

4360 CHANNEL LOADER

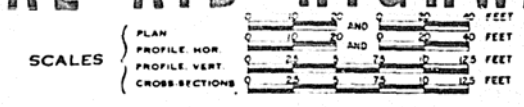
OFFICE COPY

WITH AS BUILT NOTES

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SECTION	SEC	COUNTY	DATE
540	12B-2	MACON	28

P-95-133-64



F.A.S. ROUTE 540 - SEC. 12B-2 MACON COUNTY

INDEX OF SHEETS ON SHEET No. 3.

C-95-308-70

DESIGN DESIGNATION

925(88) TS-4-550(PCC-20)

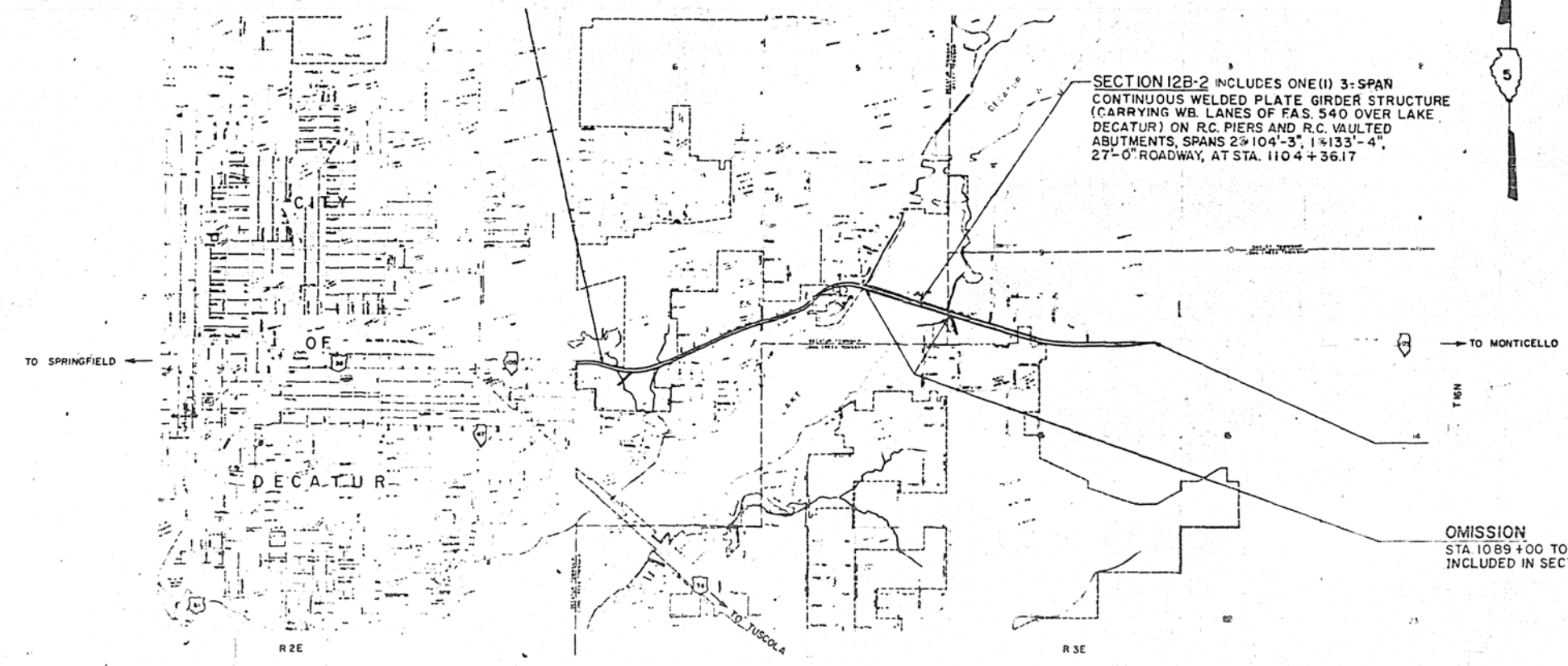
AS BUILT

B. Hays

RESIDENT ENGINEER

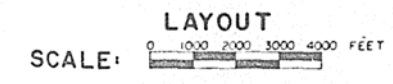


LOCATION OF SECTION INDICATED THUS: —



SECTION 12B-2 INCLUDES ONE (1) 3-SPAN CONTINUOUS WELDED PLATE GIRDER STRUCTURE (CARRYING WB. LANES OF F.A.S. 540 OVER LAKE DECATUR) ON R.C. PIERS AND R.C. VAULTED ABUTMENTS, SPANS 2@104'-3", 1@133'-4", 27'-0" ROADWAY, AT STA. 1104+36.17

OMISSION
STA 1089+00 TO STA. 1114+15 (E.B. LANES)
INCLUDED IN SECTION 12B-1



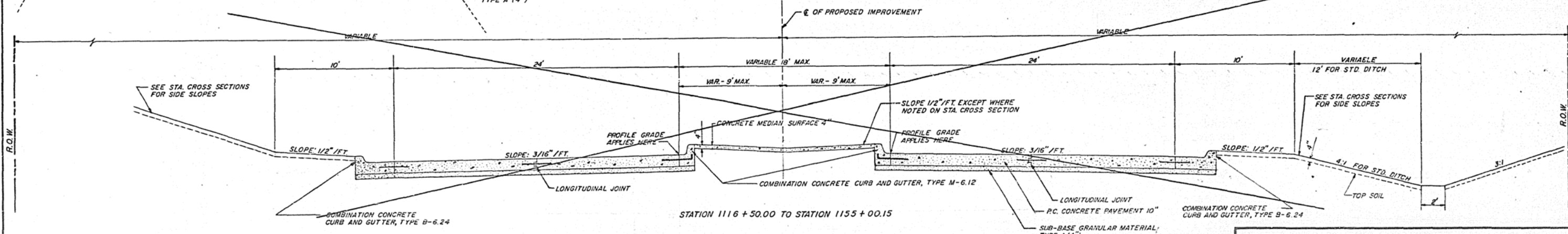
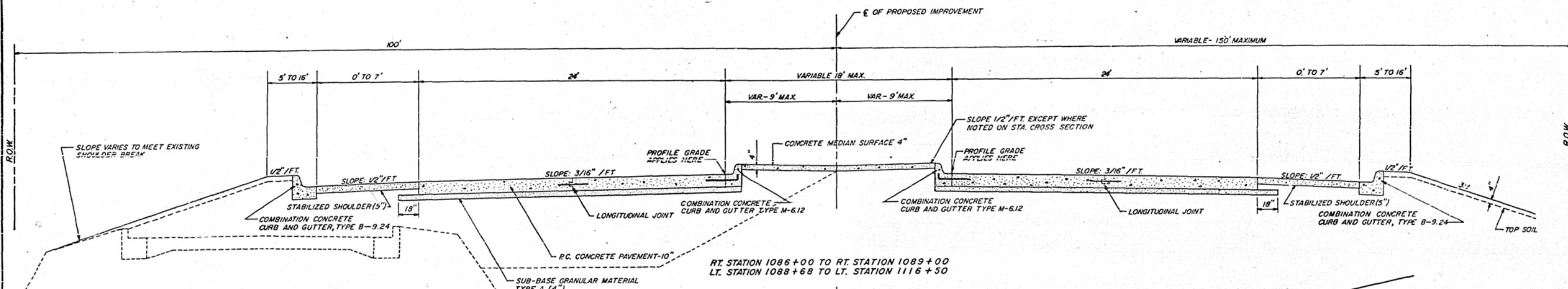
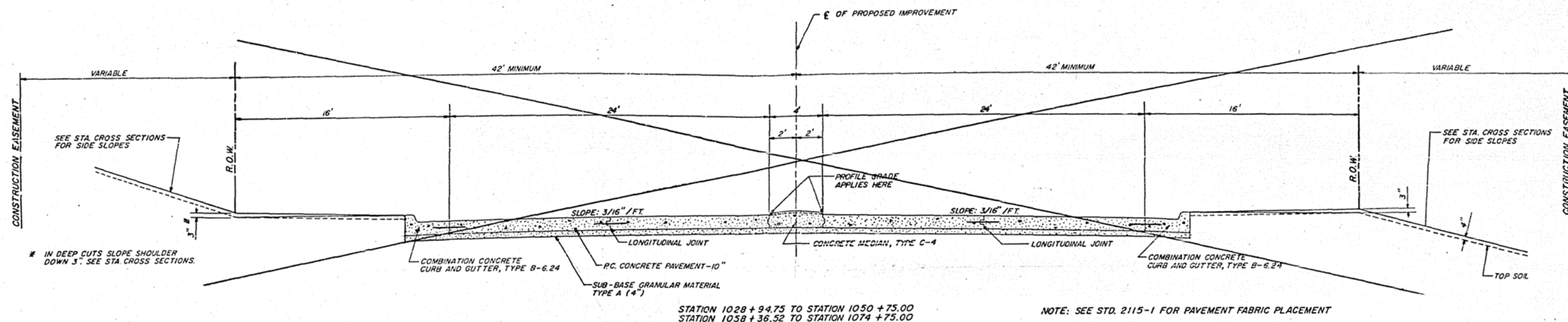
TOTAL LENGTH OF SECTION	12 B-2	386.42 FEET =	0.073 MILES
NET LENGTH OF SECTION	12 B-2	386.42 FEET =	0.073 MILES

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS	
DESIGNED BY	<i>W. G. ...</i>
EXAMINED BY	<i>May 27, 70 R. W. ...</i>
PASSED BY	<i>May 27, 70 W. E. ...</i>
APPROVED BY	<i>May 28, 70 Homer L. Chastain</i>
APPROVED BY	<i>May 28, 70 W. H. ...</i>

Homer L. Chastain

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILL. 62515

CONTRACT NO. 6993



STRUCTURAL DESIGN TRAFFIC: YEAR 1977, P.C. = 11,800
S.U. = 1,525 M.U. = 135

CLASS I STREET

MINIMUM SOIL SUPPORT: CBR = 2.2 (1007+00 TO 1167+18)
PER CENT OF S.D.T. IN DESIGN LANE: $U_p = 0.32$; $U_s = 0.45$; $U_M = 0.45$
T.F. = 1.14; $D_p = 5.50$ MIN.

THE NOMINAL THICKNESSES FOR SUBBASE GRANULAR MATERIAL, BASE AND SURFACE COURSES ARE SHOWN ON THE TYPICAL SECTIONS, STANDARDS, SCHEDULES OR SPECIAL DETAILS. THE CONSTRUCTED THICKNESS OF THE ABOVE ITEMS SHALL NOT BE LESS THAN 90 PER CENT OF THE NOMINAL THICKNESS AT ANY LOCATION.

PROTECTIVE COAT SHALL ALSO BE APPLIED TO ALL GUTTER FLAGS AND FACE OF CURBS.

REVISIONS		TYPICAL CROSS SECTIONS	
NO.	DATE	INITIALS	
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS		DRAWN BY DATE BKA 11/68
F.A.S. ROUTE 540 SECTION 12B		CHECKED BY DATE FML 11-68
MACON COUNTY		BOOK NUMBER 1709
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS		PROJECT NO. SHEET NO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P.A. 540	12B-2	MACON	28	3

SUMMARY OF QUANTITIES

Location of Work: BRIDGE
Station 1104+36.17

Construction Type Code: K031

CODE NO.	ITEM	UNIT	QUANTITY
106035	ELECTRIC CABLE IN CONDUIT, 600V (NEOPRENE-RUBBER INSULATED) 1/C NO. 12	LIN FT	184
106038	ELECTRIC CABLE IN CONDUIT, 600V (NEOPRENE-RUBBER INSULATED) 1/C NO. 6	LIN FT	1,460
106174	ELECTRIC CONDUCTOR IN CONDUIT (BARE ANNEALED COPPER) NO. 6	LIN FT	730
204001	BORROW EXCAVATION	CU YDS	1,807
209001	POROUS GRANULAR EMBANKMENT	TONS	3,721
501001	REMOVAL OF EXISTING STRUCTURES	EACH	1
502003	COFFERDAM EXCAVATION	CU YDS	367
502005	COFFERDAMS	EACH	2
503004	PROTECTIVE COAT	SQ YDS	1,925
504003	CLASS X CONCRETE	CU YDS	837.6
504004	SEAL COAT CONCRETE	CU YDS	198
507030	FURNISHING AND ERECTING STRUCTURAL STEEL	LUMP SUM	1
508006	ALUMINUM RAILING, TYPE L	LIN FT	343
512001	REINFORCEMENT BARS	POUND	146,633
513005	FURNISHING CROSCOTED PILES, 20.1 to 38 FEET	LIN FT	408
513013	FURNISHING STEEL PILES, 10BP#2	LIN FT	3,341
513022	DRIVING TIMBER PILES	LIN FT	399
513026	DRIVING STEEL PILES	LIN FT	2,959
513033	TEST PILES, STEEL 10BP#2	EACH	0
514001	NAME PLATES	EACH	1
615002	FILLING EXISTING CATCH BASINS	EACH	2
633001	METAL PLATE GUARD RAIL REMOVAL	LIN FT	600
646001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1
X60101	STONE RIPRAP, 12"	TONS	399
210029	BRIDGE SEAT SEALANT	LUMP SUM	1
L00053	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	LIN FT	700
L00056	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	LIN FT	94
L02404	LUMINAIRE, MERCURY VAPOR, WITH BUILT-IN REGULATOR BALLAST, 700 WATTS	EACH	2
L04973	LAMP, MERCURY VAPOR, 700 WATTS, TYPE H35-18NA	EACH	2
L05352	POLE, METAL, ANCHOR BASE 44 FT MH, 4 FT. MAST ARM	EACH	2

* Construction Type Code CE-58

INDEX OF SHEETS

SHEET NO.	CONTENTS
1.	COVER SHEET
2.	TYPICAL CROSS SECTION
3.	SUMMARY OF QUANTITIES, GENERAL NOTES AND INDEX OF SHEETS
4. & 5.	PLAN & PROFILE SHEETS
6.	DETAILS FOR LIGHT POLE AND JUNCTION BOX ATTACHMENT
6A.-17.(INCL.)	BRIDGE DETAILS
18.-22.(INCL.)	STATION CROSS SECTIONS
23.	STANDARD NO. 2113-1
24.	STANDARD NO. 2298-1
25.	STANDARD NO. 2299-1
26.	STANDARD NO. 2300
27.	STANDARD NO. 2302-1
28.	STANDARD NO. 2303-2

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
540	12B-2	MACON	28	3

GENERAL NOTES

EARTH EMBANKMENTS FOR THE BRIDGE CONES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STATION CROSS SECTIONS, TYPICAL CROSS SECTIONS AND AS DIRECTED BY THE ENGINEER.

ESTIMATED QUANTITY:

1,836 CU. YDS. BORROW EXCAVATION

POROUS GRANULAR EMBANKMENT SHALL BE CONSTRUCTED TO ELEVATION 616.0 IN THE BRIDGE CONES IN ACCORDANCE WITH THE STANDARD SPECIFICATION AND AS DIRECTED BY THE ENGINEER.

ESTIMATED QUANTITY:

6,850 TONS POROUS GRANULAR EMBANKMENT

STONE RIPRAP SHALL BE PLACED AROUND THE BRIDGE CONES IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

ESTIMATED QUANTITY:

400 TONS STONE RIPRAP, 12"

CONDUIT, 1" DIAMETER, GALVANIZED STEEL, SHALL BE INSTALLED ON THE PROPOSED STRUCTURE AND THE EXISTING EAST BOUND STRUCTURE AT LOCATIONS SHOWN ON THE PLANS AND AS INDICATED BY THE ENGINEER.

ESTIMATED QUANTITY:

704 LIN. FT. CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL

96 LIN. FT. CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL

MERCURY VAPOR LIGHTS SHALL BE INSTALLED ON THE PROPOSED STRUCTURE AND THE EXISTING EAST BOUND STRUCTURE AT LOCATIONS SHOWN ON THE PLANS.

QUANTITIES:

2 EACH POLE, METAL, ANCHOR BASE 3/4 FT. MH, 4 FT. MAST ARM

2 EACH LUMINAIRE, MERCURY VAPOR, WITH BUILT-IN REGULATOR BALLAST, 700 WATTS

2 EACH LAMP, MERCURY VAPOR, 700 WATTS, TYPE H35-16NA

ELECTRIC CABLE SHALL BE INSTALLED IN THE CONDUIT INSTALLED ON THE STRUCTURES AS DIRECTED BY THE ENGINEER.

ESTIMATED QUANTITIES:

190 LIN. FT. ELECTRIC CABLE IN CONDUIT, 600 V (NEOPRENE-RUBBER INSULATED) 1/C NO. 12

1,430 LIN. FT. ELECTRIC CABLE IN CONDUIT, 600 V (NEOPRENE-RUBBER INSULATED) 1/C NO. 6

730 LIN. FT. ELECTRIC CONDUCTOR IN CONDUIT (BARE ANNEALED COPPER) NO. 6

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. DATUM.

GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND STATION CROSS SECTIONS ARE FOR THE INSIDE EDGE OF PAVEMENT.

CONSTRUCT BRIDGE APPROACH SLAB
METHOD III - SEE STD. 1909
STA. 1106+29.38 TO STA. 1106+68.68
REINFORCEMENT BARS 7-39# L-5
PILE CAP - CONCRETE
SEAB REINFORCEMENT
1106+50.00 TO 1106+68.68
1106+68.68 TO 1106+83.99

S.E. 1/4, S.E. 1/4, SEC. 8, T16N, R3E.

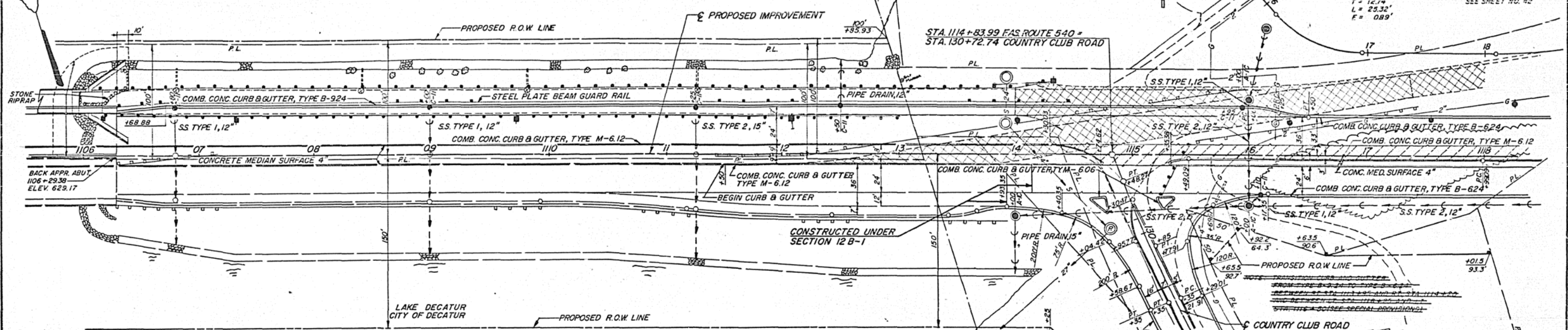
SW 1/4, S.W. 1/4, SEC. 9, T16N, R3E.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 540	12B-2	MACON	28	5
STA. 1106+00		TO STA. 1118+00		
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

REVERSE CURVE DATA
 $\Delta = 15^\circ 56' 22''$
 $D = 62^\circ 56' 55''$
 $R = 91.02'$
 $T = 12.74'$
 $L = 23.32'$
 $E = 0.89'$

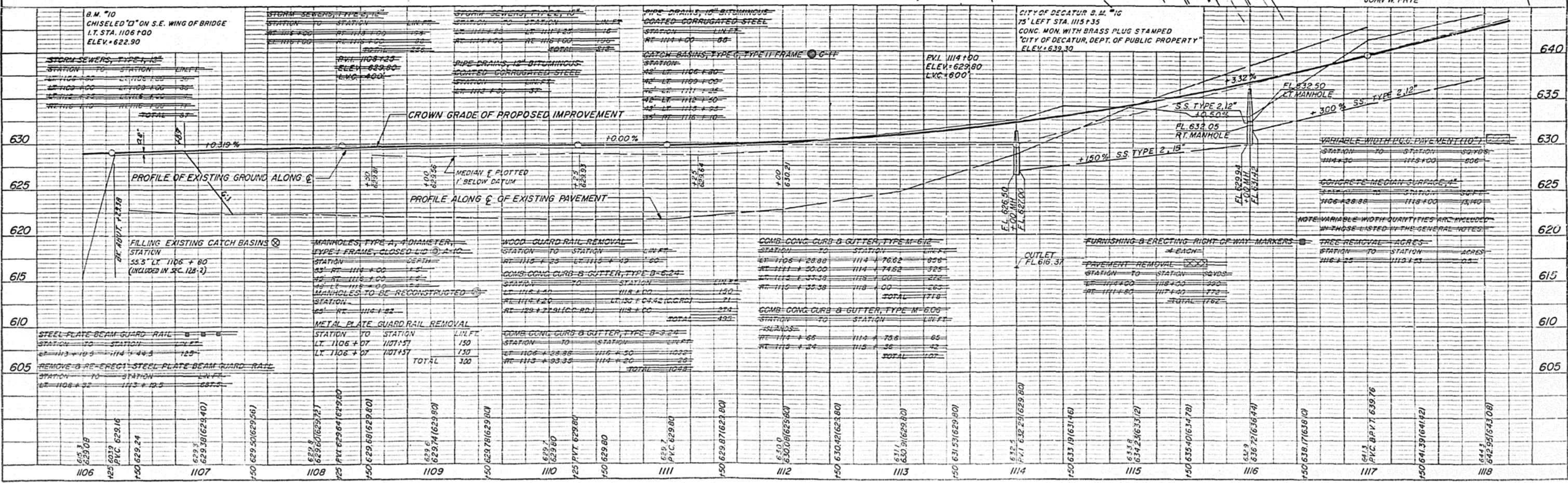
FOR ACCESS ROAD
SEE SHEET NO. 42

DATE	BY	REVISION
12-16-64	CEP	1.0
	ER	2.0
	CEP	3.0
	CEP	4.0
	CEP	5.0

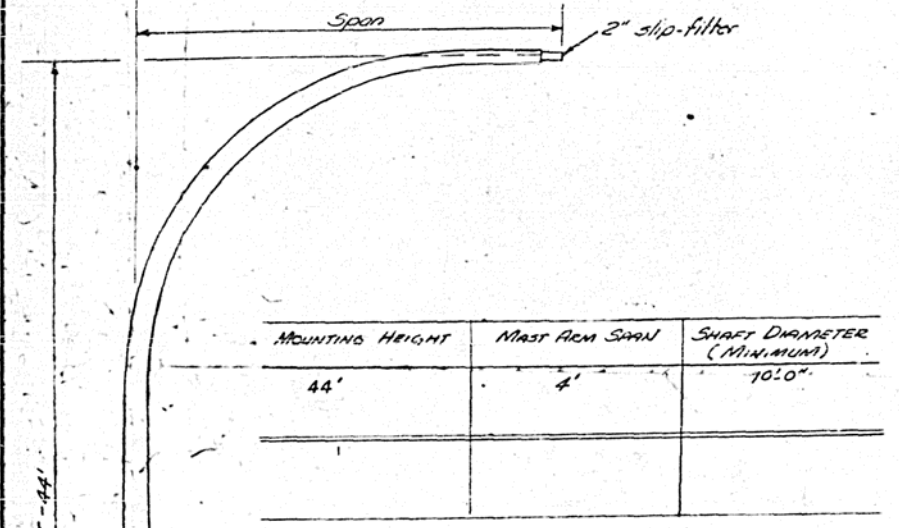


EASTBOUND LANES FROM STA. 1089+00 TO STA. 1114+15 PREVIOUSLY CONSTRUCTED UNDER SECTION 12B-1

ALL NOTES PERTAIN TO SEC. 12-R UNLESS OTHERWISE NOTED.



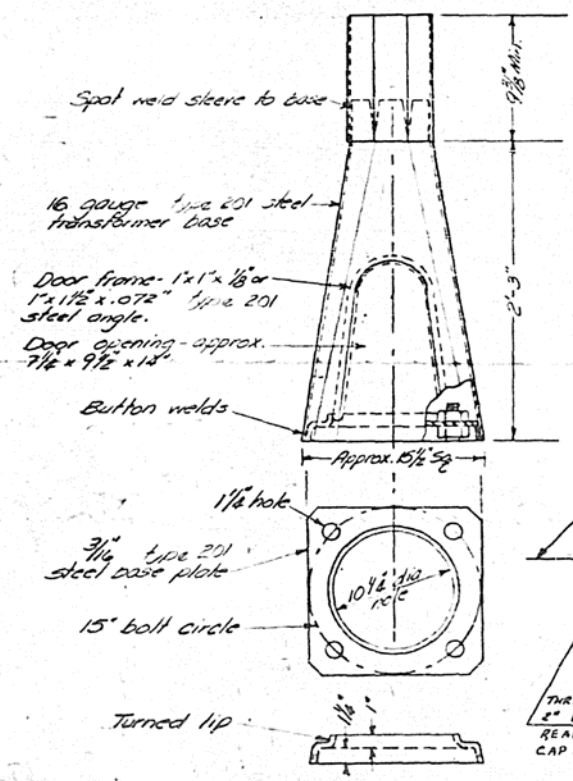
DATE	BY	REVISION
12-16-64	CEP	1.0
	ER	2.0
	CEP	3.0
	CEP	4.0
	CEP	5.0



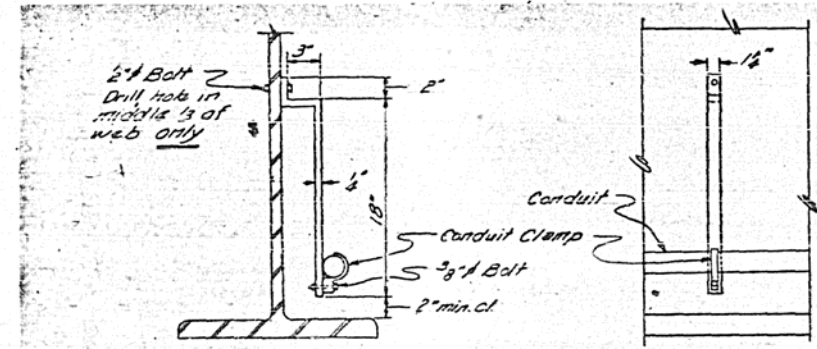
MOUNTING HEIGHT	MAST ARM SPAN	SHAFT DIAMETER (MINIMUM)
44'	4'	10.0"

NOTE FOR WEATHER-PROOF JUNCTION BOX
Cast aluminum or cast malleable iron junction box with integral cast mounting feet and cast cover, weatherproof. Box shall have inside dimensions of 8" x 6" x 4" and shall be supported by anchoring to the bridge abutment by 2 threaded stainless steel 3/8" x 18 thread per inch expansion screw anchors. Conduit shall extend through the wall of the junction box by not less than 1". Wires shall be of such that splices can be withdrawn 12" from box. Conduit and wire shall not be used to support the box. This box shall not be used below grade. Drill 2 - 1/2" holes in bottom of box.

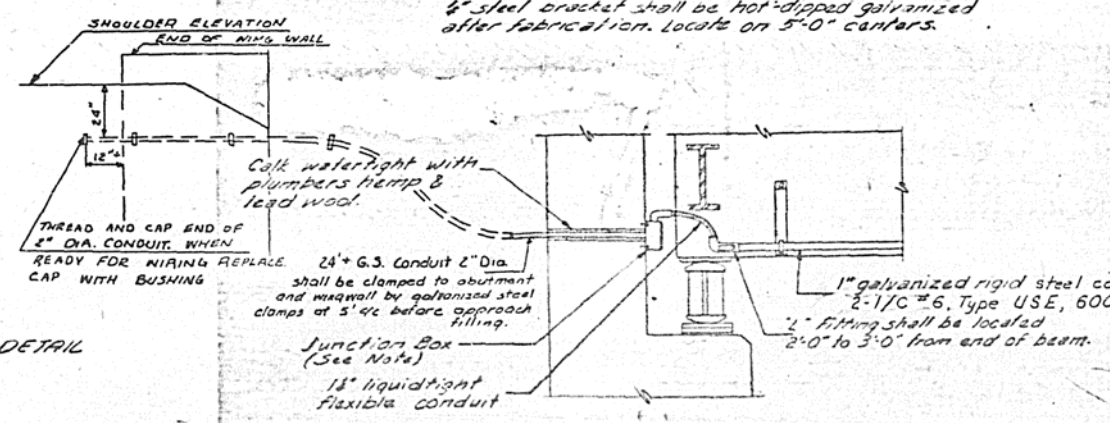
Junction Box shall be attached to abutment 18" inside web and parallel to beam line and 12" above bottom flange of fascia beam. Wiring from Junction Box by others.



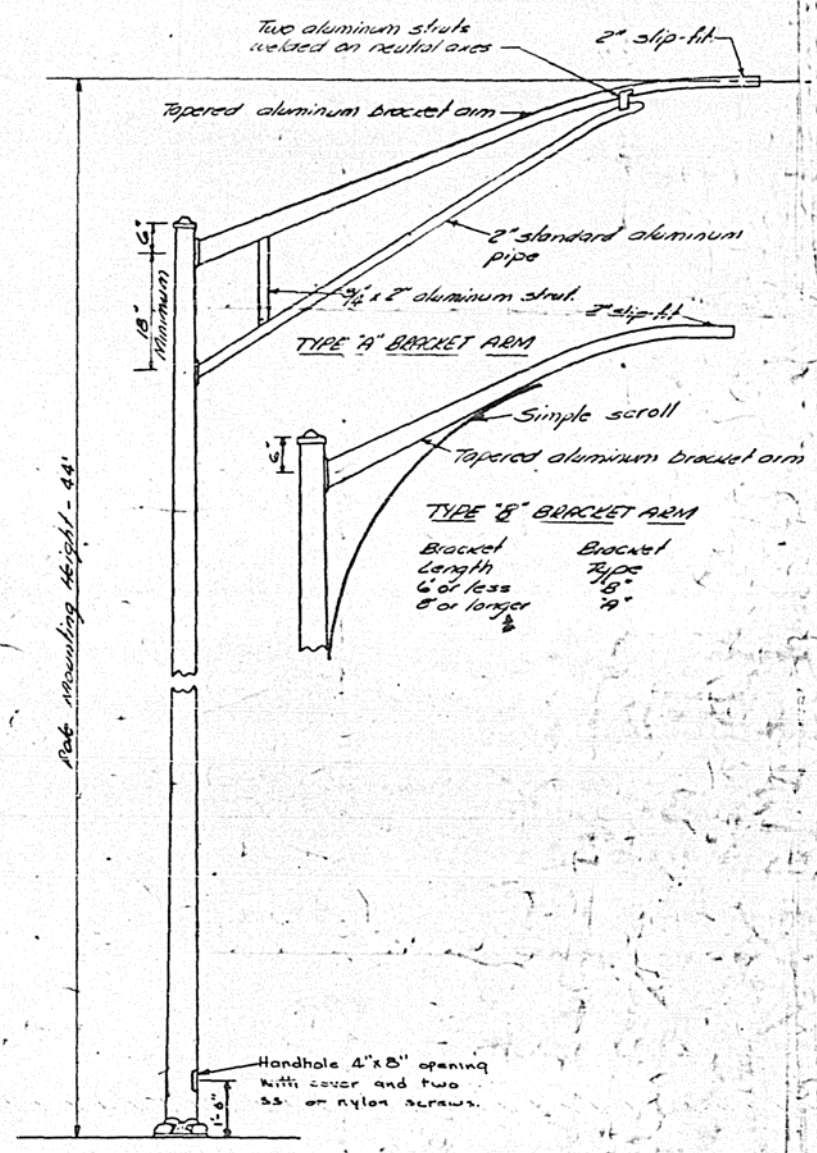
TRANSFORMER BASE DETAIL (type 201)



CONDUIT SUPPORT BRACKET
Conduit clamps shall be malleable iron, locknuts, bolts and washers shall be stainless steel. 3/8" steel bracket shall be hot-dipped galvanized after fabrication. Locate on 5'-0" centers.



JUNCTION BOX ATTACHED TO BRIDGE ABUTMENT



POLE ALUMINUM

POLE, STEEL

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

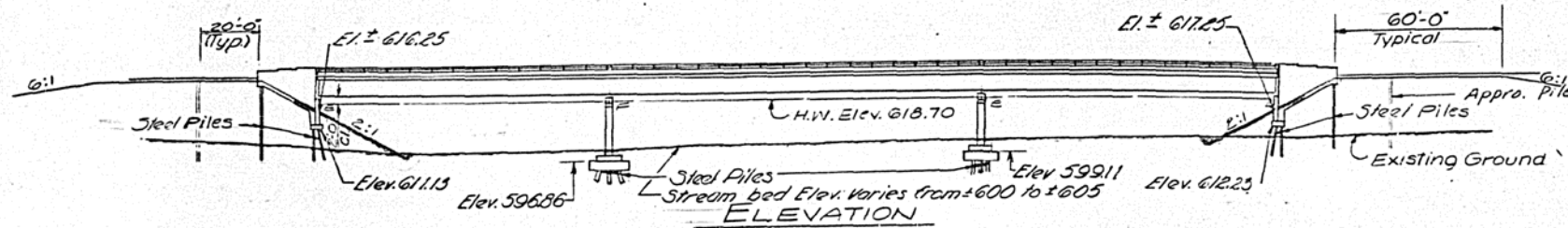
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. R. 10	12B-2	MACON	28	6A
12 SHEETS				

B.M. Chiseled "a" on S.E. wing of existing structure. Elev. 622.90
Exist. Struct.: 2-133 Steel Truss Spans, Concrete Substructure, 19' Rdwy.
The existing structure shall be removed by the Bridge Contractor before construction begins.

No Salvage.
No Temporary Bridge required.

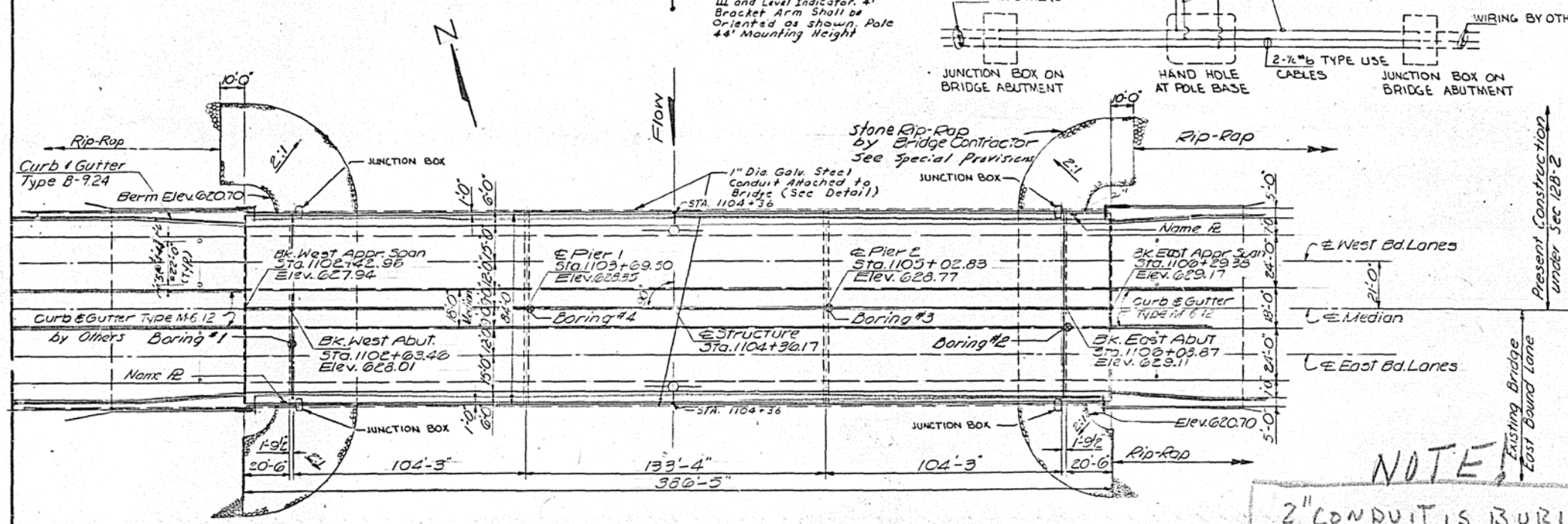
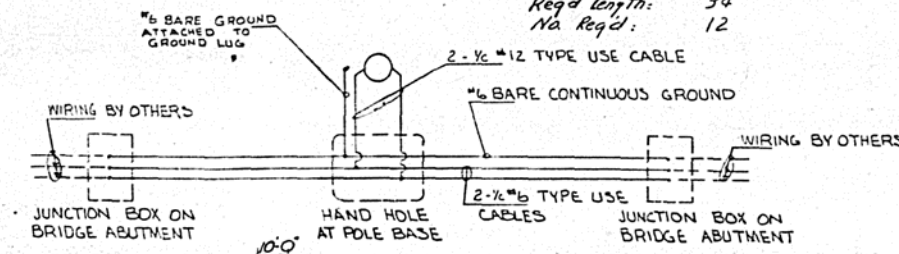
GENERAL NOTES

All reinforcement bars shall be lapped 2d diameters unless otherwise shown.
Fasteners shall be high strength bolts. Bolts 3/4"; open holes 1/2", unless otherwise shown.
Calculated weight of Structural Steel = 514,110 lbs.
Cast steel shall be Class 90. Structural steel weldments of equal sections and meeting ASTM A36 may be substituted for castings at the option of the Contractor, subject to approval by the Engineer prior to fabrication. No additional compensation will be allowed the Contractor for this substitution.
Roadway expansion guards shall be assembled in the proper position with the end in place and shall be left assembled for shop inspection.
Except as otherwise provided, all structural steel shall receive one shop coat of red point and two field coats of aluminum point.
Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
Anchor bolts shall be set before fastening Cross frame over supports.
Temporary Guardrail on East Bound Lane shall be removed after construction of West Bound Lane is completed.
The Contractor shall drive 2 test piles in permanent locations, one at Pier 1, one at East Abutment as directed by Engineer before ordering the remainder of piles



APPROACH PILE DATA

Typ. Creosoted
Req'd length: 34'
No Req'd: 12



TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Removal of Exist Structures	Each			1
Cofferdams	Each		2	2
Cofferdam Excavation	Cu.yds			271
Seal coat concrete	Cu.yds			139
Class X Concrete	Cu.yds	5395	2981	8376
Protective Coat	Sq.yds	1930		1930
Structural Steel	L.S.	L.S.		L.S.
Reinforcement Bars	Lbs.	124,230	21,960	146,190
Steel Piles (10BP42)	Lin. Ft.		3055	3055
Test Piles Steel (10BP42)	Each		2	2
Name Plates	Each	1		1
Stone Riprap	Sq.yds			400
Bridge Seal Sealant	L.S.			L.S.
Aluminum Railing (All Type L)	Lin. Ft.	343		343
Creosoted Piles (201' to 22')	Lin. Ft.			403

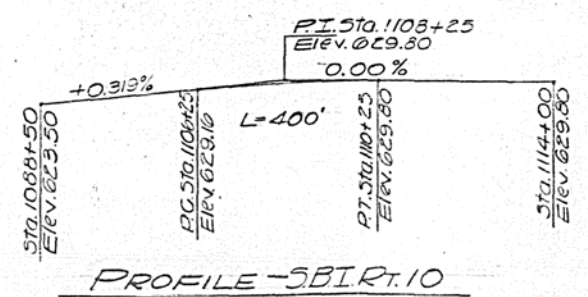
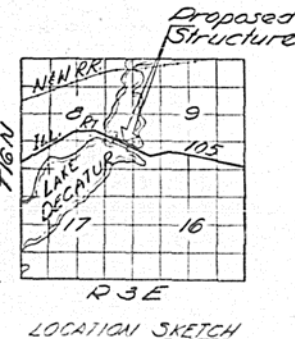
NOTE:
2" CONDUIT IS BURIED ALONG SIDE EACH ABUT. APPROACH SLAB CAP. THEY HAVE SEALED CAPS AND EXTEND 2'-3' PAST BACK OF SLAB CAP.

STATION 1104+36.17
BUILT 1966 BY
STATE OF ILLINOIS
S.B.I. RT. 10 SEC. 12 B-2
LOADING HS 20

NAME PLATE
see SH 2113-1

DESIGNED D. Choules
CHECKED A. P. Zlotnik
DRAWN D. Williams Jr.
CHECKED

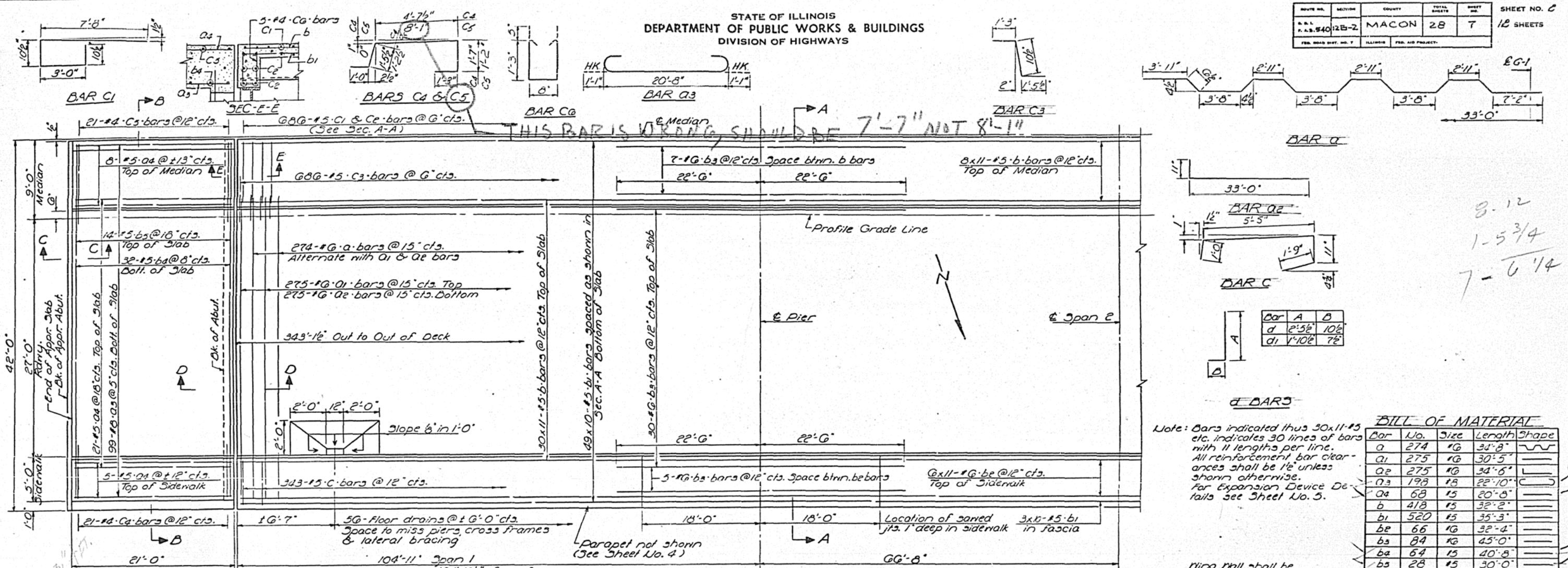
EXAMINED Jan 30 1968
PASSED
APPROVED



WATERWAY INFORMATION
Drainage Area ----- ± 534,000 Acres
Character ----- Level, rolling, hilly, wooded, cultivated
Required Opening ----- (50 Year Flood) ----- 5000 Sq. Ft.
Present Opening ----- ± 5170 Sq. Ft.
Proposed Opening ----- 5000 Sq. Ft.

DESIGN STRESSES
fc = 14000 psi. (Super. & Sub.)
fs = 20,000 psi. -- (Reinf.)
fs = 20,000 psi. -- (Struct.)
vc = 75 psi. -- (FTqs.)
n = 10
Allowable $\frac{4s}{1000}$ Non-Composite
LOADING HS20-44

WEST BOUND STRUCTURE
GENERAL PLAN ELEVATION
LAKE DECATOR
S.B.I. RT. 10 SEC. 12B-2
MACON COUNTY
STATION 1104+36.17



Note: Bars indicated thus 30x11-#5 etc. indicates 30 lines of bars with 11 lengths per line. All reinforcement bar clearances shall be 1/2" unless shown otherwise. For Expansion Device Details see Sheet No. 5.

BILL OF MATERIAL

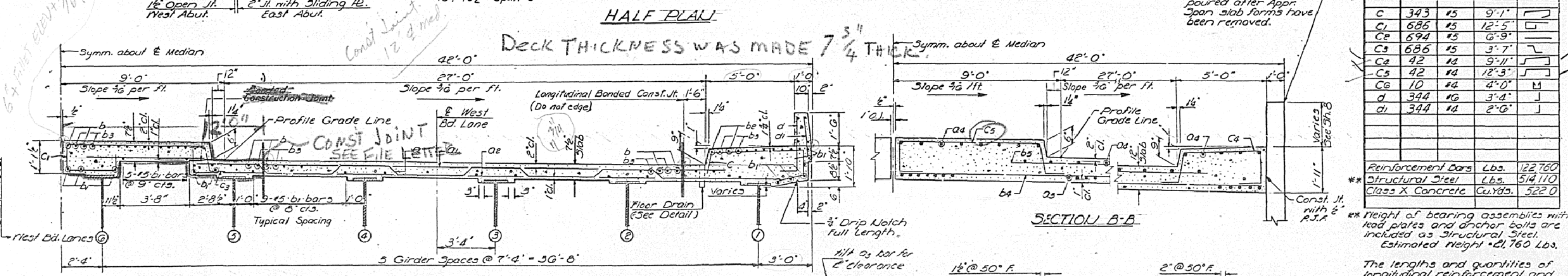
Bar	No.	Size	Length	Shape
a	274	#6	34'-8"	U
a1	275	#6	30'-5"	U
a2	275	#6	34'-6"	U
a3	198	#8	22'-10"	U
a4	68	#5	20'-8"	U
b	418	#5	32'-2"	U
b1	520	#5	35'-3"	U
b2	66	#6	32'-4"	U
b3	84	#6	45'-0"	U
b4	64	#5	40'-8"	U
b5	28	#5	30'-0"	U
c	343	#5	9'-1"	U
c1	686	#5	12'-5"	U
c2	694	#5	6'-9"	U
c3	686	#5	3'-7"	U
c4	42	#4	9'-11"	U
c5	42	#4	12'-3"	U
c6	10	#4	4'-0"	U
d	344	#6	3'-4"	J
d1	344	#4	2'-0"	J

Reinforcement Bars Lbs. 122,760
Structural Steel Lbs. 514,110
Class X Concrete Cu.Yds. 5220

** Height of bearing assemblies with lead plates and anchor bolts are included as Structural Steel. Estimated weight = 21,760 Lbs.

The lengths and quantities of longitudinal reinforcement and Class X Concrete in Parapet are not included in above quantities. See Sheet No. 4.

HALF PLAN
DECK THICKNESS WAS MADE 7 3/4" THICK



DESIGNED *D. Bonister*
CHECKED *B. R. Thikari*
DRAWN *J. Jacobs*
CHECKED *B. R. T.*

EXAMINED *Paul E. Thompson*
PASSED *H. C. B. Thompson*
APPROVED *J. G. Staff*

Jan 30 1918

1/2" x 1/2" Aluminum Bar
ASTM: B211 alloy G0G1-T6

3/8" Aluminum Sheets riveted
ASTM: D203 alloy G0G1-T6

FLOOR DRAIN SEC. C-C

SEC. D-D WEST ABUT. SEC. D-D EAST ABUT.

WEST BOUND LANE SUPERSTRUCTURE
S.P.I. RT. 10 SEC. 12B-2
MACON COUNTY
STA. 1104+36.17

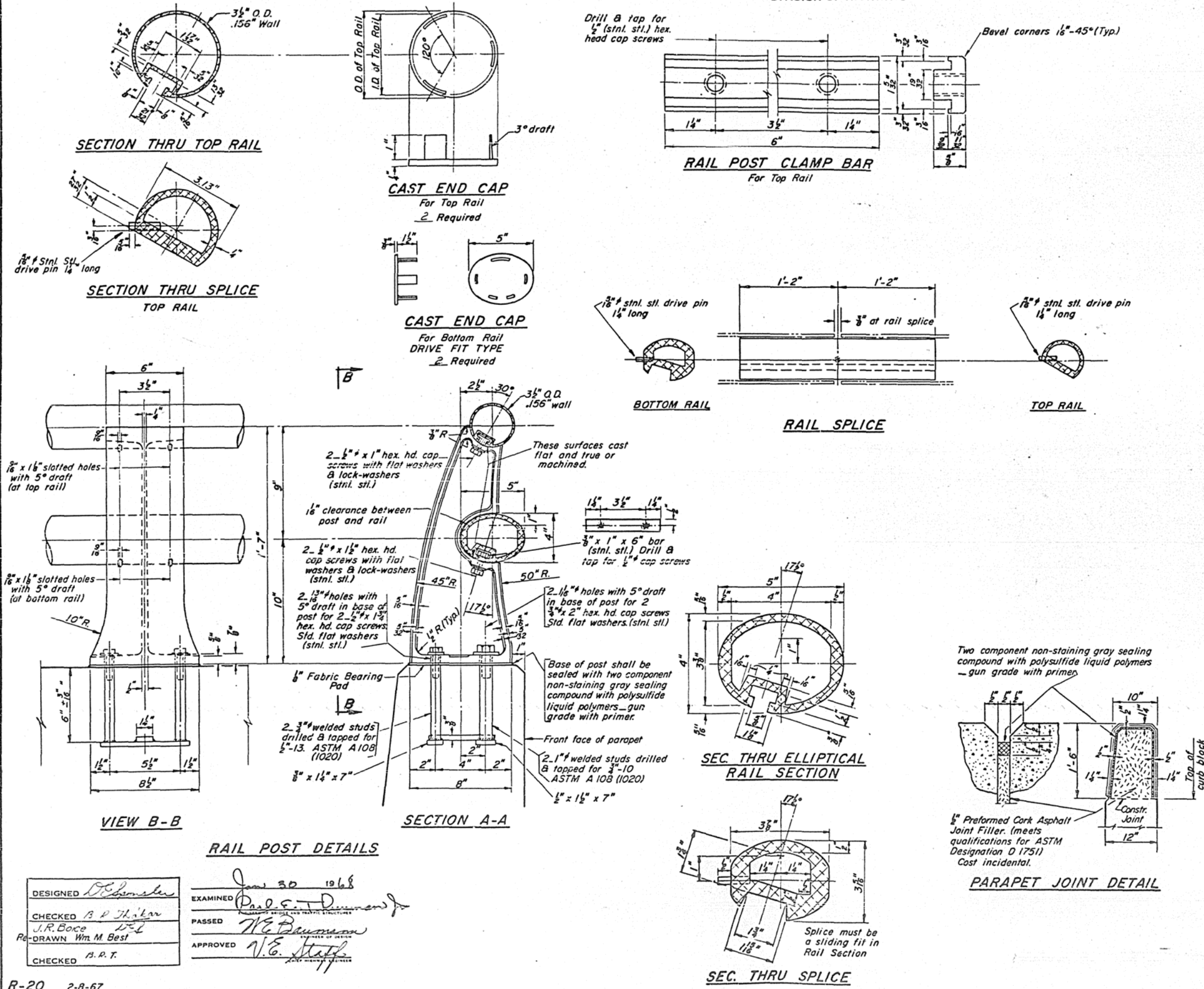
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S. 54	12B-2	MACON	28	8
ILLINOIS		FED. AID PROJECT		

SHEET NO. 3
12 SHEETS

NOTES:

All Posts shall be normal to parapet.
All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6 and shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
All joints in rail shall be spliced per detail.
See Special Provisions for the following Material Specifications:
Cast Aluminum Alloy Bridge Post—Alloy A 344-T7
Stainless Steel Bars, Cap Screws, Washers and Lockwashers
Fabric Bearing Pad
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- $\frac{1}{8}$ " and 2- $\frac{1}{16}$ " Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade—high spots shall be ground and low spots shimmed.
For Parapet Layout and Bill of Material See Sh. #4
Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for Aluminum Railing, Type L.
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.



RAIL POST DETAILS

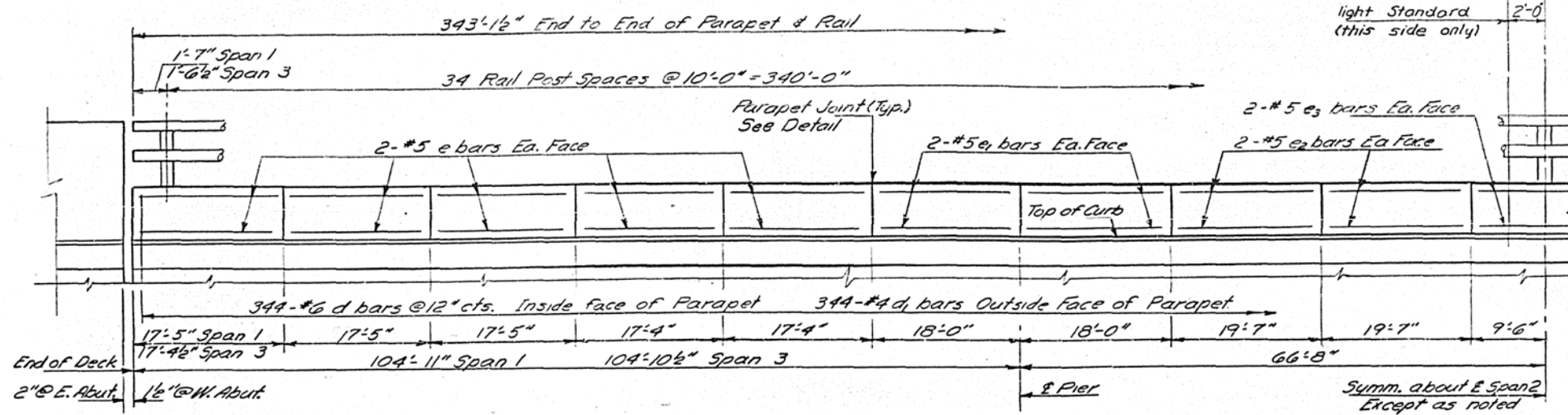
DESIGNED	W. H. H. H.	EXAMINED	Jan 30 1968
CHECKED	J. R. Boce	PASSED	W. H. H. H.
RE-DRAWN	Wm. M. Best	APPROVED	W. H. H. H.
CHECKED	A. R. T.		

BILL of MATERIALS

Item	Unit	Quantity
ALUMINUM Railing Type L	Lin. F.	343

TYPE L
ALUMINUM RAILING

WEST BOUND LANE
S.B.I. RT. 10 SEC. 12 B-2
MACON COUNTY
STA. 1104 +36.17



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.

Provide 1-¹/₈" and 2-¹/₈" 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.

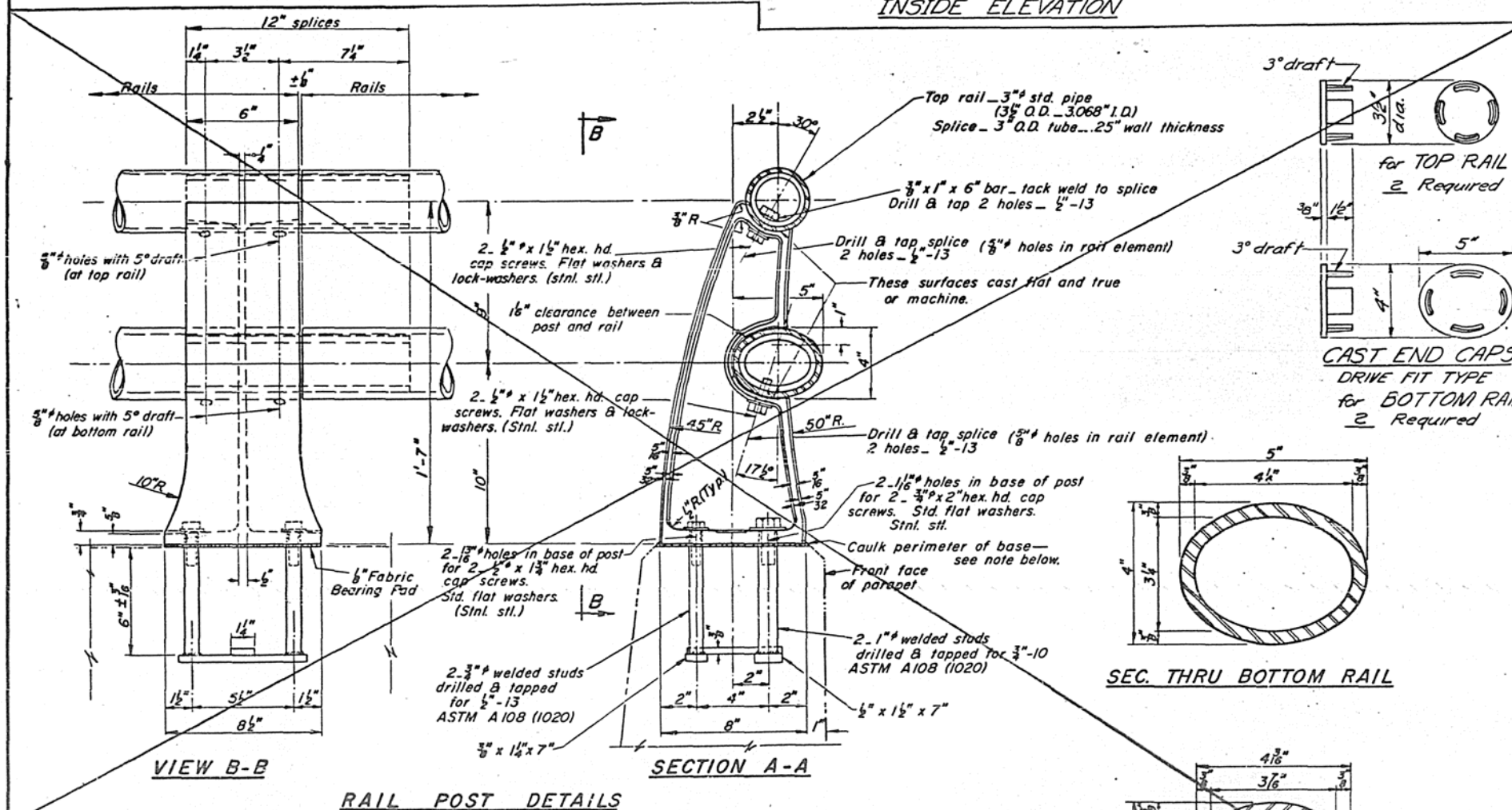
If any of the galvanizing coat is damaged or removed during erection, the affected area shall be painted with one coat of zinc paint in accordance with Military Specification MIL-P-26915 Type I, air-dry cure.

See Special Provisions for following Material Specifications:
Stainless Steel Cap Screws, Stainless Steel Bars and Stainless Steel Washer.

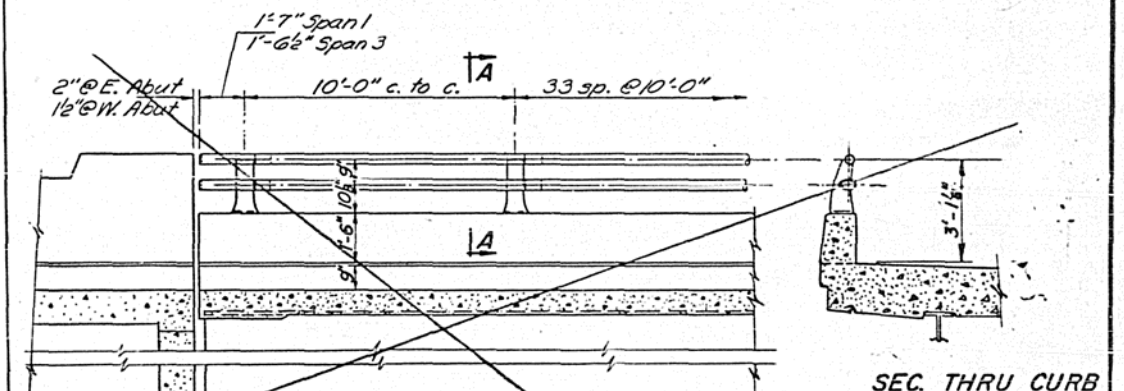
METHOD OF MEASUREMENT: Metal handrail shall be measured in lineal feet. The length paid for shall be the overall length along the top longitudinal railing member through all posts and gaps.

BASIS OF PAYMENT: Metal handrail will be paid for at the contract unit price per lineal foot 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 METAL HANDRAIL.



for detail of Tight Standard see sheet #11.

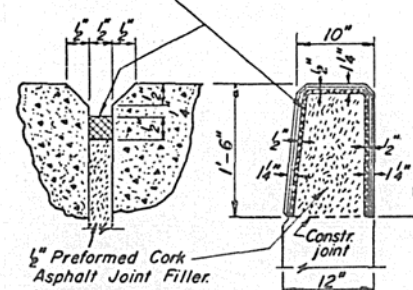


INSIDE VIEW AT ABUTMENT

**TWO HANDRAILS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
e	40	#5	17'-0"	—
e ₁	16	#5	17'-8"	—
e ₂	16	#5	19'-3"	—
e ₃	4	#5	18'-8"	—
Reinforcement Bars		Lbs.	1410	
Class X Concrete		Cu. Yds.	17.5	

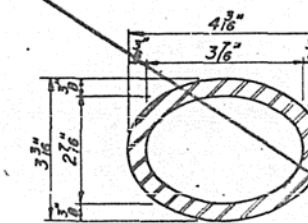
Two component non-staining gray sealing compound with polysulfide liquid polymers—gun grade with primer



1/2" Preformed Cork Asphalt Joint Filler. (meets qualifications for ASTM Designation D1751) Cost incidental

PARAPET JOINT DETAIL

SEC. THRU BOTTOM RAIL



SEC. THRU BOTTOM SPLICE

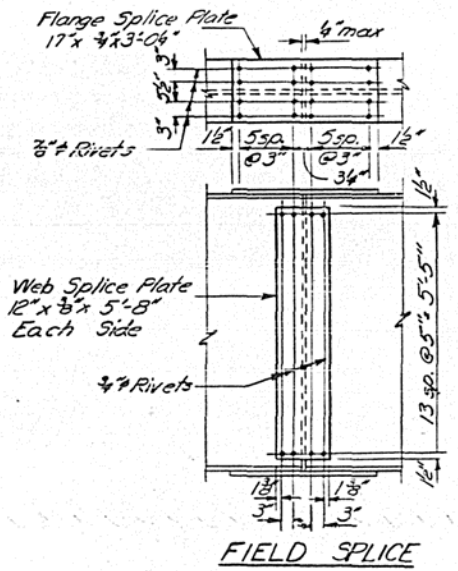
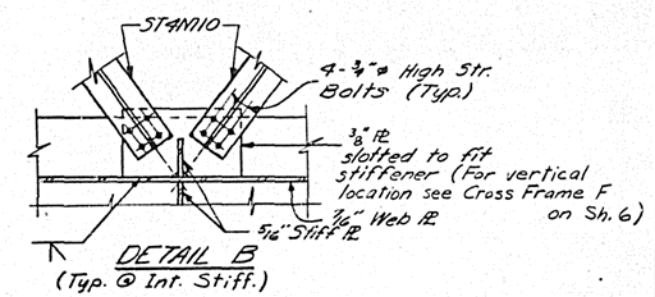
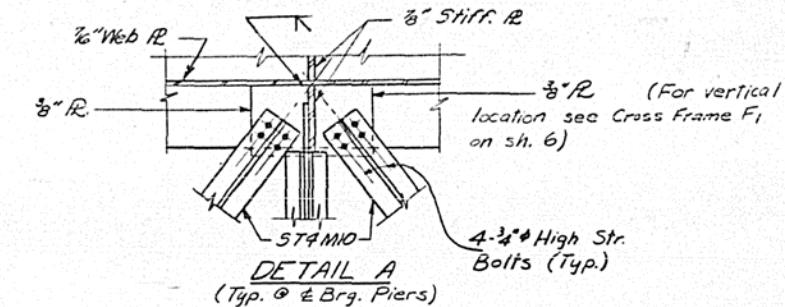
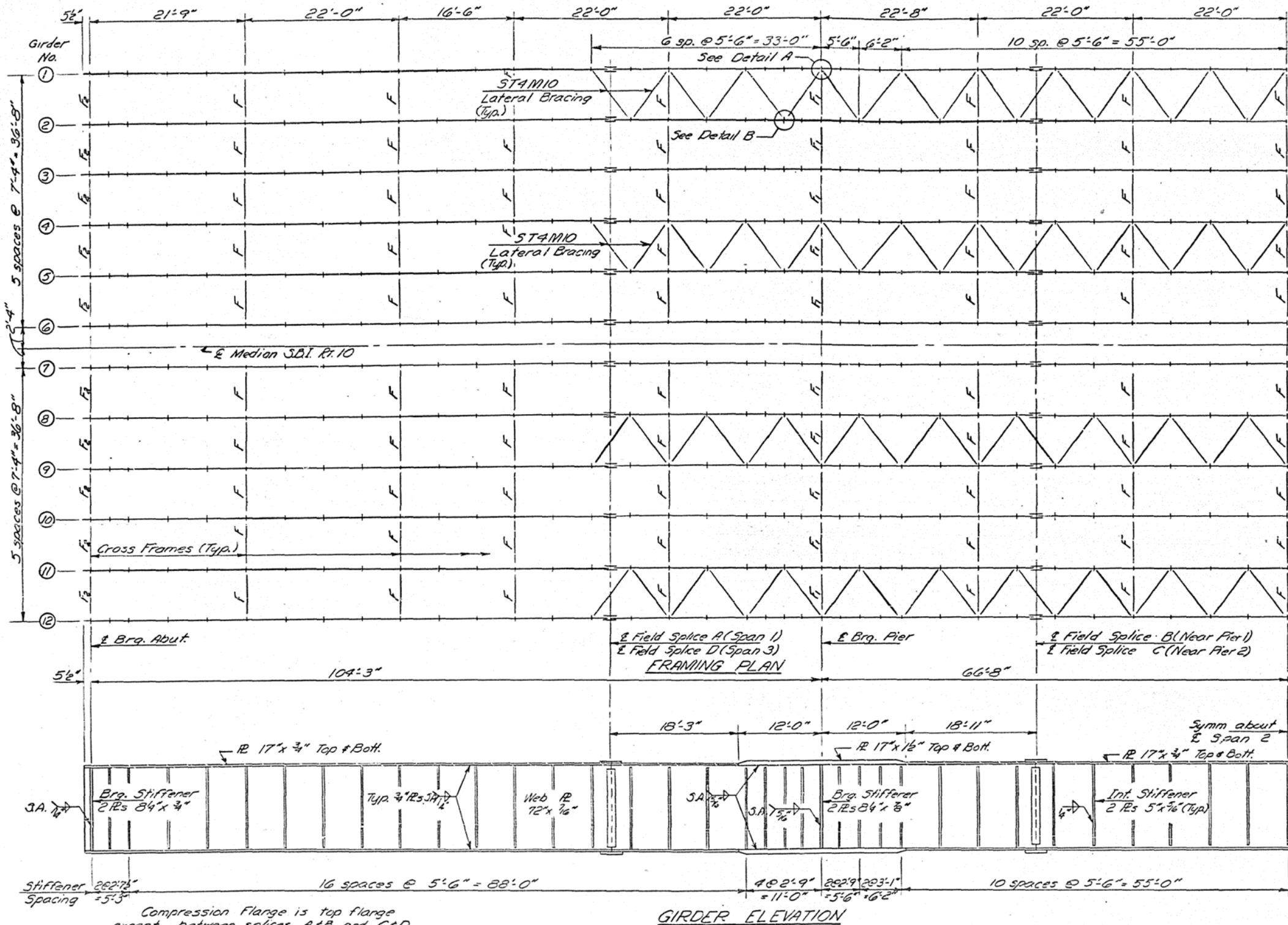
Note! Seal base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers—gun grade with primer.

Note! Splice must be sliding fit in Rail Section.

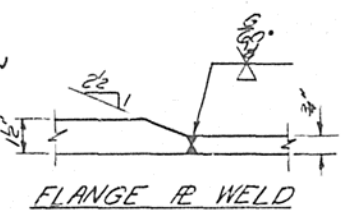
DESIGNED	D. Chonka	EXAMINED	Jaw 30 1964
CHECKED	A. R. Shaker	PASSED	H. E. Baumann
	J. R. Beck		
	Wm. M. Best	APPROVED	J. E. Stoff
CHECKED	B. R. T.		

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

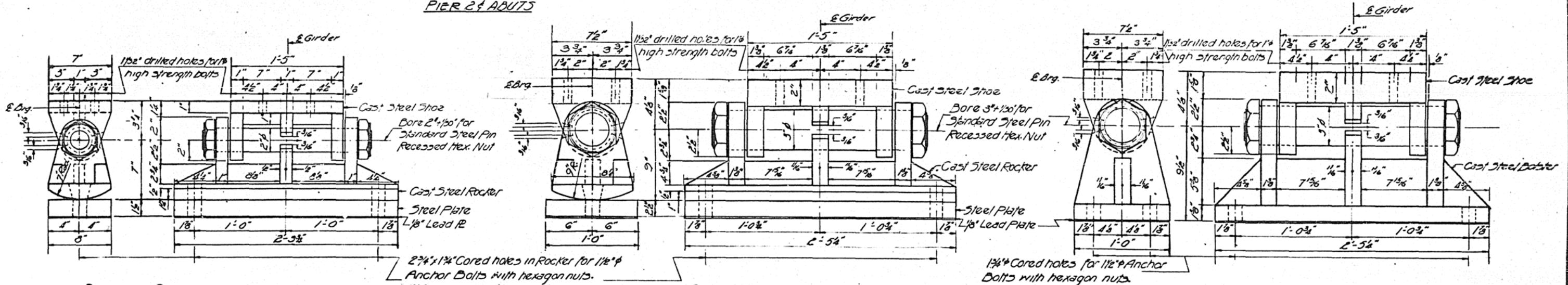
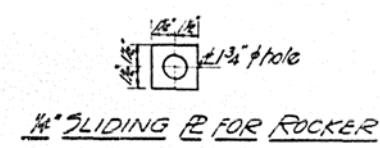
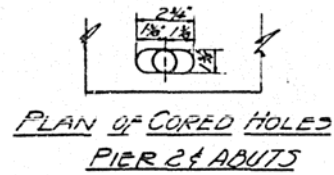
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P. 13-540	12B-2	MACON	28	10
SHEET NO. 5		12 SHEETS		



DESIGNED	<i>D. Sponaler</i>	EXAMINED	<i>Jan 30 1968</i>
CHECKED	<i>B. R. Jhalak</i>	PASSED	<i>W. E. Baumann</i>
DRAWN	<i>J. R. Boice</i>	APPROVED	<i>V. G. Stoff</i>
CHECKED	<i>B. P. T.</i>		



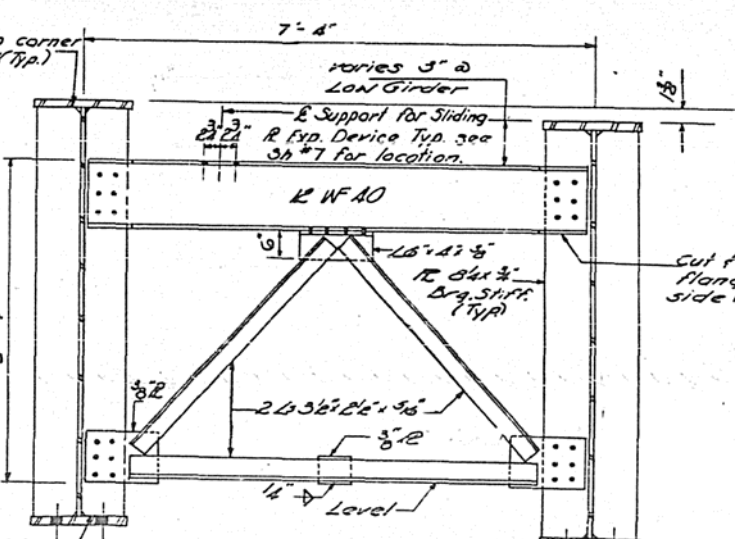
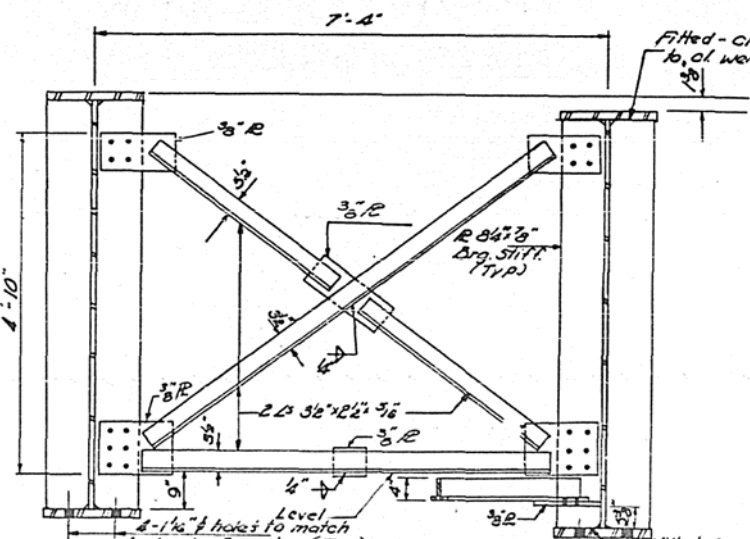
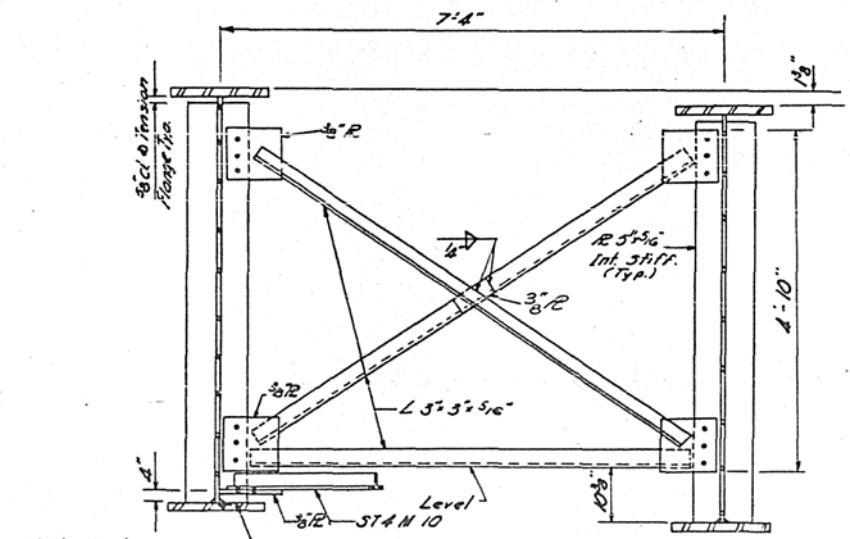
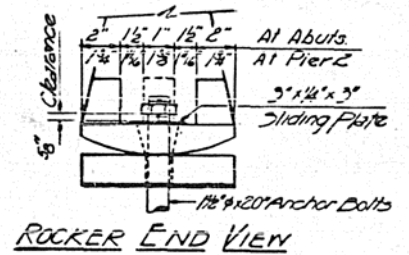
WEST BOUND LANE
STRUCTURAL STEEL
S.B.I. RT. 10 SEC. 12B-2
MACON COUNTY
STA. 1104 + 36.17



BEARING DETAIL AT ABUTMENTS
Shoes: No. Req'd. 12 Wt. of one 53 Lbs.
Rockers: No. Req'd. 12 Wt. of one 142 Lbs.

BEARING DETAIL AT PIER 2
Shoes: No. Req'd. 6 Wt. of one 94 Lbs.
Rockers: No. Req'd. 6 Wt. of one 192 Lbs.
Notes: Cast steel shall conform to AASHTO Designation M 192 Class 90. Bearing surfaces shall be finished in accordance with AASHTO Specification Art. 2.10.25.

BEARING DETAIL AT PIER 1
Shoes: No. Req'd. 6 Wt. of one 94 Lbs.
Dobbers: No. Req'd. 6 Wt. of one 272 Lbs.



TOP OF WEB ELEVATIONS

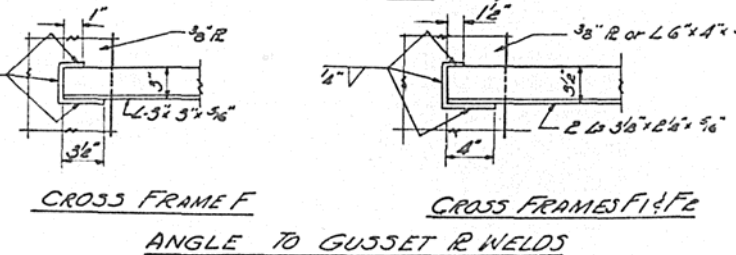
Girder Loc.	1	2	3	4	5	6
E Drq. M. Ab.	626.793	626.900	627.022	627.137	627.251	627.366
E Spl. A	627.029	627.144	627.258	627.373	627.487	627.602
E Drq. Pier 1	627.151	627.246	627.360	627.475	627.589	627.704
E Spl. B	627.224	627.339	627.453	627.568	627.682	627.797
E Spl. C	627.452	627.567	627.681	627.796	627.910	628.025
E Drq. Pier 2	627.551	627.666	627.780	627.895	628.009	628.124
E Spl. D	627.647	627.763	627.878	627.991	628.105	628.220
E Drq. E. Ab.	627.883	627.998	628.112	628.227	628.341	628.456

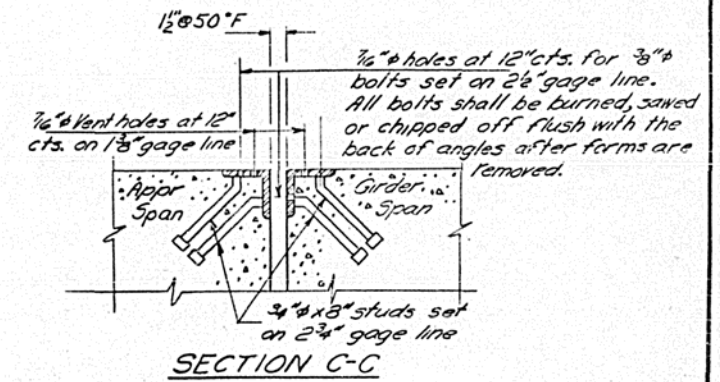
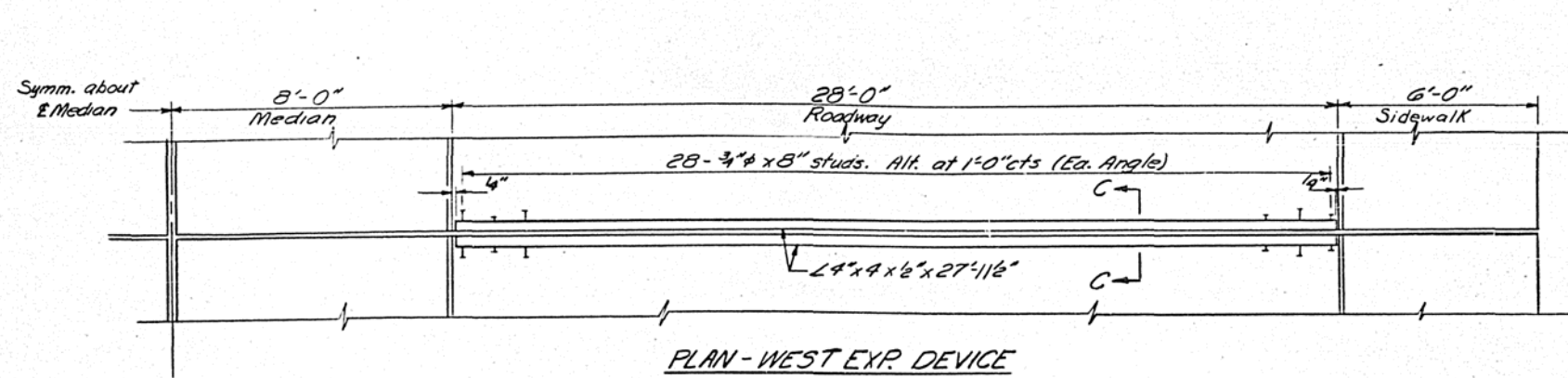
TABLE OF MOMENTS & REACTIONS INT. GIRDERS

	Moments (Ft.Kips)		Reactions (Kips)	
	A Spl. Pier	5 Spl. Abut.	Abut.	Pier
DL	914	-2004	894	51
LL	906	-1132	916	40
Imp	197	-252	177	—
Total	2017	-3448	1987	263

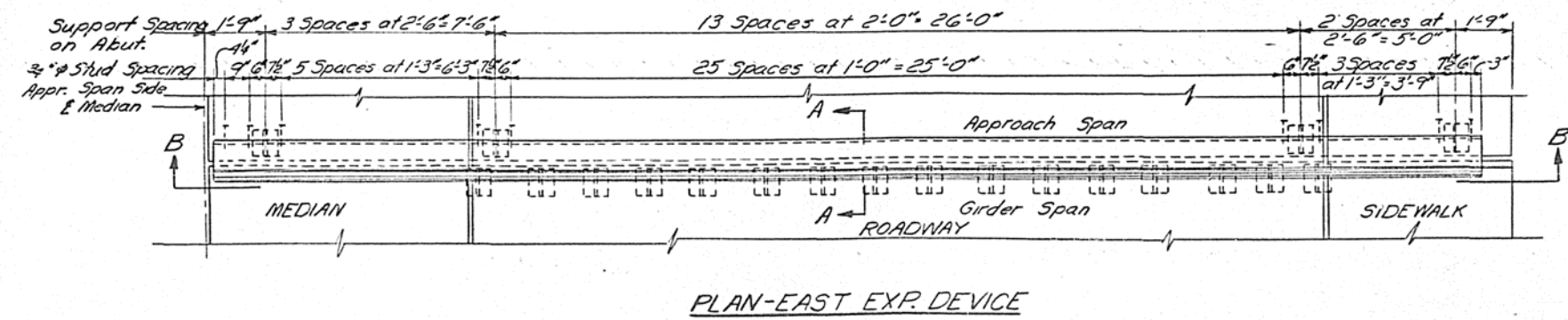
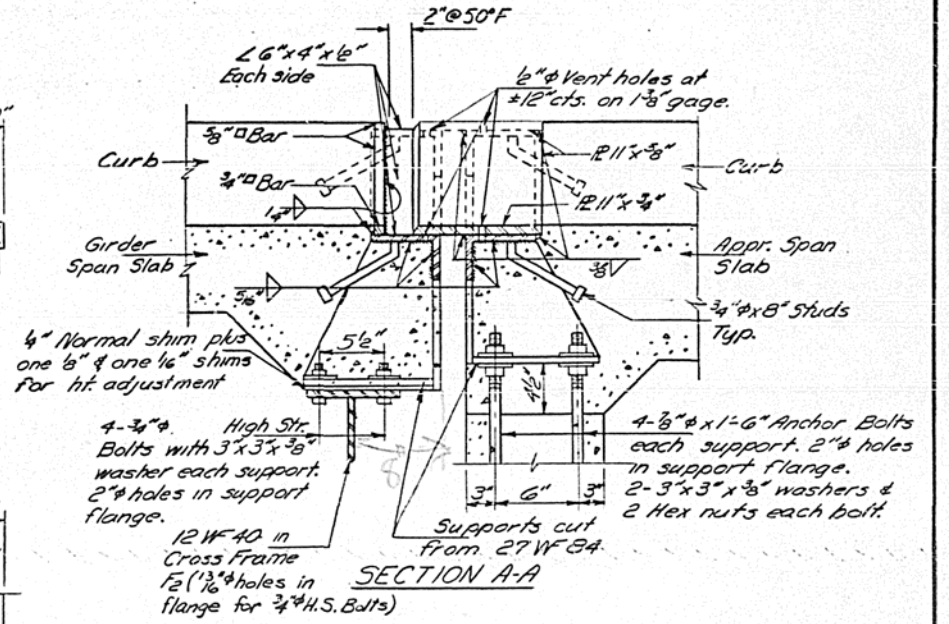
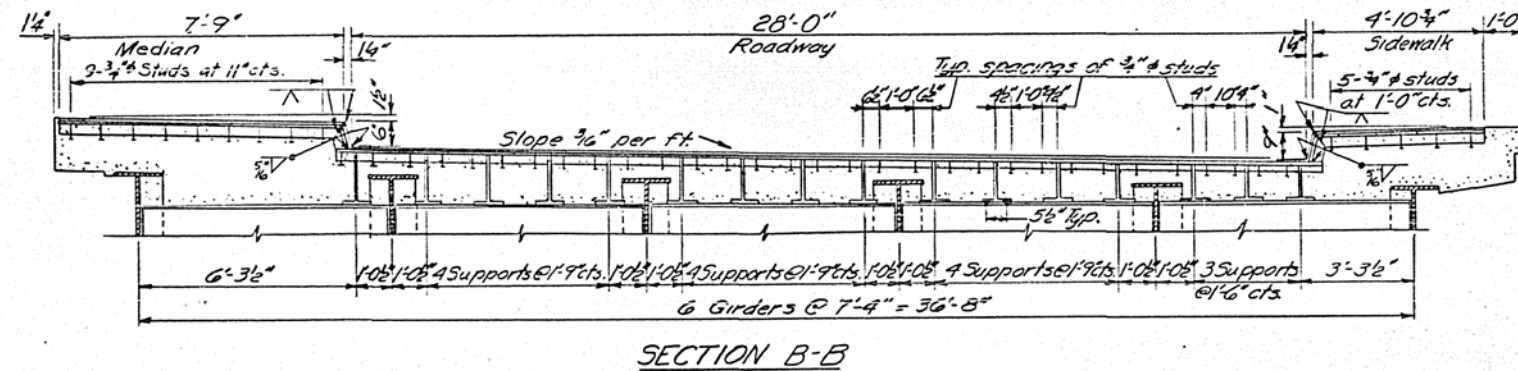
WEST BOUND LANE
BEARINGS AND CROSS FRAMES
S.B.I. PT. 10 SEC. 12 B-2
MACON COUNTY
STA. 1104+36.17

DESIGNED: D.E. Bauman
CHECKED: B.R. Zickler
DRAWN: D.W. Williams
CHECKED: B.R.T.
EXAMINED: [Signature]
PASSED: W.C. Baumann
APPROVED: J.E. Staff





Note:
3/4" x 8" studs shall be CR 1020 stl granular or solid flux filled headed studs automatically end welded.



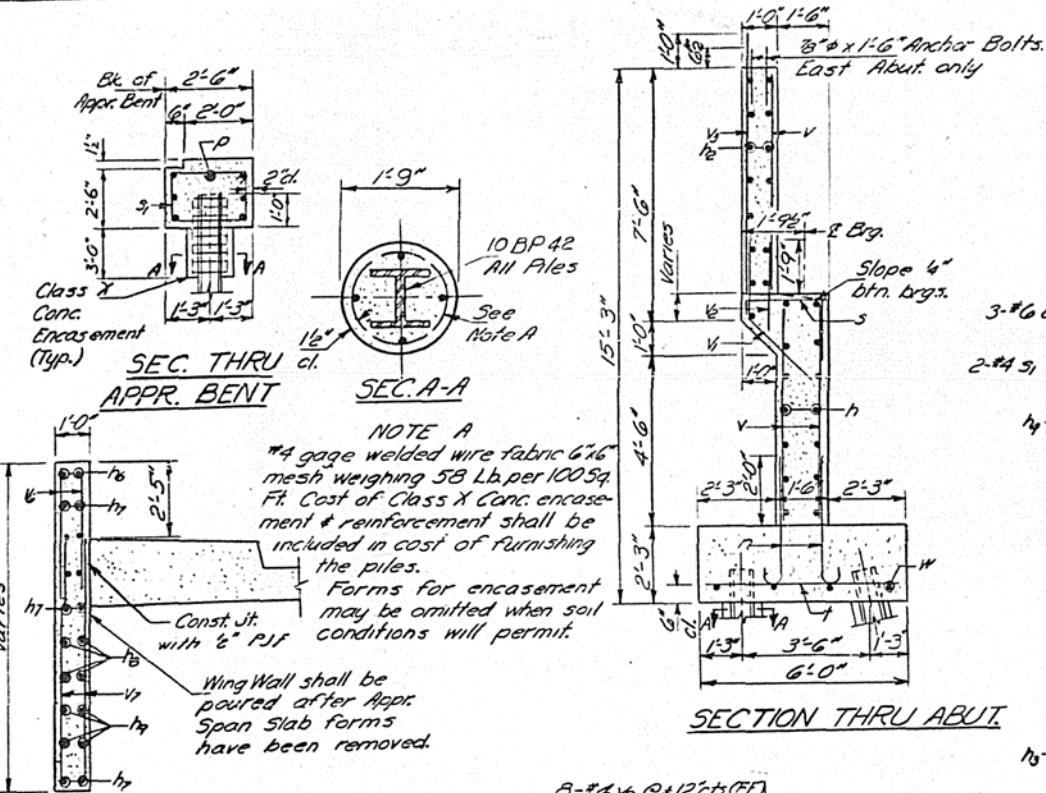
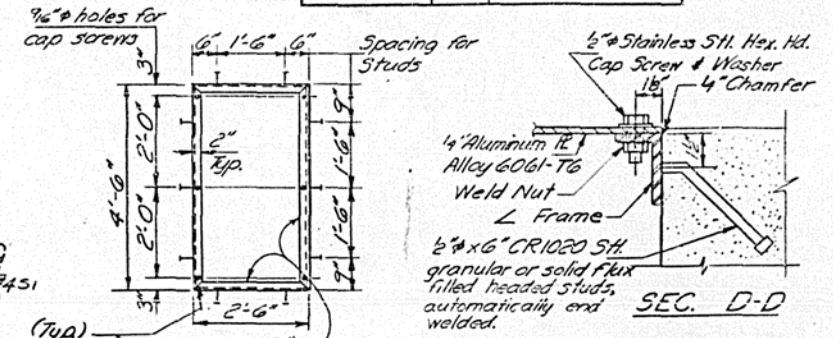
DESIGNED	<i>D. Elsonster</i>	EXAMINED	<i>Jan 30 1968</i> <i>Carl E. Thumman Jr.</i>
CHECKED	<i>B. R. Thakar</i>	PASSED	<i>W. E. Baumann</i>
DRAWN	<i>J. R. Boice</i>	APPROVED	<i>J. E. Staff</i>
CHECKED	<i>B. R. T.</i>		

WEST BOUND LANE
EXPANSION DEVICE DETAILS
S.B.I. RT. 10 SEC. 12B-2
MACON COUNTY
STA. 1104 + 36.17

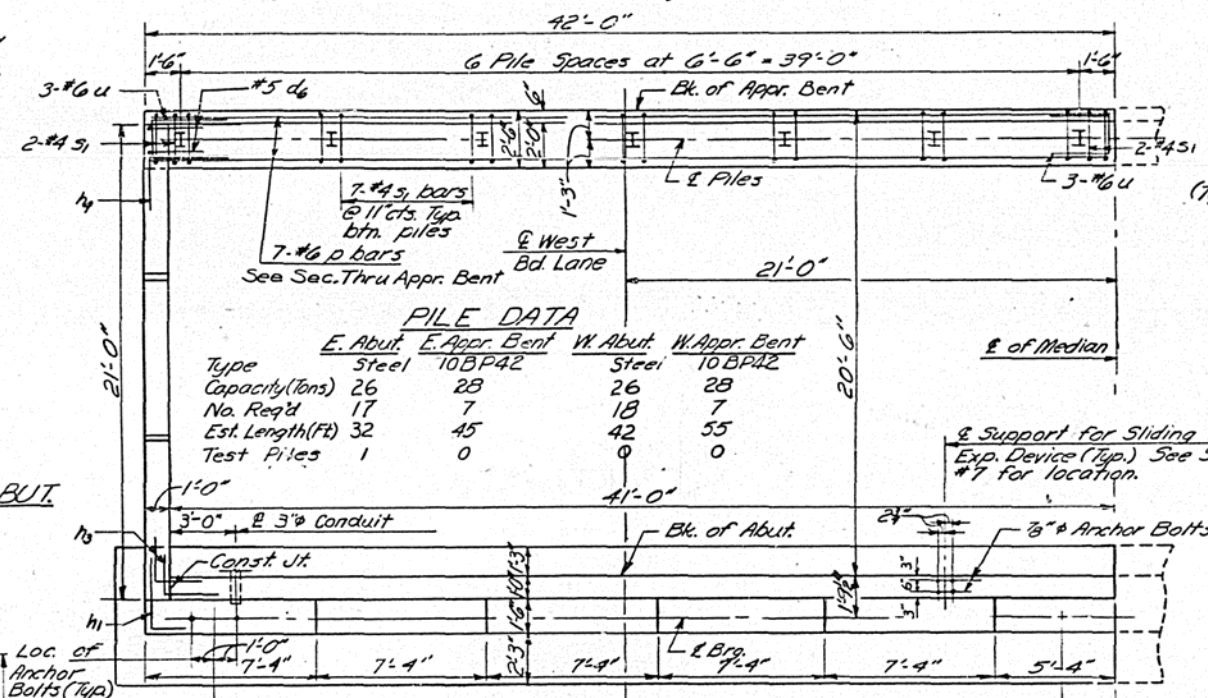
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
A.S. 540	12B-2	MACON	28 13	2 SHEETS
ILLINOIS		FED. AID PROJECT		

Note: Bars indicated thus 8x2-#4 etc. indicate 8 lines of bars with 2 lengths per line.
All reinf. bar clearances shall be 1/2" unless shown otherwise.
Space reinf. in brg. seat to miss anchor bolts.
Cost of Aluminum Doors & Frames to be incidental.



NOTE A
#4 gage welded wire fabric 6x6 mesh weighing 58 Lb. per 100 Sq. Ft. Cost of Class X Conc. encasement & reinforcement shall be included in cost of furnishing the piles.
Forms for encasement may be omitted when soil conditions will permit.
Wing Wall shall be poured after Appr. Span Slab forms have been removed.

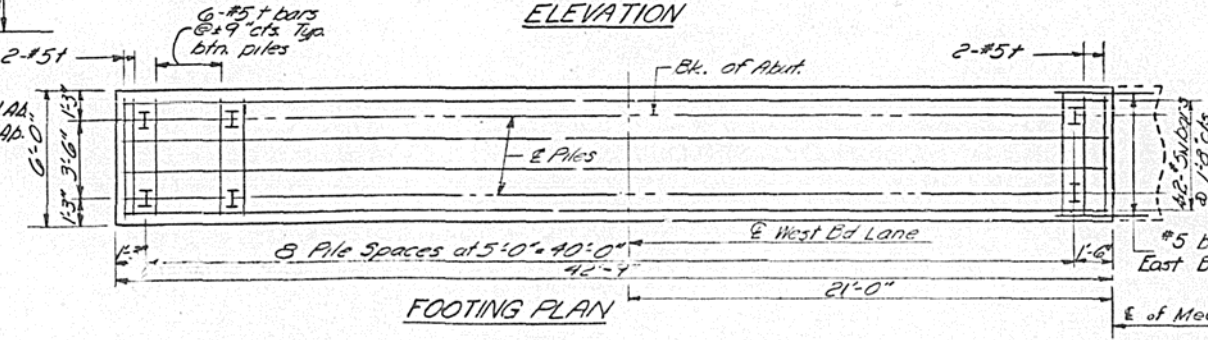
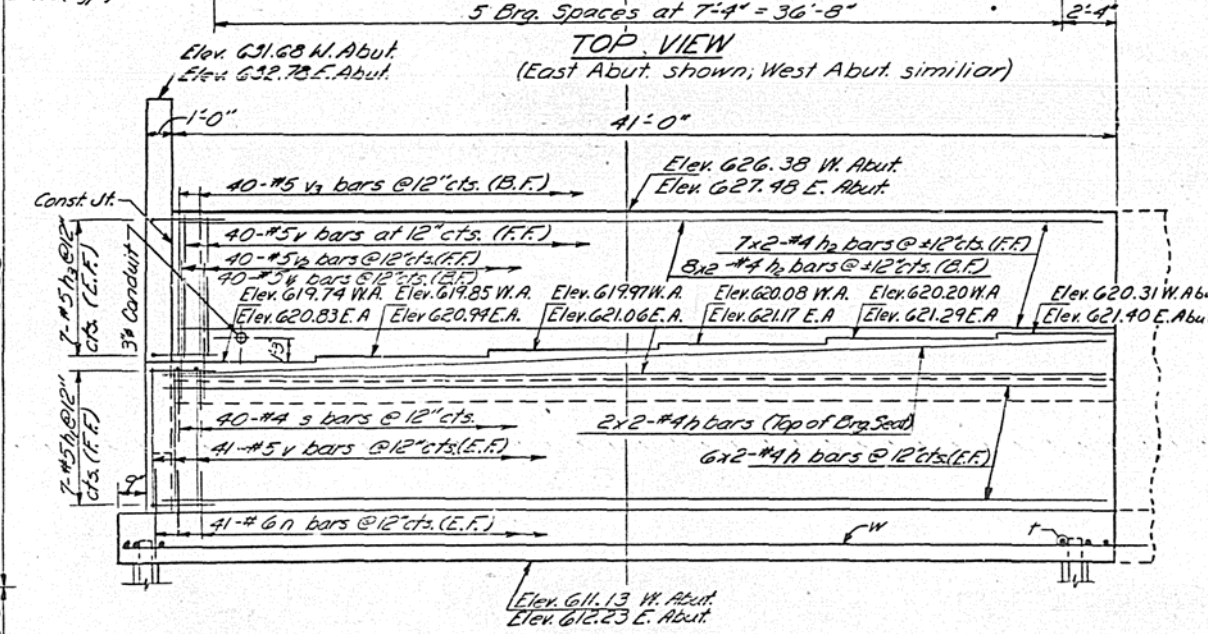
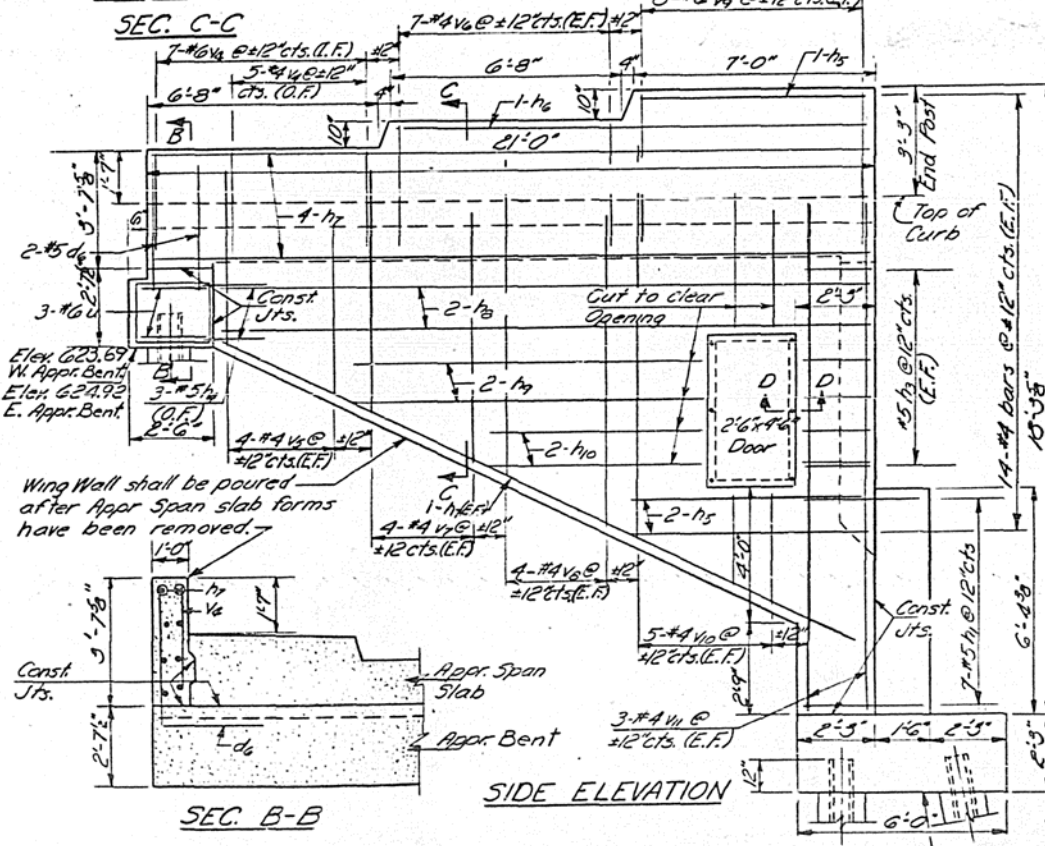


FILE DATA

Type	E. Abut.	E. Appr. Bent	W. Abut.	W. Appr. Bent
Capacity (Tons)	26	28	26	28
No. Req'd	17	7	18	7
Est. Length (Ft)	32	45	42	55
Test Piles	1	0	0	0

2 ABUTMENTS

Bar	No.	Size	Length	Shape
d6	4	#5	6'-5"	L
h	56	#4	21'-6"	—
h1	14	#5	4'-9"	—
h2	60	#4	21'-0"	—
h3	28	#5	3'-3"	—
h4	6	#5	4'-9"	—
h5	12	#4	6'-8"	—
h6	4	#4	13'-5"	—
h7	20	#4	20'-5"	—
h8	8	#4	18'-8"	—
h9	8	#4	14'-8"	—
h10	8	#4	10'-8"	—
n	164	#6	4'-5"	C
p	14	#6	41'-6"	—
s	80	#4	4'-11"	—
s1	92	#4	9'-6"	—
t	104	#5	5'-6"	—
u	12	#6	9'-7"	—
v	244	#5	6'-0"	—
v1	80	#5	5'-6"	—
v2	80	#5	3'-0"	—
v3	80	#5	7'-1"	—
v4	24	#4	3'-0"	—
v5	16	#4	5'-0"	—
v6	28	#4	3'-10"	—
v7	16	#4	7'-0"	—
v8	16	#4	10'-0"	—
v9	32	#4	4'-8"	—
v10	20	#4	11'-6"	—
w	16	#5	22'-9"	—



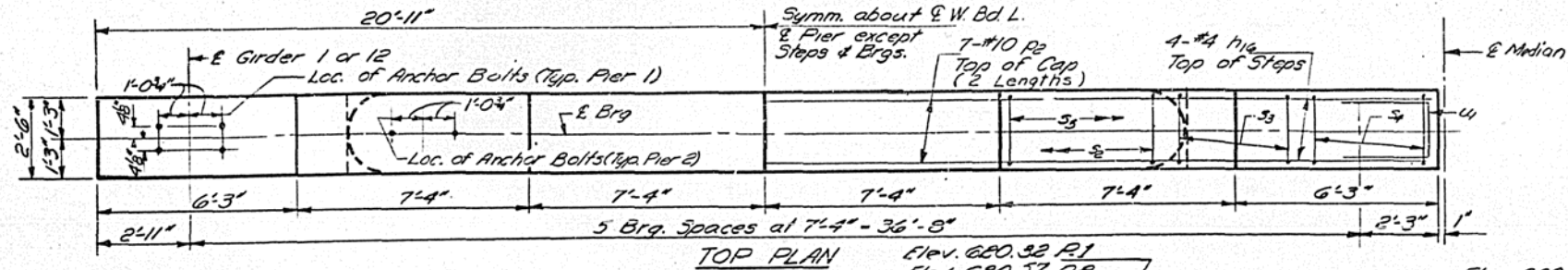
DESIGNED: P. Elspousler
CHECKED: B. R. Hixson
DRAWN: J. R. Bocke
CHECKED: B. R. T.

EXAMINED: Paul E. T. [Signature]
PASSED: [Signature]
APPROVED: J. E. [Signature]

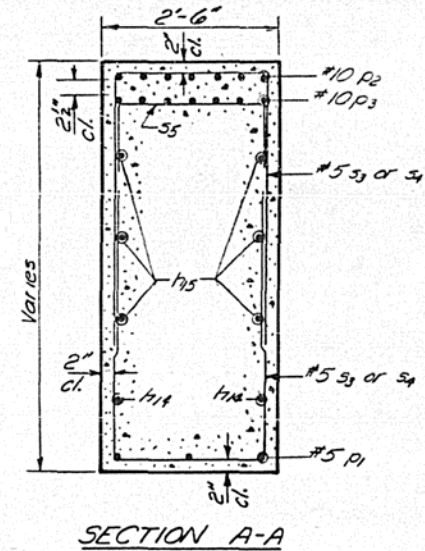
Note:
Wing wall door in North wings only.
O.F. = Outside Face
I.F. = Inside Face
E.F. = Each Face
F.F. = Front Face
B.F. = Back Face

WEST BOUND LANE
ABUTMENTS
S.B.I.R.T. 10 SEC. 12B-2
MACON COUNTY
STA. 1104+36.17

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

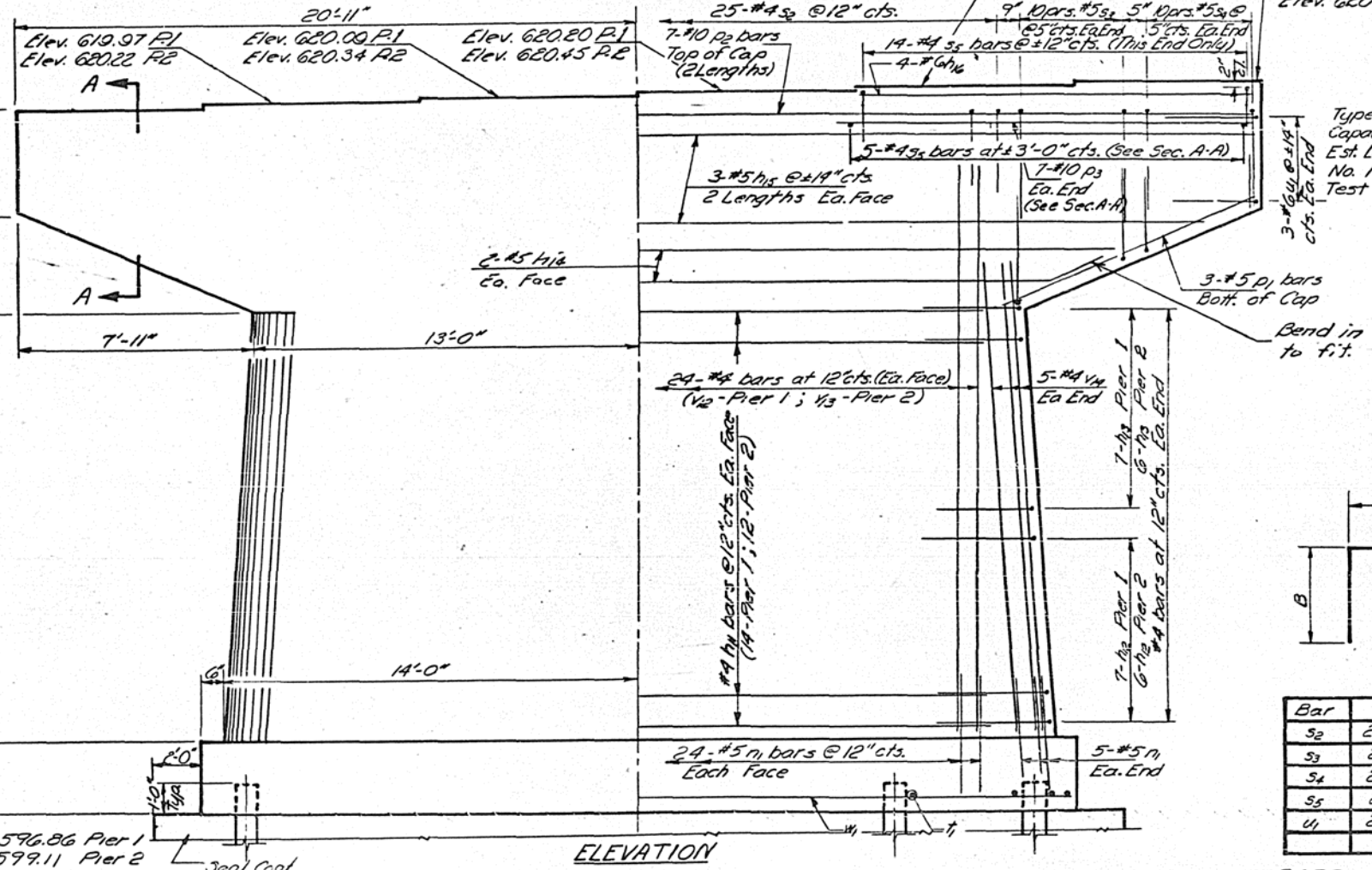
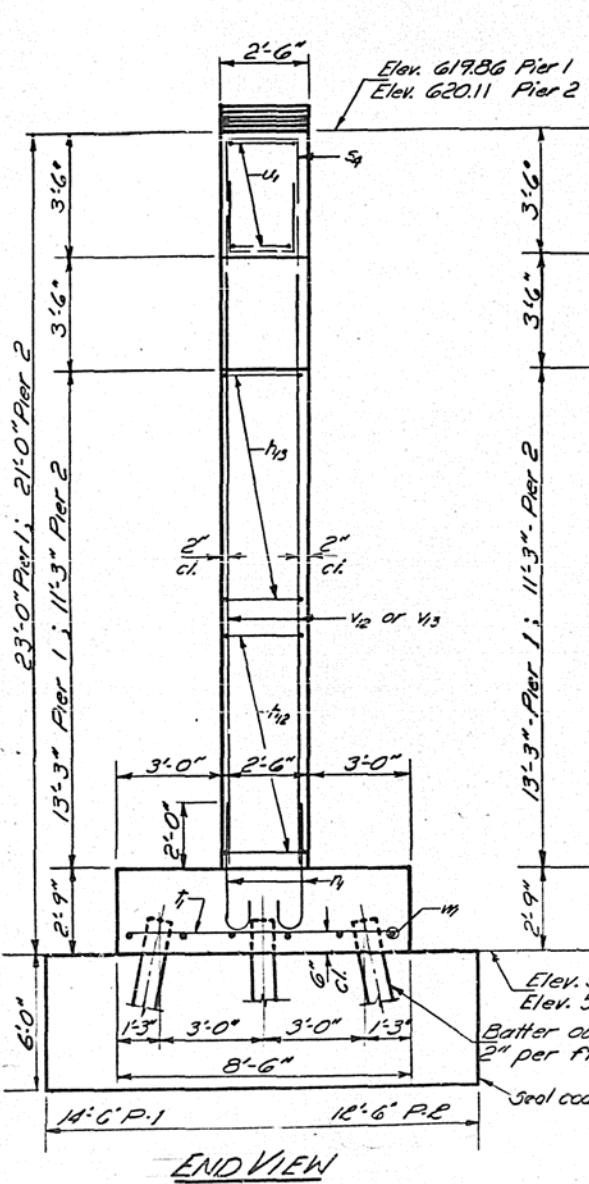


Note:
All edges shall have std. 3/8" chamfers except footing.
Space reinf. in cap to miss anchor bolts.



PILE DATA (E. Bd Lanes)

	PIER 1	PIER 2
Type	Steel (10BF42)	Steel (10BF42)
Capacity	45 tons	37 tons
Est. Length	25 ft	20 ft
No. Req'd	23	24
Test Piles	1	0

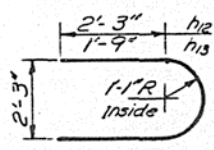


2 PIERS
BILL OF MATERIAL

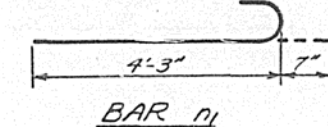
Bar	No.	Size	Length	Shape
h1	52	#4	23'-6"	—
h2	26	#4	8'-0"	—
h3	26	#4	7'-0"	—
h4	8	#5	34'-9"	—
h5	24	#5	21'-4"	—
h6	8	#6	13'-3"	—
n	116	#5	4'-10"	—
P1	12	#5	8'-9"	—
P2	28	#10	21'-10"	—
P3	28	#10	14'-0"	—
S2	50	#4	8'-2"	—
S3	80	#5	10'-0"	—
S4	80	#5	8'-6"	—
S5	48	#4	4'-8"	—
T	78	#8	8'-0"	—
U	12	#6	7'-1"	—
V2	48	#4	18'-1"	—
V3	48	#4	16'-1"	—
V4	20	#4	15'-0"	—
W1	12	#5	28'-6"	—
Class 7 Concrete			Cu. Yds.	151.5
Reinforcement Bars			Lbs.	11720
Steel Piles (10BF42)			Lin. Ft.	1055
Test Piles Steel (10BF42)			Each	1
Seal Coat Concrete			Cu. Yds.	198

Bar	A	B
S2	2'-2"	3'-0"
S3	2'-2"	3'-11"
S4	2'-2"	3'-2"
S5	2'-2"	1'-3"
U	2'-1"	2'-6"

BARS S2 thru S5 & U



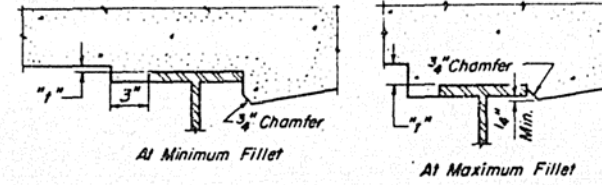
BARS h12 & h13



DESIGNED *D. Sponsler*
CHECKED *B. P. Jahan*
DRAWN *J. R. Boice*
CHECKED *B. R. T.*
EXAMINED *Jan 30 1968*
Carl E. Thompson
PASSED *W. E. Deussen*
APPROVED *J. E. Staff*

WEST BOUND LANE
PIERS
S.B.I. RT. 10 SEC. 12B-2
MACON COUNTY
STA. 1104+36.17

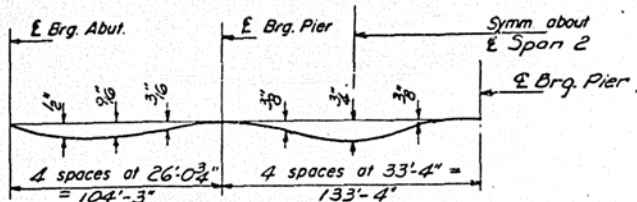
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS



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

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 510	12B-2	MACON	28	15

12 SHEETS



**GIRDERS 2 THRU 11
DEAD LOAD DEFLECTION DIAGRAM**

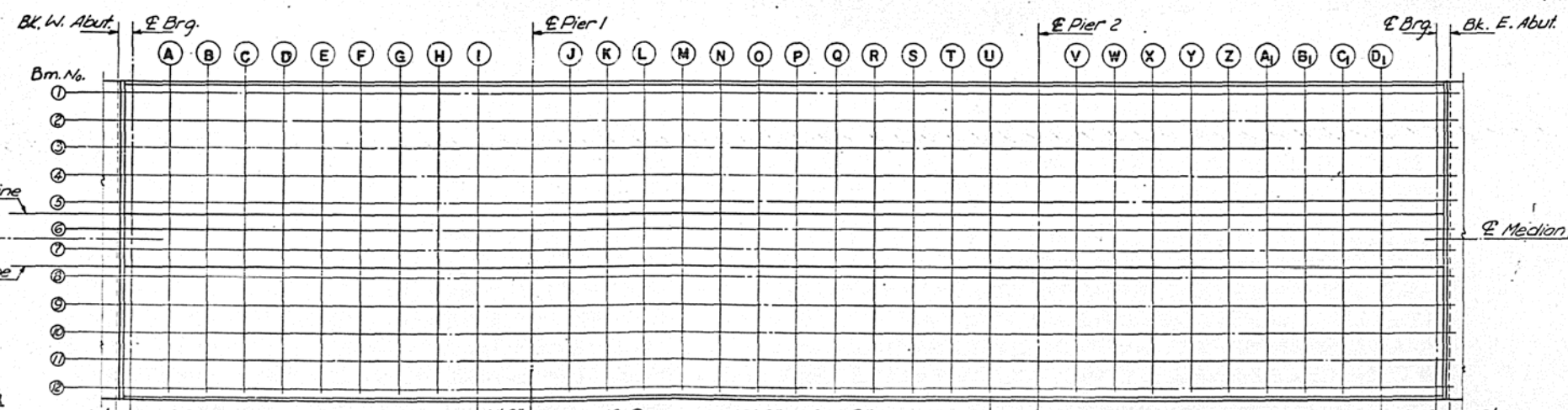
(Includes weight of concrete only)
Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	2	110263.460	31.666	627.652	627.652
	3	110263.460	17,000	627.767	627.767
	4	110263.460	9,666	627.882	627.882
	5	110263.460	9,000	627.996	627.996
	6	110263.460	2,333	628.007	628.007
	6	110263.460	2,333	628.111	628.111
E Brq.	2	110265.252	31.666	627.658	627.658
	3	110265.252	17,000	627.773	627.773
	4	110265.252	9,666	627.887	627.887
	5	110265.252	9,000	628.002	628.002
	6	110265.252	2,333	628.012	628.012
	6	110265.252	2,333	628.117	628.117
A	110275.252	31.666	627.690	627.706	
	110275.252	24,333	627.805	627.821	
	110275.252	17,000	627.919	627.935	
	110275.252	9,666	628.034	628.050	
	110275.252	2,333	628.044	628.060	
B	110285.252	31.666	627.722	627.754	
	110285.252	24,333	627.837	627.869	
	110285.252	17,000	627.951	627.983	
	110285.252	9,666	628.066	628.098	
	110285.252	2,333	628.076	628.108	
C	110295.252	31.666	627.754	627.796	
	110295.252	24,333	627.869	627.911	
	110295.252	17,000	627.983	628.026	
	110295.252	9,666	628.098	628.140	
	110295.252	2,333	628.108	628.151	
D	110305.252	31.666	627.786	627.830	
	110305.252	24,333	627.900	627.945	
	110305.252	17,000	628.015	628.059	
	110305.252	9,666	628.130	628.174	
	110305.252	2,333	628.140	628.184	

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
E	2	110315.252	31.666	627.818	627.864
	3	110315.252	24,333	627.932	627.979
	4	110315.252	17,000	628.047	628.093
	5	110315.252	9,666	628.161	628.208
	6	110315.252	2,333	628.172	628.218
	6	110315.252	2,333	628.276	628.322
F	110325.252	31.666	627.850	627.887	
	110325.252	24,333	627.964	628.002	
	110325.252	17,000	628.079	628.116	
	110325.252	9,666	628.193	628.231	
	110325.252	2,333	628.204	628.241	
	6	110325.252	2,333	628.308	628.345
G	110335.252	31.666	627.907	627.907	
	110335.252	24,333	627.996	628.022	
	110335.252	17,000	628.111	628.136	
	110335.252	9,666	628.225	628.251	
	110335.252	2,333	628.236	628.261	
H	110345.252	31.666	627.913	627.928	
	110345.252	24,333	628.028	628.043	
	110345.252	17,000	628.143	628.157	
	110345.252	9,666	628.257	628.272	
	110345.252	2,333	628.268	628.282	
I	110355.252	31.666	627.945	627.954	
	110355.252	24,333	628.060	628.068	
	110355.252	17,000	628.174	628.183	
	110355.252	9,666	628.289	628.298	
	110355.252	2,333	628.299	628.308	

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
E Pier 1	2	110369.502	31.666	627.991	627.991
	3	110369.502	24,333	628.105	628.105
	4	110369.502	17,000	628.220	628.220
	5	110369.502	9,666	628.335	628.335
	6	110369.502	2,333	628.345	628.345
	6	110369.502	2,333	628.449	628.449
J	110379.502	31.666	628.023	628.032	
	110379.502	24,333	628.137	628.147	
	110379.502	17,000	628.252	628.261	
	110379.502	9,666	628.366	628.376	
	110379.502	2,333	628.377	628.386	
	6	110379.502	2,333	628.481	628.490
K	110389.502	31.666	628.055	628.073	
	110389.502	24,333	628.169	628.188	
	110389.502	17,000	628.284	628.302	
	110389.502	9,666	628.398	628.417	
	110389.502	2,333	628.409	628.427	
L	110399.502	31.666	628.086	628.115	
	110399.502	24,333	628.201	628.229	
	110399.502	17,000	628.316	628.344	
	110399.502	9,666	628.430	628.458	
	110399.502	2,333	628.441	628.469	
M	110409.502	31.666	628.118	628.156	
	110409.502	24,333	628.233	628.270	
	110409.502	17,000	628.348	628.385	
	110409.502	9,666	628.462	628.500	
	110409.502	2,333	628.473	628.510	
N	110419.502	31.666	628.150	628.197	
	110419.502	24,333	628.265	628.312	
	110419.502	17,000	628.379	628.426	
	110419.502	9,666	628.494	628.541	
	110419.502	2,333	628.504	628.551	

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
O	2	110429.502	31.666	628.182	628.238
	3	110429.502	24,333	628.297	628.353
	4	110429.502	17,000	628.411	628.468
	5	110429.502	9,666	628.525	628.582
	6	110429.502	2,333	628.536	628.593
	6	110429.502	2,333	628.641	628.697
P	110439.502	31.666	628.214	628.273	
	110439.502	24,333	628.329	628.388	
	110439.502	17,000	628.443	628.503	
	110439.502	9,666	628.558	628.617	
	110439.502	2,333	628.568	628.628	
	6	110439.502	2,333	628.672	628.732
Q	110449.502	31.666	628.246	628.296	
	110449.502	24,333	628.361	628.411	
	110449.502	17,000	628.475	628.525	
	110449.502	9,666	628.590	628.640	
	110449.502	2,333	628.600	628.650	
R	110459.502	31.666	628.278	628.319	
	110459.502	24,333	628.392	628.433	
	110459.502	17,000	628.507	628.548	
	110459.502	9,666	628.622	628.662	
	110459.502	2,333	628.632	628.673	
S	110469.502	31.666	628.310	628.341	
	110469.502	24,333	628.424	628.456	
	110469.502	17,000	628.539	628.576	
	110469.502	9,666	628.654	628.695	
	110469.502	2,333	628.664	628.695	
T	110479.502	31.666	628.342	628.368	
	110479.502	24,333	628.456	628.474	
	110479.502	17,000	628.571	628.593	
	110479.502	9,666	628.685	628.707	
	110479.502	2,333	628.695	628.718	
U	110489.502	31.666	628.374	628.396	
	110489.502	24,333	628.488	628.501	
	110489.502	17,000	628.603	628.615	
	110489.502	9,666	628.717	628.730	
	110489.502	2,333	628.728	628.740	



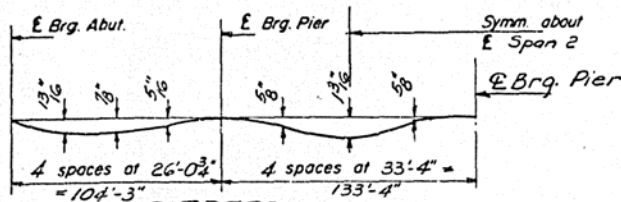
DESIGNED *D. Sponsler*
CHECKED *A. R. Zakar*
DRAWN *P. G. Barnett*
CHECKED *B. R. T.*

EXAMINED *Carl E. Johnson*
PASSED *H. E. Baumann*
APPROVED *V. E. Staff*

Jan 30 1964

PLAN
Showing location of elevation intervals

**WEST BOUND LANE
ELEVATIONS
S.B.I. RT. 10 SEC. 12B-2
MACON COUNTY
STA. 1104+36.17**



**GIRDERS 1 AND 12
DEAD LOAD DEFLECTION DIAGRAM**

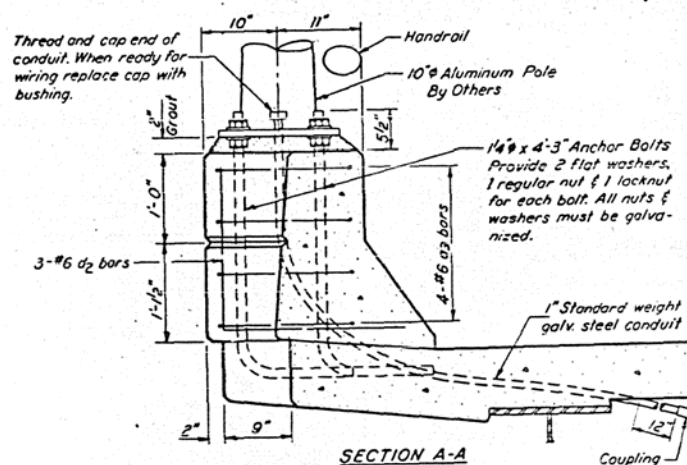
(Includes weight of concrete only)
Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
E Pier 2	2 3 4 5 6	110502.835	31.666	628.416	628.416
		110502.835	24.333	628.531	628.531
		110502.835	17.000	628.645	628.645
		110502.835	9.666	628.760	628.760
		110502.835	2.333	628.874	628.874
		110502.835	2.333	628.874	628.874
V	110512.835	31.666	628.448	628.454	
		24.333	628.563	628.569	
		17.000	628.677	628.683	
		9.666	628.792	628.798	
		2.333	628.906	628.912	
		2.333	628.906	628.912	
W	110522.835	31.666	628.480	628.492	
		24.333	628.594	628.606	
		17.000	628.709	628.721	
		9.666	628.824	628.836	
		2.333	628.938	628.950	
		2.333	628.938	628.950	
X	110532.835	31.666	628.512	628.532	
		24.333	628.626	628.641	
		17.000	628.741	628.761	
		9.666	628.856	628.876	
		2.333	628.970	628.986	
		2.333	628.970	628.986	
Y	110542.835	31.666	628.544	628.576	
		24.333	628.658	628.691	
		17.000	628.773	628.805	
		9.666	628.887	628.920	
		2.333	629.002	629.034	
		2.333	629.002	629.034	
Z	110552.835	31.666	628.576	628.620	
		24.333	628.690	628.734	
		17.000	628.805	628.849	
		9.666	628.919	628.964	
		2.333	629.034	629.074	
		2.333	629.034	629.074	
A ₁	110562.835	31.666	628.608	628.653	
		24.333	628.722	628.767	
		17.000	628.837	628.882	
		9.666	628.951	628.997	
		2.333	629.066	629.007	
		2.333	629.066	629.111	
B ₁	110572.835	31.666	628.639	628.683	
		24.333	628.754	628.797	
		17.000	628.869	628.912	
		9.666	628.983	629.026	
		2.333	629.098	629.037	
		2.333	629.098	629.141	
C ₁	110582.835	31.666	628.671	628.710	
		24.333	628.786	628.825	
		17.000	628.900	628.939	
		9.666	629.015	629.054	
		2.333	629.130	629.064	
		2.333	629.130	629.169	
D ₁	110592.835	31.666	628.703	628.726	
		24.333	628.818	628.841	
		17.000	628.932	628.955	
		9.666	629.047	629.070	
		2.333	629.162	629.080	
		2.333	629.162	629.184	

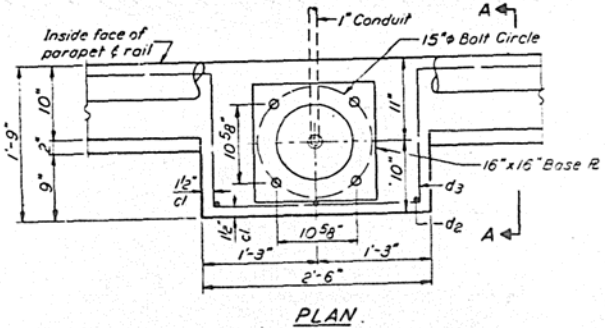
Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
E Brg.	2 3 4 5 6	110607.085	31.666	628.749	628.749
		110607.085	24.333	628.863	628.863
		110607.085	17.000	628.978	628.978
		110607.085	9.666	629.092	629.092
		110607.085	2.333	629.207	629.207
		110607.085	2.333	629.207	629.207
Bk. E. Abut.	110608.877	31.666	628.754	628.754	
		24.333	628.869	628.869	
		17.000	628.984	628.984	
		9.666	629.098	629.098	
		2.333	629.213	629.213	
		2.333	629.213	629.213	

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	1	110263.460	39.000	627.538	627.538
E Brg.	1	110265.252	39.000	627.544	627.544
A	1	110275.252	39.000	627.576	627.601
B	1	110285.252	39.000	627.607	627.659
C	1	110295.252	39.000	627.639	627.708
D	1	110305.252	39.000	627.671	627.742
E	1	110315.252	39.000	627.703	627.776
F	1	110325.252	39.000	627.735	627.794
G	1	110335.252	39.000	627.767	627.808
H	1	110345.252	39.000	627.799	627.823
I	1	110355.252	39.000	627.831	627.845
E Pier 1	1	110369.502	39.000	627.873	627.876
J	1	110379.502	39.000	627.905	627.924
K	1	110389.502	39.000	627.940	627.971
L	1	110399.502	39.000	627.972	628.019
M	1	110409.502	39.000	628.004	628.065
N	1	110419.502	39.000	628.036	628.111
O	1	110429.502	39.000	628.068	628.157
P	1	110439.502	39.000	628.099	628.194

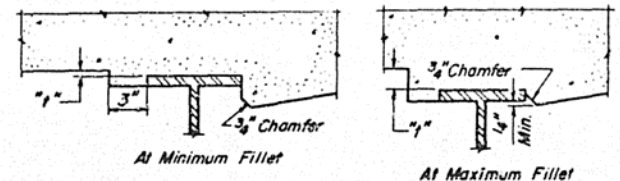
Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Q	1	110449.502	39.000	628.131	628.212
R	1	110459.502	39.000	628.163	628.229
S	1	110469.502	39.000	628.195	628.247
T	1	110479.502	39.000	628.227	628.264
U	1	110489.502	39.000	628.259	628.280
E Pier 2	1	110502.835	39.000	628.302	628.302
V	1	110512.835	39.000	628.333	628.343
W	1	110522.835	39.000	628.365	628.385
X	1	110532.835	39.000	628.397	628.430
Y	1	110542.835	39.000	628.429	628.480
Z	1	110552.835	39.000	628.461	628.530
A ₁	1	110562.835	39.000	628.493	628.564
B ₁	1	110572.835	39.000	628.525	628.594
C ₁	1	110582.835	39.000	628.557	628.620
D ₁	1	110592.835	39.000	628.589	628.626
E Brg.	1	110607.085	39.000	628.634	628.634
Bk. E. Abut.	1	110608.877	39.000	628.640	628.640



NOTE: Grout Mixture shall consist of 1 part sand, 1 part cement & 1 part chips (pea gravel). The grout shall contain water for a 1" slump.



Note: Cost of anchor bolts & conduit is incidental.



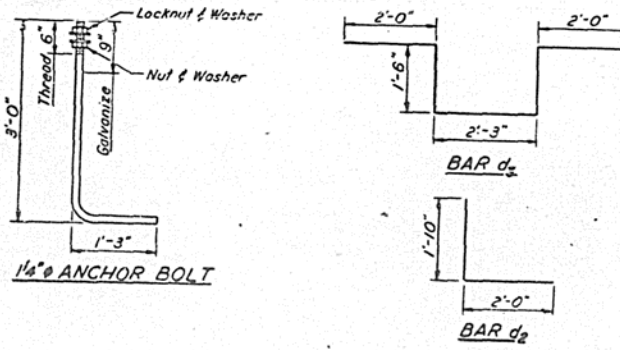
To determine "f": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet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

FILLET HEIGHTS

BAR LIST

BAR	No.	Size	Length	Shape
de	3	#6	3'-10"	L
ds	3	#6	9'-3"	L

Reinforcement Bars lbs. 60

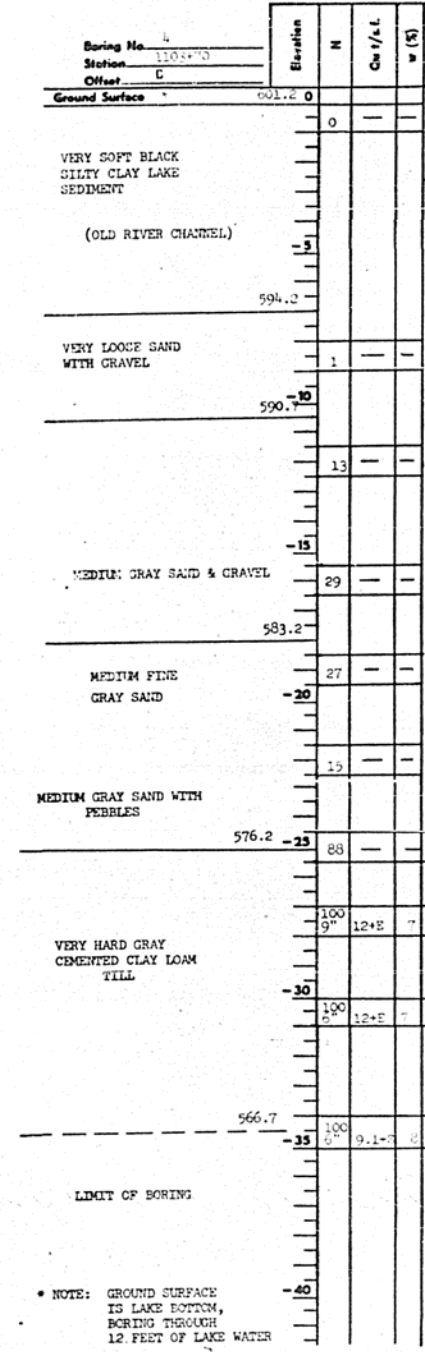
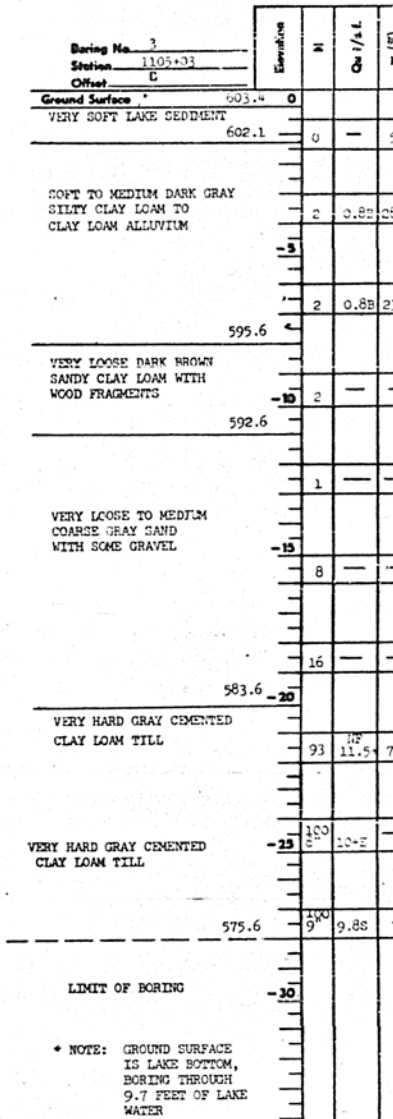
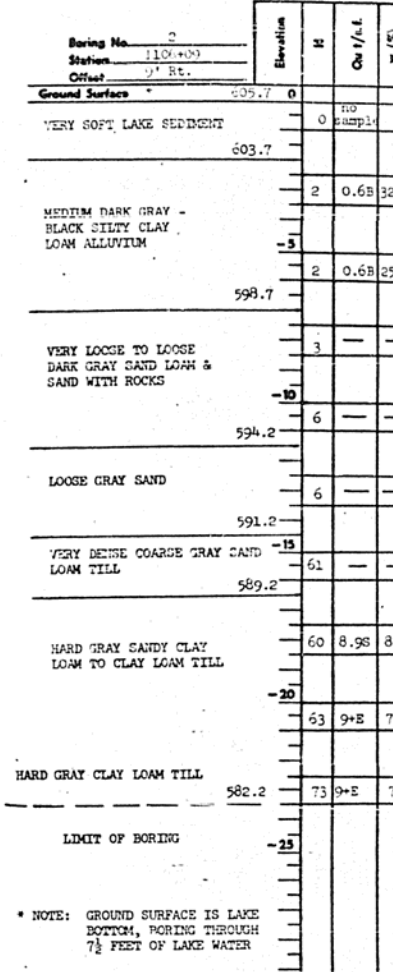
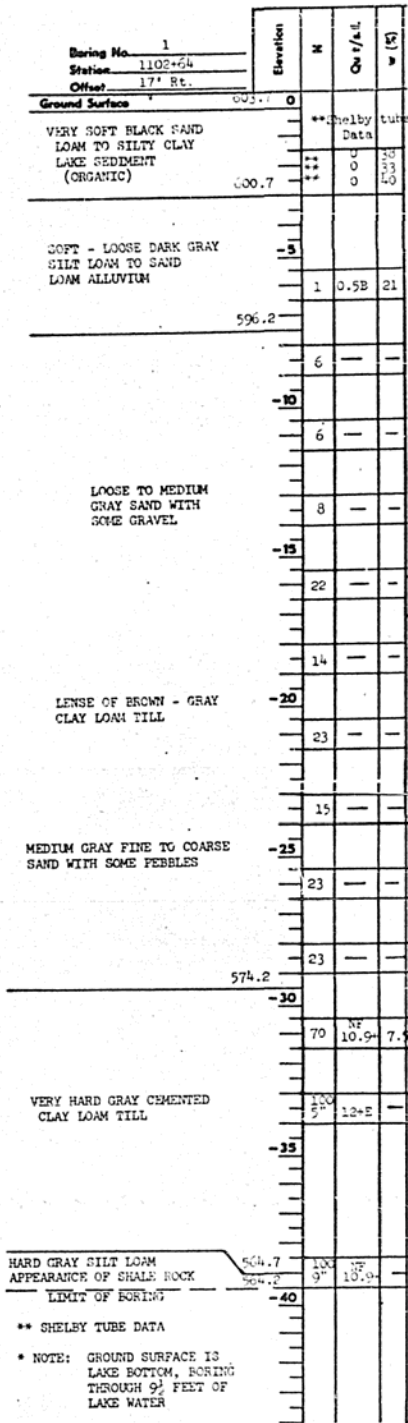


DESIGNED *D. Elson*
CHECKED *B. P. Thakar*
DRAWN *P. G. Barnett*
CHECKED *B. P. T.*
E-S 8-1-65

EXAMINED *Jan 30 1968*
PASSED *Paul E. Johnson*
APPROVED *H. G. Baumann*
V. E. Stahl

WEST BOUND LANE
ELEVATIONS
S.B.I. RT. 10 SEC. 12B-2
MACON COUNTY
STA. 1104+36.17

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



N-Standard Penetration Test - Blow per foot to drive 2" QD. Split Spoon Sampler 12" with 140# hammer falling 30"

Qu-Unconfined Compressive Strength - 1/2" w-Water Content - percentage of oven dry weight - %

Type failure
B-Bulge Failure
S-Shear Failure
E-Estimated Value
P-Penetrometer

DESIGNED *D.E. Spivack*
CHECKED *B.R. Zakar*
DRAWN *D.E.L.*
CHECKED *B.R.T.*

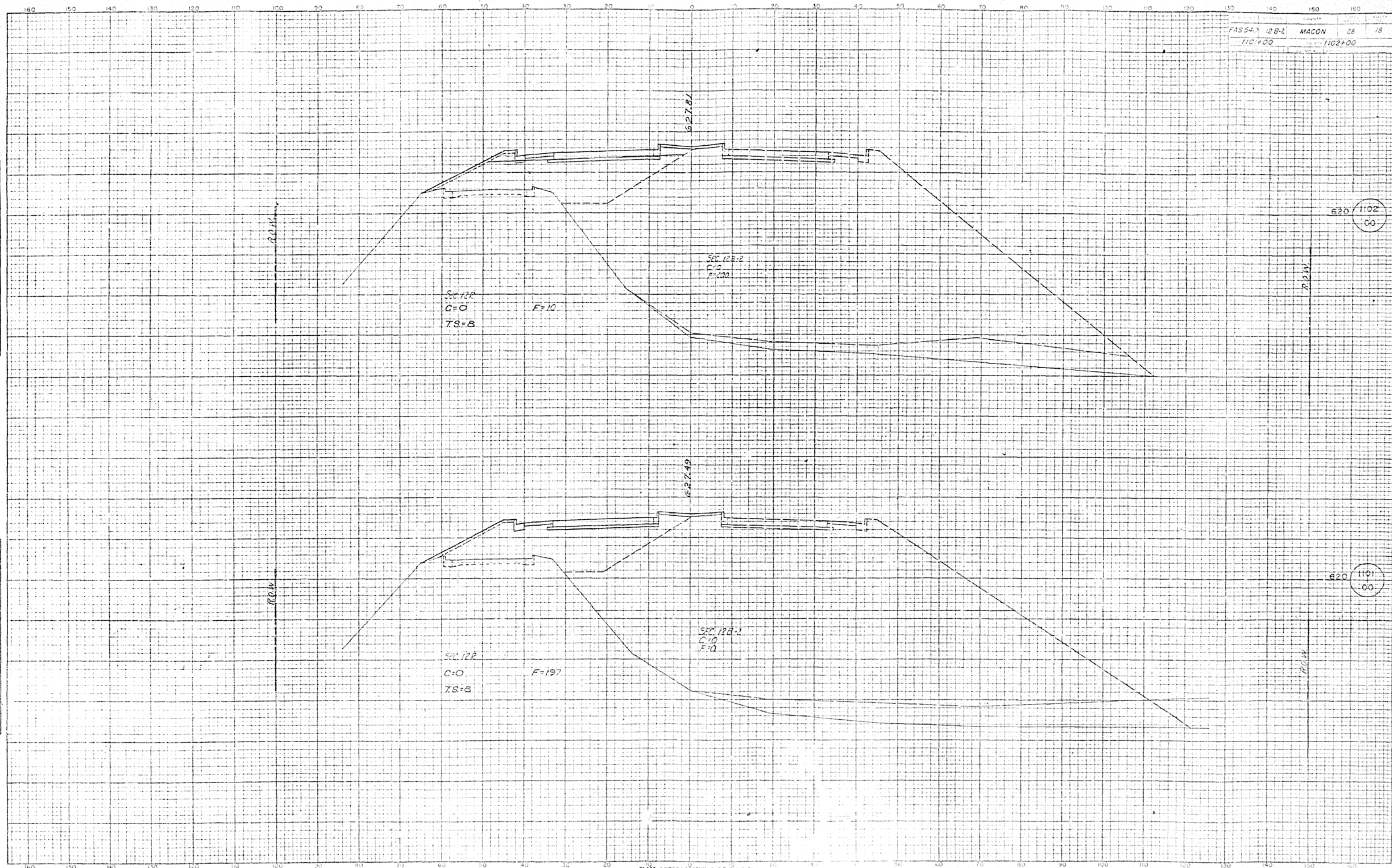
EXAMINED *Carl E. Thompson*
PASSED *W.C. Beymann*
APPROVED *V.E. Hall*

WEST BOUND LANE
BORINGS
S.B.I. RT. 10 SEC. 12B-2
MACON COUNTY
STA. 1104+36.17

SBI RT 10 SEC 12B-2 Maccon County Sta 1104+36.17

FINAL SURVEY
 DATE 11/74
 SHEET 81

ORIGINAL SURVEY
 DATE 7-82
 SHEET 80



620 1102
00

620 1101
00

FINAL SURVEY NOTE BOOK NO. 80

APPROVED FOR THE PROJECT BY: _____

DATE: _____

APPROVED FOR THE CLIENT BY: _____

DATE: _____

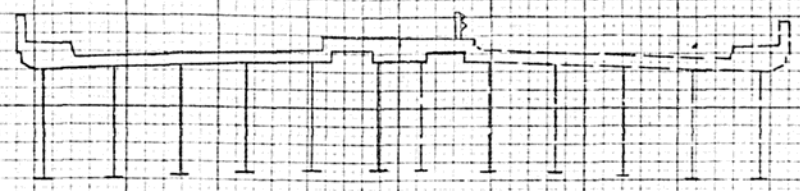
ORIGINAL SURVEY NOTE BOOK NO. 80

APPROVED FOR THE PROJECT BY: _____

DATE: _____

APPROVED FOR THE CLIENT BY: _____

DATE: _____



FROM

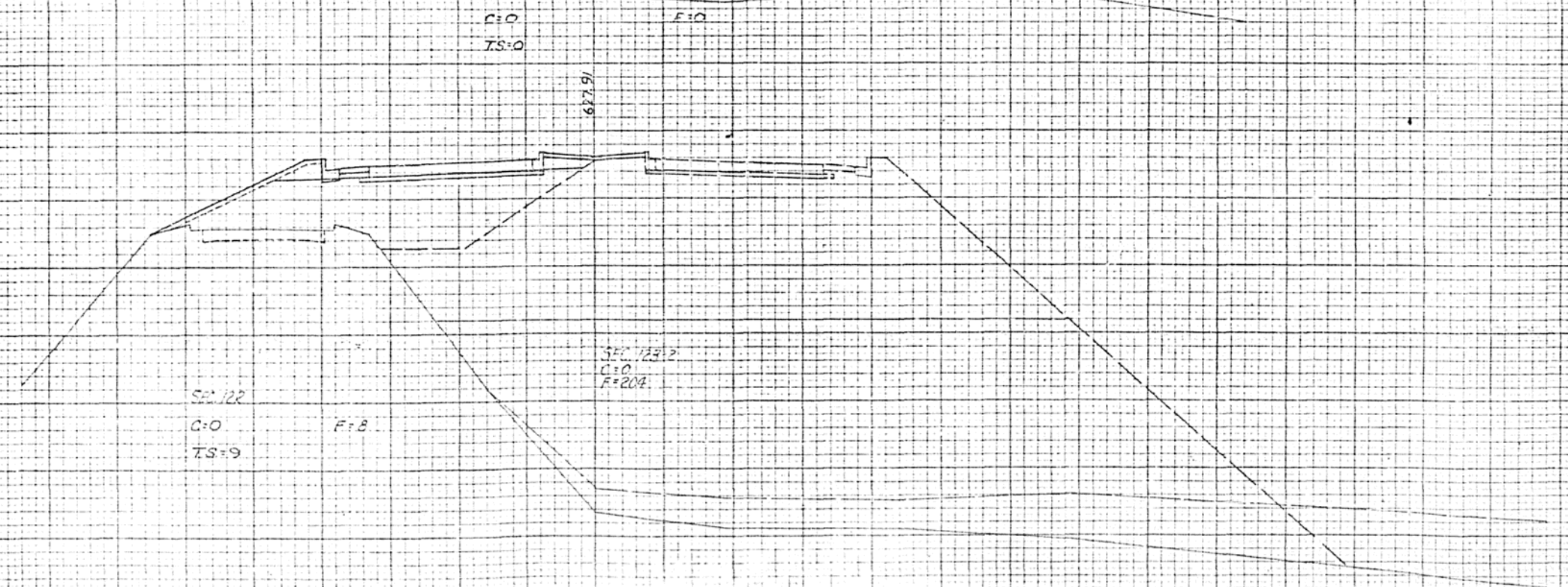
TO

620 1103 00

FROM

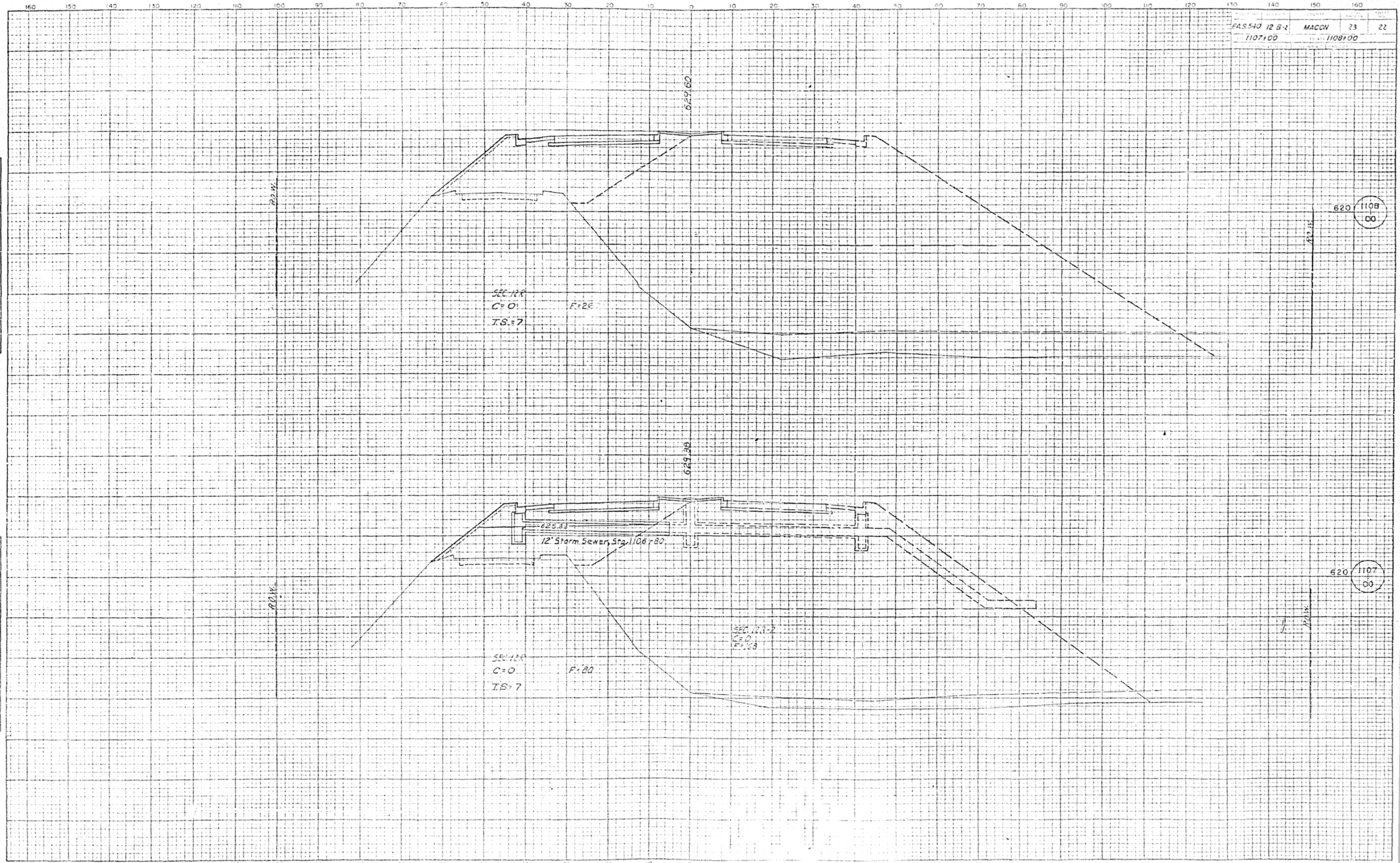
TO

620 1102 30



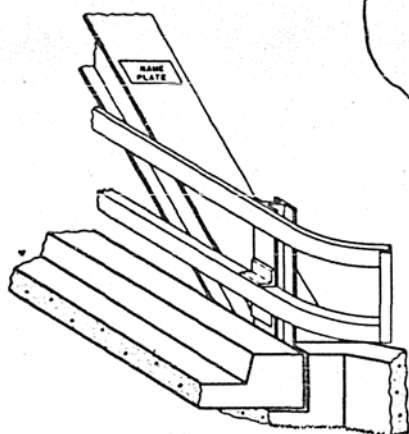
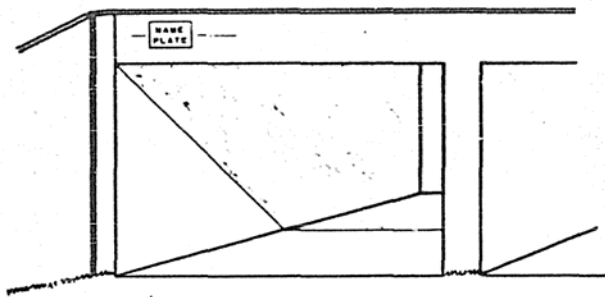
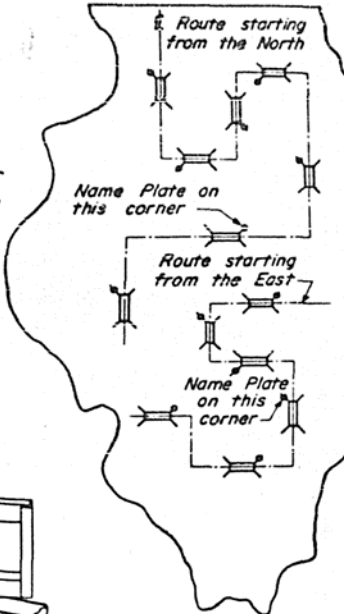
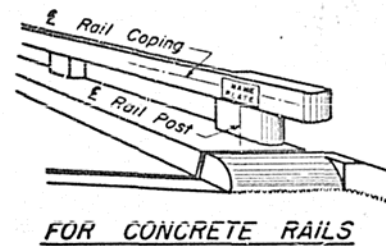
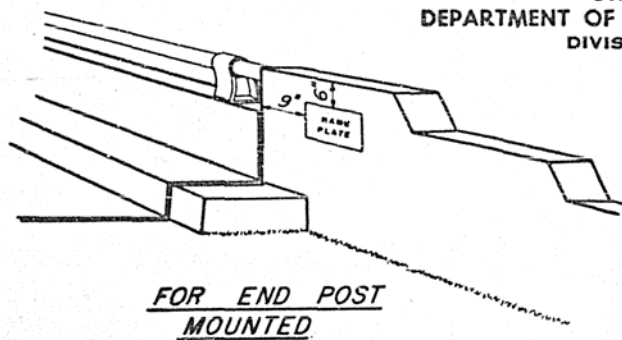
FINAL SURVEY	DATE
NOTE BOOK	BY
NO.	
REVISIONS	
NO.	
DATE	
BY	
REASON	

ORIGINAL SURVEY	DATE
NOTE BOOK	BY
NO.	
REVISIONS	
NO.	
DATE	
BY	
REASON	

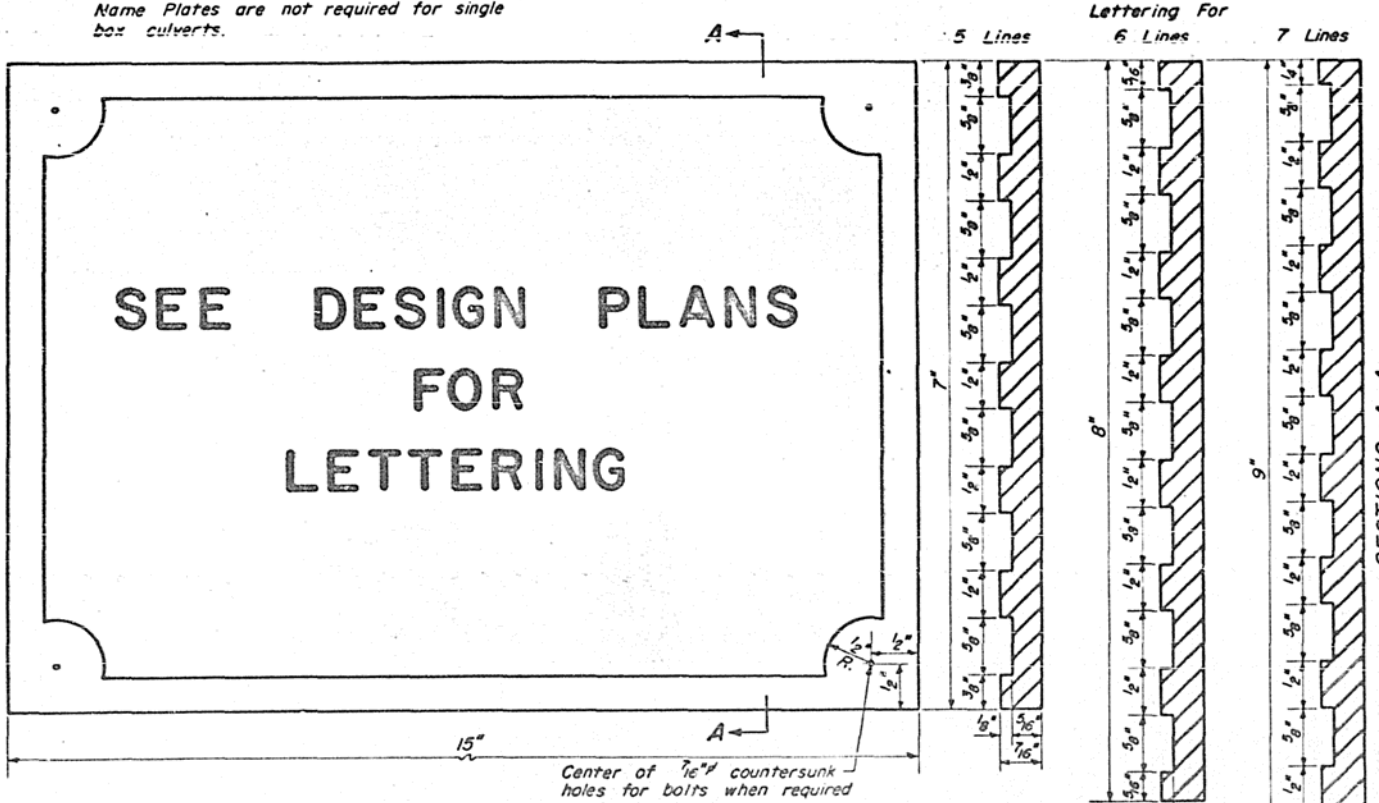


620 1108 00

620 1107 00



FOR MULTI-SPAN CULVERTS
Note: Unless otherwise noted on the plans, Name Plates are not required for single box culverts.



- Material:** Best quality brass or bronze.
Border & Lettering: Raised 1/8 inch. Square cut and not tapered. Top surface polished.
- For Concrete Rails, Culvert --- Four lugs at least three inches long, cast on back of plate.
 - For Steel Truss Span --- Plate to be fastened on steel member at fabricating shop by brazing around entire perimeter of plate.
 - For Steel Rails --- Plate to be bolted on with 4 - 3/8" brass or bronze machine bolts with countersunk head.
 - For Concrete Rails --- Plate to be centered on E of rail post and E of handrail coping.
 - For Steel Truss Span --- Braze to end post about five feet above roadway.
 - For Steel Rails --- Place midway between horizontal rail members.
 - For Subways --- See design plans for location.

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

PASSED NOVEMBER 15, 1963
A. W. [Signature]
Engineer of Road Plans and Contracts

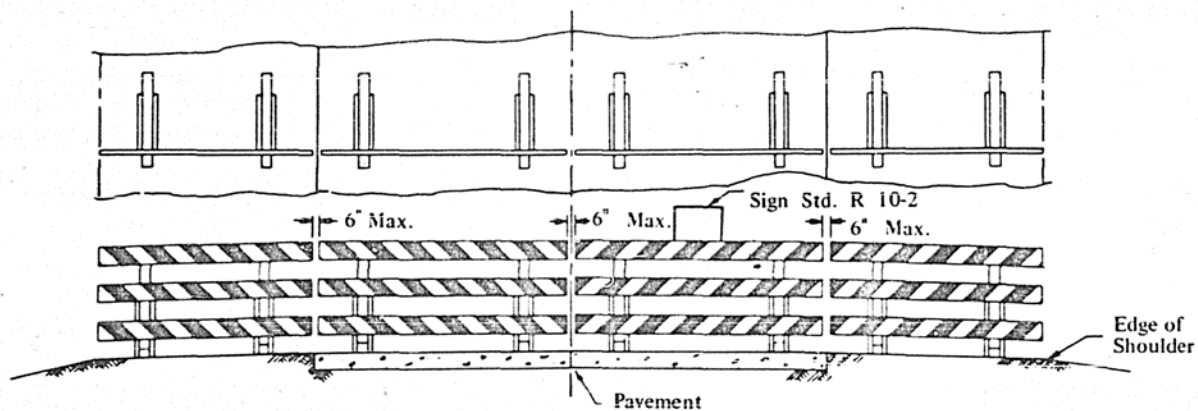
APPROVED NOVEMBER 15, 1963
[Signature]
Engineer of Design

DETAIL OF NAME PLATE FOR BRIDGES

STANDARD DESIGN

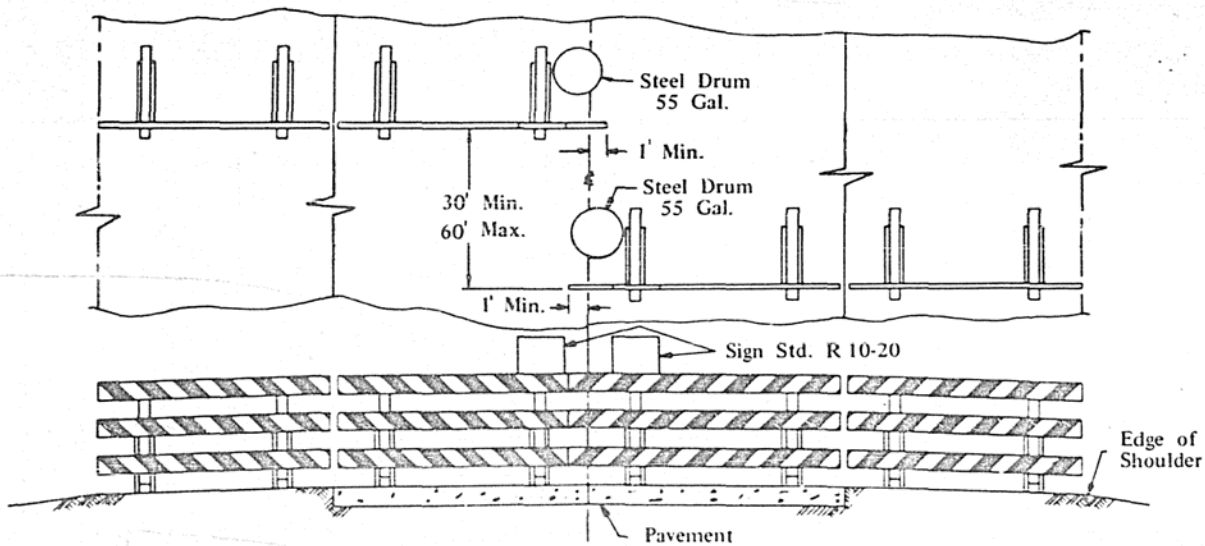
TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR HIGHWAY CONSTRUCTION AND MAINTENANCE

TYPICAL APPLICATIONS OF CLASS I BARRICADES CLOSING A ROAD



ROAD CLOSED FOR LOCAL TRAFFIC

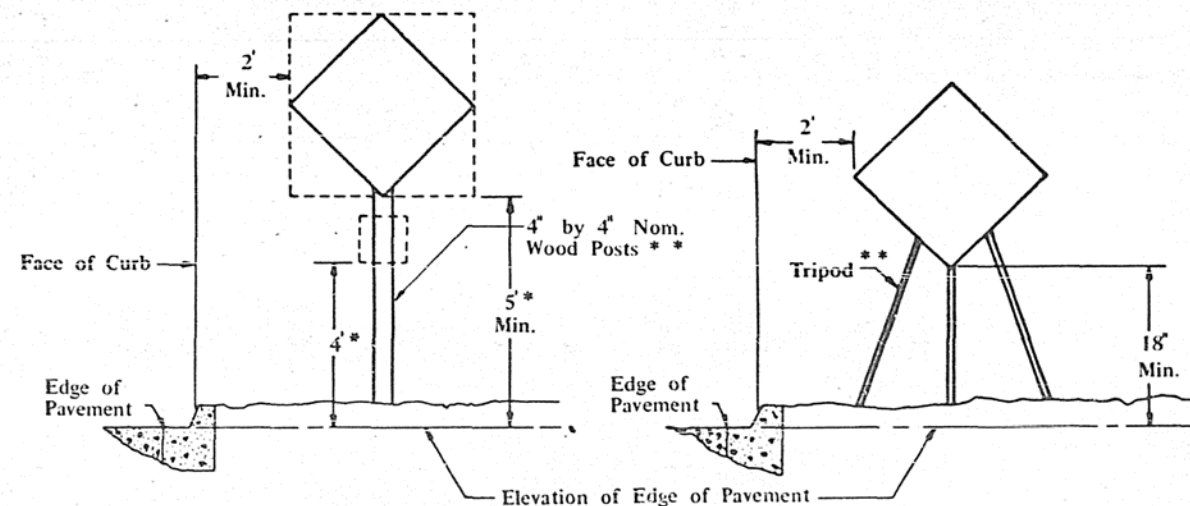
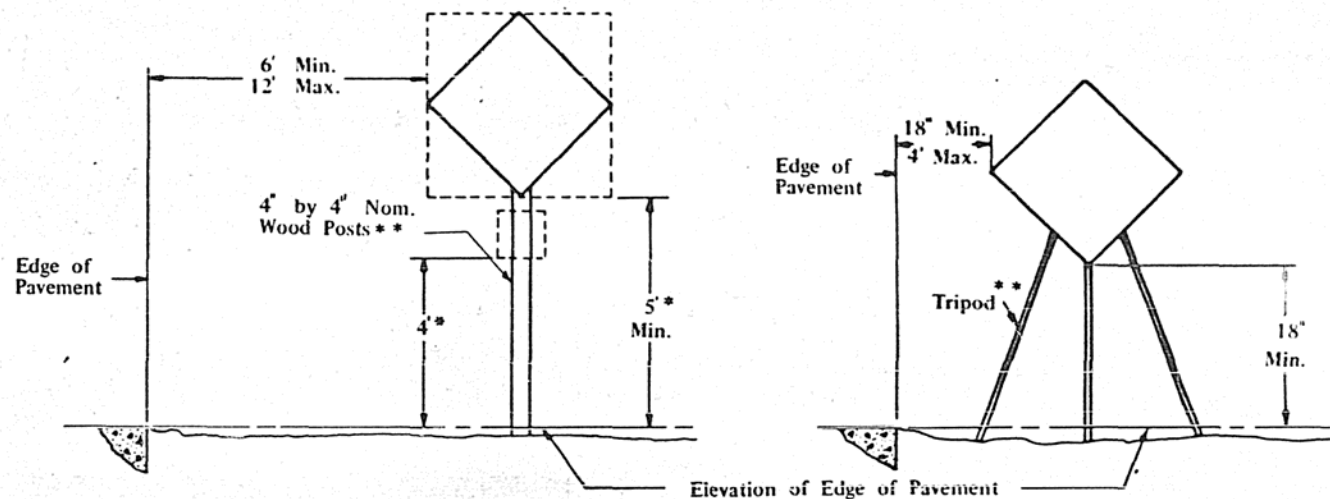
The barricades shall be to the edge of the shoulders except when otherwise directed by the Engineer or shown on the detailed construction plans.



ROAD OPEN FOR LOCAL TRAFFIC

Striping shall appear on both sides of barricades. The barricades shall be to the edge of the shoulders except when otherwise directed by the Engineer or shown on the detailed construction plans.

TYPICAL SIGN INSTALLATIONS



*Add 2 ft. if parking exists within 200 ft. in advance of the sign location at any time during the project.

**Alternate designs and/or materials may be permitted when authorized by the District Engineer. All materials shall be substantial and durable.

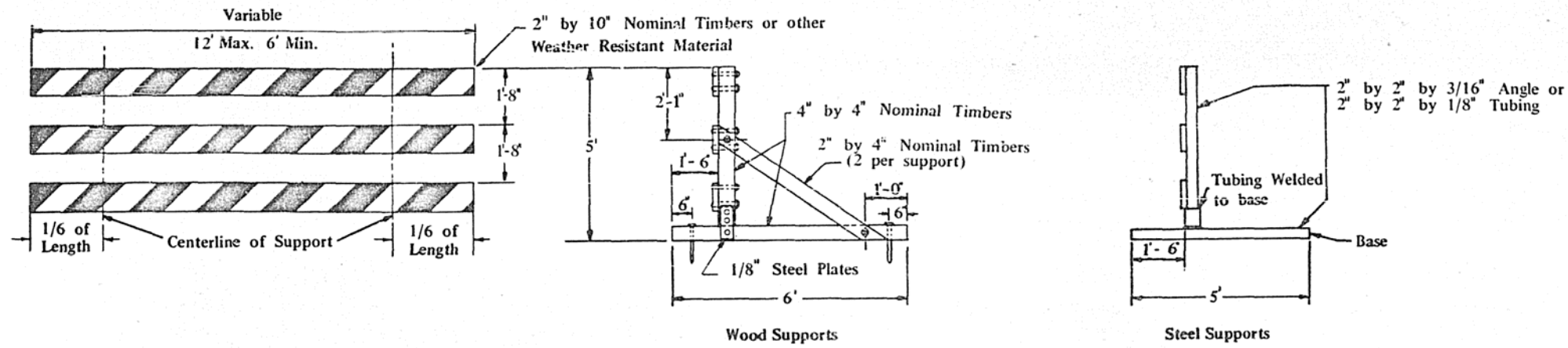
STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS	REVISED BY DATE
APPROVED <i>April 3, 1969</i> <i>N. A. Friebe</i> Engineer of Traffic	D. A. B. 12 8 69

STANDARD 2298-1

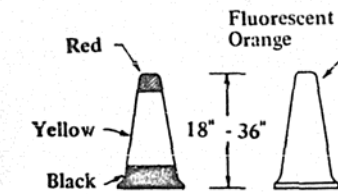
STANDARD DESIGN

DESIGN OF TRAFFIC CONTROL DEVICES FOR HIGHWAY CONSTRUCTION AND MAINTENANCE

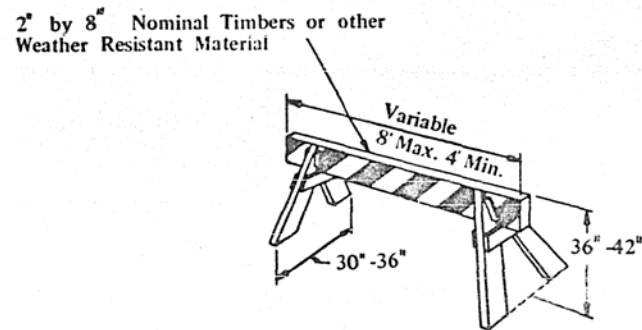
CLASS I BARRICADES



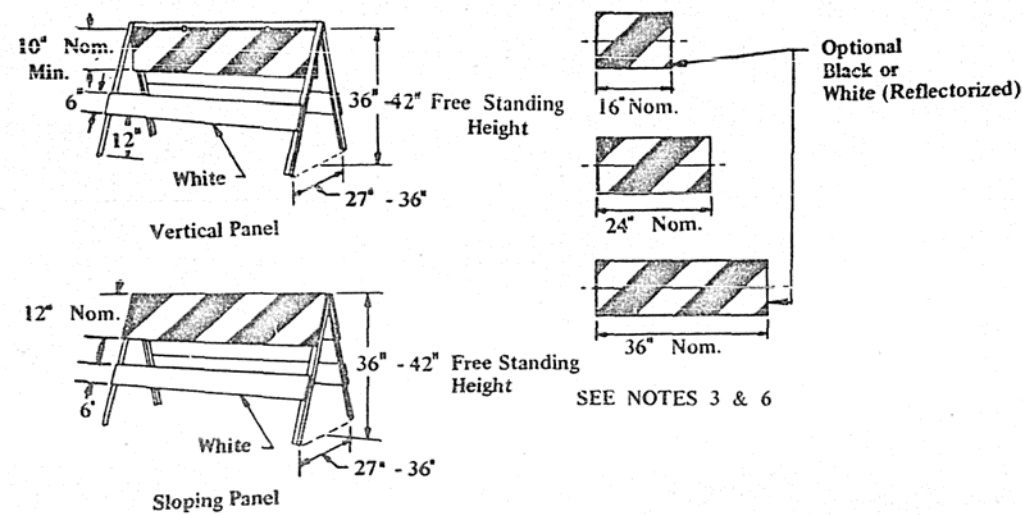
CONES



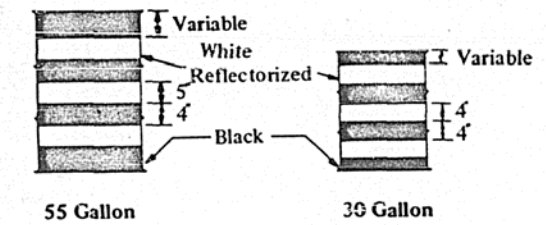
CLASS II BARRICADE



CLASS III BARRICADES



STEEL DRUMS



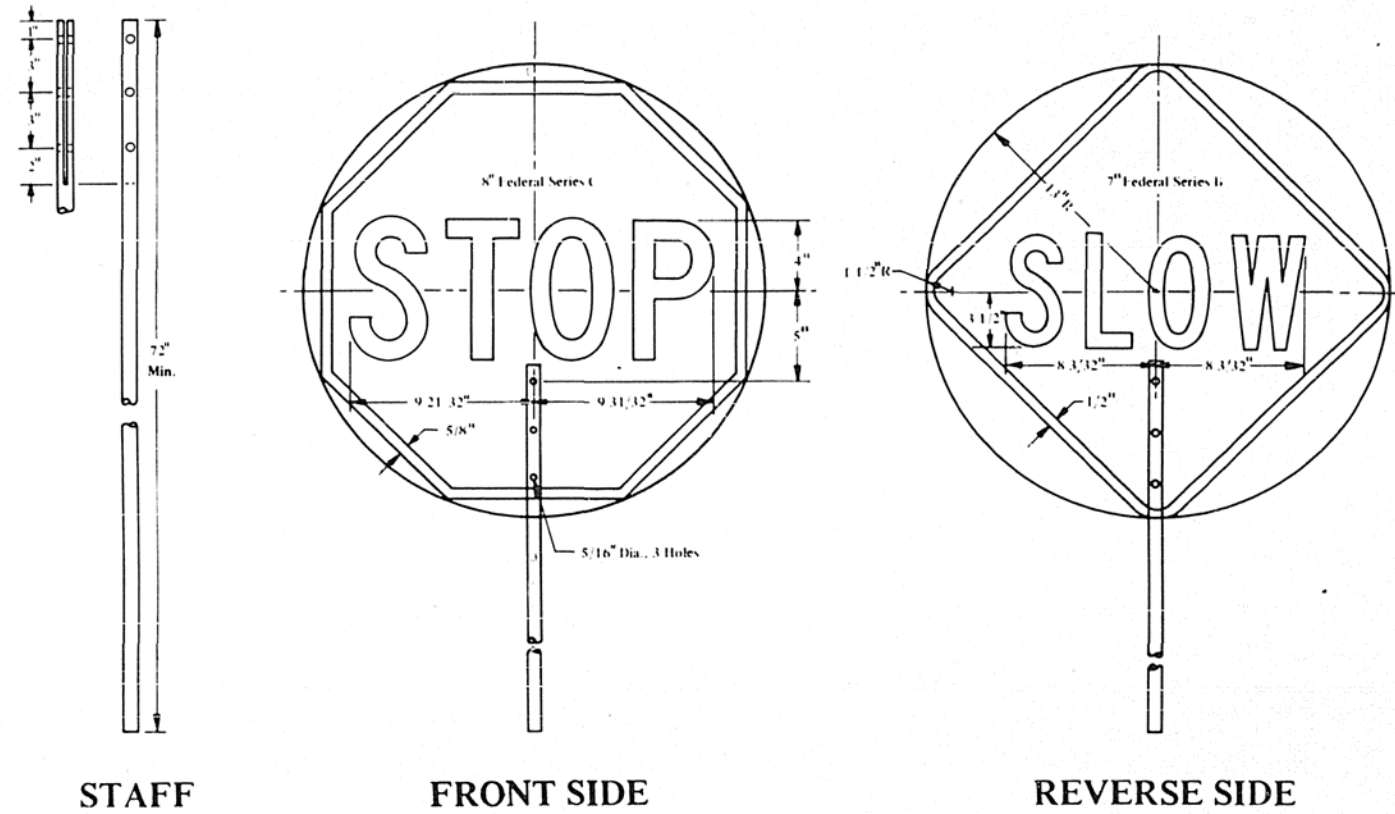
GENERAL NOTES

1. Barricade legs or supports shall be constructed of either timber or steel and shall be galvanized or painted white or black.
2. All reflectorized material shall have a smooth sealed surface covering the reflective elements.
3. The 36 inch wide panel is considered standard and will be used at all locations unless otherwise specified on the plans or directed by the District Engineer.
4. Swinging panels may be divided in two pieces either horizontally or vertically but the combined surface area must be not less than 10 times the required width.
5. All barricades shall have alternating white reflectorized and black stripes at 45° from the vertical. All stripes shall be 6 in. in width.
6. Stripe placement is shown for 12 inch panels. If a vertical panel of less than 12 inches is used the stripe placement along the horizontal center line of the panel shall be the same as shown for 12 inch panels.
7. Class II and Class III Barricades shall be striped on both sides.
8. Diagonal stripes on the Class II and Class III Barricades shall slope downward toward the side of the Barricade on which traffic will pass.
9. Barricades may be identified with a legend that does not exceed one inch in height at a location not visible to traffic.
10. Alternate designs and/or materials may be permitted when authorized in writing by the District Engineer. All materials shall be substantial and durable.

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS	REVISED BY DATE
APPROVED <i>April 3, 1967</i>	D.A.B. 12-8-69
<i>N. A. Frick</i> Engineer of Traffic	

STANDARD 2299-1

STANDARD DESIGN FOR FLAGMAN TRAFFIC CONTROL SIGN



GENERAL NOTES

1. The "STOP" face shall consist of white letters and border on a red reflectorized background.
2. The "SLOW" face shall consist of black letters and border on an orange reflectorized background.
3. Areas outside sign borders shall be light blue.
4. The portion of the staff within the sign face shall match the sign colors.
5. All colors and letters shall meet applicable federal standards.
6. The sign shall be attached to the staff with rust resistant 1/4 in. hardware.
7. The sign base material shall be 0.08 aluminum. The staff shall consist of two sections of 3/4 in. galvanized steel conduit joined by a coupling located 60 in. from the bottom of the staff. Alternate designs and/or materials may be used when approved by the District Engineer. All materials shall be substantial and durable.
8. This sign shall be furnished by the contractor and shall be used by the flagman in lieu of flags or other signaling devices. The cost of furnishing and maintaining the sign shall be considered incidental to the contract and no additional compensation will be allowed.

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS		REVISED BY DATE
APPROVED <i>April 13</i> 1962		
<i>W. A. Frick</i> Engineer of Traffic		

STANDARD 2300