

**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts.  
 Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.  
 Calculated weight of Structural Steel = lbs (M 270 Gr. 50).  
 Calculated weight of Structural Steel = lbs (M 270 Gr. 36).  
 No field welding is permitted except as specified in the contract documents.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 If the Contractor elects to use cantilever forming brackets on the exterior girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications.  
 If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior girder at each of these additional bracket locations.  
 Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.  
 Concrete Sealer shall be applied to the abutment seat areas, front faces of backwalls and hatchblocks.  
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.  
 The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6.  
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.  
 The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.  
 When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:  
 1) At least 72 hours shall have elapsed from the end of the previous pour.  
 2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.  
 Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.  
 Slipforming of parapet is not allowed.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Granular Backfill for Structures	Cu. Yd.		749	749
Stone Riprap, Class A4	Sq. Yd.		1173	1173
Filter Fabric	Sq. Yd.		1173	1173
Removal of Existing Structures	Each	2		2
Structure Excavation	Cu. Yd.		582.1	582.1
Cofferdams (Type 2), Location 1	Each		2	2
Cofferdam Excavation	Cu. Yd.		1289.5	1289.5
Concrete Structures	Cu. Yd.		1601.1	1601.1
Concrete Superstructure	Cu. Yd.	1459.6		1459.6
Bridge Deck Grooving	Sq. Yd.	4138.2		4138.2
Seal Coat Concrete	Cu. Yd.		391.8	391.8
Concrete Encasement	Cu. Yd.		33.8	33.8
Protective Coat	Sq. Yd.	5240		5240
Furnishing and Erecting Structural Steel	L. Sum	.43		.43
Stud Shear Connectors	Each	10512		10512
Reinforcement Bars, Epoxy Coated	Pound	367760	174190	541950
Bar Splicers	Each		192	192
Furnishing Metal Shell Piles 14"x .312"	Foot		6846	6846
Furnishing Steel Piles HP14x117	Foot		3600	3600
Test Pile Metal Shells	Each		4	4
Test Pile Steel HP14x117	Each		2	2
Driving Piles	Foot		10446	10446
Pile Shoes	Each		268	268
Temporary Soil Retention System	Sq. Ft.		1541	1541
Name Plates	Each	2		2
Preformed Joint Strip Seal	Foot	197		197
Elastomeric Bearing Assembly, Type II	Each	24		24
Anchor Bolts, 1"	Each	48		48
Anchor Bolts, 1 1/2"	Each	24		24
Concrete Sealer	Sq. Ft.		4022	4022
Geocomposite Wall Drain	Sq. Yd.		444	444
Pipe Underdrains for Structures, 4"	Foot		320	320
Drainage Scuppers, DS-11	Each	8		8
Form Liner Textured Surface	Sq. Ft.	6006	4823	10829
Staining Concrete Structures	Sq. Ft.	6006	4823	10829

**INDEX OF SHEETS**

1	General Plan & Elevation
2	General Data
3	Stage Construction & Temporary Soil Retention System Details
4	Temporary Concrete Barrier for Stage Construction
5	Footing Layout
6-12	Top of Slab Elevations
13	Top of West Approach Slab Elevation (E.B.)
14	Top of East Approach Slab Elevation (E.B.)
15	Top of West Approach Slab Elevation (W.B.)
16	Top of East Approach Slab Elevation (W.B.)
17	Superstructure (E.B.)
18	Superstructure (W.B.)
19-20	Superstructure Details
21	Bridge Approach Slab Details - West (W.B.), East (E.B.)
22	Bridge Approach Slab Details - East (W.B.), West (E.B.)
23-24	Bridge Approach Slab Details
25	Preformed Joint Strip Seal
26	Drainage Scupper, DS-11
27	Structural Steel
28-29	Structural Steel Details
30	Bearing Details
31-33	West Abutment (E.B.)
34-36	East Abutment (E.B.)
37-39	West Abutment (W.B.)
40-42	East Abutment (W.B.)
43	Pier (E.B.)
44	Pier (W.B.)
45-46	Formliner Details
47	HP Pile Details
48	Metal Shell Pile Details
49	Bar Splicer Assembly & Mechanical Splicer Details
50-55	Soil Boring Logs

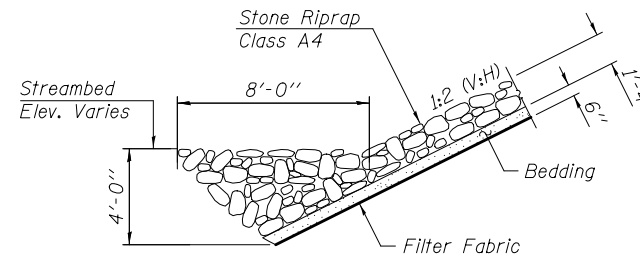
**WATERWAY INFORMATION**

Drainage Area = 6532.87 sq. mi. Existing Low Grade Elev. = 708.59 ft @ Sta. 491+52  
 Proposed Low Grade Elev. = 710.4 ft @ Sta. 930+62

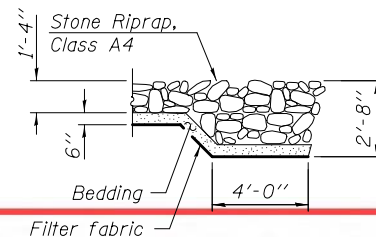
Flood	Discharge (cfs)	Waterway Opening (Sq.Ft.)		Natural H.W.E.	Head (ft.)		Headwater Elev.		
		Existing	Proposed		Existing	Proposed	Existing	Proposed	
10-YR	Main Channel	18052	15916	4353	4720				
	Relief Struc.	7473	9609	2143	2852				
	Total	25525	25525			696.3	0.2	0.1	696.5 696.4
50-YR (Design)	Main Channel	23661	20859	5060	5513				
	Relief Struc.	10464	13266	2629	3505				
	Total	34125	34125			698.2	0.3	0.2	698.5 698.4
100-YR	Main Channel	25971	22895	5335	5822				
	Relief Struc.	11719	14795	2819	3760				
	Total	37690	37690			699.0	0.3	0.2	699.3 699.2
Overtopping	Main Channel								
	Relief Struc.								
	Total								
500-YR	Main Channel	30162	27412	5911	6465				
	Relief Struc.	15463	18213	3220	4292				
	Total	45625	45625			700.5	0.4	0.2	700.9 700.7

10 Year Velocity through Existing Bridge = 3.49 fps

10 Year Velocity through Proposed Bridge = 3.37 fps

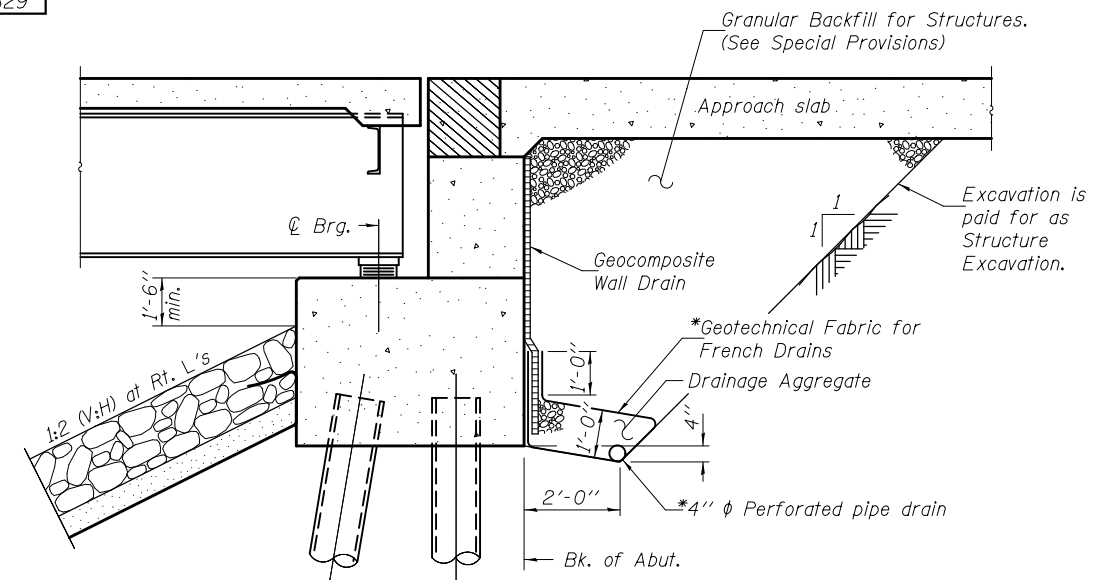


**SECTION B-B**



**SECTION A-A**  
**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevations (ft.)				
	W. Abut.	Pier (WB)	Pier (EB)	E. Abut.
Q100	702.00	670.30	675.30	699.40
Q500	702.00	669.50	674.40	699.40



**SECTION THRU PILE SUPPORTED STUB ABUTMENT**

(Horizontal dimensions are at Rt. L's)

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).  
 Geocomposite wall drains and 4" φ pipe underdrains shall be extended behind the entire abutment cap.

DESIGNED - Nick R. Barnett  
 CHECKED - Al-Barræe R. Shebib  
 DRAWN - h.t. duong  
 CHECKED - NRB/GRA

EXAMINED - *Joanne F. Duff*  
 PASSED - *Carl Bruger*  
 ACTING ENGINEER OF BRIDGE DESIGN  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

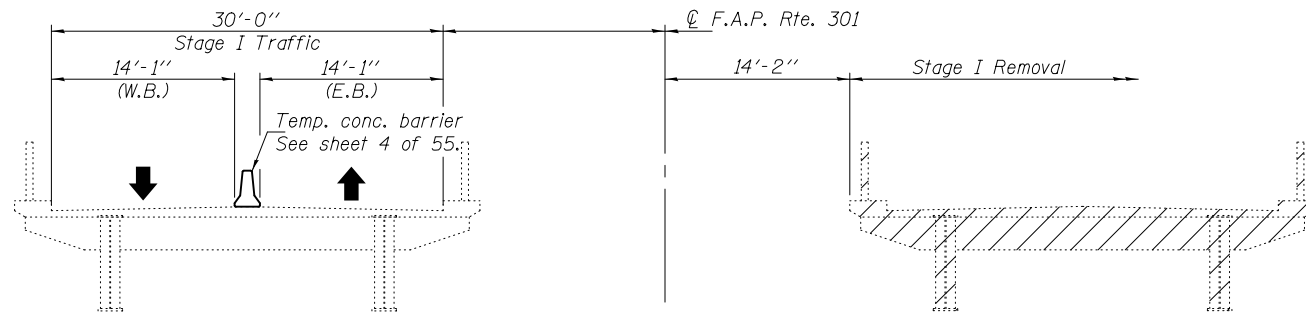
DATE - \_\_\_\_\_  
 REVISED \_\_\_\_\_  
 REVISED \_\_\_\_\_

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

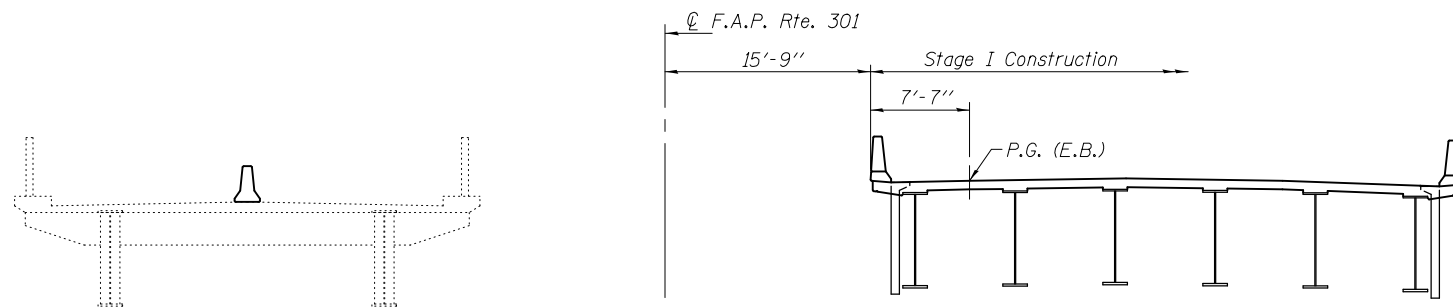
**GENERAL DATA**  
**STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)**

SHEET NO. 2 OF 55 SHEETS

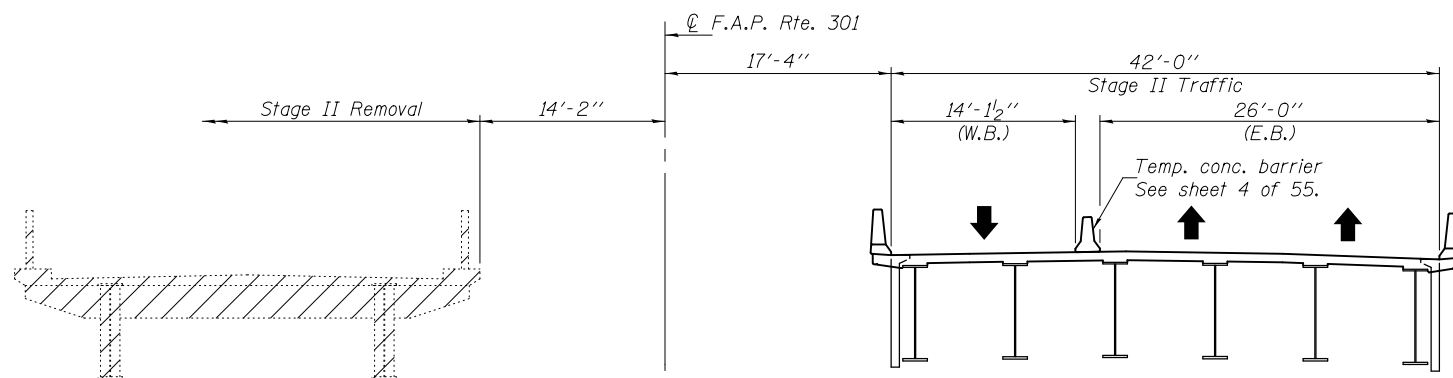
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				



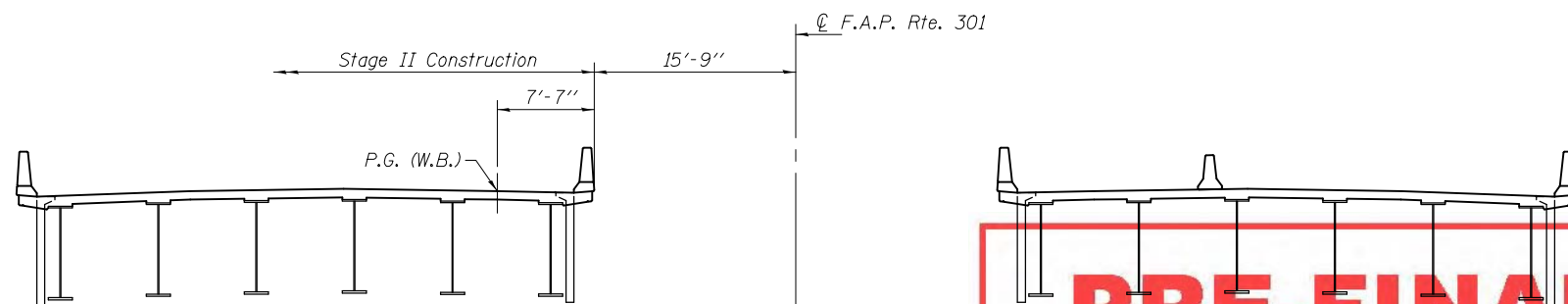
**STAGE I REMOVAL**



**STAGE I CONSTRUCTION**

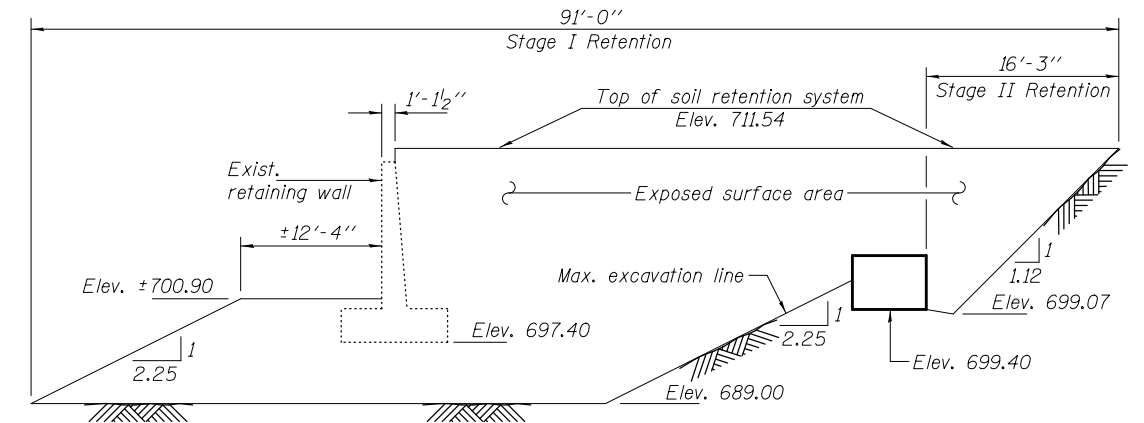


**STAGE II REMOVAL**



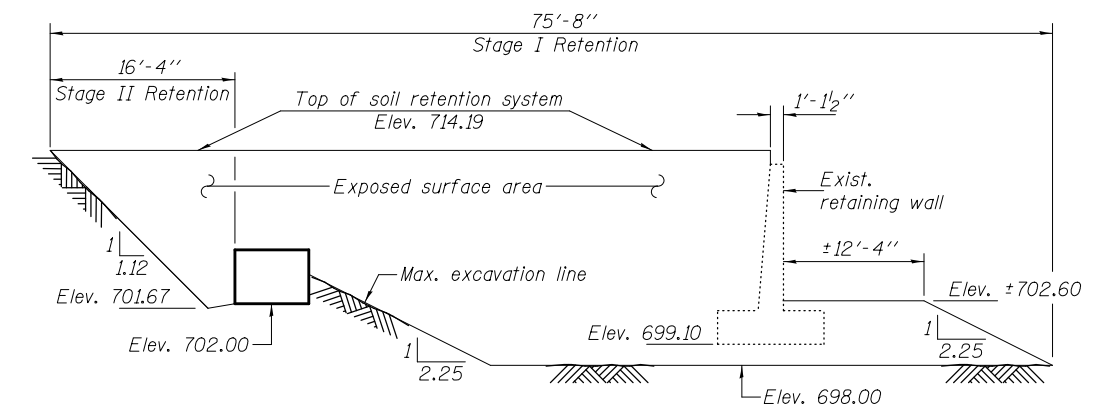
**STAGE II CONSTRUCTION**

Notes: All sections are looking east.  
Hatched area indicates removal of existing superstructure.  
For quantity of temporary concrete barrier, see Roadway Plans.



**TEMPORARY SOIL RETENTION SYSTEM AT EAST ABUTMENT**

Dimensions are taken along C.F.A.P. 301



**TEMPORARY SOIL RETENTION SYSTEM AT WEST ABUTMENT**

Dimensions are taken along C.F.A.P. 301

Note: A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

**PRE-FINAL**

DESIGNED - Nick R. Barnett
CHECKED - Al-Barræ R. Shebib
DRAWN - h.t. duong
CHECKED - NRB/GRA

EXAMINED	DATE -
PASSED	REVISED
	REVISED

DATE -
REVISED
REVISED

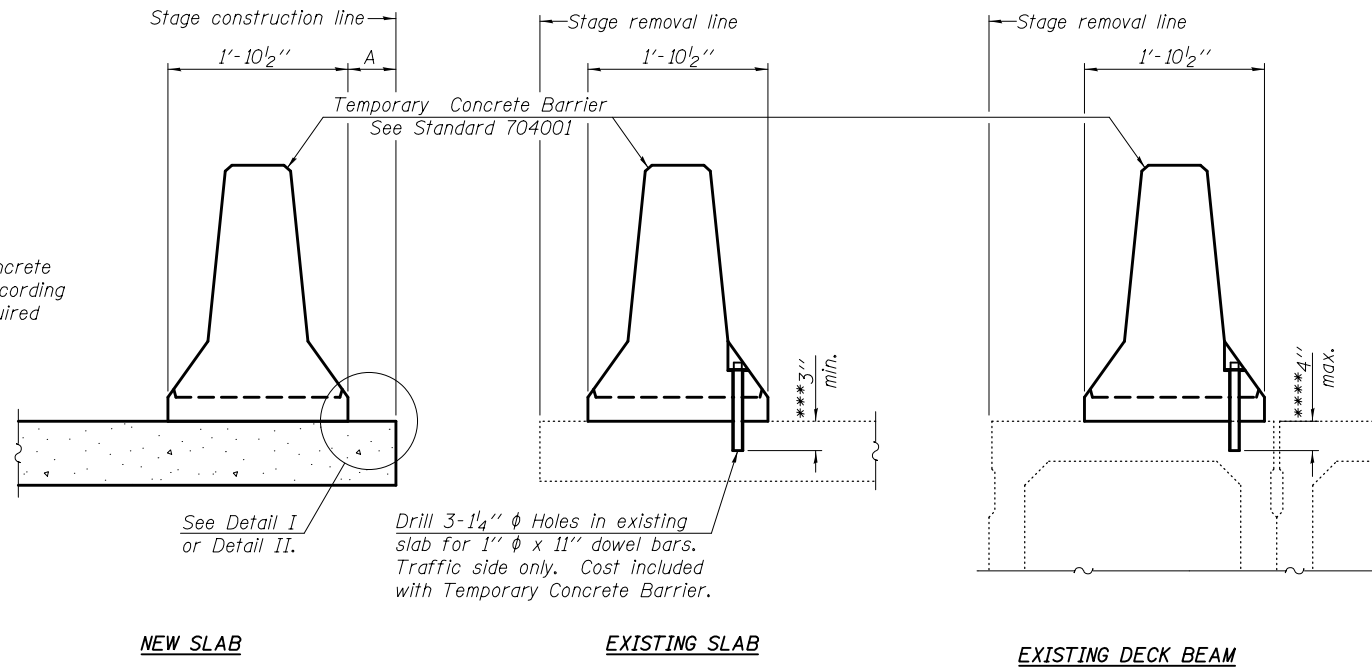
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION & TEMP. SOIL RETENTION SYSTEM DETAILS  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

SHEET NO. 3 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
				CONTRACT NO. 64D19
ILLINOIS FED. AID PROJECT				

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

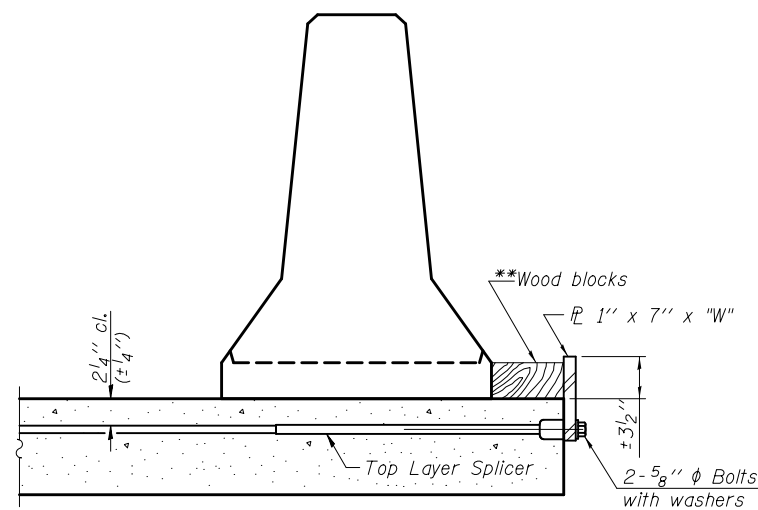
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

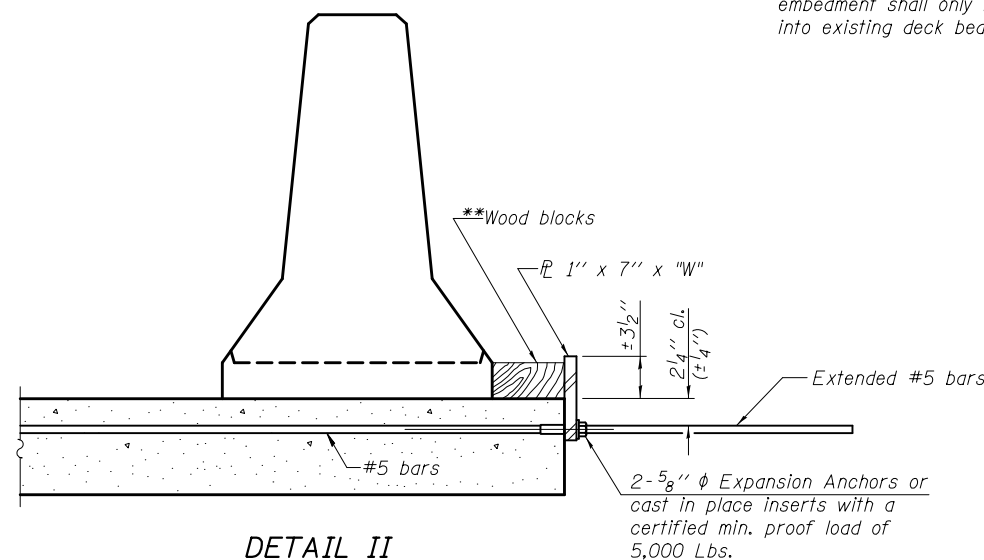
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

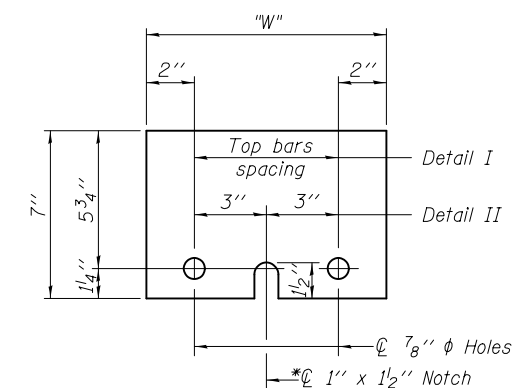
\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



**DETAIL I**



**DETAIL II**

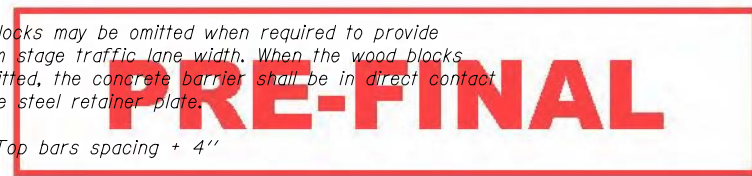


**STEEL RETAINER PL 1" x 7" x "W"**

\* Required only with Detail II

\*\* Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"



R-27

7-1-10

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Al-Barræ R. Shebb	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - h.t. duong	PASSED - <i>Carl [Signature]</i>	REVISED
CHECKED - NRB/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

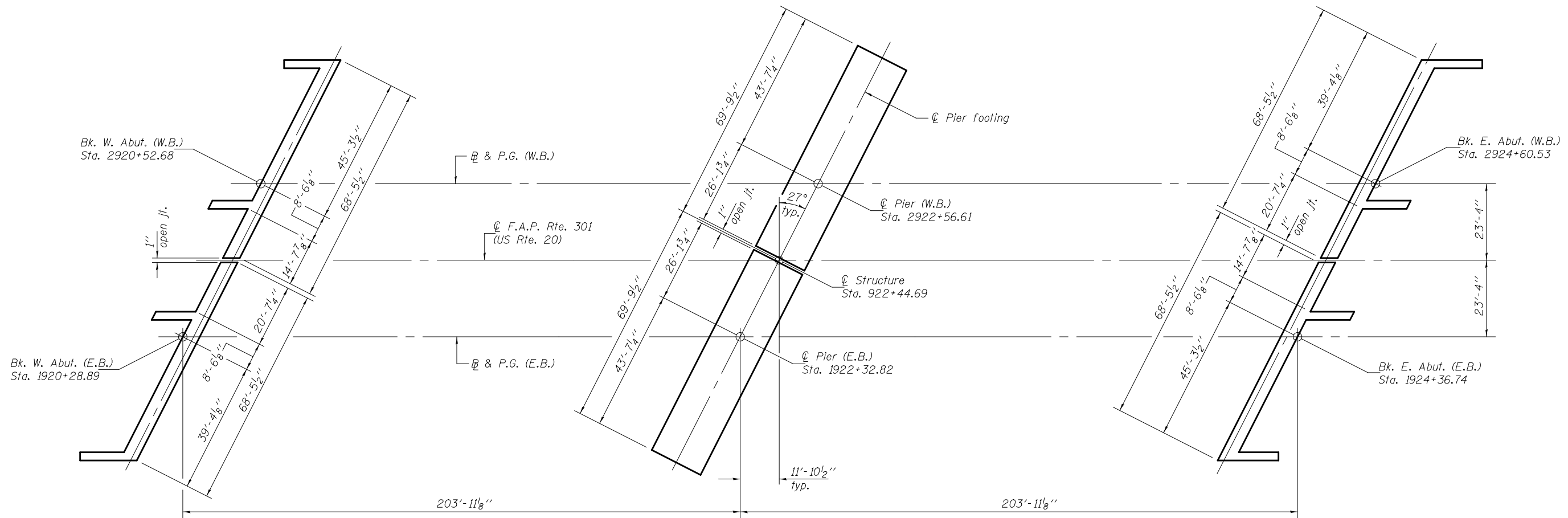
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)**

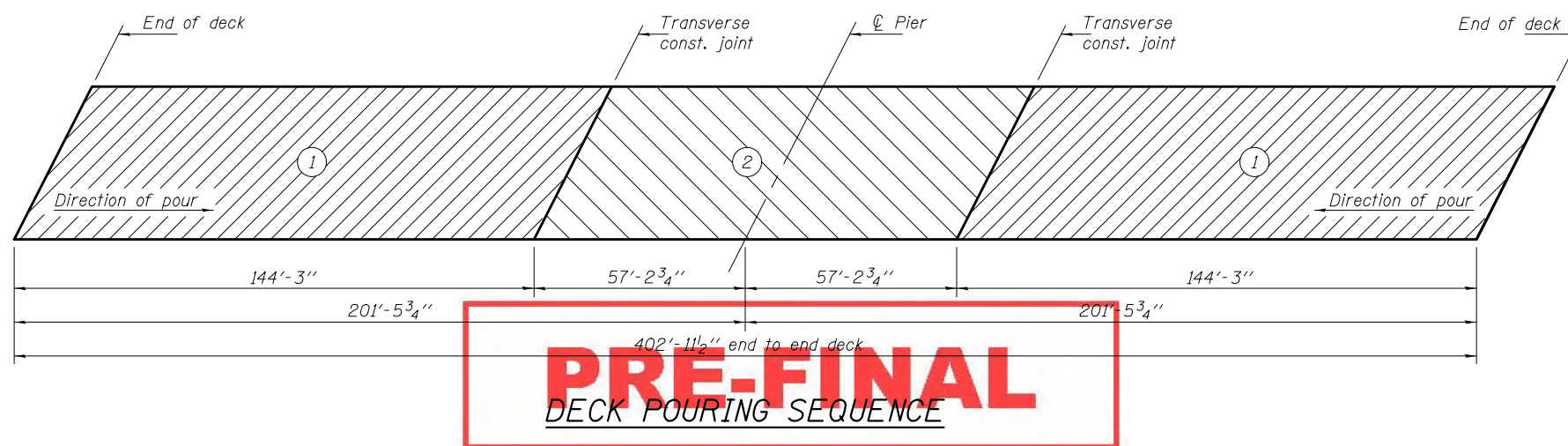
SHEET NO. 4 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
				CONTRACT NO. 64D19

ILLINOIS FED. AID PROJECT



**FOOTING LAYOUT**



DESIGNED - Nick R. Barnett  
 CHECKED - Al-Barræ R. Shebb  
 DRAWN - h.t. duong  
 CHECKED - NRB/GRA

EXAMINED - *Joanne F. [Signature]*  
 ACTING ENGINEER OF BRIDGE DESIGN  
 PASSED - *Carl [Signature]*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

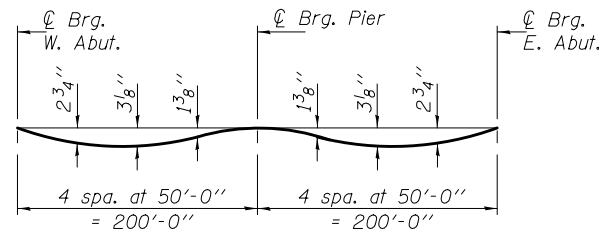
DATE - \_\_\_\_\_  
 REVISED \_\_\_\_\_  
 REVISED \_\_\_\_\_

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**FOOTING LAYOUT**  
**STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)**  
 SHEET NO. 5 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19			ILLINOIS FED. AID PROJECT	

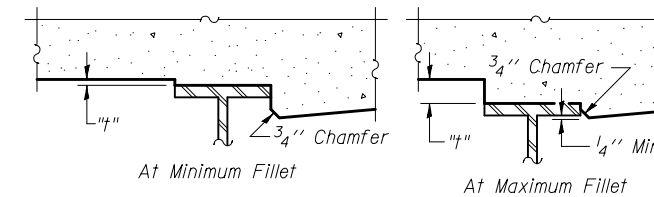




**DEAD LOAD DEFLECTION DIAGRAM**

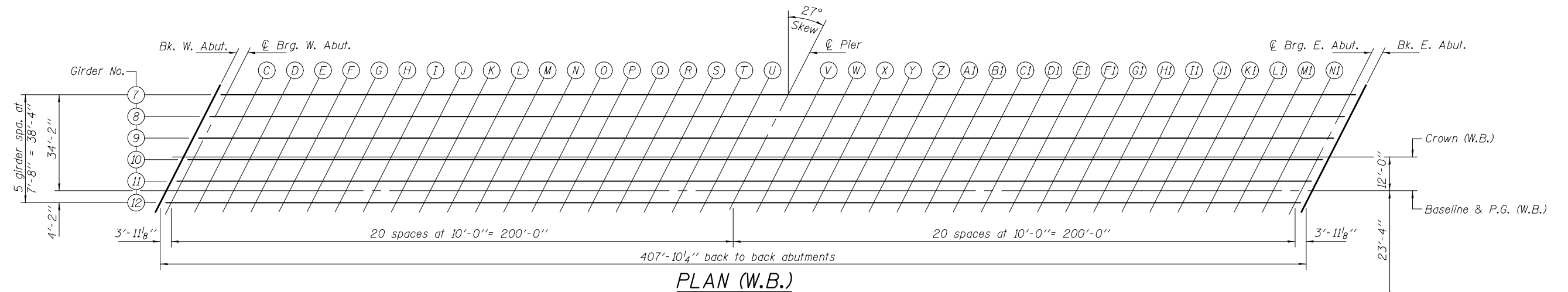
(Includes weight of concrete only.)

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 sheets 7 thru 12 of 55.

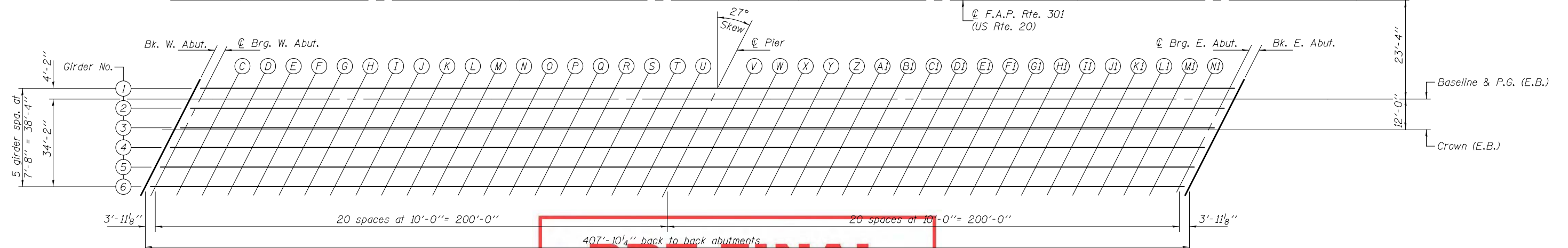


To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 7 thru 12 of 55, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**



**PLAN (W.B.)**



**PRE-FINAL**

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Al-Barræ R. Shebib	PASSED - <i>Carl [Signature]</i>	REVISED
DRAWN - h.t. duong	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - NRB/GRA		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

SHEET NO. 6 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				

ILLINOIS FED. AID PROJECT

**GIRDER 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192031.01	-4.17	714.10	714.10
☉ Brg. W. Abut.	192034.94	-4.17	714.07	714.07
C	192044.94	-4.17	714.01	714.05
D	192054.94	-4.17	713.94	714.03
E	192064.94	-4.17	713.88	714.01
F	192074.94	-4.17	713.81	713.99
G	192084.94	-4.17	713.75	713.97
H	192094.94	-4.17	713.68	713.92
I	192104.94	-4.17	713.62	713.86
J	192114.94	-4.17	713.55	713.80
K	192124.94	-4.17	713.49	713.74
L	192134.94	-4.17	713.42	713.68
M	192144.94	-4.17	713.36	713.59
N	192154.94	-4.17	713.29	713.49
O	192164.94	-4.17	713.23	713.40
P	192174.94	-4.17	713.16	713.30
Q	192184.94	-4.17	713.10	713.21
R	192194.94	-4.17	713.03	713.12
S	192204.94	-4.17	712.97	713.03
T	192214.94	-4.17	712.90	712.95
U	192224.94	-4.17	712.84	712.86
☉ Brg. Pier	192234.94	-4.17	712.77	712.77
V	192244.94	-4.17	712.71	712.73
W	192254.94	-4.17	712.64	712.69
X	192264.94	-4.17	712.58	712.64
Y	192274.94	-4.17	712.51	712.60
Z	192284.94	-4.17	712.45	712.56
A1	192294.94	-4.17	712.38	712.52
B1	192304.94	-4.17	712.32	712.49
C1	192314.94	-4.17	712.25	712.45
D1	192324.94	-4.17	712.19	712.42
E1	192334.94	-4.17	712.12	712.38
F1	192344.94	-4.17	712.06	712.31
G1	192354.94	-4.17	711.99	712.24
H1	192364.94	-4.17	711.93	712.17
I1	192374.94	-4.17	711.86	712.10
J1	192384.94	-4.17	711.80	712.02
K1	192394.94	-4.17	711.73	711.91
L1	192404.94	-4.17	711.67	711.80
M1	192414.94	-4.17	711.60	711.69
N1	192424.94	-4.17	711.54	711.58
☉ Brg. E. Abut.	192434.94	-4.17	711.47	711.47
Bk. E. Abut.	192438.87	-4.17	711.45	711.45

**BASELINE & PROFILE GRADE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192028.89	0.00	714.20	714.20
☉ Brg. W. Abut.	192032.82	0.00	714.17	714.17
C	192042.82	0.00	714.11	714.15
D	192052.82	0.00	714.04	714.13
E	192062.82	0.00	713.98	714.11
F	192072.82	0.00	713.91	714.09
G	192082.82	0.00	713.85	714.07
H	192092.82	0.00	713.78	714.02
I	192102.82	0.00	713.72	713.96
J	192112.82	0.00	713.65	713.90
K	192122.82	0.00	713.59	713.84
L	192132.82	0.00	713.52	713.78
M	192142.82	0.00	713.46	713.69
N	192152.82	0.00	713.39	713.59
O	192162.82	0.00	713.33	713.50
P	192172.82	0.00	713.26	713.40
Q	192182.82	0.00	713.20	713.31
R	192192.82	0.00	713.13	713.22
S	192202.82	0.00	713.07	713.13
T	192212.82	0.00	713.00	713.05
U	192222.82	0.00	712.94	712.96
☉ Brg. Pier	192232.82	0.00	712.87	712.87
V	192242.82	0.00	712.81	712.83
W	192252.82	0.00	712.74	712.79
X	192262.82	0.00	712.68	712.74
Y	192272.82	0.00	712.61	712.70
Z	192282.82	0.00	712.55	712.66
A1	192292.82	0.00	712.48	712.62
B1	192302.82	0.00	712.42	712.59
C1	192312.82	0.00	712.35	712.55
D1	192322.82	0.00	712.29	712.52
E1	192332.82	0.00	712.22	712.48
F1	192342.82	0.00	712.16	712.41
G1	192352.82	0.00	712.09	712.34
H1	192362.82	0.00	712.03	712.27
I1	192372.82	0.00	711.96	712.20
J1	192382.82	0.00	711.90	712.12
K1	192392.82	0.00	711.83	712.01
L1	192402.82	0.00	711.77	711.90
M1	192412.82	0.00	711.70	711.79
N1	192422.82	0.00	711.64	711.68
☉ Brg. E. Abut.	192432.82	0.00	711.57	711.57
Bk. E. Abut.	192436.74	0.00	711.55	711.55

**GIRDER 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192027.11	3.50	714.26	714.26
☉ Brg. W. Abut.	192031.03	3.50	714.24	714.24
C	192041.03	3.50	714.17	714.22
D	192051.03	3.50	714.11	714.20
E	192061.03	3.50	714.04	714.18
F	192071.03	3.50	713.98	714.16
G	192081.03	3.50	713.91	714.14
H	192091.03	3.50	713.85	714.08
I	192101.03	3.50	713.78	714.02
J	192111.03	3.50	713.72	713.97
K	192121.03	3.50	713.65	713.91
L	192131.03	3.50	713.59	713.85
M	192141.03	3.50	713.52	713.75
N	192151.03	3.50	713.46	713.66
O	192161.03	3.50	713.39	713.56
P	192171.03	3.50	713.33	713.47
Q	192181.03	3.50	713.26	713.37
R	192191.03	3.50	713.2	713.29
S	192201.03	3.50	713.13	713.20
T	192211.03	3.50	713.07	713.11
U	192221.03	3.50	713.00	713.02
☉ Brg. Pier	192231.03	3.50	712.94	712.94
V	192241.03	3.50	712.87	712.90
W	192251.03	3.50	712.81	712.85
X	192261.03	3.50	712.74	712.81
Y	192271.03	3.50	712.68	712.77
Z	192281.03	3.50	712.61	712.72
A1	192291.03	3.50	712.55	712.69
B1	192301.03	3.50	712.48	712.65
C1	192311.03	3.50	712.42	712.62
D1	192321.03	3.50	712.35	712.58
E1	192331.03	3.50	712.29	712.55
F1	192341.03	3.50	712.22	712.48
G1	192351.03	3.50	712.16	712.41
H1	192361.03	3.50	712.09	712.33
I1	192371.03	3.50	712.03	712.26
J1	192381.03	3.50	711.96	712.19
K1	192391.03	3.50	711.90	712.08
L1	192401.03	3.50	711.83	711.97
M1	192411.03	3.50	711.77	711.86
N1	192421.03	3.50	711.70	711.75
☉ Brg. E. Abut.	192431.03	3.50	711.64	711.64
Bk. E. Abut.	192434.96	3.50	711.61	711.61

**PRE-FINAL**

**GIRDER 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192023.2	11.17	714.41	714.41
☉ Brg. W. Abut.	192027.13	11.17	714.38	714.38
C	192037.13	11.17	714.32	714.36
D	192047.13	11.17	714.25	714.34
E	192057.13	11.17	714.19	714.32
F	192067.13	11.17	714.12	714.30
G	192077.13	11.17	714.06	714.29
H	192087.13	11.17	713.99	714.23
I	192097.13	11.17	713.93	714.17
J	192107.13	11.17	713.86	714.11
K	192117.13	11.17	713.80	714.05
L	192127.13	11.17	713.73	713.99
M	192137.13	11.17	713.67	713.90
N	192147.13	11.17	713.60	713.80
O	192157.13	11.17	713.54	713.71
P	192167.13	11.17	713.47	713.61
Q	192177.13	11.17	713.41	713.52
R	192187.13	11.17	713.34	713.43
S	192197.13	11.17	713.28	713.34
T	192207.13	11.17	713.21	713.26
U	192217.13	11.17	713.15	713.17
☉ Brg. Pier	192227.13	11.17	713.08	713.08
V	192237.13	11.17	713.02	713.04
W	192247.13	11.17	712.95	713.00
X	192257.13	11.17	712.89	712.95
Y	192267.13	11.17	712.82	712.91
Z	192277.13	11.17	712.76	712.87
A1	192287.13	11.17	712.69	712.83
B1	192297.13	11.17	712.63	712.80
C1	192307.13	11.17	712.56	712.76
D1	192317.13	11.17	712.50	712.73
E1	192327.13	11.17	712.43	712.69
F1	192337.13	11.17	712.37	712.62
G1	192347.13	11.17	712.30	712.55
H1	192357.13	11.17	712.24	712.48
I1	192367.13	11.17	712.17	712.41
J1	192377.13	11.17	712.11	712.34
K1	192387.13	11.17	712.04	712.22
L1	192397.13	11.17	711.98	712.11
M1	192407.13	11.17	711.91	712.00
N1	192417.13	11.17	711.85	711.89
☉ Brg. E. Abut.	192427.13	11.17	711.78	711.78
Bk. E. Abut.	192431.05	11.17	711.76	711.76

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192022.78	12.00	714.42	714.42
☉ Brg. W. Abut.	192026.70	12.00	714.40	714.40
C	192036.70	12.00	714.33	714.38
D	192046.70	12.00	714.27	714.36
E	192056.70	12.00	714.20	714.34
F	192066.70	12.00	714.14	714.32
G	192076.70	12.00	714.07	714.30
H	192086.70	12.00	714.01	714.24
I	192096.70	12.00	713.94	714.18
J	192106.70	12.00	713.88	714.13
K	192116.70	12.00	713.81	714.07
L	192126.70	12.00	713.75	714.01
M	192136.70	12.00	713.68	713.91
N	192146.70	12.00	713.62	713.82
O	192156.70	12.00	713.55	713.72
P	192166.70	12.00	713.49	713.63
Q	192176.70	12.00	713.42	713.53
R	192186.70	12.00	713.36	713.45
S	192196.70	12.00	713.29	713.36
T	192206.70	12.00	713.23	713.27
U	192216.70	12.00	713.16	713.19
☉ Brg. Pier	192226.70	12.00	713.10	713.10
V	192236.70	12.00	713.03	713.06
W	192246.70	12.00	712.97	713.01
X	192256.70	12.00	712.90	712.97
Y	192266.70	12.00	712.84	712.93
Z	192276.70	12.00	712.77	712.88
A1	192286.70	12.00	712.71	712.85
B1	192296.70	12.00	712.64	712.81
C1	192306.70	12.00	712.58	712.78
D1	192316.70	12.00	712.51	712.74
E1	192326.70	12.00	712.45	712.71
F1	192336.70	12.00	712.38	712.64
G1	192346.70	12.00	712.32	712.57
H1	192356.70	12.00	712.25	712.49
I1	192366.70	12.00	712.19	712.42
J1	192376.70	12.00	712.12	712.35
K1	192386.70	12.00	712.06	712.24
L1	192396.70	12.00	711.99	712.13
M1	192406.70	12.00	711.93	712.02
N1	192416.70	12.00	711.86	711.91
☉ Brg. E. Abut.	192426.70	12.00	711.80	711.80
Bk. E. Abut.	192430.63	12.00	711.77	711.77

**GIRDER 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192019.29	18.83	714.34	714.34
☉ Brg. W. Abut.	192023.22	18.83	714.31	714.31
C	192033.22	18.83	714.25	714.30
D	192043.22	18.83	714.18	714.28
E	192053.22	18.83	714.12	714.26
F	192063.22	18.83	714.05	714.24
G	192073.22	18.83	713.99	714.22
H	192083.22	18.83	713.92	714.16
I	192093.22	18.83	713.86	714.10
J	192103.22	18.83	713.79	714.04
K	192113.22	18.83	713.73	713.98
L	192123.22	18.83	713.66	713.93
M	192133.22	18.83	713.60	713.83
N	192143.22	18.83	713.53	713.74
O	192153.22	18.83	713.47	713.64
P	192163.22	18.83	713.40	713.54
Q	192173.22	18.83	713.34	713.45
R	192183.22	18.83	713.27	713.36
S	192193.22	18.83	713.21	713.28
T	192203.22	18.83	713.14	713.19
U	192213.22	18.83	713.08	713.10
☉ Brg. Pier	192223.22	18.83	713.01	713.01
V	192233.22	18.83	712.95	712.97
W	192243.22	18.83	712.88	712.93
X	192253.22	18.83	712.82	712.89
Y	192263.22	18.83	712.75	712.84
Z	192273.22	18.83	712.69	712.80
A1	192283.22	18.83	712.62	712.77
B1	192293.22	18.83	712.56	712.73
C1	192303.22	18.83	712.49	712.70
D1	192313.22	18.83	712.43	712.66
E1	192323.22	18.83	712.36	712.63
F1	192333.22	18.83	712.30	712.55
G1	192343.22	18.83	712.23	712.48
H1	192353.22	18.83	712.17	712.41
I1	192363.22	18.83	712.10	712.34
J1	192373.22	18.83	712.04	712.27
K1	192383.22	18.83	711.97	712.16
L1	192393.22	18.83	711.91	712.05
M1	192403.22	18.83	711.84	711.94
N1	192413.22	18.83	711.78	711.83
☉ Brg. E. Abut.	192423.22	18.83	711.71	711.71
Bk. E. Abut.	192427.15	18.83	711.69	711.69

**PRE-FINAL**

**GIRDER 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192015.39	26.50	714.23	714.23
⊕ Brg. W. Abut.	192019.31	26.50	714.21	714.21
C	192029.31	26.50	714.14	714.19
D	192039.31	26.50	714.08	714.17
E	192049.31	26.50	714.01	714.15
F	192059.31	26.50	713.95	714.13
G	192069.31	26.50	713.88	714.11
H	192079.31	26.50	713.82	714.05
I	192089.31	26.50	713.75	713.99
J	192099.31	26.50	713.69	713.93
K	192109.31	26.50	713.62	713.88
L	192119.31	26.50	713.56	713.82
M	192129.31	26.50	713.49	713.72
N	192139.31	26.50	713.43	713.63
O	192149.31	26.50	713.36	713.53
P	192159.31	26.50	713.30	713.44
Q	192169.31	26.50	713.23	713.34
R	192179.31	26.50	713.17	713.26
S	192189.31	26.50	713.10	713.17
T	192199.31	26.50	713.04	713.08
U	192209.31	26.50	712.97	712.99
⊕ Brg. Pier	192219.31	26.50	712.91	712.91
V	192229.31	26.50	712.84	712.86
W	192239.31	26.50	712.78	712.82
X	192249.31	26.50	712.71	712.78
Y	192259.31	26.50	712.65	712.74
Z	192269.31	26.50	712.58	712.69
A1	192279.31	26.50	712.52	712.66
B1	192289.31	26.50	712.45	712.62
C1	192299.31	26.50	712.39	712.59
D1	192309.31	26.50	712.32	712.55
E1	192319.31	26.50	712.26	712.52
F1	192329.31	26.50	712.19	712.45
G1	192339.31	26.50	712.13	712.37
H1	192349.31	26.50	712.06	712.30
I1	192359.31	26.50	712.00	712.23
J1	192369.31	26.50	711.93	712.16
K1	192379.31	26.50	711.87	712.05
L1	192389.31	26.50	711.80	711.94
M1	192399.31	26.50	711.74	711.83
N1	192409.31	26.50	711.67	711.72
⊕ Brg. E. Abut.	192419.31	26.50	711.61	711.61
Bk. E. Abut.	192423.24	26.50	711.58	711.58

**GIRDER 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192011.48	34.17	714.10	714.10
⊕ Brg. W. Abut.	192015.41	34.17	714.07	714.07
C	192025.41	34.17	714.01	714.05
D	192035.41	34.17	713.94	714.03
E	192045.41	34.17	713.88	714.01
F	192055.41	34.17	713.81	714.00
G	192065.41	34.17	713.75	713.98
H	192075.41	34.17	713.68	713.92
I	192085.41	34.17	713.62	713.86
J	192095.41	34.17	713.55	713.80
K	192105.41	34.17	713.49	713.74
L	192115.41	34.17	713.42	713.68
M	192125.41	34.17	713.36	713.59
N	192135.41	34.17	713.29	713.49
O	192145.41	34.17	713.23	713.40
P	192155.41	34.17	713.16	713.30
Q	192165.41	34.17	713.10	713.21
R	192175.41	34.17	713.03	713.12
S	192185.41	34.17	712.97	713.03
T	192195.41	34.17	712.90	712.95
U	192205.41	34.17	712.84	712.86
⊕ Brg. Pier	192215.41	34.17	712.77	712.77
V	192225.41	34.17	712.71	712.73
W	192235.41	34.17	712.64	712.69
X	192245.41	34.17	712.58	712.64
Y	192255.41	34.17	712.51	712.60
Z	192265.41	34.17	712.45	712.56
A1	192275.41	34.17	712.38	712.52
B1	192285.41	34.17	712.32	712.49
C1	192295.41	34.17	712.25	712.45
D1	192305.41	34.17	712.19	712.42
E1	192315.41	34.17	712.12	712.38
F1	192325.41	34.17	712.06	712.31
G1	192335.41	34.17	711.99	712.24
H1	192345.41	34.17	711.93	712.17
I1	192355.41	34.17	711.86	712.10
J1	192365.41	34.17	711.80	712.03
K1	192375.41	34.17	711.73	711.92
L1	192385.41	34.17	711.67	711.80
M1	192395.41	34.17	711.60	711.69
N1	192405.41	34.17	711.54	711.58
⊕ Brg. E. Abut.	192415.41	34.17	711.47	711.47
Bk. E. Abut.	192419.34	34.17	711.45	711.45

**PRE-FINAL**



**GIRDER 7**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292070.09	-34.17	713.72	713.72
☉ Brg. W. Abut.	292074.02	-34.17	713.69	713.69
C	292084.02	-34.17	713.63	713.67
D	292094.02	-34.17	713.56	713.65
E	292104.02	-34.17	713.50	713.63
F	292114.02	-34.17	713.43	713.61
G	292124.02	-34.17	713.37	713.59
H	292134.02	-34.17	713.30	713.54
I	292144.02	-34.17	713.24	713.48
J	292154.02	-34.17	713.17	713.42
K	292164.02	-34.17	713.11	713.36
L	292174.02	-34.17	713.04	713.30
M	292184.02	-34.17	712.98	713.21
N	292194.02	-34.17	712.91	713.11
O	292204.02	-34.17	712.85	713.02
P	292214.02	-34.17	712.78	712.92
Q	292224.02	-34.17	712.72	712.83
R	292234.02	-34.17	712.65	712.74
S	292244.02	-34.17	712.59	712.65
T	292254.02	-34.17	712.52	712.57
U	292264.02	-34.17	712.46	712.48
☉ Brg. Pier	292274.02	-34.17	712.39	712.39
V	292284.02	-34.17	712.33	712.35
W	292294.02	-34.17	712.26	712.31
X	292304.02	-34.17	712.20	712.26
Y	292314.02	-34.17	712.13	712.22
Z	292324.02	-34.17	712.07	712.18
A1	292334.02	-34.17	712.00	712.14
B1	292344.02	-34.17	711.94	712.11
C1	292354.02	-34.17	711.87	712.07
D1	292364.02	-34.17	711.81	712.04
E1	292374.02	-34.17	711.74	712.00
F1	292384.02	-34.17	711.68	711.93
G1	292394.02	-34.17	711.61	711.86
H1	292404.02	-34.17	711.55	711.79
I1	292414.02	-34.17	711.48	711.72
J1	292424.02	-34.17	711.42	711.64
K1	292434.02	-34.17	711.35	711.53
L1	292444.02	-34.17	711.29	711.42
M1	292454.02	-34.17	711.22	711.31
N1	292464.02	-34.17	711.16	711.20
☉ Brg. E. Abut.	292474.02	-34.17	711.09	711.09
Bk. E. Abut.	292477.94	-34.17	711.07	711.07

**GIRDER 8**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292066.18	-26.50	713.90	713.90
☉ Brg. W. Abut.	292070.11	-26.50	713.88	713.88
C	292080.11	-26.50	713.81	713.86
D	292090.11	-26.50	713.75	713.84
E	292100.11	-26.50	713.68	713.82
F	292110.11	-26.50	713.62	713.8
G	292120.11	-26.50	713.55	713.78
H	292130.11	-26.50	713.49	713.72
I	292140.11	-26.50	713.42	713.66
J	292150.11	-26.50	713.36	713.60
K	292160.11	-26.50	713.29	713.55
L	292170.11	-26.50	713.23	713.49
M	292180.11	-26.50	713.16	713.39
N	292190.11	-26.50	713.10	713.3
O	292200.11	-26.50	713.03	713.20
P	292210.11	-26.50	712.97	713.11
Q	292220.11	-26.50	712.90	713.01
R	292230.11	-26.50	712.84	712.92
S	292240.11	-26.50	712.77	712.84
T	292250.11	-26.50	712.71	712.75
U	292260.11	-26.50	712.64	712.66
☉ Brg. Pier	292270.11	-26.50	712.58	712.58
V	292280.11	-26.50	712.51	712.53
W	292290.11	-26.50	712.45	712.49
X	292300.11	-26.50	712.38	712.45
Y	292310.11	-26.50	712.32	712.41
Z	292320.11	-26.50	712.25	712.36
A1	292330.11	-26.50	712.19	712.33
B1	292340.11	-26.50	712.12	712.29
C1	292350.11	-26.50	712.06	712.26
D1	292360.11	-26.50	711.99	712.22
E1	292370.11	-26.50	711.93	712.19
F1	292380.11	-26.50	711.86	712.12
G1	292390.11	-26.50	711.80	712.04
H1	292400.11	-26.50	711.73	711.97
I1	292410.11	-26.50	711.67	711.90
J1	292420.11	-26.50	711.60	711.83
K1	292430.11	-26.50	711.54	711.72
L1	292440.11	-26.50	711.47	711.61
M1	292450.11	-26.50	711.41	711.50
N1	292460.11	-26.50	711.34	711.39
☉ Brg. E. Abut.	292470.11	-26.50	711.28	711.28
Bk. E. Abut.	292474.04	-26.50	711.25	711.25

**GIRDER 9**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292062.28	-18.83	714.06	714.06
☉ Brg. W. Abut.	292066.20	-18.83	714.04	714.04
C	292076.20	-18.83	713.97	714.02
D	292086.20	-18.83	713.91	714.00
E	292096.20	-18.83	713.84	713.98
F	292106.20	-18.83	713.78	713.96
G	292116.20	-18.83	713.71	713.94
H	292126.20	-18.83	713.65	713.88
I	292136.20	-18.83	713.58	713.82
J	292146.20	-18.83	713.52	713.76
K	292156.20	-18.83	713.45	713.70
L	292166.20	-18.83	713.39	713.65
M	292176.20	-18.83	713.32	713.55
N	292186.20	-18.83	713.26	713.46
O	292196.20	-18.83	713.19	713.36
P	292206.20	-18.83	713.13	713.27
Q	292216.20	-18.83	713.06	713.17
R	292226.20	-18.83	713.00	713.08
S	292236.20	-18.83	712.93	713.00
T	292246.20	-18.83	712.87	712.91
U	292256.20	-18.83	712.80	712.82
☉ Brg. Pier	292266.20	-18.83	712.74	712.74
V	292276.20	-18.83	712.67	712.69
W	292286.20	-18.83	712.61	712.65
X	292296.20	-18.83	712.54	712.61
Y	292306.20	-18.83	712.48	712.56
Z	292316.20	-18.83	712.41	712.52
A1	292326.20	-18.83	712.35	712.49
B1	292336.20	-18.83	712.28	712.45
C1	292346.20	-18.83	712.22	712.42
D1	292356.20	-18.83	712.15	712.38
E1	292366.20	-18.83	712.09	712.35
F1	292376.20	-18.83	712.02	712.27
G1	292386.20	-18.83	711.96	712.20
H1	292396.20	-18.83	711.89	712.13
I1	292406.20	-18.83	711.83	712.06
J1	292416.20	-18.83	711.76	711.99
K1	292426.20	-18.83	711.70	711.88
L1	292436.20	-18.83	711.63	711.77
M1	292446.20	-18.83	711.57	711.66
N1	292456.20	-18.83	711.5	711.55
☉ Brg. E. Abut.	292466.20	-18.83	711.44	711.44
Bk. E. Abut.	292470.13	-18.83	711.41	711.41

**PRE-FINAL**

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292058.79	-12.00	714.19	714.19
☉ Brg. W. Abut.	292062.72	-12.00	714.16	714.16
C	292072.72	-12.00	714.10	714.15
D	292082.72	-12.00	714.03	714.13
E	292092.72	-12.00	713.97	714.11
F	292102.72	-12.00	713.90	714.09
G	292112.72	-12.00	713.84	714.07
H	292122.72	-12.00	713.77	714.01
I	292132.72	-12.00	713.71	713.95
J	292142.72	-12.00	713.64	713.89
K	292152.72	-12.00	713.58	713.83
L	292162.72	-12.00	713.51	713.78
M	292172.72	-12.00	713.45	713.68
N	292182.72	-12.00	713.38	713.58
O	292192.72	-12.00	713.32	713.49
P	292202.72	-12.00	713.25	713.39
Q	292212.72	-12.00	713.19	713.30
R	292222.72	-12.00	713.12	713.21
S	292232.72	-12.00	713.06	713.13
T	292242.72	-12.00	712.99	713.04
U	292252.72	-12.00	712.93	712.95
☉ Brg. Pier	292262.72	-12.00	712.86	712.86
V	292272.72	-12.00	712.80	712.82
W	292282.72	-12.00	712.73	712.78
X	292292.72	-12.00	712.67	712.74
Y	292302.72	-12.00	712.60	712.69
Z	292312.72	-12.00	712.54	712.65
A1	292322.72	-12.00	712.47	712.61
B1	292332.72	-12.00	712.41	712.58
C1	292342.72	-12.00	712.34	712.55
D1	292352.72	-12.00	712.28	712.51
E1	292362.72	-12.00	712.21	712.48
F1	292372.72	-12.00	712.15	712.40
G1	292382.72	-12.00	712.08	712.33
H1	292392.72	-12.00	712.02	712.26
I1	292402.72	-12.00	711.95	712.19
J1	292412.72	-12.00	711.89	712.12
K1	292422.72	-12.00	711.82	712.01
L1	292432.72	-12.00	711.76	711.90
M1	292442.72	-12.00	711.69	711.79
N1	292452.72	-12.00	711.63	711.68
☉ Brg. E. Abut.	292462.72	-12.00	711.56	711.56
Bk. E. Abut.	292466.65	-12.00	711.54	711.54

**GIRDER 10**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292058.37	-11.17	714.18	714.18
☉ Brg. W. Abut.	292062.30	-11.17	714.15	714.15
C	292072.30	-11.17	714.09	714.13
D	292082.30	-11.17	714.02	714.12
E	292092.30	-11.17	713.96	714.10
F	292102.30	-11.17	713.89	714.08
G	292112.30	-11.17	713.83	714.06
H	292122.30	-11.17	713.76	714.00
I	292132.30	-11.17	713.70	713.94
J	292142.30	-11.17	713.63	713.88
K	292152.30	-11.17	713.57	713.82
L	292162.30	-11.17	713.50	713.77
M	292172.30	-11.17	713.44	713.67
N	292182.30	-11.17	713.37	713.57
O	292192.30	-11.17	713.31	713.48
P	292202.30	-11.17	713.24	713.38
Q	292212.30	-11.17	713.18	713.29
R	292222.30	-11.17	713.11	713.20
S	292232.30	-11.17	713.05	713.12
T	292242.30	-11.17	712.98	713.03
U	292252.30	-11.17	712.92	712.94
☉ Brg. Pier	292262.30	-11.17	712.85	712.85
V	292272.30	-11.17	712.79	712.81
W	292282.30	-11.17	712.72	712.77
X	292292.30	-11.17	712.66	712.73
Y	292302.30	-11.17	712.59	712.68
Z	292312.30	-11.17	712.53	712.64
A1	292322.30	-11.17	712.46	712.60
B1	292332.30	-11.17	712.40	712.57
C1	292342.30	-11.17	712.33	712.53
D1	292352.30	-11.17	712.27	712.50
E1	292362.30	-11.17	712.20	712.47
F1	292372.30	-11.17	712.14	712.39
G1	292382.30	-11.17	712.07	712.32
H1	292392.30	-11.17	712.01	712.25
I1	292402.30	-11.17	711.94	712.18
J1	292412.30	-11.17	711.88	712.11
K1	292422.30	-11.17	711.81	712.00
L1	292432.30	-11.17	711.75	711.89
M1	292442.30	-11.17	711.68	711.78
N1	292452.30	-11.17	711.62	711.66
☉ Brg. E. Abut.	292462.30	-11.17	711.55	711.55
Bk. E. Abut.	292466.22	-11.17	711.53	711.53

**GIRDER 11**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292054.46	-3.50	714.09	714.09
☉ Brg. W. Abut.	292058.39	-3.50	714.06	714.06
C	292068.39	-3.50	714.00	714.04
D	292078.39	-3.50	713.93	714.02
E	292088.39	-3.50	713.87	714.00
F	292098.39	-3.50	713.80	713.98
G	292108.39	-3.50	713.74	713.96
H	292118.39	-3.50	713.67	713.90
I	292128.39	-3.50	713.61	713.85
J	292138.39	-3.50	713.54	713.79
K	292148.39	-3.50	713.48	713.73
L	292158.39	-3.50	713.41	713.67
M	292168.39	-3.50	713.35	713.58
N	292178.39	-3.50	713.28	713.48
O	292188.39	-3.50	713.22	713.39
P	292198.39	-3.50	713.15	713.29
Q	292208.39	-3.50	713.09	713.19
R	292218.39	-3.50	713.02	713.11
S	292228.39	-3.50	712.96	713.02
T	292238.39	-3.50	712.89	712.93
U	292248.39	-3.50	712.83	712.85
☉ Brg. Pier	292258.39	-3.50	712.76	712.76
V	292268.39	-3.50	712.70	712.72
W	292278.39	-3.50	712.63	712.67
X	292288.39	-3.50	712.57	712.63
Y	292298.39	-3.50	712.50	712.59
Z	292308.39	-3.50	712.44	712.55
A1	292318.39	-3.50	712.37	712.51
B1	292328.39	-3.50	712.31	712.48
C1	292338.39	-3.50	712.24	712.44
D1	292348.39	-3.50	712.18	712.41
E1	292358.39	-3.50	712.11	712.37
F1	292368.39	-3.50	712.05	712.30
G1	292378.39	-3.50	711.98	712.23
H1	292388.39	-3.50	711.92	712.16
I1	292398.39	-3.50	711.85	712.08
J1	292408.39	-3.50	711.79	712.01
K1	292418.39	-3.50	711.72	711.90
L1	292428.39	-3.50	711.66	711.79
M1	292438.39	-3.50	711.59	711.68
N1	292448.39	-3.50	711.53	711.57
☉ Brg. E. Abut.	292458.39	-3.50	711.46	711.46
Bk. E. Abut.	292462.32	-3.50	711.43	711.43

**PRE-FINAL**

**BASELINE & PROFILE GRADE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292052.68	0.00	714.04	714.04
⊕ Brg. W. Abut.	292056.61	0.00	714.02	714.02
C	292066.61	0.00	713.95	714.00
D	292076.61	0.00	713.89	713.98
E	292086.61	0.00	713.82	713.96
F	292096.61	0.00	713.76	713.94
G	292106.61	0.00	713.69	713.92
H	292116.61	0.00	713.63	713.86
I	292126.61	0.00	713.56	713.80
J	292136.61	0.00	713.50	713.74
K	292146.61	0.00	713.43	713.69
L	292156.61	0.00	713.37	713.63
M	292166.61	0.00	713.3	713.53
N	292176.61	0.00	713.24	713.44
O	292186.61	0.00	713.17	713.34
P	292196.61	0.00	713.11	713.25
Q	292206.61	0.00	713.04	713.15
R	292216.61	0.00	712.98	713.06
S	292226.61	0.00	712.91	712.98
T	292236.61	0.00	712.85	712.89
U	292246.61	0.00	712.78	712.80
⊕ Brg. Pier	292256.61	0.00	712.72	712.72
V	292266.61	0.00	712.65	712.67
W	292276.61	0.00	712.59	712.63
X	292286.61	0.00	712.52	712.59
Y	292296.61	0.00	712.46	712.55
Z	292306.61	0.00	712.39	712.50
A1	292316.61	0.00	712.33	712.47
B1	292326.61	0.00	712.26	712.43
C1	292336.61	0.00	712.20	712.40
D1	292346.61	0.00	712.13	712.36
E1	292356.61	0.00	712.07	712.33
F1	292366.61	0.00	712.00	712.26
G1	292376.61	0.00	711.94	712.18
H1	292386.61	0.00	711.87	712.11
I1	292396.61	0.00	711.81	712.04
J1	292406.61	0.00	711.74	711.97
K1	292416.61	0.00	711.68	711.86
L1	292426.61	0.00	711.61	711.75
M1	292436.61	0.00	711.55	711.64
N1	292446.61	0.00	711.48	711.53
⊕ Brg. E. Abut.	292456.61	0.00	711.42	711.42
Bk. E. Abut.	292460.53	0.00	711.39	711.39

**GIRDER 12**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292050.56	4.17	713.97	713.97
⊕ Brg. W. Abut.	292054.48	4.17	713.94	713.94
C	292064.48	4.17	713.88	713.92
D	292074.48	4.17	713.81	713.91
E	292084.48	4.17	713.75	713.89
F	292094.48	4.17	713.68	713.87
G	292104.48	4.17	713.62	713.85
H	292114.48	4.17	713.55	713.79
I	292124.48	4.17	713.49	713.73
J	292134.48	4.17	713.42	713.67
K	292144.48	4.17	713.36	713.61
L	292154.48	4.17	713.29	713.56
M	292164.48	4.17	713.23	713.46
N	292174.48	4.17	713.16	713.36
O	292184.48	4.17	713.10	713.27
P	292194.48	4.17	713.03	713.17
Q	292204.48	4.17	712.97	713.08
R	292214.48	4.17	712.90	712.99
S	292224.48	4.17	712.84	712.90
T	292234.48	4.17	712.77	712.82
U	292244.48	4.17	712.71	712.73
⊕ Brg. Pier	292254.48	4.17	712.64	712.64
V	292264.48	4.17	712.58	712.60
W	292274.48	4.17	712.51	712.56
X	292284.48	4.17	712.45	712.52
Y	292294.48	4.17	712.38	712.47
Z	292304.48	4.17	712.32	712.43
A1	292314.48	4.17	712.25	712.39
B1	292324.48	4.17	712.19	712.36
C1	292334.48	4.17	712.12	712.32
D1	292344.48	4.17	712.06	712.29
E1	292354.48	4.17	711.99	712.26
F1	292364.48	4.17	711.93	712.18
G1	292374.48	4.17	711.86	712.11
H1	292384.48	4.17	711.80	712.04
I1	292394.48	4.17	711.73	711.97
J1	292404.48	4.17	711.67	711.90
K1	292414.48	4.17	711.60	711.79
L1	292424.48	4.17	711.54	711.68
M1	292434.48	4.17	711.47	711.57
N1	292444.48	4.17	711.41	711.45
⊕ Brg. E. Abut.	292454.48	4.17	711.34	711.34
Bk. E. Abut.	292458.41	4.17	711.32	711.32

**PRE-FINAL**

**NORTH CURB LINE**

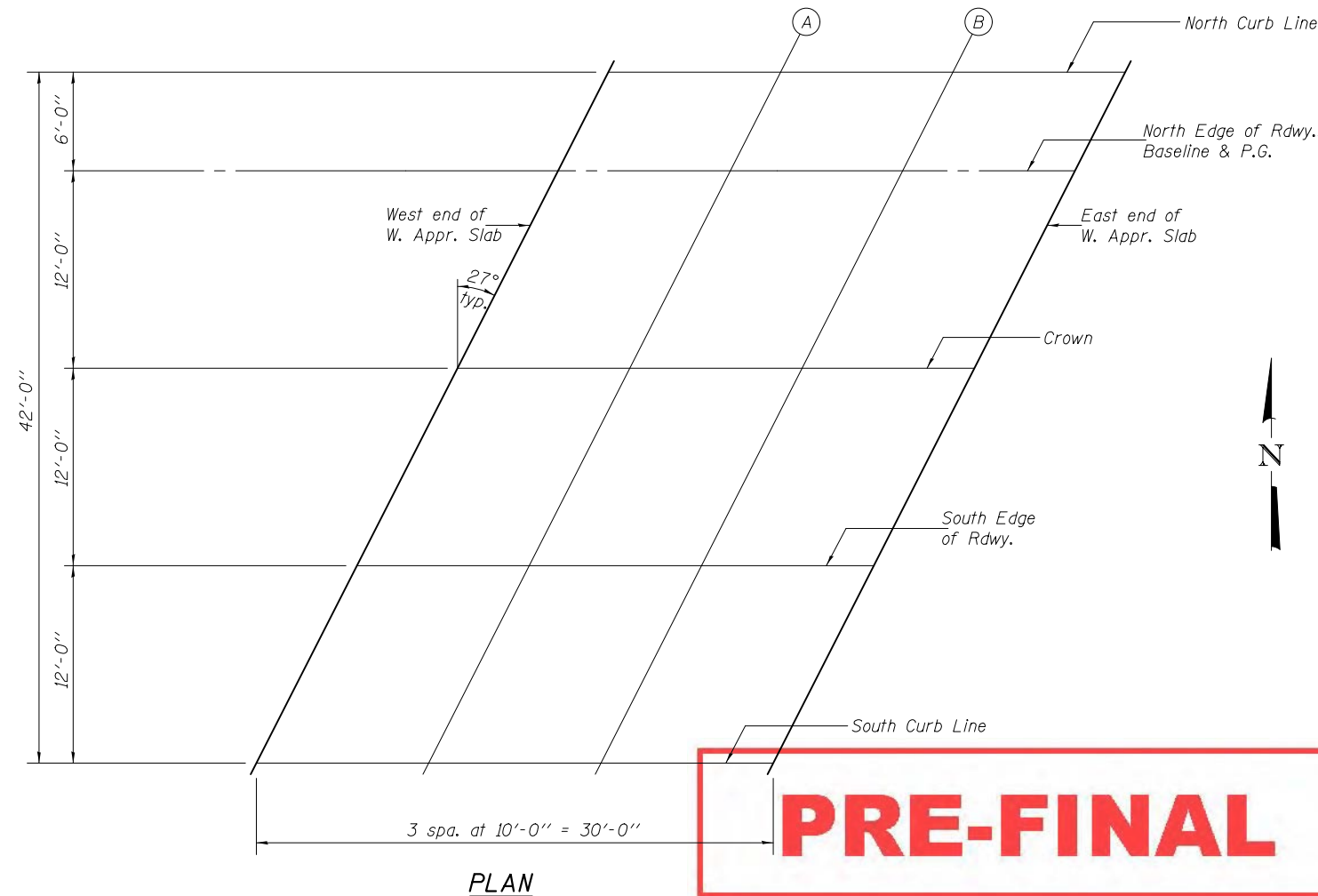
Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	192002.51	-6.00	714.24
A	192012.51	-6.00	714.18
B	192022.51	-6.00	714.11
East end of W. Appr. Slab	192032.51	-6.00	714.05

**NORTH EDGE OF RDWY., BASELINE & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	191999.45	0.00	714.39
A	192009.45	0.00	714.32
B	192019.45	0.00	714.26
East end of W. Appr. Slab	192029.45	0.00	714.19

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	191993.34	12.00	714.62
A	192003.34	12.00	714.55
B	192013.34	12.00	714.49
East end of W. Appr. Slab	192023.34	12.00	714.42



**SOUTH EDGE OF RDWY.**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	191987.22	24.00	714.47
A	191997.22	24.00	714.40
B	192007.22	24.00	714.34
East end of W. Appr. Slab	192017.22	24.00	714.27

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	191981.11	36.00	714.26
A	191991.11	36.00	714.19
B	192001.11	36.00	714.13
East end of W. Appr. Slab	192011.11	36.00	714.06

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Al-Barrae R. Shebib	ACTING ENGINEER OF BRIDGES DESIGN	
DRAWN - h.t. duong	PASSED - <i>Carl [Signature]</i>	REVISED
CHECKED - NRB/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATION (E.B.)  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				



**NORTH CURB LINE**

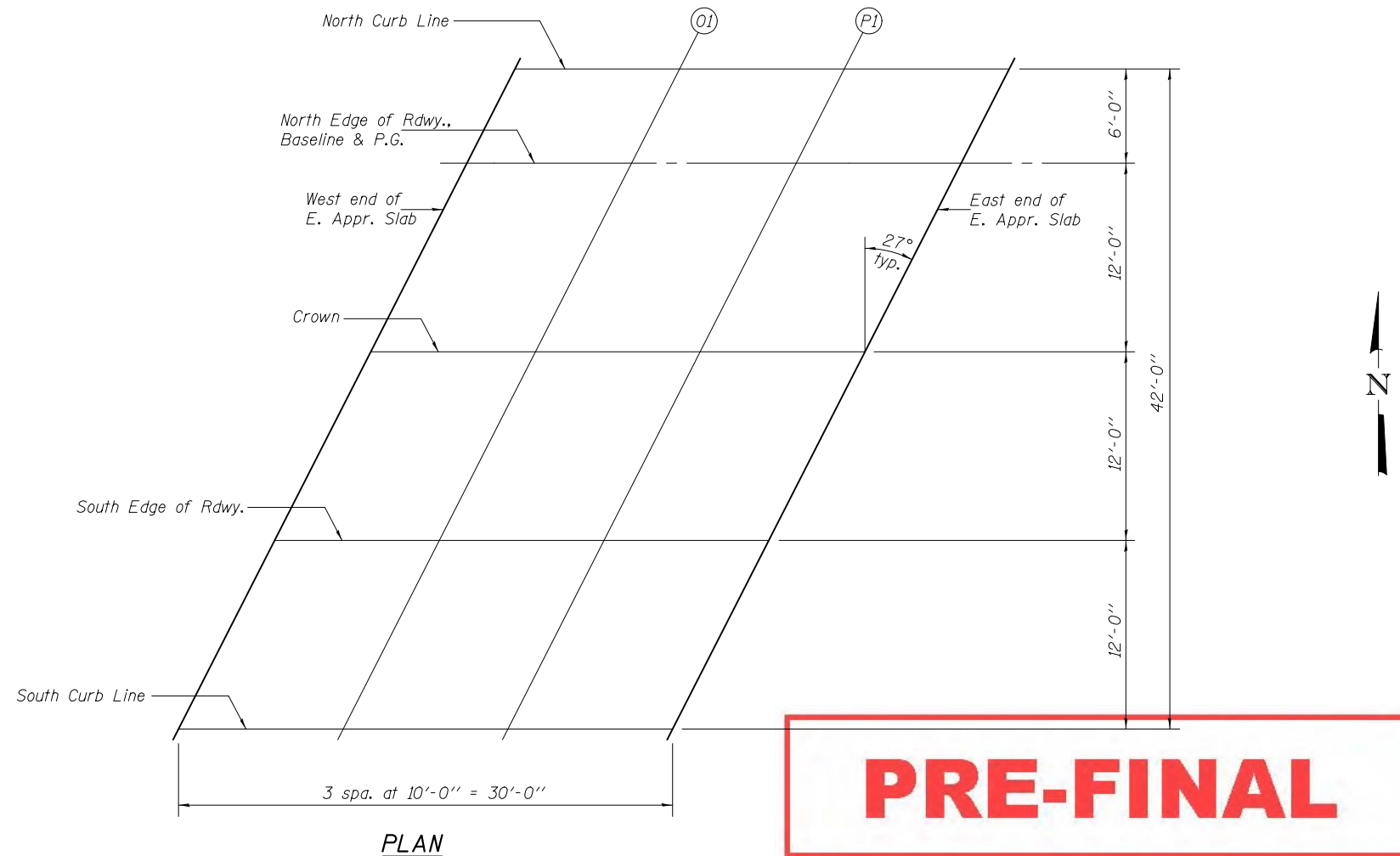
Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	192439.24	-6.00	711.41
O1	192449.24	-6.00	711.34
P1	192459.24	-6.00	711.28
East end of E. Appr. Slab	192469.24	-6.00	711.21

**NORTH EDGE OF RDWY., BASELINE & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	192436.18	0.00	711.55
O1	192446.18	0.00	711.48
P1	192456.18	0.00	711.42
East end of E. Appr. Slab	192466.18	0.00	711.35

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	192430.07	12.00	711.78
O1	192440.07	12.00	711.71
P1	192450.07	12.00	711.65
East end of E. Appr. Slab	192460.07	12.00	711.58



**SOUTH EDGE OF RDWY.**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	192423.95	24.00	711.63
O1	192433.95	24.00	711.56
P1	192443.95	24.00	711.50
East end of E. Appr. Slab	192453.95	24.00	711.43

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	192417.84	36.00	711.42
O1	192427.84	36.00	711.35
P1	192437.84	36.00	711.29
East end of E. Appr. Slab	192447.84	36.00	711.22

**NORTH CURB LINE**

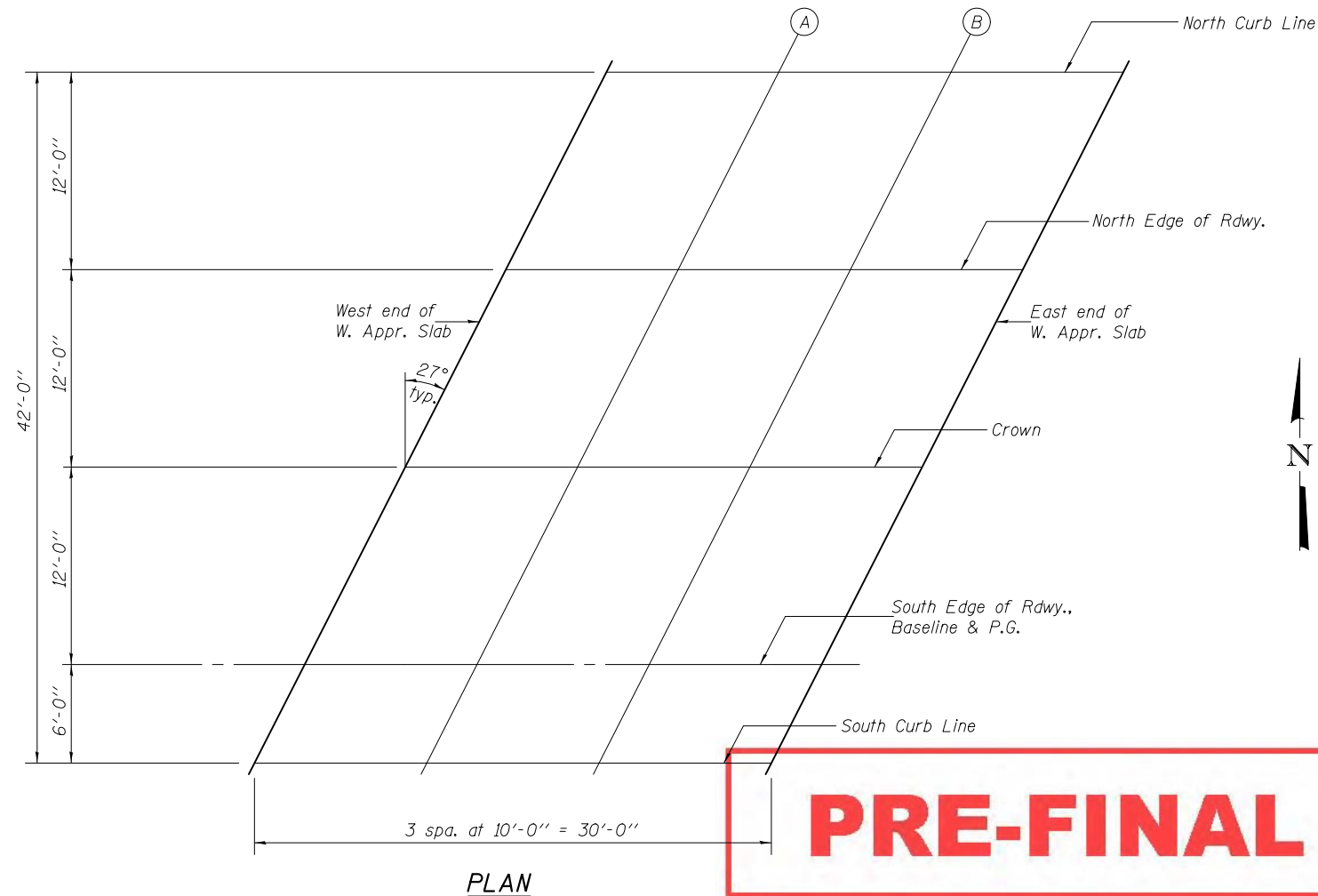
Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292041.58	-36.00	713.87
A	292051.58	-36.00	713.80
B	292061.58	-36.00	713.74
East end of W. Appr. Slab	292071.58	-36.00	713.67

**NORTH EDGE OF RDWY.**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292035.47	-24.00	714.15
A	292045.47	-24.00	714.09
B	292055.47	-24.00	714.02
East end of W. Appr. Slab	292065.47	-24.00	713.96

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292029.35	-12.00	714.38
A	292039.35	-12.00	714.32
B	292049.35	-12.00	714.25
East end of W. Appr. Slab	292059.35	-12.00	714.19



**SOUTH EDGE OF RDWY., BASELINE & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292023.24	0.00	714.23
A	292033.24	0.00	714.17
B	292043.24	0.00	714.10
East end of W. Appr. Slab	292053.24	0.00	714.04

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292020.18	6.00	714.13
A	292030.18	6.00	714.06
B	292040.18	6.00	714.00
East end of W. Appr. Slab	292050.18	6.00	713.93

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Al-Barrae R. Shebib	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - h.t. duong	PASSED - <i>Carl [Signature]</i>	REVISED
CHECKED - NRB/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS (W.B.)  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				

**NORTH CURB LINE**

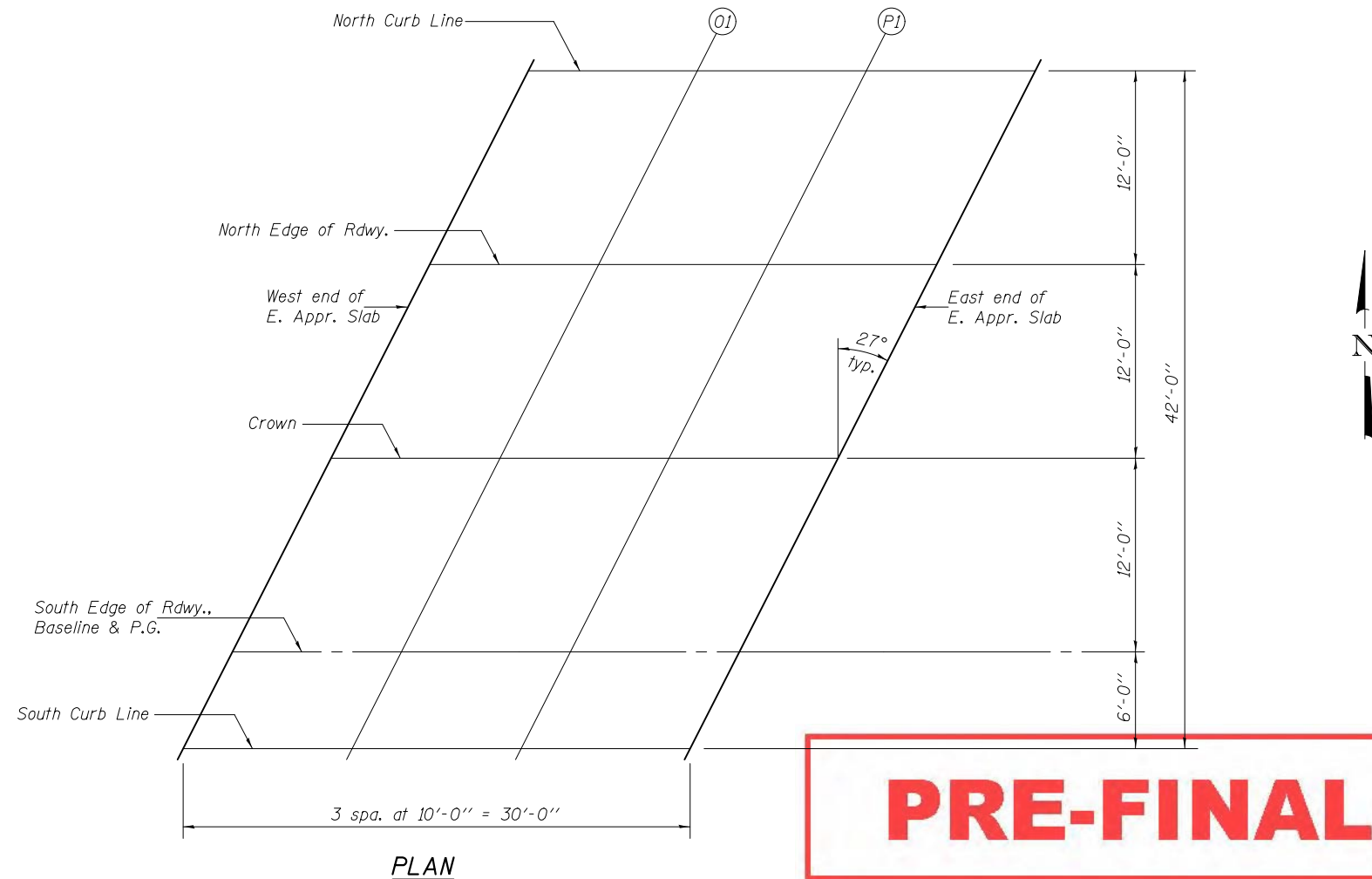
Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	292478.31	-36.00	711.03
O1	292488.31	-36.00	710.96
P1	292498.31	-36.00	710.90
East end of E. Appr. Slab	292508.31	-36.00	710.83

**NORTH EDGE OF RDWY.**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	292472.2	-24.00	711.32
O1	292482.2	-24.00	711.25
P1	292492.2	-24.00	711.19
East end of E. Appr. Slab	292502.2	-24.00	711.12

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	292466.08	-12.00	711.54
O1	292476.08	-12.00	711.48
P1	292486.08	-12.00	711.41
East end of E. Appr. Slab	292496.08	-12.00	711.35

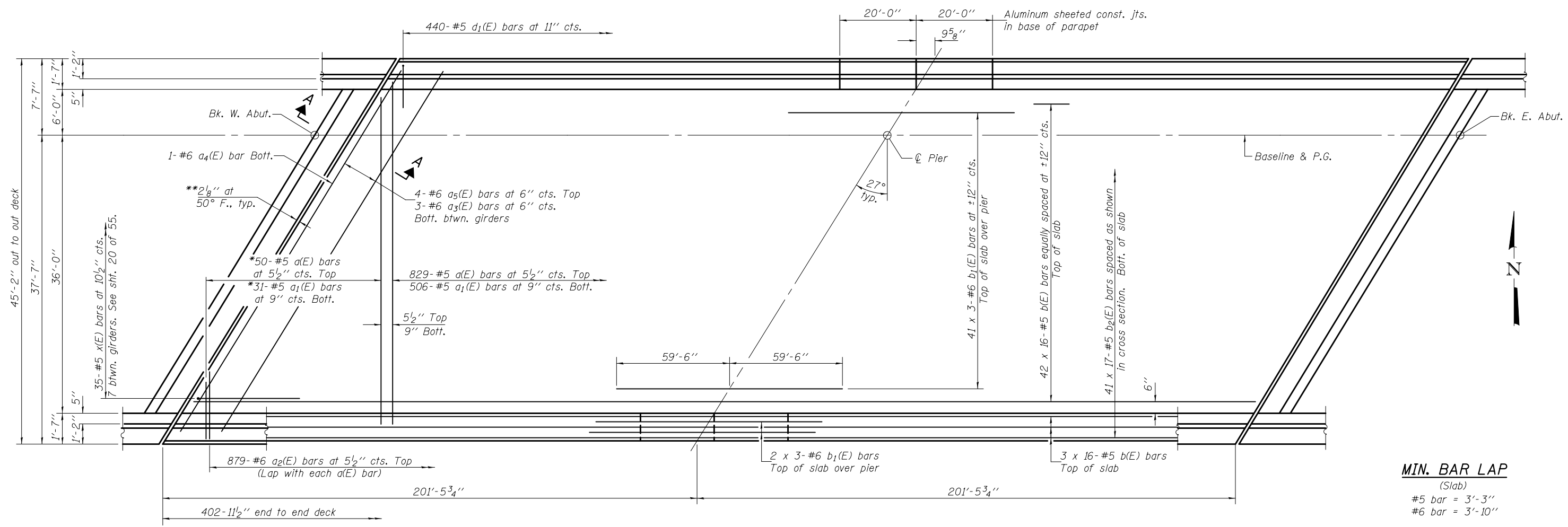


**SOUTH EDGE OF RDWY., BASELINE & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	292459.97	0.00	711.40
O1	292469.97	0.00	711.33
P1	292479.97	0.00	711.27
East end of E. Appr. Slab	292489.97	0.00	711.20

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	292456.91	6.00	711.29
O1	292466.91	6.00	711.23
P1	292476.91	6.00	711.16
East end of E. Appr. Slab	292486.91	6.00	711.10

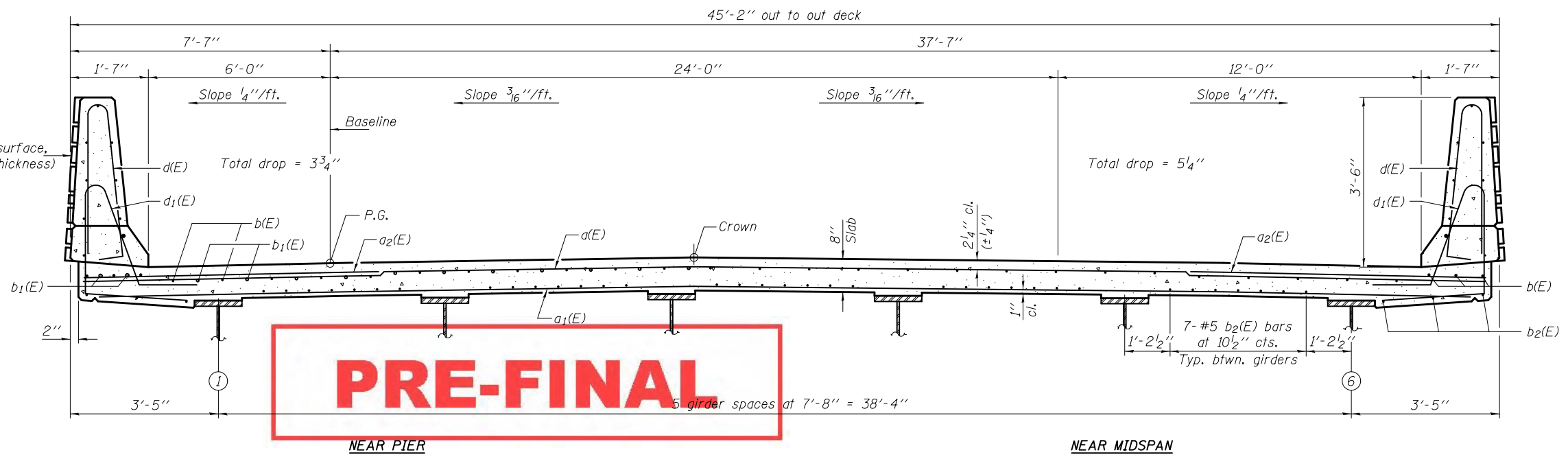


PLAN (E.B.)

**MIN. BAR LAP**  
(Slab)  
#5 bar = 3'-3"  
#6 bar = 3'-10"

\*Order a(E) & a<sub>1</sub>(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.  
\*\*Dimensions are based on a rolled rail strip seal joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on sheet 25 of 55.

Notes:  
See sheets 19 & 20 of 55 for superstructure details & Bill of Material.  
Bars indicated thus 40 x 3-#5 etc. indicates 40 lines of bars with 3 lengths per line.  
See sheet 19 of 55 for parapet reinforcement.  
See sheets 45 & 46 of 55 for details of formliner texture surface.

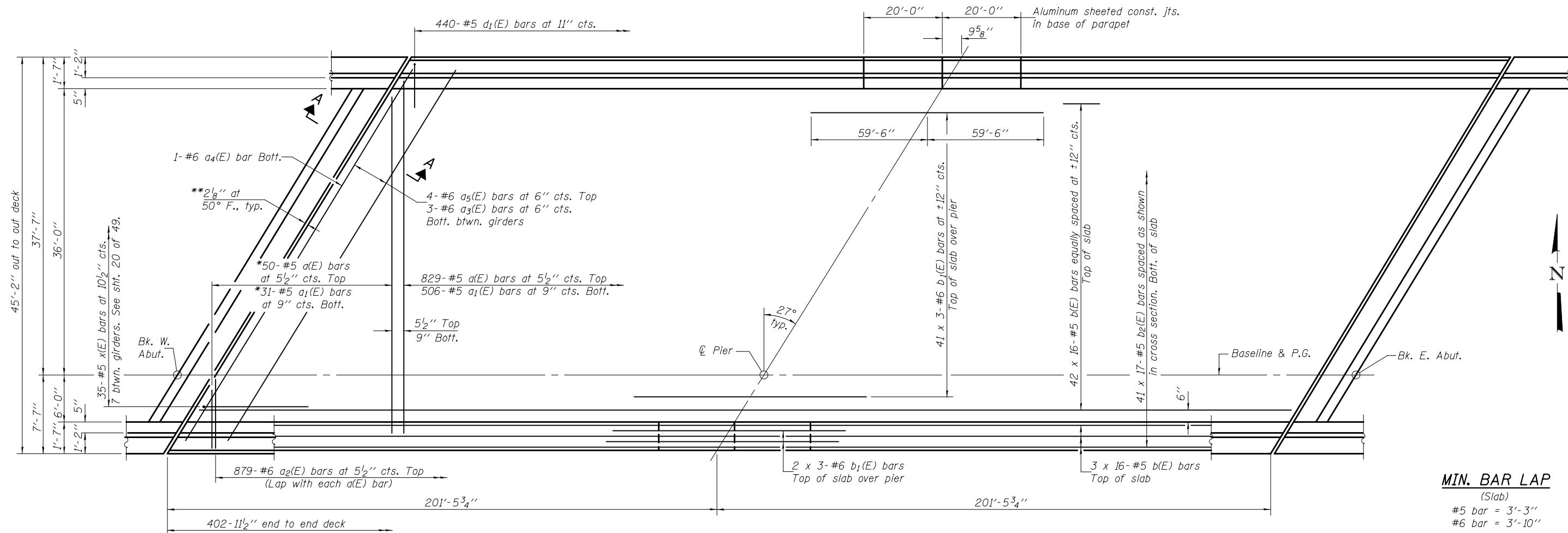


CROSS SECTION  
(Looking east)

**PRE-FINAL**

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE (E.B.) STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED - Al-Barræ R. Shebib	PASSED - <i>Carl [Signature]</i>	REVISED			CONTRACT NO. 64D19					
DRAWN - h.t. duong	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 17 OF 55 SHEETS					
CHECKED - NRB/GRA					ILLINOIS FED. AID PROJECT					



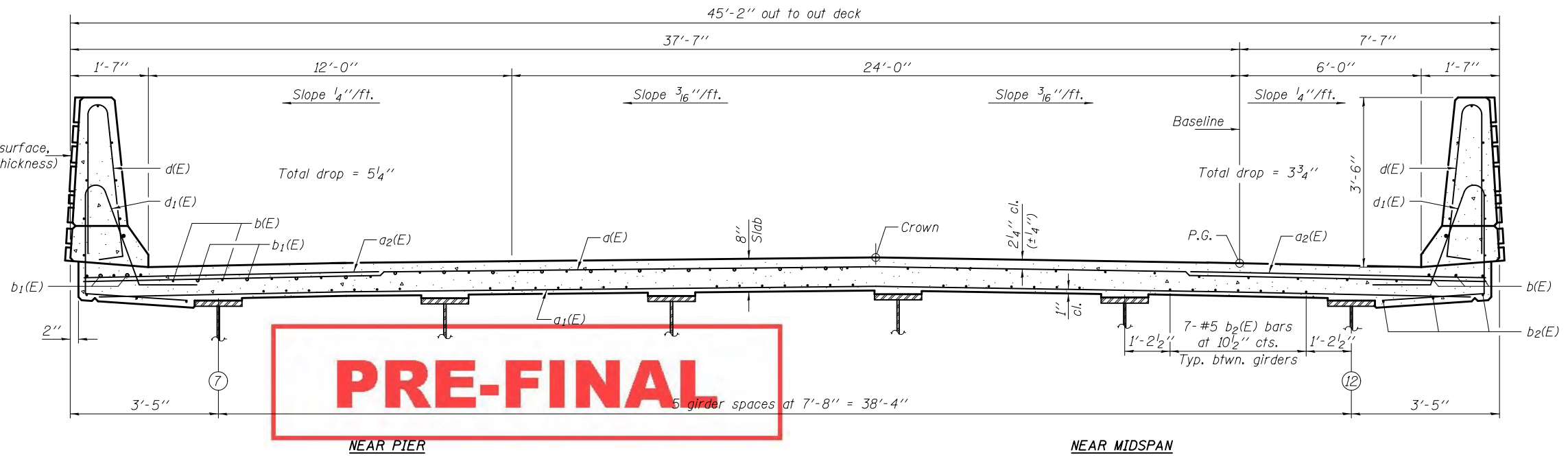


PLAN (W.B.)

**MIN. BAR LAP**  
(Slab)  
#5 bar = 3'-3"  
#6 bar = 3'-10"

\*Order a(E) & a<sub>1</sub>(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.  
\*\*Dimensions are based on a rolled rail strip seal joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on sheet 25 of 55.

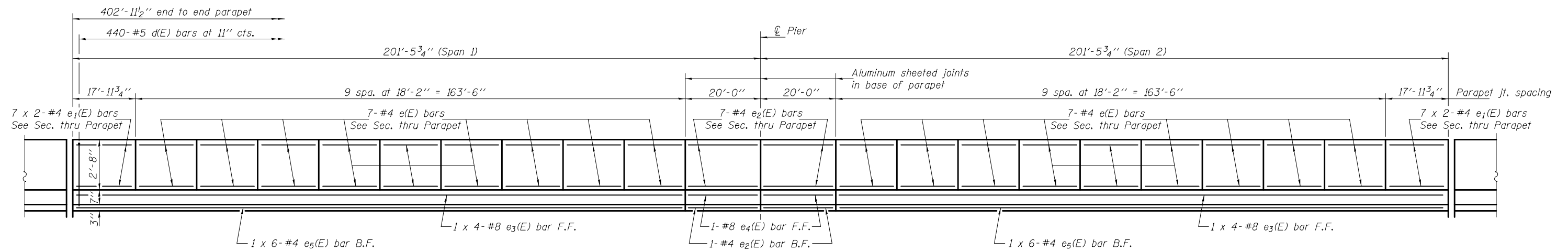
Notes:  
See sheets 19 & 20 of 55 for superstructure details & Bill of Material.  
Bars indicated thus 40 x 3-#5 etc. indicates 40 lines of bars with 3 lengths per line.  
See sheet 19 of 55 for parapet reinforcement.  
See sheets 45 & 46 of 55 for details of formliner texture surface.



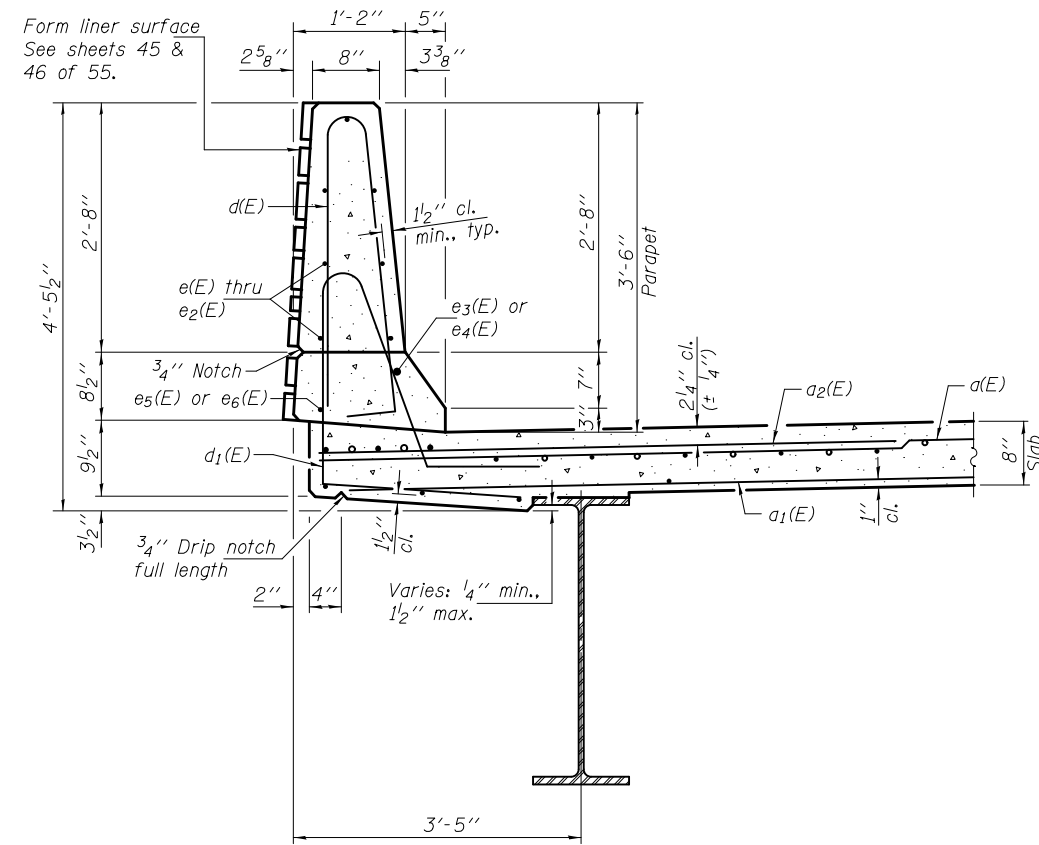
CROSS SECTION  
(Looking east)

**PRE-FINAL**

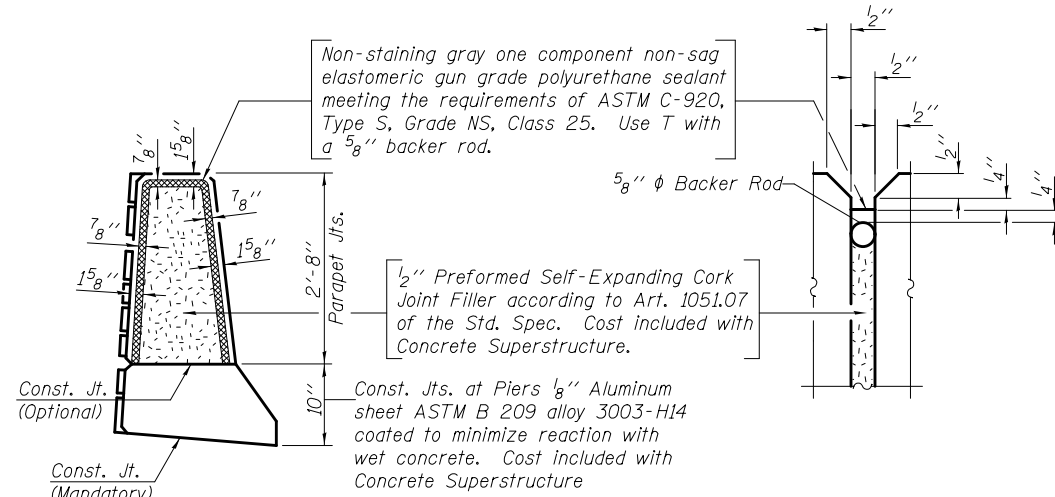
DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE (W.B.) STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED - Al-Barræ R. Shebib	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			CONTRACT NO. 64D19					
DRAWN - h.t. duong		REVISED			ILLINOIS FED. AID PROJECT					
CHECKED - NRB/GRA					SHEET NO. 18 OF 55 SHEETS					



**INSIDE ELEVATION OF NORTH PARAPET (E.B.)**  
(Looking North - South parapet similar)

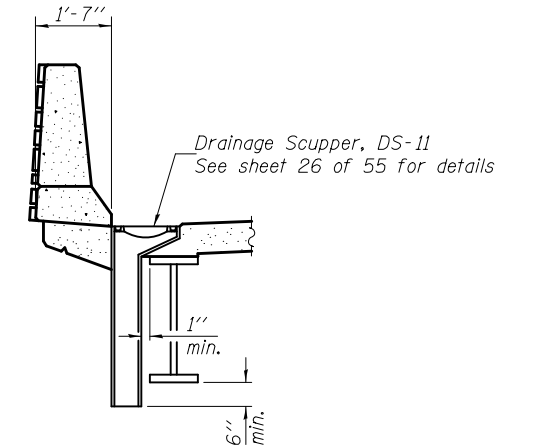


**SECTION THRU PARAPET**

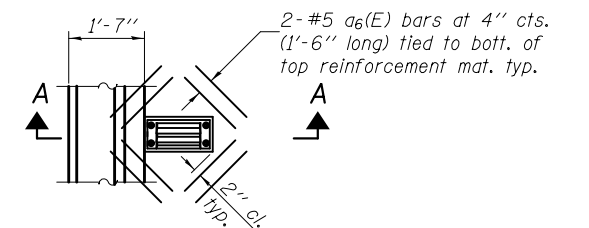


**PARAPET JOINT DETAILS**

**MIN. BAR LAP**  
(Parapet)  
#4 bar = 2'-0"  
#8 bar = 3'-2"



**SECTION A-A**



**PLAN**

Note:  
Cut longitudinal reinforcement to clear drainage scuppers.

**PRE-FINAL**

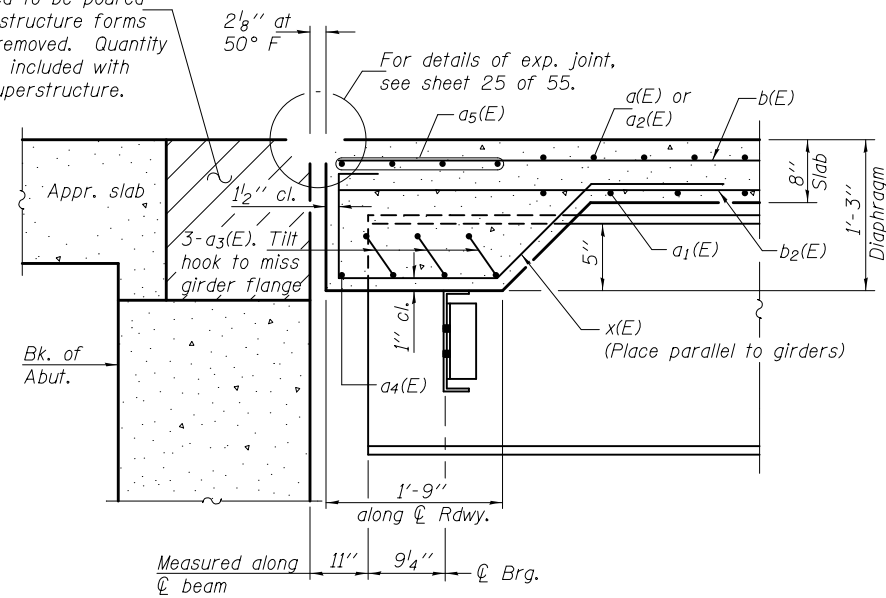
DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE DETAILS STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CHECKED - Al-Barræ R. Shebib	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED							
DRAWN - h.t. duong		REVISED							
CHECKED - NRB/GRA				SHEET NO. 19 OF 55 SHEETS	CONTRACT NO. 64D19 ILLINOIS FED. AID PROJECT				

**TWO SUPERSTRUCTURES  
(E.B. & W.B.)  
BILL OF MATERIAL**

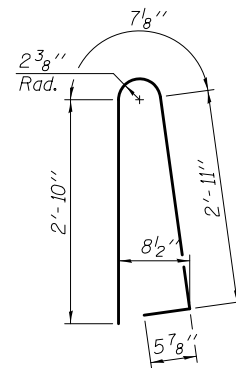
Bar	No.	Size	Length	Shape
a(E)	1758	#5	44'-7"	—
a <sub>1</sub> (E)	1074	#5	42'-10"	—
a <sub>2</sub> (E)	3516	#6	6'-6"	—
a <sub>3</sub> (E)	60	#6	9'-8"	⌋
a <sub>4</sub> (E)	4	#6	42'-9"	—
a <sub>5</sub> (E)	16	#6	49'-11"	—
a <sub>6</sub> (E)	64	#5	1'-6"	—
b(E)	1536	#5	28'-3"	—
b <sub>1</sub> (E)	270	#6	42'-3"	—
b <sub>2</sub> (E)	1394	#5	26'-9"	—
d(E)	1760	#5	6'-10"	⌋
d <sub>1</sub> (E)	1760	#5	7'-10"	⌋
e(E)	504	#4	17'-11"	—
e <sub>1</sub> (E)	112	#4	10'-3"	—
e <sub>2</sub> (E)	64	#4	19'-9"	—
e <sub>3</sub> (E)	32	#8	49'-3"	—
e <sub>4</sub> (E)	8	#8	19'-9"	—
e <sub>5</sub> (E)	48	#4	32'-0"	—
x(E)	140	#5	6'-5"	⌋
Reinforcement Bars, Epoxy Coated			Pound	
Concrete Superstructure			Cu. Yds.	

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

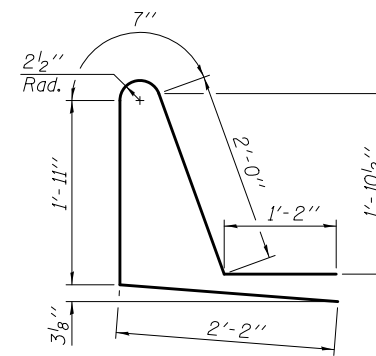
Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.



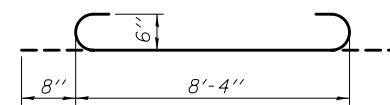
**SECTION A-A**



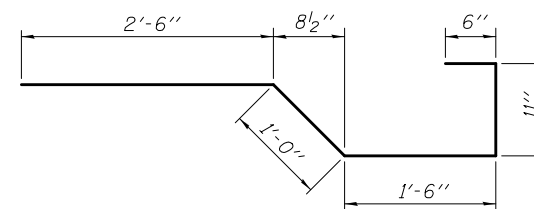
**BAR d(E)**



**BAR d<sub>1</sub>(E)**



**a<sub>3</sub>(E) BAR**



**BAR x(E)**

**PRE-FINAL**

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Al-Barrae R. Shebb	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - h.t. duong	PASSED - <i>Carl [Signature]</i>	REVISED
CHECKED - NRB/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

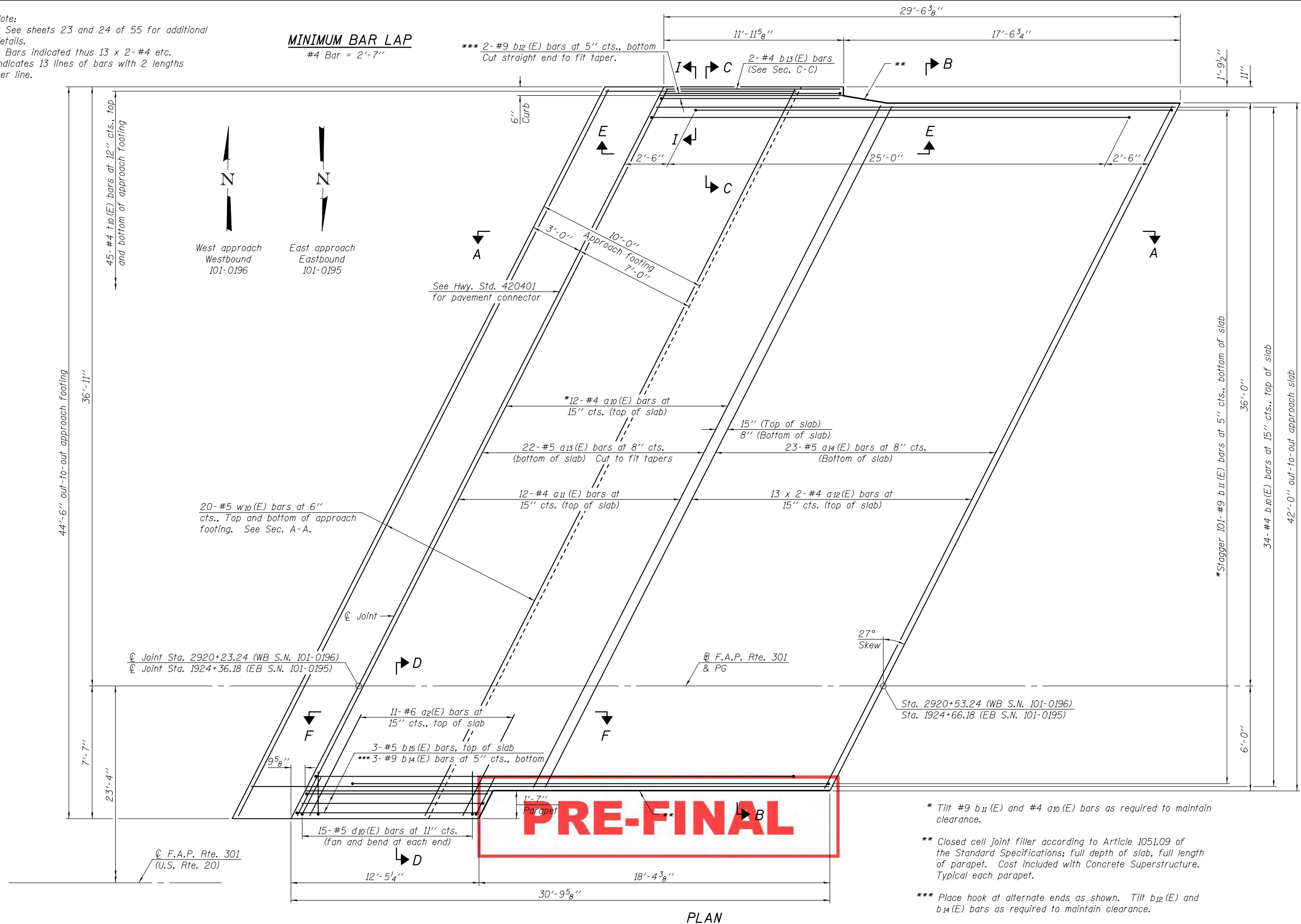
**SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)**

SHEET NO. 20 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
			CONTRACT NO. 64D19	
ILLINOIS FED. AID PROJECT				

Note:  
See sheets 23 and 24 of 55 for additional details.  
Bars indicated thus 13 x 2-#4 etc. indicates 13 lines of bars with 2 lengths per line.

**MINIMUM BAR LAP**  
#4 Bar = 2'-7"



\* Tilt #9 b11(E) and #4 a10(E) bars as required to maintain clearance.  
\*\* Closed cell joint filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Cost included with Concrete Superstructure. Typical each parapet.  
\*\*\* Place hook at alternate ends as shown. Tilt b12(E) and b14(E) bars as required to maintain clearance.

PLAN

DESIGNED - NICHOLAS R. BARNETT	EXAMINED	DATE -
CHECKED - AL-BARRAE SHEBIB	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED	REVISED
CHECKED - N.R.B. / G.R.A.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

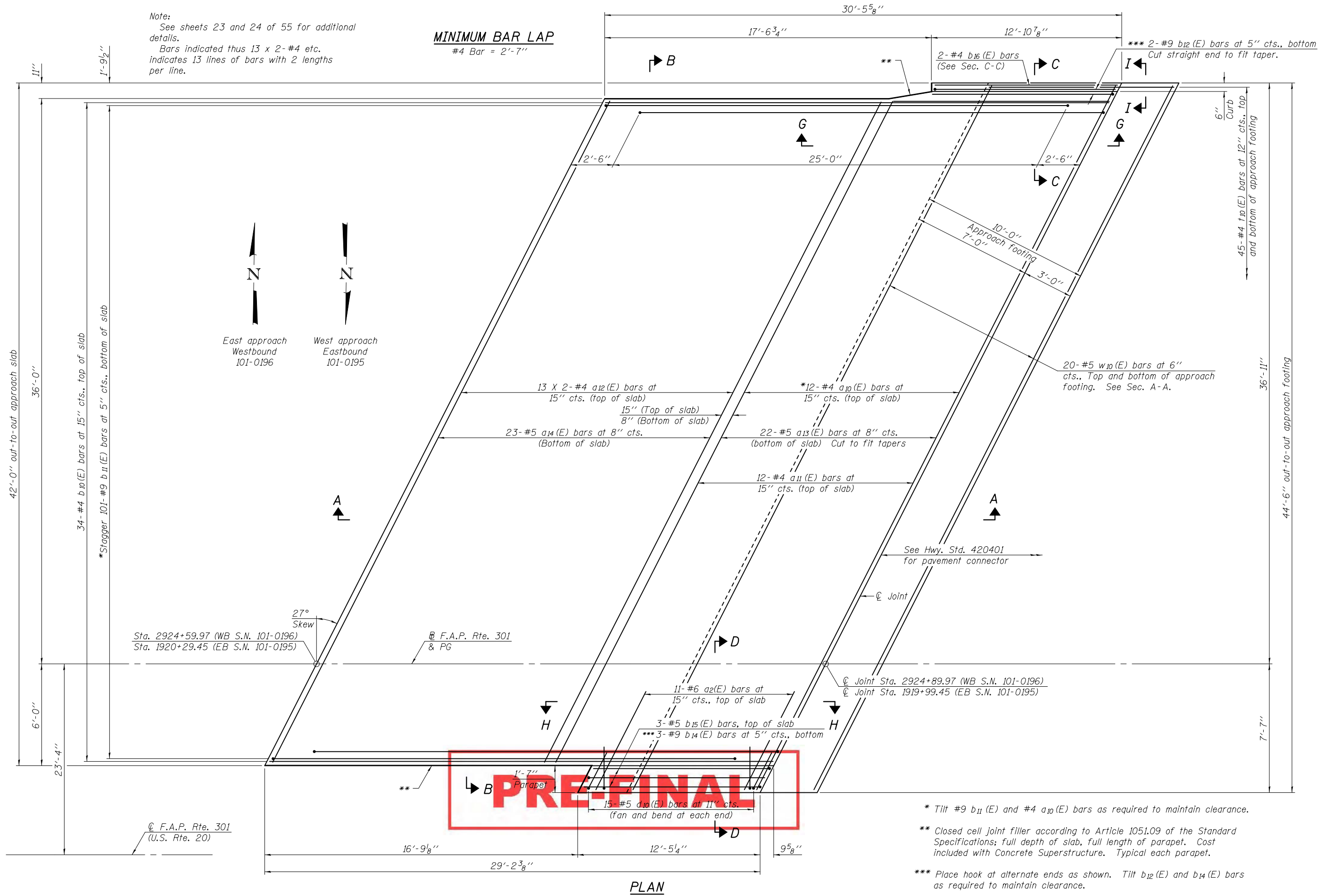
BRIDGE APPROACH SLAB DETAILS - WEST (WB) - EAST (EB)  
STRUCTURE NO. 101 - 0195 (EB) & 101 - 0196 (WB)

F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
			CONTRACT NO. 64D19	
ILLINOIS FED. AID PROJECT				



Note:  
See sheets 23 and 24 of 55 for additional details.  
Bars indicated thus 13 x 2-#4 etc. indicates 13 lines of bars with 2 lengths per line.

**MINIMUM BAR LAP**  
#4 Bar = 2'-7"



PLAN

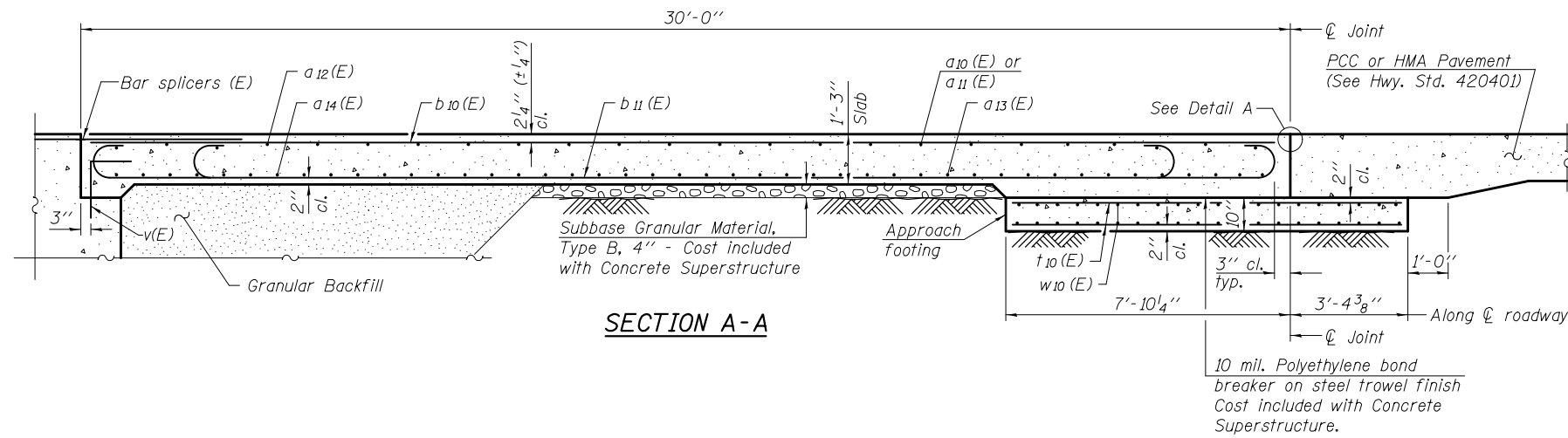
- \* Tilt #9 b<sub>11</sub>(E) and #4 a<sub>10</sub>(E) bars as required to maintain clearance.
- \*\* Closed cell joint filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Cost included with Concrete Superstructure. Typical each parapet.
- \*\*\* Place hook at alternate ends as shown. Tilt b<sub>12</sub>(E) and b<sub>14</sub>(E) bars as required to maintain clearance.

DESIGNED - NICHOLAS R. BARNETT	EXAMINED	DATE -
CHECKED - AL-BARRAE SHEBIB	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED	REVISED
CHECKED - N.R.B. / G.R.A.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

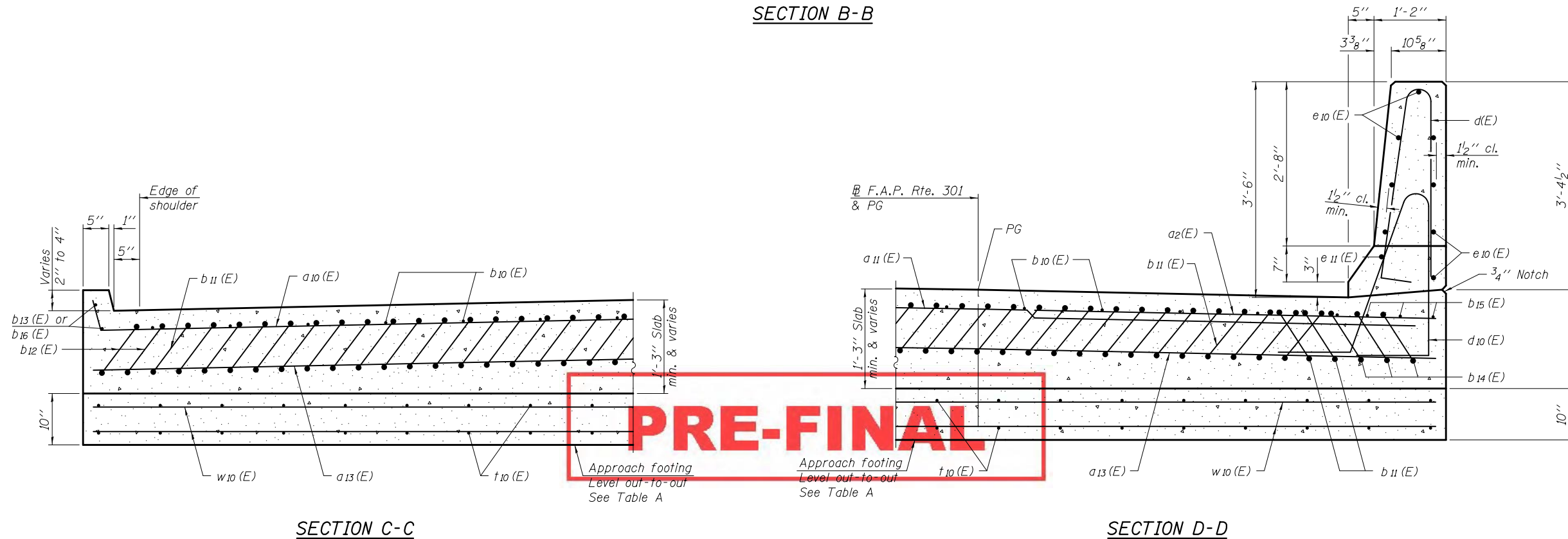
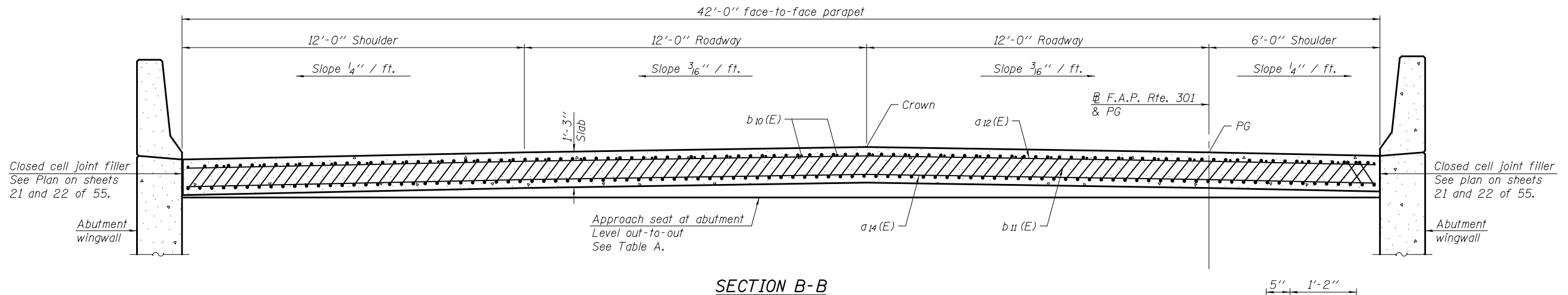
**BRIDGE APPROACH SLAB DETAILS - EAST (WB) - WEST (EB)**  
**STRUCTURE NO. 101 - 0195 (EB) & 101 - 0196 (WB)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				



**TABLE A**

Location	Approach seat Elev. at abutment	Bottom of Footing Elev.
West Approach (Westbound)	712.33	711.77
East Approach (Westbound)	709.70	708.73
West Approach (Eastbound)	712.71	712.15
East Approach (Eastbound)	710.08	709.11



DESIGNED - NICHOLAS R. BARNETT	EXAMINED - _____	DATE - _____
CHECKED - AL-BARRAE SHEBIB	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - _____	REVISED - _____
CHECKED - N.R.B. / G.R.A.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED - _____

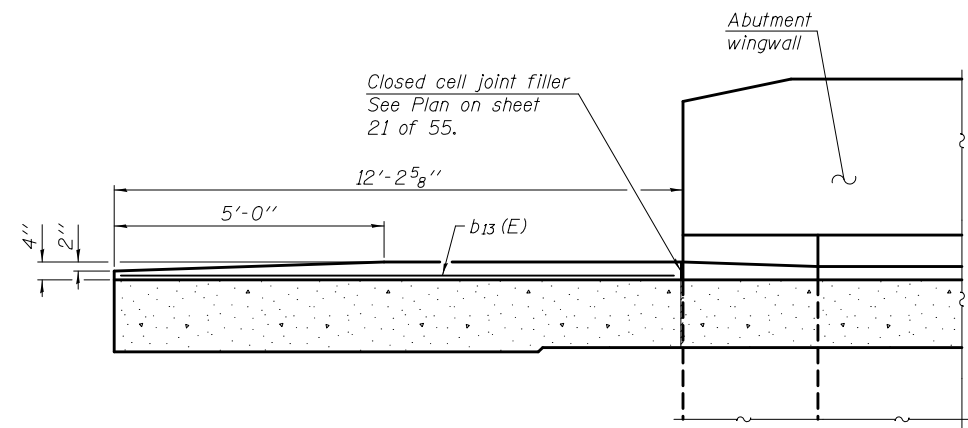
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 101 - 0195 (EB) & 101 - 0196 (WB)**

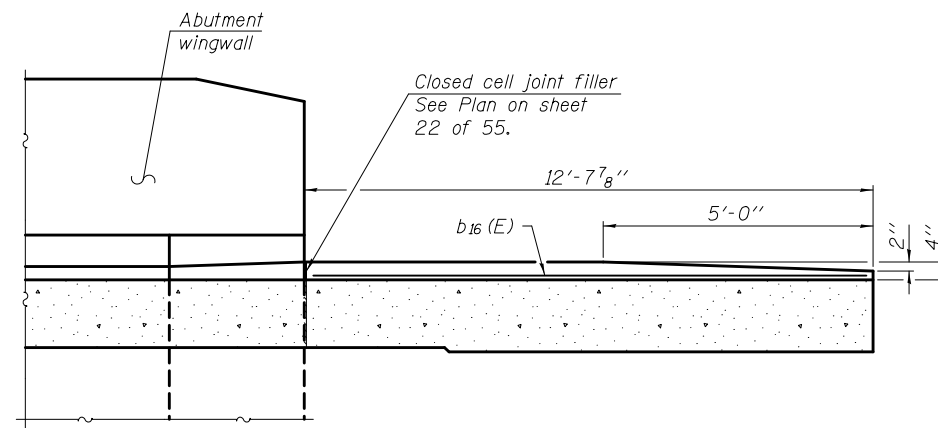
SHEET NO. 23 OF 55 SHEETS

F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CONTRACT NO. 64D19				

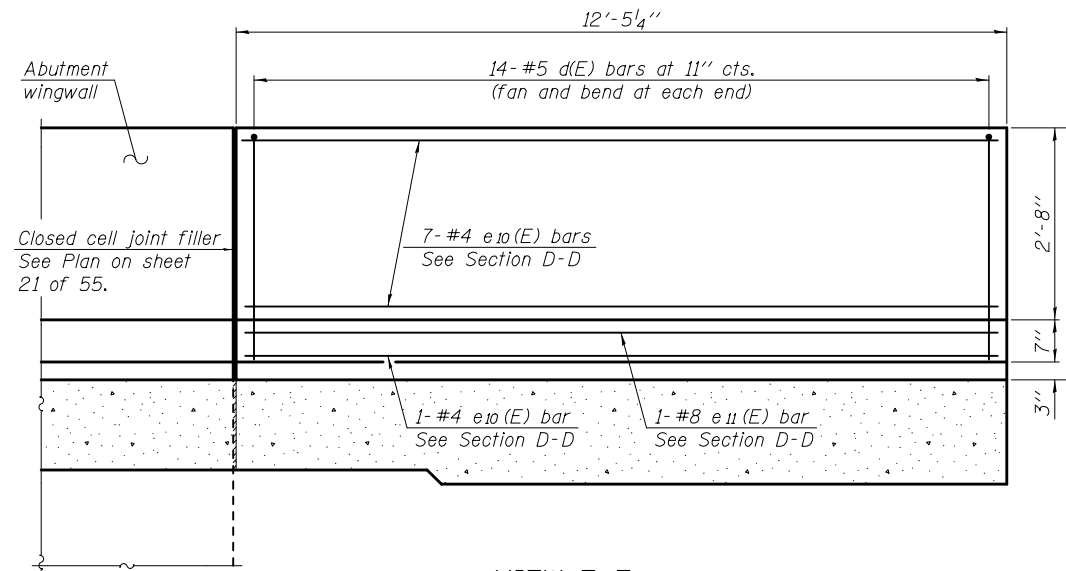
ILLINOIS FED. AID PROJECT



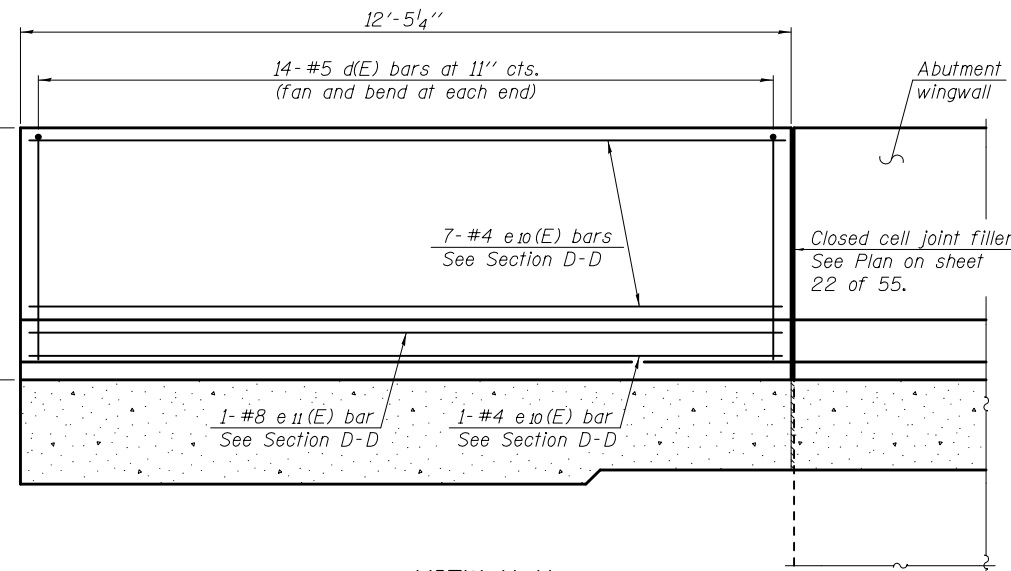
**VIEW E-E**  
(Showing curb reinforcement)



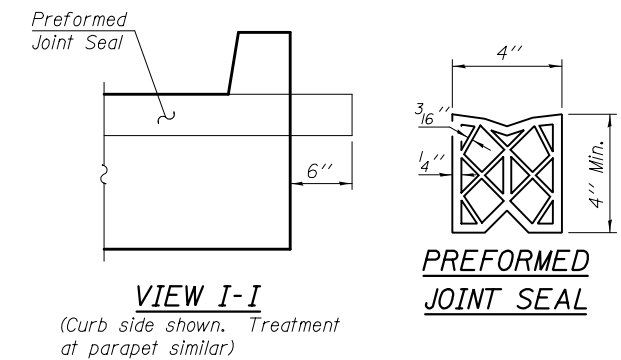
**VIEW G-G**  
(Showing curb reinforcement)



**VIEW F-F**  
(Showing parapet reinforcement)



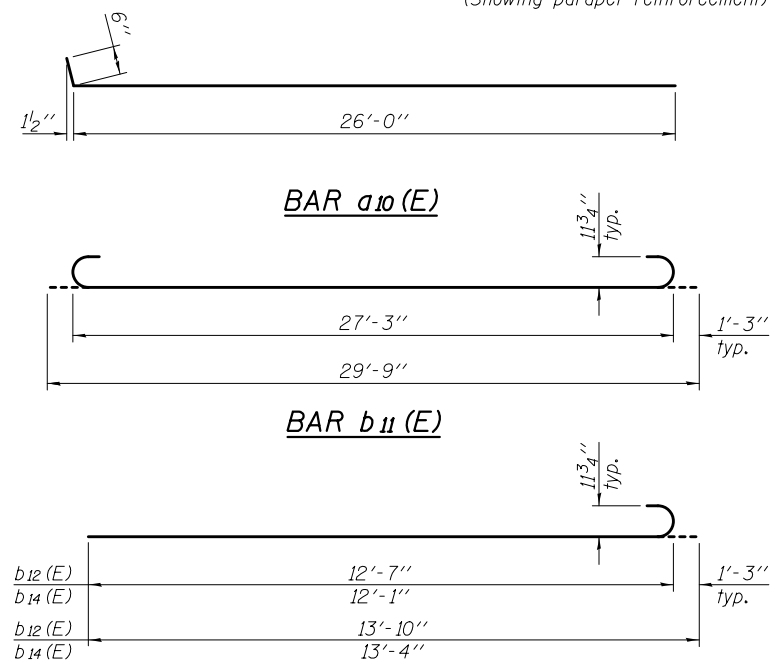
**VIEW H-H**  
(Showing parapet reinforcement)



**VIEW I-I**  
(Curb side shown. Treatment at parapet similar)

**FOUR APPROACHES  
BILL OF MATERIAL**

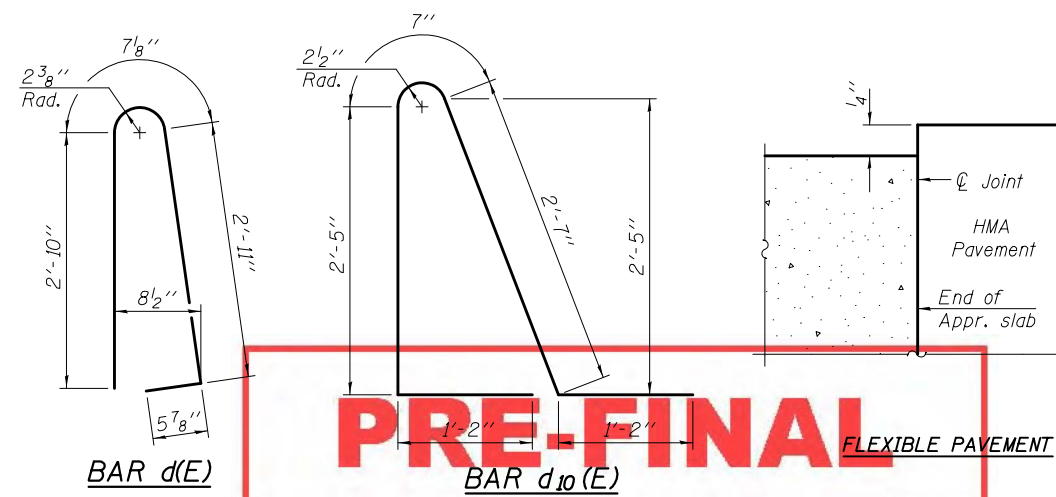
Bar	No.	Size	Length	Shape
a2(E)	44	#6	6'-6"	—
a10(E)	48	#4	26'-6"	—
a11(E)	48	#4	26'-0"	—
a12(E)	104	#4	24'-9"	—
a13(E)	88	#5	49'-6"	—
a14(E)	92	#5	46'-8"	—
b10(E)	136	#4	29'-8"	—
b11(E)	404	#9	29'-9"	—
b12(E)	8	#9	13'-10"	—
b13(E)	4	#4	11'-7"	—
b14(E)	12	#9	13'-4"	—
b15(E)	12	#5	12'-1"	—
b16(E)	4	#4	12'-5"	—
d(E)	56	#5	6'-10"	—
d10(E)	60	#5	7'-11"	—
e10(E)	32	#4	12'-2"	—
e11(E)	4	#8	12'-2"	—
t10(E)	360	#4	10'-10"	—
w10(E)	160	#5	49'-6"	—
Concrete Superstructure			Cu. Yd.	
Concrete Structures			Cu. Yd.	
Reinforcement Bars, Epoxy Coated			Pound	69,700



**BAR a10(E)**

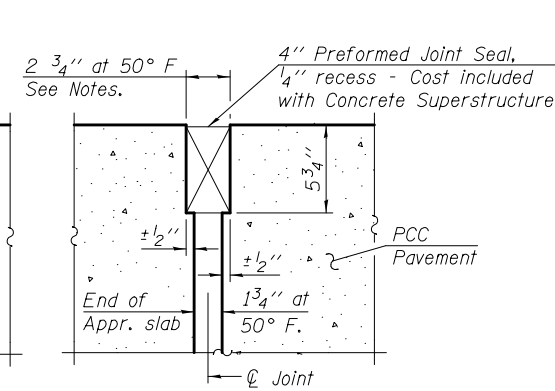
**BAR b11(E)**

**BARS b12(E) & b14(E)**



**BAR d(E)**

**BAR d10(E)**



**DETAIL A**

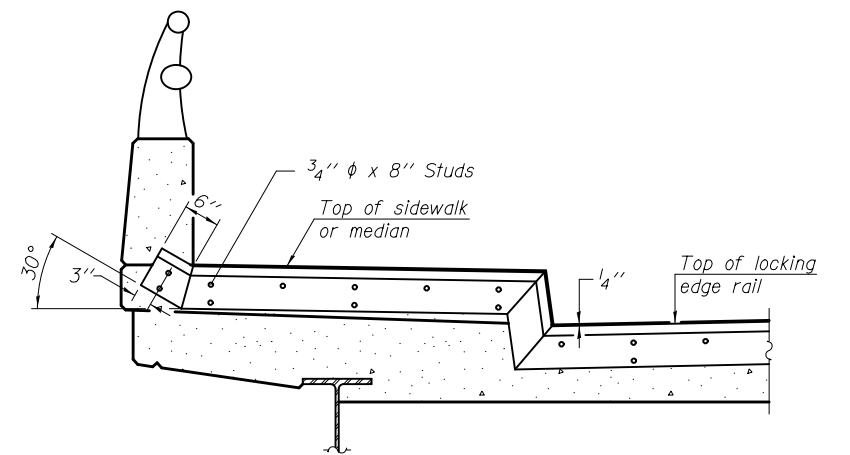
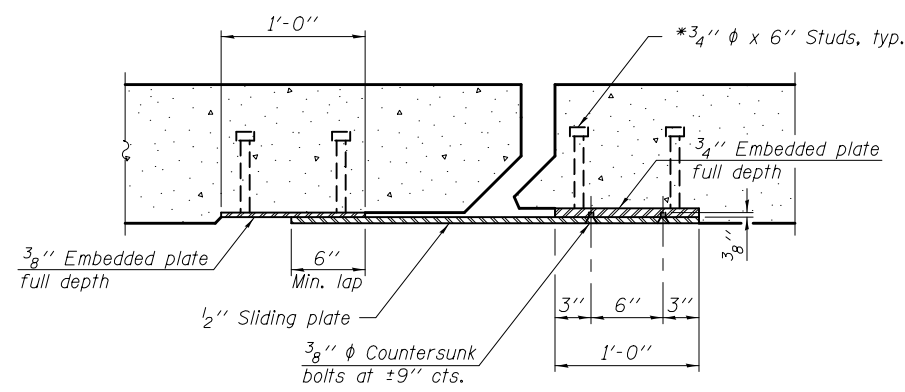
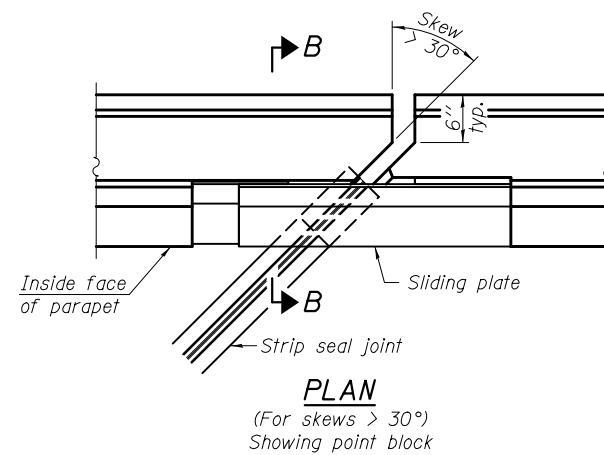
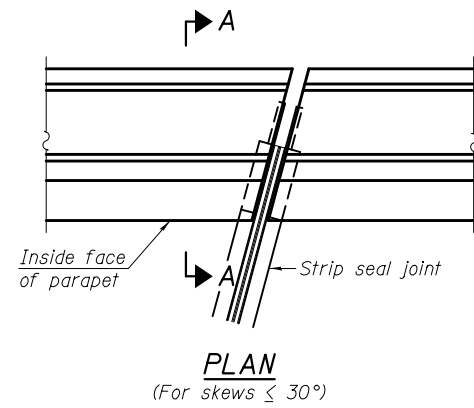
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - _____	DATE - _____
CHECKED - AL-BARRAE SHEBIB	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - _____	REVISED - _____
CHECKED - N.R.B. / G.R.A.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED - _____

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

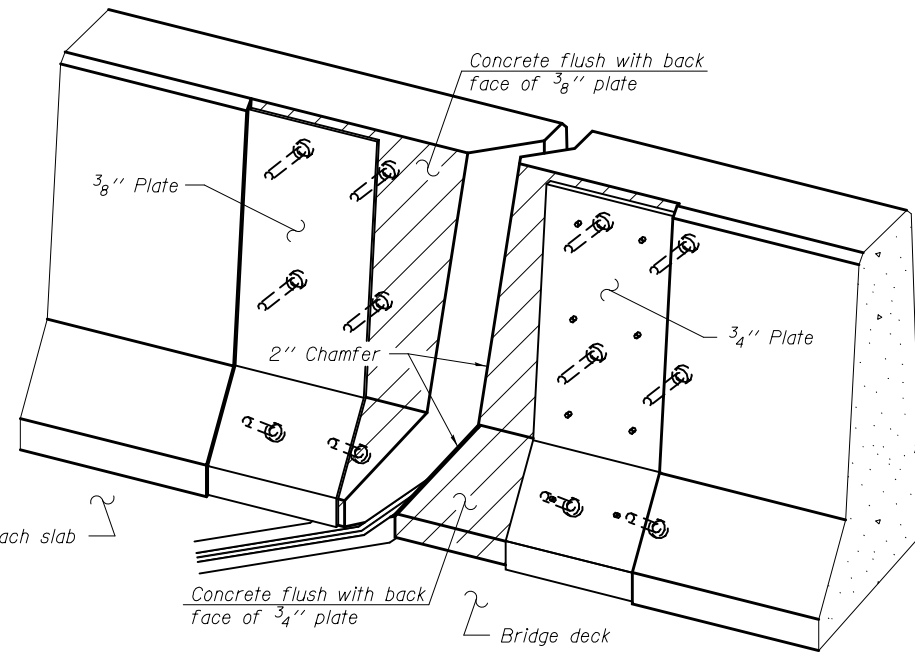
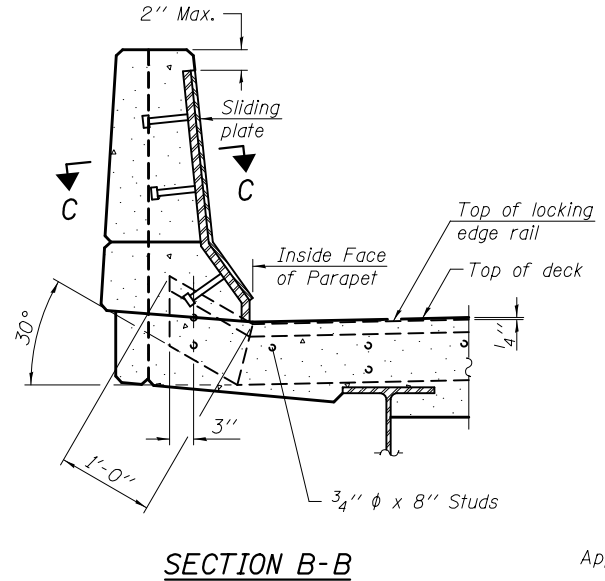
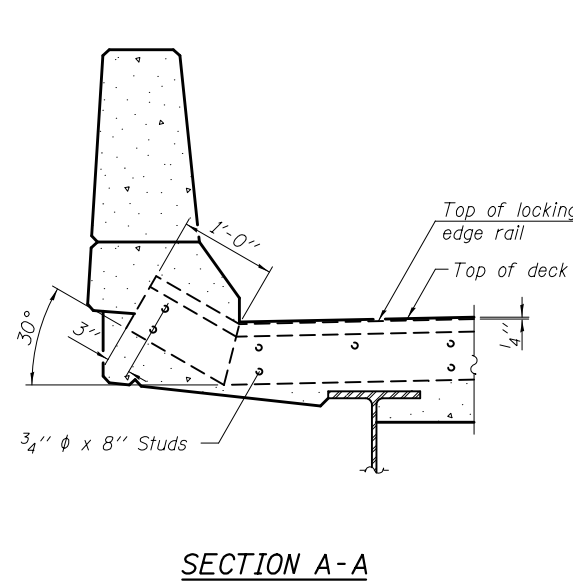
**BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 101 - 0195 (EB) & 101 - 0196 (WB)**

SHEET NO. 24 OF 55 SHEETS

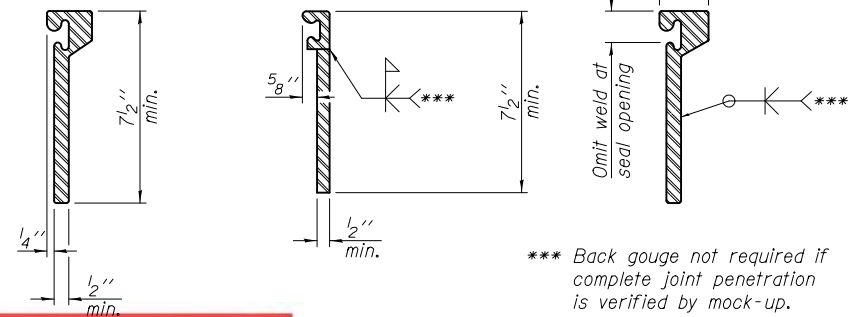
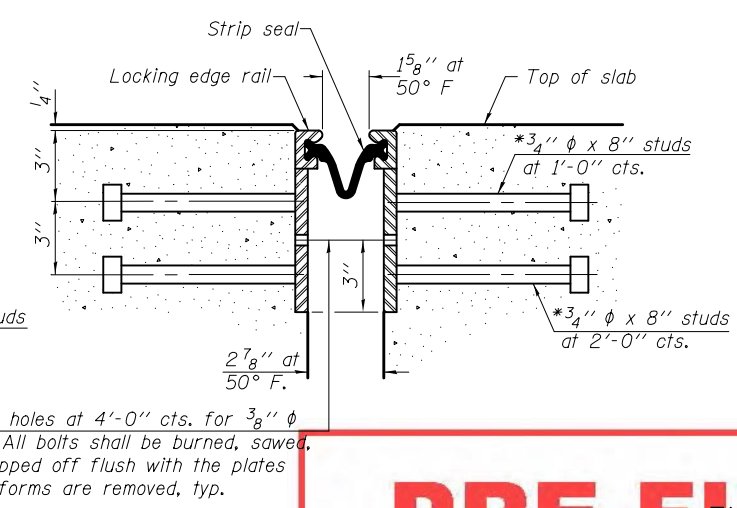
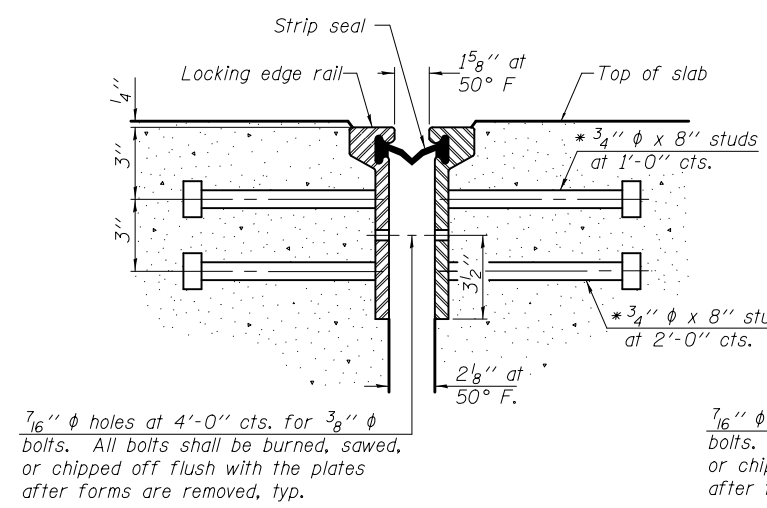
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				



**TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN**  
 Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



**Notes:**  
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.  
 The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.  
 The manufacturer's recommended installation methods shall be followed.  
 The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.  
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.  
 Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



\*\*\* Back gouge not required if complete joint penetration is verified by mock-up.

**SECTION THRU ROLLED RAIL JOINT**

**SECTION THRU WELDED RAIL JOINT**

**LOCKING EDGE RAIL SPLICE**

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	197

**PRE-FINAL**  
 ROLLED EXTRUDED RAIL WELDED RAIL

**LOCKING EDGE RAILS**

\*Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

EJ-SSJ

1-27-12

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Al-Barræ R. Shebib	PASSED - <i>Carl [Signature]</i>	REVISED
DRAWN - h.t. duong	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - NRB/GRA		

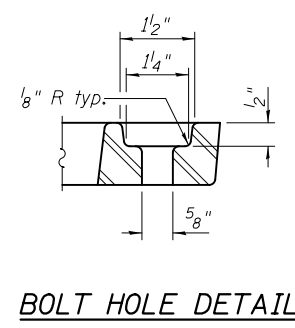
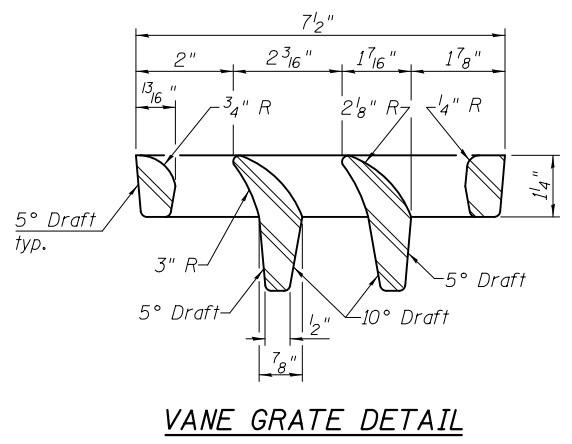
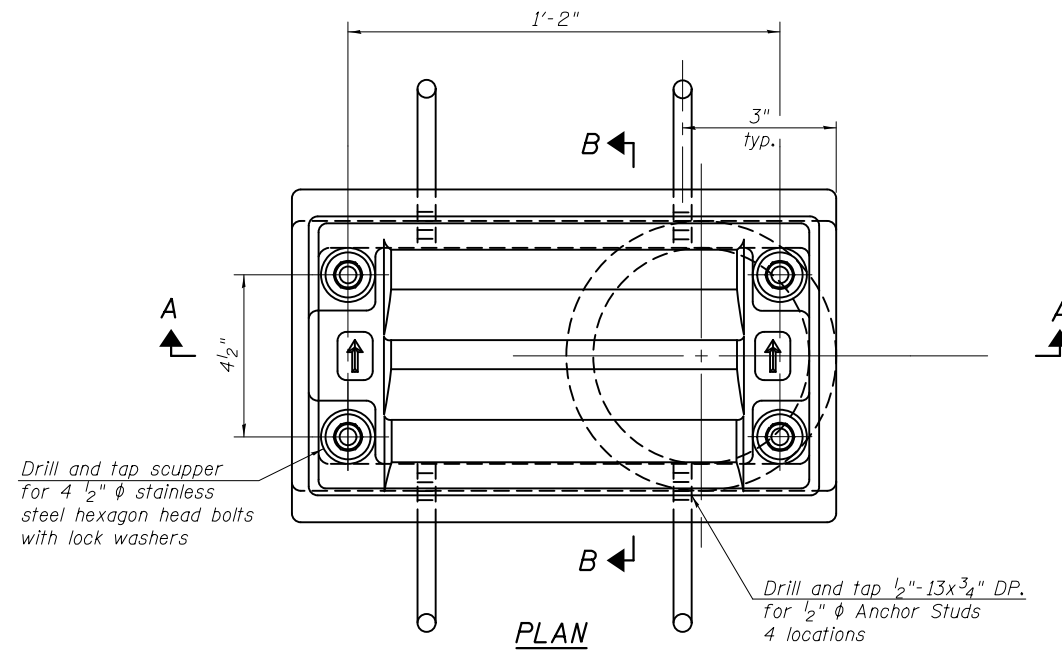
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL  
 STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

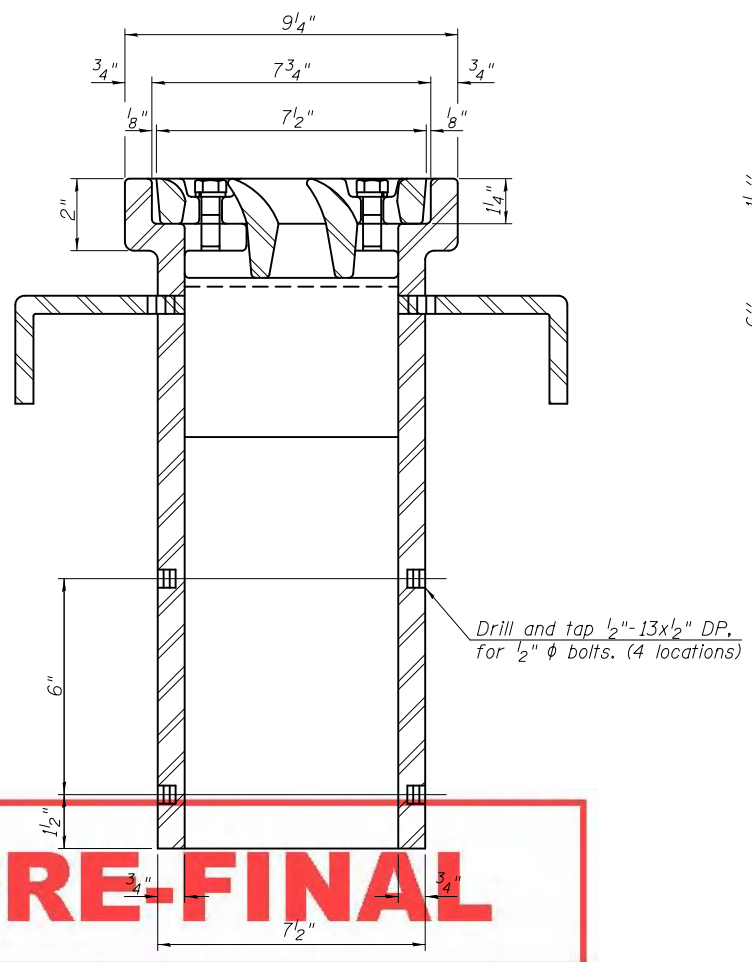
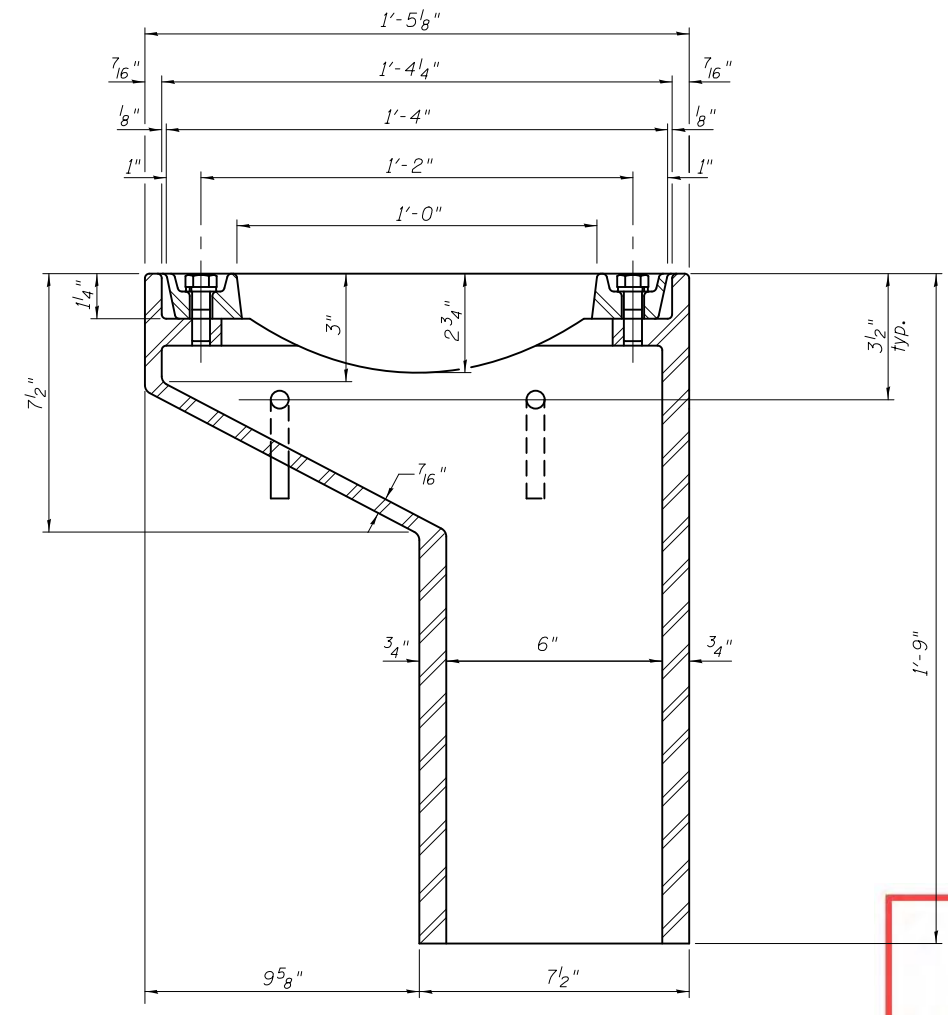
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				

SHEET NO. 25 OF 55 SHEETS

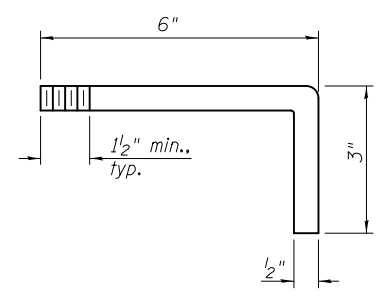
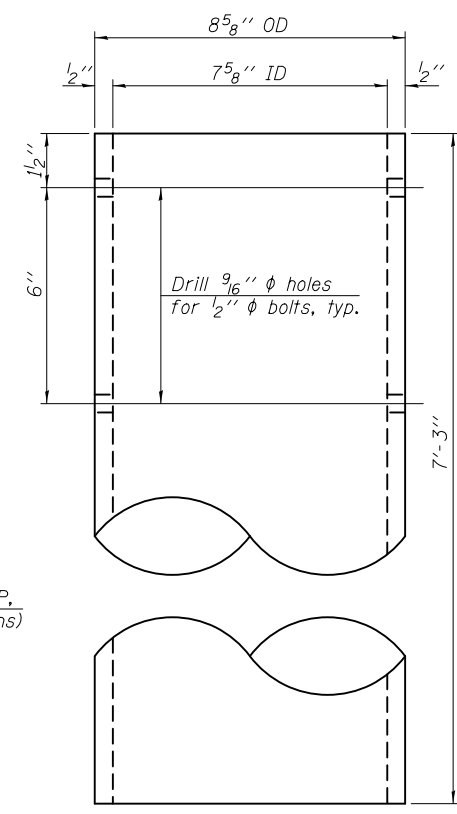




Notes:  
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.  
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.  
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.  
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.  
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.  
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.  
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.  
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.



**PRE-FINAL**



**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	8

DS-11

7-1-10

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Al-Barræ R. Shebib	PASSED - <i>Carl [Signature]</i>	REVISED
DRAWN - h.t. duong	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - NRB/GRA		

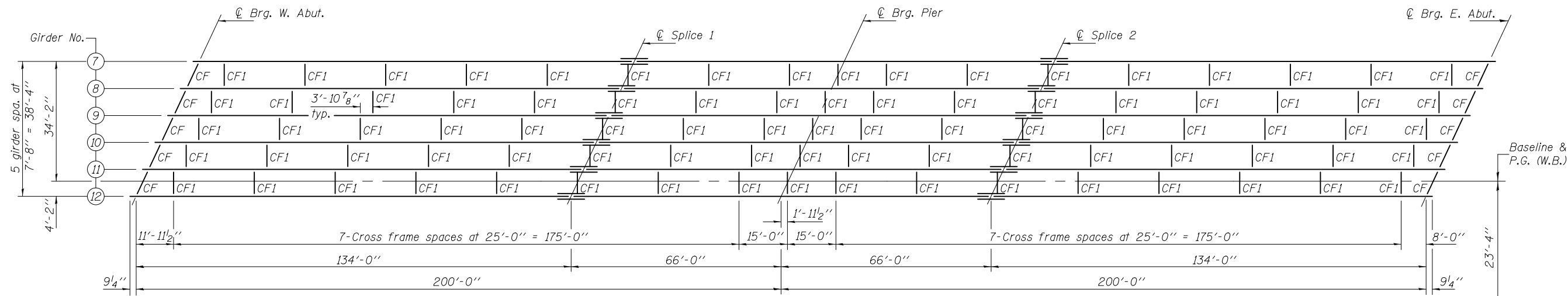
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER, DS-11  
 STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				

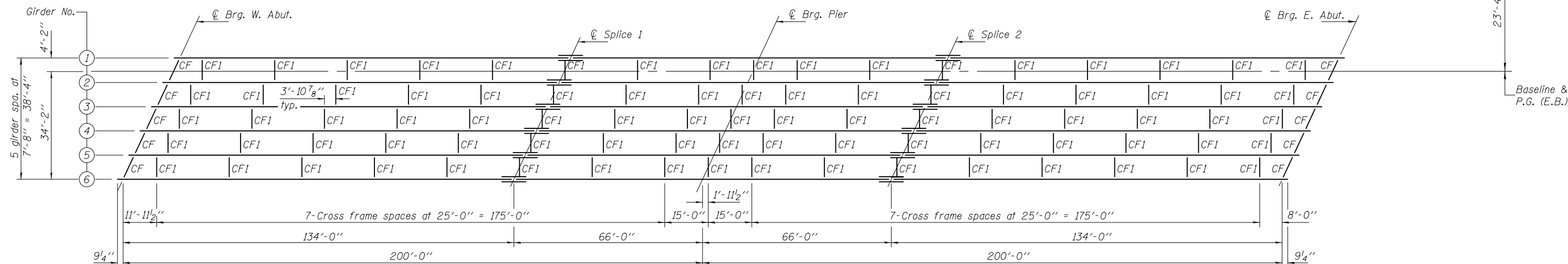
SHEET NO. 26 OF 55 SHEETS



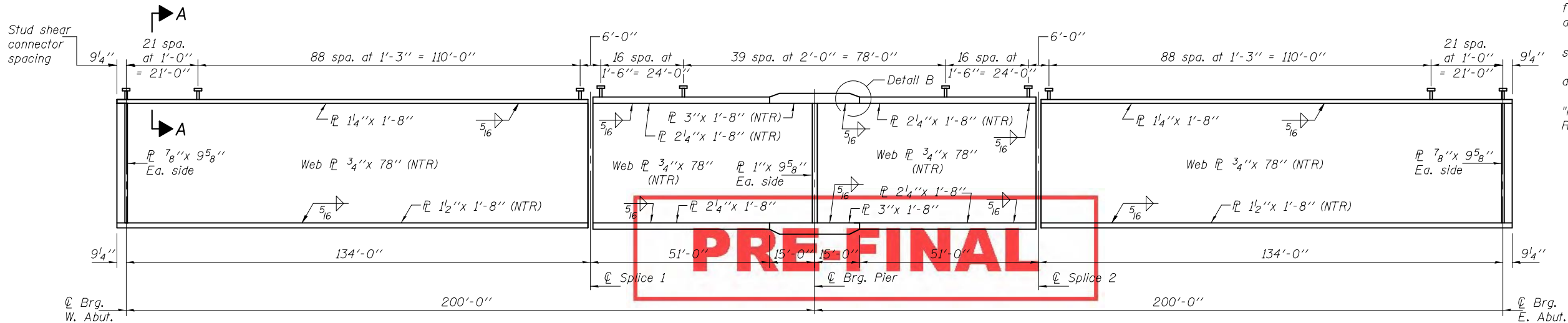


**PLAN (W.B.)**

℄ F.A.P. Rte. 301  
(US Rte. 20)

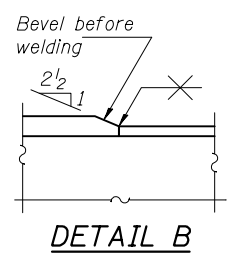


**PLAN (E.B.)**



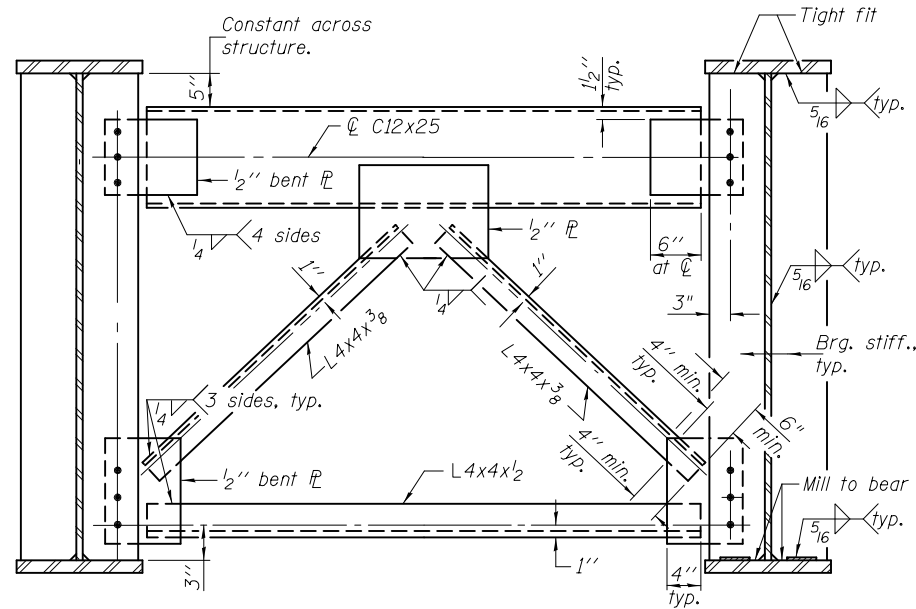
**GIRDER ELEVATION**

Note:  
All cross frames shall be installed as steel is erected and secured with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.  
All girder plates, including bearing stiffeners shall be AASHTO M 270 Grade 50.  
See sheet 28 of 55 for cross frame details and Section A-A.  
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

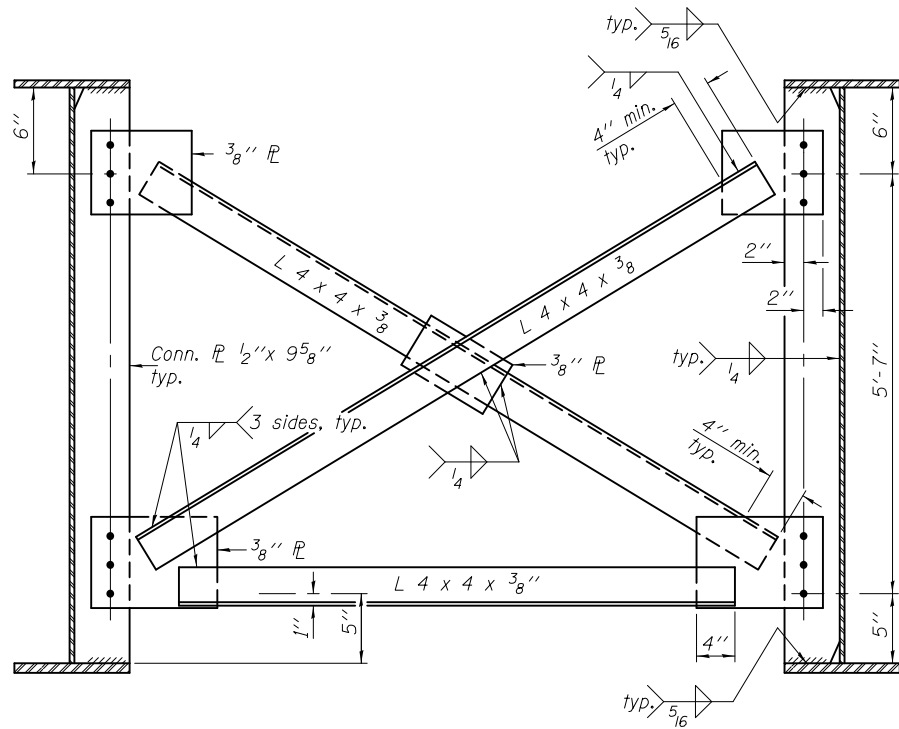


**DETAIL B**

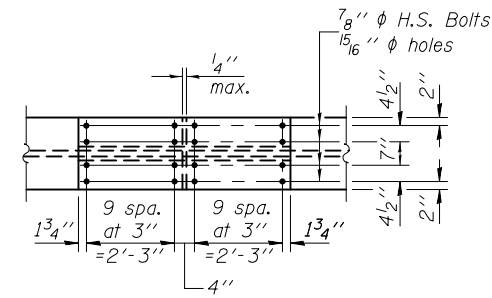
DESIGNED -	EXAMINED - <i>Jayne F. [Signature]</i>	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STRUCTURAL STEEL STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED -	PASSED - <i>Carl [Signature]</i>	REVISED			CONTRACT NO. 64D19		ILLINOIS FED. AID PROJECT			
DRAWN - h.t. duong	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 27 OF 55 SHEETS					
CHECKED -		REVISED								



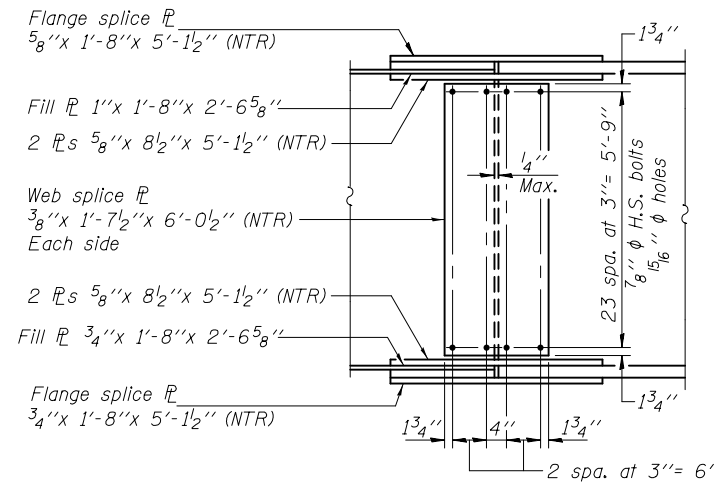
**CROSS FRAME CF**  
(20 Required)



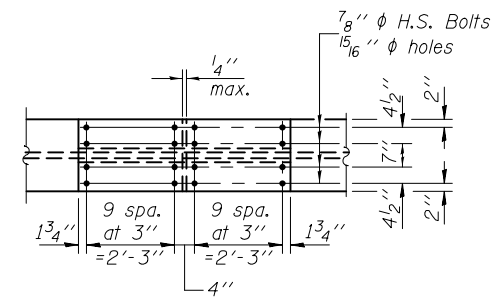
**CROSS FRAME CF1**  
(170 Required)



**PLAN - TOP FLANGE**

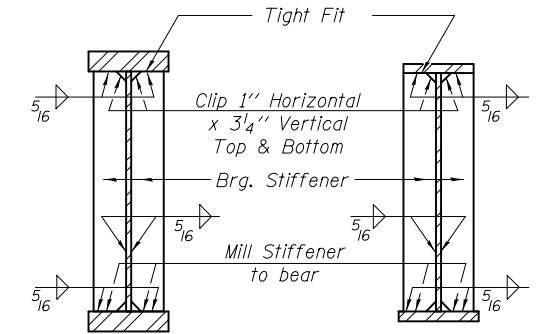


**ELEVATION**



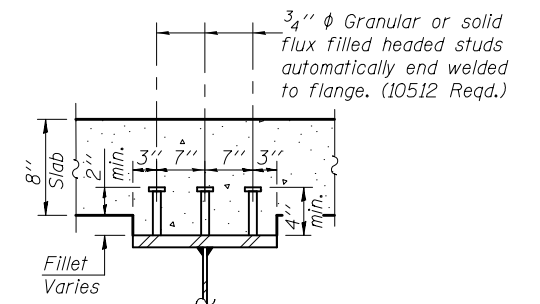
**PLAN - BOTTOM FLANGE**

**SPLICE 1 & 2 DETAILS**  
(24 Required)



**SECTION AT PIER**

**SECTION AT ABUTMENT**

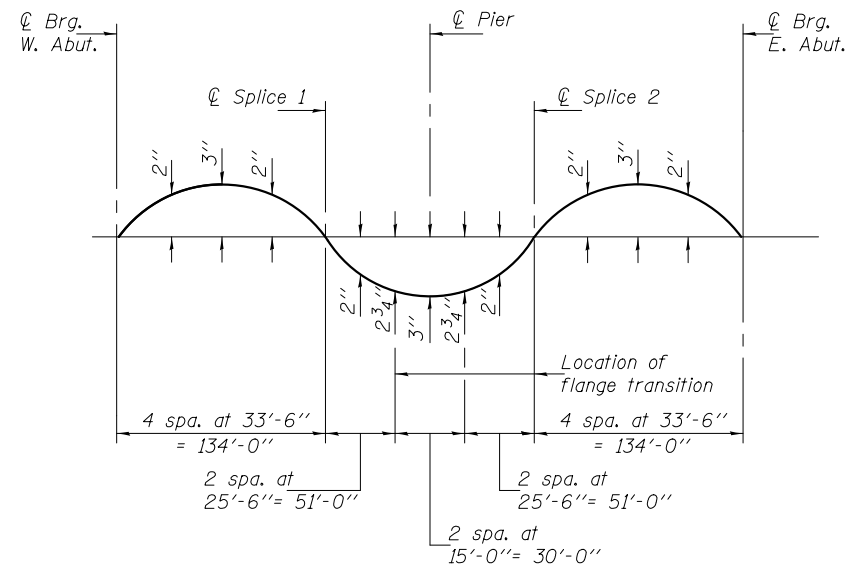


**SECTION A-A**

Notes: Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2. Use 3/4" phi H.S. bolts with 1 5/16" phi holes in CF and CF1 cross frames. Two hardened washers required for each set of oversized holes. Place cross frame with channel flanges and outstanding angle legs outward from abutment backwall. Omit connecting plates on exterior side of exterior girder. All splice plates except filler plate shall be AASHTO M 270 Gr. 50.

PRE-FINAL

DESIGNED - Nick R. Barnett	EXAMINED - <i>Jayne F. Duff</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STRUCTURAL STEEL DETAILS STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CHECKED - Al-Barrae R. Shebib	PASSED - <i>Carl Pung</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED							
DRAWN - h.t. duong		REVISED							
CHECKED - NRB/GRA				SHEET NO. 28 OF 55 SHEETS	CONTRACT NO. 64D19				



**CAMBER DIAGRAM**

**\*TOP OF GIRDER WEB ELEVATIONS (E.B.)**

Location	℄ Brg. W. Abut.	℄ Splice 1	℄ Brg. Pier	℄ Splice 2	℄ Brg. E. Abut.
Girder 1	713.24	712.25	711.77	711.39	710.66
Girder 2	713.41	712.42	711.94	711.56	710.83
Girder 3	713.55	712.56	712.08	711.70	710.97
Girder 4	713.48	712.49	712.01	711.64	710.90
Girder 5	713.38	712.39	711.91	711.53	710.80
Girder 6	713.24	712.25	711.77	711.39	710.66

\*For fabrication use only.

**\*TOP OF GIRDER WEB ELEVATIONS (W.B.)**

Location	℄ Brg. W. Abut.	℄ Splice 1	℄ Brg. Pier	℄ Splice 2	℄ Brg. E. Abut.
Girder 7	712.86	711.87	711.39	711.01	710.28
Girder 8	713.05	712.06	711.58	711.20	710.47
Girder 9	713.21	712.21	711.74	711.36	710.63
Girder 10	713.32	712.33	711.85	711.48	710.74
Girder 11	713.23	712.24	711.76	711.38	710.65
Girder 12	713.11	712.12	711.64	711.27	710.53

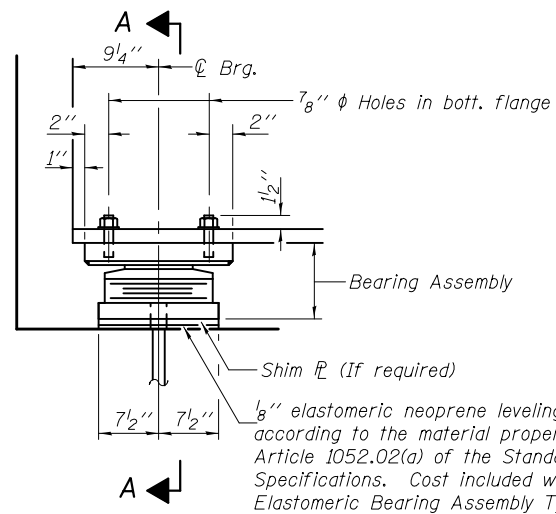
\*For fabrication use only.

INTERIOR GIRDER MOMENT TABLE		
	0.4 Sp. 1 or 0.6 Sp. 2	Pier
$I_s$	(in <sup>4</sup> ) 115965	226580
$I_c(n)$	(in <sup>4</sup> ) 220413	349594
$I_c(3n)$	(in <sup>4</sup> ) 164210	278411
$I_c(cr)$	(in <sup>4</sup> )	243085
$S_s$	(in <sup>3</sup> ) 2995	5395
$S_c(n)$	(in <sup>3</sup> ) 3780	6167
$S_c(3n)$	(in <sup>3</sup> ) 3437	5777
$S_c(cr)$	(in <sup>3</sup> )	6143
DC1	(k/ft) 1.209	1.430
M <sub>DC1</sub>	(k) 3001.0	7060.0
DC2	(k/ft) 0.173	0.173
M <sub>DC2</sub>	(k) 441.0	973.0
DW	(k/ft) 0.383	0.383
M <sub>DW</sub>	(k) 977.0	2154.0
M <sub>℄ + IM</sub>	(k) 3419.0	4126.0
M <sub>u</sub> (Strength I)	(k) 11751.3	20492.8
$\phi_r M_n$	(k) 17754.3	24545.3
$f_s$ DC1	(ksi) 12.0	15.7
$f_s$ DC2	(ksi) 1.5	1.9
$f_s$ DW	(ksi) 3.4	4.2
$f_s$ (℄ + IM)	(ksi) 10.9	8.1
$f_s$ (Service II)	(ksi) 31.1	32.3
$0.95R_n F_y f$	(ksi) 47.5	47.5
$f_s$ (Total)(Strength I)	(ksi)	42.4
$\phi_r F_n$	(ksi)	50.0
V <sub>r</sub>	(k)	54.8
		65.2

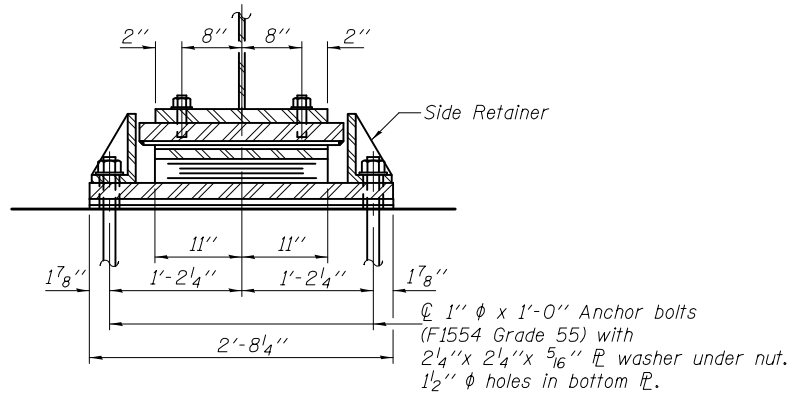
INTERIOR GIRDER REACTION TABLE		
	Abutments	Pier
R <sub>DC1</sub>	(k) 86.2	324.0
R <sub>DC2</sub>	(k) 12.4	44.3
R <sub>DW</sub>	(k) 27.5	98.1
R <sub>℄ + IM</sub>	(k) 123.6	245.3
R <sub>Total</sub>	(k) 249.7	711.7

- $I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total-Strength I, and Service II) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).
- $I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).
- $I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).
- $I_c(cr), S_c(cr)$ : Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing  $f_s$  (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M<sub>DC1</sub>: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M<sub>DC2</sub>: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M<sub>℄ + IM</sub>: Un-factored live load moment plus dynamic load allowance (kip-ft.).
- M<sub>u</sub> (Strength I): Factored design moment (kip-ft.).  
1.25 (M<sub>DC1</sub> + M<sub>DC2</sub>) + 1.5 M<sub>DW</sub> + 1.75 M<sub>℄ + IM</sub>
- $\phi_r M_n$ : Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
- $f_s$  DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).  
M<sub>DC1</sub> / S<sub>nc</sub>
- $f_s$  DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).  
M<sub>DC2</sub> / S<sub>c(3n)</sub> or M<sub>DC2</sub> / S<sub>c(cr)</sub> as applicable.
- $f_s$  DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).  
M<sub>DW</sub> / S<sub>c(3n)</sub> or M<sub>DW</sub> / S<sub>c(cr)</sub> as applicable.
- $f_s$  (℄ + IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).  
M<sub>℄ + IM</sub> / S<sub>c(n)</sub> or M<sub>DW</sub> / S<sub>c(cr)</sub> as applicable.
- $f_s$  (Service II): Sum of stresses as computed below (ksi).  
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s(\ell + IM)$
- $0.95R_n F_y f$ : Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- $f_s$  (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).  
1.25 (f<sub>sDC1</sub> + f<sub>sDC2</sub>) + 1.5 f<sub>sDW</sub> + 1.75 f<sub>s</sub>(℄ + IM)
- $\phi_r F_n$ : Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
- V<sub>r</sub>: Maximum factored shear range in span computed according to Article 6.10.10.

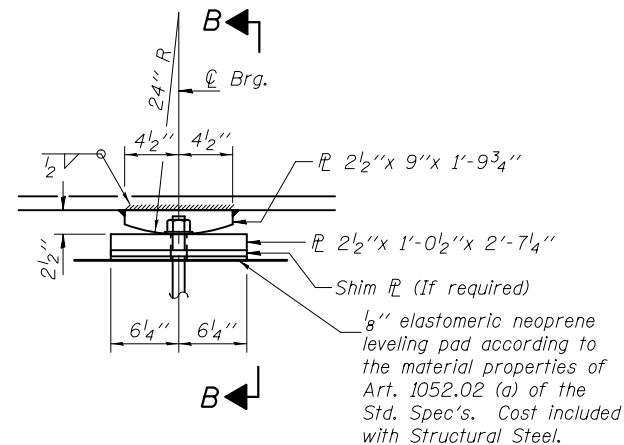
PRE-FINAL



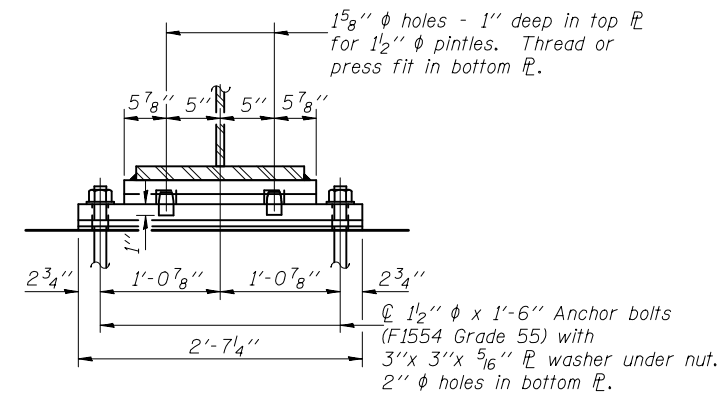
ELEVATION AT ABUT.



SECTION A-A



ELEVATION AT PIER

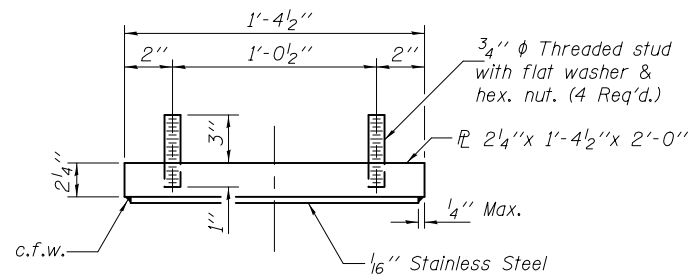


SECTION B-B

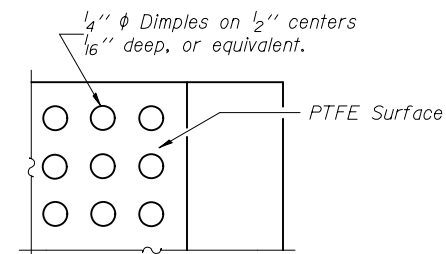
TYPE II ELASTOMERIC EXP. BRG.

FIXED BEARING

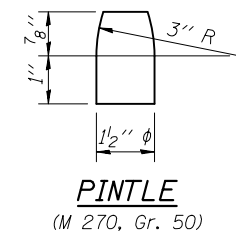
(12 Required)



TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE



PINTLE  
(M 270, Gr. 50)

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

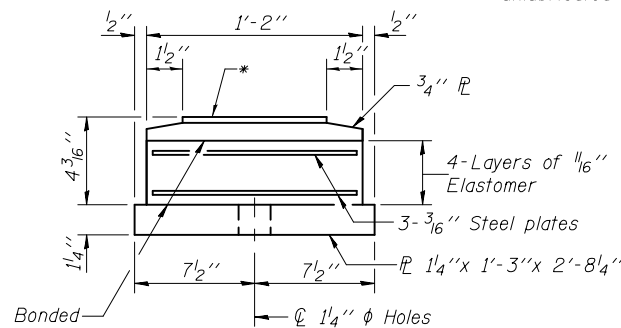
The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

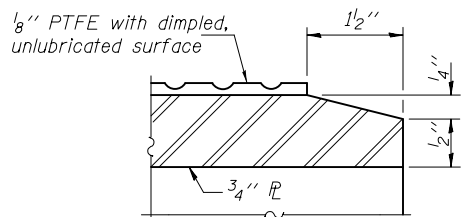
The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

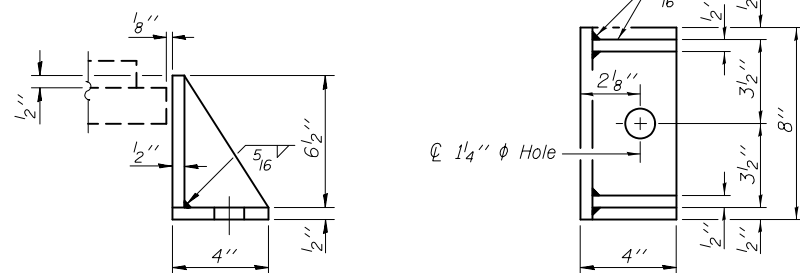
\*1/8" PTFE dimpled, unlubricated



BOTTOM BEARING ASSEMBLY

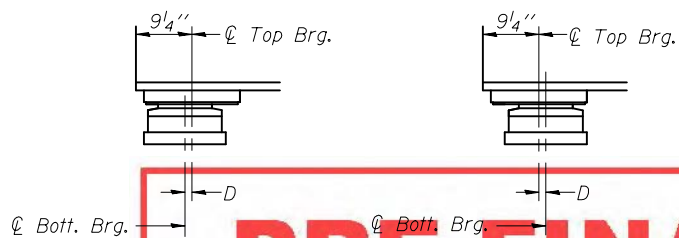


SECTION THRU PTFE



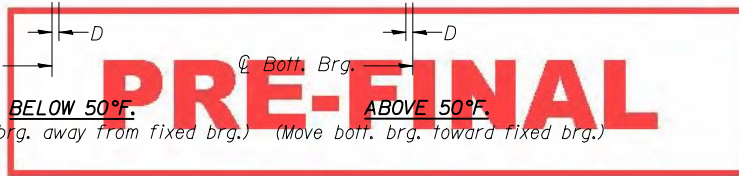
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SETTING ANCHOR BOLTS AT EXP. BRG.

$D = \frac{1}{8}$  per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	24
Anchor Bolts 1"	Each	48
Anchor Bolts 1 1/2"	Each	24

DESIGNED - Nick R. Barnett  
CHECKED - Al-Barræ R. Shehbi  
DRAWN - h.t. duong  
CHECKED - NRB/GRA

EXAMINED - *Joanne F. Duff*  
PASSED - *Carl Bragg*  
ACTING ENGINEER OF BRIDGE DESIGN  
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE -  
REVISED  
REVISED

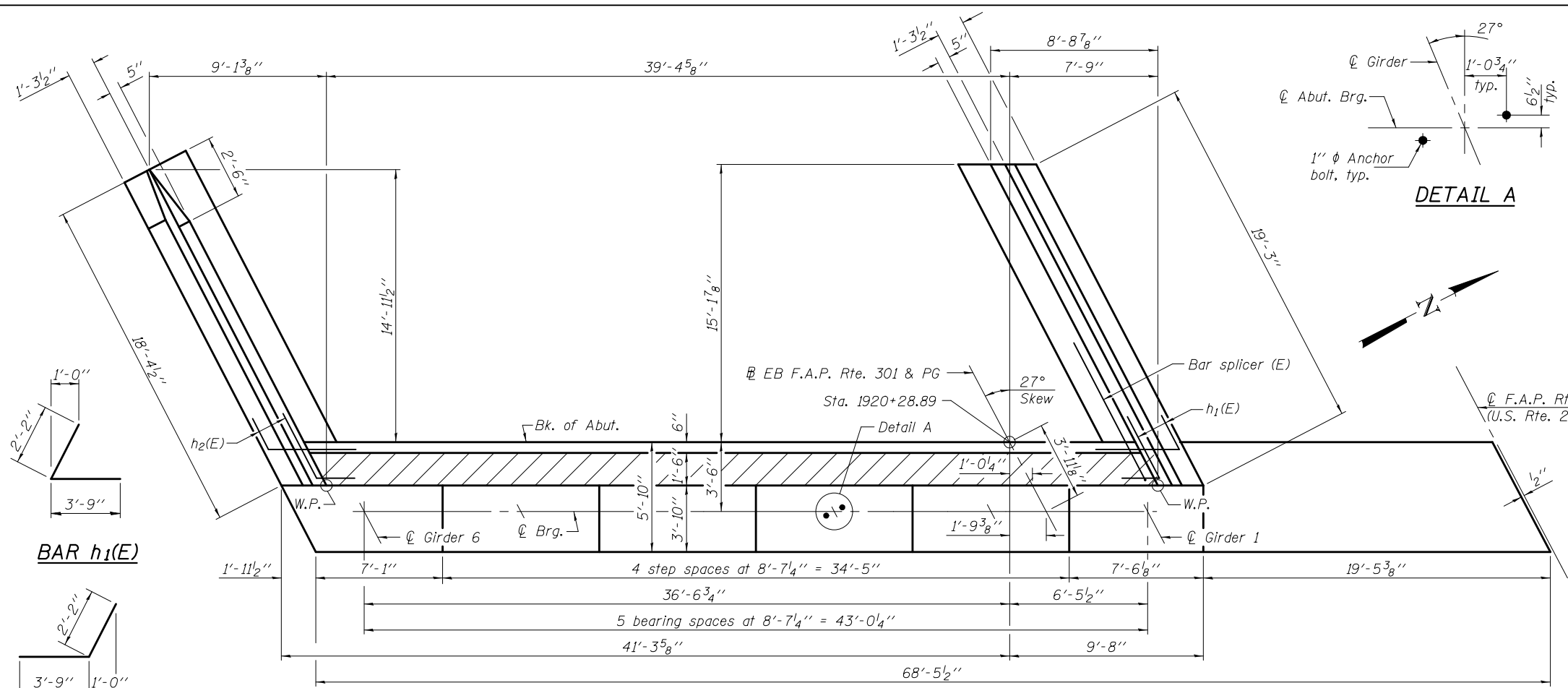
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

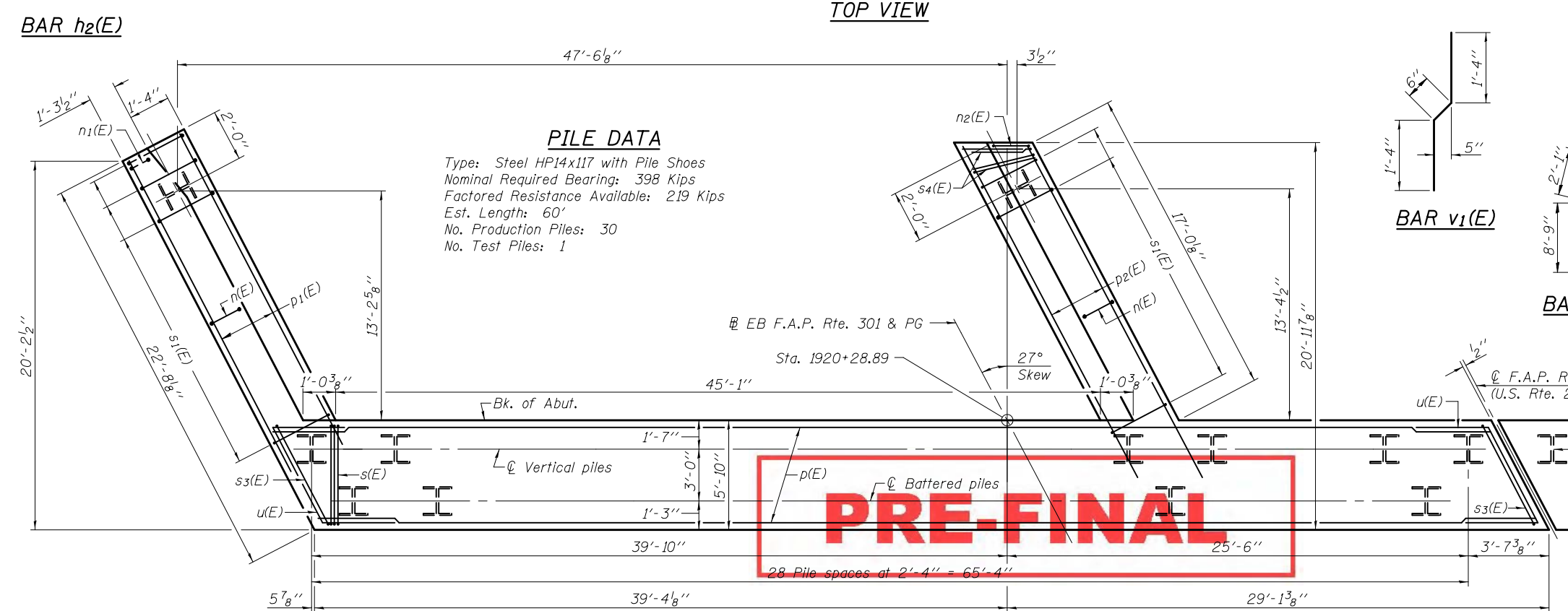
SHEET NO. 30 OF 55 SHEETS

F.A.P. RTE. 301 SECTION 3BR & 3BR-1 COUNTY WINNEBAGO TOTAL SHEETS SHEET NO. CONTRACT NO. 64D19 ILLINOIS FED. AID PROJECT



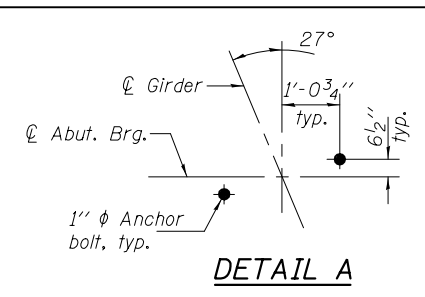


TOP VIEW

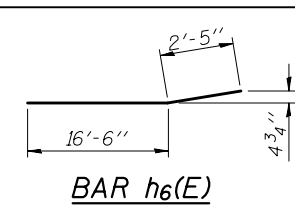


PLAN-PILE CAP

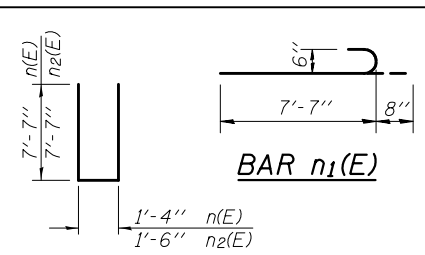
**PILE DATA**  
 Type: Steel HP14x117 with Pile Shoes  
 Nominal Required Bearing: 398 Kips  
 Factored Resistance Available: 219 Kips  
 Est. Length: 60'  
 No. Production Piles: 30  
 No. Test Piles: 1



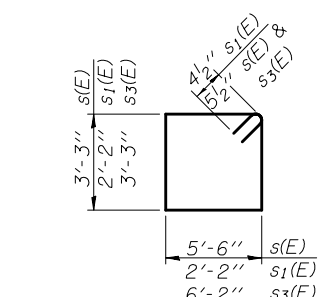
DETAIL A



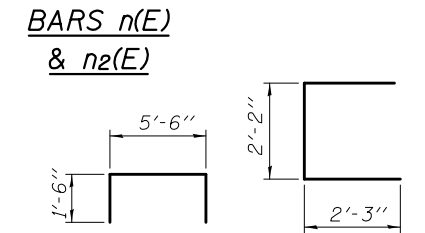
BAR h6(E)



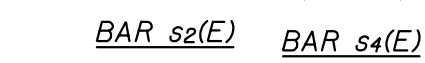
BAR n1(E)



BARS s1(E) & s3(E)



BARS n2(E) & s2(E)



BAR s4(E)

**WEST ABUTMENT (E.B.)  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	18	#5	5'-11"	L
h2(E)	18	#5	5'-11"	L
h3(E)	14	#5	46'-10"	—
h4(E)	5	#6	46'-10"	—
h6(E)	11	#4	18'-11"	—
h7(E)	28	#4	18'-11"	—
h8(E)	5	#4	34'-1"	—
h9(E)	17	#4	18'-0"	—
n(E)	35	#6	16'-6"	U
n1(E)	6	#6	8'-3"	U
n2(E)	1	#6	16'-8"	U
p(E)	24	#7	36'-7"	—
p1(E)	6	#7	20'-8"	—
p2(E)	6	#7	20'-0"	—
s(E)	84	#5	18'-5"	□
s1(E)	35	#4	9'-5"	□
s2(E)	35	#4	8'-6"	□
s3(E)	2	#5	19'-9"	□
s4(E)	4	#4	6'-8"	□
u(E)	8	#6	13'-9"	L
v(E)	48	#5	3'-10"	L
v1(E)	48	#4	3'-2"	L
v2(E)	48	#5	8'-10"	—
v3(E)	48	#5	10'-2"	—
v4(E)	3	#6	10'-10"	—
v5(E)	37	#6	11'-5"	—
v6(E)	39	#6	11'-4"	—

Structure Excavation	Cu. Yd.	145.5
Concrete Structures	Cu. Yd.	114.1
Reinforcement Bars, Epoxy Coated	Pound	10180
Furnishing Steel Piles, HP14x117	Foot	1800
Driving Piles	Foot	1800
Test Pile Steel, HP14x117	Each	1
Pile Shoes	Each	31
Concrete Encasement	Cu. Yd.	16.9
Concrete Sealer	Sq. Ft.	1015.5
Anchor Bolts, 1"	Each	12

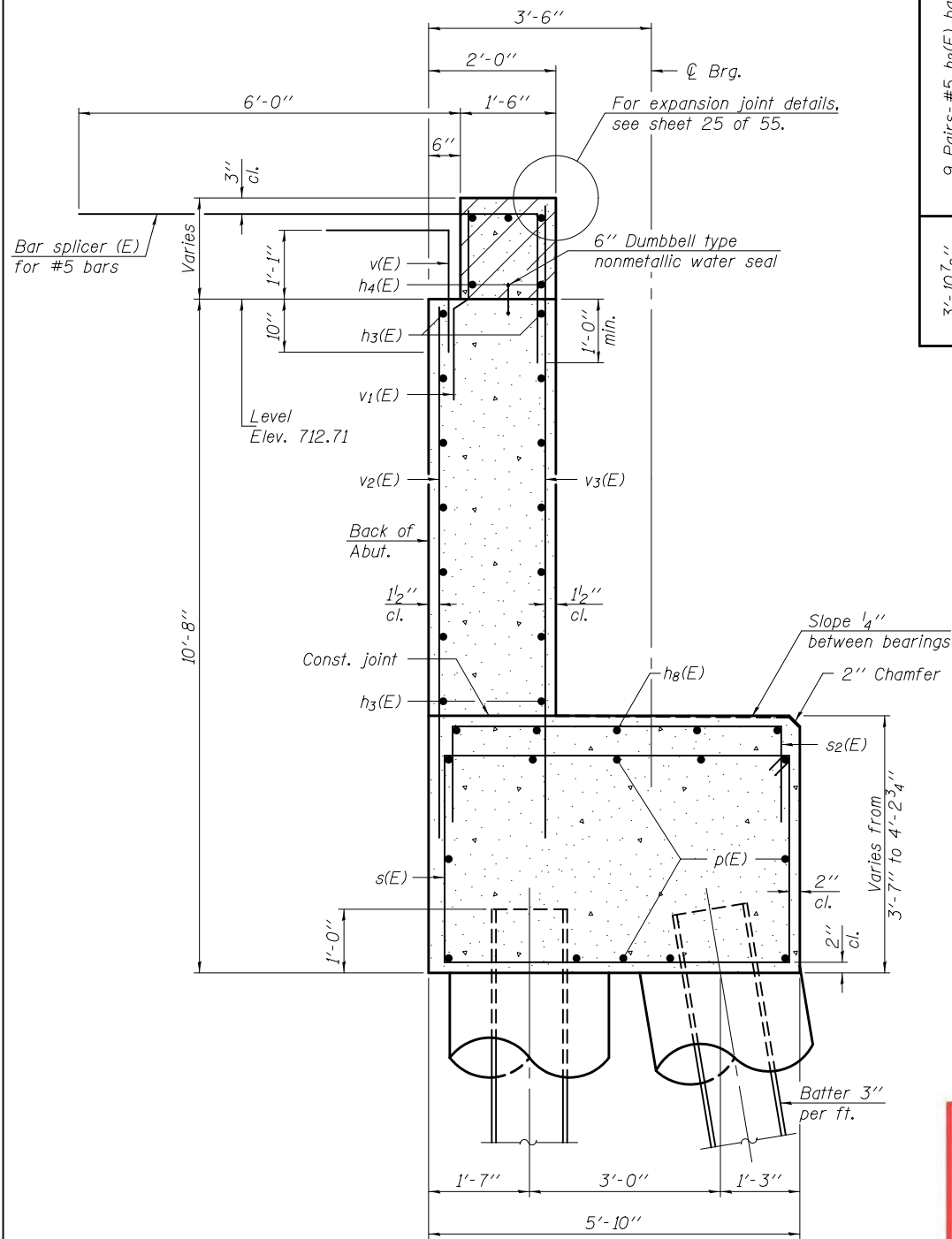
\*This pile shall be driven during Stage I Construction to avoid conflict during Stage II Construction. For location, see sheet 37 of 55. The Temp. Soil Retention System in the vicinity of this pile shall be modified to accommodate its driving.

For details of bar splicers, see sheet 49 of 55. For details of piles & concrete encasement, see sheet 47 of 55.

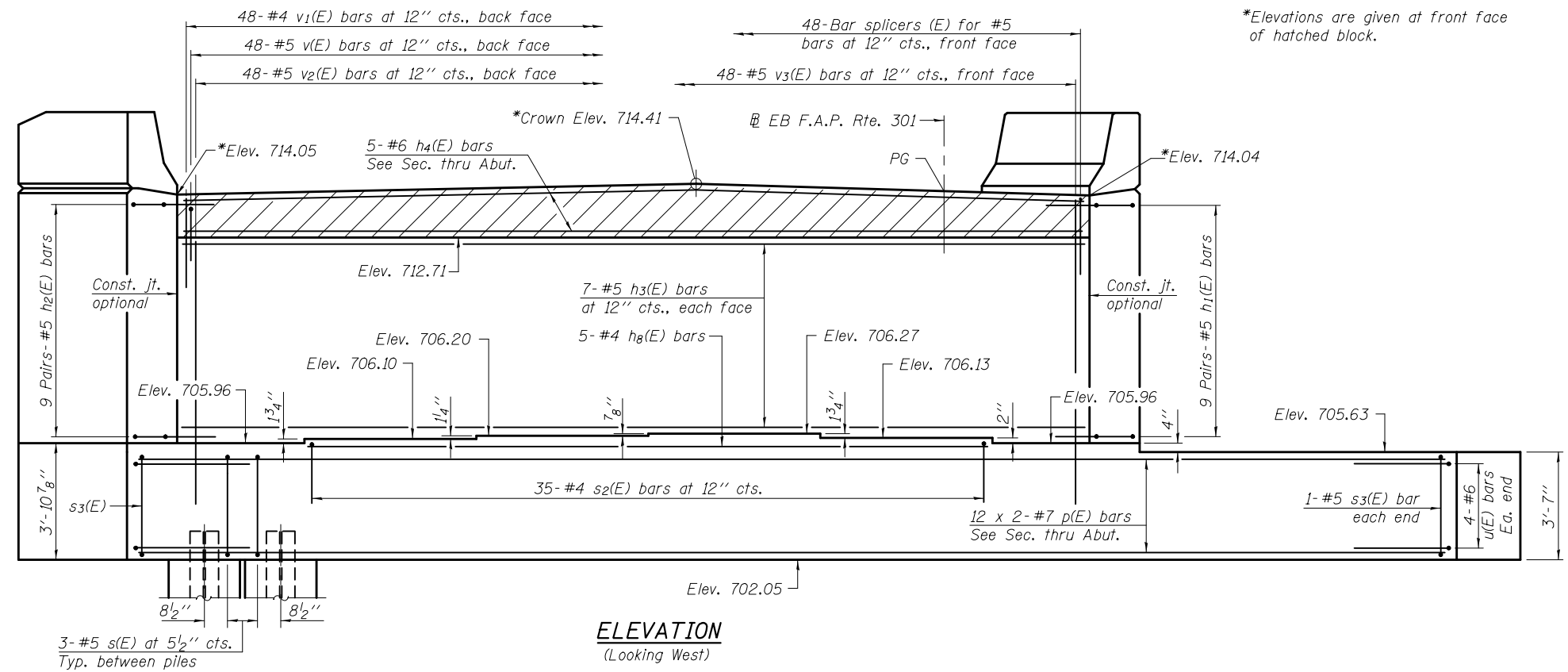


Notes:  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 Quantity of concrete in end post included with Concrete Superstructure on sheet 20 of 55.  
 For Concrete Encasement details, see sheet 47 of 55.  
 See sheet 46 of 55 for additional form liner details. Form Liner shall be placed on outside face of wingwalls as shown in the Wingwall Elevation shown below.  
 For bar splicer details, see sheet 49 of 55.

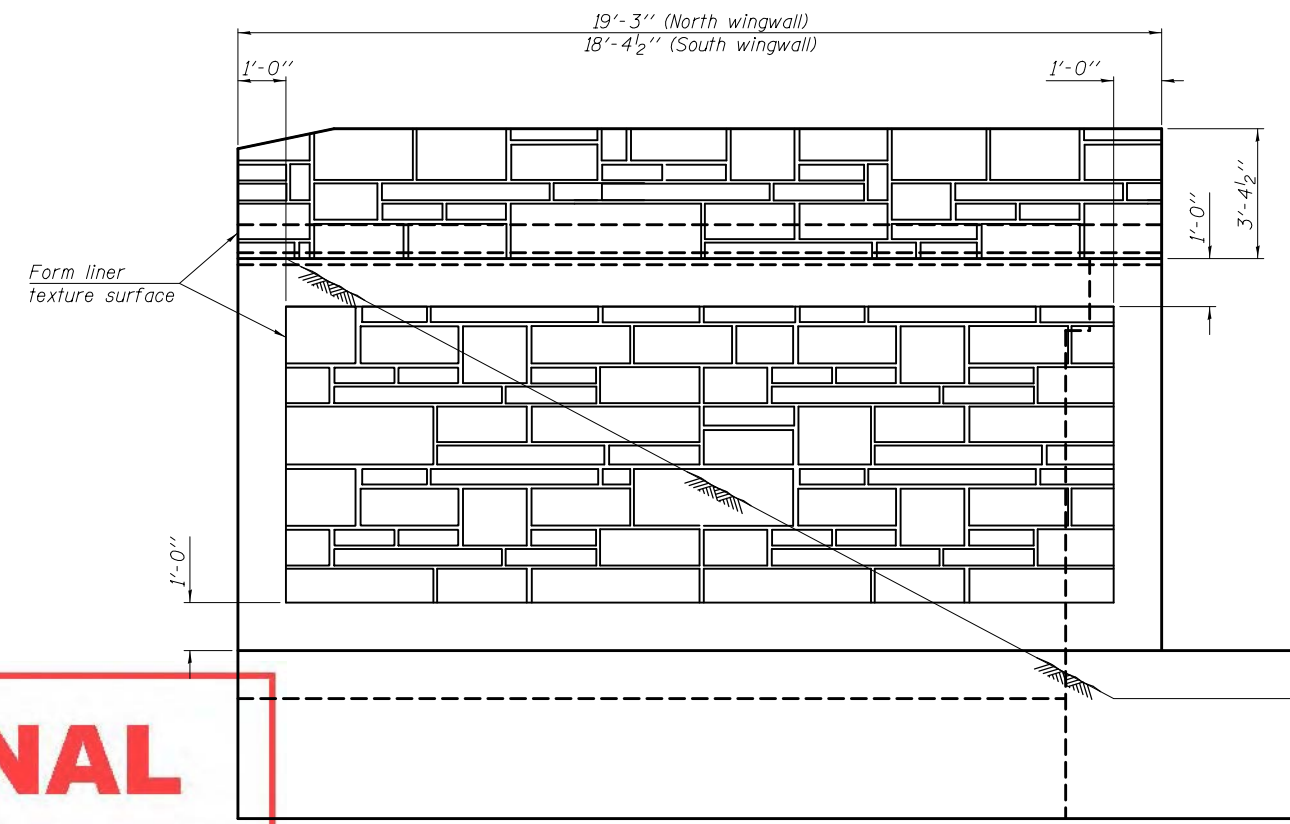
\*Elevations are given at front face of hatched block.



**SECTION THRU WEST ABUTMENT**



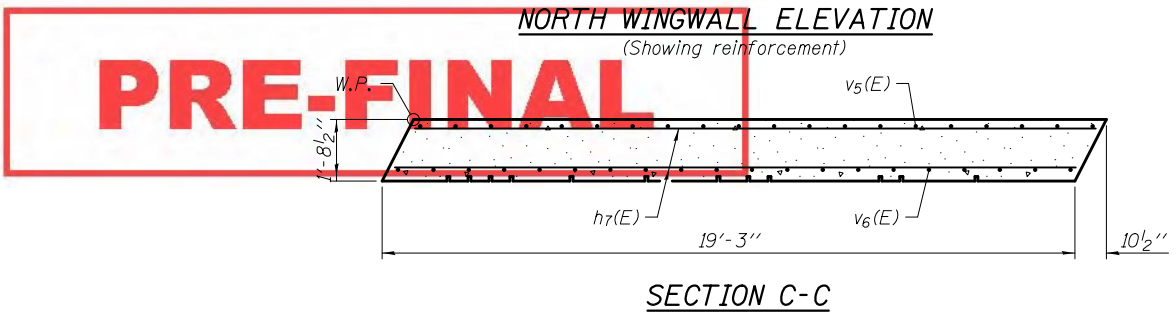
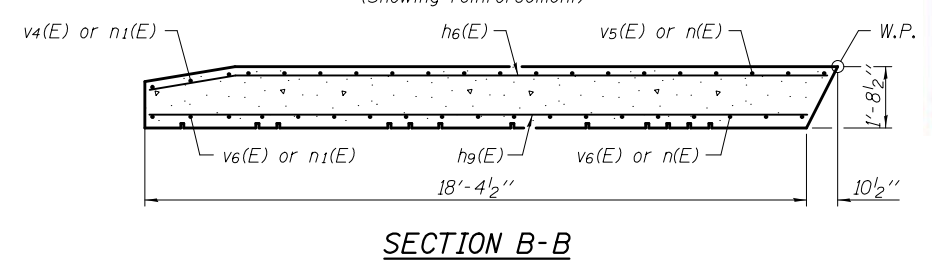
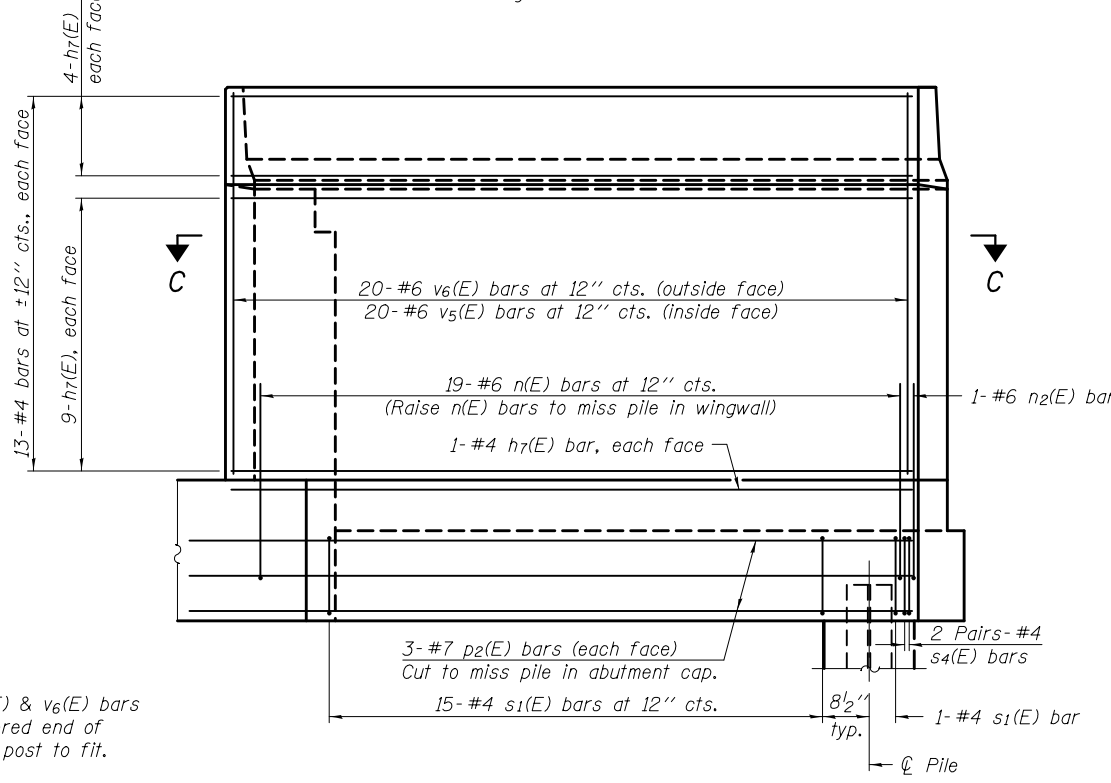
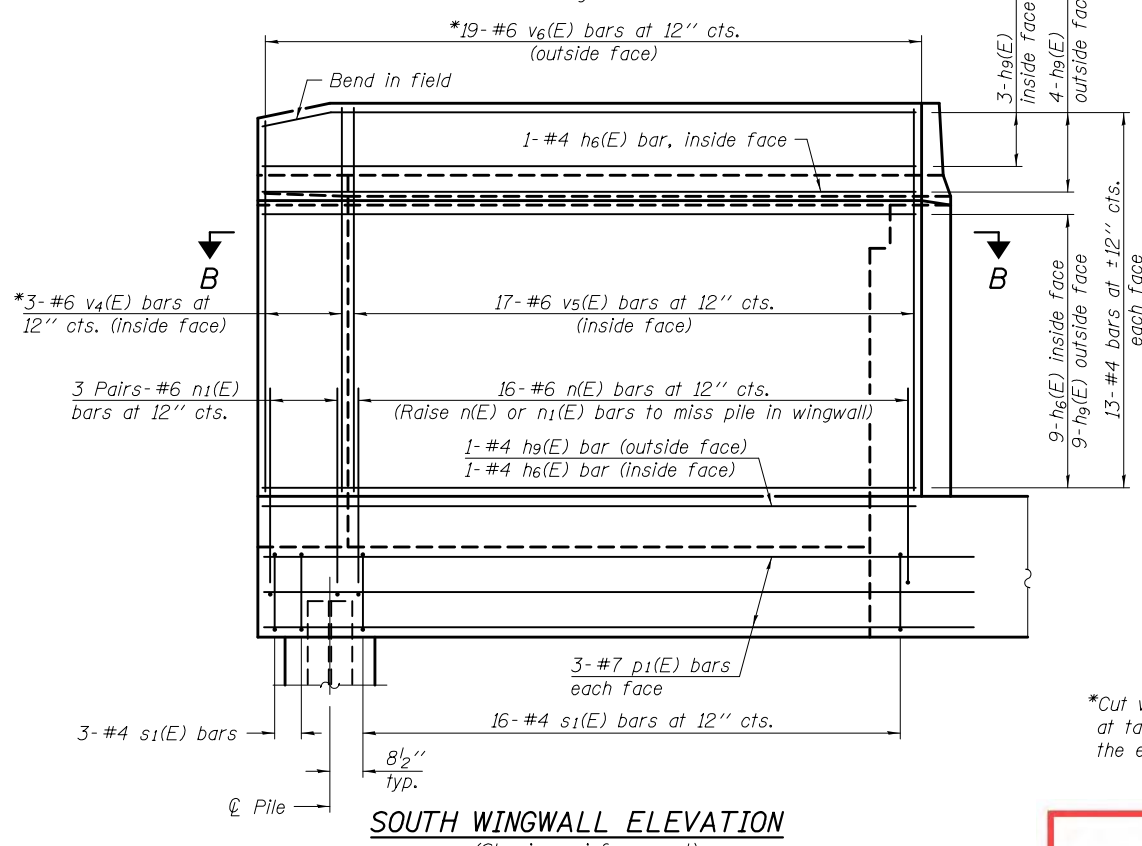
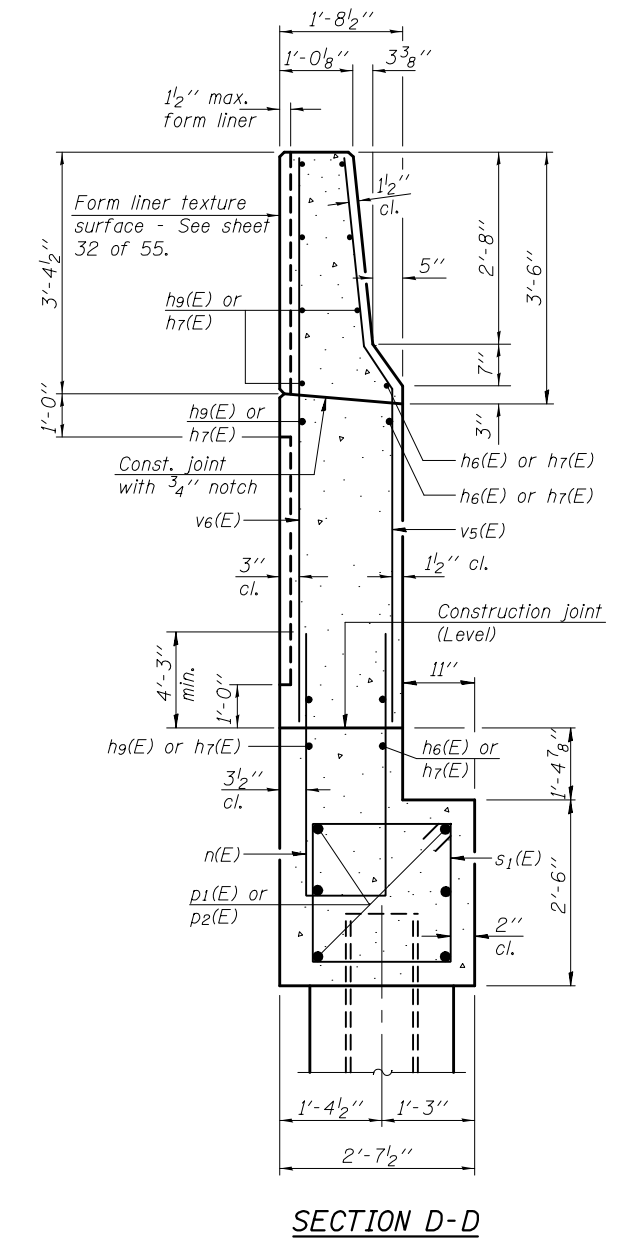
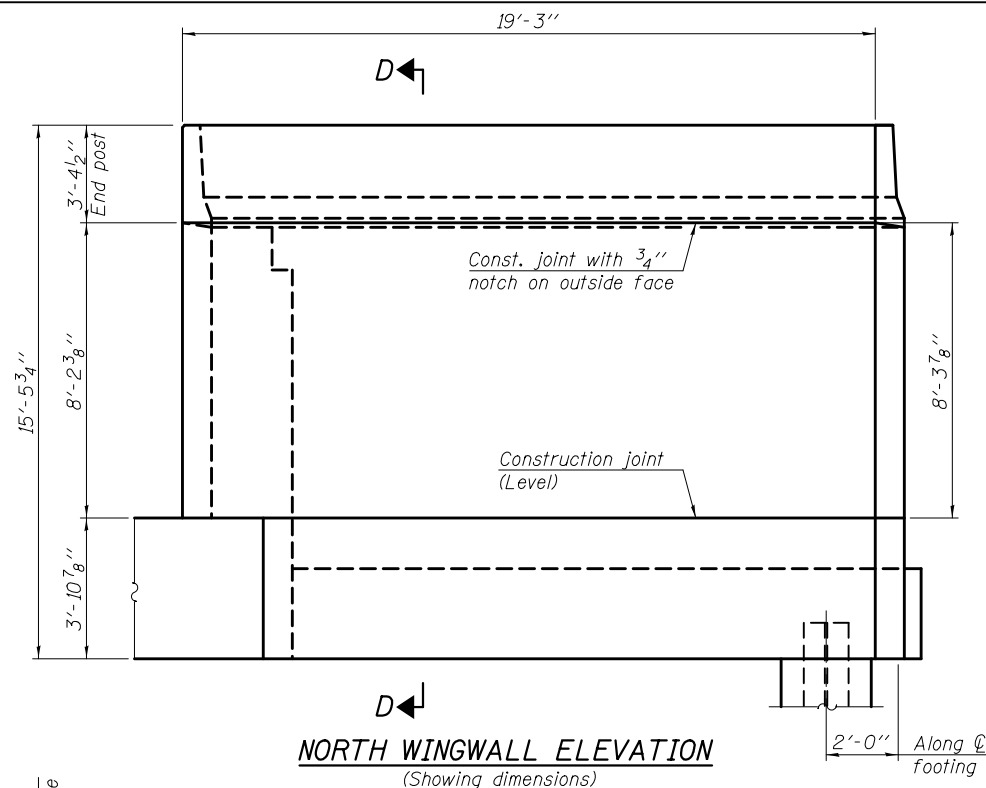
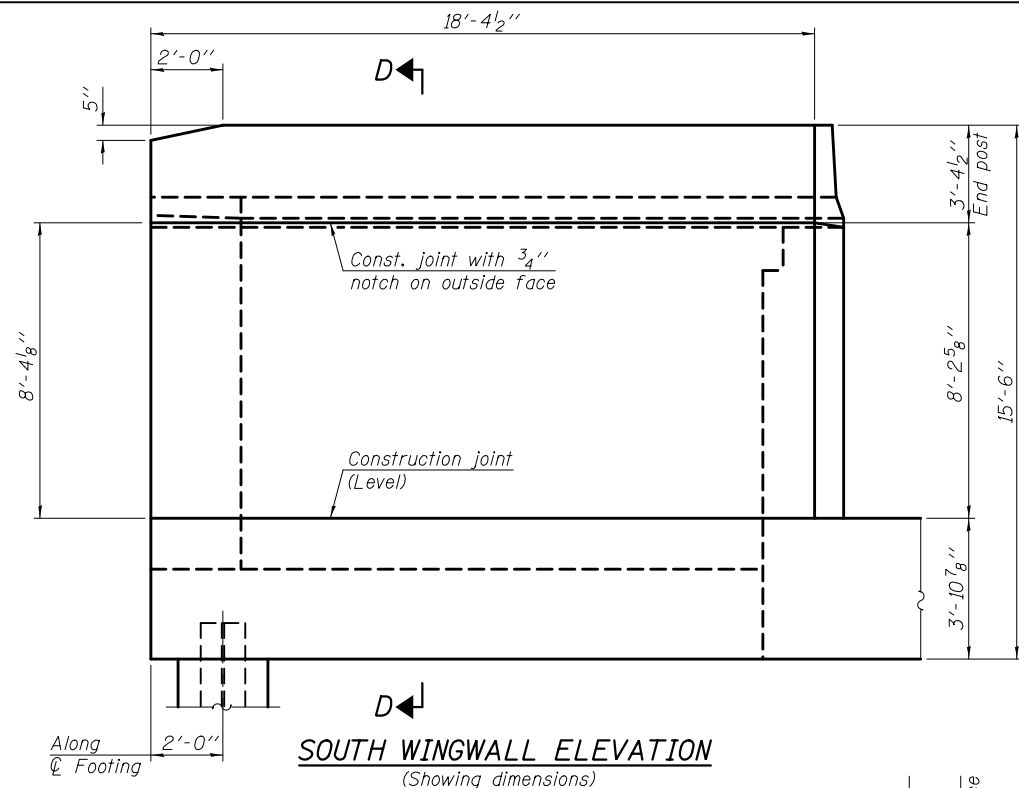
**ELEVATION**  
(Looking West)



**WINGWALL ELEVATION**  
(South wingwall shown, North wingwall similar).

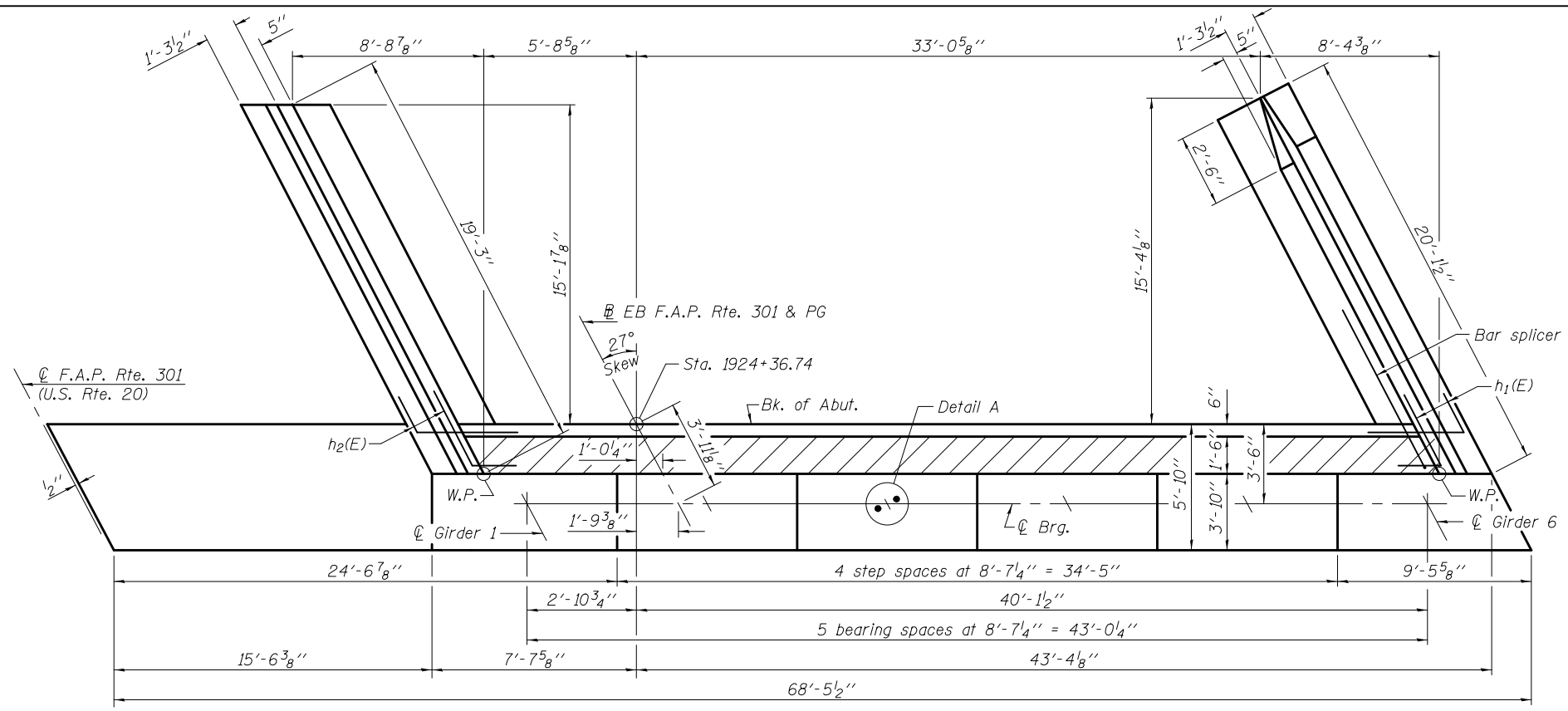
**PRE-FINAL**  
 MIN. BAR LAP  
 #7 bar = 5'-2"

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Jayne F. [Signature]</i>	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST ABUTMENT (E.B.) - STAGE I CONSTRUCTION STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED - AL-BARRAE R. SHEBIB	PASSED - <i>Carl [Signature]</i>	REVISED			CONTRACT NO. 64D19					
DRAWN - H.T. DUONG / M.B.M.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 32 OF 55 SHEETS					
CHECKED - NRB/GRA					ILLINOIS FED. AID PROJECT					



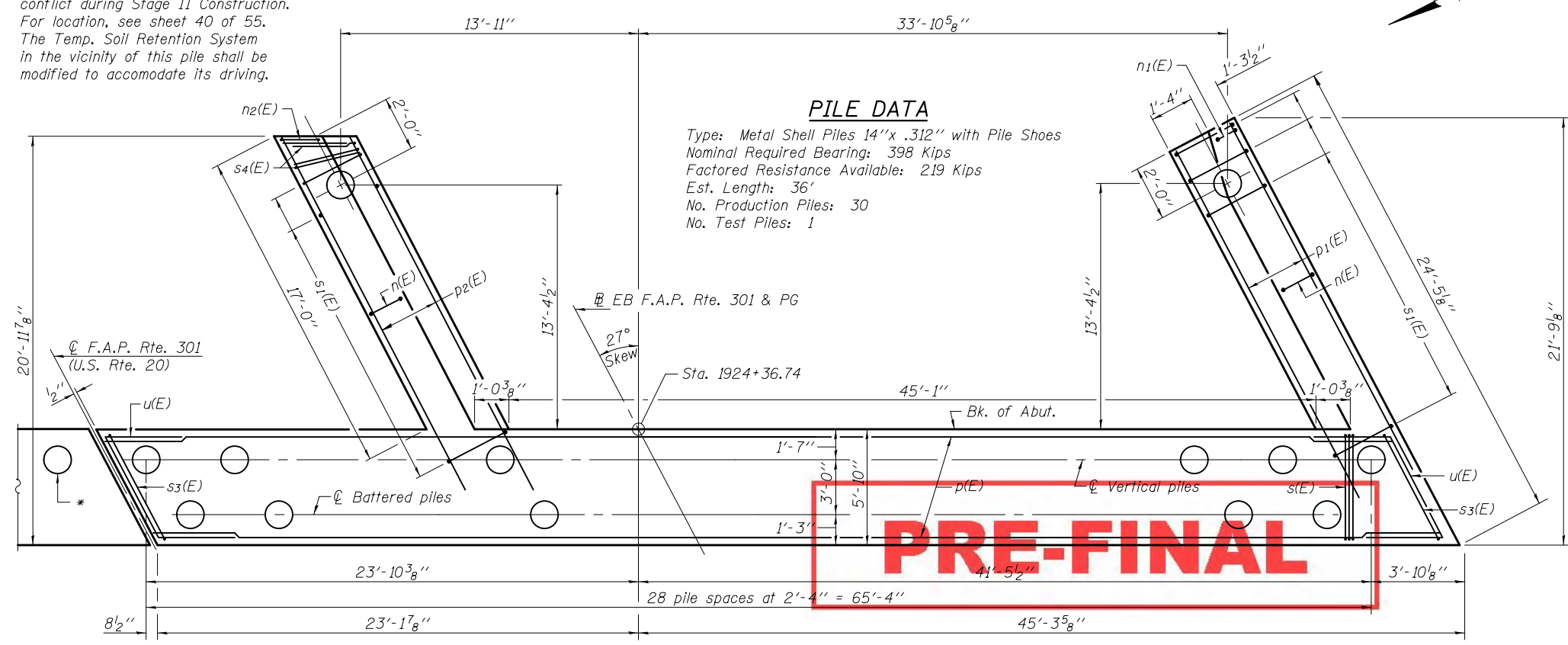
PRE-FINAL

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST ABUTMENT DETAILS (E.B.) - STAGE I CONSTRUCTION STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED - AL-BARRAE R. SHEBIB	PASSED - <i>Carl [Signature]</i>	REVISED			CONTRACT NO. 64D19					
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 33 OF 55 SHEETS					
CHECKED - NRB/GRA					ILLINOIS FED. AID PROJECT					



TOP VIEW

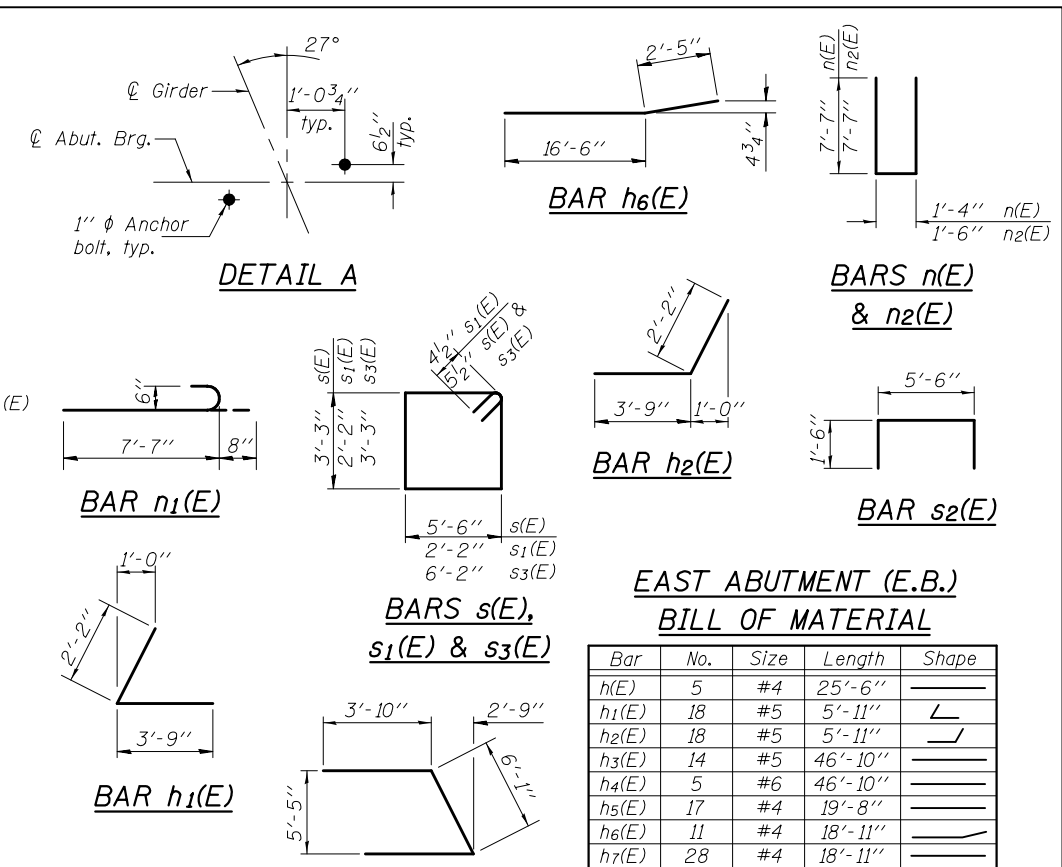
\*This pile shall be driven during Stage I Construction to avoid conflict during Stage II Construction. For location, see sheet 40 of 55. The Temp. Soil Retention System in the vicinity of this pile shall be modified to accommodate its driving.



**PILE DATA**

Type: Metal Shell Piles 14"x .312" with Pile Shoes  
 Nominal Required Bearing: 398 Kips  
 Factored Resistance Available: 219 Kips  
 Est. Length: 36'  
 No. Production Piles: 30  
 No. Test Piles: 1

PLAN-PILE CAP



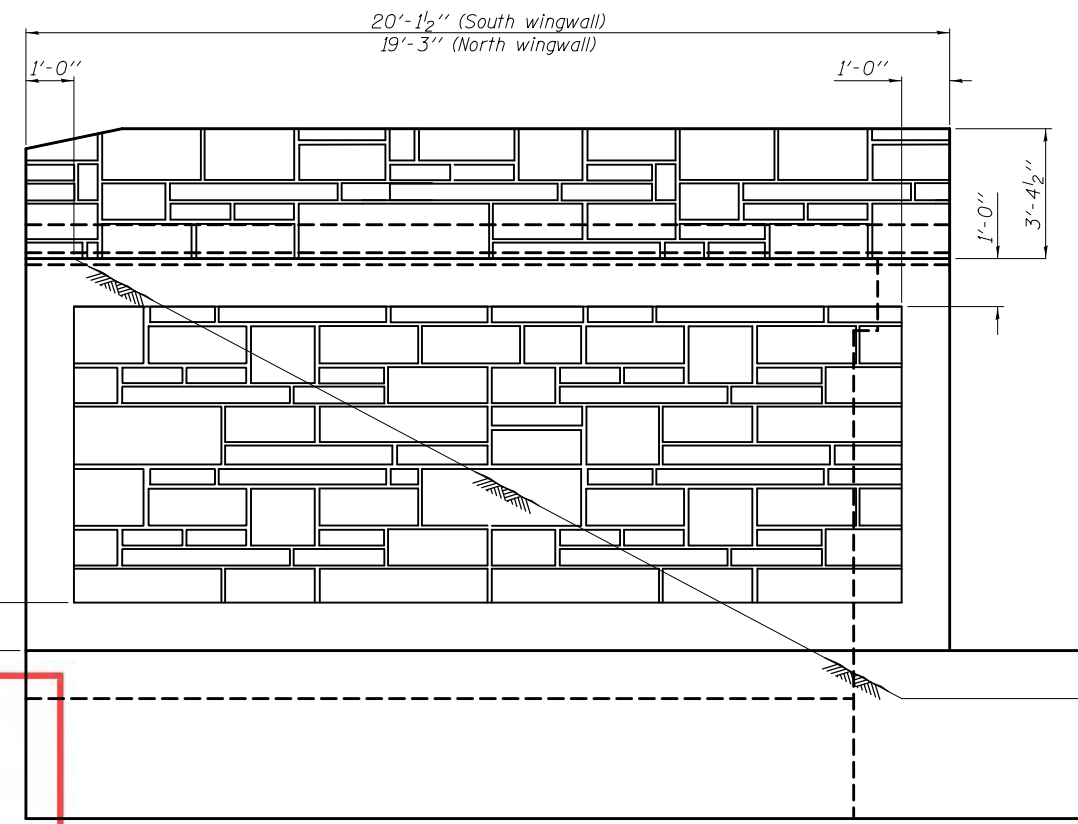
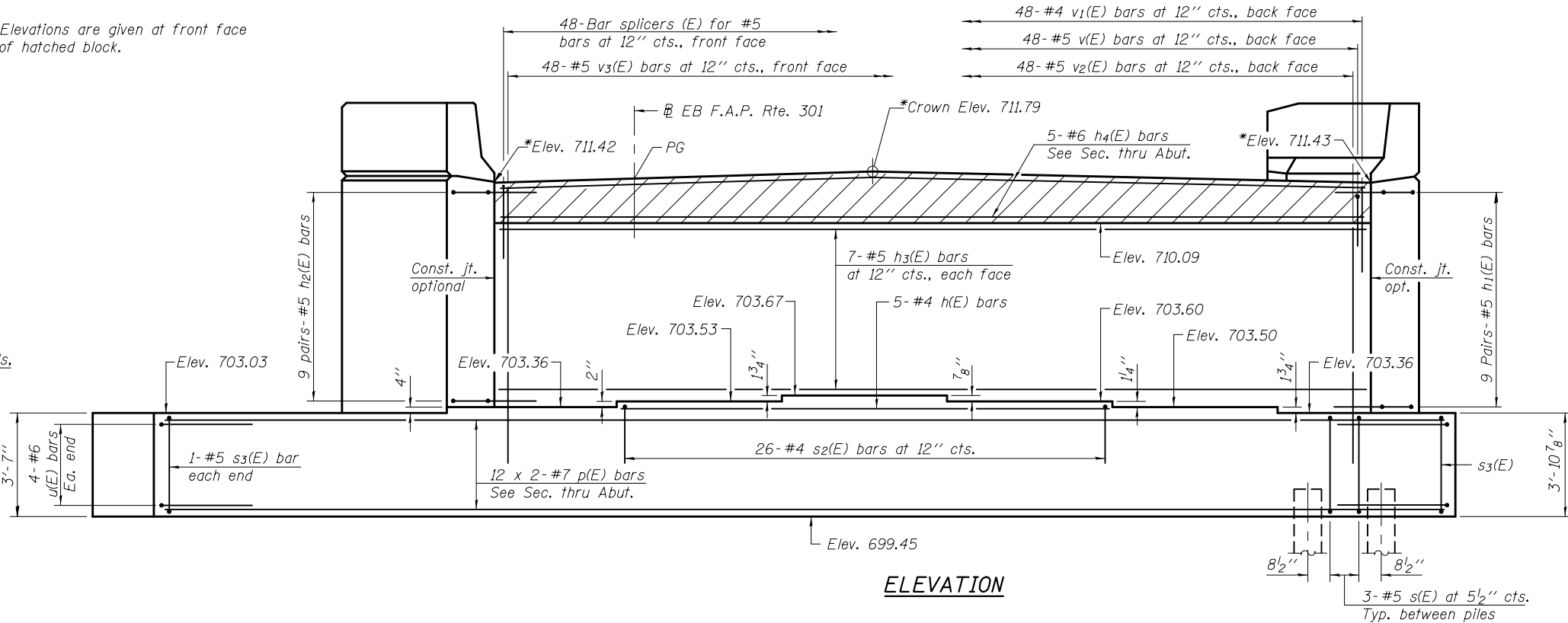
**EAST ABUTMENT (E.B.)  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	5	#4	25'-6"	—
h1(E)	18	#5	5'-11"	L
h2(E)	18	#5	5'-11"	L
h3(E)	14	#5	46'-10"	—
h4(E)	5	#6	46'-10"	—
h5(E)	17	#4	19'-8"	—
h6(E)	11	#4	18'-11"	—
h7(E)	28	#4	18'-11"	—
n(E)	35	#6	16'-6"	—
n1(E)	6	#6	8'-3"	—
n2(E)	1	#6	16'-8"	—
p(E)	24	#7	36'-7"	—
p1(E)	6	#7	20'-8"	—
p2(E)	6	#7	20'-0"	—
s(E)	84	#5	18'-5"	—
s1(E)	36	#4	9'-5"	—
s2(E)	26	#4	8'-6"	—
s3(E)	2	#5	19'-9"	—
s4(E)	4	#4	6'-8"	—
u(E)	8	#6	13'-9"	—
v(E)	48	#5	3'-10"	—
v1(E)	48	#4	3'-2"	—
v2(E)	48	#5	8'-10"	—
v3(E)	48	#5	10'-2"	—
v4(E)	3	#6	10'-10"	—
v6(E)	41	#6	11'-4"	—
v7(E)	37	#6	11'-3"	—
Structure Excavation		Cu. Yd.	145.5	
Concrete Structures		Cu. Yd.	112.9	
Reinforcement Bars, Epoxy Coated		Pound	10160	
Furnishing Metal Shell Piles 14"x .312"		Foot	1080	
Driving Piles		Foot	1080	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	31	
Concrete Sealer		Sq. Ft.	1007.7	
Anchor Bolts, 1"		Each	12	

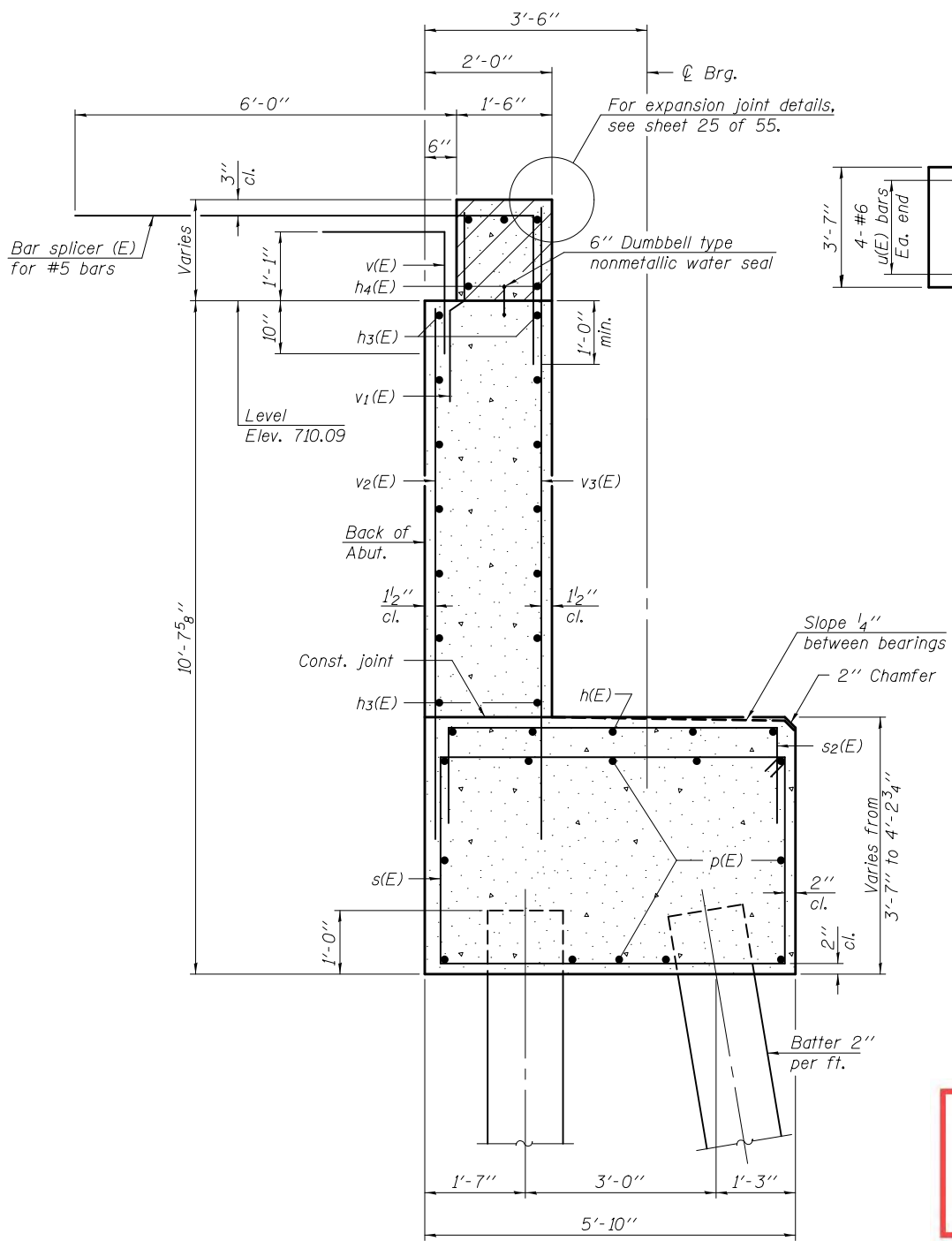
For details of bar splicers, see sheet 49 of 55.  
 For details of piles, see sheet 48 of 55.

Notes:  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 Quantity of concrete in end post included with Concrete Superstructure on sheet 20 of 55.  
 See sheet 46 of 55 for additional form liner details. Form Liner shall be placed on outside face of wingwalls as shown in the Wingwall Elevation shown below.  
 For bar splicer details, see sheet 49 of 55.

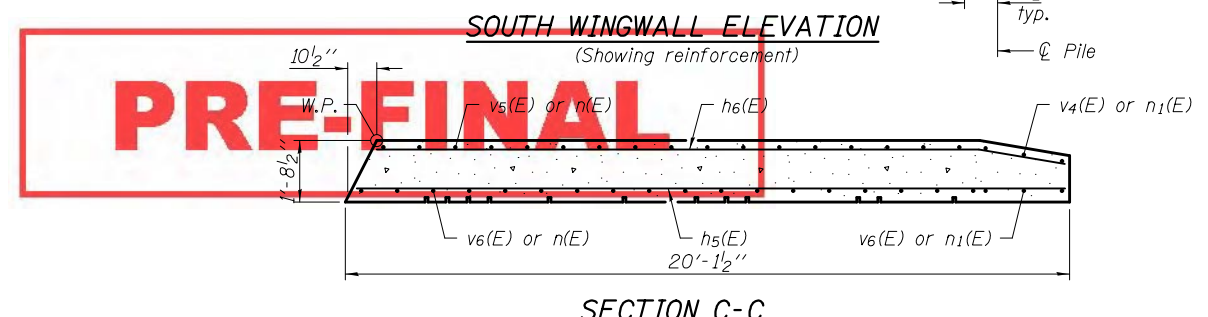
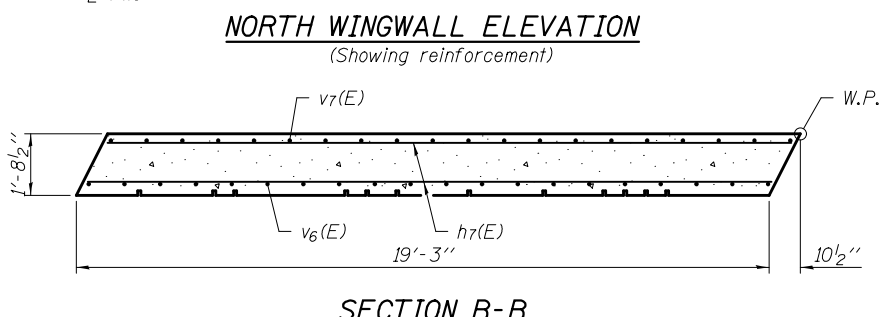
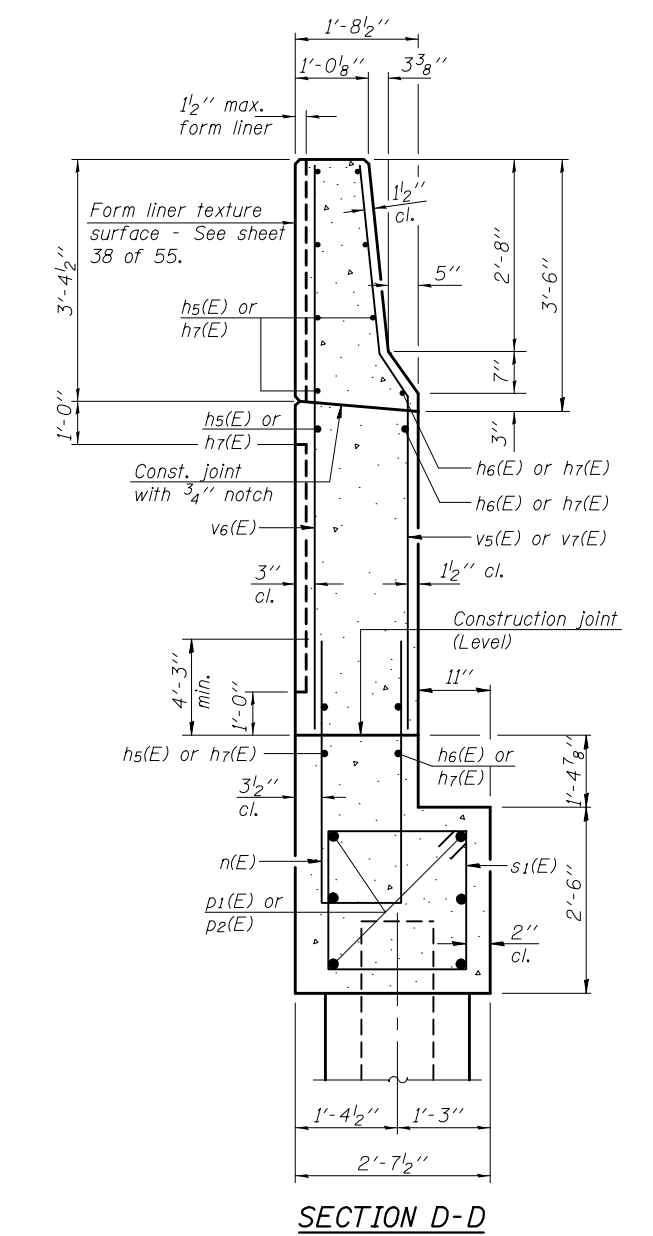
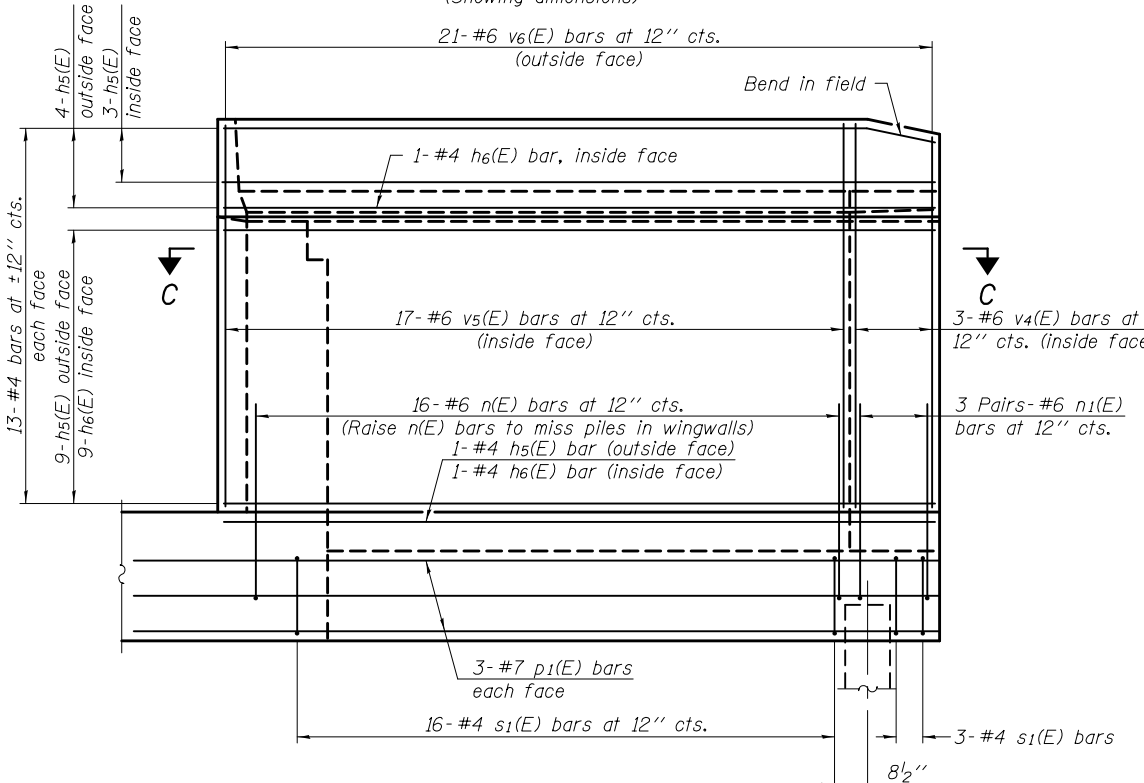
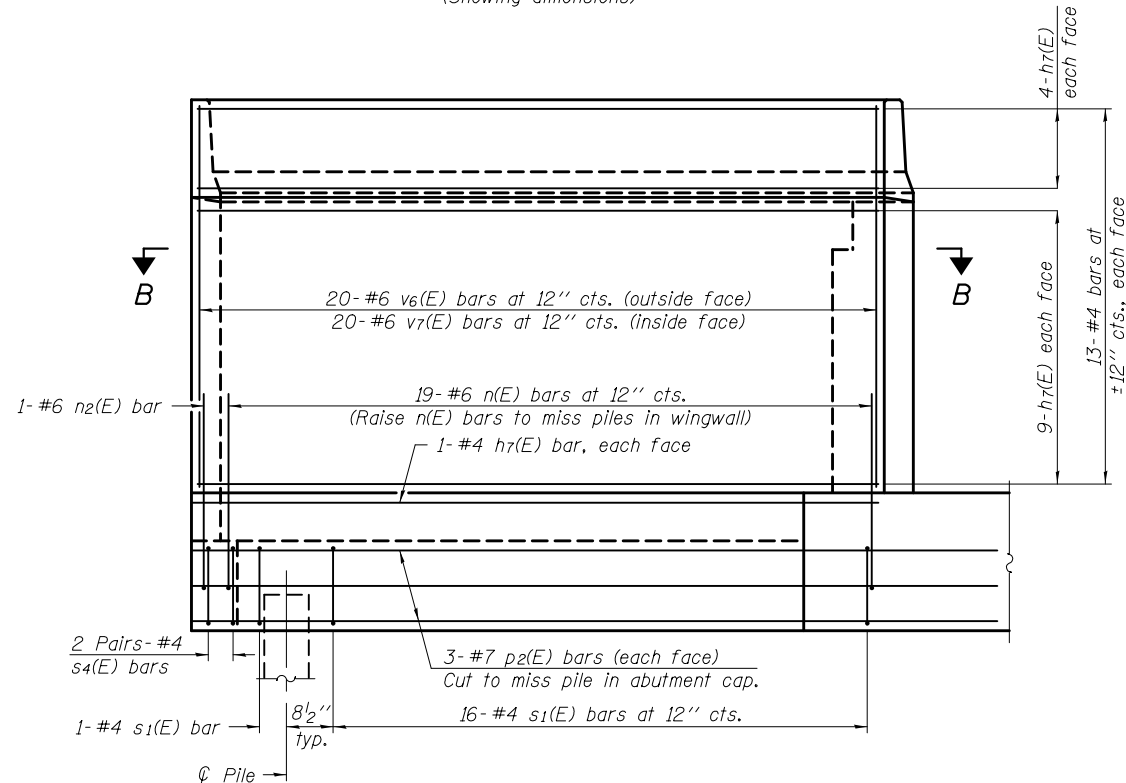
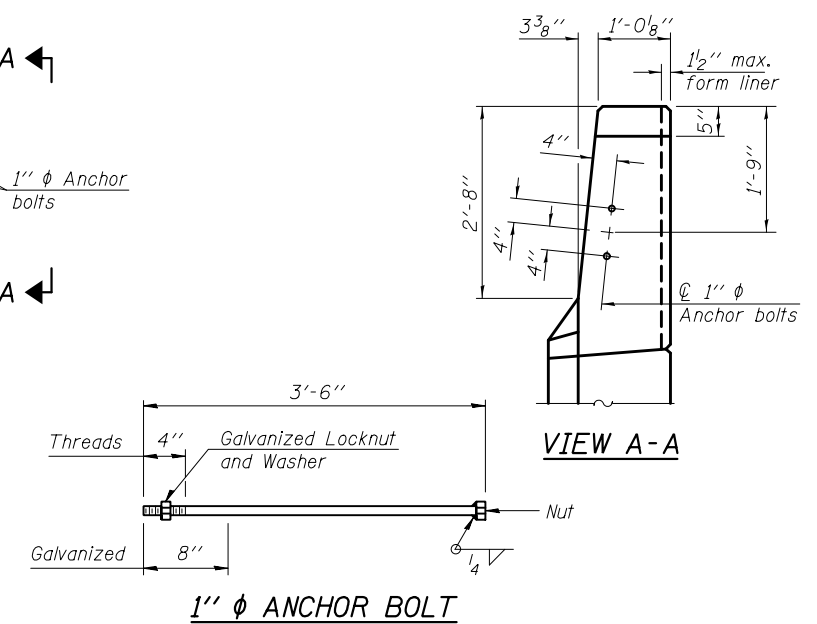
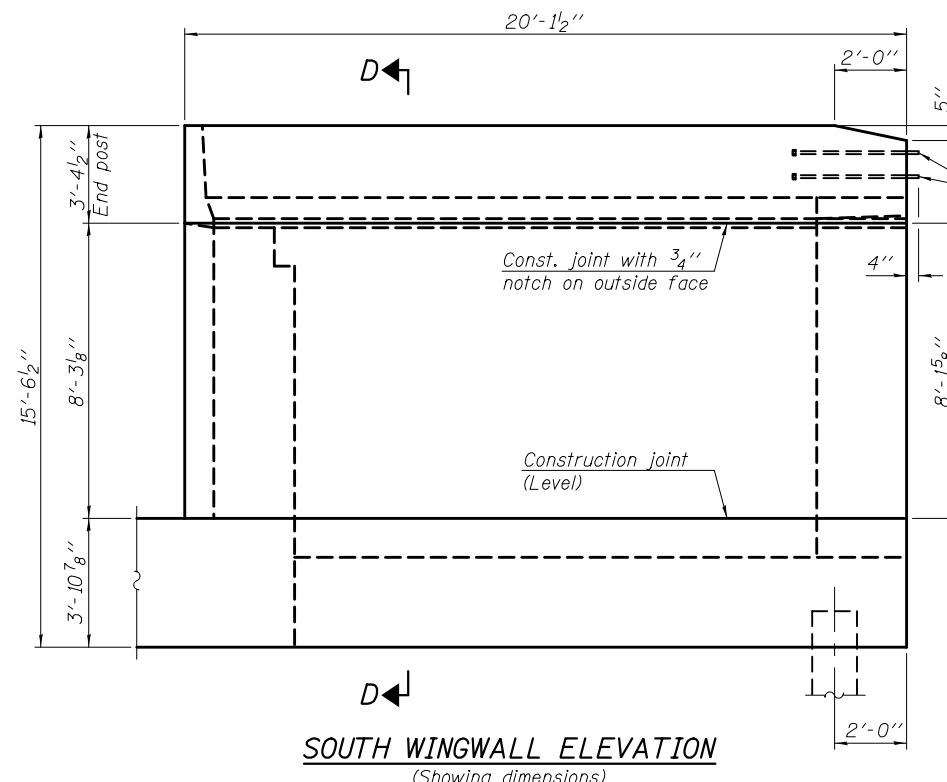
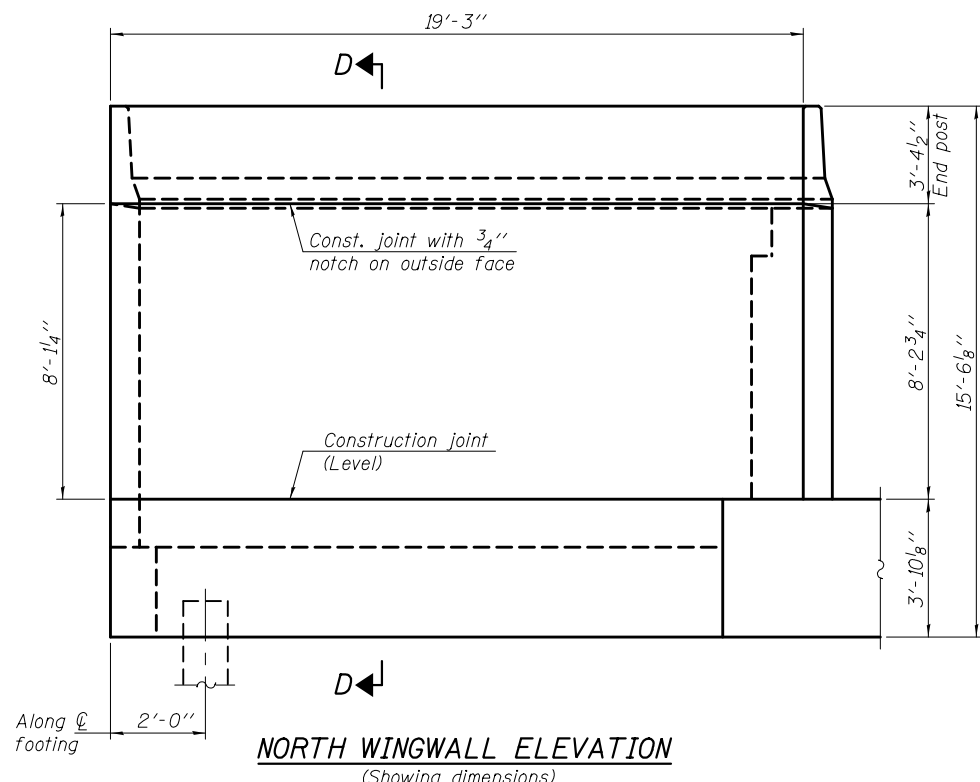
\*Elevations are given at front face of hatched block.



**PRE-FINAL**  
 MIN. BAR LAP  
 #7 bar = 5'-2"



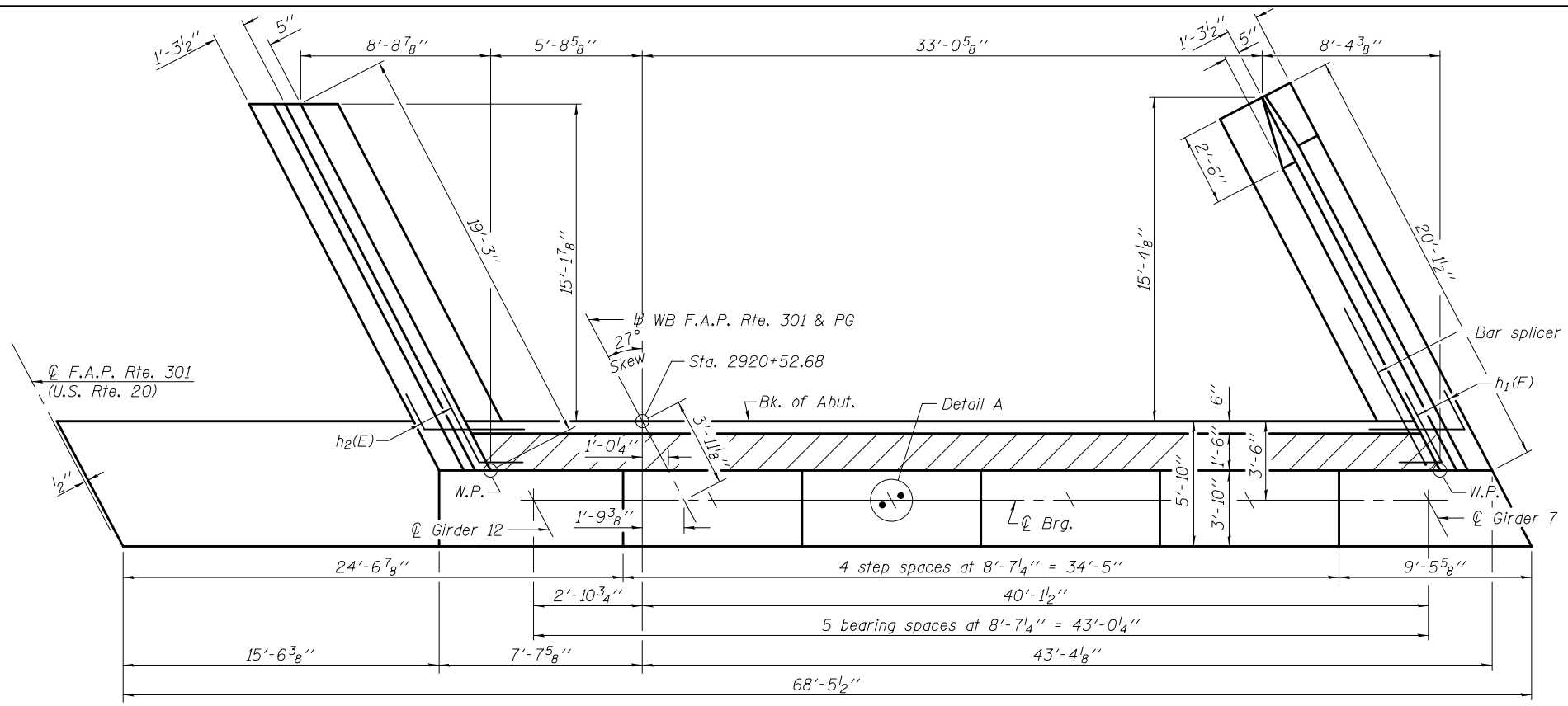
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EAST ABUTMENT (E.B.) – STAGE I CONSTRUCTION STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.		
CHECKED - AL-BARRAE R. SHEBIB	PASSED - <i>Carl [Signature]</i>	REVISED			CONTRACT NO. 64D19		ILLINOIS FED. AID PROJECT				
DRAWN - H.T. DUONG / M.B.M.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 35 OF 55 SHEETS						
CHECKED - NRB/GRA		REVISED									



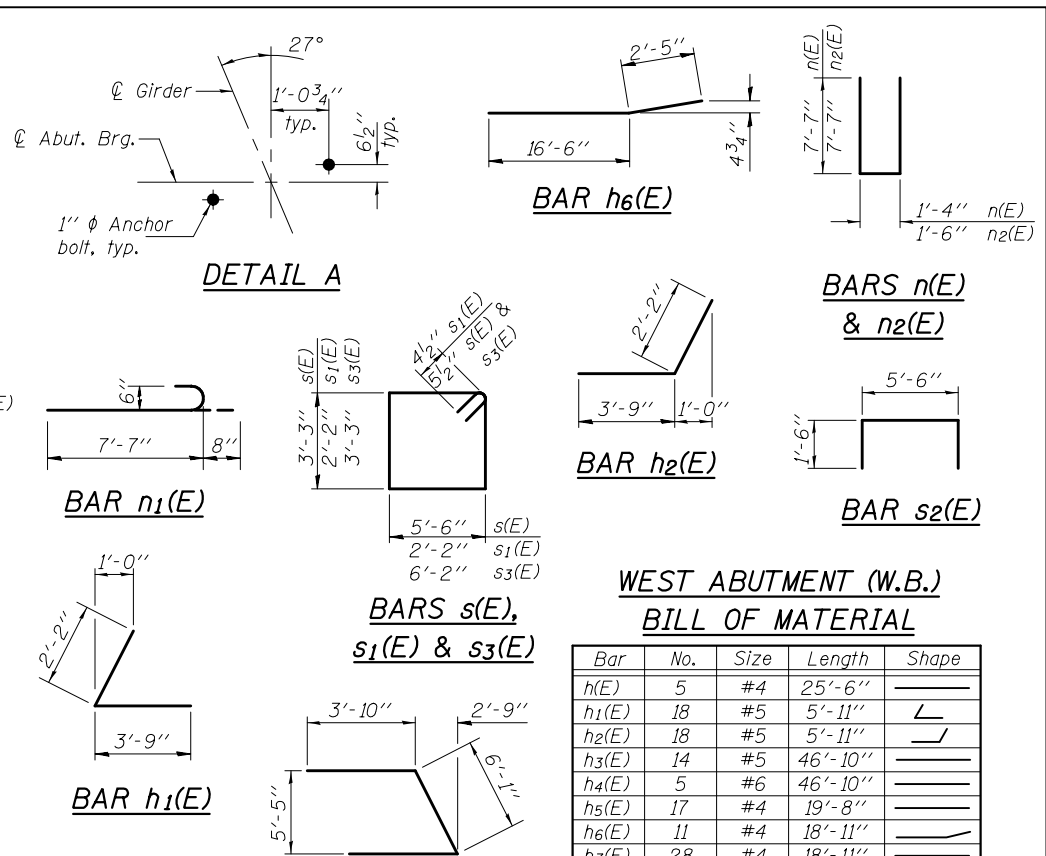
PRE-FINAL

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EAST ABUTMENT DETAILS (E.B.) - STAGE I CONSTRUCTION STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED - AL-BARRAE R. SHEBIB	PASSED - <i>Carl [Signature]</i>	REVISED			CONTRACT NO. 64D19					
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			ILLINOIS FED. AID PROJECT					
CHECKED - NRB/GRA					SHEET NO. 36 OF 55 SHEETS					

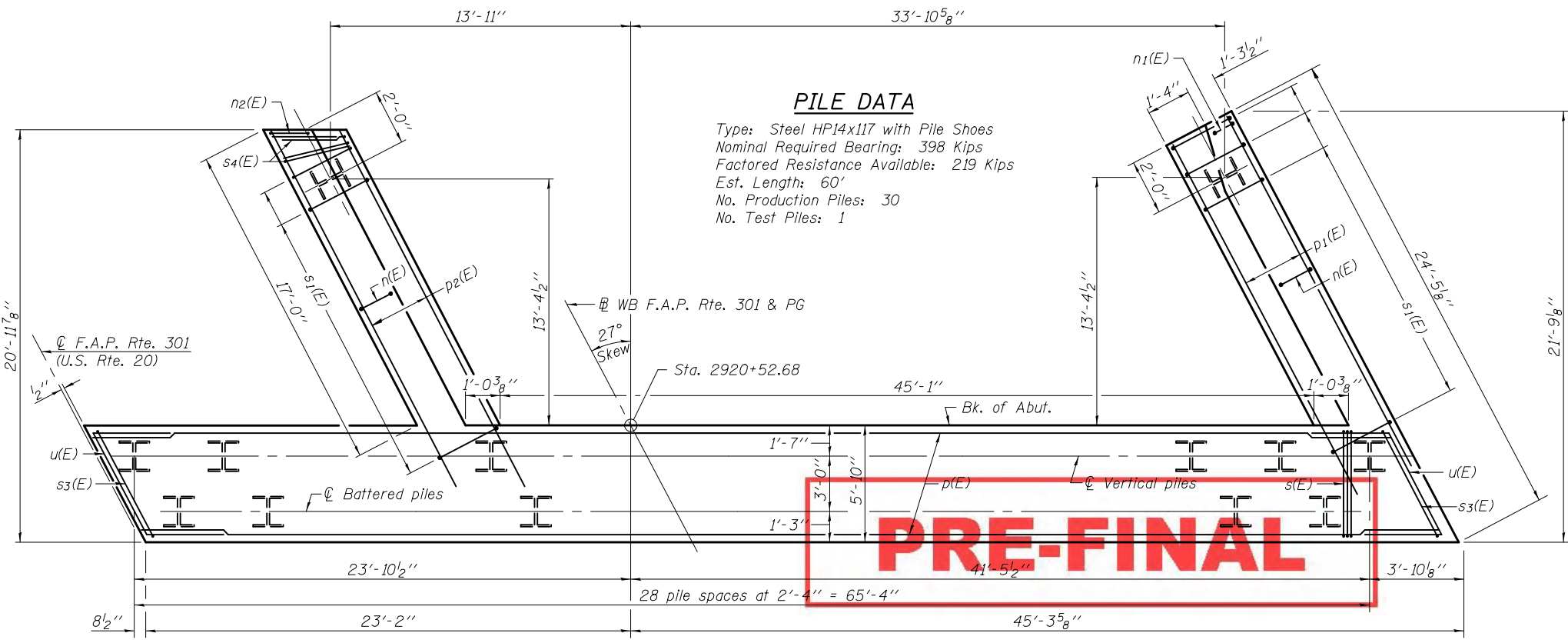




TOP VIEW



DETAIL A



**PILE DATA**

Type: Steel HP14x117 with Pile Shoes  
 Nominal Required Bearing: 398 Kips  
 Factored Resistance Available: 219 Kips  
 Est. Length: 60'  
 No. Production Piles: 30  
 No. Test Piles: 1

PRE-FINAL

PLAN-PILE CAP

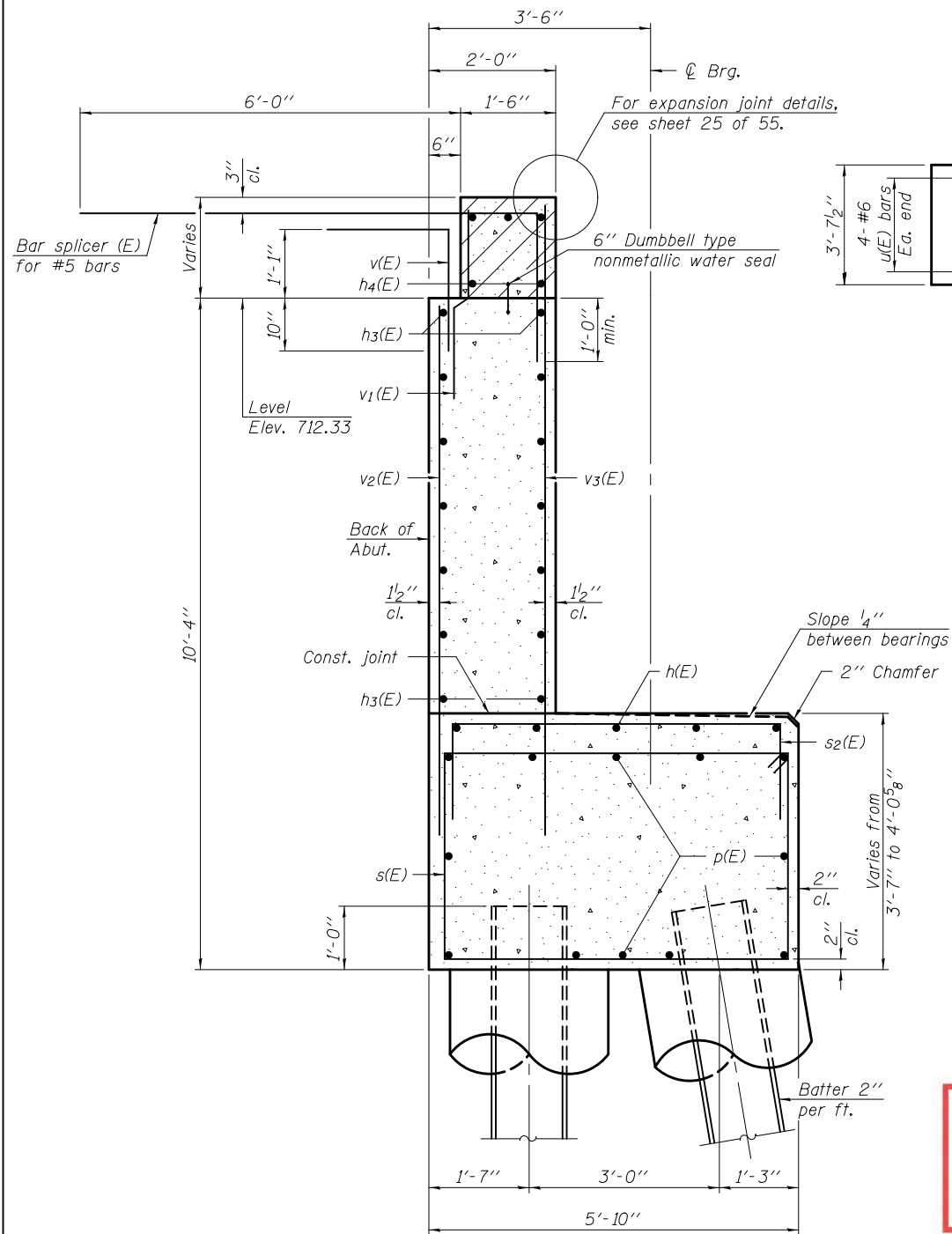
**WEST ABUTMENT (W.B.)  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	5	#4	25'-6"	—
h1(E)	18	#5	5'-11"	└
h2(E)	18	#5	5'-11"	└
h3(E)	14	#5	46'-10"	—
h4(E)	5	#6	46'-10"	—
h5(E)	17	#4	19'-8"	—
h6(E)	11	#4	18'-11"	—
h7(E)	28	#4	18'-11"	—
n(E)	35	#6	16'-6"	└
n1(E)	6	#6	8'-3"	└
n2(E)	1	#6	16'-8"	└
p(E)	24	#7	36'-7"	—
p1(E)	6	#7	20'-8"	—
p2(E)	6	#7	20'-0"	—
s(E)	84	#5	18'-5"	└
s1(E)	36	#4	9'-5"	└
s2(E)	26	#4	8'-6"	└
s3(E)	2	#5	19'-9"	└
s4(E)	4	#4	6'-8"	└
u(E)	8	#6	13'-9"	└
v(E)	48	#5	3'-10"	└
v1(E)	48	#4	3'-2"	└
v2(E)	48	#5	8'-10"	└
v3(E)	48	#5	10'-2"	└
v4(E)	3	#6	10'-10"	└
v5(E)	37	#6	11'-5"	└
v6(E)	41	#6	11'-4"	└
Structure Excavation		Cu. Yd.	145.5	
Concrete Structures		Cu. Yd.	109.4	
Reinforcement Bars, Epoxy Coated		Pound	10160	
Furnishing Steel Piles, HP14x117		Foot	1800	
Driving Piles		Foot	1800	
Test Pile Steel, HP14x117		Each	1	
Pile Shoes		Each	31	
Concrete Encasement		Cu. Yd.	16.9	
Concrete Sealer		Sq. Ft.	994.8	
Anchor Bolts, 1"		Each	12	

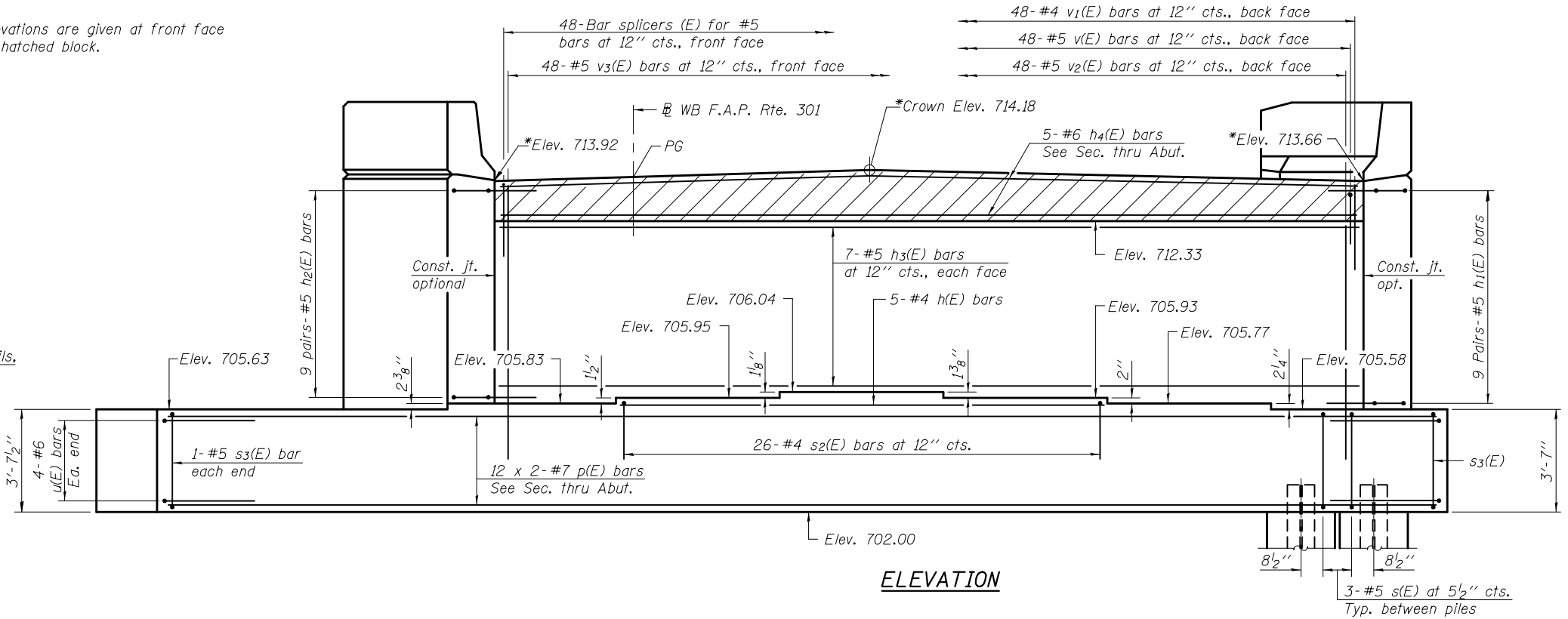
For details of bar splicers, see sheet 49 of 55.  
 For details of piles & concrete encasement, see sheet 47 of 55.

Notes:  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 Quantity of concrete in end post included with Concrete Superstructure on sheet 20 of 55.  
 For Concrete Encasement details, see sheet 47 of 55.  
 See sheet 46 of 55 for additional form liner details. Form Liner shall be placed on outside face of wingwalls as shown in the Wingwall Elevation shown below.  
 For bar splicer details, see sheet 49 of 55.

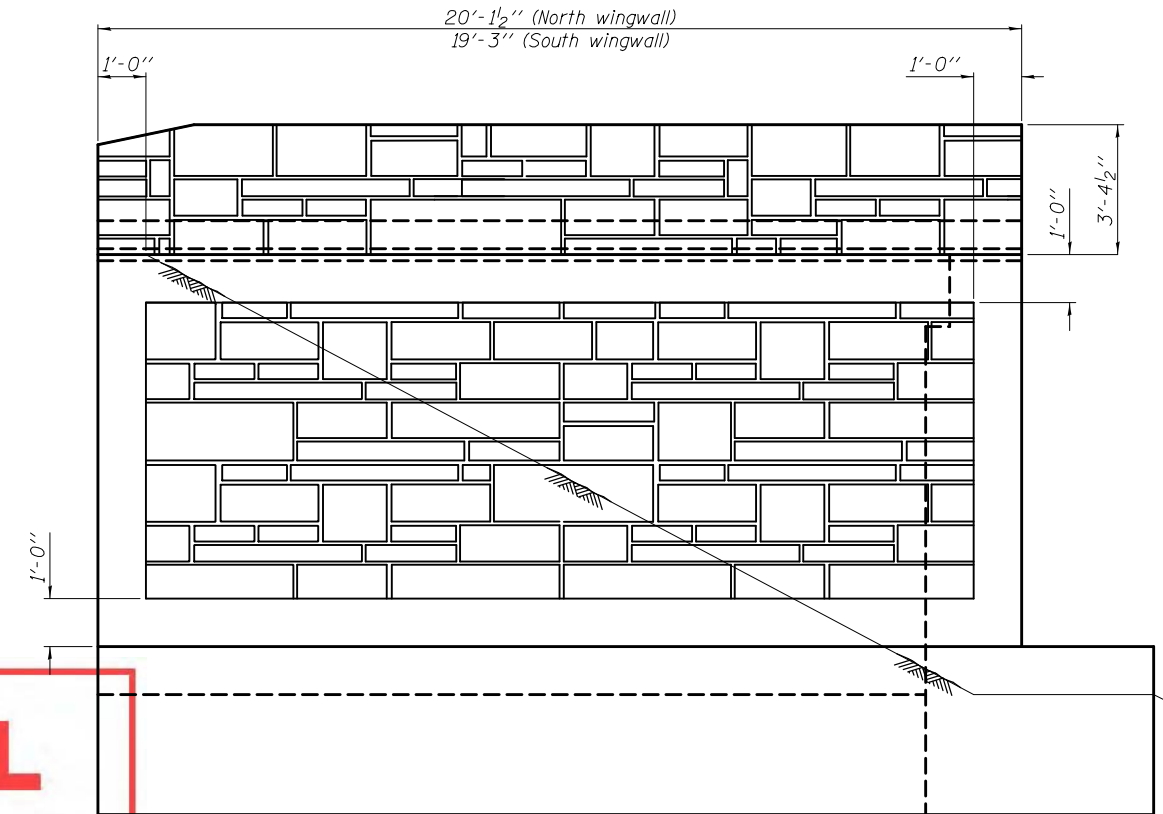
\*Elevations are given at front face of hatched block.



SECTION THRU WEST ABUTMENT



ELEVATION



WINGWALL ELEVATION

(North wingwall shown, South wingwall similar).

**PRE-FINAL**  
 MIN. BAR LAP  
 #7 bar = 5'-2"

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Joanne F. [Signature]</i>
CHECKED - AL-BARRAE R. SHEBIB	PASSED - <i>Carl [Signature]</i>
DRAWN - H.T. DUONG / M.B.M.	
CHECKED - NRB/GRA	

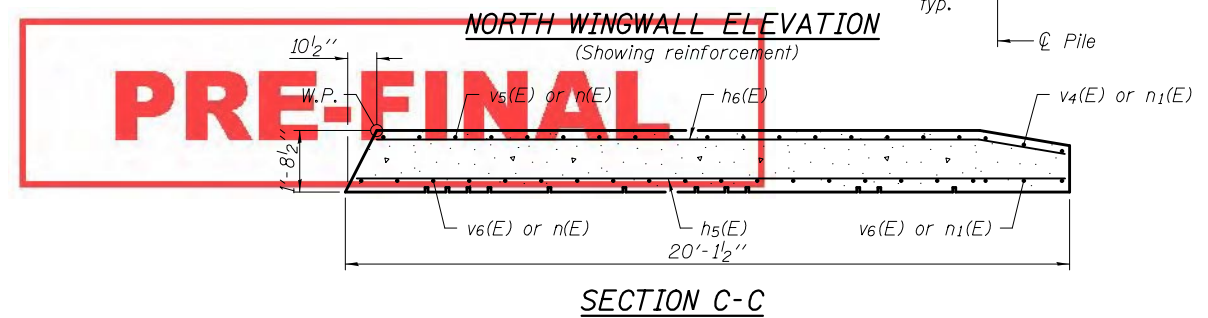
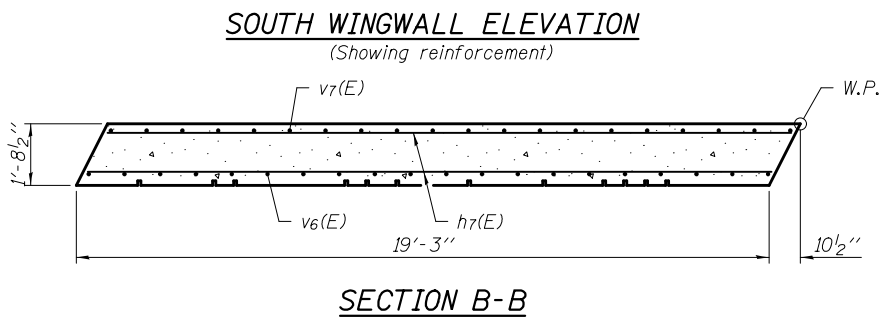
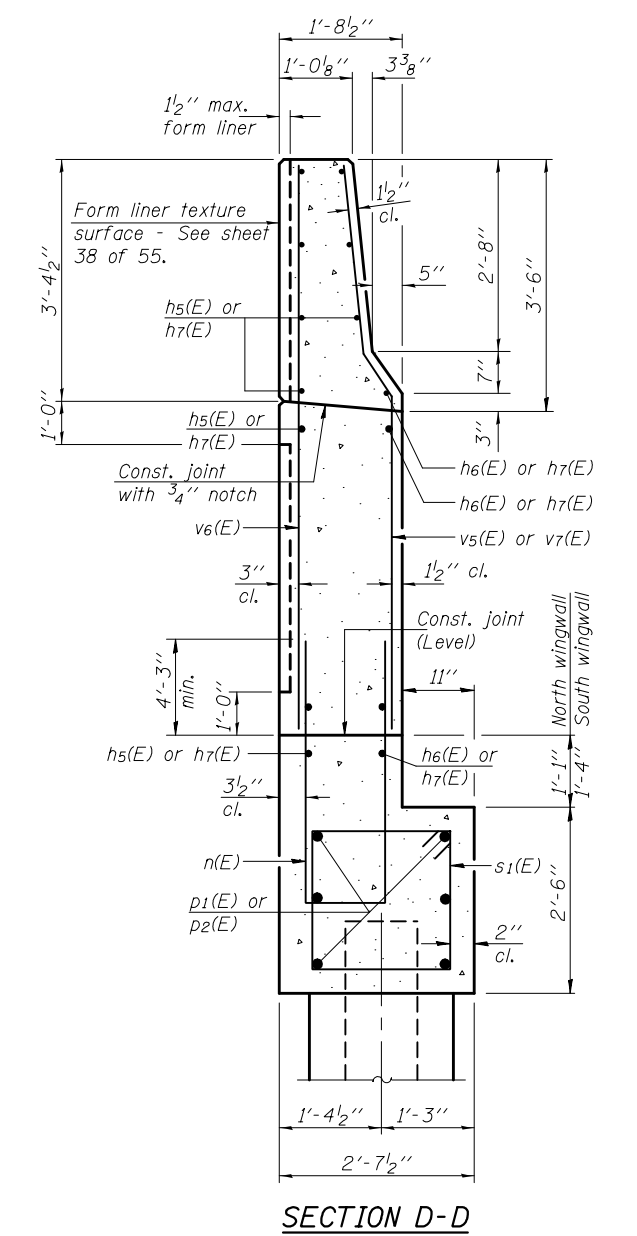
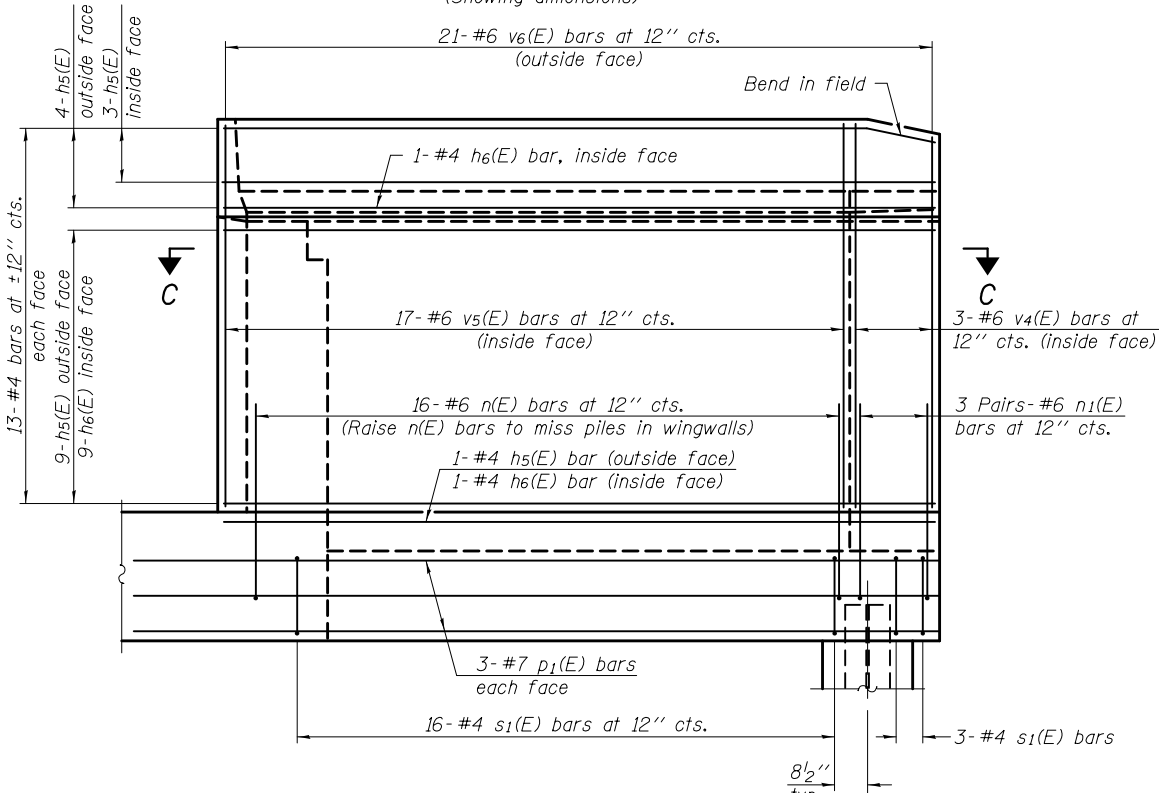
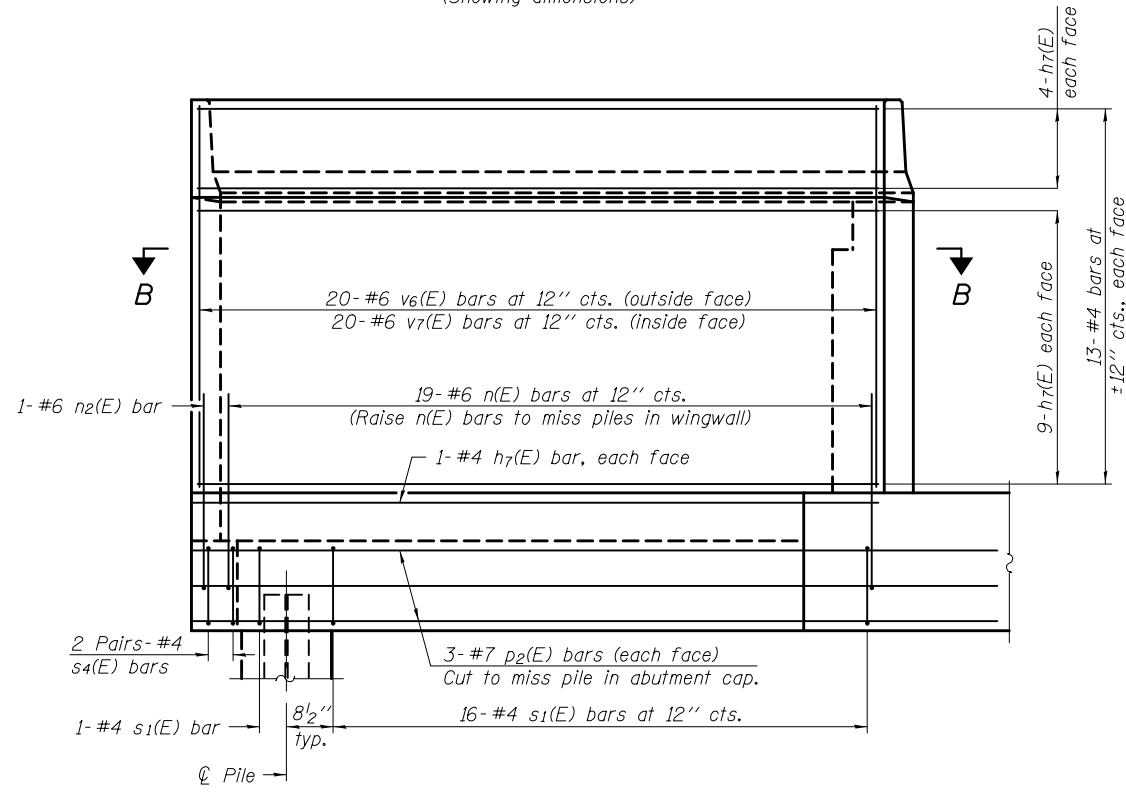
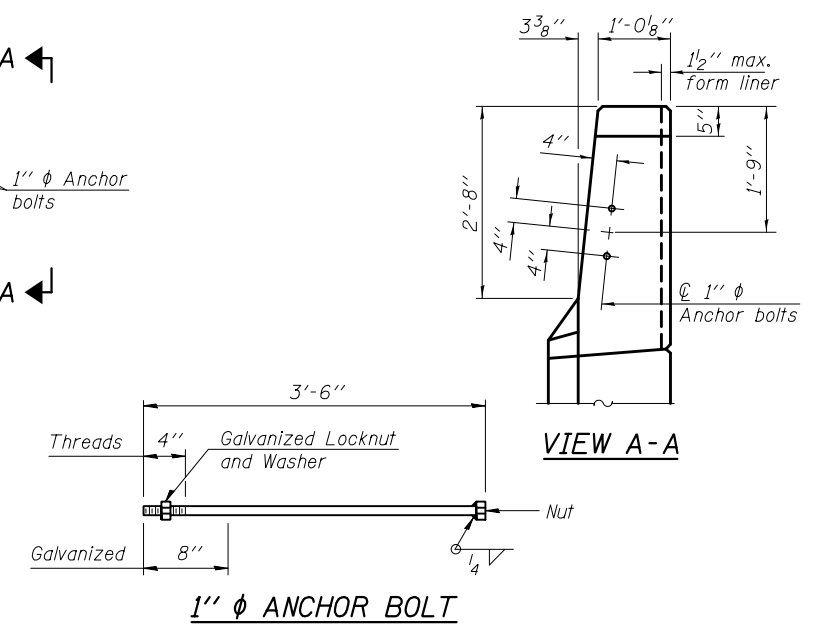
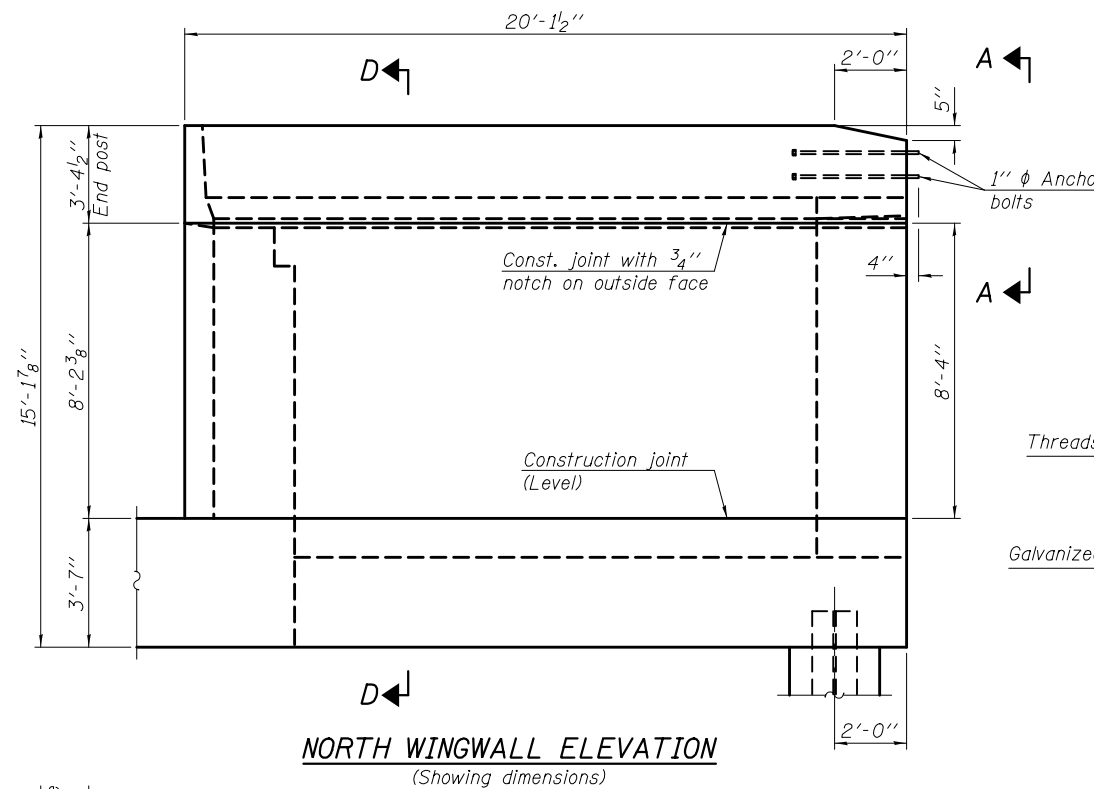
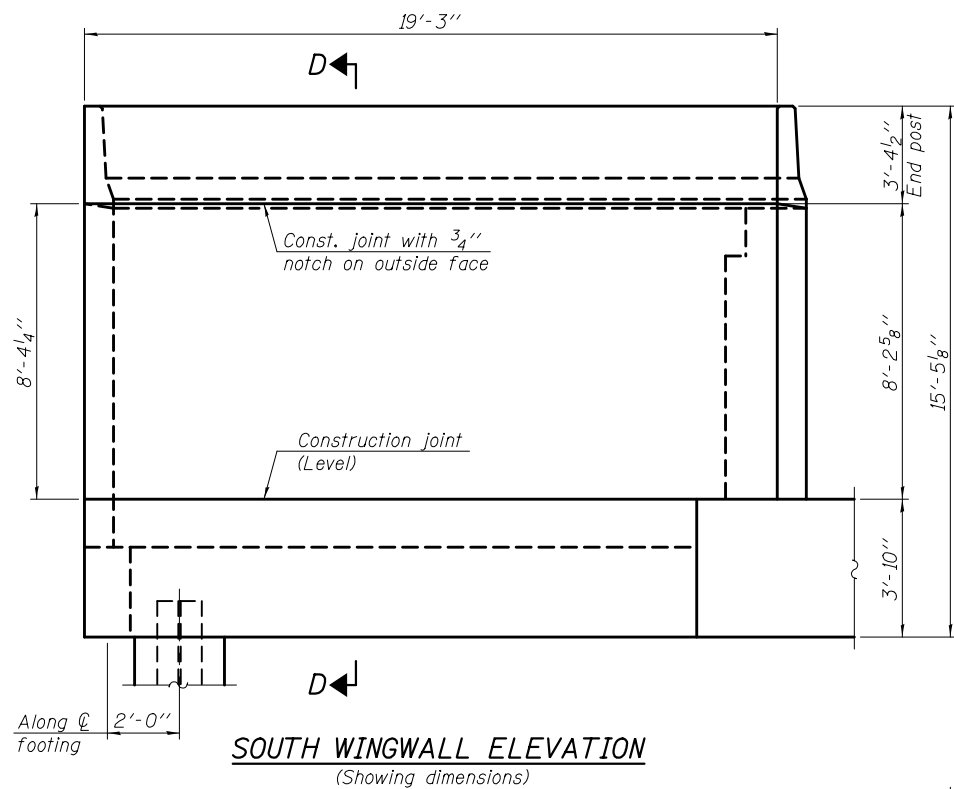
DATE -	
REVISED	
REVISED	

DATE -	
REVISED	
REVISED	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

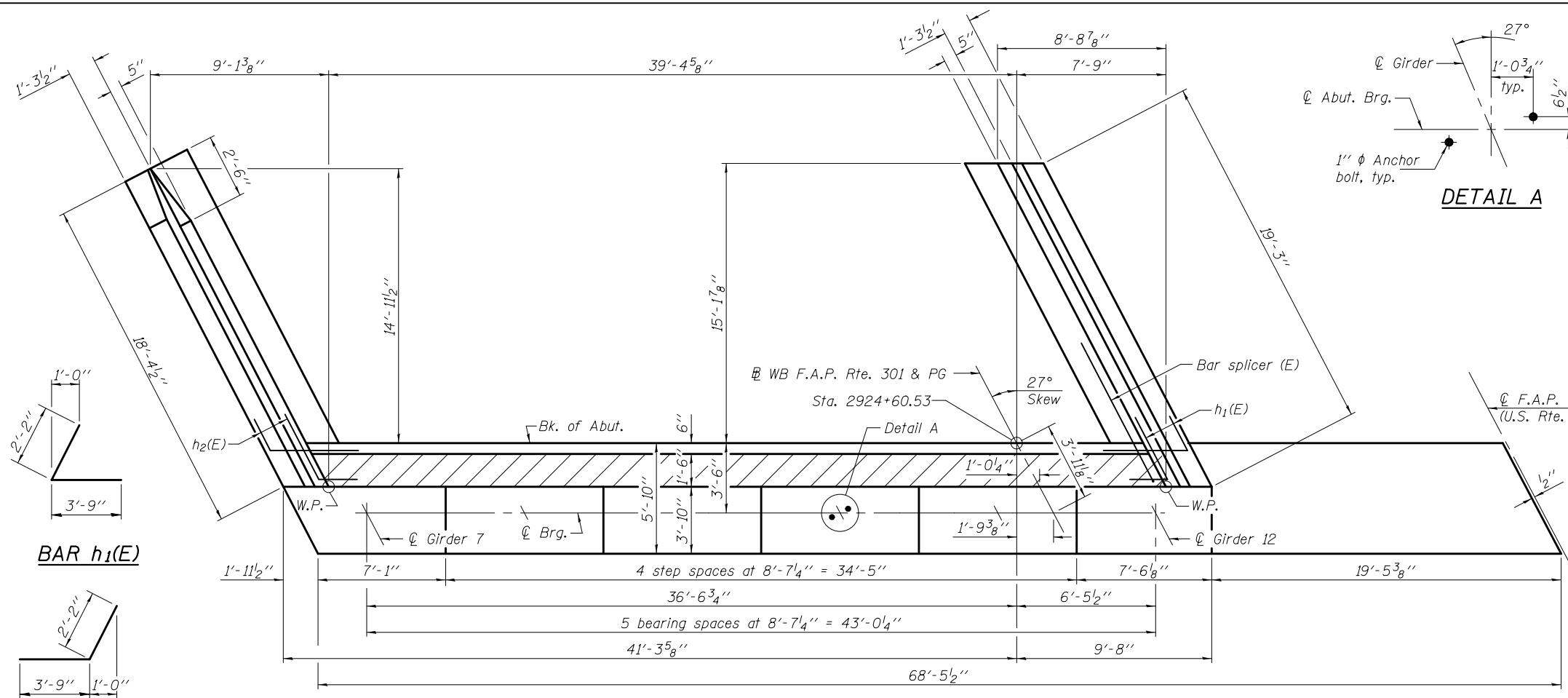
WEST ABUTMENT (W.B.) - STAGE II CONSTRUCTION  
 STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CONTRACT NO. 64D19			ILLINOIS FED. AID PROJECT	

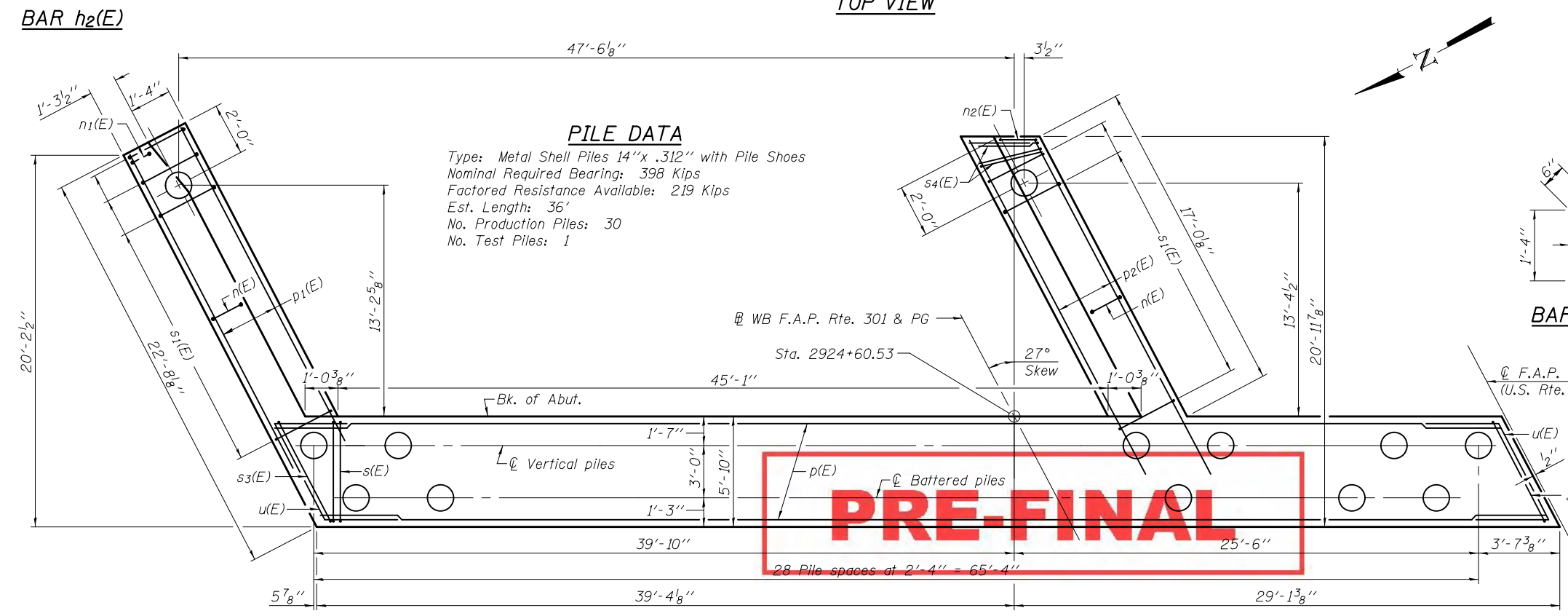


PRE-FINAL

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST ABUTMENT DETAILS (W.B.) - STAGE II CONSTRUCTION STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CHECKED - AL-BARRAE R. SHEBIB	PASSED - <i>Carl [Signature]</i>	REVISED			CONTRACT NO. 64D19				
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 39 OF 55 SHEETS				
CHECKED - NRB/GRA					ILLINOIS FED. AID PROJECT				

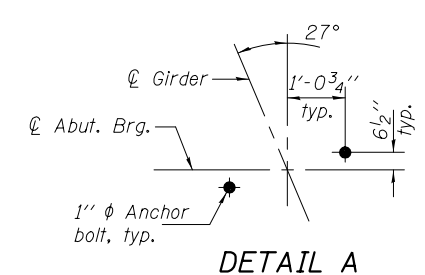


TOP VIEW

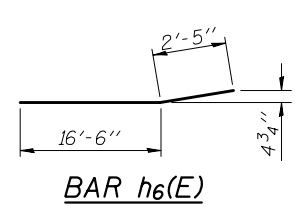


PLAN-PILE CAP

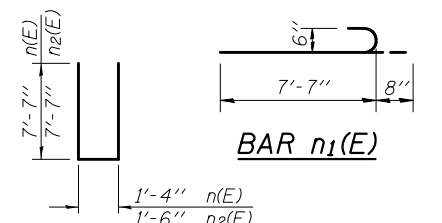
**PILE DATA**  
 Type: Metal Shell Piles 14"x .312" with Pile Shoes  
 Nominal Required Bearing: 398 Kips  
 Factored Resistance Available: 219 Kips  
 Est. Length: 36'  
 No. Production Piles: 30  
 No. Test Piles: 1



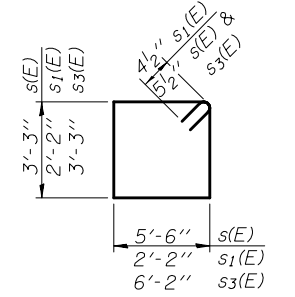
DETAIL A



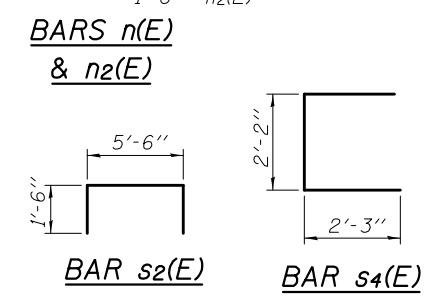
BAR h6(E)



BAR n1(E)

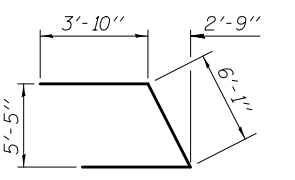


BARS s1(E) & s3(E)

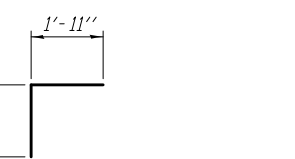


BARS n2(E) & n2(E)

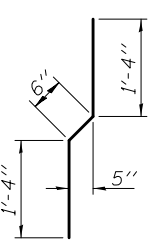
BAR s4(E)



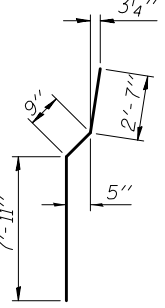
BAR u(E)



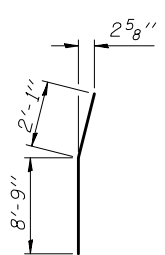
BAR v(E)



BAR v1(E)



BAR v7(E)



BAR v4(E)

**EAST ABUTMENT (W.B.)  
BILL OF MATERIAL**

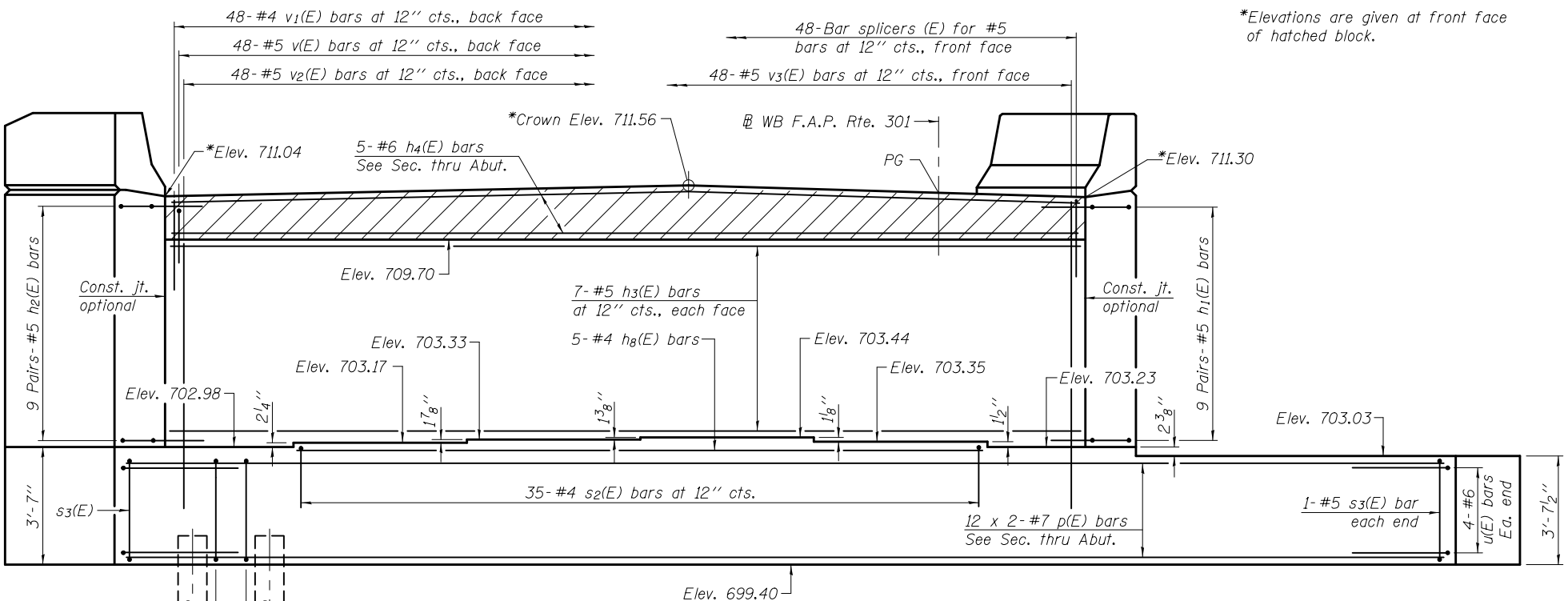
Bar	No.	Size	Length	Shape
h1(E)	18	#5	5'-11"	L
h2(E)	18	#5	5'-11"	L
h3(E)	14	#5	46'-10"	—
h4(E)	5	#6	46'-10"	—
h6(E)	11	#4	18'-11"	—
h7(E)	28	#4	18'-11"	—
h8(E)	5	#4	34'-1"	—
h9(E)	17	#4	18'-0"	—
n(E)	35	#6	16'-6"	U
n1(E)	6	#6	8'-3"	U
n2(E)	1	#6	16'-8"	U
p(E)	24	#7	36'-7"	—
p1(E)	6	#7	20'-8"	—
p2(E)	6	#7	20'-0"	—
s(E)	84	#5	18'-5"	□
s1(E)	35	#4	9'-5"	□
s2(E)	35	#4	8'-6"	□
s3(E)	2	#5	19'-9"	□
s4(E)	4	#4	6'-8"	□
u(E)	8	#6	13'-9"	L
v(E)	48	#5	3'-10"	L
v1(E)	48	#4	3'-2"	L
v2(E)	48	#5	8'-10"	—
v3(E)	48	#5	10'-2"	—
v4(E)	3	#6	10'-10"	—
v6(E)	39	#6	11'-4"	—
v7(E)	37	#6	11'-3"	—
Structure Excavation		Cu. Yd.	145.5	
Concrete Structures		Cu. Yd.	107.8	
Reinforcement Bars, Epoxy Coated		Pound	10180	
Furnishing Metal Shell Piles 14"x .312"		Foot	1080	
Driving Piles		Foot	1080	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	31	
Concrete Sealer		Sq. Ft.	1002.6	
Anchor Bolts, 1"		Each	12	

For details of bar splicers, see sheet 49 of 55.  
 For details of piles & concrete encasement, see sheet 47 of 55.

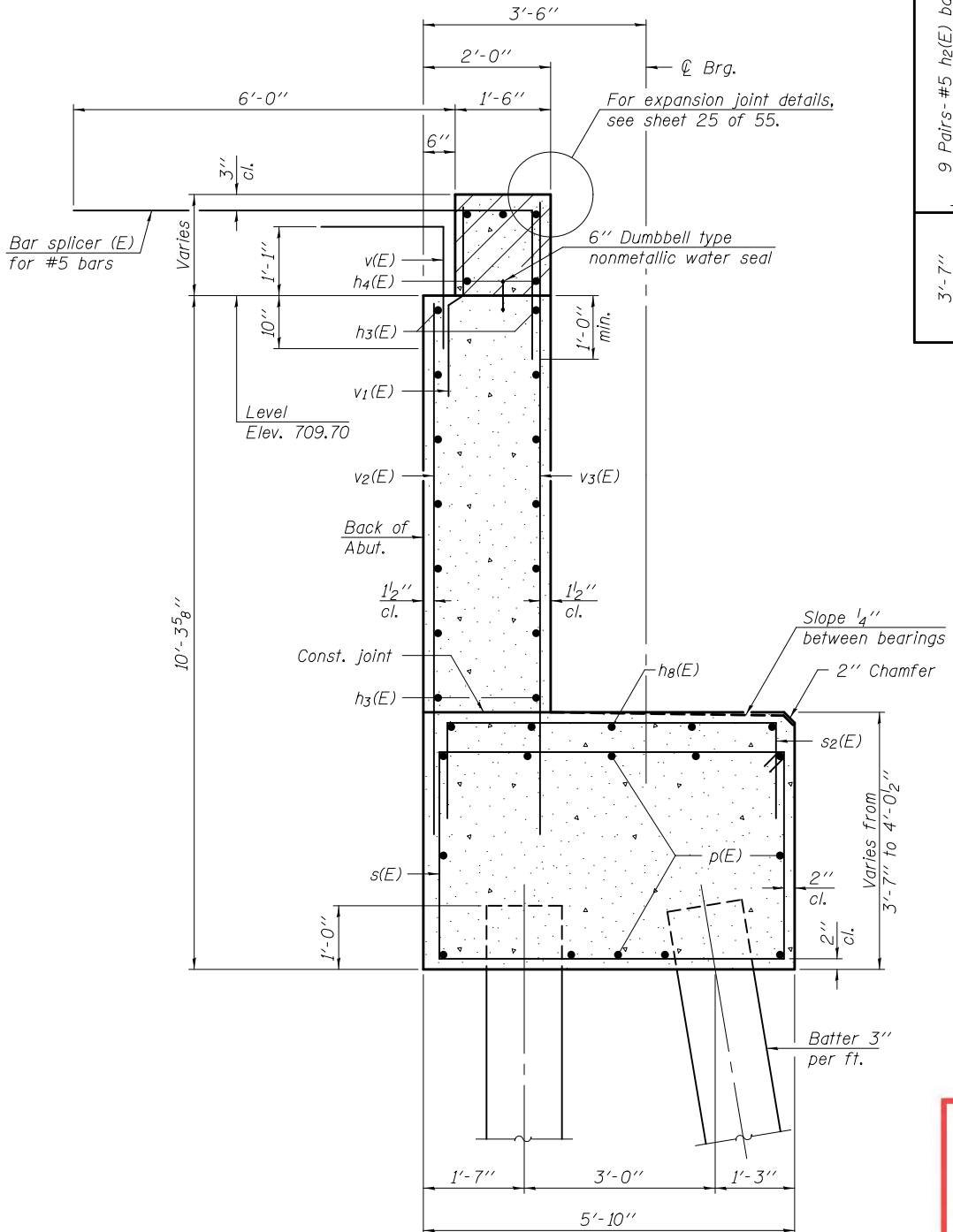


Notes:  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 Quantity of concrete in end post included with Concrete Superstructure on sheet 20 of 55.  
 See sheet 46 of 55 for additional form liner details. Form Liner shall be placed on outside face of wingwalls as shown in the Wingwall Elevation shown below.  
 For bar splicer details, see sheet 49 of 55.

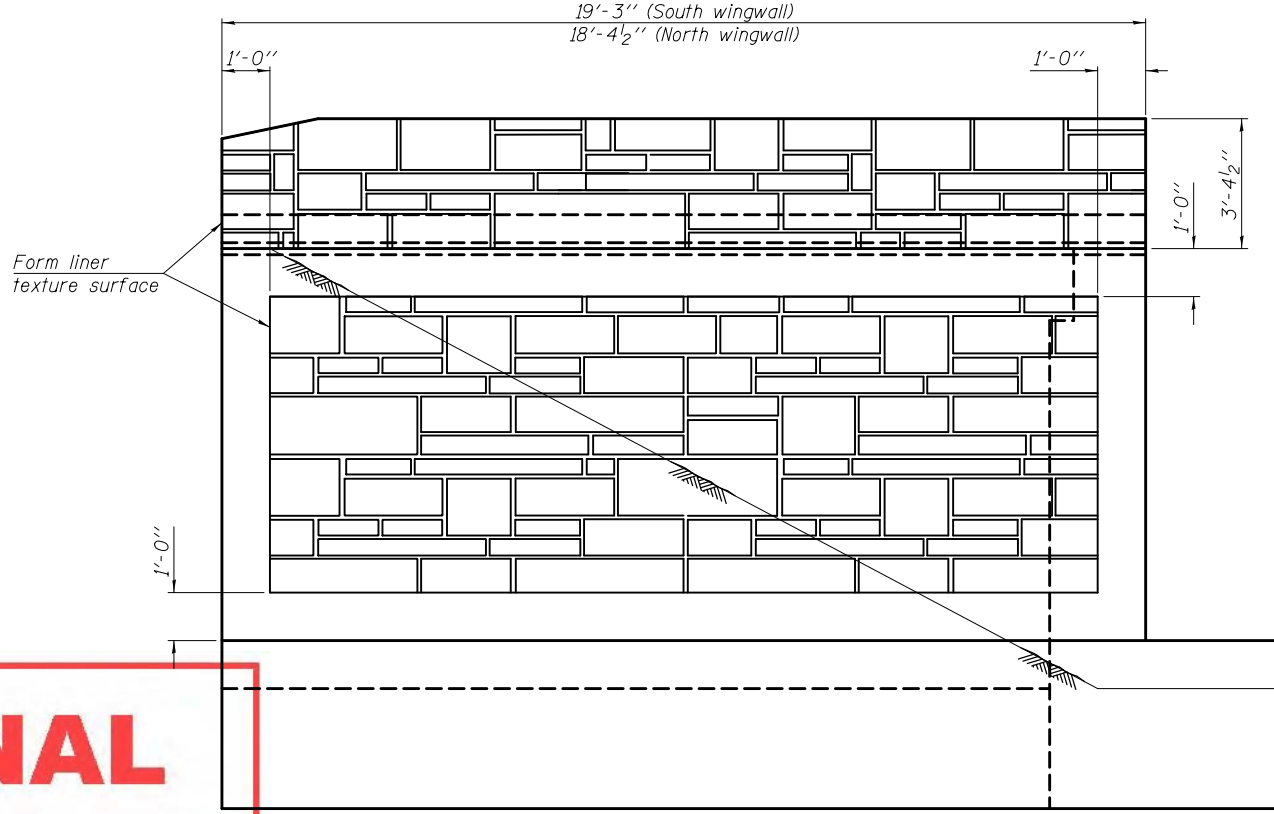
\*Elevations are given at front face of hatched block.



**ELEVATION**  
 (Looking East)



**SECTION THRU EAST ABUTMENT**

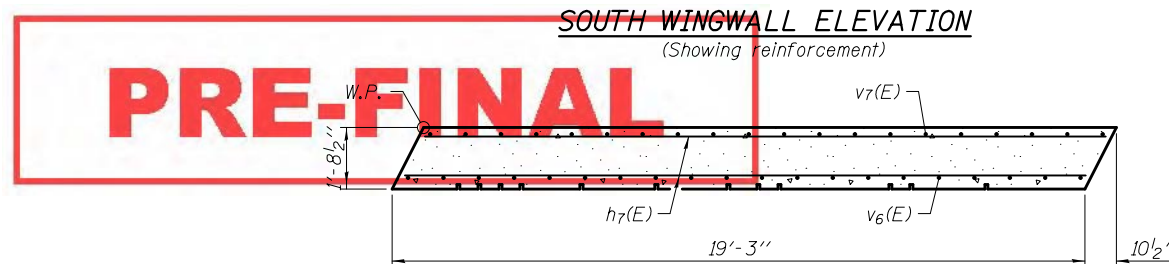
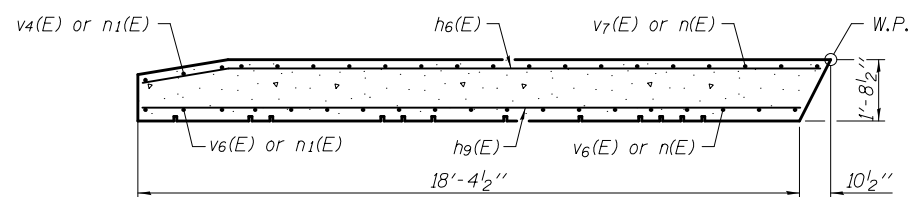
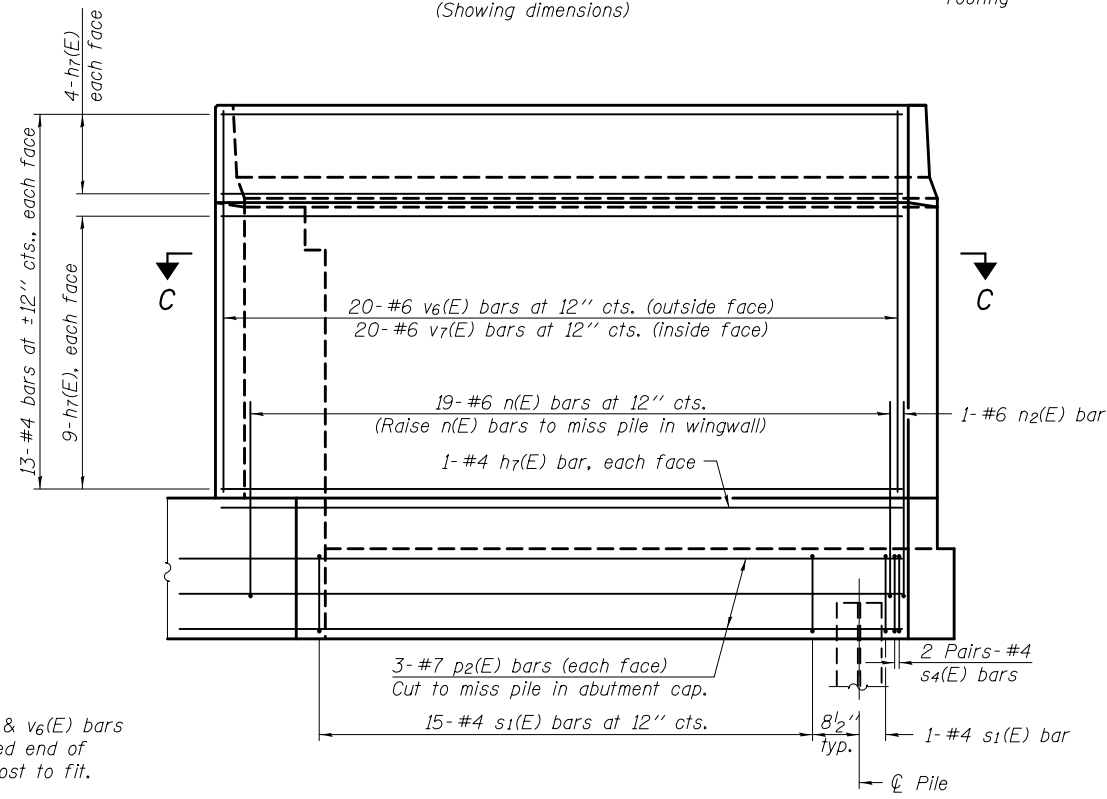
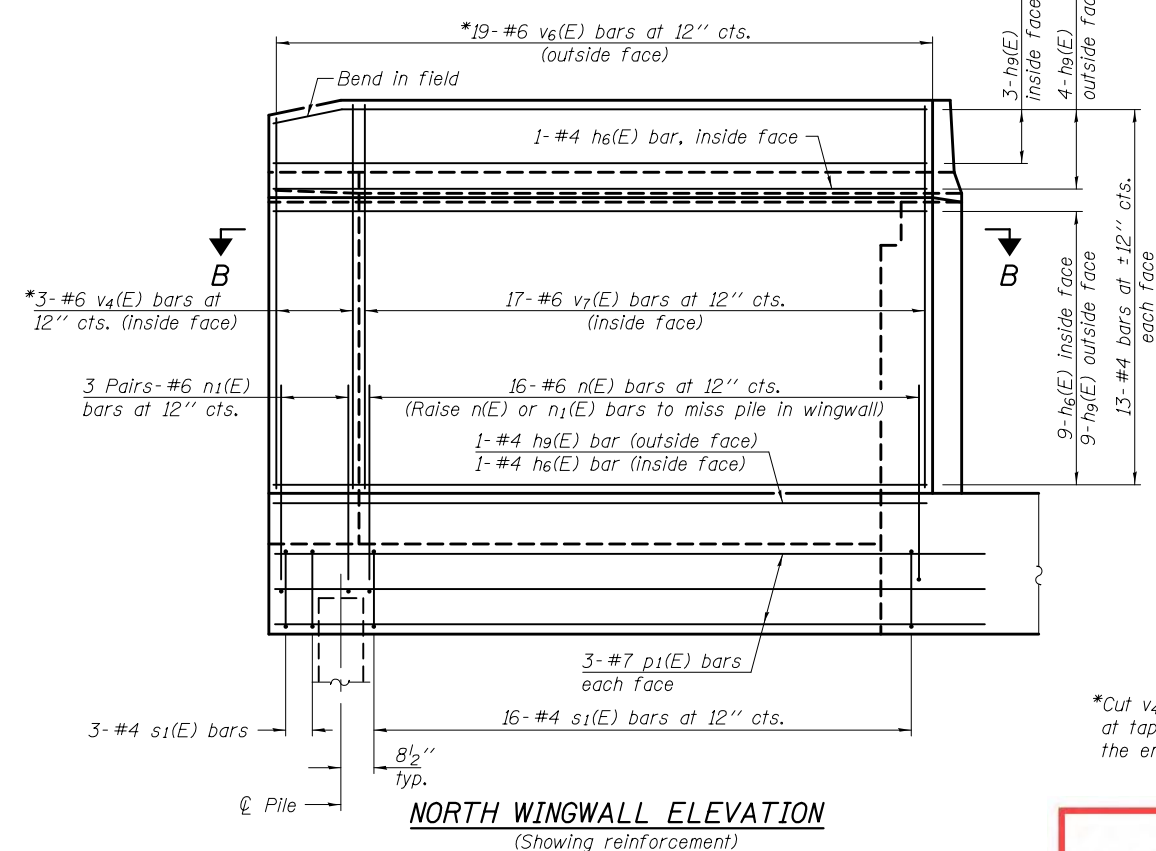
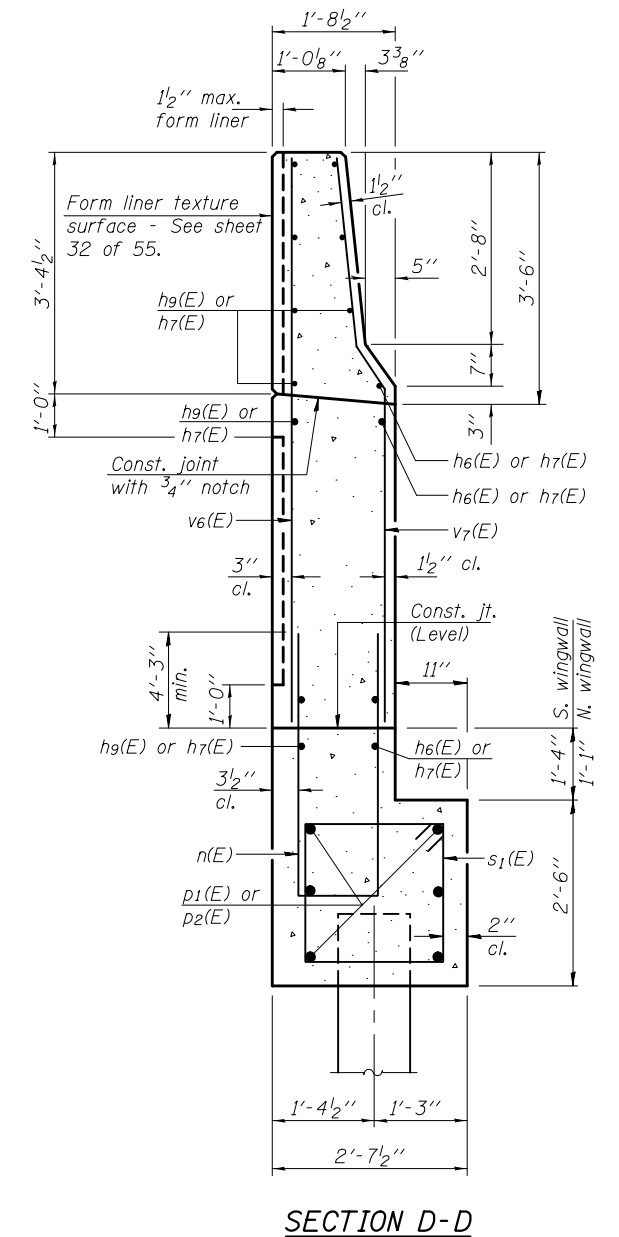
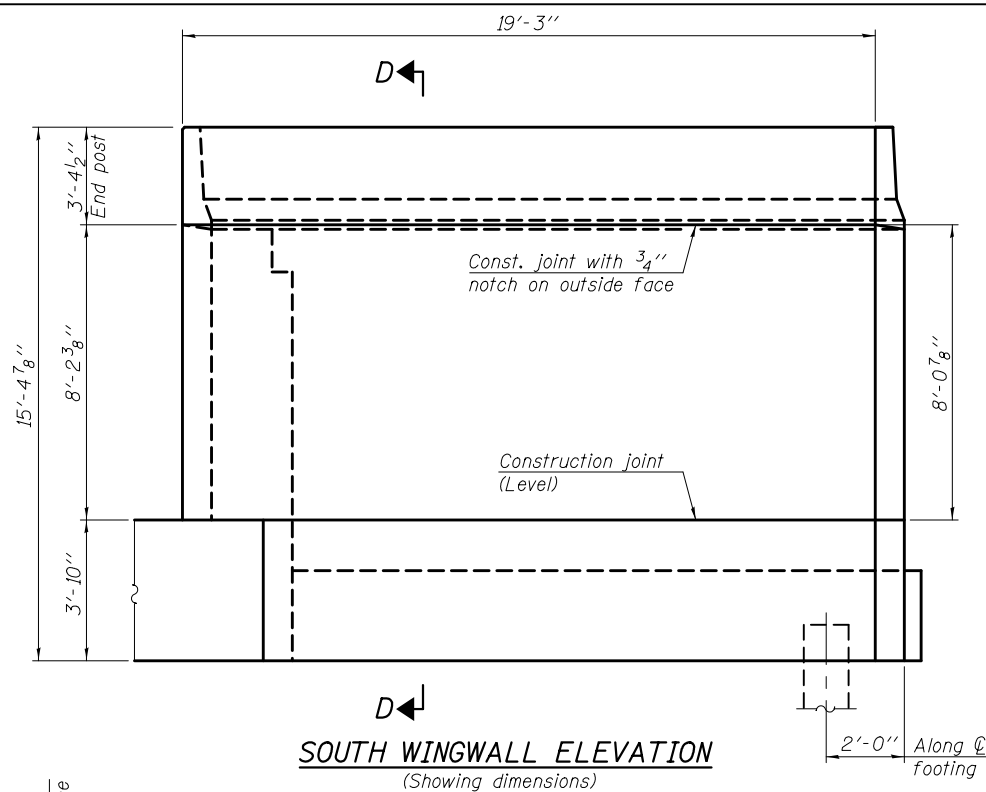
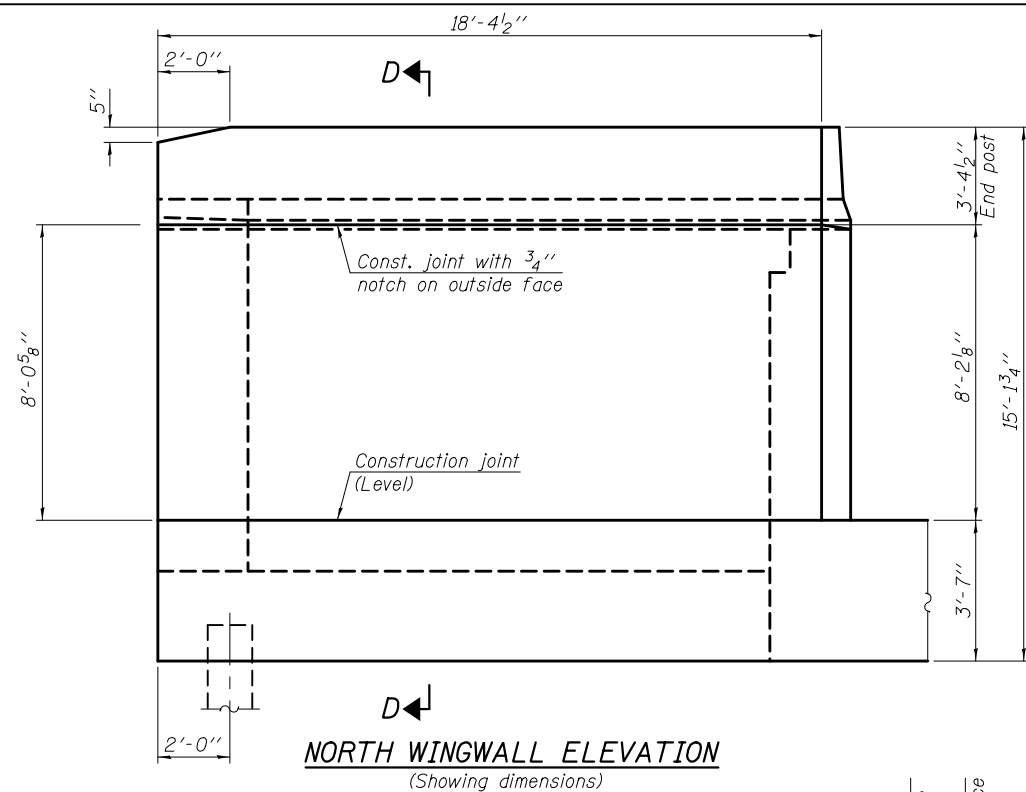


**WINGWALL ELEVATION**  
 (North wingwall shown, South wingwall similar).

**PRE-FINAL**  
 MIN. BAR LAP  
 #7 bar = 5'-2"

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Joanne F. J. [Signature]</i>	DATE -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST ABUTMENT (W.B.) – STAGE II CONSTRUCTION STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED - AL-BARRAE R. SHEBIB	PASSED - <i>Carl [Signature]</i>	REVISED			301	3BR & 3BR-1	WINNEBAGO			
DRAWN - H.T. DUONG / M.B.M.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			CONTRACT NO. 64D19					
CHECKED - NRB/GRA					SHEET NO. 41 OF 55 SHEETS					





PRE-FINAL

DESIGNED - NICHOLAS R. BARNETT  
CHECKED - AL-BARRAE R. SHEBIB  
DRAWN - MICHAEL B. MOSSMAN  
CHECKED - NRB/GRA

EXAMINED - *Joanne F. [Signature]*  
PASSED - *Carl [Signature]*  
ACTING ENGINEER OF BRIDGE DESIGN  
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - \_\_\_\_\_  
REVISED \_\_\_\_\_  
REVISED \_\_\_\_\_

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

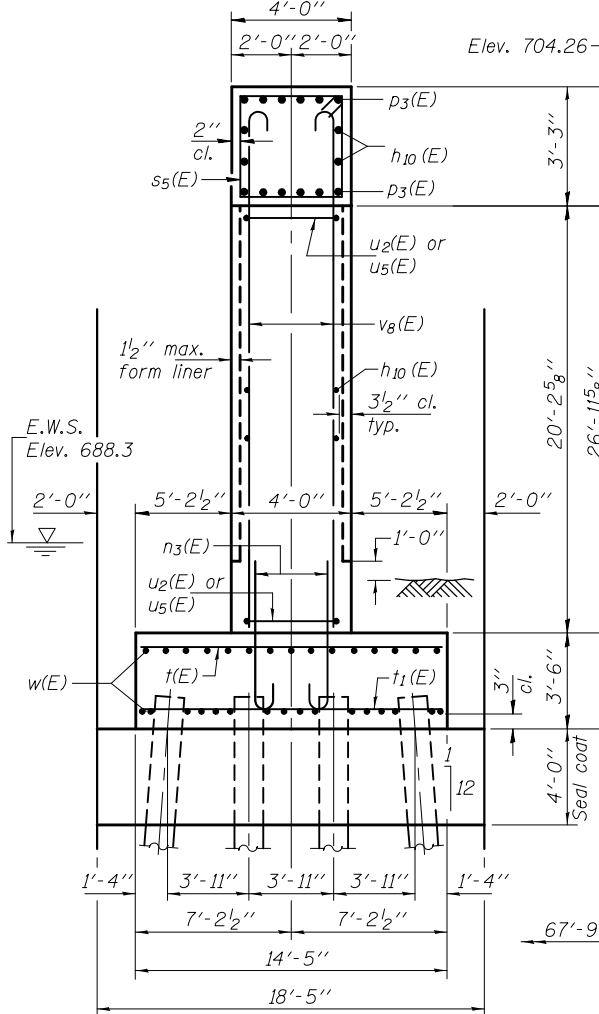
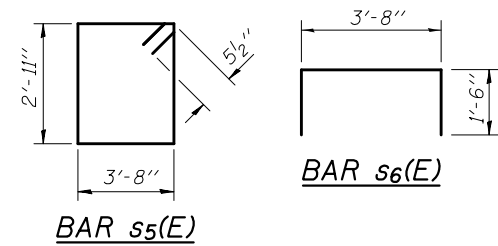
EAST ABUTMENT DETAILS (W.B.) - STAGE II CONSTRUCTION  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

SHEET NO. 42 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				

ILLINOIS FED. AID PROJECT

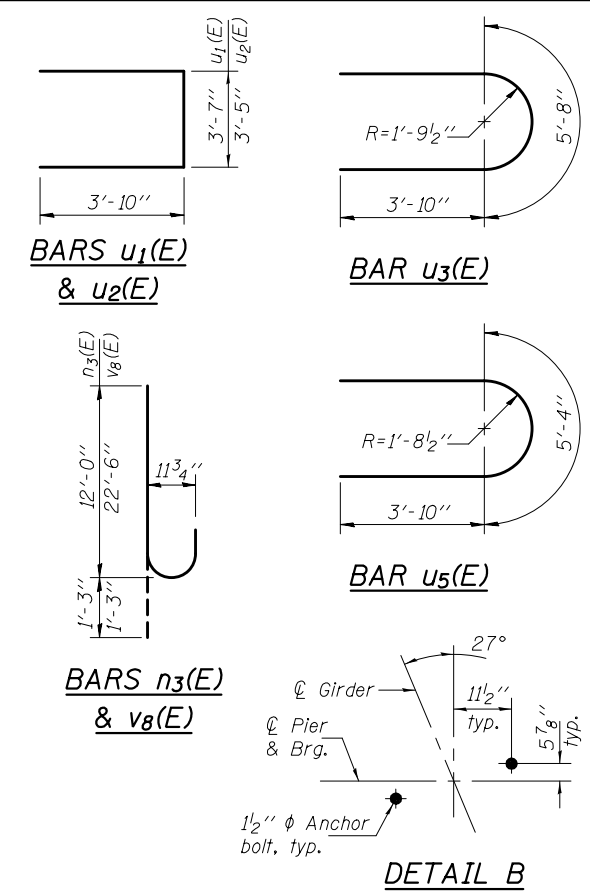
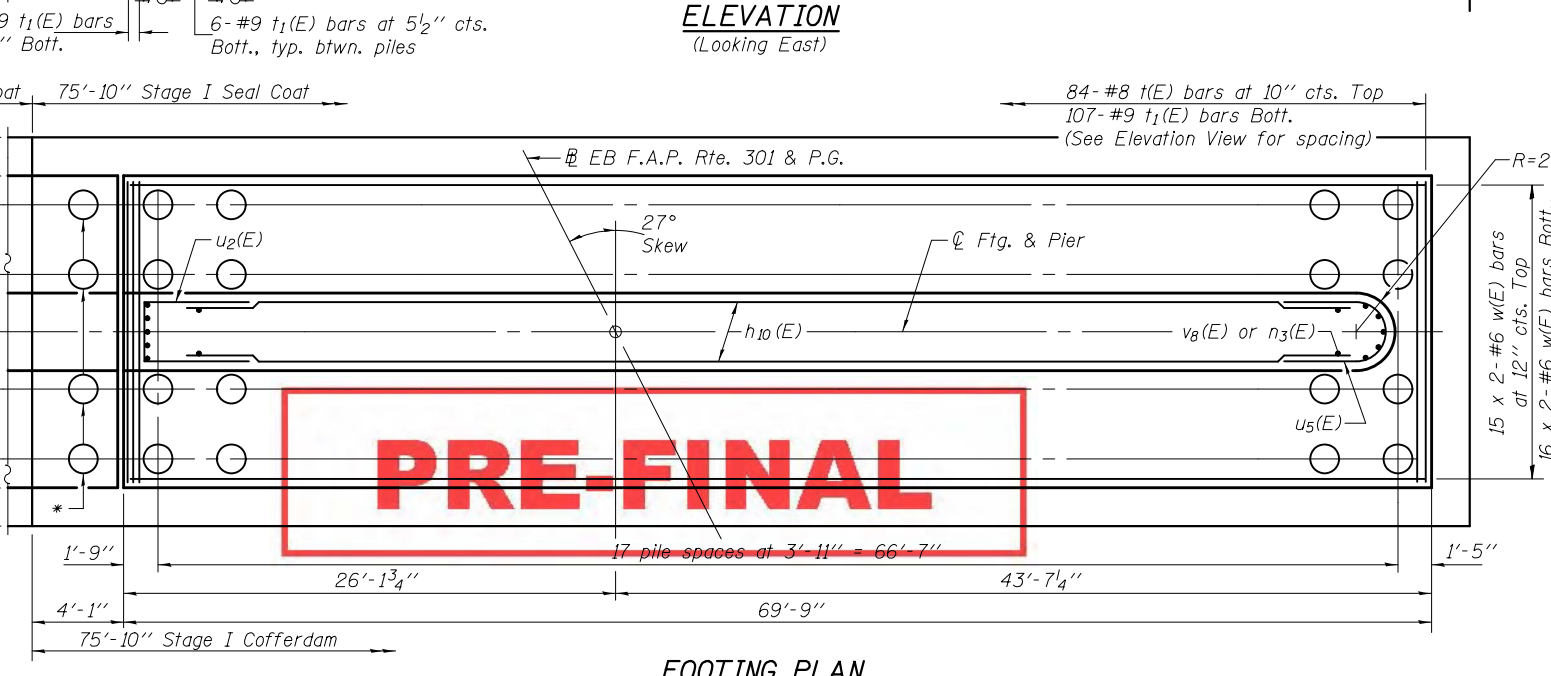
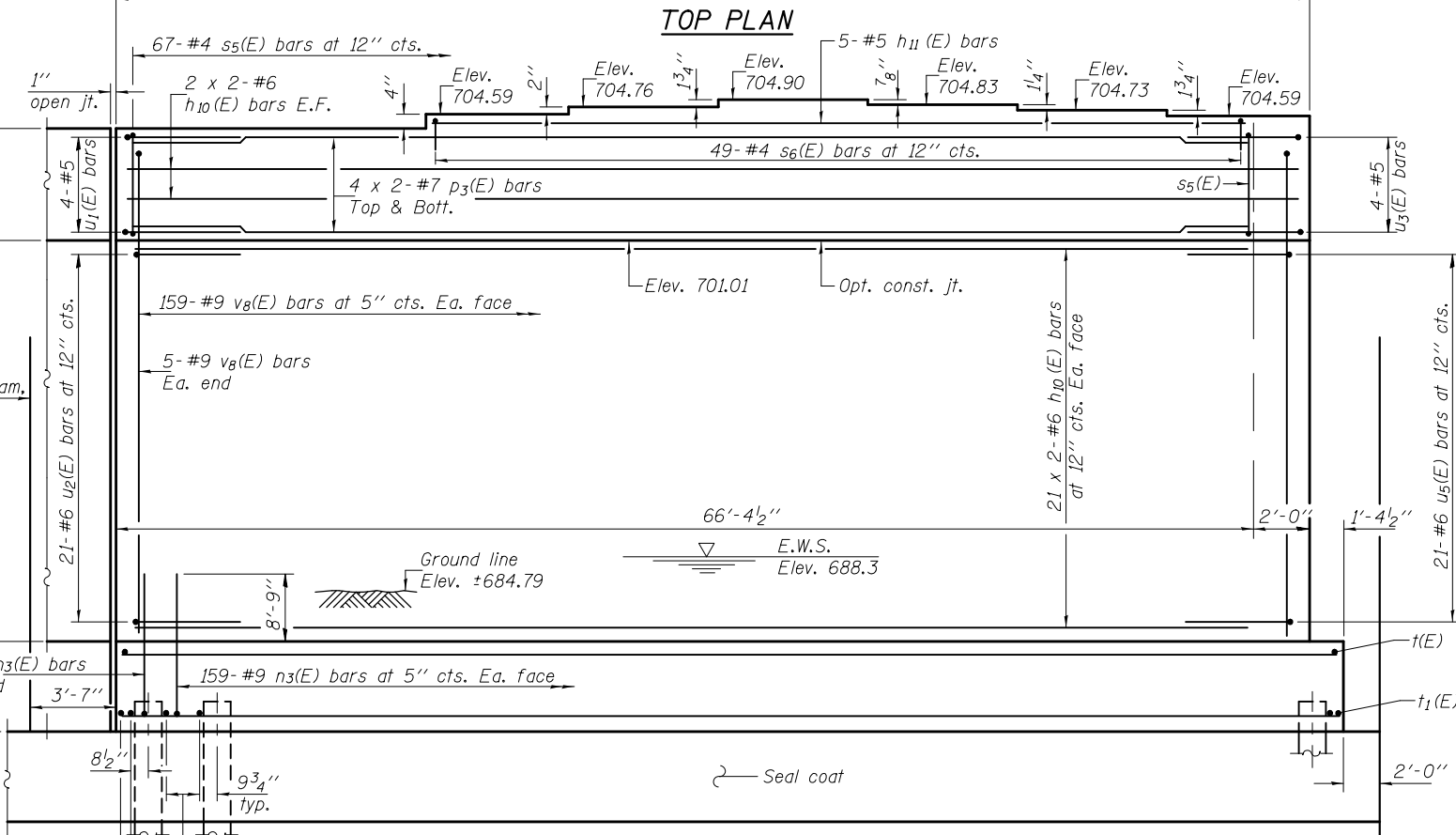
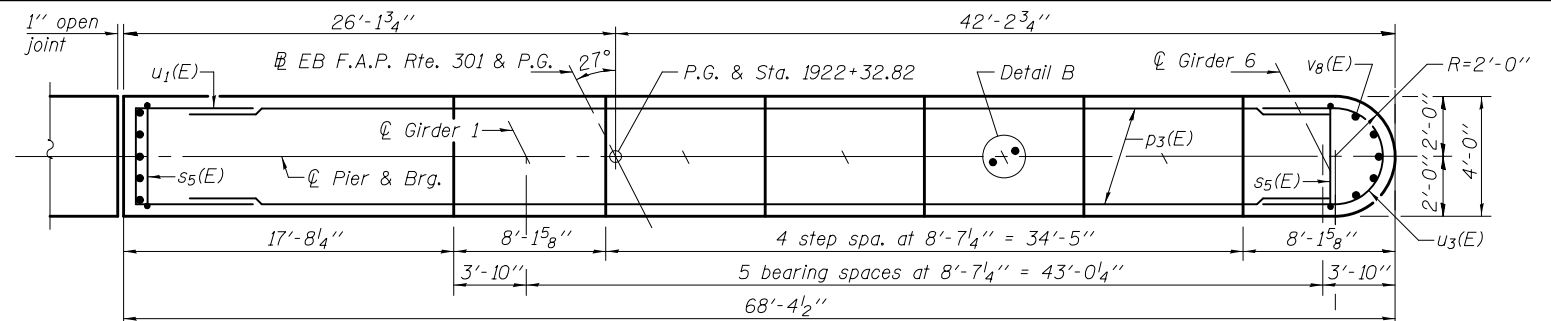
Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Four steps monolithically with cap.  
 For details of piles, see sheet 48 of 55.



**PILE DATA**  
 Type: Metal Shell Piles 14"x .312" with Pile Shoes  
 Nominal Required Bearing: 279 Kips  
 Factored Resistance Available: 151 Kips  
 Est. Length: 33'  
 No. Production Piles: 71  
 No. Test Piles: 1

**MIN. BAR LAP**  
 #6 bar = 3'-10"  
 #7 bar = 5'-2"

\*These piles shall be driven during Stage I Construction to avoid conflict during Stage II Construction.

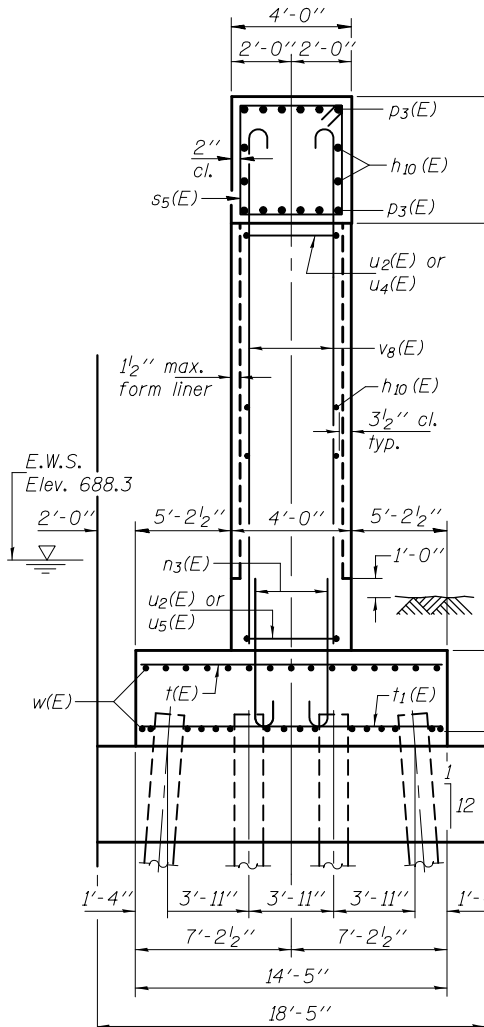
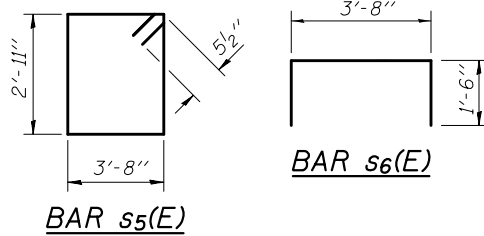


**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h <sub>10</sub> (E)	92	#6	35'-1"	—
h <sub>11</sub> (E)	5	#5	48'-4"	—
n <sub>3</sub> (E)	328	#9	13'-3"	U
p <sub>3</sub> (E)	16	#7	35'-9"	—
s <sub>5</sub> (E)	67	#5	14'-1"	□
s <sub>6</sub> (E)	49	#4	6'-8"	□
t(E)	84	#8	14'-3"	—
t <sub>1</sub> (E)	107	#9	14'-3"	—
u <sub>1</sub> (E)	4	#6	11'-3"	U
u <sub>2</sub> (E)	21	#6	11'-1"	U
u <sub>3</sub> (E)	4	#6	13'-4"	U
u <sub>5</sub> (E)	21	#6	13'-0"	U
v <sub>8</sub> (E)	328	#9	23'-9"	U
w(E)	62	#6	36'-8"	—
Cofferdam Excavation		Cu. Yd.	595	
Concrete Structures		Cu. Yd.	331	
Reinforcement Bars, Epoxy Coated		Pound	61440	
Furnishing Metal Shell Piles 14"x .312"		Foot	2343	
Driving Piles		Foot	2343	
Test Pile, Metal Shells		Each	1	
Pile Shoes		Each	72	
Cofferdam (Type 2), Location 1		Each	1	
Anchor Bolts 1/2"		Each	12	
Seal Coat Concrete		Cu. Yd.	206.9	

**PRE-FINAL**

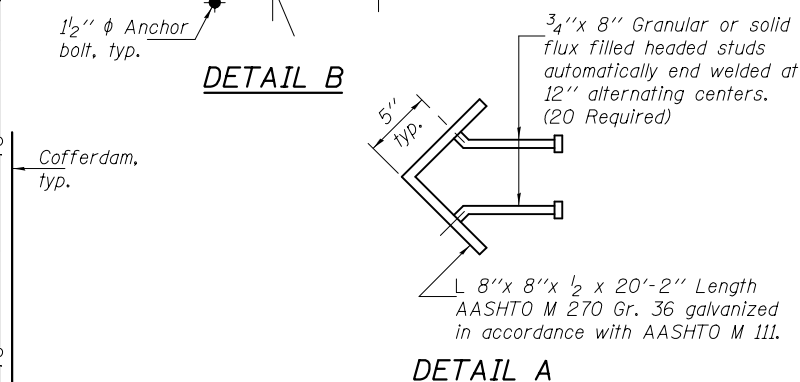
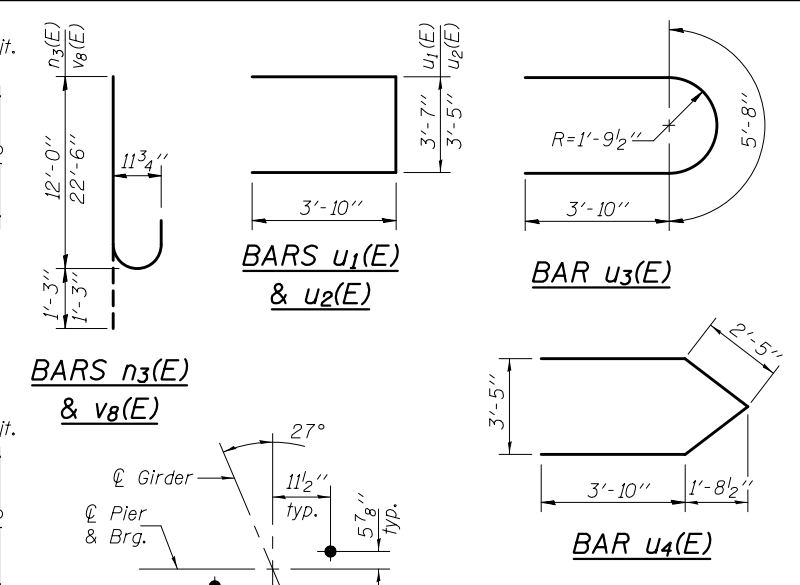
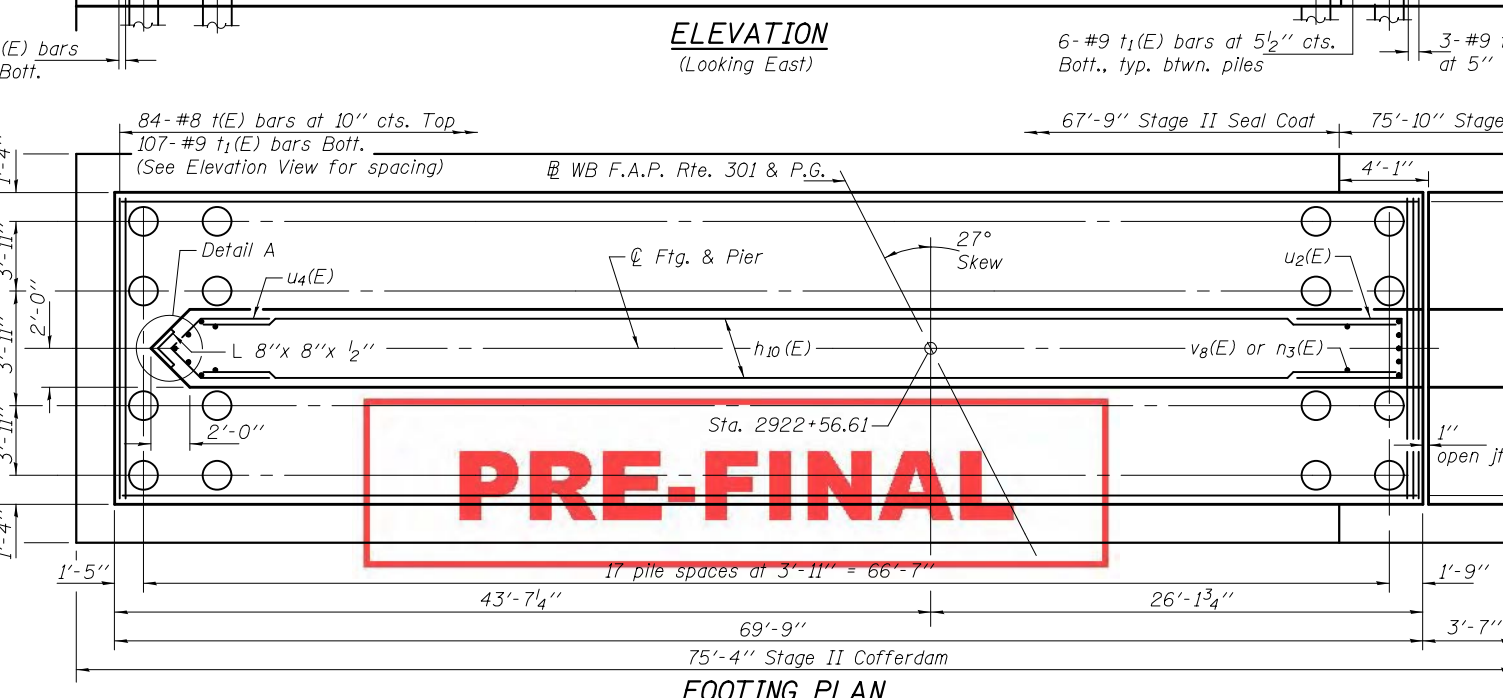
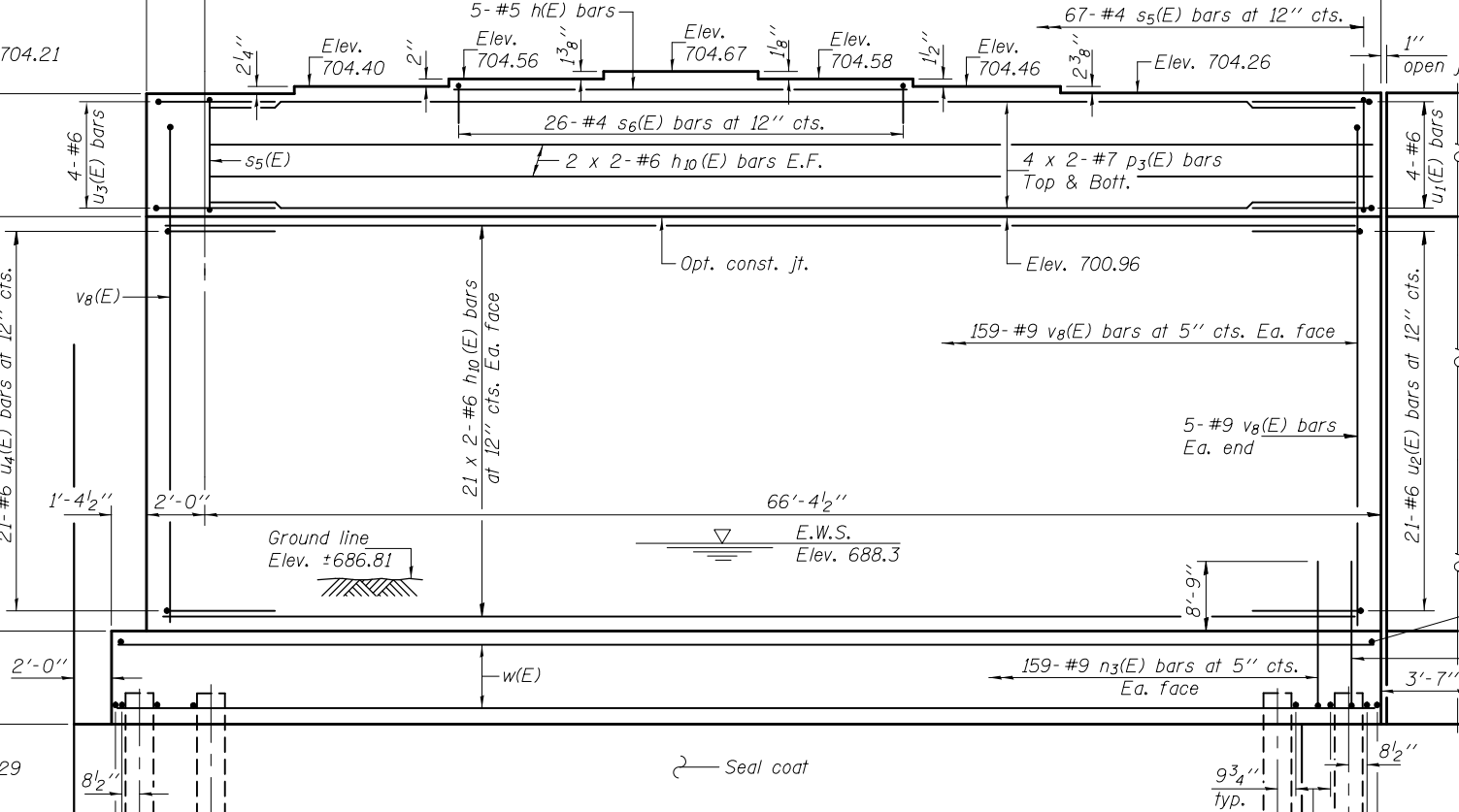
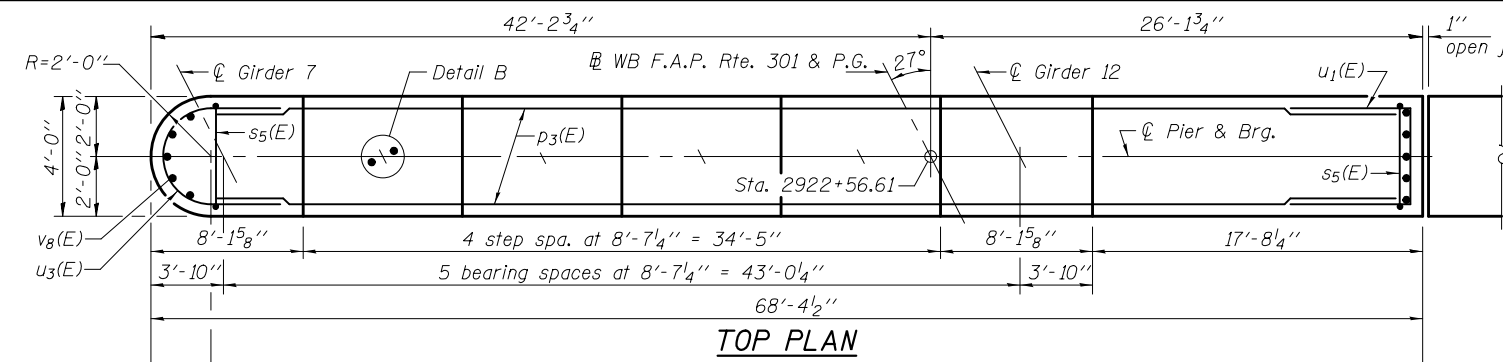
Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Four steps monolithically with cap.  
 For details of piles, see sheet 48 of 55.



**MIN. BAR LAP**  
 #6 bar = 3'-10"  
 #7 bar = 5'-2"

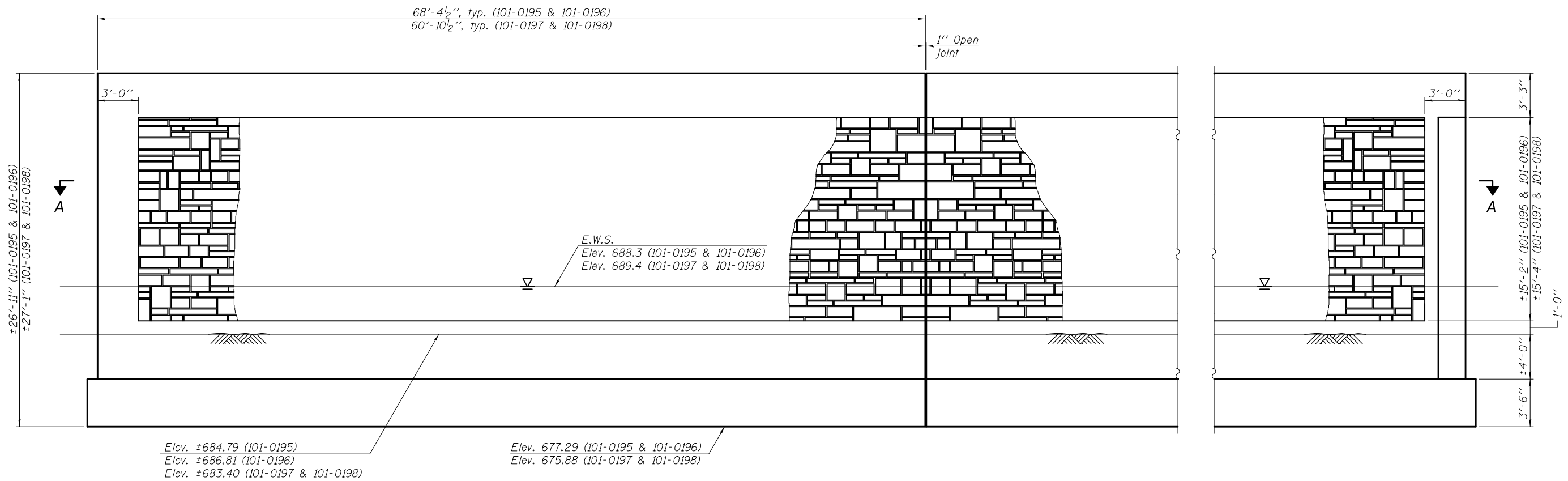
**PILE DATA**

Type: Metal Shell Piles 14"x .312" with Pile Shoes  
 Nominal Required Bearing: 314 Kips  
 Factored Resistance Available: 151 Kips  
 Est. Length: 33'  
 No. Production Piles: 71  
 No. Test Piles: 1

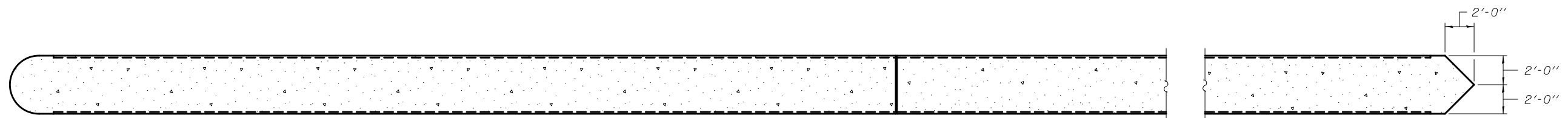


**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	5	#5	25'-6"	—
h10(E)	92	#6	35'-1"	—
n3(E)	328	#9	13'-3"	U
p3(E)	16	#7	35'-9"	—
s5(E)	67	#5	14'-1"	□
s6(E)	26	#4	6'-8"	□
t(E)	84	#8	14'-3"	—
t1(E)	107	#9	14'-3"	—
u1(E)	4	#6	11'-3"	U
u2(E)	21	#6	11'-1"	U
u3(E)	4	#6	13'-4"	U
u4(E)	21	#6	12'-6"	U
v8(E)	328	#9	23'-9"	U
w(E)	62	#6	36'-8"	—
Cofferdam Excavation			Cu. Yd.	625
Concrete Structures			Cu. Yd.	331
Reinforcement Bars, Epoxy Coated			Pound	61200
Furnishing Metal Shell Piles 14"x .312"			Foot	2343
Driving Piles			Foot	2343
Test Pile, Metal Shells			Each	1
Pile Shoes			Each	72
Cofferdam (Type 2), Location 1			Each	1
Anchor Bolts 1/2"			Each	12
Seal Coat Concrete			Cu. Yd.	184.8



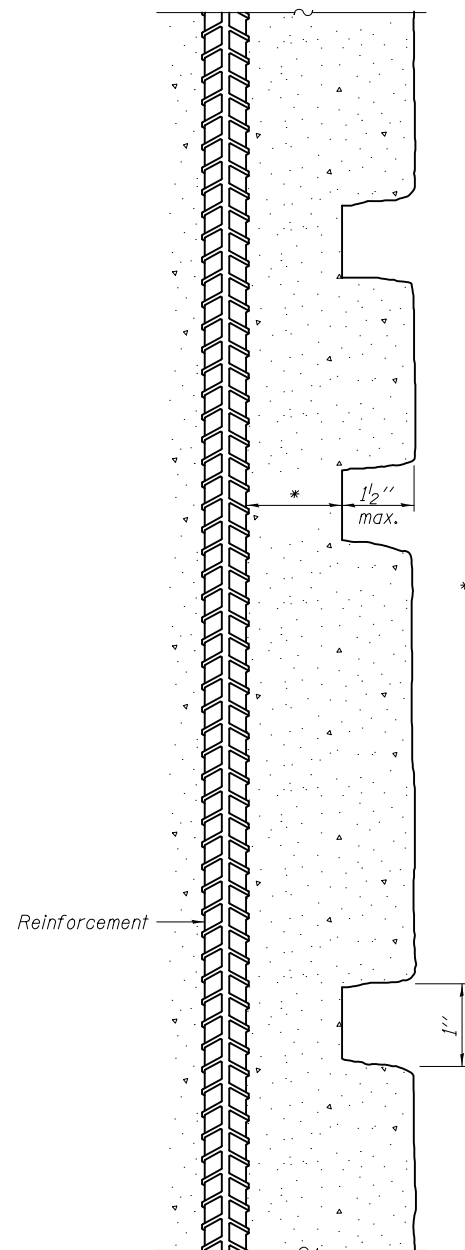
ELEVATION



**PRE-FINAL** SECTION A-A

DESIGNED - NICHOLAS R. BARNETT	EXAMINED _____ ACTING ENGINEER OF BRIDGE DESIGN	DATE - _____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FORM LINER DETAILS STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED - _____	PASSED _____ ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED _____			SHEET NO. 45 OF 55 SHEETS	CONTRACT NO. 64D19		ILLINOIS FED. AID PROJECT		
DRAWN - MICHAEL B. MOSSMAN		REVISED _____								
CHECKED - _____		REVISED _____								





\*Varies  
 1/2" min. at Parapets & Abuts.  
 2" at Piers



SECTION THRU  
FORM LINER

RANDOM BLOCK ASHLAR STONE  
**PRE-FINAL** FORM LINER  
 (Pattern #1506)

DESIGNED - NICHOLAS R. BARNETT	EXAMINED _____	DATE - _____
CHECKED - _____	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED _____	REVISED _____
CHECKED - _____	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED _____

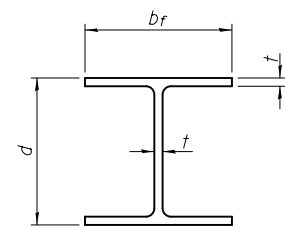
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**FORM LINER DETAILS**  
**STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)**

SHEET NO. 46 OF 55 SHEETS

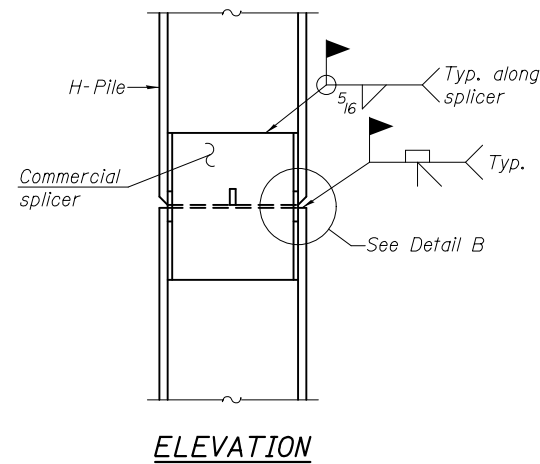
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				



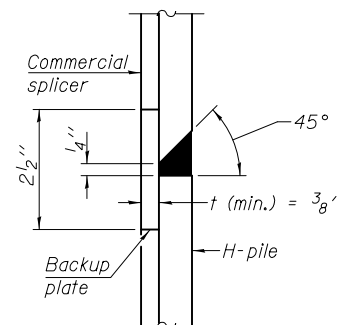


**STEEL PILE TABLE**

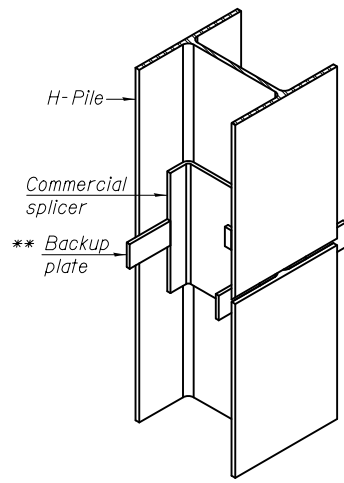
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



**ELEVATION**

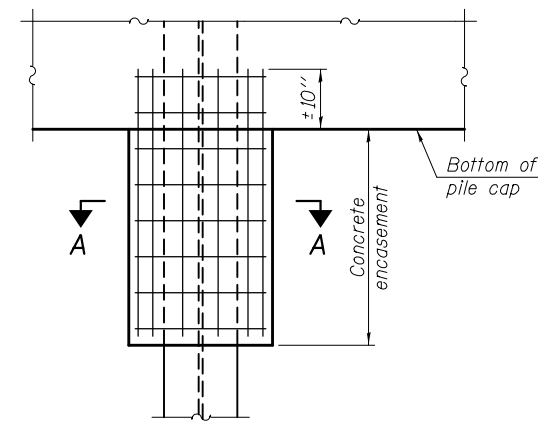


**DETAIL "B"**



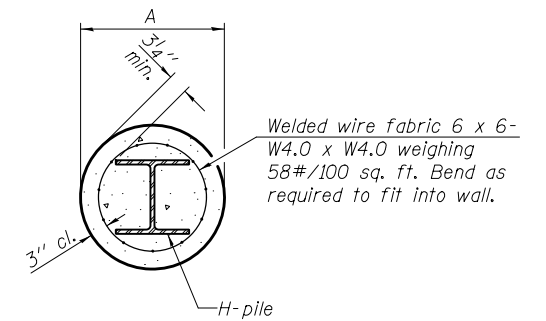
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**



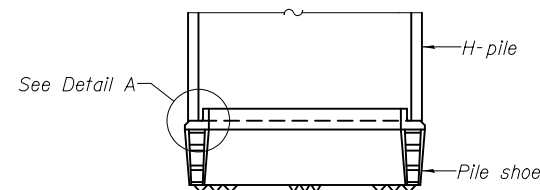
**ELEVATION**

**PILE ENCASEMENT**

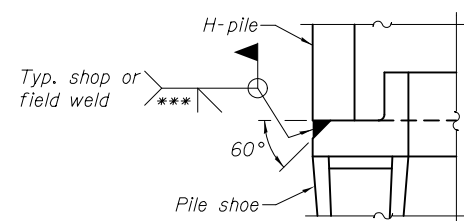


**SECTION A-A**

Note:  
Forms for encasement may be omitted when soil conditions permit.

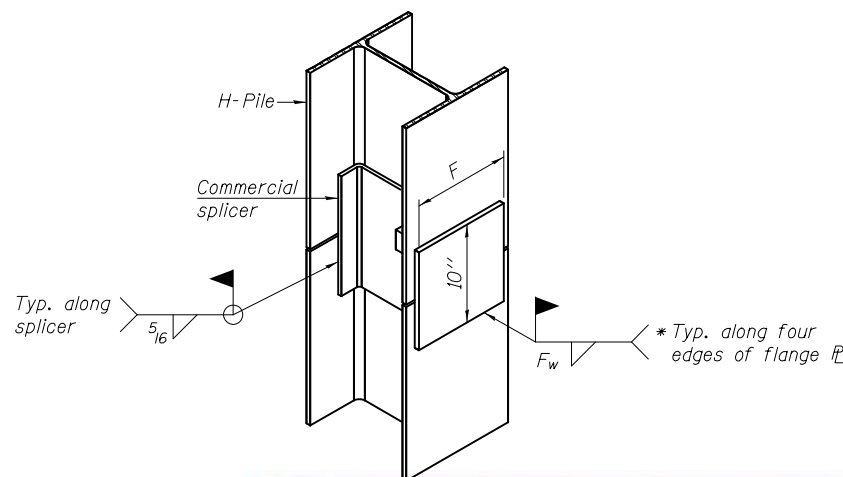


**ELEVATION**



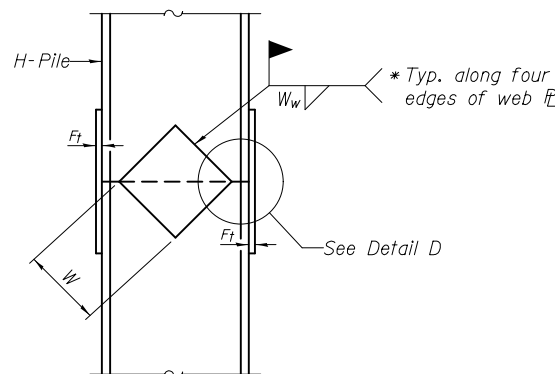
**DETAIL A**

**H-PILE SHOE ATTACHMENT**



**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**

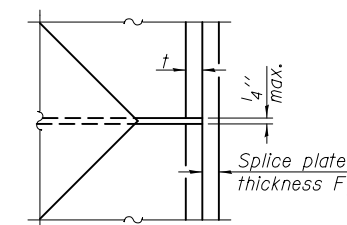


**ELEVATION**

**DETAIL D**

**WELDED PLATE FIELD SPLICE**

Designation	F	F <sub>t</sub>	F <sub>w</sub>	W	W <sub>t</sub>	W <sub>w</sub>
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"



- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).

Note:  
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP 1-27-12

DESIGNED - Nick R. Barnett	EXAMINED - <i>Jayne F. [Signature]</i>	DATE -
CHECKED - Al-Barræ R. Shebib	PASSED - <i>Carl [Signature]</i>	REVISED -
DRAWN - h.t. duong	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED -
CHECKED - NRB/GRA		

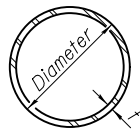
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS  
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

SHEET NO. 47 OF 55 SHEETS

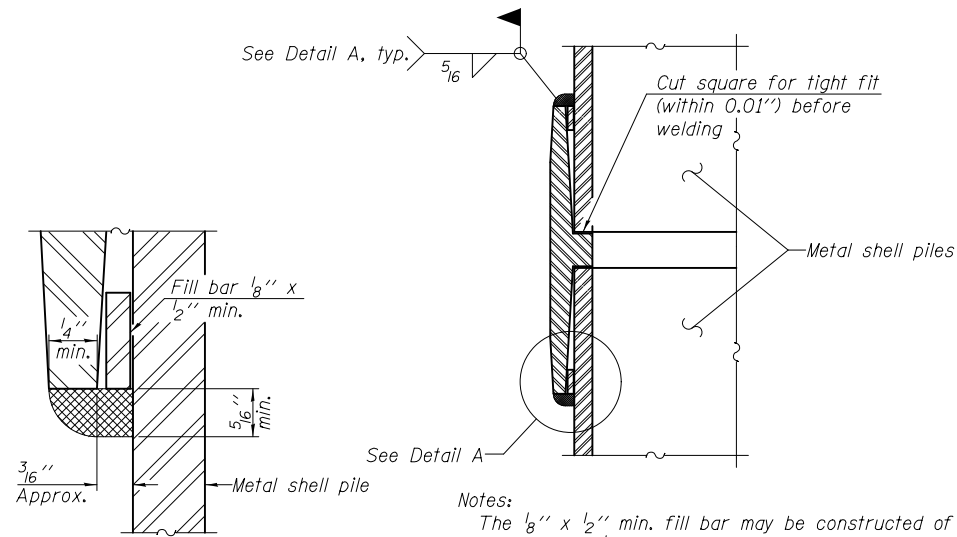
F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CONTRACT NO. 64D19			ILLINOIS FED. AID PROJECT	

**PRE-FINAL**



**METAL SHELL PILE TABLE**

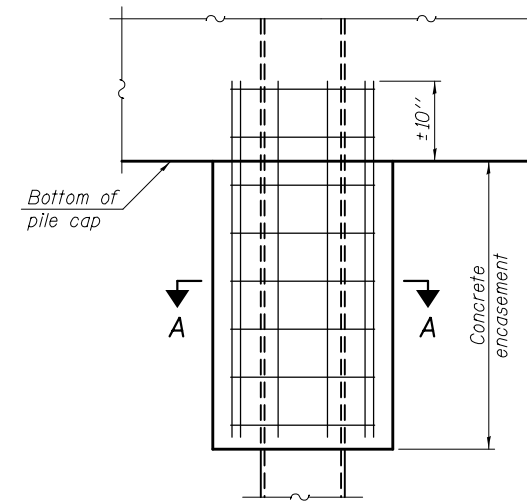
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



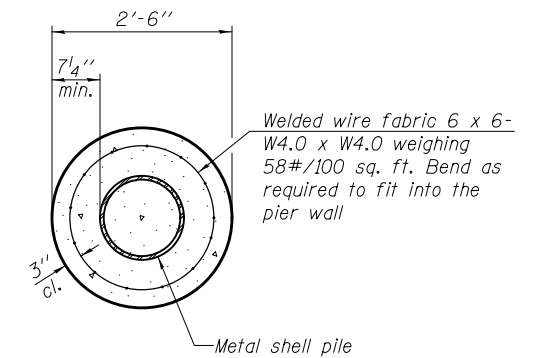
**DETAIL A**

**Notes:**  
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.  
 Pile segments shall be driven to solid contact with splicer before welding.

**WELDED COMMERCIAL SPLICE**



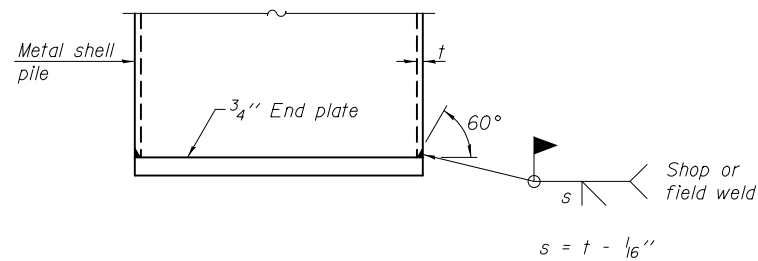
**ELEVATION**



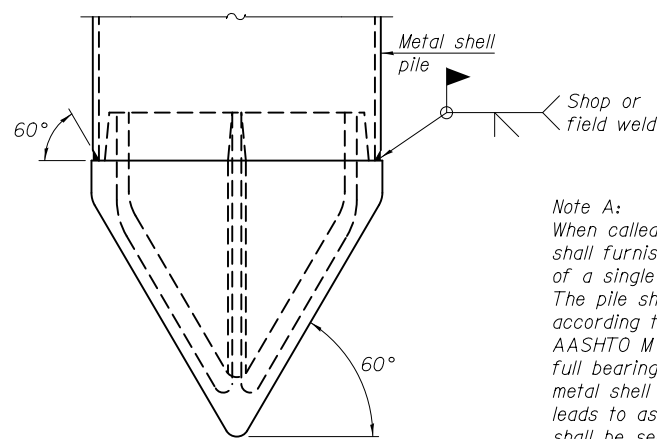
**SECTION A-A**

**Note:**  
 Forms for encasement may be omitted when soil conditions permit.

**CONCRETE ENCASEMENT AT PIERS**



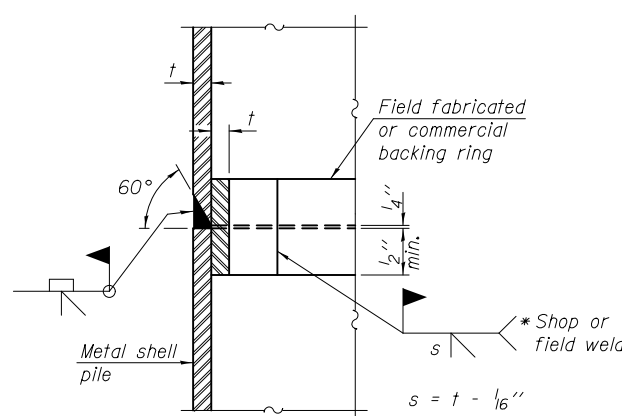
**END PLATE ATTACHMENT**



**Note A:**  
 When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

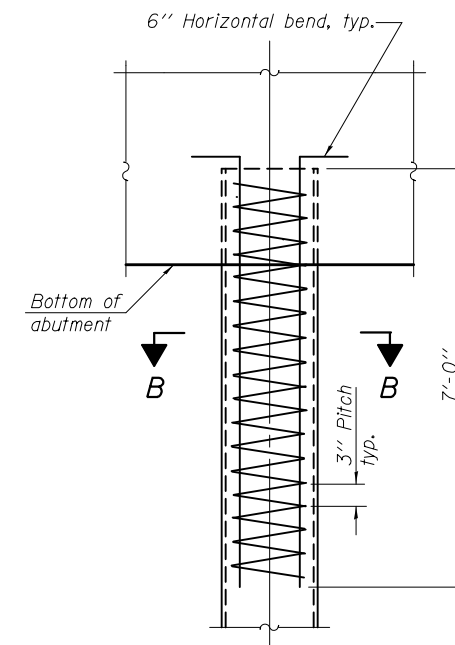
**METAL SHELL PILE SHOE ATTACHMENT**

(See Note A)

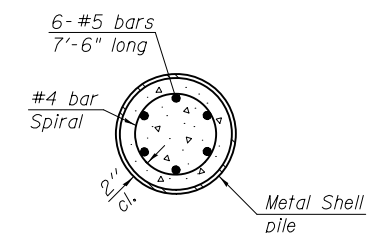


**COMPLETE PENETRATION WELD SPLICE**

\*Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**ELEVATION**



**SECTION B-B**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**

**Note:**  
 The metal shell piles shall be according to ASTM A 252 Grade 3.

F-MS 1-27-12

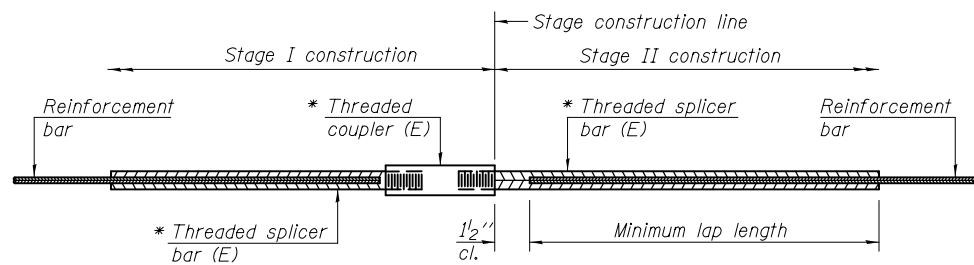
DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Al-Barræ R. Shebib	PASSED - <i>Carl [Signature]</i>	REVISED
DRAWN - h.t. duong	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - NRB/GRA		

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**METAL SHELL PILE DETAILS  
 STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)**

SHEET NO. 48 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				



**STANDARD BAR SPLICER ASSEMBLY**

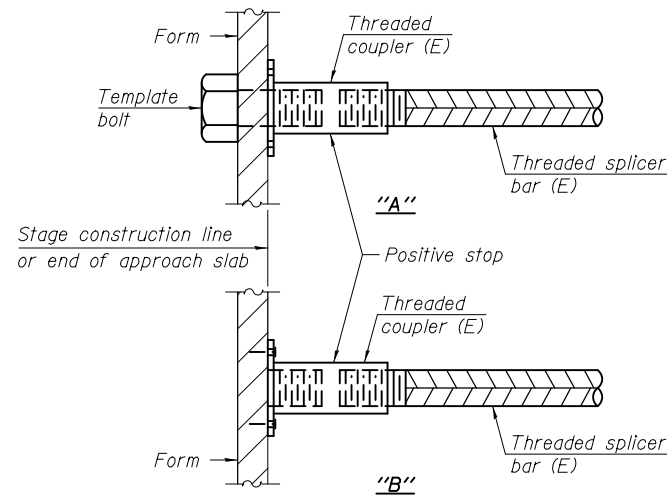
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

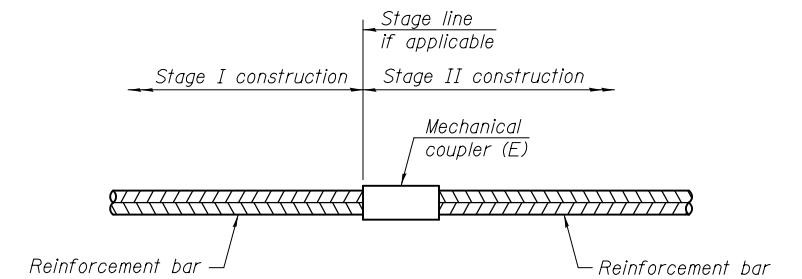
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



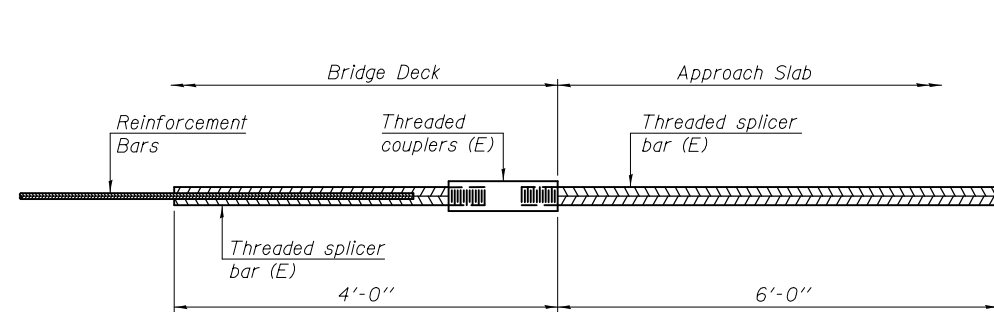
**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



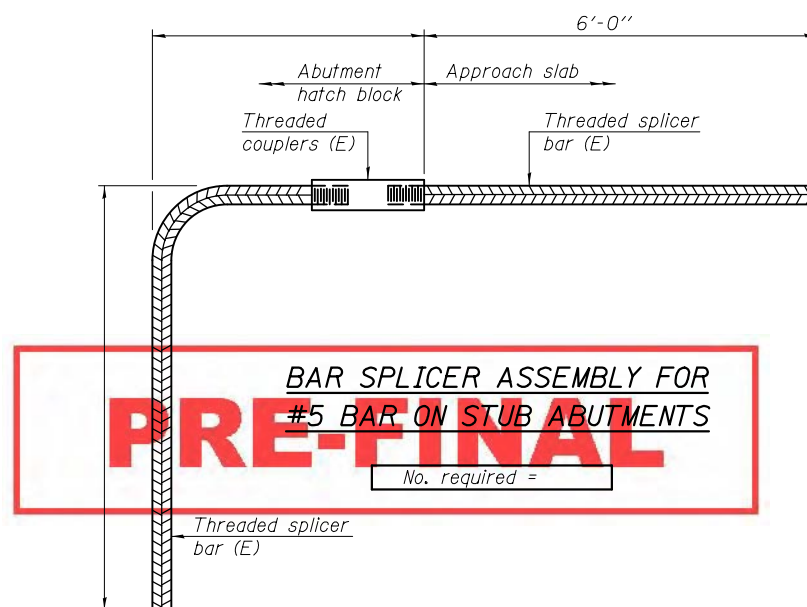
**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

No. required =



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

**NOTES**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-27-12

DESIGNED - Nick R. Barnett  
 CHECKED - Al-Barræ R. Shebib  
 DRAWN - h.t. duong  
 CHECKED - NRB/GRA

EXAMINED - *Jayne F. Duff*  
 PASSED - *Carl Perry*  
 ACTING ENGINEER OF BRIDGE DESIGN  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE -  
 REVISED  
 REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)

SHEET NO. 49 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				

**Illinois Department of Transportation**  
 Division of Highways  
 Illinois Department of Transportation

**SOIL BORING LOG** Page 1 of 2  
 Date 2/5/08

ROUTE Bypass 20, FAP 301 DESCRIPTION P92-075-08 US Bypass 20 Bridge over Rock River Channel, .5 m. E. of IL 2 LOGGED BY W. Garza

SECTION (3, 4) R LOCATION Rockford Twp. - 10 NE, SEC., TWP. 43N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 101-0057 & 0058 Station 483+55  
 BORING NO. B-1 Station 483+63  
 Offset 60.00ft Lt CL  
 Ground Surface Elev. 691.2 ft

Description	Depth (ft)	Bulge (ft)	Shear (%)	Penetrometer (%)	Blow Counts			
					(ft)	(ft)	(ft)	(ft)
SOFT brown SILTY CLAY LOAM with 12RGANICS	689.20	0.3	36					
VERY STIFF brown SILTY CLAY LOAM	687.70	2.1	29					
MEDIUM dark gray SANDY LOAM	684.70	0.8	24					
No Recovery	682.70							
VERY LOOSE gray SAND & GRAVEL	680.20							
VERY LOOSE gray SAND & GRAVEL	677.70							
MEDIUM gray SAND & GRAVEL	675.20							
Wash MEDIUM tan clean medium coarse SAND	672.70							
	670.20							
	667.70							
	665.20							
	662.70							
	660.20							
	657.70							
	655.20							
	652.70							
	650.00							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, form 137 (Rev. 8-99)

**Illinois Department of Transportation**  
 Division of Highways  
 Illinois Department of Transportation

**SOIL BORING LOG** Page 2 of 2  
 Date 2/5/08

ROUTE Bypass 20, FAP 301 DESCRIPTION P92-075-08 US Bypass 20 Bridge over Rock River Channel, .5 m. E. of IL 2 LOGGED BY W. Garza

SECTION (3, 4) R LOCATION Rockford Twp. - 10 NE, SEC., TWP. 43N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 101-0057 & 0058 Station 483+55  
 BORING NO. B-1 Station 483+63  
 Offset 60.00ft Lt CL  
 Ground Surface Elev. 691.2 ft

Description	Depth (ft)	Bulge (ft)	Shear (%)	Penetrometer (%)	Blow Counts			
					(ft)	(ft)	(ft)	(ft)
Wash MEDIUM tan SANDY GRAVEL (continued)	650.20							
Wash MEDIUM tan clean medium coarse SAND	647.70							
Wash MEDIUM tan clean medium coarse SAND	645.20							
Wash DENSE tan clean medium coarse SAND with medium GRAVEL	642.70							
Wash DENSE tan clean medium coarse SAND	640.20							
Borehole continued 20808								
Wash DENSE tan clean medium coarse SAND with medium GRAVEL	637.70							
Wash VERY DENSE tan clean medium coarse SAND with medium GRAVEL	635.20							
Wash VERY DENSE tan SANDY GRAVEL	632.70							
End of Boring	630.00							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, form 137 (Rev. 8-99)

PRE-FINAL

DESIGNED -	EXAMINED -	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOIL BORING LOGS STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CHECKED -	PASSED -	REVISED		SHEET NO. 50 OF 55 SHEETS	CONTRACT NO. 64D19		ILLINOIS FED. AID PROJECT		

Page 1 of 2

**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Date 2/8/08

ROUTE Bypass 20, FAP 301 DESCRIPTION P92-075-08 US Bypass 20 Bridge over Rock River Channel, .5 m. E. of IL 2 LOGGED BY W. Garza

SECTION (3, 4) R LOCATION Rockford Twp. - 10 NE, SEC., TWP. 43N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.	D E P T H (ft)				B L O W S (tsf)				U C S (psi)				M O I S T			
Station	(ft)	(6")	(tsf)	(%)	Surface Water Elev.	(ft)	(6")	(tsf)	(%)	Stream Bed Elev.	(ft)	(6")	(tsf)	(%)	Groundwater Elev.:	
															First Encounter	
<u>101-0057 &amp; 0058</u>																
483+55										65.0						
BORING NO. <u>B-2</u>																
Station <u>483+10</u>															683.2 ft	
Offset <u>61.00ft Rt CL</u>															Wash	
Ground Surface Elev. <u>690.2</u> ft															ft	
SOFT brown SILTY CLAY LOAM with ORGANICS			0.3	48												
			P													
MEDIUM brown SILTY LOAM with ORGANICS		1	0.8	38												
		3	B													
MEDIUM brown SILTY CLAY LOAM		2	0.6	42												
		2	B													
MEDIUM gray dirty SAND		4														
		7														
		5														
LOOSE gray dirty SAND & GRAVEL		1														
		1														
		4														
Wash LOOSE tan SANDY GRAVEL		4														
		2														
		2														
Wash LOOSE tan clean medium coarse SAND		3														
		3														
		4														
Wash LOOSE tan clean medium coarse SAND		2														
		2														
		4														

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

Page 2 of 2

**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Date 2/8/08

ROUTE Bypass 20, FAP 301 DESCRIPTION P92-075-08 US Bypass 20 Bridge over Rock River Channel, .5 m. E. of IL 2 LOGGED BY W. Garza

SECTION (3, 4) R LOCATION Rockford Twp. - 10 NE, SEC., TWP. 43N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.	D E P T H (ft)				B L O W S (tsf)				U C S (psi)				M O I S T			
Station	(ft)	(6")	(tsf)	(%)	Surface Water Elev.	(ft)	(6")	(tsf)	(%)	Stream Bed Elev.	(ft)	(6")	(tsf)	(%)	Groundwater Elev.:	
															First Encounter	
<u>101-0057 &amp; 0058</u>																
483+55										65.0						
BORING NO. <u>B-2</u>																
Station <u>483+10</u>															683.2 ft	
Offset <u>61.00ft Rt CL</u>															Wash	
Ground Surface Elev. <u>690.2</u> ft															ft	
Wash DENSE tan SANDY GRAVEL (continued)		22														
		21														
Wash MEDIUM tan clean medium coarse SAND		6														
		10														
		15														
Wash DENSE tan clean medium coarse SAND		7														
		11														
		22														
Wash VERY DENSE tan SANDY GRAVEL		51														
		42														
		55														
Wash VERY DENSE tan SANDY GRAVEL		40														
		63														
		100/12														
End of Boring																

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

PRE-FINAL

DESIGNED - CHECKED - DRAWN - CHECKED -	EXAMINED <div style="text-align: center;"><i>Joanne F. Duffy</i> ACTING ENGINEER OF BRIDGE DESIGN</div> PASSED <div style="text-align: center;"><i>Carl Berger</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES</div>	DATE -  REVISED  REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOIL BORING LOGS STRUCTURE NO. 101-0195 (E.B.) &amp; 101-0196 (W.B.)</b>  SHEET NO. 51 OF 55 SHEETS	<table border="1" style="border-collapse: collapse; font-size: 8px;"> <tr> <td style="text-align: center;">F.A.P. RTE.</td> <td style="text-align: center;">SECTION</td> <td style="text-align: center;">COUNTY</td> <td style="text-align: center;">TOTAL SHEETS</td> <td style="text-align: center;">SHEET NO.</td> </tr> <tr> <td style="text-align: center;">301</td> <td style="text-align: center;">3BR &amp; 3BR-1</td> <td style="text-align: center;">WINNEBAGO</td> <td style="text-align: center;">55</td> <td style="text-align: center;">51</td> </tr> <tr> <td colspan="5" style="text-align: center;">CONTRACT NO. 64D19</td> </tr> <tr> <td colspan="5" style="text-align: center;">ILLINOIS FED. AID PROJECT</td> </tr> </table>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	301	3BR & 3BR-1	WINNEBAGO	55	51	CONTRACT NO. 64D19					ILLINOIS FED. AID PROJECT				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																					
301	3BR & 3BR-1	WINNEBAGO	55	51																					
CONTRACT NO. 64D19																									
ILLINOIS FED. AID PROJECT																									







**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Page 1 of 2  
Date 3/13/08

ROUTE Bypass 20, FAP 301 DESCRIPTION P92-075-08 US Bypass 20 Bridge over Rock River Channel, .5 m. E. of IL 2 over Rock River LOGGED BY W. Garza

SECTION (3, 4) R LOCATION Rockford Twp. - 10 NE, SEC., TWP. 43N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Dledrich Automatic

STRUCT. NO. 101-0057 & 0058  
Station 483+55

BORING NO. B-5  
Station 485+30  
Offset 5.00ft Rt CL  
Ground Surface Elev. 710.5 ft

Description	Depth (ft)	Blow Count (6")	UCS (tsf)	Failure Mode (%)	Soil Description	Depth (ft)	Blow Count (6")	UCS (tsf)	Failure Mode (%)	Groundwater Elev.	
										ft	ft
LOOSE brown moist SANDY GRAVEL	689.00	3			STIFF gray LOAM with SILT	689.00	4	1.2	29	Surface Water Elev. _____ ft	Stream Bed Elev. <u>65.0</u> ft
MEDIUM brown SANDY GRAVEL	708.00	3			MEDIUM gray SILTY LOAM	686.00	1	0.5	27	Groundwater Elev.:	
MEDIUM tan SANDY GRAVEL	706.50	6			MEDIUM gray dirty SAND	684.00	3			First Encounter <u>685.5</u> ft	Upon Completion _____ ft
LOOSE tan/brown medium SAND	704.00	6			MEDIUM tan/gray SANDY GRAVEL	681.50	10			After _____ Hrs.	
LOOSE brown SAND	698.50	3			LOOSE tan SANDY GRAVEL	679.00	5				
STIFF gray SANDY LOAM	696.50	4	1.9	15	MEDIUM gray clean medium coarse SAND	676.50	5				
VERY STIFF gray LOAM with GRAVEL	694.00	11	3.5	11	Wash MEDIUM gray clean medium coarse SAND with medium GRAVEL	674.00	7				
STIFF gray LOAM	691.50	7	1.5	18	MEDIUM gray clean medium coarse SAND	671.50	6				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Page 2 of 2  
Date 3/13/08

ROUTE Bypass 20, FAP 301 DESCRIPTION P92-075-08 US Bypass 20 Bridge over Rock River Channel, .5 m. E. of IL 2 over Rock River LOGGED BY W. Garza

SECTION (3, 4) R LOCATION Rockford Twp. - 10 NE, SEC., TWP. 43N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Dledrich Automatic

STRUCT. NO. 101-0057 & 0058  
Station 483+55

BORING NO. B-5  
Station 485+30  
Offset 5.00ft Rt CL  
Ground Surface Elev. 710.5 ft

Description	Depth (ft)	Blow Count (6")	UCS (tsf)	Failure Mode (%)	Soil Description	Depth (ft)	Blow Count (6")	UCS (tsf)	Failure Mode (%)	Groundwater Elev.	
										ft	ft
MEDIUM gray clean medium coarse SAND	669.00	8			Wash DENSE tan clean medium coarse SAND with medium GRAVEL	649.00	13			Surface Water Elev. _____ ft	Stream Bed Elev. <u>65.0</u> ft
Wash DENSE tan fine SAND	666.50	13			Wash MEDIUM tan clean medium coarse SAND	644.00	13			Groundwater Elev.:	
Wash MEDIUM tan clean medium coarse SAND	664.00	11			Wash DENSE tan clean medium coarse SAND	641.50	19			First Encounter <u>685.5</u> ft	Upon Completion _____ ft
Wash DENSE tan clean medium coarse SAND	659.00	7			End of Boring	-70				After _____ Hrs.	
Wash DENSE tan clean medium coarse SAND	654.00	11									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

PRE-FINAL

**Illinois Department of Transportation**  
 Division of Highways  
 Illinois Department of Transportation

**SOIL BORING LOG** Page 1 of 2

Date 3/14/08

ROUTE Bypass 20, FAP 301 DESCRIPTION P92-075-08 US Bypass 20 Bridge over Rock River Channel, .5 m. E. of IL 2 LOGGED BY W. Garza

SECTION (3, 4) R LOCATION Rockford Twp. - 10 NE, SEC., TWP. 43N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Dledrich Automatic

STRUCT. NO. 101-0057 & 0058  
 Station 483+55

BORING NO. B-6  
 Station 481+83  
 Offset 8.00ft Lt CL  
 Ground Surface Elev. 712.0 ft

Description	Depth (ft)	Blow Count (6")	SPT (tsf)	UCS (%)	Soil Description			
					Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	Notes
LOOSE brown SANDY GRAVEL	17	24			690.50			DENSE tan SANDY GRAVEL
MEDIUM brown SANDY GRAVEL	3	5			709.50			MEDIUM tan fine SAND
LOOSE brown SANDY GRAVEL	4	4			708.00			MEDIUM tan clean medium coarse SAND with medium GRAVEL
MEDIUM gray SANDY LOAM	2	2	0.6	13	705.00			MEDIUM tan clean medium coarse SAND
MEDIUM gray SILTY CLAY LOAM with fine SAND lens	3	3	0.8	21	703.00			Wash MEDIUM tan clean medium coarse SAND
DENSE tan SANDY GRAVEL	9	14			700.00			MEDIUM tan clean medium coarse SAND
DENSE tan SANDY GRAVEL	14	19			698.00			Wash MEDIUM tan fine SAND
VERY DENSE tan SANDY GRAVEL	15	23			695.50			Wash MEDIUM tan fine SAND

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, form 137 (Rev. 8-99)

**Illinois Department of Transportation**  
 Division of Highways  
 Illinois Department of Transportation

**SOIL BORING LOG** Page 2 of 2

Date 3/14/08

ROUTE Bypass 20, FAP 301 DESCRIPTION P92-075-08 US Bypass 20 Bridge over Rock River Channel, .5 m. E. of IL 2 LOGGED BY W. Garza

SECTION (3, 4) R LOCATION Rockford Twp. - 10 NE, SEC., TWP. 43N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Dledrich Automatic

STRUCT. NO. 101-0057 & 0058  
 Station 483+55

BORING NO. B-6  
 Station 481+83  
 Offset 8.00ft Lt CL  
 Ground Surface Elev. 712.0 ft

Description	Depth (ft)	Blow Count (6")	SPT (tsf)	UCS (%)	Soil Description			
					Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	Notes
MEDIUM tan clean medium coarse SAND	10	11			670.50			DENSE tan clean medium coarse SAND
Wash DENSE tan clean medium coarse SAND	10	15			668.00			Wash DENSE tan clean medium coarse SAND
Wash MEDIUM tan clean medium coarse SAND	7	11			665.50			End of Boring
Wash VERY DENSE tan SANDY GRAVEL	12	18			663.00			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, form 137 (Rev. 8-99)

**PRE-FINAL**

975

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 194	3B, 3F	WINNEBAGO		
STA.	TO STA.			
FED. ROAD DIST. NO. 7 (ILLINOIS)		PROJ. U 284 (5)		

**STATE OF ILLINOIS**  
**DEPARTMENT OF PUBLIC WORKS AND BUILDINGS**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**FEDERAL AID HIGHWAY**  
**BRIDGE OVER ROCK RIVER**

WINNEBAGO COUNTY  
 ROCKFORD BYPASS

F.A. ROUTE 194 SECTION 3B, 3F  
 F.A. ROUTE 194 SECTION 3B-1, 3F-1

PROJECT U-284 (5)

**Section 3B:** Includes the construction of Dual Built-Up Steel Girder Deck Type Bridges (on the Rockford Bypass over Rock River) spans: 1 @ 100'-0", 1 @ 130'-0", and 1 @ 100'-0" at sta. 483+55, with the exception of furnishing, fabricating and shop painting the structural steel.

**Section 3F:** Includes furnishing, fabricating and shop painting the structural steel for Dual Built-Up Steel Girder Deck Type Bridges (on the Rockford Bypass over Rock River) spans: 1 @ 100'-0", 1 @ 130'-0" and 1 @ 100'-0" at sta. 483+55.

**Note:** Structural steel shall be delivered f.o.b. Railway Team Track nearest the bridge site located near the intersection of Sandy Hollow Road and Kishwaukee Street in Rockford. Except that delivery may be made f.o.b. bridge site by truck if suitable arrangements are made with the contractor of section 3B.



LOCATION OF SECTION INDICATED THIS:—

SPECIAL COVER SHEET  
 PREPARED FOR  
 FEDERAL PROJECT

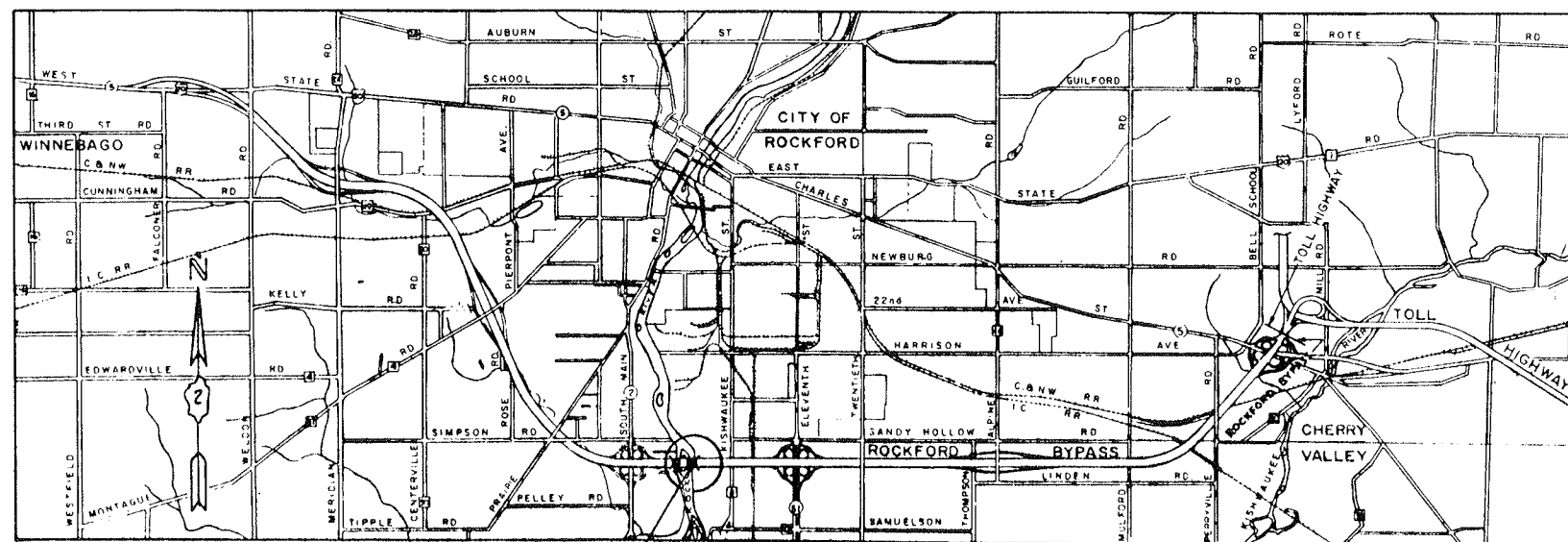
**SECTION 3B1** INCLUDES THE CONSTRUCTION OF TWO BUILT-UP STEEL GIRDER DECK TYPE BRIDGES (ON THE ROCKFORD BELT LINE OVER ROCK RIVER) SPANS: 1 @ 120' - 0", 1 @ 156' - 0" AND 1 @ 120' - 0" FROM STA. 490 + 32 TO STA. 494 + 28, WITH THE EXCEPTION OF FURNISHING AND FABRICATING STRUCTURAL STEEL, FURNISHING AND APPLYING SHOP COAT OF PAINT, AND DELIVERY OF THE STRUCTURAL STEEL.

**SECTION 3F-1** INCLUDES FURNISHING AND FABRICATING STRUCTURAL STEEL, FURNISHING AND APPLYING SHOP COAT OF PAINT AND THE DELIVERY OF THE STRUCTURAL STEEL FOR TWO BUILT-UP STEEL GIRDER DECK TYPE BRIDGES (ON THE ROCKFORD BELT LINE OVER ROCK RIVER) SPANS: 1 @ 120' - 0", 1 @ 156' - 0" AND 1 @ 120' - 0" FROM STA. 490 + 32 TO STA. 494 + 28.

ROAD CLASSIFICATION: 1500-T-70

ENTIRE SECTION INSPECTED AND APPROVED AS TO POLICY.

DATE September 30, 1938  
 DISTRICT ENGINEER M. M. Mombles



Sections 3B & 3F

**MACCABEE, CAMPBELL & ASSOCIATES**  
 CONSULTING ENGINEERS  
 173 W. MADISON ST. CHICAGO, ILL.

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS	
DESIGNED	<u>September 30, 1938</u>
BY	<u>M. M. Mombles</u>
EXAMINED	<u>June 2, 1939</u>
BY	<u>A. Van Cannel</u>
PASSED	<u>June 2, 1939</u>
APPROVED	<u>[Signature]</u>
APPROVED	<u>June 2, 1939</u>
APPROVED	<u>[Signature]</u>

DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
APPROVED	
DIVISION ENGINEER	DATE

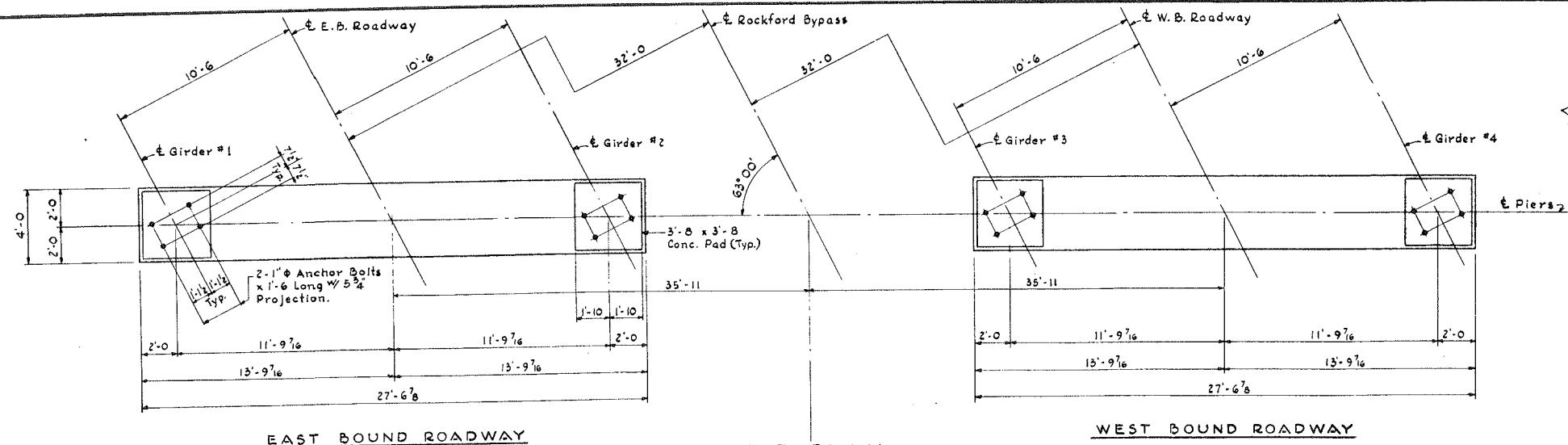
**FOR INFORMATION ONLY**



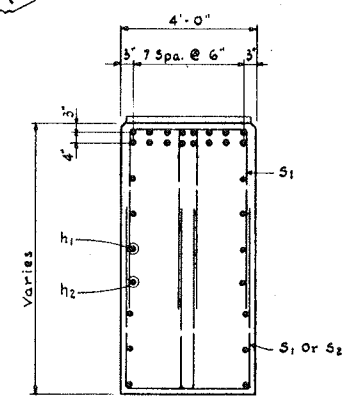




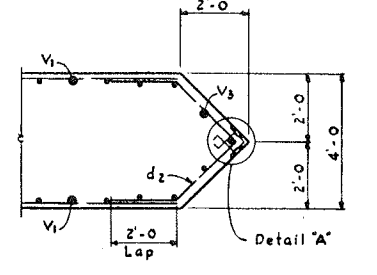
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS
F.A. 194	35	WINNEBAGO	28
STA.	TO STA.		18
FED. ROAD DIST. NO. 7	ILLINOIS		PROJ.



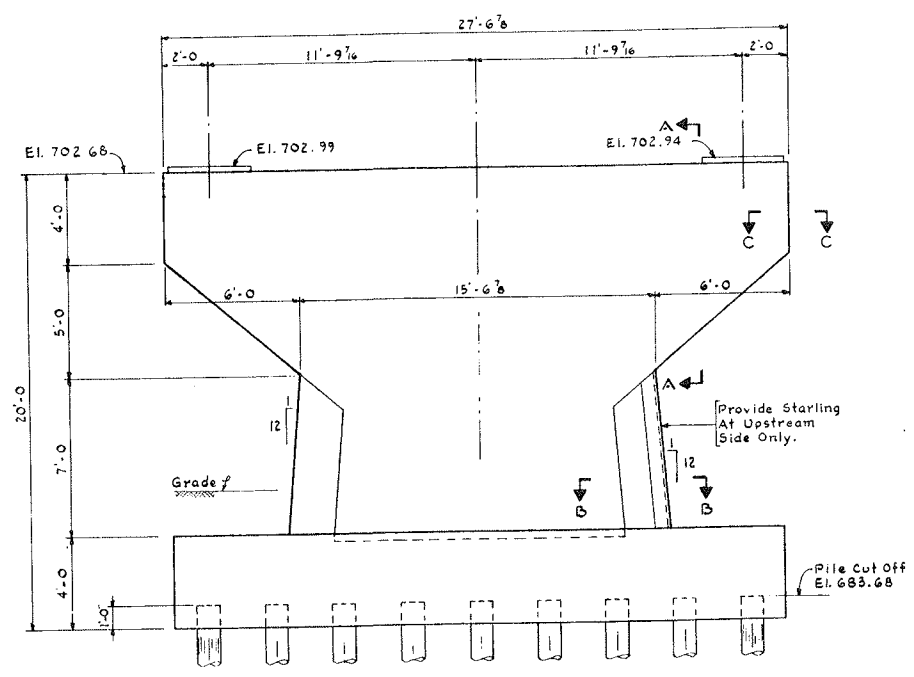
**TOP PLAN**  
Scale: 1/4" = 1'-0"



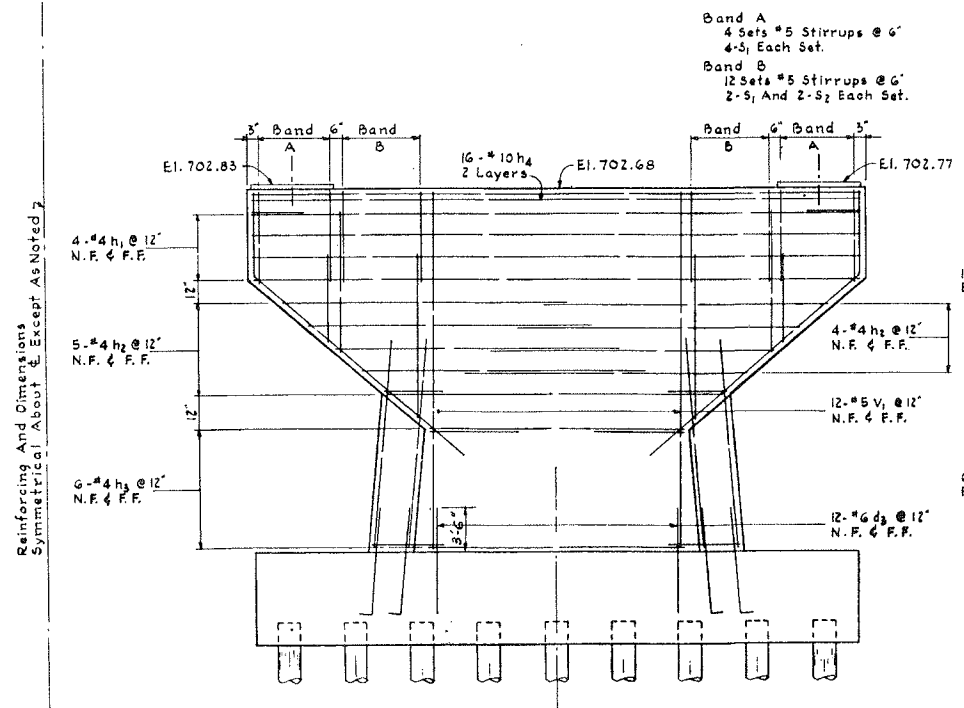
**SECTION A-A**  
Scale: 3/8" = 1'-0"



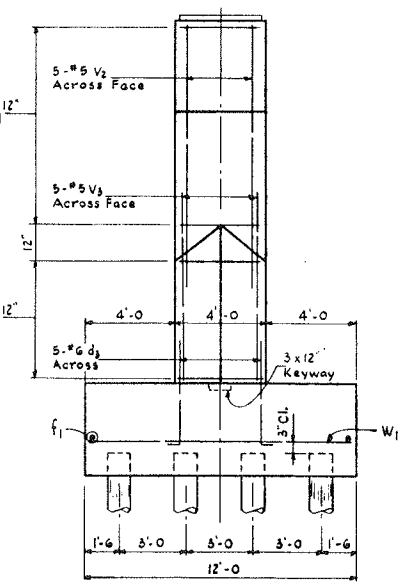
**SECTION B-B**  
Scale: 3/8" = 1'-0"



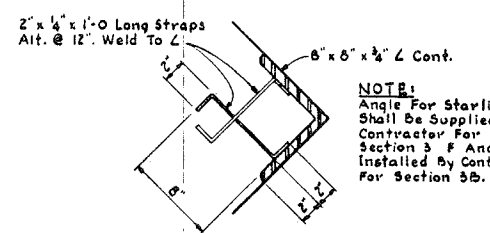
**DIMENSIONS**



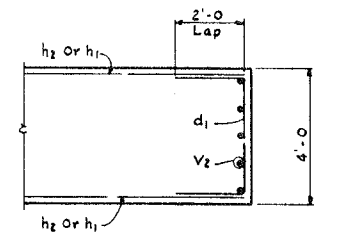
**REINFORCING**



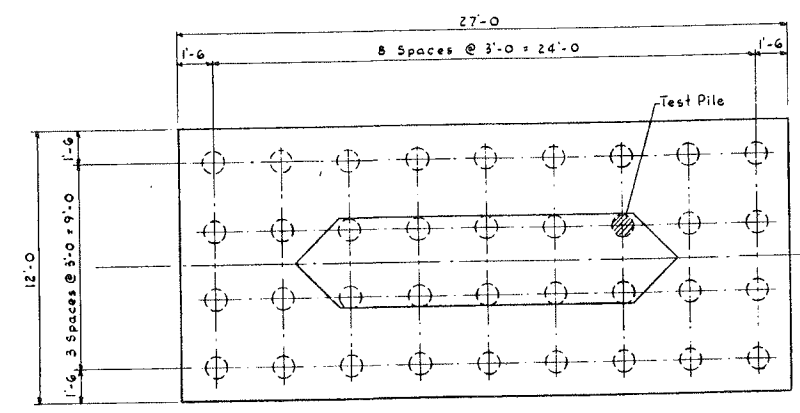
**END VIEW**  
Scale: 1/4" = 1'-0"



**STARTLING DETAIL A**  
Scale: 1/2" = 1'-0"

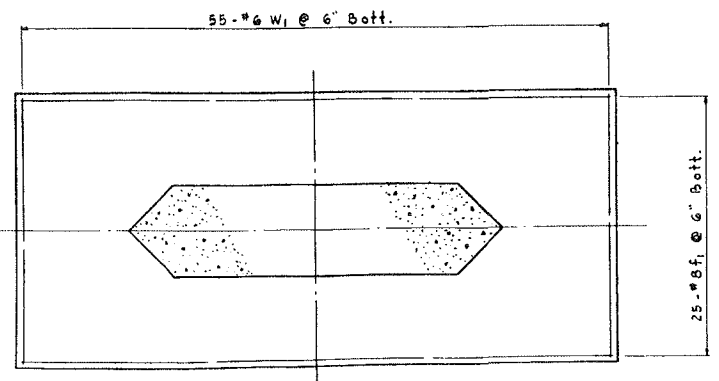


**SECTION C-C**  
Scale: 3/8" = 1'-0"



**PILING PLAN**

**ELEVATIONS**  
Scale: 1/4" = 1'-0"



**FOOTING PLAN**  
Scale: 1/4" = 1'-0"

**REINFORCING**

**FOR INFORMATION ONLY**

**QUANTITIES FOR 2 PIERS**

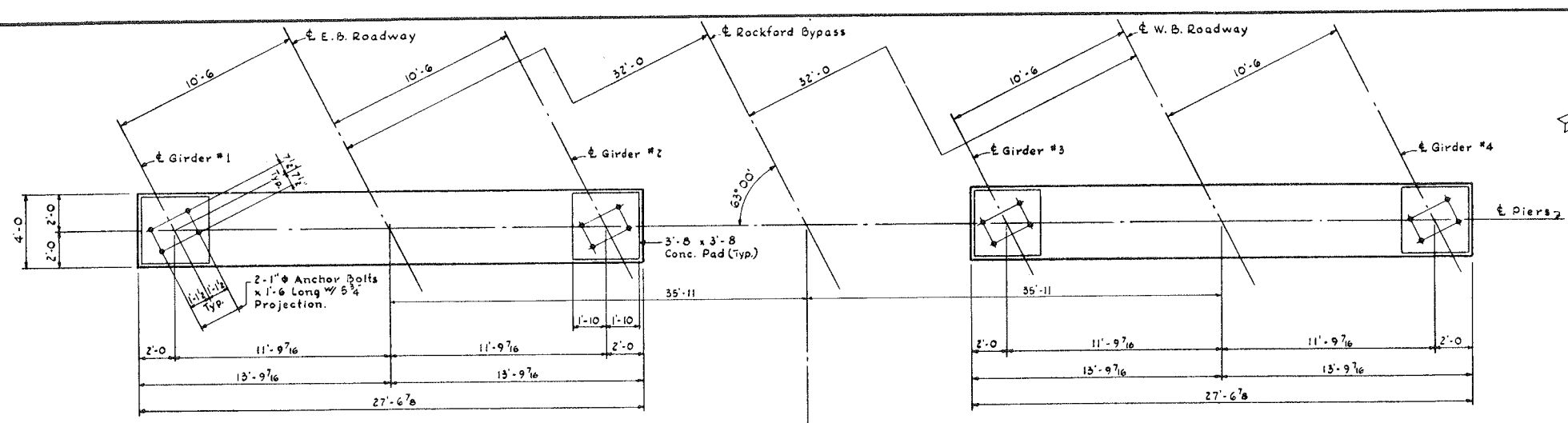
ITEM	UNIT	TOTAL
CLASS "X" CONC.	CU. YDS.	187
REINFORCING	LBS.	15356
PILES	L.F.	4260
CLASS "A" EXCAVATION	CU. YDS.	220
TEST PILE	EACH	1

**NOTES:**  
For General Notes See Drawing #2.  
Work This Drawing With Reinforcing Schedule.  
Concrete Pads To Be Poured Monolithically With Pier Cap.  
**PILE DATA:**  
30 Ton Concrete Piles  
Estimated Length 60'  
Number Required 72

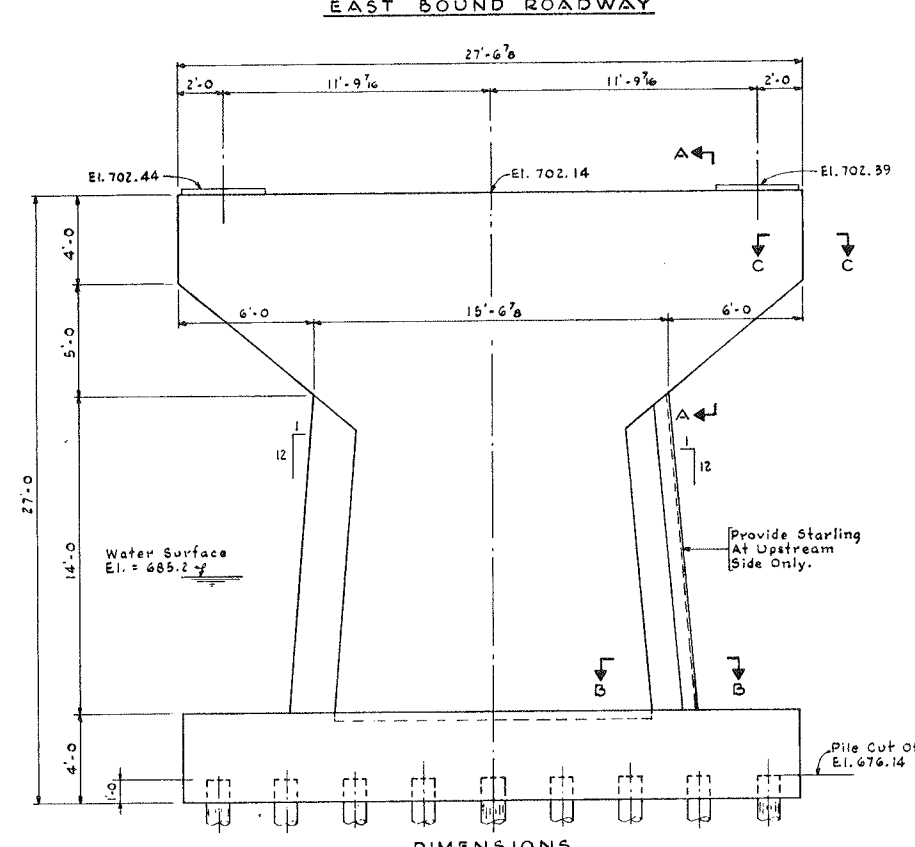
**ILLINOIS DIVISION OF HIGHWAY**  
**ROCKFORD BYPASS**  
F. A. ROUTE 194  
PROJECT SECTION 31  
WINNEBAGO COUNTY  
**PIER NO. 1**

Designed By: E.S. Drawn By: G.G. Checked By:

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 194	3 B	WINNEBAGO	26	6
TO STA.			PROJ.	
FED. ROAD DIST. NO. 7 (ILLINOIS)				

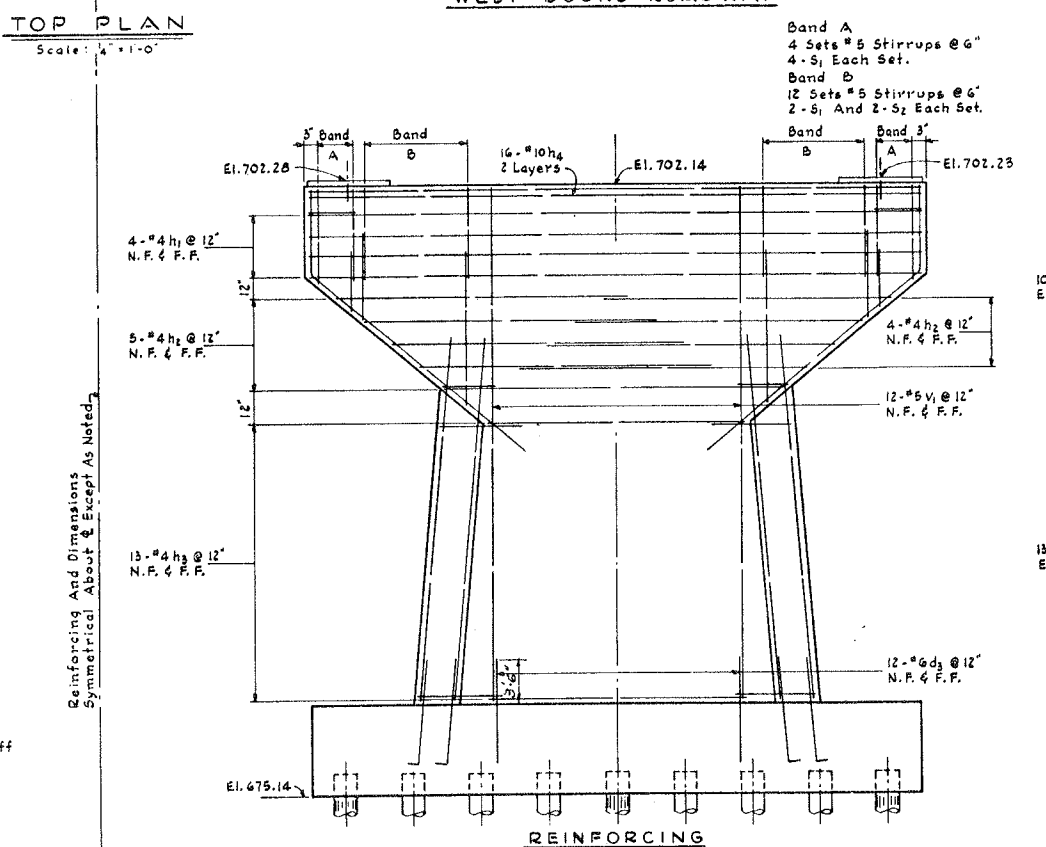


**TOP PLAN**  
Scale: 1/4" = 1'-0"

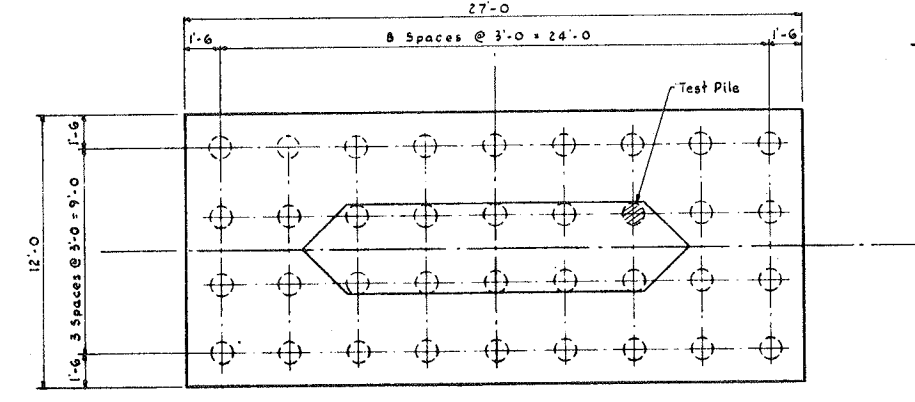


**DIMENSIONS**

**ELEVATIONS**  
Scale: 1/4" = 1'-0"

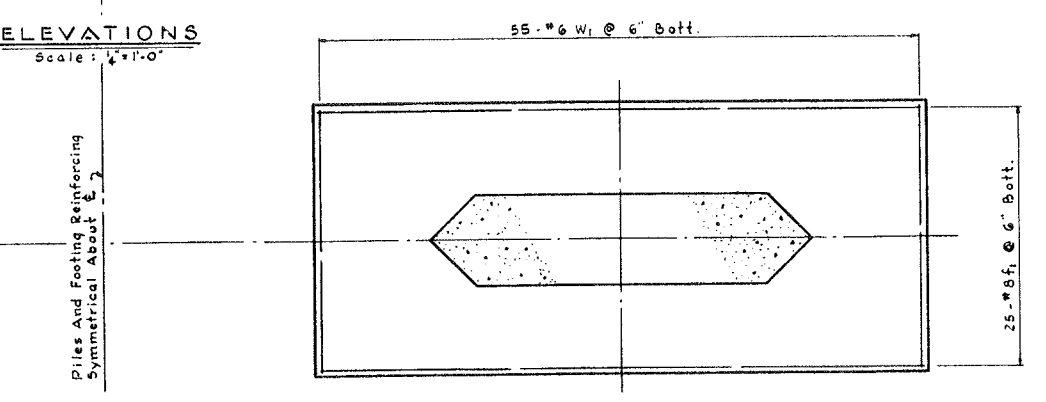


**REINFORCING**

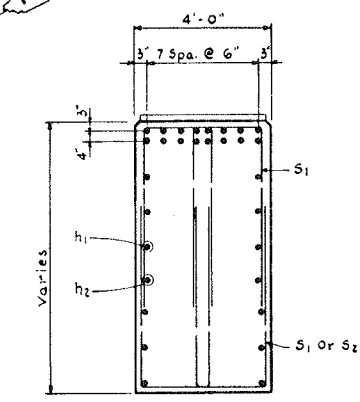


**PILING PLAN**

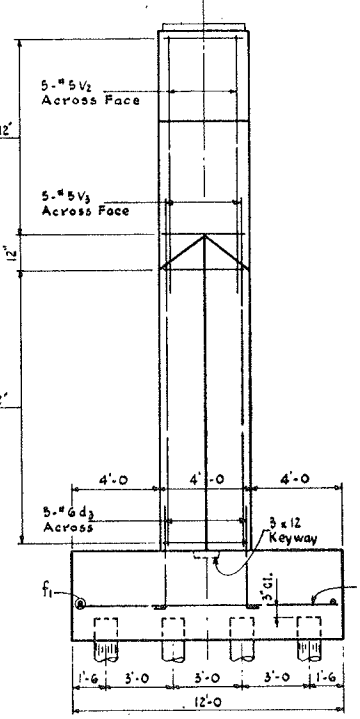
**FOOTING PLAN**  
Scale: 1/4" = 1'-0"



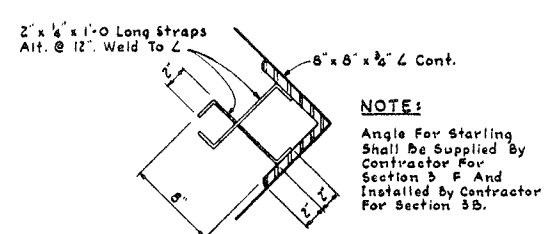
**REINFORCING**



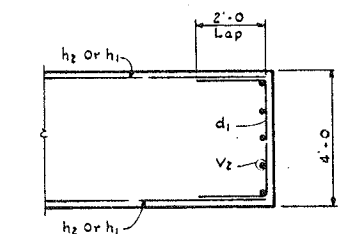
**SECTION A-A**  
Scale: 3/8" = 1'-0"



**END VIEW**  
Scale: 1/4" = 1'-0"



**STARLING DETAIL A**  
Scale: 1/2" = 1'-0"



**SECTION C-C**  
Scale: 3/8" = 1'-0"

**NOTE:**  
Minimum Lap All Reinforcement Bars Shall Be 20 Bar Diameters.

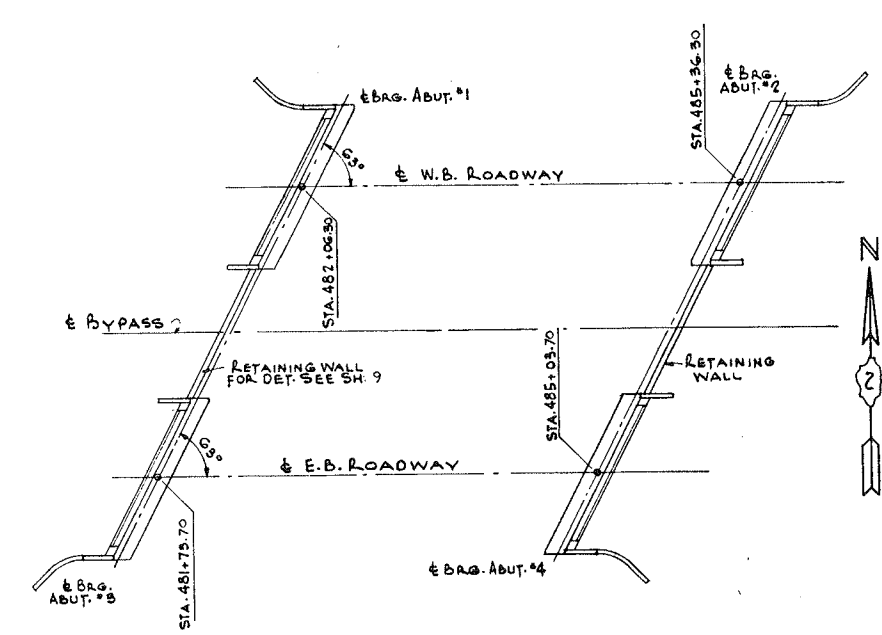
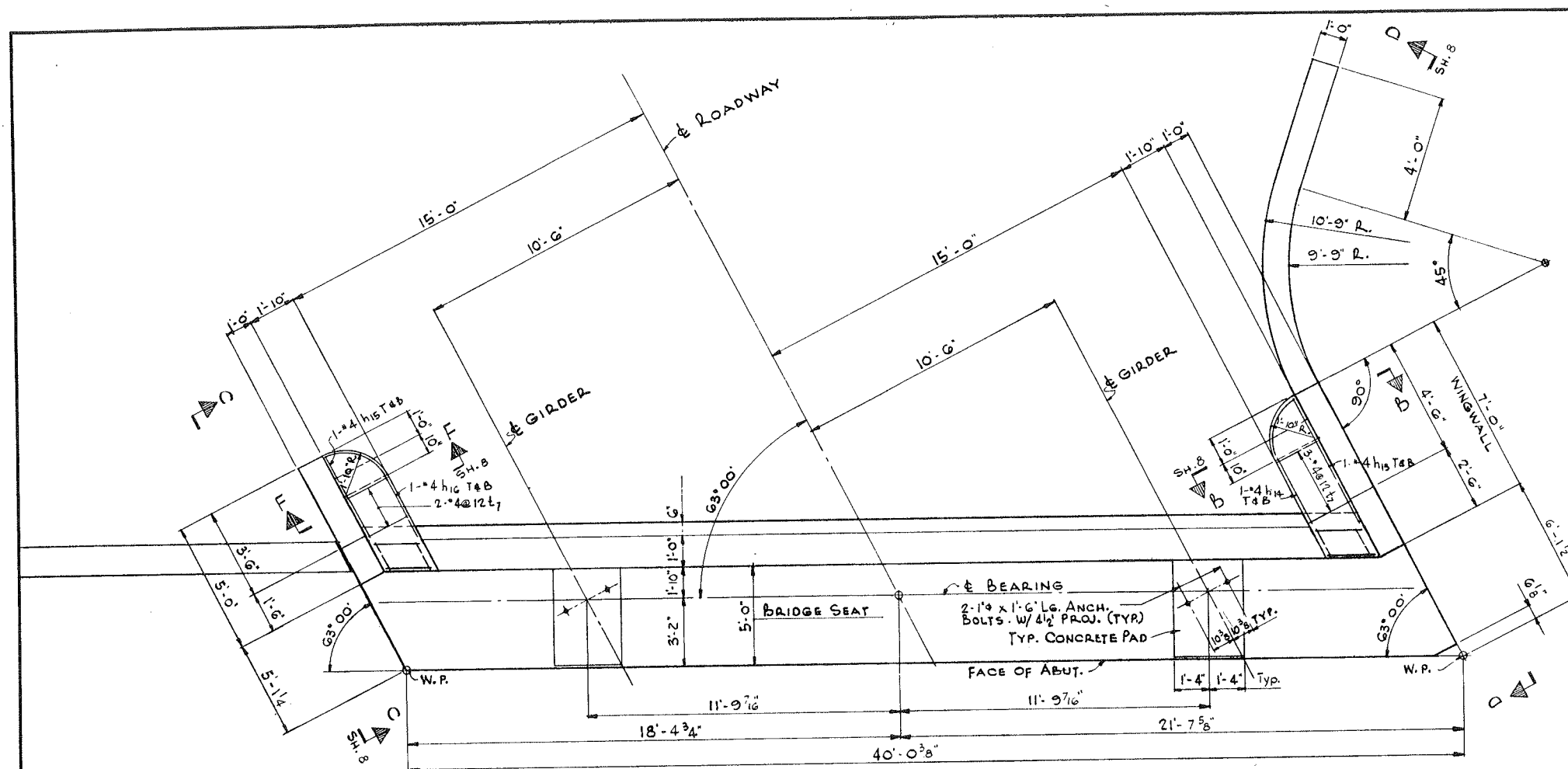
QUANTITIES FOR 2 PIERS		
ITEM	UNIT	TOTAL
CLASS 'X' CONC.	CU. YDS.	223
REINFORCING	LBS.	16 234
PILES	L. F.	4260
CLASS 'B' EXCAVATION	CU. YDS.	400
TEST PILE	EACH	1

**NOTES:**  
For General Notes See Drawing #2.  
Work This Drawing With Reinforcing Schedule.  
Concrete Pads To Be Poured Monolithically With Pier Cap.  
**PILE DATA:**  
30 Ton Concrete Piles  
Estimated Length 60'  
Number Required 72

ILLINOIS DIVISION OF HIGHWAYS ROCKFORD BYPASS	
F. A. ROUTE 194	
PROJECT	SECTION 3 B
WINNEBAGO COUNTY	
PIER NO. 2	
Designed By: E.S.	Drawn By: G.G. Checked By: JDP

**FOR INFORMATION ONLY**





PLAN - ABUTMENTS

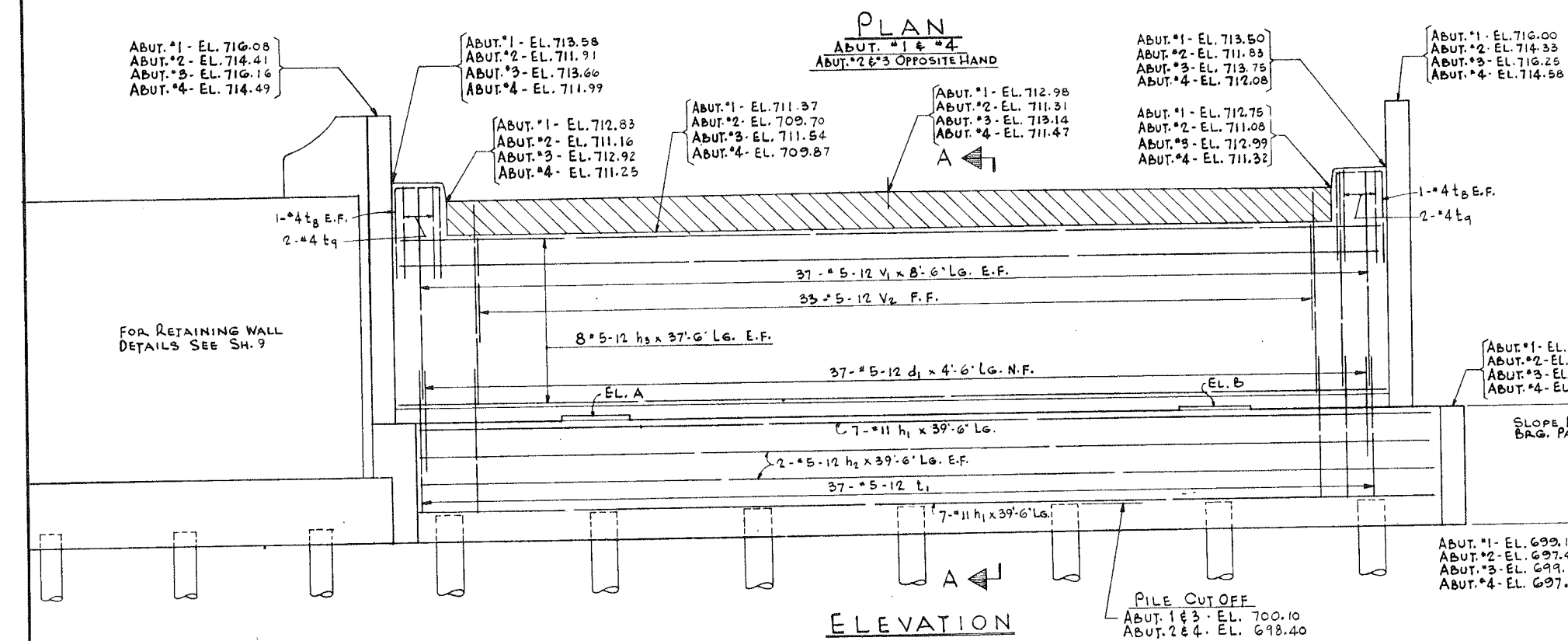
QUANTITIES FOR ALL ABUTS. & WALLS

ITEM	UNIT	TOTAL
CLASS "X" CONC.	CU. YDS.	369
REINFORCING	LBS.	34970
CONCRETE PILES	L.F.	3060
TIMBER PILES	L.F.	2520
TEST PILES (CONC.)	EACH	1
TEST PILES (TIMBER)	EACH	1

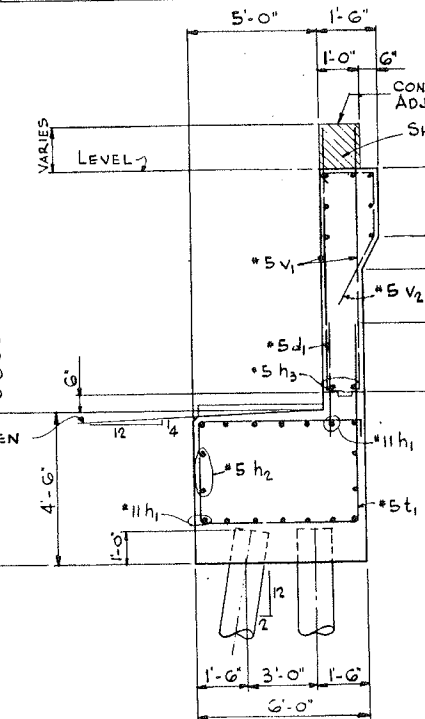
TOP OF CONC. PAD ELEVATIONS

ABUT. No.	A	B
1	703.70	703.65
2	702.05	702.00
3	703.81	703.86
4	702.16	702.21

NOTES  
FOR REINFORCING SCHEDULE SEE SH. 19 & 20.  
WORK THIS SH. WITH SH. 8 & 9.  
FOR GENERAL NOTES SEE SH. 2.



ELEVATION

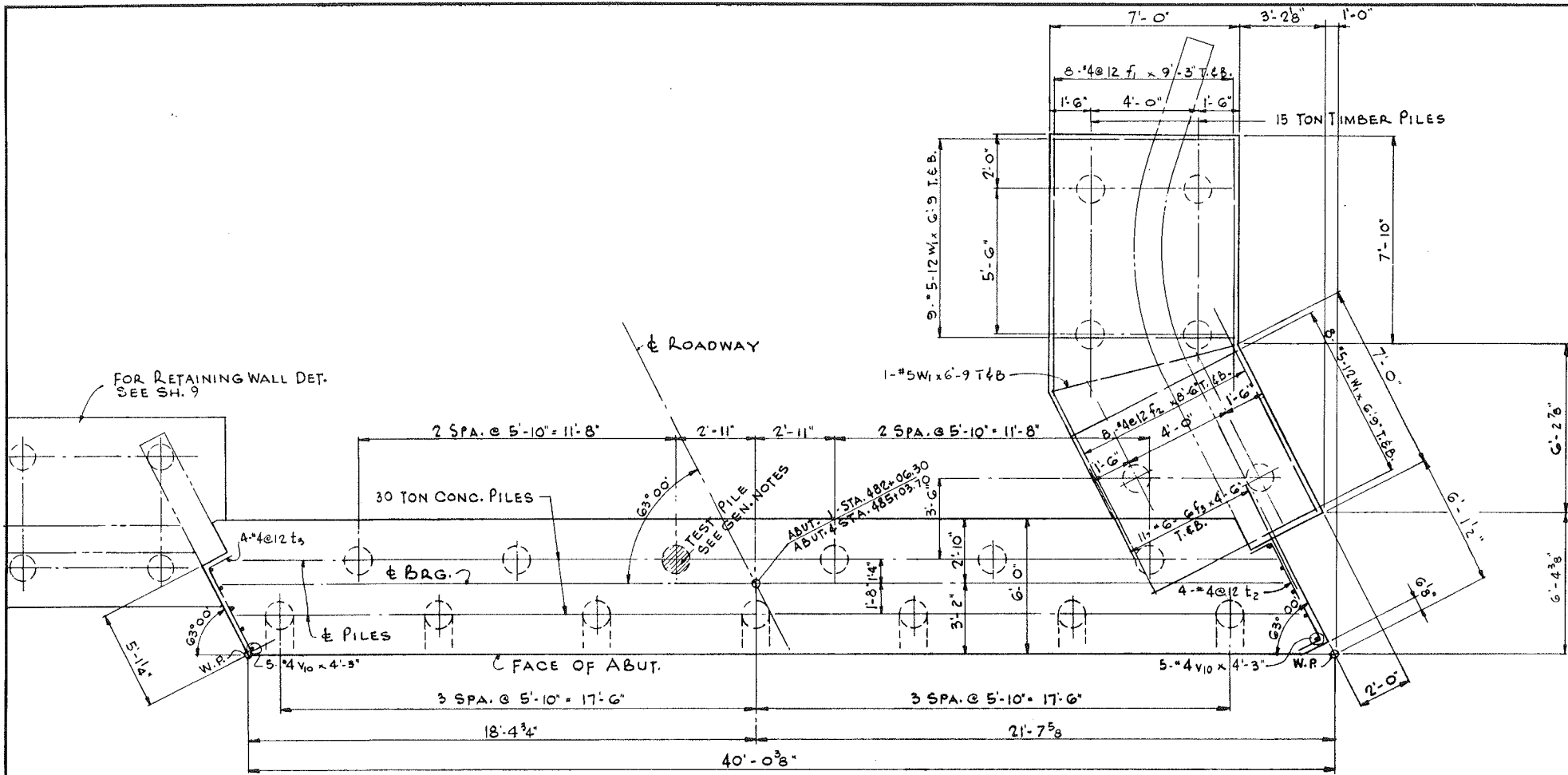


PILE DATA  
ABUTMENT  
30 TON CONCRETE PILE  
EST. LENGTH - 60  
NUMBER REQD. - 52  
WING WALLS  
15 TON CREOSOTED PILES  
EST. LENGTH - 45  
NUMBER REQD. - 28  
WALL BETWEEN ABUTMENTS  
15 TON CREOSOTED PILES  
EST. LENGTH - 45  
NUMBER REQD. - 30

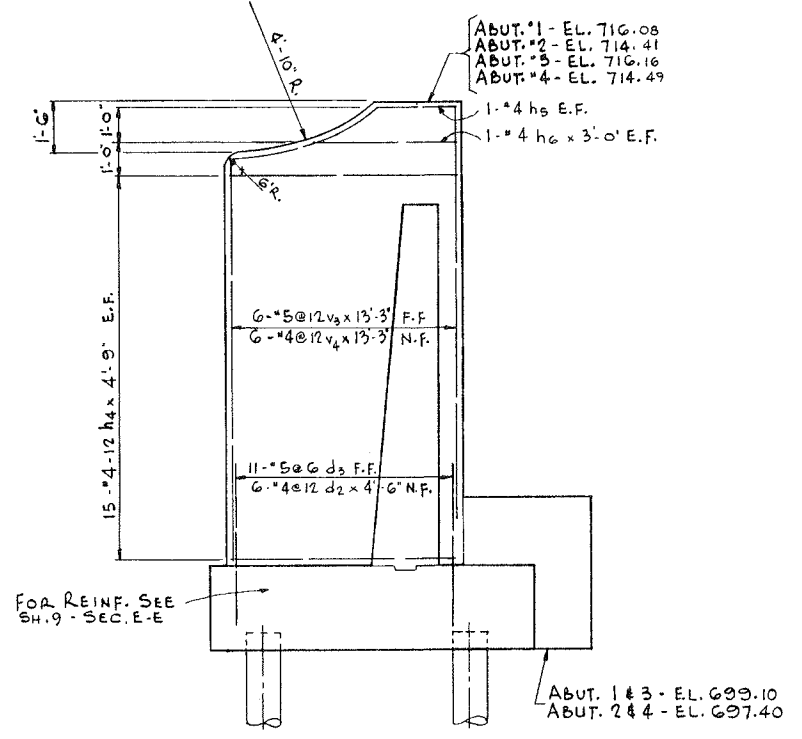
ILLINOIS DIVISION OF HIGHWAY  
ROCKFORD BYPASS  
F. A. ROUTE 194  
PROJECT \_\_\_\_\_ SECTION 3.B  
WINNEBAGO COUNTY  
**ABUTMENTS PART I**  
Designed By: E.S. Drawn By: R.N. Checked By: \_\_\_\_\_

**FOR INFORMATION ONLY**

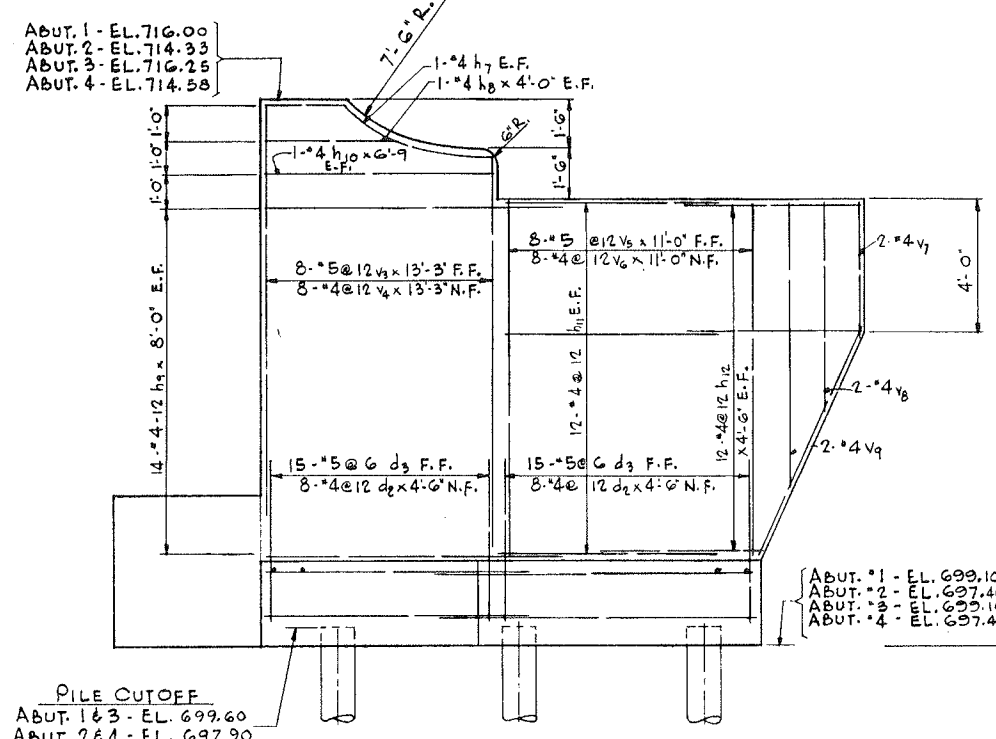
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 194	3B	WINNEBAGO	26	8
STA. TO STA.		PROJ.		
FED. ROAD DIST. NO. 7 ILLINOIS				



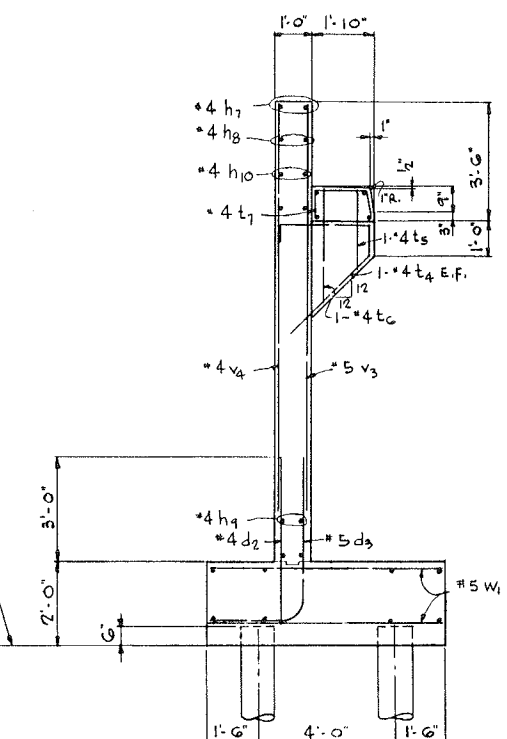
PILE PLAN-ABUT. 1&4



ELEVATION C-C



ELEVATION D-D



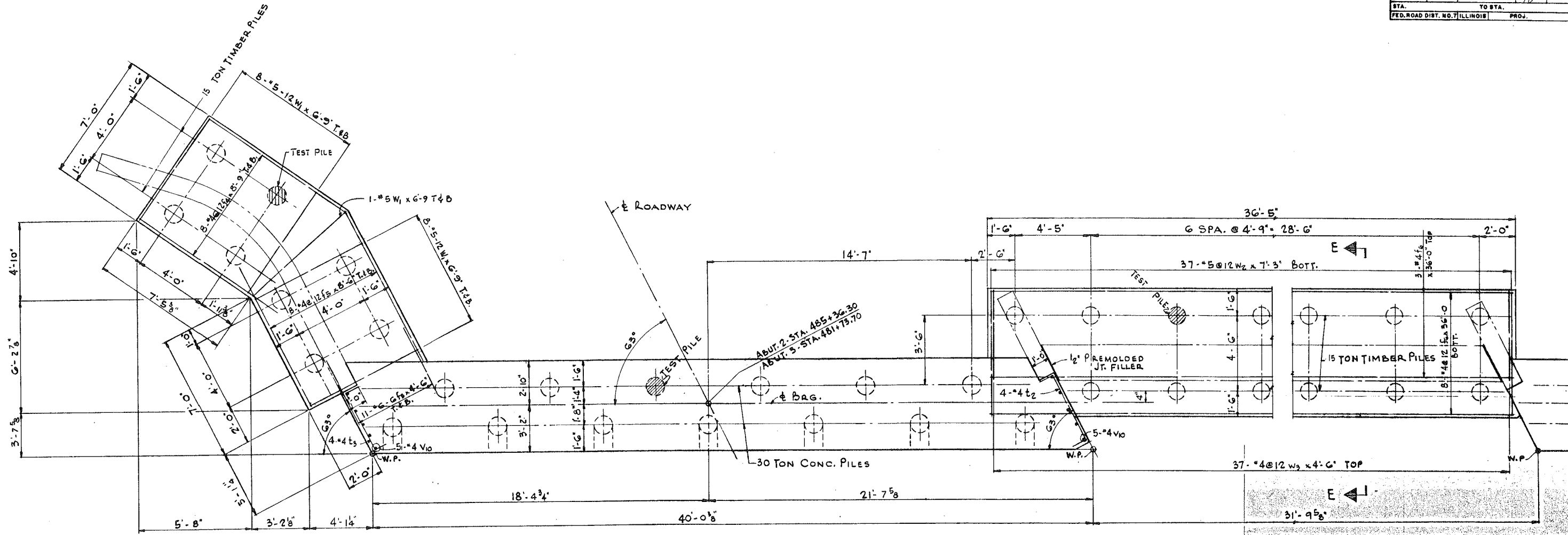
SECTION B-B  
SCALE AS SHOWN

NOTES:  
FOR REINFORCING SCHEDULE SEE SHTS. 19 & 20.  
WORK THIS SH. WITH SHTS. 7 & 9.

ILLINOIS DIVISION OF HIGHWAYS  
ROCKFORD BYPASS  
F. A. ROUTE 194  
PROJECT SECTION 3B  
WINNEBAGO COUNTY  
ABUTMENTS PART 2

FOR INFORMATION ONLY

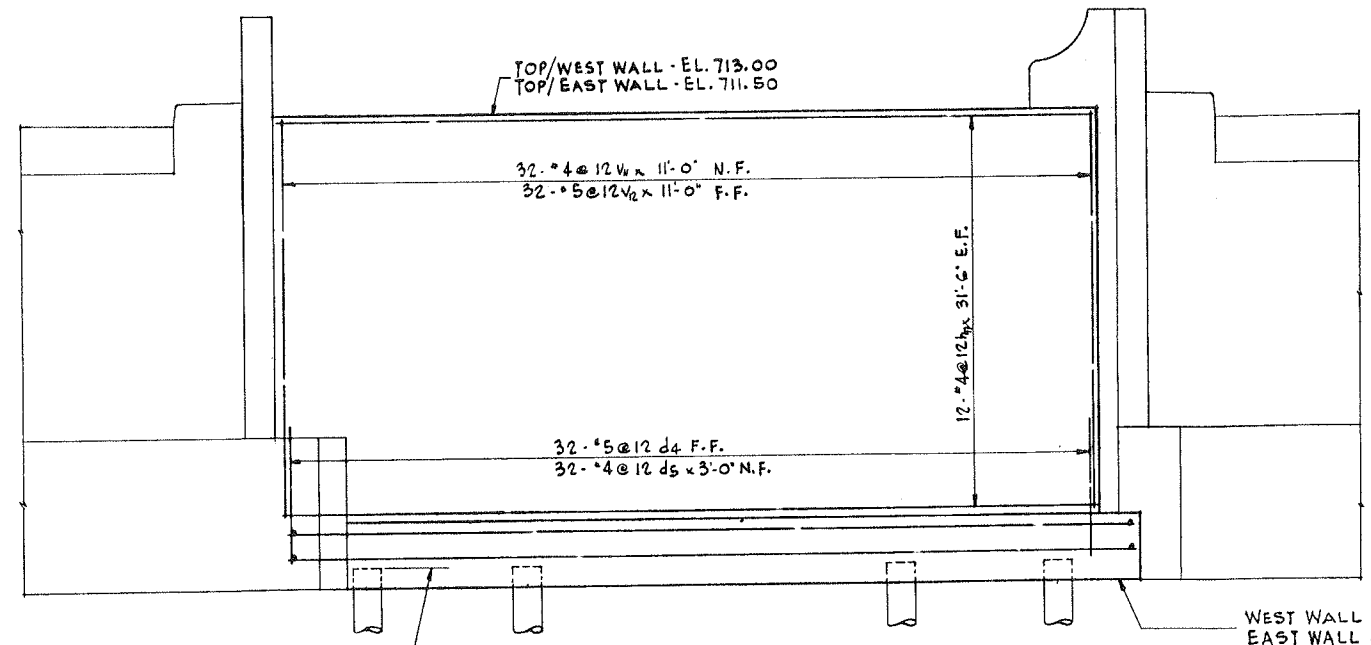
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
194	35	WINNEBAGO	26	9
STA. 184		TO STA. 188		PROJ.
FED. ROAD DIST. NO. 7 ILLINOIS				



NOTE  
FOR DIMENSIONS NOT  
SHOWN SEE PILE PLAN-ABUT. 1&4  
SHEET # 7.

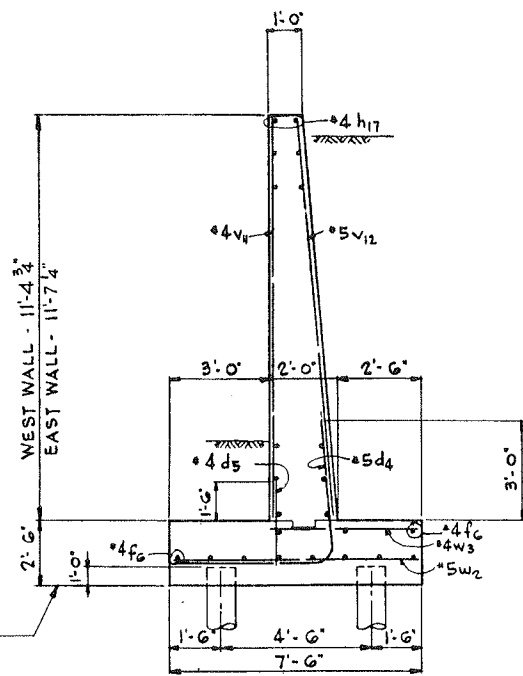
PILE PLAN - ABUT. 2 & 3

PILE PLAN - RETAINING WALL



PILE CUT OFF  
WEST WALL - EL. 700.10  
EAST WALL - EL. 698.40

ELEVATION - RETAINING WALL



WEST WALL - 11'-4 3/4"  
EAST WALL - 11'-7 1/4"

WEST WALL - EL. 699.10  
EAST WALL - EL. 697.40

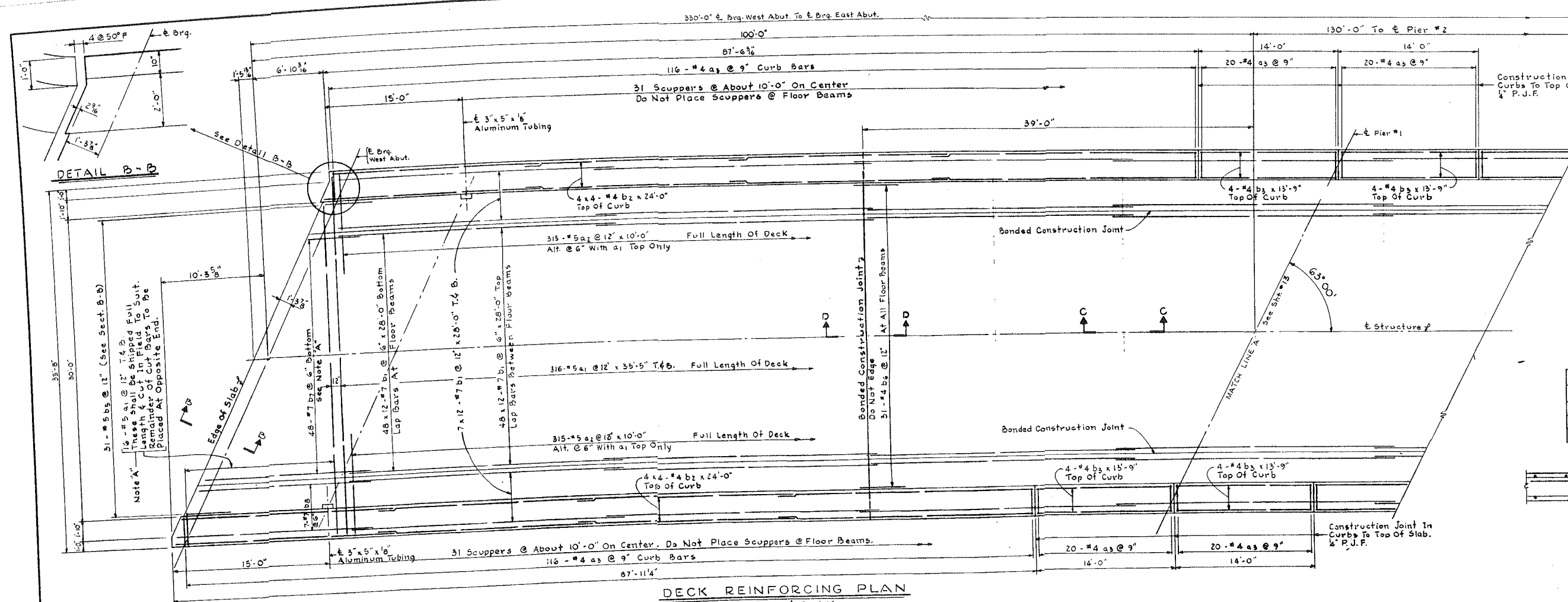
SECTION - RETAINING WALL

NOTES:  
FOR REINFORCING SCHEDULES SEE SHTS. 194 & 20.  
WORK THIS SH. WITH SHTS. 7 & 8.

ILLINOIS DIVISION OF HIGHWAYS	
ROCKFORD BYPASS	
F. A. ROUTE 194	
PROJECT	SECTION 3.B
WINNEBAGO COUNTY	
ABUTMENTS PART 3	
Designed By: E.S.	Drawn By: P.N.
Checked By: JDP	

FOR INFORMATION ONLY

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 194	3B	WINNEBAGO	26	10
STA. TO STA.			FED. ROAD DIST. NO. 7 ILLINOIS PROJ.	

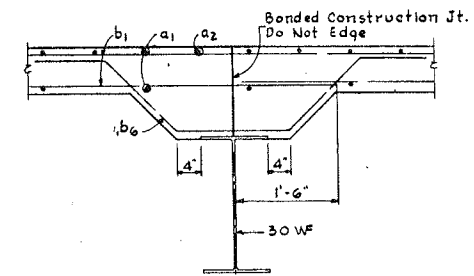


**DECK REINFORCING PLAN**  
Scale: 3/8" = 1'-0"

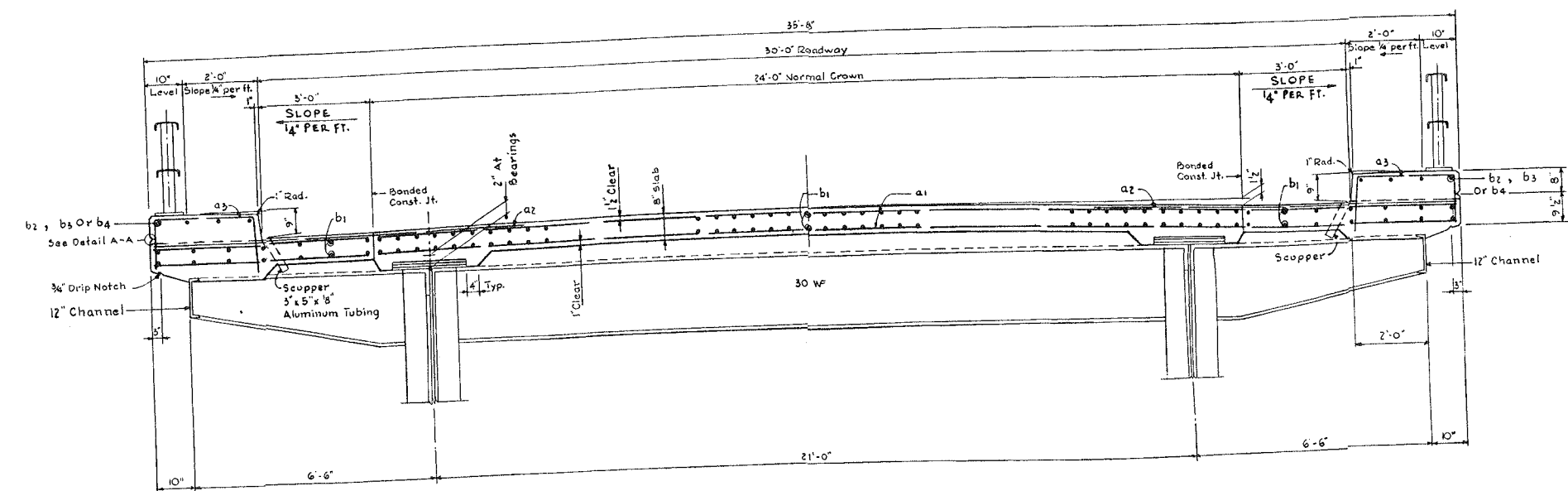
bars b2, b3 or b4 shall not pass thru construction joints.  
bars designated 4x4-#4 indicates that there are 4 rows & each row contains 4 lengths of bars.

QUANTITIES FOR ONE BRIDGE ONLY

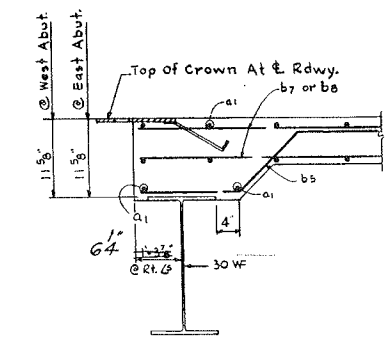
ITEM	UNIT	TOTAL
CLASS 'X' CONC.	Cu. Yds.	403
REINFORCING	lbs.	126,423
STRUCTURAL STEEL	lbs.	421,371



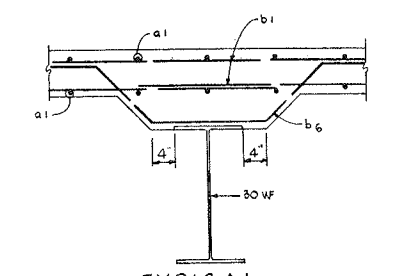
**SECTION D-D AT CONSTRUCTION JOINT**  
Scale: 3/8" = 1'-0"



**CROSS SECTION**  
Scale: 1/2" = 1'-0"

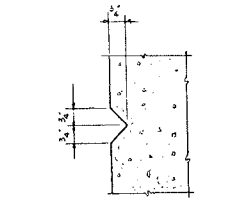


**SECTION B-B**  
Scale: 3/8" = 1'-0"



**TYPICAL SECTION C-C**  
Scale: 3/8" = 1'-0"

NOTES:  
For General Notes See Sheet #2.  
For Reinforcing Details See Schedules Shts. 1942



**DETAIL A-A**  
Scale: 5/8" = 1'-0"

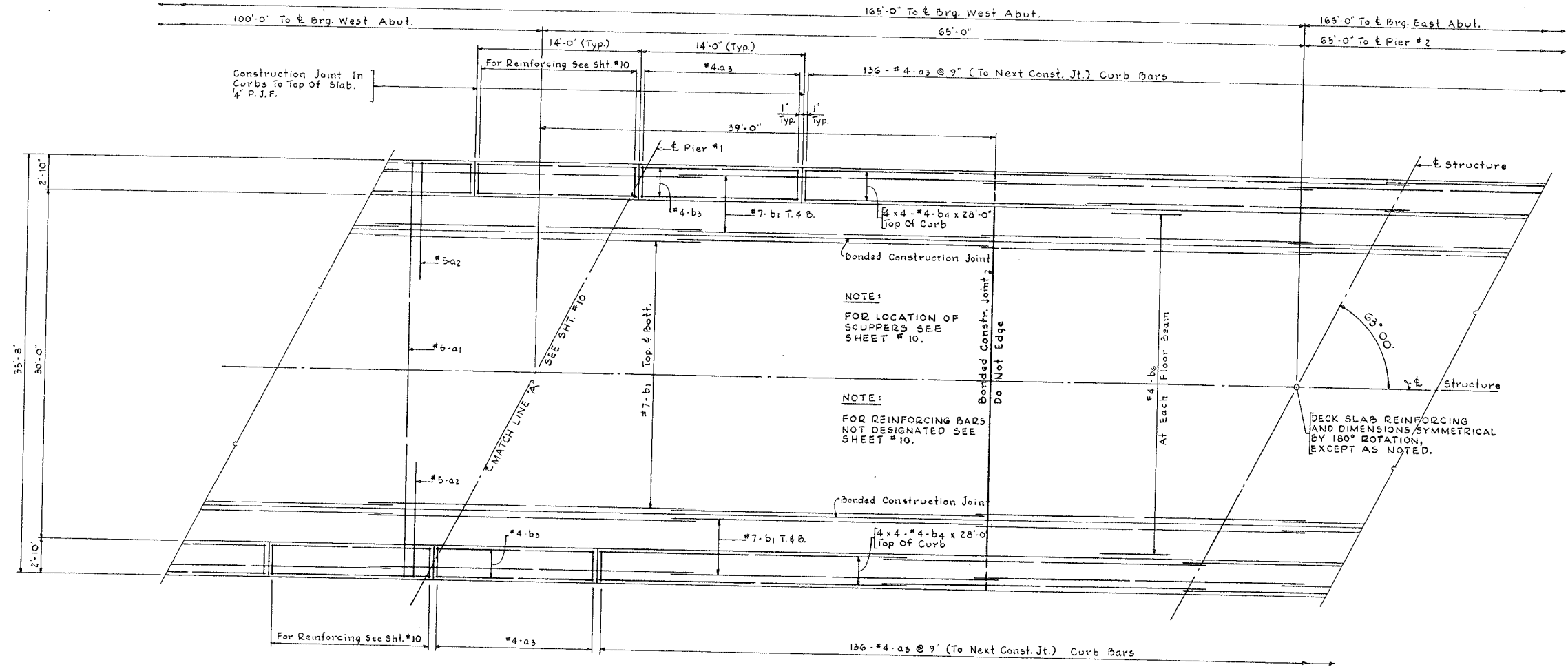
MACCABEE, CAMPBELL & ASSOCIATES CONSULTING ENGINEERS  
177 WEST MADISON STREET CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAY  
ROCKFORD BYPASS  
F. A. ROUTE 194  
PROJECT SECTION 3B  
WINNEBAGO COUNTY

**DECK PLAN PART I**

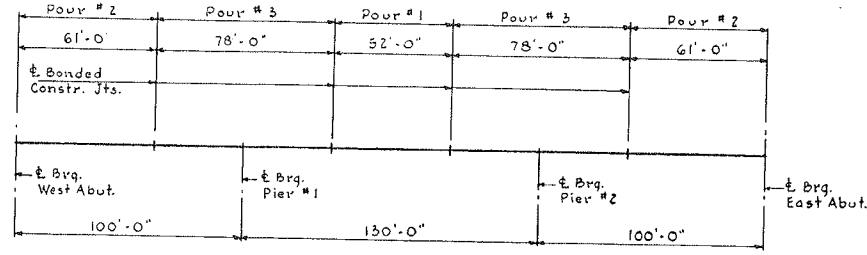
**FOR INFORMATION ONLY**

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SH.
F.A. 194	3B	WINNEBAGO	26	18
STA.	TO STA.		PROJ.	
FED. ROAD DIST. NO. 7	ILLINOIS			



**DECK REINFORCING PLAN**  
Scale: 3/16" = 1'-0"

Bars b2, b3 Or b4 Shall Not Pass Thru Construction Joints.  
Bars Designated 4x4-#4 Indicates That There Are 4 Rows & Each Row Contains 4 Lengths of Bars.



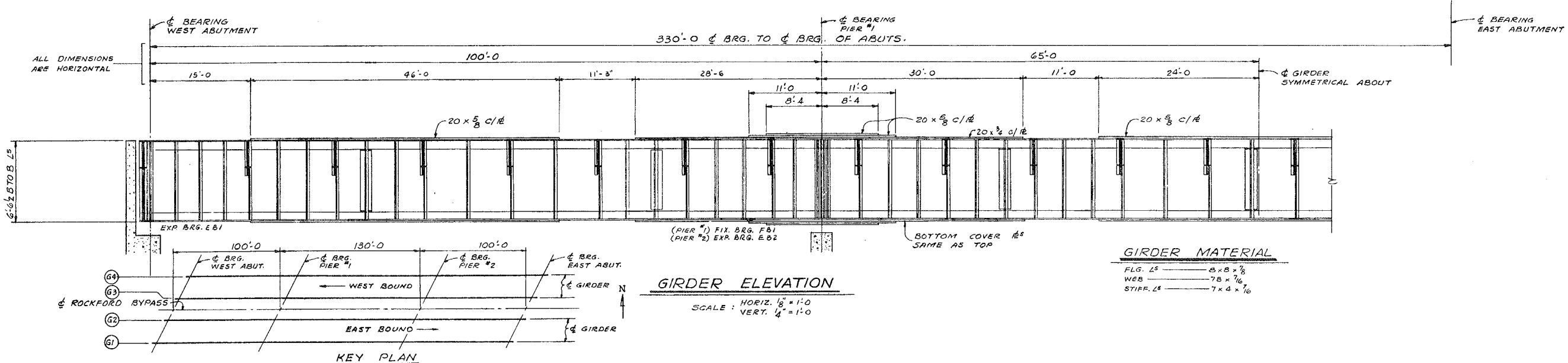
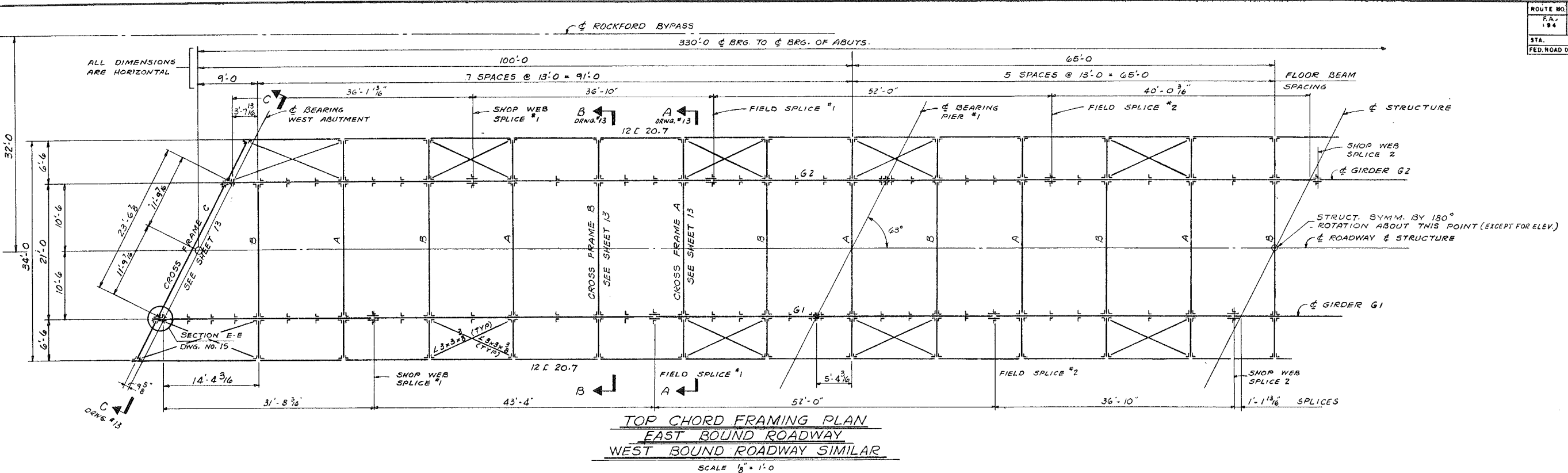
**DECK SLAB POURING SEQUENCE**

NOTES:  
For General Notes See Sheet #2.  
For Cross Section See Sheet #10.  
For Reinforcing Details See Schedule, Sheets #19 & #20.

**FOR INFORMATION ONLY**

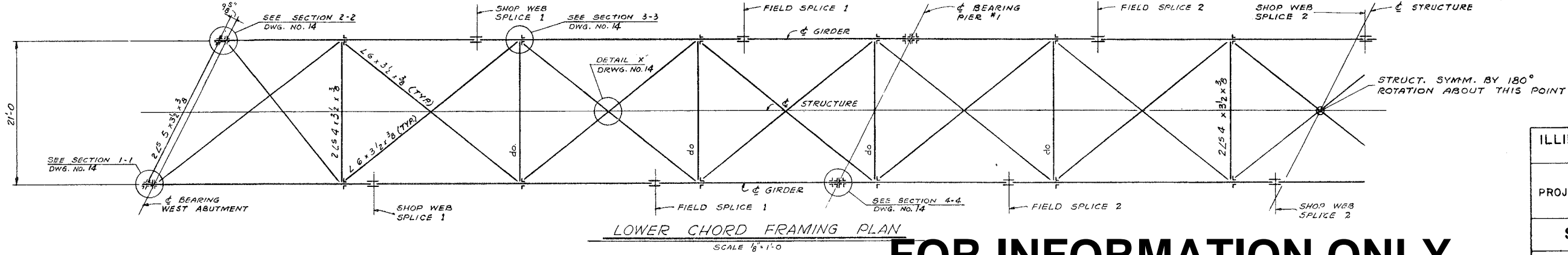
ILLINOIS DIVISION OF HIGHWAYS  
ROCKFORD BYPASS  
F. A. ROUTE 194  
PROJECT \_\_\_\_\_ SECTION **3B**  
WINNEBAGO COUNTY  
**DECK PLAN PART 2**  
Sheet 164 of 290





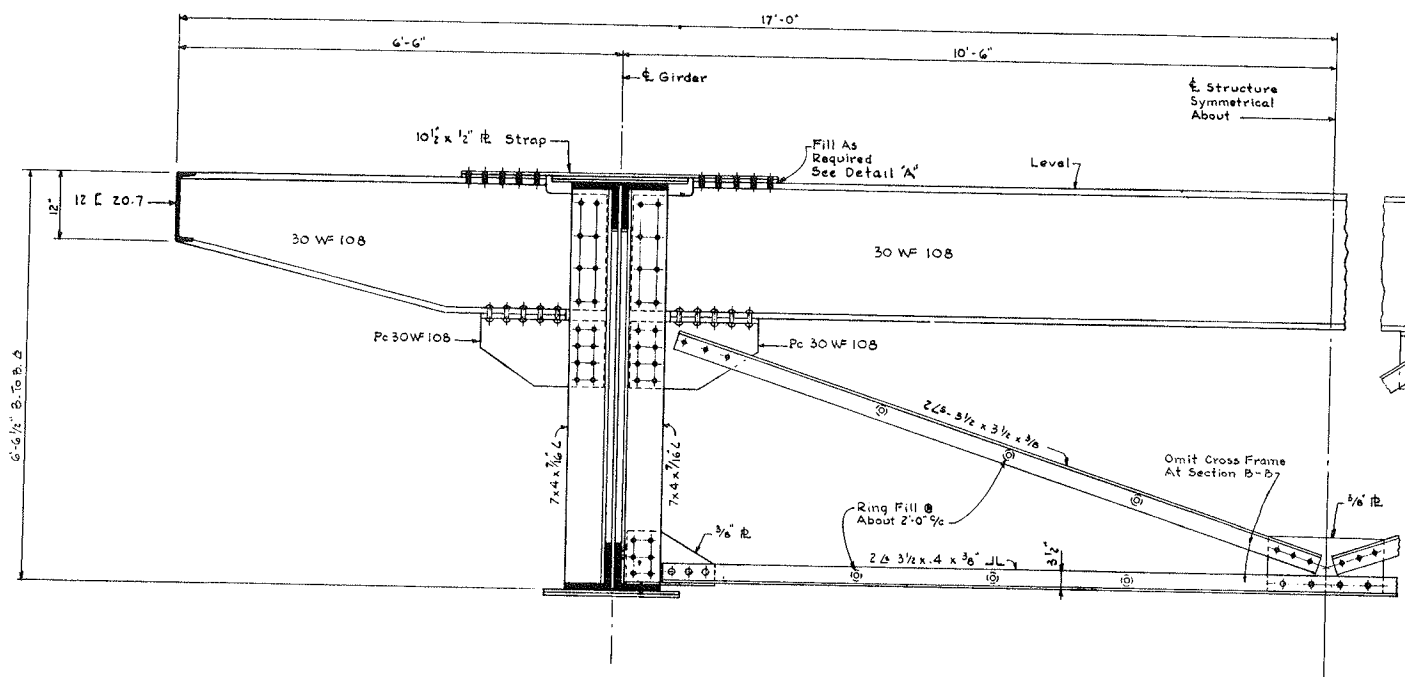
**GIRDER MATERIAL**

FLG. L5	8 x 8 x 7/8
WEB	78 x 7/16
STIFF. L5	7 x 4 x 7/16

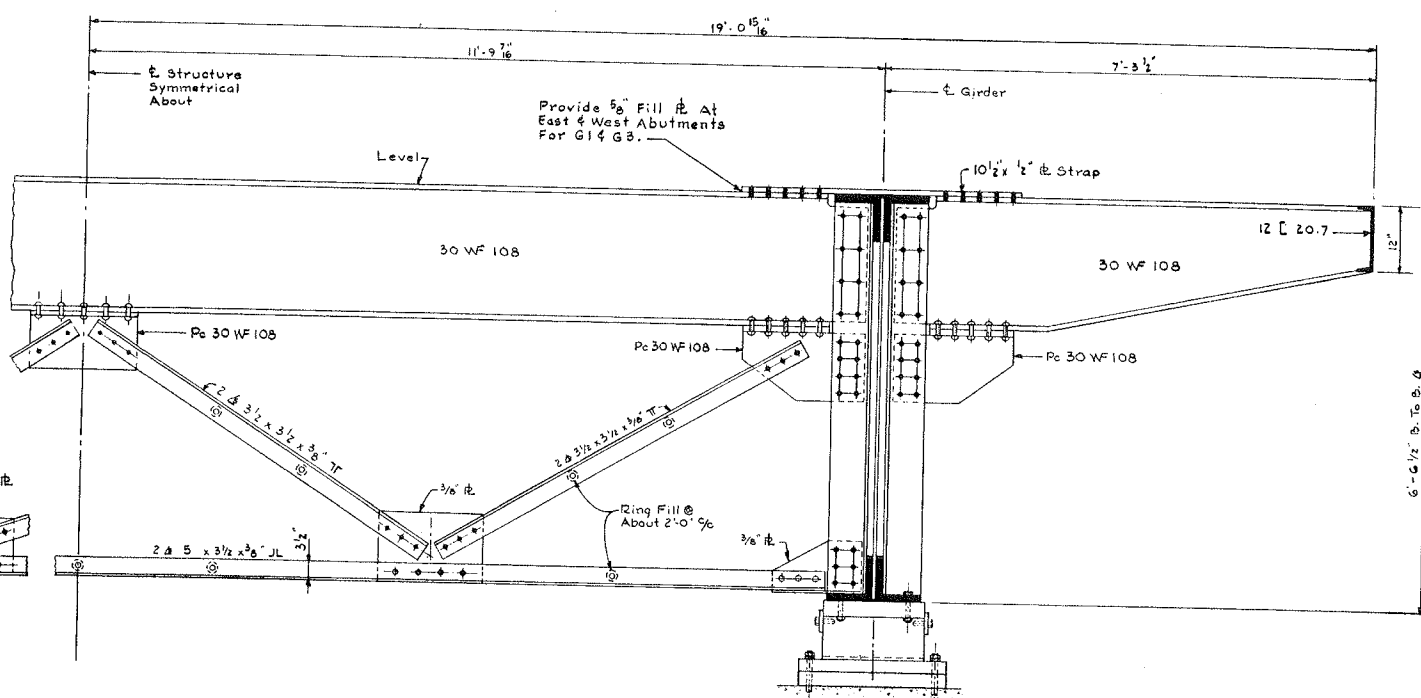


ILLINOIS DIVISION OF HIGHWAYS  
ROCKFORD BYPASS  
F A ROUTE 194  
PROJECT SECTION 3B  
WINNEBAGO COUNTY  
**STEEL FRAMING PLAN**  
Designed By: H. W. E. Drawn By: A. P. W. Checked By: J. D. P.

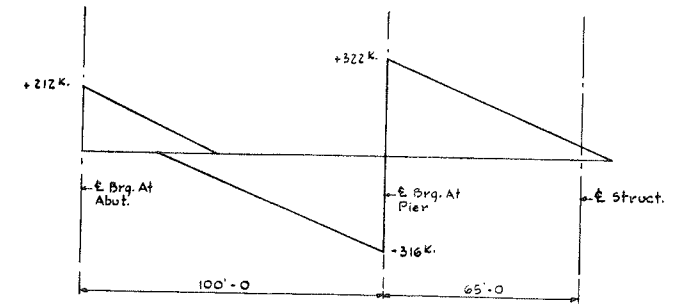
**FOR INFORMATION ONLY**



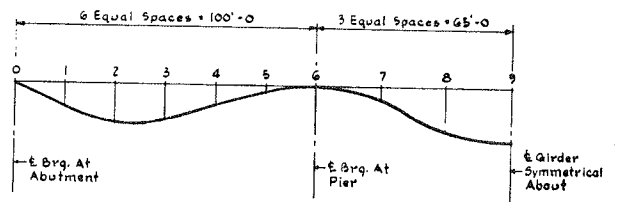
HALF CROSS SECTION A-A (WITH CROSS FRAME)  
 HALF CROSS SECTION B-B (WITHOUT CROSS FRAME)  
 Scale: 3/4" = 1'-0"



HALF CROSS SECTION C-C  
 Scale: 3/4" = 1'-0"



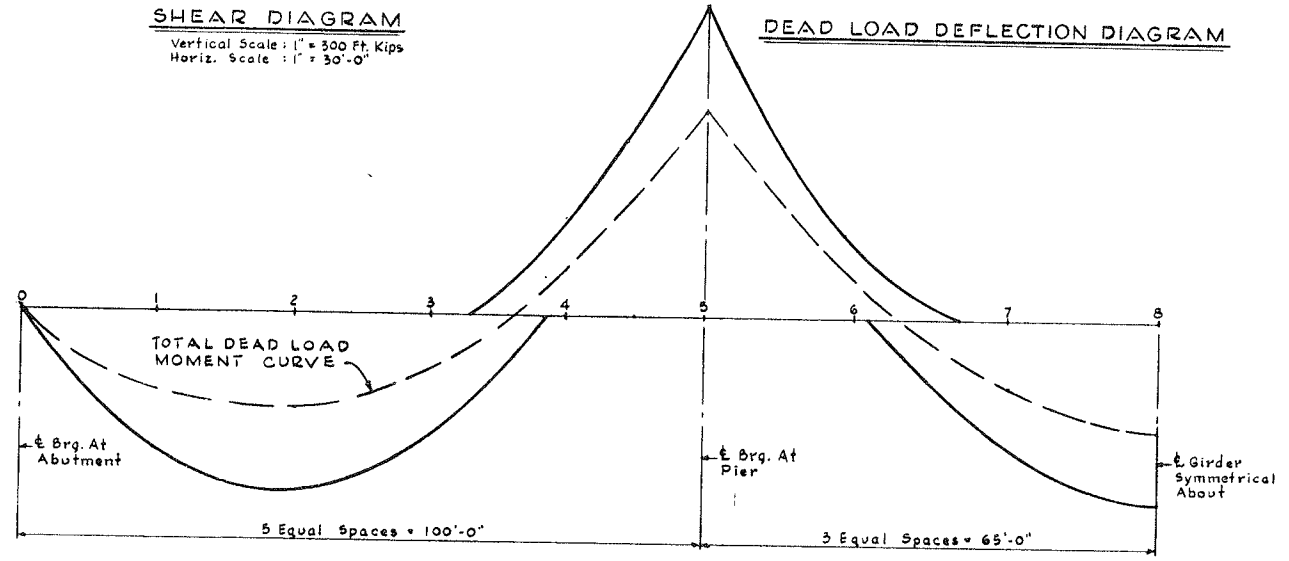
SHEAR DIAGRAM  
 Vertical Scale: 1" = 500 Ft. Kips  
 Horiz. Scale: 1" = 30'-0"



DEAD LOAD DEFLECTION DIAGRAM

POINT GIRDER	1	2	3	4	5	6	7	8	9
G1	1/2"	3/8"	3/4"	7/16"	5/8"	0	1/4"	1"	1 1/2"
G2	1/2"	3/8"	3/4"	7/16"	5/8"	0	1/4"	1"	1 1/2"

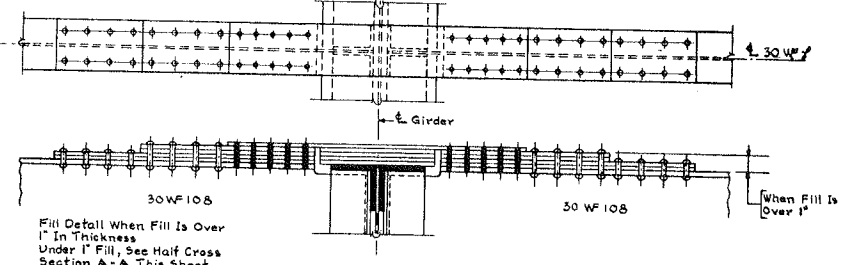
GIRDER	+M SPAN L <sub>1</sub>	-M R <sub>B</sub>	+M SPAN L <sub>2</sub>
G1	3850	6930	4070
G2	3850	6930	4070



COMBINED MOMENT DIAGRAM  
 D.L. + L.L. + I.  
 Vert. Scale: 1" = 2000 Ft. Kips

GIRDER NO.	LOCATION	E BRG. W. ABUT.	E BRG. PIER #1	E BRG. PIER #2	E BRG. E. ABUT.
G1	TOP OF SLAB	713.06	712.56	711.91	711.41
	TOP OF STEEL	712.23	711.73	711.08	710.58
G2	TOP OF SLAB	713.01	712.51	711.86	711.36
	TOP OF STEEL	712.18	711.68	711.03	710.53
G3	TOP OF SLAB	712.90	712.40	711.75	711.25
	TOP OF STEEL	712.07	711.57	710.92	710.42
G4	TOP OF SLAB	712.85	712.35	711.70	711.20
	TOP OF STEEL	712.01	711.51	710.86	710.36

Elevations Given To Back Of Top Flange Angles At E Of Bearings.



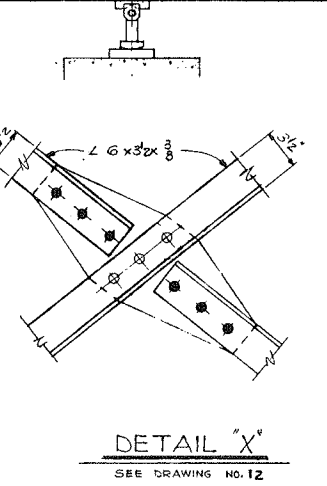
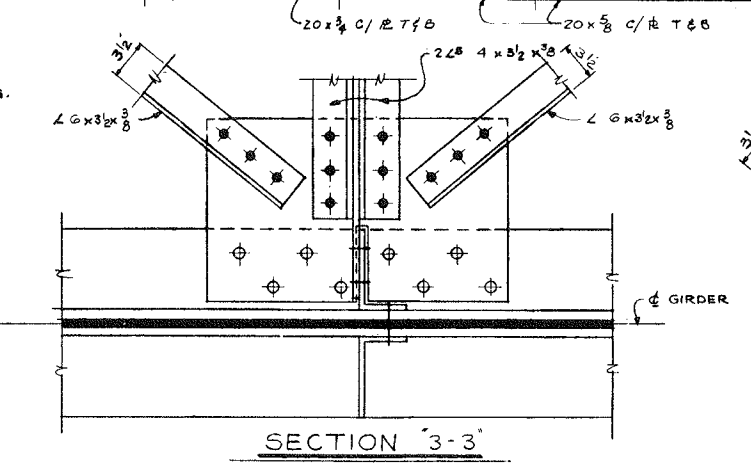
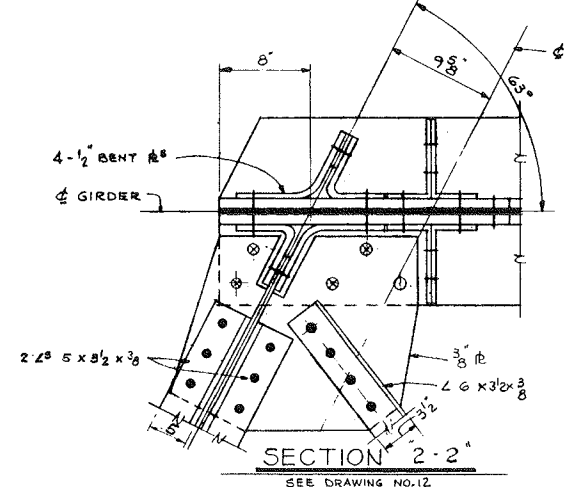
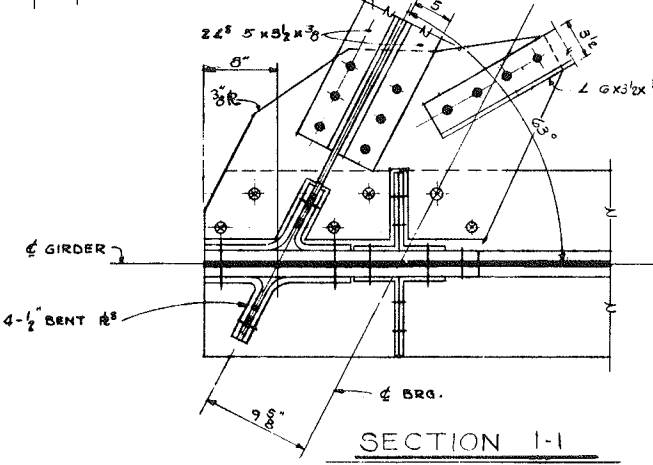
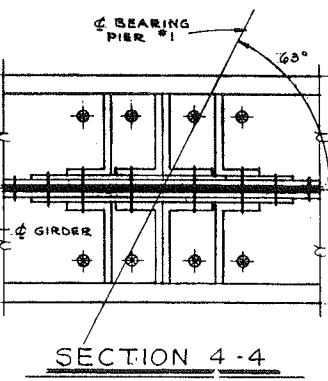
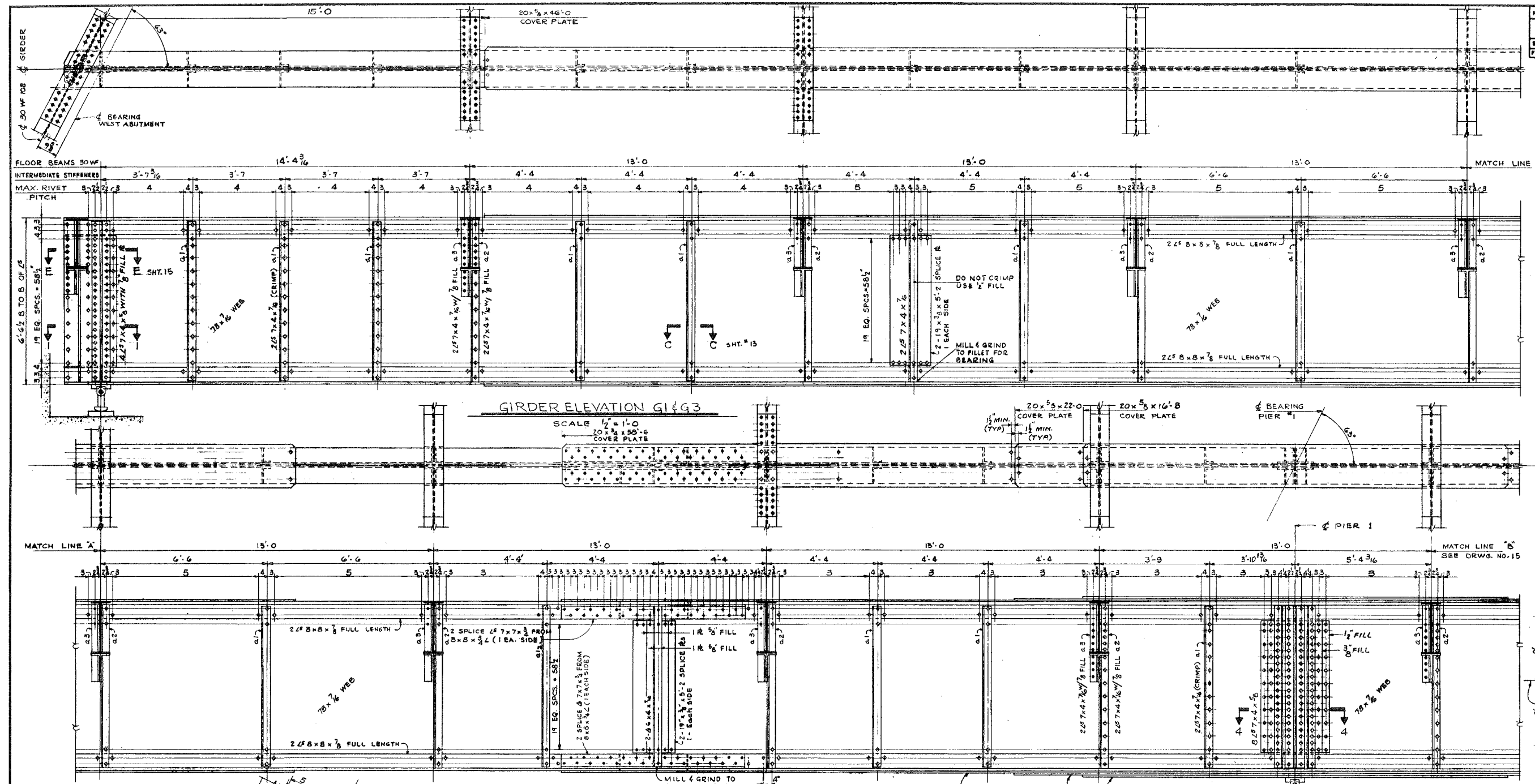
DETAIL - A  
 Scale: 3/4" = 1'-0"

NOTES:  
 See Sht. 2 For General Notes.  
 Girders Shall Be Cambered For D.L. Deflection.  
 Work This Sheet With Sheets 12, 14, & 15.

**FOR INFORMATION ONLY**

ILLINOIS DIVISION OF HIGHWAYS  
 ROCKFORD BYPASS  
 F. A. ROUTE 194  
 PROJECT \_\_\_\_\_ SECTION 3.B  
 WINNEBAGO COUNTY  
 DESIGN DATA AND  
 CROSS FRAMES  
 Designed By E.S. Brown By G.W.G. Checked By J.P.P.

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 194	3B	WINNEBAGO	26	14
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS		PROJ.	

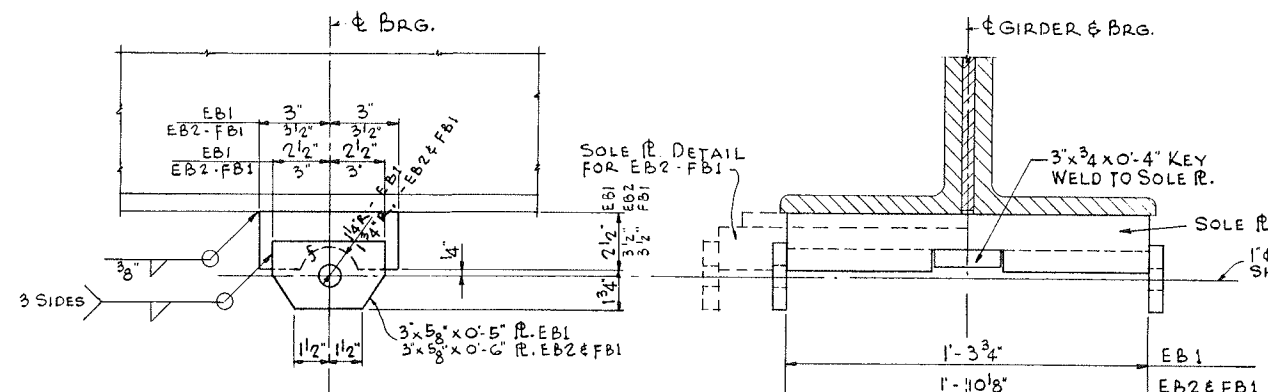


ILLINOIS DIVISION OF HIGHWAYS  
 ROCKFORD BYPASS  
 F. A. ROUTE 194  
 PROJECT SECTION 3B  
 WINNEBAGO COUNTY  
 GIRDER DETAILS PART I  
 Designed By: E.S.J. Drawn By: A.P.W. Checked By:

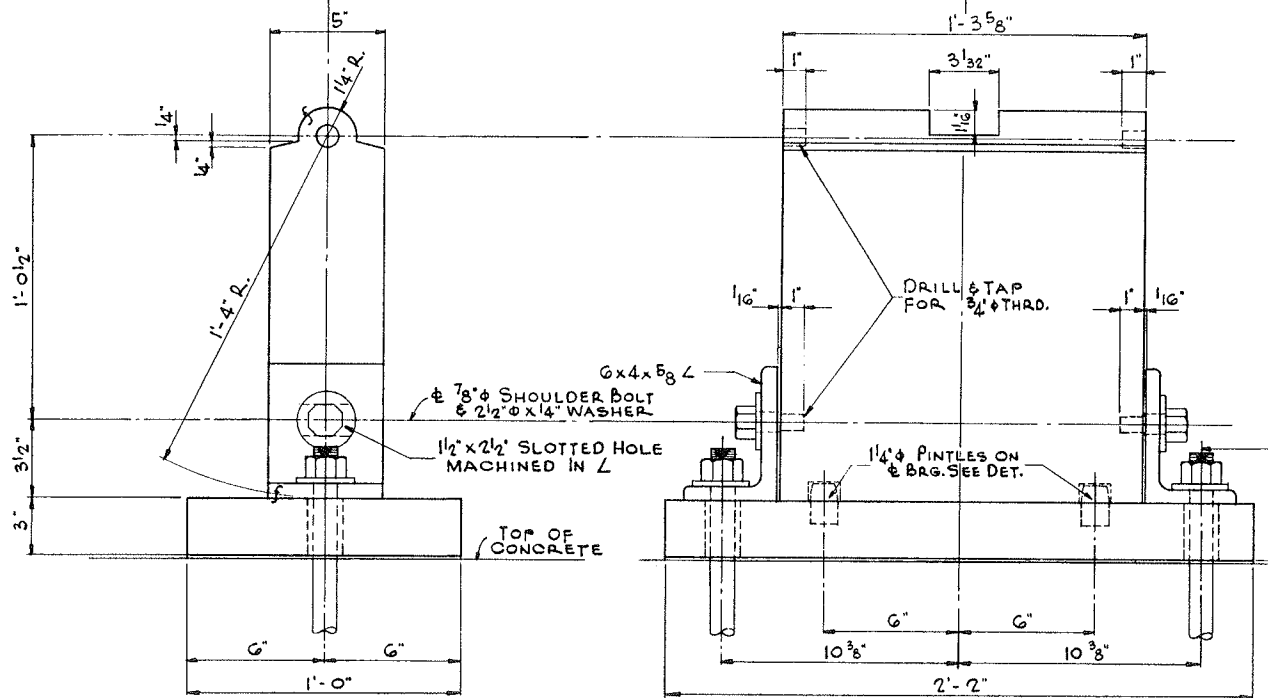
**FOR INFORMATION ONLY**



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 194	3 B	WINNEBAGO	26	16
STA.		TO STA.		PROJ.
FED. ROAD DIST. NO. ILLINOIS				

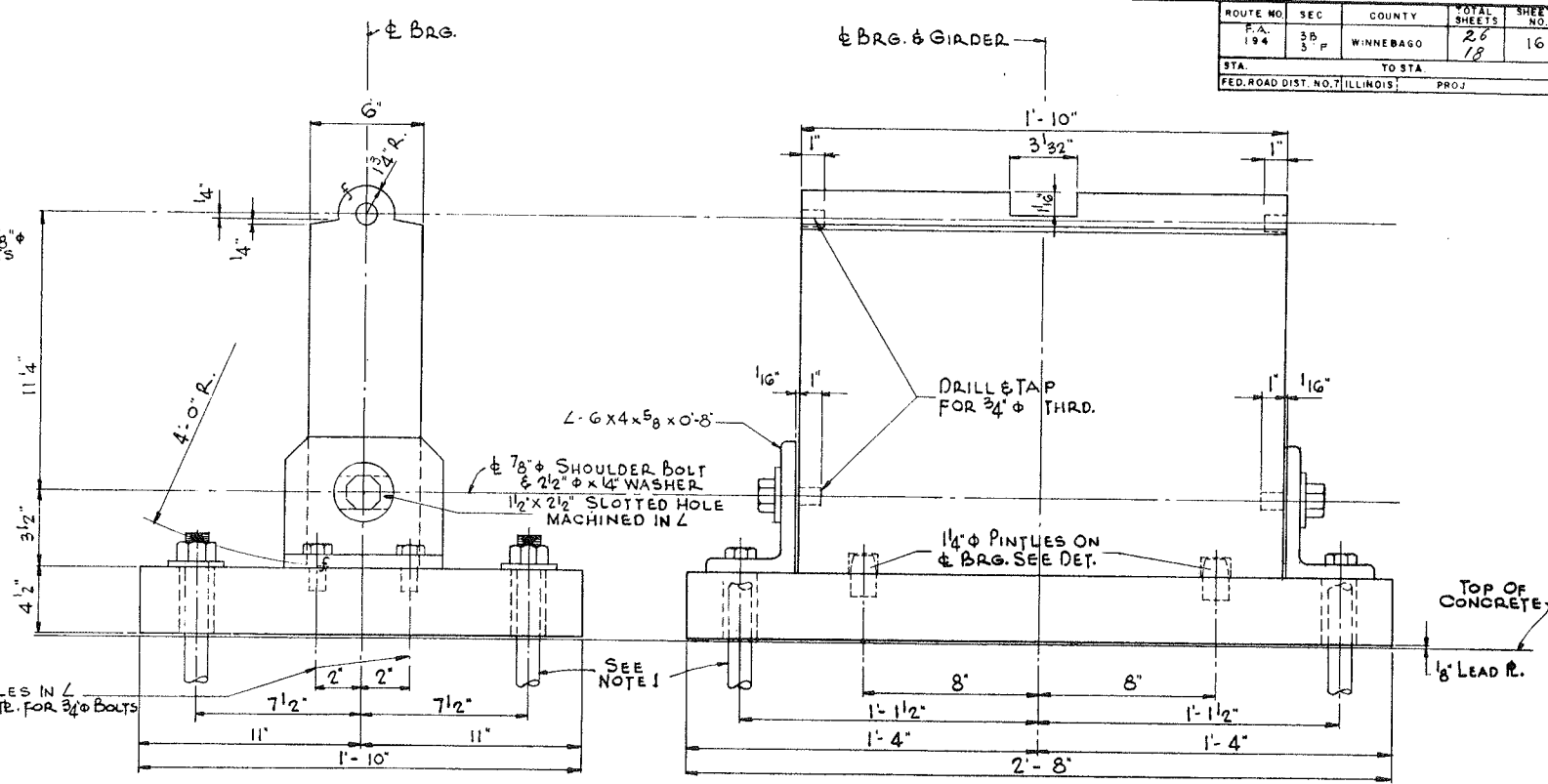


SOLE PL. FOR FIXED & EXP. BRGS.

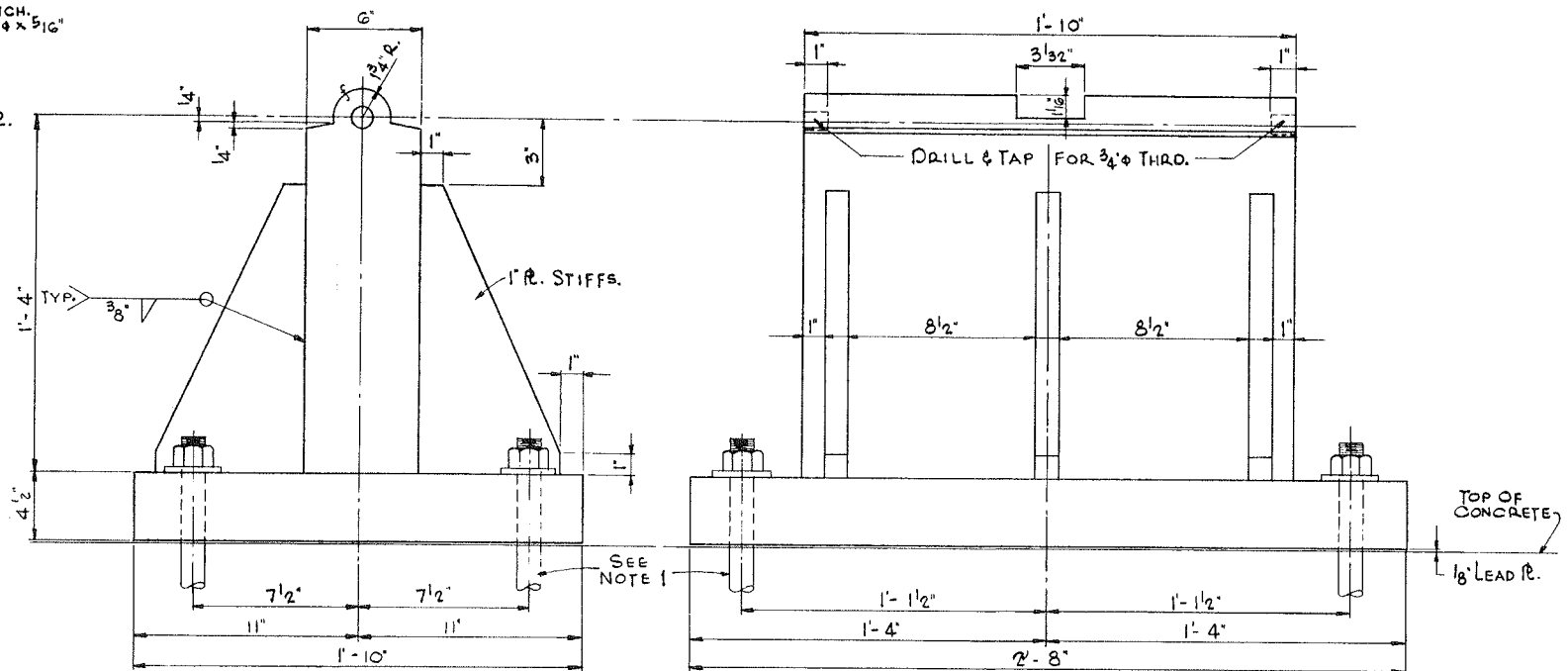


EXPANSION BRG. EB1

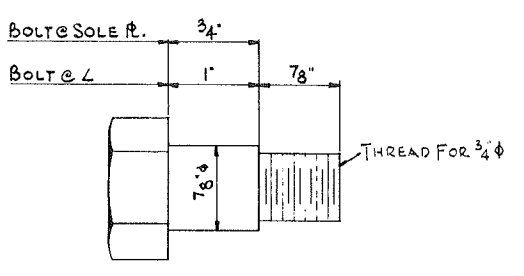
NOTE 1  
1 1/2" HOLE FOR 1" x 1 1/2" LG. SWEDGED ANCH. BOLT W/ 2 1/2" x 5/16" WASHER.



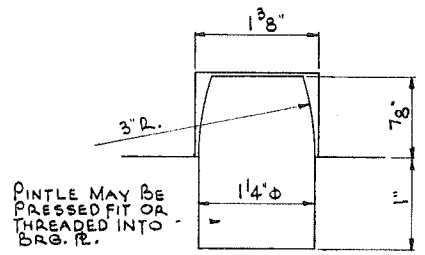
EXPANSION BRG. EB2



FIXED BRG. FB1



SHOULDER BOLT



PINTLE

BEARING NOTES

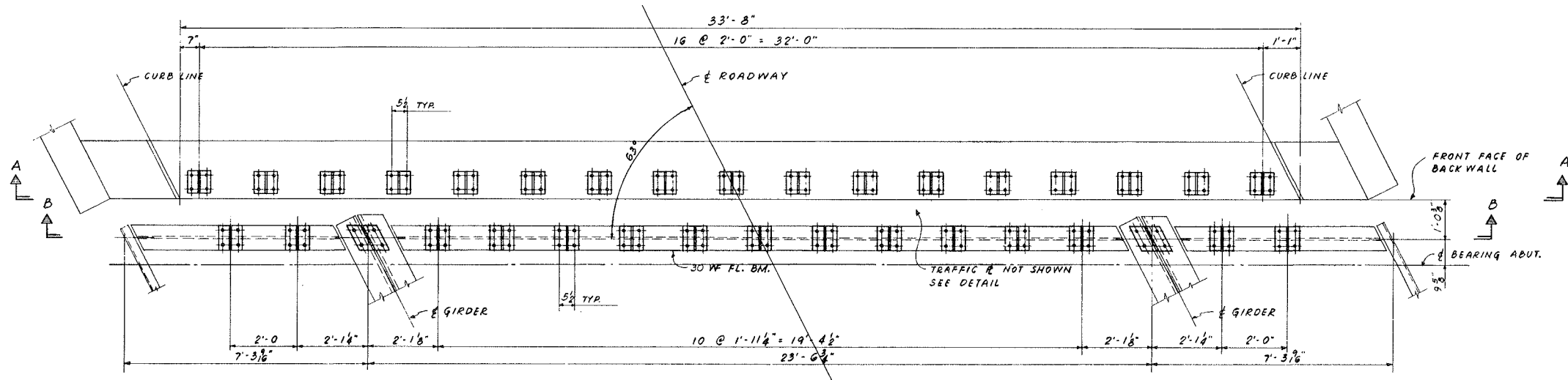
FIXED & EXPANSION BEARINGS SHALL BE FABRICATED FROM STRUCTURAL STEEL PL. OR SLABS. MACHINED PIN FOR FIXED & EXP. BRGS. & SEMI-CIRCULAR HOLE IN SOLE PL. SHALL BE FINISHED SMOOTH WITH FINAL FINISHING CUT SO THAT SURFACES ARE IN FULL BEARING & CAN ROTATE FREELY. SLOTTED HOLES IN HOLD DOWN PL. SHALL BE ACCURATELY FINISHED SO AS TO BE FREE OF BINDING. BEARINGS SHALL BE SHOP ASSEMBLED & MATCH MARKED.

ILLINOIS DIVISION OF HIGHWAYS	
ROCKFORD BYPASS	
F. A. ROUTE 194	
PROJECT	SECTION 3 B
WINNEBAGO COUNTY	
BEARING DETAILS	

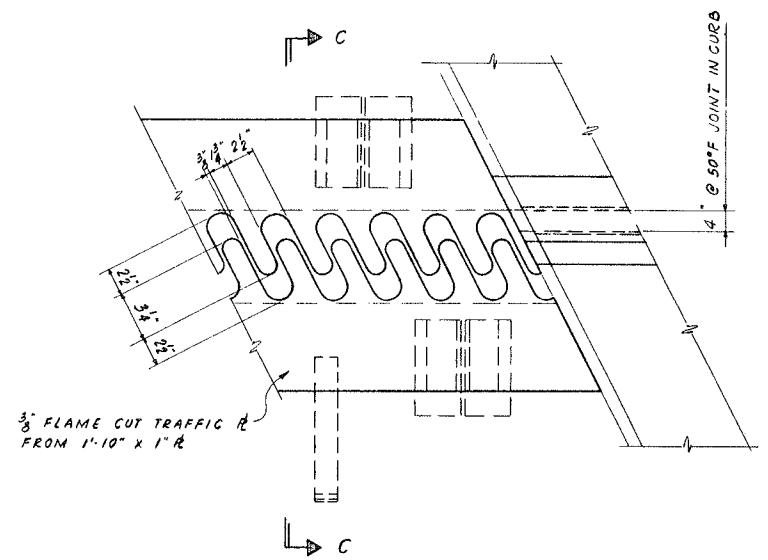
FOR INFORMATION ONLY



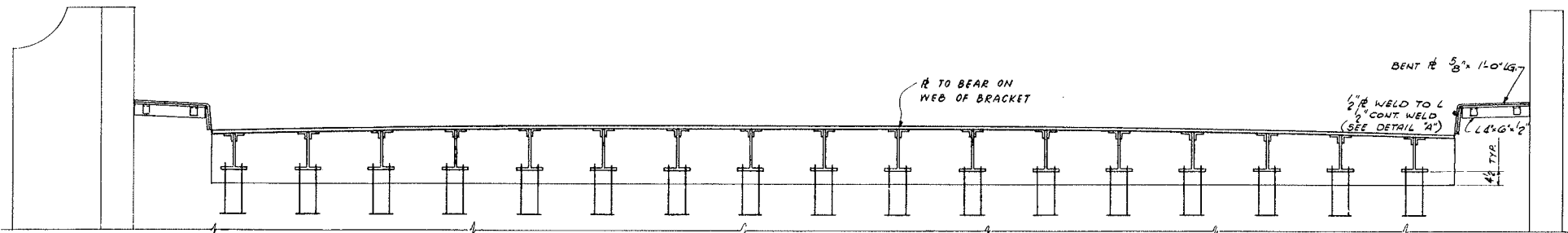
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 194	30 F	WINNEBAGO	26	17
STA.	TO STA.		PROJ.	
FED. ROAD DIST. NO. 7 ILLINOIS				



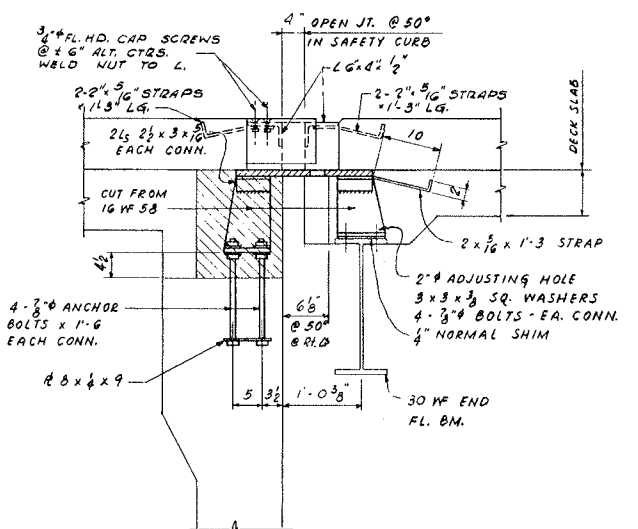
P L A N



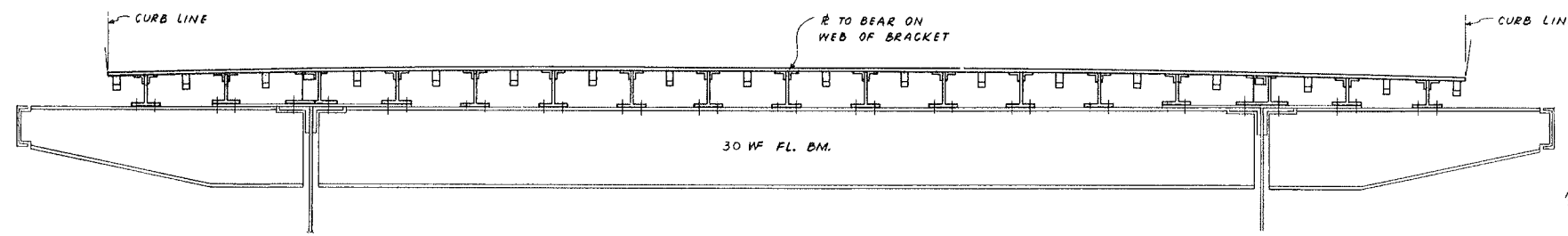
TRAFFIC R DETAIL @ 50°



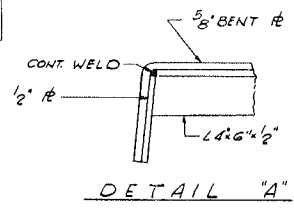
S E C T I O N "A - A"



S E C T I O N "C - C"



S E C T I O N "B - B"



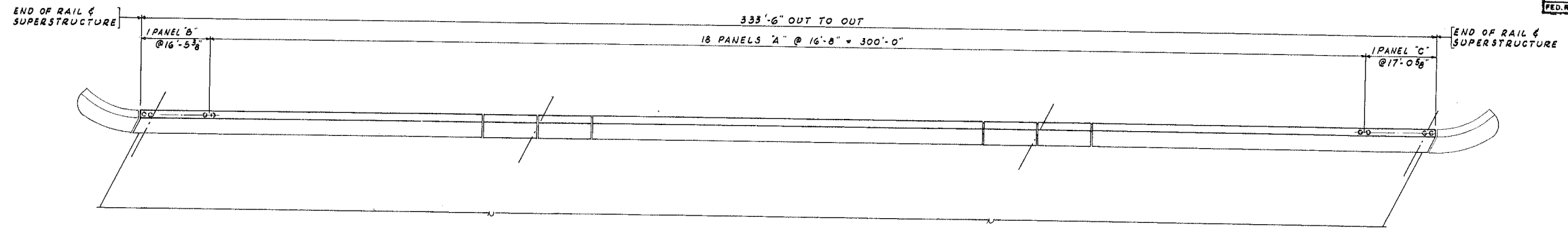
DETAIL "A"

ILLINOIS DIVISION OF HIGHWAYS	
ROCKFORD BYPASS	
F. A. ROUTE 194	
PROJECT	SECTION 3 B
WINNEBAGO COUNTY	
EXPANSION GUARD	
Designed By: E.S.	Drawn By: L.W.
Checked By: JDP	

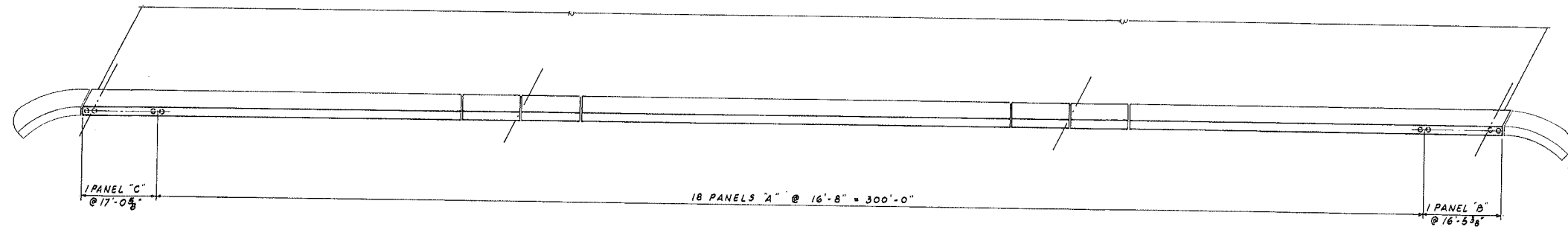
FOR INFORMATION ONLY

MACCABEE, CAMPBELL & ASSOCIATES CONSULTING ENGINEERS  
CHICAGO, ILLINOIS

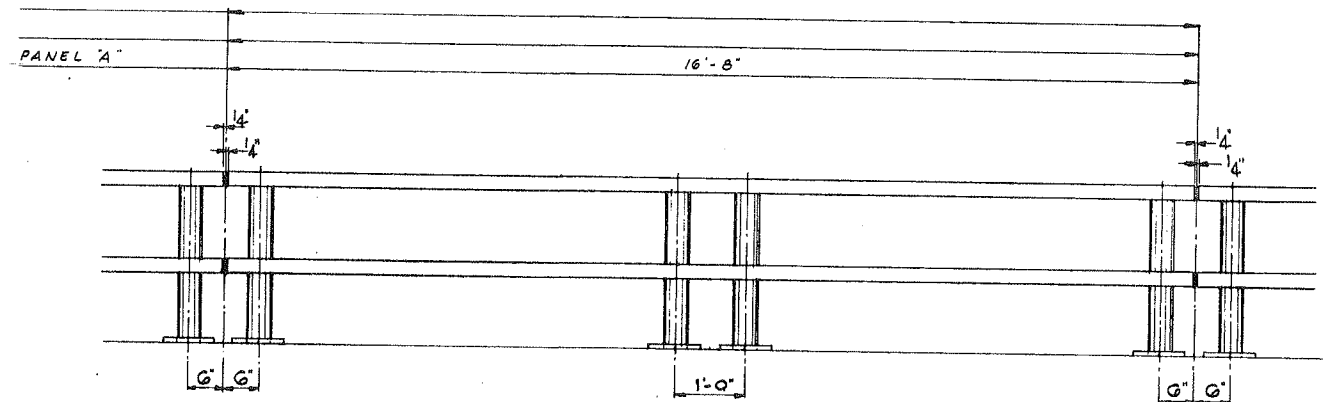
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 194	3B	WINNEBAGO	26	18
STA.	TO STA.		PROJ.	
FED. ROAD DIST. NO. 7	ILLINOIS			



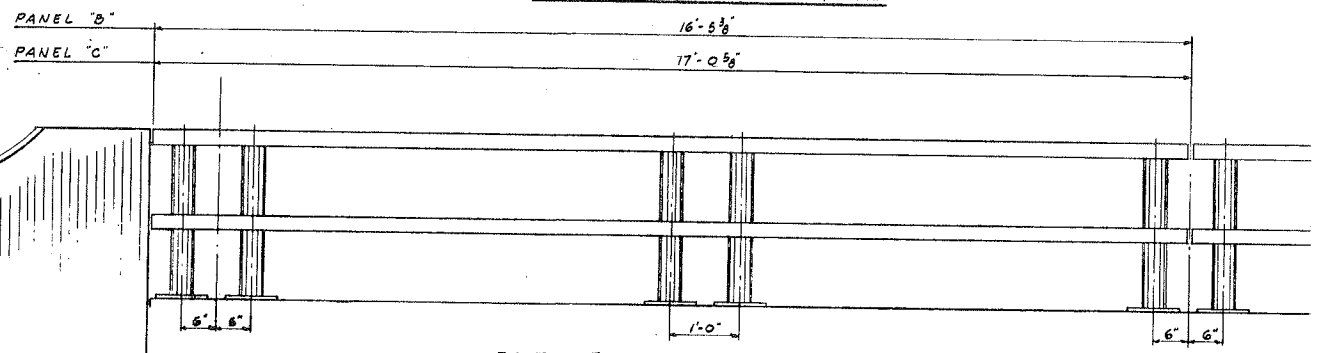
PLAN - NORTH RAIL



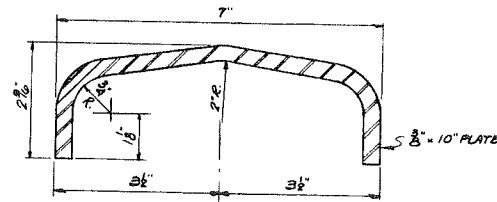
PLAN - SOUTH RAIL



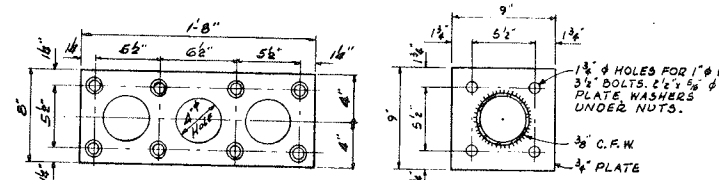
ELEVATION - TYR PANEL



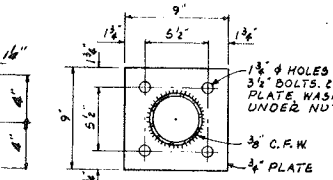
ELEVATION - TYR END PANEL



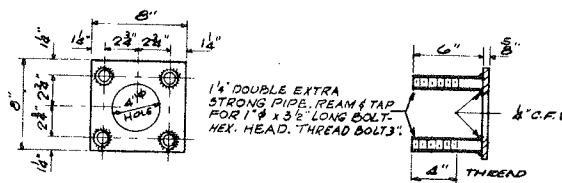
DETAIL OF RAIL



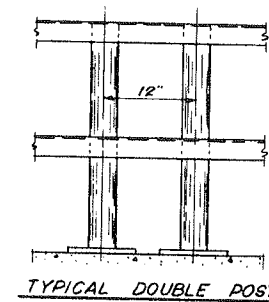
ANCHOR DEVICE AT DOUBLE POSTS



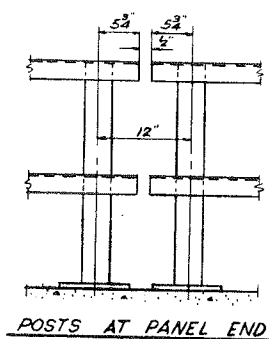
BASE PLATE ALL POSTS - SUPERSTRUCTURE



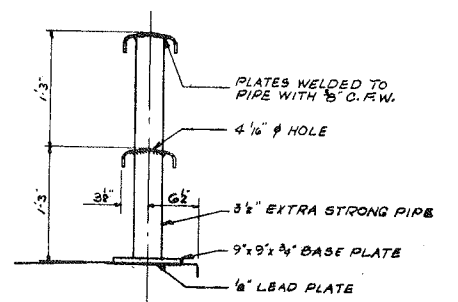
ANCHOR DEVICE AT SINGLE POST



TYPICAL DOUBLE POST



POSTS AT PANEL END



TYPICAL CROSS SECTION

Provide 2 shim plates 9" x 9" x 1/8" & 1 shim plate 9" x 9" x 1/8" for 50% of rail posts in order to obtain vertical alignment in the field. Holes in shim plates to match base plate.

FOR ONE BRIDGE ONLY  
BILL OF MATERIAL

METAL HANDRAIL	LIN. FT.	665'-6"
----------------	----------	---------

ILLINOIS DIVISION OF HIGHWAYS  
ROCKFORD BYPASS  
F. A. ROUTE 194  
PROJECT \_\_\_\_\_ SECTION 3B  
WINNEBAGO COUNTY

HANDRAIL DETAILS

**FOR INFORMATION ONLY**

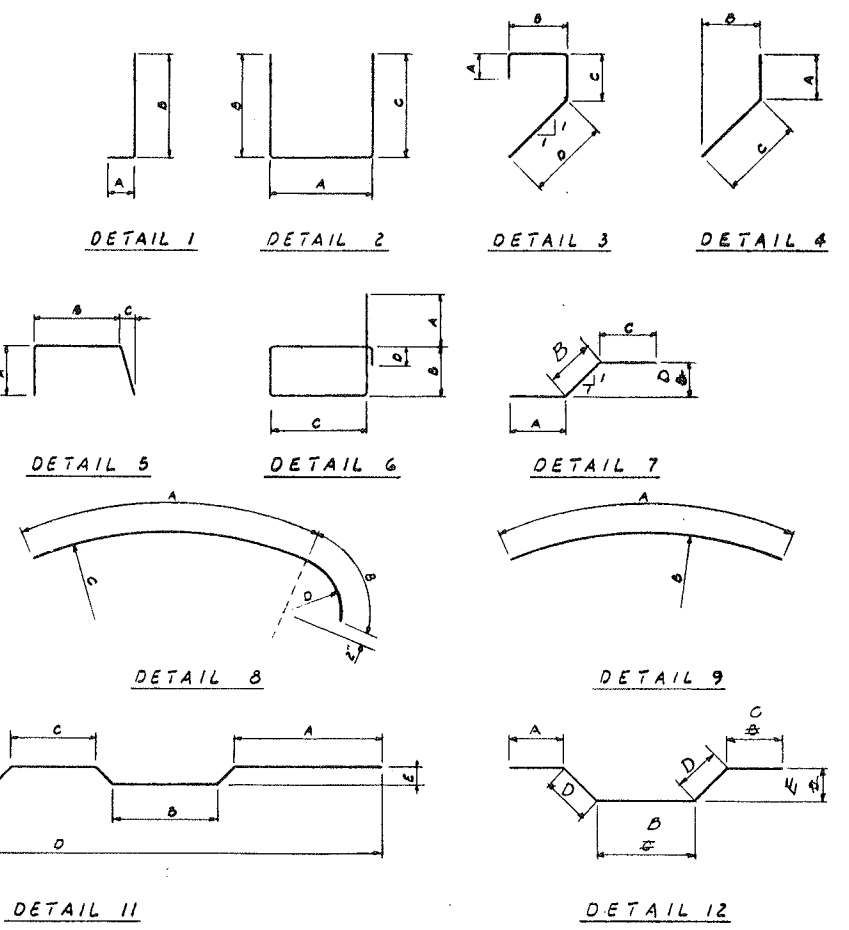
Designed By: \_\_\_\_\_ Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_  
Sheet 171 of 290

# B A R S C H E D U L E (W. B. RDWY.)

ROUTE NO. F.A. 194	SEC. 3B	COUNTY WINNEBAGO	TOTAL SHEETS 26	SHEET NO. 19
STA. FED. ROAD DIST. NO. 7 ILLINOIS		TO STA. PROJ.		

BAR	NO.	SIZE	LENGTH	DETAIL	DIMENSIONS					BAR	NO.	SIZE	LENGTH	DETAIL	DIMENSIONS				
					A	B	C	D	E						A	B	C	D	E
<b>PIER 1</b>																			
h1	8	#4	27'-3"	—						t1	37	#5	21'-3"	6	3'-3"	3'-0"	5'-9"	6"	
h2	18	#4	12'-9"	—						t2	4	#4	7'-3"	2	5'-9"	9"	9"		
h3	12	#4	11'-3"	—						t3	4	#4	6'-3"	2	4'-9"	9"	9"		
h4	16	#10	27'-3"	—						t4	4	#4	7'-3"	3	6"	2'-6"	9"	3'-6"	
V1	24	#5	15'-9"	—						t5	2	#4	5'-0"	2	6"	2'-3"	2'-3"		
V2	10	#5	16'-0"	4	3'-9"	9'-9"	12'-3"			t6	2	#4	7'-0"	2	6"	3'-3"	3'-3"		
V3	10	#5	9'-0"	—						t7	5	#4	2'-11"	5	9"	1'-5"	1"		
d1	20	#4	7'-9"	2	3'-9"	2'-0"	2'-0"			t8	4	#4	8'-0"	2	1'-6"	3'-3"	3'-3"		
d2	12	#4	9'-2"	13	2'-0"	1'-10"	1'-10"			t9	4	#4	7'-6"	2	1'-0"	3'-3"	3'-3"		
d3	34	#6	6'-6"	1	6"	6'-0"				f1	16	#4	9'-3"	—					
S1	80	#5	9'-6"	2	2'-0"	3'-9"	3'-9"			f2	16	#4	8'-6"	—					
S2	48	#5	15'-6"	2	2'-0"	6'-9"	6'-9"			f3	22	#6	4'-6"	—					
f1	25	#8	26'-9"	—						W1	36	#5	6'-9"	—					
W1	55	#6	11'-9"	—															
<b>PIER 2</b>																			
h1	8	#4	27'-3"	—						h1	14	#11	29'-6"	—					
h2	18	#4	12'-9"	—						h2	4	#5	39'-6"	—					
h3	20	#4	11'-3"	—						h3	16	#5	37'-6"	—					
h4	16	#10	27'-3"	—						h4	30	#4	4'-9"	—					
V1	24	#5	22'-9"	—						h5	2	#4	5'-0"	10	4'-9"	—	5'-0"	2'-3"	
V2	10	#5	16'-0"	4	3'-9"	9'-9"	12'-3"			h6	2	#4	3'-0"	—					
V3	10	#5	16'-0"	—						h7	2	#4	7'-0"	10	6'-9"	—	7'-8"	2'-3"	
d1	20	#4	7'-9"	2	3'-9"	2'-0"	2'-0"			h8	2	#4	4'-0"	—					
d2	26	#4	9'-2"	13	2'-0"	1'-10"	1'-10"			h9	28	#4	8'-0"	—					
d3	34	#6	6'-6"	1	6"	6'-0"				h10	2	#4	6'-9"	—					
S1	80	#5	9'-6"	2	2'-0"	3'-9"	3'-9"			h11	24	#4	8'-0"	9	8'-0"	10'-3"			
S2	48	#5	15'-6"	2	2'-0"	6'-9"	6'-9"			h12	24	#4	4'-6"	—					
f1	25	#8	26'-9"	—						h13	2	#4	5'-3"	—					
W1	55	#6	11'-9"	—						h14	2	#4	5'-6"	8	2'-9"	2'-9"	—	1'-8"	
										h15	2	#4	3'-6"	—					
										h16	2	#4	5'-3"	8	2'-6"	2'-9"	—	1'-8"	
<b>ABUTMENT 1</b>																			
h1	14	#11	39'-6"	—						V1	74	#5	8'-6"	—					
h2	4	#5	39'-6"	—						V2	33	#5	6'-0"	3	6"	1'-3"	2'-0"	2'-3"	
h3	16	#5	37'-6"	—						V3	14	#5	13'-3"	—					
h4	30	#4	4'-9"	—						V4	14	#4	13'-3"	—					
h5	2	#4	5'-0"	10	4'-9"	—	5'-0"	2'-3"		V5	8	#5	11'-0"	—					
h6	2	#4	3'-0"	—						V6	8	#4	11'-0"	—					
h7	2	#4	7'-0"	10	6'-9"	—	7'-8"	2'-3"		V7	2	#4	11'-0"	4	3'-9"	3'-0"	7'-3"		
h8	2	#4	4'-0"	—						V8	2	#4	6'-3"	—					
h9	28	#4	8'-0"	—						V9	2	#4	8'-3"	—					
h10	2	#4	6'-9"	—						V10	10	#4	4'-3"	—					
h11	24	#4	8'-0"	9	8'-0"	10'-3"				d1	37	#5	4'-6"	—					
h12	24	#4	4'-6"	—						d2	22	#4	4'-6"	—					
h13	2	#4	5'-3"	—						d3	41	#5	7'-0"	1	2'-9"	4'-3"			
h14	2	#4	5'-6"	8	2'-9"	2'-9"	—	1'-8"		t1	37	#5	21'-3"	6	3'-3"	3'-0"	5'-9"	6"	
h15	2	#4	3'-6"	—						t2	4	#4	7'-3"	2	5'-9"	9"	9"		
h16	2	#4	5'-3"	8	2'-6"	2'-9"	—	1'-8"		t3	4	#4	6'-3"	2	4'-9"	9"	9"		
V1	74	#5	8'-6"	—						t4	4	#4	7'-3"	3	6"	2'-6"	9"	3'-6"	
V2	33	#5	6'-0"	3	6"	1'-3"	2'-0"	2'-3"		t5	2	#4	5'-0"	2	6"	2'-3"	2'-3"		
V3	14	#5	13'-3"	—						t6	2	#4	7'-0"	2	6"	3'-3"	3'-3"		
V4	14	#4	13'-3"	—						t7	5	#4	2'-11"	5	9"	1'-5"	1"		
V5	8	#5	11'-0"	—						t8	4	#4	8'-0"	2	1'-6"	3'-3"	3'-3"		
V6	8	#4	11'-0"	—						t9	4	#4	7'-6"	2	1'-0"	3'-3"	3'-3"		
V7	2	#4	11'-0"	4	3'-9"	3'-0"	7'-3"			f3	22	#6	4'-6"	—					
V8	2	#4	6'-3"	—						f4	16	#4	8'-9"	—					
V9	2	#4	8'-3"	—						f5	16	#4	8'-0"	—					
V10	10	#4	4'-3"	—						W1	34	#5	6'-9"	—					
d1	37	#5	4'-6"	—															
d2	22	#4	4'-6"	—															
d3	41	#5	7'-0"	1	2'-9"	4'-3"													

BAR	NO.	SIZE	LENGTH	DETAIL	DIMENSIONS				
					A	B	C	D	E
<b>RETAINING WALL (WEST)</b>									
h12	24	#4	31'-6"	—					
V11	32	#4	11'-0"	—					
V12	32	#5	11'-0"	—					
d4	32	#5	8'-9"	1	4'-6"	4'-3"			
d5	32	#4	3'-0"	—					
f6	11	#4	36'-0"	—					
W2	37	#5	7'-3"	—					
W3	37	#4	4'-6"	—					
<b>DECK</b>									
d1	664	#5	35'-5"	—					
d2	630	#5	10'-0"	—					
d3	896	#4	4'-10"	5	1'-2"	2'-6"	1"		
d4	1488	#7	28'-0"	—					
d5	64	#4	24'-0"	—					
d6	32	#4	13'-9"	—					
d7	32	#4	28'-0"	—					
d8	62	#5	4'-5"	7	1'-3"	1'-1"	1'-6"	3/4"	
d9	775	#4	6'-0"	12	1'-0"	1'-8"	1'-0"	1'-0"	6
d10	48	#7	17'-0"	—					
d11	7	#7	20'-0"	—					
<b>ELEVATION</b>									
<b>PLAN</b>									
<b>DETAIL 10</b>									
<b>DETAIL 11</b>									
<b>DETAIL 12</b>									
<b>DETAIL 13</b>									



**ILLINOIS DIVISION OF HIGHWAYS  
ROCKFORD BYPASS**

**F. A. ROUTE 194  
PROJECT SECTION 3B  
WINNEBAGO COUNTY**

**REINFORCING SCHEDULE**

Designed By:                      Drawn By:                      Checked By:                     

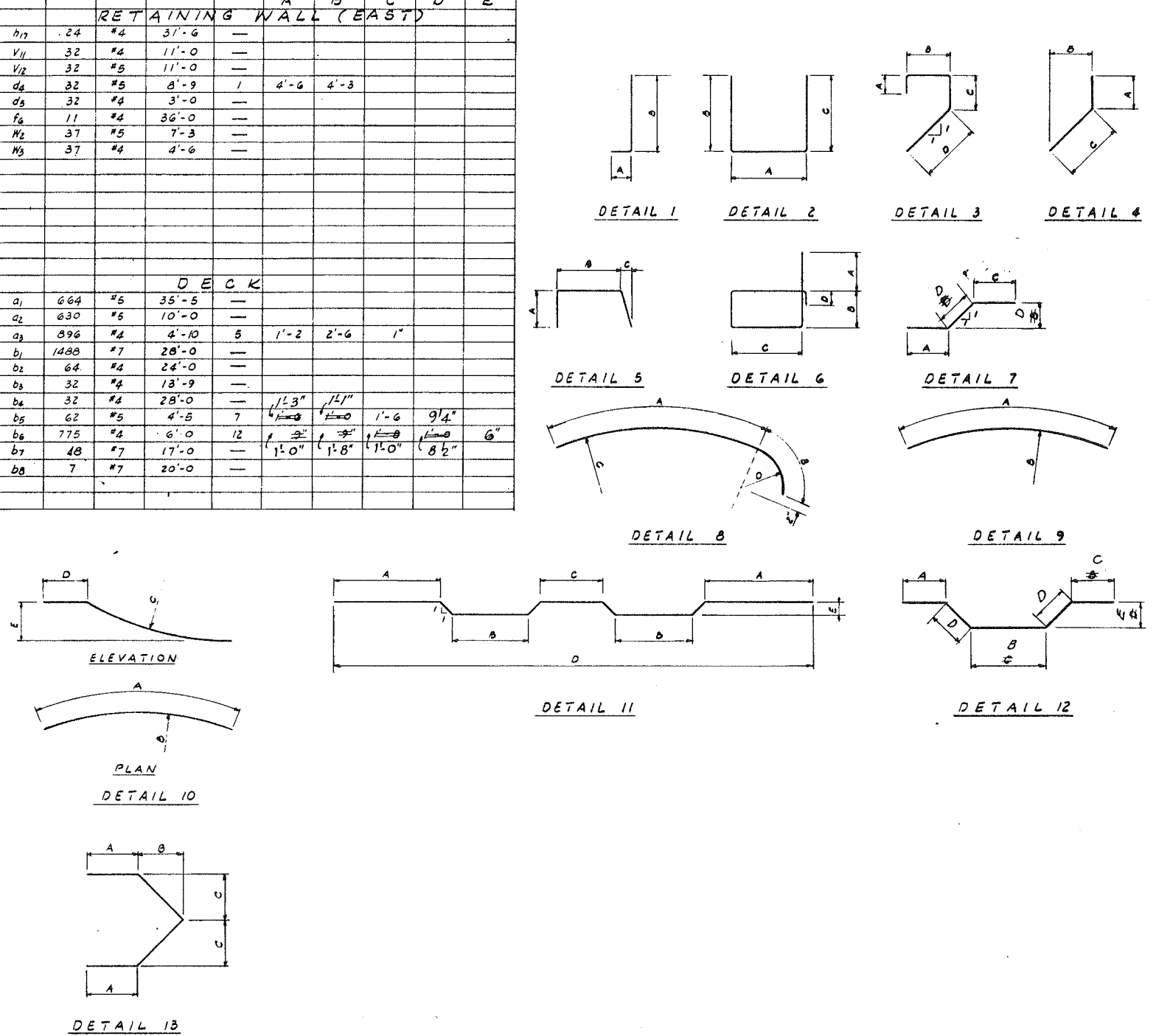
MACCABEE, CAMPBELL & ASSOCIATES CONSULTING ENGINEERS  
1100 W. MICHIGAN STREET CHICAGO, ILLINOIS

## FOR INFORMATION ONLY

# B A R S C H E D U L E (E.B. RDWY.)

ROUTE NO. F.A. 194	SEC. 3B	COUNTY WINNEBAGO	TOTAL SHEETS 26	SHEET NO. 20
STA. FED. ROAD DIST. NO. 1 (ILLINOIS)		TO STA. PROJ.		

BAR NO.	SIZE	LENGTH	DETAIL	DIMENSIONS					BAR NO.	SIZE	LENGTH	DETAIL	DIMENSIONS																		
				A	B	C	D	E					A	B	C	D	E														
<b>PIER 1</b>														<b>PIER 2</b>																	
h1	8	#4	27'-3"						h1	8	#4	27'-3"						<b>ABUTMENT 3</b>													
h2	18	#4	12'-9"						h2	18	#4	12'-9"						h1	14	#11	39'-6"										
h3	12	#4	11'-3"						h3	26	#4	11'-3"						h2	4	#5	39'-6"										
h4	16	#10	27'-3"						h4	16	#4	27'-3"						h3	16	#5	37'-6"										
V1	24	#5	15'-9"						V1	24	#5	22'-9"						h4	30	#4	4'-9"										
V2	10	#5	16'-0"	4	3'-9"	9'-9"	12'-3"		V2	10	#5	16'-0"	4	3'-9"	9'-9"	12'-3"		h5	2	#4	5'-0"	10	4'-9"		5'-0"	2'-3"					
V3	10	#5	9'-0"						V3	10	#5	16'-0"						h6	2	#4	3'-0"										
d1	20	#4	7'-9"	2	3'-9"	2'-0"	2'-0"		d1	20	#4	7'-9"	2	3'-9"	2'-0"	2'-0"		h7	2	#4	7'-0"	10	6'-9"		7'-8"	2'-3"					
d2	12	#4	9'-2"	13	2'-0"	1'-10"	1'-10"		d2	26	#4	9'-2"	13	2'-0"	1'-10"	1'-10"		h8	2	#4	4'-0"										
d3	34	#6	5'-0"	1	6"	4'-6"			d3	34	#6	5'-0"	1	6"	4'-6"			h9	28	#4	8'-0"										
s1	80	#5	9'-6"	2	2'-0"	3'-9"	3'-9"		s1	80	#5	9'-6"	2	2'-0"	3'-9"	3'-9"		h10	2	#4	6'-9"										
s2	48	#5	15'-6"	2	2'-0"	6'-9"	6'-9"		s2	48	#5	15'-6"	2	2'-0"	6'-9"	6'-9"		h11	24	#4	8'-0"	9	8'-0"	10'-3"							
f1	25	#8	26'-9"						f1	25	#8	26'-9"						h12	24	#4	4'-6"										
N1	55	#6	11'-9"						N1	55	#6	11'-9"						h13	2	#4	5'-3"										
<b>ABUTMENT 4</b>														<b>DECK</b>																	
h1	14	#11	39'-6"						d1	664	#5	35'-5"						h1	14	#11	39'-6"										
h2	4	#5	39'-6"						d2	830	#5	10'-0"						h2	4	#5	39'-6"										
h3	16	#5	37'-6"						d3	896	#4	4'-10"	5	1'-2"	2'-6"	1'		h3	16	#5	37'-6"										
h4	30	#4	4'-9"						b1	1488	#7	28'-0"						h4	30	#4	4'-9"										
h5	2	#4	5'-0"	10	4'-9"		5'-0"	2'-3"	b2	64	#4	24'-0"						h5	2	#4	5'-0"	10	4'-9"		5'-0"	2'-3"					
h6	2	#4	3'-0"						b3	32	#4	13'-9"						h6	2	#4	3'-0"										
h7	2	#4	7'-0"	10	6'-9"		7'-8"	2'-3"	b4	32	#4	28'-0"						h7	2	#4	7'-0"	10	6'-9"		7'-8"	2'-3"					
h8	2	#4	4'-0"						b5	62	#5	4'-5"	7	1'-3"	1'-11"	1'-6"	9'-4"	h8	2	#4	4'-0"										
h9	28	#4	8'-0"						b6	775	#4	6'-0"	12	1'-0"	1'-8"	1'-0"	8'-2"	h9	28	#4	8'-0"										
h10	2	#4	6'-9"						b7	48	#7	17'-0"						h10	2	#4	6'-9"										
h11	24	#4	8'-0"	9	8'-0"	10'-3"			b8	7	#7	20'-0"						h11	24	#4	8'-0"	9	8'-0"	10'-3"							
h12	24	#4	4'-6"						<b>ELEVATION</b>																						
h13	2	#4	5'-3"						<b>PLAN</b>																						
h14	2	#4	5'-6"	8	2'-9"	2'-9"		1'-8"	<b>DETAIL 10</b>																						
h15	2	#4	3'-6"						<b>DETAIL 11</b>																						
h16	2	#4	5'-3"	8	2'-6"	2'-9"		1'-8"	<b>DETAIL 12</b>																						
V1	74	#5	8'-6"						<b>DETAIL 13</b>																						
V2	33	#5	6'-0"	3	6"	1'-3"	2'-0"	2'-3"	<b>DETAIL 1</b>																						
V3	14	#5	13'-3"						<b>DETAIL 2</b>																						
V4	14	#4	13'-3"						<b>DETAIL 3</b>																						
V5	8	#5	11'-0"						<b>DETAIL 4</b>																						
V6	8	#4	11'-0"						<b>DETAIL 5</b>																						
V7	2	#4	11'-0"	4	3'-9"	3'-0"	7'-3"		<b>DETAIL 6</b>																						
V8	2	#4	6'-3"						<b>DETAIL 7</b>																						
V9	2	#4	8'-3"						<b>DETAIL 8</b>																						
V10	10	#4	4'-3"						<b>DETAIL 9</b>																						
d1	37	#5	4'-6"						<b>DETAIL 10</b>																						
d2	22	#4	4'-6"						<b>DETAIL 11</b>																						
d3	41	#5	7'-0"	1	2'-9"	4'-3"			<b>DETAIL 12</b>																						
t1	37	#5	21'-3"	6	3'-3"	3'-0"	5'-9"	6"	<b>DETAIL 13</b>																						
t2	4	#4	7'-3"	2	5'-9"	9"	9"		<b>DETAIL 1</b>																						
t3	4	#4	6'-3"	2	4'-9"	9"	9"		<b>DETAIL 2</b>																						
t4	4	#4	7'-3"	3	6"	2'-6"	3"	3'-6"	<b>DETAIL 3</b>																						
t5	2	#4	5'-0"	2	6"	2'-3"	2'-3"		<b>DETAIL 4</b>																						
t6	2	#4	7'-0"	2	6"	3'-3"	3'-3"		<b>DETAIL 5</b>																						
t7	5	#4	2'-11"	5	9"	1'-5"	1"		<b>DETAIL 6</b>																						
t8	4	#4	8'-0"	2	1'-6"	3'-3"	3'-3"		<b>DETAIL 7</b>																						
t9	4	#4	7'-6"	2	1'-0"	3'-3"	3'-3"		<b>DETAIL 8</b>																						
f1	16	#4	9'-3"						<b>DETAIL 9</b>																						
f2	16	#4	8'-6"						<b>DETAIL 10</b>																						
f3	22	#6	4'-6"						<b>DETAIL 11</b>																						
N1	36	#5	6'-9"						<b>DETAIL 12</b>																						



**ILLINOIS DIVISION OF HIGHWAYS  
ROCKFORD BYPASS**

F. A. ROUTE 194  
PROJECT \_\_\_\_\_ SECTION 3B  
WINNEBAGO COUNTY

**REINFORCING SCHEDULE**

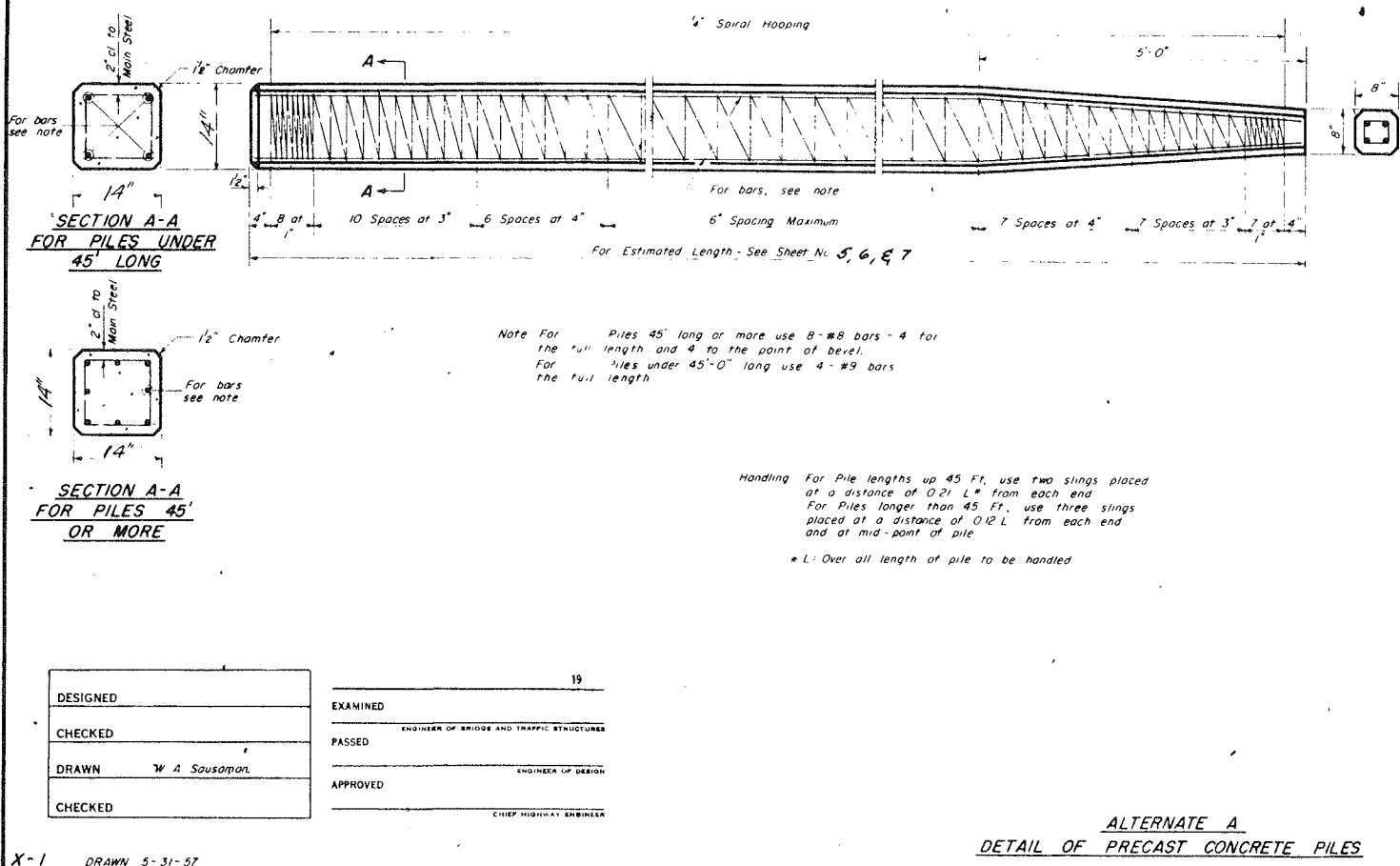
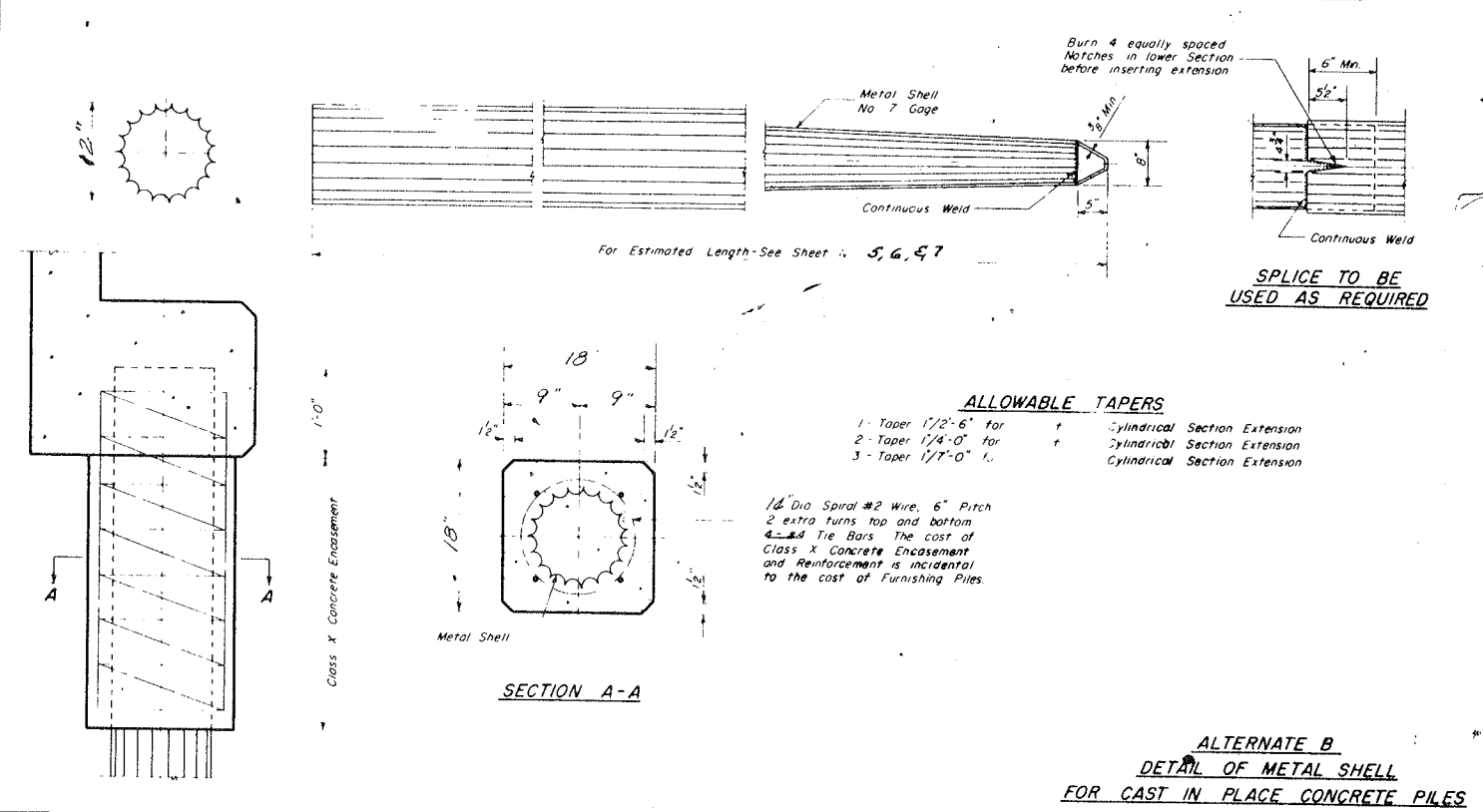
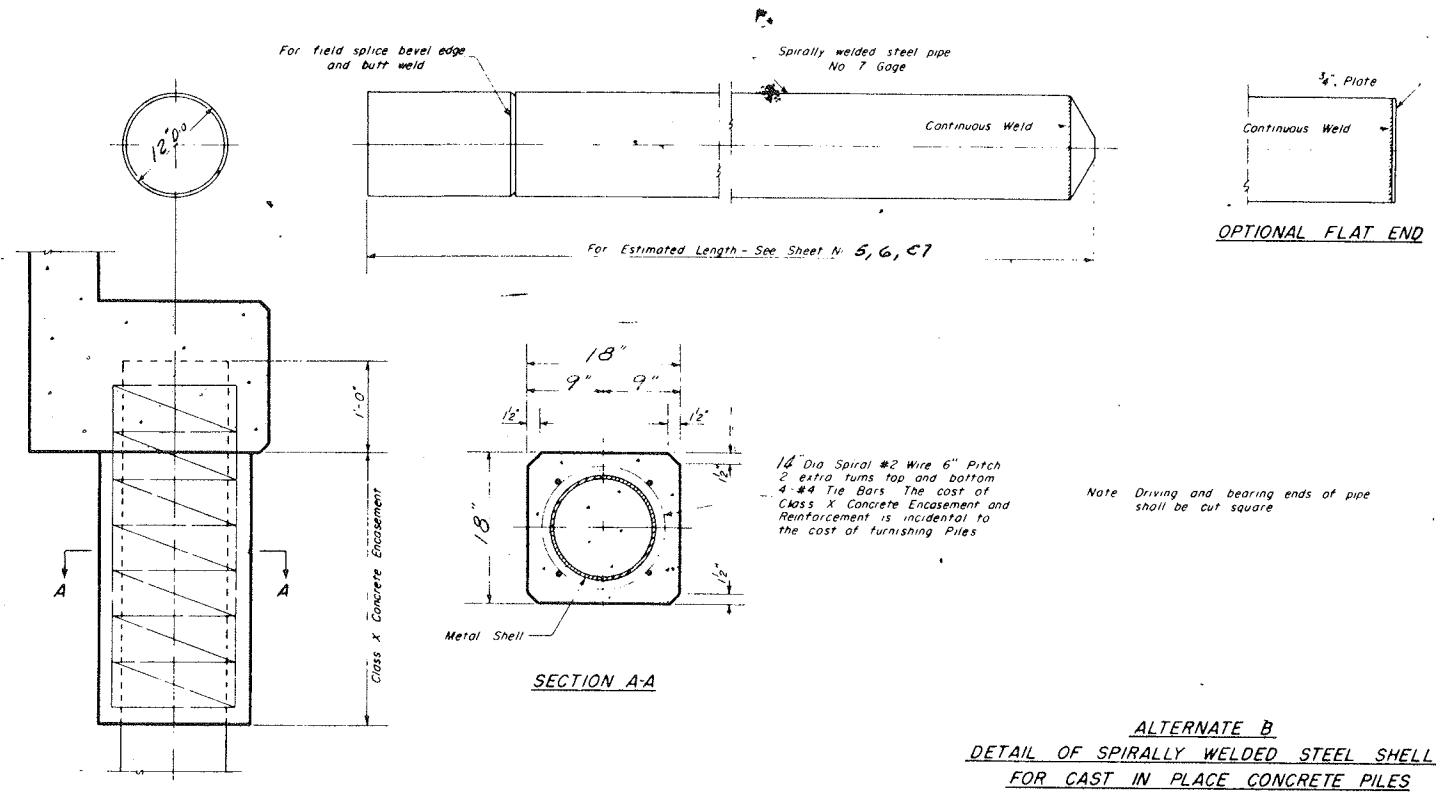
Designed By: \_\_\_\_\_  
Checked By: \_\_\_\_\_

MACCABEE, CAMPBELL & ASSOCIATES CONSULTING ENGINEERS  
110 N. MADISON STREET CHICAGO, ILLINOIS

## FOR INFORMATION ONLY

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
194			26	23	
F.A.					
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT		



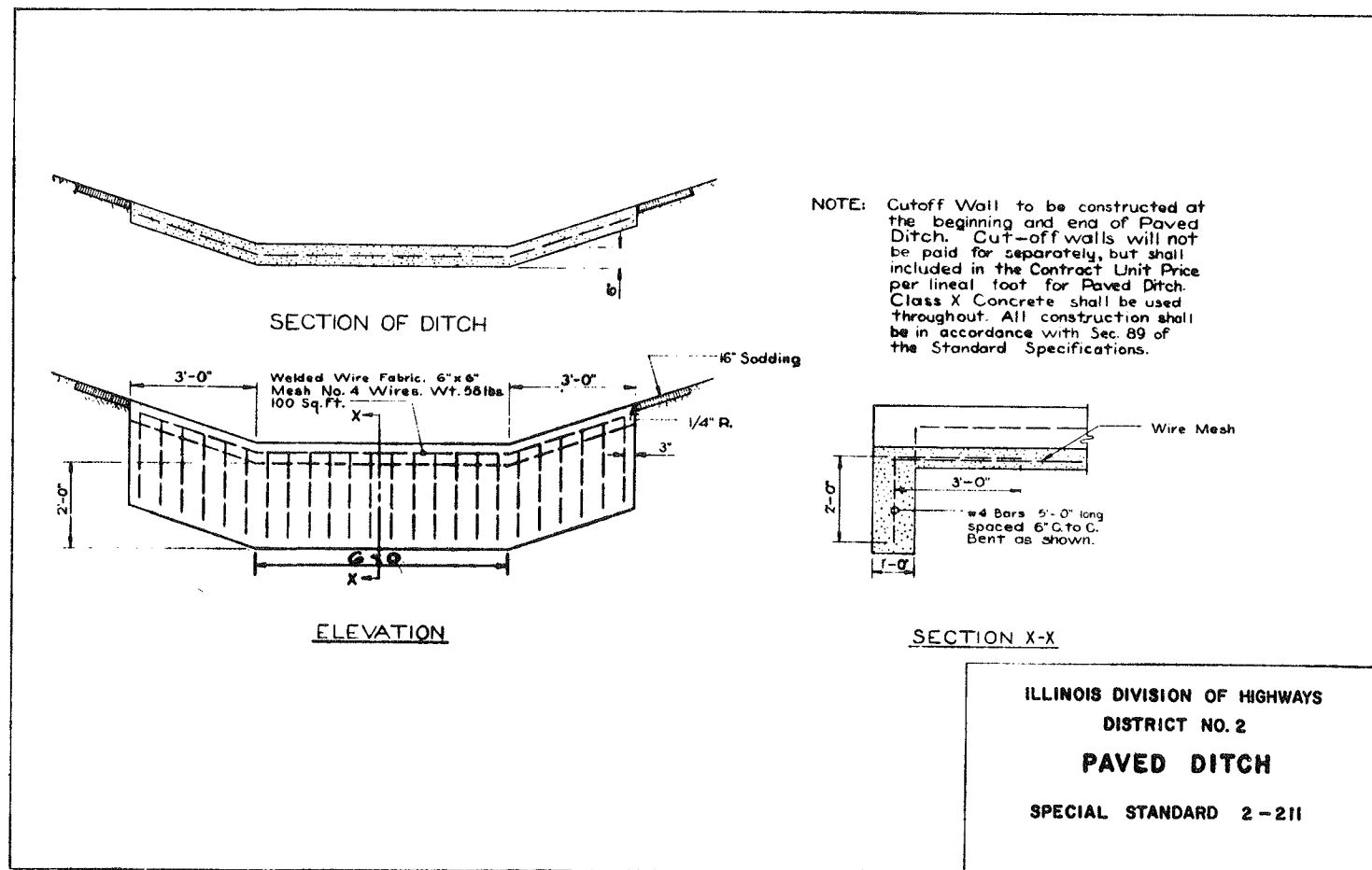
DESIGNED	19
CHECKED	EXAMINED
DRAWN W A Sauspart	PASSED
CHECKED	APPROVED

F.A. ROUTE 194 SECTION 3B  
ROCKFORD BYPASS  
WINNEBAGO CTY.  
CONCRETE PILE STAND

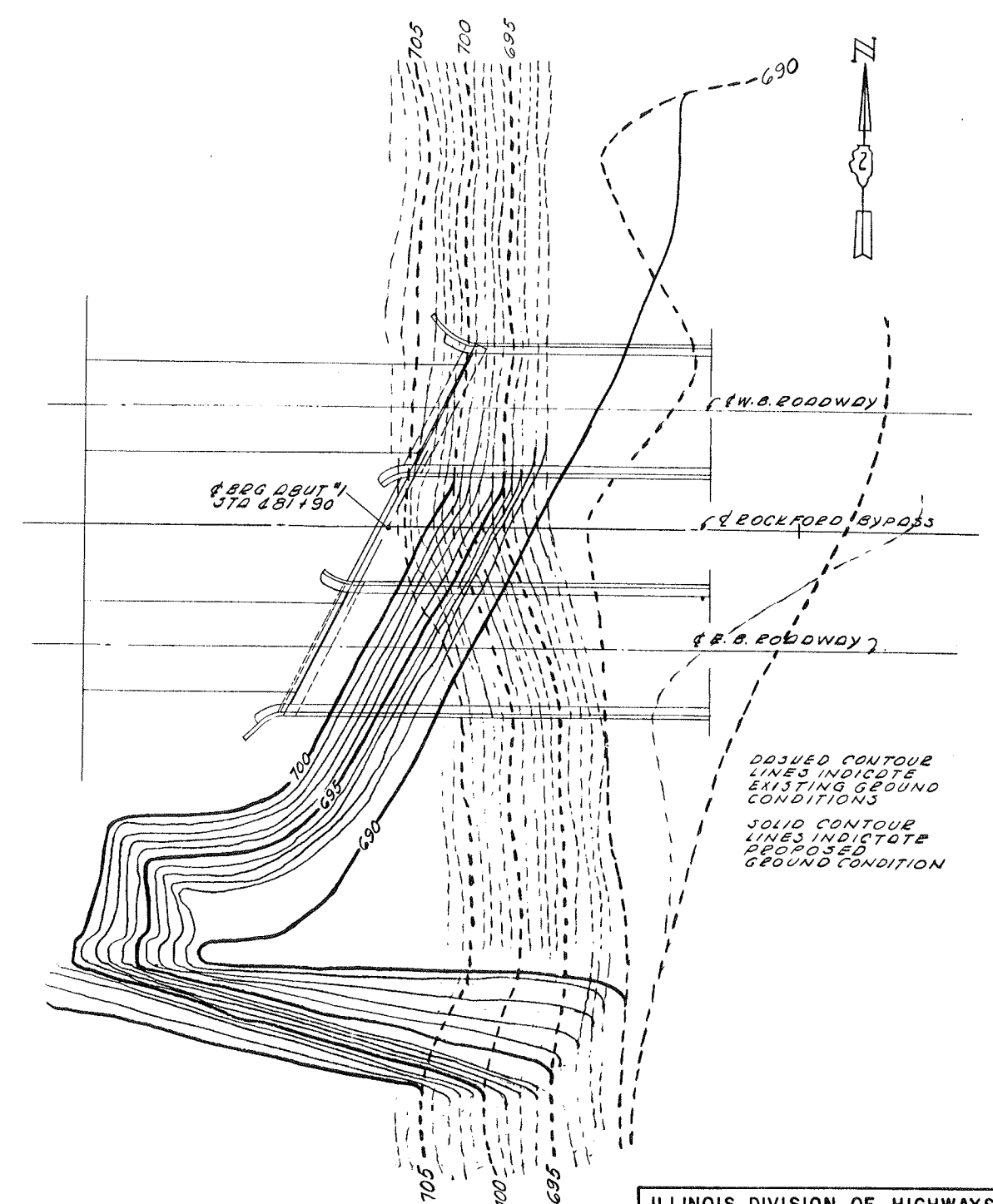
FOR INFORMATION ONLY



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
194	3B	WINNEBAGO	26	24
STA.		TO STA.		
FED. ROAD DIST. NO. 7 ILLINOIS		PROJ.		



ILLINOIS DIVISION OF HIGHWAYS  
 DISTRICT NO. 2  
**PAVED DITCH**  
 SPECIAL STANDARD 2-211



ILLINOIS DIVISION OF HIGHWAYS  
 ROCKFORD BYPASS  
 F. A. ROUTE 194  
 PROJECT \_\_\_\_\_ SECTION 3B  
 WINNEBAGO COUNTY  
 PAVED DITCH AND  
 GRADING PLAN  
 Designed By: \_\_\_\_\_ Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_

**FOR INFORMATION ONLY**



**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts.  
 Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.  
 Calculated weight of Structural Steel = 2,797,340 lbs (M 270 Gr. 50).  
 Calculated weight of Structural Steel = 98,440 lbs (M 270 Gr. 36).  
 No field welding is permitted except as specified in the contract documents.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 If the Contractor elects to use cantilever forming brackets on the exterior girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications.  
 If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior girder at each of these additional bracket locations.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the abutment seat areas, front faces of backwalls and hatchblocks.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

- At least 72 hours shall have elapsed from the end of the previous pour.
- The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design. Slipforming of parapet is not allowed.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Granular Backfill for Structures	Cu. Yd.		623.3	623.3
Stone Riprap, Class A4	Sq. Yd.		1484	1484
Filter Fabric	Sq. Yd.		1484	1484
Removal of Existing Structures	Each		2	2
Structure Excavation	Cu. Yd.		472.2	472.2
Cofferdam (Type 2), Location 1	Each		0.5	0.5
Cofferdam Excavation	Cu. Yd.		1023.6	1023.6
Concrete Structures	Cu. Yd.		1168.8	1168.8
Concrete Superstructure	Cu. Yd.	1527		1527
Bridge Deck Grooving	Sq. Yd.	4374		4374
Seal Coat Concrete	Cu. Yd.		305.8	305.8
Protective Coat	Sq. Yd.		5617	5617
Furnishing and Erecting Structural Steel	L. Sum	0.57		0.57
Stud Shear Connectors	Each	10944		10944
Reinforcement Bars, Epoxy Coated	Pound	384030	148980	533010
Bar Splicers	Each		172	172
Furnishing Metal Pile Shells 14"x .312"	Foot		10738	10738
Test Pile Metal Shells	Each		6	6
Driving Piles	Foot		10738	10738
Pile Shoes	Each		244	244
Temporary Soil Retention System	Sq. Ft.		1297	1297
Name Plates	Each	2		2
Preformed Joint Strip Seal	Foot	176		176
Elastomeric Bearing Assembly, Type II	Each	24		24
Anchor Bolts, 1"	Each		48	48
Anchor Bolts, 1 1/2"	Each		24	24
Concrete Sealer	Sq. Ft.		4117	4117
Geocomposite Wall Drain	Sq. Yd.		242	242
Pipe Underdrains for Structures, 4"	Foot		310	310
Drainage Scupper, DS-11	Each	8		8
Form Liner Textured Surface	Sq. Ft.	6424	4618	11042
Staining Concrete Structures	Sq. Ft.	6424	4618	11042

**INDEX OF SHEETS**

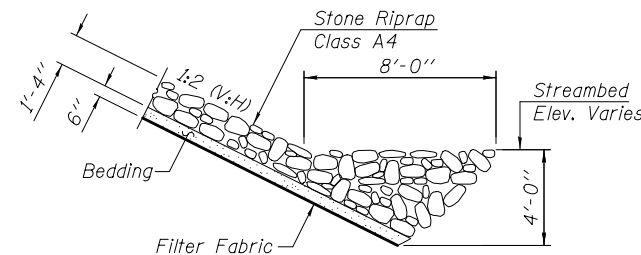
1	General Plan & Elevation
2	General Data
3	Stage Construction & Temporary Soil Retention System Details
4	Temporary Concrete Barrier for Stage Construction
5	Footing Layout
6-12	Top of Slab Elevations
13	Top of West Approach Slab Elevation (E.B.)
14	Top of East Approach Slab Elevation (E.B.)
15	Top of West Approach Slab Elevation (W.B.)
16	Top of East Approach Slab Elevation (W.B.)
17	Superstructure (E.B.)
18	Superstructure (W.B.)
19-20	Superstructure Details
21	Bridge Approach Slab Details - West (W.B.); East (E.B.)
22	Bridge Approach Slab Details - East (W.B.); West (E.B.)
23-24	Bridge Approach Slab Details
25	Preformed Joint Strip Seal
26	Drainage Scupper, DS-11
27	Structural Steel
28-29	Structural Steel Details
30	Bearing Details
31-32	West Abutment (E.B.)
33-34	East Abutment (E.B.)
35	Abutment Details (E.B.)
36-37	West Abutment (W.B.)
38-39	East Abutment (W.B.)
40	Abutment Details (W.B.)
41	Pier (E.B.)
42	Pier (W.B.)
43-44	Formliner Details
45	Metal Shell Pile Details
46	Bar Splicer Assembly & Mechanical Splicer Details
47-50	Soil Boring Logs

**WATERWAY INFORMATION**

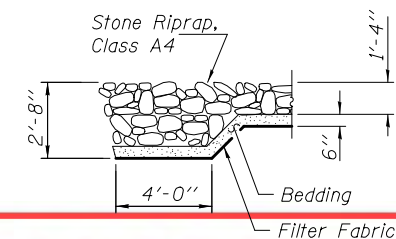
Flood		Discharge (cfs)		Waterway Opening (Sq.Ft.)		Natural H.W.E.	Head (ft.)		Headwater Elev.	
		Existing	Proposed	Existing	Proposed		Existing	Proposed	Existing	Proposed
Drainage Area = 6532.87 sq. mi. Existing Low Grade Elev. = 708.59 ft @ Sta. 491+52 Proposed Low Grade Elev. = 710.4 ft @ Sta. 930+62										
10-YR	Main Channel	18052	15916	4353	4720					
	Relief Struc.	7473	9609	2143	2850					
	Total	25525	25525			696.3	0.2	0.1	696.5	696.4
50-YR (Design)	Main Channel	23661	20859	5060	5513					
	Relief Struc.	10464	13266	2629	3507					
	Total	34125	34125			698.2	0.3	0.2	698.5	698.4
100-YR	Main Channel	25971	22895	5335	5822					
	Relief Struc.	11719	14795	2819	3764					
	Total	37690	37690			699.0	0.3	0.2	699.3	699.2
Overtopping	Main Channel									
	Relief Struc.									
	Total									
500-YR	Main Channel	30162	27412	5911	6465					
	Relief Struc.	15463	18213	3220	4299					
	Total	45625	45625			700.5	0.4	0.2	700.9	700.7

10 Year Velocity through Existing Bridge = 4.15 fps

10 Year Velocity through Proposed Bridge = 3.37 fps



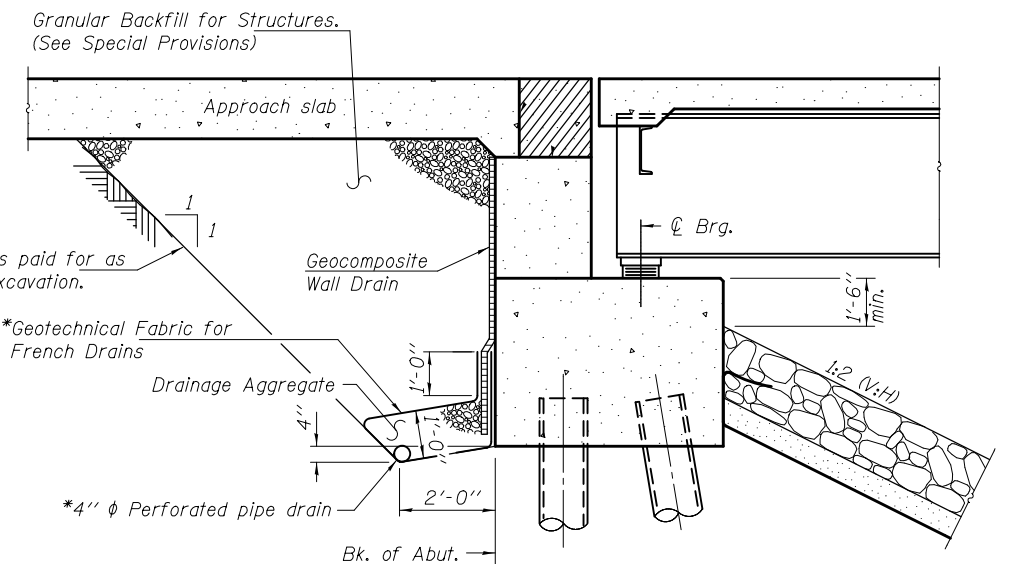
**SECTION B-B**



**SECTION A-A**

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevations (ft.)			
	W. Abut.	Pier	E. Abut.
Q100	698.41	675.12	700.52
Q500	698.41	674.30	700.52



**SECTION THRU PILE SUPPORTED STUB ABUTMENT**

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101). Geocomposite wall drains and 4" φ pipe underdrains shall be extended behind the entire abutment cap.

DESIGNED - Nick R. Barnett  
 CHECKED - Frank W. Sharp  
 DRAWN - h.t. duong  
 CHECKED - NRB/FWS/GRA

EXAMINED - *Joanne F. Joffe*  
 ACTING ENGINEER OF BRIDGES  
 PASSED - *Carl Pung*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

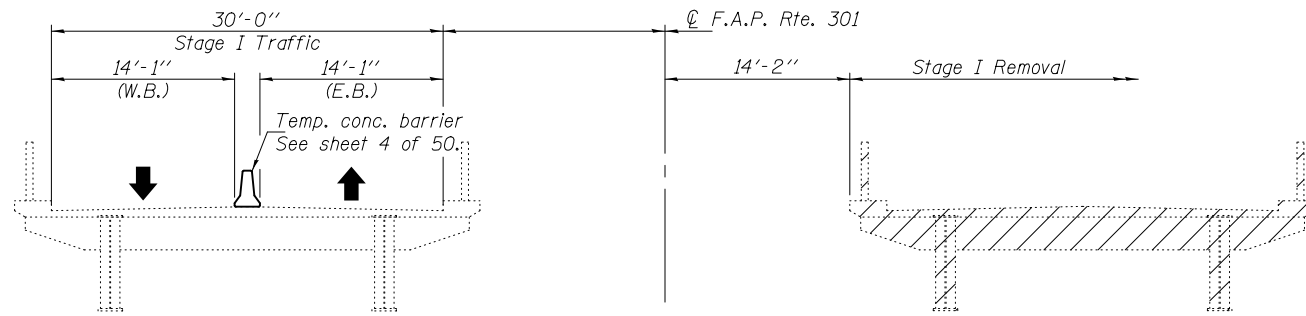
DATE - \_\_\_\_\_  
 REVISED \_\_\_\_\_  
 REVISED \_\_\_\_\_

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

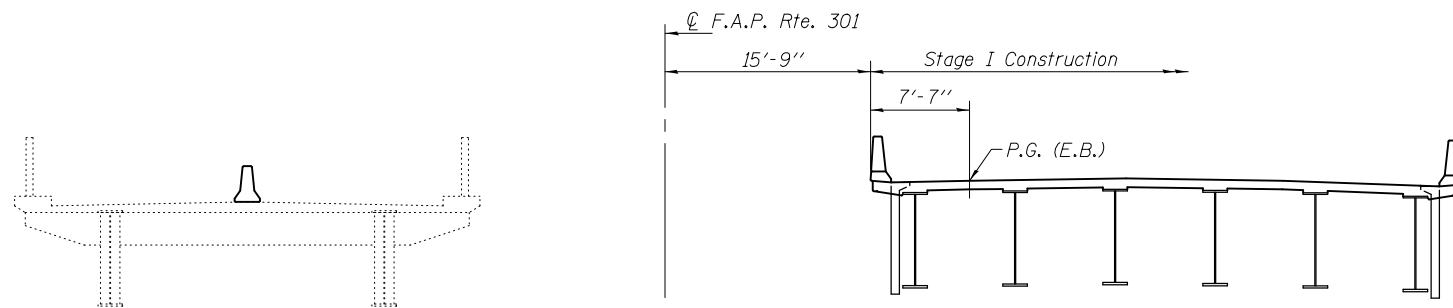
**GENERAL DATA  
 STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)**

SHEET NO. 2 OF 50 SHEETS

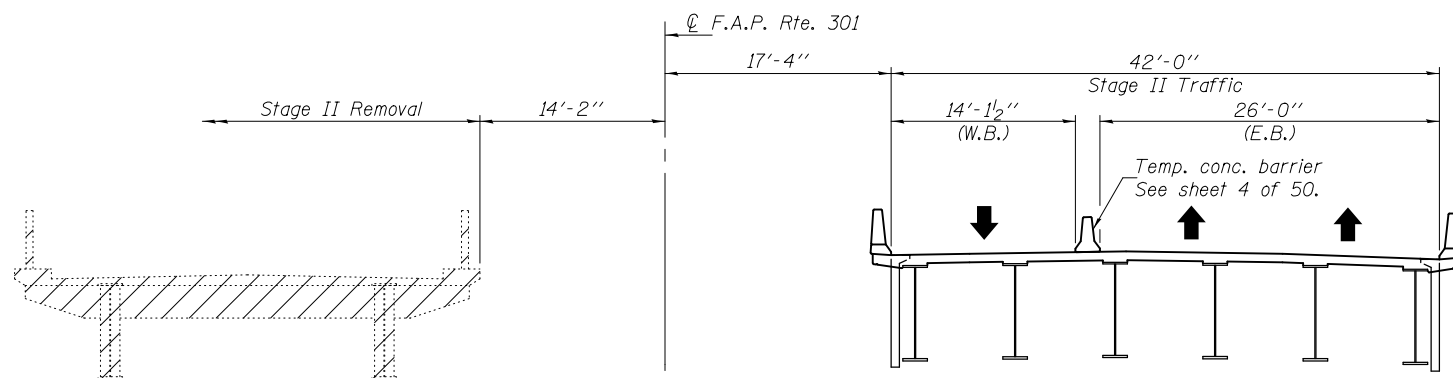
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				



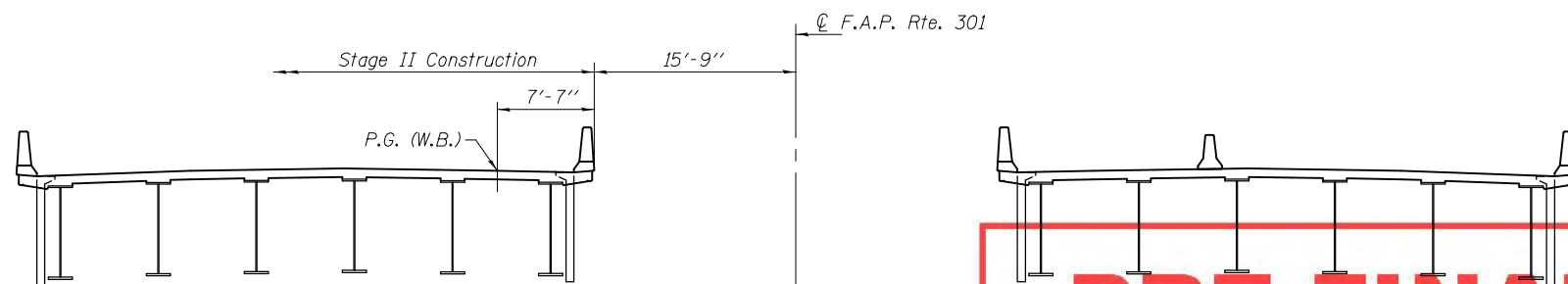
**STAGE I REMOVAL**



**STAGE I CONSTRUCTION**



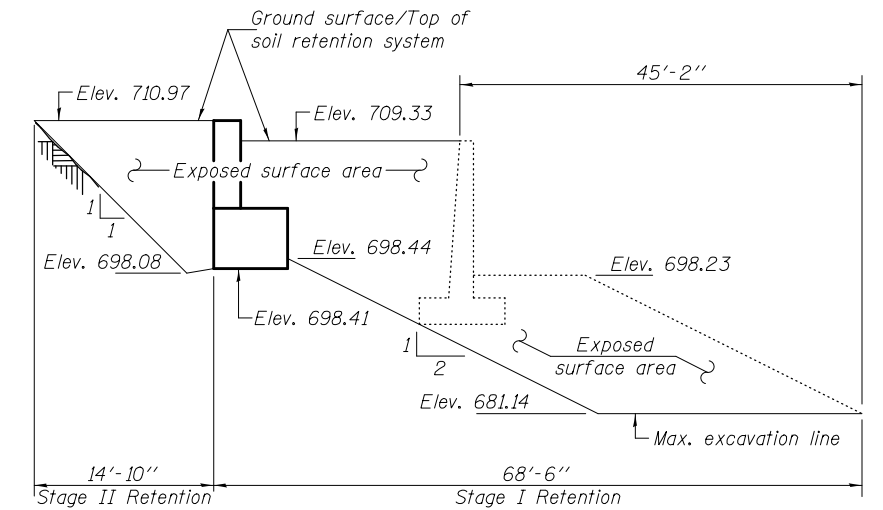
**STAGE II REMOVAL**



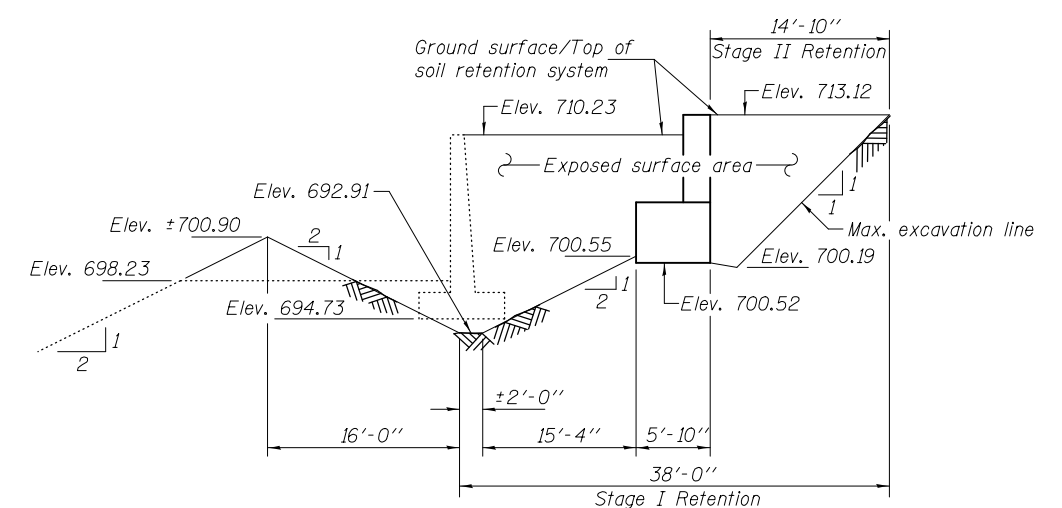
**STAGE II CONSTRUCTION**

**PRE-FINAL**

Notes: All sections are looking east.  
Hatched area indicates removal of existing superstructure.  
For quantity of temporary concrete barrier, see Roadway Plans.



**TEMPORARY SOIL RETENTION SYSTEM - WEST ABUT.**



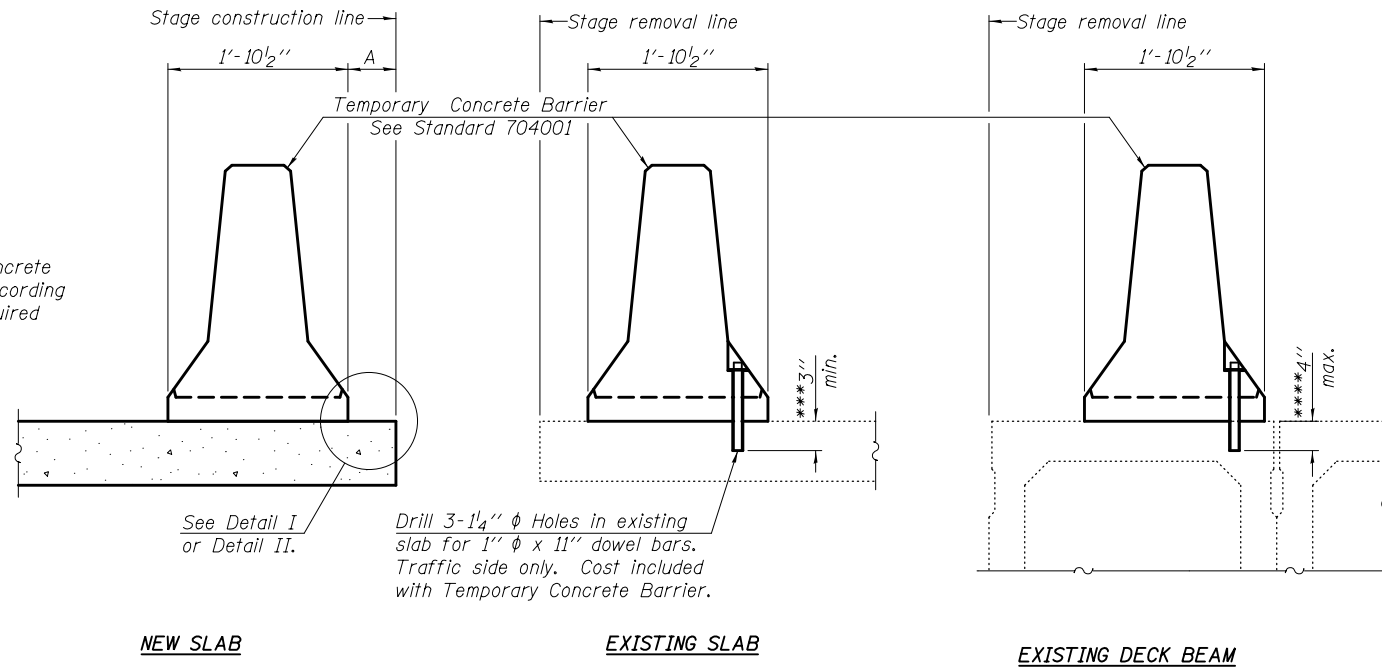
**TEMPORARY SOIL RETENTION SYSTEM - EAST ABUT.**

Note: A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE CONSTRUCTION &amp; TEMP. SOIL RETENTION SYSTEM DETAILS STRUCTURE NO. 101-0197 (E.B.) &amp; 101-0198 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED - Frank W. Sharp	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED								
DRAWN - h.t. duong		REVISED								
CHECKED - NRB/FWS/GRA										
				SHEET NO. 3 OF 50 SHEETS	ILLINOIS FED. AID PROJECT CONTRACT NO. 64D19					



When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

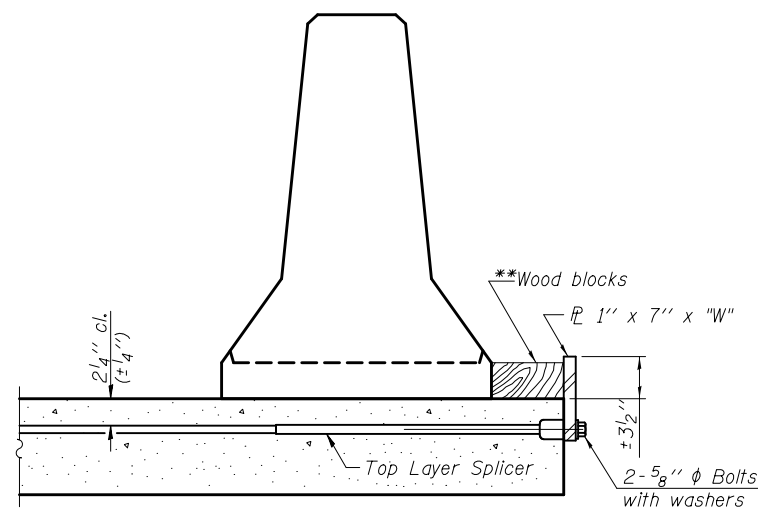
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

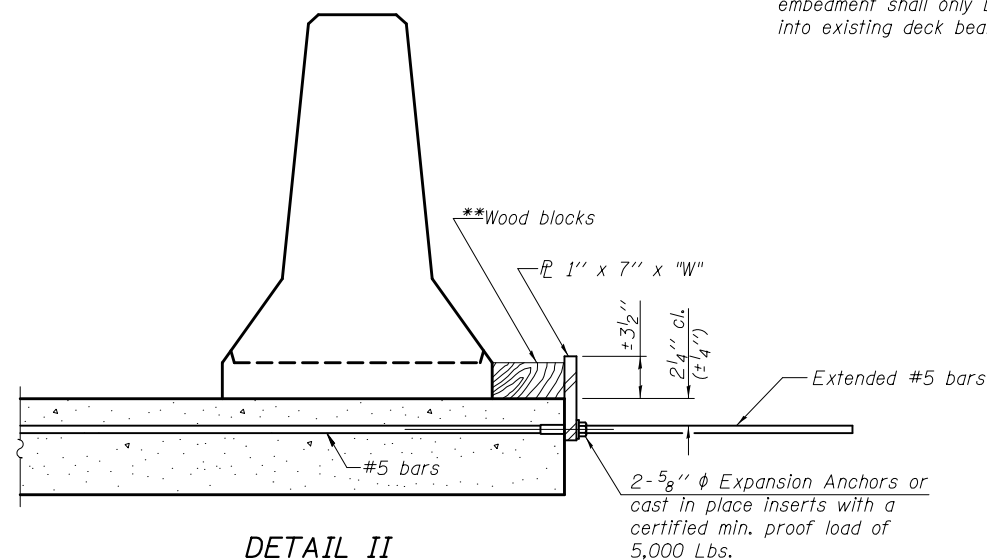
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

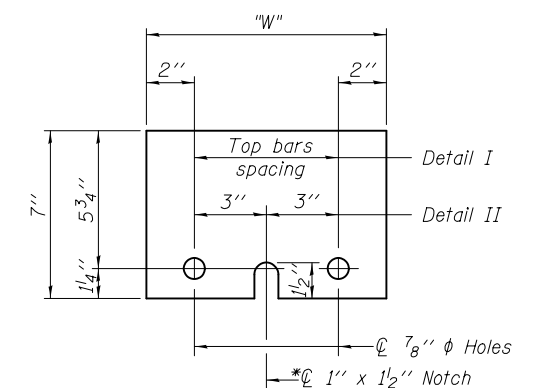
\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



**DETAIL I**



**DETAIL II**



**STEEL RETAINER PL 1" x 7" x "W"**

\* Required only with Detail II

\*\* Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"



R-27

7-1-10

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Frank W. Sharp	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - h.t. duong	PASSED - <i>Carl [Signature]</i>	REVISED
CHECKED - NRB/FWS/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

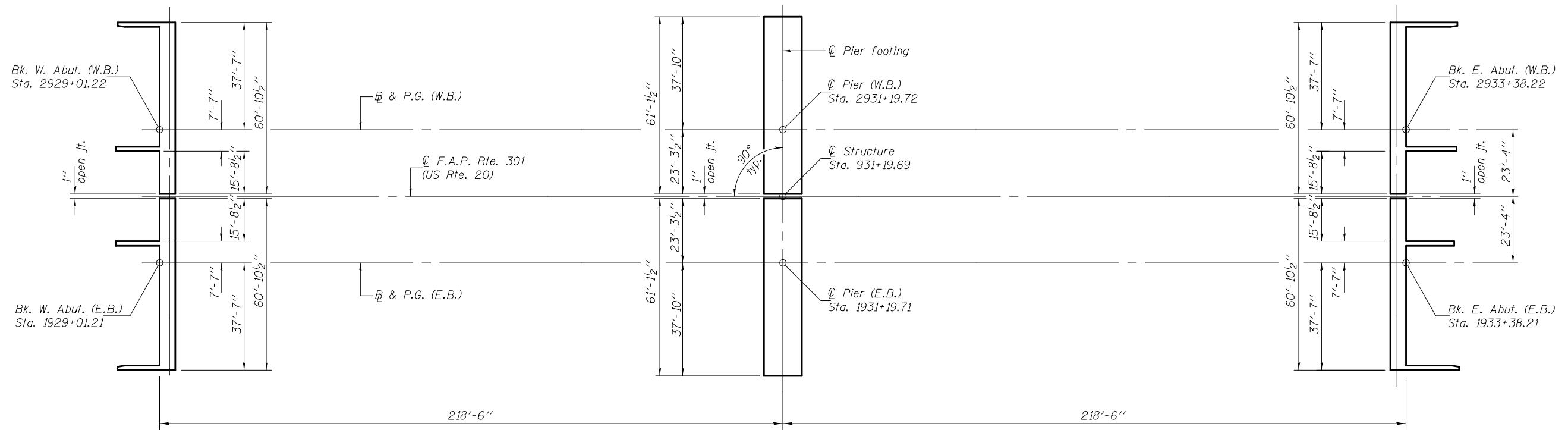
**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)**

SHEET NO. 4 OF 50 SHEETS

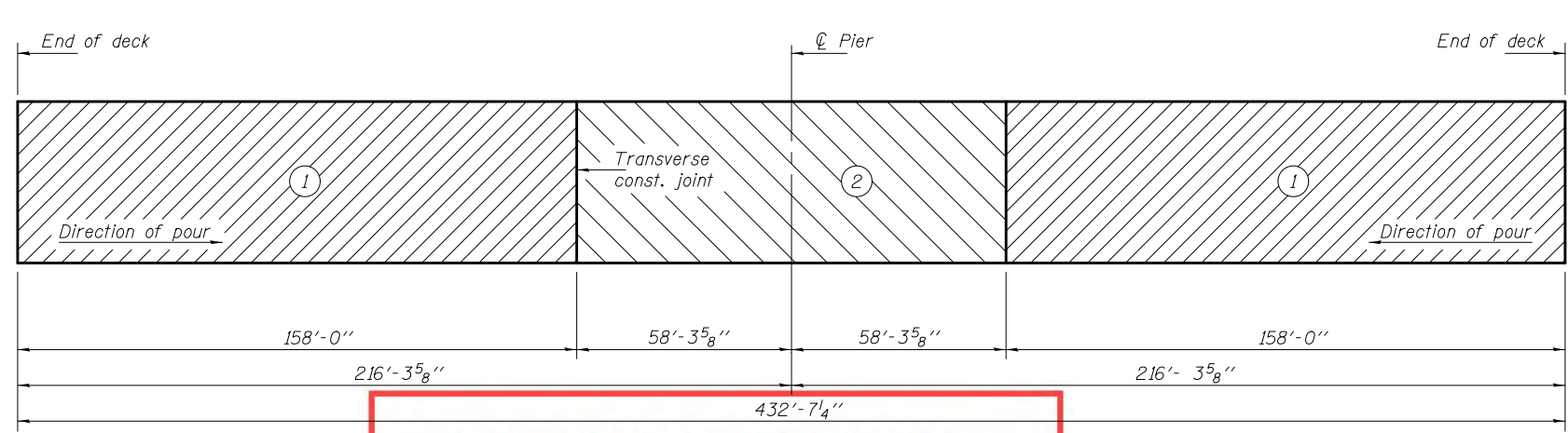
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				

ILLINOIS FED. AID PROJECT



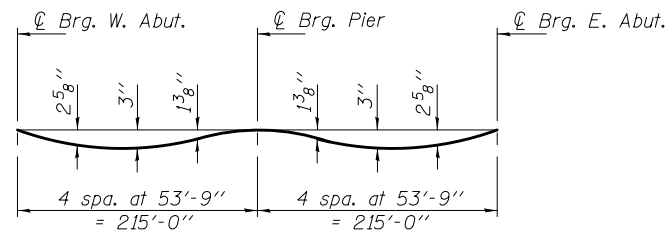


**FOOTING LAYOUT**



**PRE-FINAL**  
DECK POURING SEQUENCE

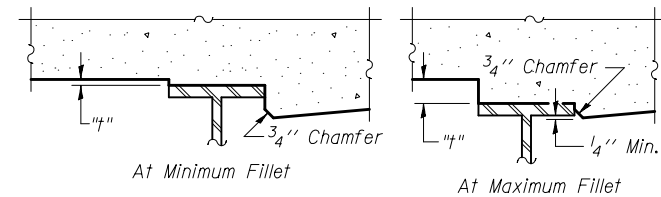
DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FOOTING LAYOUT STRUCTURE NO. 101-0197 (E.B.) &amp; 101-0198 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CHECKED - Frank W. Sharp	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED							
DRAWN - h.t. duong		REVISED							
CHECKED - NRB/FWS/GRA				SHEET NO. 5 OF 50 SHEETS	CONTRACT NO. 64D19 ILLINOIS FED. AID PROJECT				



**DEAD LOAD DEFLECTION DIAGRAM**

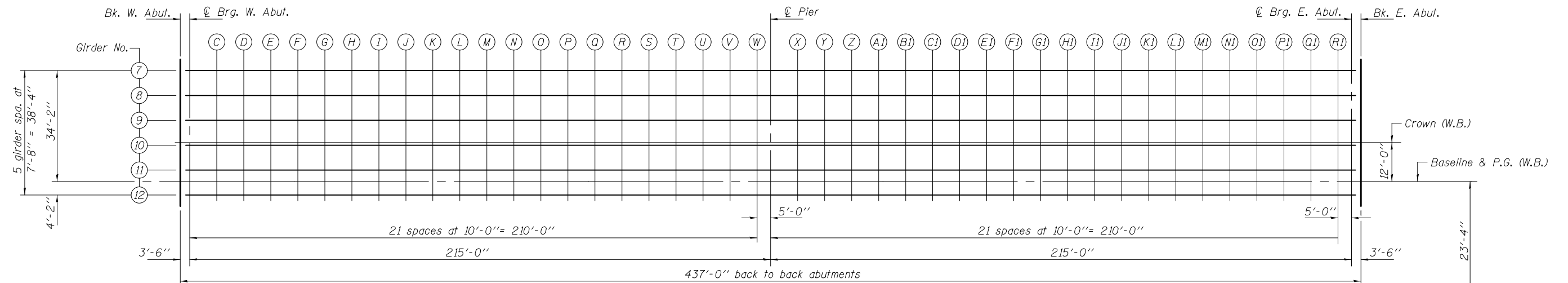
(Includes weight of concrete only.)

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 sheets 7 thru 12 of 50.

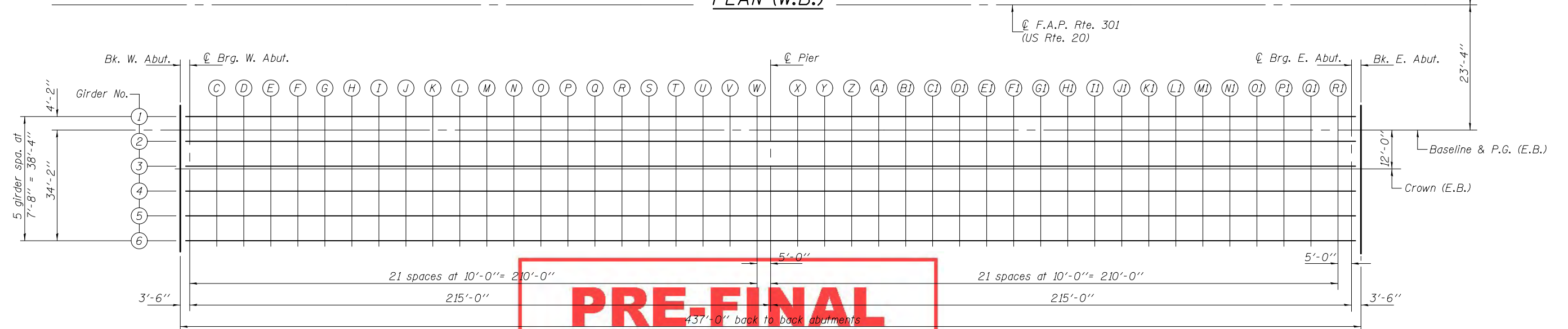


To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 7 thru 12 of 50, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**



**PLAN (W.B.)**



**PLAN (E.B.)**

DESIGNED - Nick R. Barnett  
 CHECKED - Frank W. Sharp  
 DRAWN - h.t. duong  
 CHECKED - NRB/FWS/GRA

EXAMINED - *Joanne F. [Signature]*  
 ACTING ENGINEER OF BRIDGE DESIGN  
 PASSED - *Carl [Signature]*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - \_\_\_\_\_  
 REVISED \_\_\_\_\_  
 REVISED \_\_\_\_\_

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
 STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)

SHEET NO. 6 OF 50 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				

ILLINOIS FED. AID PROJECT

**GIRDER 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192901.21	-4.17	710.89	710.89
☉ Brg. W. Abut.	192904.71	-4.17	710.91	710.91
C	192914.71	-4.17	710.95	711.00
D	192924.71	-4.17	711.00	711.09
E	192934.71	-4.17	711.05	711.18
F	192944.71	-4.17	711.10	711.27
G	192954.71	-4.17	711.15	711.35
H	192964.71	-4.17	711.20	711.42
I	192974.71	-4.17	711.25	711.48
J	192984.71	-4.17	711.30	711.53
K	192994.71	-4.17	711.35	711.59
L	193004.71	-4.17	711.40	711.64
M	193014.71	-4.17	711.44	711.69
N	193024.71	-4.17	711.49	711.71
O	193034.71	-4.17	711.54	711.73
P	193044.71	-4.17	711.59	711.76
Q	193054.71	-4.17	711.64	711.78
R	193064.71	-4.17	711.69	711.80
S	193074.71	-4.17	711.74	711.83
T	193084.71	-4.17	711.79	711.86
U	193094.71	-4.17	711.84	711.89
V	193104.71	-4.17	711.89	711.92
W	193114.71	-4.17	711.93	711.94
☉ Pier	193119.71	-4.17	711.96	711.96
X	193129.71	-4.17	712.01	712.03
Y	193139.71	-4.17	712.06	712.10
Z	193149.71	-4.17	712.11	712.17
A1	193159.71	-4.17	712.15	712.24
B1	193169.71	-4.17	712.20	712.31
C1	193179.71	-4.17	712.25	712.38
D1	193189.71	-4.17	712.30	712.45
E1	193199.71	-4.17	712.35	712.53
F1	193209.71	-4.17	712.40	712.60
G1	193219.71	-4.17	712.45	712.68
H1	193229.71	-4.17	712.50	712.75
I1	193239.71	-4.17	712.55	712.79
J1	193249.71	-4.17	712.60	712.83
K1	193259.71	-4.17	712.64	712.88
L1	193269.71	-4.17	712.69	712.92
M1	193279.71	-4.17	712.74	712.96
N1	193289.71	-4.17	712.79	712.98
O1	193299.71	-4.17	712.84	712.98
P1	193309.71	-4.17	712.89	712.99
Q1	193319.71	-4.17	712.94	713.00
R1	193329.71	-4.17	712.99	713.01
☉ Brg. E. Abut.	193334.71	-4.17	713.01	713.01
Bk. E. Abut.	193338.21	-4.17	713.03	713.03

**BASELINE & PROFILE GRADE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192901.21	0.00	710.97	710.97
☉ Brg. W. Abut.	192904.71	0.00	710.99	710.99
C	192914.71	0.00	711.04	711.08
D	192924.71	0.00	711.09	711.17
E	192934.71	0.00	711.14	711.26
F	192944.71	0.00	711.19	711.35
G	192954.71	0.00	711.24	711.44
H	192964.71	0.00	711.29	711.51
I	192974.71	0.00	711.33	711.56
J	192984.71	0.00	711.38	711.62
K	192994.71	0.00	711.43	711.67
L	193004.71	0.00	711.48	711.73
M	193014.71	0.00	711.53	711.77
N	193024.71	0.00	711.58	711.8
O	193034.71	0.00	711.63	711.82
P	193044.71	0.00	711.68	711.84
Q	193054.71	0.00	711.73	711.87
R	193064.71	0.00	711.78	711.89
S	193074.71	0.00	711.82	711.92
T	193084.71	0.00	711.87	711.95
U	193094.71	0.00	711.92	711.97
V	193104.71	0.00	711.97	712.00
W	193114.71	0.00	712.02	712.03
☉ Pier	193119.71	0.00	712.05	712.05
X	193129.71	0.00	712.09	712.11
Y	193139.71	0.00	712.14	712.18
Z	193149.71	0.00	712.19	712.25
A1	193159.71	0.00	712.24	712.32
B1	193169.71	0.00	712.29	712.39
C1	193179.71	0.00	712.34	712.47
D1	193189.71	0.00	712.39	712.54
E1	193199.71	0.00	712.44	712.62
F1	193209.71	0.00	712.49	712.69
G1	193219.71	0.00	712.54	712.77
H1	193229.71	0.00	712.58	712.83
I1	193239.71	0.00	712.63	712.88
J1	193249.71	0.00	712.68	712.92
K1	193259.71	0.00	712.73	712.96
L1	193269.71	0.00	712.78	713.01
M1	193279.71	0.00	712.83	713.05
N1	193289.71	0.00	712.88	713.06
O1	193299.71	0.00	712.93	713.07
P1	193309.71	0.00	712.98	713.08
Q1	193319.71	0.00	713.03	713.09
R1	193329.71	0.00	713.07	713.09
☉ Brg. E. Abut.	193334.71	0.00	713.10	713.10
Bk. E. Abut.	193338.21	0.00	713.12	713.12

**GIRDER 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192901.21	3.50	711.03	711.03
☉ Brg. W. Abut.	192904.71	3.50	711.05	711.05
C	192914.71	3.50	711.10	711.14
D	192924.71	3.50	711.14	711.23
E	192934.71	3.50	711.19	711.32
F	192944.71	3.50	711.24	711.41
G	192954.71	3.50	711.29	711.50
H	192964.71	3.50	711.34	711.56
I	192974.71	3.50	711.39	711.62
J	192984.71	3.50	711.44	711.67
K	192994.71	3.50	711.49	711.73
L	193004.71	3.50	711.54	711.78
M	193014.71	3.50	711.59	711.83
N	193024.71	3.50	711.63	711.85
O	193034.71	3.50	711.68	711.87
P	193044.71	3.50	711.73	711.90
Q	193054.71	3.50	711.78	711.92
R	193064.71	3.50	711.83	711.94
S	193074.71	3.50	711.88	711.97
T	193084.71	3.50	711.93	712.00
U	193094.71	3.50	711.98	712.03
V	193104.71	3.50	712.03	712.06
W	193114.71	3.50	712.08	712.09
☉ Pier	193119.71	3.50	712.10	712.10
X	193129.71	3.50	712.15	712.17
Y	193139.71	3.50	712.20	712.24
Z	193149.71	3.50	712.25	712.31
A1	193159.71	3.50	712.30	712.38
B1	193169.71	3.50	712.35	712.45
C1	193179.71	3.50	712.39	712.52
D1	193189.71	3.50	712.44	712.59
E1	193199.71	3.50	712.49	712.67
F1	193209.71	3.50	712.54	712.75
G1	193219.71	3.50	712.59	712.82
H1	193229.71	3.50	712.64	712.89
I1	193239.71	3.50	712.69	712.93
J1	193249.71	3.50	712.74	712.97
K1	193259.71	3.50	712.79	713.02
L1	193269.71	3.50	712.84	713.06
M1	193279.71	3.50	712.88	713.10
N1	193289.71	3.50	712.93	713.12
O1	193299.71	3.50	712.98	713.13
P1	193309.71	3.50	713.03	713.13
Q1	193319.71	3.50	713.08	713.14
R1	193329.71	3.50	713.13	713.15
☉ Brg. E. Abut.	193334.71	3.50	713.15	713.15
Bk. E. Abut.	193338.21	3.50	713.17	713.17

**PRE-FINAL**

**GIRDER 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192901.21	11.17	711.15	711.15
☉ Brg. W. Abut.	192904.71	11.17	711.17	711.17
C	192914.71	11.17	711.22	711.26
D	192924.71	11.17	711.26	711.35
E	192934.71	11.17	711.31	711.44
F	192944.71	11.17	711.36	711.53
G	192954.71	11.17	711.41	711.62
H	192964.71	11.17	711.46	711.68
I	192974.71	11.17	711.51	711.74
J	192984.71	11.17	711.56	711.79
K	192994.71	11.17	711.61	711.85
L	193004.71	11.17	711.66	711.90
M	193014.71	11.17	711.71	711.95
N	193024.71	11.17	711.75	711.97
O	193034.71	11.17	711.80	711.99
P	193044.71	11.17	711.85	712.02
Q	193054.71	11.17	711.90	712.04
R	193064.71	11.17	711.95	712.06
S	193074.71	11.17	712.00	712.09
T	193084.71	11.17	712.05	712.12
U	193094.71	11.17	712.10	712.15
V	193104.71	11.17	712.15	712.18
W	193114.71	11.17	712.20	712.21
☉ Pier	193119.71	11.17	712.22	712.22
X	193129.71	11.17	712.27	712.29
Y	193139.71	11.17	712.32	712.36
Z	193149.71	11.17	712.37	712.43
A1	193159.71	11.17	712.42	712.50
B1	193169.71	11.17	712.46	712.57
C1	193179.71	11.17	712.51	712.64
D1	193189.71	11.17	712.56	712.71
E1	193199.71	11.17	712.61	712.79
F1	193209.71	11.17	712.66	712.86
G1	193219.71	11.17	712.71	712.94
H1	193229.71	11.17	712.76	713.01
I1	193239.71	11.17	712.81	713.05
J1	193249.71	11.17	712.86	713.09
K1	193259.71	11.17	712.91	713.14
L1	193269.71	11.17	712.95	713.18
M1	193279.71	11.17	713.00	713.22
N1	193289.71	11.17	713.05	713.24
O1	193299.71	11.17	713.10	713.24
P1	193309.71	11.17	713.15	713.25
Q1	193319.71	11.17	713.20	713.26
R1	193329.71	11.17	713.25	713.27
☉ Brg. E. Abut.	193334.71	11.17	713.27	713.27
Bk. E. Abut.	193338.21	11.17	713.29	713.29

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192901.21	12.00	711.16	711.16
☉ Brg. W. Abut.	192904.71	12.00	711.18	711.18
C	192914.71	12.00	711.23	711.27
D	192924.71	12.00	711.28	711.36
E	192934.71	12.00	711.33	711.45
F	192944.71	12.00	711.38	711.54
G	192954.71	12.00	711.42	711.63
H	192964.71	12.00	711.47	711.70
I	192974.71	12.00	711.52	711.75
J	192984.71	12.00	711.57	711.81
K	192994.71	12.00	711.62	711.86
L	193004.71	12.00	711.67	711.91
M	193014.71	12.00	711.72	711.96
N	193024.71	12.00	711.77	711.98
O	193034.71	12.00	711.82	712.01
P	193044.71	12.00	711.87	712.03
Q	193054.71	12.00	711.91	712.05
R	193064.71	12.00	711.96	712.08
S	193074.71	12.00	712.01	712.10
T	193084.71	12.00	712.06	712.13
U	193094.71	12.00	712.11	712.16
V	193104.71	12.00	712.16	712.19
W	193114.71	12.00	712.21	712.22
☉ Pier	193119.71	12.00	712.23	712.23
X	193129.71	12.00	712.28	712.30
Y	193139.71	12.00	712.33	712.37
Z	193149.71	12.00	712.38	712.44
A1	193159.71	12.00	712.43	712.51
B1	193169.71	12.00	712.48	712.58
C1	193179.71	12.00	712.53	712.65
D1	193189.71	12.00	712.58	712.73
E1	193199.71	12.00	712.62	712.80
F1	193209.71	12.00	712.67	712.88
G1	193219.71	12.00	712.72	712.95
H1	193229.71	12.00	712.77	713.02
I1	193239.71	12.00	712.82	713.06
J1	193249.71	12.00	712.87	713.11
K1	193259.71	12.00	712.92	713.15
L1	193269.71	12.00	712.97	713.19
M1	193279.71	12.00	713.02	713.24
N1	193289.71	12.00	713.07	713.25
O1	193299.71	12.00	713.11	713.26
P1	193309.71	12.00	713.16	713.27
Q1	193319.71	12.00	713.21	713.27
R1	193329.71	12.00	713.26	713.28
☉ Brg. E. Abut.	193334.71	12.00	713.29	713.29
Bk. E. Abut.	193338.21	12.00	713.30	713.30

**GIRDER 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192901.21	18.83	711.06	711.06
☉ Brg. W. Abut.	192904.71	18.83	711.07	711.07
C	192914.71	18.83	711.12	711.16
D	192924.71	18.83	711.17	711.25
E	192934.71	18.83	711.22	711.34
F	192944.71	18.83	711.27	711.43
G	192954.71	18.83	711.32	711.52
H	192964.71	18.83	711.37	711.59
I	192974.71	18.83	711.42	711.64
J	192984.71	18.83	711.46	711.70
K	192994.71	18.83	711.51	711.75
L	193004.71	18.83	711.56	711.81
M	193014.71	18.83	711.61	711.86
N	193024.71	18.83	711.66	711.88
O	193034.71	18.83	711.71	711.9
P	193044.71	18.83	711.76	711.92
Q	193054.71	18.83	711.81	711.95
R	193064.71	18.83	711.86	711.97
S	193074.71	18.83	711.91	712.00
T	193084.71	18.83	711.95	712.03
U	193094.71	18.83	712.00	712.05
V	193104.71	18.83	712.05	712.08
W	193114.71	18.83	712.10	712.11
☉ Pier	193119.71	18.83	712.13	712.13
X	193129.71	18.83	712.18	712.20
Y	193139.71	18.83	712.22	712.26
Z	193149.71	18.83	712.27	712.33
A1	193159.71	18.83	712.32	712.40
B1	193169.71	18.83	712.37	712.47
C1	193179.71	18.83	712.42	712.55
D1	193189.71	18.83	712.47	712.62
E1	193199.71	18.83	712.52	712.70
F1	193209.71	18.83	712.57	712.77
G1	193219.71	18.83	712.62	712.85
H1	193229.71	18.83	712.67	712.91
I1	193239.71	18.83	712.71	712.96
J1	193249.71	18.83	712.76	713.00
K1	193259.71	18.83	712.81	713.04
L1	193269.71	18.83	712.86	713.09
M1	193279.71	18.83	712.91	713.13
N1	193289.71	18.83	712.96	713.14
O1	193299.71	18.83	713.01	713.15
P1	193309.71	18.83	713.06	713.16
Q1	193319.71	18.83	713.11	713.17
R1	193329.71	18.83	713.16	713.18
☉ Brg. E. Abut.	193334.71	18.83	713.18	713.18
Bk. E. Abut.	193338.21	18.83	713.20	713.20

**PRE-FINAL**

**GIRDER 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192901.21	26.50	710.92	710.92
☉ Brg. W. Abut.	192904.71	26.50	710.94	710.94
C	192914.71	26.50	710.99	711.03
D	192924.71	26.50	711.04	711.12
E	192934.71	26.50	711.09	711.21
F	192944.71	26.50	711.14	711.30
G	192954.71	26.50	711.18	711.39
H	192964.71	26.50	711.23	711.46
I	192974.71	26.50	711.28	711.51
J	192984.71	26.50	711.33	711.57
K	192994.71	26.50	711.38	711.62
L	193004.71	26.50	711.43	711.68
M	193014.71	26.50	711.48	711.72
N	193024.71	26.50	711.53	711.75
O	193034.71	26.50	711.58	711.77
P	193044.71	26.50	711.63	711.79
Q	193054.71	26.50	711.67	711.81
R	193064.71	26.50	711.72	711.84
S	193074.71	26.50	711.77	711.86
T	193084.71	26.50	711.82	711.89
U	193094.71	26.50	711.87	711.92
V	193104.71	26.50	711.92	711.95
W	193114.71	26.50	711.97	711.98
☉ Pier	193119.71	26.50	711.99	711.99
X	193129.71	26.50	712.04	712.06
Y	193139.71	26.50	712.09	712.13
Z	193149.71	26.50	712.14	712.20
A1	193159.71	26.50	712.19	712.27
B1	193169.71	26.50	712.24	712.34
C1	193179.71	26.50	712.29	712.41
D1	193189.71	26.50	712.34	712.49
E1	193199.71	26.50	712.39	712.56
F1	193209.71	26.50	712.43	712.64
G1	193219.71	26.50	712.48	712.71
H1	193229.71	26.50	712.53	712.78
I1	193239.71	26.50	712.58	712.82
J1	193249.71	26.50	712.63	712.87
K1	193259.71	26.50	712.68	712.91
L1	193269.71	26.50	712.73	712.95
M1	193279.71	26.50	712.78	713.00
N1	193289.71	26.50	712.83	713.01
O1	193299.71	26.50	712.88	713.02
P1	193309.71	26.50	712.92	713.03
Q1	193319.71	26.50	712.97	713.03
R1	193329.71	26.50	713.02	713.04
☉ Brg. E. Abut.	193334.71	26.50	713.05	713.05
Bk. E. Abut.	193338.21	26.50	713.06	713.06

**GIRDER 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	192901.21	34.17	710.76	710.76
☉ Brg. W. Abut.	192904.71	34.17	710.78	710.78
C	192914.71	34.17	710.83	710.87
D	192924.71	34.17	710.88	710.96
E	192934.71	34.17	710.93	711.05
F	192944.71	34.17	710.98	711.14
G	192954.71	34.17	711.03	711.23
H	192964.71	34.17	711.07	711.30
I	192974.71	34.17	711.12	711.35
J	192984.71	34.17	711.17	711.41
K	192994.71	34.17	711.22	711.46
L	193004.71	34.17	711.27	711.52
M	193014.71	34.17	711.32	711.56
N	193024.71	34.17	711.37	711.59
O	193034.71	34.17	711.42	711.61
P	193044.71	34.17	711.47	711.63
Q	193054.71	34.17	711.52	711.65
R	193064.71	34.17	711.56	711.68
S	193074.71	34.17	711.61	711.70
T	193084.71	34.17	711.66	711.73
U	193094.71	34.17	711.71	711.76
V	193104.71	34.17	711.76	711.79
W	193114.71	34.17	711.81	711.82
☉ Pier	193119.71	34.17	711.83	711.83
X	193129.71	34.17	711.88	711.90
Y	193139.71	34.17	711.93	711.97
Z	193149.71	34.17	711.98	712.04
A1	193159.71	34.17	712.03	712.11
B1	193169.71	34.17	712.08	712.18
C1	193179.71	34.17	712.13	712.25
D1	193189.71	34.17	712.18	712.33
E1	193199.71	34.17	712.23	712.40
F1	193209.71	34.17	712.28	712.48
G1	193219.71	34.17	712.32	712.55
H1	193229.71	34.17	712.37	712.62
I1	193239.71	34.17	712.42	712.67
J1	193249.71	34.17	712.47	712.71
K1	193259.71	34.17	712.52	712.75
L1	193269.71	34.17	712.57	712.80
M1	193279.71	34.17	712.62	712.84
N1	193289.71	34.17	712.67	712.85
O1	193299.71	34.17	712.72	712.86
P1	193309.71	34.17	712.77	712.87
Q1	193319.71	34.17	712.81	712.88
R1	193329.71	34.17	712.86	712.88
☉ Brg. E. Abut.	193334.71	34.17	712.89	712.89
Bk. E. Abut.	193338.21	34.17	712.90	712.90

**PRE-FINAL**

DESIGNED - Nick R. Barnett  
 CHECKED - Frank W. Sharp  
 DRAWN - h.t. duong  
 CHECKED - NRB/FWS/GRA

EXAMINED  
 PASSED  
 ACTING ENGINEER OF BRIDGE DESIGN  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE -  
 REVISED  
 REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS (E.B.)  
 STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
SHEET NO. 9 OF 50 SHEETS				
ILLINOIS FED. AID PROJECT				



**GIRDER 7**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292901.22	-34.17	710.76	710.76
☉ Brg. W. Abut.	292904.72	-34.17	710.78	710.78
C	292914.72	-34.17	710.83	710.87
D	292924.72	-34.17	710.88	710.96
E	292934.72	-34.17	710.93	711.05
F	292944.72	-34.17	710.98	711.14
G	292954.72	-34.17	711.03	711.23
H	292964.72	-34.17	711.07	711.30
I	292974.72	-34.17	711.12	711.35
J	292984.72	-34.17	711.17	711.41
K	292994.72	-34.17	711.22	711.46
L	293004.72	-34.17	711.27	711.52
M	293014.72	-34.17	711.32	711.56
N	293024.72	-34.17	711.37	711.59
O	293034.72	-34.17	711.42	711.61
P	293044.72	-34.17	711.47	711.63
Q	293054.72	-34.17	711.52	711.65
R	293064.72	-34.17	711.56	711.68
S	293074.72	-34.17	711.61	711.70
T	293084.72	-34.17	711.66	711.73
U	293094.72	-34.17	711.71	711.76
V	293104.72	-34.17	711.76	711.79
W	293114.72	-34.17	711.81	711.82
☉ Pier	293119.72	-34.17	711.83	711.83
X	293129.72	-34.17	711.88	711.90
Y	293139.72	-34.17	711.93	711.97
Z	293149.72	-34.17	711.98	712.04
A1	293159.72	-34.17	712.03	712.11
B1	293169.72	-34.17	712.08	712.18
C1	293179.72	-34.17	712.13	712.25
D1	293189.72	-34.17	712.18	712.33
E1	293199.72	-34.17	712.23	712.40
F1	293209.72	-34.17	712.28	712.48
G1	293219.72	-34.17	712.32	712.55
H1	293229.72	-34.17	712.37	712.62
I1	293239.72	-34.17	712.42	712.67
J1	293249.72	-34.17	712.47	712.71
K1	293259.72	-34.17	712.52	712.75
L1	293269.72	-34.17	712.57	712.80
M1	293279.72	-34.17	712.62	712.84
N1	293289.72	-34.17	712.67	712.85
O1	293299.72	-34.17	712.72	712.86
P1	293309.72	-34.17	712.77	712.87
Q1	293319.72	-34.17	712.81	712.88
R1	293329.72	-34.17	712.86	712.88
☉ Brg. E. Abut.	293334.72	-34.17	712.89	712.89
Bk. E. Abut.	293338.22	-34.17	712.90	712.90

**GIRDER 8**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292901.22	-26.5	710.92	710.92
☉ Brg. W. Abut.	292904.72	-26.5	710.94	710.94
C	292914.72	-26.5	710.99	711.03
D	292924.72	-26.5	711.04	711.12
E	292934.72	-26.5	711.09	711.21
F	292944.72	-26.5	711.14	711.30
G	292954.72	-26.5	711.19	711.39
H	292964.72	-26.5	711.23	711.46
I	292974.72	-26.5	711.28	711.51
J	292984.72	-26.5	711.33	711.57
K	292994.72	-26.5	711.38	711.62
L	293004.72	-26.5	711.43	711.68
M	293014.72	-26.5	711.48	711.72
N	293024.72	-26.5	711.53	711.75
O	293034.72	-26.5	711.58	711.77
P	293044.72	-26.5	711.63	711.79
Q	293054.72	-26.5	711.68	711.81
R	293064.72	-26.5	711.72	711.84
S	293074.72	-26.5	711.77	711.86
T	293084.72	-26.5	711.82	711.89
U	293094.72	-26.5	711.87	711.92
V	293104.72	-26.5	711.92	711.95
W	293114.72	-26.5	711.97	711.98
☉ Pier	293119.72	-26.5	711.99	711.99
X	293129.72	-26.5	712.04	712.06
Y	293139.72	-26.5	712.09	712.13
Z	293149.72	-26.5	712.14	712.20
A1	293159.72	-26.5	712.19	712.27
B1	293169.72	-26.5	712.24	712.34
C1	293179.72	-26.5	712.29	712.41
D1	293189.72	-26.5	712.34	712.49
E1	293199.72	-26.5	712.39	712.56
F1	293209.72	-26.5	712.43	712.64
G1	293219.72	-26.5	712.48	712.71
H1	293229.72	-26.5	712.53	712.78
I1	293239.72	-26.5	712.58	712.82
J1	293249.72	-26.5	712.63	712.87
K1	293259.72	-26.5	712.68	712.91
L1	293269.72	-26.5	712.73	712.95
M1	293279.72	-26.5	712.78	713.00
N1	293289.72	-26.5	712.83	713.01
O1	293299.72	-26.5	712.88	713.02
P1	293309.72	-26.5	712.92	713.03
Q1	293319.72	-26.5	712.97	713.03
R1	293329.72	-26.5	713.02	713.04
☉ Brg. E. Abut.	293334.72	-26.5	713.05	713.05
Bk. E. Abut.	293338.22	-26.5	713.06	713.06

**GIRDER 9**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292901.22	-18.83	711.06	711.06
☉ Brg. W. Abut.	292904.72	-18.83	711.07	711.07
C	292914.72	-18.83	711.12	711.16
D	292924.72	-18.83	711.17	711.25
E	292934.72	-18.83	711.22	711.34
F	292944.72	-18.83	711.27	711.43
G	292954.72	-18.83	711.32	711.52
H	292964.72	-18.83	711.37	711.59
I	292974.72	-18.83	711.42	711.64
J	292984.72	-18.83	711.46	711.70
K	292994.72	-18.83	711.51	711.75
L	293004.72	-18.83	711.56	711.81
M	293014.72	-18.83	711.61	711.86
N	293024.72	-18.83	711.66	711.88
O	293034.72	-18.83	711.71	711.90
P	293044.72	-18.83	711.76	711.92
Q	293054.72	-18.83	711.81	711.95
R	293064.72	-18.83	711.86	711.97
S	293074.72	-18.83	711.91	712.00
T	293084.72	-18.83	711.95	712.03
U	293094.72	-18.83	712.00	712.05
V	293104.72	-18.83	712.05	712.08
W	293114.72	-18.83	712.10	712.11
☉ Pier	293119.72	-18.83	712.13	712.13
X	293129.72	-18.83	712.18	712.20
Y	293139.72	-18.83	712.22	712.26
Z	293149.72	-18.83	712.27	712.33
A1	293159.72	-18.83	712.32	712.40
B1	293169.72	-18.83	712.37	712.47
C1	293179.72	-18.83	712.42	712.55
D1	293189.72	-18.83	712.47	712.62
E1	293199.72	-18.83	712.52	712.70
F1	293209.72	-18.83	712.57	712.77
G1	293219.72	-18.83	712.62	712.85
H1	293229.72	-18.83	712.67	712.91
I1	293239.72	-18.83	712.71	712.96
J1	293249.72	-18.83	712.76	713.00
K1	293259.72	-18.83	712.81	713.04
L1	293269.72	-18.83	712.86	713.09
M1	293279.72	-18.83	712.91	713.13
N1	293289.72	-18.83	712.96	713.14
O1	293299.72	-18.83	713.01	713.15
P1	293309.72	-18.83	713.06	713.16
Q1	293319.72	-18.83	713.11	713.17
R1	293329.72	-18.83	713.16	713.18
☉ Brg. E. Abut.	293334.72	-18.83	713.18	713.18
Bk. E. Abut.	293338.22	-18.83	713.20	713.20

PRE-FINAL

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292901.22	-12.00	711.16	711.16
☉ Brg. W. Abut.	292904.72	-12.00	711.18	711.18
C	292914.72	-12.00	711.23	711.27
D	292924.72	-12.00	711.28	711.36
E	292934.72	-12.00	711.33	711.45
F	292944.72	-12.00	711.38	711.54
G	292954.72	-12.00	711.42	711.63
H	292964.72	-12.00	711.47	711.70
I	292974.72	-12.00	711.52	711.75
J	292984.72	-12.00	711.57	711.81
K	292994.72	-12.00	711.62	711.86
L	293004.72	-12.00	711.67	711.92
M	293014.72	-12.00	711.72	711.96
N	293024.72	-12.00	711.77	711.98
O	293034.72	-12.00	711.82	712.01
P	293044.72	-12.00	711.87	712.03
Q	293054.72	-12.00	711.91	712.05
R	293064.72	-12.00	711.96	712.08
S	293074.72	-12.00	712.01	712.10
T	293084.72	-12.00	712.06	712.13
U	293094.72	-12.00	712.11	712.16
V	293104.72	-12.00	712.16	712.19
W	293114.72	-12.00	712.21	712.22
☉ Pier	293119.72	-12.00	712.23	712.23
X	293129.72	-12.00	712.28	712.30
Y	293139.72	-12.00	712.33	712.37
Z	293149.72	-12.00	712.38	712.44
A1	293159.72	-12.00	712.43	712.51
B1	293169.72	-12.00	712.48	712.58
C1	293179.72	-12.00	712.53	712.65
D1	293189.72	-12.00	712.58	712.73
E1	293199.72	-12.00	712.62	712.80
F1	293209.72	-12.00	712.67	712.88
G1	293219.72	-12.00	712.72	712.95
H1	293229.72	-12.00	712.77	713.02
I1	293239.72	-12.00	712.82	713.06
J1	293249.72	-12.00	712.87	713.11
K1	293259.72	-12.00	712.92	713.15
L1	293269.72	-12.00	712.97	713.19
M1	293279.72	-12.00	713.02	713.24
N1	293289.72	-12.00	713.07	713.25
O1	293299.72	-12.00	713.11	713.26
P1	293309.72	-12.00	713.16	713.27
Q1	293319.72	-12.00	713.21	713.27
R1	293329.72	-12.00	713.26	713.28
☉ Brg. E. Abut.	293334.72	-12.00	713.29	713.29
Bk. E. Abut.	293338.22	-12.00	713.30	713.30

**GIRDER 10**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292901.22	-11.17	711.15	711.15
☉ Brg. W. Abut.	292904.72	-11.17	711.17	711.17
C	292914.72	-11.17	711.22	711.26
D	292924.72	-11.17	711.26	711.35
E	292934.72	-11.17	711.31	711.44
F	292944.72	-11.17	711.36	711.53
G	292954.72	-11.17	711.41	711.62
H	292964.72	-11.17	711.46	711.68
I	292974.72	-11.17	711.51	711.74
J	292984.72	-11.17	711.56	711.79
K	292994.72	-11.17	711.61	711.85
L	293004.72	-11.17	711.66	711.90
M	293014.72	-11.17	711.71	711.95
N	293024.72	-11.17	711.75	711.97
O	293034.72	-11.17	711.80	711.99
P	293044.72	-11.17	711.85	712.02
Q	293054.72	-11.17	711.90	712.04
R	293064.72	-11.17	711.95	712.06
S	293074.72	-11.17	712.00	712.09
T	293084.72	-11.17	712.05	712.12
U	293094.72	-11.17	712.10	712.15
V	293104.72	-11.17	712.15	712.18
W	293114.72	-11.17	712.20	712.21
☉ Pier	293119.72	-11.17	712.22	712.22
X	293129.72	-11.17	712.27	712.29
Y	293139.72	-11.17	712.32	712.36
Z	293149.72	-11.17	712.37	712.43
A1	293159.72	-11.17	712.42	712.50
B1	293169.72	-11.17	712.46	712.57
C1	293179.72	-11.17	712.51	712.64
D1	293189.72	-11.17	712.56	712.71
E1	293199.72	-11.17	712.61	712.79
F1	293209.72	-11.17	712.66	712.86
G1	293219.72	-11.17	712.71	712.94
H1	293229.72	-11.17	712.76	713.01
I1	293239.72	-11.17	712.81	713.05
J1	293249.72	-11.17	712.86	713.09
K1	293259.72	-11.17	712.91	713.14
L1	293269.72	-11.17	712.95	713.18
M1	293279.72	-11.17	713.00	713.22
N1	293289.72	-11.17	713.05	713.24
O1	293299.72	-11.17	713.10	713.24
P1	293309.72	-11.17	713.15	713.25
Q1	293319.72	-11.17	713.20	713.26
R1	293329.72	-11.17	713.25	713.27
☉ Brg. E. Abut.	293334.72	-11.17	713.27	713.27
Bk. E. Abut.	293338.22	-11.17	713.29	713.29

**GIRDER 11**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292901.22	-3.50	711.03	711.03
☉ Brg. W. Abut.	292904.72	-3.50	711.05	711.05
C	292914.72	-3.50	711.10	711.14
D	292924.72	-3.50	711.14	711.23
E	292934.72	-3.50	711.19	711.32
F	292944.72	-3.50	711.24	711.41
G	292954.72	-3.50	711.29	711.50
H	292964.72	-3.50	711.34	711.56
I	292974.72	-3.50	711.39	711.62
J	292984.72	-3.50	711.44	711.67
K	292994.72	-3.50	711.49	711.73
L	293004.72	-3.50	711.54	711.78
M	293014.72	-3.50	711.59	711.83
N	293024.72	-3.50	711.63	711.85
O	293034.72	-3.50	711.68	711.87
P	293044.72	-3.50	711.73	711.90
Q	293054.72	-3.50	711.78	711.92
R	293064.72	-3.50	711.83	711.94
S	293074.72	-3.50	711.88	711.97
T	293084.72	-3.50	711.93	712.00
U	293094.72	-3.50	711.98	712.03
V	293104.72	-3.50	712.03	712.06
W	293114.72	-3.50	712.08	712.09
☉ Pier	293119.72	-3.50	712.10	712.10
X	293129.72	-3.50	712.15	712.17
Y	293139.72	-3.50	712.20	712.24
Z	293149.72	-3.50	712.25	712.31
A1	293159.72	-3.50	712.30	712.38
B1	293169.72	-3.50	712.35	712.45
C1	293179.72	-3.50	712.39	712.52
D1	293189.72	-3.50	712.44	712.59
E1	293199.72	-3.50	712.49	712.67
F1	293209.72	-3.50	712.54	712.75
G1	293219.72	-3.50	712.59	712.82
H1	293229.72	-3.50	712.64	712.89
I1	293239.72	-3.50	712.69	712.93
J1	293249.72	-3.50	712.74	712.97
K1	293259.72	-3.50	712.79	713.02
L1	293269.72	-3.50	712.84	713.06
M1	293279.72	-3.50	712.88	713.10
N1	293289.72	-3.50	712.93	713.12
O1	293299.72	-3.50	712.98	713.13
P1	293309.72	-3.50	713.03	713.13
Q1	293319.72	-3.50	713.08	713.14
R1	293329.72	-3.50	713.13	713.15
☉ Brg. E. Abut.	293334.72	-3.50	713.15	713.15
Bk. E. Abut.	293338.22	-3.50	713.17	713.17

**PRE-FINAL**

**BASELINE & PROFILE GRADE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292901.22	0.00	710.97	710.97
☉ Brg. W. Abut.	292904.72	0.00	710.99	710.99
C	292914.72	0.00	711.04	711.08
D	292924.72	0.00	711.09	711.17
E	292934.72	0.00	711.14	711.26
F	292944.72	0.00	711.19	711.35
G	292954.72	0.00	711.24	711.44
H	292964.72	0.00	711.29	711.51
I	292974.72	0.00	711.34	711.56
J	292984.72	0.00	711.38	711.62
K	292994.72	0.00	711.43	711.67
L	293004.72	0.00	711.48	711.73
M	293014.72	0.00	711.53	711.77
N	293024.72	0.00	711.58	711.80
O	293034.72	0.00	711.63	711.82
P	293044.72	0.00	711.68	711.84
Q	293054.72	0.00	711.73	711.87
R	293064.72	0.00	711.78	711.89
S	293074.72	0.00	711.83	711.92
T	293084.72	0.00	711.87	711.95
U	293094.72	0.00	711.92	711.97
V	293104.72	0.00	711.97	712.00
W	293114.72	0.00	712.02	712.03
☉ Pier	293119.72	0.00	712.05	712.05
X	293129.72	0.00	712.09	712.11
Y	293139.72	0.00	712.14	712.18
Z	293149.72	0.00	712.19	712.25
A1	293159.72	0.00	712.24	712.32
B1	293169.72	0.00	712.29	712.39
C1	293179.72	0.00	712.34	712.47
D1	293189.72	0.00	712.39	712.54
E1	293199.72	0.00	712.44	712.62
F1	293209.72	0.00	712.49	712.69
G1	293219.72	0.00	712.54	712.77
H1	293229.72	0.00	712.58	712.83
I1	293239.72	0.00	712.63	712.88
J1	293249.72	0.00	712.68	712.92
K1	293259.72	0.00	712.73	712.96
L1	293269.72	0.00	712.78	713.01
M1	293279.72	0.00	712.83	713.05
N1	293289.72	0.00	712.88	713.06
O1	293299.72	0.00	712.93	713.07
P1	293309.72	0.00	712.98	713.08
Q1	293319.72	0.00	713.03	713.09
R1	293329.72	0.00	713.07	713.09
☉ Brg. E. Abut.	293334.72	0.00	713.10	713.10
Bk. E. Abut.	293338.22	0.00	713.12	713.12

**GIRDER 12**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	292901.22	4.17	710.89	710.89
☉ Brg. W. Abut.	292904.72	4.17	710.91	710.91
C	292914.72	4.17	710.95	711.00
D	292924.72	4.17	711.00	711.09
E	292934.72	4.17	711.05	711.18
F	292944.72	4.17	711.10	711.27
G	292954.72	4.17	711.15	711.36
H	292964.72	4.17	711.2	711.42
I	292974.72	4.17	711.25	711.48
J	292984.72	4.17	711.30	711.53
K	292994.72	4.17	711.35	711.59
L	293004.72	4.17	711.40	711.64
M	293014.72	4.17	711.44	711.69
N	293024.72	4.17	711.49	711.71
O	293034.72	4.17	711.54	711.73
P	293044.72	4.17	711.59	711.76
Q	293054.72	4.17	711.64	711.78
R	293064.72	4.17	711.69	711.80
S	293074.72	4.17	711.74	711.83
T	293084.72	4.17	711.79	711.86
U	293094.72	4.17	711.84	711.89
V	293104.72	4.17	711.89	711.92
W	293114.72	4.17	711.93	711.94
☉ Pier	293119.72	4.17	711.96	711.96
X	293129.72	4.17	712.01	712.03
Y	293139.72	4.17	712.06	712.10
Z	293149.72	4.17	712.11	712.17
A1	293159.72	4.17	712.15	712.24
B1	293169.72	4.17	712.20	712.31
C1	293179.72	4.17	712.25	712.38
D1	293189.72	4.17	712.30	712.45
E1	293199.72	4.17	712.35	712.53
F1	293209.72	4.17	712.40	712.60
G1	293219.72	4.17	712.45	712.68
H1	293229.72	4.17	712.50	712.75
I1	293239.72	4.17	712.55	712.79
J1	293249.72	4.17	712.60	712.83
K1	293259.72	4.17	712.64	712.88
L1	293269.72	4.17	712.69	712.92
M1	293279.72	4.17	712.74	712.96
N1	293289.72	4.17	712.79	712.98
O1	293299.72	4.17	712.84	712.98
P1	293309.72	4.17	712.89	712.99
Q1	293319.72	4.17	712.94	713.00
R1	293329.72	4.17	712.99	713.01
☉ Brg. E. Abut.	293334.72	4.17	713.01	713.01
Bk. E. Abut.	293338.22	4.17	713.03	713.03

**PRE-FINAL**

DESIGNED - Nick R. Barnett  
 CHECKED - Frank W. Sharp  
 DRAWN - h.t. duong  
 CHECKED - NRB/FWS/GRA

EXAMINED *Joanne F. [Signature]*  
 ACTING ENGINEER OF BRIDGE DESIGN  
 PASSED *Carl [Signature]*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - \_\_\_\_\_  
 REVISED \_\_\_\_\_  
 REVISED \_\_\_\_\_

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS (W.B.)  
 STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				

**NORTH CURB LINE**

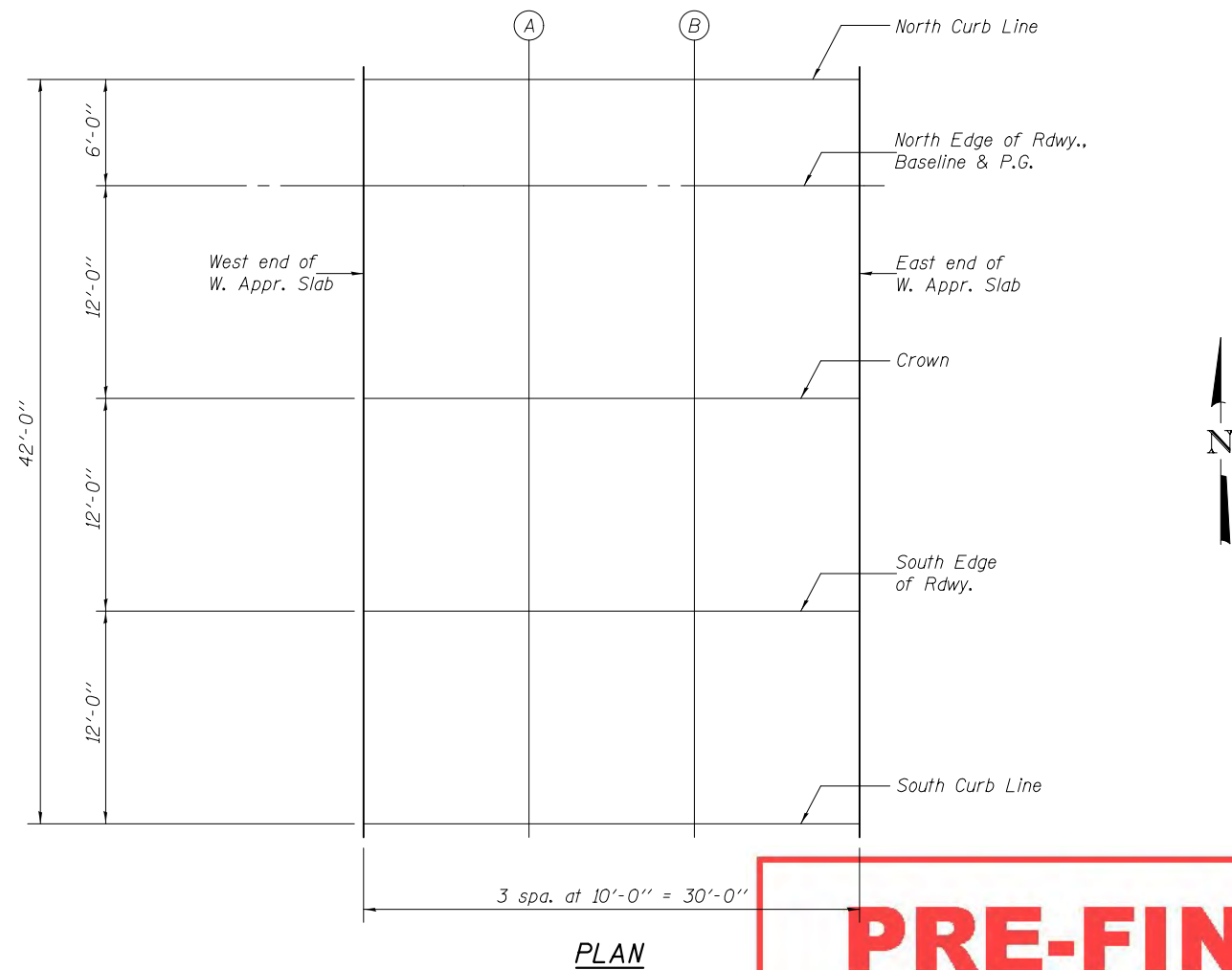
Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	192871.71	-6.00	710.71
A	192881.71	-6.00	710.75
B	192891.71	-6.00	710.80
East end of W. Appr. Slab	192901.71	-6.00	710.85

**NORTH EDGE OF RDWY., BASELINE & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	192871.71	0.00	710.83
A	192881.71	0.00	710.88
B	192891.71	0.00	710.93
East end of W. Appr. Slab	192901.71	0.00	710.98

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	192871.71	12.00	711.02
A	192881.71	12.00	711.07
B	192891.71	12.00	711.12
East end of W. Appr. Slab	192901.71	12.00	711.16



**SOUTH EDGE OF RDWY.**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	192871.71	24.00	710.83
A	192881.71	24.00	710.88
B	192891.71	24.00	710.93
East end of W. Appr. Slab	192901.71	24.00	710.98

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	192871.71	36.00	710.58
A	192881.71	36.00	710.63
B	192891.71	36.00	710.68
East end of W. Appr. Slab	192901.71	36.00	710.73

**NORTH CURB LINE**

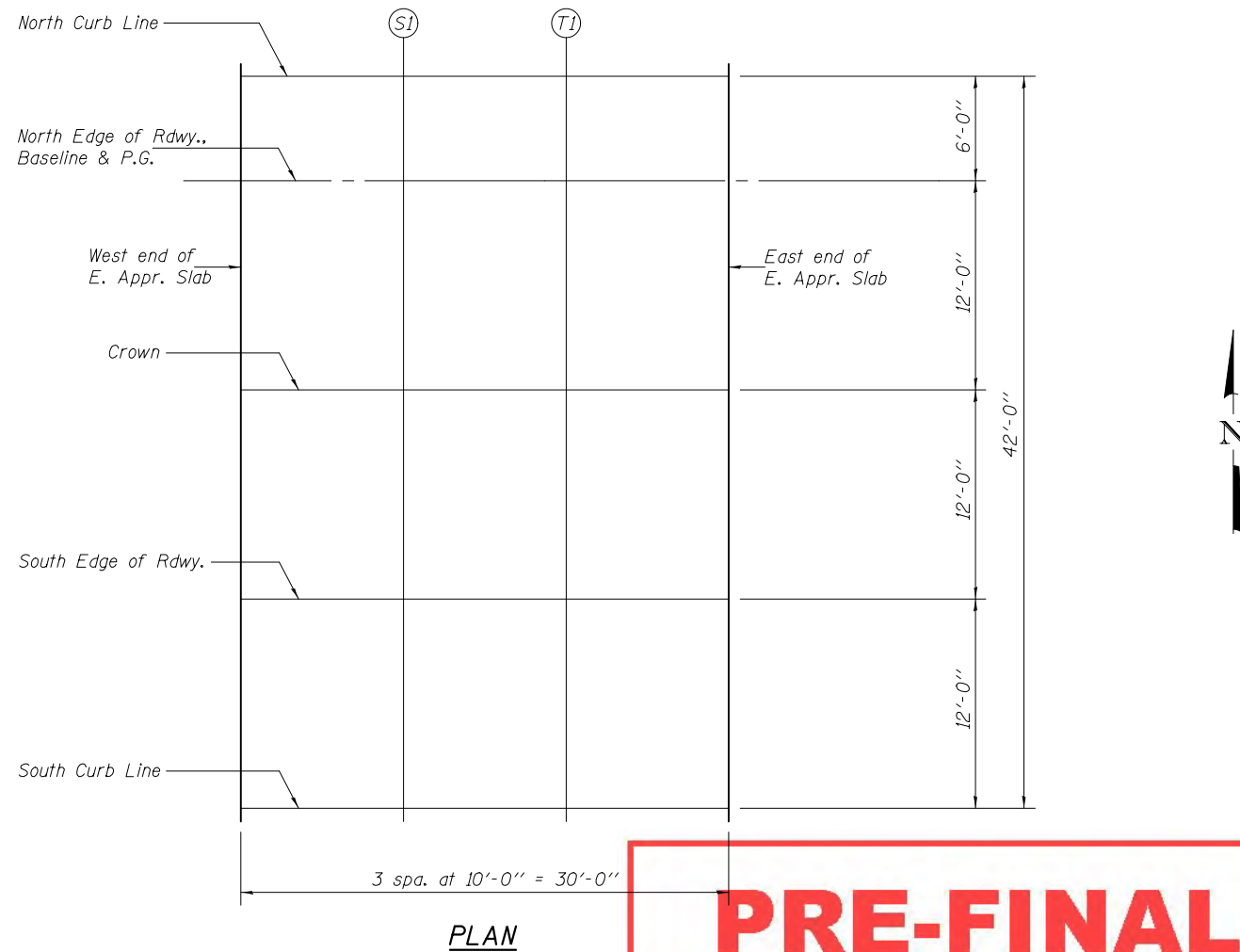
Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	193337.71	-6.00	712.99
SI	193347.71	-6.00	713.04
T1	193357.71	-6.00	713.09
East end of E. Appr. Slab	193367.71	-6.00	713.14

**NORTH EDGE OF RDWY., BASELINE & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	193337.71	0.00	713.11
SI	193347.71	0.00	713.16
T1	193357.71	0.00	713.21
East end of E. Appr. Slab	193367.71	0.00	713.26

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	193337.71	12.00	713.30
SI	193347.71	12.00	713.35
T1	193357.71	12.00	713.40
East end of E. Appr. Slab	193367.71	12.00	713.45



**SOUTH EDGE OF RDWY.**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	193337.71	24.00	713.11
SI	193347.71	24.00	713.16
T1	193357.71	24.00	713.21
East end of E. Appr. Slab	193367.71	24.00	713.26

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	193337.71	36.00	712.86
SI	193347.71	36.00	712.91
T1	193357.71	36.00	712.96
East end of E. Appr. Slab	193367.71	36.00	713.01

PRE-FINAL



**NORTH CURB LINE**

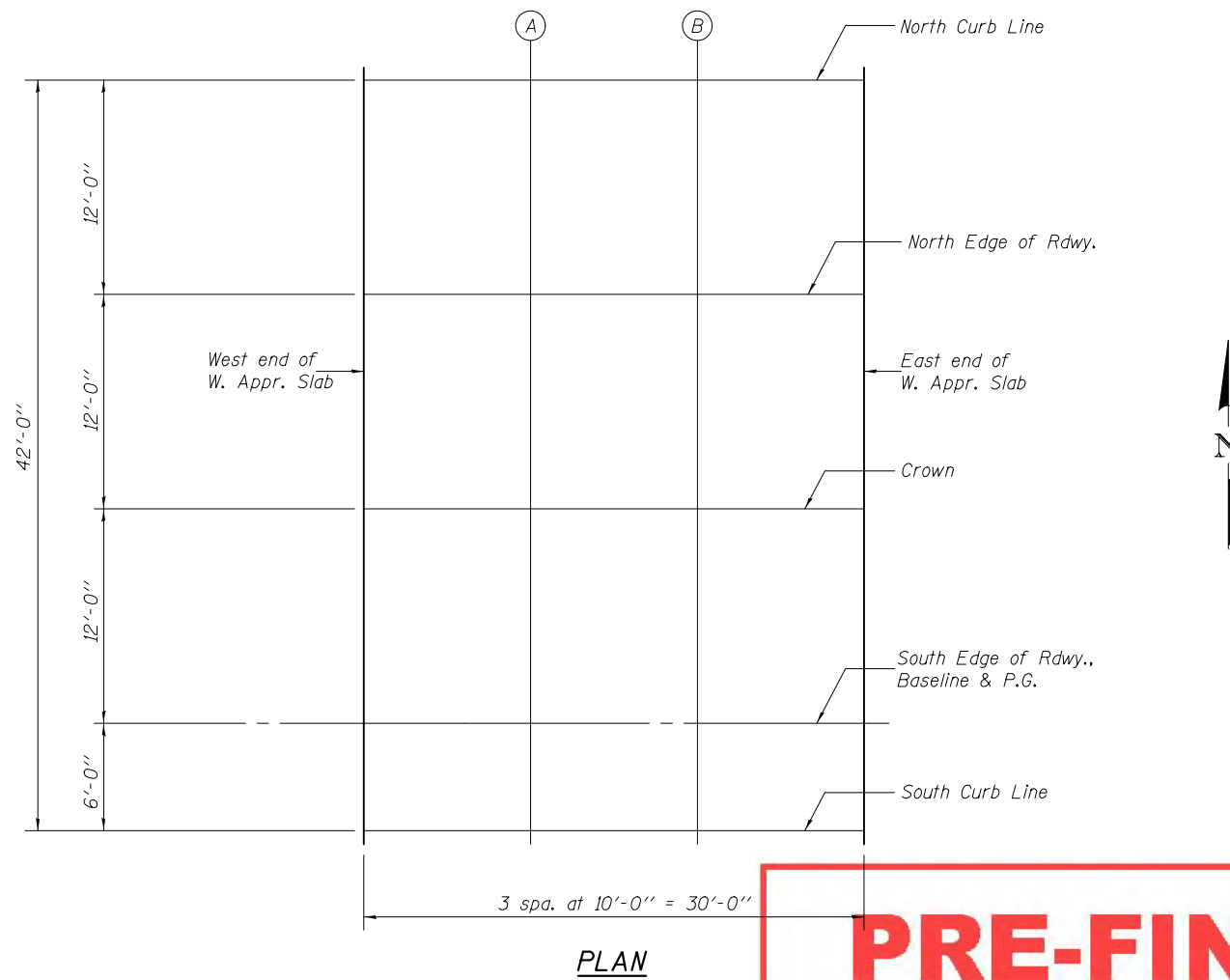
Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292871.72	-36.00	710.58
A	292881.72	-36.00	710.63
B	292891.72	-36.00	710.68
East end of W. Appr. Slab	292901.72	-36.00	710.73

**NORTH EDGE OF RDWY.**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292871.72	-24.00	710.83
A	292881.72	-24.00	710.88
B	292891.72	-24.00	710.93
East end of W. Appr. Slab	292901.72	-24.00	710.98

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292871.72	-12.00	711.02
A	292881.72	-12.00	711.07
B	292891.72	-12.00	711.12
East end of W. Appr. Slab	292901.72	-12.00	711.16



**SOUTH EDGE OF RDWY., BASELINE & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292871.72	0.00	710.83
A	292881.72	0.00	710.88
B	292891.72	0.00	710.93
East end of W. Appr. Slab	292901.72	0.00	710.98

**SOUTH CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
West end of W. Appr. Slab	292871.72	6.00	710.71
A	292881.72	6.00	710.75
B	292891.72	6.00	710.80
East end of W. Appr. Slab	292901.72	6.00	710.85

**PRE-FINAL**

**NORTH CURB LINE**

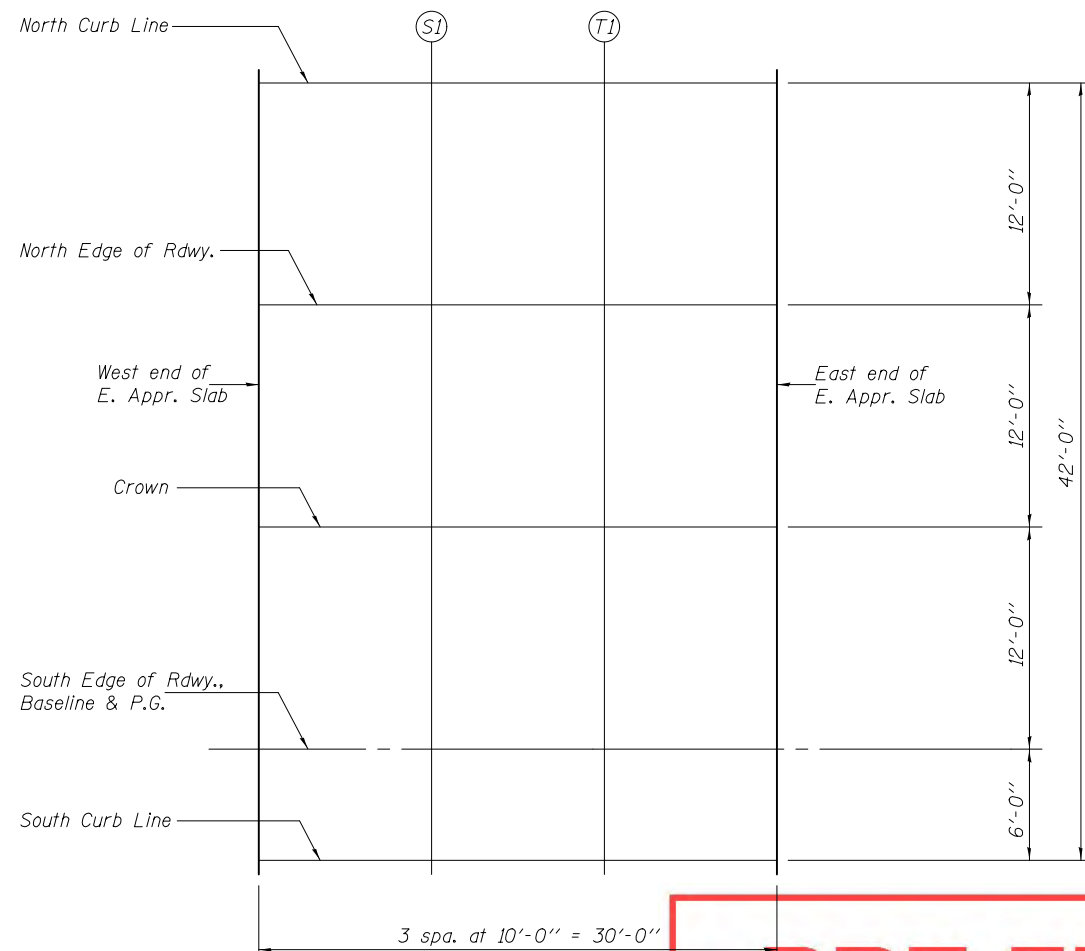
Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	293337.72	-36.00	712.86
S1	293347.72	-36.00	712.91
T1	293357.72	-36.00	712.96
East end of E. Appr. Slab	293367.72	-36.00	713.01

**NORTH EDGE OF RDWY.**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	293337.72	-24.00	713.11
S1	293347.72	-24.00	713.16
T1	293357.72	-24.00	713.21
East end of E. Appr. Slab	293367.72	-24.00	713.26

**CROWN**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	293337.72	-12.00	713.30
S1	293347.72	-12.00	713.35
T1	293357.72	-12.00	713.40
East end of E. Appr. Slab	293367.72	-12.00	713.45



**PLAN**

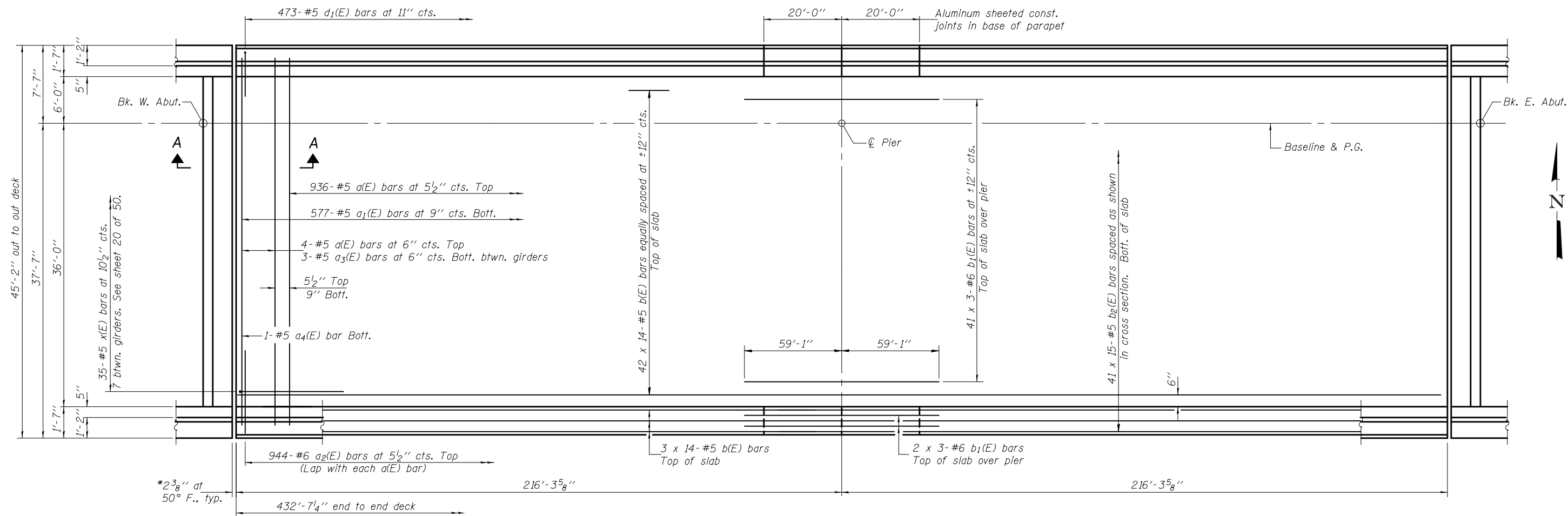
**SOUTH EDGE OF RDWY., BASELINE & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	293337.72	0.00	713.11
S1	293347.72	0.00	713.16
T1	293357.72	0.00	713.21
East end of E. Appr. Slab	293367.72	0.00	713.26

**SOUTH CURB LINE**

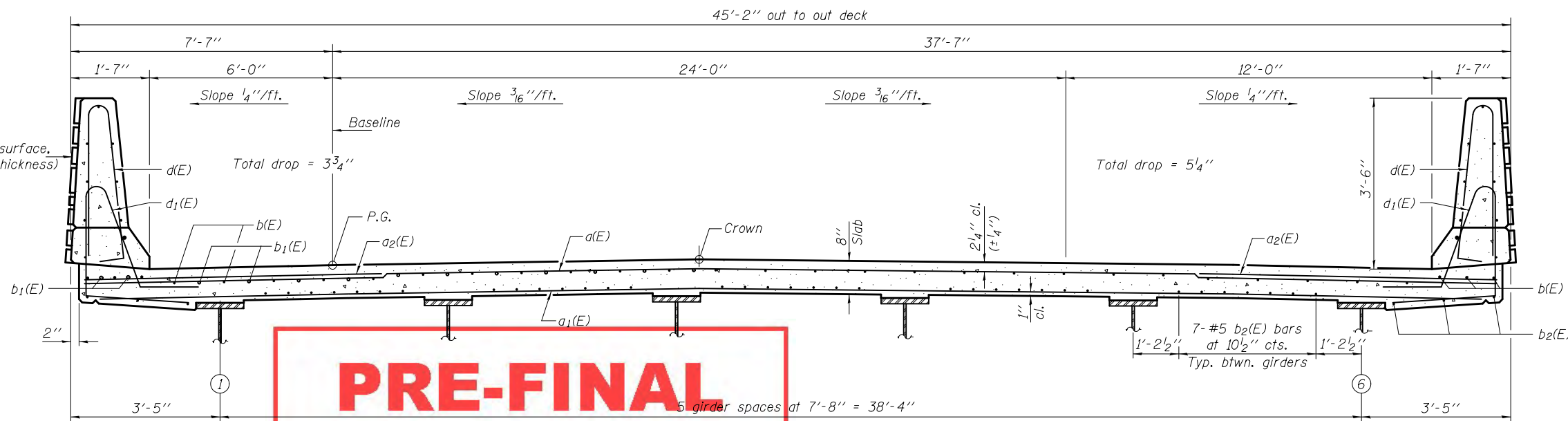
Location	Station	Offset	Theoretical Grade Elevations
West end of E. Appr. Slab	293337.72	6.00	712.99
S1	293347.72	6.00	713.04
T1	293357.72	6.00	713.09
East end of E. Appr. Slab	293367.72	6.00	713.14

**PRE-FINAL**



PLAN (E.B.)

\*Dimensions are based on a rolled rail strip seal joint. If the Contractor elects to use the welded rail joint, the opening and deck dimensions shall be modified according to the dimensions detailed on sheet 25 of 50.



CROSS SECTION  
(Looking east)

Notes:  
See sheets 19 & 20 of 50 for superstructure details & Bill of Material.  
Bars indicated thus 40 x 3-#5 etc. indicates 40 lines of bars with 3 lengths per line.  
See sheet 19 of 50 for parapet reinforcement.  
See sheets 43 & 44 of 50 for details of form liner texture surface.

**MIN. BAR LAP**

(Slab)  
#5 bar = 3'-3"  
#6 bar = 3'-10"

**PRE-FINAL**

DESIGNED - Nick R. Barnett
CHECKED - Frank W. Sharp
DRAWN - h.t. duong
CHECKED - NRB/FWS/GRA

EXAMINED	DATE -
PASSED	REVISED
	REVISED

ACTING ENGINEER OF BRIDGES AND STRUCTURES
---

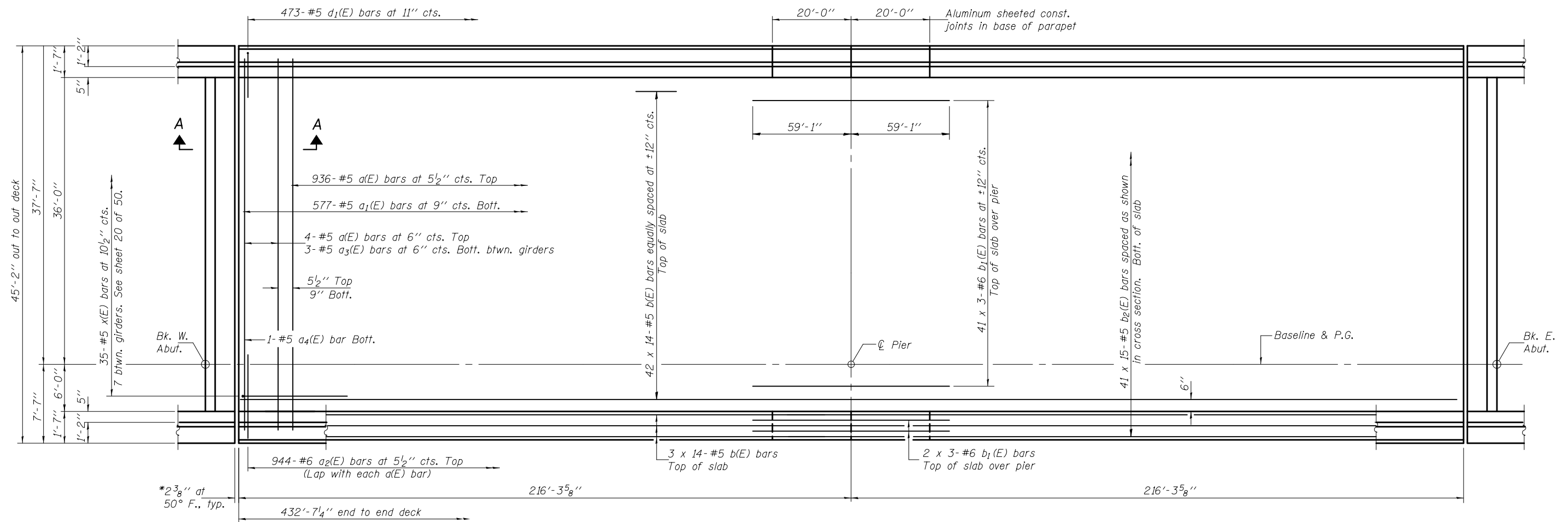
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE (E.B.)  
STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)

SHEET NO. 17 OF 50 SHEETS

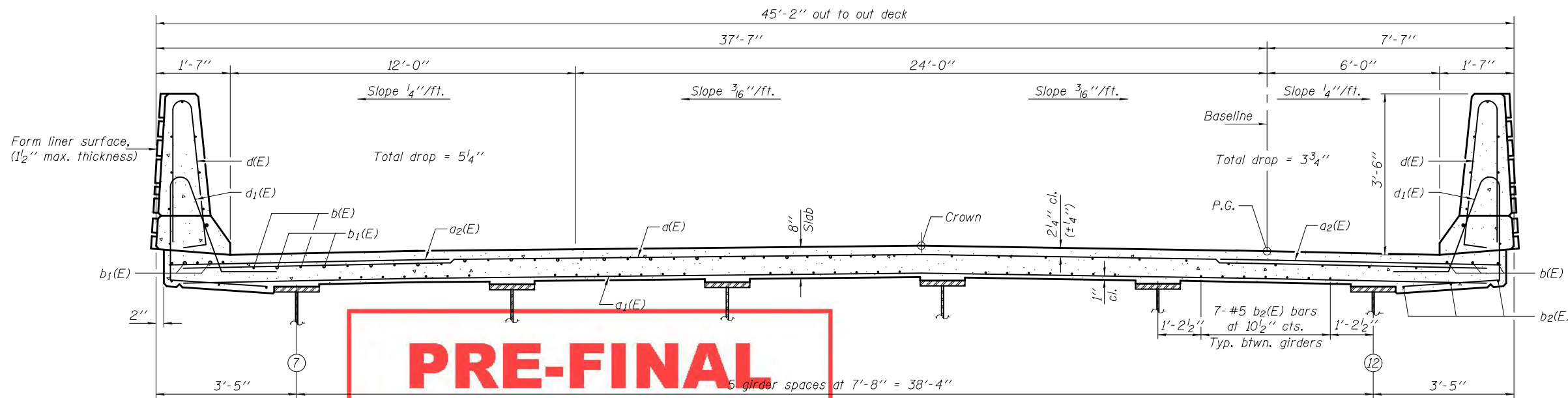
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				

ILLINOIS FED. AID PROJECT



PLAN (W.B.)

\*Dimensions are based on a rolled rail strip seal joint. If the Contractor elects to use the welded rail joint, the opening and deck dimensions shall be modified according to the dimensions detailed on sheet 25 of 50.



CROSS SECTION  
(Looking east)

Notes:  
See sheets 19 & 20 of 50 for superstructure details & Bill of Material.  
Bars indicated thus 40 x 3-#5 etc. indicates 40 lines of bars with 3 lengths per line.  
See sheet 19 of 50 for parapet reinforcement.  
See sheets 43 & 44 of 50 for details of form liner texture surface.

**MIN. BAR LAP**

(Slab)  
#5 bar = 3'-3"  
#6 bar = 3'-10"

PRE-FINAL

DESIGNED - Nick R. Barnett
CHECKED - Frank W. Sharp
DRAWN - h.t. duong
CHECKED - NRB/FWS/GRA

EXAMINED	 ACTING ENGINEER OF BRIDGES AND STRUCTURES	DATE -
PASSED		REVISOR

REVISOR
REVISOR

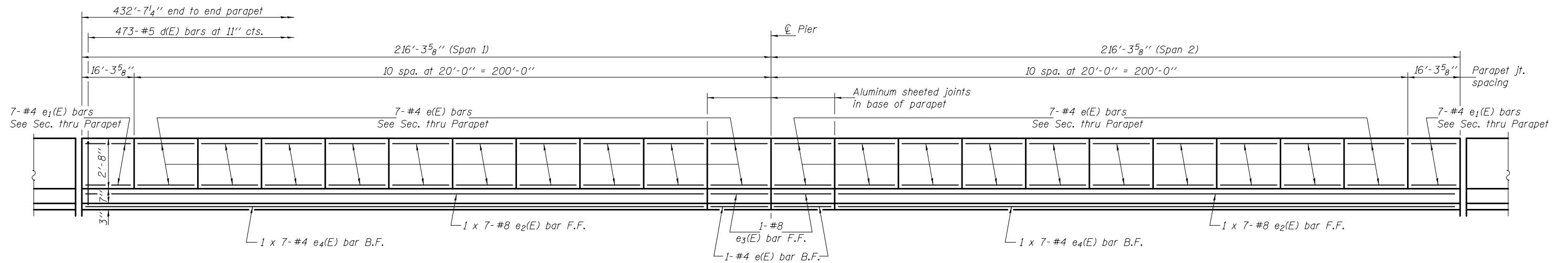
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE (W.B.)  
STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)**

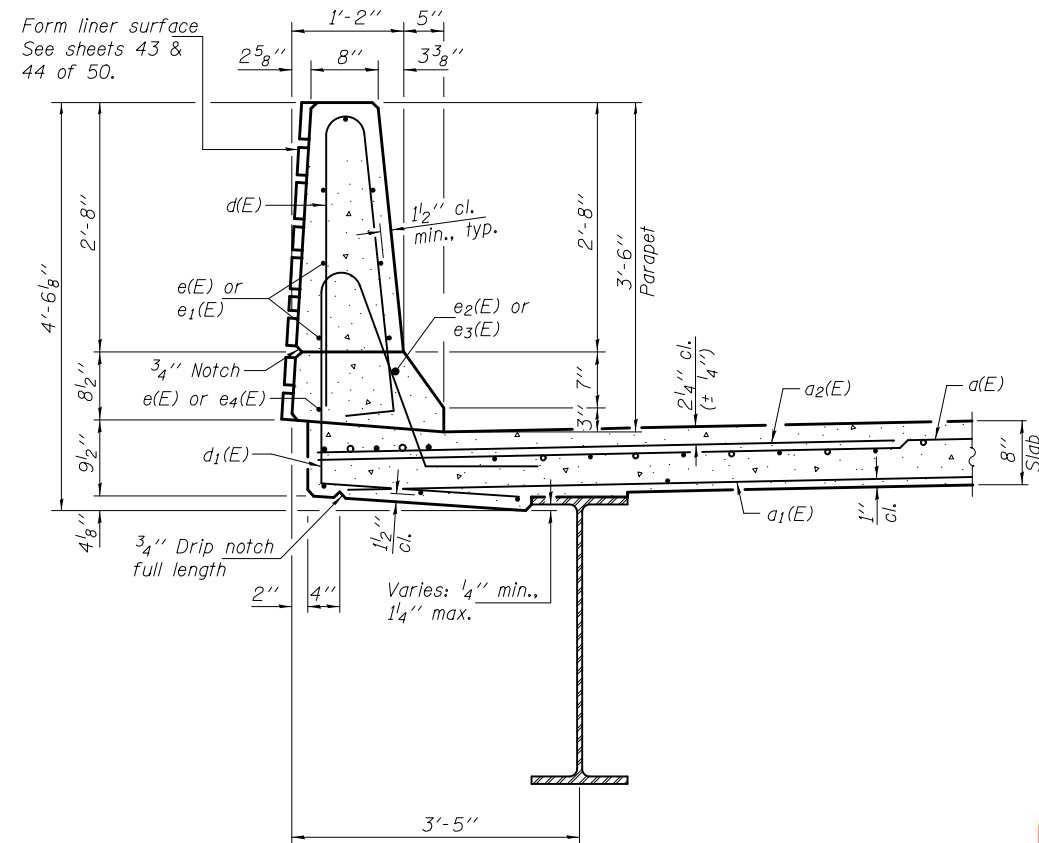
SHEET NO. 18 OF 50 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				

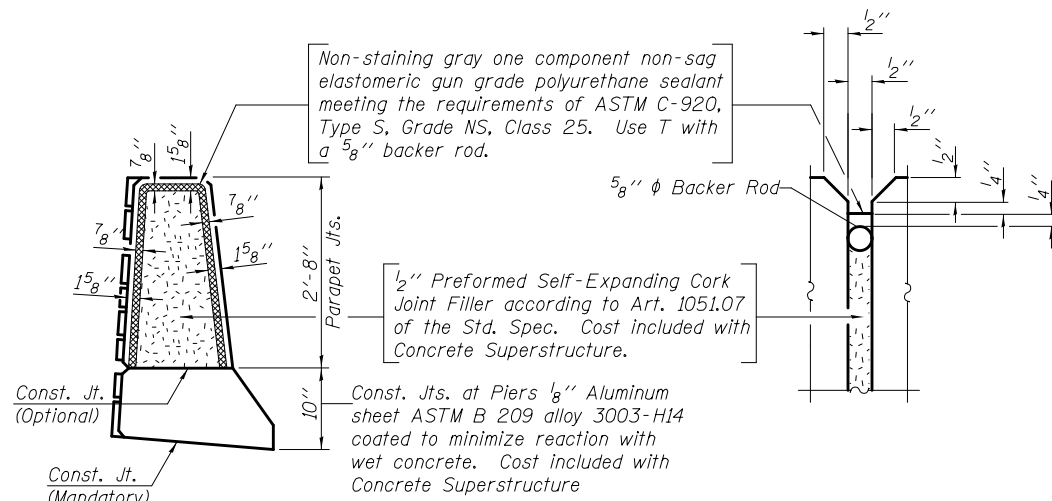
ILLINOIS FED. AID PROJECT



**INSIDE ELEVATION OF NORTH PARAPET (E.B.)**  
(Looking North - South parapet similar)

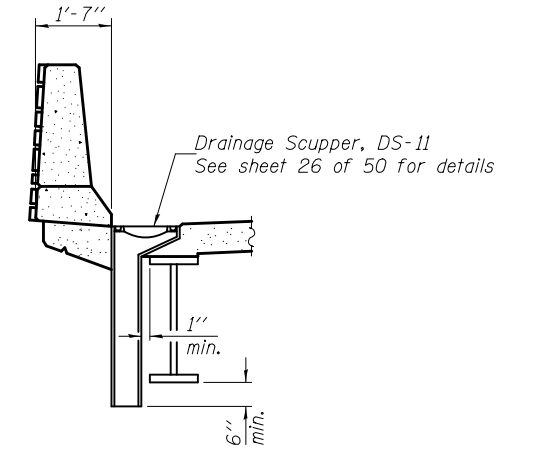


**SECTION THRU PARAPET**

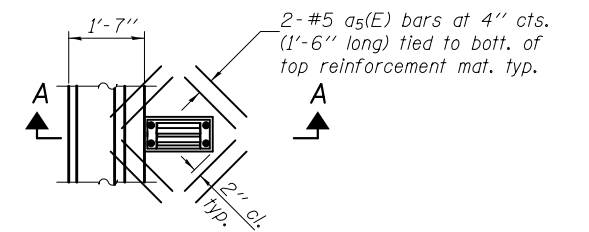


**PARAPET JOINT DETAILS**

**MIN. BAR LAP**  
(Parapet)  
#4 bar = 2'-0"  
#8 bar = 5'-2"



**SECTION A-A**



**PLAN**

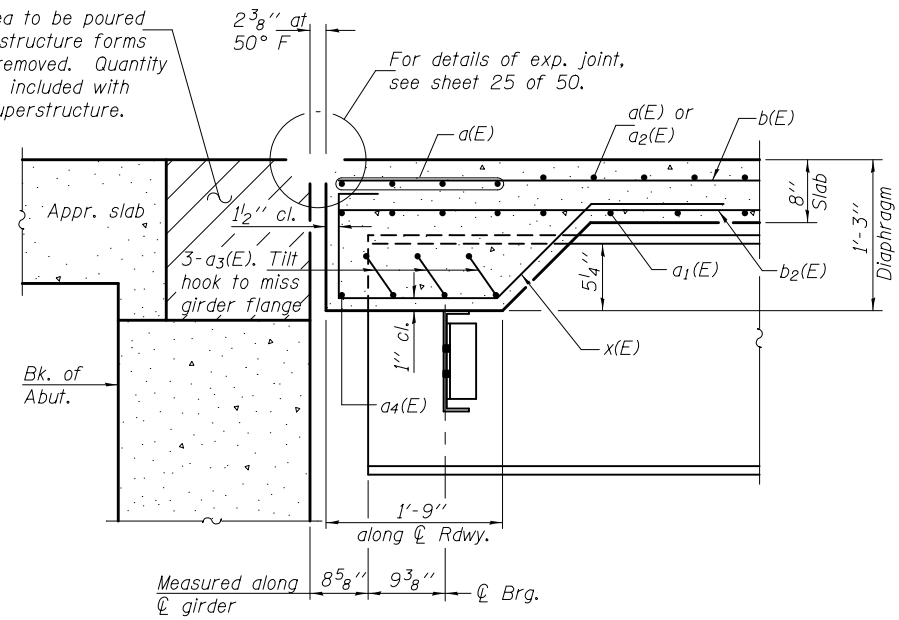
Note:  
Cut longitudinal reinforcement to clear drainage scuppers.

PRE-FINAL

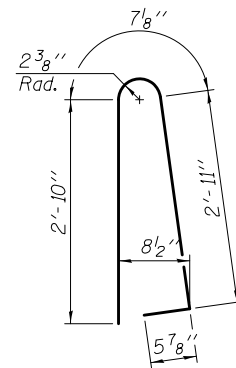
DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE DETAILS STRUCTURE NO. 101-0197 (E.B.) &amp; 101-0198 (W.B.)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
CHECKED - Frank W. Sharp	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED							
DRAWN - h.t. duong		REVISED							
CHECKED - NRB/FWS/GRA				SHEET NO. 19 OF 50 SHEETS	ILLINOIS FED. AID PROJECT				



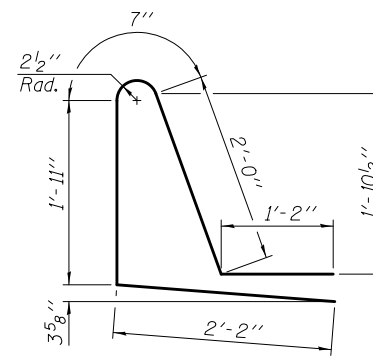
Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.



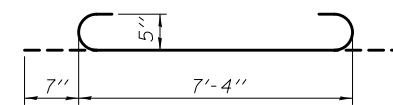
SECTION A-A



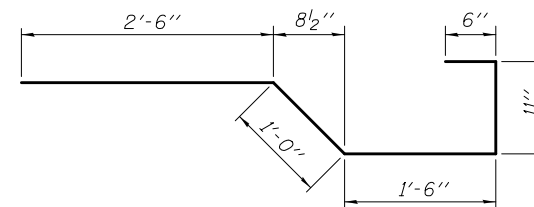
BAR d(E)



BAR d1(E)



a3(E) BAR



BAR x(E)

TWO SUPERSTRUCTURES  
(E.B. & W.B.)  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	1888	#5	44'-7"	—
a1(E)	1154	#5	42'-10"	—
a2(E)	3776	#6	6'-6"	—
a3(E)	60	#5	8'-6"	—
a4(E)	4	#5	38'-0"	—
a5(E)	64	#5	1'-6"	—
b(E)	1344	#5	33'-11"	—
b1(E)	270	#6	42'-0"	—
b2(E)	1230	#5	31'-11"	—
d(E)	1892	#5	6'-10"	—
d1(E)	1892	#5	7'-10"	—
e(E)	568	#4	19'-9"	—
e1(E)	56	#4	16'-0"	—
e2(E)	56	#8	32'-6"	—
e3(E)	8	#8	19'-9"	—
e4(E)	56	#4	29'-9"	—
x(E)	140	#5	6'-5"	—
Reinforcement Bars, Epoxy Coated			Pound	326890
Concrete Superstructure			Cu. Yds.	1275.6

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

**PRE-FINAL**

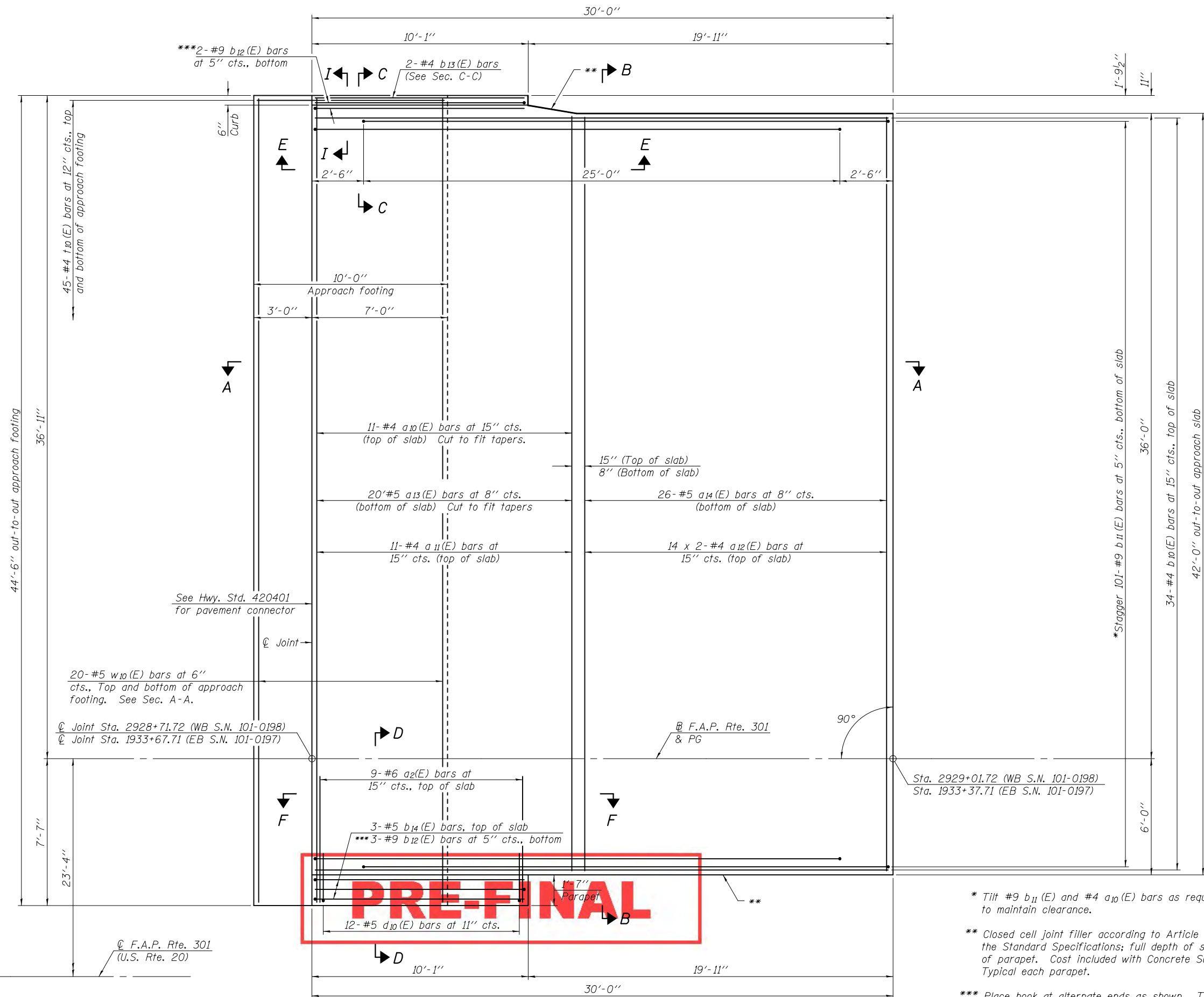
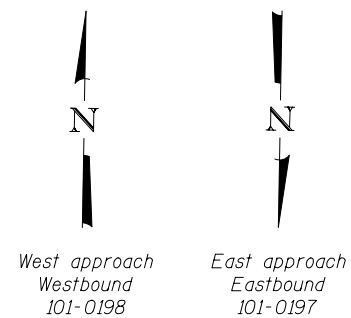
DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. [Signature]</i>	DATE -
CHECKED - Frank W. Sharp	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - h.t. duong	PASSED - <i>Carl [Signature]</i>	REVISED
CHECKED - NRB/FWS/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)

SHEET NO. 20 OF 50 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
				CONTRACT NO. 64D19
ILLINOIS FED. AID PROJECT				



**MINIMUM BAR LAP**  
#4 Bar = 2'-7"

Note:  
See sheets 23 & 24 of 50 for additional details.  
Bars indicated thus 14 x 2-#4 etc. indicates 14 lines of bars with 2 lengths per line.

\* Tilt #9 b11(E) and #4 a10(E) bars as required to maintain clearance.

\*\* Closed cell joint filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Cost included with Concrete Superstructure. Typical each parapet.

\*\*\* Place hook at alternate ends as shown. Tilt b12(E) bars as required to maintain clearance.

PLAN

DESIGNED - NICHOLAS R. BARNETT	EXAMINED	DATE -
CHECKED - FRANK W. SHARP	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED	REVISED
CHECKED - NRB/FWS/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

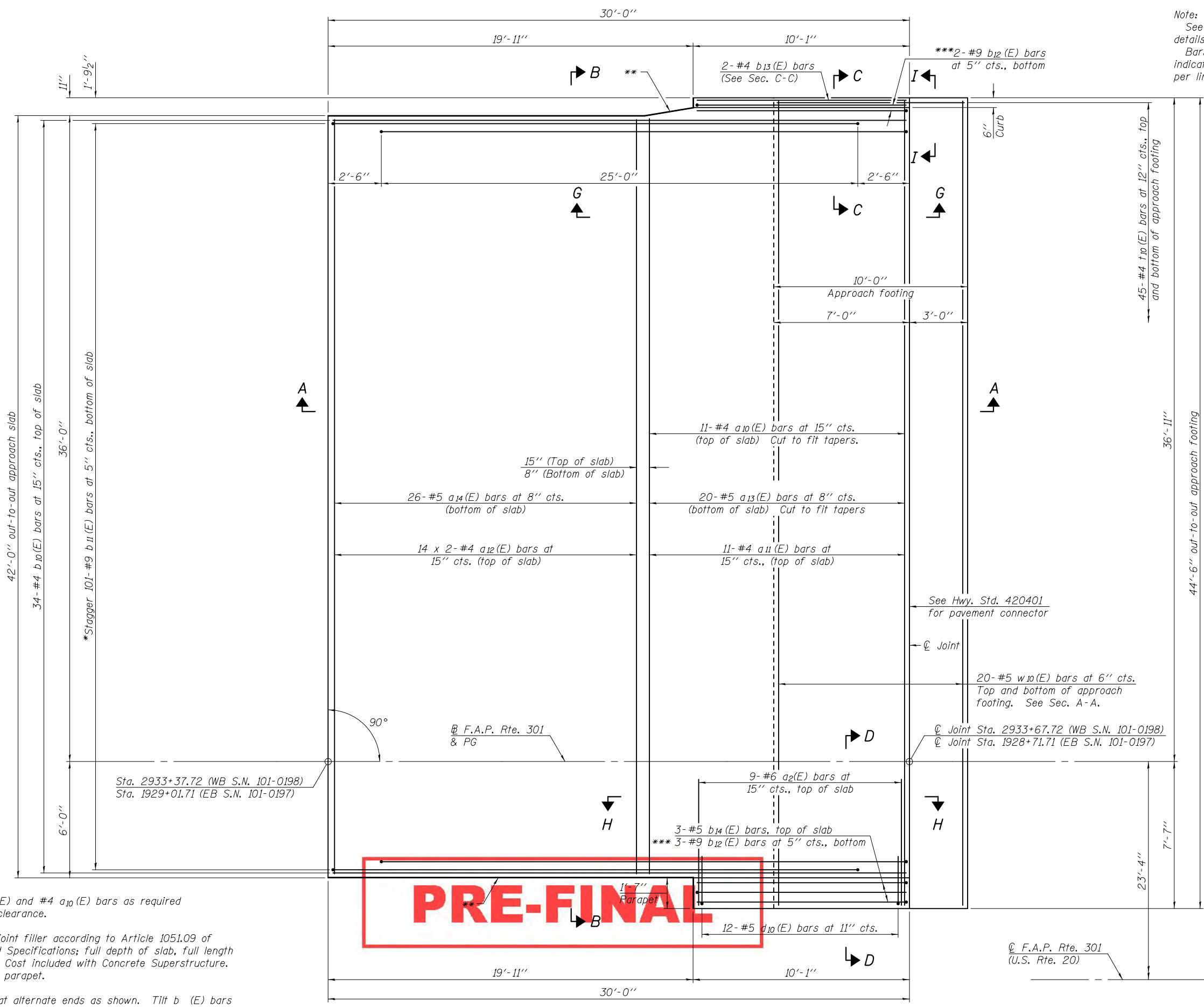
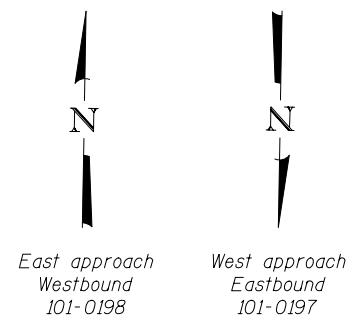
BRIDGE APPROACH SLAB DETAILS - WEST (WB) - EAST (EB)  
STRUCTURE NO. 101 - 0197 (EB) & 101 - 0198 (WB)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				

SHEET NO. 21 OF 50 SHEETS

ILLINOIS FED. AID PROJECT

Note:  
See sheets 23 & 24 of 50 for additional details.  
Bars indicated thus 14 x 2-#4 etc. indicates 14 lines of bars with 2 lengths per line.



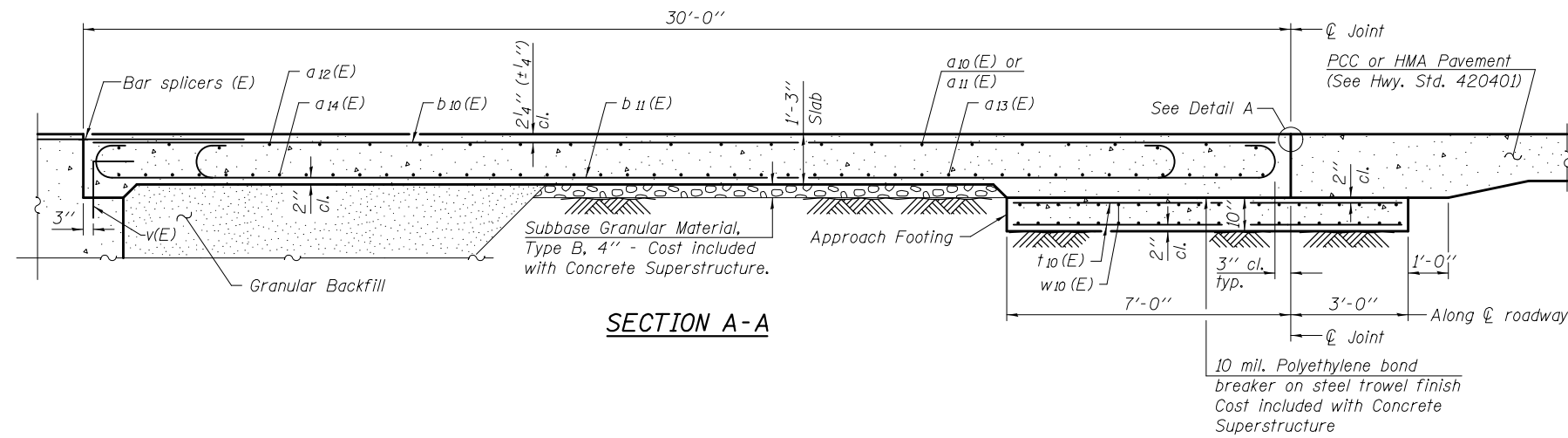
**MINIMUM BAR LAP**  
#4 Bar = 2'-7"

- \* Tilt #9 b<sub>11</sub>(E) and #4 a<sub>10</sub>(E) bars as required to maintain clearance.
- \*\* Closed cell joint filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Cost included with Concrete Superstructure. Typical each parapet.
- \*\*\* Place hook at alternate ends as shown. Tilt b (E) bars as required to maintain clearance.

PRE-FINAL

PLAN

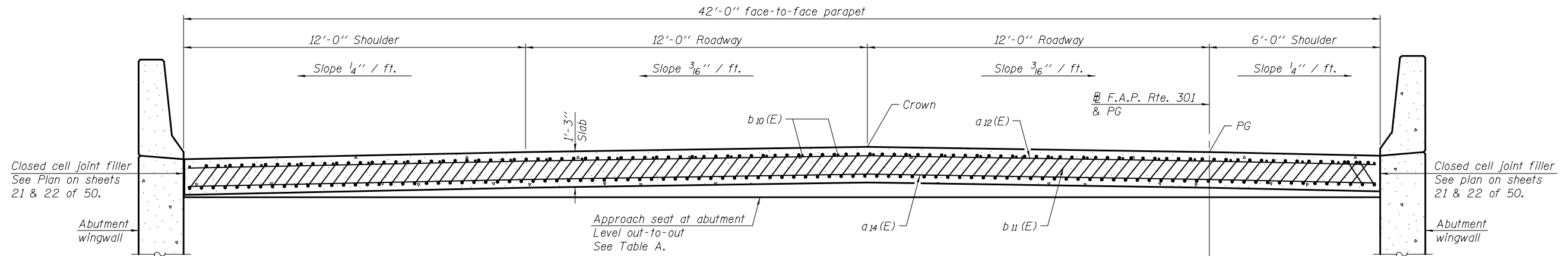
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - _____ ACTING ENGINEER OF BRIDGE DESIGN	DATE - _____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BRIDGE APPROACH SLAB DETAILS - EAST (WB) - WEST (EB) STRUCTURE NO. 101 - 0197 (EB) &amp; 101 - 0198 (WB)</b>	F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.	
CHECKED - FRANK W. SHARP	PASSED - _____ ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED - _____			CONTRACT NO. 64D19					
DRAWN - MICHAEL B. MOSSMAN	REVISED - _____	REVISED - _____			SHEET NO. 22 OF 50 SHEETS					
CHECKED - NRB/FWS/GRA	REVISED - _____	REVISED - _____			ILLINOIS FED. AID PROJECT					



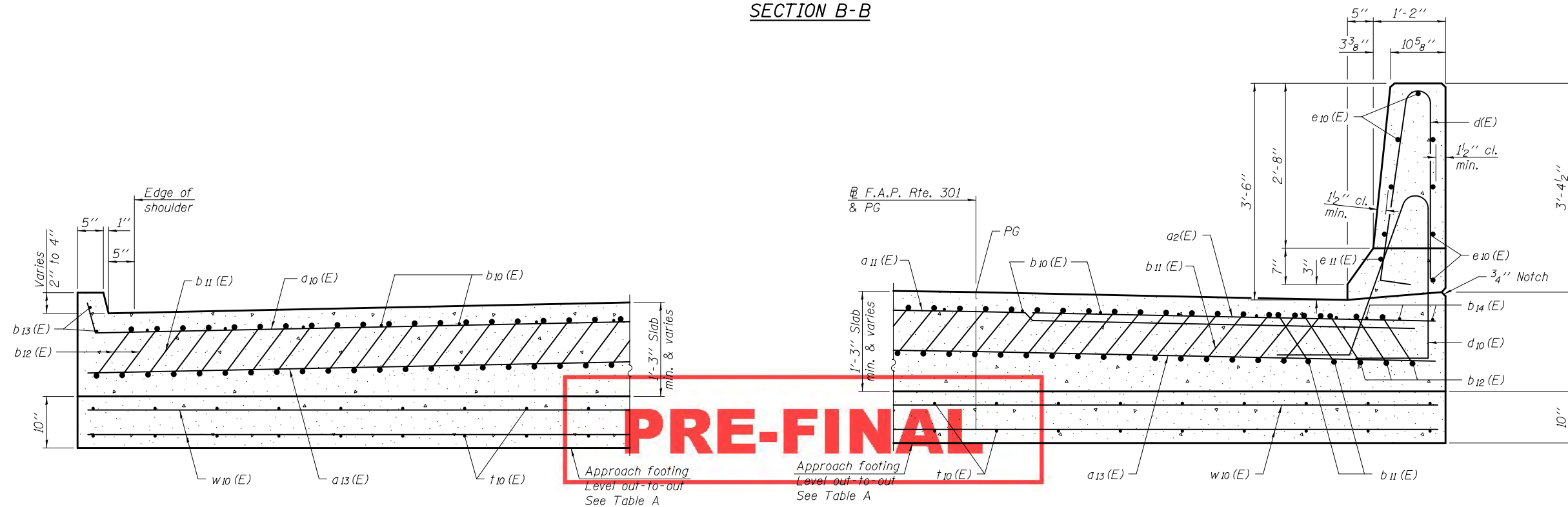
**SECTION A-A**

**TABLE A**

Location	Approach seat Elev. at abutment	Bottom of Footing Elev.
West Approach (Westbound)	709.40	708.47
East Approach (Westbound)	711.52	710.90
West Approach (Eastbound)	709.40	708.47
East Approach (Eastbound)	711.52	710.90



**SECTION B-B**



**SECTION C-C**

**SECTION D-D**

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - _____	DATE - _____
CHECKED - FRANK W. SHARP	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - _____	REVISED - _____
CHECKED - NRB/FWS/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED - _____

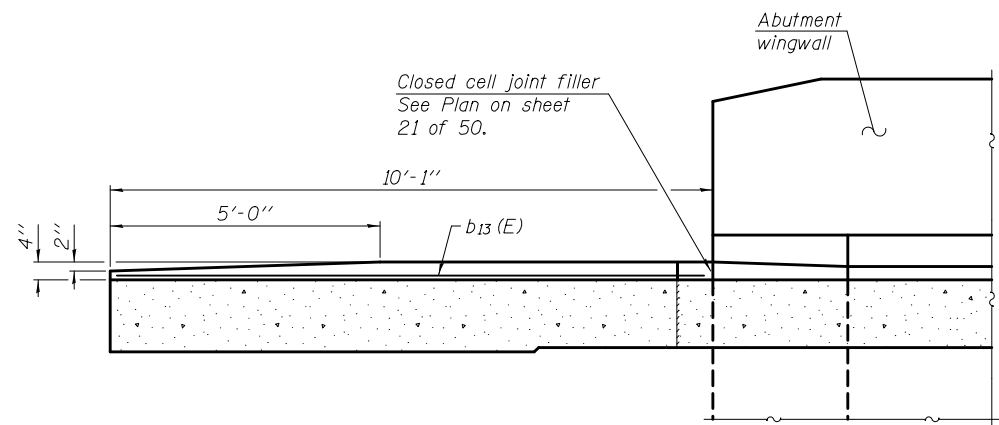
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 101 - 0197 (EB) & 101 - 0198 (WB)**

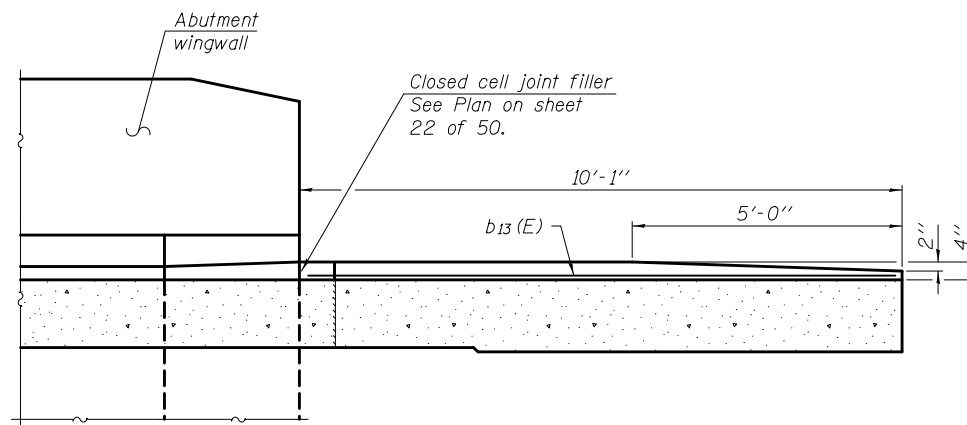
F.A.P. RTE. 301	SECTION 3BR & 3BR-1	COUNTY WINNEBAGO	TOTAL SHEETS	SHEET NO.
			CONTRACT NO. 64D19	

SHEET NO. 23 OF 50 SHEETS

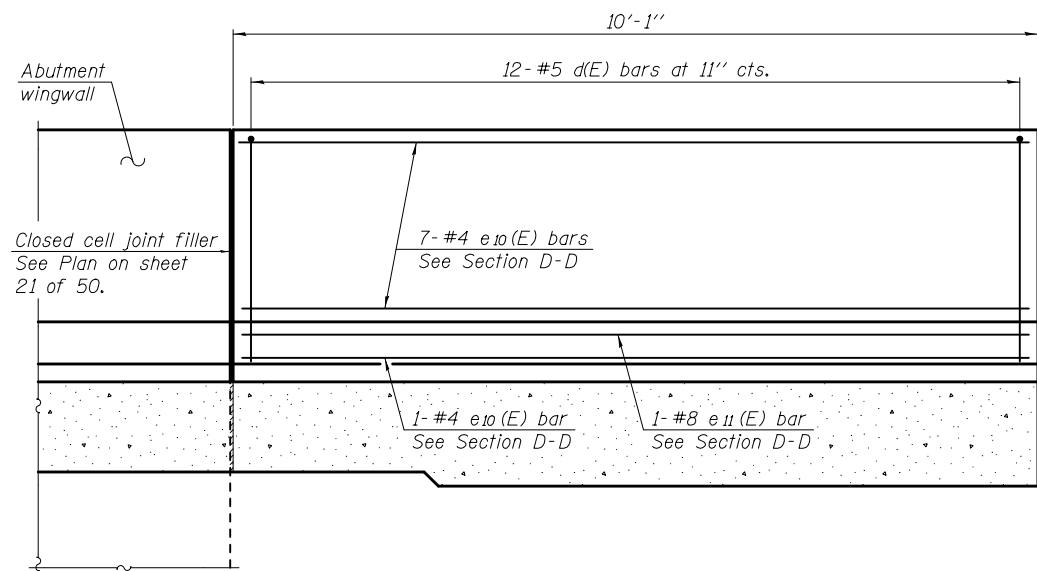
ILLINOIS FED. AID PROJECT



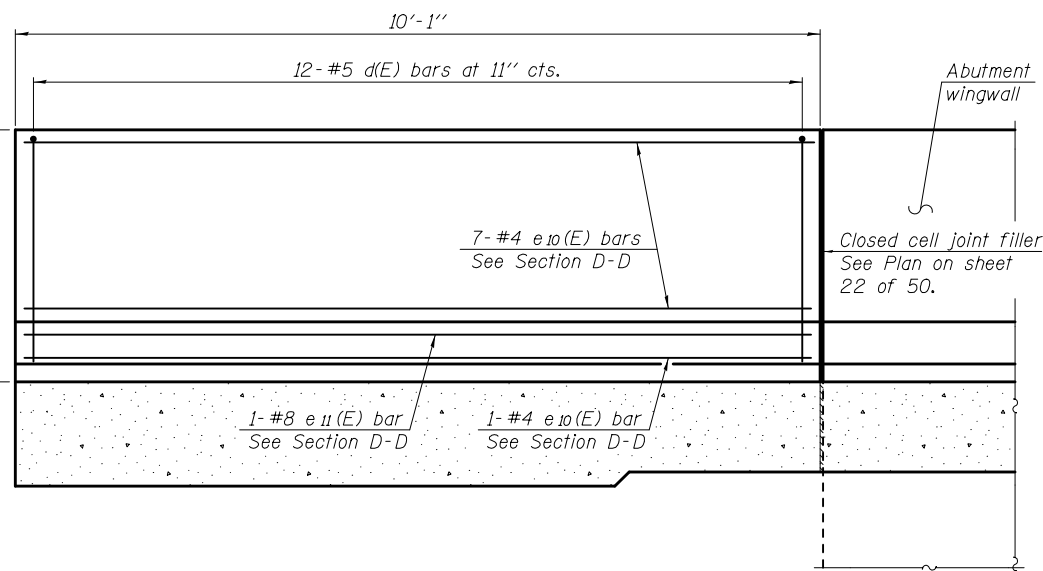
**VIEW E-E**  
(Showing curb reinforcement)



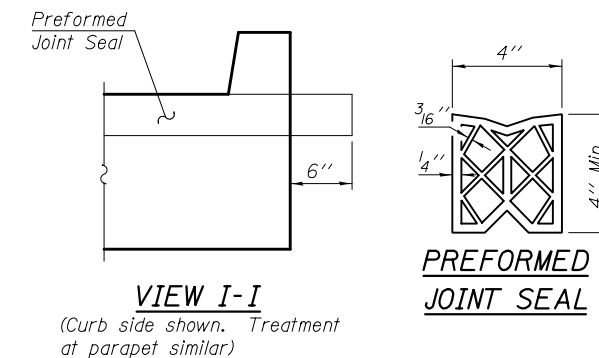
**VIEW G-G**  
(Showing curb reinforcement)



**VIEW F-F**  
(Showing parapet reinforcement)

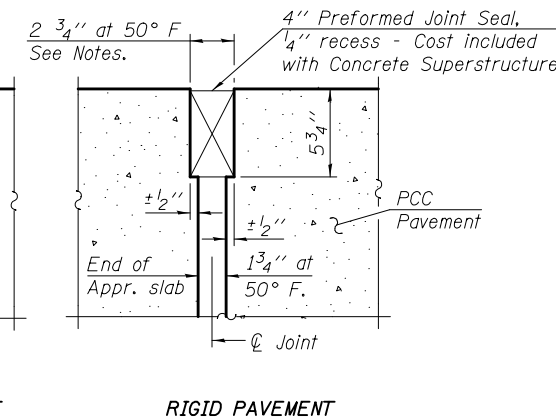
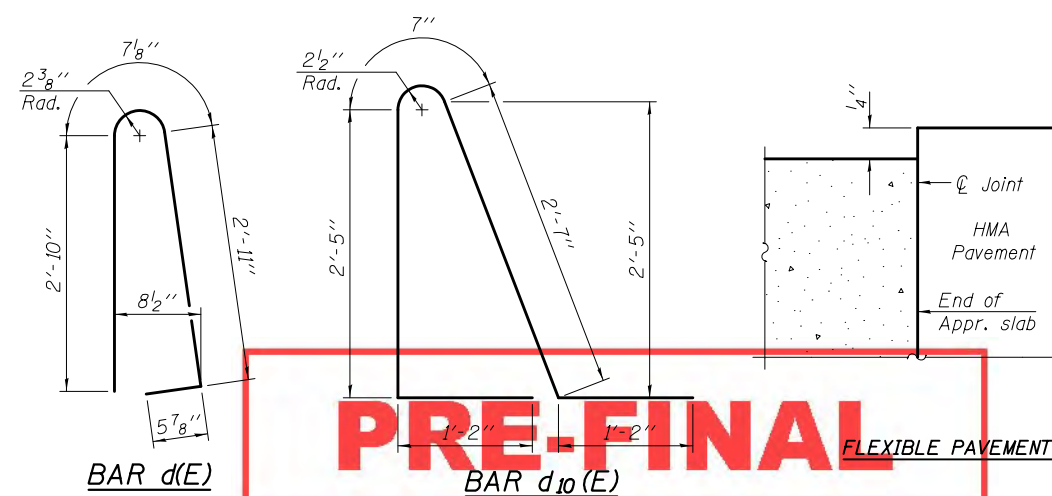
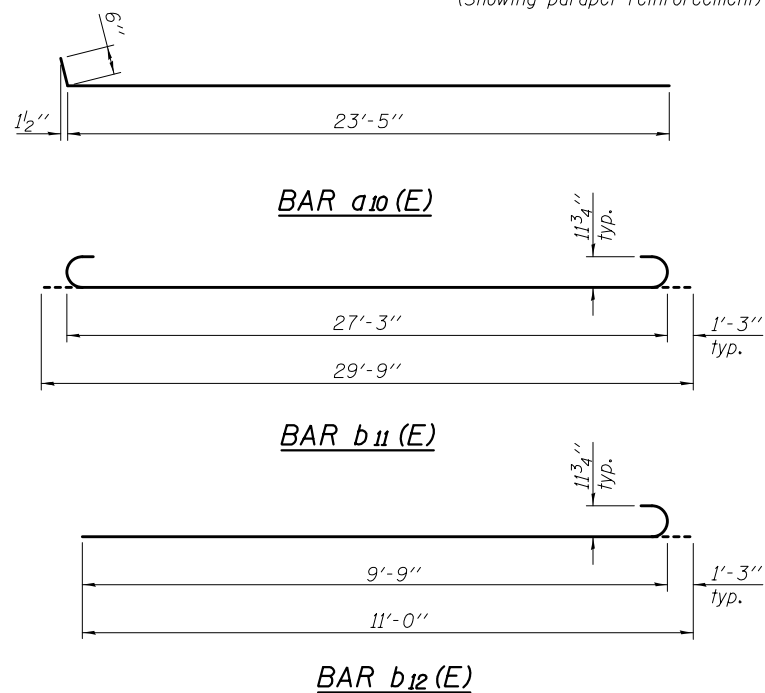


**VIEW H-H**  
(Showing parapet reinforcement)



**FOUR APPROACHES  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a2(E)	36	#6	6'-6"	—
a10(E)	44	#4	23'-11"	—
a11(E)	44	#4	23'-5"	—
a12(E)	112	#4	22'-2"	—
a13(E)	80	#5	44'-2"	—
a14(E)	104	#5	41'-8"	—
b10(E)	136	#4	29'-8"	—
b11(E)	404	#9	29'-9"	—
b12(E)	20	#9	11'-0"	—
b13(E)	8	#4	9'-9"	—
b14(E)	12	#5	9'-9"	—
d(E)	48	#5	6'-10"	—
d10(E)	48	#5	7'-11"	—
e10(E)	32	#4	9'-9"	—
e11(E)	4	#8	9'-9"	—
f10(E)	360	#4	9'-8"	—
w10(E)	160	#5	44'-2"	—
Concrete Superstructure		Cu. Yd.	251.4	
Concrete Structures		Cu. Yd.	54.9	
Reinforcement Bars, Epoxy Coated		Pound	66840	



**DETAIL A**

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - _____	DATE - _____
CHECKED - FRANK W. SHARP	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - _____	REVISED - _____
CHECKED - NRB/FWS/GRA	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED - _____

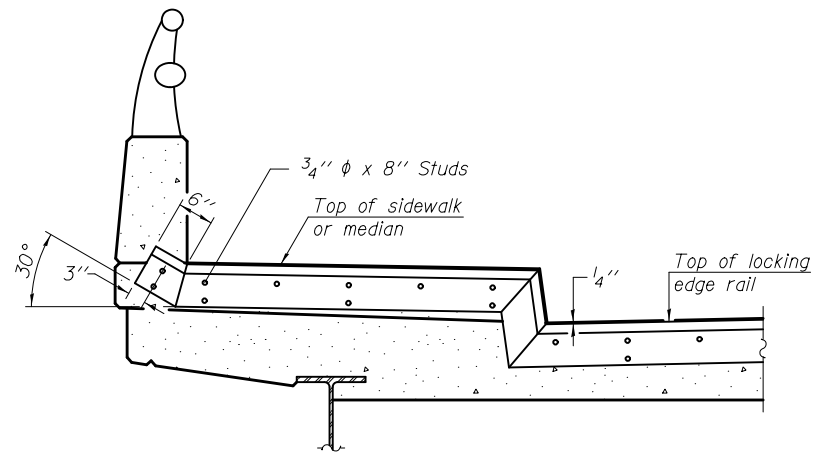
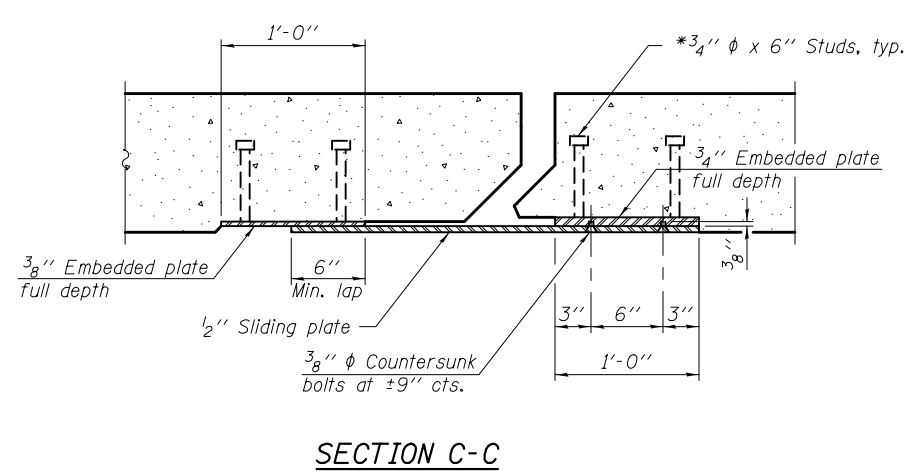
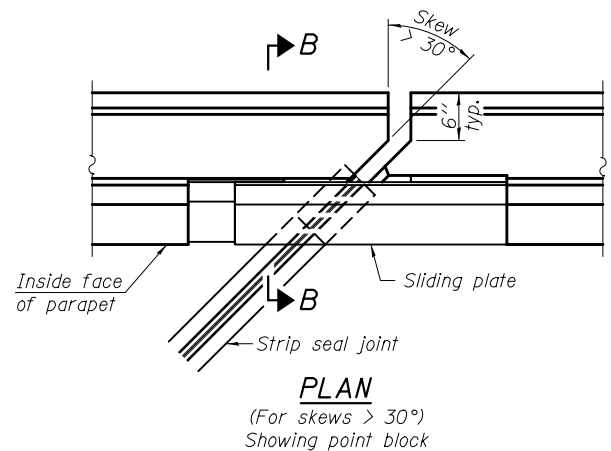
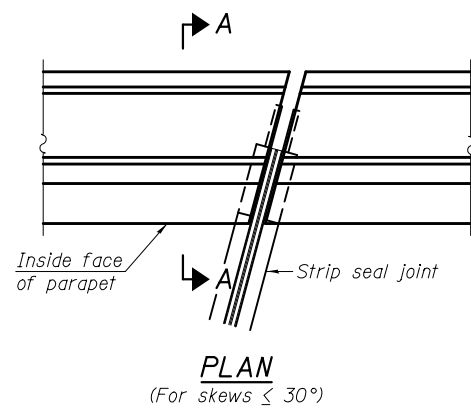
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 101 - 0197 (EB) & 101 - 0198 (WB)**

SHEET NO. 24 OF 50 SHEETS

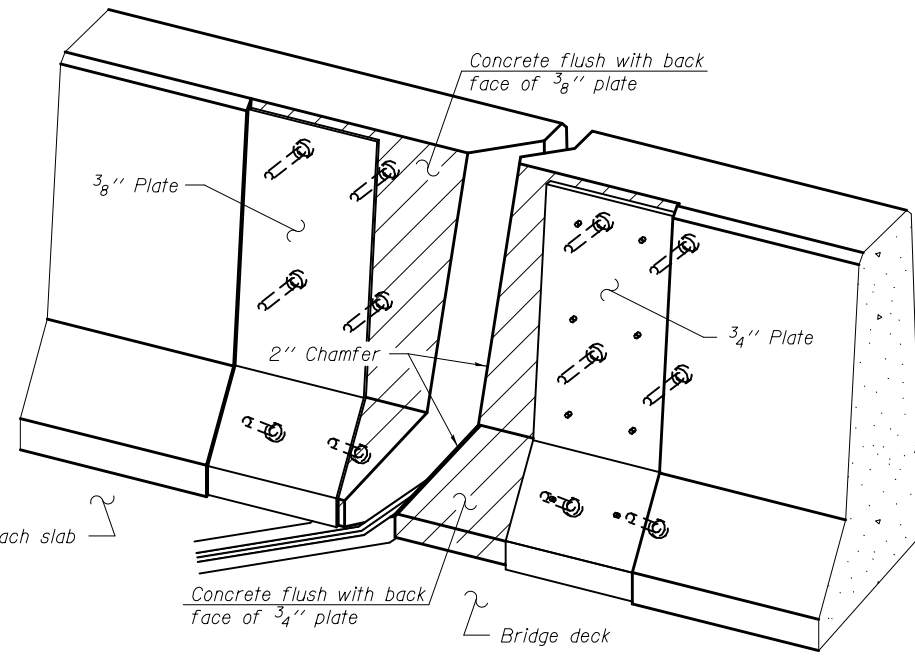
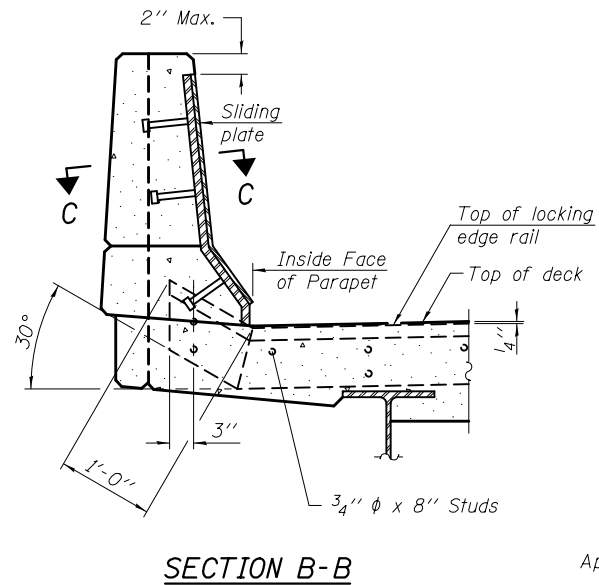
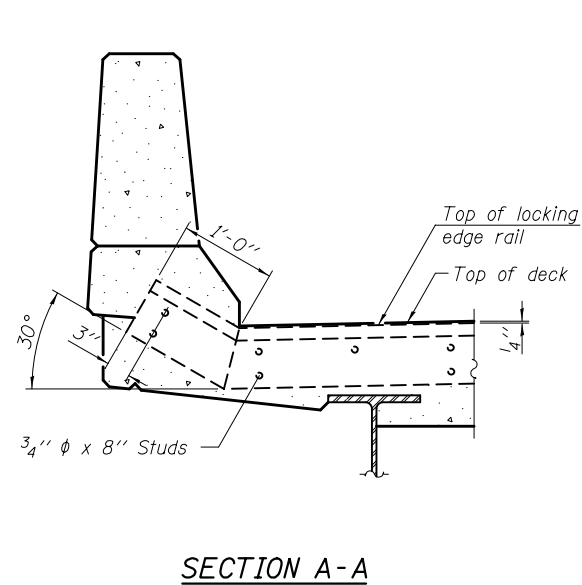
F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				





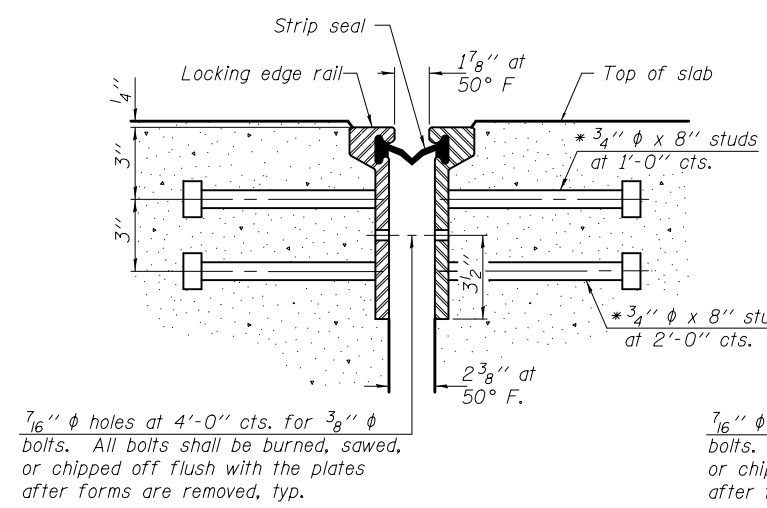
**TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN**

Shorter plates with a single row of studs at 12 inch cts. may be necessary on medians which are shallower than 9 inch. See manufacturer's recommendation.

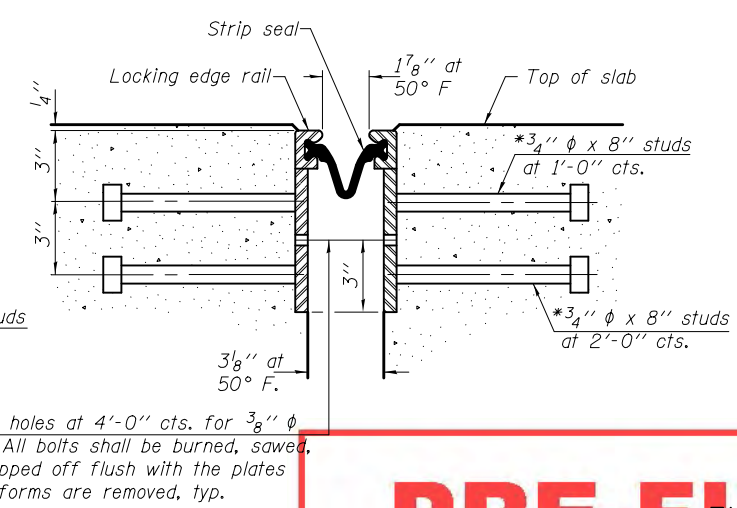


**TRIMETRIC VIEW (Showing back plates only)**

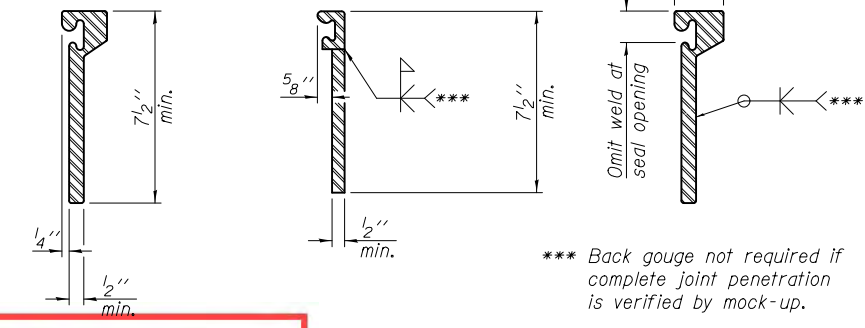
**Notes:**  
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4 inch. The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.  
 The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.  
 The manufacturer's recommended installation methods shall be followed.  
 The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.  
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16 inch, sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.  
 Parapet plates and anchorage studs for skews > 30 degrees included in the cost of Preformed Joint Strip Seal.



**SECTION THRU ROLLED RAIL JOINT**



**SECTION THRU WELDED RAIL JOINT**



**LOCKING EDGE RAIL SPLICE**

The inside of the locking edge rail groove shall be free of weld residue.  
 Rolled rail shown, welded rail similar.

**PRE-FINAL**  
 ROLLED EXTRUDED RAIL WELDED RAIL

**LOCKING EDGE RAILS**

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	176

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

EJ-SSJ 1-27-12

DESIGNED - Nick R. Barnett	EXAMINED - <i>Joanne F. Joffe</i>
CHECKED - Frank W. Sharp	PASSED - <i>Carl Pinger</i>
DRAWN - h.t. duong	
CHECKED - NRB/FWS/GRA	

ACTING ENGINEER OF BRIDGE DESIGN  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE -	REVISED
	REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL  
 STRUCTURE NO. 101-0197 (E.B.) & 101-0198 (W.B.)

SHEET NO. 25 OF 50 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO		
CONTRACT NO. 64D19				
ILLINOIS FED. AID PROJECT				