

033

11-09-2018 LETTING ITEM 033

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	561-BP-1	ST. CLAIR	15	I
ILLINOIS CONTRACT NO. 76L97				

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PROPOSED HIGHWAY PLANS

FAP ROUTE 103 (IL 13)  
SECTION 561-BP-1  
PROJECT NHPP-DOT5(022)  
BRIDGE PAINTING  
ST. CLAIR COUNTY

C-98-342-18

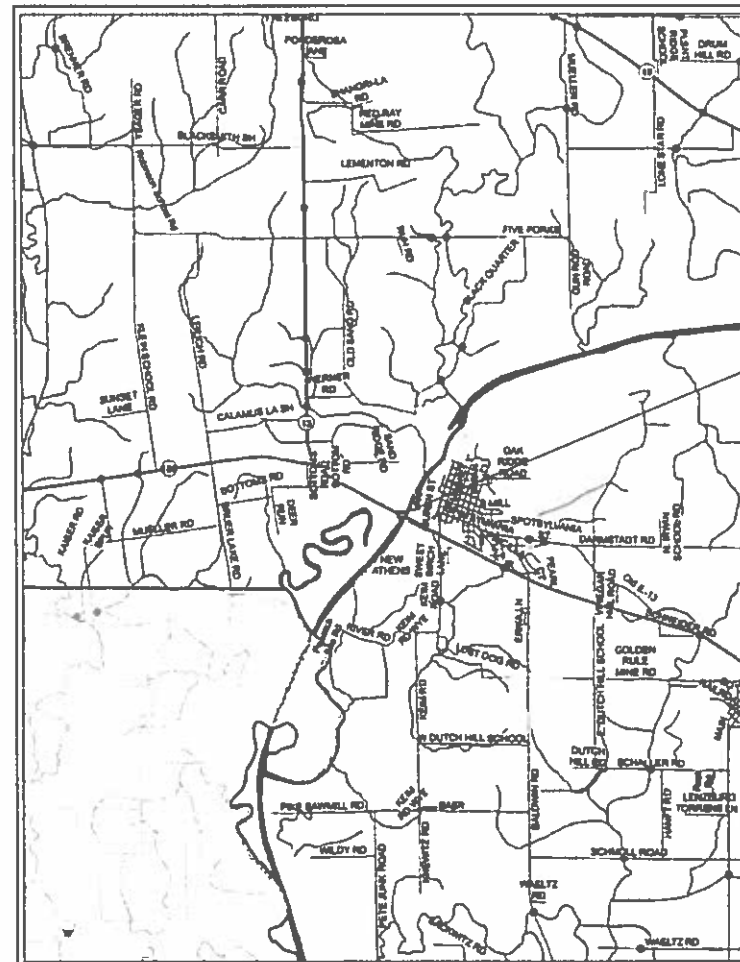
R8W

R7W

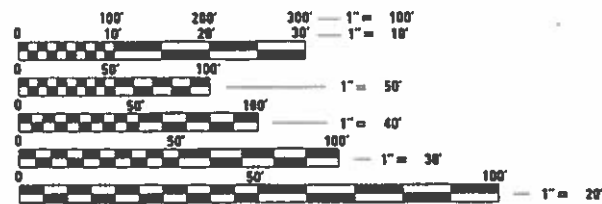


T2S

T3S



PROJECT LOCATION  
IL 13 OVER KASKASKIA RIVER  
SN 082-0198  
LAT: 38.32010  
LONG: -89.8886



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 611

PROJECT ENGINEER: HERVE GELIN (618) 346-3179  
PROJECT MANAGER: BILLIE OWEN (618) 346-3209

CONTRACT NO. 76L97

GROSS LENGTH = 575 FT.

NOT TO SCALE

D-98-115-18



LOCATION OF SECTION INDICATED THUS: [Symbol]

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED Aug 3 20 18  
[Signature] REGIONAL ENGINEER  
[Signature] ENGINEER OF DESIGN AND ENVIRONMENT  
Oct 9 20 18  
[Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

ADT  
2017 = 7500 (ACTUAL)  
2020 = 7600 (ESTIMATED)  
SU = 13.7% MU = 5.0%

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% STATE	
				CONSTR. CODE	
				RURAL BRIDGE	
				0047	
				082-0198	
67100100	MOBILIZATION	L SUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	153	153	
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	248	248	
70300570	PAVEMENT MARKING TAPE, TYPE III 24"	FOOT	24	24	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	787.5	787.5	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1	
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1	

MODEL: Default  
 FILE: \\nas101.pva\illinois\BID\NTEC\Illinois\gov\PI\DOT\Documents\DOT Office\Director\B\Projects\0876197\CAD\data\CAD\sheet\0876197-rt-500.dgn

USER NAME = challandeske	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/3/2018	DATE -	REVISED -

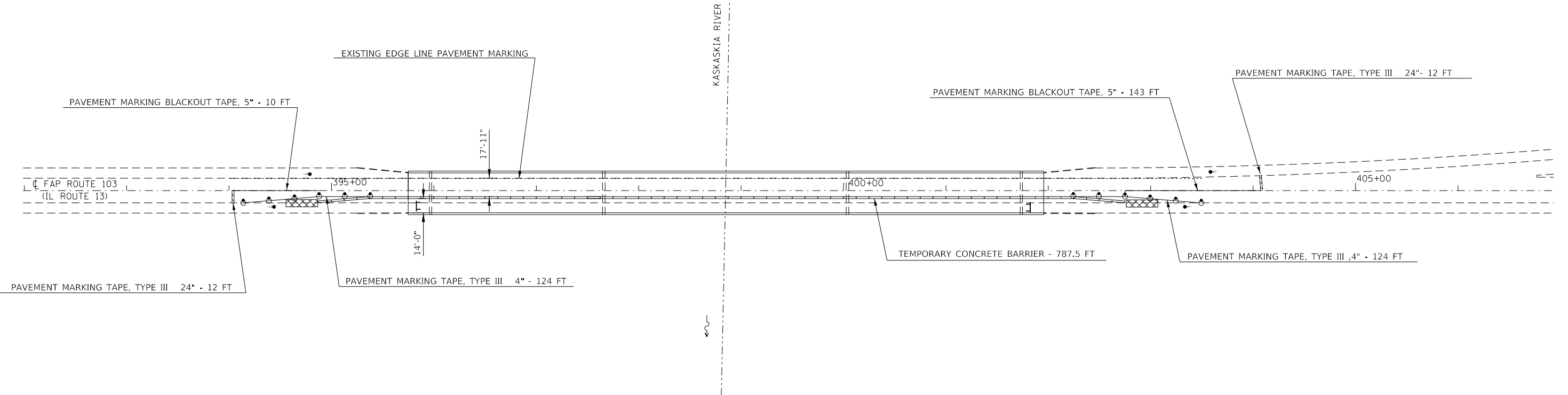
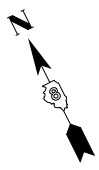
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	561-BP-1	ST. CLAIR	14	3
			CONTRACT NO. 76L97	
		ILLINOIS	FED. AID PROJECT	

- TEMPORARY CONCRETE BARRIER
- TEMPORARY BRIDGE TRAFFIC SIGNALS
- ⊗ IMPACT ATTENUATOR, TEMPORARY NON-REDRICTIVE TEST LEVEL 3
- ⊙ DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT



GRAPHIC SCALE



FOR DETAILS NOT SHOWN, USE STANDARD 643001 AND 701321

MODEL: Default  
 FILE: \\nrc-pix1ul08a\EBID\NTEC\Illinois\gov\PIWDOT\Documents\DOT Office\BIDirect\B\Projects\08761971\CAD\data\CAD\sheet\08761971-1-1-1.dgn

USER NAME = challeske	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/2/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGING DETAILS**

SCALE: 1"=100'    SHEET 1 OF 1 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	561-BP-1	ST. CLAIR	15	4
CONTRACT NO. 76L97				
ILLINOIS FED. AID PROJECT				





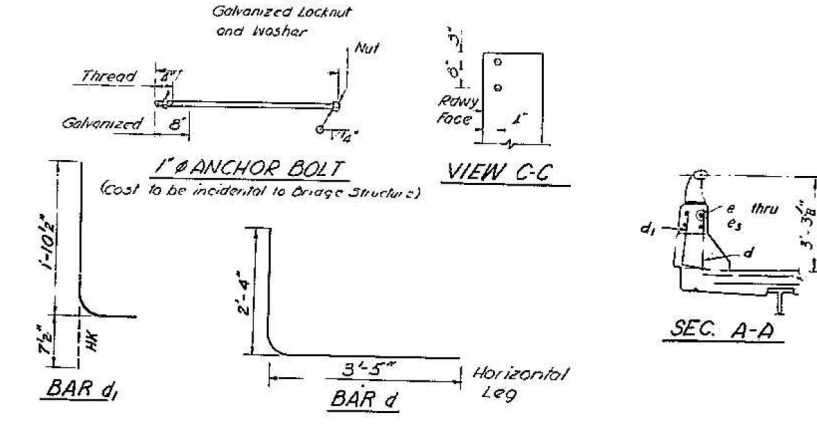
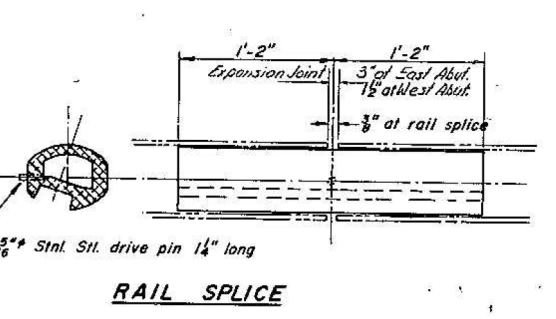
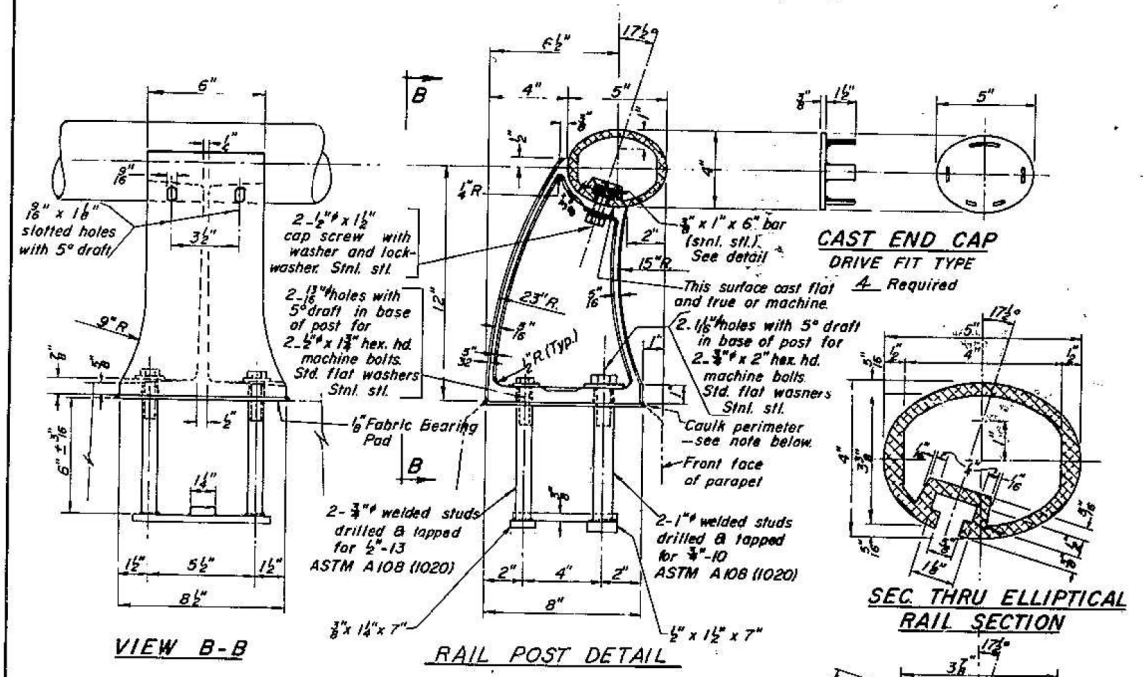
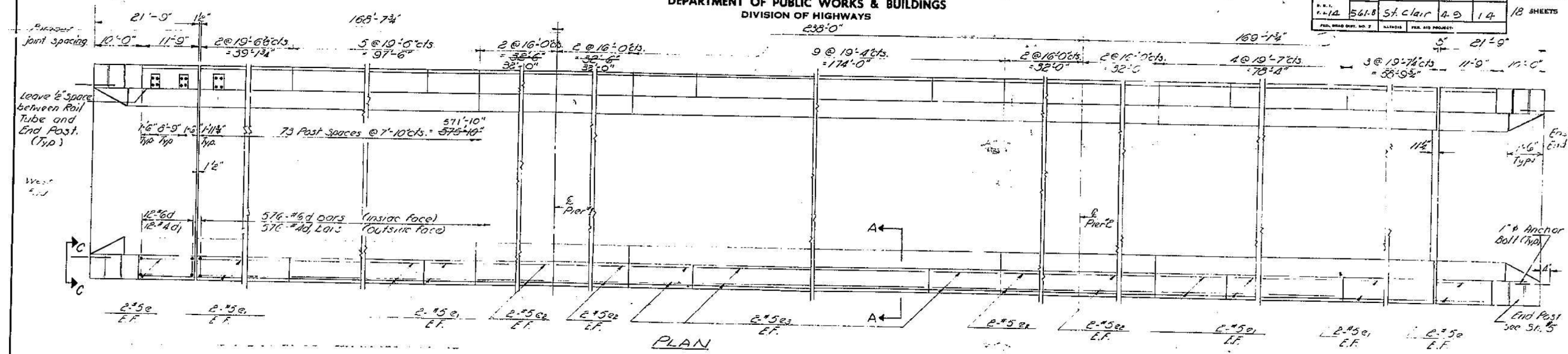






STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561-B	St. Clair	4-D	14	18



NOTES:

All Aluminum Alloy Extrud. 1 Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

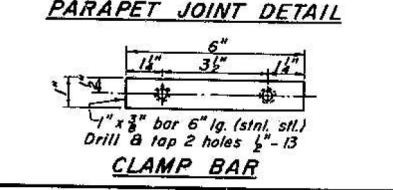
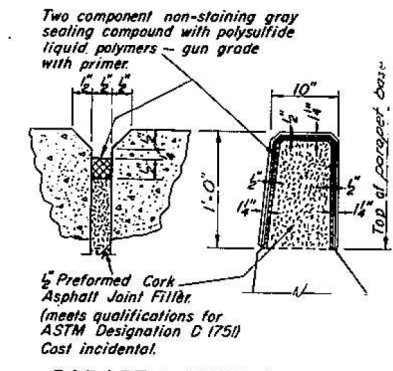
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with Min. yield 35 ksi, Min. tensile 38 ksi, and elongation of 10% in 2 inches.

**BAR LIST**

Bar	No.	Size	Length	Shape
e	16	#5	11'-6"	
e1	112	#5	19'-3"	
e2	64	#5	15'-9"	
e3	72	#5	19'-0"	
d	1200	#6	5'-9"	
d1	1200	#4	2'-6"	

**BILL OF MATERIAL**

Aluminum Railing	Lin. Ft.	1199
------------------	----------	------



DESIGNED: [Signature]  
CHECKED: [Signature]  
DRAWN: [Signature]  
CHECKED: [Signature]

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

JAN 24 1968

Note: Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.

R-17 11-18-66  
Revised: 7-8-68 W H

FOR INFORMATION ONLY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS

USER NAME = challesdeske	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 7/24/2018	CHECKED -	REVISED -
	DATE -	REVISED -

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							103	561-BP-1	ST. CLAIR	15	8
ILLINOIS FED. AID PROJECT											

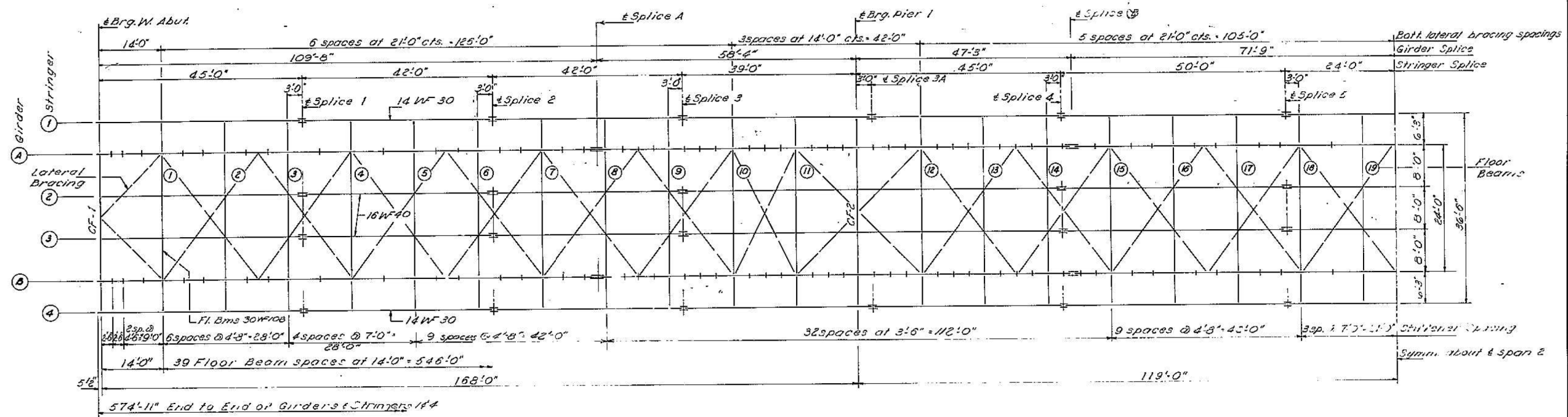
ALUMINUM RAILING  
S.B.L. RT. 13 SEC. 561-D  
ST. CLAIR COUNTY  
STA. 398+04.88

Quantities of Rein. Bars and Class X Concrete are included with Superstructure and Approach Slabs. See Sheets #4 & #5.

MODEL: Default  
FILE: Model - Project\BID\BIDDING\Illinois\gov\FW\DOT\Documents\BIDDING\Projects\0876197\CAD\Drawings\0876197-SP-1-PL-18-01.dwg

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
S. I. 13	561-B	St. Clair	49	15	18 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



HALF PLAN

ELEVATIONS TOP OF WF (STRINGERS)

(For Fabrication only)

Loc.	# Brg. W. Abut.	# Spl. 1	# Spl. 2	# Spl. 3	# Brg. Pier 1	# Spl. 3A	# Spl. 4	# Spl. 5	# Spl. 6	# Spl. 7	# Spl. 8A	# Brg. Pier 2	# Spl. 8	# Spl. 9	# Spl. 10	# Brg. E. Abut.
Stringer 1	419.30	419.42	419.60	419.73	419.88	419.89	419.95	419.92	419.92	419.95	419.89	419.88	419.73	419.60	419.42	419.30
Stringer 2	419.53	419.65	419.83	419.96	419.90	420.20	420.15	420.15	420.20	420.20	419.90	419.96	419.83	419.65	419.53	

Note: Stringer 3 is parallel to Stringer 2 but 0.07 lower  
Stringer 4 is parallel to Stringer 1 but 0.09 lower

Note:

See sheets 8 thru 13 for Girder Elevation & Cross Section.  
See sheet 11 for Girder Camber Diagram & Detail of Lateral Bracing.  
See sheet 12 for Expansion Device.  
See sheet 13 for Bearing Detail.  
Weight of structural steel billed on sheet 4.

ELEVATIONS TOP OF GIRDER WEB

Location	# Brg. W. Abut.	# Brg. Pier 1	# Brg. Pier 2	# Brg. E. Abut.
Girder A	419.30	419.76	419.76	419.30
Girder B	419.22	419.68	419.68	419.22

TABLE OF MOMENTS & REACTIONS \*

	Moments (in kip ft.)			Reactions (in kips)	
	.4 sp. 1	Piers	.5 sp. 2	Abutment	Pier
D.L	6024	18,282	9613	222	910
L.L	3599	6083	4739	111	273
Imp.	612	912	616	19	41
Total	10,235	25,277	14,968	352	1224

\* For Girders A or B only

DESIGNED: *T. Spawen*  
 CHECKED: *W. Healy*  
 DRAWN: *D.D. J. Kessler*  
 CHECKED: *W. Healy*

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

JAN 24 1968

STRUCTURAL STEEL PLAN  
S.B.I. RT. 13 SEC. 561-B  
ST. CLAIR COUNTY  
STATION 398 + 84.88

FOR INFORMATION ONLY

MODEL: Default  
FILE: \\p1010848\BID\NTEC\Illinois\gov\FW\DOT\Documents\13DOT\Office\BIDirect\B\Projects\0876197\COORD\DATA\CAD\Sheet\0876197-STR-SP-1561-B.dgn

USER NAME = challesdeske	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 7/24/2018	DATE -	REVISED -

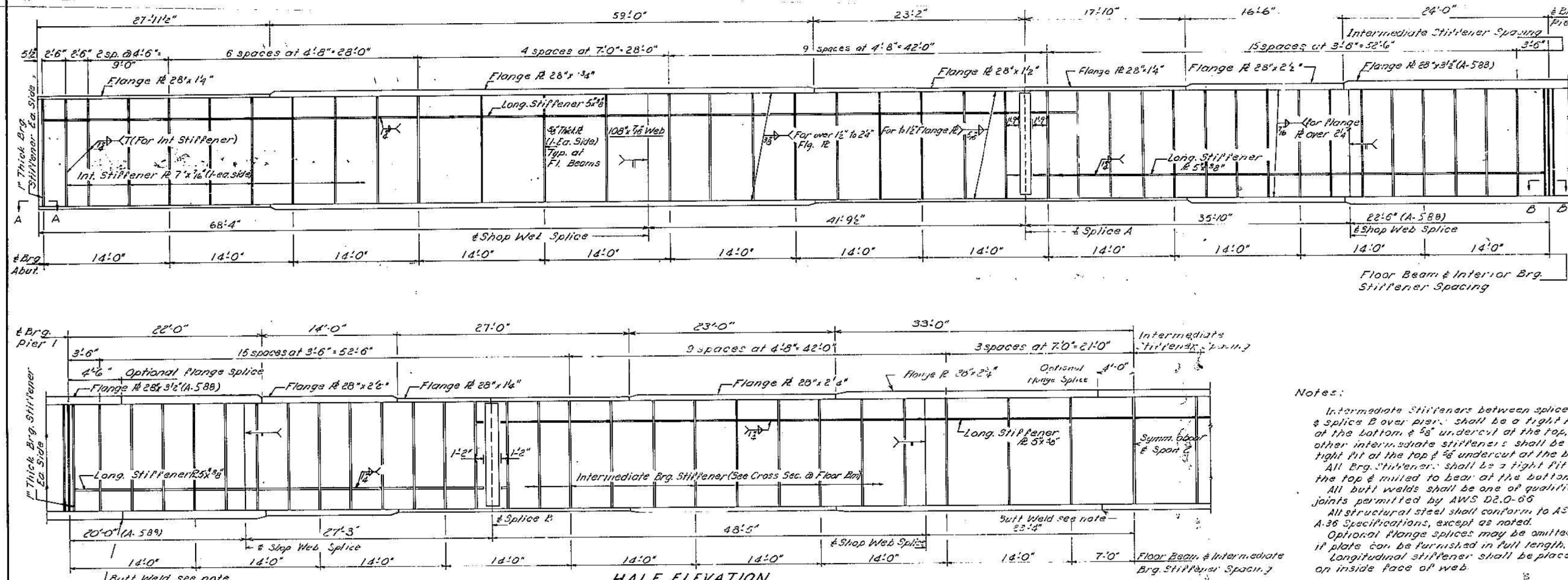
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

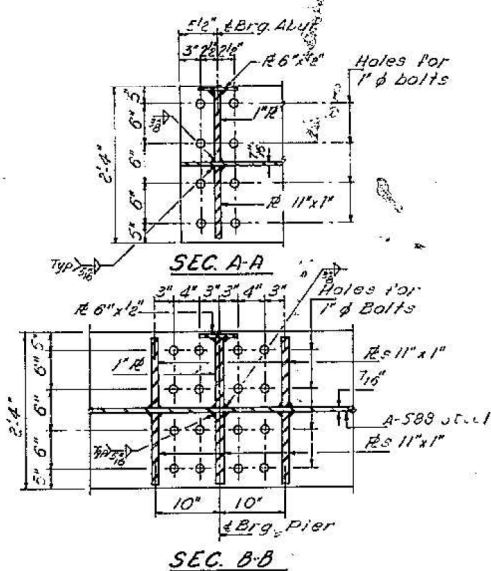
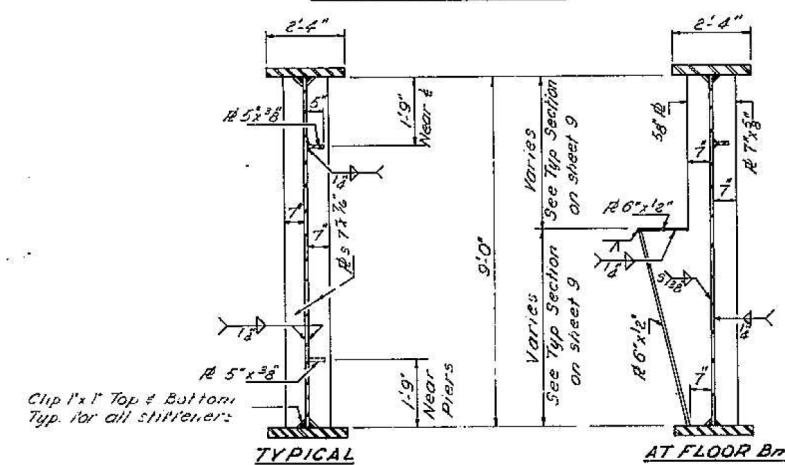
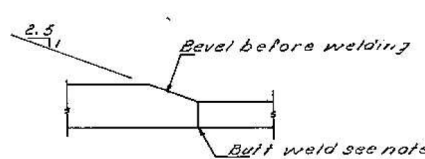
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	561-BP-1	ST. CLAIR	15	9
CONTRACT NO. 76L97				
ILLINOIS FED. AID PROJECT				

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

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561-B	St. Clair	49	16	18



Notes:  
 Intermediate Stiffeners between splice A & splice B over pier shall be a tight fit at the bottom & 5/8" undercut at the top, all other intermediate stiffeners shall be a tight fit at the top & 5/8" undercut at the bottom. All Brg. Stiffeners shall be a tight fit at the top & milled to bear at the bottom. All butt welds shall be one of qualified joints permitted by AWS D2.0-66. All structural steel shall conform to ASTM A-36 Specifications, except as noted. Optional flange splices may be omitted if plate can be furnished in full length. Longitudinal stiffener shall be placed on inside face of web.



DESIGNED	<i>D. Sporn</i>	EXAMINED	<i>J. E. Staff</i>
CHECKED	<i>W. Henry</i>	PASSED	<i>K. C. Bauman</i>
DRAWN	<i>J. Kessler</i>	APPROVED	<i>J. E. Staff</i>
CHECKED	<i>W. Henry</i>		

JAN. 24 1968

FOR INFORMATION ONLY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS

USER NAME = challesdeske	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 7/24/2018	DATE -	REVISED -

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	561-BP-1	ST. CLAIR	15	10

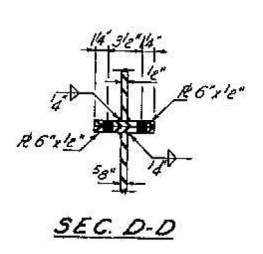
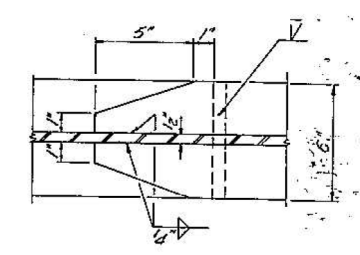
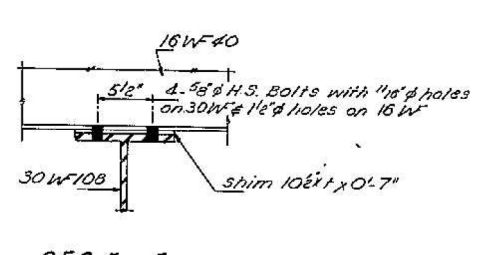
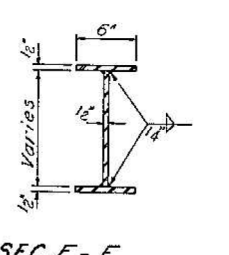
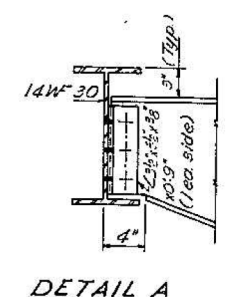
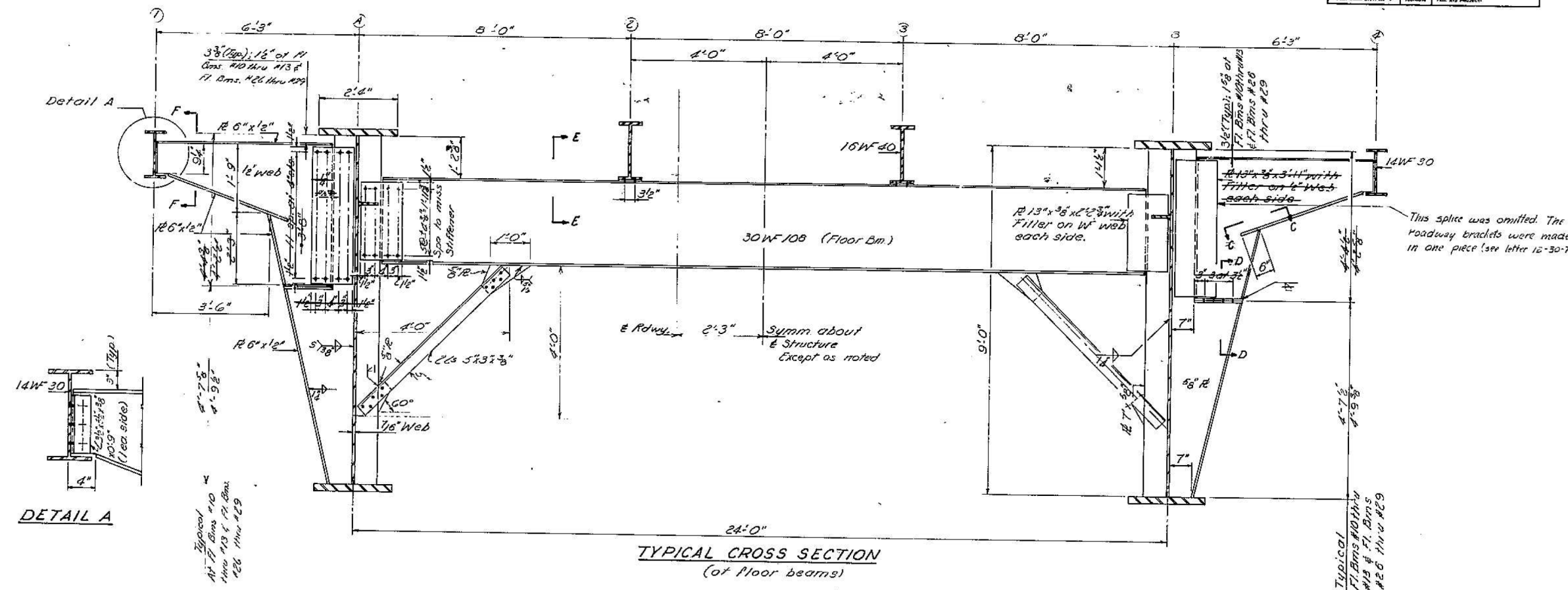
CONTRACT NO. 76L97

ILLINOIS FED. AID PROJECT

MODEL: Default  
 FILE: Model - P:\CADD\BIDDING\TEC\Illinois\gov\FWD\DOT\Documents\DOT - Offices\Director 8\Projects\0876197\CADD\DATA\CAD\Sheet\0876197-SP-18-18.dgn

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
S. I. 14	561-B	St. Clair	49	17	18 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



Note:  
All connections made with 7/8\"/>

DESIGNED *N. J. Sporn*  
CHECKED *W. H. Kessler*  
DRAWN *J. Kessler*  
CHECKED *W. H. Kessler*

EXAMINED *C. S. Hummer*  
PASSED *M. E. Dammann*  
APPROVED *V. E. Staff*

JAN 24 1968

VALUE of t

Stringer 2						
Floor	11&28	10&29	13&26	15,16	All others	14&25
Beam No.			63&24			
t	1"	1 1/2"	1 3/4"	1 1/2"	3/4"	1 1/2"
Stringer 3						
Floor	11&28	10&29	13&26	15,16	All others	14&25
Beam No.			63&24			
t	3/4"	1 1/2"	3/4"	1/2"	0	3/8"

Revised 7-8-68 WH

STRUCTURAL STEEL DET.  
S. I. RT 13 SEC 561-B  
ST. CLAIR COUNTY  
STATION 398 + 84.88

FOR INFORMATION ONLY

MODEL: Default  
FILE: \\mspc\p\ul\B&E\ID\ITC\Illinois\gov\p\ul\DOT\Documents\1\DOT - Office\Director\B\Projects\08761971\CAD\data\CAD\sheet\08761971-st-tyr\st-tyr.dgn

USER NAME = challandeske	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 7/24/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS	SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	561-BP-1	ST. CLAIR	15	11
CONTRACT NO. 76L97				
ILLINOIS FED. AID PROJECT				



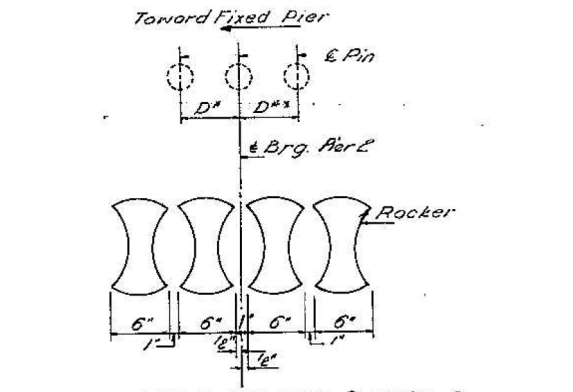
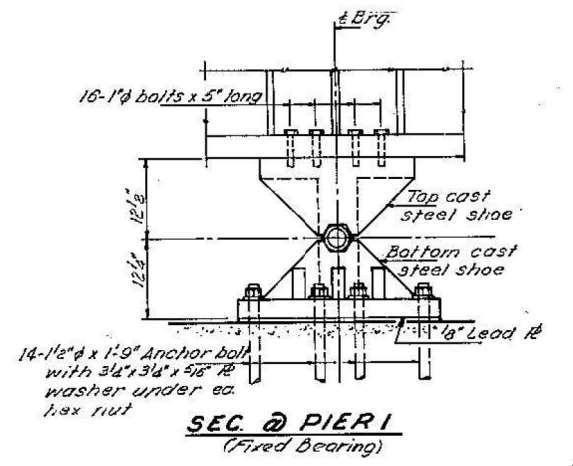
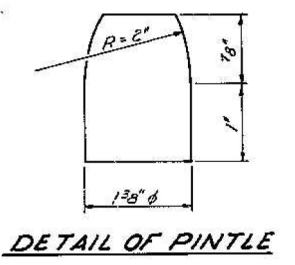
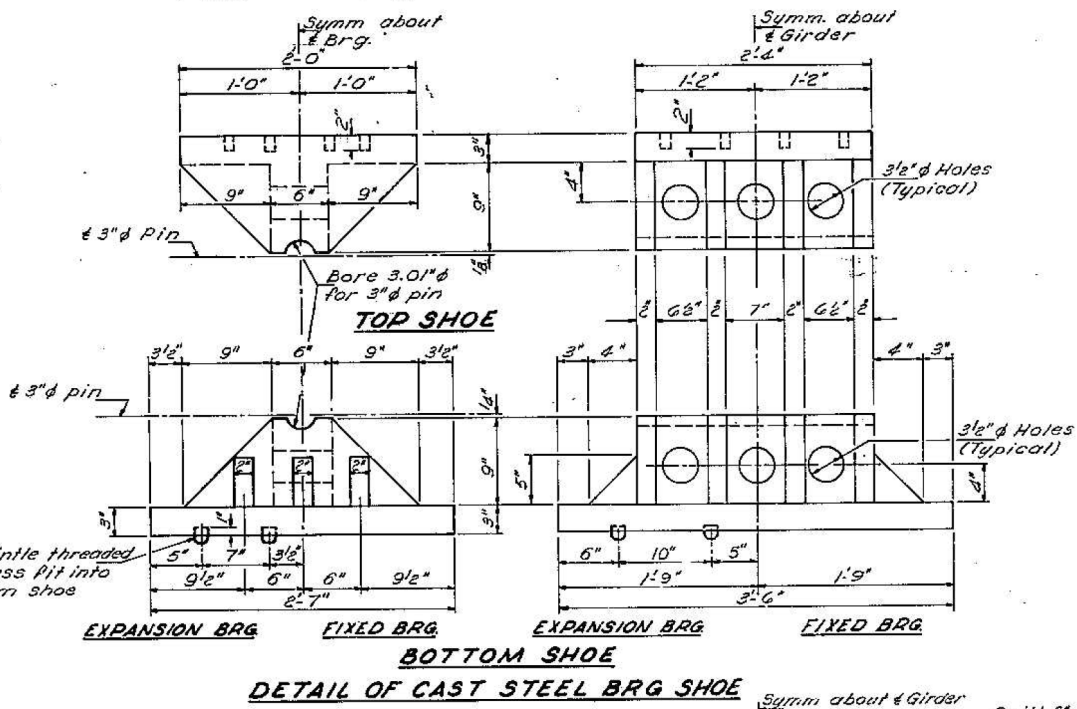
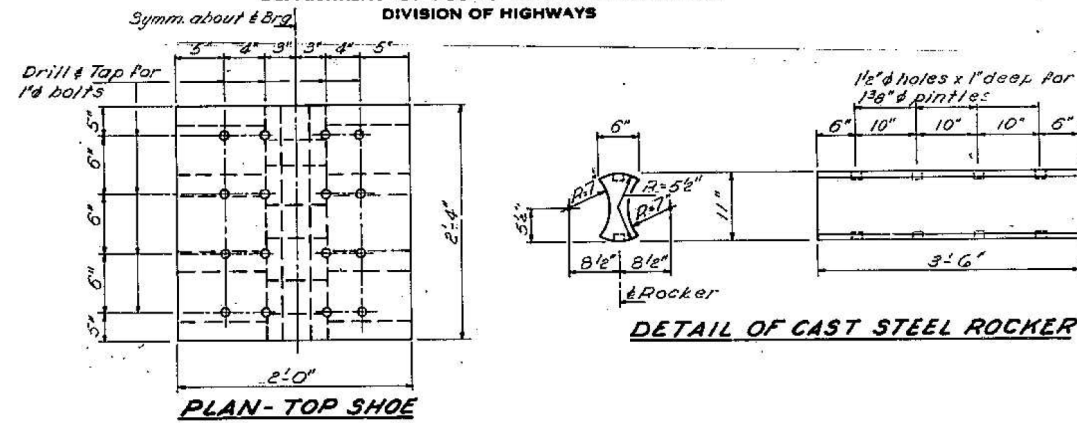
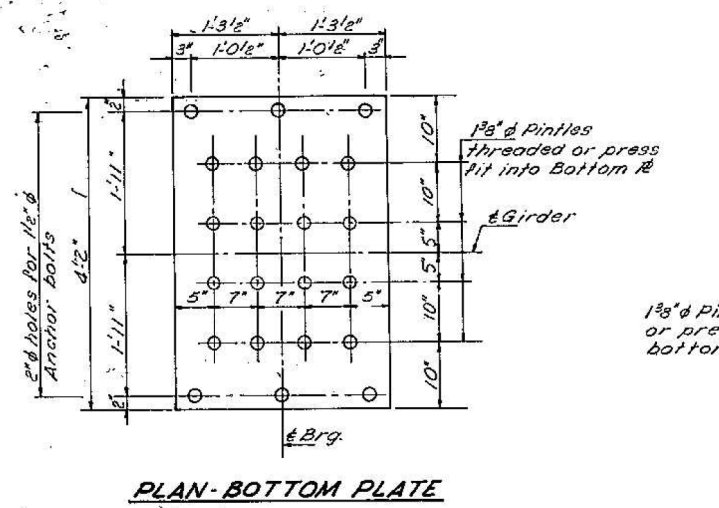
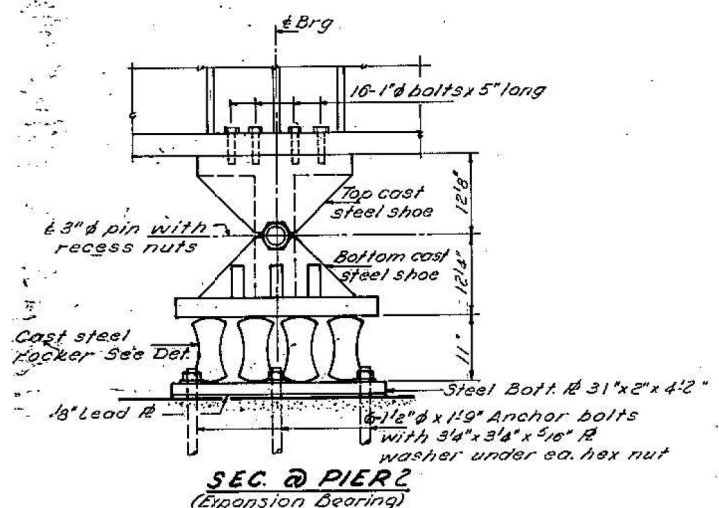






STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

PROJECT NO.	SECTION	QUANTITY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13
S.B.I. 561-B	St. Clair	49	21	18	SHEETS
FED. ROAD DIST. NO. 1	STATION	FED. AID PROJECT			



$D^* = 18/100$  ft. of Exp. for every 15° below the normal temp. of 50°  
 $D^* = 18/100$  ft. of Exp. for every 15° above the normal temp. of 50°

**BILL OF MATERIAL**

Item	Unit	Quantity
Cast Steel	Lbs.	19,320
Carbon Steel	Lbs.	4410
Total	Lbs.	23,730

Pins, Stl. R's, Bolts, Anchor Bolts and Lead R's are listed as Carbon steel.  
 The above total quantity is included in the quantity of structural steel listed on sheet "A".  
 For Brg. Assembly at abutment see sheet "B".  
 Cast steel shall conform to AASHTO Designation M 192 Class 70 (ASTM A 486).  
 The surfaces of bearing plates that are to come in contact with each other or with conc. shall be finished according to AASHTO Spec's Art. 2.10.25.

**BEARING DETAILS**  
 S.B.I. RT. 13 SEC. 561-B  
 ST. CLAIR COUNTY  
 STATION 398 + 84.88

DESIGNED: *W. J. Kessler*  
 CHECKED: *W. J. Kessler*  
 DRAWN: *J. Kessler*  
 CHECKED: *W. J. Kessler*

EXAMINED: *W. J. Kessler*  
 PASSED: *W. J. Kessler*  
 APPROVED: *W. J. Kessler*

Jan 24 1968

USER NAME = challesdeske	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 7/24/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS	SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
----------------	--------	-------	----	--------	------	----	------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	561-BP-1	ST. CLAIR	15	14
ILLINOIS FED. AID PROJECT			CONTRACT NO. 76L97	

**FOR INFORMATION ONLY**

