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OMITTED SHEETS NO. 6 & NO. 16  
\* Includes Sheet No. 21-A

DESCRIPTION OF IMPROVEMENT:

THE WORK TO BE DONE UNDER THIS CONTRACT CONSISTS OF THE FURNISHING OF ALL MATERIALS AND THE COMPLETE CONSTRUCTION OF A 2-SPAN STEEL PLATE GIRDER BRIDGE CARRYING 175TH STREET OVER THE SOUTH EXPRESSWAY (WEST LEG). THE EXCAVATION AND FINAL GRADING FOR PAVING, THE CONSTRUCTION OF EMBANKMENT, THE CONSTRUCTION OF P.C. CONCRETE PAVEMENT 10'.

THE CONSTRUCTION OF STABILIZED SUB-BASE AND BASE-COURSE, THE CONSTRUCTION OF DRAINAGE FACILITIES, AND ALL INCIDENTAL AND COLLATERAL WORK NECESSARY TO COMPLETE THE IMPROVEMENT AS SHOWN ON THE PLANS AND DESCRIBED IN THE SPECIAL PROVISIONS.

PREPARED BY: *[Signature]* 9/1/65  
DISTRICT DESIGN ENGINEER

EXAMINED BY: *[Signature]* 9/1/65  
DISTRICT CONSTRUCTION ENGR

EXAMINED BY: *[Signature]* 9/7/65  
DISTRICT MATERIAL ENGINEER

EXAMINED BY: *[Signature]* 9/1/65  
ASS'T. DIST. ENGR. ENGINEERING

EXAMINED BY: *[Signature]* 9/7/65  
ASS'T. DIST. ENGR. - OPERATIONS

ENTIRE SECTION INSPECTED AND APPROVED AS TO POLICY

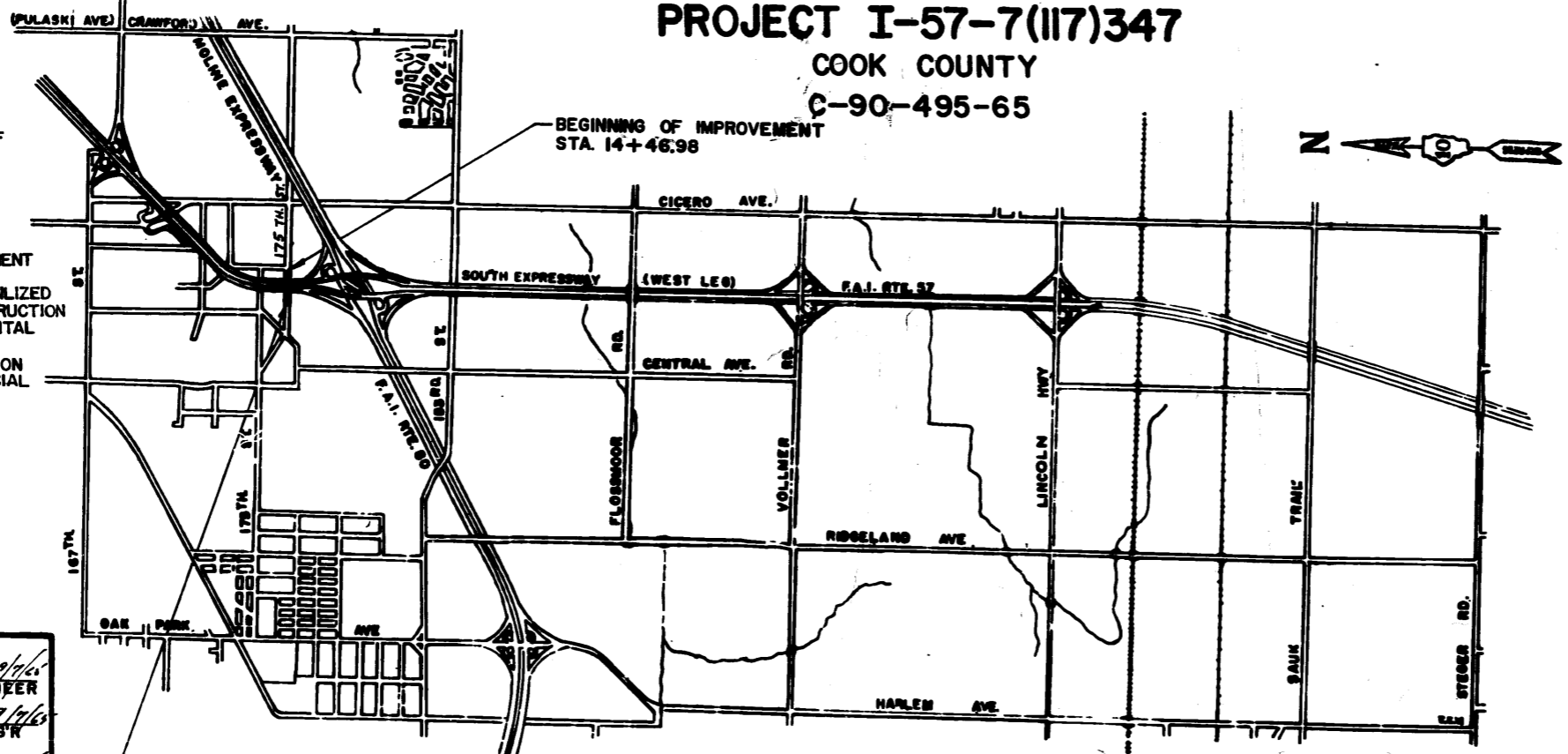
BY: *[Signature]*  
DISTRICT ENGINEER

CONTRACT NO. 24890

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF HIGHWAYS  
PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY  
SOUTH EXPRESSWAY (WEST LEG)

F.A.I. ROUTE 57 SECTION 0809-1014HB  
175 TH STREET  
GRADE SEPARATION AND  
STREET RECONSTRUCTION

PROJECT I-57-7(117)347  
COOK COUNTY  
C-90-495-65

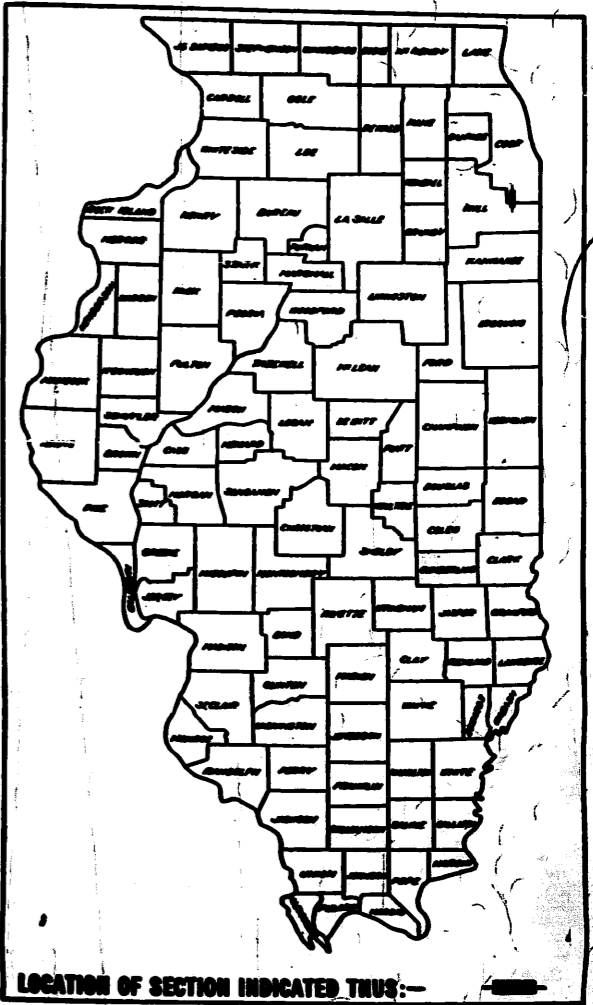


LOCATION PLAN

NET LENGTH OF IMPROVEMENT = 2,128.34 LIN. FT. = 0.403 MILES  
NET LENGTH OF PROJECT = 0.00 LIN. FT. = 0.000 MILES

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
57	0809-1014HB	COOK	43	1

P-90-503-00



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

DESIGNED BY: *[Signature]* 9-7-65  
C.A. Bonawit

APPROVED BY: *[Signature]* October 1, 1965  
A. Van Gindell

APPROVED BY: *[Signature]* October 1, 1965  
H. J. Allen

APPROVED BY: *[Signature]* October 1, 1965  
Charles J. Barry

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

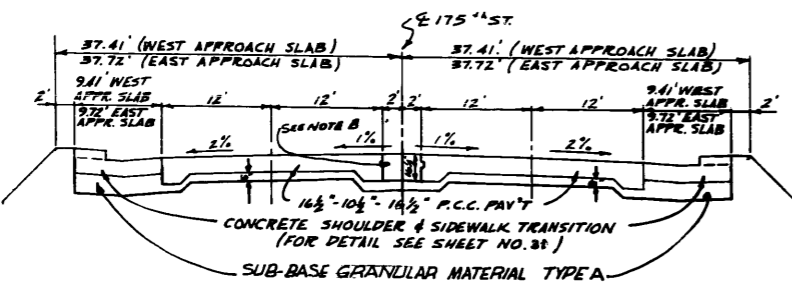
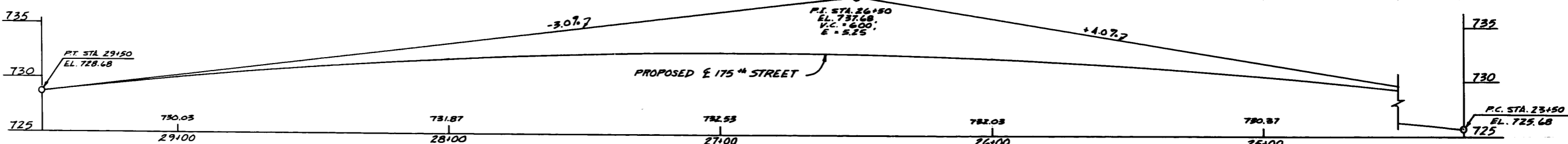
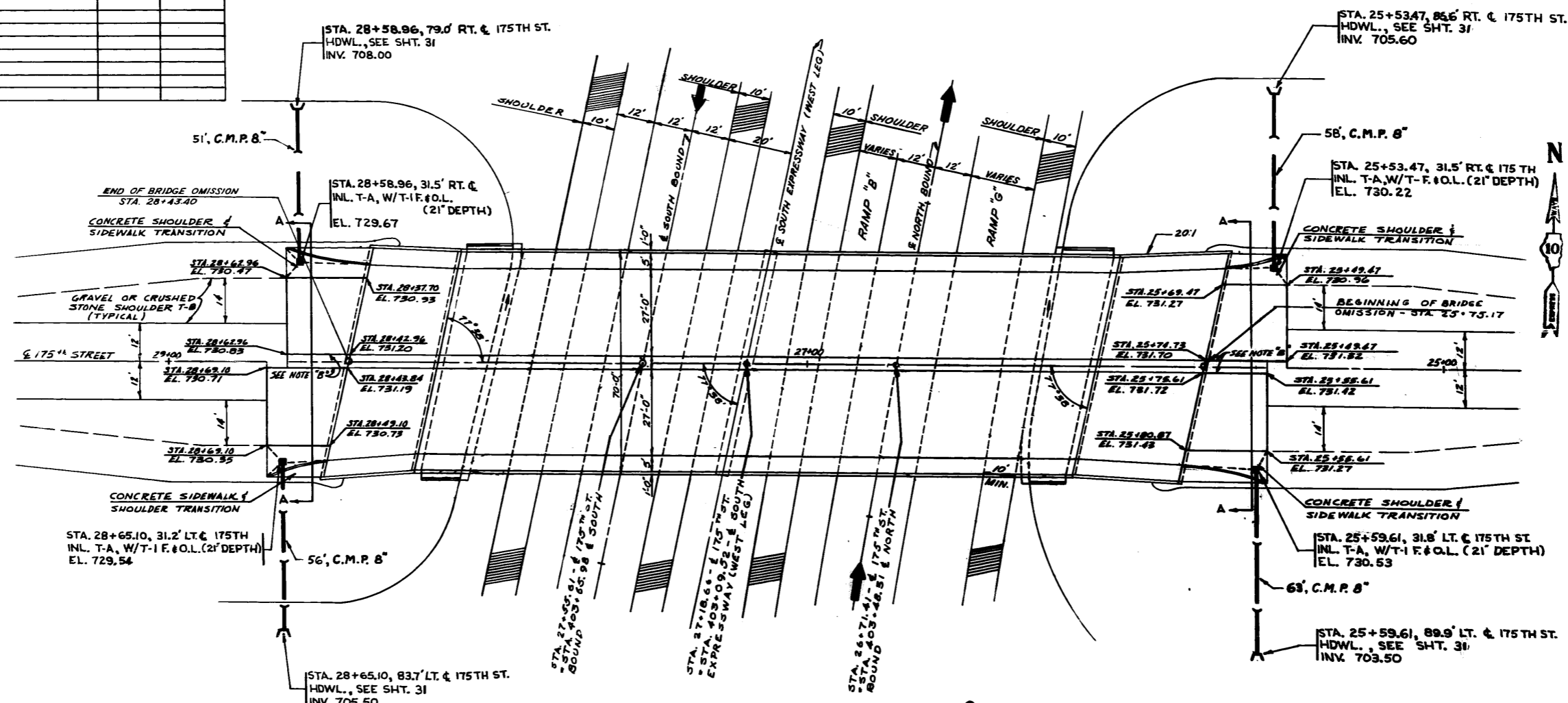
APPROVED

DATE

BILL OF MATERIALS		
ITEM	UNIT	QUANTITY
1 1/2" - 10 1/2" - 1 1/2" P.C.C. PAVEMENT	SQ. YD.	241.2
REINFORCEMENT BARS	LB.	13,672.0
CLASS X CONCRETE	CU. YD.	8.0
PROTECTIVE COAT	SQ. YD.	259
SUB-BASE GRANULAR MATERIAL TYPE A	TON	118

BAR SCHEDULE					
ONE APPROACH SLAB			TOTAL NO.		
ITEM	NO.	SIZE	LENGTH	SHAPE	4 APPROACH SLABS
TRANSVERSE BARS	33	#5	23'-10"	—	132
LONGITUDINAL BARS	31	#8	21'-4"	—	124
	18	#8	17'-4"	—	72

F.A.L. SHEET	SECTION	EXPRESSWAY	TOTAL SHEETS	SHEET NO.
57	0507 - 1014 UB	SOUTH EXPRESSWAY (WEST LEG)	83	13
STA.		TO STA.		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



SECTION A-A

NOTE A: APPROACH SLABS SHALL CONFORM TO STANDARD 1909 - 6 METHOD III

NOTE B: 1 1/2" P.C.C. PAVEMENT MEDIAN 4' WIDE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF CLASS X CONCRETE.

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS  
SOUTH EXPRESSWAY (WEST LEG)

APPROACH SLABS

SCALE: HORIZ. 1" = 20'  
VERT. 1" = 10'  
DATE: JUNE, 1965  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

REQ. 9-21-65 Chgd 8" METAL CULVERT PIPE in 4 places to CORRUG. METAL PIPE 8"

B.M. 3' Located 3935.8' West and 30.3' South of intersection of Cicero Ave. and 175th St. Top of U.S.G.S. 1959 Monument V-207 E1.720.89

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

TABLE OF MOMENTS & REACTIONS INTERIOR GIRDER

MOMENTS - FT. KIPS	REACTIONS - KIPS		
	4 SPAN	PIER 1	PIER 1
D.L.	915	-1,543	44.4
L.L.	830	-815	40.3
IMP	174	-180	68.7
TOTAL	1,919	-2,538	208.7

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET
57	1014 NB	Cook	43	18	11 SHEETS

**GENERAL NOTES**

Class X Concrete shall be used throughout.  
Coarse aggregate to be used in parapet handrails must be absolutely free of chert, flint, limonite, lignite and soft sandstone.  
The concrete floor slab shall be finished in accordance with Art. 51.19 of the Std. Specifications.  
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, #4 wires, weighing 58# per 100 sq. ft.  
All reinforcement bars shall have a minimum lap of 20 diameters.  
Rivets 3/4", open holes 1 1/2", unless otherwise noted.  
These items are included in quantity of structural steel:  
a) Rockers, bolsters, bearing plates, pintles, lead plates and anchor bolts, Est. weight 15,120 Lbs.  
b) Expansion guards, Est. weight 4,210 Lbs.  
c) Frames and grates, Est. weight 370 Lbs.  
Anchor bolts shall be set before connecting cross frames over supports.  
Exposed surfaces of the expansion guard, inaccessible after erection, shall receive two shop coats of red lead paint. All other surfaces shall be given one shop coat of red lead paint. Anchor studs shall not be painted.  
Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions.

**CURVE #17**  
(Double Spiral)

$\Delta = 23^{\circ}-00'-00''$   
 $D_c = 3^{\circ}-06'-21.03''$   
 $R_c = 1844.775'$   
 $L_s = 740.540'$   
 $O_s = 11^{\circ}-30'-00''$   
 $P = 12.374'$   
 $K = 369.774'$   
 $X_c = 737.563'$   
 $Y_c = 49.401'$   
 $L.T. = 494.740'$   
 $S.T. = 247.799'$   
 $L_c = 739.219'$   
 $T.S. = 747.612'$   
 $E_s = 50.416'$   
 $S = 0.06$   
S.C.S. Sta 398+68.185  
E North Bd.

**CURVE #17-B**  
(Double Spiral)

$\Delta = 23^{\circ}-00'-00''$   
 $D_c = 2^{\circ}-55'-35.16''$   
 $R_c = 1957.870'$   
 $L_s = 785.939'$   
 $O_s = 11^{\circ}-30'-00''$   
 $P = 13.133'$   
 $K = 392.443'$   
 $X_c = 782.779'$   
 $Y_c = 52.430'$   
 $L.T. = 525.070'$   
 $S.T. = 262.991'$   
 $L_c = 784.532'$   
 $T.S. = 793.445'$   
 $E_s = 53.507'$   
 $S = 0.06$   
S.C.S. Sta. 30+01.970  
Ramp "B"

Permanent forms will not be permitted in forming the concrete floor.  
All structural steel shall comply with the specifications for structural steel ASTM Designation A36.  
All welding shall conform to the current specifications for welded Highway and Railway Bridges of the American Welding Society.  
The Contractor shall drive two (2) test piles; one (1) concrete pile at East Abut. in a permanent location, one (1) timber pile near Pier 1, as directed by the Engineer before ordering the remaining piles.  
Concrete piles at Approach abutments shall be driven in holes precored through the embankment in accordance with Art. 60.9 (c) of the Std. Specifications.

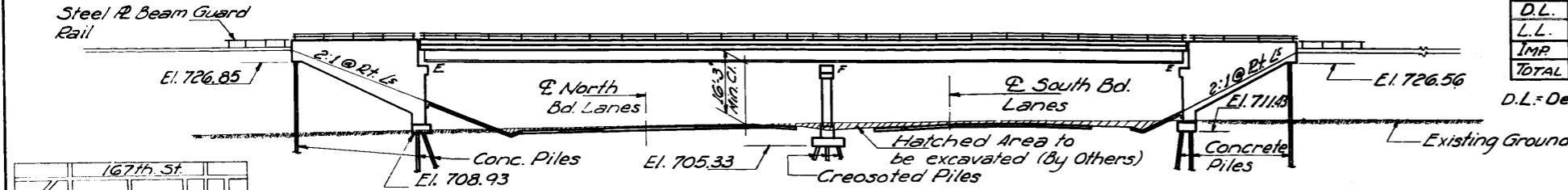
**TOTAL BILL OF MATERIAL**

Item	Super	Sub	Total
Class "A" Excavation	Cu.Yds.		180
Class X Concrete	Cu.Yds.	696.6	1,106.8
Structural Steel	Lbs.	659,600	659,600
Aluminum Handrail	Lin.Ft.	536	536
Reinforcement Bars	Lbs.	173,600	212,870
Creosoted Piles	Lin.Ft.	1,350	1,350
Test Piles (Timber)	Ea.	1	1
Concrete Piles	Lin.Ft.	3,460	3,460
Test Piles (Concrete)	Ea.	1	1
Name Plates	Ea.	2	2
Slope Wall (ft)	Sq.Yds.		340
Protective Coat	Sq.Yds.		2,219
Preformed Joint Sealer	Lin.Ft.	143	143
Metal Handrail	Lin.Ft.	536	536

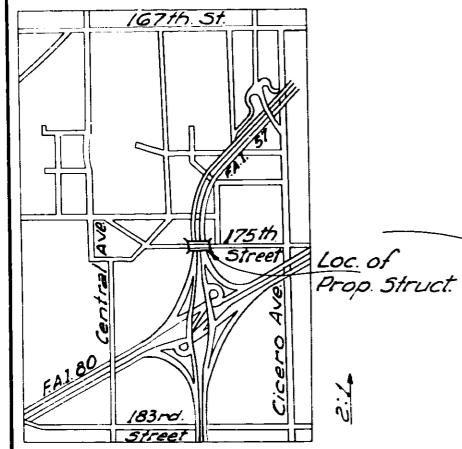
(\*) Includes Exc. for slope wall

**GENERAL PLAN & ELEVATION**  
**PROJ. I-57-7 (11) 347**  
**175th ST. OVER So. EXPRESSWAY**  
**FA.I. RT. 57 SEC. 0809-1014 NB**  
**COOK COUNTY**

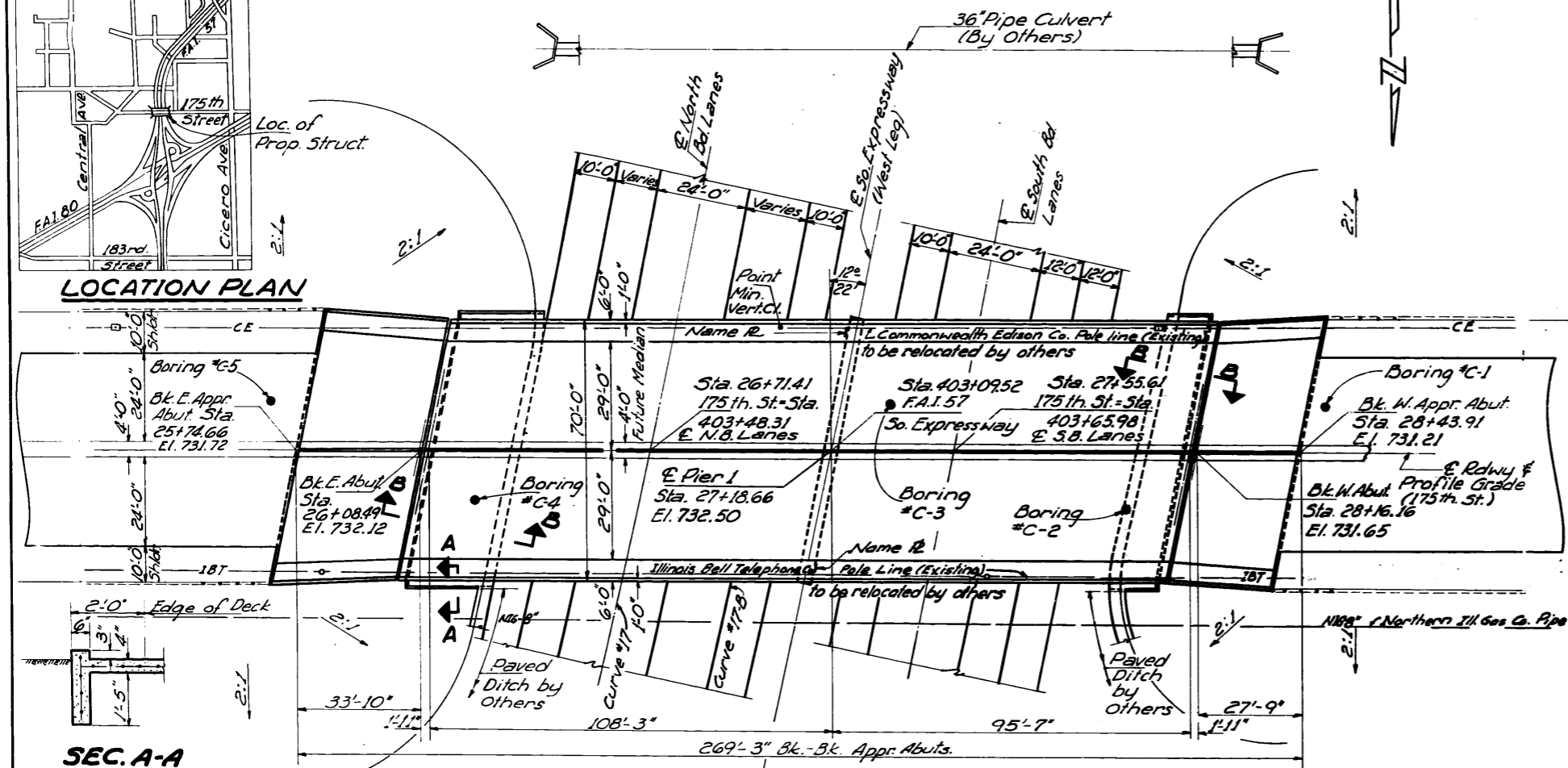
STA. 403+09.52 (FA.I.57) STA. 27+18.66 (175th St.)



**ELEVATION**

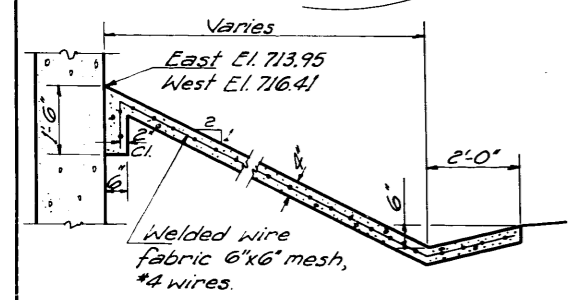


**LOCATION PLAN**



**PLAN**

**SEC. A-A**



**SECTION B-B**

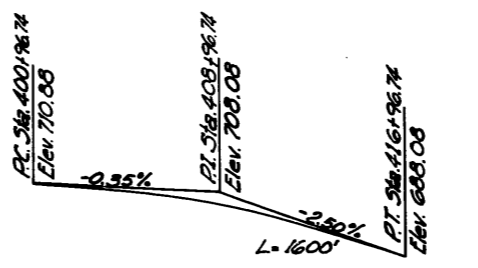
DESIGNED	<i>P. Jander</i>
CHECKED	<i>D. Charles</i>
DRAWN	<i>A. Barrera</i>
CHECKED	<i>P. J.</i>

EXAMINED	<i>C. J. ...</i>	July 27 1965
PASSED	<i>J. ...</i>	
APPROVED	<i>J. ...</i>	

**PROFILE S. BD. LANES**  
**DESIGN STRESSES**

$f_c = 1400$  psi (Super & Sub.)  
 $f_s = 20,000$  psi (Reinf.)  
 $f_s = 20,000$  psi (Struct.)  
 $v_c = 75$  psi (Figs.)  
 $n = 10$   
Allowable  $\frac{1}{4}$  Deflection  $\frac{L}{1000}$   
LOADING HS 20-44

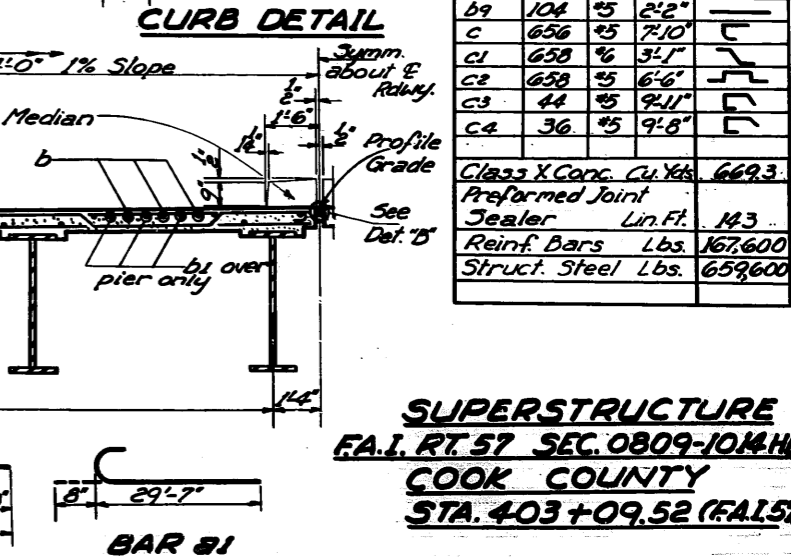
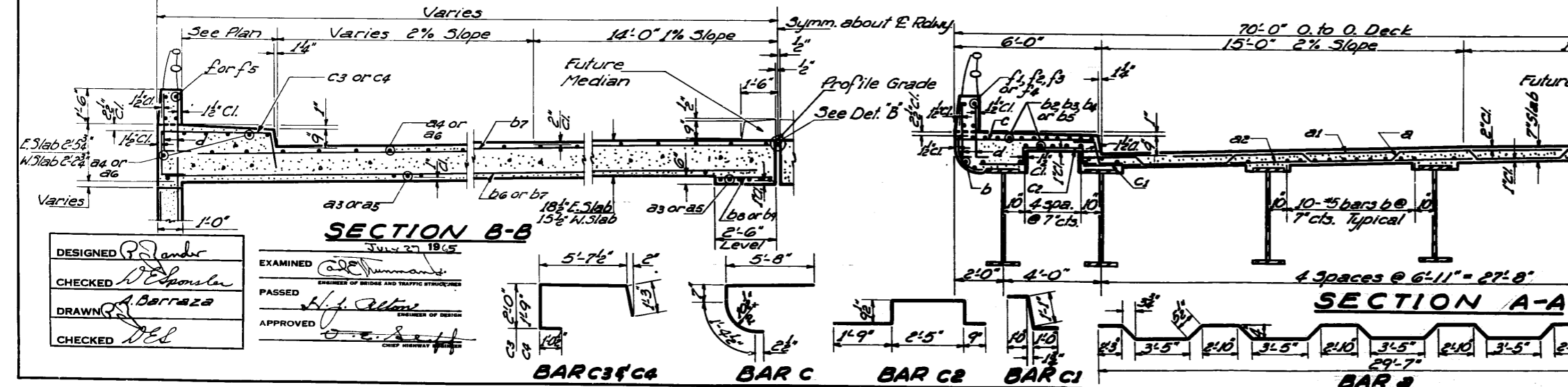
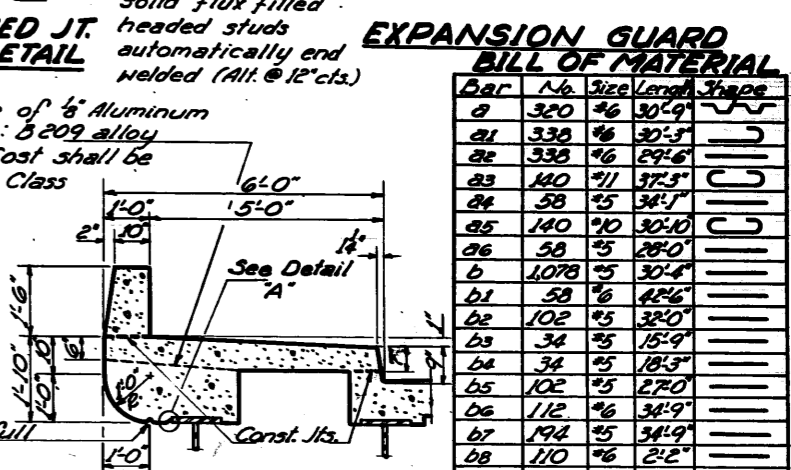
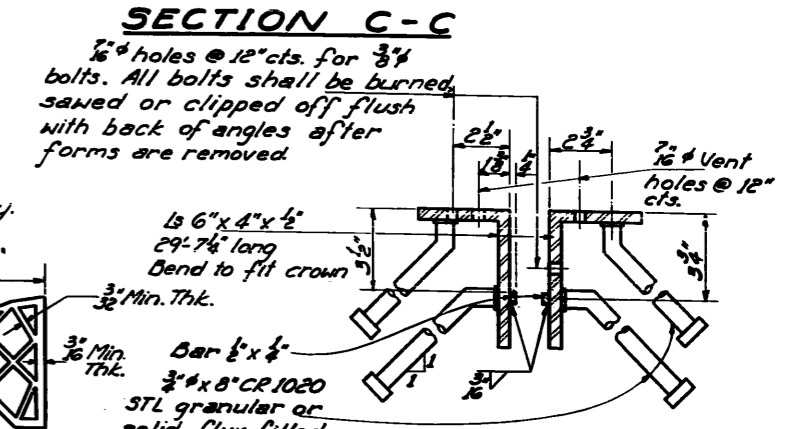
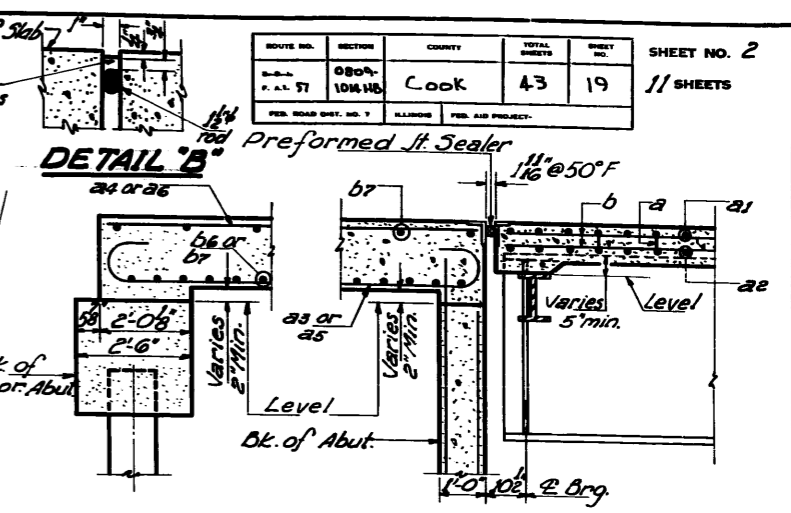
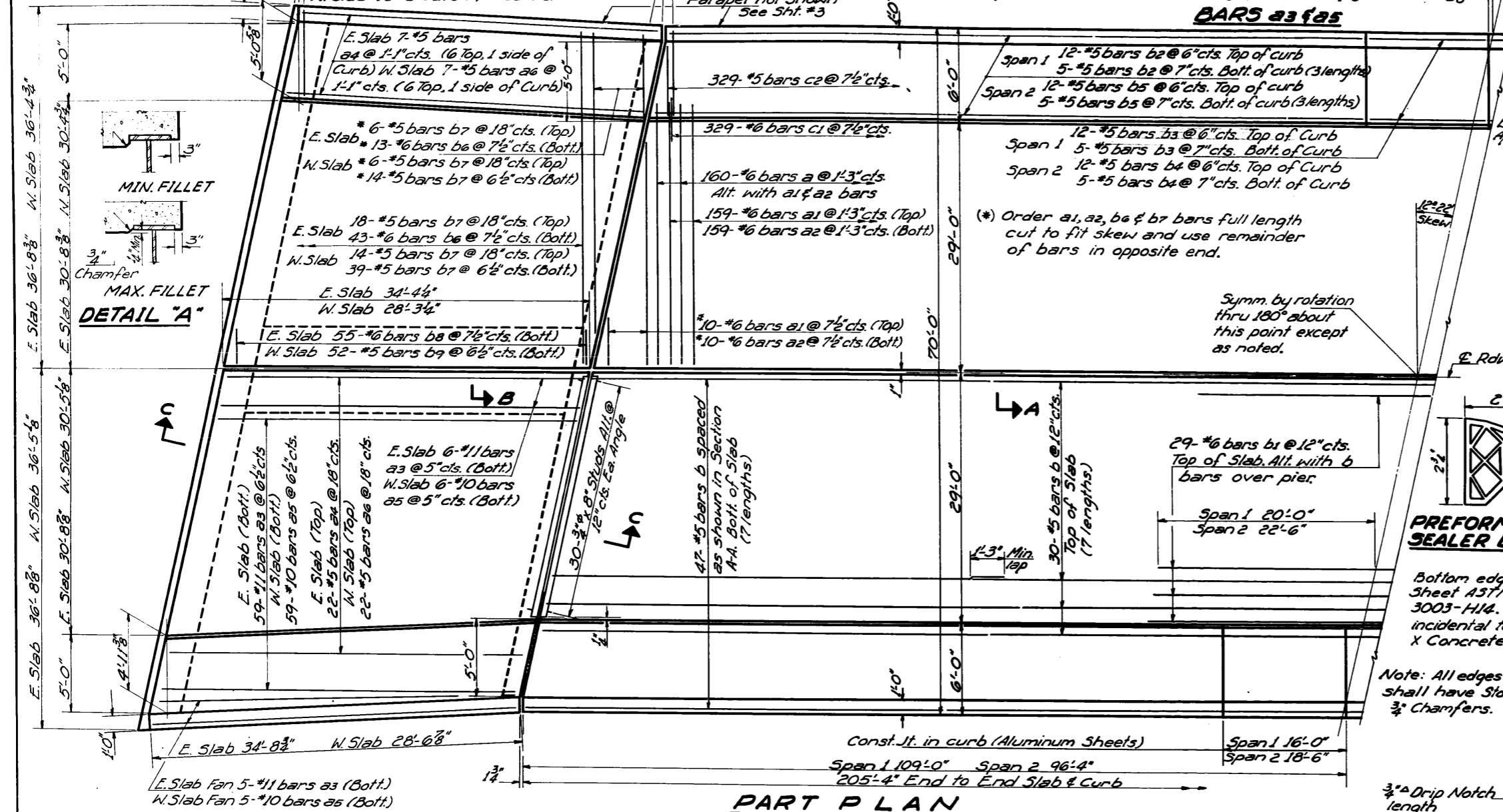
**PROFILE - 175th ST.**



**PROFILE - N. BD. LANES**

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	0809-104 HB	Cook	43	19
PREPARED BY: J. J. BARRAZA		DESIGNED BY: J. J. BARRAZA	SHEET NO. 2	
CHECKED BY: J. J. BARRAZA		11 SHEETS		



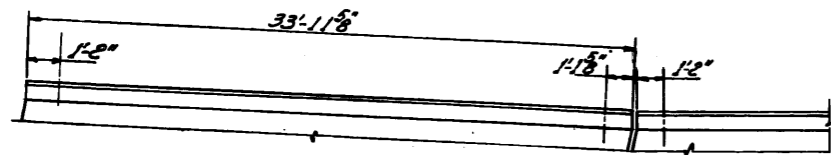
DESIGNED P. J. Anderson  
CHECKED J. J. Barraza  
DRAWN A. Barraza  
CHECKED J. J. Barraza

EXAMINED J. J. Barraza  
PASSED H. J. Atkinson  
APPROVED J. J. Barraza

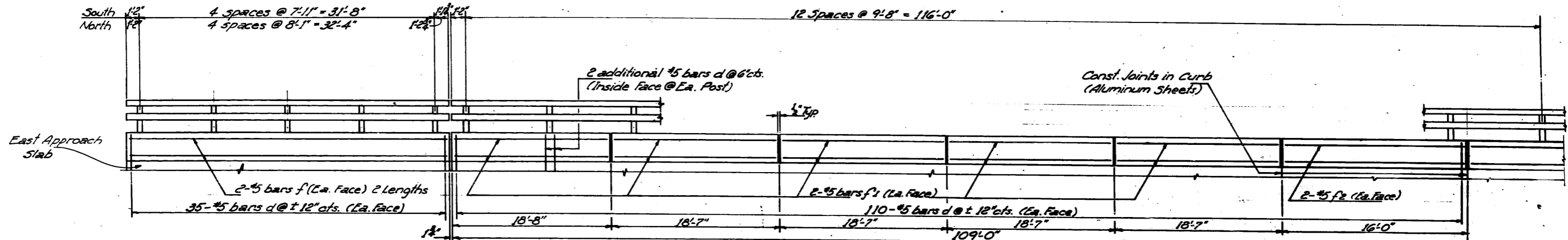
SUPERSTRUCTURE  
F.A.I. RT. 57 SEC. 0809-104 HB  
COOK COUNTY  
STA. 403+09.52 (F.A.I. 57)

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

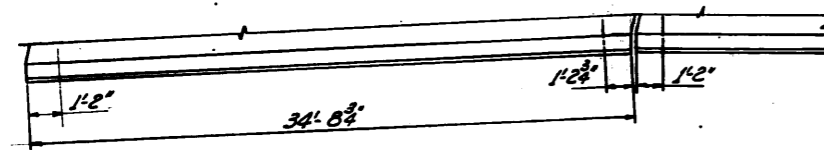
PROJECT NO.	DATE	DESIGNER	SCALE	SHEET NO.
57	0809-1014	COOK	43	20
11 SHEETS				



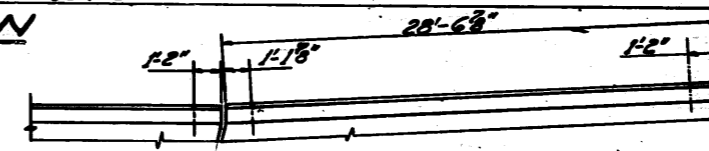
PLAN-SOUTH END POST



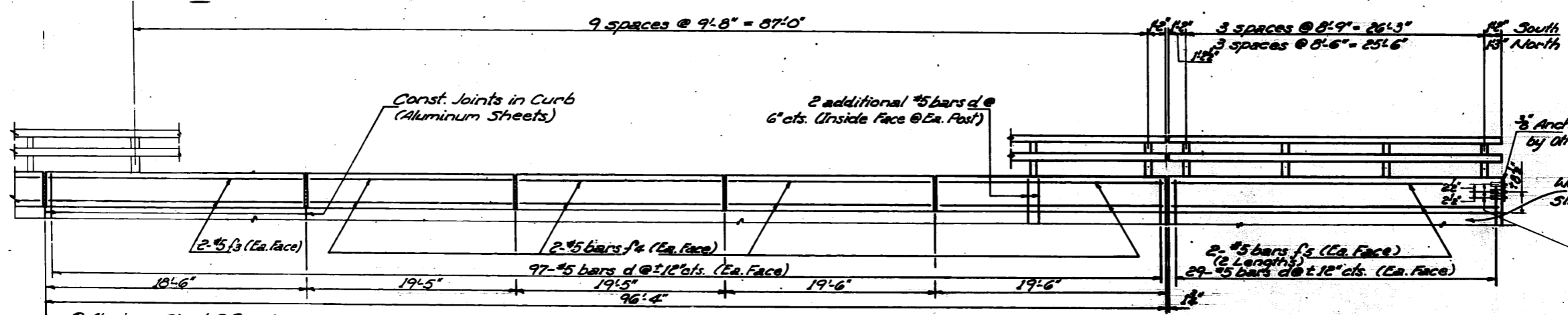
PART ELEVATION



PLAN-NORTH END POST



PLAN-SOUTH END POST



PART ELEVATION

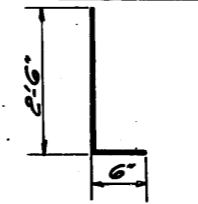
2 HANDRAILS  
BILL OF MATERIAL

Bar	No.	Size	Length	Weight
d	1200	#5	3'-0"	L
f	16	#5	17'-10"	
f1	40	#5	10'-3"	
f2	8	#5	15'-8"	
f3	8	#5	10'-2"	
f4	32	#5	19'-1"	
f5	16	#5	14'-9"	
Reinf. Bars				Lbs. 6000
Class X Concrete Cu. Yds.				273
Aluminum Handrail Lin. Ft.				536
Metal Handrail Lin. Ft.				536

DESIGNED *R. J. ...*  
CHECKED *D. E. ...*  
DRAWN *A. ...*  
CHECKED *D. E. ...*

EXAMINED *C. E. ...*  
PASSED *H. J. ...*  
APPROVED *D. E. ...*

June 27 1965



BARd

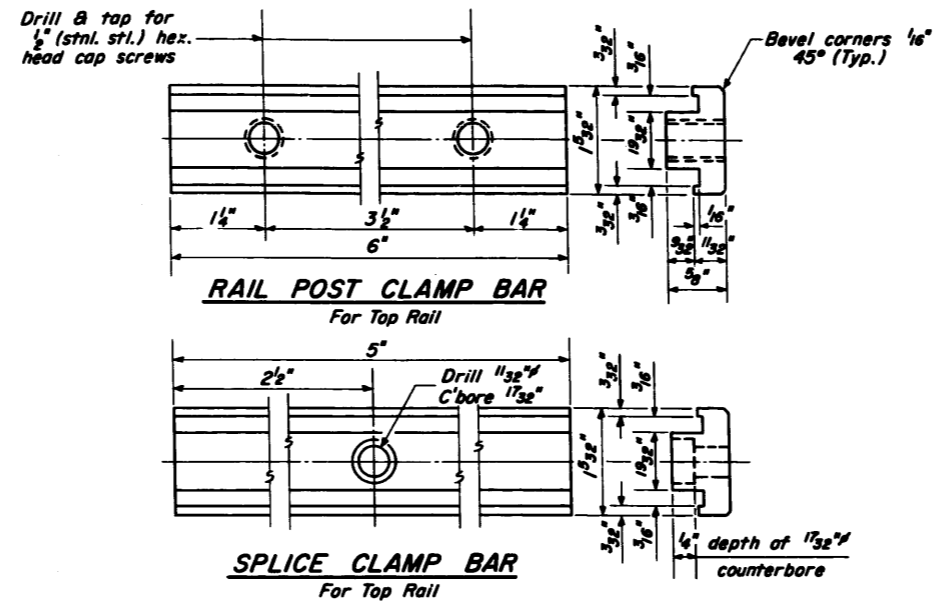
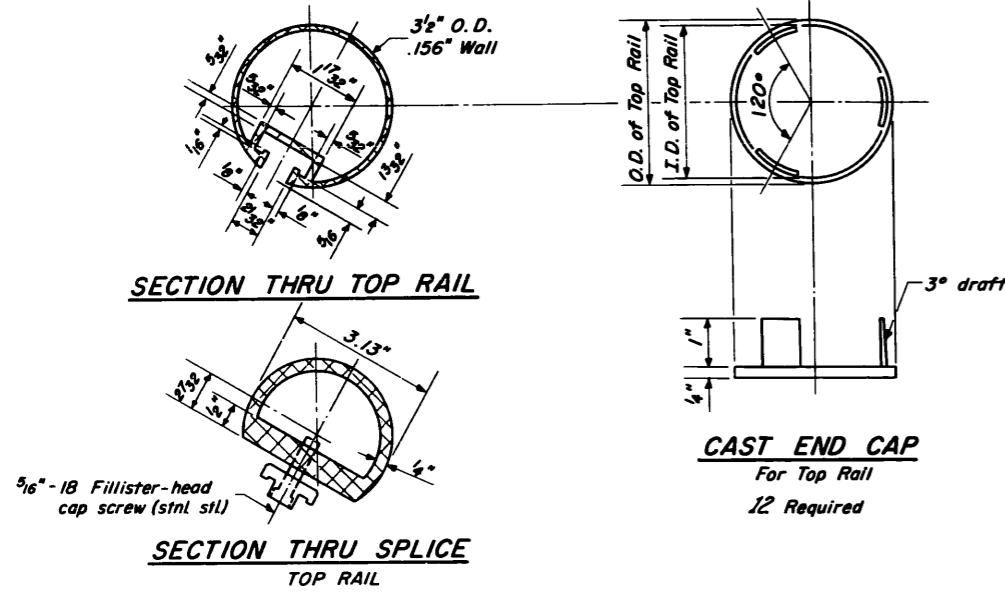


PLAN-NORTH END POST

HANDRAIL  
FAI RT. 57 SEC. 0809-1014  
COOK COUNTY  
STA. 403+09.52 (FAI 57)

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

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0809-1014HB	COOK	43	21	11 SHEETS



**NOTES**  
All Posts shall be normal to parapet.  
All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6, or 6062-T6, and shall extend a minimum of 2 panel lengths (attached to minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.

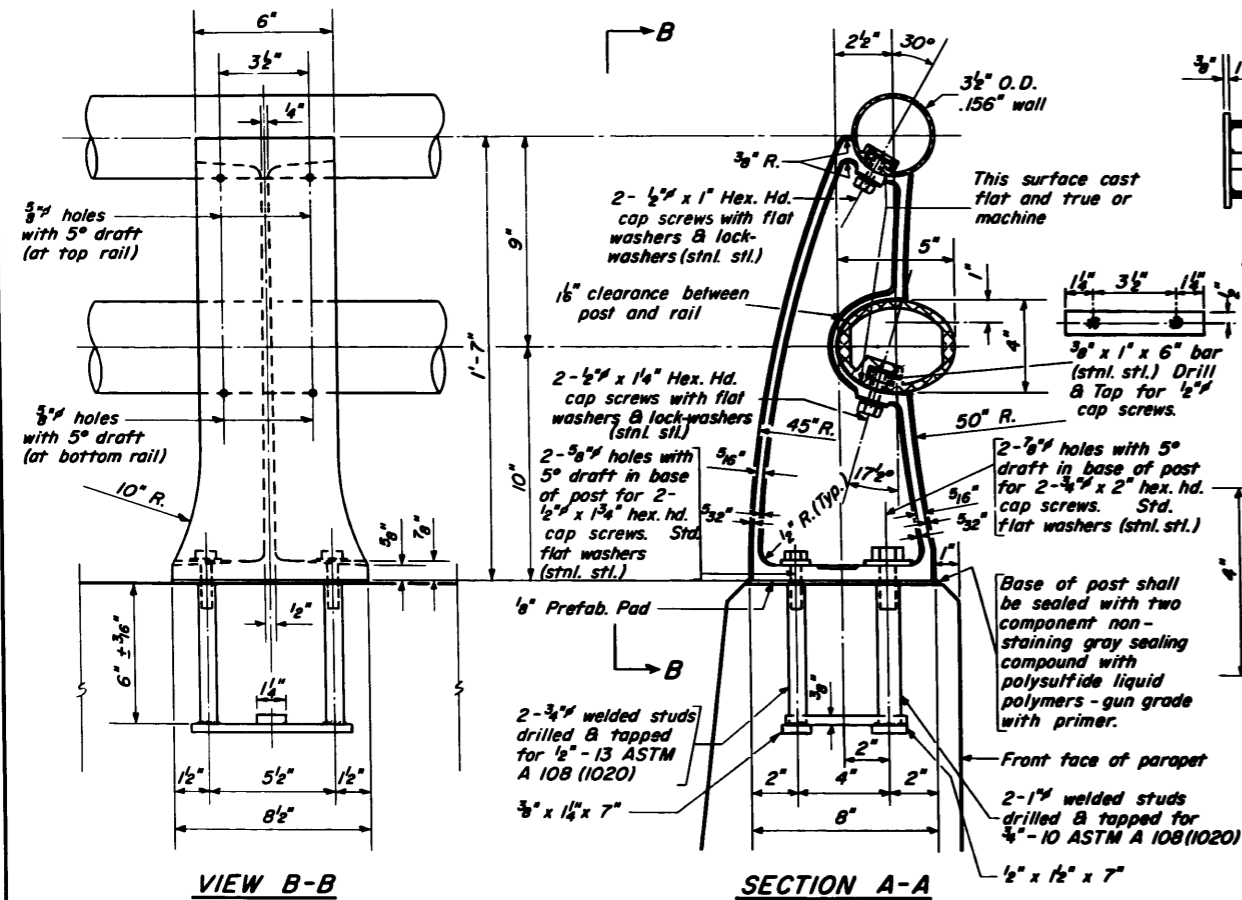
See Special Provisions for following Material Specifications:  
Cast Aluminum Alloy Bridge Post - Alloy A344-T4.  
Stainless Steel Cap Screws, Washers and Bars.

For material composition of Prefabricated Pad, see Article 54.9 (f), (Bearing and Anchorage), of the Standard Specifications.  
**METHOD OF MEASUREMENT:** Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

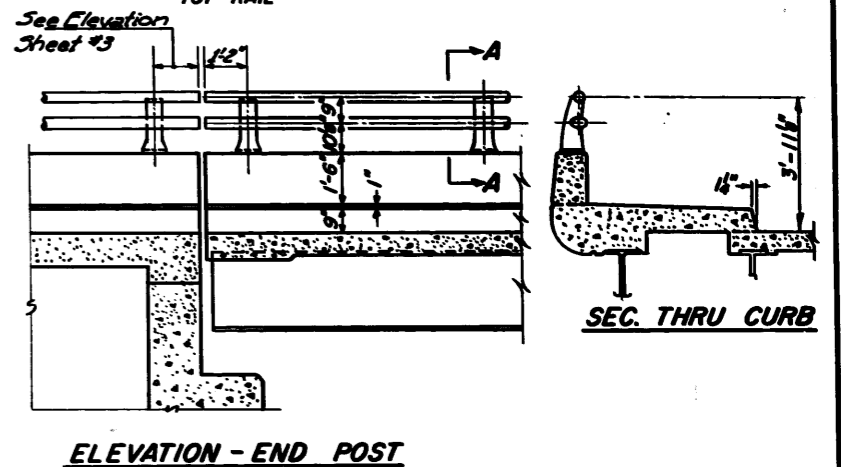
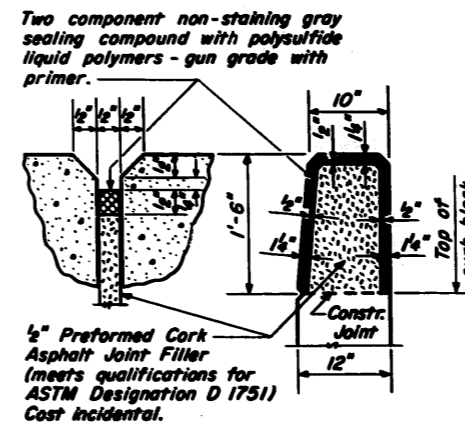
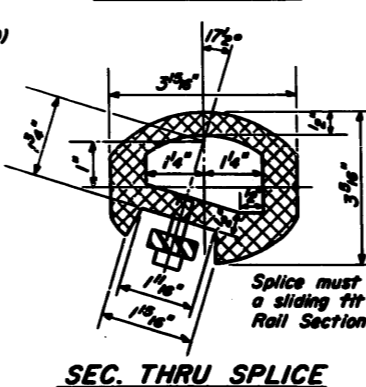
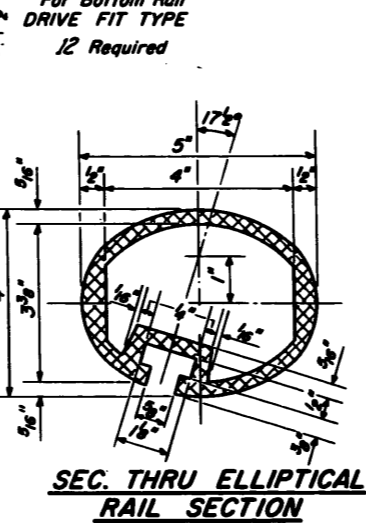
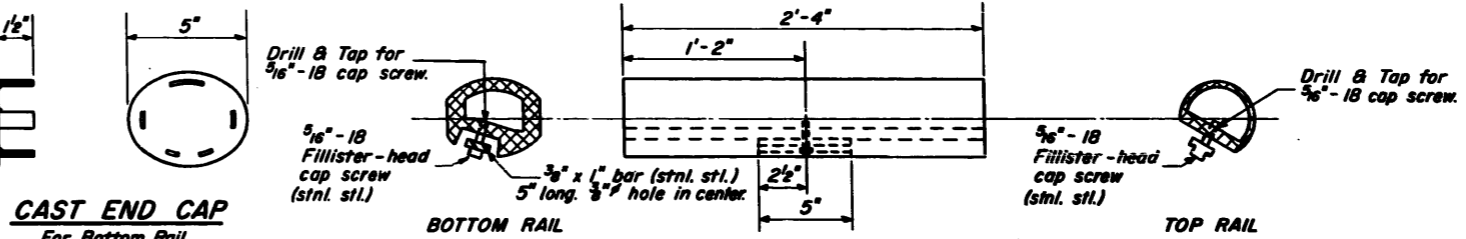
**BASIS OF PAYMENT:** Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation and erection.

Cost of rail splice, end caps and hardware to be incidental to item ALUMINUM HANDRAIL.

Provide 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.



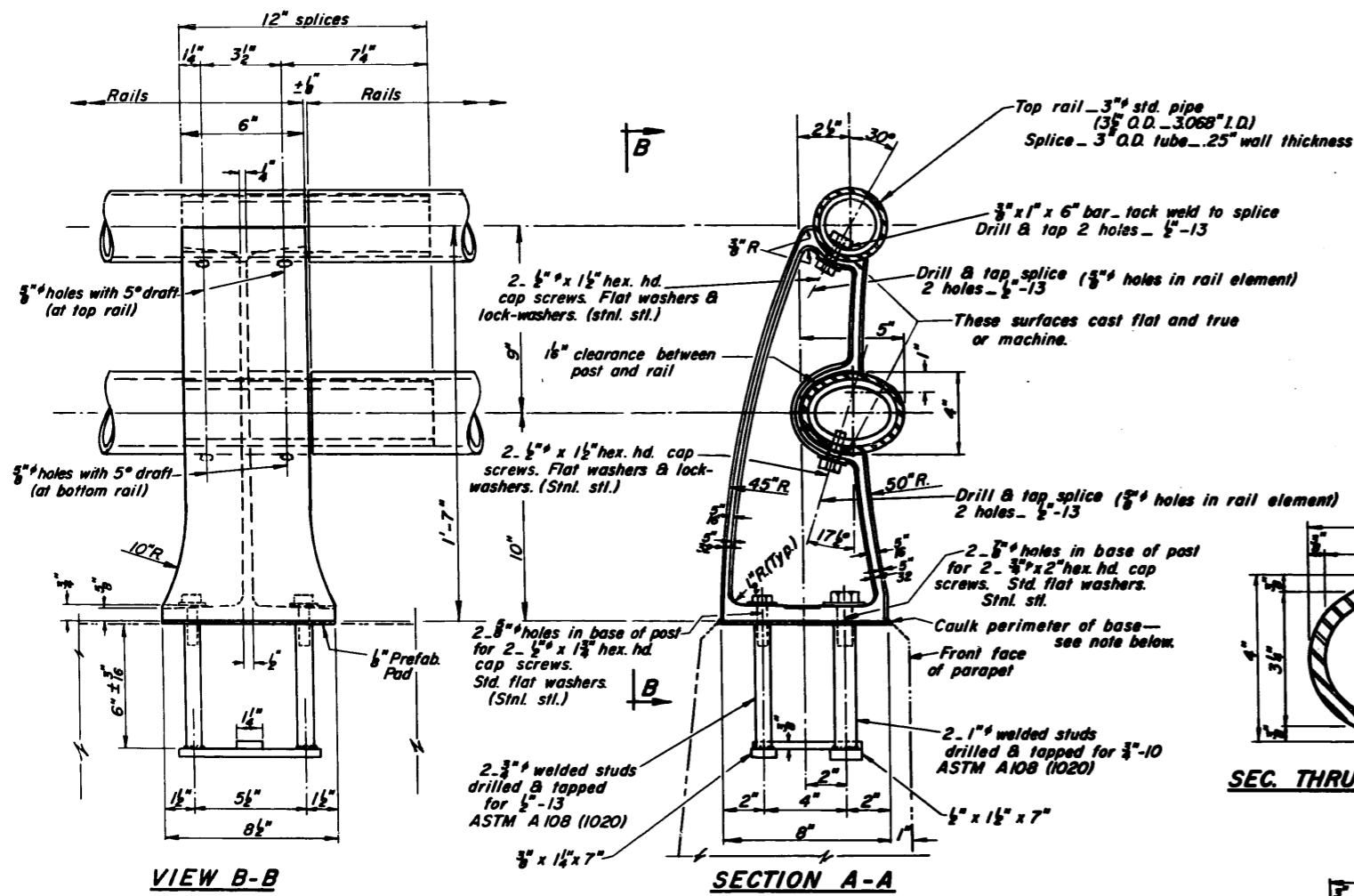
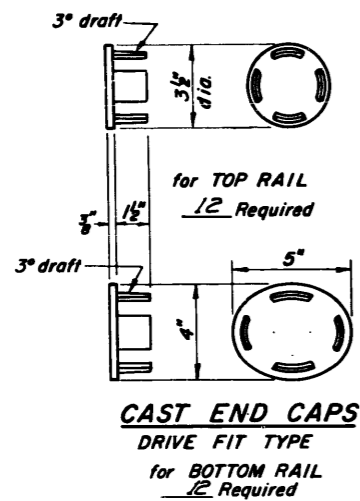
**RAIL POST DETAILS**



DESIGNED	W. A. Sausaman Jr.
CHECKED	W. M. Best
DRAWN	W. A. Sausaman Jr.
CHECKED	DEL

EXAMINED	July 27 1965
PASSED	
APPROVED	

**TYPE L**  
**ALUMINUM HANDRAIL DETAILS**  
F.A.I. RT. 57 SEC. 0809-JOMHB  
COOK COUNTY  
STA. 403+09.52 (F.A.I. 57)



DESIGNED	W. M. Best
CHECKED	H. J. ...
DRAWN	W. M. Best
CHECKED	V. E. ...

EXAMINED  
PASSED  
APPROVED

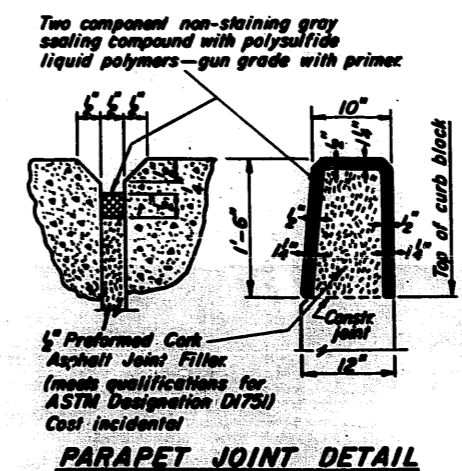
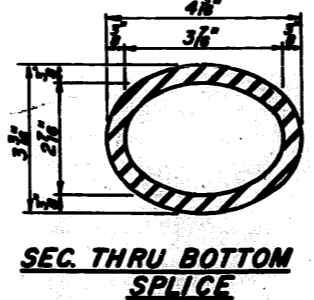
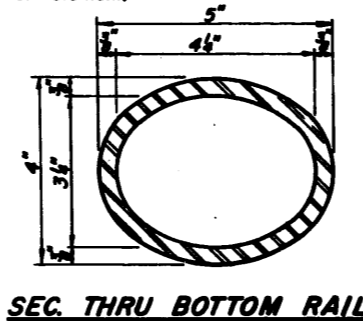
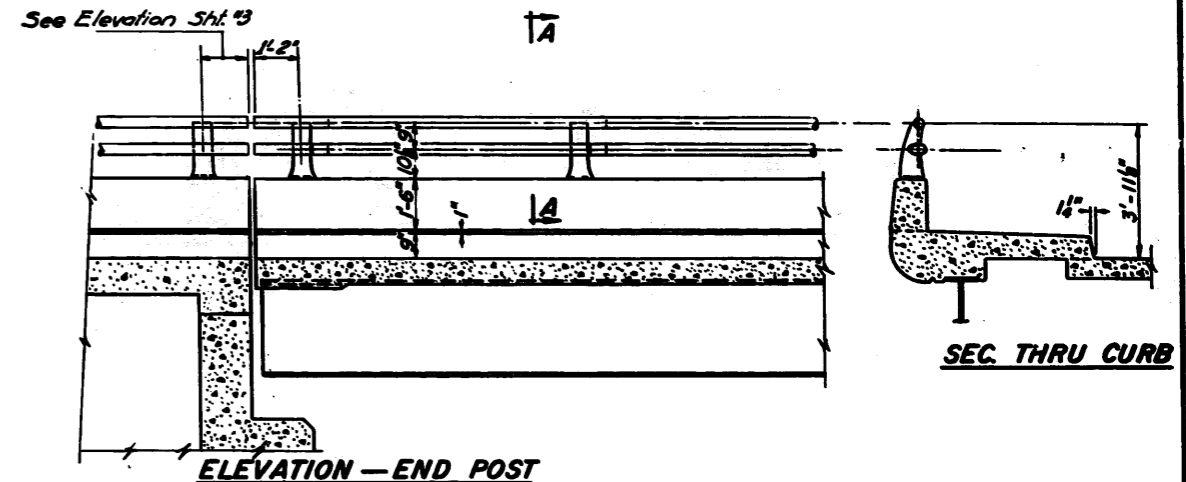
July 27 1965

Note! Seal base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers—gun grade with primer.

Note! Splice must be sliding fit in Rail Section.

**NOTES:**

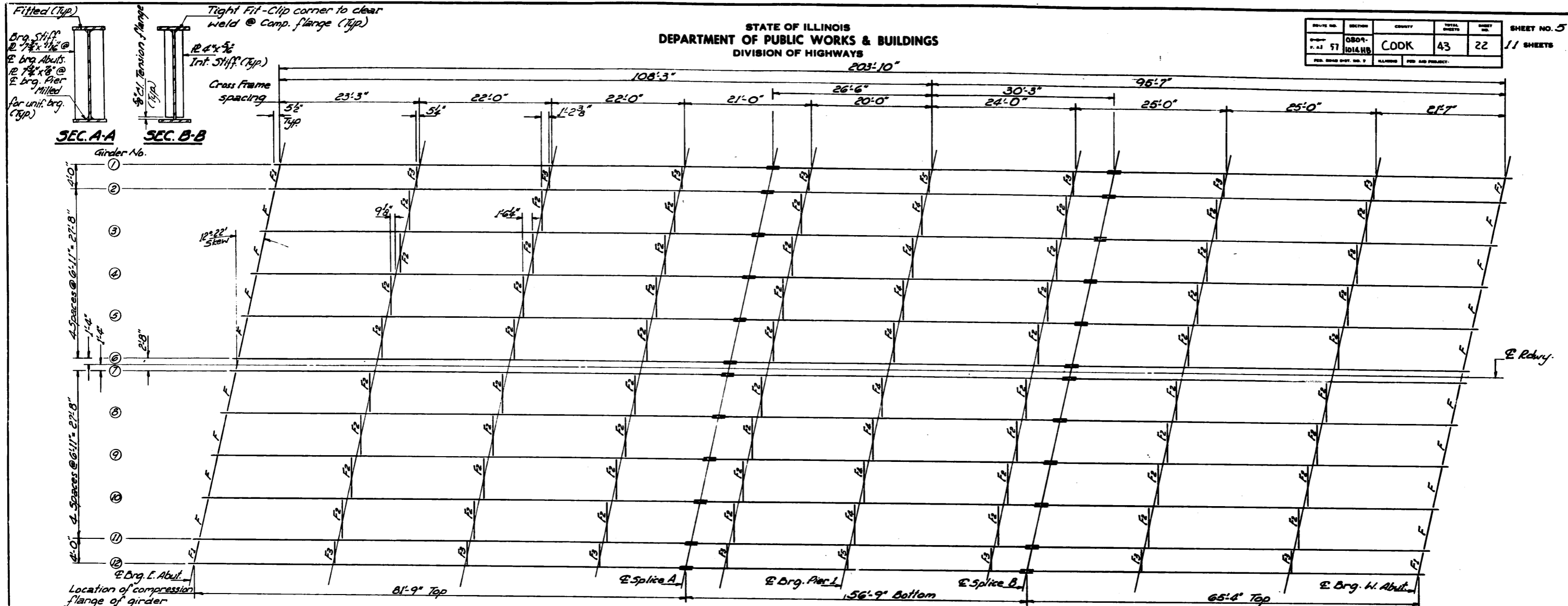
All Posts shall be normal to parapet.  
All Posts shall be malleable cast iron conforming to ASTM A-47, Grade 35018, galvanized to ASTM A-153.  
All Rail Tubing shall conform to applicable requirements of ASTM A-53, Grade B, (pipe or tube) galvanized to ASTM A-120.  
For material composition of Prefabricated Pad, see Art. 54.9 (f), (Bearing and Anchorage), of the Standard Specifications.  
Provide 1-<sup>5</sup>/<sub>8</sub>" and 2-<sup>1</sup>/<sub>2</sub>" galvanized sheet steel shims for 25% of the Posts. Rail element shall be parallel to Grade—high spots shall be ground and low spots shimmed.  
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.  
See Special Provisions for following Material Specifications:  
Stainless Steel Cap Screws, Stainless Steel Bars and Stainless Steel Washer.  
METHOD of MEASUREMENT: 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.  
BASIS of PAYMENT: Metal handrail will be paid for at the contract unit price per lineal for METAL HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation and erection.  
Cost of rail splice, end caps and hardware to be incidental to item METAL HANDRAIL.



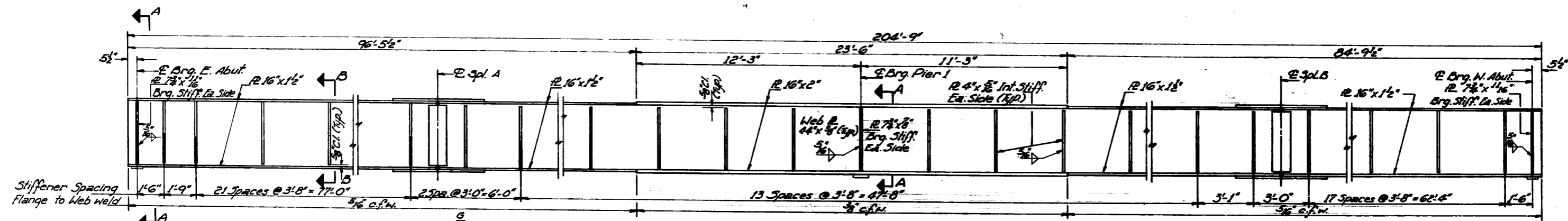
**TYPE M**  
**METAL HANDRAIL DETAILS**  
F.A.I. 57 SEC. 0809-1014HB  
COOK COUNTY  
STA. 403+09.52 (F.A.I. 57)

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	0809-1014HB	COOK	43	22
SHEET NO. 5				
11 SHEETS				

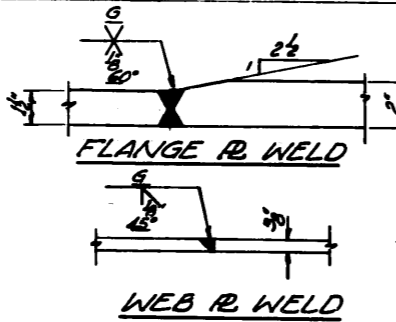


**FRAMING PLAN**



**GIRDER ELEVATION**

PROPERTIES OF GIRDER	
I (in. 4)	3 (in. 3)
Midspan	27,505
Pier	1,170
Pier	36,518
I = Moment of Inertia S = Section Modulus	



ELEVATION TOP OF GIRDERS												
Loc. Girder	1	2	3	4	5	6	7	8	9	10	11	12
E. Brg. E. Abut.	731.047	731.047	731.106	731.325	731.407	731.476	731.476	731.406	731.325	731.106	731.046	731.045
E. Spl. A	731.410	731.410	731.557	731.696	731.778	731.847	731.847	731.777	731.696	731.557	731.417	731.416
E. Brg. Pier 1	731.352	731.352	731.491	731.630	731.712	731.781	731.781	731.711	731.630	731.491	731.351	731.350
E. Spl. B	731.107	731.107	731.326	731.465	731.547	731.616	731.616	731.546	731.465	731.326	731.106	731.105
E. Brg. W. Abut.	730.549	730.549	730.688	730.827	730.909	730.978	730.978	730.908	730.827	730.688	730.548	730.547

DESIGNED *P. Jander*  
CHECKED *W. J. Jander*  
DRAWN *A. Barraza*  
CHECKED *DEL*

EXAMINED *W. J. Jander*  
PASSED *H. J. Peters*  
APPROVED *W. E. Jander*

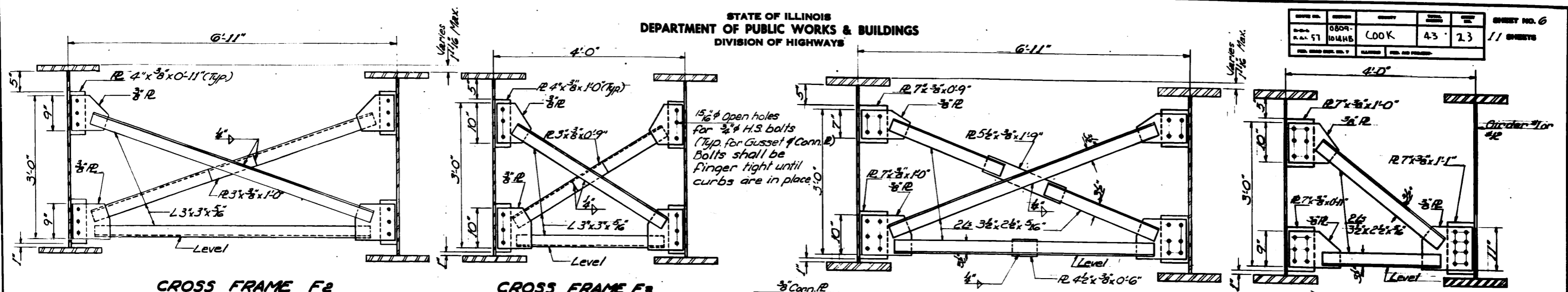
July 27 1965

**STRUCTURAL STEEL**  
**FA. RT. 57 SEC. 0809-1014HB**  
**COOK COUNTY**  
**STA. 403+09.52 (FA. 57)**



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

DESIGNED	EXAMINED	DATE	SHEET NO.
LOOK	43	23	11
PROJECT		NO. OF SHEETS	
STA. 403+09.52			

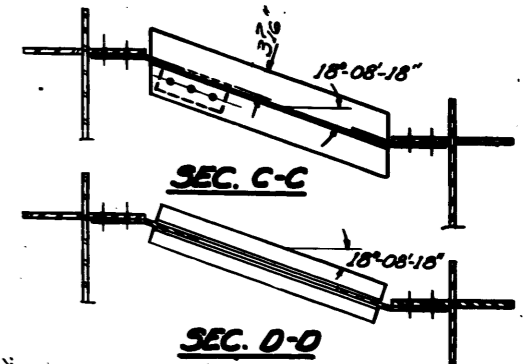
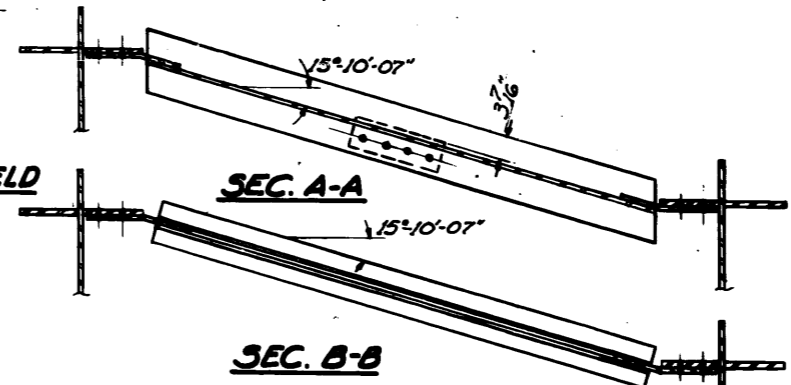
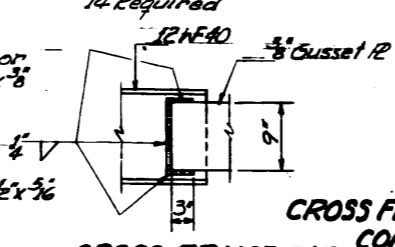
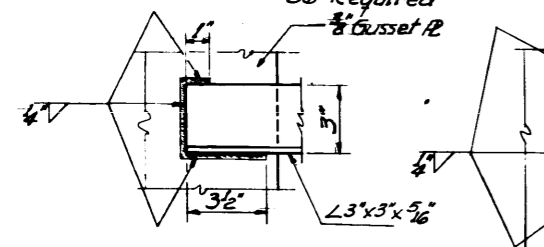


**CROSS FRAME F2**  
56 Required

**CROSS FRAME F3**  
14 Required

**CROSS FRAME F4**  
8 Required

**CROSS FRAME F5**  
2 Required



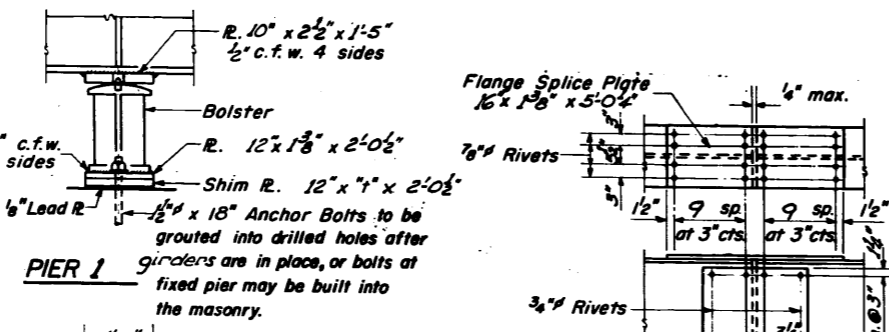
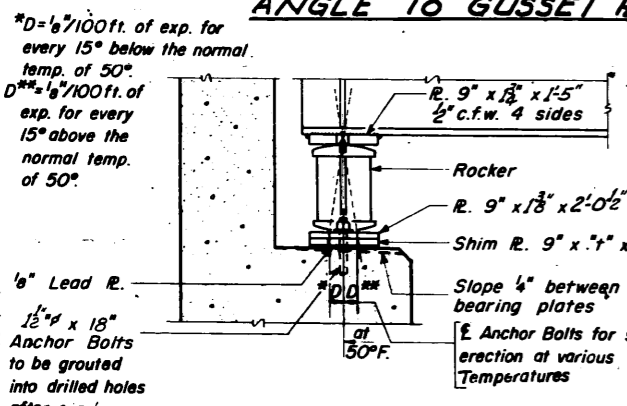
**CROSS FRAME F2 & F3**  
ANGLE TO GUSSET R WELD

**CROSS FRAME F4 & F5**  
CONNECTION R TO WEB WELD

**CROSS FRAME F4 & F5**  
GUSSET R TO W-BEAM WELD

SHIM \" DIMENSIONS

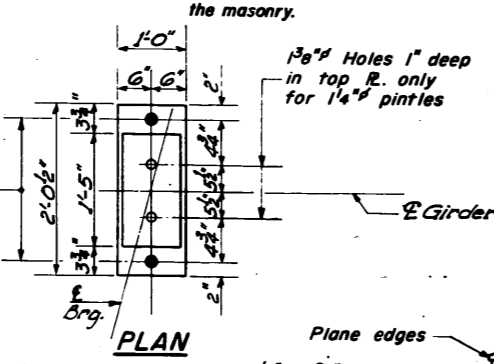
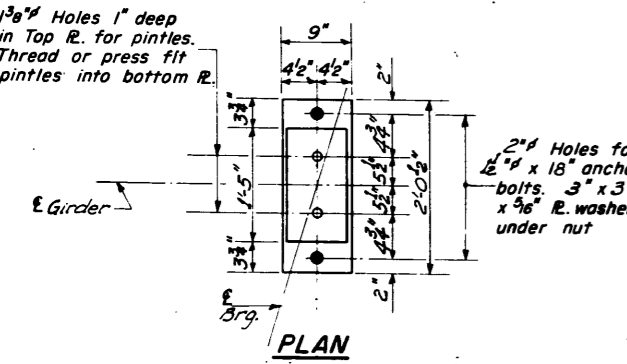
Girder No.	1	2	3	4	5	6	7	8	9	10	11	12
\"	0	0	1/16	3/16	5/16	7/16	9/16	11/16	13/16	15/16	0	0



**SECTION AT ABUTMENTS**

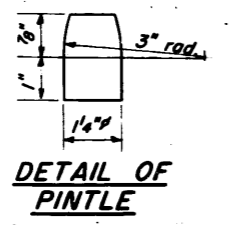
**PIER 1**

**DETAIL OF SPLICE**

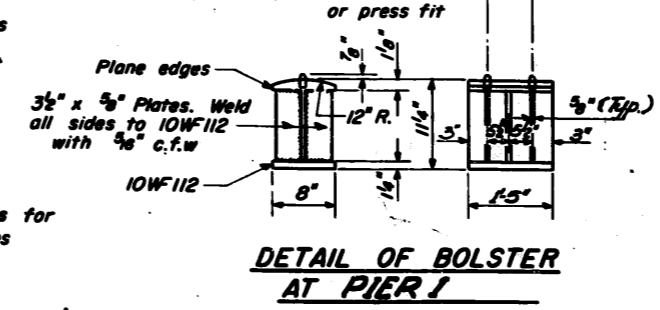


DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN	APPROVED
CHECKED	

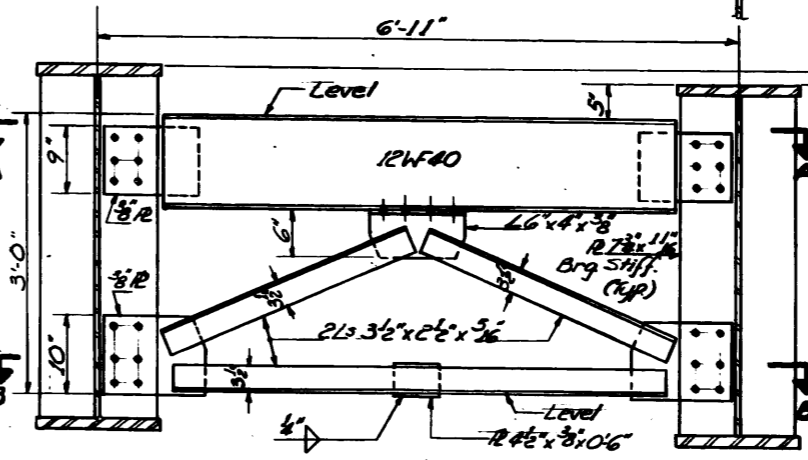
July 27 1965  
A. Barrera  
V. E. Still



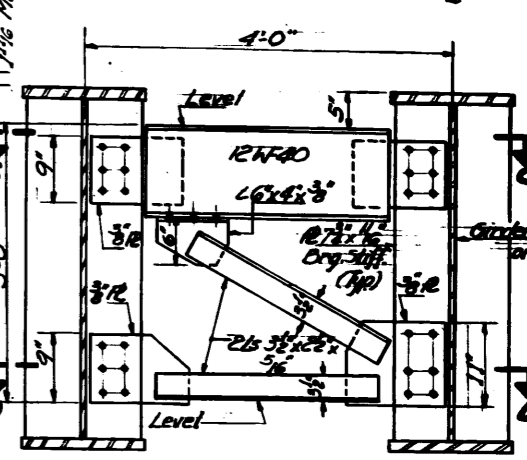
**DETAIL OF ROCKER AT ABUTMENTS**



**DETAIL OF BOLSTER AT PIER 1**



**CROSS FRAME F (16 Required)**



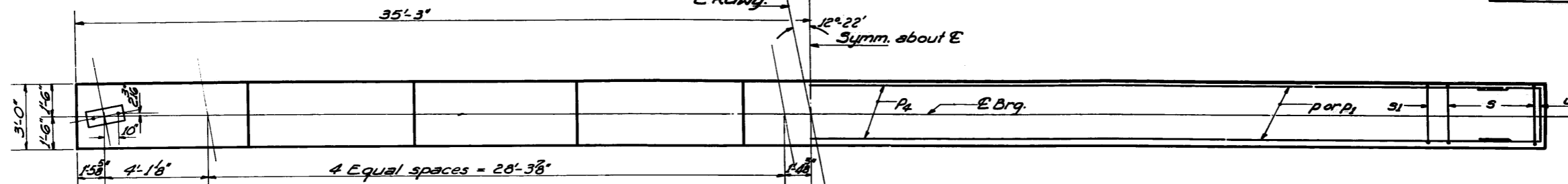
**CROSS FRAME F1 (4 Required)**

**STRUCTURAL STEEL DETAILS**  
FAL RT 57 SEC. 0809-10448  
COOK COUNTY  
STA. 403+09.52 (FAL RT 57)

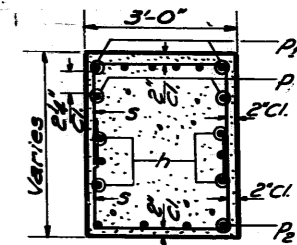
Revised 3/17/66 Added note for Open holes of bolts in Cross Frame F3

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

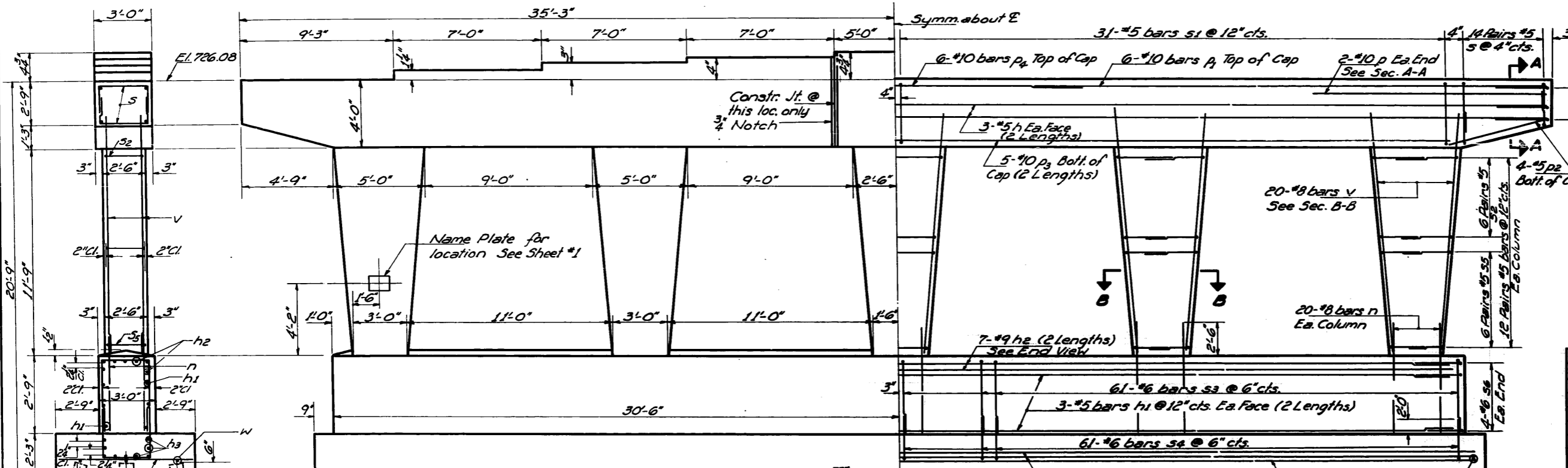
PROJECT NO. FAI 57	SECTION DIA-16	COUNTY COOK	TOTAL SHEETS 43	SHEET NO. 24	SHEET NO. 7 11 SHEETS
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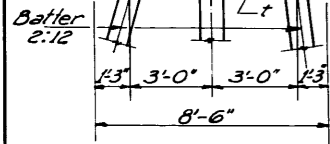
TOP PLAN



SECTION A-A

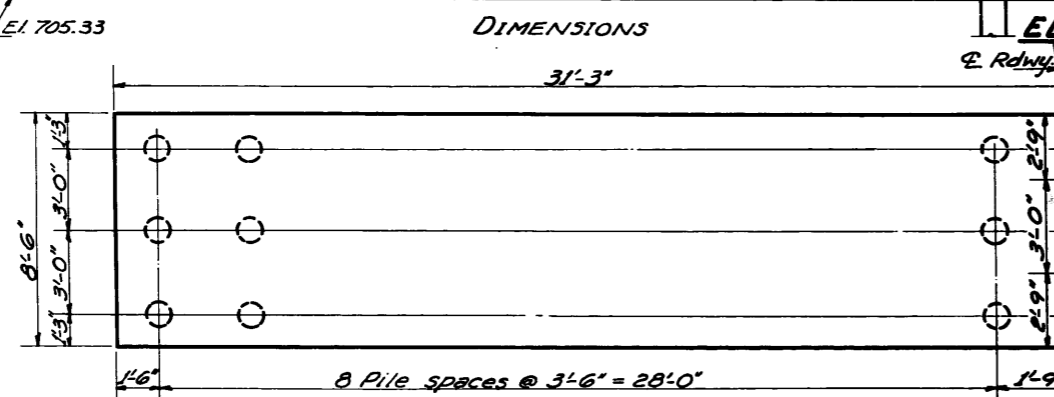


ELEVATION

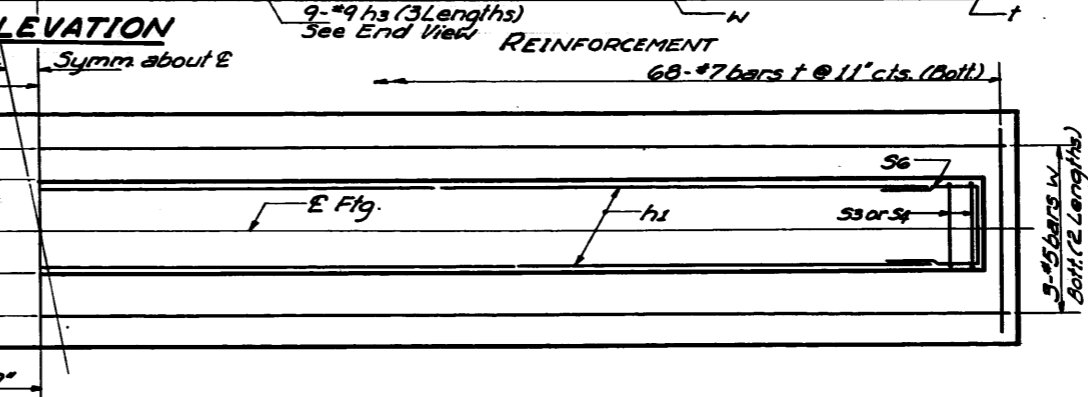


END VIEW

**PILE DATA**  
Type - Creosoted  
Capacity - 24 Tons  
Est. Length - 25 Ft.  
No. Req'd. 54  
Test Pile 1



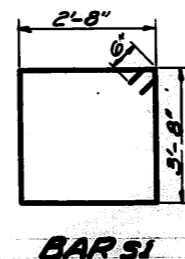
PILE LAYOUT & DIMENSIONS



FOOTING PLAN

**A&B DIMENSIONS**

Bar	A	B
S	2'-8"	2'-6"
S2	2'-2"	2'-10"
S3	2'-8"	2'-7"
S4	2'-8"	3'-8"
S5	2'-2"	2'-6"
S6	2'-6"	2'-9"



REINFORCEMENT

Note: Space reinforcement in cap to miss anchor bolts.  
All edges shall have Std. 3/4 chamfer's.  
Four steps monolithically with cap.

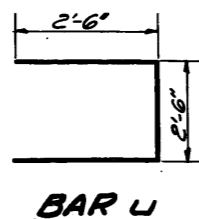
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h	12	#5	35'-9"	—
h1	12	#5	30'-11"	—
h2	14	#9	3'-0"	—
h3	27	#9	2'-4"	—
n	100	#8	5'-3"	—
p	4	#10	13'-0"	—
p1	12	#10	2'-11"	—
p2	8	#5	4'-10"	—
p3	10	#10	3'-7"	—
p4	6	#10	16'-2"	—
s	56	#5	7'-4"	U
s1	62	#5	13'-8"	U
s2	60	#5	7'-10"	U
s3	122	#6	7'-10"	U
s4	122	#6	10'-0"	U
s5	60	#5	6'-10"	U
s6	8	#6	7'-0"	U
t	68	#7	8'-0"	—
u	8	#6	7'-6"	U
v	100	#8	13'-10"	—
w	6	#5	3'-11"	—
Reinforcement Bars Lbs.				19,890
Class X Concrete Cu.Yds.				116.2
Creosote Piles Lin.Ft.				1,350
Test Piles (Timber) Ea.				1

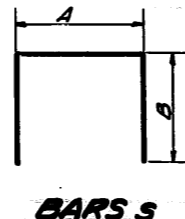
**PIER 1**  
FAI RT. 57 SEC. 0809-10416  
COOK COUNTY  
STA. 403+09.52 (FAI 57)

DESIGNED	R. D. PATEL
CHECKED	P. D. Jander
DRAWN	A. Carranza
CHECKED	P. D. Jander

EXAMINED	July 27 1965
PASSED	H. J. Peters
APPROVED	J. E. Smith



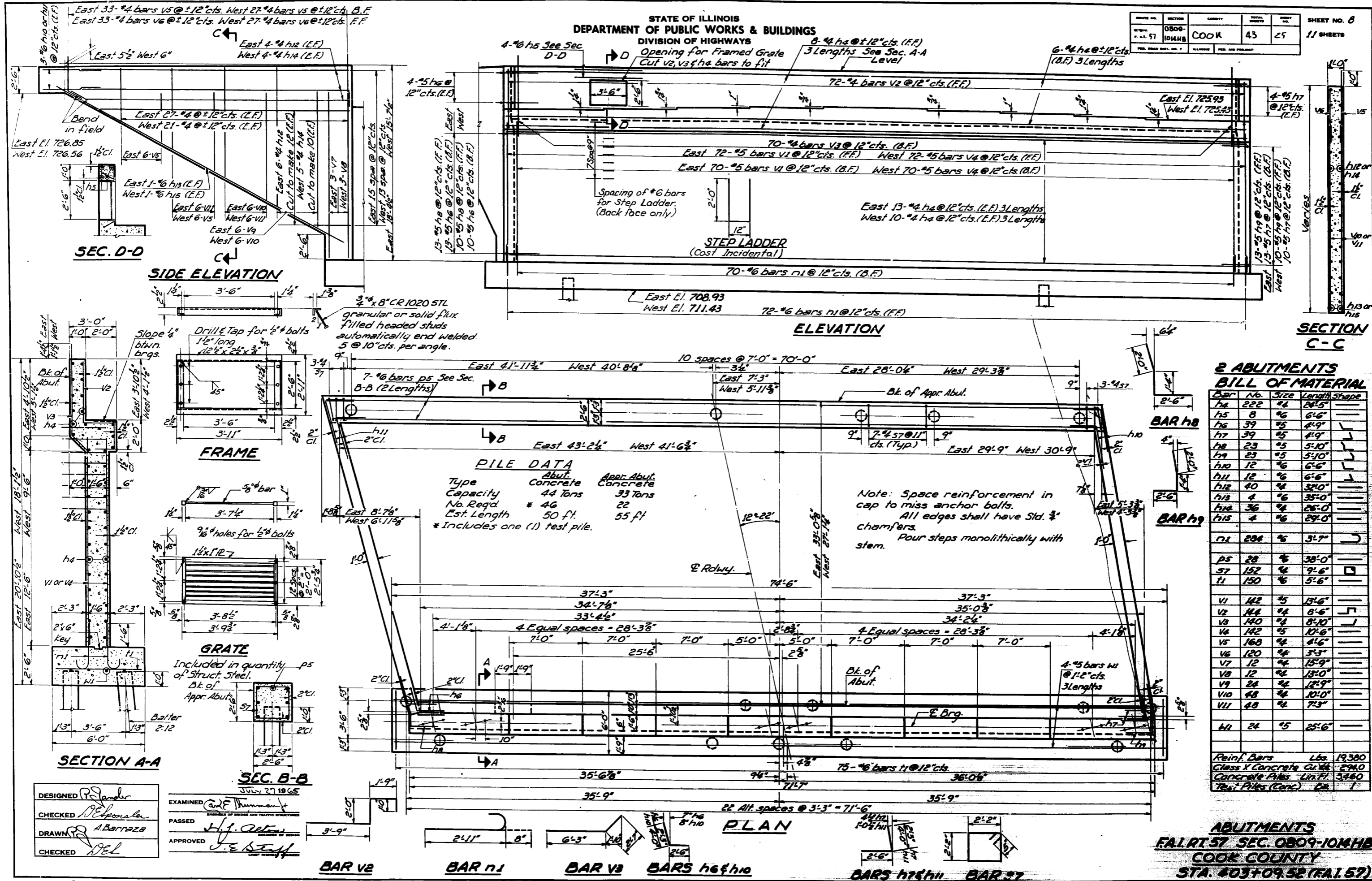
BAR U



BARS S

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

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RAI 57	0809-104MB	COOK	43	25
SHEET NO. 8		11 SHEETS		



DESIGNED *P. J. Lander*  
CHECKED *P. J. Lander*  
DRAWN *A. Barrazza*  
CHECKED *J. E. Lander*

EXAMINED *Carl E. Thurman*  
PASSED  
APPROVED *J. E. Lander*  
JULY 27 1965

Rev. 9-1-65 With Step Ladder added.

Column A - Grade Elevations  
Column B - Grade Elevations  
Adjusted for D.L. Deflections

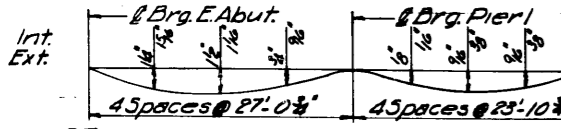
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

NO. 57	1014HD	LOOK	43	26	11 SHEETS
PROJECT NO. 9					11 SHEETS

INTERIOR GIRDERS

EXTERIOR GIRDERS

Girder No.	Station	Offset	Column A	Column B	Girder No.	Station	Offset	Column A	Column B	Girder No.	Station	Offset	Column A	Column B	Girder No.	Station	Offset	Column A	Column B										
Brk. of E. Abut.	10	2602,102	29,000	731,817	731,817	Brk. of Pier I	10	2712,236	29,000	732,075	732,075	Brk. of E. Abut.	9	2606,681	8,250	732,021	732,021	Brk. of Pier I	7	2716,048	8,250	732,421	732,421	Brk. of E. Abut.	12	2801,256	33,000	731,208	731,208

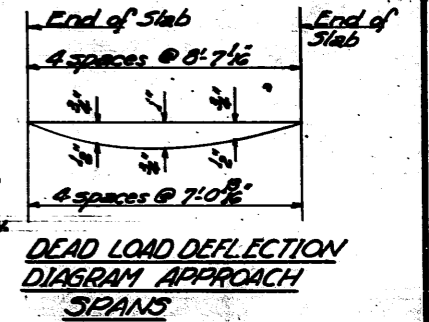
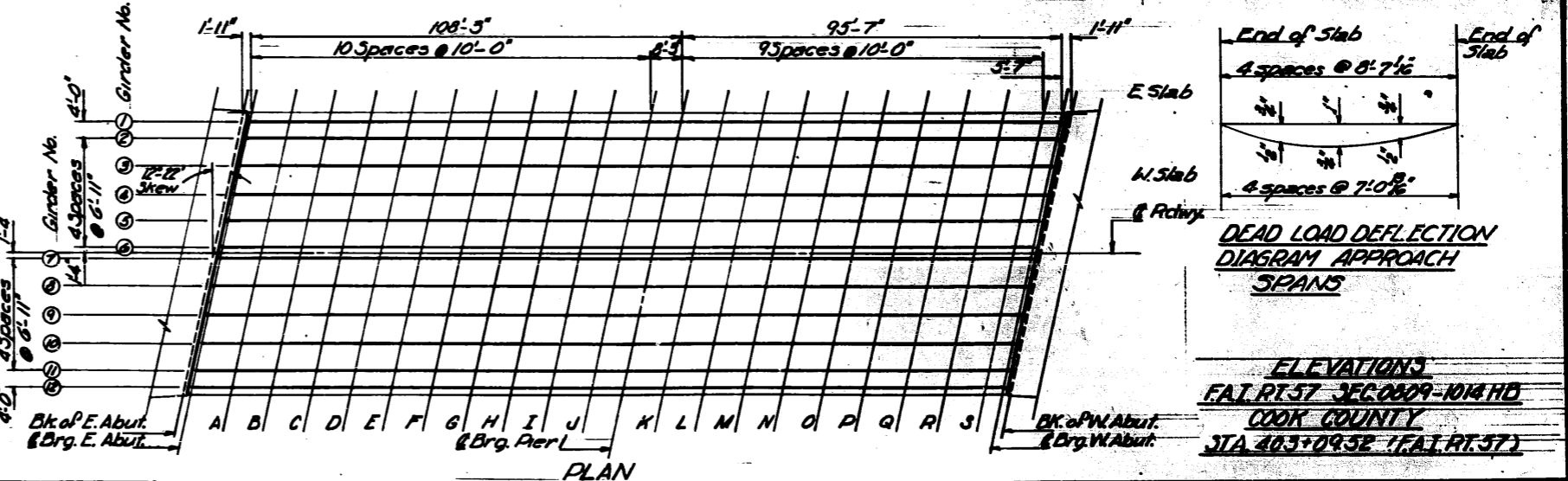


STANDARD FILLET DETAIL  
To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown. These elevations subtracted from the "Grade Elevations Adjusted for Dead Load Deflections", minus slab thickness, equals the fillet heights "t" above top of girders.

DESIGNED *P.S. Jander*  
CHECKED *D. Delon*  
DRAWN *P.S. Jander*  
CHECKED *D.L.*

EXAMINED *C.A. Delon*  
PASSED *H.J. Palmer*  
APPROVED *J.E. Smith*

July 27 1965

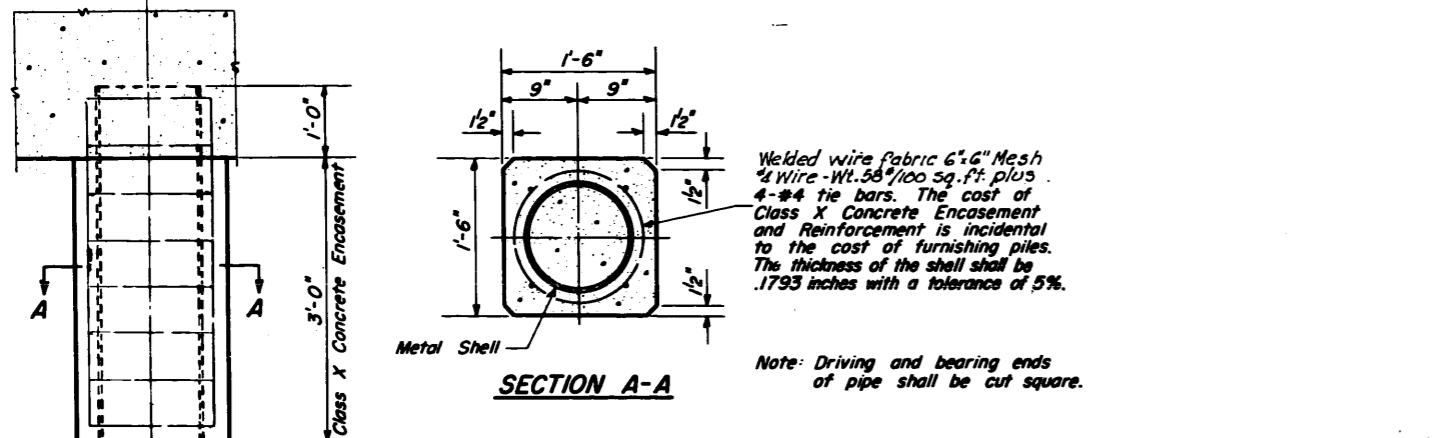
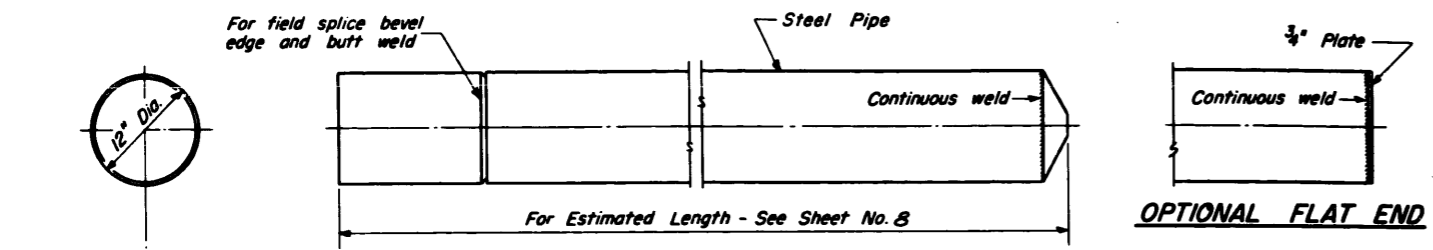


ELEVATIONS  
FAI RT. 57 SEC. 0009-1014HD  
COOK COUNTY  
STA. 405+09.52 (FAI RT. 57)

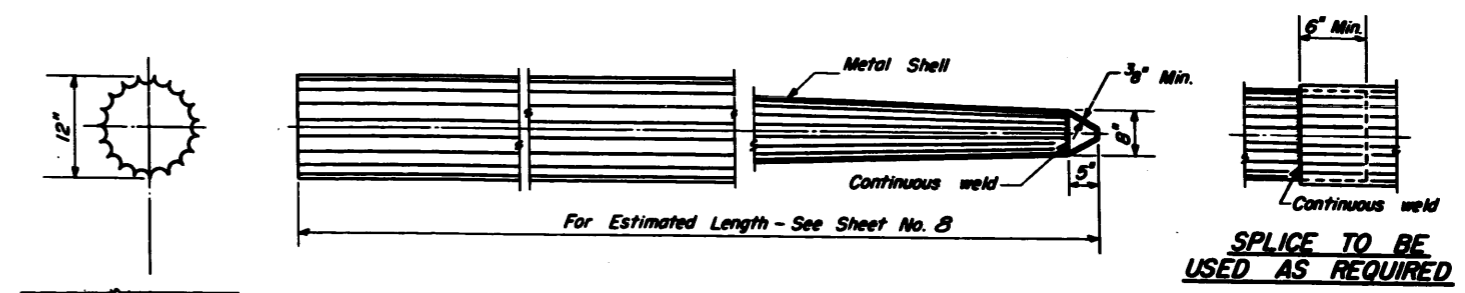
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

PROJECT NO.	SECTION	COUNTY	SHEET NO.	SHEET
F.A.T. 57	0809-10A14B	COOK	43	27
FILED UNDER SEC. 57		PLANNED	FILED FOR PROJECT	

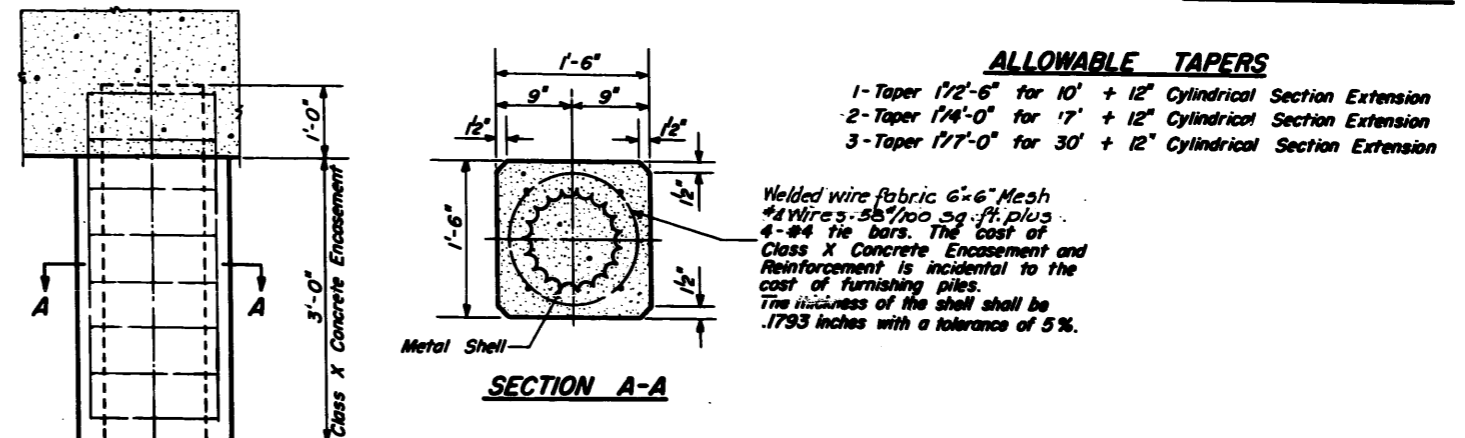
SHEET NO. 10  
11 SHEETS



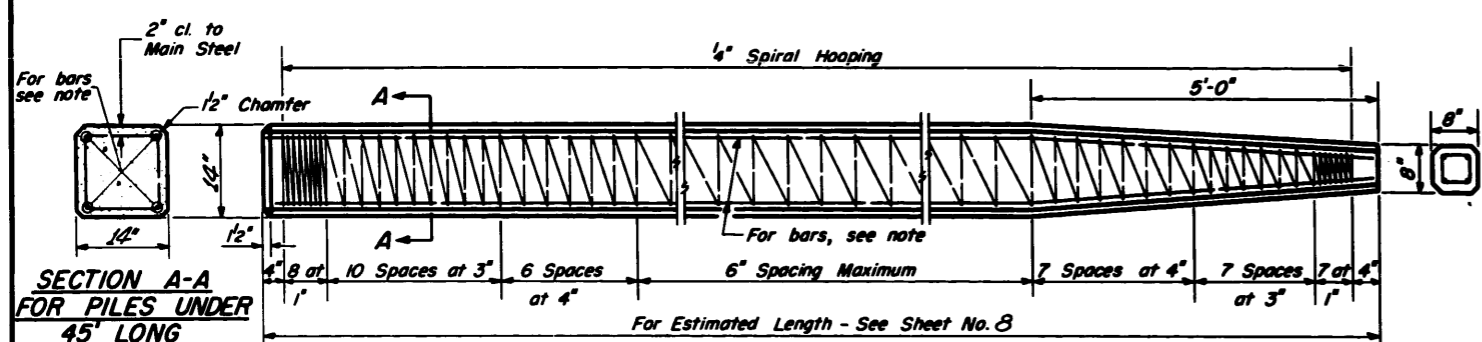
**DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES**



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



**DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES**

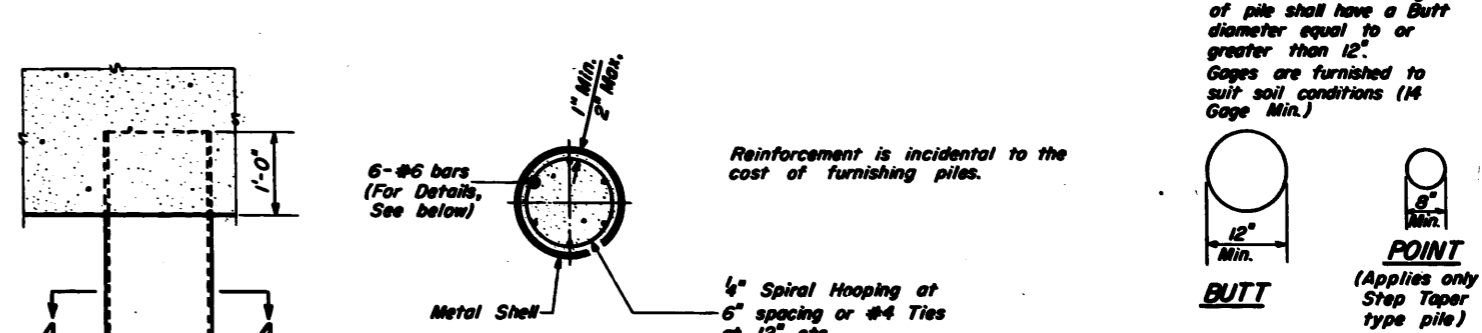
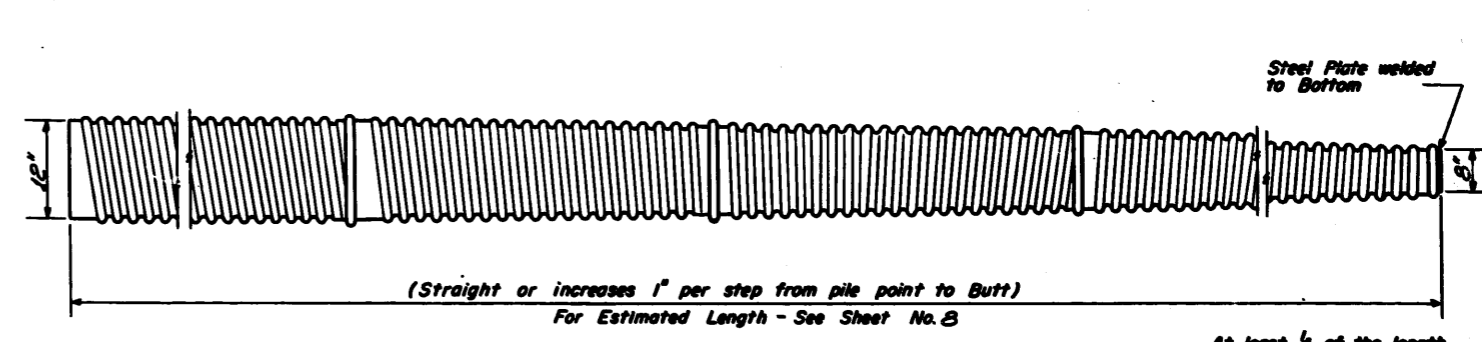


**SECTION A-A FOR PILES UNDER 45' LONG**

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.



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

DESIGNED	P. Rander	EXAMINED	July 27 1965 C. E. Hummel
CHECKED	D. E. Spaulter	PASSED	H. J. [Signature]
DRAWN	P. G. Barnett W. A. Sausaman	APPROVED	[Signature]
CHECKED	[Signature]		

