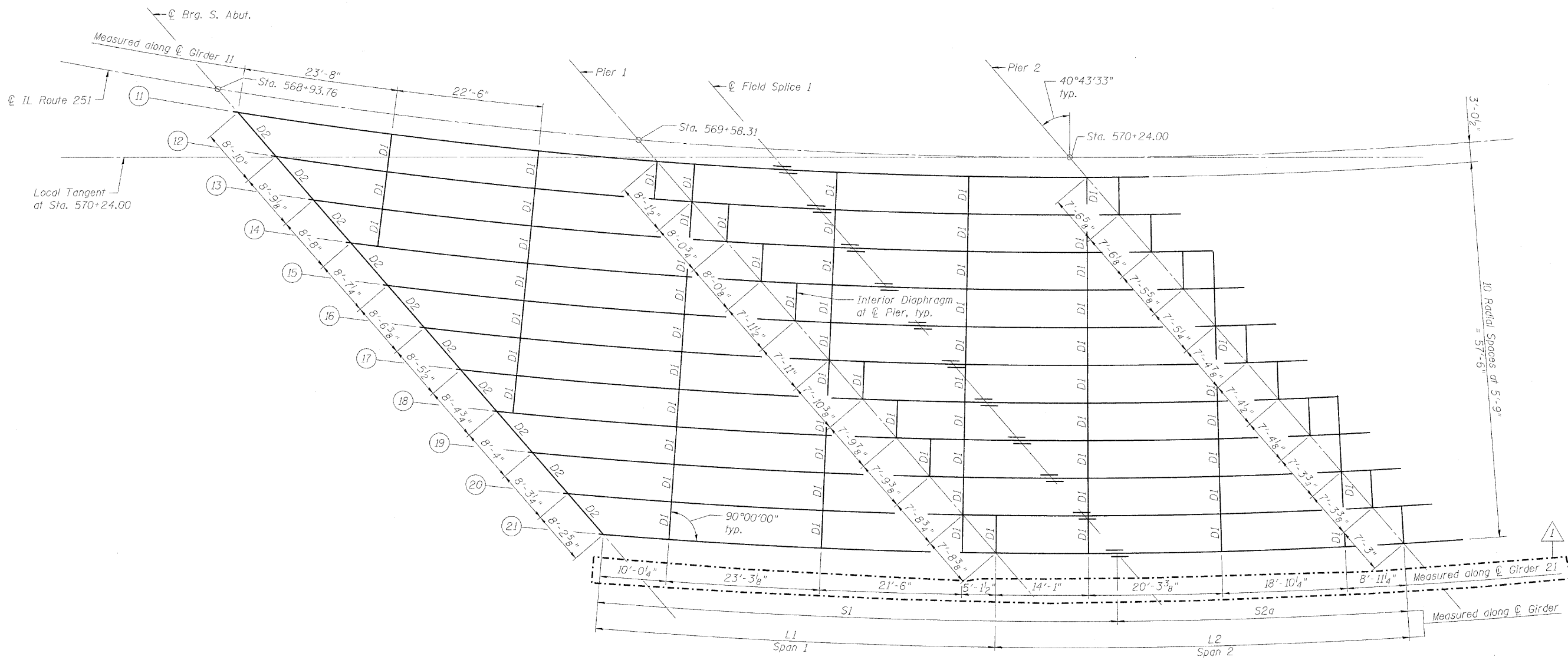
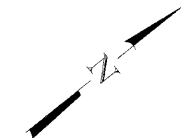


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN - NB SPANS 1 AND 2

Note:
Work this sheet with Sheets 32 thru 42.

**FRAMING PLAN
NORTHBOUND - SPANS 1 AND 2
STRUCTURE NO. 101-0190**

DESIGNED	- JY
CHECKED	- GSP
DRAWN	- MJB
CHECKED	- JY

SHEET NO. 36	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216	91
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

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Bench Mark: #408 stainless steel plug on wall Elev. 738.30, #410 cut square on wall Elev. 731.55

Existing Structure: S.N. 101-0042 was built in 1956 as F.A. Route 188, Section 1-HB-F at Station 24+71.4. It was widened in 1967 and rehabilitated in 1985 and 2001. Existing dual structures consist of four span simple supported steel WF straight beams and reinforced concrete deck supported by stub abutments on concrete piles and multi-column piers on timber piles. 250'-4 3/8" Bk. to Bk. abutments along the tangent. Varies from 119'-6" to 122'-6" out-to-out deck. Structures to be removed and replaced. Traffic to be maintained using stage construction.

No salvage

Traffic Barrier Terminal
Std. 631031 - Type 6
Appr. Ends
Std. 631026 - Type 5
Exit Ends

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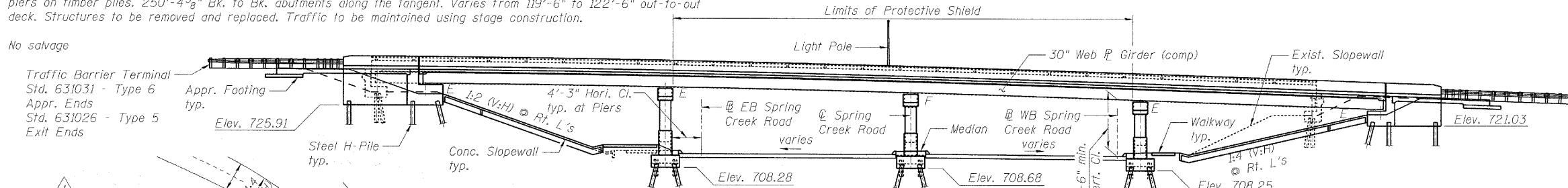
LOADING HL 93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications
with 2008 and 2009 Interims

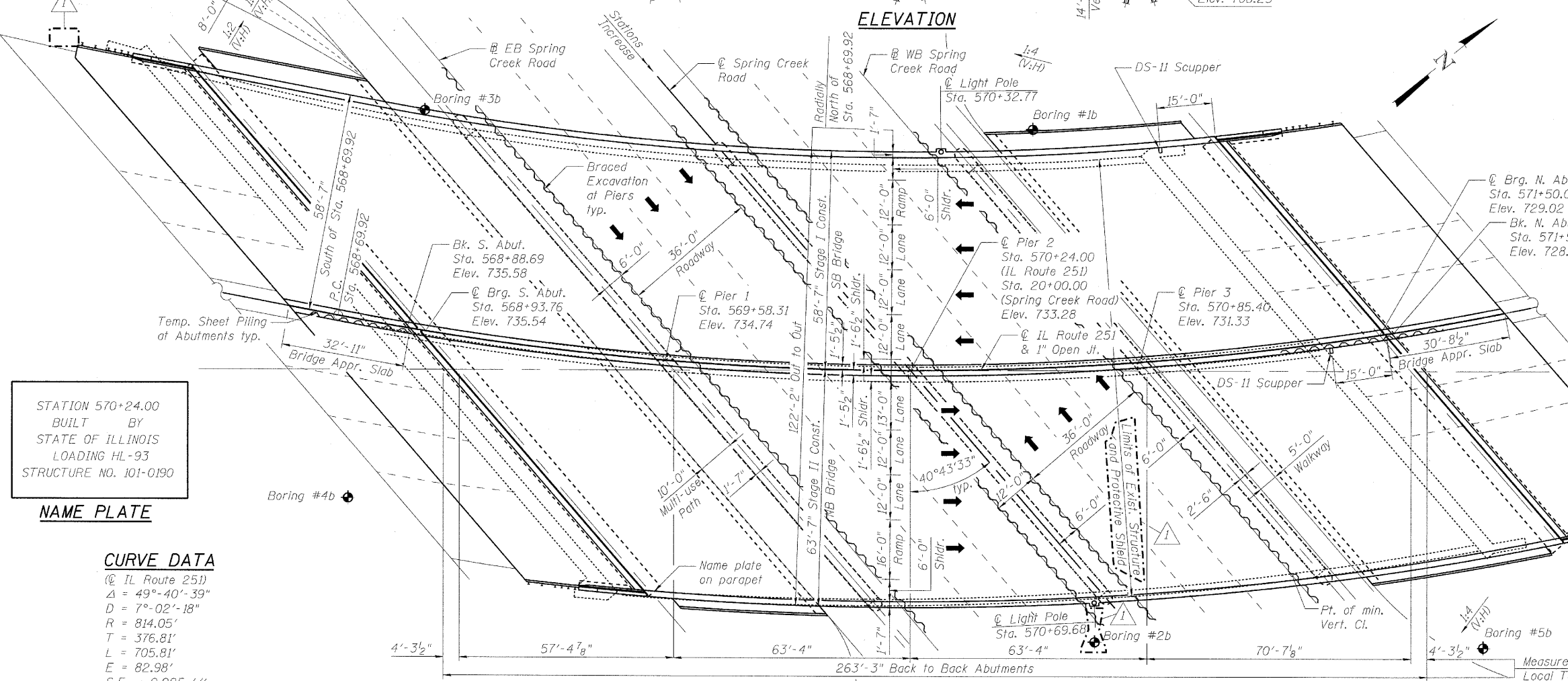
DESIGN STRESSES

FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (M270 grade 50)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.055g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.098g
Soil Site Class = C



ELEVATION



PLAN

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Anderson (TOD)
ENGINEER OF BRIDGES AND STRUCTURES



Gary S. Powell
GARY S. POWELL, S.E.
IL. LIC. NO. 081-004771

EXP 11-30-2012

DATE 10-19-2010

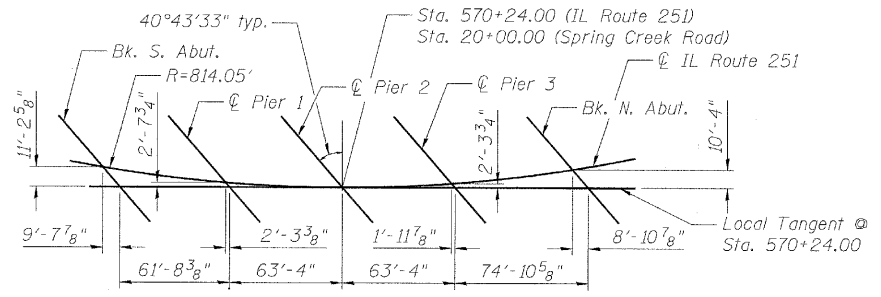
STATION 570+24.00
BUILT BY
STATE OF ILLINOIS
LOADING HL-93
STRUCTURE NO. 101-0190

NAME PLATE

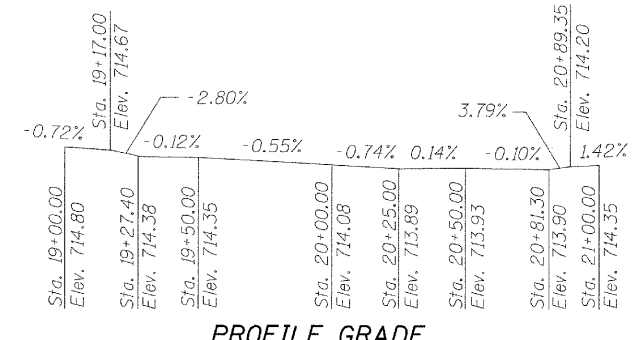
CURVE DATA
(@ IL Route 251)
Δ = 49°-40'-39"
D = 7°-02'-18"
R = 814.05'
T = 376.81'
L = 705.81'
E = 82.98'
S.E. = 0.025 1/4
P.C. Sta. = 568+69.92
P.T. Sta. = 575+75.73
P.I. Sta. = 572+46.74

Southbound superelevation transition from normal crown at Sta. 568+16.60 to full superelevation at Sta. 569+12.80. Full superelevation for the Northbound direction is achieved south of the approach slab.

DESIGNED - JY
CHECKED - GSP
DRAWN - MJB
CHECKED - JY

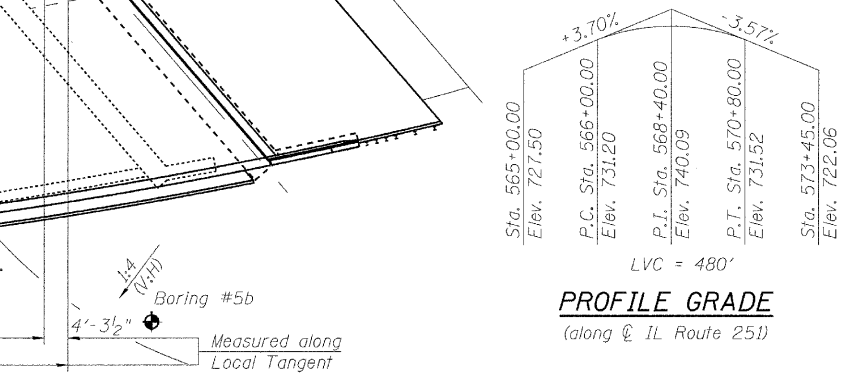


OFFSET SKETCH



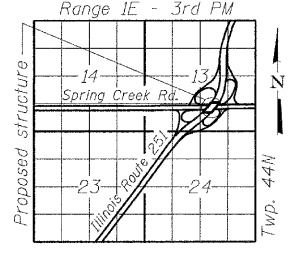
PROFILE GRADE

(along @ Spring Creek Road From Survey)
(at Top of Median)



PROFILE GRADE

(along @ IL Route 251)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 251 OVER
SPRING CREEK ROAD
F.A.P. 303 SEC. 1 - HBR
WINNEBAGO COUNTY
STATION 570+24.00
STRUCTURE NO. 101-0190

SHEET NO. 1 61 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	56
	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

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GENERAL NOTES

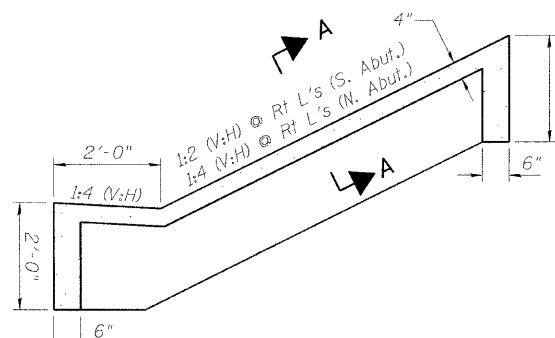
- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{1}{2}$ " ϕ , holes $\frac{15}{16}$ " ϕ , unless otherwise noted.
- Calculated weight of Structural Steel (M270 Grade 50) = 1,394,330 lbs.
Calculated weight of Structural Steel (M270 Grade 36) = 18,680 lbs.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or 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 beam at each of these additional bracket locations.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ 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 designated areas of the exposed surfaces of backwalls, bridge seats, and front faces of pile caps under abutment deck joints; and all exposed surface areas at piers within 10 ft. of the outer edge of shoulder.
- 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 that 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 Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

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- General Plan & Elevation
- General Notes, Index of Sheets & Total Bill of Material
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- Substructure Excavation Details
- Stage Construction - Superstructure
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- Top of Slab Elevations (1 of 5)
- Top of Slab Elevations (2 of 5)
- Top of Slab Elevations (3 of 5)
- Top of Slab Elevations (4 of 5)
- Top of Slab Elevations (5 of 5)
- Top of Approach Slab Elevations - South Approach
- Top of Approach Slab Elevations - North Approach
- Deck Plan - Southbound Spans 1 and 2
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- Drainage Scupper DS-II
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- Approach Slab Sections and Details - North Approach
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- Camber Diagram and Top of Web Elevations
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- Bearing Details (1 of 2)
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- South Abutment Details
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- North Abutment - Northbound Plan & Elevation
- North Abutment Details
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- Pier Details & Bill of Material
- Bar Splicer Assembly Details
- HP Pile Details
- Boring Logs (1 of 2)
- Boring Logs (2 of 2)

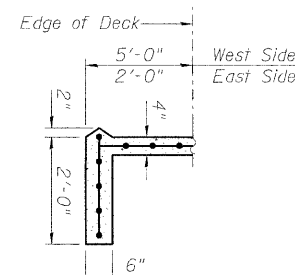
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	608		608
Removal of Existing Structures	Each			1
Protective Shield	Sq. Yd.	1636		1636
Structure Excavation	Cu. Yd.		918	918
Concrete Structures	Cu. Yd.		1565.5	1565.5
Concrete Superstructure	Cu. Yd.	1418.1		1418.1
Bridge Deck Grooving	Sq. Yd.	4085		4085
Protective Coat	Sq. Yd.	4856		4856
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	18566		18566
Reinforcement Bars, Epoxy Coated	Pound	357,900	207,010	564,910
Bar Splicers	Each	326	72	398
Slope Wall 4 Inch	Sq. Yd.		1339	1339
Furnishing Steel Piles HP12x53	Foot		9638	9638
Driving Piles	Foot		9638	9638
Test Pile Steel HP12x53	Each		5	5
Pile Shoes	Each		387	387
Temporary Sheet Piling	Sq. Ft.		1536	1536
Name Plates	Each		1	1
Preformed Joint Strip Seal	Foot	323.5		323.5
Anchor Bolts, 1 1/4"	Each	210		210
Concrete Sealer	Sq. Ft.		17965	17965
Geocomposite Wall Drain	Sq. Yd.		321	321
Pipe Underdrains for Structures 4"	Foot		370	370
Conduit Embedded in Structure 2" Dia., PVC	Foot	523	46	569
Junction Box, Stainless Steel, Embedded in Structure, 12"x10"x6"	Each		4	4
Braced Excavation	Cu. Yd.		1067	1067
Elastomeric Bearing Assembly, Type I (Special)	Each	42		42
Elastomeric Bearing Assembly, Type II (Special)	Each	42		42
Drainage Scupper, DS-II	Each	2		2

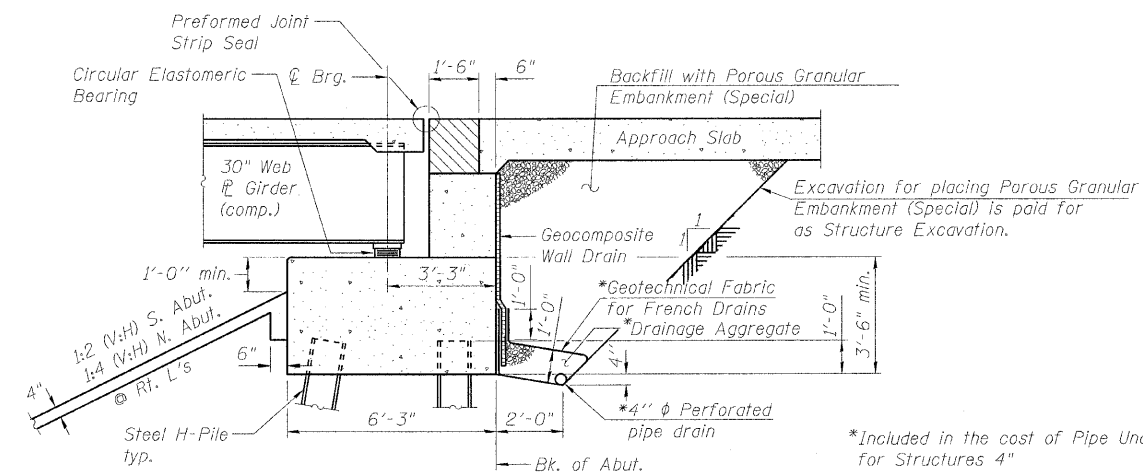


SECTION THRU SLOPEWALL

Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.



SECTION A-A



SECTION THRU ABUTMENT

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures 4"

Note:
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).

GENERAL NOTES, INDEX OF SHEETS
& TOTAL BILL OF MATERIAL
STRUCTURE NO. 101-0190

SHEET NO. 2	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216	57
		IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79	
		FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT	

* F.A.P. 303 & F.A.U. 5146

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER 21

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	569+53.42	60.54	736.34	736.34
☉ Brg. S. Abut.	569+57.74	60.54	736.27	736.27
A	569+67.05	60.54	736.10	736.12
B	569+76.36	60.54	735.92	735.95
C	569+85.66	60.54	735.73	735.76
D	569+94.97	60.54	735.52	735.54
E	570+04.28	60.54	735.30	735.31
☉ Pier 1	570+13.50	60.54	735.07	735.07
G	570+22.81	60.54	734.83	734.83
H	570+32.12	60.54	734.57	734.58
I	570+41.42	60.54	734.30	734.31
J	570+50.73	60.54	734.01	734.03
K	570+60.04	60.54	733.72	733.72
☉ Pier 2	570+71.35	60.54	733.34	733.34
M	570+80.66	60.54	733.01	733.01
N	570+89.97	60.54	732.68	732.68
O	570+99.27	60.54	732.35	732.35
P	571+08.58	60.54	732.01	732.01
Q	571+17.89	60.54	731.68	731.68
☉ Pier 3	571+26.22	60.54	731.38	731.38
R	571+35.53	60.54	731.05	731.07
S	571+44.84	60.54	730.72	730.75
T	571+54.14	60.54	730.39	730.43
U	571+63.45	60.54	730.05	730.10
V	571+72.76	60.54	729.72	729.76
☉ Brg. N. Abut.	571+84.62	60.54	729.30	729.30
Bk. N. Abut.	571+88.09	60.54	729.17	729.17

☉ ILLINOIS ROUTE 251 & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	568+88.69	0.00	735.58	735.58
☉ Brg. S. Abut.	568+93.76	0.00	735.54	735.54
A	569+03.76	0.00	735.46	735.48
B	569+13.76	0.00	735.36	735.40
C	569+23.76	0.00	735.25	735.29
D	569+33.76	0.00	735.12	735.15
E	569+43.76	0.00	734.98	734.99
F	569+53.76	0.00	734.82	734.82
☉ Pier 1	569+58.31	0.00	734.74	734.74
G	569+68.31	0.00	734.56	734.57
H	569+78.31	0.00	734.37	734.38
I	569+88.31	0.00	734.16	734.17
J	569+98.31	0.00	733.93	733.95
K	570+08.31	0.00	733.69	733.70
L	570+18.31	0.00	733.43	733.44
☉ Pier 2	570+24.00	0.00	733.28	733.28
M	570+34.00	0.00	733.00	733.00
N	570+44.00	0.00	732.71	732.71
O	570+54.00	0.00	732.40	732.40
P	570+64.00	0.00	732.07	732.07
Q	570+74.00	0.00	731.73	731.73
☉ Pier 3	570+85.40	0.00	731.33	731.33
R	570+95.40	0.00	730.97	730.99
S	571+05.40	0.00	730.61	730.65
T	571+15.40	0.00	730.26	730.31
U	571+25.40	0.00	729.90	729.95
V	571+35.40	0.00	729.54	729.58
☉ Brg. N. Abut.	571+50.05	0.00	729.02	729.02
Bk. N. Abut.	571+53.87	0.00	728.88	728.88



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DESIGNED - JY
CHECKED - GSP
DRAWN - MJB
CHECKED - JY

TOP OF SLAB ELEVATIONS (5 OF 5)
STRUCTURE NO. 101-0190

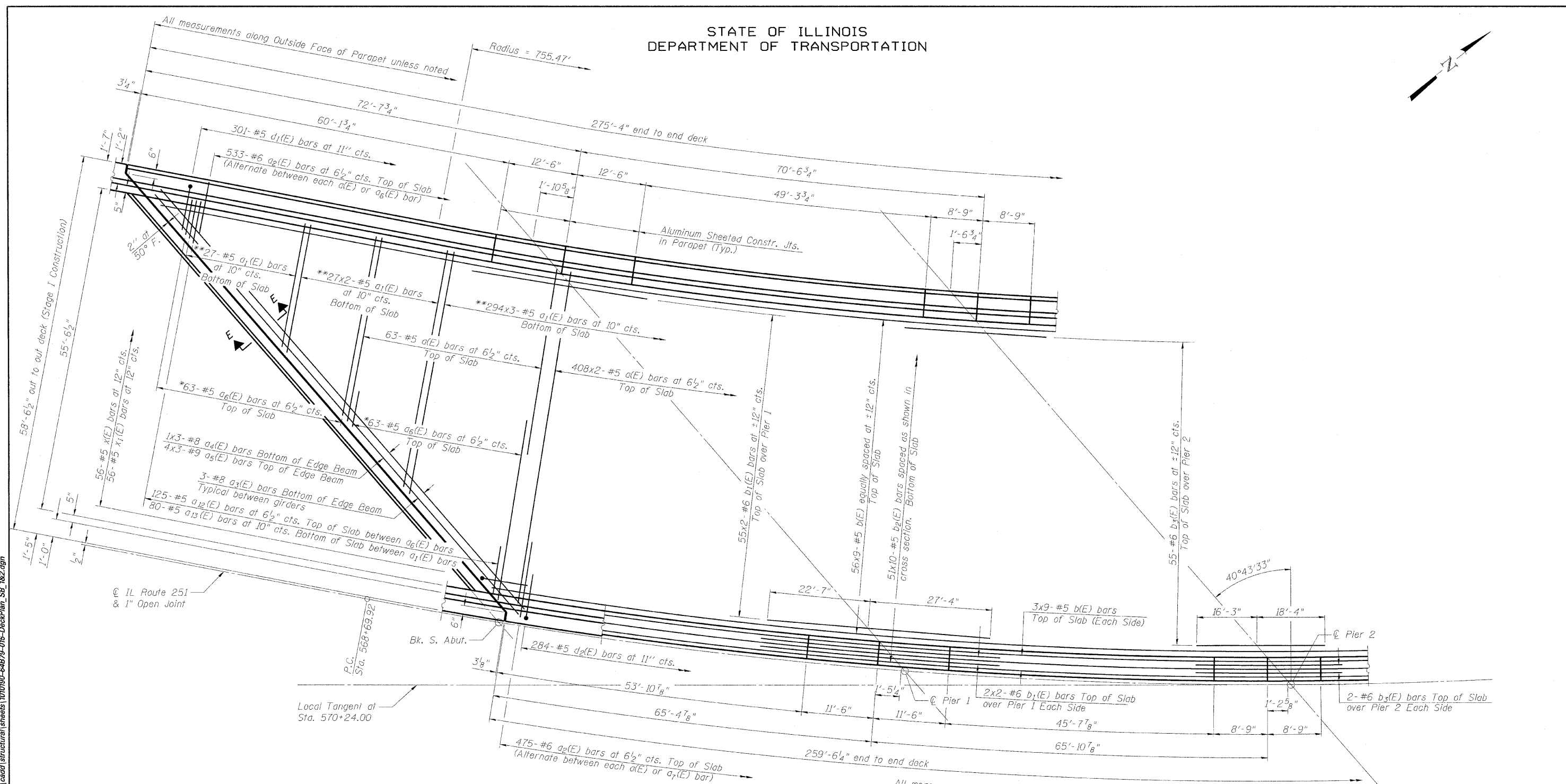
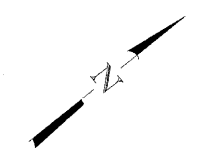
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	*	1-HBR & 1-2HB-D	WINNEBAGO	216	67
61 SHEETS	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



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*Order a₆(E) bars full length. Cut to fit skew and use remainder of bars in same end of deck.
**Vary lap length or cut to fit skew.

SOUTHBOUND DECK PLAN - SPANS 1 AND 2

**DECK PLAN - SOUTHBOUND
SPANS 1 AND 2
STRUCTURE NO. 101-0190**

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DESIGNED	JY
CHECKED	GSP
DRAWN	MJB
CHECKED	JY

MINIMUM BAR LAPS
(Deck)

#5 Bar	- 2'-7"
#6 Bar	- 3'-1"
#8 Bar	- 6'-9"
#9 Bar	- 9'-8"

Notes:
See Sheet 17 for deck cross section.
See Sheets 22 and 23 for superstructure details, Section E-E and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 21 for parapet reinforcement.
Transverse bars shall be placed radially.
Longitudinal bars shall be placed along the curve.

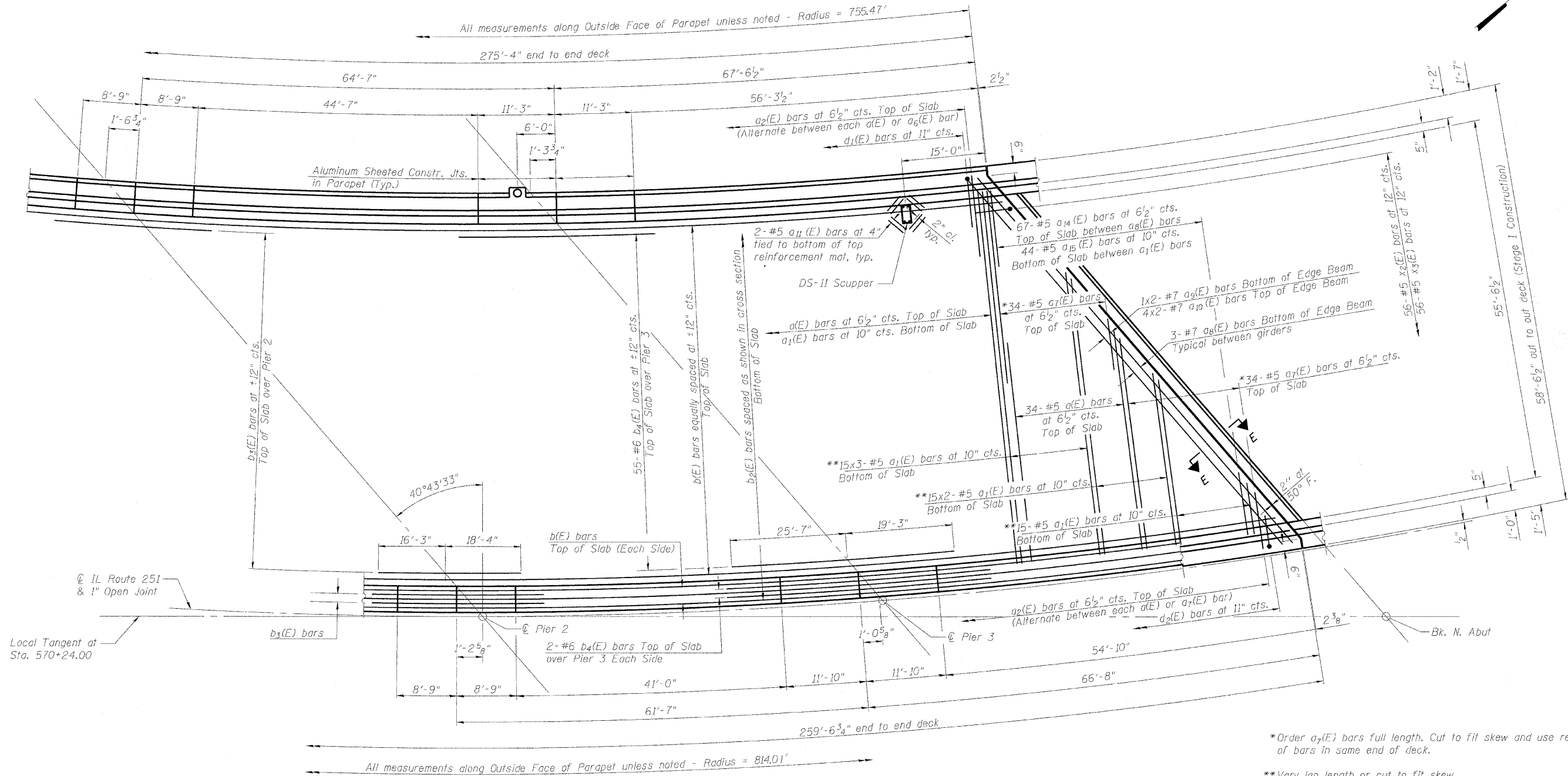
SHEET NO. 15 61 SHEETS	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	70
	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SOUTHBOUND DECK PLAN - SPANS 3 AND 4

**DECK PLAN - SOUTHBOUND
SPANS 3 AND 4
STRUCTURE NO. 101-0190**

DESIGNED	- JY
CHECKED	- GSP
DRAWN	- MJB
CHECKED	- JY

MINIMUM BAR LAPS

- (Deck)
 #5 Bar - 2'-7"
 #6 Bar - 3'-1"
 #7 Bar - 5'-10"

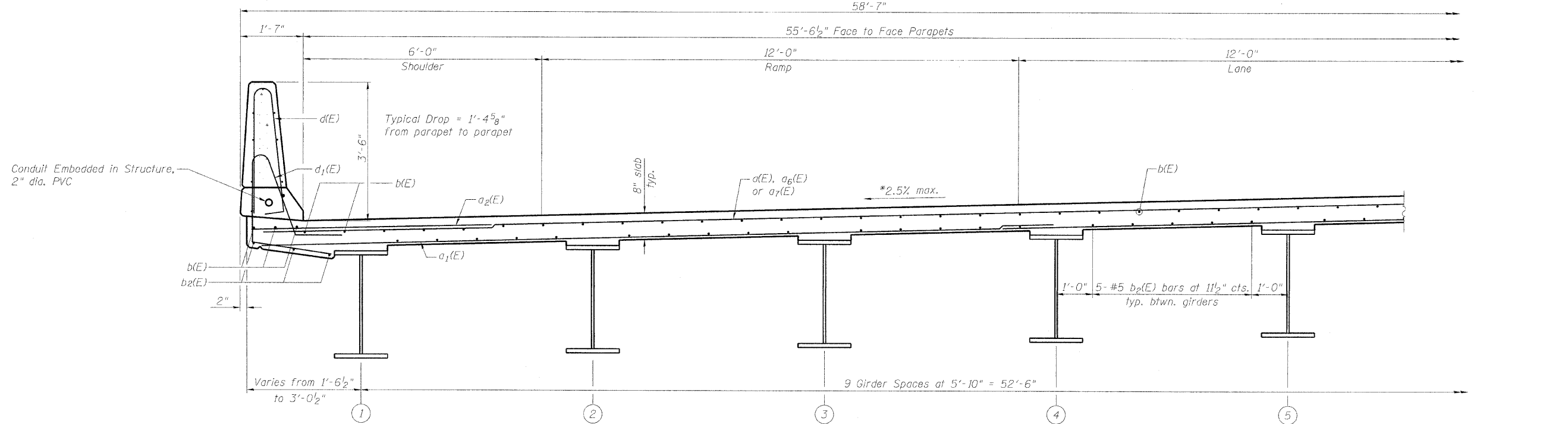
Notes:
 See Sheet 17 for deck cross section.
 See Sheets 22 and 23 for superstructure details, Section F-F and Bill of Material.
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 See Sheet 21 for parapet reinforcement.
 Transverse bars shall be placed radially.
 Longitudinal bars shall be placed along the curve.
 Cut longitudinal reinforcement to clear drainage scupper.

SHEET NO. 16	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	71
61 SHEETS	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

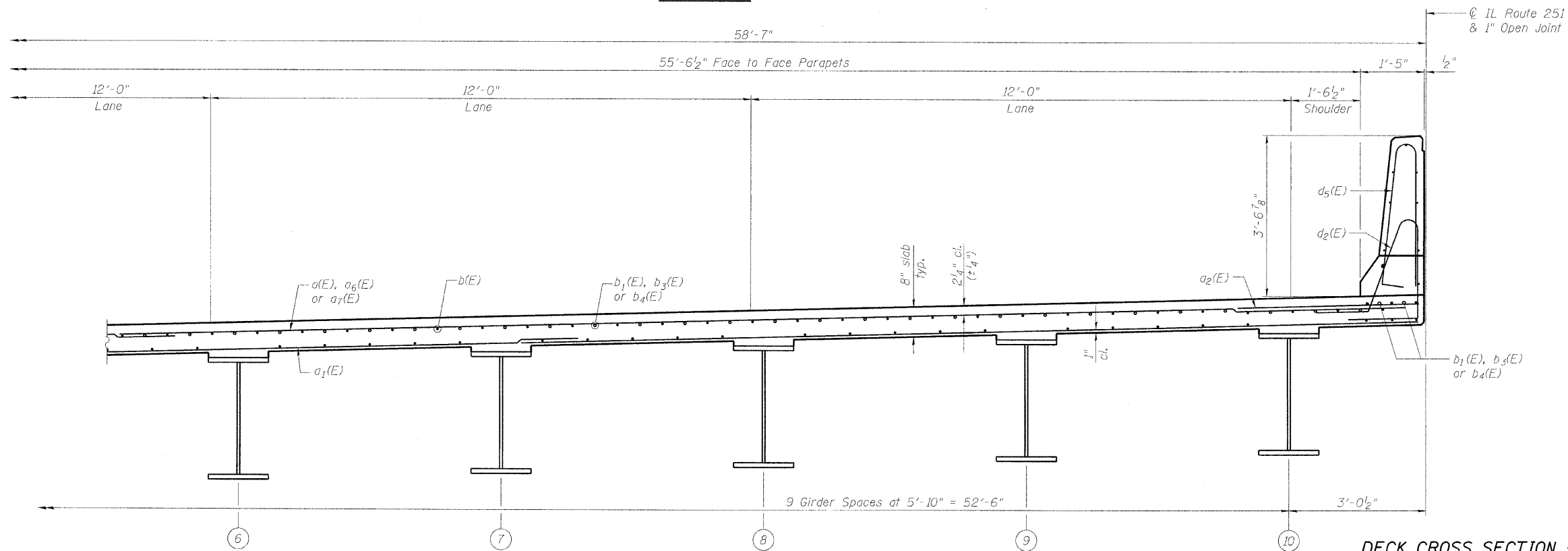
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NEAR MIDSPAN



NEAR PIER

DECK CROSS SECTION - SOUTHBOUND
STRUCTURE NO. 101-0190

MINIMUM BAR LAPS
(Deck)
#5 Bar - 2'-7"
#6 Bar - 3'-1"

SOUTHBOUND DECK CROSS SECTION

(Looking North - Horizontal dimensions are measured radial to IL Route 251)

*Note: Superelevation transition from normal crown at Sta. 568+16.60 to full superelevation at Sta. 569+12.80.

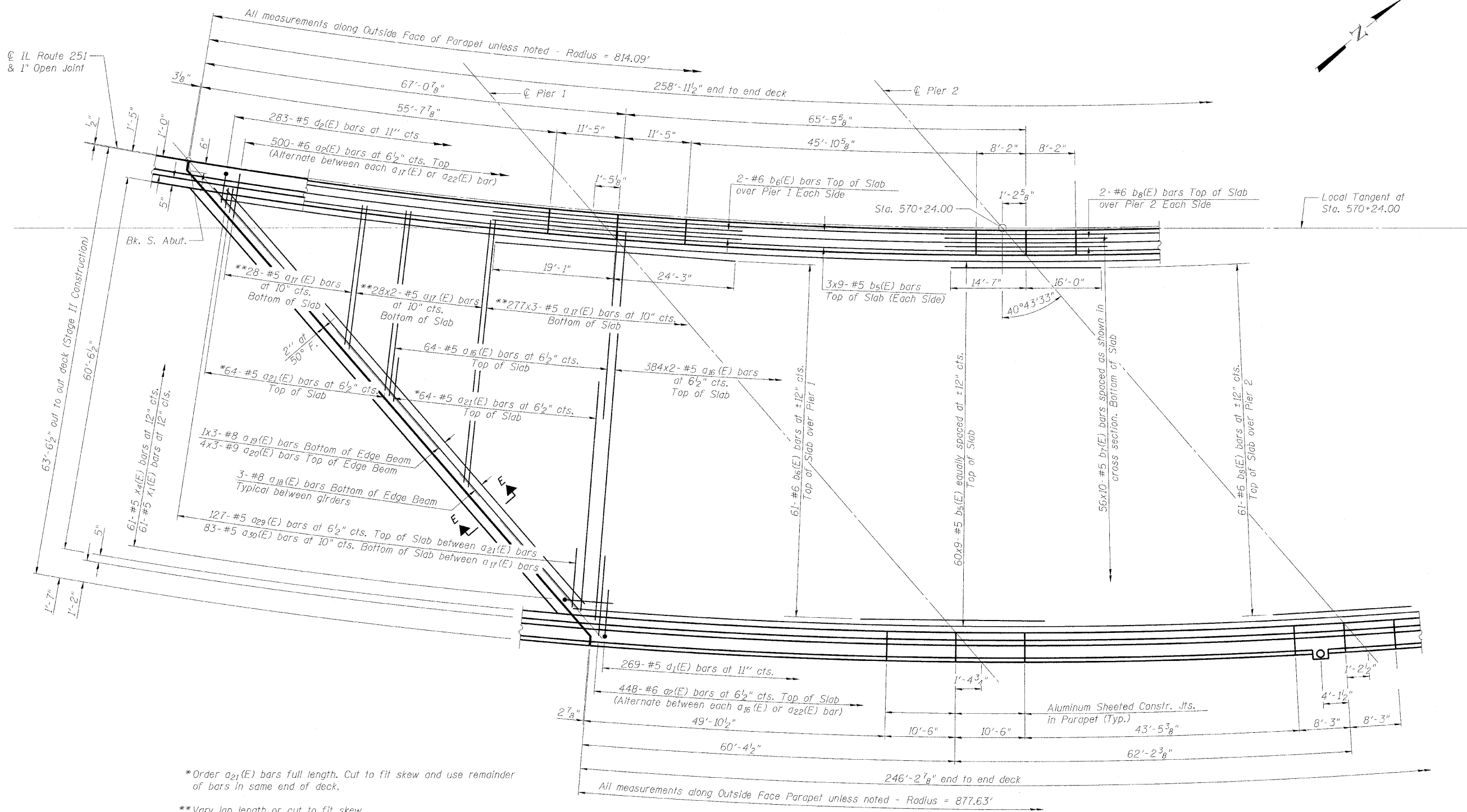
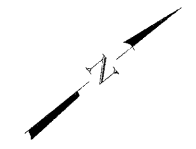
SHEET NO. 17	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	72
61 SHEETS	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

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DESIGNED - JY
CHECKED - GSP
DRAWN - MJB
CHECKED - JY

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*Order a₂₁(E) bars full length. Cut to fit skew and use remainder of bars in same end of deck.
**Vary lap length or cut to fit skew.

NORTHBOUND DECK PLAN - SPANS 1 AND 2

**DECK PLAN - NORTHBOUND
SPANS 1 AND 2
STRUCTURE NO. 101-0190**

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DESIGNED	JY
CHECKED	GSP
DRAWN	MJB
CHECKED	JY

MINIMUM BAR LAPS
(Deck)

#5 Bar	- 2'-7"
#6 Bar	- 3'-1"
#8 Bar	- 6'-9"
#9 Bar	- 9'-8"

Notes:
See Sheet 20 for deck cross section.
See Sheets 22 and 23 for superstructure details, Section E-E and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 21 for parapet reinforcement.
Transverse bars shall be placed radially.
Longitudinal bars shall be placed along the curve.

SHEET NO. 18 61 SHEETS	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	73
IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79			
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



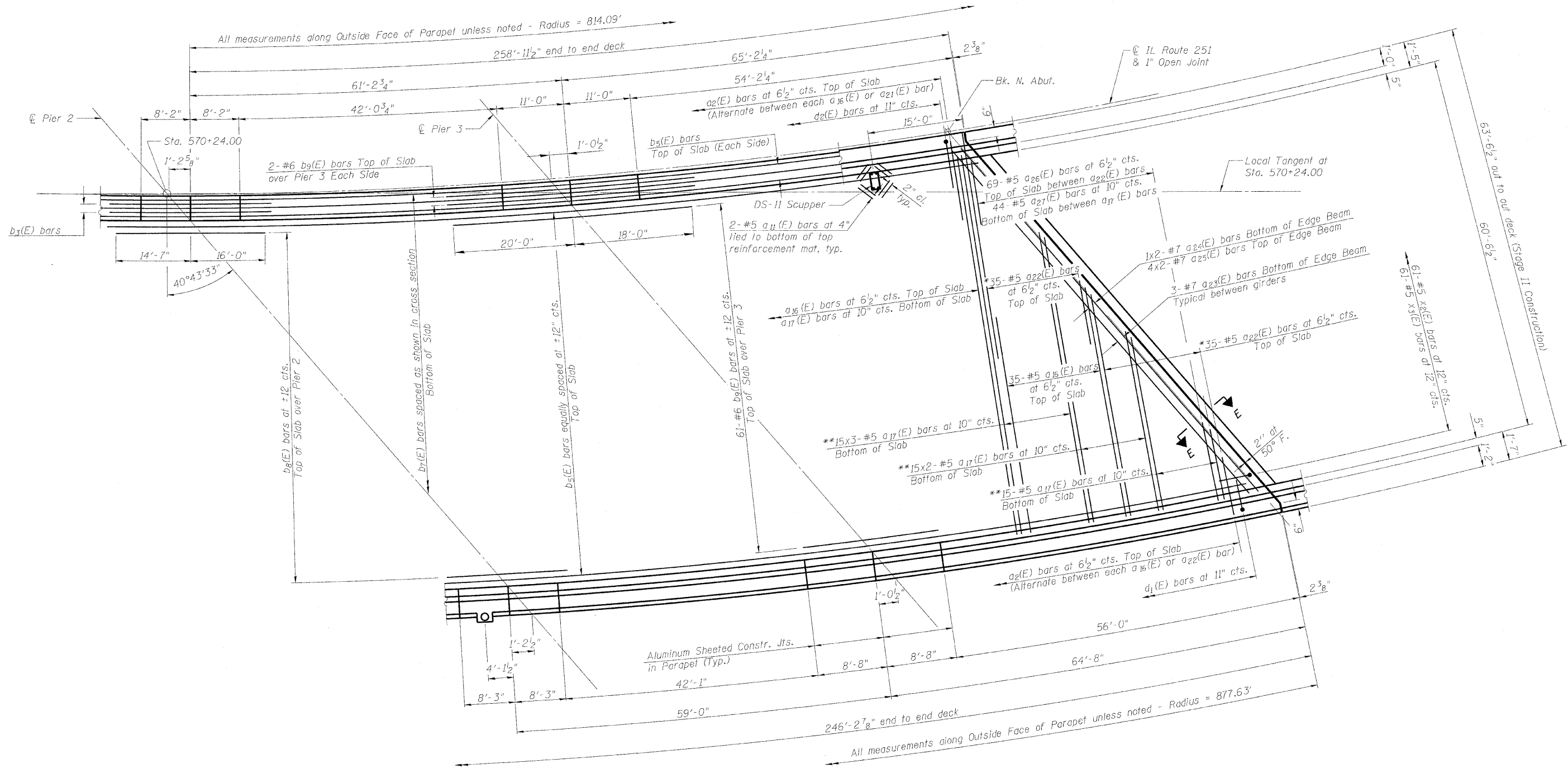
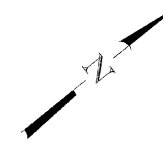
* F.A.P. 303 & F.A.U. 5146

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

*Order a₂₂(E) bars full length. Cut to fit skew and use remainder of bars in same end of deck.

**Vary lap length or cut to fit skew.



NORTHBOUND DECK PLAN - SPANS 3 AND 4

**DECK PLAN - NORTHBOUND
SPANS 3 AND 4
STRUCTURE NO. 101-0190**

DESIGNED	- JY
CHECKED	- GSP
DRAWN	- MJB
CHECKED	- JY

MINIMUM BAR LAPS
(Deck)

#5 Bar	- 2'-7"
#6 Bar	- 3'-1"
#7 Bar	- 5'-10"

Notes:
See Sheet 20 for deck cross section.
See Sheets 22 and 23 for superstructure details, Section F-F and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 21 for parapet reinforcement.
Traverse bars shall be placed radially.
Longitudinal bars shall be placed along the curve.

SHEET NO. 19 61 SHEETS	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	74
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

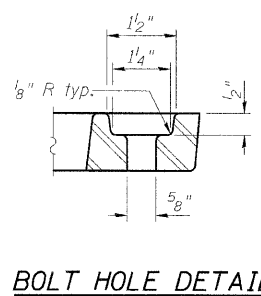
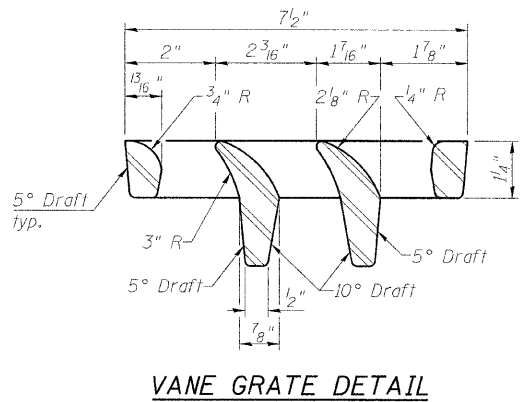
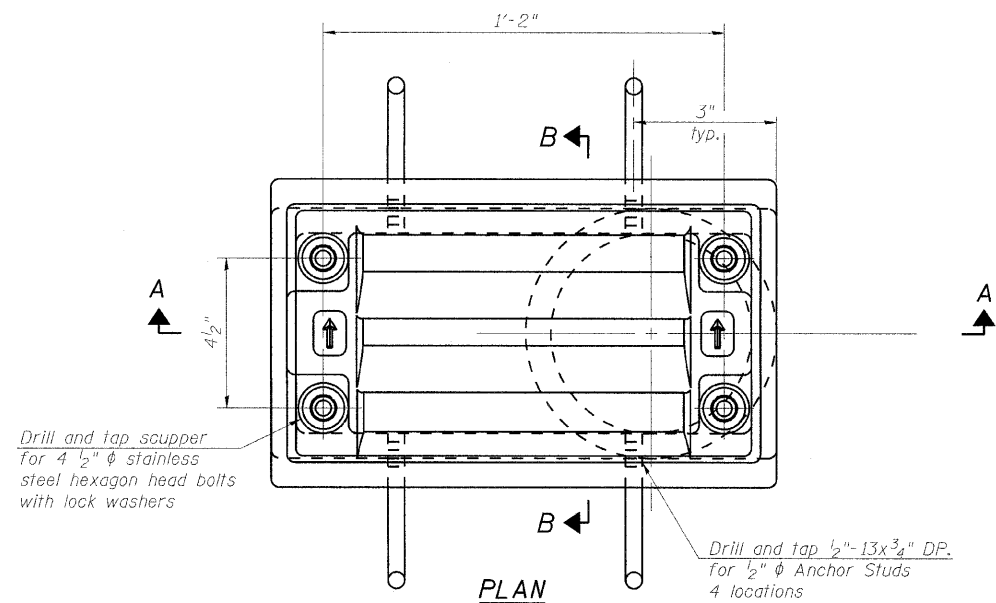
* F.A.P. 303 & F.A.U. 5146

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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.

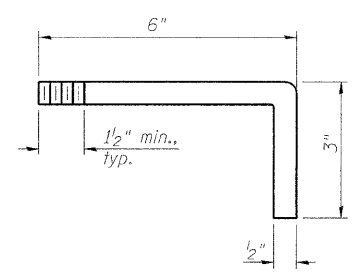
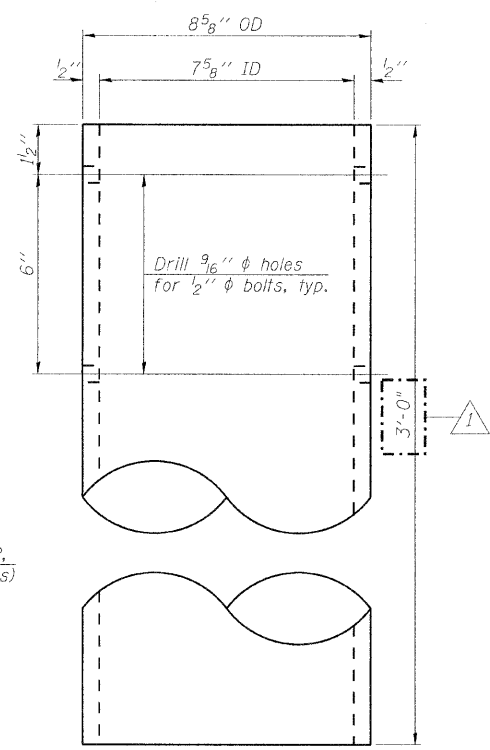
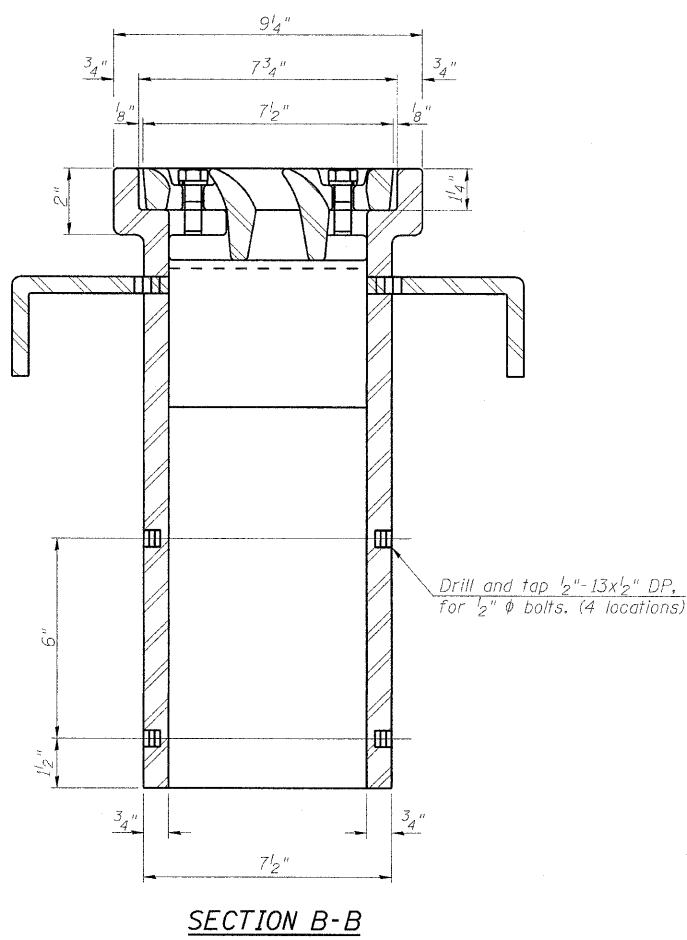
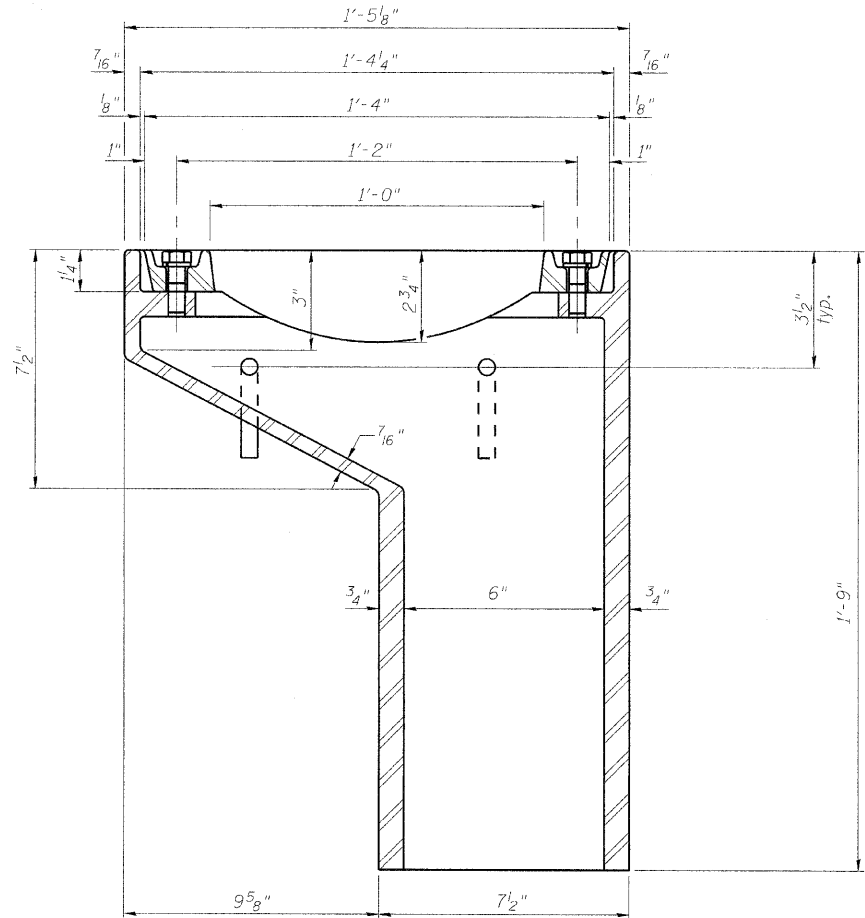
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

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.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	2

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 101-0190

DESIGNED	JY
CHECKED	GSP
DRAWN	MJB
CHECKED	JY

DS-11 7-1-10

SHEET NO. 25	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216	80
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

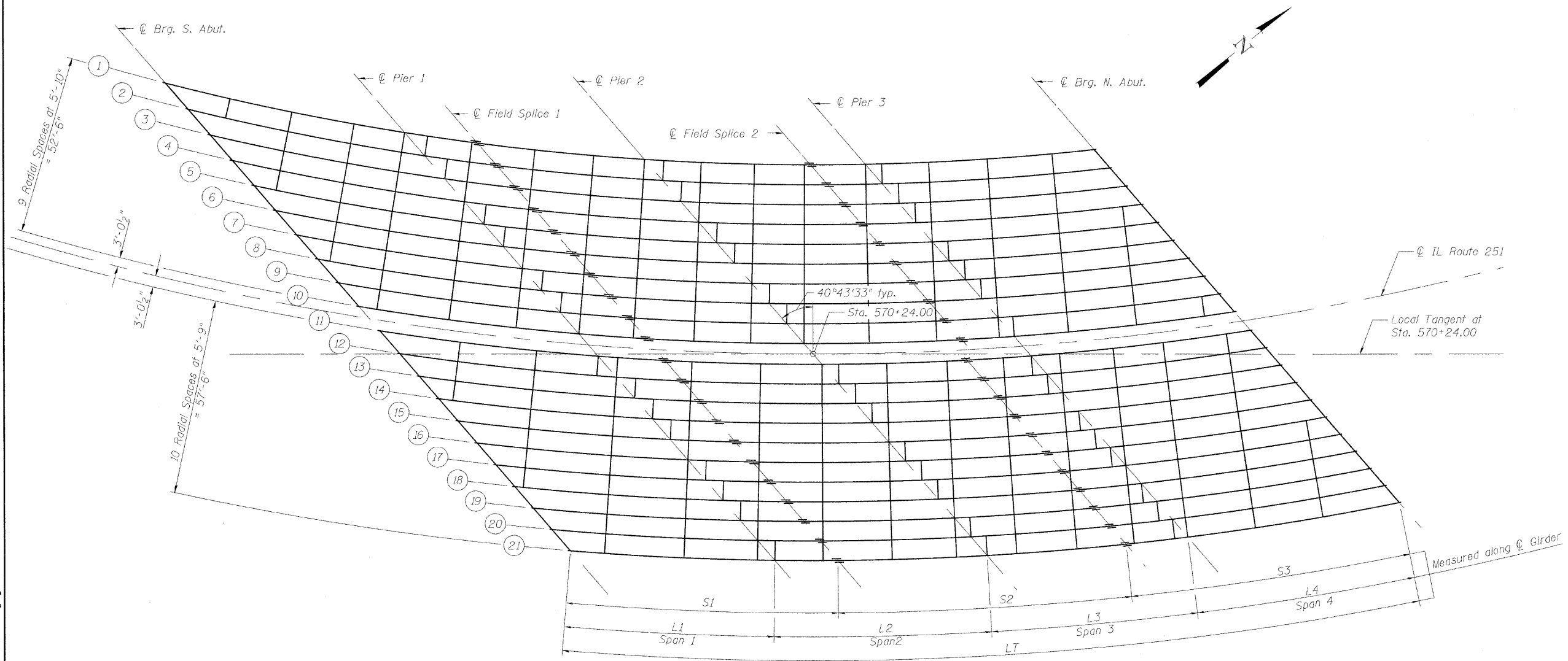
* F.A.P. 303 & F.A.U. 5146

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DEPARTMENT OF TRANSPORTATION



GIRDER GENERAL DIMENSIONS (IN FEET)

Girder No.	Radius	Span 1			Span 2			Span 3			Span 4			LT		
		L1a	L1b	L1=L1a+L1b	L2a	L2b	L2c	L2=L2a+L2b+L2c	L3a	L3b	L3c	L3=L3a+L3b+L3c	L4a		L4b	L4=L4a+L4b
Girder 1	758.510	58.750	12.687	71.437	26.813	32.750	10.988	70.551	17.763	26.000	20.851	64.614	19.789	47.250	67.039	273.640
Girder 2	764.343	52.750	17.778	70.528	24.722	33.750	11.461	69.934	15.789	28.000	20.429	64.217	16.749	50.000	66.749	271.428
Girder 3	770.176	52.250	17.422	69.672	22.328	34.000	13.018	69.346	15.232	27.250	21.355	63.837	16.220	50.250	66.470	269.325
Girder 4	776.010	51.250	17.615	68.865	22.385	32.250	14.152	68.786	15.098	26.500	21.873	63.472	15.950	50.250	66.200	267.323
Girder 5	781.843	50.250	17.854	68.104	20.397	34.750	13.105	68.252	14.645	26.250	22.225	63.120	14.940	51.000	65.940	265.415
Girder 6	787.676	49.000	18.383	67.383	19.451	35.250	13.040	67.741	14.960	27.000	20.823	62.782	15.688	50.000	65.688	263.594
Girder 7	793.510	49.000	17.700	66.700	21.050	32.500	13.702	67.253	13.798	25.750	22.909	62.457	15.195	50.250	65.445	261.854
Girder 8	799.343	48.000	18.051	66.051	17.949	35.500	13.336	66.785	13.914	24.750	23.480	62.144	15.209	50.000	65.209	260.189
Girder 9	805.176	46.750	18.685	65.435	17.065	36.000	13.272	66.337	12.728	24.750	24.364	61.842	15.231	49.750	64.981	258.595
Girder 10	811.010	42.750	22.099	64.849	18.901	29.750	17.256	65.907	13.494	22.250	25.807	61.551	14.760	50.000	64.760	257.067
Girder 11	817.093	49.750	14.517	64.267	23.733	30.000	11.744	65.477	15.506	26.500	19.252	61.258	17.288	47.250	64.538	255.540
Girder 12	822.843	47.500	16.242	63.742	24.758	28.750	11.579	65.087	16.171	25.000	19.820	60.991	16.083	48.250	64.333	254.154
Girder 13	828.593	47.250	15.991	63.241	21.009	31.500	12.203	64.712	14.048	26.250	20.436	60.733	13.636	50.500	64.136	252.821
Girder 14	834.343	46.500	16.261	62.761	19.989	31.750	12.612	64.350	14.138	28.500	17.845	60.484	15.443	48.500	63.943	251.539
Girder 15	840.093	47.250	15.052	62.302	19.198	32.250	12.554	64.002	13.946	25.000	21.296	60.242	15.507	48.250	63.757	250.303
Girder 16	845.843	45.250	16.612	61.862	17.388	30.000	16.279	63.667	8.971	28.500	22.537	60.008	15.326	48.250	63.576	249.113
Girder 17	851.593	44.750	16.689	61.439	18.311	32.500	12.533	63.343	13.717	24.000	22.064	59.782	13.400	50.000	63.400	247.964
Girder 18	857.343	44.500	16.534	61.034	18.216	33.250	11.565	63.031	13.935	22.000	23.627	59.562	14.979	48.250	63.229	246.856
Girder 19	863.093	43.000	17.644	60.644	17.856	32.250	12.623	62.729	13.627	24.500	21.223	59.350	14.813	48.250	63.063	245.786
Girder 20	868.843	43.500	16.769	60.269	16.231	34.000	12.207	62.438	15.043	21.250	22.850	59.143	14.651	48.250	62.901	244.751
Girder 21	874.593	41.500	18.409	59.909	17.092	31.000	14.064	62.156	13.436	22.250	23.258	58.943	14.494	48.250	62.744	243.751

Note:
Work this sheet with Sheets 33 thru 42.

DESIGNED	- JY
CHECKED	- GSP
DRAWN	- MJB
CHECKED	- JY

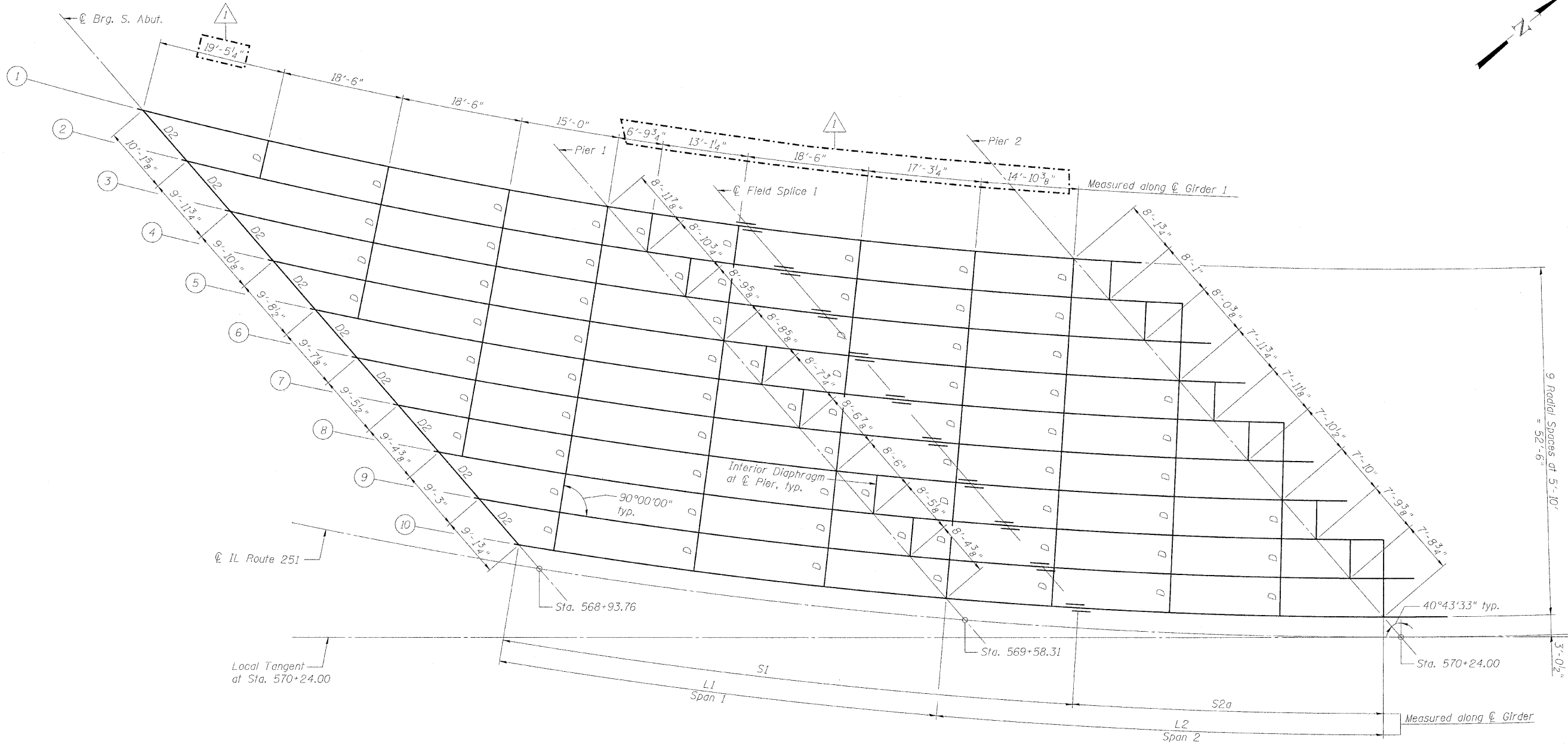
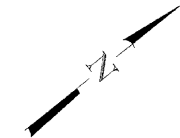
GENERAL FRAMING PLAN
STRUCTURE NO. 101-0190

SHEET NO. 32	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	87
61 SHEETS	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN - SB SPANS 1 AND 2

Note:
Work this sheet with Sheets 32 thru 42.

FRAMING PLAN
SOUTHBOUND - SPANS 1 AND 2
STRUCTURE NO. 101-0190

DESIGNED	JY
CHECKED	GSP
DRAWN	MJB
CHECKED	JY

SHEET NO. 34	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216	89
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

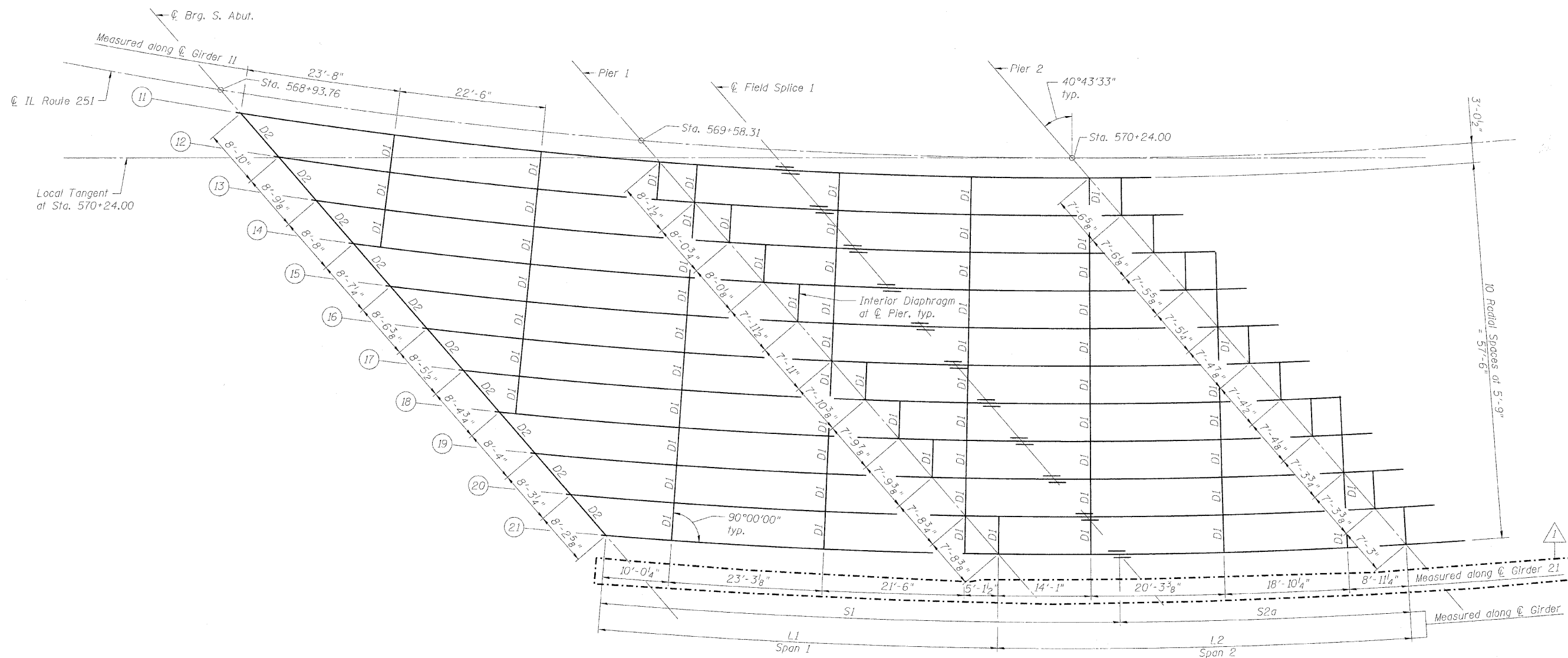
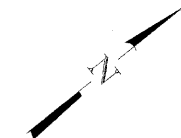
* F.A.P. 303 & F.A.U. 5146

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN - NB SPANS 1 AND 2

Note:
Work this sheet with Sheets 32 thru 42.

**FRAMING PLAN
NORTHBOUND - SPANS 1 AND 2
STRUCTURE NO. 101-0190**

DESIGNED	- JY
CHECKED	- GSP
DRAWN	- MJB
CHECKED	- JY

SHEET NO. 36	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216	91
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

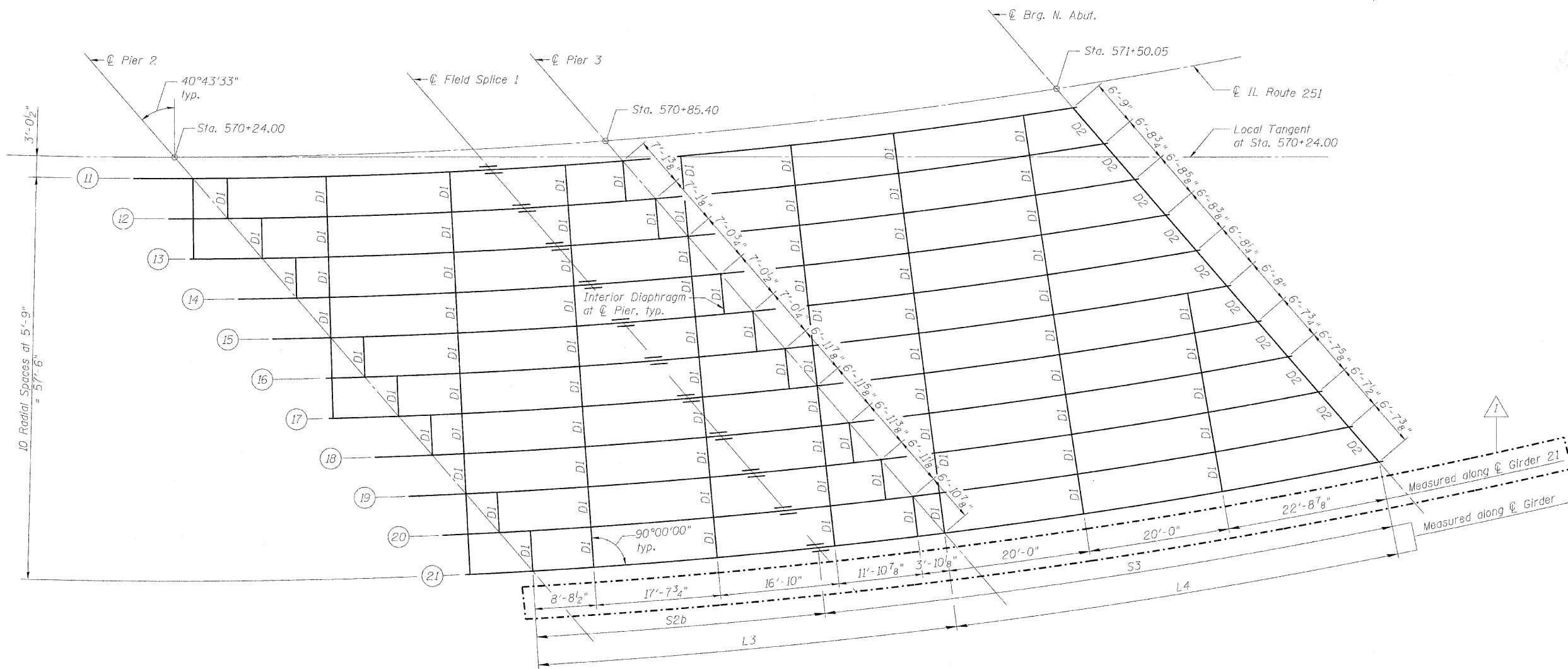
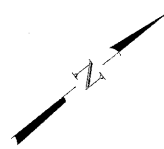
* F.A.P. 303 & F.A.U. 5146

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN - NB SPANS 3 AND 4

Note:
Work this sheet with Sheets 32 thru 42.

**FRAMING PLAN
NORTHBOUND - SPANS 3 AND 4
STRUCTURE NO. 101-0190**

DESIGNED	- JY
CHECKED	- GSP
DRAWN	- MJB
CHECKED	- JY

SHEET NO. 37	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216	92
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

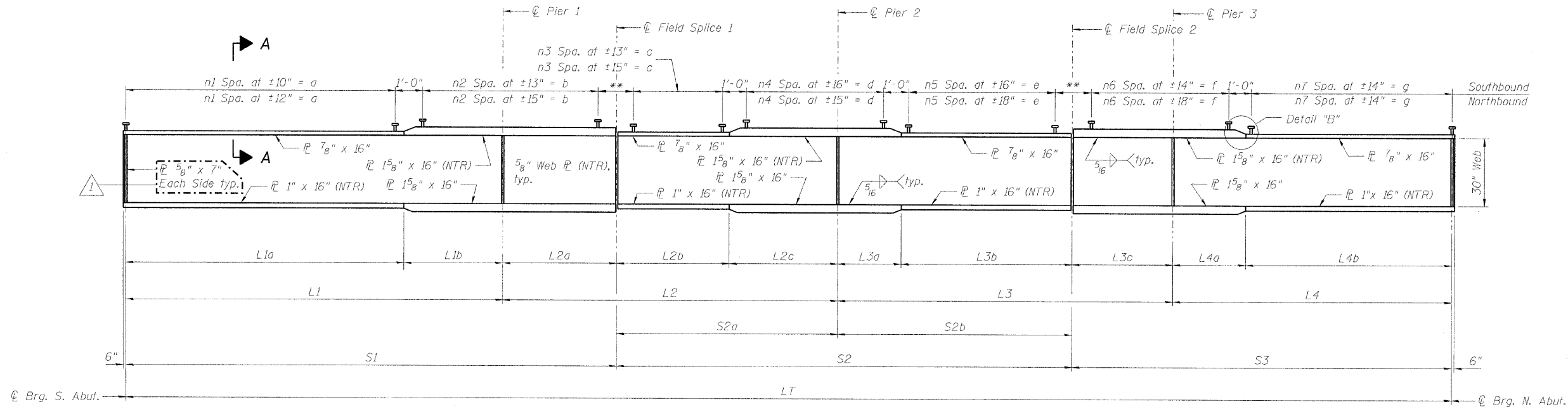
* F.A.P. 303 & F.A.U. 5146

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DEPARTMENT OF TRANSPORTATION



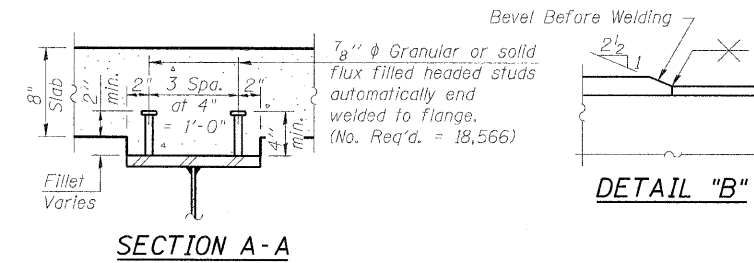
**Note: See sheet 39 for shear stud plan at splice.

GIRDER ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

GIRDER FIELD SPLICE LOCATION (IN FEET)

	Girder No.	S1	S2a	S2b	S2=S2a+S2b	S3
Southbound	Girder 1	98.250	43.738	43.763	87.500	87.890
	Girder 2	95.250	45.211	43.789	89.000	87.178
	Girder 3	92.000	47.018	42.482	89.500	87.825
	Girder 4	91.250	46.402	41.598	88.000	88.073
	Girder 5	88.500	47.855	40.895	88.750	88.165
	Girder 6	86.833	48.290	41.960	90.250	86.511
	Girder 7	87.750	46.202	39.548	85.750	88.354
	Girder 8	84.000	48.836	38.664	87.500	88.689
	Girder 9	82.500	49.272	37.478	86.750	89.345
	Girder 10	83.750	47.006	35.744	82.750	90.567
Northbound	Girder 11	88.000	41.744	42.006	83.750	83.790
	Girder 12	88.500	40.329	41.171	81.500	84.154
	Girder 13	84.250	43.703	40.298	84.000	84.571
	Girder 14	82.750	44.362	42.638	87.000	81.789
	Girder 15	81.500	44.804	38.946	83.750	85.053
	Girder 16	79.250	46.279	37.471	83.750	86.113
	Girder 17	79.750	45.033	37.717	82.750	85.464
	Girder 18	79.250	44.815	35.935	80.750	86.856
	Girder 19	78.500	44.873	38.127	83.000	84.286
	Girder 20	76.500	46.207	36.293	82.500	85.751
	Girder 21	77.000	45.064	35.686	80.750	86.001



Notes:
Work this sheet with Sheets 32 thru 42.
See Sheet 39 for shear stud table and layout
at diaphragms and field splices.

**GIRDER ELEVATION
STRUCTURE NO. 101-0190**

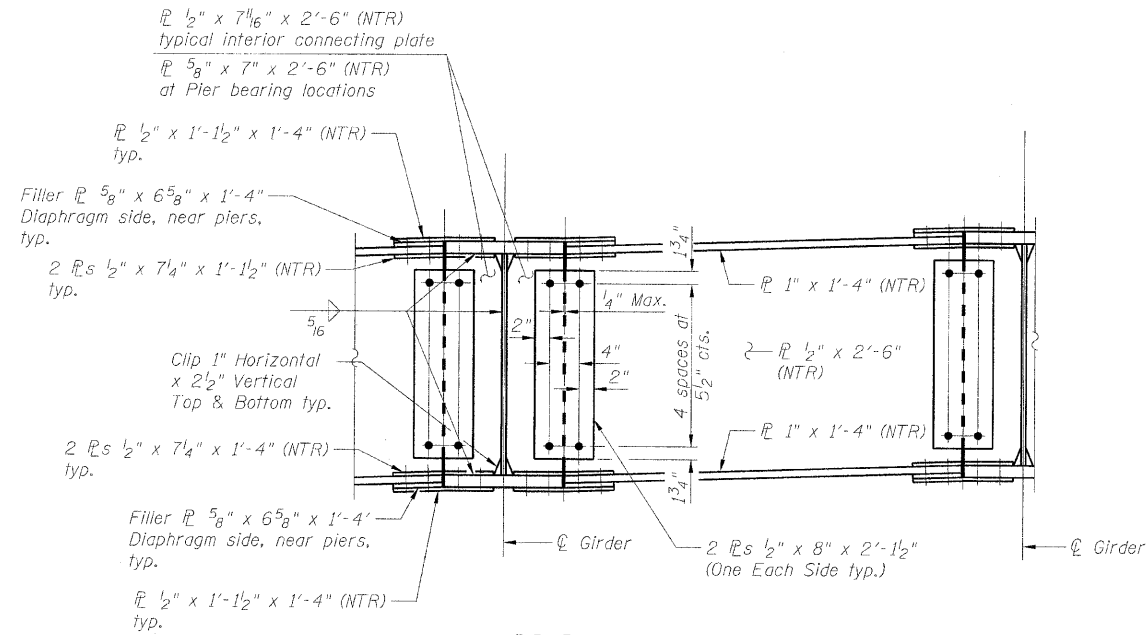
DESIGNED - JY
CHECKED - GSP
DRAWN - MJB
CHECKED - JY

SHEET NO. 38 61 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	93
IL RTE 251 & FOREST HILLS RD			CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

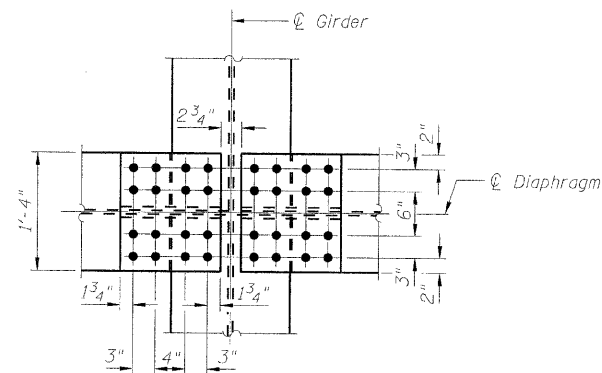
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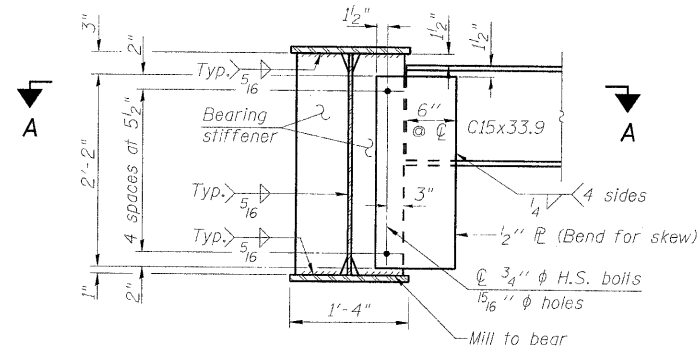


DIAPHRAGM D OR D1 ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

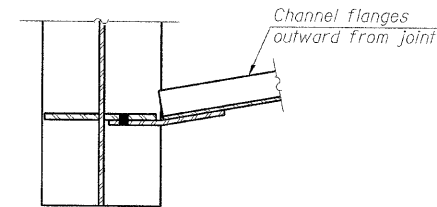


DIAPHRAGM D OR D1 PLAN



END DIAPHRAGM D2

Note: Two hardened washers required for each set of oversized holes.



SECTION A-A

Note:
All cross frames or diaphragms between beams or girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

DESIGNED - JY
CHECKED - GSP
DRAWN - MJB
CHECKED - JY

**DIAPHRAGM DETAILS
STRUCTURE NO. 101-0190**

SHEET NO. 40	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216	95
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MOMENT TABLE	INTERIOR GIRDER			EXTERIOR GIRDER		
	0.4 Sp. 1	Pier 1	0.5 Sp. 2	0.4 Sp. 1	Pier 1	0.5 Sp. 2
I_s	8,568	14,420	8,568	8,568	14,420	8,568
$I_c(n)$	21,569	15,292	21,569	21,569	15,292	21,569
$I_c(3n)$	15,423	15,292	15,423	15,423	15,292	15,423
S_s	558	867	558	558	867	558
$S_c(n)$	787	869	787	787	869	787
$S_c(3n)$	708	869	708	708	869	708
S_{xt}	43	69	43	43	69	43
DC1	0.79	0.85	0.79	0.79	0.85	0.79
M _{DC1}	281	500	114	290	521	123
DC2	0.17	0.17	0.17	0.35	0.35	0.35
M _{DC2}	67	90	32	137	186	67
DW	0.29	0.29	0.29	0.23	0.23	0.23
M _{DW}	113	153	54	89	121	44
M _{L + IM}	797	610	532	810	639	644
M _u (Strength I)	1,999	2,035	1,369	2,085	2,184	1,430
M _{bt}	41.84	36.45	28.66	43.98	39.41	30.17
f_s DC1	6.0	6.9	2.5	6.2	7.2	2.6
f_s DC2	1.13	1.24	0.54	2.32	2.57	1.13
f_s DW	1.91	2.11	0.91	1.51	1.67	0.75
f_s 1.3(I+IM)	15.80	10.95	12.53	16.07	11.47	12.77
f_r	14.99	9.74	11.28	15.59	10.52	11.71
f_s (Service II)	24.89	21.22	16.43	26.13	22.92	17.29
f_s (Total)(Strength I)	33.1	28.1	22.0	34.6	30.2	23.0
F_{cr} (Service II)	47.5	47.5	47.5	47.5	47.5	47.5
V _r	57.18	73.61	35.10	69.64	89.66	38.86
R_{cr}	50.00	40.54	50.00	50.00	40.57	50.00

REACTION TABLE	INTERIOR GIRDER			EXTERIOR GIRDER		
	S. Abut.	Pier 1	N. Abut.	S. Abut.	Pier 1	N. Abut.
R _{DC1}	32	87	22	36	98	23
R _{DC2}	1	2	2	10	27	7
R _{DW}	9	28	7	10	23	7
R _{L + IM}	61	121	70	82	105	51
R _{Total}	103	238	101	138	253	88

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.⁴ and in.³).

$I_c(n), S_c(n)$: 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) due to short-term composite live loads (in.⁴ and in.³).

$I_c(3n), S_c(3n)$: 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) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

S_{xt} : Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: 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_{DC2}: 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_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{L + IM}: Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{L + IM}

M_{bt}: Factored lateral bending moment for controlling flange plate (kip-ft.).

f_r : Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending (kip-ft.).

f_s (Service II): Sum of stresses as computed from the moments below (ksi).
M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_{L + IM}

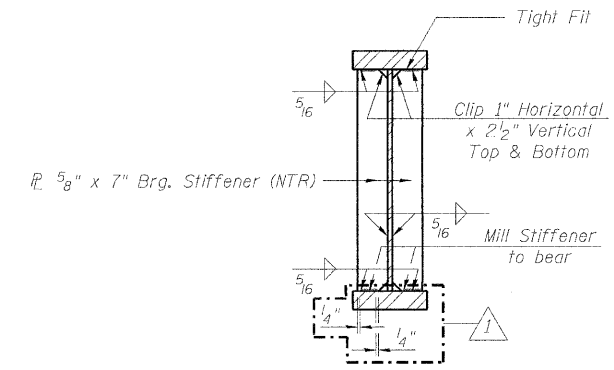
f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{L + IM}

F_{cr} (Service II): Critical flange stress at Service II computed according to Article 6.10.4.2 (ksi).

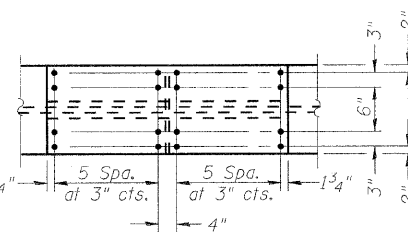
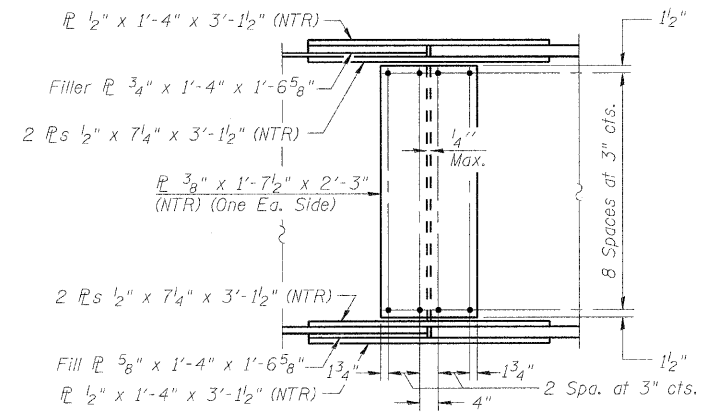
F_{cr} : Critical flange stress computed according to Article 6.10.7 or 6.10.8 (ksi).

V_r: Maximum factored shear range computed according to Article 6.10.10.

Note:
M_L and R_L include the effects of centrifugal force and superelevation.



SECTION AT ABUTMENTS AND PIERS



FIELD SPLICE DETAIL
"NTR" denotes plates to which notch toughness requirements are applicable.

MOMENT AND REACTION TABLE
& STEEL DETAILS
STRUCTURE NO. 101-0190

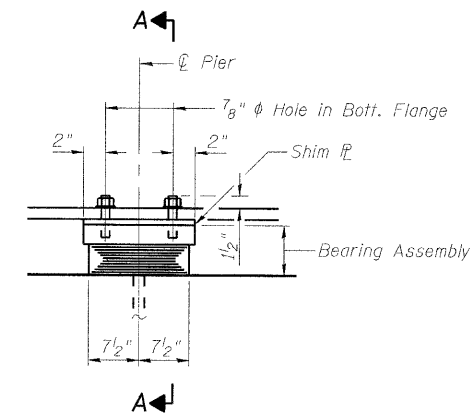
SHEET NO. 42	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

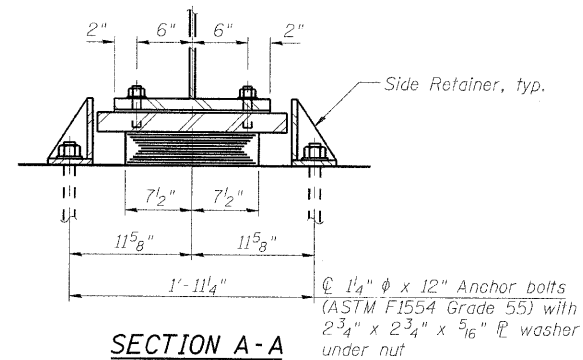
Revised 10/25/10 BHS

11:13:47 AM g:\project\2082773_001\cadd\structural\sheet\1010190-64B79-042-Mom Table&Details.dgn 10/19/2010

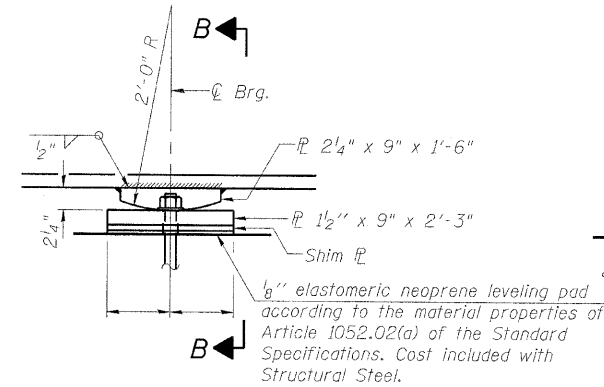
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



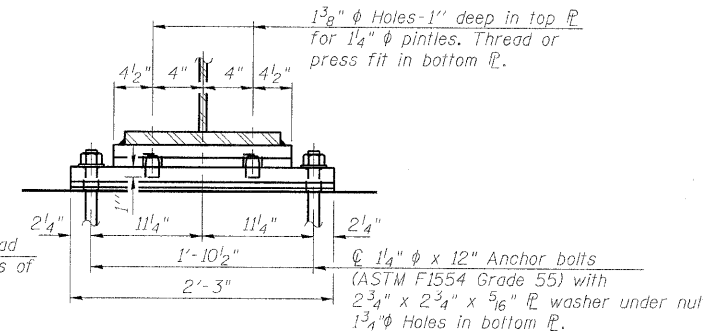
ELEVATION AT PIER



SECTION A-A



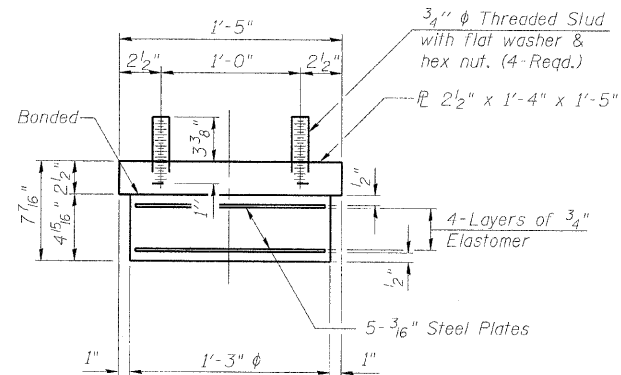
ELEVATION AT PIER 2



SECTION B-B

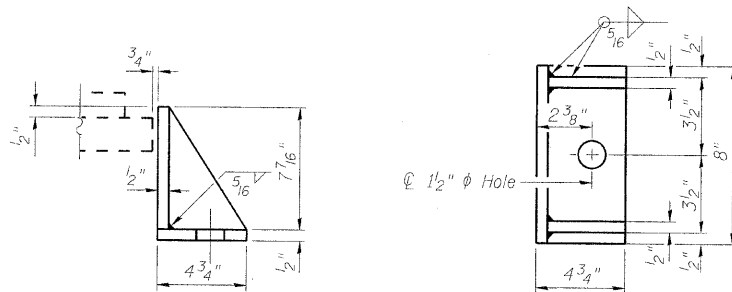
FIXED BEARING AT PIER 2

TYPE I ELASTOMERIC EXP. BRG. AT PIERS 1 AND 3



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

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

Notes:

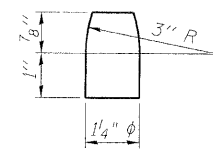
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

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 side retainers may be cast in place or installed in holes drilled before or after members are in place.

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 I (Special).



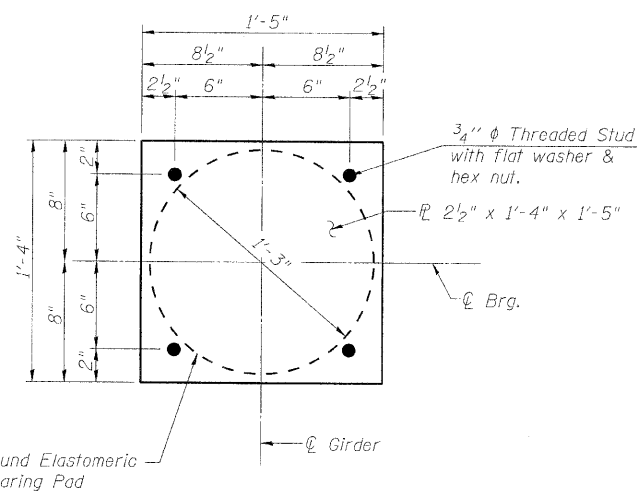
PINTLE

REQUIRED SHIM PLATE TABLES

PIER 1		
Girder	Size (in.)	Thickness
8	1'-4" x 1'-5"	5/8"
10	1'-4" x 1'-5"	5/8"
12	1'-4" x 1'-5"	1/2"
14	1'-4" x 1'-5"	1/2"
16	1'-4" x 1'-5"	3/8"
18	1'-4" x 1'-5"	3/8"
19	1'-4" x 1'-5"	5/8"
21	1'-4" x 1'-5"	1/4"

PIER 2		
Girder	Size (in.)	Thickness
2	9" x 2'-3"	3/8"
3	9" x 2'-3"	5/8"
5	9" x 2'-3"	5/8"
6	9" x 2'-3"	3/8"
7	9" x 2'-3"	5/8"
8	9" x 2'-3"	5/8"
10	9" x 2'-3"	1/2"
12	9" x 2'-3"	1/2"
13	9" x 2'-3"	1/4"
14	9" x 2'-3"	1/4"
15	9" x 2'-3"	3/8"
16	9" x 2'-3"	3/8"
17	9" x 2'-3"	1/2"
18	9" x 2'-3"	1/2"
19	9" x 2'-3"	5/8"
20	9" x 2'-3"	5/8"
21	9" x 2'-3"	5/8"

PIER 3		
Girder	Size (in.)	Thickness
1	1'-4" x 1'-5"	3/8"
2	1'-4" x 1'-5"	1/4"
4	1'-4" x 1'-5"	1/8"
5	1'-4" x 1'-5"	5/8"
6	1'-4" x 1'-5"	1/2"
7	1'-4" x 1'-5"	3/8"
8	1'-4" x 1'-5"	1/4"
9	1'-4" x 1'-5"	1/8"
17	1'-4" x 1'-5"	1/8"
18	1'-4" x 1'-5"	1/4"
19	1'-4" x 1'-5"	3/8"
20	1'-4" x 1'-5"	1/2"



PLAN AT EXPANSION BEARING

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I (Special)	Each	42
Anchor Bolts, 1/4"	Each	126

Note:
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.

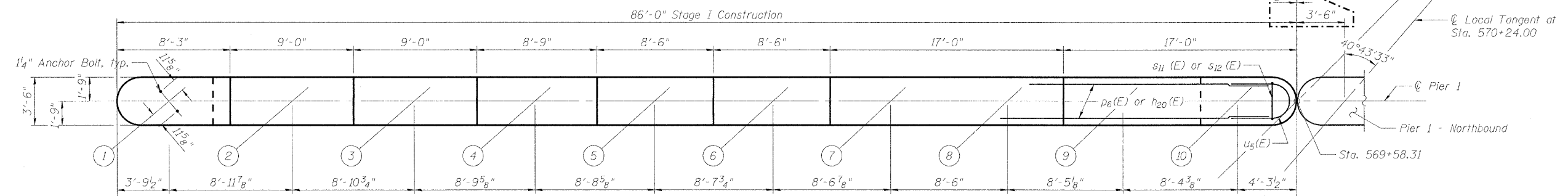
BEARING DETAILS (1 OF 2)
STRUCTURE NO. 101-0190

SHEET NO. 43 61 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	98
IL RTE 251 & FOREST HILLS RD			CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

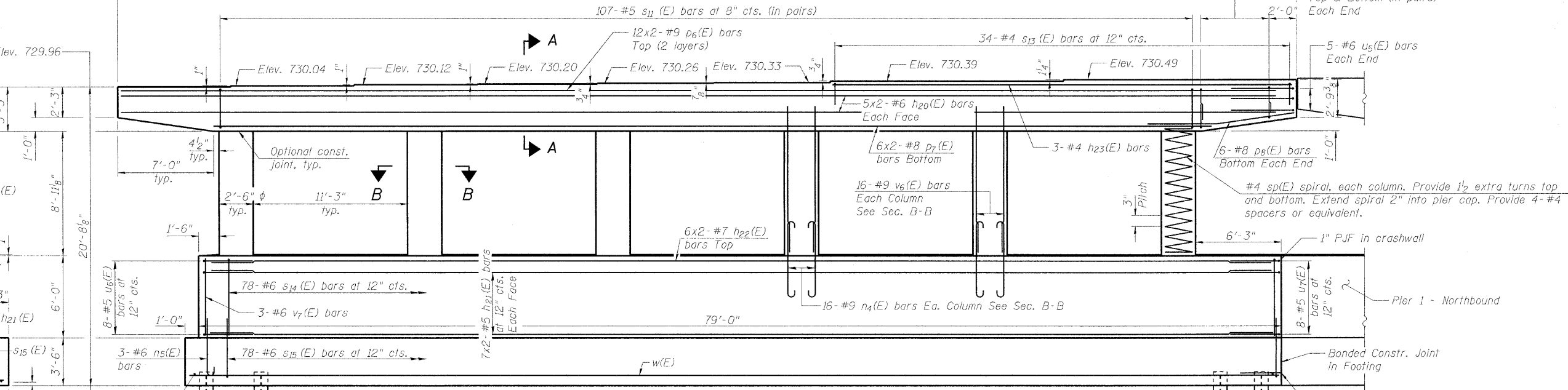
* F.A.P. 303 & F.A.U. 5146

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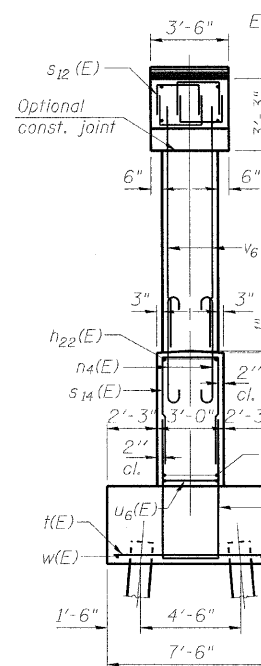
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



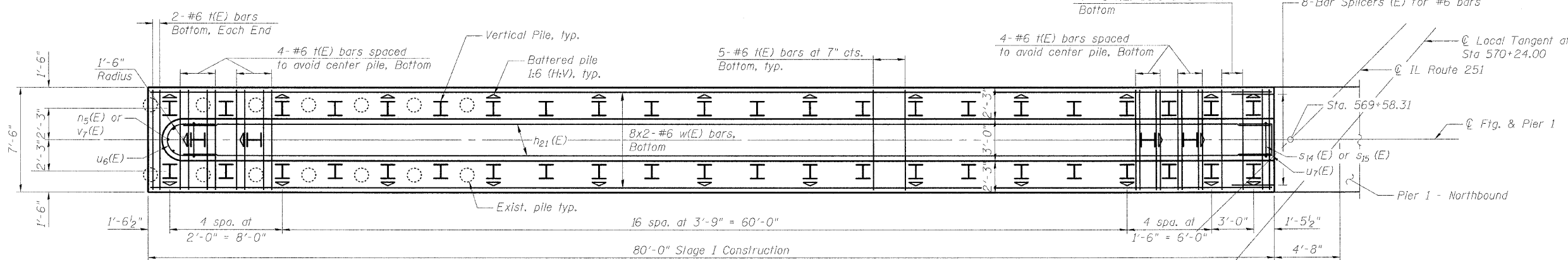
TOP PLAN



ELEVATION
(Looking North)



END VIEW



FOOTING PLAN

PILE DATA

Type: Steel HP 12x53 with pile shoes
Nominal Required Bearing: 318 kips
Factored Resistance Available: 175 kips
Est. Length: 23 ft
No. Production Piles: 47
No. Test Piles: 1

Note:
For Section A-A, B-B and Bill of Material, see Sheet 57 of 61.

MINIMUM BAR LAPS

- (Piers)
#5 Bar - 3'-3"
#6 Bar - 3'-10"
#7 Bar - 5'-10"
#8 Bar - 6'-9"
#9 Bar - 9'-8"

PIER 1 - SOUTHBOUND
STRUCTURE NO. 101-0190

SHEET NO. 51 61 SHEETS	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	106
	IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79 FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

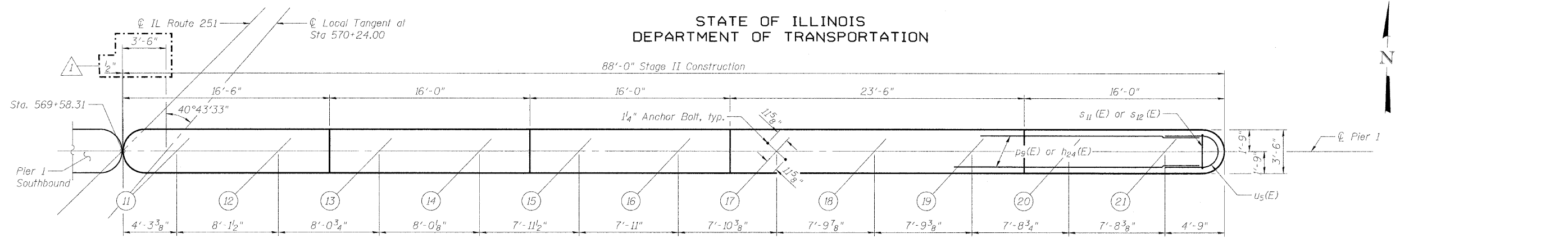
* F.A.P. 303 & F.A.U. 5146

Revised 10/25/10 BHS

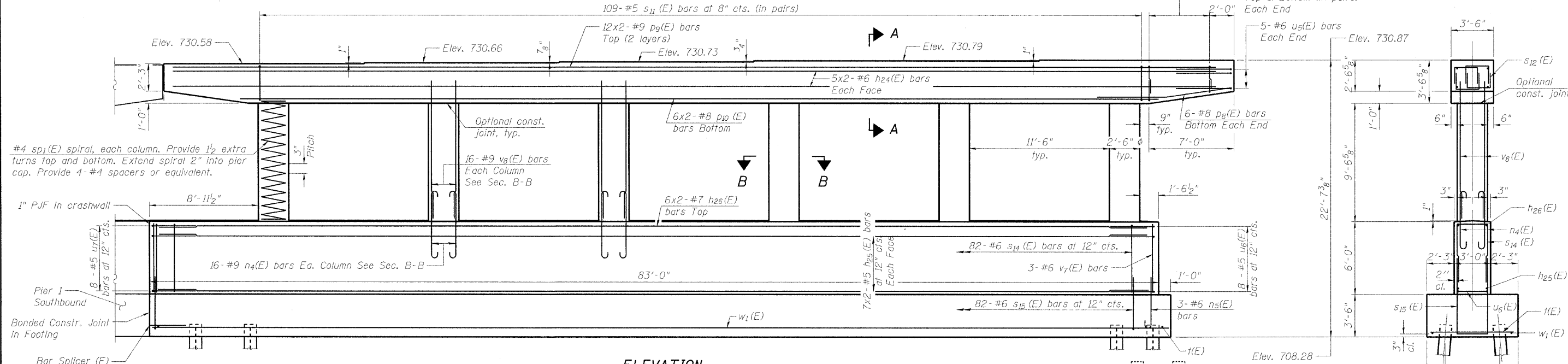
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DEPARTMENT OF TRANSPORTATION

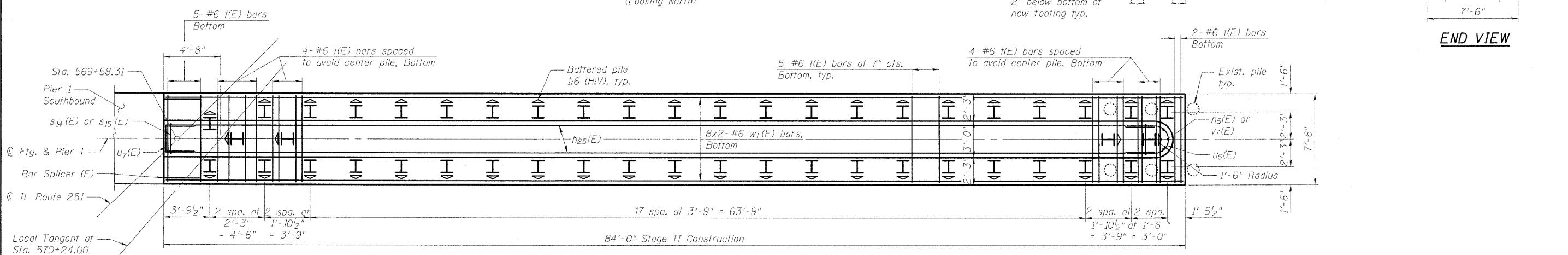


TOP PLAN



ELEVATION
(Looking North)

END VIEW



FOOTING PLAN

PILE DATA

Type: Steel HP 12x53 with pile shoes
Nominal Required Bearing: 318 kips
Factored Resistance Available: 175 kips
Est. Length: 23 ft
No. Production Piles: 48
No. Test Piles: 0

MINIMUM BAR LAPS

- (Piers)
#5 Bar - 3'-3"
#6 Bar - 3'-10"
#7 Bar - 5'-10"
#8 Bar - 6'-9"
#9 Bar - 9'-8"

Note:
For Section A-A, B-B and Bill of Material, see Sheet 57 of 61.

DESIGNED	- JY
CHECKED	- GSP
DRAWN	- MJB
CHECKED	- JY

PIER 1 - NORTHBOUND
STRUCTURE NO. 101-0190

SHEET NO. 52 61 SHEETS	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	107
IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79			
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

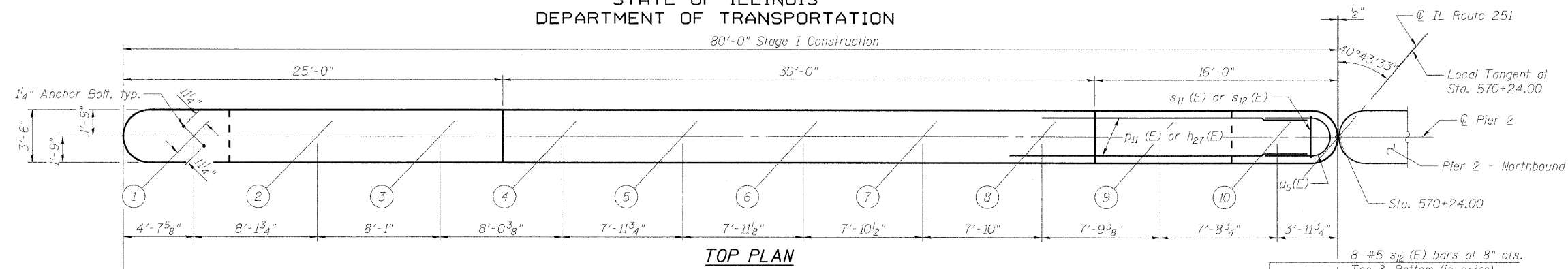
Revised 10/25/10 BHS

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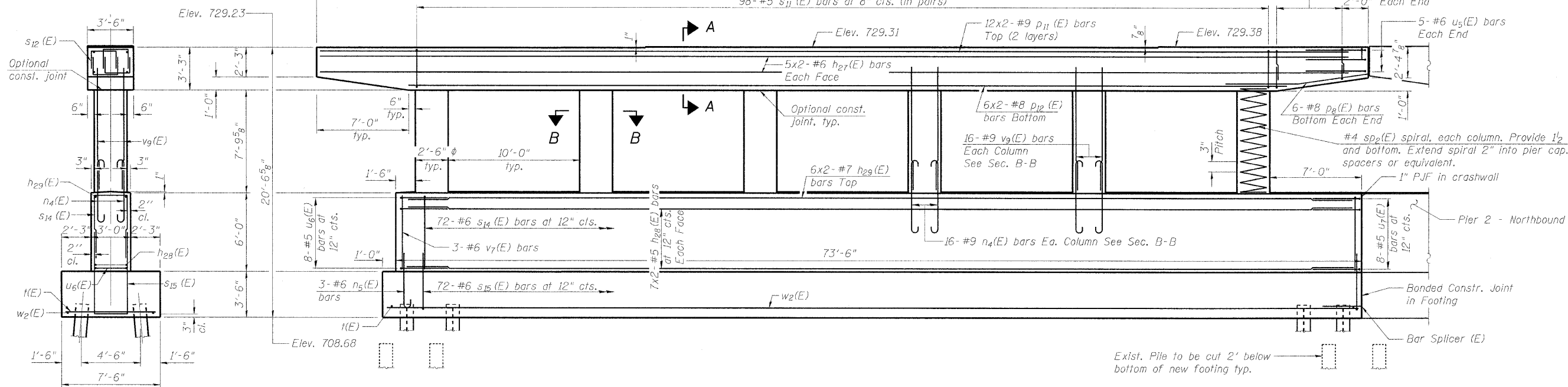


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DEPARTMENT OF TRANSPORTATION

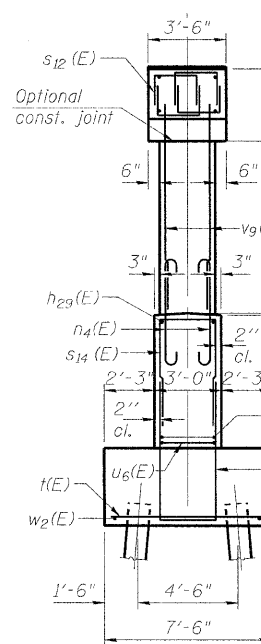
80'-0" Stage I Construction



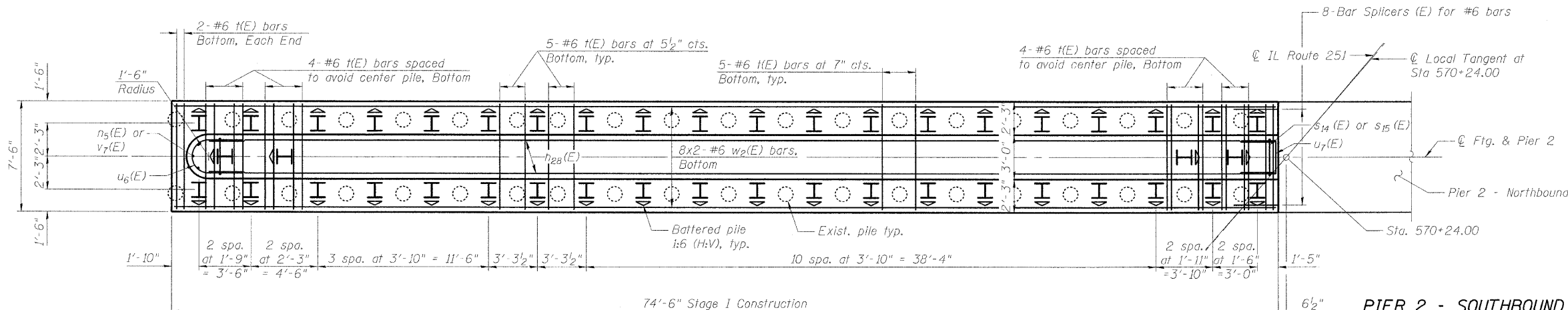
TOP PLAN



ELEVATION
(Looking North)



END VIEW



FOOTING PLAN

MINIMUM BAR LAPS

- (Piers)
- #5 Bar - 3'-3"
 - #6 Bar - 3'-10"
 - #7 Bar - 5'-10"
 - #8 Bar - 6'-9"
 - #9 Bar - 9'-8"

PILE DATA

Type: Steel HP 12x53
Nominal Required Bearing: 318 kips
Factored Resistance Available: 175 kips
Est. Length: 25 ft
No. Production Piles: 43
No. Test Piles: 1

Note:
For Section A-A, B-B and Bill of Material, see Sheet 57 of 61.

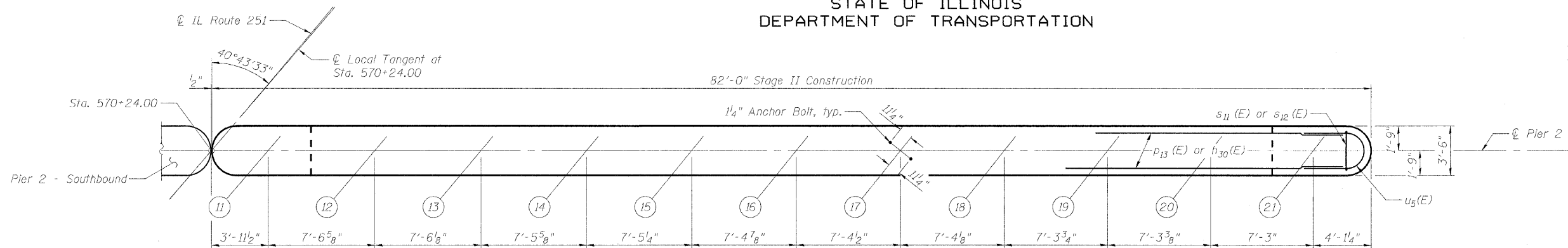
SHEET NO. 53	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	108
61 SHEETS	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

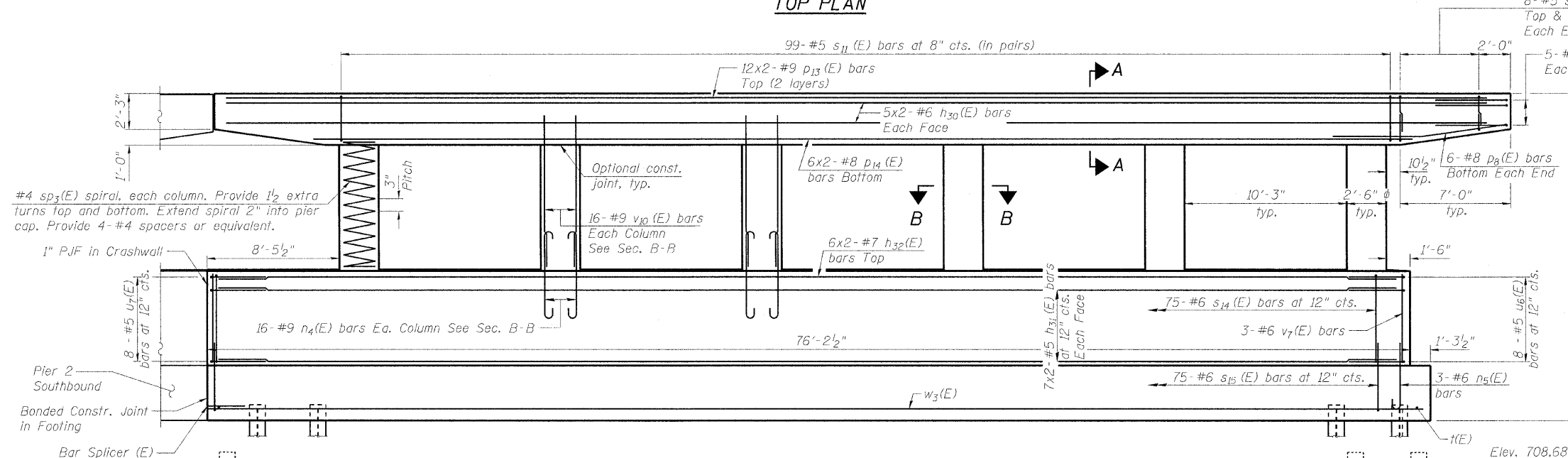
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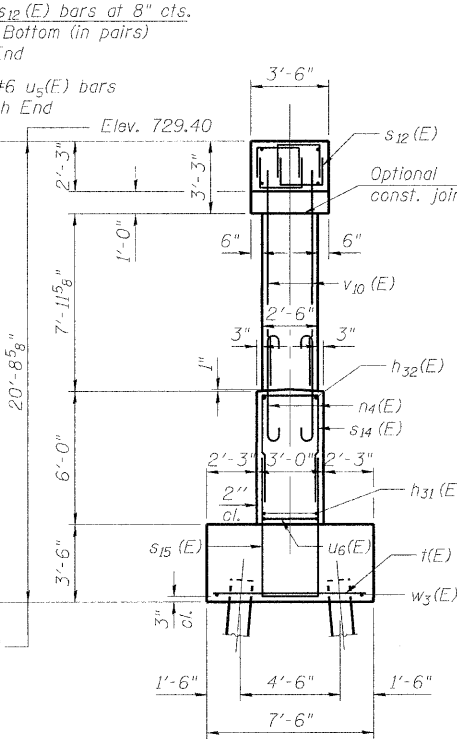
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



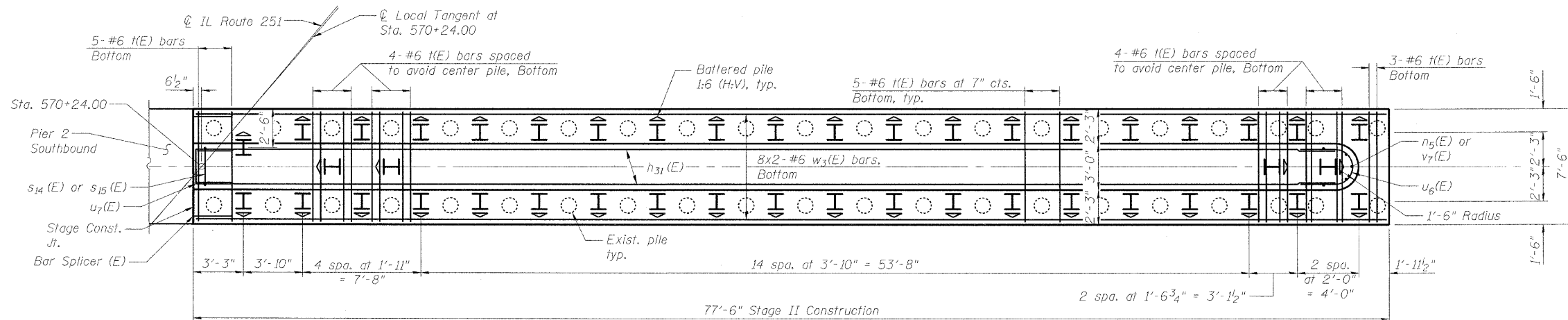
TOP PLAN



ELEVATION
(Looking North)



END VIEW



FOOTING PLAN

PILE DATA

Type: Steel HP 12x53 with pile shoes
Nominal Required Bearing: 318 kips
Factored Resistance Available: 175 kips
Est. Length: 25 ft
No. Production Piles: 44
No. Test Piles: 0

Note:
For Section A-A, B-B and Bill of Material, see Sheet 57 of 61.

MINIMUM BAR LAPS

- (Piers)
- #5 Bar - 3'-3"
 - #6 Bar - 3'-10"
 - #7 Bar - 5'-10"
 - #8 Bar - 6'-9"
 - #9 Bar - 9'-8"

PIER 2 - NORTHBOUND
STRUCTURE NO. 101-0190

DESIGNED	JY
CHECKED	GSP
DRAWN	MJB
CHECKED	JY

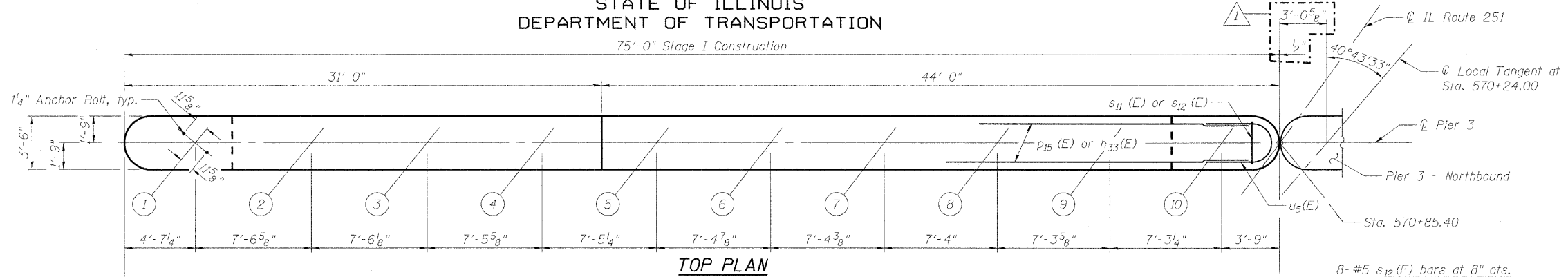
SHEET NO. 54 61 SHEETS	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	109
		ILL. RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79	
		FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT	

* F.A.P. 303 & F.A.U. 5146

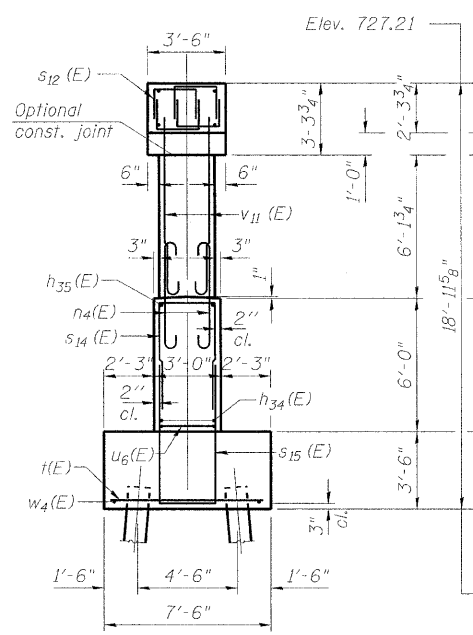
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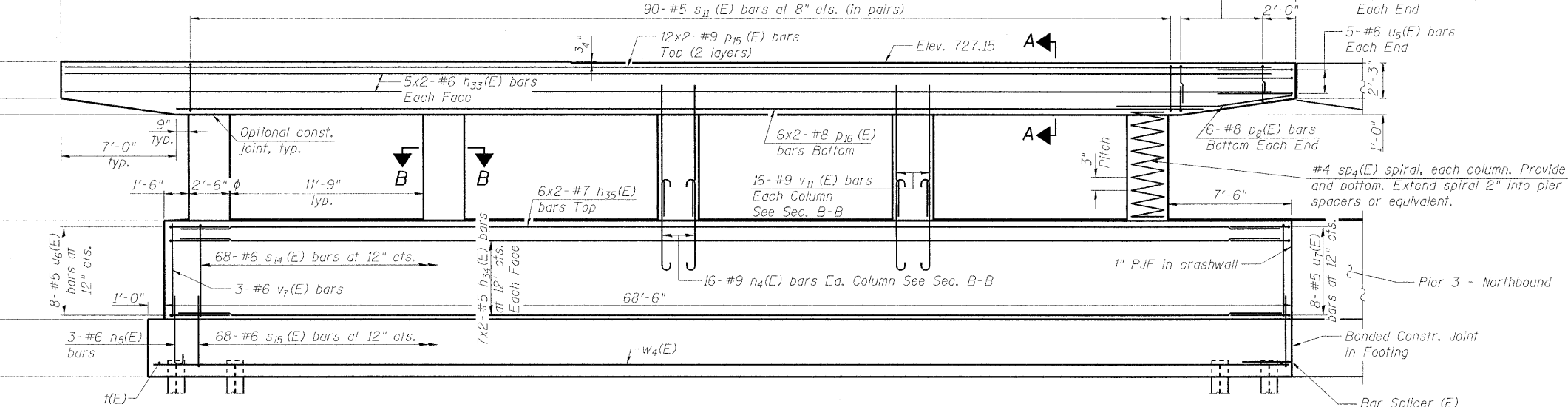
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
75'-0" Stage I Construction



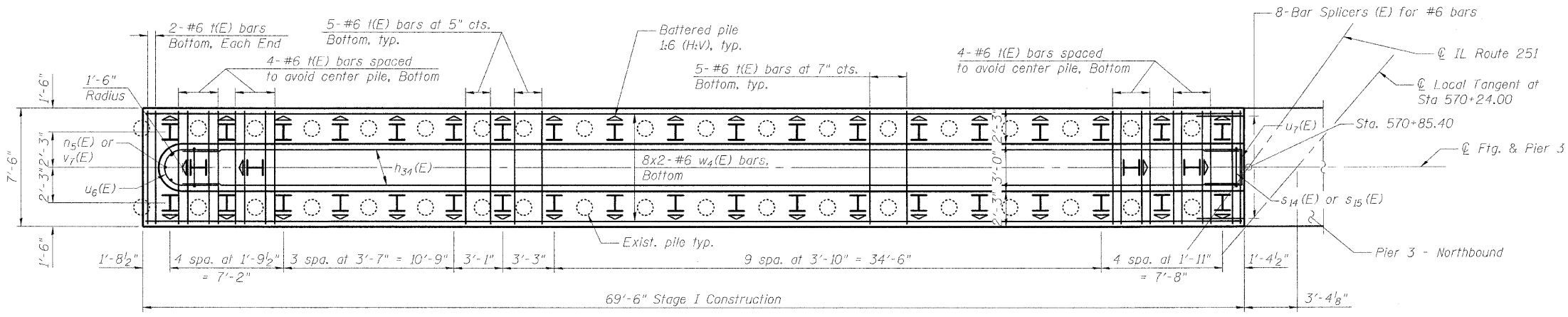
TOP PLAN



END VIEW



ELEVATION
(Looking North)



FOOTING PLAN

PILE DATA

Type: Steel HP 12x53 with pile shoes
Nominal Required Bearing: 318 kips
Factored Resistance Available: 175 kips
Est. Length: 29 ft
No. Production Piles: 41
No. Test Piles: 1

Note:
For Section A-A, B-B and Bill of Material, see Sheet 57 of 61.

MINIMUM BAR LAPS

- (Piers)
#5 Bar - 3'-3"
#6 Bar - 3'-10"
#7 Bar - 5'-10"
#8 Bar - 6'-9"
#9 Bar - 9'-8"

PIER 3 - SOUTHBOUND
STRUCTURE NO. 101-0190

DESIGNED	JY
CHECKED	GSP
DRAWN	MJB
CHECKED	JY

SHEET NO. 55	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	110
61 SHEETS	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

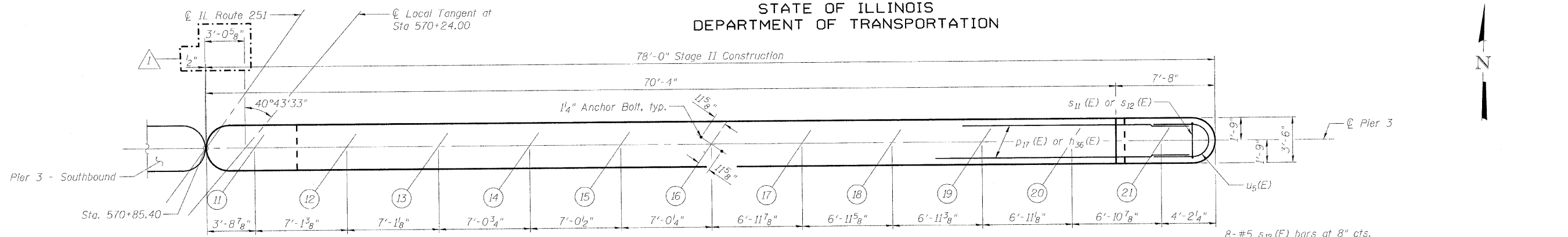
* F.A.P. 303 & F.A.U. 5146

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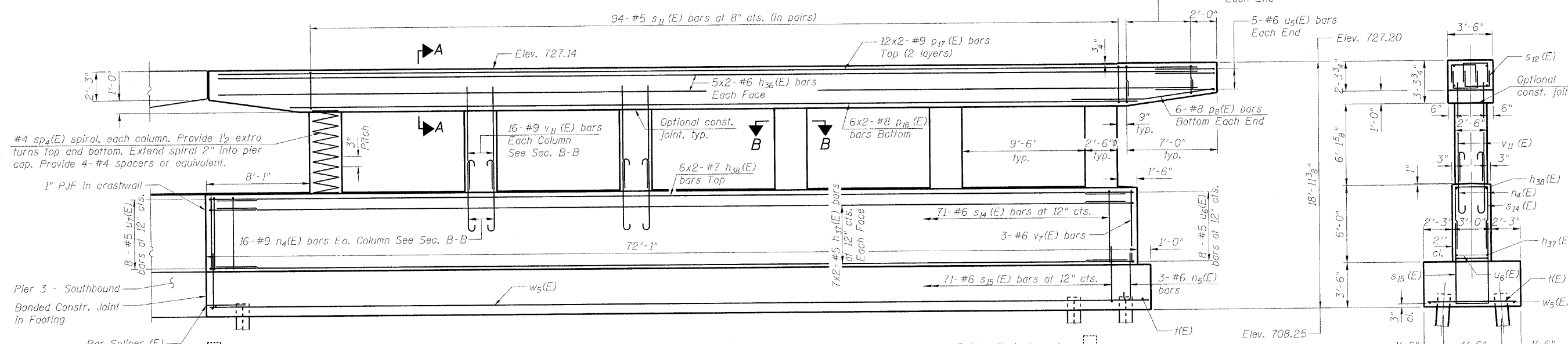
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STATE OF ILLINOIS
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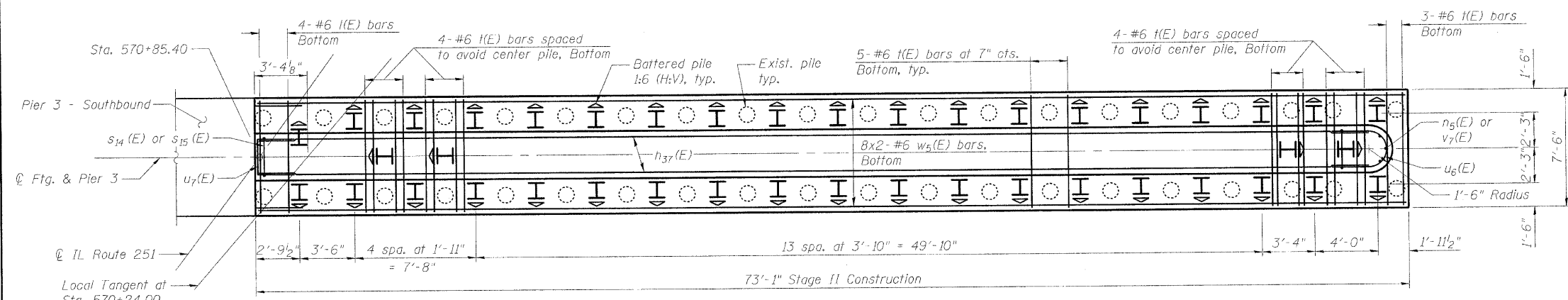


TOP PLAN



ELEVATION
(Looking North)

END VIEW



FOOTING PLAN

PIER 3 - NORTHBOUND
STRUCTURE NO. 101-0190

DESIGNED	JY
CHECKED	GSP
DRAWN	MJB
CHECKED	JY

PILE DATA
 Type: Steel HP 12x53 with pile shoes
 Nominal Required Bearing: 318 kips
 Factored Resistance Available: 175 kips
 Est. Length: 29 ft
 No. Production Piles: 42
 No. Test Piles: 0

Note:
 For Section A-A, B-B and Bill of Material, see Sheet 57 of 61.

SHEET NO. 56	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	111
61 SHEETS	IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146

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