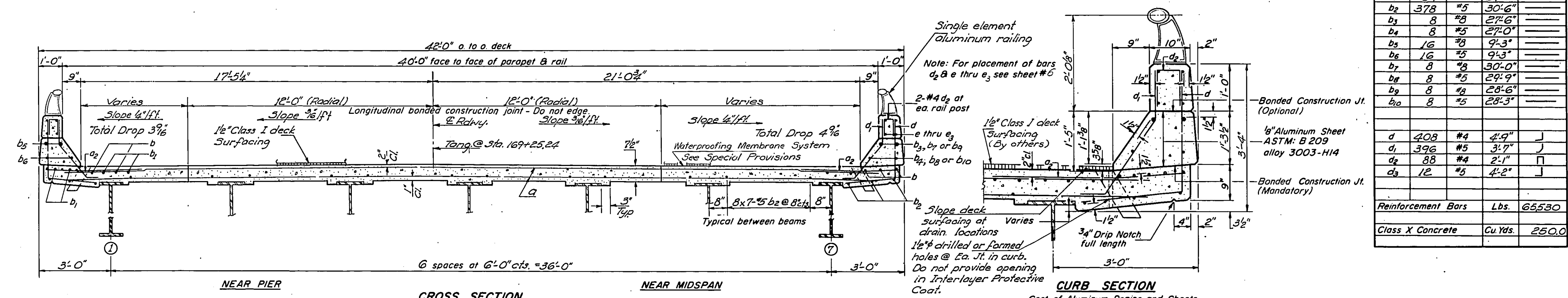
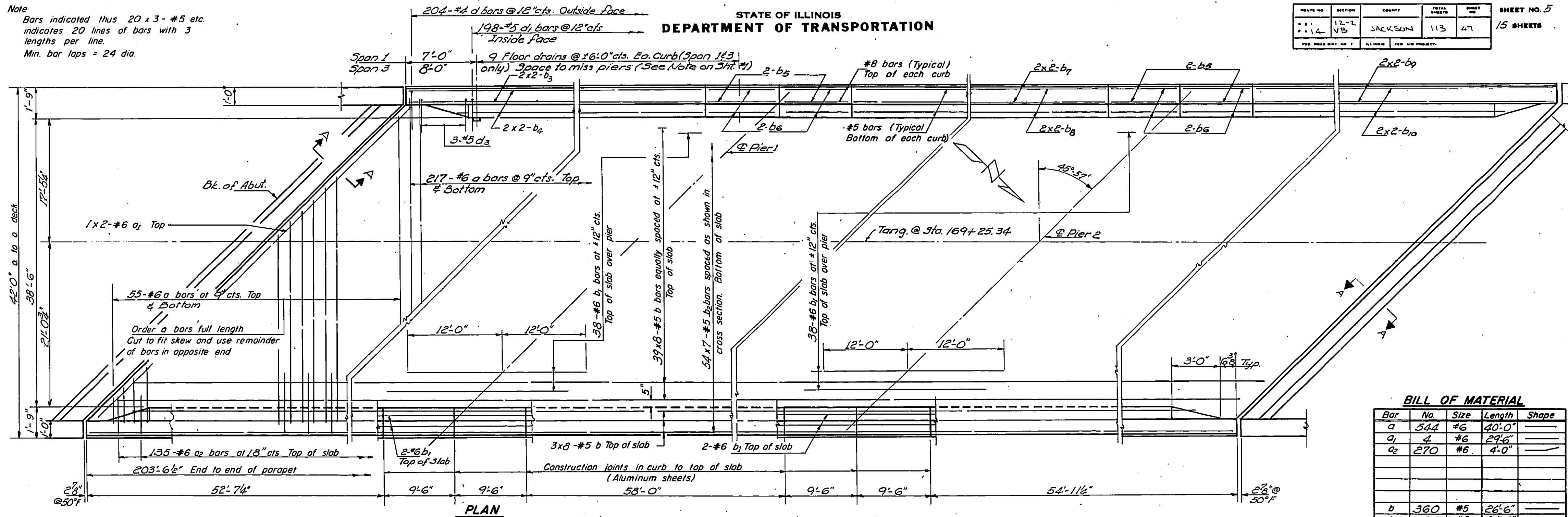


FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
12-2	VB	JACKSON	113	47	15 SHEETS

Note:
Bars indicated thus 20 x 3 - #5 etc.
indicates 20 lines of bars with 3
lengths per line.
Min. bar laps = 24 dia.



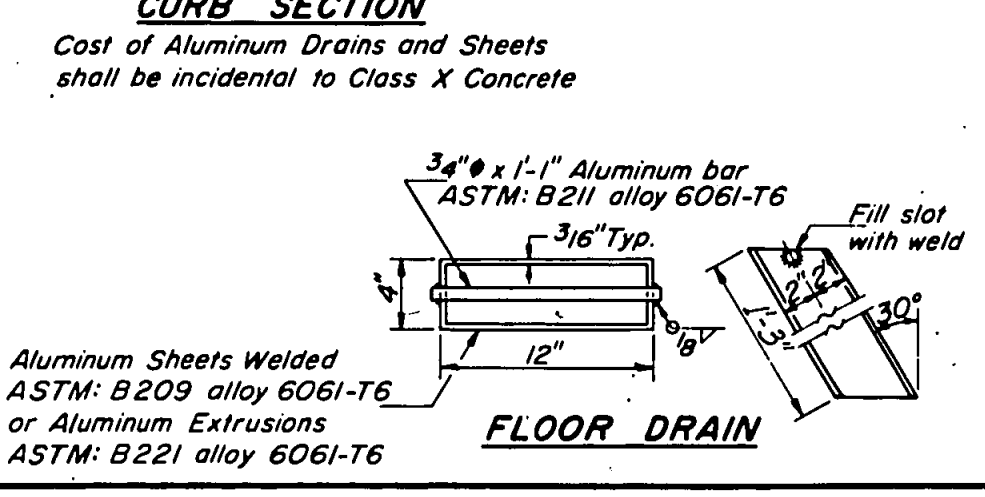
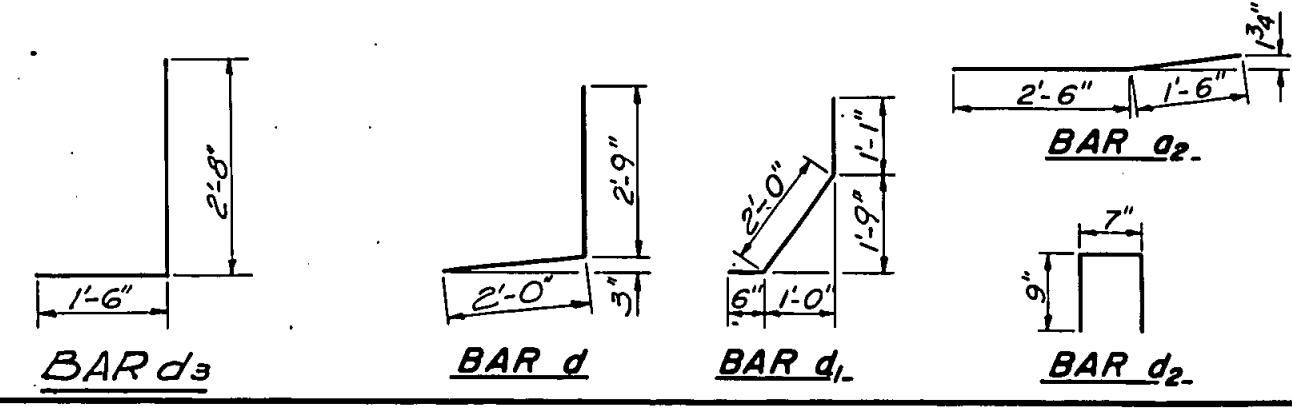
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	544	#6	40'-0"	—
a ₁	4	#6	29'-6"	—
a ₂	270	#6	4'-0"	—
b	360	#5	26'-6"	—
b ₁	84	#6	24'-0"	—
b ₂	378	#5	30'-6"	—
b ₃	8	#8	27'-6"	—
b ₄	8	#5	27'-0"	—
b ₅	16	#3	9'-3"	—
b ₆	16	#3	9'-3"	—
b ₇	8	#3	30'-0"	—
b ₈	8	#5	29'-9"	—
b ₉	8	#3	28'-6"	—
b ₁₀	8	#5	28'-3"	—
d	408	#4	4'-9"	J
d ₁	396	#5	3'-7"	J
d ₂	88	#4	2'-1"	J
d ₃	12	#5	4'-2"	J
Reinforcement Bars				Lbs. 65,530
Class X Concrete				Cu.Yds. 250.0

DESIGNED: Stanley S. Liu
CHECKED: Dan Chilton
DRAWN: A. Barroza
CHECKED: D.L.B.

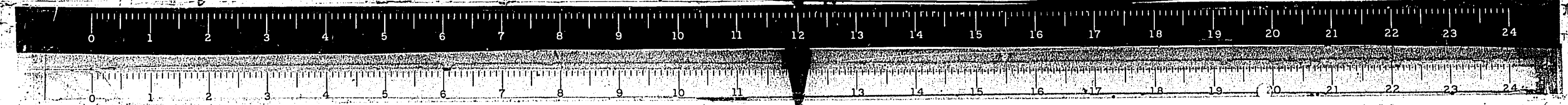
EXAMINED: [Signature]
PASSED: [Signature]
APPROVED: [Signature]

Note: See Sheet #8 for Section A-A



The lengths and quantities of longitudinal reinforcement and Class X Concrete in parapets are not included in above quantities. See sheet #6.

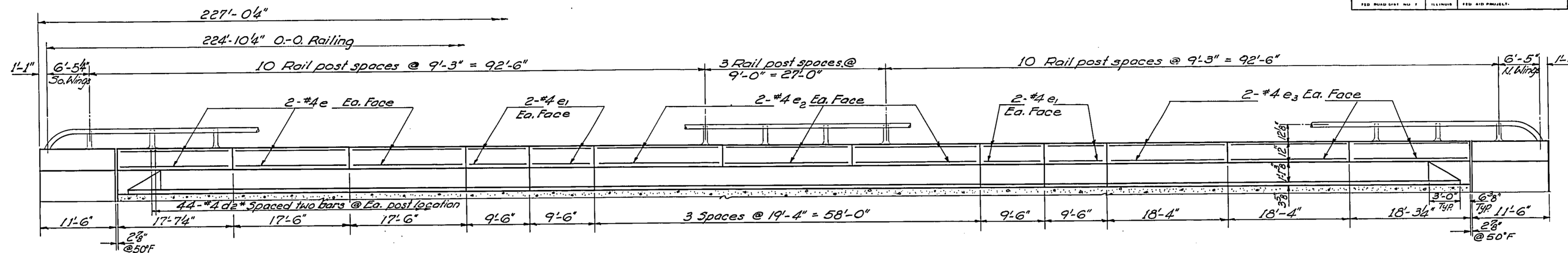
SUPERSTRUCTURE
F.A. RTE. 14 SEC. 12-2VB
JACKSON COUNTY
STA. 169+25.34



FOR INFORMATION ONLY

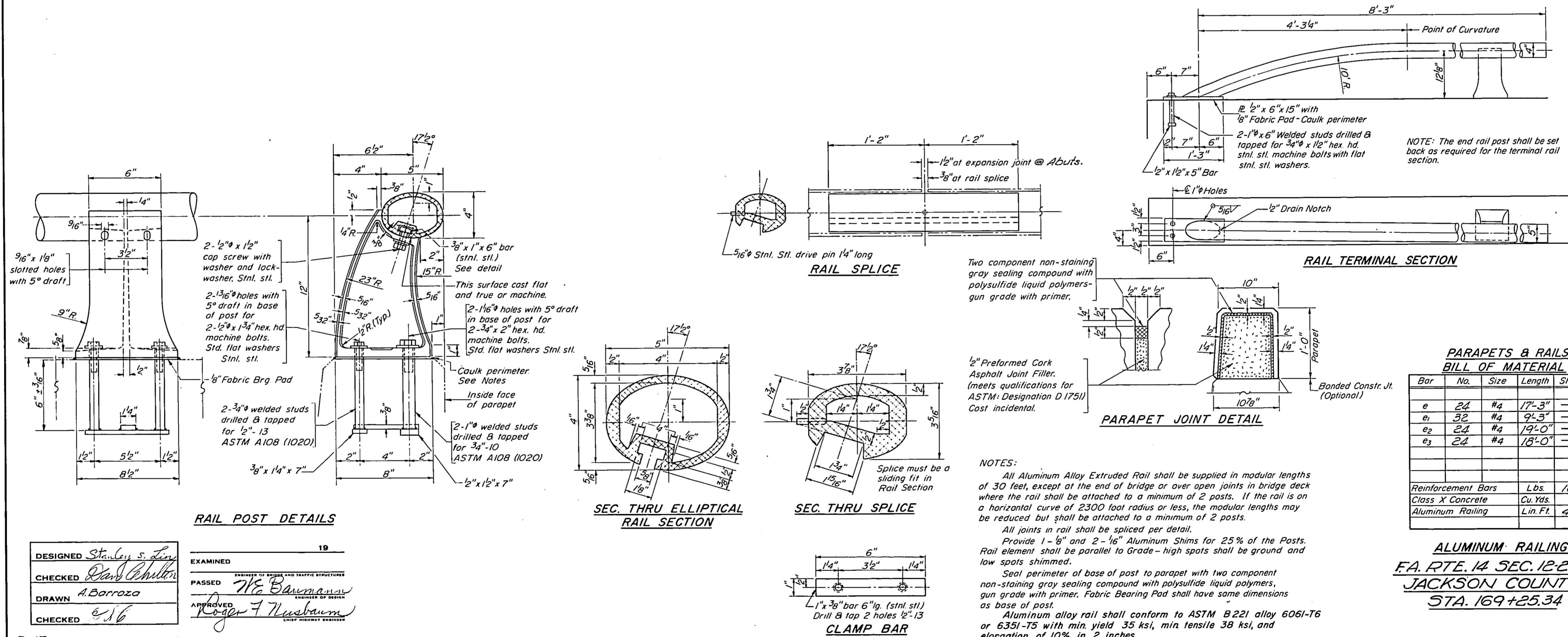
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
173-C	JACKSON	JACKSON	113	46
SHEET NO. 6 15 SHEETS				



* See Sheet #5 for detail and quantity

ELEVATION
Showing inside face of West parapet



**PARAPETS & RAILS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
e	24	#4	17'-3"	
e ₁	32	#4	9'-3"	
e ₂	24	#4	19'-0"	
e ₃	24	#4	18'-0"	
Reinforcement Bars			Lbs.	1070
Class X Concrete			Cu. Yds.	13.7
Aluminum Railing			Lin. Ft.	450

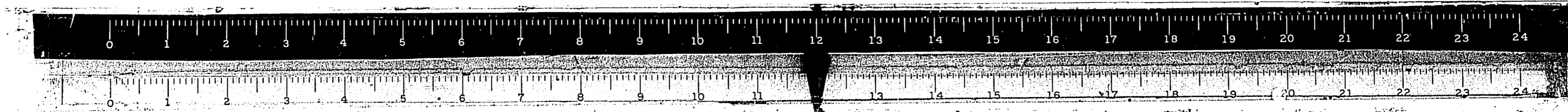
DESIGNED *Stanley S. Linn*
CHECKED *Dan Chilton*
DRAWN *A. Barroza*
CHECKED *e.s.b.*

EXAMINED
PASSED *W.E. Basman*
APPROVED *Roger F. Nusbaum*

R-17 4-22-68 9-18-69 3-3-71

ALUMINUM RAILING
FA. RTE. 14 SEC. 12-2VB
JACKSON COUNTY
STA. 169+25.34

NOTES:
All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
All joints in rail shall be spliced per detail.
Provide 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to grade - high spots shall be ground and low spots shimmed.
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

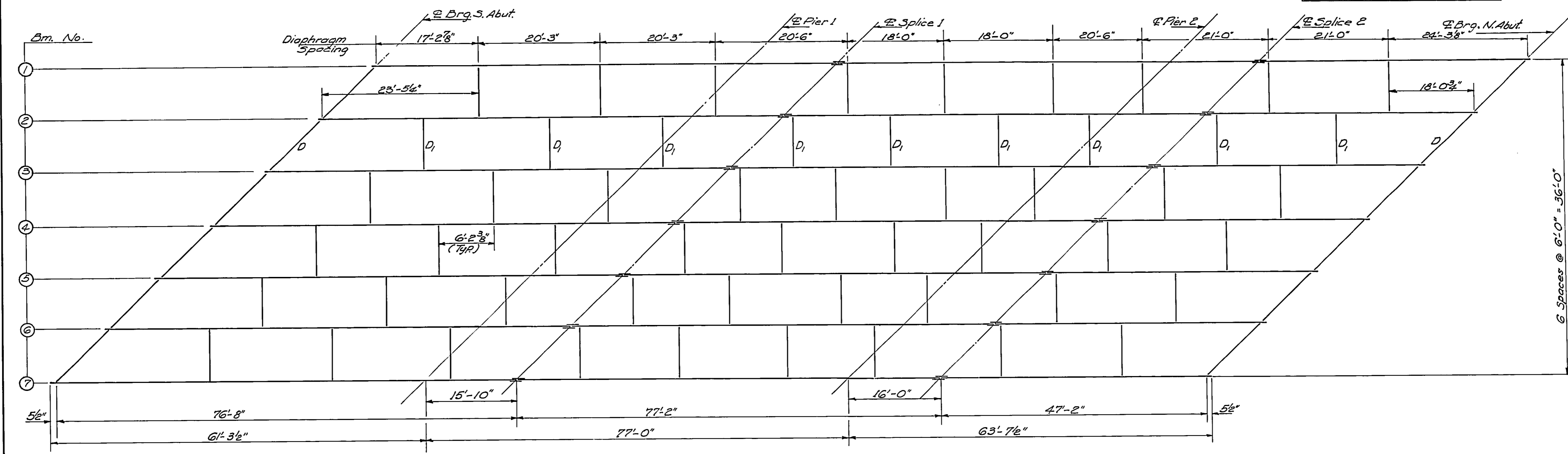


FOR INFORMATION ONLY

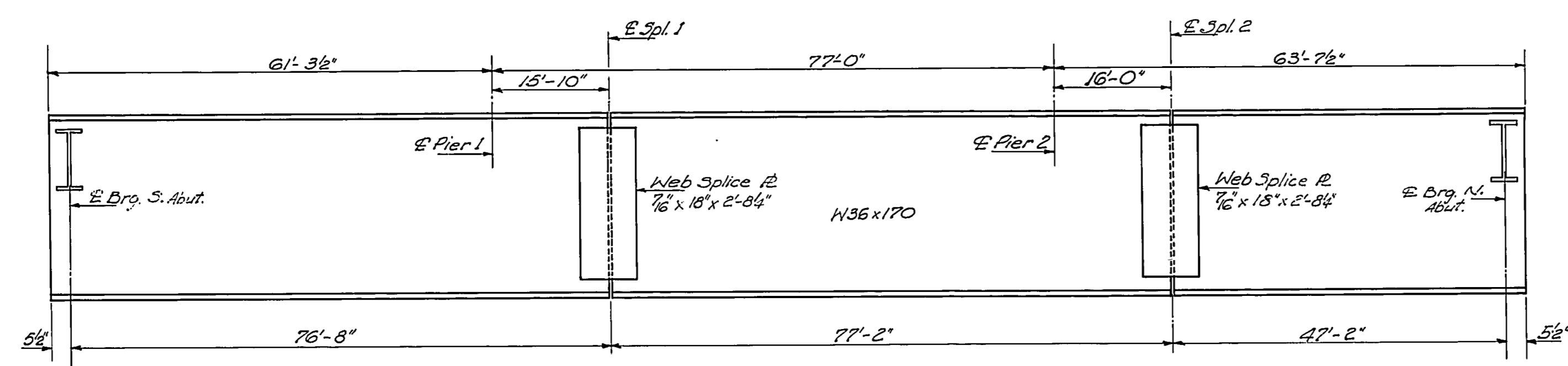
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P.A. 14	VB	JACKSON	113	49
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 7
15 SHEETS



PLAN

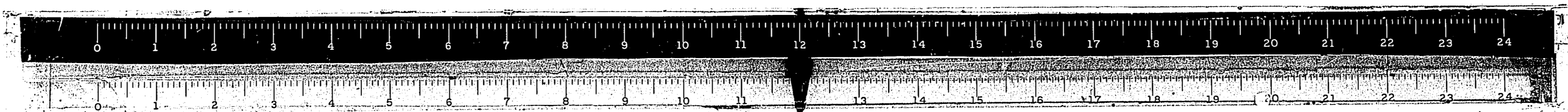


B.M. ELEVATION

DESIGNED *Stanley S. Linn*
 CHECKED *Paul Lehman*
 DRAWN *A. Borraza*
 CHECKED *ESL*

EXAMINED *Aug 3 1913*
 PASSED *W. F. Baumgardner*
 APPROVED *Foster F. Nusbaum*

FRAMING PLAN
 F.A. RTE. 14 SEC. 12-2VB
 JACKSON COUNTY
 STA. 169+25.34

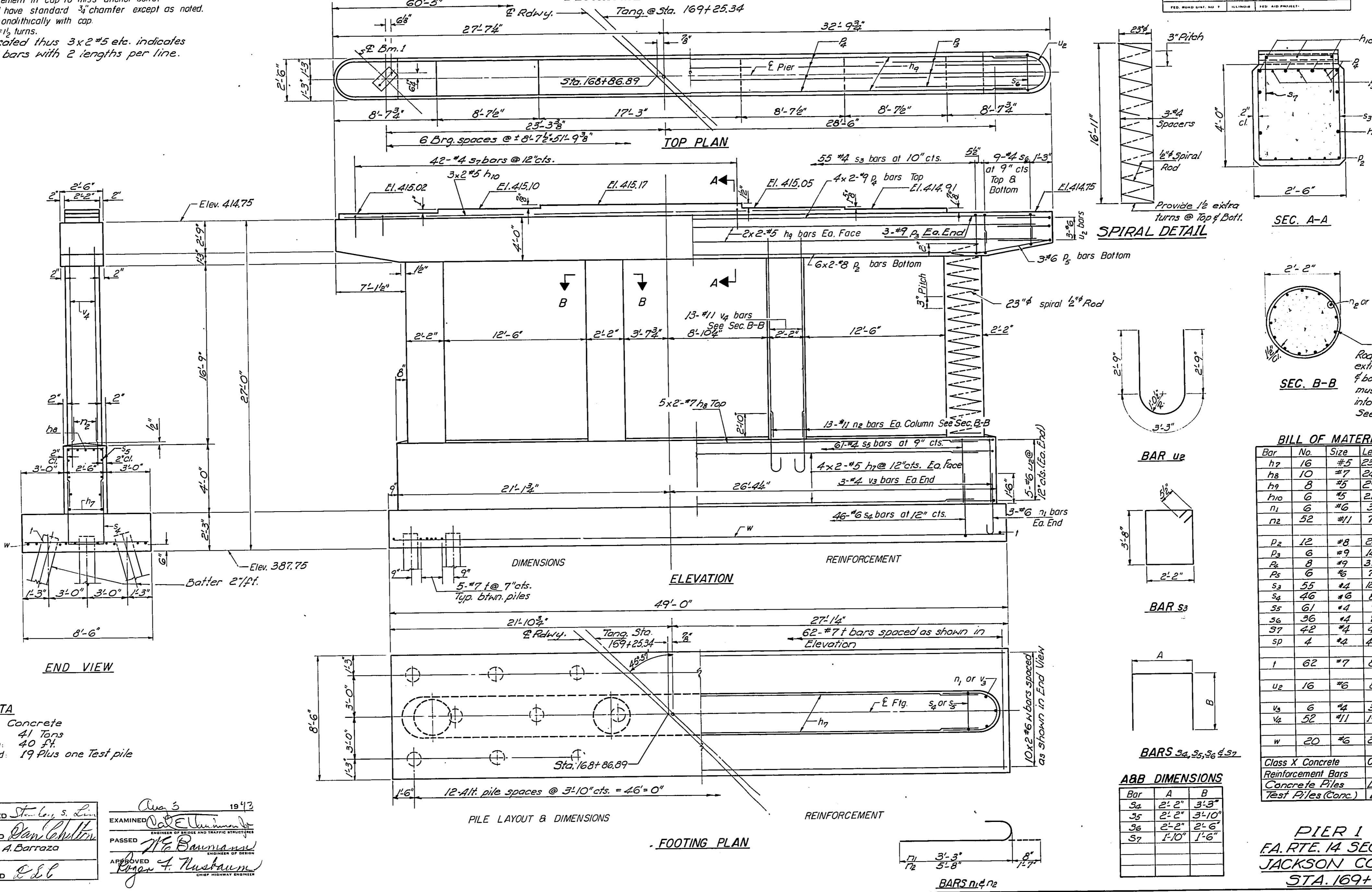


FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12-2	14	JACKSON	112	55
SHEET NO. 11				
15 SHEETS				

NOTES:
Space Reinforcement in cap to miss anchor bolts.
All edges shall have standard $\frac{3}{4}$ " chamfer except as noted.
Pour steps monolithically with cap.
Min Spiral lap = 1/2 turns.
Bars indicated thus 3x2 #5 etc. indicates 3 lines of bars with 2 lengths per line.



PILE DATA
Type: Concrete
Capacity: 41 Tons
Est. Length: 40 ft.
No. Required: 19 Plus one Test pile

DESIGNED	St. G. S. Linn	EXAMINED	W. E. Elmer
CHECKED	Dan Colton	PASSED	H. C. Bauman
DRAWN	A. Barroza	APPROVED	Roger F. Neumann
CHECKED	E. L. C.		

1943
P-24 10-5-70

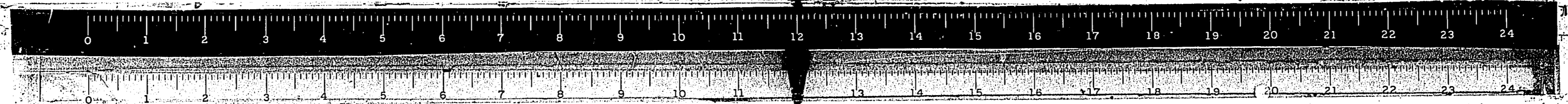
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7	16	#5	23'-3"	
h8	10	#7	24'-9"	
h9	8	#5	29'-9"	
h10	6	#5	21'-6"	
n1	6	#6	3'-11"	
n2	52	#1	7'-3"	
p2	12	#8	24'-3"	
p3	6	#9	14'-0"	
p4	8	#9	31'-3"	
p5	6	#6	7'-3"	
s3	55	#4	12'-7"	
s4	46	#6	8'-8"	
s5	61	#4	9'-10"	
s6	36	#4	7'-2"	
s7	42	#4	4'-10"	
sp	4	#2	49'-6"	WWWW
u2	16	#6	8'-9"	
v9	6	#4	3'-9"	
v8	52	#1	19'-6"	
w	20	#6	25'-3"	

Class X Concrete Cu. Yds. 830
Reinforcement Bars Lbs. 16640
Concrete Piles Lin. Ft. 760
Test Piles (Conc.) Ea. 1

PIER 1
FA. RTE. 14 SEC. 12-2VB
JACKSON COUNTY
STA. 169+25.34

FOR INFORMATION ONLY

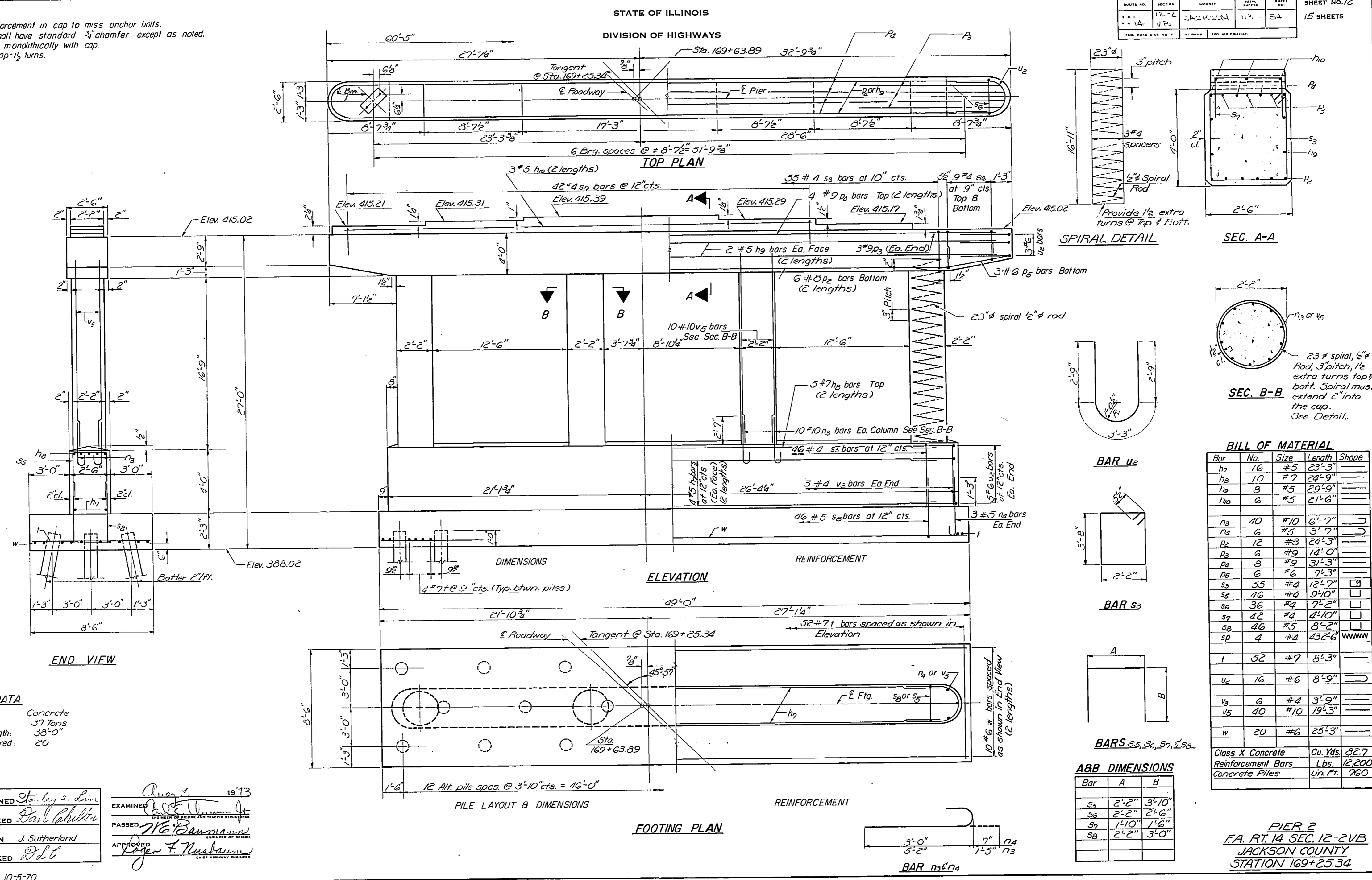


NOTES:

Space Reinforcement in cap to miss anchor bolts.
 All edges shall have standard 3/8" chamfer except as noted.
 Pour steps monolithically with cap.
 Min Spiral lap = 1/2 turns.

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
14	12-2	JACKSON	112	154
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT:	

SHEET NO. 12
15 SHEETS



PILE DATA
 Type: Concrete
 Capacity: 37 Tons
 Est. Length: 38'-0"
 No. Required: 20

DESIGNED *Stanley S. Linn*
 CHECKED *David Johnson*
 DRAWN *J. Sutherland*
 CHECKED *D.L.C.*

EXAMINED *[Signature]* 1973
 PASSED *[Signature]*
 APPROVED *[Signature]*

P-24 10-5-70

BILL OF MATERIAL

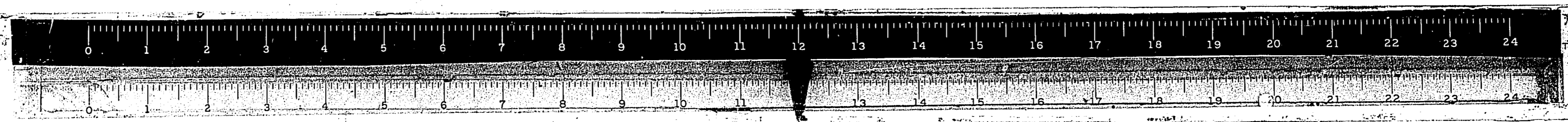
Bar	No.	Size	Length	Shape
n ₂	16	#5	23'-3"	U
n ₄	10	#7	24'-9"	U
n ₆	8	#5	29'-9"	U
n ₈	6	#5	21'-6"	U
n ₃	40	#10	6'-7"	U
n ₄	6	#5	3'-7"	U
p ₂	12	#8	24'-3"	U
p ₃	6	#9	14'-0"	U
p ₄	8	#9	31'-3"	U
p ₅	6	#6	7'-3"	U
s ₂	55	#4	12'-7"	U
s ₃	46	#4	9'-10"	U
s ₄	36	#4	7'-2"	U
s ₇	42	#4	4'-10"	U
s ₈	46	#5	8'-2"	U
s ₉	4	#4	43'-6"	U
i	52	#7	8'-3"	U
v ₂	16	#6	8'-9"	U
v ₄	6	#4	3'-9"	U
v ₅	40	#10	19'-3"	U
w	20	#6	25'-3"	U

Class X Concrete	Cu. Yds.	82.7
Reinforcement Bars	Lbs.	12,200
Concrete Piles	Lin. Ft.	760

ABB DIMENSIONS

Bar	A	B
s ₂	2'-6"	3'-10"
s ₃	2'-2"	2'-6"
s ₇	1'-10"	1'-6"
s ₈	2'-2"	3'-0"

PIER 2
 FA. RT. 14 SEC. 12-2VB
 JACKSON COUNTY
 STATION 169+25.34



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
169-2	12-2	JACKSON	113	55
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT	

SHEET NO. 13
15 SHEETS

Soil Description	Elevation	N	Qu / f.c.L.	w (%)	Surface Water El.	Groundwater El. at Completion	Remarks
Ground Surface	399.0	0			NONE	353.5	
(FILL MATERIAL) STIFF DAMP BROWN CRUSHED STONE WITH SILTY CLAY LOAM MIXED	396.0					384.0	
STIFF MOIST BROWN MOTTLED GREY AND BLACK SILTY CLAY A7-G(13-14)	393.5	17	1.75	17		373.5	
VERY STIFF MOIST TO DAMP BROWN MOTTLED GREY AND BLACK SILTY CLAY A7-G(13-14)	391.0	24	5.95	22		369.0	
VERY STIFF MOIST BROWN MOTTLED GREY CLAY A7-G(14-15)	389.5	18	4.75	21		367.5	
VERY STIFF MOIST BROWN MOTTLED GREY SILTY CLAY A7-G(13-14)	387.0	14	2.98	17		366.0	
VERY STIFF MOIST BROWN MOTTLED GREY CLAY TO CLAY LOAM A-G(10-11)	384.0	11	2.18	18		366.0	
VERY STIFF MOIST BROWN MOTTLED GREY CLAY TO CLAY LOAM A-G(10-11)	381.0	11	3.78	16		366.0	

Soil Description	Elevation	N	Qu / f.c.L.	w (%)	Surface Water El.	Groundwater El. at Completion	Remarks
Ground Surface	358.5	40			NONE	353.5	
STIFF MOIST GREY SILTY CLAY A-G(11)	356.0	15	1.78	19		349.0	
STIFF MOIST GREY CLAY TO CLAY LOAM A-G(9-10)	353.5	11	1.68	20		349.0	
BOTTOM OF HOLE = 69.0 FEET	330.0	12	1.48	24		349.0	
DURING DRILLING OPERATIONS IT APPEARED THAT FREE WATER WAS ENCOUNTERED AT 28.0 FEET	341.0						

N - Standard Penetration Test
Blows per ft. to Drive 2" O.D.
Split Spoon Sampler 12" with
140 lb. Hammer falling 30".
N. S. - No Sample

Qu - Unconfined Compressive
Strength - $\frac{1}{2}$ sf
NP - Non Plastic
S.T. - Shelby Tube
w - Water Content - Percentage
of Oven Dry Weight - %

Type Failure
B - Bulge Failure
S - Shear Failure
E - Est. Value
A.S. - Auger Sample

Soil Description	Elevation	N	Qu / f.c.L.	w (%)	Surface Water El.	Groundwater El. at Completion	Remarks
Ground Surface	390.7	0			NONE	374.2	
VERY STIFF DAMP TO MOIST BROWN MOTTLED GREY AND BLACK SILTY CLAY TO CLAY A7-G(14)	388.2	9	1.38	21		385.2	
STIFF MOIST TO VERY MOIST BROWN MOTTLED GREY SILTY CLAY A-G(11)	385.7	12	2.78	21		385.2	
VERY STIFF MOIST BROWN MOTTLED GREY AND BLACK CLAY A7-G(14-15)	382.7	10	2.95	23		385.2	
STIFF MOIST VERY MOIST BROWN MOTTLED GREY CLAY TO CLAY LOAM A-G(10)	380.2	9	1.88	19		385.2	
VERY STIFF MOIST TO VERY MOIST BROWN MOTTLED GREY SILTY CLAY TO CLAY A-G(11-12)	377.7	9	1.88	19		385.2	
STIFF MOIST VERY MOIST BROWN MOTTLED GREY CLAY TO CLAY LOAM A-G(10)	372.7	13	1.68	20		385.2	
MEDIUM VERY MOIST TO WET BROWN MOTTLED GREY AND BLACK SAND LOAM TO SAND	370.2	28	-	15		385.2	

Soil Description	Elevation	N	Qu / f.c.L.	w (%)	Surface Water El.	Groundwater El. at Completion	Remarks
Ground Surface	40				NONE	374.2	
SEE PREVIOUS SHEET	347.7	14	2.78	17		385.2	
STIFF VERY MOIST GREY SILTY CLAY A-G(11)	345.2	15	1.68	19		385.2	
VERY STIFF MOIST GREY CLAY LOAM A-G(6) WITH GRAVEL MIXED	342.7	58	2.85	12		385.2	
VERY STIFF MOIST GREY SILTY CLAY A-G(11)	342.7	24	2.98	18		385.2	
VERY STIFF MOIST TO VERY MOIST GREY CLAY A7-G(13-14)	332.7	17	2.78	17		385.2	
VERY STIFF MOIST GREY CLAY A7-G(15)	330.2	23	3.78	16		385.2	
	330.2	7	1.98	19		385.2	
	327.7	14	2.78	17		385.2	
	327.7	19	2.38	22		385.2	
	327.7	32	4.75	22		385.2	

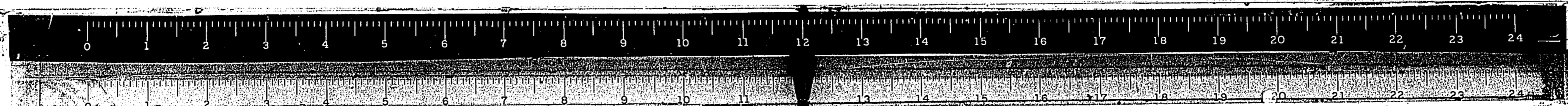
DESIGNED Stanley S. Lee
CHECKED Dan Cheller
DRAWN J. Sutherland
CHECKED D.L.C.

EXAMINED D. E. Thomson
PASSED H. E. Baumann
APPROVED Roger F. Musbaum

1973

BORINGS
FA. RT. 14 SEC. 12-24B
JACKSON COUNTY
STATION 169+25.34

FOR INFORMATION ONLY



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 14
17-1	17-1	JACKSON	113	56	15 SHEETS
FED. ROAD DIST. NO. 7			FED. AID PROJECT		

Boring No. 3-S
Station 169+57
Offset 7' LT. CENTERLINE

Elevation	N	Qu / L.L.	W (F)	Surface Water El.	Groundwater El. at Completion After Hours	Elevation	N	Qu / L.L.	W (F)
392.8	0			NONE		369.8			
				SEE PREVIOUS COLUMN					
				VERY STIFF MOIST TO VERY MOIST BROWN MOTTLED GREY AND BLACK SILTY CLAY A7-6(13-14)		21	6.0R	17	
						25			
387.3						17	3.5B	18	
						15	2.5B	19	
384.8						18	4.6S	17	
						11	3.7B	21	
379.8						11	1.6R	20	
						9	1.0B	22	
377.3						14	1.8B	21	
						18			
374.8						13	1.8B	21	
						17	3.4B	18	
372.3						14	2.1B	20	
						10	3.9B	18	

Boring No. 3-S
Station 169+57
Offset 7' LT. CENTERLINE

Elevation	N	Qu / L.L.	W (F)	Surface Water El.	Groundwater El. at Completion After Hours	Elevation	N	Qu / L.L.	W (F)
4.0				NONE					
				SEE PREVIOUS COLUMN					
				SEE PREVIOUS SHEET		13	1.8B	21	
						25	3.9B	19	
						14	2.1B	20	
4.5						32	3.7S	20	
						26	5.2S	20	
347.3									
						22	2.9B	17	
344.8						18	2.7B	17	
						20	2.7B	19	
337.3						23	2.3B	20	
						19	2.1B	22	
334.8						20	4.4S	22	

N - Standard Penetration Test Blows per ft. to Drive 2" O.D. Split Spoon Sampler 12" with 140 lb. Hammer falling 30".
Qu - Unconfined Compressive Strength - $\frac{1}{2}$ in.
NP - Non Plastic
S.T. - Shelby Tube
w - Water Content - Percentage of Oven Dry Weight - %
N.S. - No Sample
Type Failure
B - Bulge Failure
S - Shear Failure
E - Est. Value
A.S. - Auger Sample

Boring No. 4-S
Station 170+30
Offset CENTERLINE

Elevation	N	Qu / L.L.	W (F)	Surface Water El.	Groundwater El. at Completion After 24 Hours	Elevation	N	Qu / L.L.	W (F)
400.8	0			NONE	385.3	377.8			
				SEE PREVIOUS COLUMN	386.2				
				MEDIUM MOIST BROWN MOTTLED GREY SILTY CLAY LOAM A-4(8) TO A-6(9)		11	1.6B	19	
						375.8			
397.8						3	0.2B	21	
						10	2.1S	20	
395.3						18			
						20	4.2S	18	
390.3						16	3.5B	18	
						14	3.7S	14	
387.8						14	2.9S	18	
						13	3.9S	22	
385.3						15	3.1B	17	
						12	2.6S	21	
						11	2.0S	21	

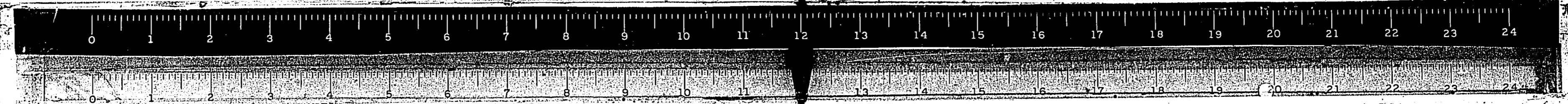
Boring No. 4-S
Station 170+30
Offset CENTERLINE

Elevation	N	Qu / L.L.	W (F)	Surface Water El.	Groundwater El. at Completion After 24 Hours	Elevation	N	Qu / L.L.	W (F)
4.0				NONE	385.3				
				SEE PREVIOUS COLUMN	386.2				
				SEE PREVIOUS SHEET		14	2.7B	18	
						10	1.6B	20	
						10	1.6B	20	
4.5						10	1.4B	20	
						11	1.5B	20	
350.3						15	1.9B	19	
						12	2.1B	22	
345.3						14	1.9B	16	
						12	1.5B	18	
						14	1.7B	19	

DESIGNED Stanley S. Lim
CHECKED Dan Chilton
DRAWN J. Sutherland
CHECKED D.L.C.
EXAMINED [Signature] 10/73
PASSED [Signature]
APPROVED [Signature]

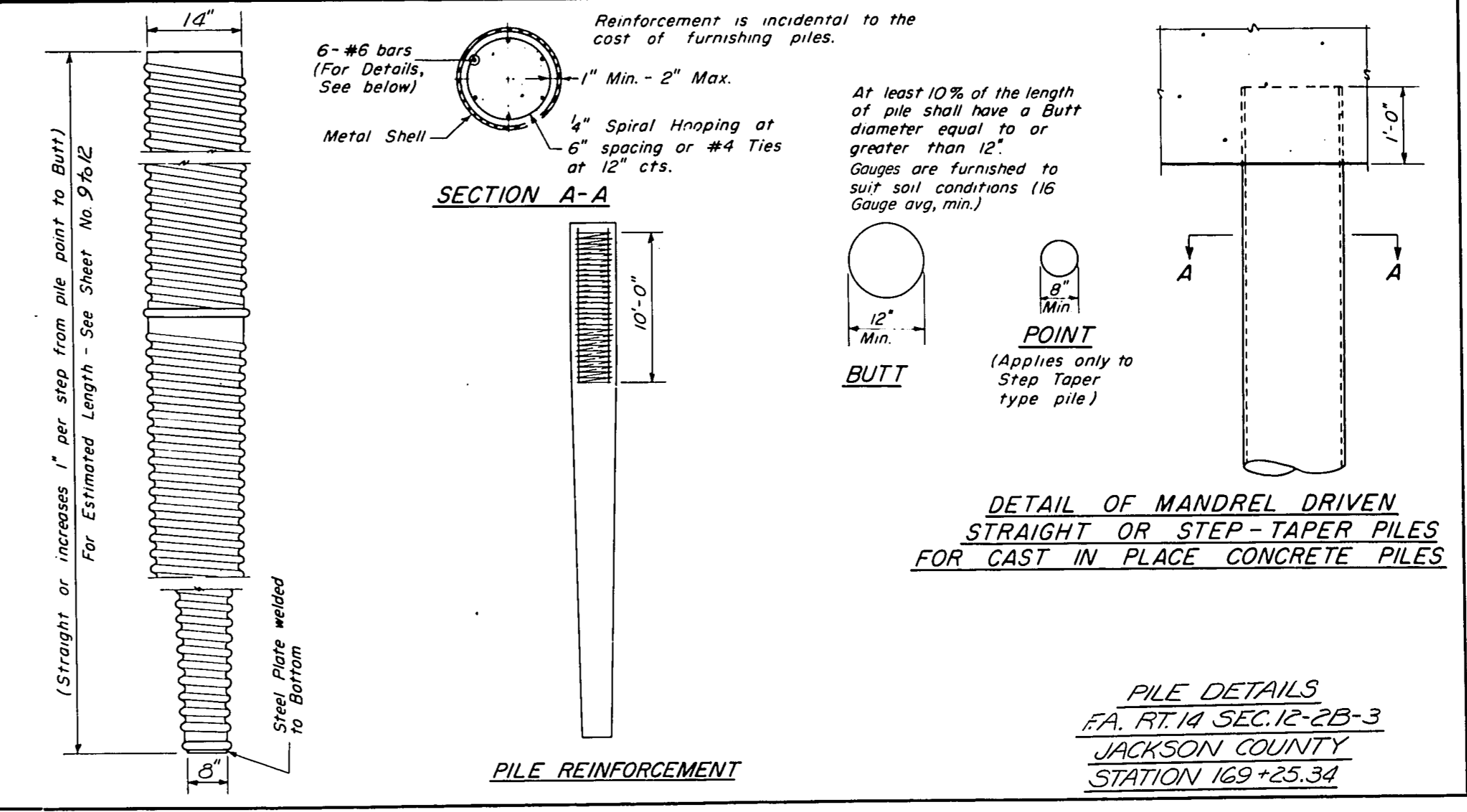
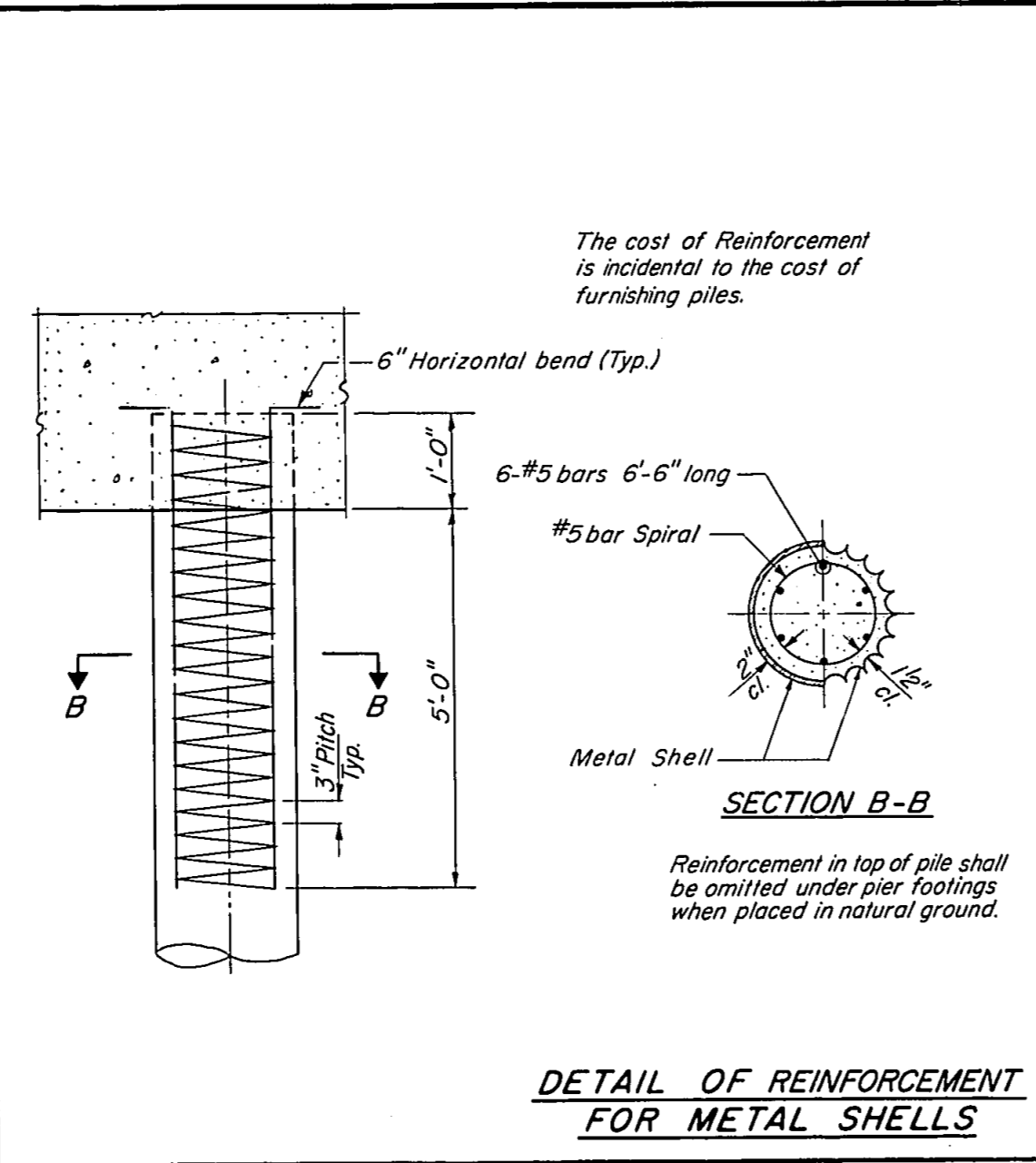
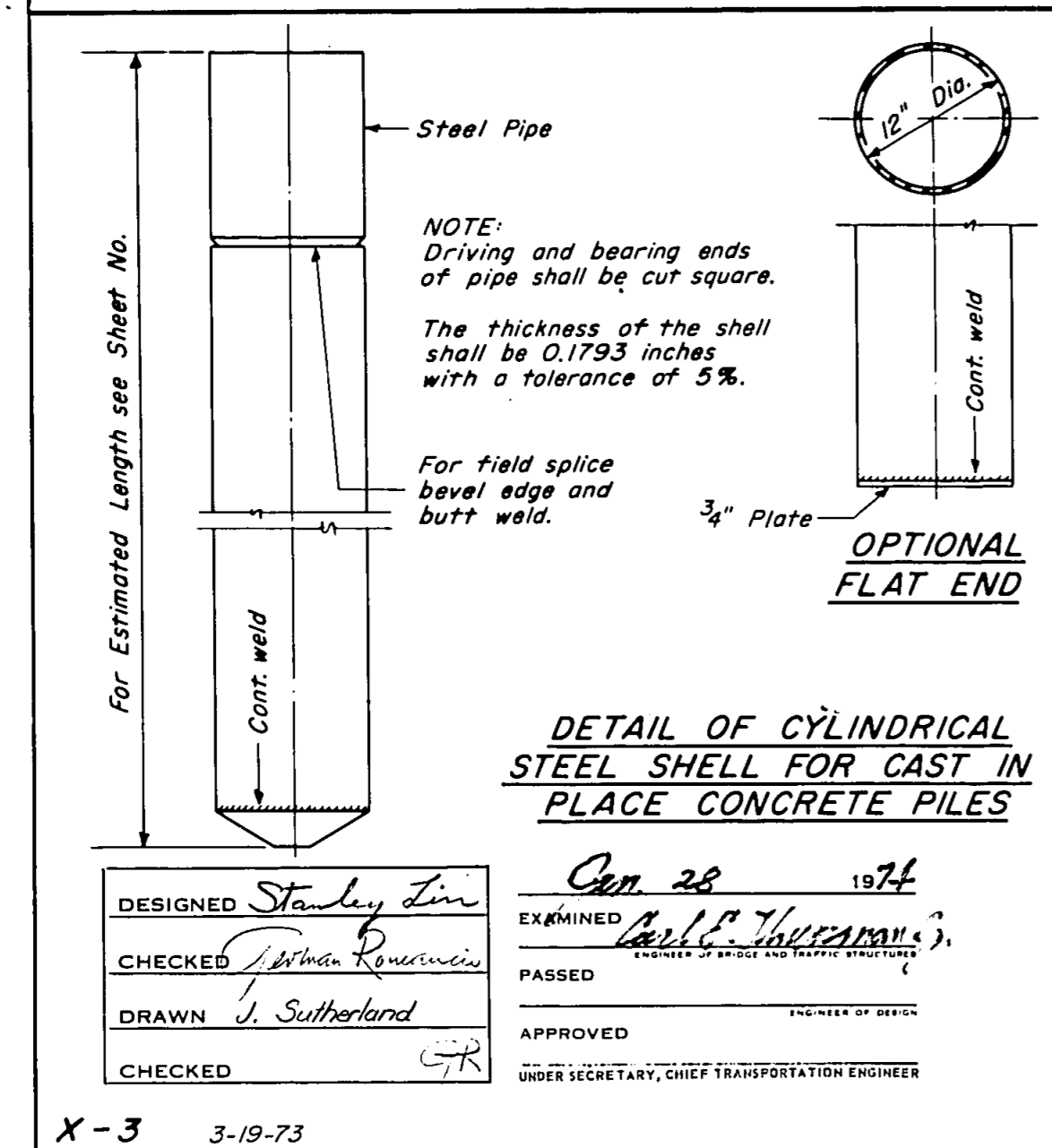
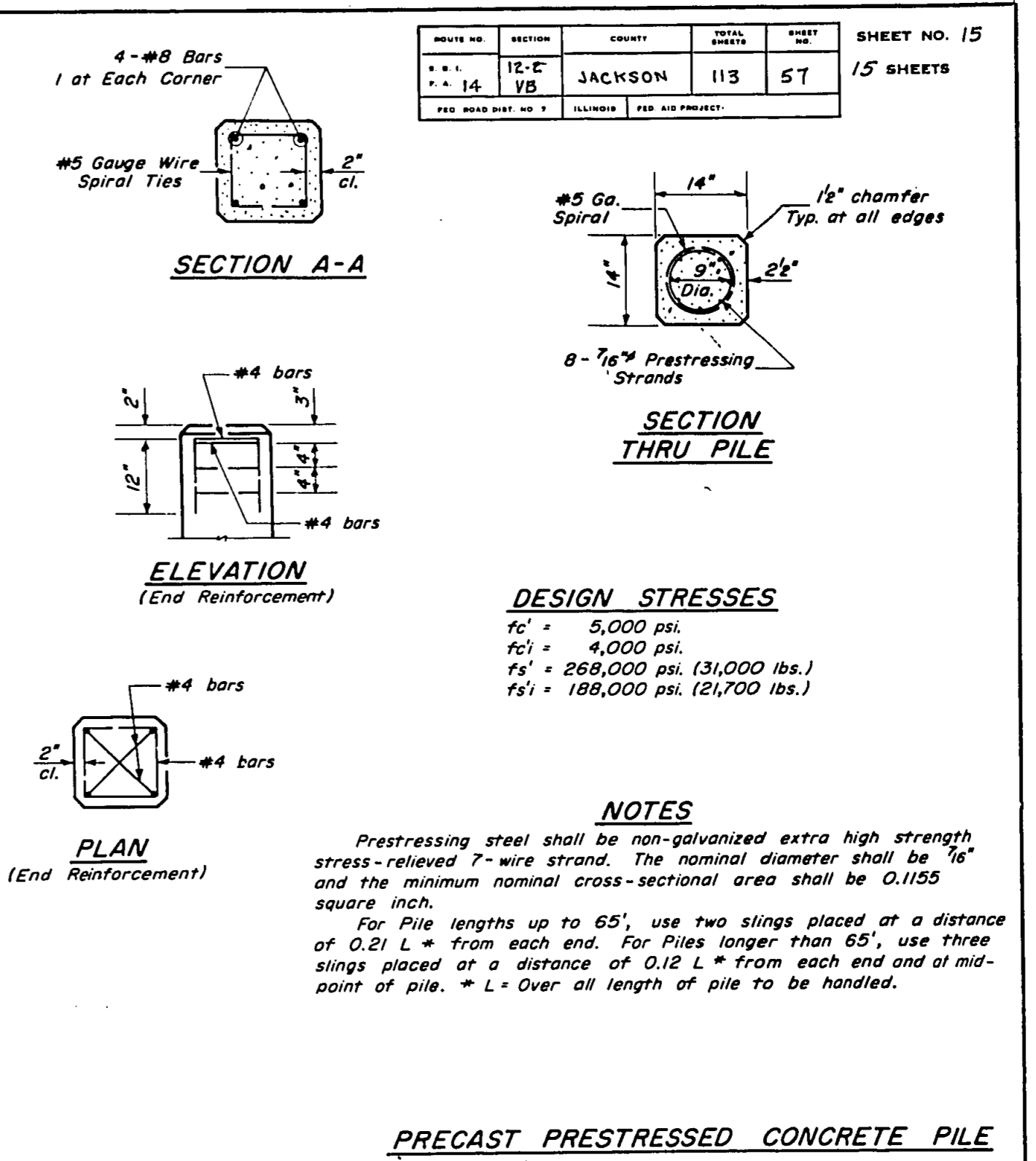
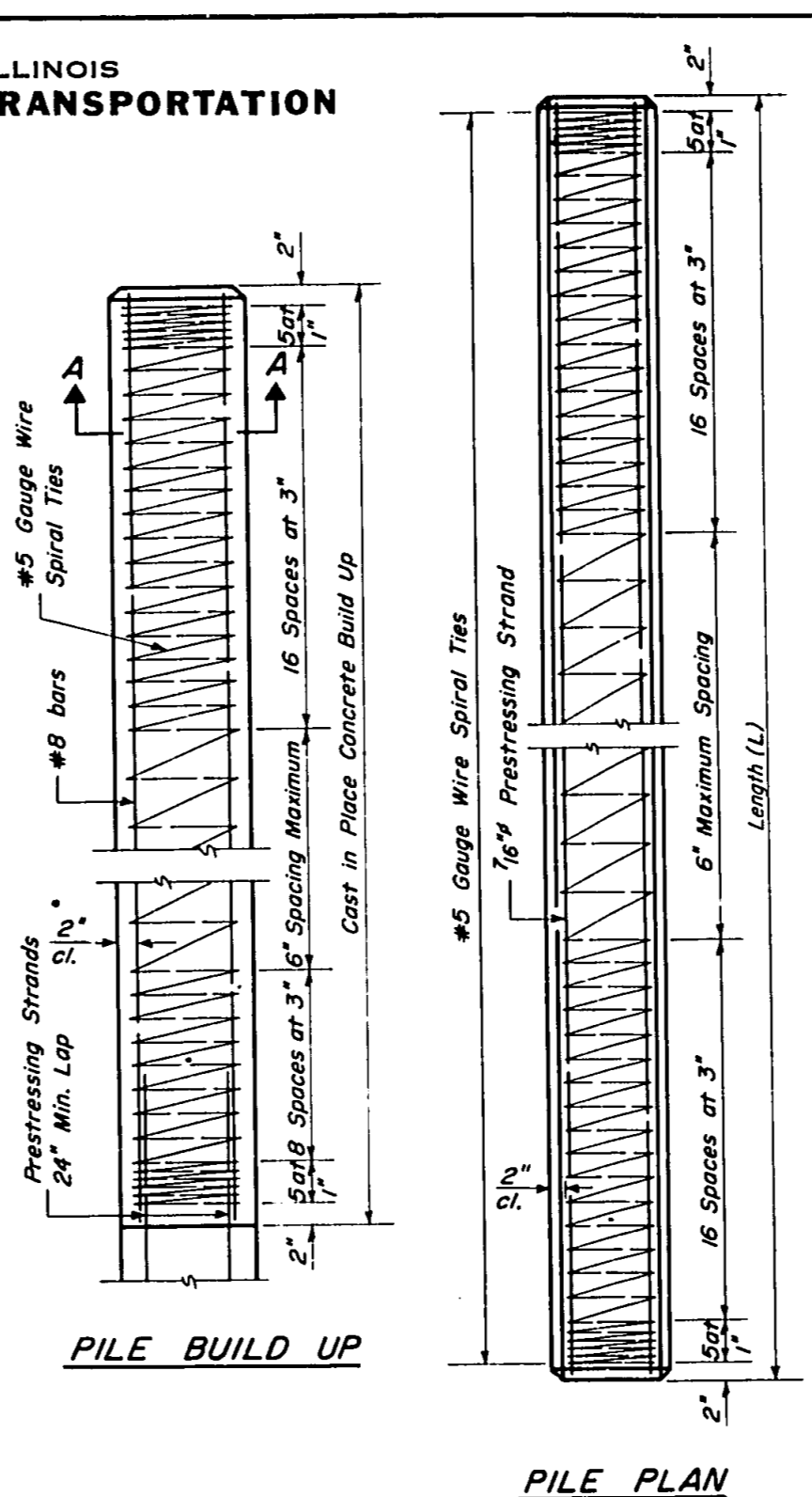
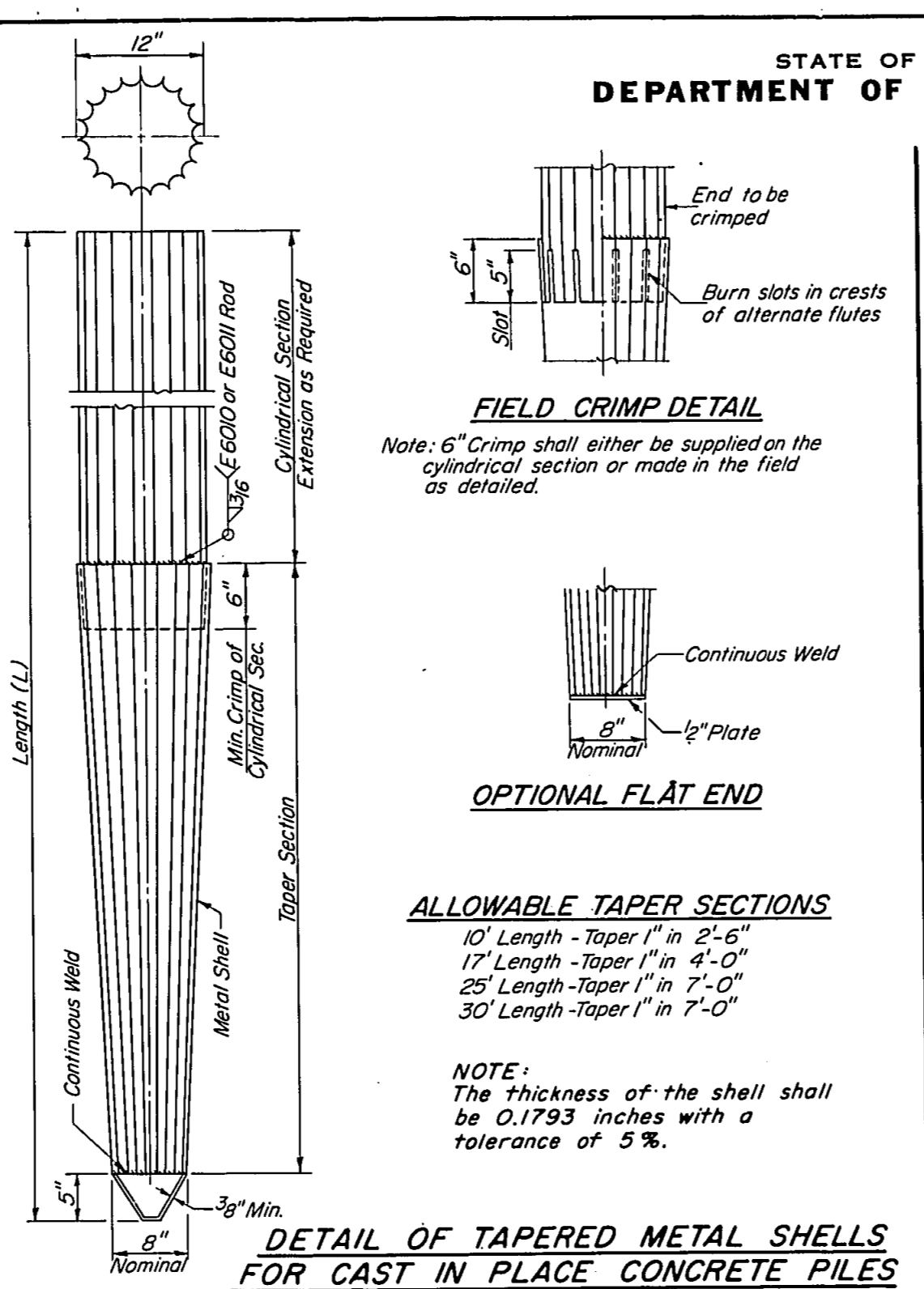
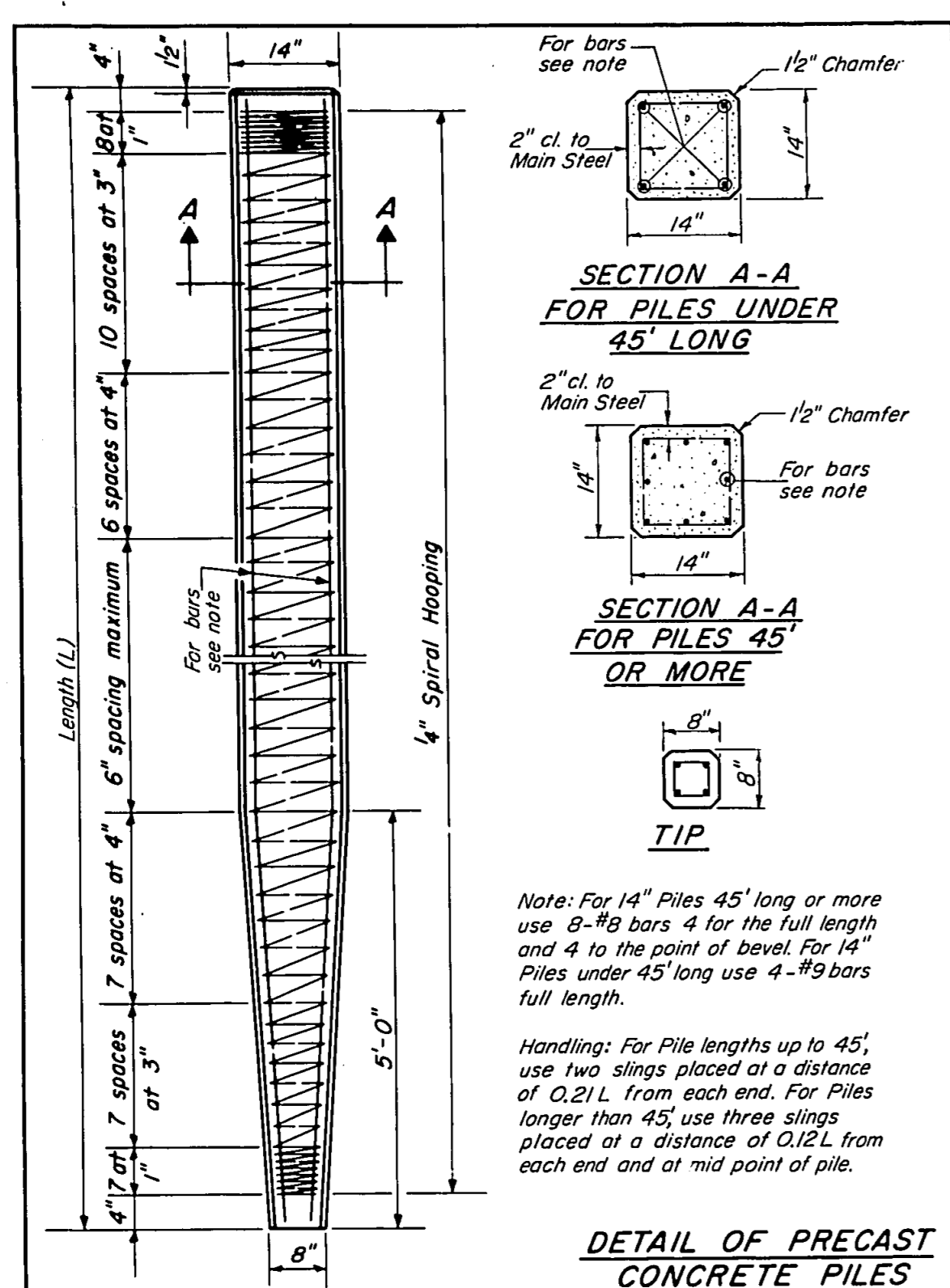
BORINGS
F.A. RT. 14 SEC. 12-2VB
JACKSON COUNTY
STATION 169+25.34

FOR INFORMATION ONLY



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
14	12-C	JACKSON	113	57
SHEET NO. 15 15 SHEETS				



DESIGNED *Stanley Linn*
 CHECKED *Arthur R. Sutherland*
 DRAWN *J. Sutherland*
 CHECKED *GR*

CON. 28 1974
 EXAMINED *Arthur R. Sutherland*
 PASSED
 APPROVED
 UNDER SECRETARY, CHIEF TRANSPORTATION ENGINEER

X-3 3-19-73

FOR INFORMATION ONLY

