

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

3/4" ϕ x 1'-1" Aluminum bar
ASTM: B211 alloy 6061-T6

Fill slot with weld

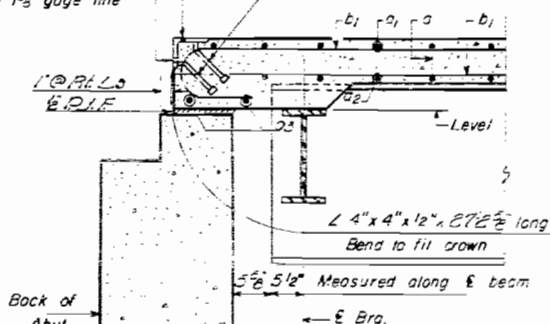
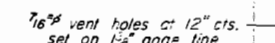
ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
111 1A=57	38-5 HB	IAQUOIS	25	12

SHEET NO 8
11 SHEETS

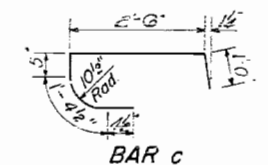


7/16" ϕ holes at 12" cts. for 3/8" bolts set on 2 1/2" gage line. All bolts shall be burned, sawed, or clipped off flush with back of angles after forms are removed.

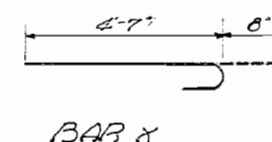
3/4" x 8" CR 1020 STL granular
or solid flux filled headed studs,
automatically end welded
(Alternate at 1'-0" c/s.)



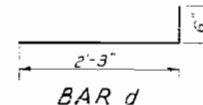
SECTION A-A



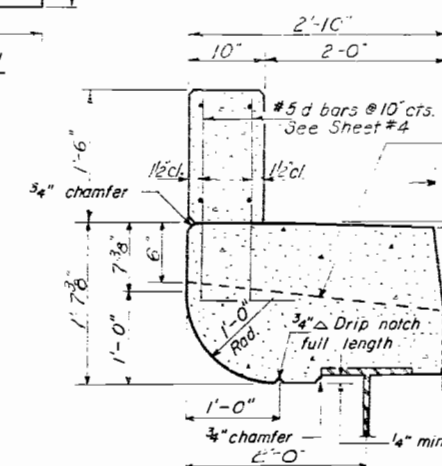
BAR C



BAR x



BAR d



CURB DETAIL

Cost of aluminum sheets
shall be incidental to
Class X Concrete.

BILL OF MATERIAL

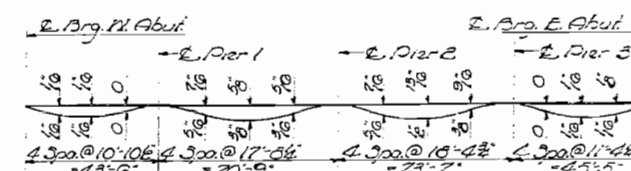
Bar	No.	Size	Length	Sp.:
a	203	25	36" 6"	—
a ₁	224	25	31" 6"	—
a ₂	224	25	31" 6"	—
a ₃	6	25	27" 0"	—
b ₁	463	25	27" 5"	—
b ₂	62	25	19" 0"	—
b ₃	22	25	27" 0"	—
b ₄	26	25	26" 0"	—
b ₅	26	25	7" 5"	—
b ₆	43	41	26" 5"	—
b ₇	24	41	9" 5"	—

Reinforcement Bars	Lbs.	45950
Structural Steel	Lbs.	748.0
Glass X Concrete	Cu. Yds.	263.7

* Weight of bearing assemblies with lead plates and anchor bolts are included as structural steel.

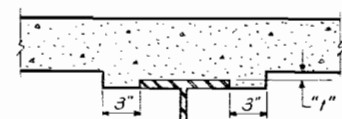
Est. Weight = 3,670 lbs.
The lengths & quantities of longitudinal reinforcement & Cross X Concrete in porceps are not included in above quantities.
See sheet #4

SUPERSTRUCTURE
FA. RT. 57 SEC. 38-54B
IROQUOIS COUNTY
STA. 541+66.36



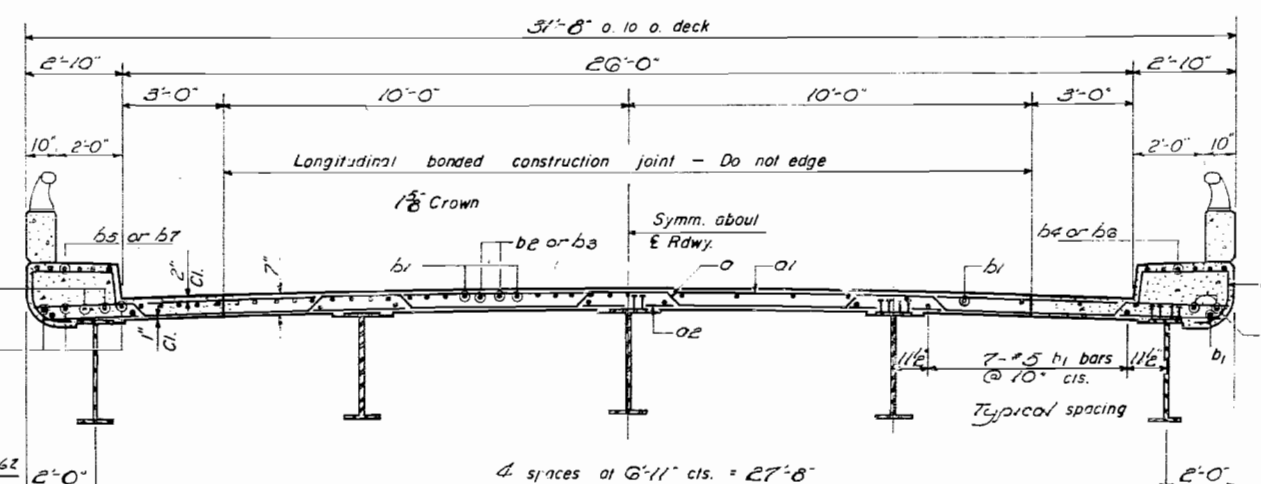
DEAD LOAD DEFLECTION DIAGRAM

(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 on sheet 8.



STANDARD FILLET DETAIL

To determine "f": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheet 8. These elevations subtracted from the "Grade Elevations Adjusted for Dead Load Deflections" shown on sheet 8, minus slab thickness, equals the fillet heights "f" above top of beams.



NEAR PIERS

NEAR MIDSPAN

CROSS SECTION

DESIGNED *M.E. Gansden*
CHECKED *C.H. Hogeween*
M.E. H. Jacobs
DRAWN *D.L. Beemer*
CHECKED *J.H. H.*

Nov. 28 1962

EXAMINED *W. E. Ransom*
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED *W. E. Ransom*
ENGINEER OF DESIGN

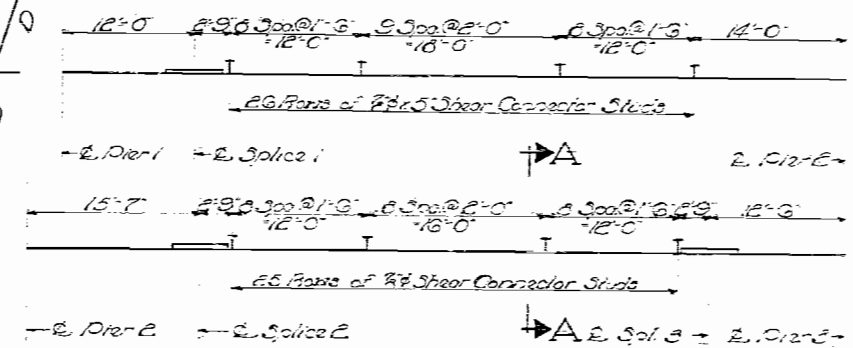
APPROVED *W. E. Ransom*

I-6-L ($> 10^\circ$) 7-2-62

Rev. 5-17-66 J.L.A. Changed slab thickness from 6'2" to 7", curb height from 11" to 9", c bar length from 6'-1" to 5'-6" & fillets from 4" to 3". Added Parapet, 4 bars & drain detail. Changed Class X Conc. from 206.9 to 209.7 Cu Yds & Reinf. Bars from 42,480 to 45,960#.

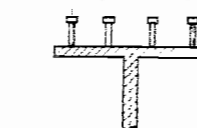
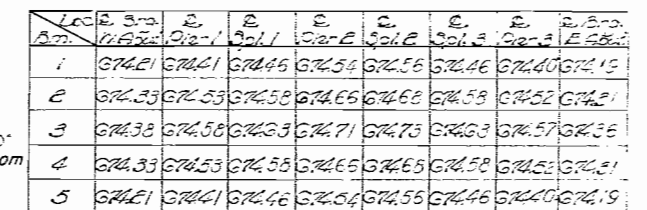
ROUTE NO.	SECTION	LEADS	TOTAL SLEETS	SLEET NO.
S. 1 1357	38-5 H5	IRAGUONS	26	13
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			

SHEET NO. 2
11 SHEETS

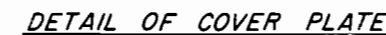


SHEAR CONNECTOR LAYOUT

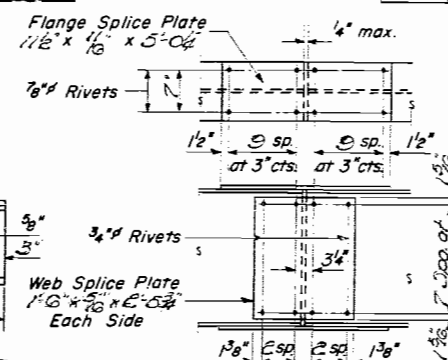
14 3300.00 3 14

ELEVATION TOP OF WF

Cover Plate
9" x 7 1/8" x 1 1/2" O.
Top & Bottom



PLAN



DETAIL OF SPLICE

7. DIMENSIONS					
Alt. Pairs	Bm.1	Bm.2	Bm.3	Bm.4	Bm.5
6 Alt. Pairs	0	0	6	0	0

STRUCTURAL STEEL
FA.I.RT.57 SEC.36-54HP
IROQUOIS COUNTY
STA. 541+00.36

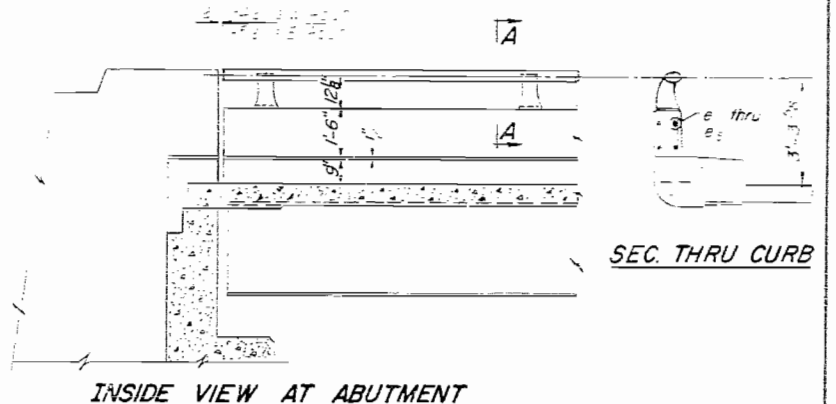
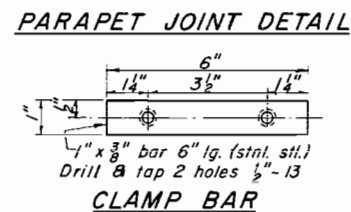
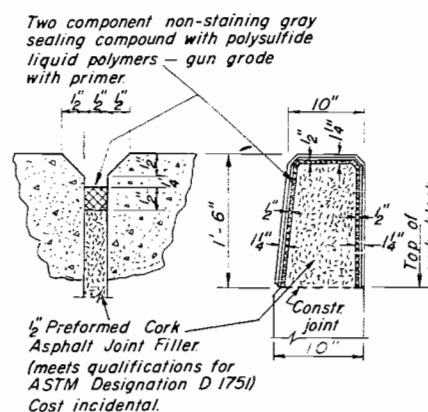
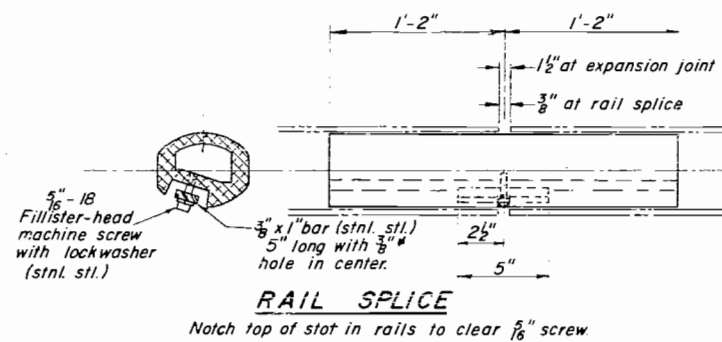
Nov. 28 1962

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

PASSED *E. J. Shuck*
ENGINEER OF DESIGN

APPROVED *J. E. Smith*

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1 11 SHEETS
R.R. 1 F.A.T. 57	33-5 HB	IRROQUOIS	25	14	
FED. ROAD DIST. NO. 7		LANDS		FED. AID PROJECT	



All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6 and shall extend a minimum of 2 panel lengths (attached to a 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.

Cast Aluminum Alloy Bridge Post—Alloy A344-T4
Stainless Steel Bars, Cap Screws, Washers and Lockwashers.
Fabric Bearing Pad

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.

Provide 1- $\frac{1}{8}$ " and 2- $\frac{1}{16}$ " Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade — high spots shall be ground, and low spots shimmed.

<i>Bar</i>	<i>No.</i>	<i>Size</i>	<i>Length</i>	<i>Shape</i>
<i>e</i>	<i>5</i>	<i>#5</i>	<i>13'-0"</i>	<i>_____</i>
<i>e₁</i>	<i>5</i>	<i>#5</i>	<i>7'-0"</i>	<i>_____</i>
<i>e₂</i>	<i>5</i>	<i>#5</i>	<i>7'-0"</i>	<i>_____</i>
<i>e₃</i>	<i>5</i>	<i>#5</i>	<i>3'-0"</i>	<i>_____</i>
<i>e₄</i>	<i>5</i>	<i>#5</i>	<i>13'-0"</i>	<i>_____</i>
<i>e₅</i>	<i>5</i>	<i>#5</i>	<i>3'-0"</i>	<i>_____</i>
<i>Class X Concrete</i>			<i>Cu. Yds.</i>	<i>5.7</i>
<i>Reinforcement Bars</i>			<i>Lbs</i>	<i>830</i>
<i>Aluminum Handrail</i>			<i>Lin. Ft</i>	<i>475</i>

HANDRAIL DETAILS
F.A.I. RT. 57 SEC. 38-5HB
IROQUOIS COUNTY
STA. 541+66.36

	19
EXAMINED	
	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED	
	ENGINEER OF DESIGN
APPROVED	

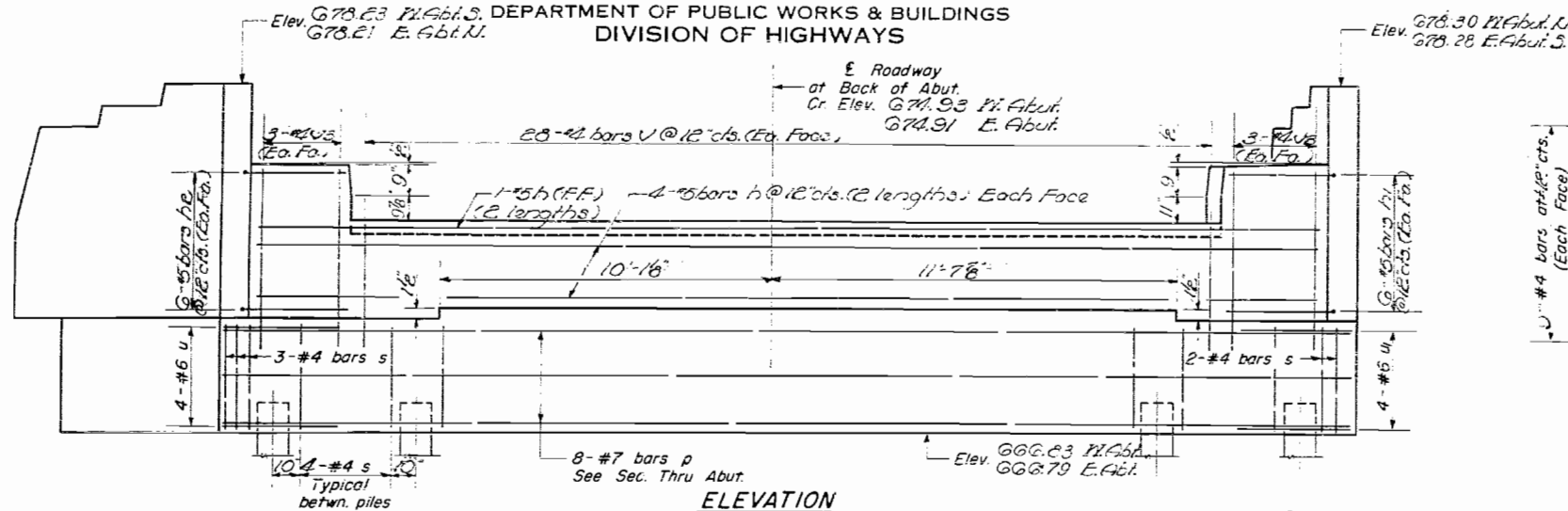
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers—gun grade with primer.

Splice must be a sliding fit in Rail Section

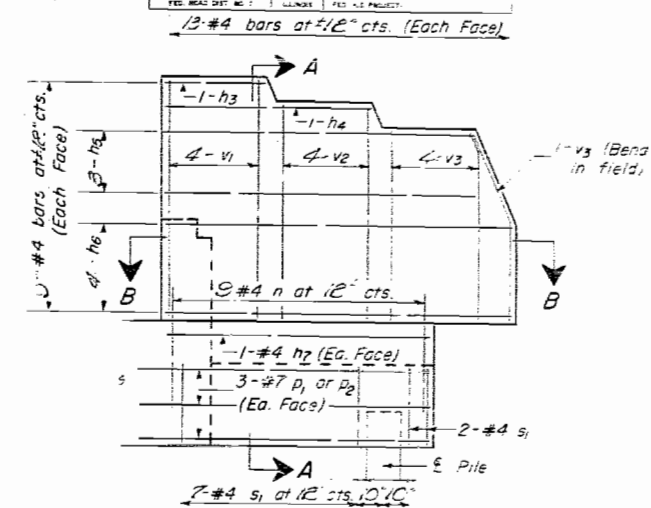
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	32-C			
11.257	HB	IROQUOIS	25	15

SHEET NO. 5

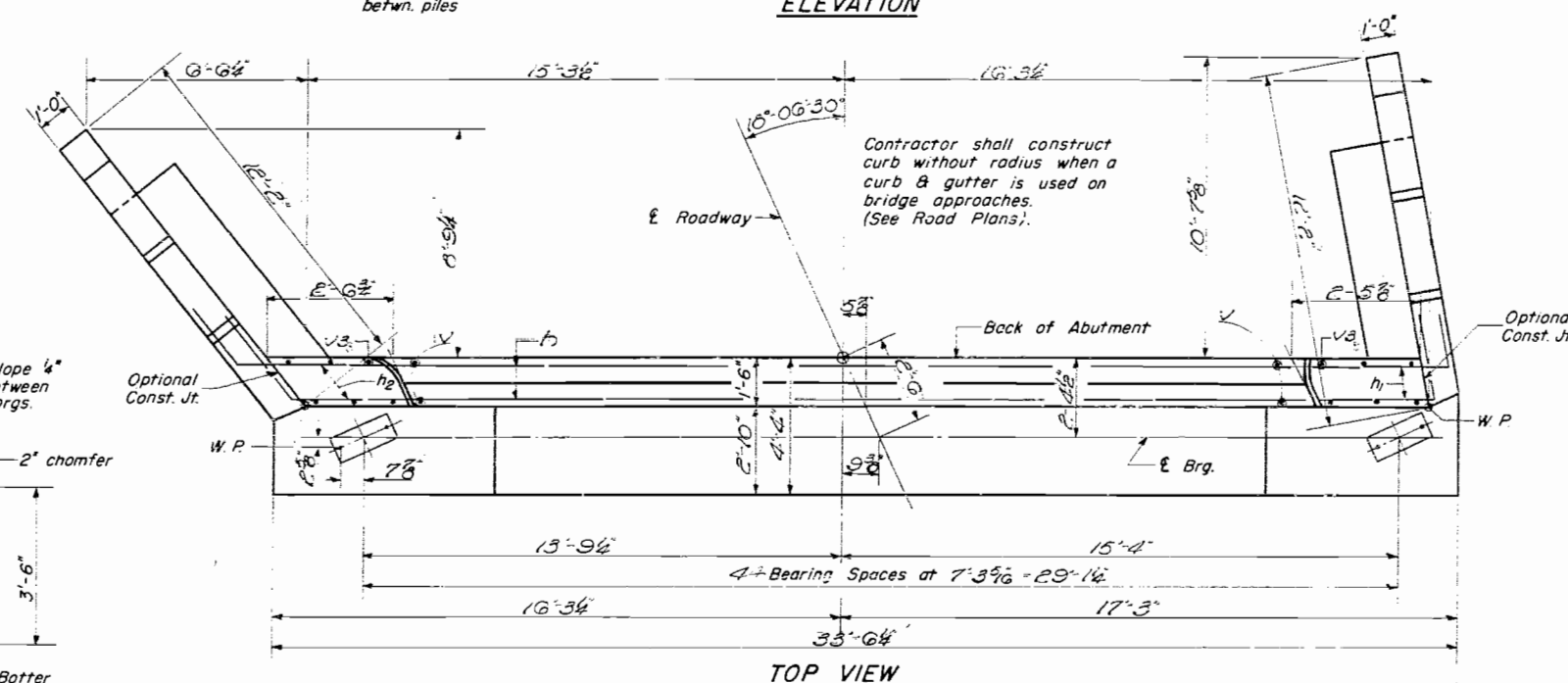
11 SHEETS



ELEVATION



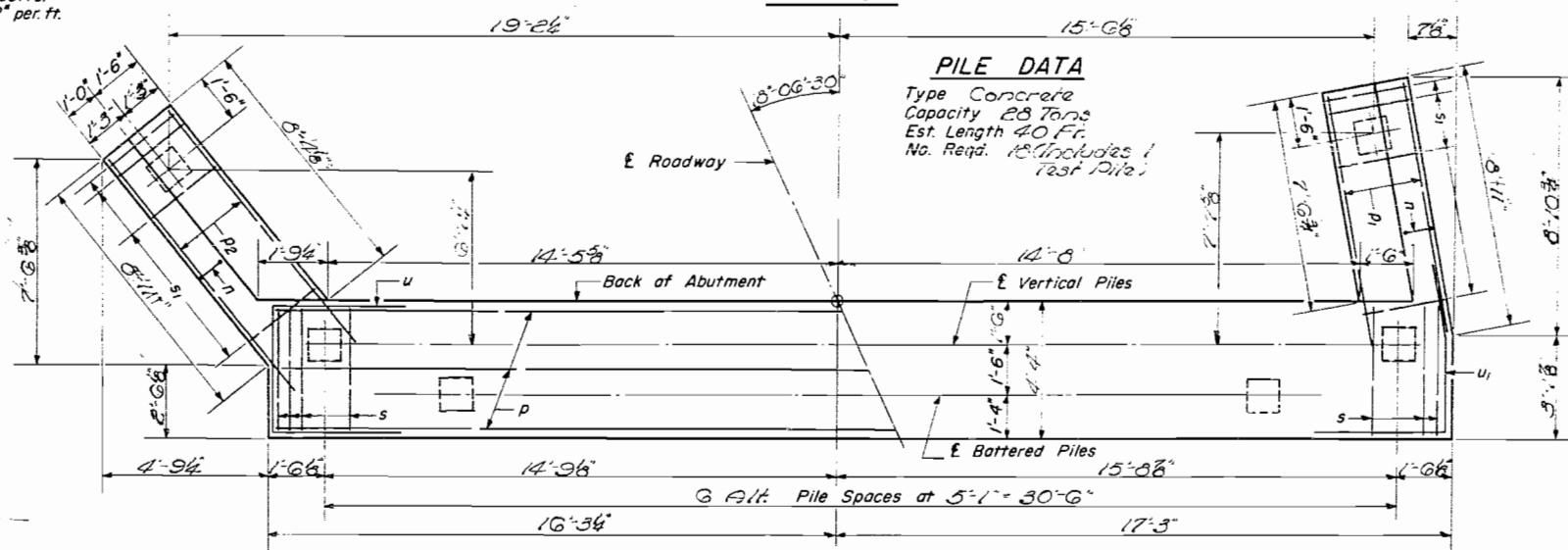
WING WALL ELEVATION
Reinforcement



SEC. THRU ABUT.

TOP VIEW

Contractor shall construct curb without radius when a curb & gutter is used on bridge approaches.
(See Road Plans).



PLAN - PILE CAP

N.G.E. ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n	36	#5	16'-6"	—
n ₁	36	#5	5'-3"	L
n ₂	36	#5	5'-6"	L
n ₃	3	#4	3'-3"	—
n ₄	3	#4	3'-0"	—
n ₅	36	#4	10'-8"	—
n ₆	36	#4	11'-8"	—
n ₇	3	#4	8'-0"	—

η	3G	#4	7'-9"	☐
ρ	1G	#7	35'-0"	☐
ρ_1	1E	#7	3'-9"	☐
ρ_2	1E	#7	10'-5"	☐
s	5S	#4	15'-1"	☐
s_1	3G	#4	3'-5"	☐
u	3	#6	17'-5"	☐
u_1	3	#6	10'-0"	☐

Class X Concrete	Cu. Yds.	7.1
Reinforcement Bars	Lbs.	4950
Concrete Piles	Lin. Ft.	280
Test Piles (Concrete)	Ea.	.

ABUTMENTS
F.A.I. RT. 57" SEC. 38-5413
ILLINOIS COUNTY
STA. 541+66.36

DESIGNED *M. E. Gansdon*
CHECKED *P. H. Hogerover*
m. h. wilcocks
DRAWN *W. A. Sausaman Jr.*
CHECKED *G. A. B.*

Nov 28 1962

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

PASSED E.F. Blum
ENGINEER OF DESIGN

APPROVED [Signature]

A-8-L (15° - 35°) 7-18-62

Rev 5-17-66 J.L.A. Lowered Abuts. .04', Changed Curb block from 11" to 9", No quantity change

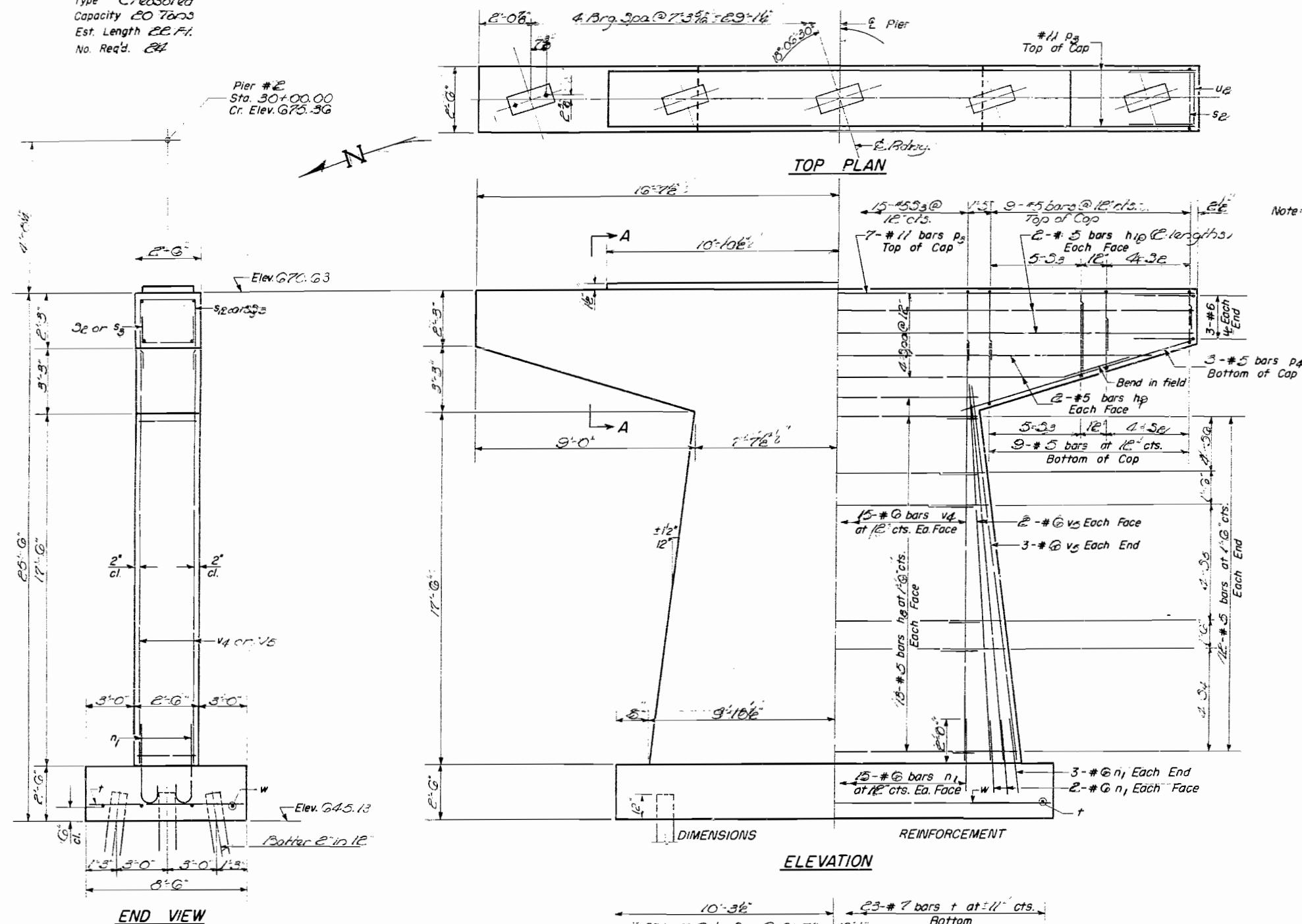
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	DATE	BY	SHEET NO.
157	HB	10/25/65	16	11

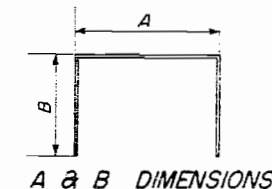
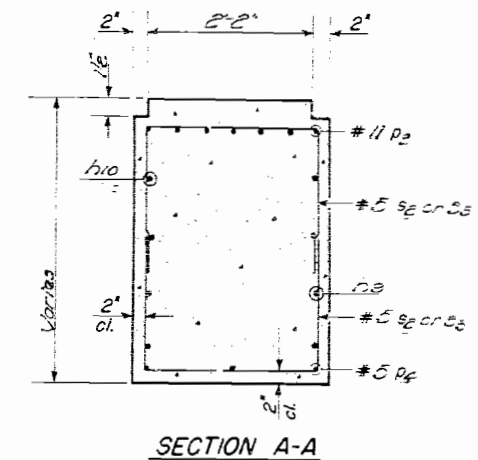
PILE DATA

Type *Crested*
Capacity *20 Tons*
Est. Length *22 ft.*
No. Req'd. *24*

Pier #2
Sta. 30+00.00
Cr. Elev. 670.36

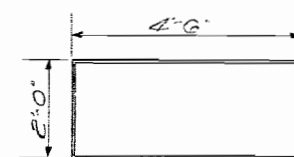


Note: All edges shall have standard 3/4" chamfers except footings.

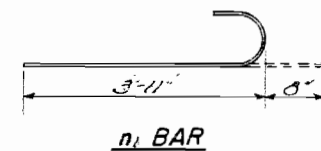


Bar	A	B
s6	8'-0"	8'-0"
s5	8'-0"	8'-0"
s4	8'-0"	8'-0"
s3	8'-0"	8'-0"
s2	8'-0"	8'-0"

s BARS



u6 BAR



n1 BAR

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
he	23	#5	15'-0"	—
h9	4	#5	21'-0"	—
h10	5	#5	17'-0"	—
n1	44	#6	4'-7"	—
p3	7	#11	32'-11"	—
p4	6	#5	10'-8"	—
s6	16	#5	8'-0"	—
s5	35	#5	8'-0"	—
s4	6	#5	9'-3"	—
s3	6	#5	7'-3"	—
s2	6	#5	5'-9"	—
t	23	#7	16'-3"	—
u6	3	#3	11'-0"	—
v2	30	#3	21'-0"	—
v5	14	#6	15'-3"	—
w	4	#4	20'-3"	—
Class X Concrete Cu.Yds. 50.3				
Reinforcement Bars Lbs. 4750				
Crested Piles Lbs. 500				

DESIGNED	M.E. Hamilton
CHECKED	P.H. Rogers
DRAWN	W.A. Sausaman
CHECKED	P.H. Rogers
EXAMINED	W.E. Brumann
PASSED	P.H. Rogers
APPROVED	P.H. Rogers

Nov 28 1962

FOOTING PLAN

P-2 Re-drawn 7-17-59 Rev. 11-25-59

Rev 5-17-66 JLA Lowered Pier .04'

PIER 2
FAIRBURY SEC. 30-5HB
IROQUOIS COUNTY
STA. 541 + 66.36

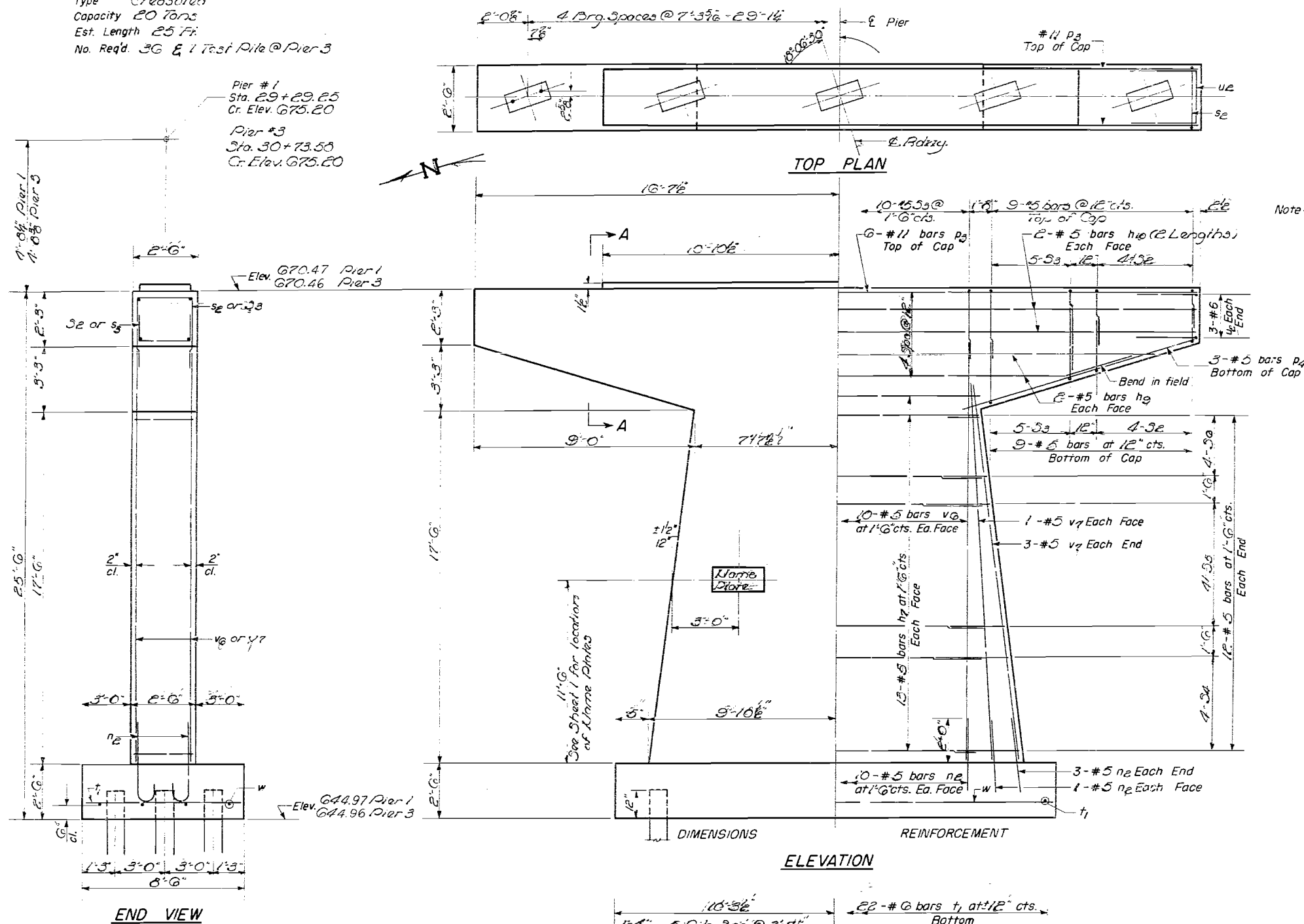
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT NO. 157-30.5
SHEET NO. 7
11 SHEETS

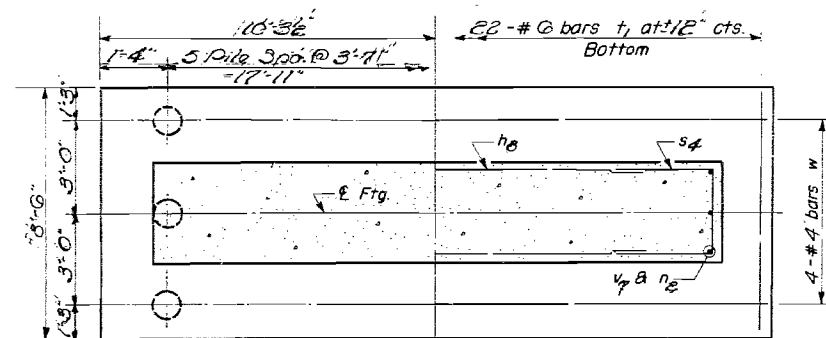
PILE DATA

Type Creosoted
Capacity 20 tons
Est. Length 25 Ft.
No. Req'd. 36 & 1 Test Pile @ Pier 3

Pier #1
Sta. 29+29.25
Cr. Elev. 675.20
Pier #3
Sta. 30+73.58
Cr. Elev. 675.20

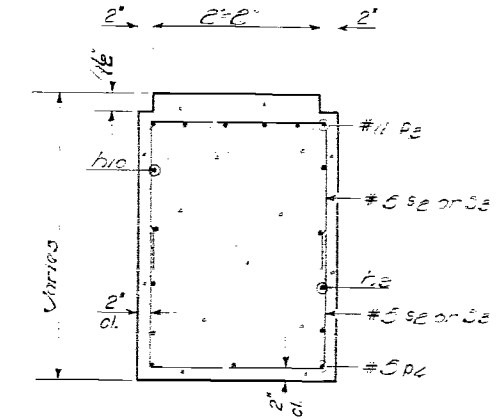


ELEVATION

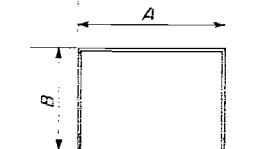


FOOTING PLAN

Note: All edges shall have standard 3/4\"



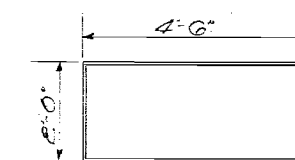
SECTION A-A



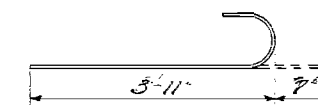
A & B DIMENSIONS

Bar	A	B
s ₂	2'-2"	2'-0"
s ₃	2'-2"	3'-0"
s ₄	2'-3"	3'-0"
s ₅	2'-3"	2'-0"
s ₆	2'-3"	1'-9"

s BARS



u₂ BAR



n₂ BAR

PIER 1 & 3
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₂	36	#5	15'-0"	—
h ₃	6	#5	27'-0"	—
Pier 1 & 3	12	#5	17'-0"	—
n ₂	36	#5	4'-6"	□
P ₃	12	#11	36'-11"	—
P ₄	12	#5	17'-0"	—
s ₂	36	#5	2'-6"	□
s ₃	36	#5	3'-0"	□
s ₄	12	#5	3'-0"	□
s ₅	12	#5	7'-0"	□
s ₆	12	#5	5'-9"	□
t ₁	44	#6	6'-0"	—
u ₂	12	#6	17'-0"	□
v ₆	40	#5	27'-0"	—
v ₇	20	#5	16'-0"	—
#	6	#4	20'-0"	—
Class 1 Concrete Cu.Yds. 170				
Reinforcement Bars Lbs. 7240				
Creosoted Piles Lin.Ft. 300				
Test Piles (Concrete) Ea.				

PIERS 1 & 3
FAIRF. 57-30.5/HB
IROQUOIS COUNTY
STA. 541+66.36

DESIGNED M.E. Hamada
CHECKED C. J. Hagen
DRAWN W.A. Sausaman
CHECKED P. J. J.

EXAMINED Nov 28 1962
PASSED W.E. Baumann
APPROVED L. S. Smith