FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	25-8B	EFFINGHAM	41	1
U. S. ROUTE NO.	ILLINOIS	PROJECT	I-57-4(28)167	

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

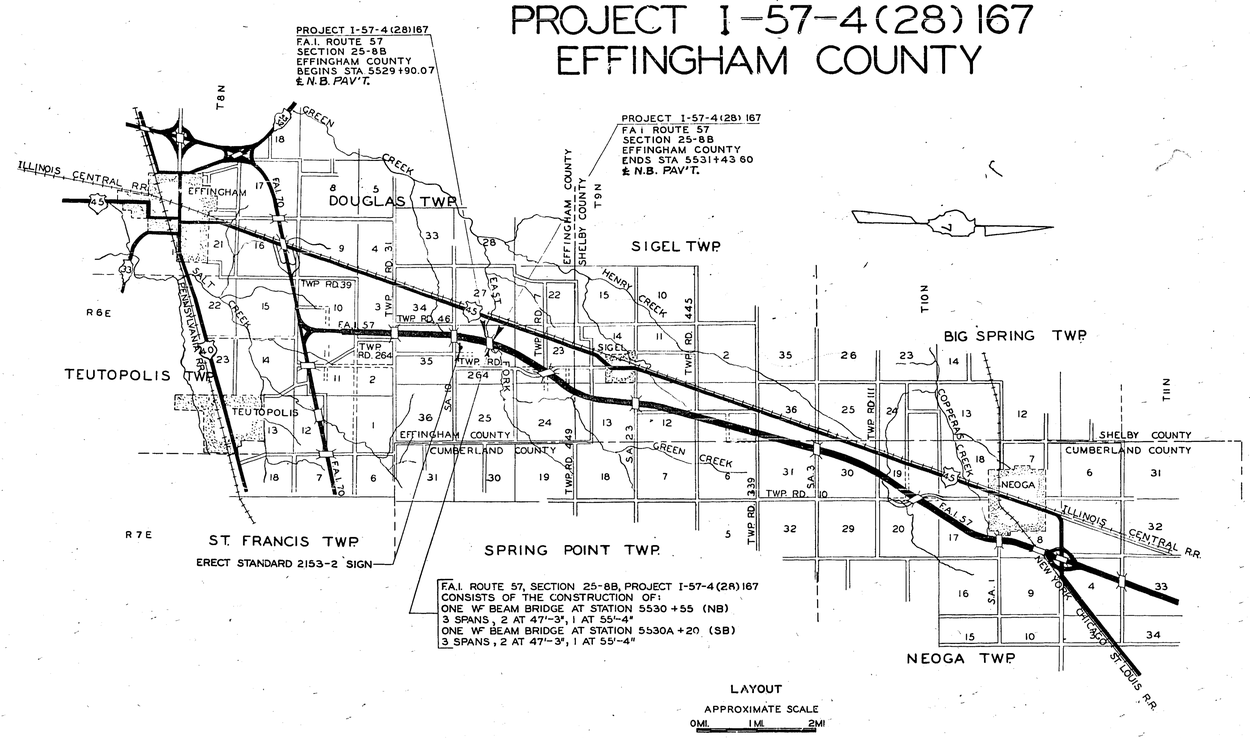
INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET AND INDEX OF SHEETS
2	TYPICAL SECTIONS
3	SUMMARY OF QUANTITIES; GENERAL NOTES; CLASS X SCHEDULE; SIGNATURES
4-6	ROADWAY PLAN SHEETS
* 7-26	BRIDGE PLAN SHEETS
27-38	STATION CROSS SECTIONS
39	STANDARD 1686-2
40	STANDARDS 2113 & 2153-2
41	STANDARD 2114, 1971-3

*INCLUDES SHEET 12 A

SCALES
PLAN 0' 50' 100' 200'
PROFILE HOR. 0' 50' 100' 200'
PROFILE VERT 0' 5' 10' 20'
CROSS-SECTIONS. HOR. 0' 5' 10' 20'
CROSS SECTIONS VERT 0' 5' 10'

F.A.I. ROUTE 57
SECTION 25-8B
PROJECT I-57-4(28)167
EFFINGHAM COUNTY



F.A.I. ROUTE 57, SECTION 25-8B, PROJECT I-57-4(28)167
CONSISTS OF THE CONSTRUCTION OF:
ONE W BEAM BRIDGE AT STATION 5530+55 (NB)
3 SPANS, 2 AT 47'-3", 1 AT 55'-4"
ONE W BEAM BRIDGE AT STATION 5530A+20 (SB)
3 SPANS, 2 AT 47'-3", 1 AT 55'-4"

LAYOUT
APPROXIMATE SCALE
0MI. 1MI. 2MI

NET LENGTH TO BE IMPROVED SECTION 25-8B = 153.50' = 0.029 MILES
NET LENGTH OF PROJECT I-57-4 (28)167 153.50' = 0.029 MILES

LOCATION OF SECTION INDICATED THUS:—

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED Jan 14 1963
DISTRICT ENGINEER
EXAMINED MARCH 7 1963
ENGINEER OF ROAD PLANS AND CONTRACTS
PASSED MARCH 7 1963
ENGINEER OF DESIGN
APPROVED MARCH 7 1963
CHIEF HIGHWAY ENGINEER
APPROVED MARCH 7 1963
DIRECTOR

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED
DIVISION ENGINEER
DATE

HIGHWAY CLASSIFICATION
1240 T 70

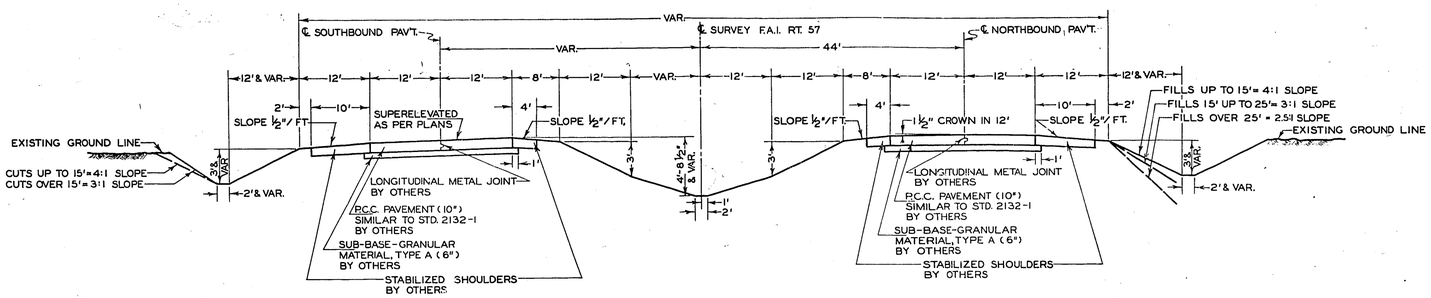
Job No 22908

EFFINGHAM COUNTY SECTION 25-8B F. A.I. ROUTE 57

2-15-63 AH Added Std. 2114, 1971-3. Deleted Std. 2138-1, mentioned sheet 12 A in index.

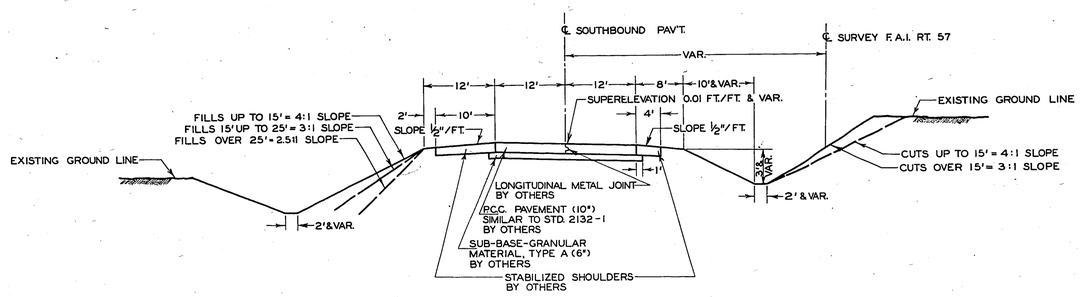
F.A.I. 57 25-8B EFFINGHAM 41 2
TYPICAL CROSS SECTIONS

1



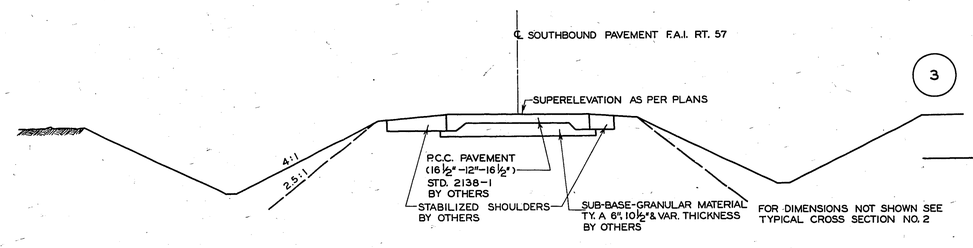
TYPICAL CROSS SECTION (F.A.I. ROUTE 57)
FROM STA. 5509 + 71.41 TO STA. 5529 + 66.81 NORTHBOUND PAVEMENT 1½" CROWN
FROM STA. 5531 + 86.96 TO STA. 5575 + 28.59 NORTHBOUND PAVEMENT 1½" CROWN

2



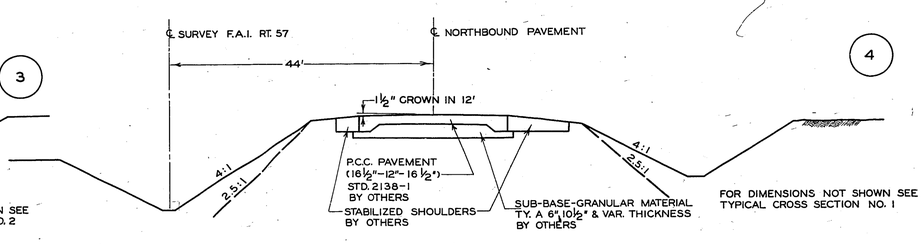
TYPICAL CROSS SECTION F.A.I. ROUTE 57 SOUTHBOUND PAVEMENT
FROM STA 5519A + 74.43 TO STA. 5529A + 21.19
FROM STA. 5531A + 39.96 TO STA. 5566A + 08.53

3



TYPICAL CROSS SECTION F.A.I. ROUTE 57 SOUTHBOUND PAVEMENT
FROM STA. 5529A + 21.19 TO STA. 5529A + 43.28
FROM STA. 5530A + 96.78 TO STA. 5531A + 39.96

4



TYPICAL CROSS SECTION F.A.I. ROUTE 57 NORTHBOUND PAVEMENT
FROM STA. 5529 + 66.81 TO STA 5529 + 90.07
FROM STA. 5531 + 43.60 TO STA. 5531 + 86.96

F.A.I. RT. 57 SEC. 25-8B EFFINGHAM COUNTY TYPICAL CROSS SECTIONS

SUMMARY OF QUANTITIES

ITEM	CODE NO.	UNIT	QUANTITY
TREE REMOVAL ACRES	010005	ACRES	8.4
EARTH EXCAVATION	011001	CU. YD.	30,300
CHANNEL EXCAVATION	012001	CU. YD.	10,200
CLASS A EXCAVATION FOR STRUCTURES	050001	CU. YD.	620
CLASS B EXCAVATION FOR STRUCTURES	050002	CU. YD.	580
CLASS X CONCRETE	052003	CU. YD.	882.6
PROTECTIVE COAT	052021	SQ. YD.	1,560
FURNISH AND ERECT STRUCTURAL STEEL	054001	POUND	273,620
REINFORCEMENT BARS	059001	POUND	134,600
FURNISH CREOSOTED PILES UP TO 20'	060004	LIN. FT.	180
DRIVE TIMBER PILES	060008	LIN. FT.	180
DRIVE CONCRETE PILES	060043	LIN. FT.	1,670
FURNISH CONCRETE PILES	060044	LIN. FT.	1,670
TEST PILE CONCRETE	060047	EACH	2
NAME PLATES	061001	EACH	2
SLOPE WALL, 6"	083003	SQ. YD.	3,540
ALTERNATE "A"			
ALUMINUM HANDRAIL TYPE D	Z01152	LIN. FT.	605
ALTERNATE "B"			
METAL HANDRAIL TYPE E	055015	LIN. FT.	605

GENERAL NOTES
F.A.I. ROUTE 57
SECTION 25-8B
EFFINGHAM COUNTY

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, " STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 2, 1958, THE "SUPPLEMENTAL SPECIFICATIONS", EFFECTIVE APRIL 2, 1962, AND THE SPECIAL PROVISIONS.

THE WORK INCLUDED IN SECTION 25-8B CONSISTS OF: THE FABRICATION, FURNISHING, AND COMPLETE CONSTRUCTION OF TWO 3 SPAN WF-BEAM BRIDGES, EACH WITH 2 SPANS AT 47'-3" AND 1 SPAN AT 55'-4" ALONG F.A.I ROUTE 57 AT STATIONS 5530+55 NORTHBOUND LANE AND 5530A+20 SOUTHBOUND; CHANNEL EXCAVATION; THE CONSTRUCTION OF BRIDGE ABUTMENT CONES; AND OTHER WORK NECESSARY TO COMPLETE THE SECTION.

EMBANKMENT SHALL BE CONSTRUCTED BY THE BRIDGE CONTRACTOR AS SHOWN BY THE PLANS, STATION CROSS SECTIONS, AND THE SPECIAL PROVISIONS, THE MATERIAL TO CONSTRUCT THESE EMBANKMENTS SHALL BE OBTAINED FROM THE MAIN LINE OF F.A.I. ROUTE 57 FROM STATION 5525+00 TO STATION 5530+00 AS SHOWN BY STATION CROSS SECTIONS AND FROM THE CHANNEL CHANGE. SEE THE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL FURNISH AND ERECT ONE (1) STANDARD 2153-2 SIGN AT THE LOCATION SHOWN ON THE PLANS.

NO PAYMENT WILL BE MADE FOR OVERHAUL ON ANY MATERIAL HAULED FROM ANY SOURCE ON THIS SECTION.

CLASS "X" CONCRETE SCHEDULE
F.A.I. ROUTE 57
SECTION 25-8B
EFFINGHAM COUNTY

LOCATION	BRIDGE STATION 5530+55 (NB) CU. YD. CL.X CONC.	LBS. REINF. BARS	BRIDGE STATION 5530A+20 (SB) CU. YD. CL.X CONC.	LBS. REINF. BARS
SOUTH ABUTMENT	49.8	2,830	49.1	2,820
PIER NO. 1	84.6	7,380	83.5	7,320
PIER NO. 2	87.6	8,750	86.7	8,700
NORTH ABUTMENT	49.8	2,830	49.1	2,820
DECK	171.2	45,510	171.2	45,640
TOTALS	443.0	67,300	439.6	67,300

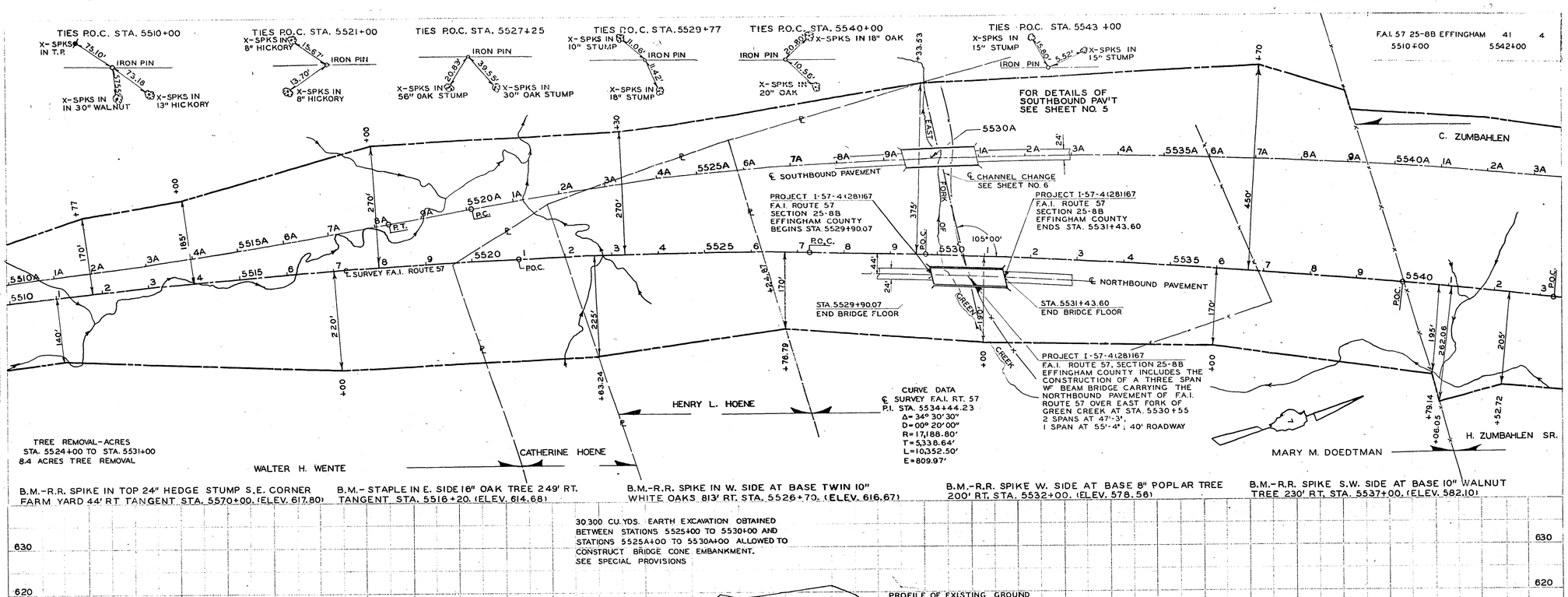
GRAND TOTAL CLASS X CONCRETE 882.6 CUBIC YARDS.
GRAND TOTAL REINFORCEMENT BARS 134,600 POUNDS

SIGNATURES
F.A.I. ROUTE 57
SECTION 25-8B
EFFINGHAM COUNTY

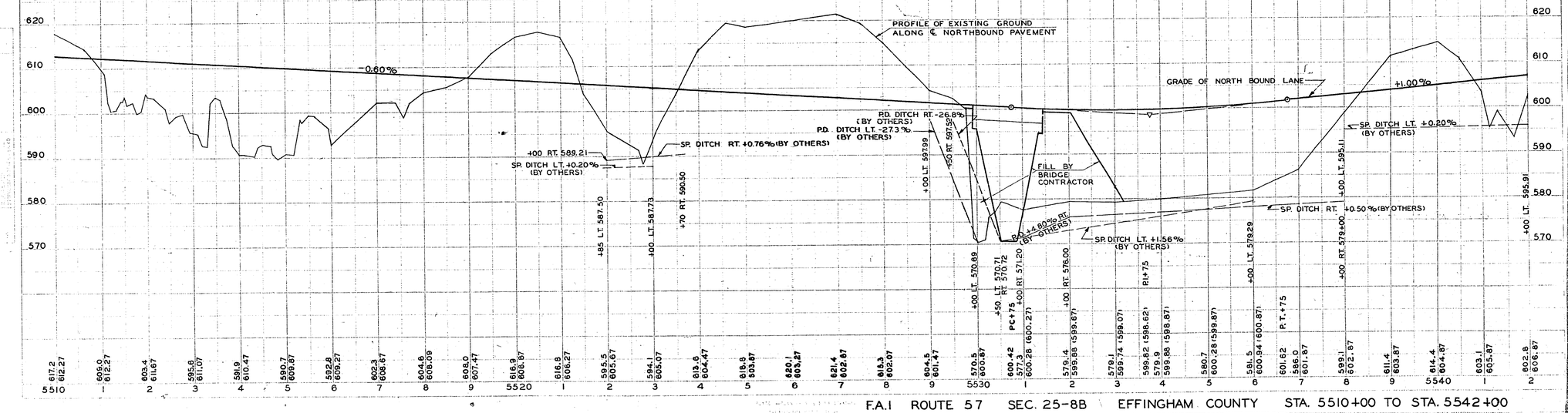
PLANS PREPARED BY DISTRICT 7 DESIGN OFFICE

EXAMINED Jan. 10, 1963 — J. H. Dirkhollar — DISTRICT ENGINEER OF DESIGN
EXAMINED Jan. 14, 1963 — Robert N. Gamble — DISTRICT ENGINEER OF CONSTRUCTION
EXAMINED Jan. 11, 1963 — Harold L. Scott — DISTRICT ENGINEER OF MAINTENANCE
EXAMINED Jan. 10, 1963 — K. H. Woelfer — DISTRICT ENGINEER OF RESEARCH AND PLANNING
EXAMINED Jan. 11, 1963 — Hugh Osborn — DISTRICT ENGINEER OF TRAFFIC
EXAMINED Jan. 14, 1963 — L. C. Klein — DISTRICT ENGINEER

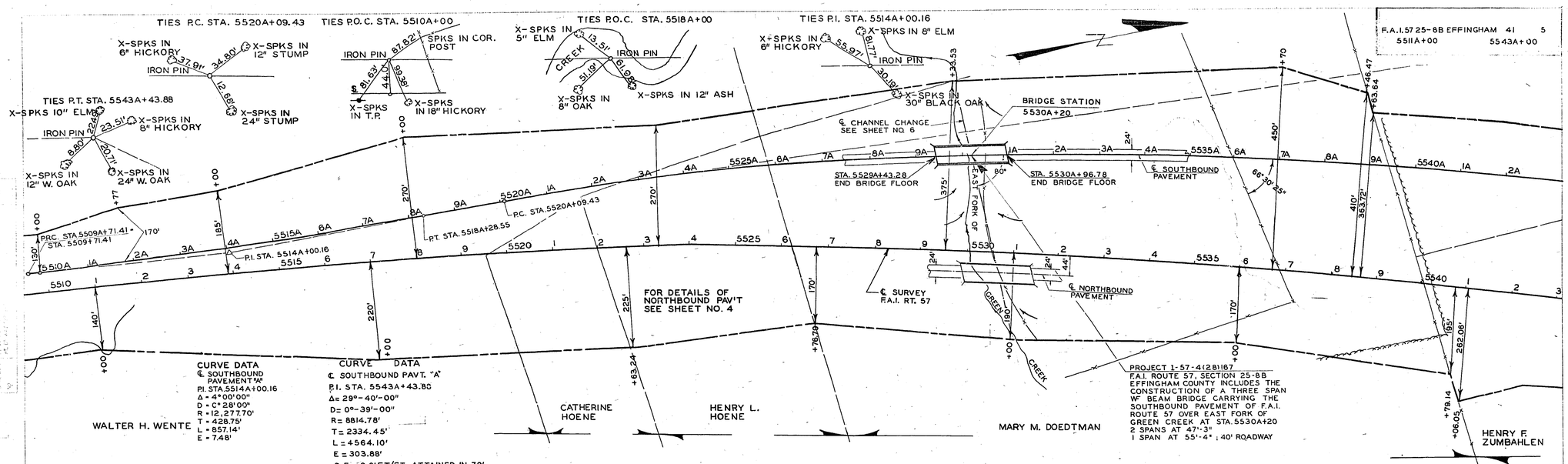
Added HANDRAIL ALTERNATES EXCEPT QUANTITY WHS 2-8-63



30,300 CU. YDS. EARTH EXCAVATION OBTAINED BETWEEN STATIONS 5525+00 TO 5530+00 AND STATIONS 5525A+00 TO 5530A+00 ALLOWED TO CONSTRUCT BRIDGE CONE EMBANKMENT. SEE SPECIAL PROVISIONS



F.A.I ROUTE 57 SEC. 25-8B EFFINGHAM COUNTY STA. 5510+00 TO STA. 5542+00



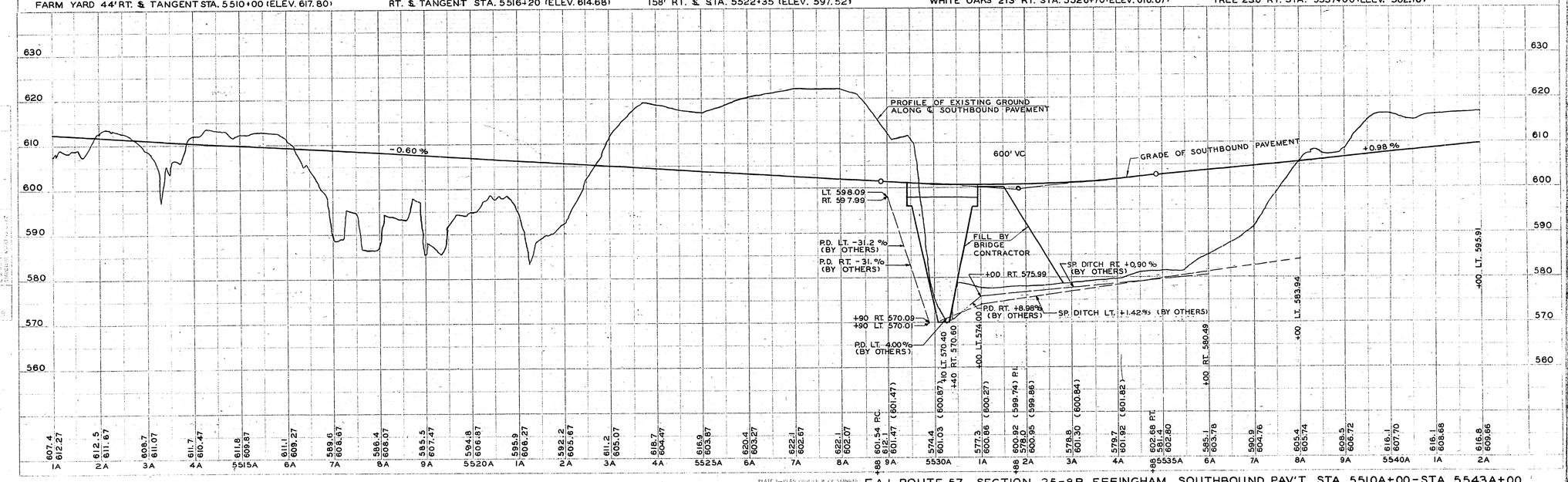
B.M.-R.R. SPIKE IN TOP 24" HEDGE STUMP S.E. CORNER FARM YARD 44' RT. ℄ TANGENT STA. 5510+00 (ELEV. 617.80)

B.M. STAPLE IN E. SIDE 16" OAK TREE 249' RT. ℄ TANGENT STA. 5516+20 (ELEV. 614.68)

B.M.-R.R. SPIKE W. SIDE BASE OF 18" WHITE OAK 158' RT. ℄ STA. 5522+35 (ELEV. 597.52)

B.M.-R.R. SPIKE IN W. SIDE, AT BASE TWIN 10" WHITE OAKS 213' RT. STA. 5526+70 (ELEV. 616.67)

B.M.-R.R. SPIKE S.W. SIDE AT BASE 10" WALNUT TREE 230' RT. STA. 5537+00 (ELEV. 582.10)



F.A.I. ROUTE 57 SECTION 25-8B EFFINGHAM SOUTHBOUND PAV'T STA. 5510A+00 - STA. 5543A+00

FAI 57 25-8B EFFINGHAM 41 6
CHANNEL CHANGE STA. 5530+55

TIES P.O.C. STA. 5527+25

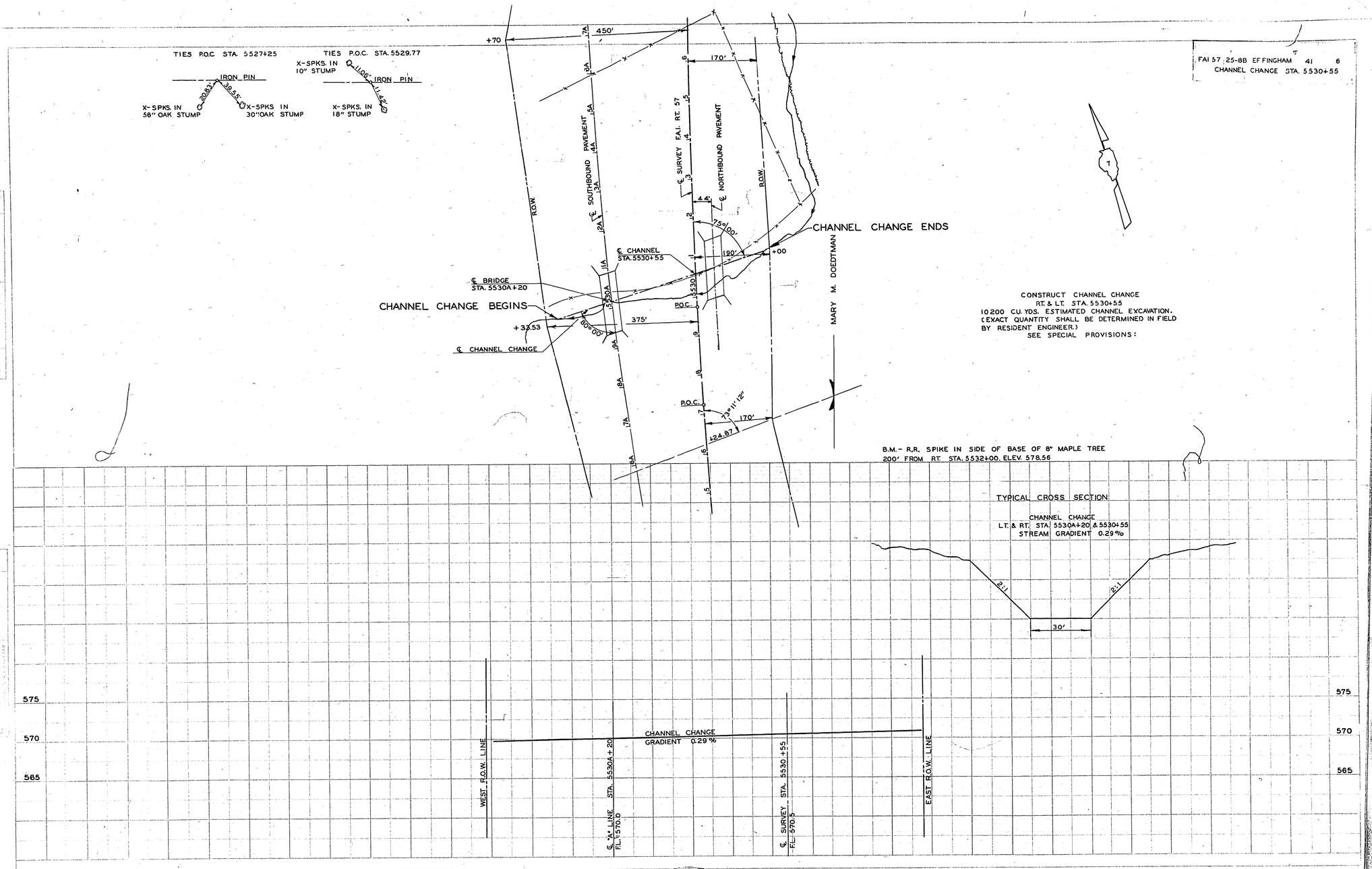
IRON PIN

X-SPKS. IN 58" OAK STUMP — 20.83' — 39.55' — X-SPKS IN 30" OAK STUMP

TIES P.O.C. STA. 5529.77

X-SPKS. IN 10" STUMP — 11.06' — 11.42' — IRON PIN

X-SPKS. IN 18" STUMP



CONSTRUCT CHANNEL CHANGE
RT & LT STA. 5530+55
10200 CU. YDS. ESTIMATED CHANNEL EXCAVATION.
(EXACT QUANTITY SHALL BE DETERMINED IN FIELD BY RESIDENT ENGINEER.)
SEE SPECIAL PROVISIONS:

B.M.- R.R. SPIKE IN SIDE OF BASE OF 8" MAPLE TREE
200' FROM RT. STA. 5532+00. ELEV. 578.56

TYPICAL CROSS SECTION

CHANNEL CHANGE
LT. & RT. STA. 5530A+20 & 5530+55
STREAM GRADIENT 0.29%

FAI ROUTE 57 SEC. 25-8B EFFINGHAM COUNTY CHANNEL CHANGE

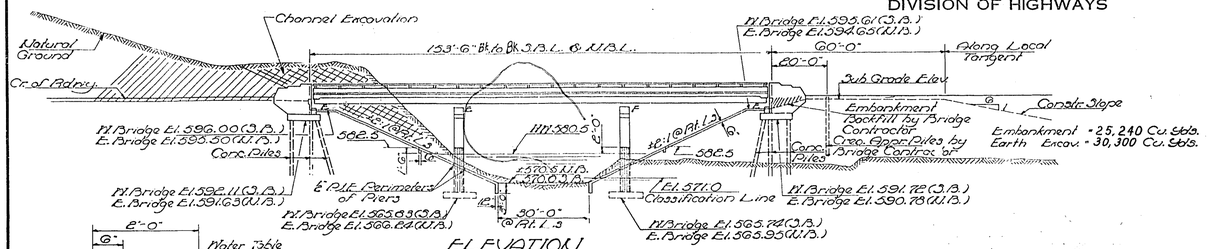
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

B.M.: R.R. Spike N. Side of Base 8" Poplar Tree 200' Ft. Station 5532+00 El. 575.56.

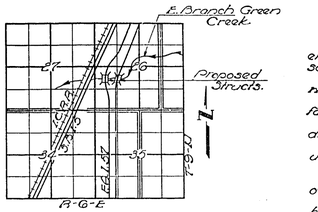
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	7
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT I-57-4(28)167		

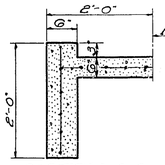
SHEET NO. 1
20 SHEETS



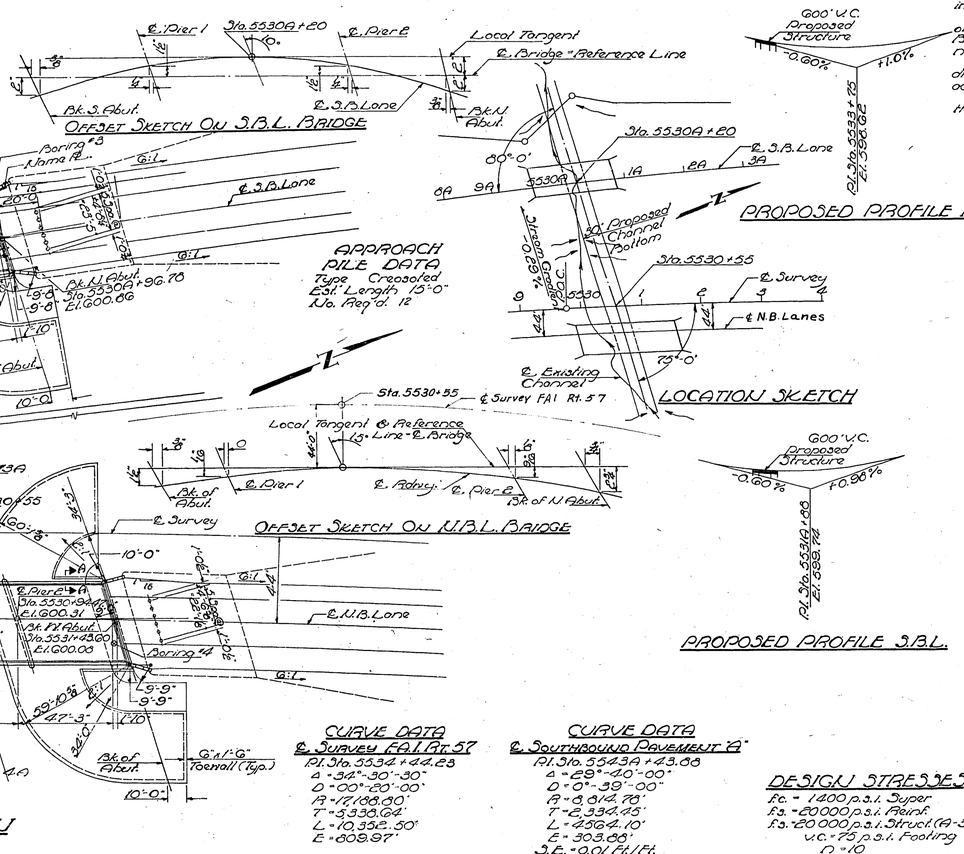
ELEVATION



LOCATION SKETCH



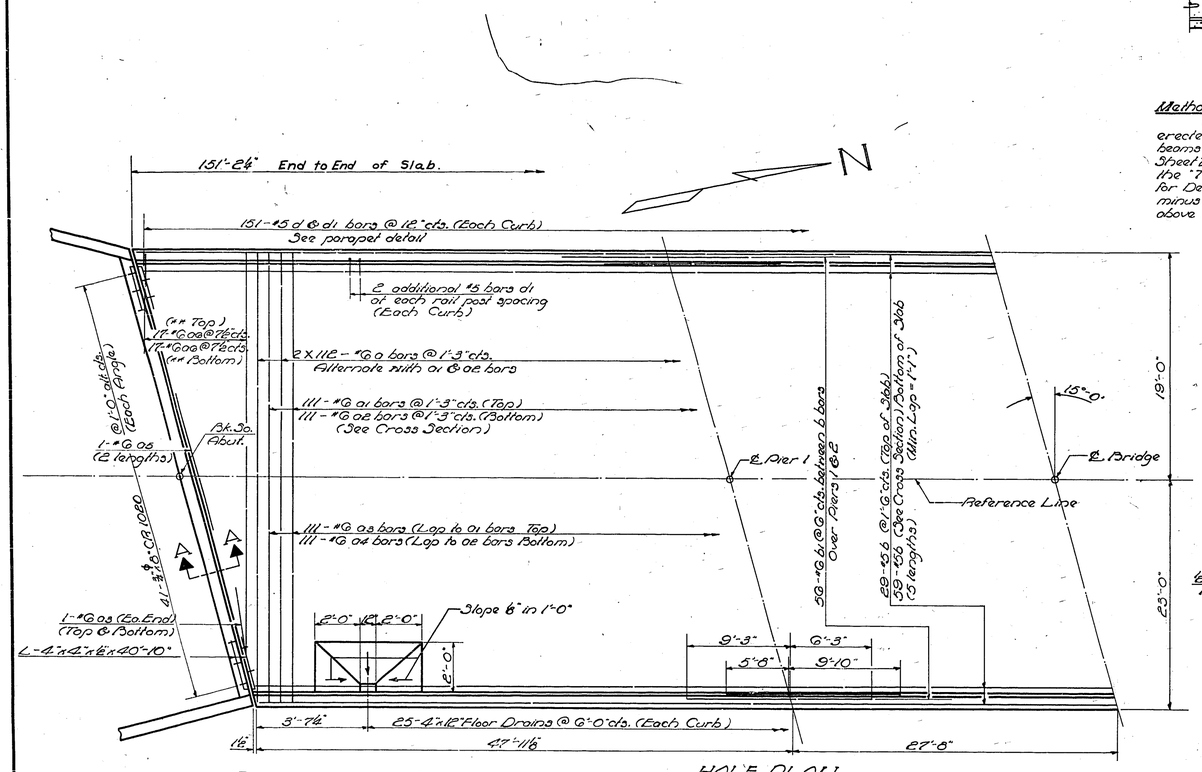
SECTION A-A


℄ Pier 1
Sta. 5530A+20
10°
℄ Pier 2
Local Tangent
℄ Bridge "Reference Line
Bk. S. Abut.
R. S.B. Lane
Bk. N. Abut.
Sta. 5530A+20
80'-0"
R. S.B. Lane
℄ S.B. Lane
Bk. of Abut.
Boring #1A
Boring #3
Name ℄...
Boring #1
Boring #2
Boring #5
Boring #6
Boring #4
Boring #3
Boring #4A
Boring #3A
Bk. of Abut.
Sta. 5529+43.26
El. 601.25
℄ Pier 2
Sta. 5530+42.16
El. 600.92
Bk. N. Abut.
Sta. 5530A+99.78
El. 600.66
Bk. of Abut.
Sta. 5530+99.78
El. 600.66
Bk. S. Abut.
Sta. 5529+43.26
El. 601.25
℄ Pier 1
Sta. 5530+99.78
El. 600.64
Bk. of Abut.
Sta. 5530+99.78
El. 600.93
Bk. of Abut.
Sta. 5530+99.78
El. 600.93
℄ Pier 1
Sta. 5530+99.78
El. 600.64
Bk. of Abut.
Sta. 5530+99.78
El. 600.93
℄ Pier 2
Sta. 5530+94.16
El. 600.31
Bk. N. Abut.
Sta. 5531+43.00
El. 600.00
Name ℄...
Local Tangent
Proposed ℄ Channel
℄ S.B. Lane
℄ N.B. Lane
Local Tangent
Toeroll (Typ.)
Toeroll (Typ.)
Toeroll (Typ.)

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

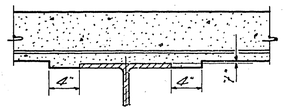
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
20 SHEETS



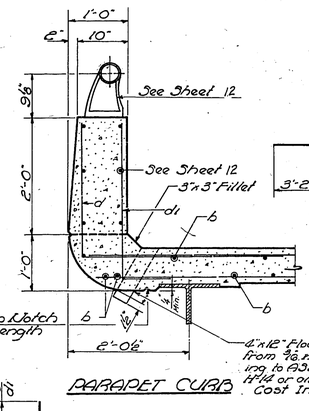
HALF PLAN

** Order bars full length - cut bars to fit skew and use remainder on opposite end of bridge.



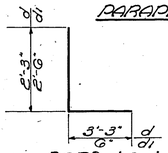
Method of Determining Fillet Heights 7"

After all Structural Steel has been erected elevations of the top flanges of the beams shall be taken at the stations shown on Sheet 23. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheet 23 minus floor thickness equals the fillet heights above top of Beams.



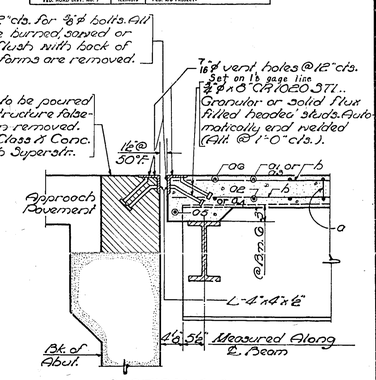
4"x12" Floor Drains - Fabricated from ⅜ welded sheets conforming to A373 Id: B 209 alloy 3003-H14 or alloy 6061-T6. Cost Incidental

PARAPET CURB

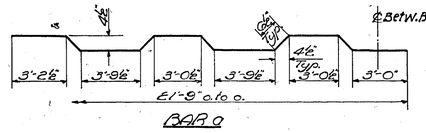


BARS d & d1

* Includes Parapet Reinforcement Shown on Sheet 12



SECTION A-A

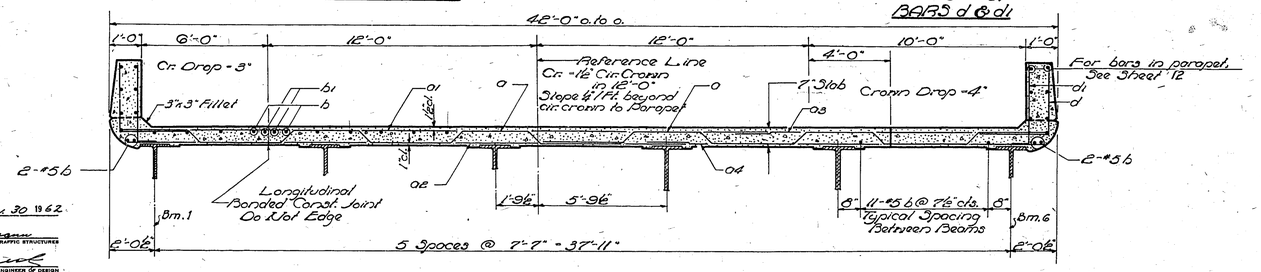


BAR a

* BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	224	#6	22'-7"	
a1	111	#6	29'-0"	
a2	111	#6	25'-0"	
a3	115	#6	14'-0"	
a4	111	#6	17'-0"	
a5	4	#6	20'-6"	
a6	34	#6	36'-0"	
b	440	#5	31'-3"	
b1	112	#6	15'-6"	
be	72	#5	15'-8"	
b3	24	#5	17'-11"	
b4	12	#5	18'-9"	
d	302	#5	5'-0"	L
d1	370	#5	3'-0"	L

Class X Concrete	Cu. Yds.	171.2	
Reinforcement Bars	Lbs.	45510	
Structural Steel	Lbs.	136920	



OVER PIERS

CROSS SECTION
Looking North

TYPICAL

DESIGNED	Emery J. Stickan	
CHECKED	J. F. Otto	
DRAWN	E. J. S. pkl jacobs	
CHECKED	J. F. Otto	

Nov. 30 1962

EXAMINED W. S. Brennan — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED E. J. Stickan — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

SUPERSTRUCTURE
EAST BRIDGE (NO. BOUND)
F.A.I. RT. 57 - SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530+55

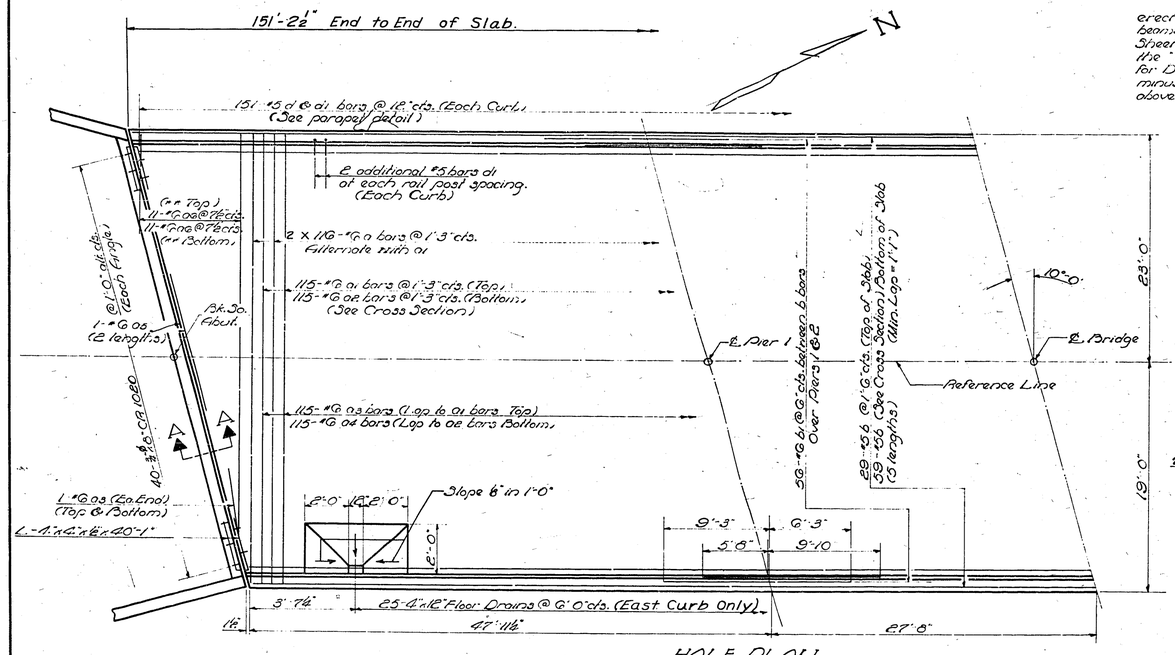
Revised 1/31/63: In CROSS SECTION changed location of longitudinal bonded joint (left side) from 15" left of Reference Line to 12" " "

K+E 186 IMPERIAL

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI 57	25-8B	EFFINGHAM	41	9
FED ROAD DIST NO 7	ILLINOIS	FED AID PROJECT		

SHEET NO 3
20 SHEETS



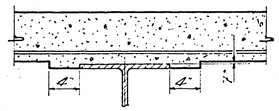
N

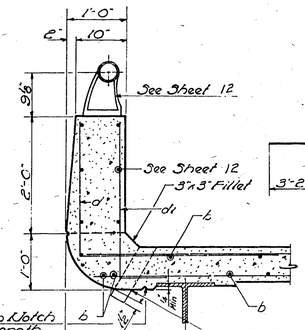
* Order bars full length - cut bars to fit skew and use remainder on opposite end of Bridge.

HALF PLAN

Method of Determining Fillet Heights "f"

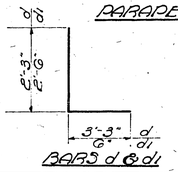
After all Structural Steel has been erected elevations of the top flanges of the beams shall be taken at the stations shown on Sheet 22. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown on Sheet 22 minus fiber thickness equals the fillet heights above top of Beams.





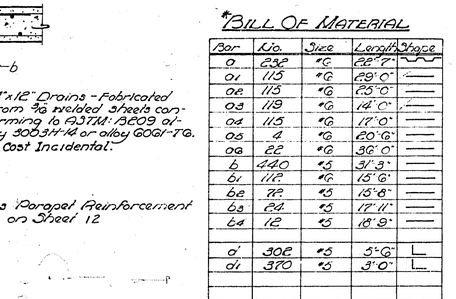
PARAPET CURB

8"x12" Drains - Fabricated from 3/8 welded sheets conforming to ASTM: A709 of Toy 300 stainless or alloy 6061-T6. Cost Incidental.

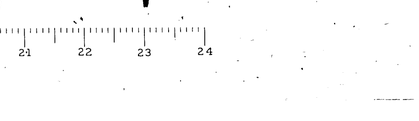


BARS d & d1

* Includes Parapet Reinforcement Shown on Sheet 12



SECTION A-A

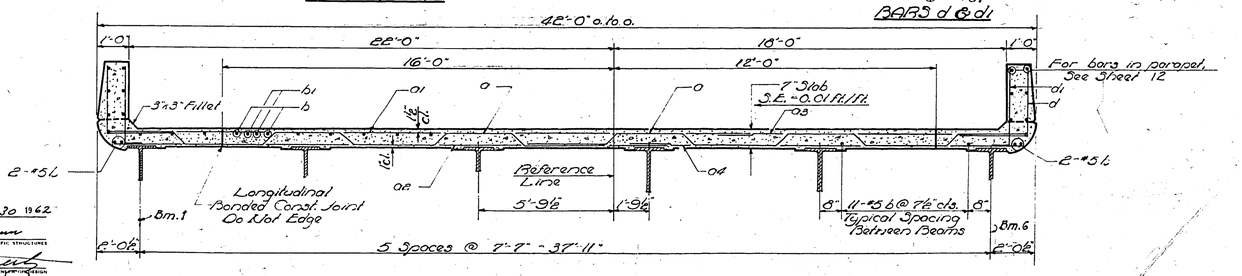


BAR a

*BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	232	#6	22'-7"	
a1	115	#6	29'-0"	
a2	115	#6	25'-0"	
a3	119	#6	14'-0"	
a4	115	#6	17'-0"	
a5	4	#6	20'-6"	
a6	22	#6	36'-0"	
b	440	#5	3'-3"	
b1	112	#6	13'-6"	
b2	72	#5	13'-6"	
b3	24	#5	17'-11"	
b4	12	#5	18'-9"	
d	308	#5	3'-6"	L
d1	370	#5	3'-0"	L

Class A Concrete	Cu. Yds.	171.2
Reinforcement Bars	Lbs.	45640
Structural Steel	Lbs.	78670



OVER PIERS

CROSS SECTION
Looking North

TYPICAL

DESIGNED	Emery J. Stickan	
CHECKED	J. F. Pitts	
DRAWN	E.J.S. 11/1966	
CHECKED	J. F. Pitts	
EXAMINED	W. E. Baumann, Engineer of Bridge and Traffic Structures	Nov. 30 1962
PASSED	C. F. Stucki, Engineer of Design	
APPROVED	V. E. Smith, Chief Highway Engineer	

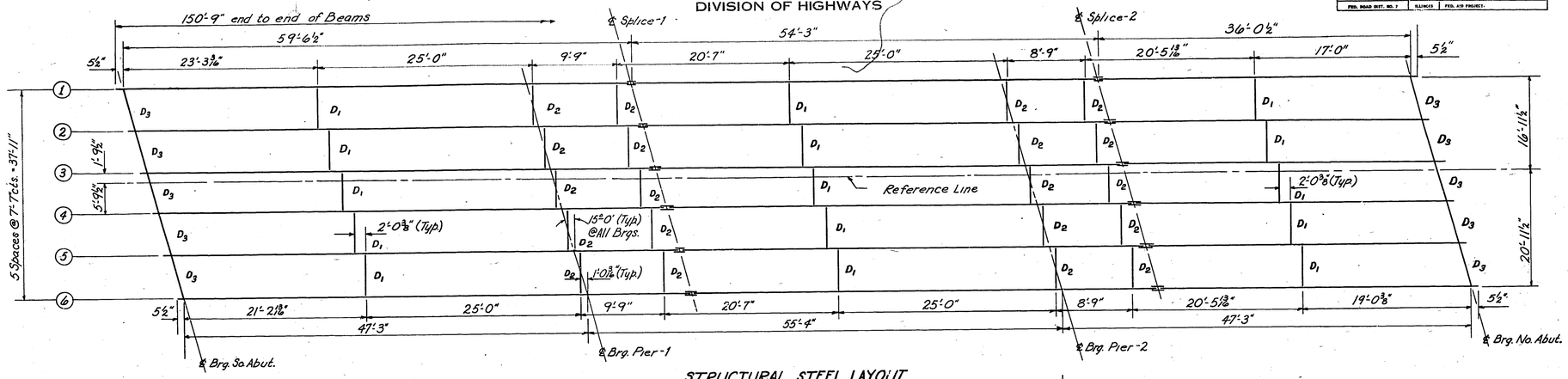
SUPERSTRUCTURE
WEST BRIDGE (NO. BOUND)
FA.I. RT. 57 - SEC. 25-8-B
EFFINGHAM COUNTY
STA. 5530A+20

Revised 1/31/63 - In CROSS SECTION changed location of longitudinal bonded joints - left side from 16'-0" to 16'-0" - right side from 15'-0" to 11'-0" etc.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

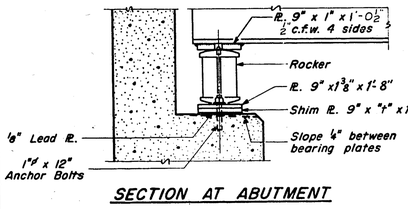
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI 57	25-8B	EFFINGHAM	41	10
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 4
20 SHEETS

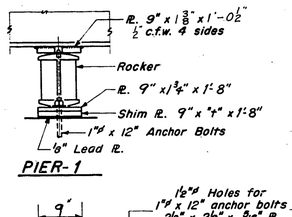


STRUCTURAL STEEL LAYOUT

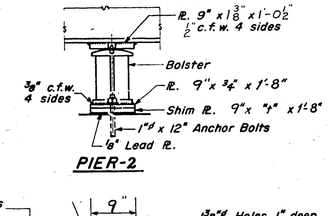
All Beams 33 WF 118 - A-36 STEEL



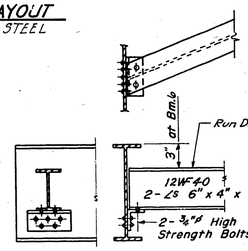
SECTION AT ABUTMENT



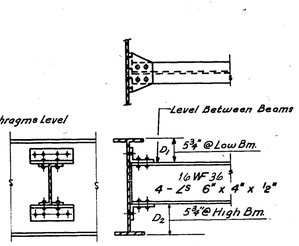
PIER-1



PIER-2



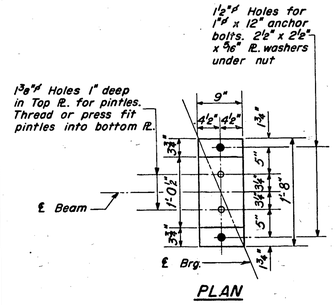
DIAPHRAGM D_3
10-Required



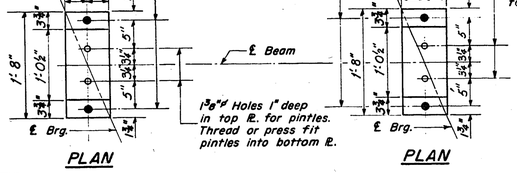
DIAPHRAGM D_1 & D_2
35 Required

ELEVATION TOP OF WF

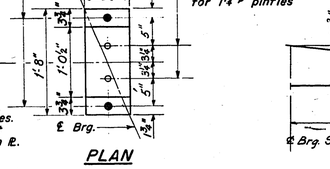
Brm.	℄ Brg.(So.A)	℄ Brg.(P-1)	℄ Spl-1	℄ Brg.(P-2)	℄ Spl-2	℄ Brg.(No.A)
1	600.16	599.83	599.74	599.47	599.41	599.31
2	600.29	599.96	599.87	599.60	599.54	599.44
3	600.36	600.03	599.94	599.67	599.61	599.51
4	600.32	599.99	599.90	599.63	599.57	599.47
5	600.18	599.85	599.76	599.49	599.43	599.33
6	600.01	599.68	599.59	599.32	599.26	599.16



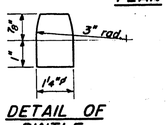
PLAN



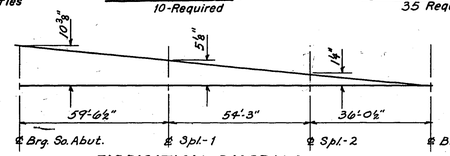
PLAN



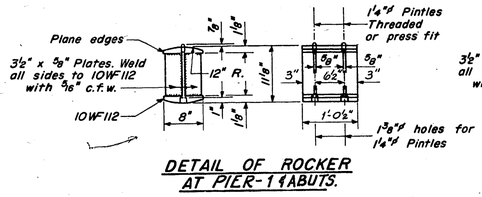
PLAN



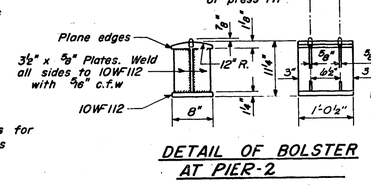
DETAIL OF PINTLE



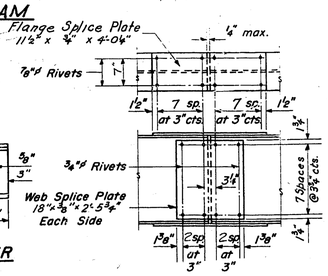
FABRICATION DIAGRAM



DETAIL OF ROCKER AT PIER-1 & ABUTS.



DETAIL OF BOLSTER AT PIER-2



DETAIL OF SPLICE

NOTE: No Shim ℞ For Bms. 1, 2, 5 & 6
"t" = ⅜" for Shim ℞ Brm. 3 @ All Bearings
"t" = ¼" for Shim ℞ Brm 4 @ All Bearings

DESIGNED	Emery J. Sticker	
CHECKED	J. F. Pitts	
DRAWN	E. J. S. W. A. Sausaman Jr.	
CHECKED	J. F. Pitts	

Nov. 30 1962

EXAMINED W. E. Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

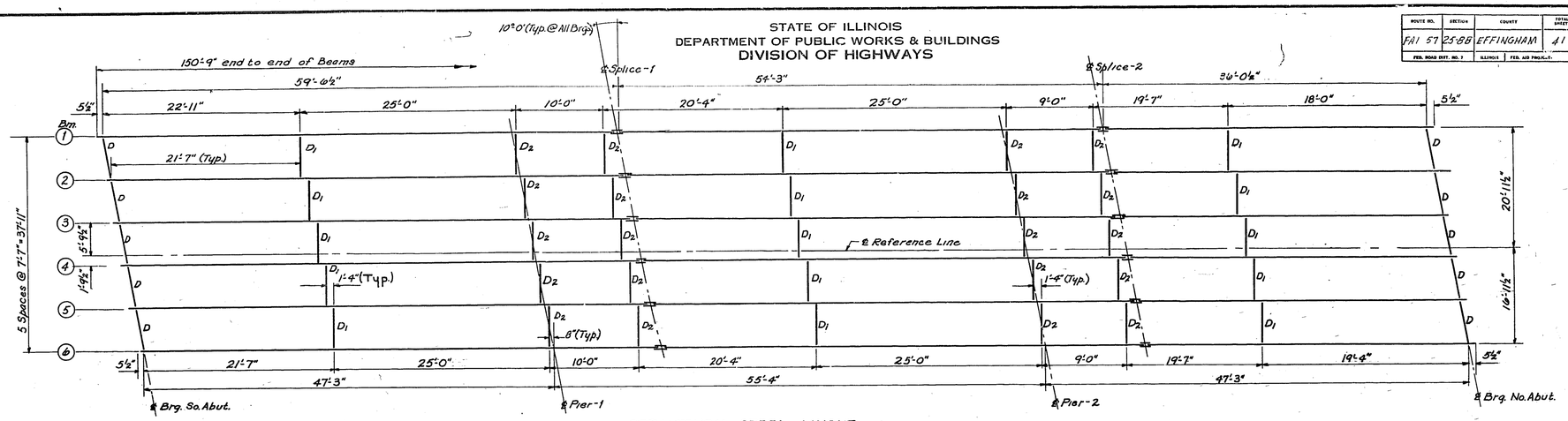
EAST BRIDGE (N.B. LANE 3)
STRUCTURAL STEEL LAYOUT
F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530+55.00

I-2-C 2-20-62

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

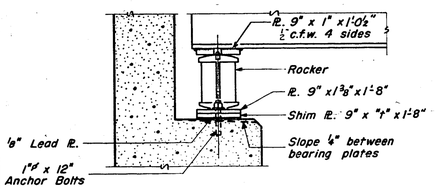
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJ.-T.		

SHEET NO. 5
20 SHEETS

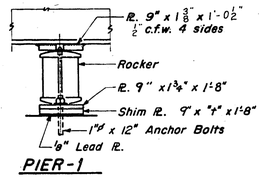


STRUCTURAL STEEL LAYOUT

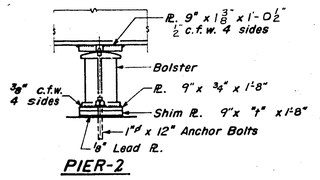
All Beams 33WF118-A36 STEEL



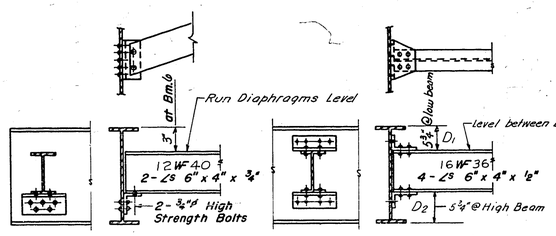
SECTION AT ABUTMENT



PIER-1

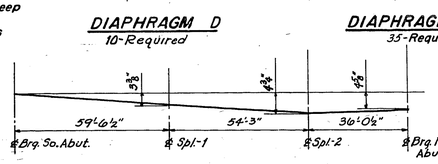


PIER-2



DIAPHRAGM D
10-Required

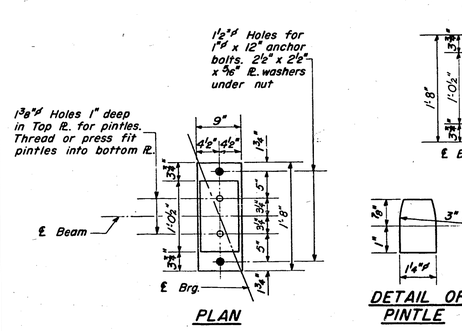
DIAPHRAGM D1 & D2
35-Required



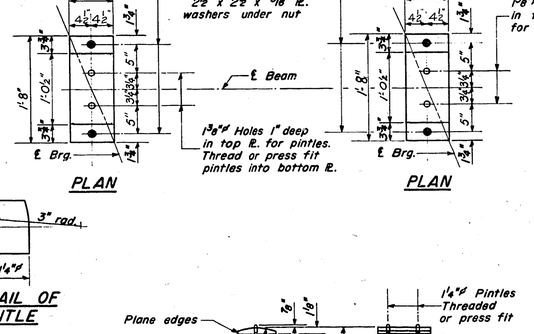
FABRICATION DIAGRAM

ELEVATION TOP OF WF

Beam	℄ Brg (So. A)	℄ Brg (P-1)	℄ Spl-1	℄ Brg (P-2)	℄ Spl-2	℄ Brg (N.A)
1	600.89	600.67	600.61	600.51	600.49	600.50
2	600.81	600.59	600.53	600.43	600.41	600.42
3	600.73	600.51	600.45	600.35	600.33	600.34
4	600.65	600.43	600.37	600.27	600.25	600.26
5	600.57	600.35	600.29	600.19	600.17	600.18
6	600.49	600.27	600.21	600.11	600.09	600.10



PLAN



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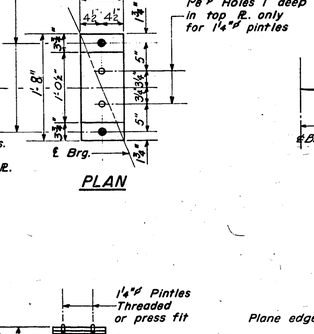
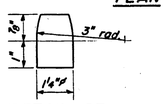
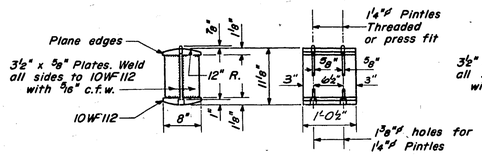


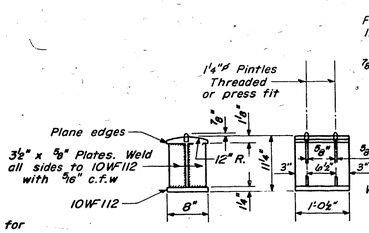
PLAN



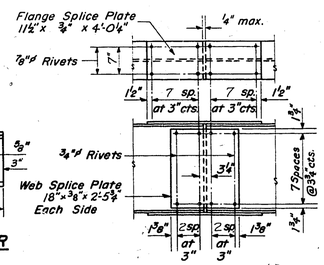
DETAIL OF PINTLE



DETAIL OF ROCKER AT PIER-1 & ABUTS.



DETAIL OF BOLSTER AT PIER-2



DETAIL OF SPLICE

DESIGNED Emery J. Stiehm
CHECKED J. F. Potts — W.R.D.
DRAWN E.J.S. — W. A. Sausaman Jr.
CHECKED J. F. Potts

Nov. 30 1962
EXAMINED W. E. Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED C. A. Shutt — ENGINEER OF DESIGN
APPROVED V. E. Scott — CHIEF HIGHWAY ENGINEER

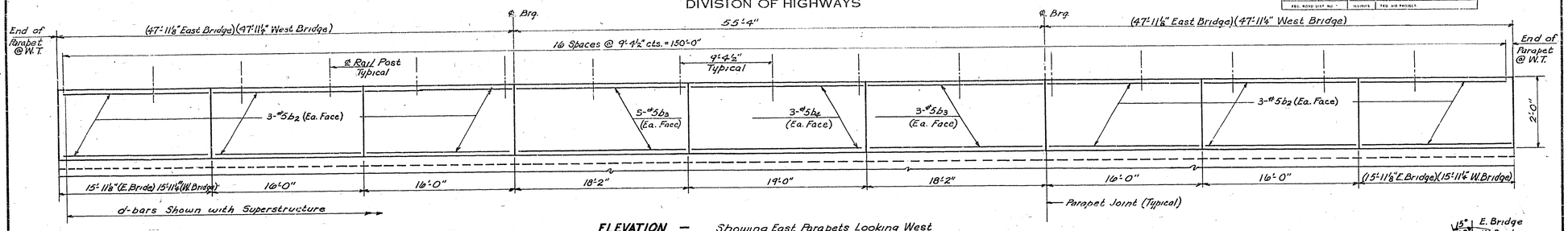
I-2 2-20-62

WEST BRIDGE (S.B. LANES)
STRUCTURAL STEEL LAYOUT
F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530A + 20

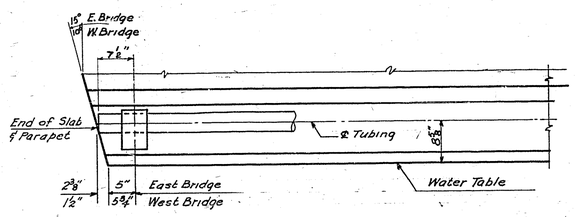
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

POJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	25-8B	EFFINGHAM	41	12
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

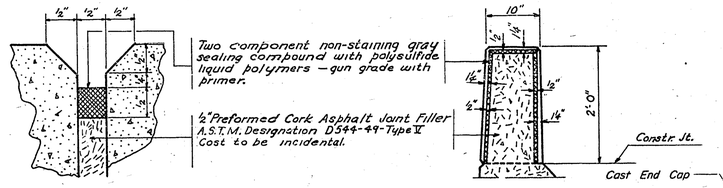
SHEET NO. 6
20 SHEETS



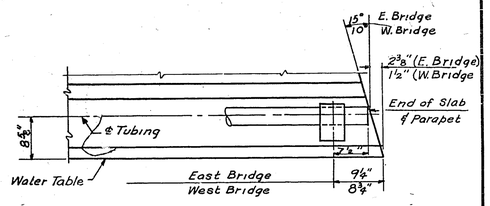
ELEVATION — Showing East Parapets Looking West
West Parapets Similar When Rotated 180°



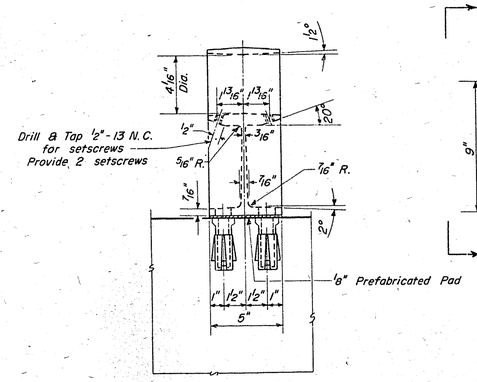
S.E. & N.W. CORNER DETAILS



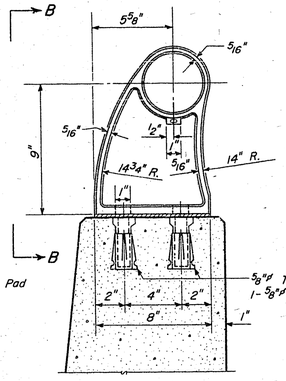
PARAPET JOINT DETAIL



S.W. & N.E. CORNER DETAILS

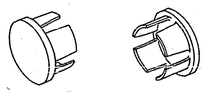


VIEW B-B

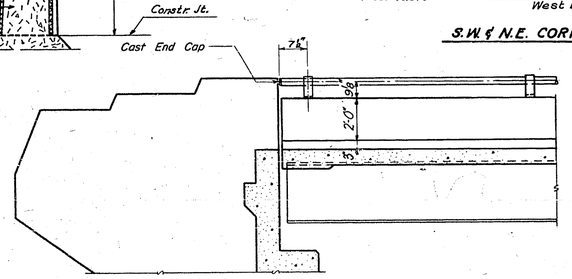


SECTION A-A

RAIL POST DETAILS



CAST END CAP
DRIVE FIT TYPE
4 - Required (Each Bridge)
Incidental to item "Aluminum Handrail"

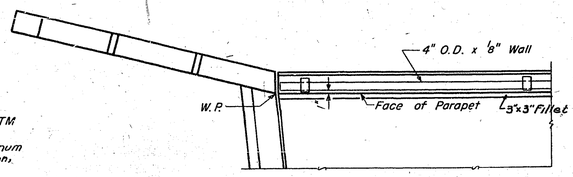


ELEVATION - END POST

(2 BRIDGES)
BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Handrail	Lin. Ft.	605

NOTE: See Sheets 8 or 9 for Cross Section of Parapet.



PLAN - END POST

TYPE D
ALUMINUM HANDRAIL

NOTES
All Posts shall be placed normal to parapet
All Posts shall be of Aluminum conforming to ASTM Specification B-108 alloy 56-T05-T6.
All Rail Tubing shall be of Aluminum conforming to ASTM Specification B-235 alloy 6061-T6
The contract unit price bid per lineal foot for aluminum handrail shall include the furnishing, fabrication, transportation and erection of all material.
Rail Tubing may be cut to random lengths.
For material composition of Prefabricated Pad, See Art. 54.9 (f), (Bearings and Anchorage), of the Std. Specs.
Set Screws shall be of Aluminum conforming to ASTM Specification B-211 alloy 2024-T4

DESIGNED	Emery J. Stickan
CHECKED	J. F. Cotte
E. S.	Staff R.D. P.B.
DRAWN	W. A. Sausaman
CHECKED	J. F. Cotte

Nov. 30 1962
EXAMINED W. E. Baumann, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED C. A. Shurtz, ENGINEER OF DESIGN
APPROVED V. E. Erickoff, CHIEF HIGHWAY ENGINEER

PARAPET & HANDRAIL
F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA 5530+55
STA 5530A+20

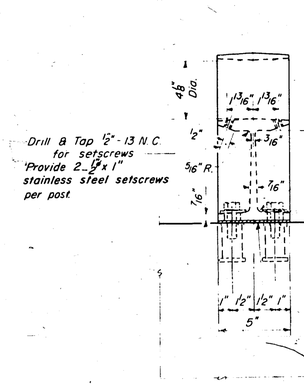
R-10 Drawn 2-16-60

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

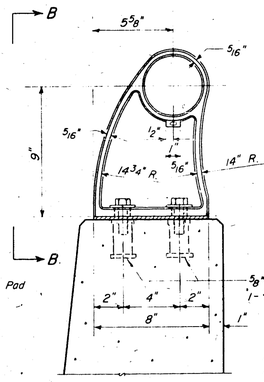
F.A.I. 57	25-8B	EFFINGHAM	41	12A

SHEET NO 6A
20 SHEETS

NOTE: SEE SHEET 6 FOR ELEVATION.



VIEW B-B



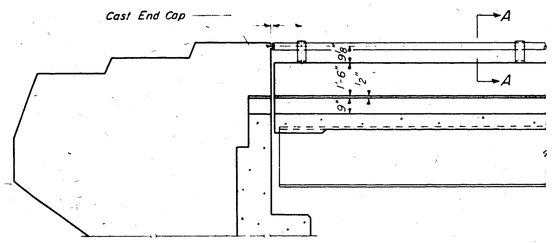
SECTION A-A

1/8" Prefabricated Pad

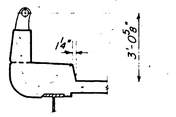
5/8" ϕ Threaded Inserts. Provide 1- Stainless Steel Washer and 1- 5/8" ϕ x 2" Stainless Steel Bolt with each Insert
4 - Required each post
Inserts shall be cast in place.

RAIL POST DETAILS

CAST END CAP
DRIVE FIT TYPE
4 Required
Galvanize to A.S.T.M. A-153.
Incidental to item "Metal Handrail".



ELEVATION - END POST



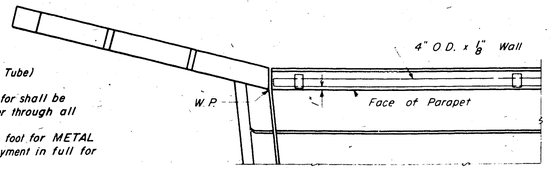
SEC. THRU CURB

BILL OF MATERIAL

Item	Unit	Quantity
METAL HANDRAIL	Lin. Ft.	605

NOTES

All Posts shall be placed normal to parapet.
All Posts shall be malleable cast iron conforming to A.S.T.M. A-47, Grade 35018, galvanized to A.S.T.M. A-153.
All Rail Tubing shall conform to A.S.T.M. A-53, Grade B, (Pipe or Tube) galvanized to A.S.T.M. A-120.
Metal handrail shall be measured in lineal feet. The length paid for shall be the overall length along the top longitudinal railing member through all posts and gaps.
Metal handrail will be paid for at the contract unit price per lineal foot for METAL HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.
If any of the galvanizing coat is damaged or removed during erection, the affected area shall be painted with one coat of zinc paint in accordance with Military Specification MIL-P-26915 Type I, air-dry cure.
Rail Tubing may be cut to random lengths.
For material composition of Prefabricated Pad, see Art. 549 (f), (Bearing and Anchorage), of the Standard Specifications.
Galvanized railing shall not be painted.



PLAN - END POST

TYPE E
METAL HANDRAIL

F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530+55
STA. 5530A+20

DESIGNED	
CHECKED	
DRAWN Wm. M. Best	
CHECKED	

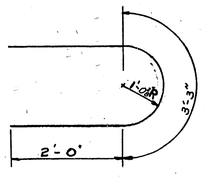
19
EXAMINED
PASSED
APPROVED

R-14 Drawn 11-2-62

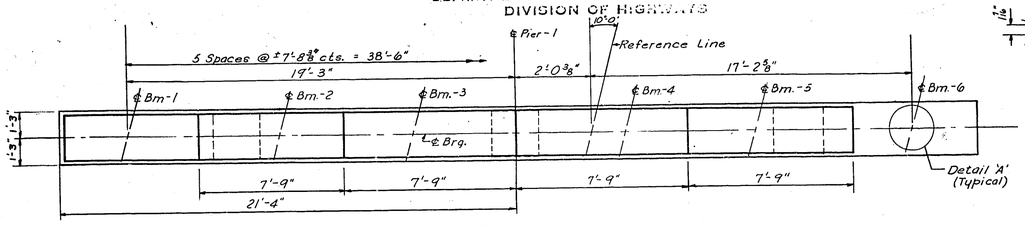
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

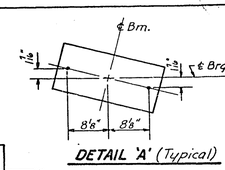
SHEET NO. 7
20 SHEETS



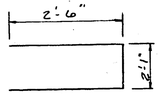
BAR - X



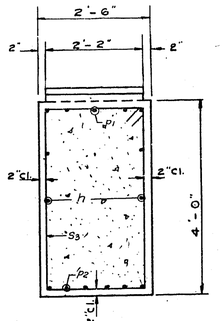
TOP PLAN
LOOKING NORTH



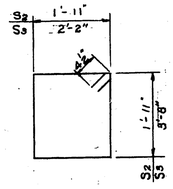
DETAIL 'A' (Typical)



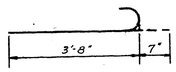
BAR - U5



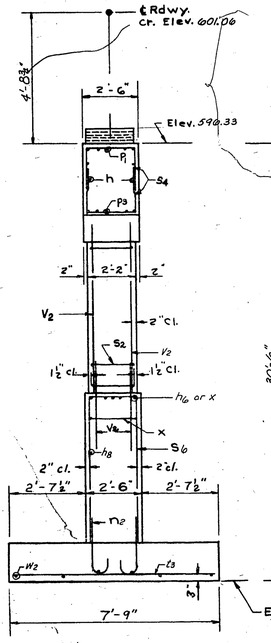
SECTION A-A



BARS - S2 & S3

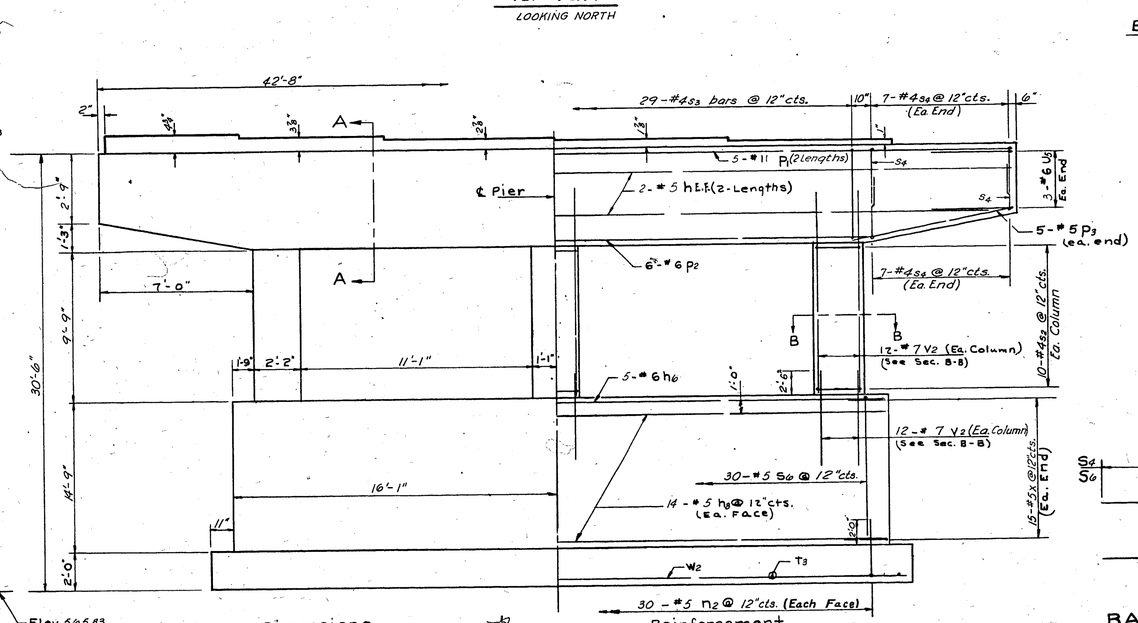


BAR - n2

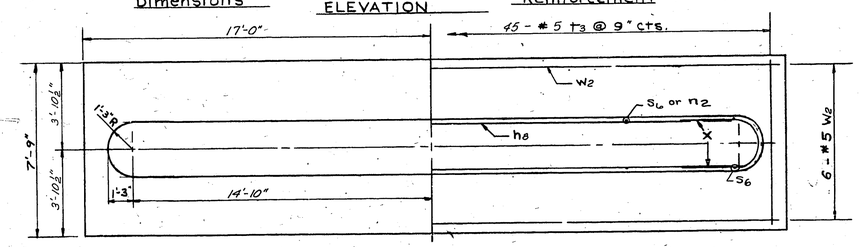


END VIEW

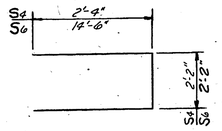
Max. Bearing Pressure on Footing = 4,000 #/0'



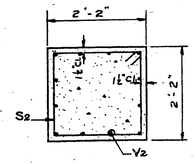
Dimensions — ELEVATION — Reinforcement



FOOTING PLAN



BAR - S4 & S6



SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	8	#5	22'-3"	—
h6	5	#6	29'-4"	—
h8	28	#5	28'-9"	—
n2	60	#5	4'-3"	⊃
P1	10	#11	23'-0"	—
P2	6	#6	28'-6"	—
P3	10	#5	8'-3"	—
S2	30	#4	8'-5"	□
S3	29	#4	12'-5"	□
S4	28	#4	6'-10"	□
S6	30	#5	31'-2"	□
t3	45	#5	7'-6"	—
U5	6	#6	7'-1"	□
V2	12	#7	12'-9"	—
W2	6	#5	33'-9"	—
X	30	#5	7'-3"	⊃

Item	Unit	Quan
cl. X Concrete	cu. Yd.	83.5
Reinforcing Bars	Lb.	7320

PIER - 1 W. BRIDGE
F.A.I. - RT. 57 SEC. 25-8B
EFFINGHAM COUNTY

STA. 5530A + 20 S.B.

DESIGNED	Emery J. Stuckan
CHECKED	J. F. Pitts
DETAILED	E. S. & B. H. R. B.
CHECKED	J. F. Pitts

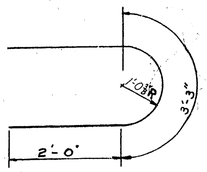
Nov. 30 1962

EXAMINED	W. E. Baumann ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED	C. L. Shutt ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
APPROVED	V. E. Sollo CHIEF HIGHWAY ENGINEER

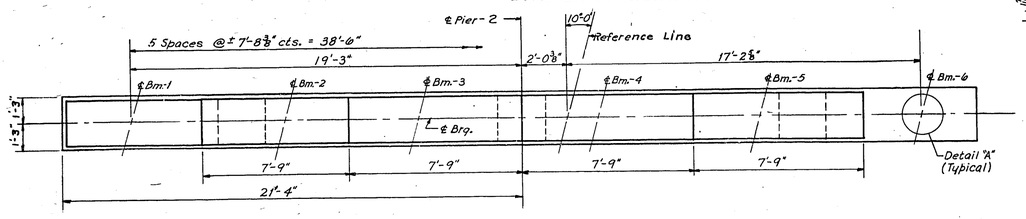
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	14
FED. ROAD DIST. No. 7	ILLINOIS	FED. AID PROJECT.		

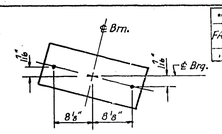
SHEET NO. 8
20 SHEETS



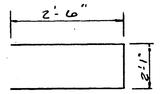
BAR - X



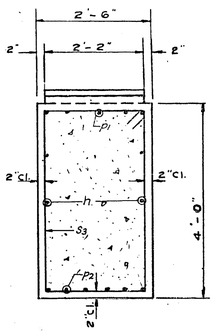
TOP PLAN
LOOKING NORTH



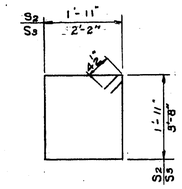
DETAIL- A (Typical)



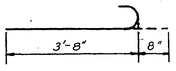
BAR - U5



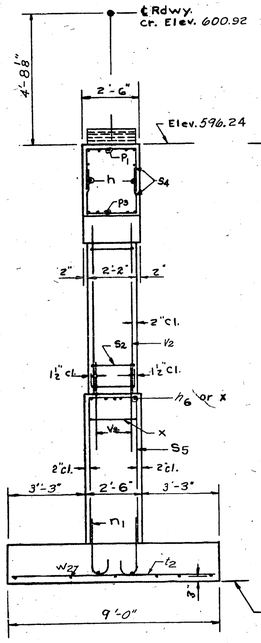
SECTION A-A



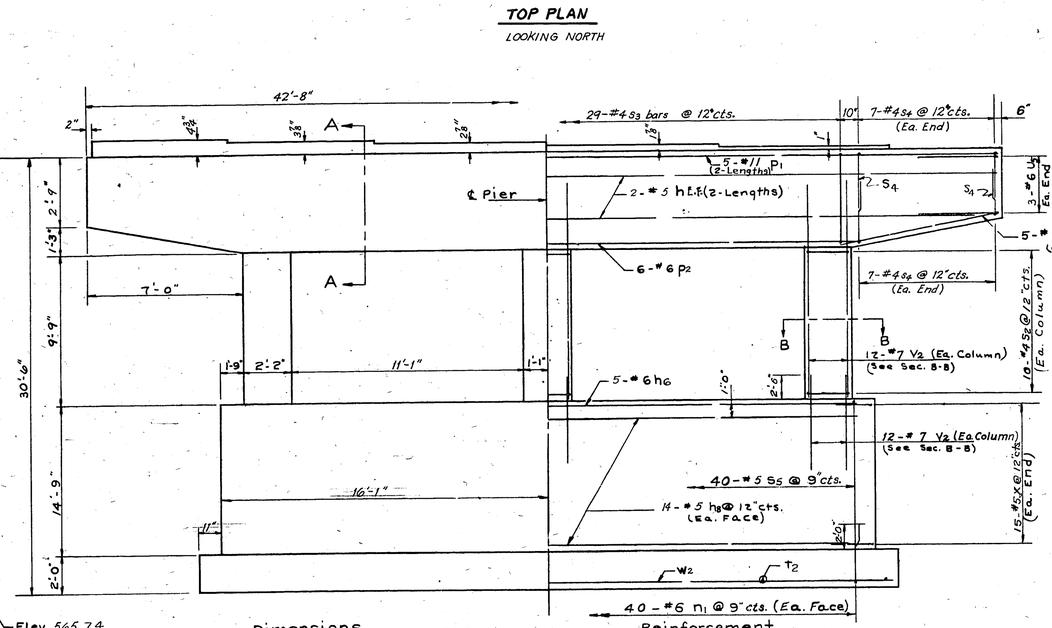
BARS - S2 & S3



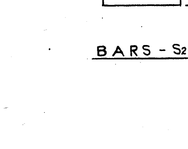
BAR - n1



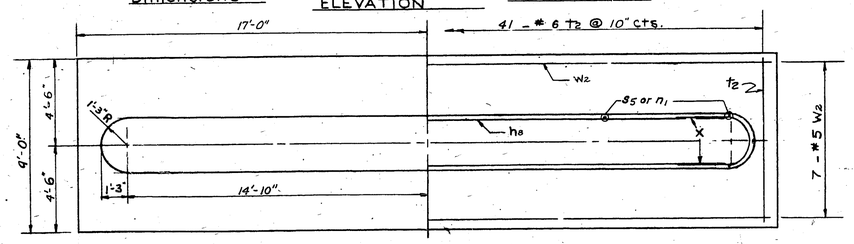
END VIEW
Max. Bearing Pressure on Footing = 5,000 #/



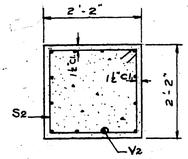
Dimensions ELEVATION Reinforcement



BAR - S4 & S5



FOOTING PLAN



SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	8	#5	22'-3"	—
h6	5	#6	29'-4"	—
h8	28	#5	28'-9"	—
n1	80	#6	4'-4"	⊃
P1	10	#11	23'-0"	—
P2	6	#6	28'-6"	—
P3	10	#5	8'-3"	—
S2	30	#4	8'-5"	□
S3	29	#4	12'-5"	□
S4	28	#4	6'-10"	□
S5	40	#6	31'-2"	□
t2	41	#6	8'-9"	—
U5	6	#6	7'-1"	□
V2	72	#7	12'-9"	—
W2	7	#5	33'-9"	—
X	30	#5	7'-3"	⊃

Item	Unit	Quan.
Cl. X Concrete	cu. Yd.	66.7
Reinforcing Bars	Lb.	8700

DESIGNED	Emery J. Stichan	
CHECKED	J. F. Pitts	
COMPUTED	E. S.	H. R. D.
CHECKED	J. F. Pitts	

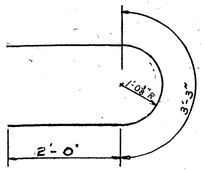
Nov. 30 1962
EXAMINED W. E. Bauman, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED E. T. Slonneger, ENGINEER OF BRIDGES
APPROVED V. E. Schaeff, CHIEF HIGHWAY ENGINEER

PIER - 2 W. BRIDGE
F.A.I. - RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530A + 20 S.B.

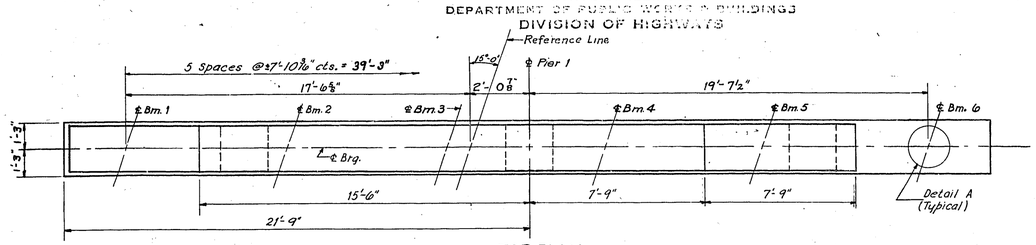
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

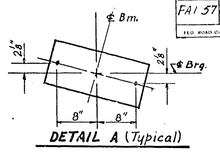
SHEET NO. 9
20 SHEETS



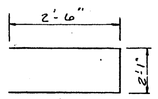
BAR - X



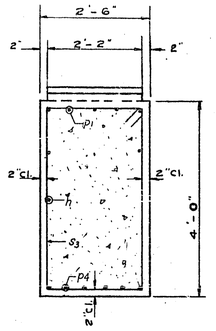
TOP PLAN
LOOKING NORTH



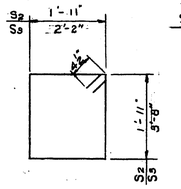
DETAIL A (Typical)



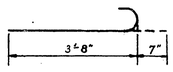
BAR - U5



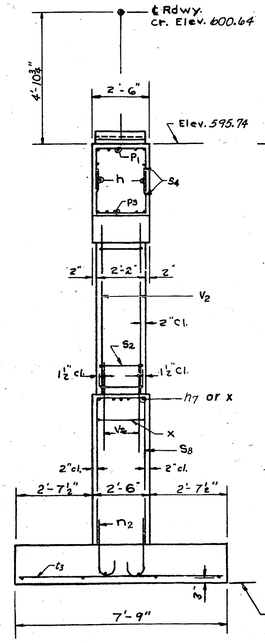
SECTION A-A



BARS - S2 & S3

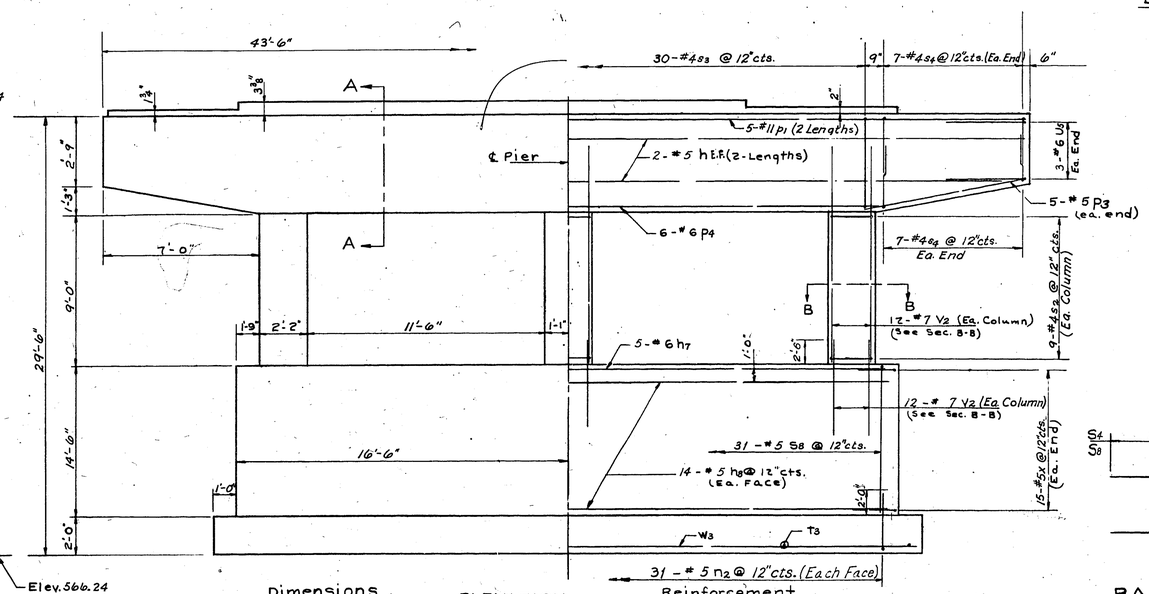


BAR - n2

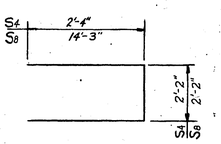


END VIEW

Max. bearing Pressure on Footing = 4,000 #/□



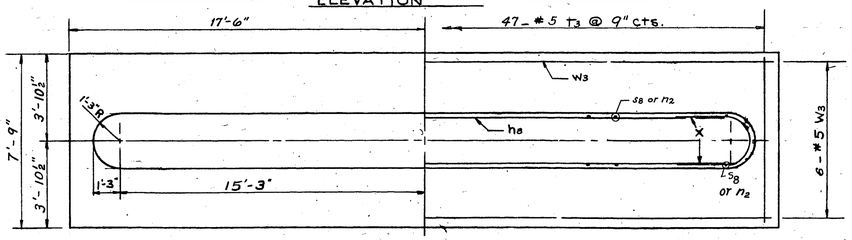
ELEVATION



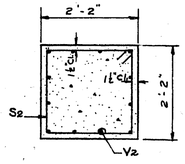
BAR - S4 & S8

Dimensions

Reinforcement



FOOTING PLAN



SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	8	#5	22'-3"	—
h7	5	#6	30'-3"	—
h8	28	#5	28'-9"	—
n2	62	#5	4'-3"	⊃
P1	10	#11	23'-0"	—
P3	10	#5	8'-3"	—
P4	6	#6	29'-6"	—
S2	27	#4	8'-5"	⊐
S3	30	#4	12'-5"	⊐
S4	28	#4	6'-10"	⊐
S8	31	#5	30'-8"	⊐
t3	47	#5	7'-6"	—
U5	6	#6	7'-1"	⊐
V2	72	#7	12'-9"	—
W3	6	#5	34'-9"	—
X	30	#5	7'-3"	⊃

Item	Unit	Quan
	cu.yd.	
Cl. X Concrete	cu.yd.	81.6
Reinforcing Bars	L.b.	7,380

PIER -1 E. BRIDGE
F.A.I. - RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530 + 55 N.B.

DESIGNED	Emery J. Stuhan
CHECKED	J. F. Otto
DRAWN	E. S.
CHECKED	J. F. Otto

Nov. 30 1962

EXAMINED M. E. Baumann
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

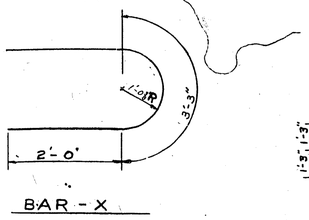
PASSED E. F. Sherman
ENGINEER OF BRIDGES

APPROVED V. E. Hoffman
CHIEF HIGHWAY ENGINEER

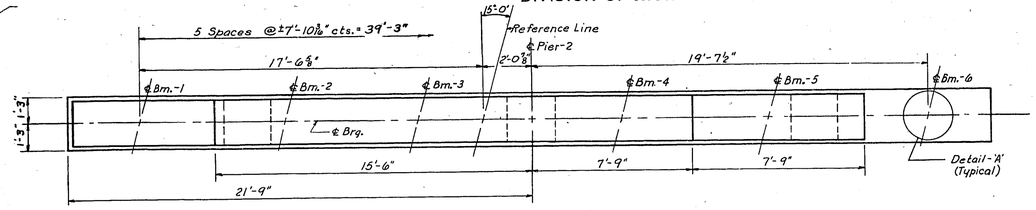
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	16
FED. HIGHWAY DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

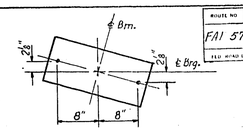
SHEET NO. 10
20 SHEETS



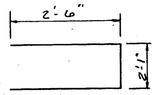
BAR - X



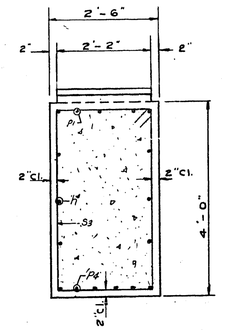
TOP PLAN
LOOKING NORTH



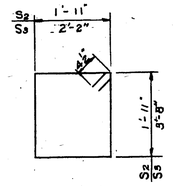
DETAIL-'A' (Typical)



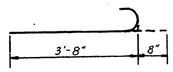
BAR - U5



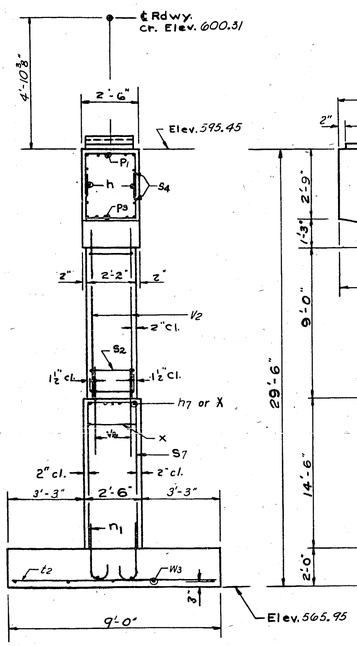
SECTION A-A



BARS - S2 & S3

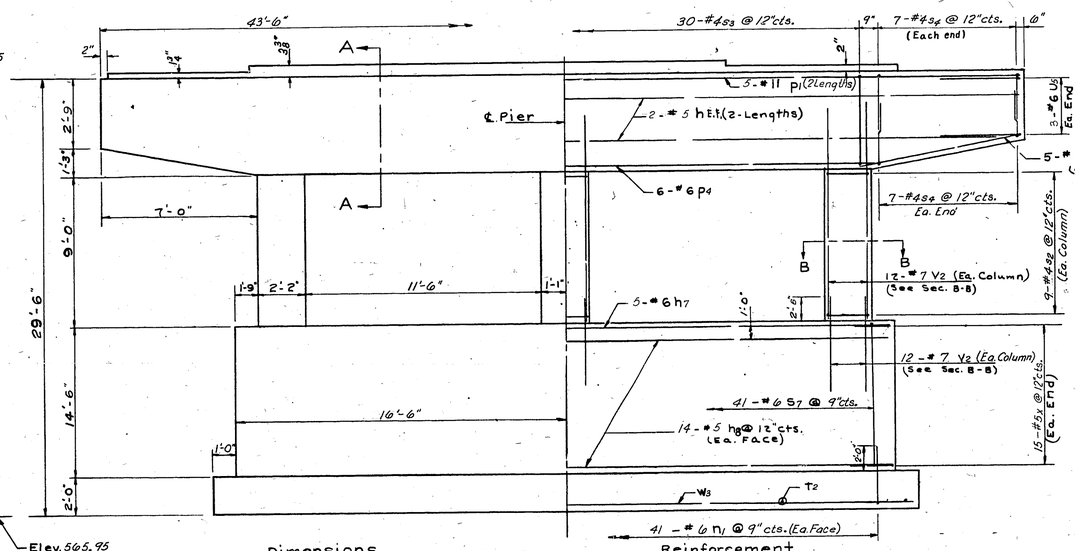


BAR - n1

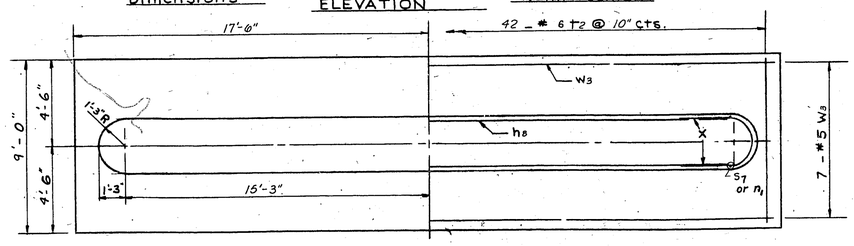


END VIEW

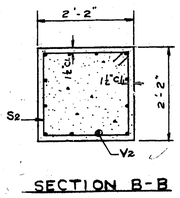
Max. Bearing Pressure on Footing = 5,000 #/ft²



Dimensions — ELEVATION — Reinforcement



FOOTING PLAN



BAR - S4 & S7

SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	8	#5	22'-3"	—
h7	5	#6	30'-3"	—
h8	28	#5	28'-9"	—
n1	82	#6	4'-4"	⊃
P1	10	#11	23'-0"	—
P3	10	#5	8'-3"	—
P4	6	#6	29'-6"	—
S2	27	#4	8'-5"	□
S3	30	#4	12'-5"	□
S4	28	#4	6'-10"	□
S7	41	#6	30'-8"	⊐
t2	42	#6	8'-9"	—
U5	6	#6	7'-1"	⊐
V2	72	#7	12'-9"	—
W3	7	#5	34'-9"	—
X	30	#5	7'-3"	⊃

Item	Unit	Quan
Cl. X Concrete	Cu. Yd.	87.6
Reinforcing Bars	Lb.	6,750

PIER - 2 E. BRIDGE
F.A.I. - RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530 + 55 N.B.

DESIGNED	Emery J. Stichan	
CHECKED	J. F. Otte	
DRAWN	E. S.	W. R. Deason RGB
CHECKED	J. F. Otte	

Nov. 30 1962

EXAMINED W. E. Bauman
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

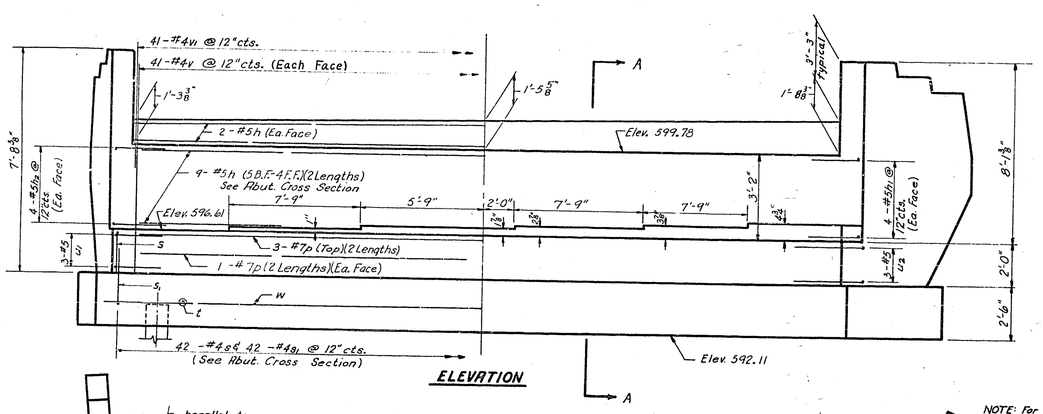
PASSED C. H. Scholz
ENGINEER OF DESIGN

APPROVED J. E. Doyle
CHIEF HIGHWAY ENGINEER

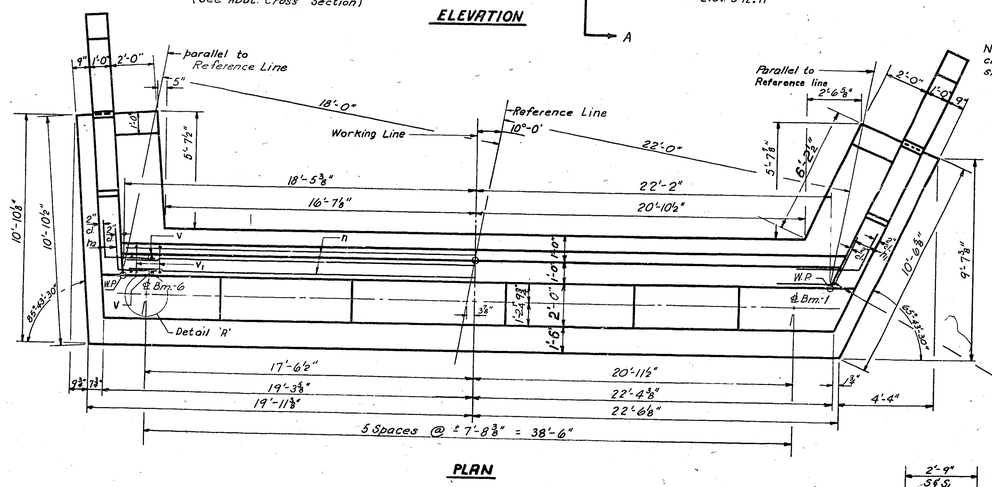
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	17
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 11
20 SHEETS

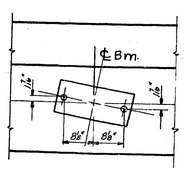


ELEVATION

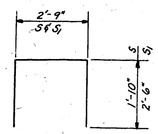


PLAN

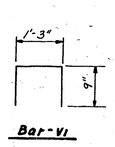
NOTE: For details of end post and cross section of abutment, see sheet - 21 .



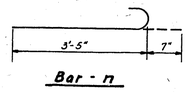
Detail 'A'
(Typical)



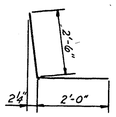
Bars - s & s1



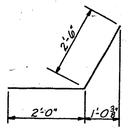
Bar - V1



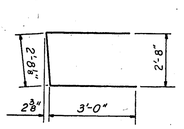
Bar - n



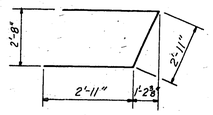
Bar - h2



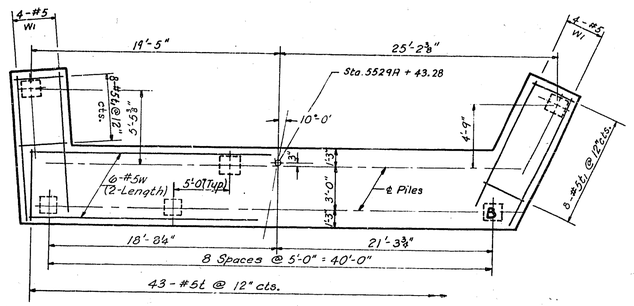
Bar - h1



Bar - U1



Bar - U2



Pile Layout & Footing Reinforcement

B denotes 2:12 batter for front row piles,

PILE DATA

Type - Concrete
Capacity - 25 Tons
Estimated Length - 25'-0"
No. Req'd - 11

* BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h	26	#5	22'-3"	
	h1	8	#5	4'-6"	
	h2	8	#5	4'-6"	
**	n	36	#5	4'-0"	
	p	10	#7	23'-0"	
	s	42	#4	6'-5"	
	s1	42	#4	7'-9"	
	t	43	#5	5'-3"	
	t1	16	#5	3'-6"	
	u1	3	#5	8'-8"	
	u2	3	#5	8'-9"	
	V	82	#4	6'-0"	
	V1	41	#4	2'-9"	
	W	12	#5	23'-0"	
	W1	8	#5	10'-0"	

Item	Unit	Quan.
Cl. X Concrete	Cu. Yds.	49.1
Reinf. Bars	lbs.	2820
Concrete Piles	Lin. Ft.	275

** Placement shown on Sheet #21.

* Bill of material includes reinforcement and class X concrete for end posts. See sheet - 21 .

DESIGNED	Emery J. Stickan
CHECKED	E. F. Pitts
DRAWN	E. Stickan Deason
CHECKED	E. F. Pitts

Nov. 30 1962

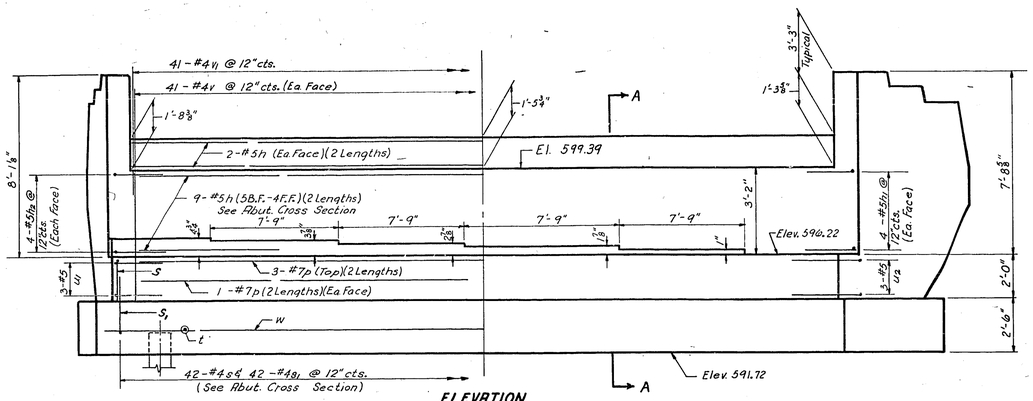
EXAMINED W. E. Baumann, ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED E. F. Pitts, ENGINEER OF ROADS
APPROVED J. E. Bell, CHIEF HIGHWAY ENGINEER

WEST BRIDGE - SO. ABUTMENT
F.A.I. - RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530A + 20 (S.B.)

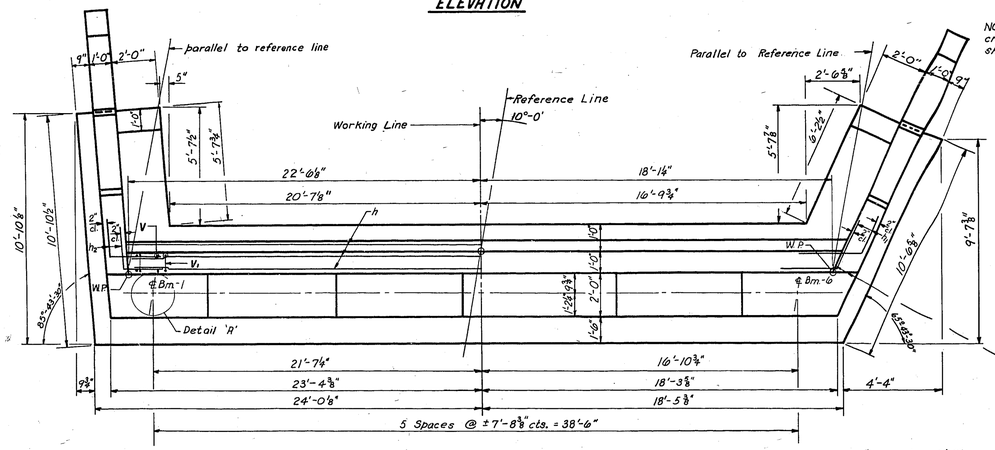
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	18
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 12
20 SHEETS

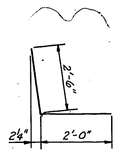


ELEVATION

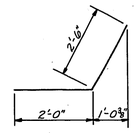


PLAN

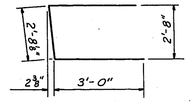
NOTE: For details of end post and cross section of abutment, see sheet 21.



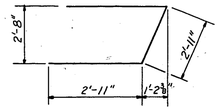
Bar - h2



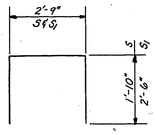
Bar - h1



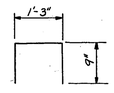
Bar - u1



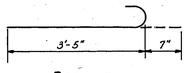
Bar - u2



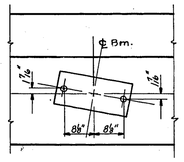
Bars - s & s1



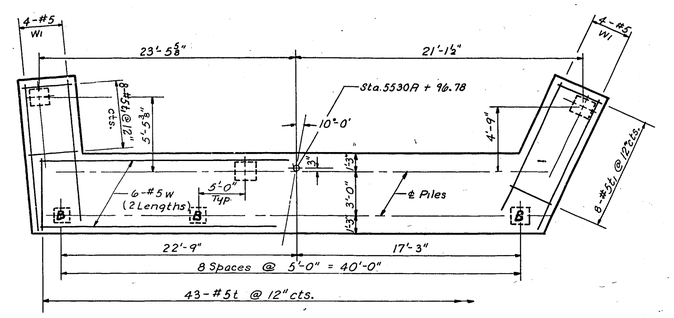
Bar - v1



Bar - n



Detail 'A'
(Typical)



Pile Layout & Footing Reinforcement

B denotes 2:12 batter for front row piles.

PILE DATA

Type - Concrete
Capacity - 25 Tons
Estimated Length - 50'-0"
No. Req'd - 11 including 1 test pile

* **BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h	26	#5	22'-3"	—
h1	8	#5	4'-6"	⌐
h2	8	#5	4'-6"	⌐
** n	36	#5	4'-0"	⊃
p	10	#7	23'-0"	—
s	42	#4	6'-5"	⊏⊐
s1	42	#4	7'-9"	⊏⊐
t	43	#5	5'-3"	—
t1	16	#5	3'-6"	—
u1	3	#5	8'-8"	⊏⊐
u2	3	#5	8'-9"	⊏⊐
v	82	#4	6'-0"	—
v1	41	#4	2'-9"	—
w	12	#5	23'-0"	—
w1	8	#5	10'-0"	—

Item	Unit	Quan.
Cl. X Concrete	Cu. Yds.	49.1
Reinf. Bars	lbs.	2,820
Concrete Piles	Lin. Ft.	500
Test Piles (Conc)	Ea.	1

** Placement shown on Sheet #21.

* Bill of material includes reinforcement and class X concrete for end posts. See Sheet 21.

DESIGNED	Emery J. Sticken
CHECKED	J. F. Otto
DRAWN	E. Sticken, P.B. W.R. Deason
CHECKED	J. F. Otto

Nov. 30 1962

EXAMINED — W. B. Baumann, ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED — E. P. Shurtleff, ENGINEER OF DESIGN
APPROVED — T. E. Hess, CHIEF HIGHWAY ENGINEER

WEST BRIDGE - NO. ABUTMENT

F.A.I. - RT. 57 SEC. 25-8B

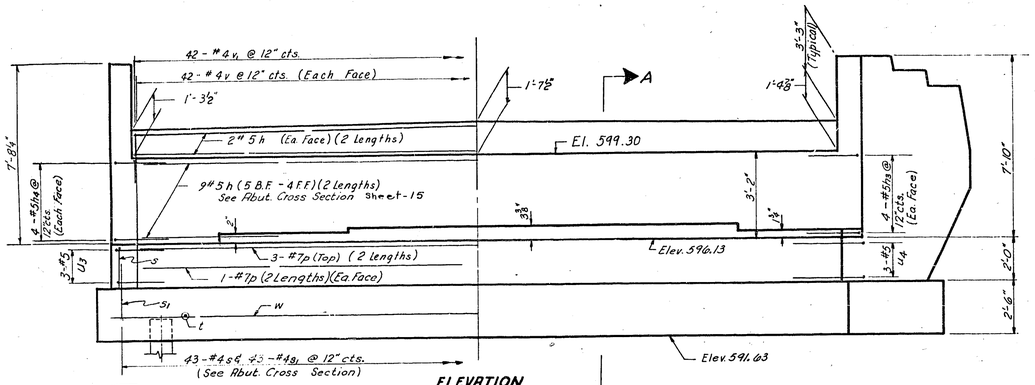
EFFINGHAM COUNTY

STA. 5530 A + 20 (S.B.)

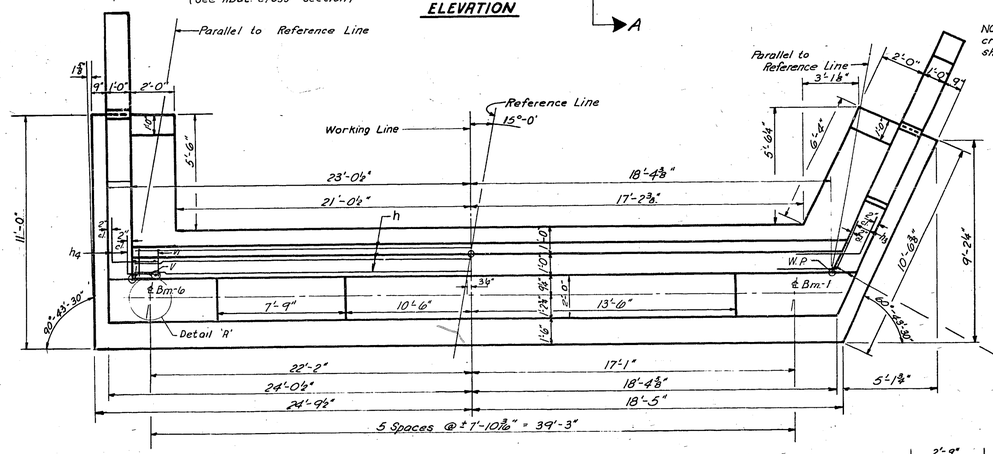
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	19
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO 13
20 SHEETS

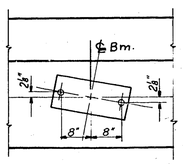


ELEVATION

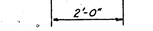


PLAN

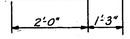
NOTE: For details of end post and cross section of abutment, see sheet 21.



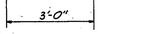
Detail 'A'
(Typical)



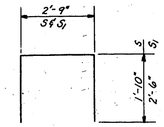
Bar - h4



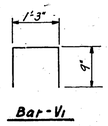
Bar - h3



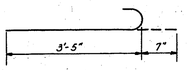
Bar - U3



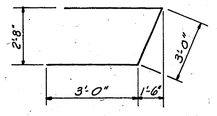
Bars - s & s1



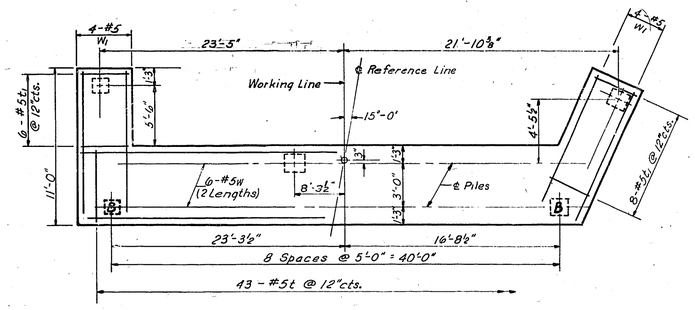
Bar - V1



Bar - n



Bar - U4



Pile Layout & Footing Reinforcement

B denotes 2:12 batter for front row piles.

PILE DATA

Type - Concrete
Capacity - 25 Tons
Est. Length - 40'-0"
No. Req'd - 11 including 1 Test pile

***BILL OF MATERIAL**

	Bar	No	Size	Length	Shape
	h	26	#5	22'-3"	—
	h3	8	#5	4'-6"	⟋
	h4	8	#5	4'-6"	⌊
**	n	36	#5	4'-0"	⌒
	p	10	#7	23'-0"	—
	s	43	#4	6'-5"	⌐⌐
	s1	43	#4	7'-9"	⌐⌐
	t	43	#5	5'-3"	—
	t1	14	#5	3'-6"	—
	u3	3	#5	8'-8"	⌐⌐
	u4	3	#5	9'-0"	⌐⌐
	V	84	#4	6'-0"	—
	V1	42	#4	2'-9"	⌐⌐
	W	12	#5	23'-0"	—
	W1	8	#5	10'-0"	—

Item	Unit	Quan.
Cl. X Concrete	Cu. Yds.	44.8
Reinf. Bars	lbs.	2830
Concrete Piles	Lin. Ft.	400
Test Piles (Conc)	Ea.	1

**Placement shown on Sheet #21.

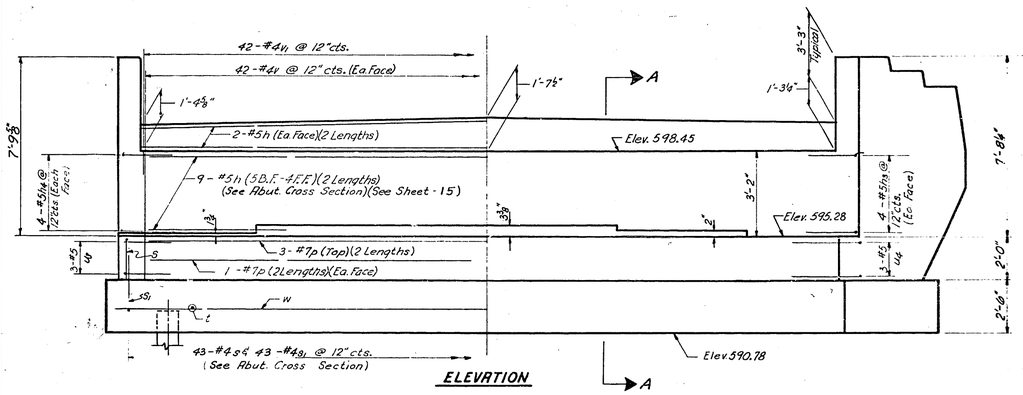
*Bill of material includes reinforcement and class X concrete for end posts. See sheet-21.

DESIGNED	Emery J. Stickan	
CHECKED	J. F. Otto	
DRAWN	E. Stickan Deason	
CHECKED	J. F. Otto	
EXAMINED	W. E. Baumann, ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES	Nov. 30 1962
PASSED	E. F. Sheets, ENGINEER OF DISTRICT	
APPROVED	J. E. Doyle, CHIEF HIGHWAY ENGINEER	

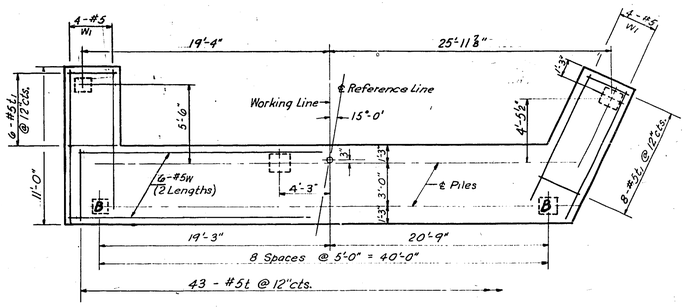
EAST BRIDGE - SO. ABUTMENT
F.A.I.-RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530 + 55 (N. B.)

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

					SHEET NO 14
FAI 57	25-8B	EFFINGHAM	41	20	20 SHEETS

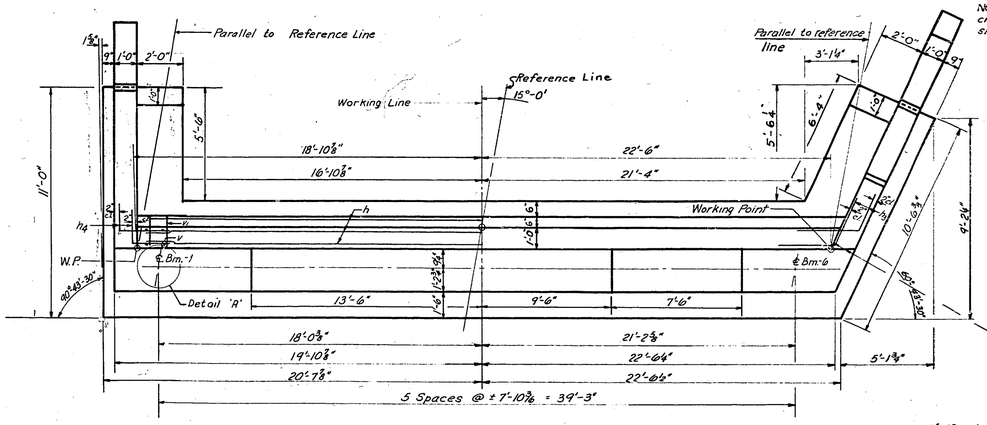


ELEVATION



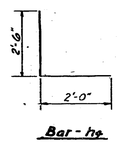
Pile Layout & Footing Reinforcement
B denotes 2:12 batter for front row piles.

PILE DATA
Type: Concrete
Capacity: 25 Tons
Est. Length: 45'-0"
No. Req'd: 11

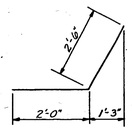


PLAN

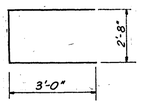
NOTE: For details of end post and cross section of abutment, see sheet - 21.



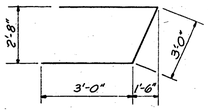
Bar - h_4



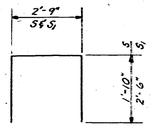
Bar - h_3



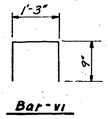
Bar - u_3



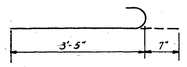
Bar - u_4



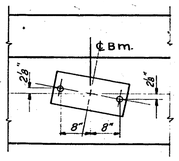
Bars - s & s_1



Bar - v_1



Bar - n



Detail 'A'
(Typical)

* BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	26	#5	22'3"	—
h_3	8	#5	4'-6"	L
h_4	8	#5	4'-6"	⌟
n	36	#5	4'-0"	⊃
p	10	#7	23'-0"	—
s	43	#4	6'-5"	⊔
s_1	43	#4	7'-9"	⊔
t	43	#5	5'-3"	—
t_1	14	#5	3'-6"	—
u_3	3	#5	8'-8"	⊏
u_4	3	#5	9'-0"	⊐
V	84	#4	6'-0"	—
v_1	42	#4	2'-9"	⊓
W	12	#5	23'-0"	—
W_1	8	#5	10'-0"	—

Item	Unit	Quan.
Cl. X Concrete	Cu. Yds	49.8
Reinf. Bars	lbs.	2,830
Concrete Piles	Lin. Ft.	495

** Placement shown on Sheet # 21.

* Bill of material includes reinforcement and class X concrete for end posts. See sheet 21.

DESIGNED	Emery J. Stickan
CHECKED	J. F. Otto
DRAWN	E. Stickan Deason
CHECKED	J. F. Otto

Nov. 30 1962

EXAMINED	W. E. Ramsauer, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED	E. F. Shanahan, ENGINEER OF DESIGN
APPROVED	V. E. Lee, CHIEF HIGHWAY ENGINEER

EAST BRIDGE - NO. ABUTMENT

F.A.I. - RT. 57 SEC. 25-8B

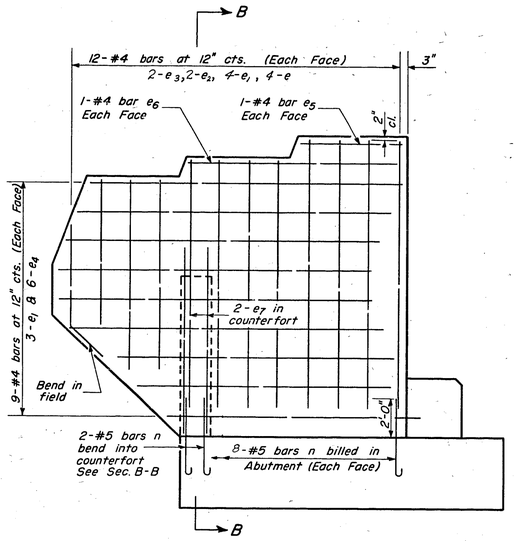
EFFINGHAM COUNTY

STA. 5530 + 55 (N.B.)

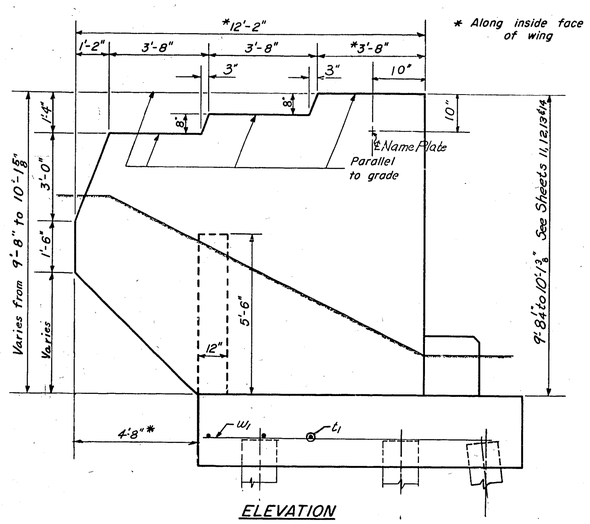
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

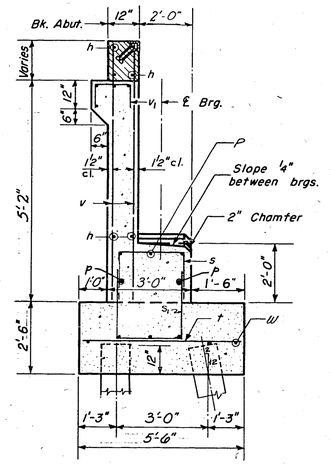
SHEET NO. 15
20 SHEETS



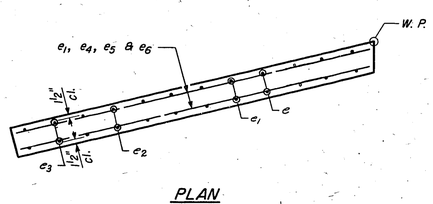
ELEVATION



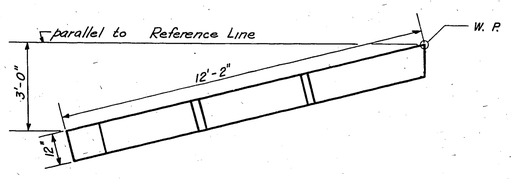
ELEVATION



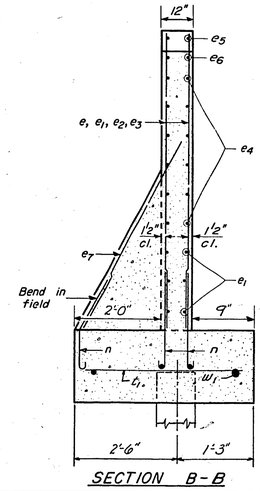
SECTION A-A



PLAN



PLAN



SECTION B-B

ONE END POST
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e	8	#4	9'-6"	—
e1	14	#4	8'-9"	—
e2	4	#4	6'-6"	—
e3	4	#4	5'-0"	—
e4	12	#4	10'-6"	—
e5	2	#4	3'-6"	—
e6	2	#4	7'-0"	—
e7	2	#5	7'-0"	—
Class X Concrete			Cu. Yds.	3.9
Reinforcement Bars			Lbs.	280

STATION 5530+55
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 57 SEC. 25-8B
PROJ. I-57-4(28)
LOADING H20-S16 & ALT.

NAME PLATE LETTERING (N.B.)
Locate on S.E. End Post of No. Bound Bridge. See Std 2113

STATION 5530A+20
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 57 SEC. 25-8B
PROJ. I-57-4(28)
LOADING H20-S16 & ALT.

NAME PLATE LETTERING (S.B.)
Locate on N.W. End Post of So. Bound Bridge. See Std. 2113

END POST DETAILS
F.A.I-RT 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530+55 (N.B.)
STA. 5530A+20 (S.B.)

DESIGNED	Emery J. Stuba
CHECKED	J. F. Otto
DRAWN	E.S. P.B.A. W. A. Sausaman
CHECKED	J. F. Otto

EXAMINED Nov 30 1962
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED
ENGINEER OF DESIGN
APPROVED
CHIEF HIGHWAY ENGINEER

AW-1 Drawn 1-29-60

Revised 1/31/61: In NAME PLATE LETTERING (N.B.) & (S.B.) changed Proj. No. from I-57-4(1) to I-57-4(28) and changed loading from LOADING H20-S16 & ALTERNATE to read LOADING H20-S16 & ALT. W.S.

KEUFFEL AND ESSER CO. NO. 1235 IMPERIAL

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	22
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 16
20 SHEETS

BEAM		STATION	OFFSET FROM ℄	ELEVATION ℄ DEFLECTION NOT INCLUDED	ELEVATION ℄ DEFLECTION INCLUDED
BK. SO. ABUT.	1	552939.775 -	21.157	601.476	601.476
	2	552941.061 -	13.562	601.394	601.394
	3	552942.310 -	5.967	601.313	601.313
	*4	552943.280 -	.167	601.250	601.250
	5	552943.580	1.637	601.231	601.231
	6	552944.853	9.221	601.149	601.149
		552946.128	16.816	601.068	601.068
℄ BRGS. SO. ABUT.	1	552941.604 -	21.141	601.468	601.468
	2	552942.872 -	13.546	601.386	601.386
	3	552944.142 -	5.951	601.304	601.304
	*4	552945.113 -	.151	601.242	601.242
	5	552945.414	1.642	601.222	601.222
	6	552946.688	9.237	601.141	601.141
		552947.965	16.831	601.059	601.059
SPAN 1	1	552951.580 -	21.057	601.422	601.436
	2	552952.856 -	13.464	601.341	601.354
	3	552954.135 -	5.871	601.259	601.273
	*4	552955.113 -	.072	601.197	601.211
	5	552955.415	1.721	601.178	601.191
	6	552956.698	9.314	601.097	601.110
		552957.983	16.907	601.016	601.029
SPAN 2	1	552961.556 -	20.985	601.380	601.397
	2	552962.861 -	13.393	601.299	601.316
	3	552964.128 -	5.802	601.218	601.235
	*4	552965.112 -	.004	601.156	601.173
	5	552965.417	1.789	601.137	601.154
	6	552966.709	9.380	601.056	601.073
		552968.003	16.971	600.975	600.992
SPAN 3	1	552971.532 -	20.925	601.340	601.354
	2	552972.825 -	13.334	601.259	601.273
	3	552974.121 -	5.744	601.178	601.192
	*4	552975.112 -	.052	601.117	601.131
	5	552975.419	1.845	601.098	601.112
	6	552976.719	9.435	601.017	601.031
		552978.022	17.025	600.936	600.950
SPAN 4	1	552981.508 -	20.875	601.303	601.309
	2	552982.810 -	13.286	601.222	601.229
	3	552984.115 -	5.698	601.142	601.148
	*	552985.112 -	.097	601.081	601.087
	5	552985.421	1.890	601.062	601.068
	6	552986.730	9.478	600.981	600.988
		552988.041	17.067	600.901	600.907

BEAM		STATION	OFFSET FROM ℄	ELEVATION ℄ DEFLECTION NOT INCLUDED	ELEVATION ℄ DEFLECTION INCLUDED
℄ BRGS. PIER-1	1	552988.741 -	20.867	601.278	601.278
	2	552990.049 -	13.259	601.197	601.197
	3	552991.360 -	5.671	601.117	601.117
	*4	552992.362 -	.123	601.056	601.056
	5	552992.673	1.916	601.037	601.037
	6	552993.988	9.503	600.957	600.957
		552995.305	17.090	600.877	600.877
SPAN 1	1	552998.717 -	20.817	601.245	601.251
	2	553000.034 -	13.230	601.165	601.171
	3	553001.353 -	5.644	601.086	601.091
	*4	553002.362 -	.149	601.025	601.030
	5	553002.675	1.941	601.006	601.011
	6	553003.998	9.527	600.926	600.932
		553005.324	17.112	600.846	600.852
SPAN 2	1	553008.694 -	20.798	601.216	601.226
	2	553010.019 -	13.213	601.136	601.146
	3	553011.347 -	5.629	601.057	601.067
	*4	553012.363 -	.163	600.996	601.006
	5	553012.677	1.955	600.977	600.987
	6	553014.009	9.539	600.898	600.908
		553015.344	17.123	600.818	600.828
SPAN 3	1	553018.670 -	20.791	601.189	601.201
	2	553020.004 -	13.208	601.109	601.122
	3	553021.341 -	5.625	601.030	601.042
	*4	553022.363 -	.166	600.970	600.982
	5	553022.679	1.957	600.951	600.963
	6	553024.020	9.540	600.872	600.884
		553025.363	17.123	600.793	600.805
SPAN 4	1	553028.647 -	20.795	601.165	601.173
	2	553029.989 -	13.213	601.086	601.094
	3	553031.334 -	5.632	601.007	601.015
	*4	553032.363 -	.158	600.947	600.955
	5	553032.681	1.949	600.928	600.936
	6	553034.031	9.530	600.849	600.858
		553035.383	17.111	600.771	600.779
SPAN 5	1	553038.623 -	20.811	601.143	601.146
	2	553039.974 -	13.230	601.065	601.068
	3	553041.328 -	5.650	600.986	600.989
	*4	553042.363 -	.138	600.926	600.929
	5	553042.684	1.929	600.908	600.911
	6	553044.042	9.508	600.829	600.832
		553045.402	17.088	600.751	600.754

BEAM		STATION	OFFSET FROM ℄	ELEVATION ℄ DEFLECTION NOT INCLUDED	ELEVATION ℄ DEFLECTION INCLUDED
℄ BRGS. PIER-2	1	553043.944 -	20.824	601.133	601.133
	2	553045.300 -	13.244	601.054	601.054
	3	553046.658 -	5.665	600.976	600.976
	*4	553047.696	.123	600.916	600.916
	5	553048.018	1.913	600.898	600.898
	6	553049.381	9.492	600.820	600.820
		553050.746	17.071	600.742	600.742
SPAN 1	1	553053.920 -	20.857	601.116	601.124
	2	553055.285 -	13.279	601.038	601.046
	3	553056.651 -	5.701	600.960	600.968
	*4	553057.696	.086	600.900	600.909
	5	553058.020	1.876	600.882	600.891
	6	553059.391	9.453	600.804	600.813
		553060.765	17.030	600.726	600.735
SPAN 2	1	553063.897 -	20.901	601.101	601.117
	2	553065.269 -	13.324	601.023	601.039
	3	553066.645 -	5.748	600.946	600.962
	*4	553067.696	.037	600.887	600.902
	5	553068.022	1.827	600.868	600.884
	6	553069.402	9.403	600.791	600.807
		553070.784	16.978	600.713	600.729
SPAN 3	1	553073.873 -	20.956	601.089	601.106
	2	553075.254 -	13.381	601.012	601.029
	3	553076.638 -	5.807	600.935	600.952
	*4	553077.696 -	.022	600.876	600.893
	5	553078.024	1.767	600.858	600.874
	6	553079.412	9.341	600.781	600.797
		553080.803	16.915	600.703	600.720
SPAN 4	1	553083.849 -	21.023	601.080	601.090
	2	553085.239 -	13.450	601.003	601.013
	3	553086.631 -	5.877	600.926	600.936
	*4	553087.696 -	.093	600.868	600.877
	5	553088.026	1.695	600.850	600.859
	6	553089.423	9.268	600.773	600.783
		553090.822	16.841	600.696	600.706
SPAN 5	1	553091.081 -	21.078	601.075	601.075
	2	553092.477 -	13.506	600.999	600.999
	3	553093.876 -	5.934	600.922	600.922
	*4	553094.946 -	.151	600.864	600.864
	5	553095.277	1.637	600.846	600.846
	6	553096.680	9.208	600.769	600.769
		553098.086	16.779	600.693	600.693
BK. NO. ABUT.	1	553092.910 -	21.093	601.074	601.074
	2	553094.308 -	13.522	600.998	600.998
	3	553095.708 -	5.950	600.921	600.921
	*4	553096.779 -	.167	600.863	600.863
	5	553097.110	1.621	600.845	600.845
	6	553098.515	9.192	600.768	600.768
		553099.923	16.763	600.692	600.692

* DENOTES ℄ BRIDGE CHORD.

DESIGNED	Emery J. Stricker
CHECKED	J. A. Pitts
DRAWN	E.J.S. A.R.D
CHECKED	J. A. Pitts

Nov 30 1962

EXAMINED W. E. Baumann
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED C. F. Shurtz
ENGINEER OF DISTRICT

APPROVED J. E. Doolittle
CHIEF HIGHWAY ENGINEER

TOP OF SLAB ELEVATIONS
WEST BRIDGE (S.B. LANES)
F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY

STA. 5530A +20 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECT'N	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	23
FED. AID SYST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO 17
20 SHEETS

BEAM		STATION	OFFSET FROM ℄	ELEVATION ℄ DEFLECTION NOT INCLUDED	ELEVATION ℄ DEFLECTION INCLUDED
BK. SO. ABUT.	1	552985.387	- 17.099	600.727	600.727
	2	552987.392	- 9.507	600.867	600.867
	3	552989.399	- 1.916	600.950	600.950
	*℄ 4	552989.873	- .123	600.931	600.931
	5	552991.408	5.674	600.894	600.894
	6	552993.418	13.265	600.758	600.758
		552995.431	20.855	600.588	600.588
℄ BRGS. SO. ABUT.	1	552987.223	- 17.091	600.716	600.716
	2	552989.229	- 9.500	600.856	600.856
	3	552991.237	- 1.909	600.919	600.919
	*℄ 4	552991.711	- .116	600.920	600.920
	5	552993.246	5.681	600.883	600.883
	6	552995.258	13.271	600.747	600.747
		552997.271	20.861	600.577	600.577
	1	552997.238	- 17.055	600.656	600.670
	2	552999.249	- 9.465	600.797	600.810
	3	553001.261	- 1.875	600.859	600.873
	*℄ 4	553001.737	- .082	600.860	600.873
	5	553003.275	5.714	600.822	600.835
	6	553005.291	13.303	600.686	600.699
		553007.309	20.892	600.516	600.529
	1	553007.254	- 17.024	600.597	600.614
	2	553009.269	- 9.435	600.737	600.755
	3	553011.286	- 1.847	600.799	600.817
	*℄ 4	553011.763	- .054	600.799	600.817
	5	553013.304	5.741	600.762	600.779
	6	553015.325	13.329	600.625	600.643
		553017.347	20.917	600.455	600.473
	1	553017.270	- 16.999	600.537	600.551
	2	553019.289	- 9.412	600.677	600.691
	3	553021.310	- 1.824	600.739	600.753
	*℄ 4	553021.788	- .032	600.739	600.753
	5	553023.333	5.762	600.701	600.715
	6	553025.358	13.349	600.565	600.579
		553027.385	20.936	600.395	600.409
	1	553027.286	- 16.980	600.478	600.484
	2	553029.309	- 9.394	600.618	600.624
	3	553031.335	- 1.807	600.679	600.686
	*℄ 4	553031.814	- .015	600.679	600.686
	5	553033.362	5.778	600.641	600.647
	6	553035.391	13.363	600.504	600.511
		553037.422	20.949	600.334	600.341

BEAM		STATION	OFFSET FROM ℄	ELEVATION ℄ DEFLECTION NOT INCLUDED	ELEVATION ℄ DEFLECTION INCLUDED
℄ BRGS. PIER-1	1	553034.547	- 16.970	600.434	600.434
	2	553036.574	- 9.386	600.574	600.574
	3	553038.603	- 1.799	600.636	600.636
	*℄ 4	553039.082	- .007	600.636	600.636
	5	553040.633	5.785	600.597	600.597
	6	553042.666	13.370	600.460	600.461
		553044.700	20.955	600.291	600.291
	1	553044.563	- 16.961	600.374	600.380
	2	553046.594	- 9.377	600.514	600.520
	3	553048.627	- 1.792	600.575	600.581
	*℄ 4	553049.108	- .001	600.575	600.581
	5	553050.662	5.791	600.537	600.543
	6	553052.699	13.374	600.400	600.406
		553054.738	20.958	600.230	600.236
	1	553054.578	- 16.958	600.316	600.325
	2	553056.614	- 9.375	600.454	600.464
	3	553058.652	- 1.792	600.515	600.525
	*℄ 4	553059.134	- .000	600.515	600.525
	5	553060.691	5.790	600.477	600.487
	6	553062.733	13.373	600.340	600.350
		553064.776	20.955	600.170	600.180
	1	553064.594	16.960	600.254	600.266
	2	553066.635	9.378	600.394	600.406
	3	553068.677	1.797	600.455	600.467
	*℄ 4	553069.159	- .005	600.455	600.467
	5	553070.721	5.784	600.417	600.429
	6	553072.766	13.365	600.280	600.292
		553074.814	20.946	600.110	600.122
	1	553074.610	- 16.969	600.194	600.202
	2	553076.655	- 9.388	600.334	600.342
	3	553078.701	- 1.808	600.395	600.404
	*℄ 4	553079.185	- .016	600.395	600.403
	5	553080.750	5.772	600.357	600.365
	6	553082.800	13.352	600.221	600.229
		553084.852	20.932	600.051	600.060
	1	553084.626	- 16.983	600.135	600.138
	2	553086.675	- 9.404	600.275	600.278
	3	553088.726	- 1.824	600.337	600.340
	*℄ 4	553089.211	- .033	600.337	600.340
	5	553090.779	5.754	600.300	600.303
	6	553092.833	13.333	600.165	600.168
		553094.890	20.912	599.996	599.999

BEAM		STATION	OFFSET FROM ℄	ELEVATION ℄ DEFLECTION NOT INCLUDED	ELEVATION ℄ DEFLECTION INCLUDED
℄ BRGS. PIER-2	1	553089.967	- 16.993	600.104	600.104
	2	553092.019	- 9.414	600.245	600.245
	3	553094.072	- 1.835	600.307	600.308
	*℄ 4	553094.558	- .065	600.308	600.308
	5	553096.127	5.742	600.271	600.271
	6	553098.184	13.320	600.136	600.136
		553100.243	20.898	599.967	599.967
	1	553099.983	- 17.017	600.049	600.058
	2	553102.039	- 9.439	600.190	600.199
	3	553104.097	- 1.861	600.254	600.262
	*℄ 4	553104.583	- .071	600.254	600.263
	5	553106.156	5.715	600.218	600.226
	6	553108.218	13.292	600.084	600.092
		553110.281	20.869	599.915	599.924
	1	553109.999	- 17.046	599.996	600.012
	2	553112.059	- 9.469	600.138	600.154
	3	553114.121	- 1.893	600.203	600.218
	*℄ 4	553114.609	- .103	600.203	600.219
	5	553116.185	5.683	600.167	600.183
	6	553118.251	13.259	600.034	600.050
		553120.319	20.834	599.867	599.883
	1	553120.014	- 17.081	599.946	599.963
	2	553122.079	- 9.505	600.089	600.105
	3	553124.146	- 1.930	600.154	600.171
	*℄ 4	553124.634	- .140	600.155	600.172
	5	553126.214	5.644	600.120	600.137
	6	553128.284	13.219	599.988	600.005
		553130.356	20.793	599.821	599.838
	1	553130.030	- 17.121	599.899	599.908
	2	553132.099	- 9.547	600.042	600.051
	3	553134.170	- 1.973	600.108	600.118
	*℄ 4	553134.660	- .184	600.109	600.119
	5	553136.243	5.600	600.075	600.085
	6	553138.318	13.173	599.944	599.954
		553140.394	20.746	599.778	599.787
℄ BRGS. NO. ABUT.	1	553137.291	- 17.154	599.866	599.866
	2	553139.364	- 9.581	600.009	600.009
	3	553141.438	- 2.008	600.077	600.077
	*℄ 4	553141.928	- .219	600.078	600.078
	5	553143.514	5.564	600.045	600.045
	6	553145.592	13.137	599.914	599.914
		553147.671	20.709	599.748	599.748
BK. NO. ABUT.	1	553139.127	- 17.163	599.858	599.858
	2	553141.201	- 9.590	600.001	600.001
	3	553143.276	- 2.017	600.069	600.069
	*℄ 4	553143.766	- .228	600.070	600.070
	5	553145.352	5.554	600.037	600.037
	6	553147.431	13.127	599.907	599.907
		553149.512	20.699	599.741	599.741

* DENOTES ℄ BRIDGE CHORD

DESIGNED	Emery J. Stickan
CHECKED	J. F. Pitts
DRAWN	E. J. S. W.R.D.
CHECKED	J. F. Pitts

Nov 30 1962

EXAMINED W. E. Baumann, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED R. F. Shanks, ENGINEER OF DESIGN
APPROVED V. E. Schaeff, CHIEF HIGHWAY ENGINEER

TOP OF SLAB ELEVATIONS
EAST BRIDGE (N. B. LANES)
F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530 + 55 (N.B.)

© KEUFFEL & ESSER CO. NO. 139 IMPERIAL

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	24
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 18
20 SHEETS

SEC. 25-8B STA. 5530A + 20 Checked By J. J. Klay

COUNTY Effingham
Boring No. 1-(A)
Station 5530A+20
Offset 75' Lt. & SBL

Surface Water El. —
Groundwater El. at Completion
After 1 Hours 565.0

Elevation	z	Qu t/s.f.	w (%)
Ground Surface 578.5			
Medium, dark grey, SANDY CLAY LOAM			
576.5	7	0.9 S	4
Medium, dark grey, SILTY CLAY LOAM to LOAM			
574.5	9	0.9 S	15
Very loose, brown grey, SANDY LOAM; wet @ 573.0	-5		
572.0	2		19
Hard, brown grey, CLAY LOAM TILL	-25		
	11	6.2 S	9
2" Sandy Loam seam at 571.3	-30		
	35	7.3 S	9
568.0	-10		
Hard, grey, CLAY TILL to CLAY LOAM TILL 566.5	36	5.9 B	8
564.0	*		24
Hard, grey, CLAY LOAM TILL 564.5	34	5.0 S	14
Extent of Exploration	-35		
	-15		

* Medium, grey, wet, SANDY LOAM, N value = 6 for ½ ft.

COUNTY Effingham
Boring No. 2-(A)
Station 5530A+20
Offset 75' Rt. & SBL

Surface Water El. —
Groundwater El. at Completion
After 24 Hours 572.0 / 572.0

Elevation	z	Qu t/s.f.	w (%)
Ground Surface 579.0			
Medium, dark grey, LOAM to SANDY CLAY LOAM 578.0	4	0.9 S	7
Very loose, grey, damp, SANDY LOAM	3		9
	-5		
	4		10
	3		18
570.0	-10		
Very stiff, grey, weathered, CLAY TILL to CLAY LOAM TILL	13	2.7 B	16
567.0	28	3.8 B	10
Medium, brown grey, water bearing, SANDY LOAM 565.0	11		19
Hard, grey, CLAY LOAM TILL 563.5	-15 32	4.5 B	5
Extent of Exploration			

COUNTY Effingham
Boring No. 3-(A)
Station 5530+55
Offset 251' Lt. & SBL

Surface Water El. —
Groundwater El. at Completion
After 2 Hours 565.0

Elevation	z	Qu t/s.f.	w (%)
Ground Surface 578.8			
Medium, dark grey, SANDY CLAY LOAM to LOAM	5	0.5 S	16
576.3			
Loose, grey, combination of 4" layers of SILTY CLAY LOAM and 2" layers of SANDY LOAM to SALTY CLAY LOAM 574.3	6	0.4 S	13
	-5		
Very loose, brown grey, wet SANDY LOAM	3		9
	4		15
570.3	-10		
Very stiff, brown grey, weathered, CLAY LOAM TILL	26	3.4 B	15
	24	3.4 B	13
	33	3.8 B	15
	-15		
	24	3.4 B	14
560.8			
Hard, grey, CLAY LOAM TILL	26	5.3 B	10
	-20		
	68	5.9 B	10
Extent of Exploration 557.8			

COUNTY Effingham
Boring No. 4-A
Station 5530+60
Offset 1191' Rt. & SBL

Surface Water El. —
Groundwater El. at Completion
After 0.3 Hours 565.5

Elevation	z	Qu t/s.f.	w (%)
Ground Surface 576.50			
SANDY LOAM	4		5
loose brown grey			
SAND	4		2
	-5		
wet SAND & GRAVEL	5		17
571.5			
Very stiff to Hard, brown grey, weathered, CLAY LOAM TILL	19	3.9 B	13
	-10		
568.0	21	4.6 S	11
Hard, grey, CLAY LOAM TILL			
	34	10.2 *	8
* No failure in test specimen			
	62	10.2 *	7
Extent of Exploration 561.5	-15		

COUNTY Effingham
Boring No. 1
Station 5530.40
Offset 40' Rt. & Survy

Surface Water El. —
Groundwater El. at Completion
After — Hours 570.1

Elevation	z	Qu t/s.f.	w (%)
Ground Surface 577.10			
Soft, brown grey, LOAM	5	0.4 S	23
575.6			
Loose, grey brown, SANDY LOAM	8		14
572.1	-5		
Dense, brown spotted grey, SANDY CLAY LOAM TILL	31	3.2 S	16
570.1			
Dense, grey blue, SANDY LOAM	46		14
568.1			
	-10		
Hard, grey CLAY LOAM TILL	52	9.3 S	10
*No failure in test specimen.			
	56	10.2 *	10
	-15		
	61	10.2 *	9
	55	10.2 *	11
	-20		
556.6	62	7.2 S	11
Extent of Exploration			

NOTE: BORINGS DESIGNATED WITH (A) WERE MADE PREVIOUS TO BORINGS DESIGNATED ONLY BY NUMBER.

COUNTY Effingham
Boring No. 2
Station 5530A+50
Offset 6' Rt. & S.B.L.

Surface Water El. —
Groundwater El. at Completion
After — Hours 563.0

Elevation	z	Qu t/s.f.	w (%)
Ground Surface 577.0			
Soft, brown grey, LOAM to SANDY CLAY LOAM	5	0.4 S	18
575.5			
Loose, grey brown, SANDY CLAY LOAM to SANDY LOAM	4		15
572.0	-5		
Medium, grey brown, Wet, SANDY LOAM	14		13
570.0			
Very stiff, grey spotted brown, CLAY LOAM to CLAY TILL	21	3.2 B	17
	-10		
	19	2.5 B	20
	27	3.6 B	19
	-15		
	30	3.4 B	17
560.0			
Very stiff to stiff, grey to dark grey, SILTY CLAY and ORGANICS	15	2.2 B	32
	-20		
	13	1.7 B	39
555.0			

Elevation	z	Qu t/s.f.	w (%)
Dense, grey-blue, GRAVELLY CLAY LOAM	32		13
552.0	25		
Hard, grey, CLAY LOAM TILL	38	4.8 B	15
548.0	-30		
Very dense, blue grey, GRAVELLY LOAM	54		11
543.5	92		9
Extent of Exploration	-35		

COUNTY Effingham
Boring No. 3
Station 5530A+96
Offset 20' Lt. & SBL

Surface Water El. —
Groundwater El. at Completion
After — Hours 572.6

Elevation	z	Qu t/s.f.	w (%)
Ground Surface 576.10			
Loose, brown grey, SANDY CLAY LOAM to LOAM	5	0.4 S	14
574.1			
Loose, grey brown, wet to water bearing, SANDY LOAM and GRAVEL	5		11
	-5		
	3		18
568.1			
Very stiff, grey spotted brown, CLAY LOAM to SANDY CLAY LOAM	18	2.9 B	19
566.1	-10		
Very stiff to hard, grey, CLAY LOAM TILL to CLAY TILL	23	2.8 B	18
	-15		
	30	4.7 B	16
559.1			
Very stiff, grey to dark grey, SILTY CLAY and ORGANICS	28	4.2 B	17
	15	2.3 B	34
	-20		
553.6	17	2.1 B	18

Elevation	z	Qu t/s.f.	w (%)
Very stiff, grey green, SANDY CLAY LOAM to CLAY LOAM	29	3.7 B	12
551.1	25		
Hard, grey, CLAY LOAM TILL	32	4.6 B	14
	31	4.7 B	15
	-30		
	33	4.8 B	15
	31	3.7 B	16
	-35		
540.1	33	3.6 B	
Very dense, blue grey, GRAVELLY LOAM	76		5
538.1			
Extent of Exploration	-40		
	-45		

DESIGNED Emery J. Stickan
CHECKED J. F. Pettes
DRAWN E. J. S.
CHECKED J. F. Pettes

Nov. 30 1962

EXAMINED W. E. Baumann, ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED [illegible], ENGINEER OF DESIGN
APPROVED [illegible], CHIEF HIGHWAY ENGINEER

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 - t/sf

w - Water Content - percentage of oven dry weight - %.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value

BORINGS
F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530+55 (N.B.)
STA. 5530A+20 (S.B.)

M-E 100 IMPERIAL

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	25-8B	EFFINGHAM	41	25
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 19
20 SHEETS

COUNTY Effingham
Boring No. 4
Station 5531+45
Offset 56' Rt. ℄ Sur.

Surface Water El. —
Groundwater El. at Completion 565.5
After — Hours —

Elevation	Z	Qu t/s.f.	w (%)
Ground Surface 575.6			
Very loose, brown grey SANDY CLAY LOAM to LOAM 573.6	4	0.4 B	12
Soft, brown grey, LOAM to SILTY CLAY LOAM	3	0.4 B	23
570.6 -5			
Loose, grey brown, wet, SANDY CLAY LOAM to LOAM 568.6	4	0.5 B	23
Hard, grey brown, CLAY LOAM TILL 566.6	35	5.1 S	14
Hard, grey, CLAY LOAM TILL -10	55	8.9 S	11
*No failure in test specimen	58	10.2 *	11
-15	66	10.2 *	10
	79	10.2 *	10
-20 554.6	72	8.9 S	11
Extent of Exploration			

COUNTY Effingham
Boring No. 5
Station 5529A+44
Offset 21' Lt. ℄ S.B.L.

Surface Water El. —
Groundwater El. at Completion —
After — Hours —

Elevation	Z	Qu t/s.f.	w (%)
Ground Surface 609.60			
Flight augers used to a proach elevation of proposed grade.		FLIGHT AUGERS	
-5 600.6			
Hard, brown grey, CLAY LOAM TILL -10	50	7.5 S	10
	66	7.9 S	10
594.6 -15	79	8.1 S	9
Hard, grey, CLAY LOAM TILL	59	8.3 S	10
-20	43	8.0 S	10
Extent of Exploration 564.6 -45			

Elevation	Z	Qu t/s.f.	w (%)
Hard, grey, CLAY LOAM TILL	44	8.1 S	10
-25 582.6	46	7.9 S	10
Very stiff, grey, CLAY LOAM TILL to SANDY CLAY LOAM TILL	39	4.1 S	10
-30	31	3.9 S	9
	33	3.9 S	9
-35 573.1	31	2.8 S	12
Very stiff, grey green, very damp, CLAY LOAM to SILTY CLAY 571.1	16	2.1 B	16
Hard, grey, CLAY LOAM TILL -40	78	7.8 S	12
	70	7.6 S	12
	39	4.6 S	16

COUNTY Effingham
Boring No. 6
Station 5529+90
Offset 30' Rt. ℄ Survey

Surface Water El. —
Groundwater El. at Completion 570.0
After — Hours —

Elevation	Z	Qu t/s.f.	w (%)
Ground Surface 599.8			
Very stiff, grey brown, crumbly CLAY LOAM to CLAY	20	3.5 S	9
594.8 -5			
Hard, brown grey, fractured CLAY LOAM TILL.	56	6.6 S	10
589.8 -10			
Hard, grey, CLAY LOAM TILL	71	10.2 *	10
*No failure in test specimen			
-15	68	10.2 *	8
-20	33	6.3 B	13

The location of the abutment (Sta. 5529+90) falls on a nearly vertical bank at approx. elev. 580.0. This point is so near the creek that no material should be considered for foundation above elev. 569.0 which is elevation of creek bed.

Elevation	Z	Qu t/s.f.	w (%)
-2	42	7.2 S	14
569.0 -3	74	10.2 *	9
Hard, grey, CLAY LOAM TILL	62	10.2 *	
Water seeps in through a crack in the till at approx. elev. 564.3 -35	52	8.4 S	
	68	10.2 *	12
-40	61	10.2 *	11
	53	6.7 B	12
-45			

COUNTY Effingham
Boring No. 7
Station 5529A+95
Offset 4' Rt. ℄ S.B.L.

Surface Water El.
Groundwater El. at Completion 561.5
After 24 Hours 566.0

Elevation	N	Qu t/s.f.	w (%)	Elevation
Ground Surface 571.40				
Very stiff to hard, blue grey CLAY LOAM TILL	14	3.8 S	18	
-5 565.9	22	4.3 B	17	
Very stiff, grey, CLAY LOAM to SILTY CLAY and a few ORGANICS	15	3.0 S	19	
561.9	14	2.7 S	18	
Medium, grey, wet, SANDY CLAY LOAM to SANDY LOAM -10 559.9	28		14	
Hard, grey, CLAY LOAM TILL	31	5.9 S	12	
-15	38	5.9 S	13	
	40	6.0 B	12	
552.4				
Dense, grey, wet, SANDY CLAY LOAM to SANDY LOAM -20 550.4	48		25	
Hard, grey, CLAY LOAM TILL	52	5.0 B	13	

COUNTY Effingham
Boring No. 6
Station 5529+60
Offset 30' Rt. ℄ Survey

Groundwater Elev. 570.0

Elevation	Z	Qu t/s.f.	w (%)
Ground Surface 0			
Hard, grey, CLAY LOAM TILL			
-45 553.8	52	6.1 S	14
Hard, grey, CLAY LOAM TILL and streaks of dark grey ORGANICS -50 550.8	36	4.7 S	16
Hard, grey, CLAY LOAM TILL	47	5.9 S	13
Extent of Exploration 548.8			

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 - t/sf

w - Water Content - percentage of oven dry weight - %.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value

DESIGNED	Emery J. Stichan
CHECKED	J. F. Pitts P.E.
DRAWN	E. J. S. W.T. Deason
CHECKED	J. F. Pitts

Nov. 30 1962

EXAMINED W. E. Baumann — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES

PASSED E. L. Skinner — ENGINEER OF DESIGN

APPROVED J. E. Duff — CHIEF HIGHWAY ENGINEER

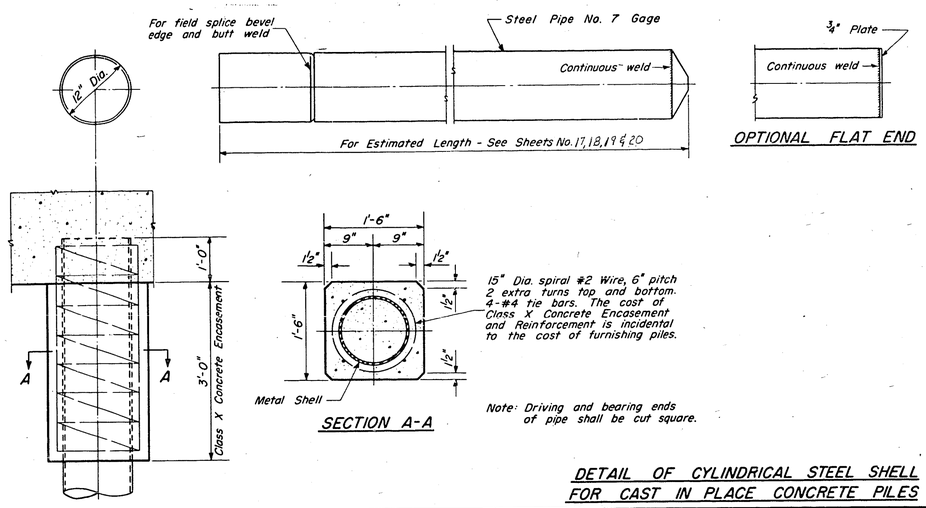
BORINGS
F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530 + 55 (N. B.)
STA. 5530A + 20 (S. B.)

KEUFFEL & ESSER CO. NO. 359 IMPERIAL

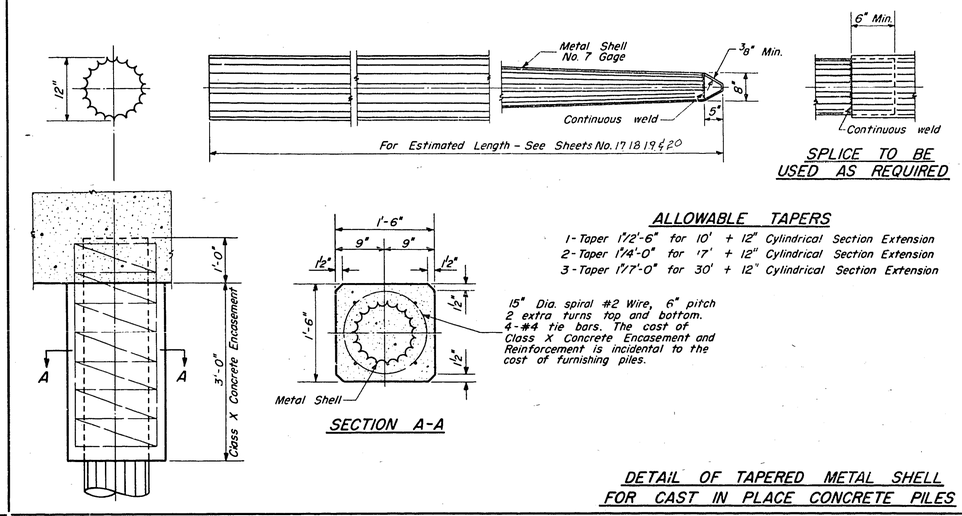
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
FAI 57	25-8B	EFFINGHAM	41	26	20 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.			

SHEET NO. 20



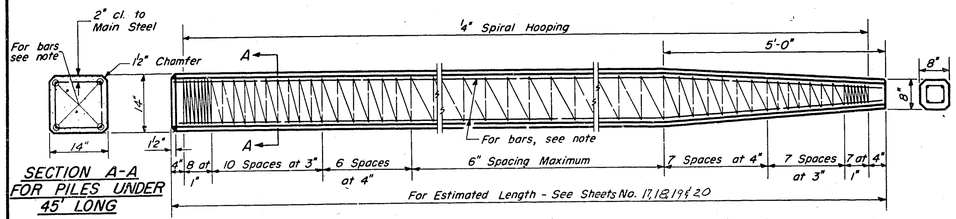
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



ALLOWABLE TAPERS

1-Taper 1'1/2'-6" for 10' + 12" Cylindrical Section Extension
2-Taper 1'1/4'-0" for 17' + 12" Cylindrical Section Extension
3-Taper 1'1/7'-0" for 30' + 12" Cylindrical Section Extension

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES



Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel.
For 14" Piles under 45' long use 4-#9 bars the full length.

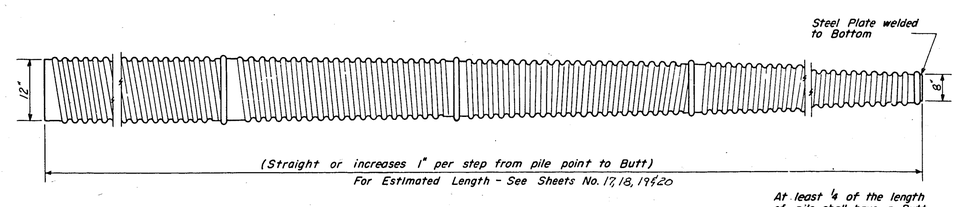
Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21 L* from each end.
For Piles longer than 45', use three slings placed at a distance of 0.12 L* from each end and at mid-point of pile.
*L = Over all length of pile to be handled.

DESIGNED	Emery J. Stricker	
CHECKED	J. F. Pitts	H. A. Sausaman
DRAWN	E. S.	W. A. Sausaman
CHECKED	J. F. Pitts	

EXAMINED: W. A. Baumann, ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED: E. F. Sherry, ENGINEER OF DESIGN
APPROVED: V. E. Bradt, CHIEF HIGHWAY ENGINEER
Nov. 30 1962

X-1 Rev. 5-12-61 9-27-62

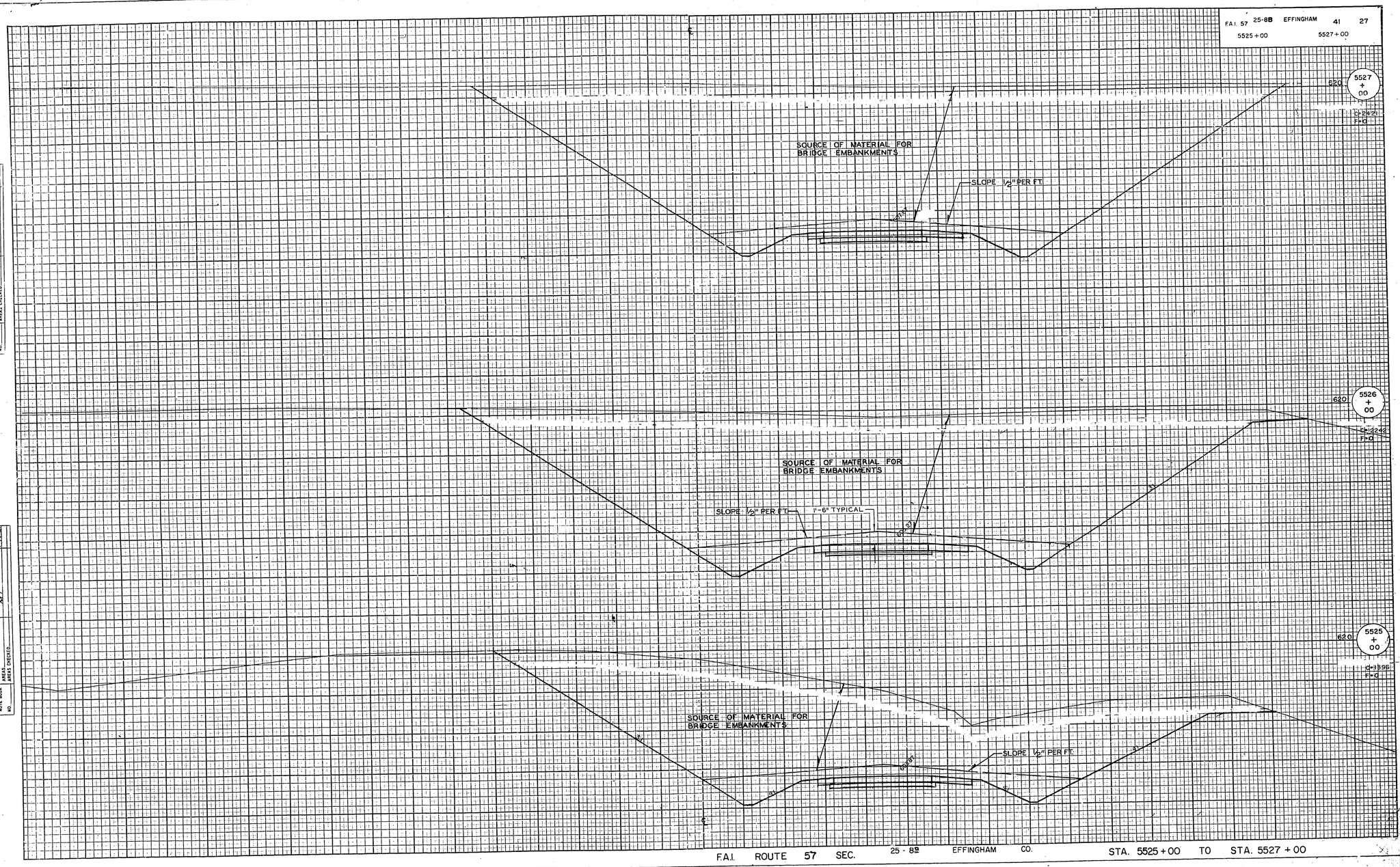
DETAIL OF PRECAST CONCRETE PILES



DETAIL OF MANDREL DRIVEN STRAIGHT OR STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES

PILE DETAILS
F.A.I. RT. 57 SEC. 25-8B
EFFINGHAM COUNTY
STA. 5530 + 55 (N.B.)
STA. 5530A + 20 (S.B.)

F.A.I. 57	25-8B	EFFINGHAM	41	27
5525+00		5527+00		



F.A.I. ROUTE 57 SEC. 25 - 8B EFFINGHAM CO. STA. 5525+00 TO STA. 5527+00

PLATE 3 - CROSS SECTION A. R. E. & R. E. STANDARD
THE FRANCIS POST CO., CHICAGO

FINAL SURVEY
SURVEYED BY
PLOTTED
TEMPLATE
AREAS CHECKED
NOTE BOOK
NO.
DATE
BY

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

F.A.I. 57 25-8B EFFINGHAM 41 28

5527+50 5528+50

SOURCE OF MATERIAL FOR BRIDGE EMBANKMENTS

SLOPE ½" PER FT.

100'

610

5528 + 50

C-1232 F-10

SOURCE OF MATERIAL FOR BRIDGE EMBANKMENTS

SLOPE ½" PER FT.

1'-6" TYPICAL

615

5528 + 00

C-2167 F-01

SOURCE OF MATERIAL FOR BRIDGE EMBANKMENTS

SLOPE ½" PER FT.

620

5527 + 50

C-2121-25 F-01

FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
NOTE BOOK
AREAS CHECKED
NO.
BY
DATE

F.A.I. ROUTE 57 SEC. 25-8B EFFINGHAM CO. STA. 5527+50 TO STA. 5528+50

PLATE 3 —CROSS SECTION O. P. R. & P. E. STANDARD
THE FREDERICK POST CO. CHICAGO

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

F.A.I. 57 25-8B EFFINGHAM 41 29

5529+00 5530+00

FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
NOTE BOOK
NO. AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
NOTE BOOK
NO. AREAS CHECKED
BY
DATE
7-14-44
147

6'-10"

BRIDGE

570 5530 + 00
C-0
F-0

605 5529 + 00
C-476
F-0

SOURCE OF MATERIAL FOR BRIDGE EMBANKMENT

SLOPE ½" PER FT.

597.99

F.A.I. ROUTE 57 SEC. 25-8B EFFINGHAM CO. STA. 5529+00 TO STA. 5530+00

PLATE 3 —CROSS SECTION O. P. R. & P. E. STANDARD
THE FREDERICK POST CO. CHICAGO

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FA I 57 25-8B EFFINGHAM 41 30

5531+00 5533+00

FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
NOTE BOOK
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AREAS CHECKED
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FINAL SURVEY
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NO.
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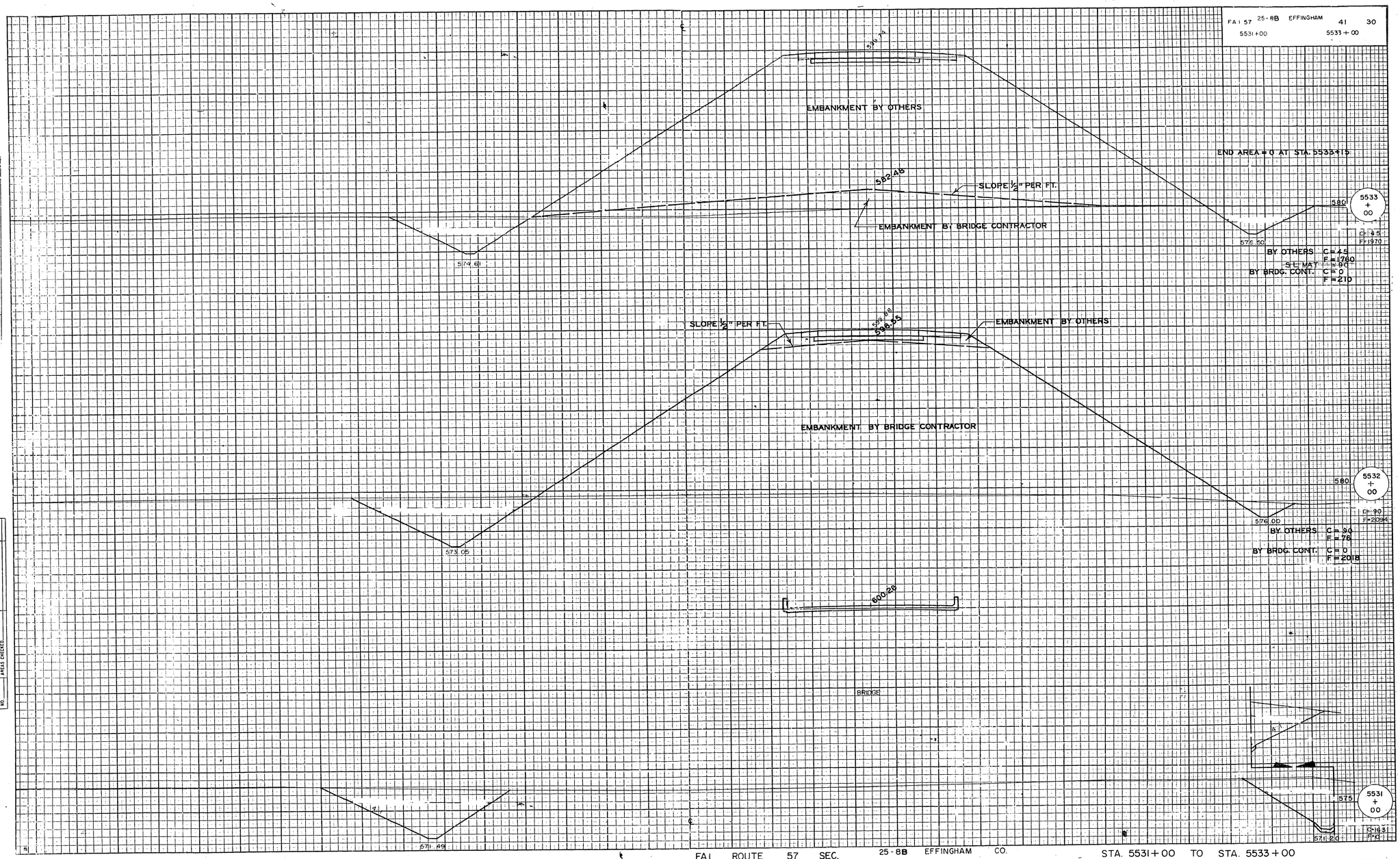
7-25-96

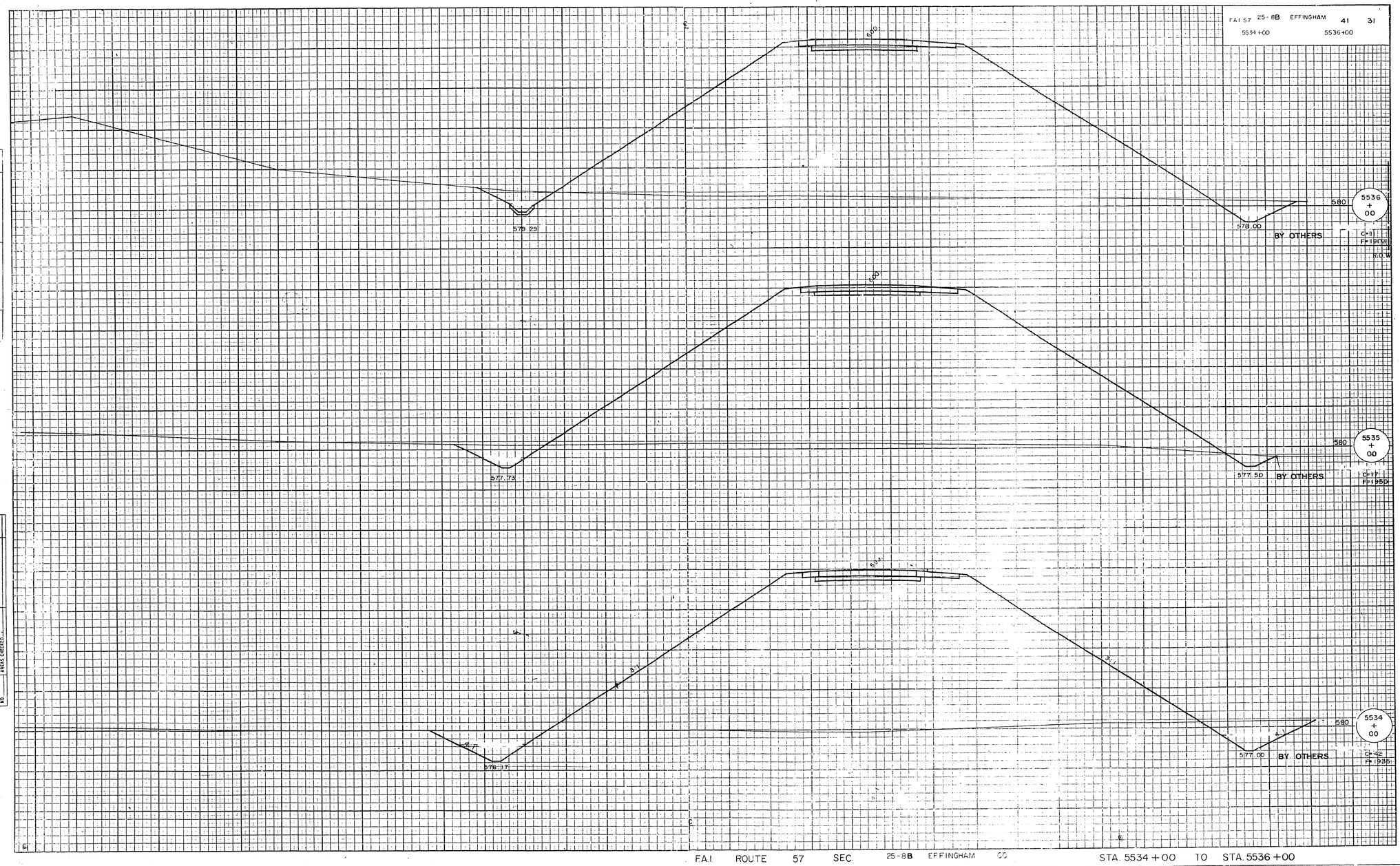


F.A.I. ROUTE 57 SEC. 25-8B EFFINGHAM CO. STA. 5531+00 TO STA. 5533+00

PLATE 3 — CROSS SECTION A. R. E. A. & P. E. STANDARD
THE FREDERICK POST CO. CHICAGO

FAI 57 25-8B EFFINGHAM 41 31

5534+00 5536+00



FINAL SURVEY — SURVEYED / PLOTTED / TEMPLATE / AREAS — NOTE BOOK NO. — AREAS CHECKED

DATE 7-25-96 — BY KLF

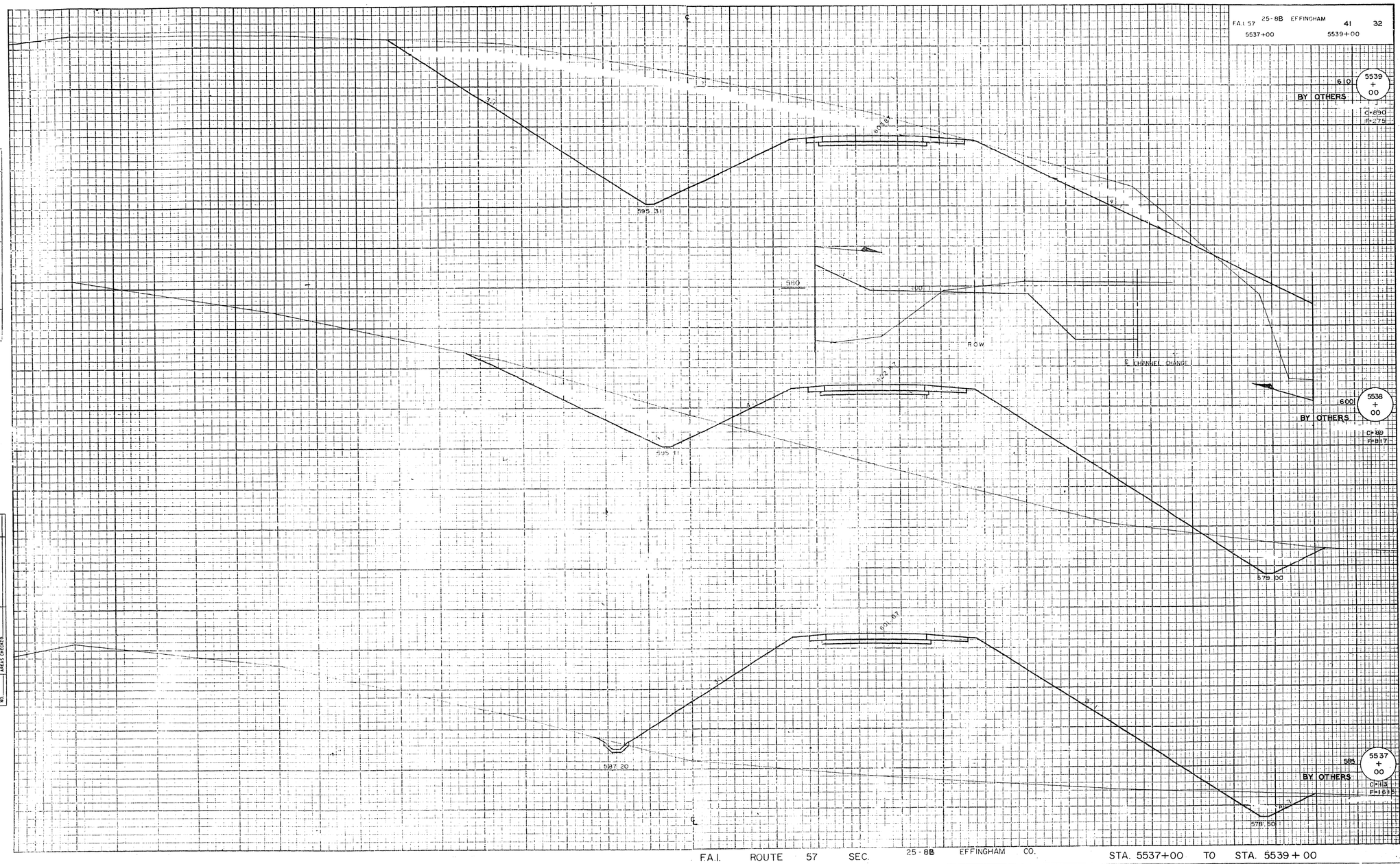
FAI ROUTE 57 SEC. 25-8B EFFINGHAM CO STA. 5534+00 TO STA. 5536+00

PLATE 3 – CROSS SECTION 6 p. x 4 p. x STANDARD
THE KALSEMICK POST CO CHICAGO

K-12-12-02

FA.I. 57 25-8B EFFINGHAM 41 32

5537+00 5539+00



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 M.T. — DATE 7-24-62

F.A.I. ROUTE 57 SEC. 25-8B EFFINGHAM CO. STA. 5537+00 TO STA. 5539+00

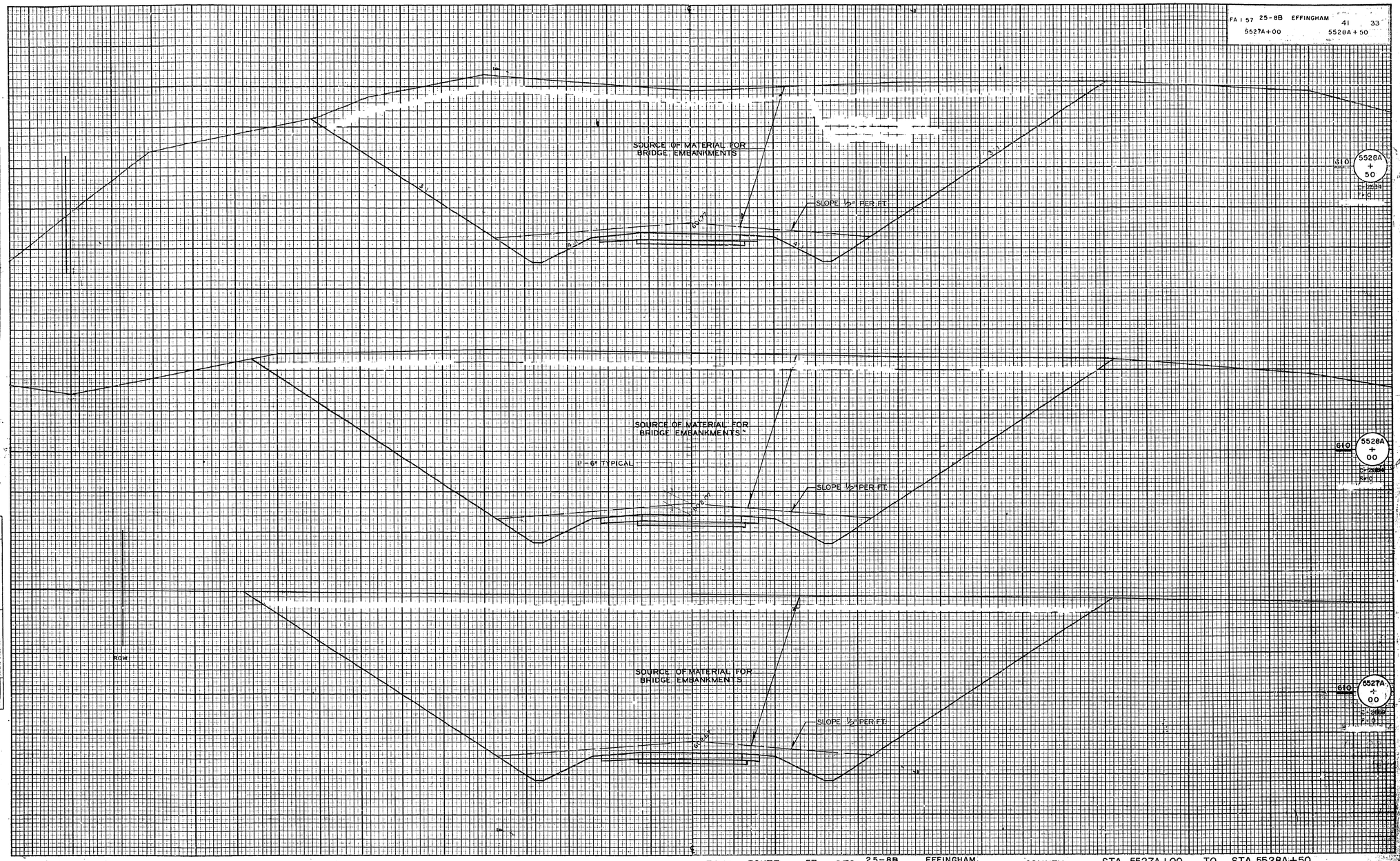
PLATE 9 - CROSS SECTION P.R.S. & T. STANDARD
THE FREDERICK POST CO. CHICAGO

K-12-12-62

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FA I 57 25-8B EFFINGHAM 41 33

5527A+00 5528A+50



FINAL SURVEY
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PLOTTED
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AREAS CHECKED
NOTE BOOK
NO.
BY
DATE

FINAL SURVEY
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AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE

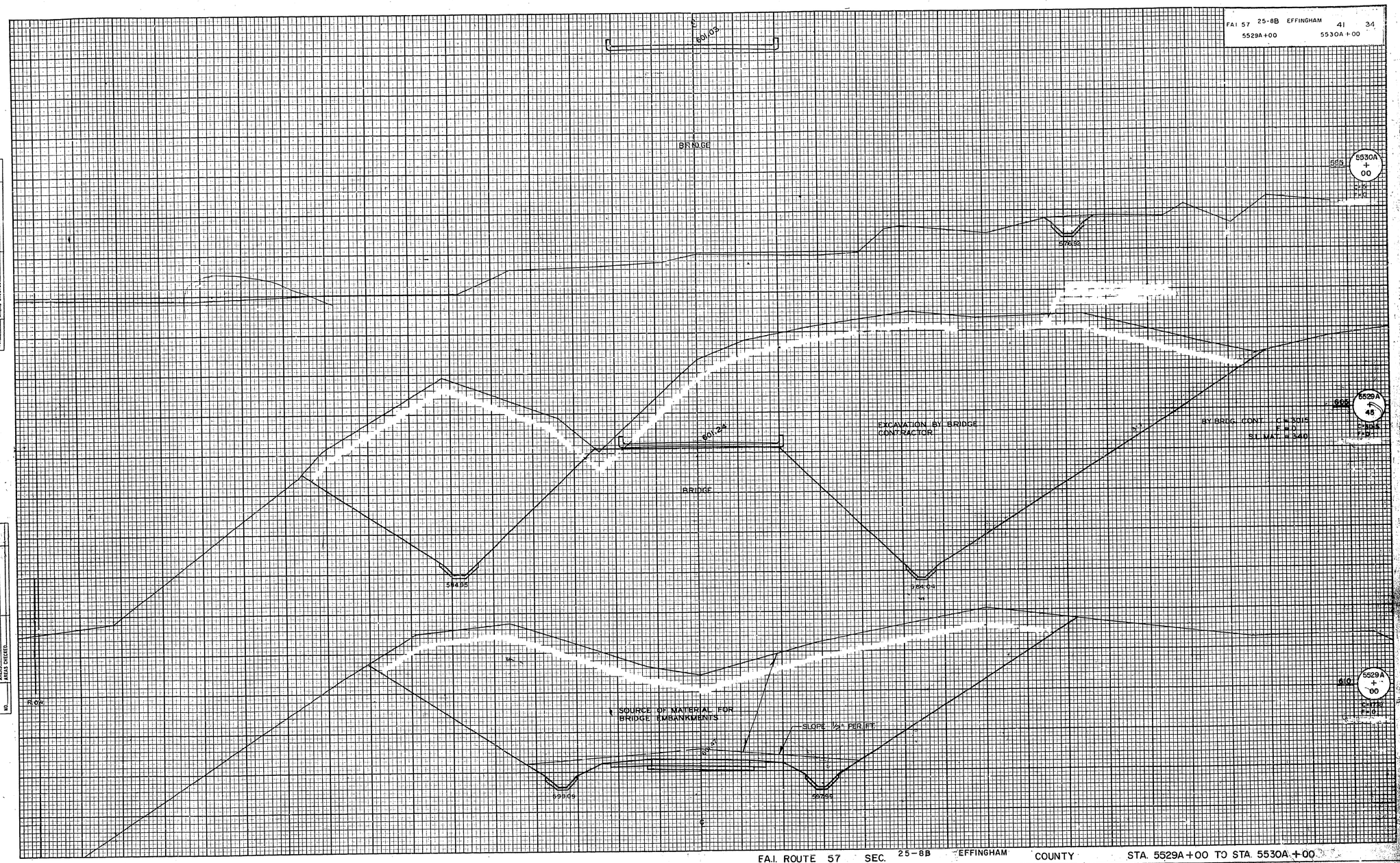
F.A.I. ROUTE 57 SEC. 25-8B EFFINGHAM COUNTY STA. 5527A+00 TO STA. 5528A+50

PLATE 3 —CROSS SECTION O. P. R. & R. E. STANDARD
THE FREDERICK POST CO., CHICAGO

K-15-12-42

FAI 57 25-8B EFFINGHAM 41 34

5529A+00 5530A+00



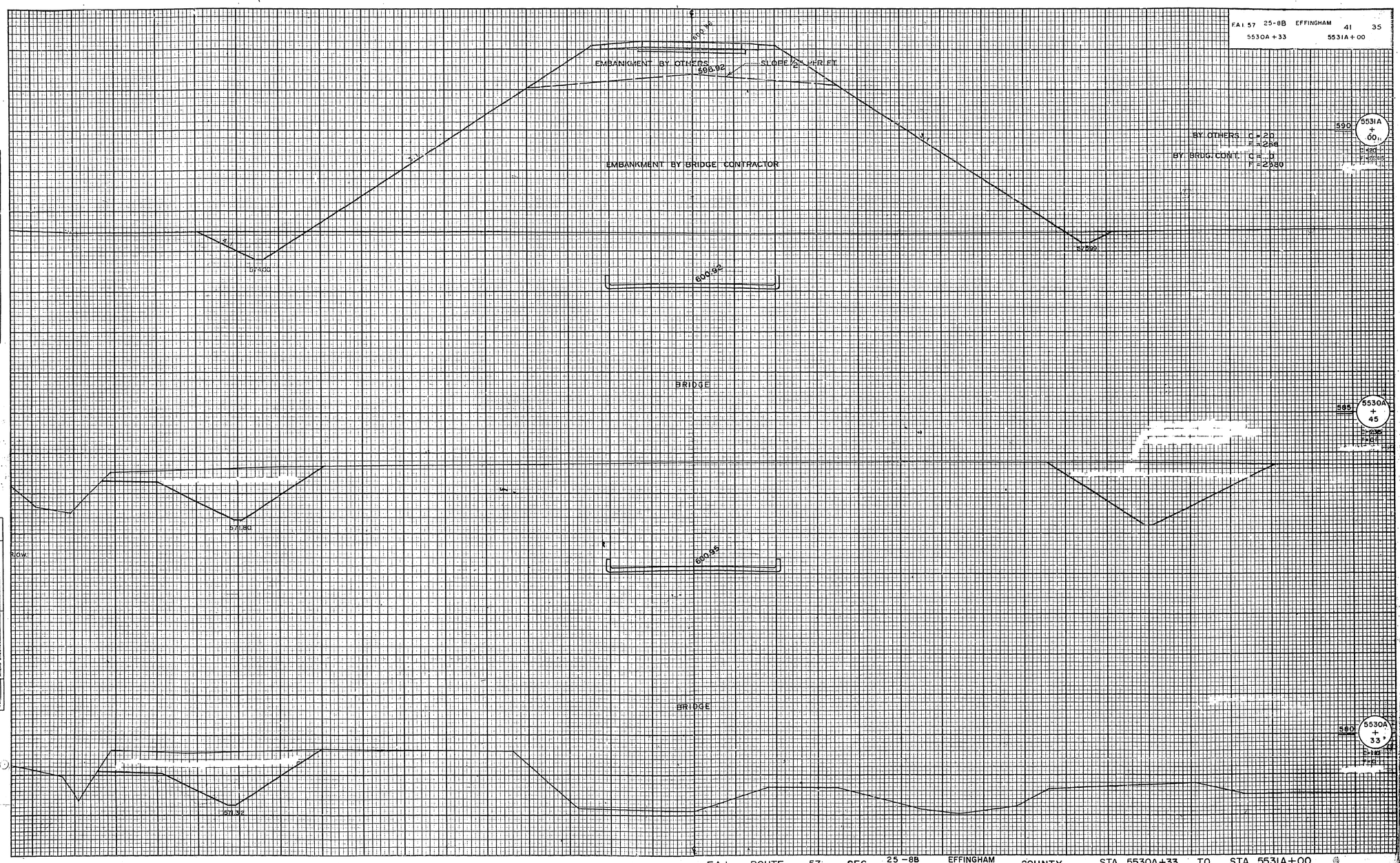
FINAL SURVEY — SURVEYED, PLOTTED, TRIANGULATED, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

FINAL SURVEY — SURVEYED, PLOTTED, TRIANGULATED, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

FA.I. ROUTE 57 SEC. 25-8B EFFINGHAM COUNTY STA. 5529A+00 TO STA. 5530A+00

PLATE 3 —CROSS SECTION O. P. S. & R. E. STANDARD
THE FREDERICK POST CO., CHICAGO

FAI 57 25-8B EFFINGHAM 41 35
5530A+33 5531A+00



FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

PLATE 3 —CROSS SECTION O. P. R. & I. E. STANDARD
THE FREDERICK POST CO., CHICAGO

FA I. 57 · 25-8B EFFINGHAM 41 36

5532A+00 5534A+00

FINAL SURVEY
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AREAS CHECKED
NOTE BOOK
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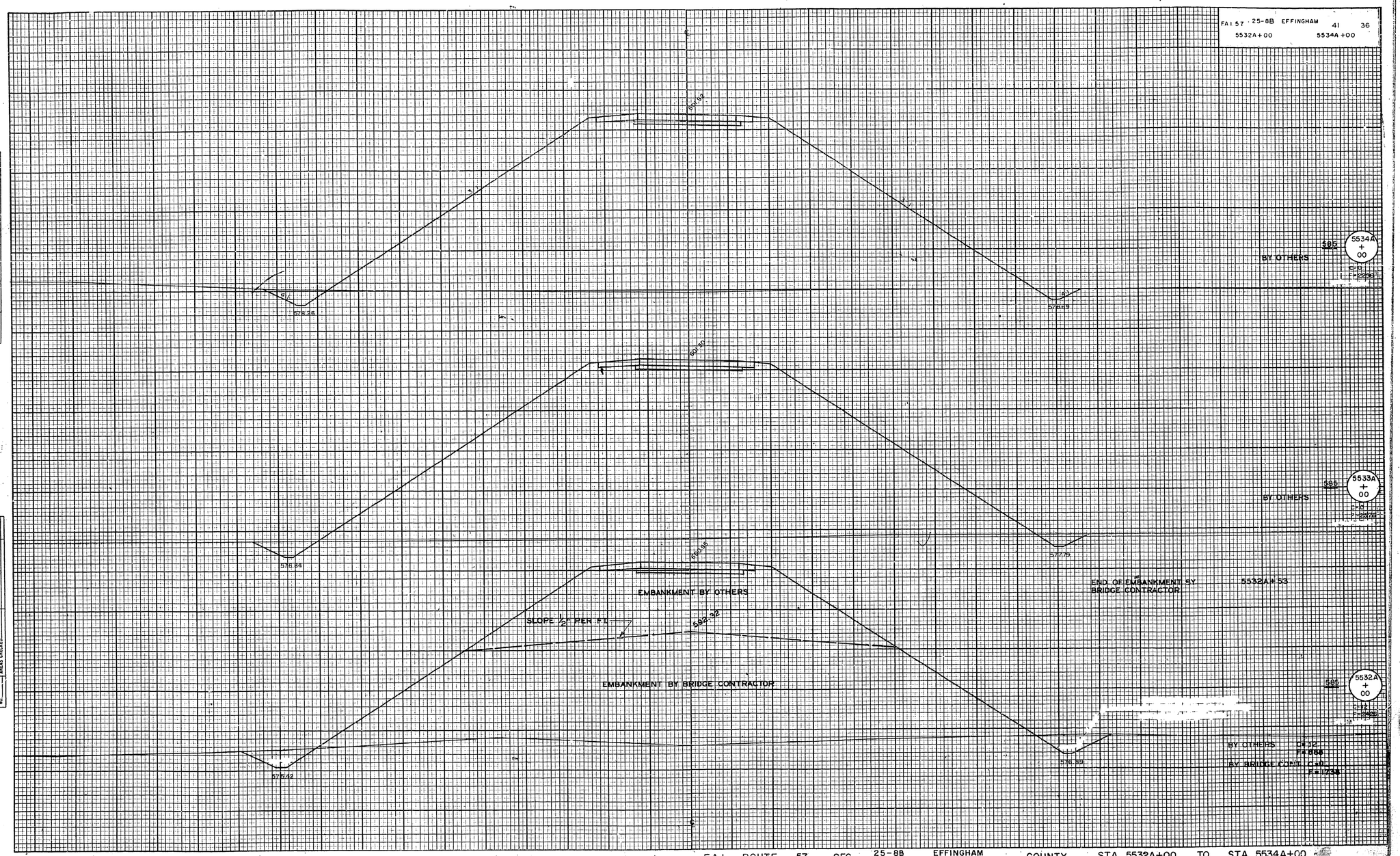
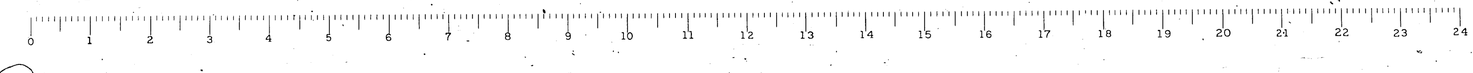


F.A.I. ROUTE 57 SEC. 25-8B EFFINGHAM COUNTY STA. 5532A+00 TO STA. 5534A+00

PLATE 3 —CROSS SECTION C. P. R. & R. E. STANDARD
THE FREDERICK POST CO., CHICAGO



FA.I. 57 25-8B EFFINGHAM 41 37
5535A+00 5537A+00

FINAL SURVEY
SUBMITTED
PLOTTED
TEMPLATE
NOTE BOOK
NO.
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
SUBMITTED
PLOTTED
TEMPLATE
NOTE BOOK
NO.
AREAS CHECKED
BY
DATE

5535A+00
590
BY OTHERS
E-1556
F-1076

5536A+00
590
BY OTHERS
E-1556
F-1076

5537A+00
590
BY OTHERS
E-1556
F-1076

582.72
591.38
581.10
580.89
579.00
575.59

FA.I. ROUTE 57 SEC. 25-8B EFFINGHAM COUNTY STA. 5535A+00 TO STA. 5537A+00

PLATE 3 —CROSS SECTION O. P. R. & B. E. STANDARD
THE FREDERICK POST CO., CHICAGO

F.A.I. 57 25-8B EFFINGHAM 41 38
5538A+00 TO 5539A+00

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TRAVERSE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
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SURVEYED
PLOTTED
TRAVERSE
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AREAS CHECKED
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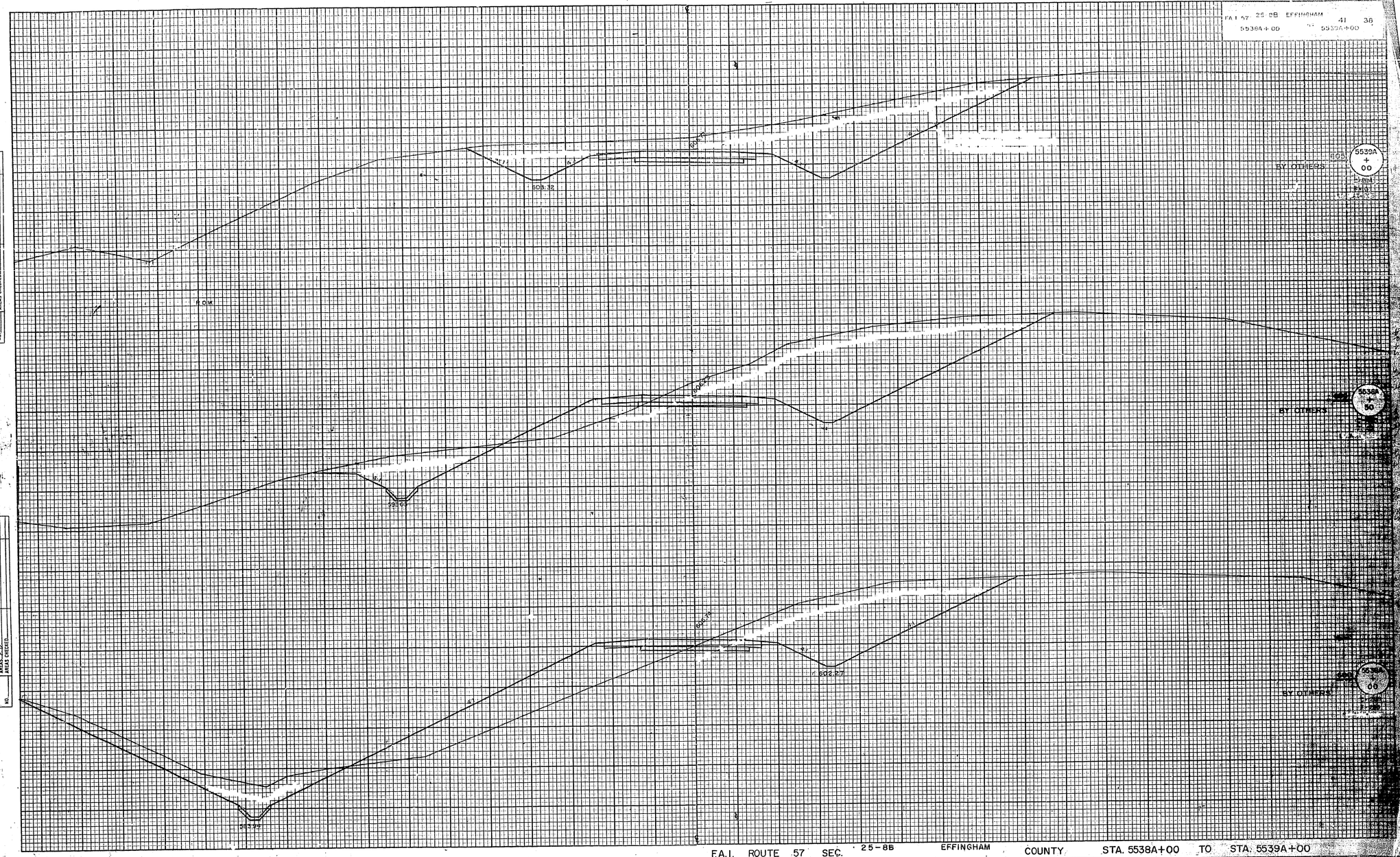
R.O.W.
603.32
603.27
603.32
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