

NOTES:

See Sheet S-22 for Section C-C, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to \mathcal{L} I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 See Electrical Drawings for Junction Box and Conduit Details.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790
 #25 bars = 1320

LEGEND

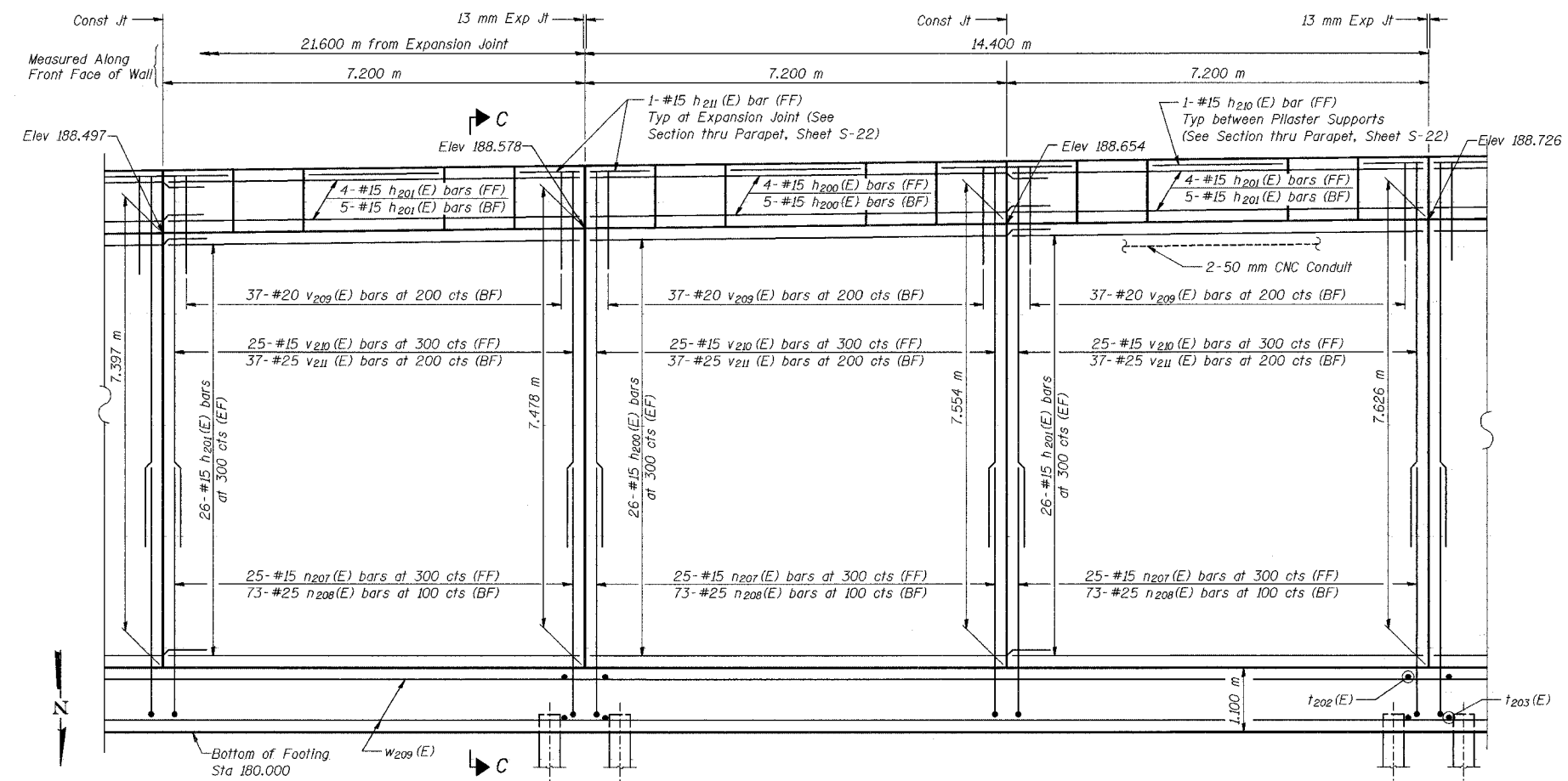
BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

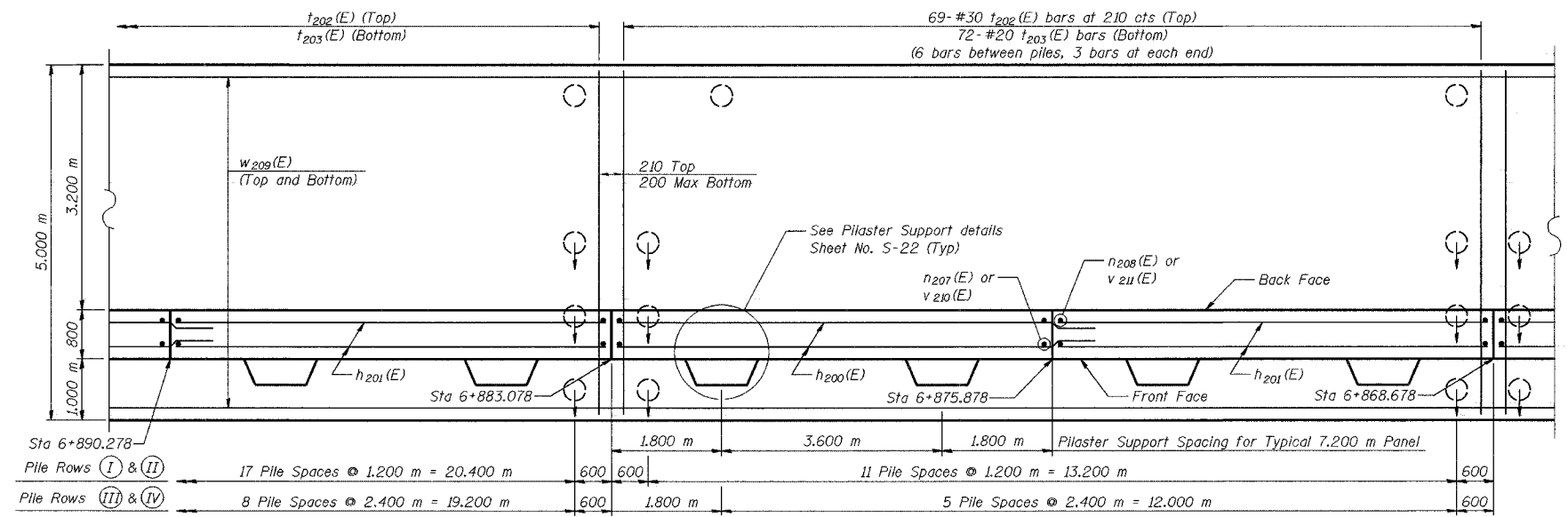
PLAN AND ELEVATION (17 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 TO STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY



ELEVATION



FOOTING PLAN

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790
 #25 bars = 1320

LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

NOTES:
 See Sheet S-22 for Section C-C, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to \bar{C} I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 See Electrical Drawings for Junction Box and Conduit Details.

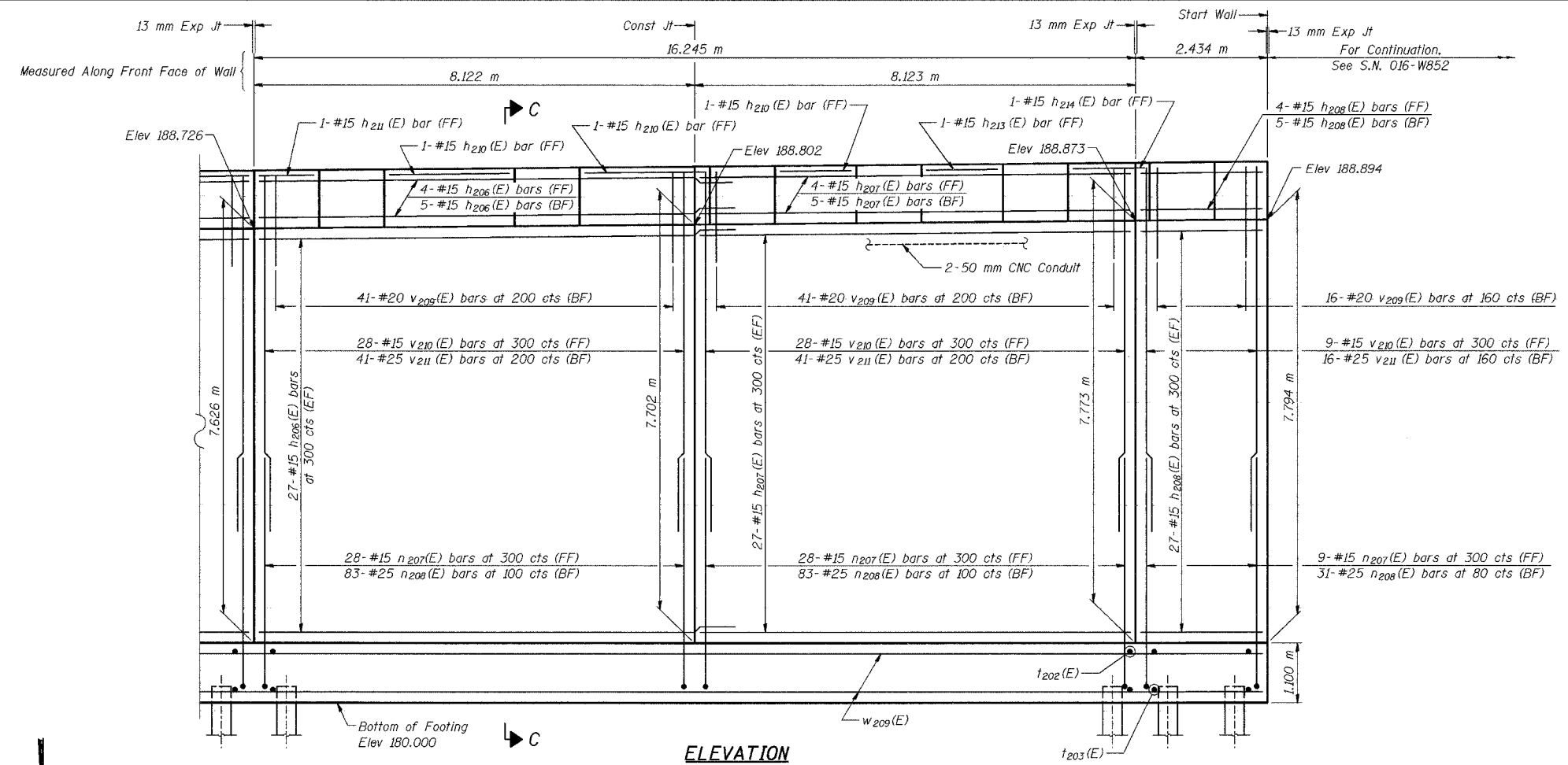
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (18 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05

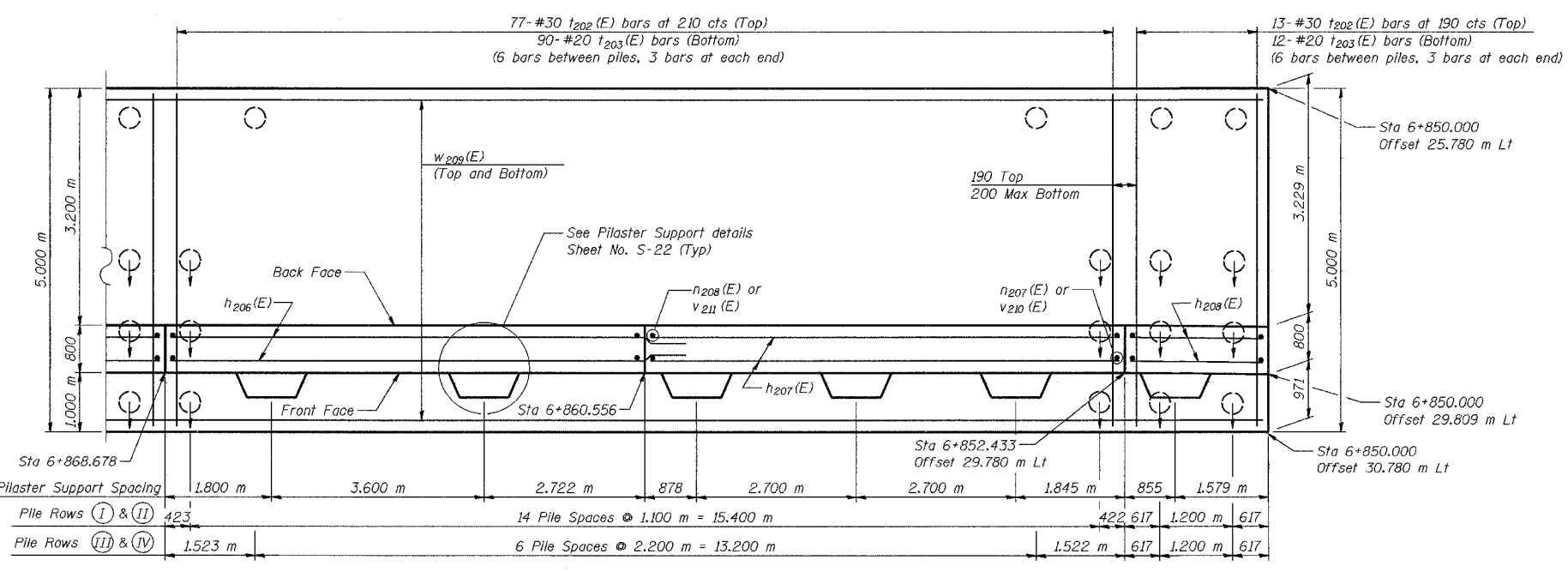
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.L. 001/94	2001-167R	COOK	1207	1003
SHEET NO. S-21				
35 SHEETS				
CONTRACT No. 62114				



ELEVATION



FOOTING PLAN

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

NOTES:

See Sheet S-22 for Section C-C, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 See Electrical Drawings for Junction Box and Conduit Details.

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790
 #25 bars = 1320

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

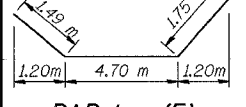
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION
PLAN AND ELEVATION (19 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05



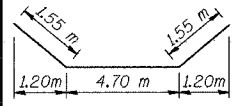
FOR INFORMATION ONLY

PILE DATA

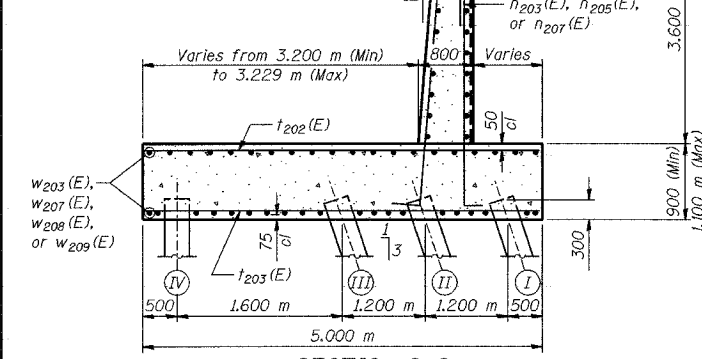
Type - 356 ϕ Metal Shell
 Capacity - 500 kN
 Est. Length - 13.7 m
 No. Req'd. - 666
 Test Piles - 7



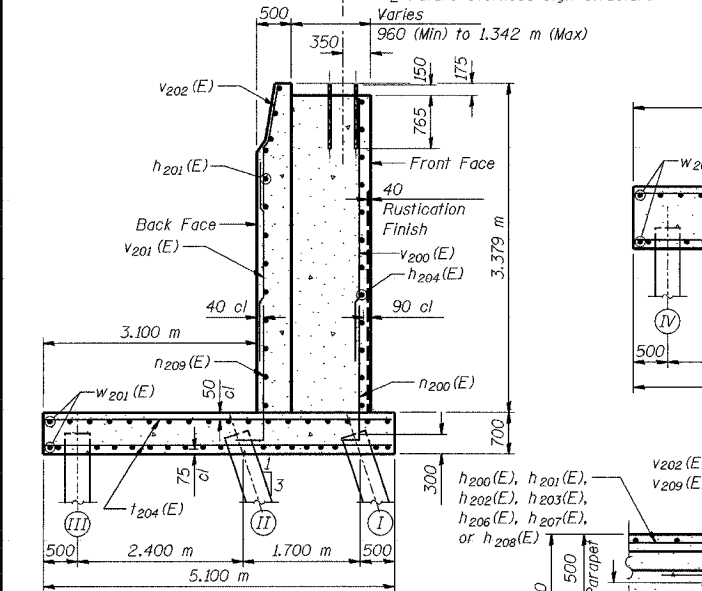
BAR h204(E)



BAR h205(E)

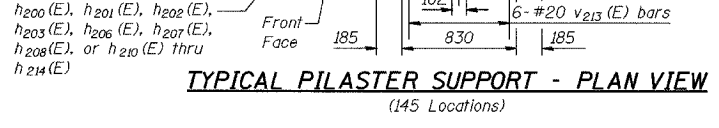


SECTION C-C

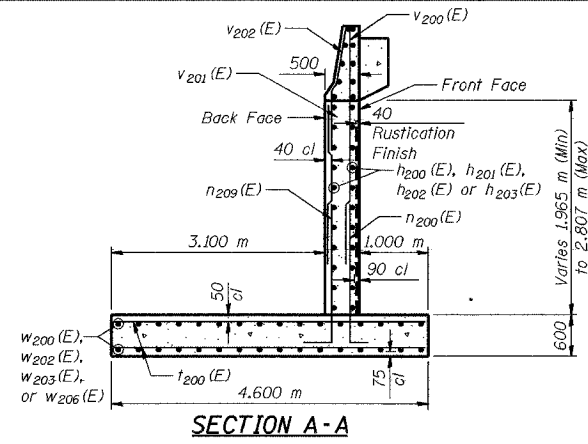


SECTION D-D

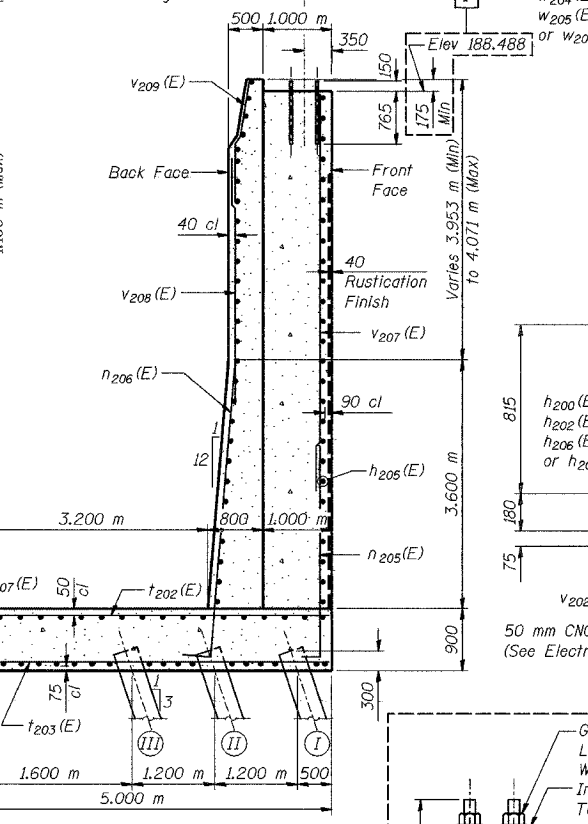
DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP



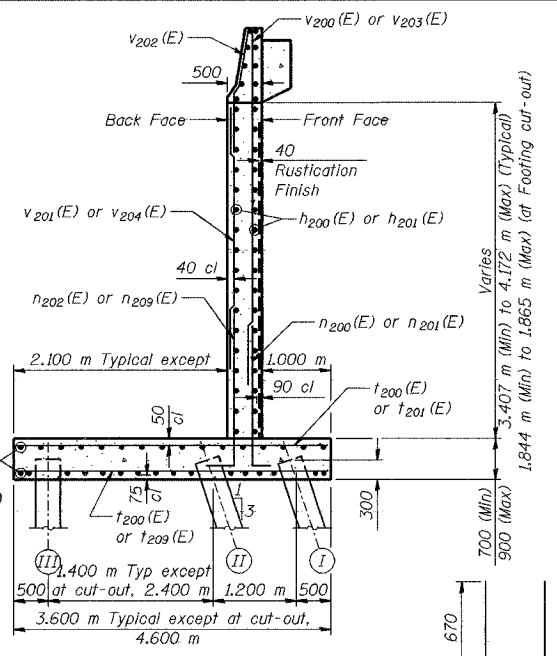
TYPICAL PILASTER SUPPORT - PLAN VIEW
 (145 Locations)



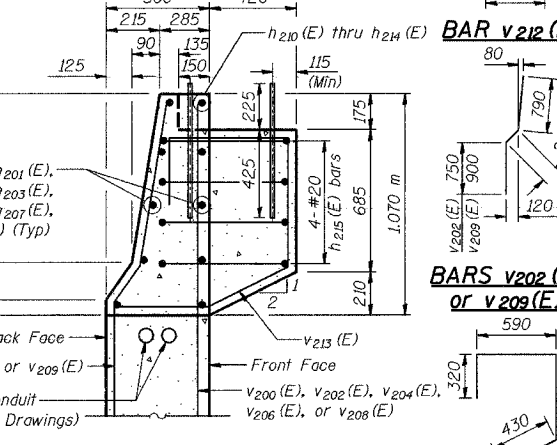
SECTION A-A



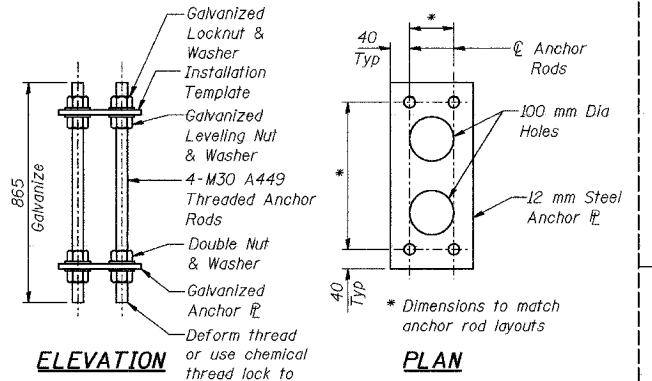
SECTION E-E



SECTION B-B



SECTION THRU PARAPET



NOISE ABATEMENT WALL ANCHOR ROD ASSEMBLY
 (149 Req'd)

REVISED 05-25-04 KFA

REVISED 10-22-04 MJW

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790
 #25 bars = 1320

BILL OF MATERIAL

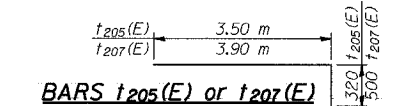
Bar	No.	Size	Length (m)	Shape
h200(E)	1642	#15	7.84	—
h201(E)	968	#15	7.10	—
h202(E)	29	#15	5.74	—
h203(E)	27	#15	8.44	—
h204(E)	12	#15	7.94	—
h205(E)	27	#15	7.80	—
h206(E)	63	#15	8.77	—
h207(E)	63	#15	8.02	—
h208(E)	63	#15	2.33	—
h209(E)	16	#15	0.60	—
h210(E)	115	#15	2.30	—
h211(E)	54	#15	1.10	—
h212(E)	1	#15	1.39	—
h213(E)	1	#15	1.74	—
h214(E)	1	#15	1.13	—
h215(E)	580	#20	2.86	—
n200(E)	894	#15	2.45	L
n201(E)	150	#15	2.35	L
n202(E)	276	#20	2.41	L
n203(E)	300	#15	3.44	L
n204(E)	468	#25	5.09	L
n205(E)	227	#15	2.89	L
n206(E)	477	#25	5.49	L
n207(E)	265	#15	2.84	L
n208(E)	171	#25	5.69	L
n209(E)	1318	#20	2.51	L
t200(E)	1654	#20	4.50	—
t201(E)	145	#25	3.50	—
t202(E)	926	#30	4.90	—
t203(E)	1010	#20	4.90	—
t204(E)	61	#20	5.00	—
t205(E)	16	#20	3.82	—
t206(E)	10	#20	3.50	—
t207(E)	12	#30	4.40	—
t208(E)	14	#20	3.90	—
t209(E)	144	#20	3.50	—
v200(E)	900	#15	2.81	—
v201(E)	1328	#15	1.74	—
v202(E)	1604	#20	1.76	—
v203(E)	150	#15	4.37	—
v204(E)	276	#15	3.30	—
v205(E)	300	#15	5.44	—
v206(E)	468	#20	3.01	—
v207(E)	227	#15	6.79	—
v208(E)	243	#25	3.95	—
v209(E)	1105	#20	1.91	—
v210(E)	265	#15	7.90	—
v211(E)	394	#25	4.81	—
v212(E)	10	#20	1.74	—
v213(E)	870	#20	2.39	—
v214(E)	8	#15	0.60	—
w200(E)	256	#15	6.39	—
w201(E)	36	#15	7.10	—
w202(E)	32	#15	9.19	—
w203(E)	684	#15	8.57	—
w204(E)	32	#15	2.56	—
w205(E)	32	#15	2.42	—
w206(E)	416	#15	6.34	—
w207(E)	372	#15	7.84	—
w208(E)	108	#15	7.60	—
w209(E)	360	#15	8.27	—
w210(E)	32	#15	1.54	—
w211(E)	32	#15	2.37	—
w212(E)	16	#15	2.34	—
w213(E)	16	#15	2.94	—
w214(E)	31	#15	2.14	—
w215(E)	31	#15	2.80	—
w216(E)	18	#15	2.65	—
Test Pile Metal Shells	Each		7	
Structure Excavation	m ³		15,280	
Concrete Structures	m ³		3,418.0	
Protective Coat	m ²		3,758	
Reinforcement Bars, Epoxy Coated	kg		231,070	
Furnishing Metal Pile Shells, 356 ϕ	m		9,124.0	
Driving and Filling Shells	m		9,124.0	
Geocomposite Wall Drain	m ²		2,195	
Pipe Underdrains for Structures 150 mm	m		537.0	
Overhead Sign Structure - Span, Anchor Rod Assembly	Each		4	
Noise Abatement Wall Anchor Rod Assembly	Each		149	

Bar	No.	Size	Length (m)	Shape
w200(E)	256	#15	6.39	—
w201(E)	36	#15	7.10	—
w202(E)	32	#15	9.19	—
w203(E)	684	#15	8.57	—
w204(E)	32	#15	2.56	—
w205(E)	32	#15	2.42	—
w206(E)	416	#15	6.34	—
w207(E)	372	#15	7.84	—
w208(E)	108	#15	7.60	—
w209(E)	360	#15	8.27	—
w210(E)	32	#15	1.54	—
w211(E)	32	#15	2.37	—
w212(E)	16	#15	2.34	—
w213(E)	16	#15	2.94	—
w214(E)	31	#15	2.14	—
w215(E)	31	#15	2.80	—
w216(E)	18	#15	2.65	—

Bar	No.	Size	Length (m)	Shape
t205(E)	1654	#20	4.50	—
t206(E)	145	#25	3.50	—
t207(E)	926	#30	4.90	—
t208(E)	1010	#20	4.90	—
t209(E)	61	#20	5.00	—
t210(E)	16	#20	3.82	—
t211(E)	10	#20	3.50	—
t212(E)	12	#30	4.40	—
t213(E)	14	#20	3.90	—
t214(E)	144	#20	3.50	—

BAR DIMENSIONS

Bar	A	B
n200(E)	2.19m	260
n201(E)	2.09m	260
n202(E)	2.09m	320
n203(E)	3.18m	260
n204(E)	4.69m	400
n205(E)	2.63m	260
n206(E)	5.09m	400
n207(E)	2.58m	260
n208(E)	5.29m	400
n209(E)	2.19m	320
w210(E)	770	---
w211(E)	770	1.09m
w212(E)	1.17m	---
w213(E)	1.17m	1.66m
w214(E)	1.07m	---
w215(E)	1.07m	1.52m
w216(E)	970	1.37m



NOTES:
 See Sheet S-23 for Rustlocation details.
 Stations are referenced to $\text{C} \pm 1-80/94$.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 See Typical Section on S-2 for Drainage Details and Protective Coat Limits.

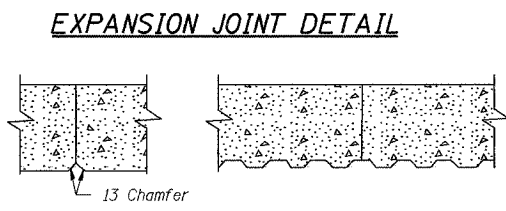
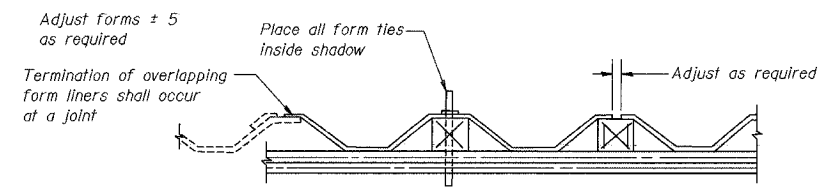
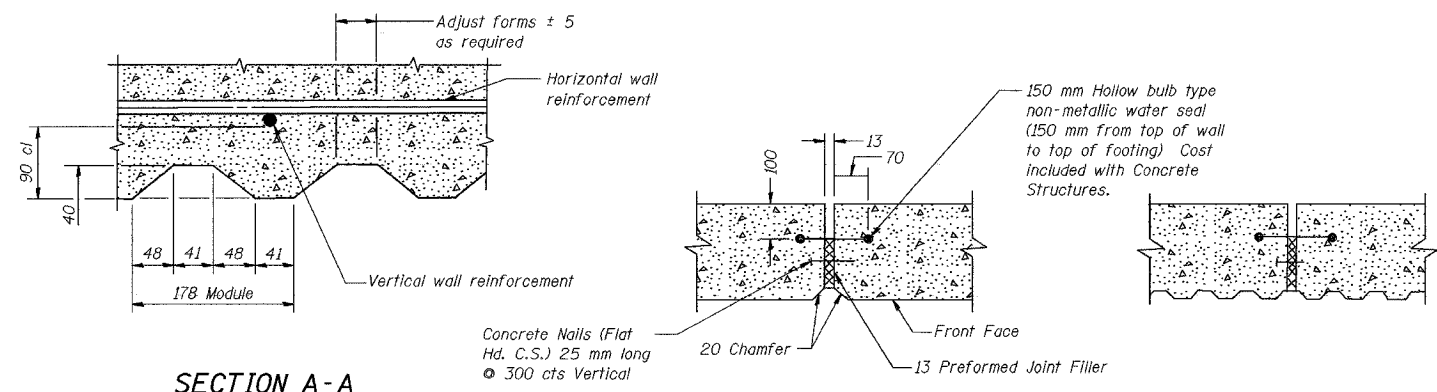
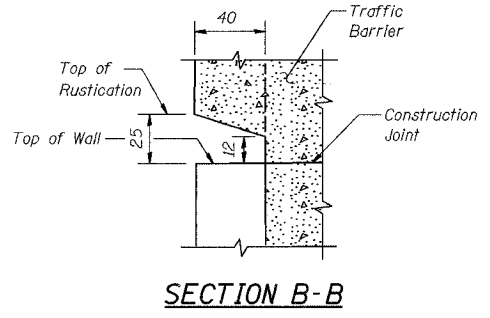
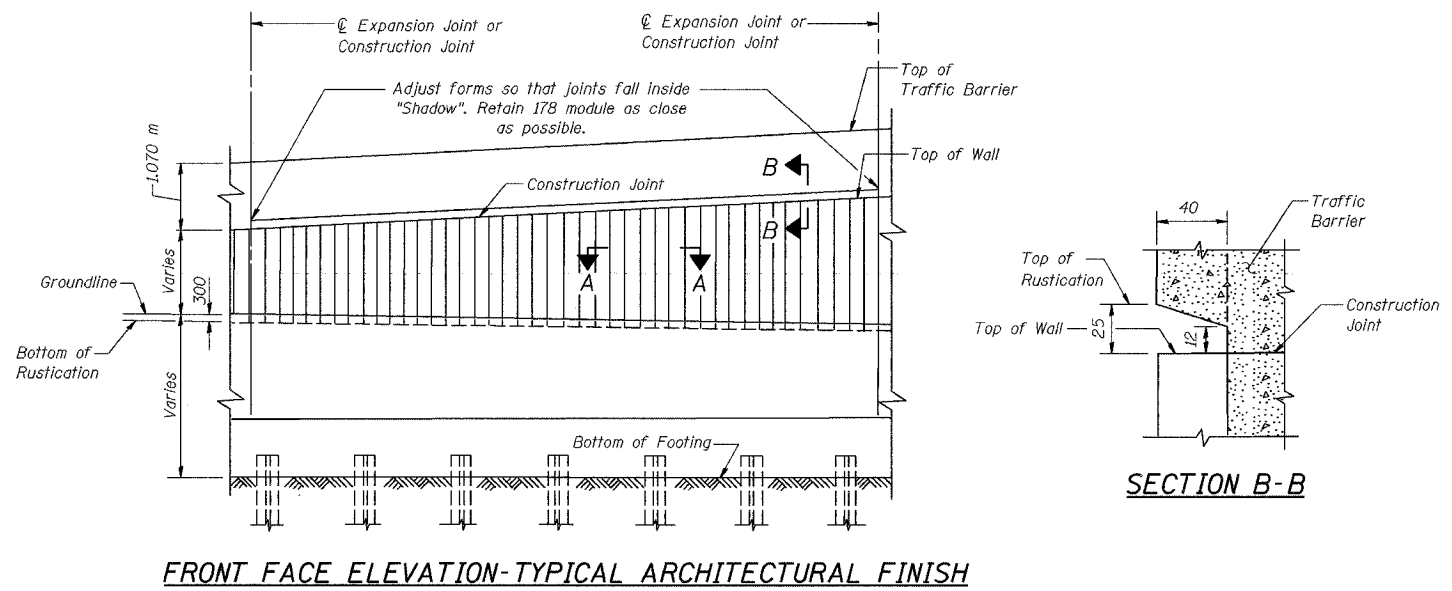
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION
WALL SECTIONS AND DETAILS
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 TO STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05



FOR INFORMATION ONLY

RUSTICATION LIMITS

STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION	STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION
6+850.000	188.894	181.734	7+178.278	183.863	182.549
6+852.433	188.873	181.746	7+185.478	183.815	182.553
6+860.556	188.802	181.813	7+192.678	183.773	182.549
6+868.678	188.726	181.875	7+199.878	183.738	182.536
6+875.878	188.654	181.910	7+207.078	183.710	182.515
6+883.078	188.578	181.933	7+214.278	183.687	182.489
6+890.278	188.497	181.946	7+221.478	183.665	182.463
6+897.478	188.412	181.948	7+228.678	183.644	182.443
6+904.678	188.323	181.938	7+235.874	183.614	182.430
6+911.878	188.230	181.917	7+243.072	183.585	182.424
6+919.078	188.133	181.889	7+250.269	183.556	182.427
6+926.278	188.031	181.862	7+257.467	183.527	182.441
6+933.478	187.926	181.835	7+264.664	183.507	182.459
6+940.678	187.815	181.806	7+271.862	183.497	182.479
6+947.878	187.701	181.779	7+279.059	183.493	182.497
6+955.078	187.583	181.751	7+286.257	183.493	182.516
6+962.278	187.460	181.723	7+293.454	183.500	182.531
6+969.478	187.333	181.696	7+300.652	183.509	182.536
6+976.678	187.202	181.668	7+309.170	183.509	182.533
6+983.878	187.067	181.640	7+316.347	183.509	182.519
6+991.078	186.929	181.613	7+323.524	183.509	182.496
6+998.278	186.791	181.585	7+330.701	183.654	182.463
7+005.478	186.653	181.558	7+337.901	183.668	182.426
7+012.678	186.515	181.537	7+345.101	183.680	182.383
7+019.878	186.376	181.528	7+352.301	183.692	182.336
7+027.078	186.238	181.531	7+359.501	183.701	182.288
7+034.278	186.100	181.544	7+366.701	183.709	182.349
7+041.478	185.962	181.568	7+373.901	183.734	182.409
7+048.678	185.824	181.603	7+379.000	183.752	182.452
7+055.878	185.686	181.650			
7+063.078	185.548	181.707			
7+070.278	185.410	181.771			
7+077.478	185.272	181.836			
7+084.678	185.134	181.901			
7+091.878	184.996	181.966			
7+099.078	184.863	182.030			
7+106.278	184.737	182.094			
7+113.478	184.619	182.159			
7+120.678	184.507	182.224			
7+127.878	184.402	182.289			
7+135.078	184.304	182.350			
7+142.278	184.213	182.404			
7+149.478	184.129	182.450			
7+156.678	184.052	182.487			
7+163.878	183.982	182.516			
7+171.078	183.919	182.536			



DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

BILL OF MATERIAL

Item	Unit	Total
Rustication Finish	m ²	1731

Note: All dimensions are in millimeters (mm) unless otherwise noted.

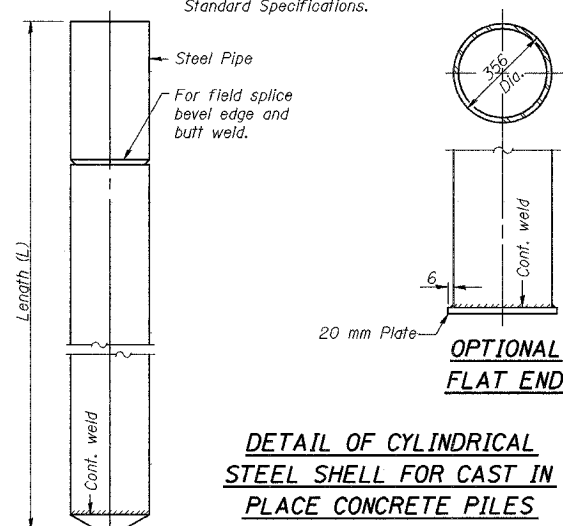
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

RUSTICATION FINISH DETAILS
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

Notes: Driving and bearing ends of pipe shall be cut square.
The thickness of the shell shall be 6.35 mm with a tolerance of 5% .
The shell shall be according to Article 1006.05(a) of the Standard Specifications.



DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

X-PB (M) 4-30-97 (All dimensions are in millimeters (mm) except as noted.)

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

CONCRETE PILE DETAILS
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

I:\PROJECTS\016-W874\016-W874.dwg

BORING NO. AR-001 (1 OF 2)

BORING NO. AR-001 (2 OF 2)

BORING NO. AR-002 (1 OF 2)

BORING LOG AR-001 Page 1 of 2
 Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
 wangeng3@wangeng.com
 100 Fairbank Street
 Addison, IL 60101
 Telephone: 630 458-0700
 Fax: 630 458-0900

WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 182.20 m
 North: 545547.62 m
 East: 366322.44 m
 Station: 6 +886.51
 Offset: 32.17 LT

BORING LOG AR-001 Page 2 of 2
 Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
 wangeng3@wangeng.com
 100 Fairbank Street
 Addison, IL 60101
 Telephone: 630 458-0700
 Fax: 630 458-0900

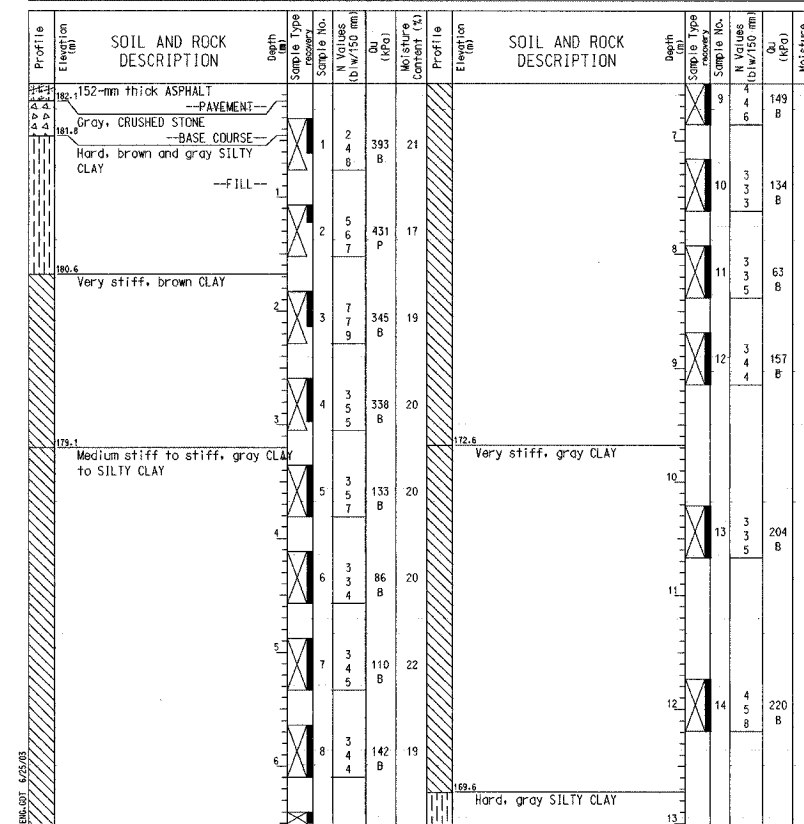
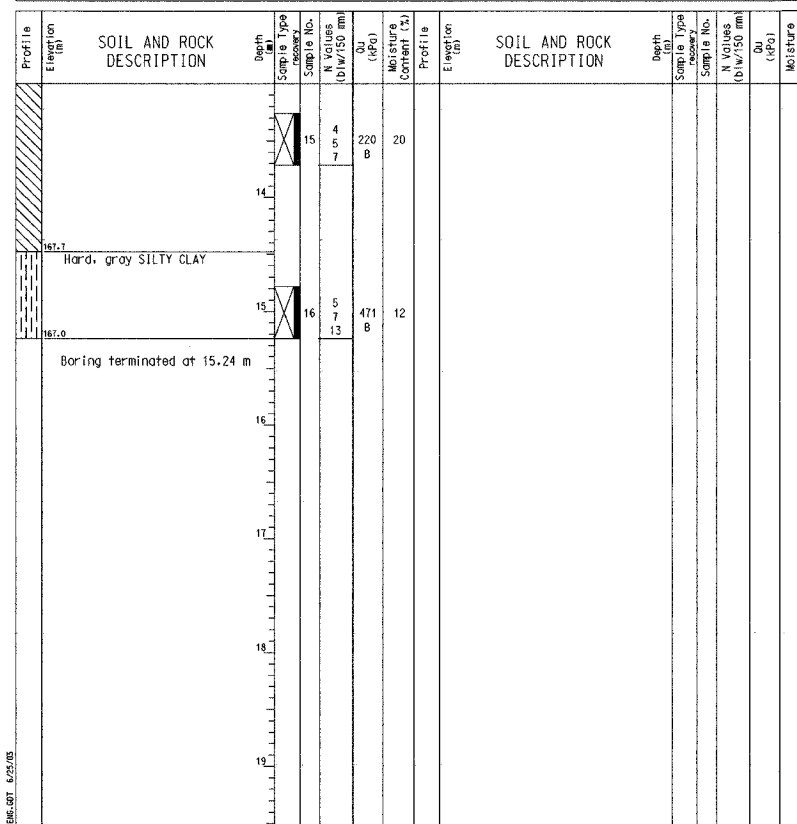
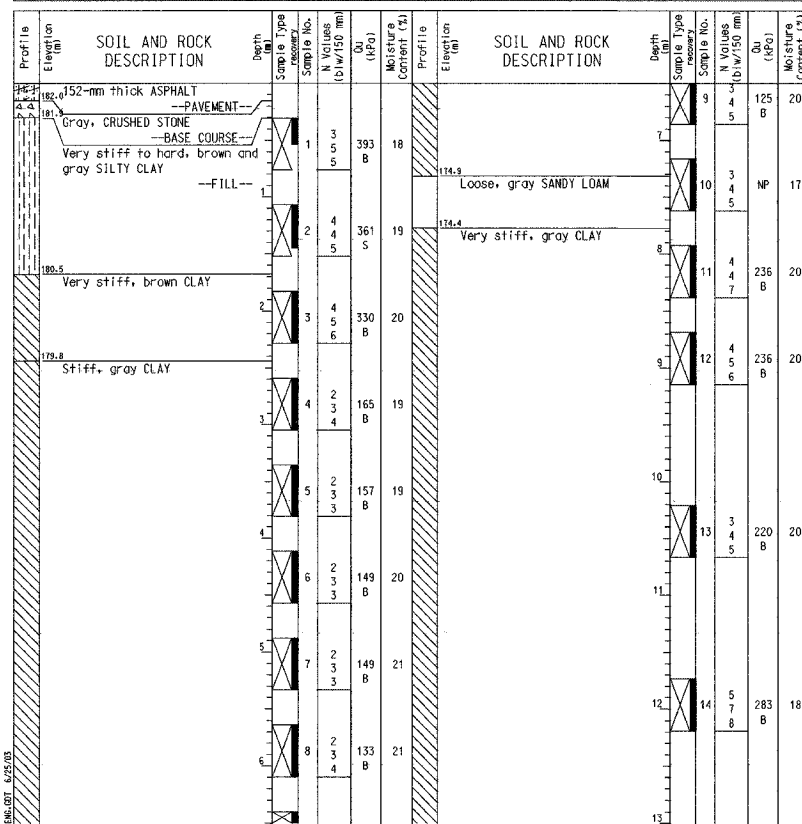
WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 182.20 m
 North: 545547.62 m
 East: 366322.44 m
 Station: 6 +886.51
 Offset: 32.17 LT

BORING LOG AR-002 Page 1 of 2
 Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
 wangeng3@wangeng.com
 100 Fairbank Street
 Addison, IL 60101
 Telephone: 630 458-0700
 Fax: 630 458-0900

WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 182.30 m
 North: 545547.74 m
 East: 366343.56 m
 Station: 6 +907.63
 Offset: 32.05 LT



GENERAL NOTES
 Begin Drilling 10-12-2001 Complete Drilling 10-12-0201
 Drilling Contractor TSC Drill Rig B-61
 Driller G&F Logger B. Fugiel checked by B. Fugiel
 Drilling Method 3.25-in. HSA Grouted

WATER LEVEL DATA
 While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES
 Begin Drilling 10-12-2001 Complete Drilling 10-12-0201
 Drilling Contractor TSC Drill Rig B-61
 Driller G&F Logger B. Fugiel checked by B. Fugiel
 Drilling Method 3.25-in. HSA Grouted

WATER LEVEL DATA
 While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES
 Begin Drilling 09-17-2001 Complete Drilling 09-17-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller G&F Logger B. Fugiel checked by B. Fugiel
 Drilling Method 3.25-in. HSA Grouted

WATER LEVEL DATA
 While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

BORING LOGS (1 OF 11)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6 + 850.000 to STATION 7 + 379.000
 STRUCTURE NO. 016-W874
 DATE 07/05

AMERICAN CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-002 (2 OF 2)

BORING NO. AR-003 (1 OF 1)

BORING NO. AR-004 (1 OF 2)

BORING LOG AR-002 Page 2 of 2

Wang Engineering, INC.
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Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.30 m
North: 545547.74 m
East: 366343.56 m
Station: 6 +907.63
Offset: 32.05 LT

BORING LOG AR-003 Page 1 of 1

Wang Engineering, INC.
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Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

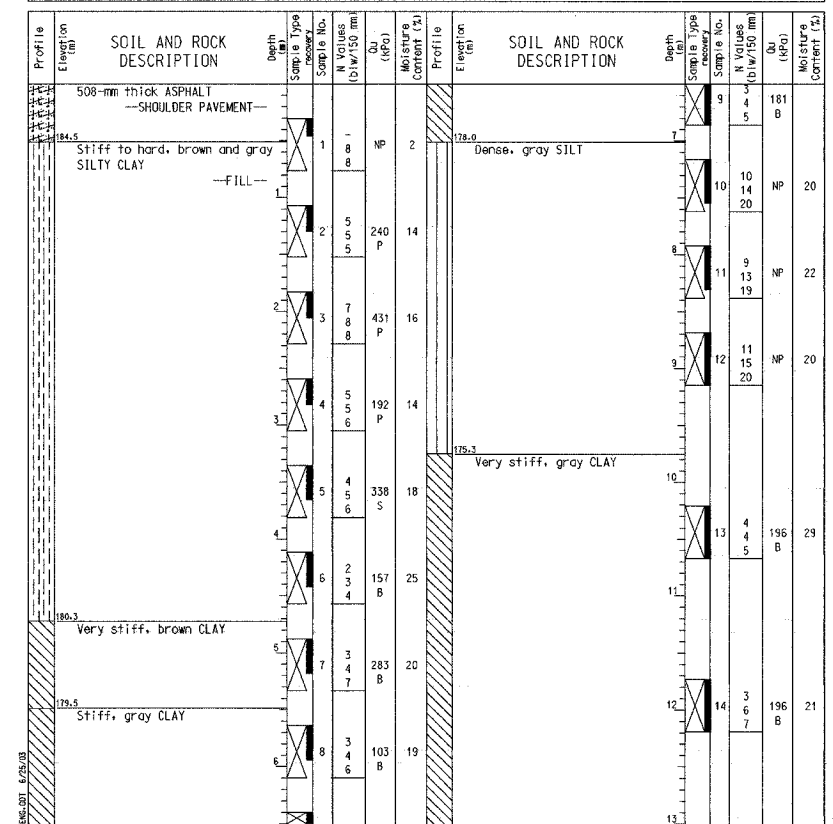
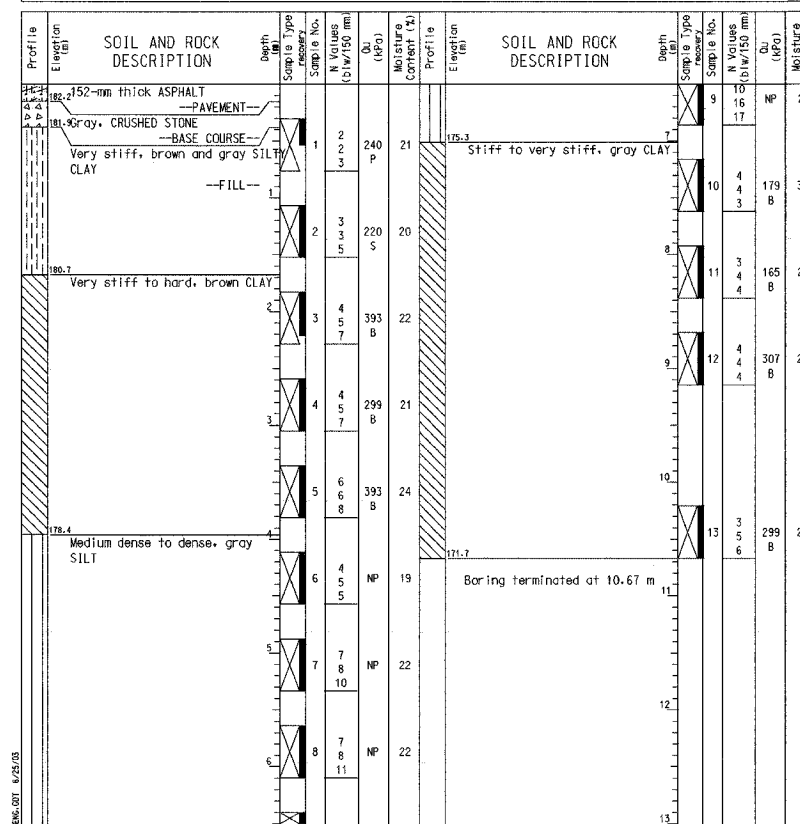
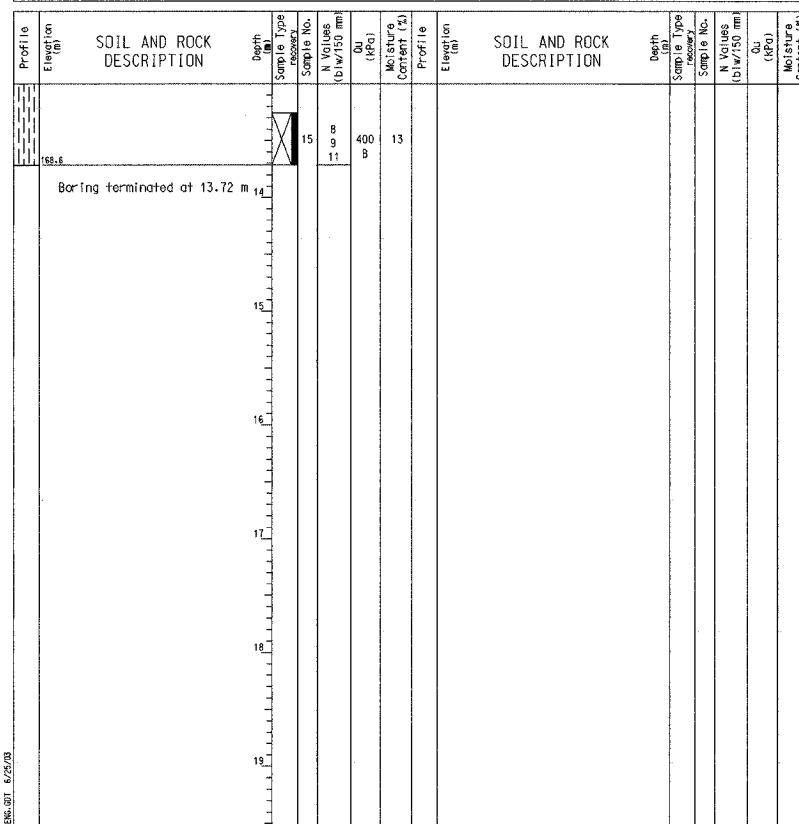
Datum: USGS
Elevation: 182.33 m
North: 545548.77 m
East: 366366.88 m
Station: 6 +930.96
Offset: 32.82 LT

BORING LOG AR-004 Page 1 of 2

Wang Engineering, INC.
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Telephone: 630 458-0700
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WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 185.03 m
North: 545531.25 m
East: 366387.41 m
Station: 6 +951.28
Offset: 15.06 LT



GENERAL NOTES

Begin Drilling 09-17-2001 Complete Drilling 09-17-2001

Drilling Contractor TSC Drill Rig B-61

Driller G&F Logger B. Fugiel Checked by B. Fugiel

Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

While Drilling DRY

At Completion of Drilling DRY

Time After Drilling NA

Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 09-17-2001 Complete Drilling 09-17-2001

Drilling Contractor TSC Drill Rig B-61

Driller G&F Logger B. Fugiel Checked by B. Fugiel

Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

While Drilling DRY

At Completion of Drilling DRY

Time After Drilling NA

Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 11-05-2001 Complete Drilling 11-05-2001

Drilling Contractor TSC Drill Rig CMC-75

Driller C&J Logger B. Fugiel Checked by B. Fugiel

Drilling Method Mud Rotary; grouted upon completion

WATER LEVEL DATA

While Drilling DRY

At Completion of Drilling DRY

Time After Drilling NA

Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

BORING LOGS (2 OF 11)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-004 (2 OF 2)

BORING NO. AR-005 (1 OF 1)

BORING NO. AR-006 (1 OF 2)

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BORING LOG AR-004 Page 2 of 2
 WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 185.03 m
 North: 545531.25 m
 East: 366387.41 m
 Station: 6 +951.28
 Offset: 15.06 LT

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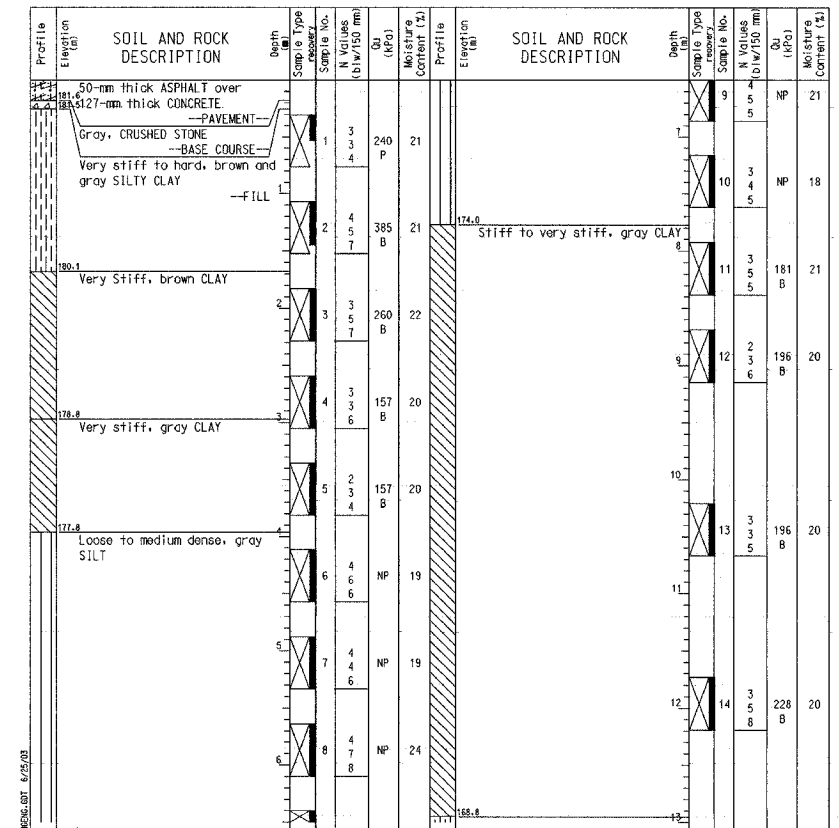
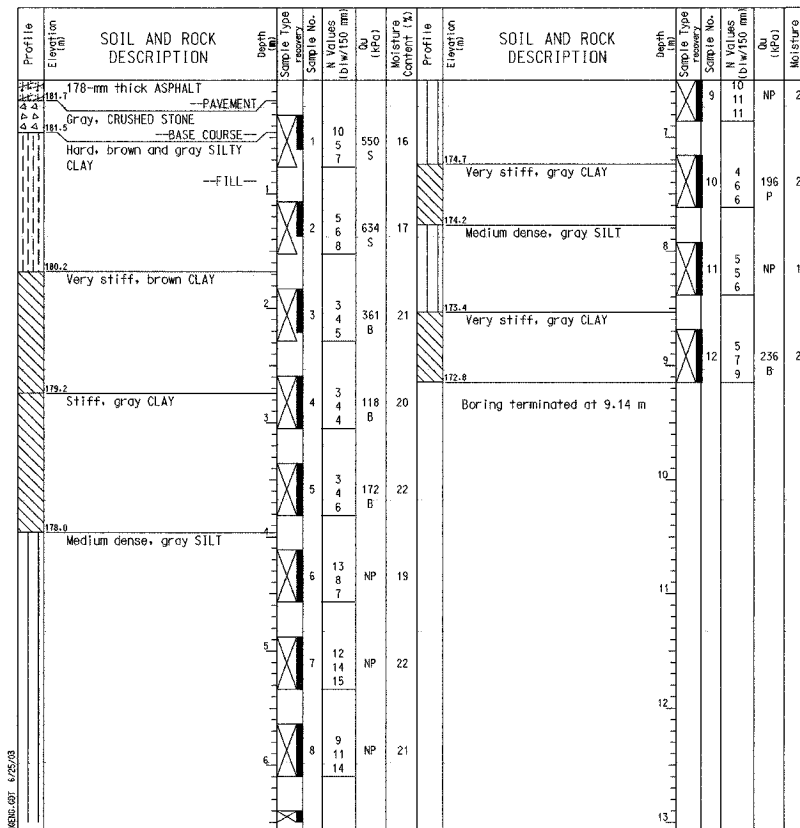
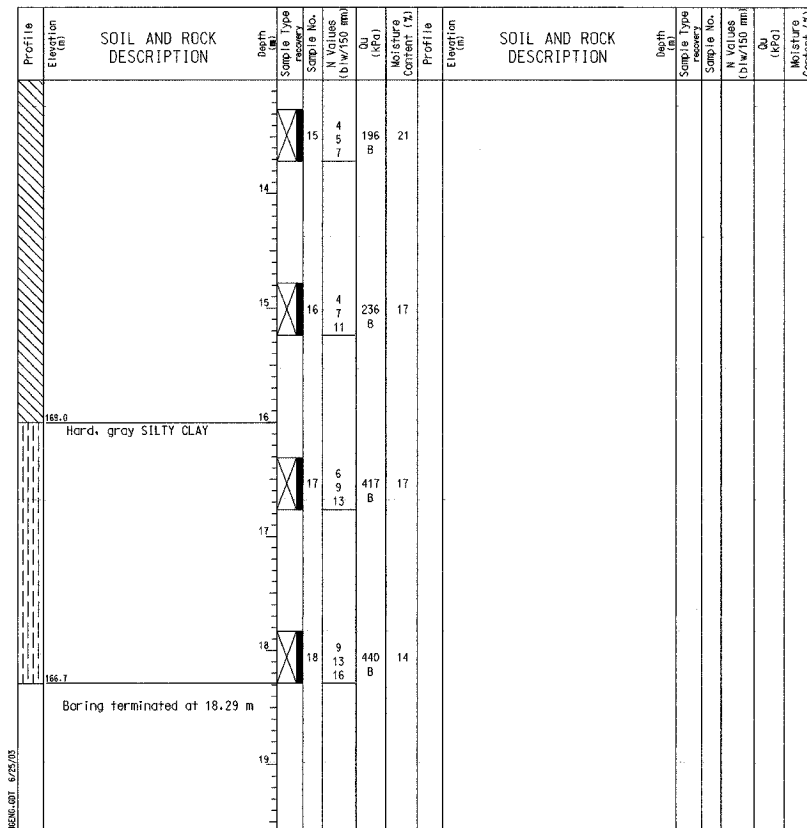
BORING LOG AR-005 Page 1 of 1
 WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 181.92 m
 North: 545549.32 m
 East: 366412.12 m
 Station: 6 +976.2
 Offset: 32.85 LT

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BORING LOG AR-006 Page 1 of 2
 WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 181.76 m
 North: 545549.16 m
 East: 366433.19 m
 Station: 6 +997.26
 Offset: 32.45 LT



GENERAL NOTES

Begin Drilling 11-05-2001 Complete Drilling 11-05-2001
 Drilling Contractor TSC Drill Rig CME-75
 Driller C&J Logger B. Fugiel checked by B. Fugiel
 Drilling Method Mud Rotary; grouted upon completion

WATER LEVEL DATA

While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 09-17-2001 Complete Drilling 09-17-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller G&F Logger B. Fugiel checked by B. Fugiel
 Drilling Method 2.25-in. SSA; Backfilled

WATER LEVEL DATA

While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 09-25-2001 Complete Drilling 09-25-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller G&F Logger B. Fugiel checked by B. Fugiel
 Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

BORING LOGS (3 OF 11)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6 + 850.000 to STATION 7 + 379.000
 STRUCTURE NO. 016-W874
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-006 (2 OF 2)

BORING NO. AR-007 (1 OF 2)

BORING NO. AR-007 (2 OF 2)

BORING LOG AR-006 Page 2 of 2

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Telephone: 630 458-0700
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WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 181.76 m
North: 545549.16 m
East: 366433.19 m
Station: 6 +997.26
Offset: 32.45 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
181.0	Very stiff, gray SILTY CLAY	9	15	9	354 B	181.0					
		10									
		11									
	Boring terminated at 13.72 m	14									
		15									
		16									
		17									
		18									
		19									

GENERAL NOTES	WATER LEVEL DATA
Begin Drilling 09-25-2001 Complete Drilling 09-25-2001	While Drilling <input checked="" type="checkbox"/> DRY
Drilling Contractor TSC Drill Rig B-61	At Completion of Drilling <input checked="" type="checkbox"/> DRY
Driller G&F Logger B. Fugiel Checked by B. Fugiel	Time After Drilling NA
Drilling Method 3.25-in. HSA; Grouted	Depth to Water <input checked="" type="checkbox"/> NA
	The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

BORING LOG AR-007 Page 1 of 2

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WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 181.63 m
North: 545549.48 m
East: 366455.95 m
Station: 7 +020.03
Offset: 32.51 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
181.4	152-mm thick ASPHALT PAVEMENT	3	9	4	172 B	181.4					
	Gray, CRUSHED STONE	4									
	BASE COURSE	5									
	Stiff to very stiff, brown and SILTY CLAY	6									
	FILL	7									
		8									
		9									
		10									
		11									
		12									
		13									
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BORING NO. AR-008 (1 OF 2)

BORING NO. AR-008 (2 OF 2)

BORING NO. AR-009 (1 OF 2)

BORING LOG AR-008 Page 1 of 2

Wang Engineering, INC.
 Consulting Geotechnical and Environmental Engineers
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 100 Fairbank Street
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 Telephone: 630 458-0700
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WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 183.26 m
 North: 545532.58 m
 East: 366479.96 m
 Station: 7 +043.84
 Offset: 15.34 LT

BORING LOG AR-008 Page 2 of 2

Wang Engineering, INC.
 Consulting Geotechnical and Environmental Engineers
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 100 Fairbank Street
 Addison, IL 60101
 Telephone: 630 458-0700
 Fax: 630 458-0900

WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

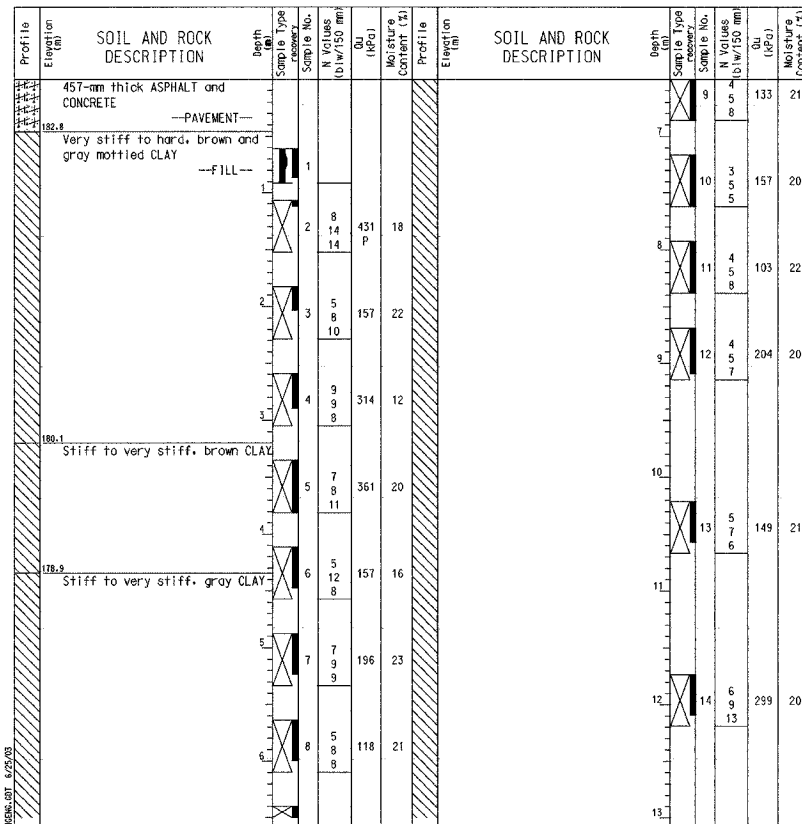
Datum: USGS
 Elevation: 183.26 m
 North: 545532.58 m
 East: 366479.96 m
 Station: 7 +043.84
 Offset: 15.34 LT

BORING LOG AR-009 Page 1 of 2

Wang Engineering, INC.
 Consulting Geotechnical and Environmental Engineers
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 100 Fairbank Street
 Addison, IL 60101
 Telephone: 630 458-0700
 Fax: 630 458-0900

WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 181.78 m
 North: 545539.96 m
 East: 366501.10 m
 Station: 7 +065.07
 Offset: 22.41 LT



BORING NO. AR-009 (2 OF 2)

BORING NO. AR-010 (1 OF 2)

BORING NO. AR-010 (2 OF 2)

BORING LOG AR-009 Page 2 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
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100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
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WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 181.78 m
North: 545539.96 m
East: 366501.10 m
Station: 7 +088.07
Offset: 22.47 LT

BORING LOG AR-010 Page 1 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
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100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

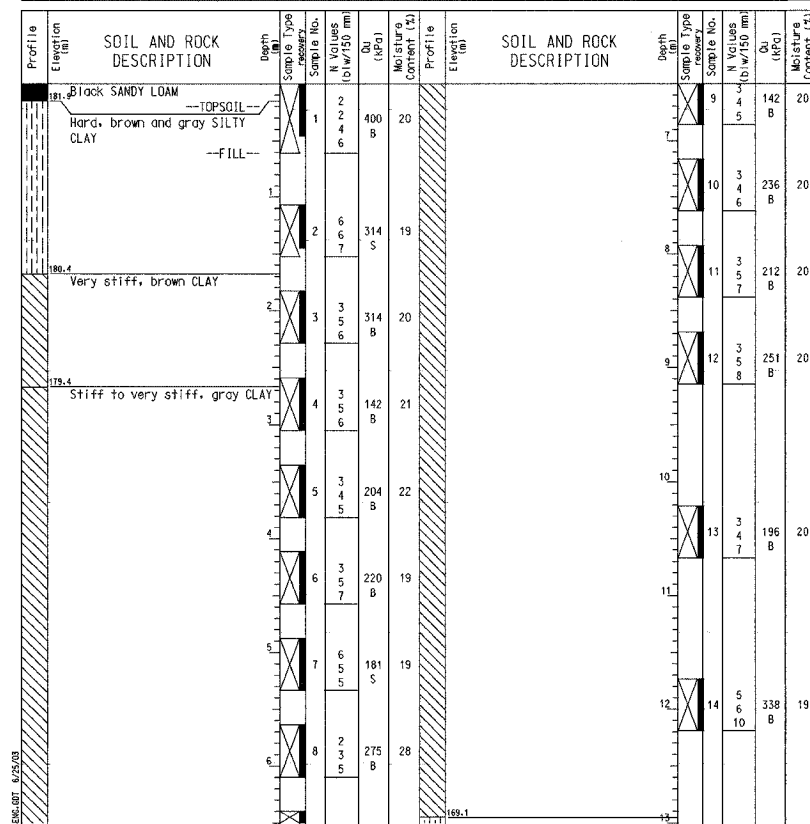
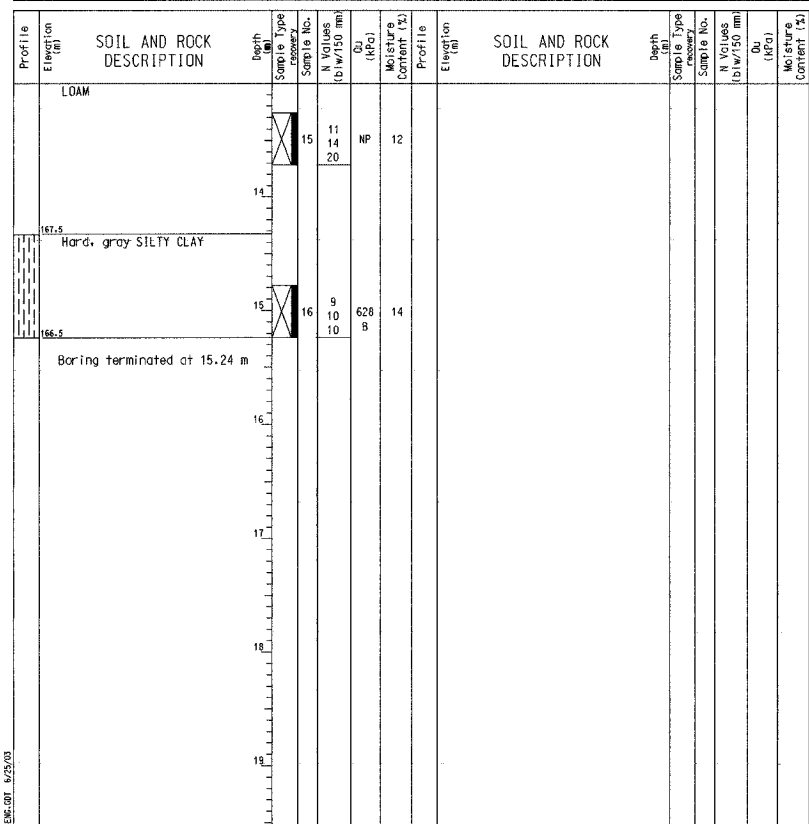
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Elevation: 182.03 m
North: 545539.75 m
East: 366524.99 m
Station: 7 +088.95
Offset: 21.99 LT

BORING LOG AR-010 Page 2 of 2

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Telephone: 630 458-0700
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WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.03 m
North: 545539.75 m
East: 366524.99 m
Station: 7 +088.95
Offset: 21.99 LT



BORING NO. AR-011 (1 OF 1)

BORING NO. AR-012 (1 OF 2)

BORING NO. AR-012 (2 OF 2)

BORING LOG AR-011 Page 1 of 1

Wang Engineering, INC.
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WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 I36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 181.97 m
 North: 545539.33 m
 East: 366547.04 m
 Station: 7 +110.99
 Offset: 21.32 LT

BORING LOG AR-012 Page 1 of 2

Wang Engineering, INC.
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WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 I36N R10W & s29 R15E T36N

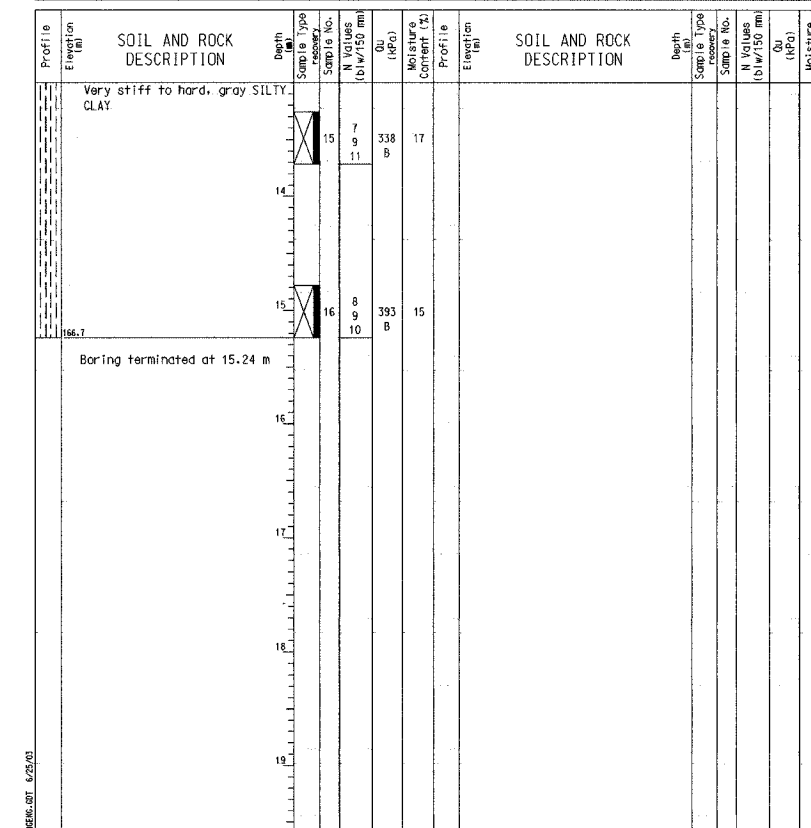
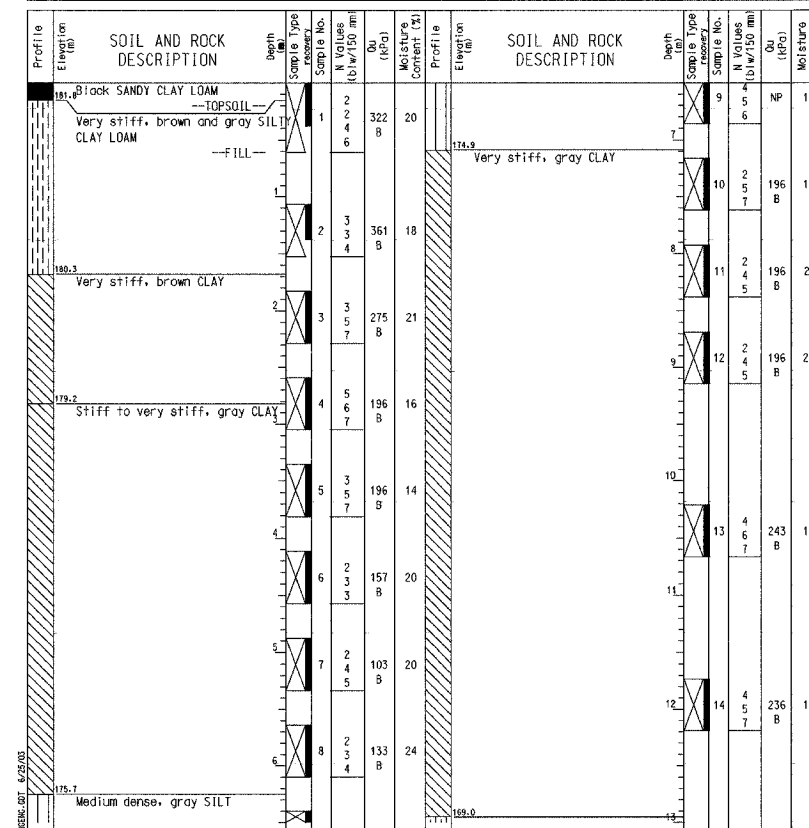
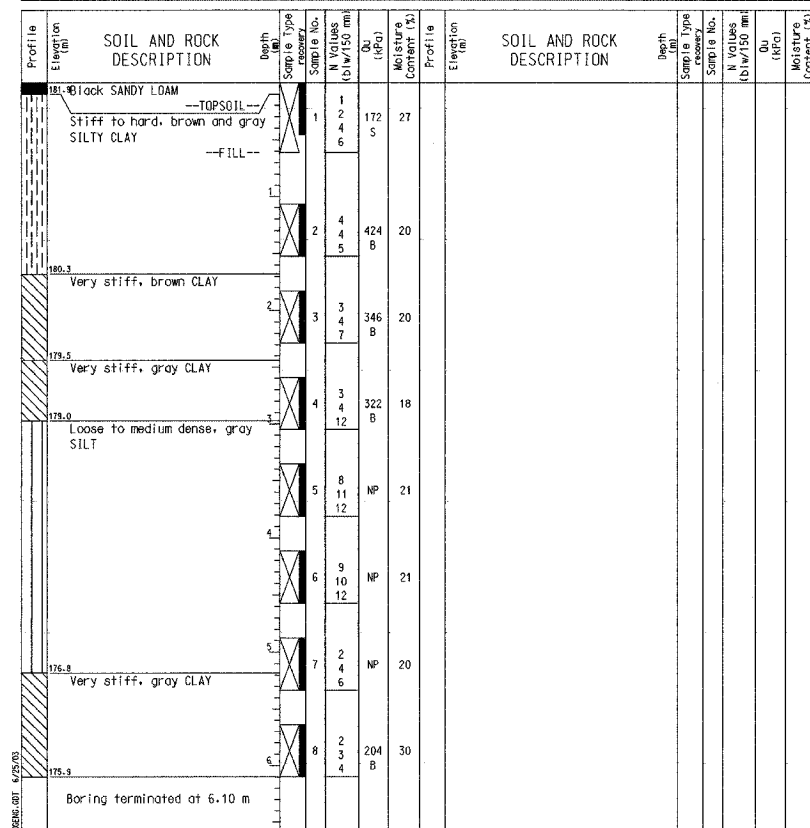
Datum: USGS
 Elevation: 181.99 m
 North: 545539.78 m
 East: 366570.51 m
 Station: 7 +134.53
 Offset: 21.50 LT

BORING LOG AR-012 Page 2 of 2

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 Telephone: 630 458-0700
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WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 I36N R10W & s29 R15E T36N

Datum: USGS
 Elevation: 181.99 m
 North: 545539.78 m
 East: 366570.51 m
 Station: 7 +134.53
 Offset: 21.50 LT



GENERAL NOTES

Begin Drilling 10-01-2001 Complete Drilling 10-01-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller GAF Logger B. Fugiel Checked by B. Fugiel
 Drilling Method 2.25-in. SSA; Backfilled

WATER LEVEL DATA

White Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 10-15-2001 Complete Drilling 10-15-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller GAF Logger B. Fugiel Checked by B. Fugiel
 Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

White Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 10-15-2001 Complete Drilling 10-15-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller GAF Logger B. Fugiel Checked by B. Fugiel
 Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

White Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

BORING LOGS (7 OF 11)
SECTION 2001-167R
COOK COUNTY
STATION 6 + 850.000 to STATION 7 + 379.000
STRUCTURE NO. 016-W874
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-013 (1 OF 1)

BORING NO. AR-014 (1 OF 2)

BORING NO. AR-014 (2 OF 2)

BORING LOG AR-013 Page 1 of 1

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Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.03 m
North: 545540.59 m
East: 366594.29 m
Station: 7 +158.26
Offset: 22.04 LT

BORING LOG AR-014 Page 1 of 2

Wang Engineering, INC.
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Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

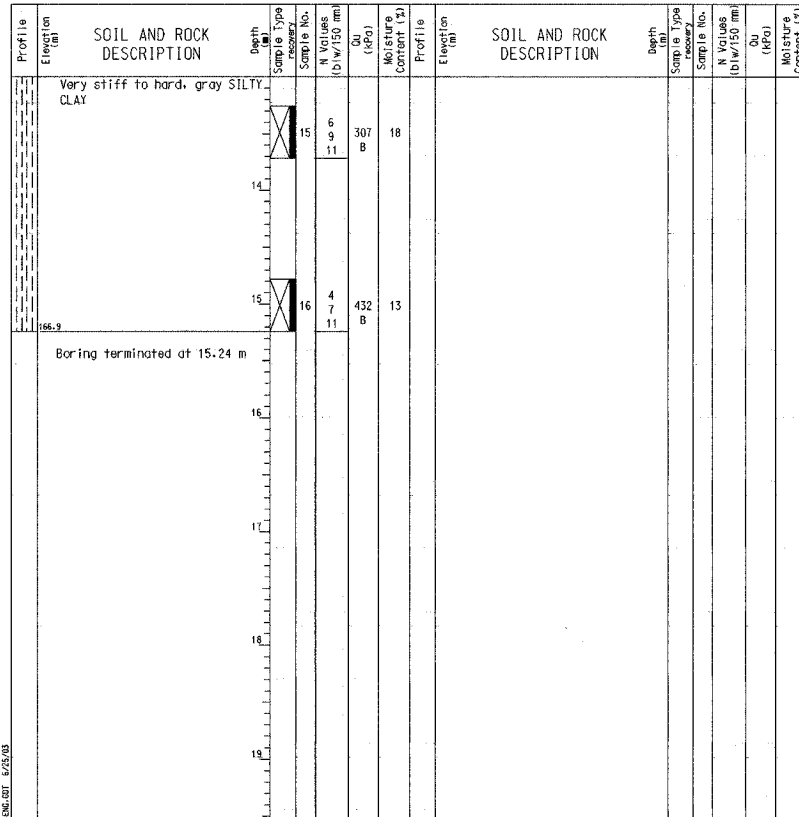
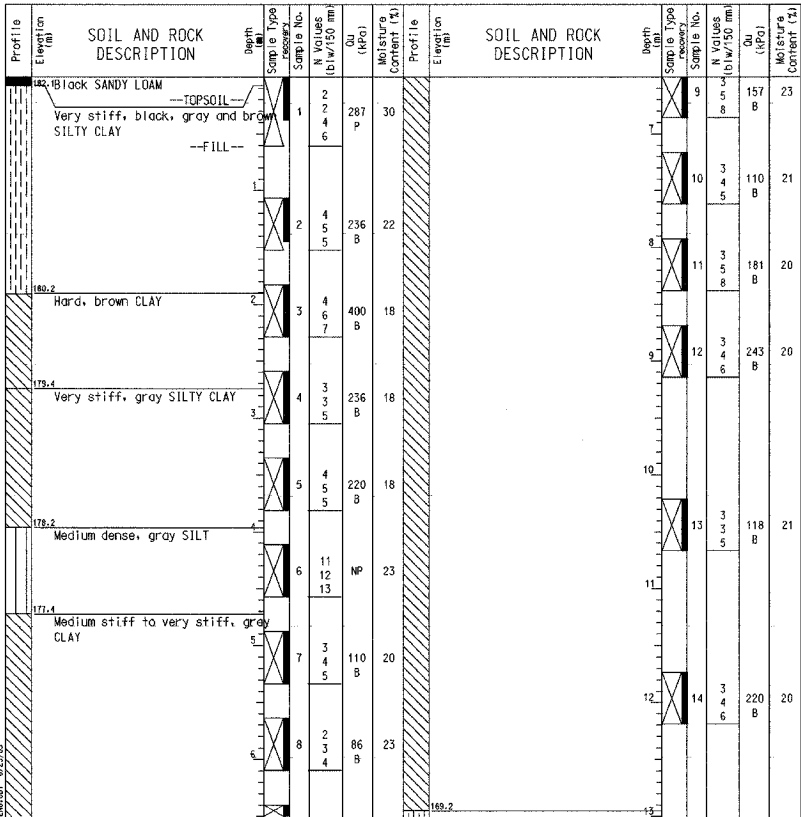
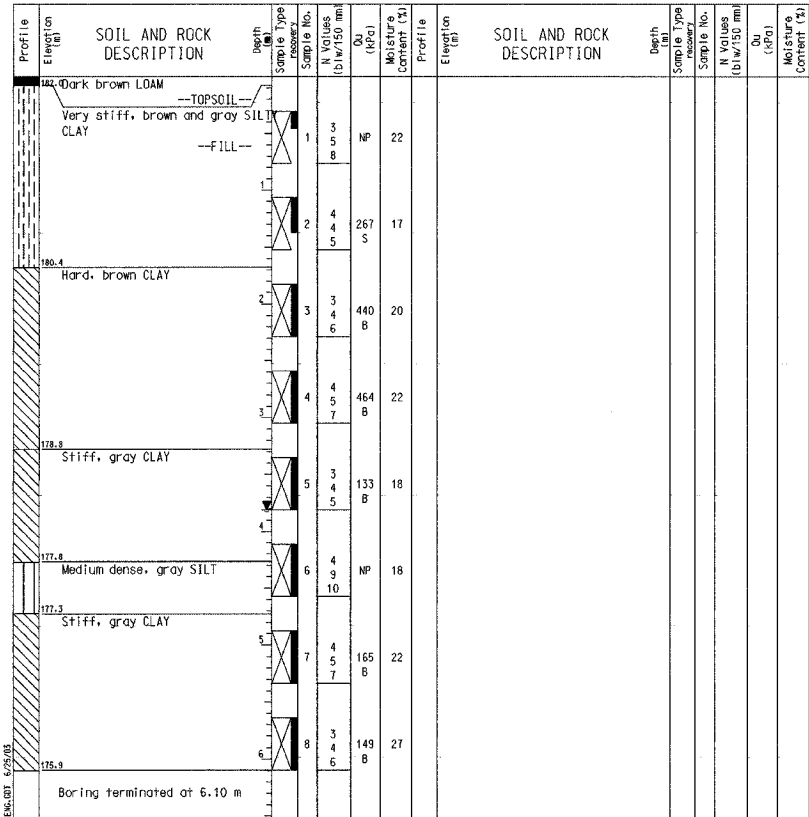
Datum: USGS
Elevation: 182.14 m
North: 545539.34 m
East: 366617.53 m
Station: 7 +181.49
Offset: 20.53 LT

BORING LOG AR-014 Page 2 of 2

Wang Engineering, INC.
wangeng3@wangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.14 m
North: 545539.34 m
East: 366617.53 m
Station: 7 +181.49
Offset: 20.53 LT



GENERAL NOTES

Begin Drilling 09-18-2001 Complete Drilling 09-18-2001
Drilling Contractor TSC Drill Rig B-61
Driller GAF Logger B. Fugiel Checked by B. Fugiel
Drilling Method 2.25-in. SSA; Backfilled

WATER LEVEL DATA

White Drilling 3.81 m
At Completion of Drilling 3.81 m
Time After Drilling NA
Depth to Water NA

GENERAL NOTES

Begin Drilling 10-15-2001 Complete Drilling 10-15-2001
Drilling Contractor TSC Drill Rig B-61
Driller GAF Logger B. Fugiel Checked by B. Fugiel
Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

White Drilling DRY
At Completion of Drilling DRY
Time After Drilling NA
Depth to Water NA

GENERAL NOTES

Begin Drilling 10-15-2001 Complete Drilling 10-15-2001
Drilling Contractor TSC Drill Rig B-61
Driller GAF Logger B. Fugiel Checked by B. Fugiel
Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

White Drilling DRY
At Completion of Drilling DRY
Time After Drilling NA
Depth to Water NA

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

BORING LOGS (8 OF 11)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-015 (1 OF 1)

BORING NO. AR-016 (1 OF 2)

BORING NO. AR-016 (1 OF 2)

BORING LOG AR-015 Page 1 of 1

Wang Engineering, INC.
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.03 m
North: 545542.41 m
East: 366639.84 m
Station: 7 +203.83
Offset: 23.34 LT

BORING LOG AR-016 Page 1 of 2

Wang Engineering, INC.
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.23 m
North: 545540.35 m
East: 366661.24 m
Station: 7 +225.2
Offset: 21.04 LT

BORING LOG AR-016 Page 2 of 2

Wang Engineering, INC.
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.23 m
North: 545540.35 m
East: 366661.24 m
Station: 7 +225.2
Offset: 21.04 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
182.0	Stiff to very stiff, brown and gray SILTY CLAY --FILL--	1	330 B	3	21					
180.4	Very stiff, brown CLAY	2	133 B	3	25					
179.4	Medium dense, gray SILT	3	307 B	3	20					
178.5	Stiff, gray CLAY	4	58 B	4	16					
178.1	Medium dense, gray SILT	5	189 B	4	18					
176.5	Stiff, gray CLAY	6	111 B	9	25					
175.5	Stiff, gray CLAY	7	75 B	8	20					
175.3	Boring terminated at 6.10 m	8	149 B	2	18					

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
182.0	Black SANDY to SILTY LOAM --TOPSOIL--	1	263 P	2	21					
175.2	Very stiff to hard, brown and gray SILTY CLAY --FILL--	2	432 B	3	19					
174.5	Medium dense, gray SILT	3	314 S	3	20					
173.3	Stiff to very stiff, gray CLAY	4	240 P	5	18					
172.6	Very stiff, brown CLAY	5	192 P	4	20					
171.1	Stiff, gray CLAY	6	165 B	2	20					
169.3	Stiff, gray CLAY	7	157 B	2	19					
167.0	Boring terminated at 15.24 m	8	118 B	2	19					

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
182.0	Very stiff, gray SILTY CLAY	1	280 B	3	15					
176.0	Boring terminated at 15.24 m	2	314 B	6	16					

GENERAL NOTES

Begin Drilling 09-18-2001 Complete Drilling 09-18-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller GAF Logger B. Fugiel Checked by B. Fugiel
 Drilling Method 2.25-in. SSA; Backfilled

WATER LEVEL DATA

While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 10-15-2001 Complete Drilling 10-15-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller GAF Logger B. Fugiel Checked by B. Fugiel
 Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 10-15-2001 Complete Drilling 10-15-2001
 Drilling Contractor TSC Drill Rig B-61
 Driller GAF Logger B. Fugiel Checked by B. Fugiel
 Drilling Method 3.25-in. HSA; Grouted

WATER LEVEL DATA

While Drilling DRY
 At Completion of Drilling DRY
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

BORING LOGS (9 OF 11)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6 + 850.000 to STATION 7 + 379.000
 STRUCTURE NO. 016-W874

DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-019 (1 OF 1)

BORING NO. AR-020 (1 OF 1)

BORING LOG AR-019 Page 1 of 1

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

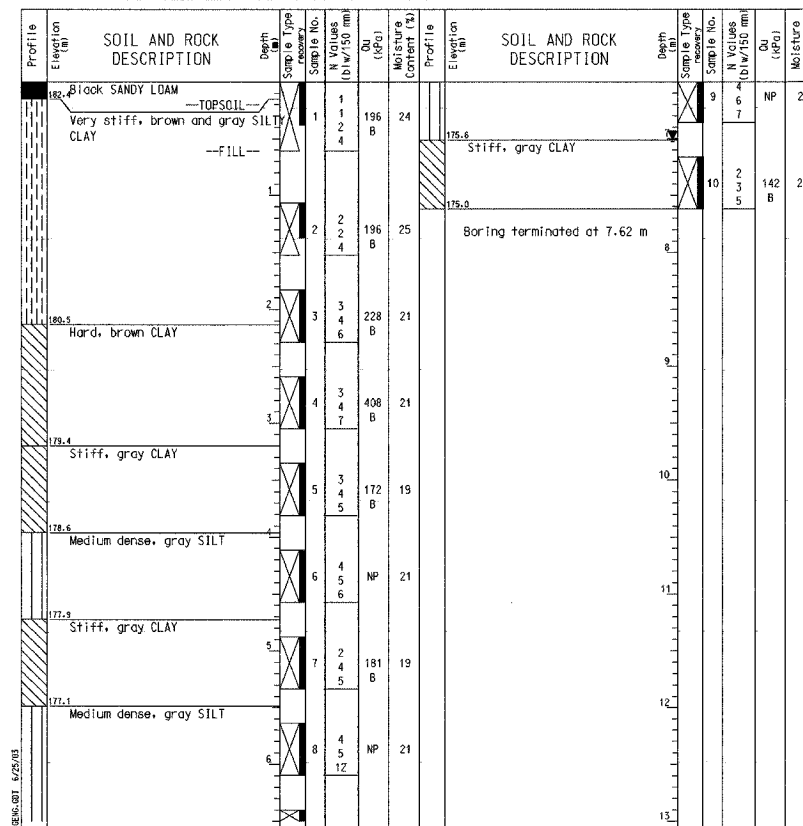
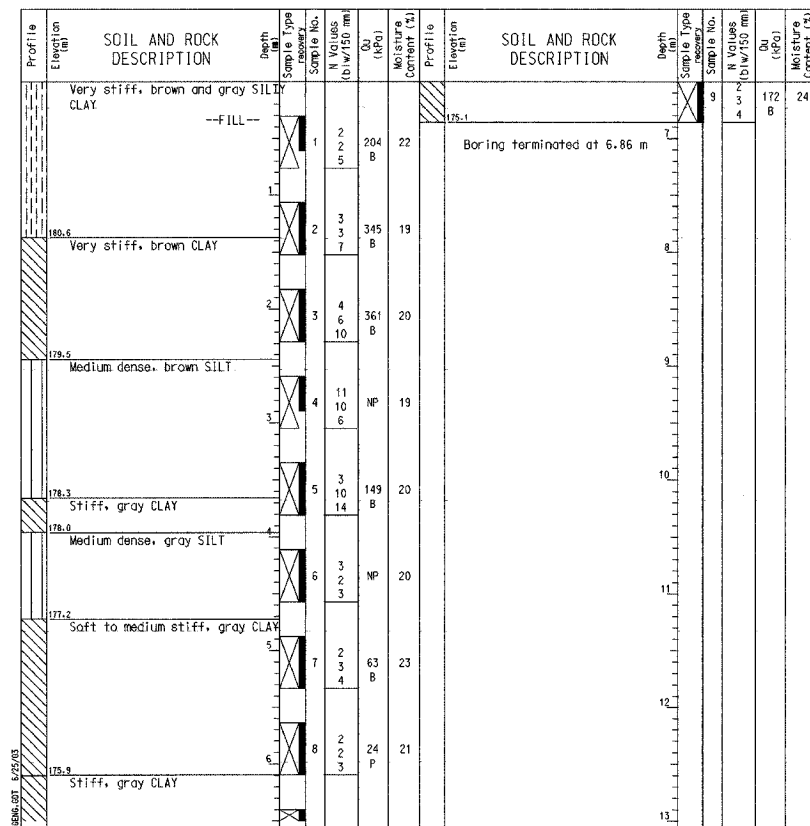
Datum: USGS
Elevation: 181.95 m
North: 545543.73 m
East: 366730.00 m
Station: 7 +293.99
Offset: 23.63 LT

BORING LOG AR-020 Page 1 of 1

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.59 m
North: 545540.50 m
East: 366754.55 m
Station: 7 +318.51
Offset: 20.12 LT



GENERAL NOTES

Begin Drilling 09-18-2001 Complete Drilling 09-18-2001
Drilling Contractor TSC Drill Rig B-61
Driller GAF Logger B. Fugiel Checked by B. Fugiel
Drilling Method 2.25-in. SSA; Backfilled

WATER LEVEL DATA

While Drilling DRY
At Completion of Drilling DRY
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 10-08-2001 Complete Drilling 10-08-2001
Drilling Contractor TSC Drill Rig B-61
Driller GAF Logger B. Fugiel Checked by B. Fugiel
Drilling Method 2.25-in. SSA; Backfilled

WATER LEVEL DATA

While Drilling 7.01 m
At Completion of Drilling 7.01 m
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

BORING LOGS (11 OF 11)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

Benchmark: Chiseled box on Northeast corner of Northeast Wingwall over Little Calumet River
 Bridge Westbound I-80 mile marker 0.4. Elevation = 191.662
 Existing Structure: Remove Existing Mechanically Stabilized Earth Wall
 All dimensions in millimeters (mm) except as noted.

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
180/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1018
SHEET NO. S-1				

CONTRACT NO. 62114 INDOT DES. NO. 0100987

LOADING

Wind Load on Future Noise Wall = 1.7 kPa

DESIGN STRESSES

FIELD UNITS

$f'_c = 24 \text{ MPa}$
 $f_y = 400 \text{ MPa (Reinf.)}$
 Maximum Applied Soil Bearing Pressure = 160 kPa

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges
 AASHTO 1989 Guide Specifications for Structural Design of Sound Barriers and 1992 Interims

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES

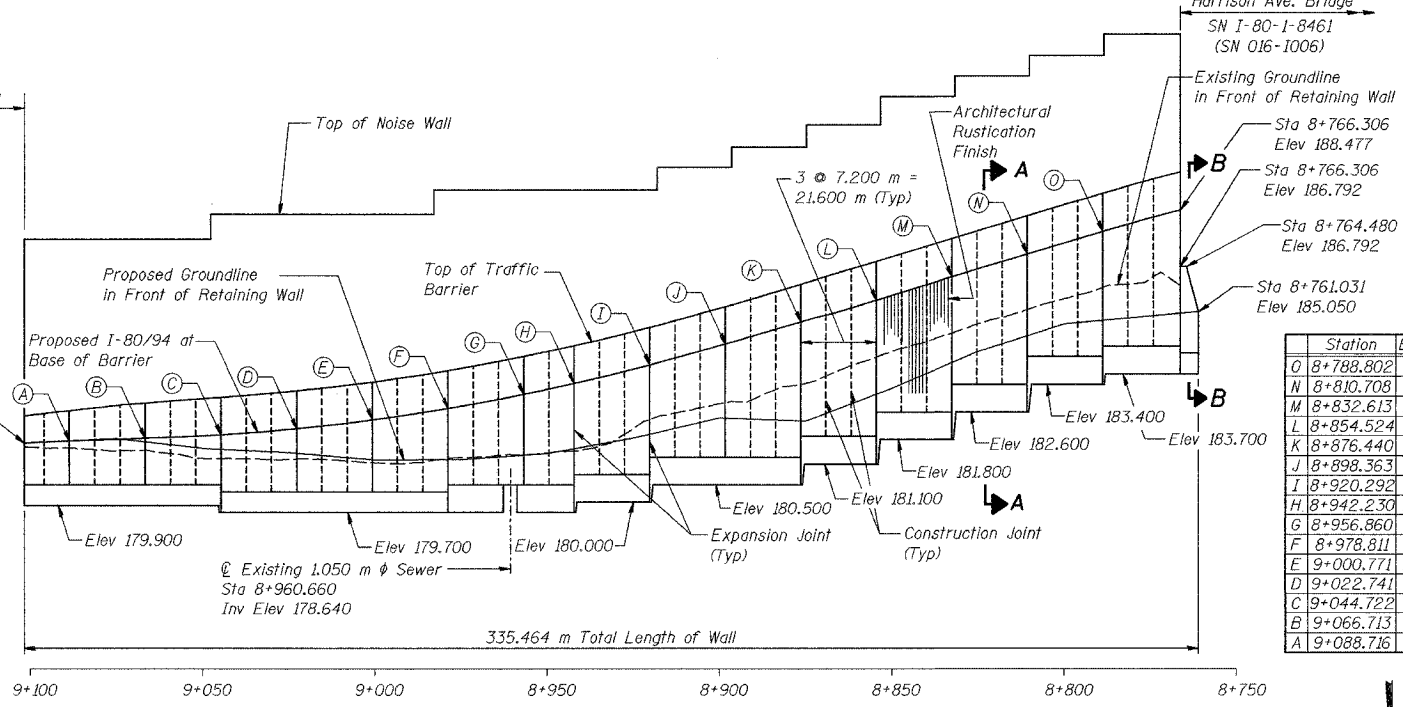
- LEGEND**
- ⊕ - Soil Boring Location
 - - Existing Roadway/Structure
 - - Proposed Roadway/Structure
 - ⊙ - Tree
 - - Shrubs/Brush
 - - Proposed Storm Sewer
 - - Existing Sanitary Sewer
 - - Existing Storm Sewer
 - - Existing Water Main
 - - Electrical Aerial Cable
 - - Existing Gas Line
 - - Existing Cable TV
 - - Existing Fiberoptics

CURVE DATA I-80/94

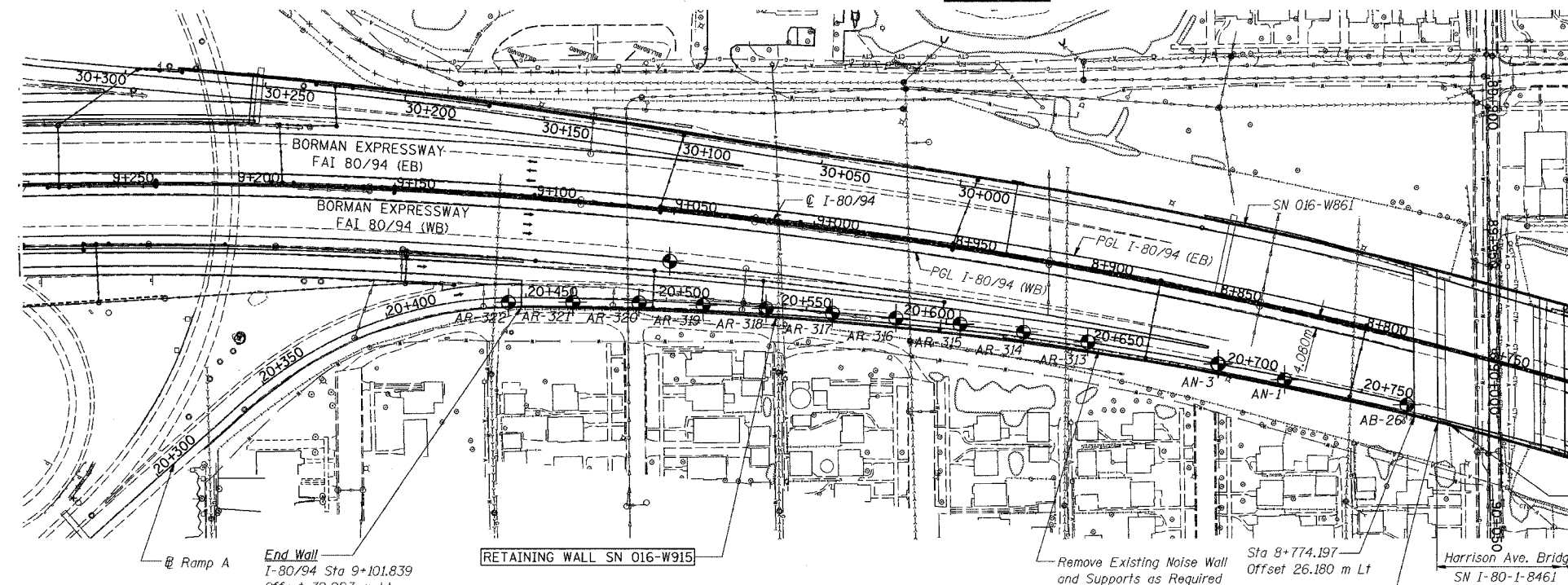
$\Delta = 20^\circ-51'-41"$
 $R = 1,864.600 \text{ m}$
 $T = 343.250 \text{ m}$
 $L = 678.899 \text{ m}$
 $E = 31.331 \text{ m}$
 $P.C. \text{ Sta} = 8+603.684$
 $P.I. \text{ Sta} = 8+946.934$
 $P.T. \text{ Sta} = 9+282.583$
 $S.E. = 3.0 \%$

CURVE DATA RAMP A

$\Delta = 12^\circ-33'-26"$
 $R = 1,466.000 \text{ m}$
 $T = 161.294 \text{ m}$
 $L = 321.295 \text{ m}$
 $E = 8.846 \text{ m}$
 $P.C. \text{ Sta} = 20+448.434$
 $P.I. \text{ Sta} = 20+609.727$
 $P.T. \text{ Sta} = 20+769.729$
 $S.E. = 3.0 \%$



Station	Elevation	
O	8+788.802	187.859
N	8+810.708	187.210
M	8+832.613	186.552
L	8+854.524	185.892
K	8+876.440	185.271
J	8+898.363	184.641
I	8+920.292	184.035
H	8+942.230	183.502
G	8+956.860	183.189
F	8+978.811	182.782
E	9+000.771	182.449
D	9+022.741	182.192
C	9+044.722	182.009
B	9+066.713	181.902
A	9+088.716	181.837



PLAN

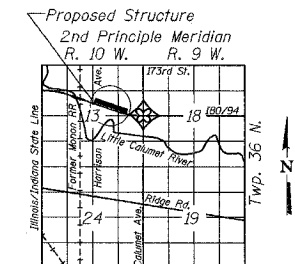
Note: Retaining Wall is built in straight line segments between Expansion and Construction Joints. Back Face of the Retaining Wall is aligned with the outside edge of shoulder at joints.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP



Gary S. Powell
 GARY S. POWELL, S.E.
 IL. LIC. NO. 081-004771
 EXP 11-30-2006
 DATE 09-12-2005

Gary S. Powell
 GARY S. POWELL, P. E.
 IN. LIC. NO. 10403944
 EXP 07-31-2006
 DATE 09-12-2005



LOCATION SKETCH

ILLINOIS DEPARTMENT OF TRANSPORTATION
 1-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
GENERAL PLAN
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+762.750 TO STATION 9+101.839
 STRUCTURE NO. 016-W915
 DATE 09/05



ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-2
P.A.L. 88-74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1019	25 SHEETS
ILLINOIS		FED. AID PROJECT:			

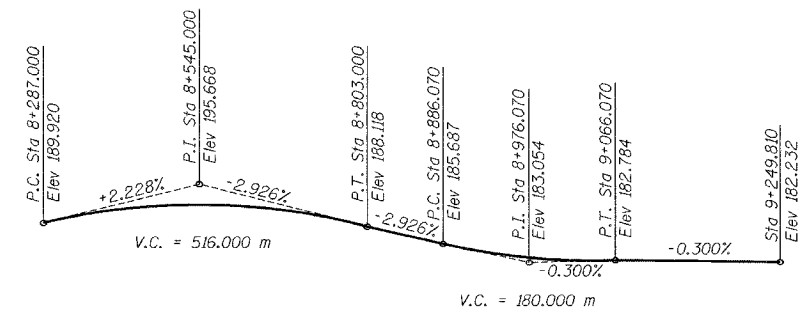
CONTRACT NO. 62114 INDOT DES. NO. 0100987

INDEX OF SHEETS

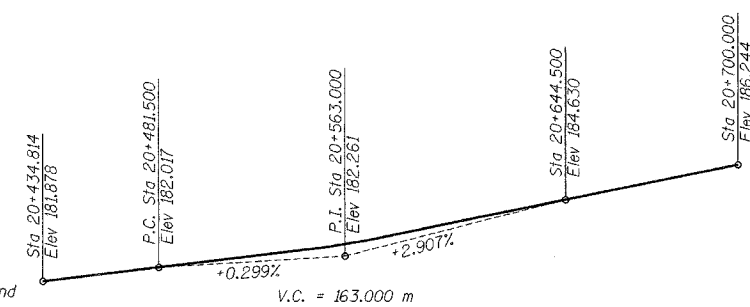
SHEET NO.	TITLE
S-1	General Plan
S-2	Index of Sheets, General Notes and Total Bill of Material
S-3	Plan and Elevation (1 of 13)
S-4	Plan and Elevation (2 of 13)
S-5	Plan and Elevation (3 of 13)
S-6	Plan and Elevation (4 of 13)
S-7	Plan and Elevation (5 of 13)
S-8	Plan and Elevation (6 of 13)
S-9	Plan and Elevation (7 of 13)
S-10	Plan and Elevation (8 of 13)
S-11	Plan and Elevation (9 of 13)
S-12	Plan and Elevation (10 of 13)
S-13	Plan and Elevation (11 of 13)
S-14	Plan and Elevation (12 of 13)
S-15	Plan and Elevation (13 of 13)
S-16	Wall Sections and Details (1 of 2)
S-17	Wall Sections and Details (2 of 2)
S-18	Rustication Finish Details
S-19	Boring Logs (1 of 7)
S-20	Boring Logs (2 of 7)
S-21	Boring Logs (3 of 7)
S-22	Boring Logs (4 of 7)
S-23	Boring Logs (5 of 7)
S-24	Boring Logs (6 of 7)
S-25	Boring Logs (7 of 7)

GENERAL NOTES

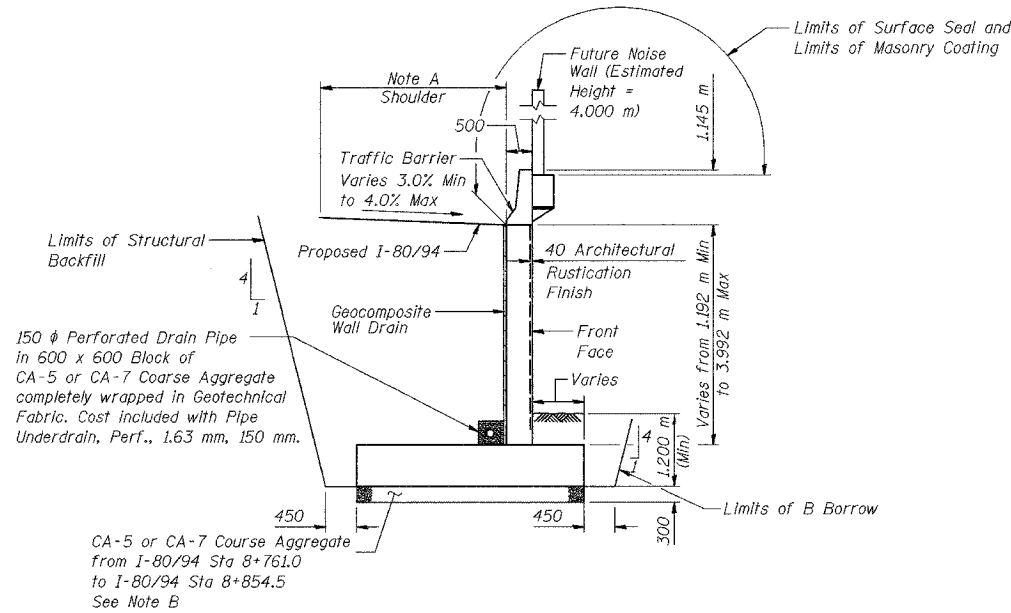
1. Reinforcement bars shall conform to the requirements of AASHTO M 31M or M322M Grade 400.
2. All dimensions are in millimeters (mm) except as noted.
3. All construction joints shall be bonded.
4. Removal of Existing Mechanically Stabilized Earth Wall required from Sta 8+927.060 to Sta 9+101.870 See Roadway Cross Sections.



**PROFILE GRADE
PROPOSED I-80/94 WESTBOUND**



**PROFILE GRADE
PROPOSED RAMP A**



TYPICAL SECTION

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
(IN) Excavation, Foundation, Unclassified	m ³	3,844.5
(IN) Concrete, A, Substructure	m ³	1,563.8
Rustication Finish	m ²	809
(IN) Reinforcing Bars, Epoxy Coated	kg	109,610
(IN) Surface Seal	L Sum	0.04
Geocomposite Wall Drain	m ²	742
(IN) Pipe, Underdrain, Perf., 1.63 mm, 150 mm	m	335.5
Noise Abatement Wall Anchor Rod Assembly	Each	93
(IN) B Borrow	m ³	487.9
(IN) Structural Backfill	m ³	2,421.00
Remove Mechanically Stabilized Earthwall	m ²	442
(IN) Masonry Coating	L Sum	0.09

(IN) Indiana Pay Items, denoted by "(Indiana)" in Special Provisions and Summary of Quantities.

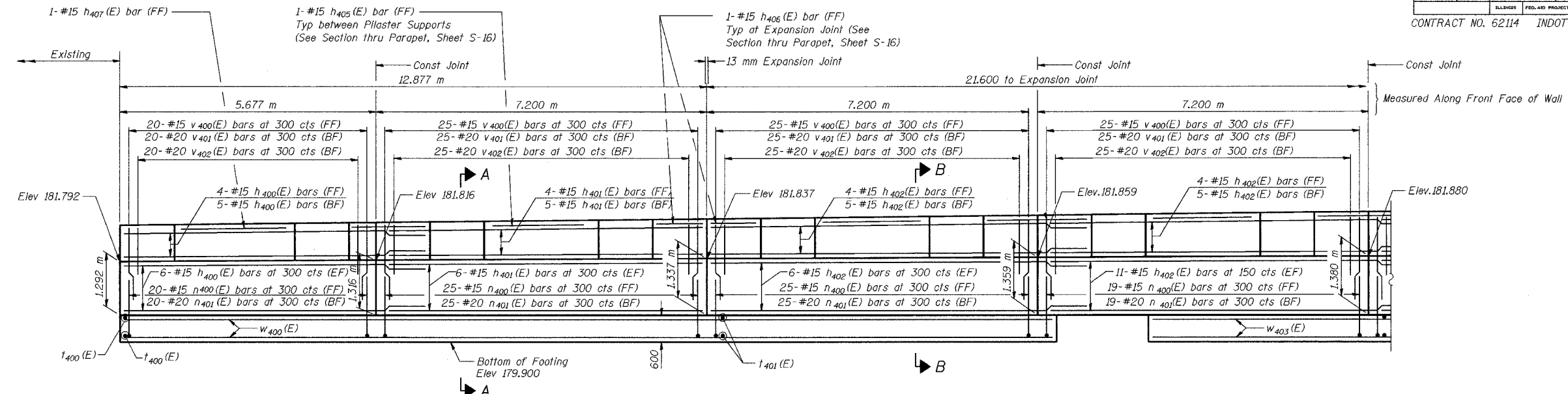
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

Note A: Constant 3.600 m from I-80/94 Sta 8+776.306 to I-80/94 Sta 8+776.173, Ramp A Sta 20+769.729
Varies from 3.600 m at I-80/94 Sta 8+776.173, Ramp A Sta 20+769.729 to 3.000 m at Ramp A Sta 20+741.820
Constant 3.000 m from Ramp A Sta 20+741.820 to Ramp A Sta 20+448.434

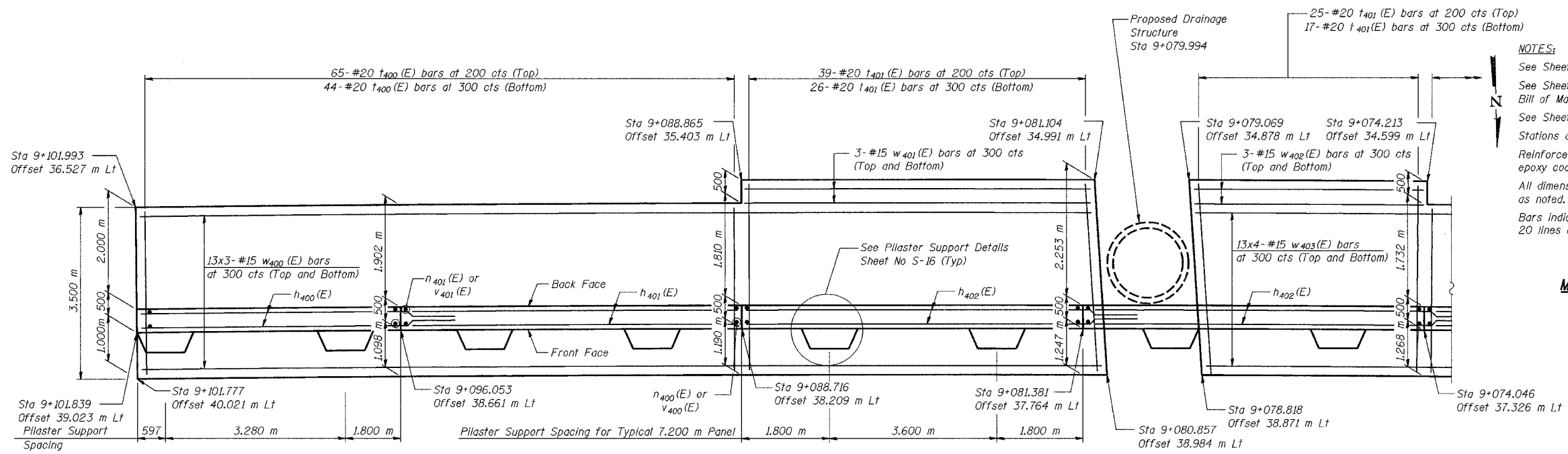
Note B: Structure Undercut to be measured and paid for as Excavation Foundation, Unclassified (Indiana) and the Course Aggregate Backfill to be measured and paid for as Structural Backfill (Indiana).

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41
**INDEX OF SHEETS, GENERAL NOTES
AND TOTAL BILL OF MATERIAL**
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915
DATE 09/05
AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL	SHEET NO. S-3 25 SHEETS
1-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1020	
CONTRACT NO. 62114		INDOT DES. NO. 0100987			



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-16 for Section A-A and Section B-B.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

MINIMUM BAR LAPS

- #15 bars = 640
- #20 bars = 790

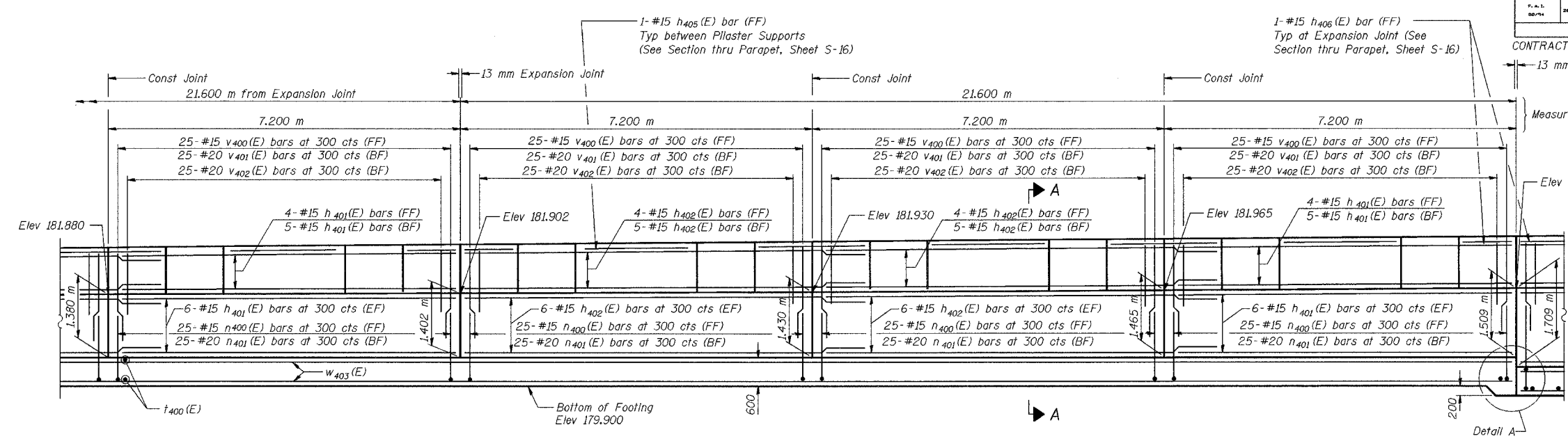
LEGEND

- BF = Back Face
- FF = Front Face
- EF = Each Face

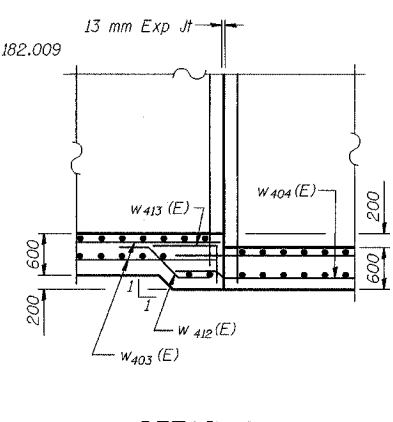
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (1 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-4
2626.2-R-2	LAKE COUNTY, INDIANA	1207	1021	25 SHEETS	
CONTRACT NO. 62114		INDOT DES. NO. 0100987			

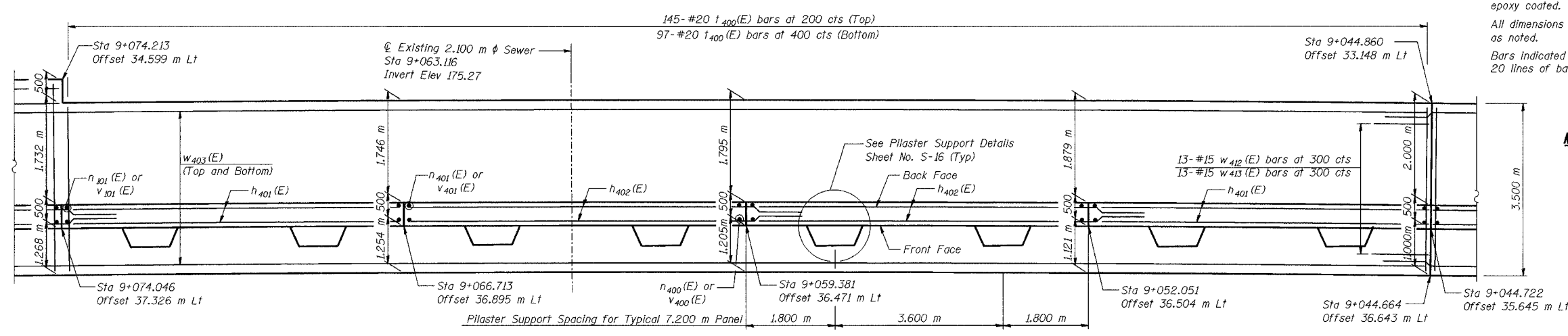


ELEVATION



DETAIL A

NOTES:
 See Sheet S-16 for Section A-A.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to ϕ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. Indicates 20 lines of bars with 3 lengths per line.



FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

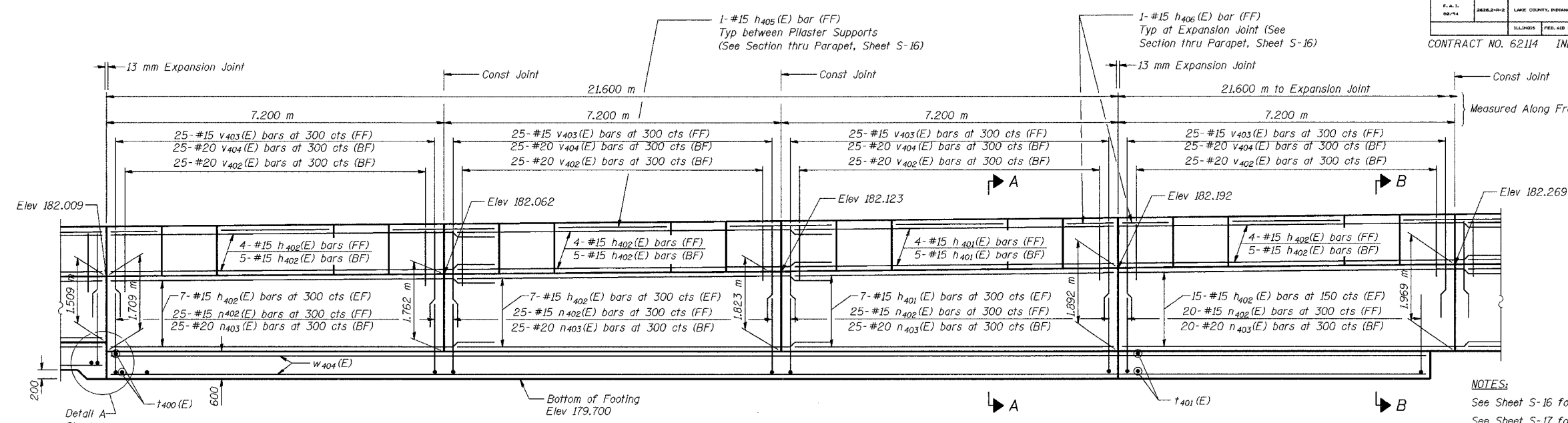
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (2 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

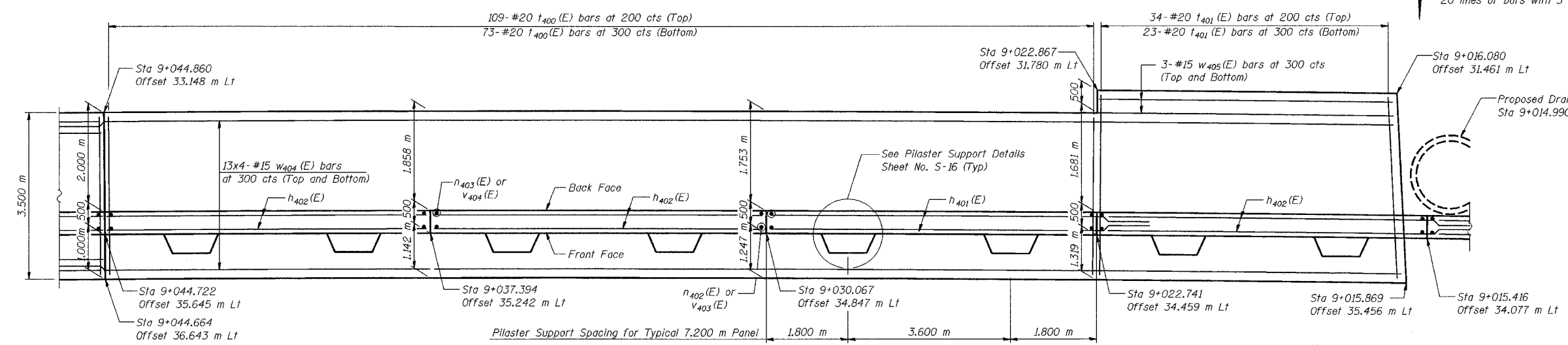
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS



ELEVATION

NOTES:
 See Sheet S-16 for Section A-A and Section B-B.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \pm I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.



FOOTING PLAN

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS

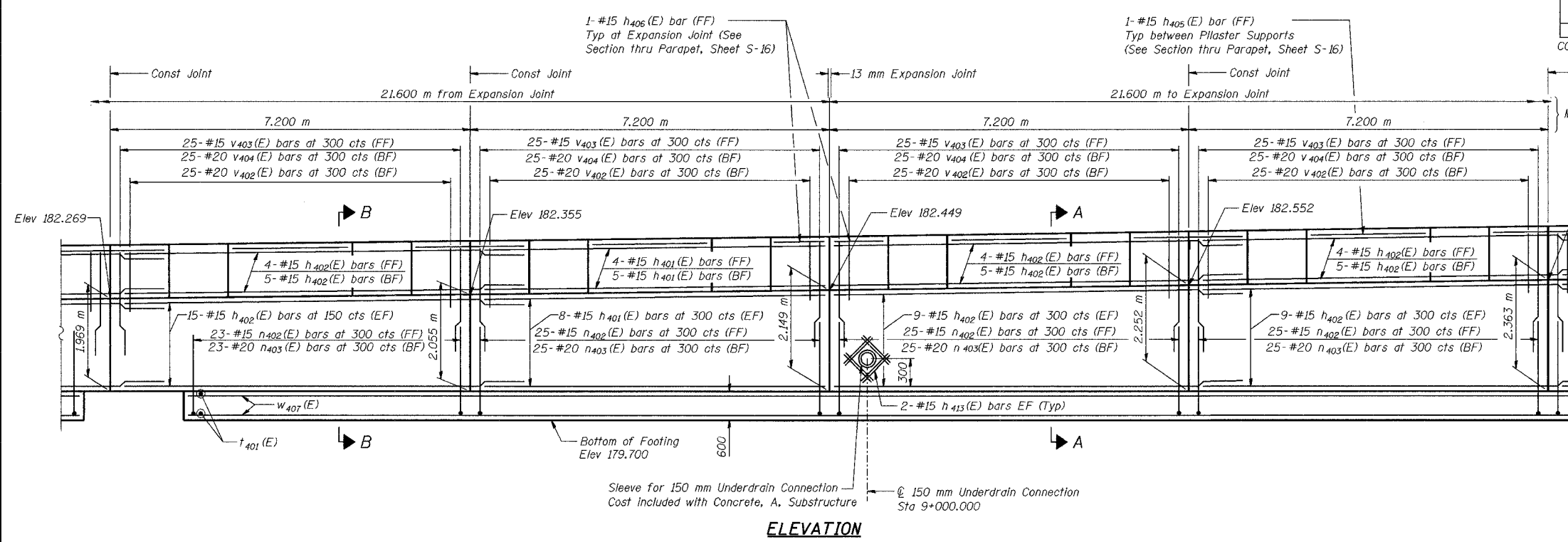
#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

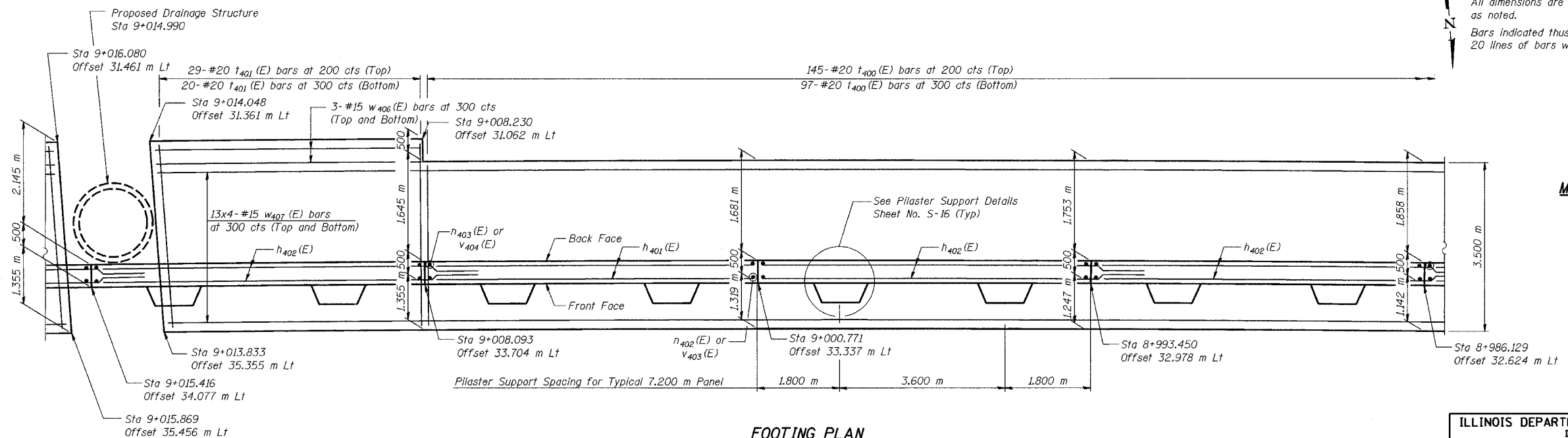
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (3 OF 13)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+762.750 TO STATION 9+101.839
 STRUCTURE NO. 016-W915
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-6
I-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1023	25 SHEETS
ILLINOIS FEDERAL PROJECT			CONTRACT NO. 62114 INDOT DES. NO. 0100987		



ELEVATION

NOTES:
 See Sheet S-16 for Section A-A and Section B-B.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to CL I-80/94 .
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.



FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

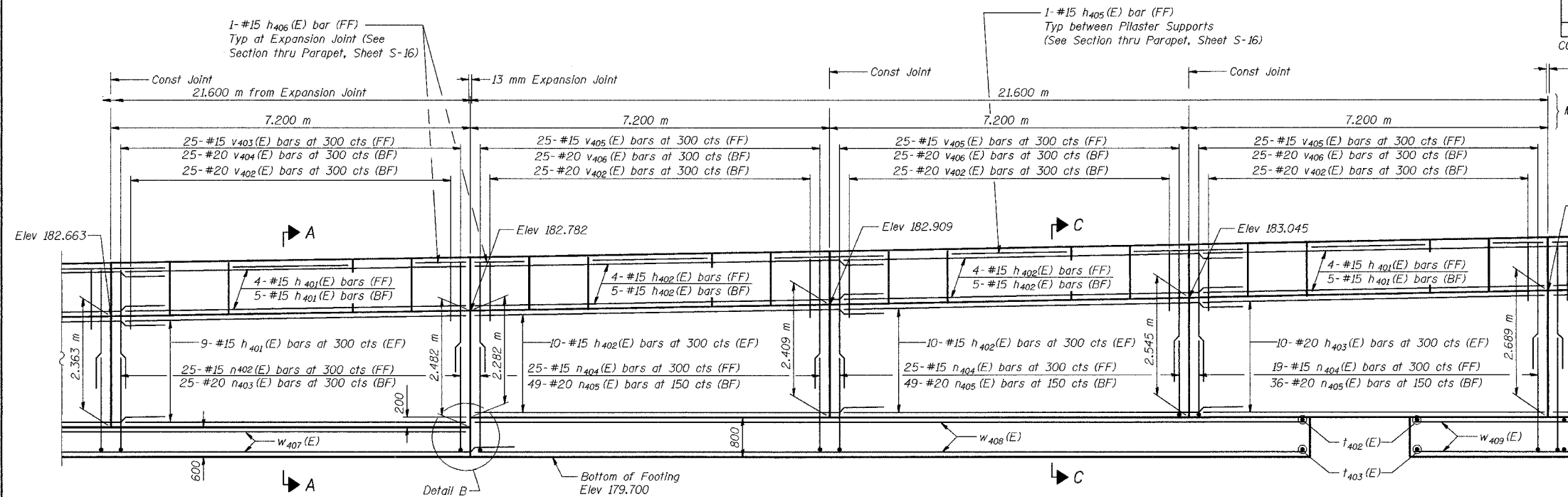
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (4 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

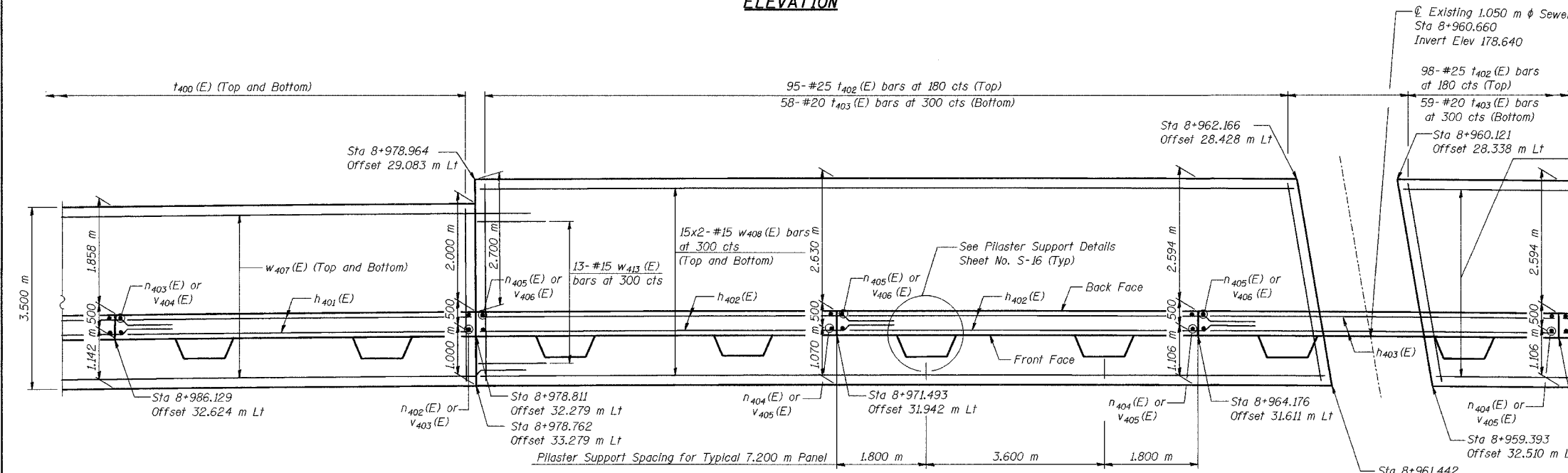
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

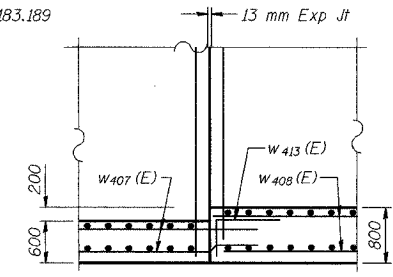
ROUTE NO.	SECTION	COUNTY	PROJECT	SHEET	SHEET NO. S-7 25 SHEETS
F.A.S. 08/74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1024	
ILLINOIS		FED. AID PROJECT		CONTRACT NO. 62114 INDOT DES. NO. 0100987	



ELEVATION



FOOTING PLAN



DETAIL B

NOTES:
 See Sheet S-16 for Section A-A and Section C-C.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS

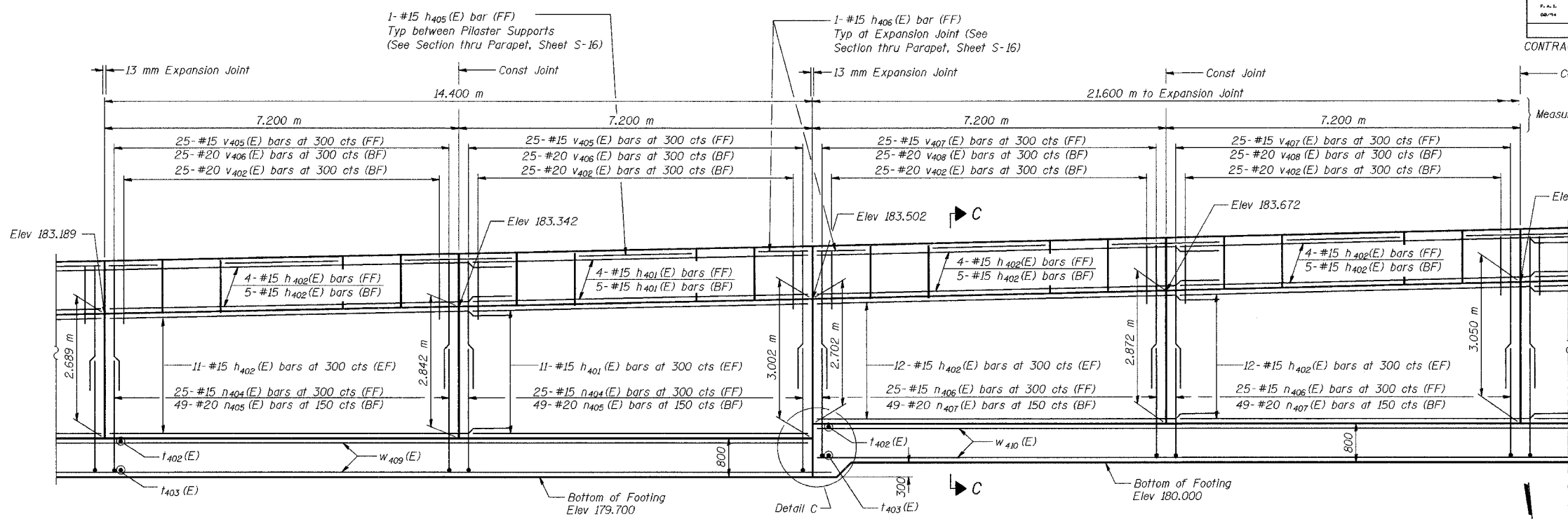
#15 bars = 640
 #20 bars = 790

LEGEND

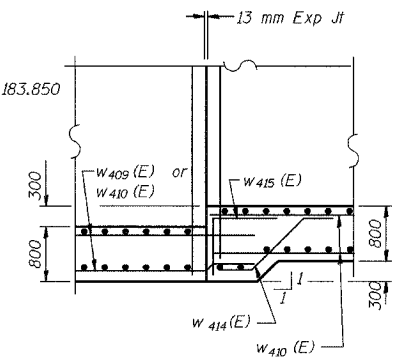
BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (5 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-8
2626.2-R-2	LAKE COUNTY, INDIANA	1207	1025	25 SHEETS	
CONTRACT NO. 62114		INDOT DES. NO. 0100987			

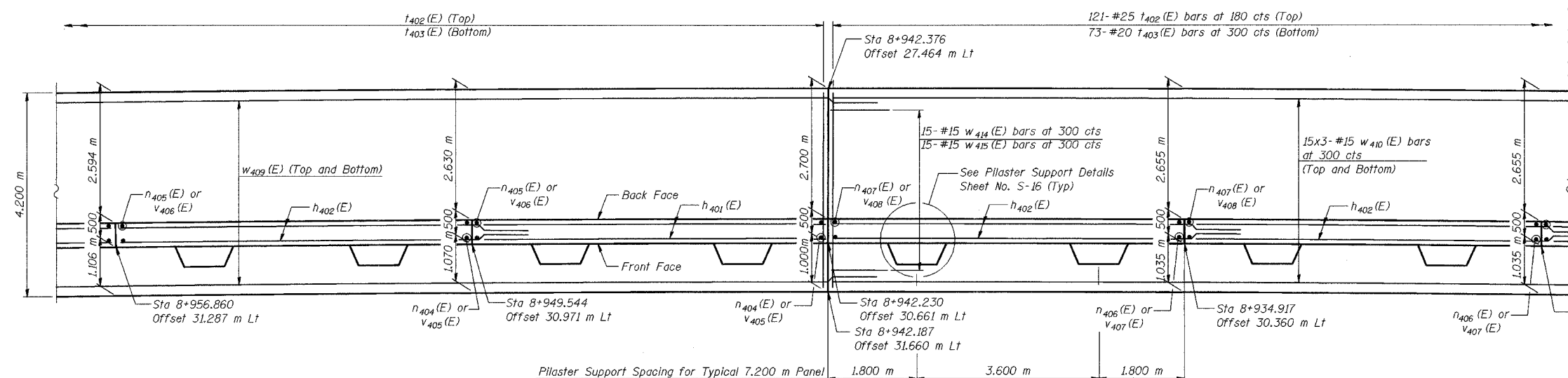


ELEVATION



DETAIL C

NOTES:
 See Sheet S-16 for Section A-A and Section C-C.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \bar{C} I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.



FOOTING PLAN

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

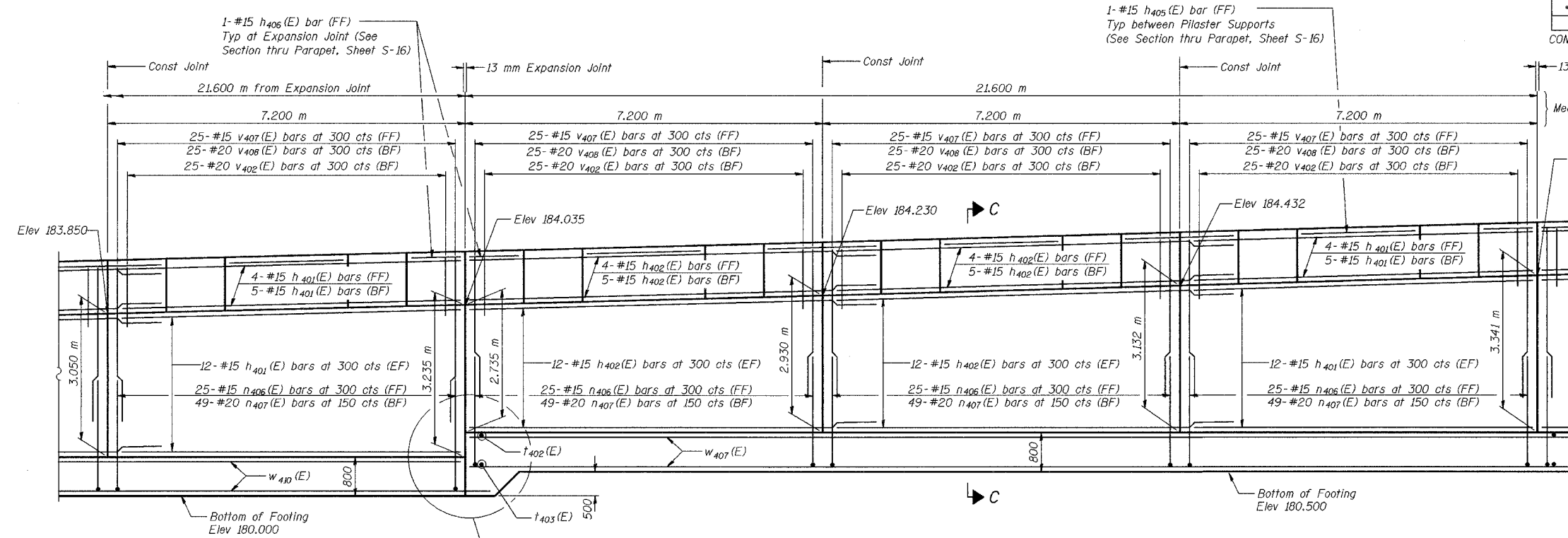
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (6 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

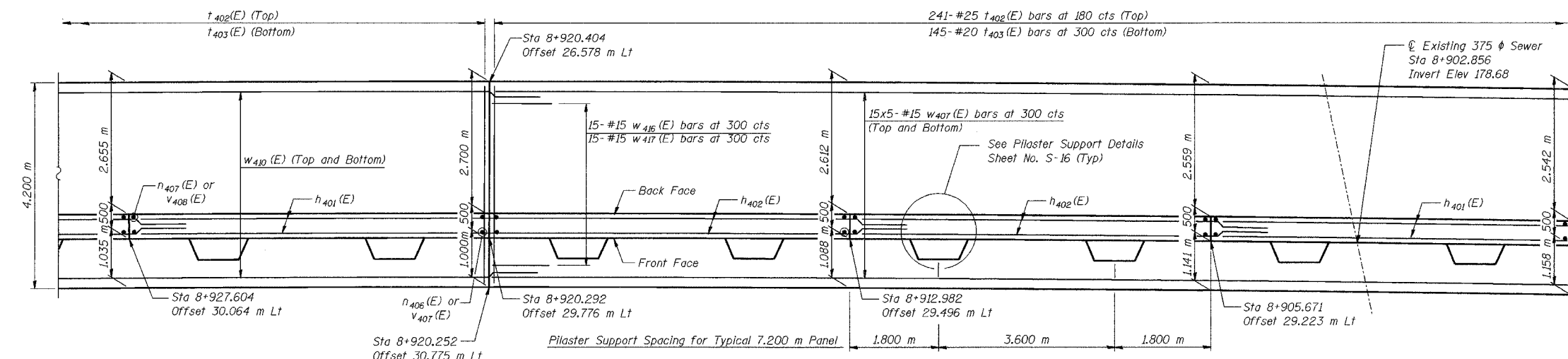
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

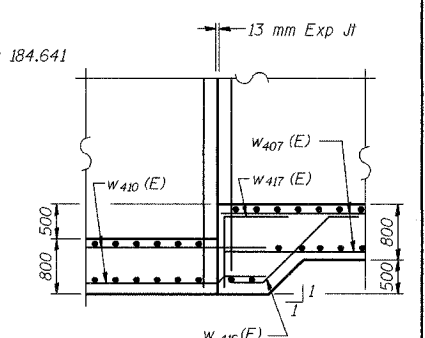
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-9 25 SHEETS
F.A.L. 88-74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1026	
CONTRACT NO. 62114 INDOT DES. NO. 0100987					



ELEVATION



FOOTING PLAN



DETAIL D

NOTES:
 See Sheet S-16 for Section C-C.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \mathcal{L} 1-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

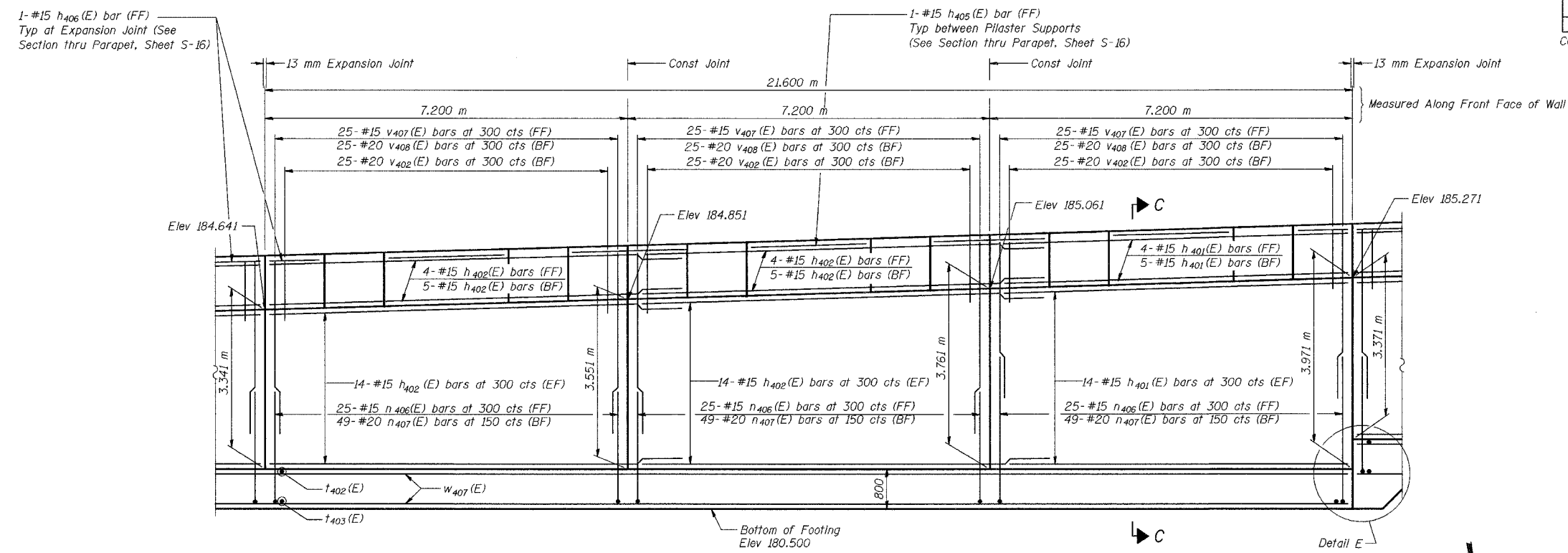
BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

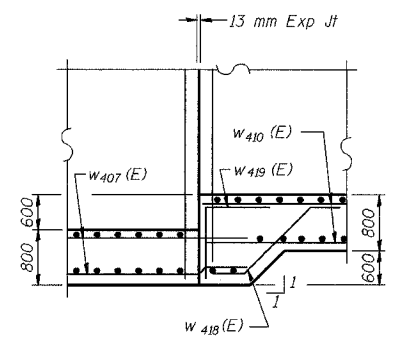
**PLAN AND ELEVATION (7 OF 13)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+762.750 TO STATION 9+101.839
 STRUCTURE NO. 016-W915**

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

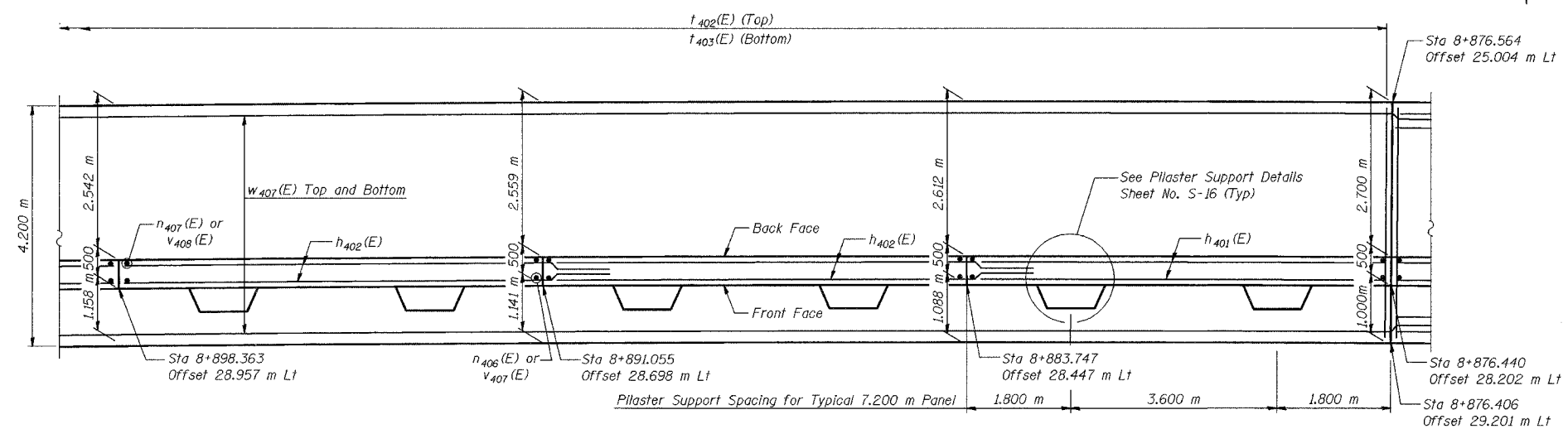


ELEVATION



DETAIL E

NOTES:
 See Sheet S-16 for Section C-C.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \mathcal{L} I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.



FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

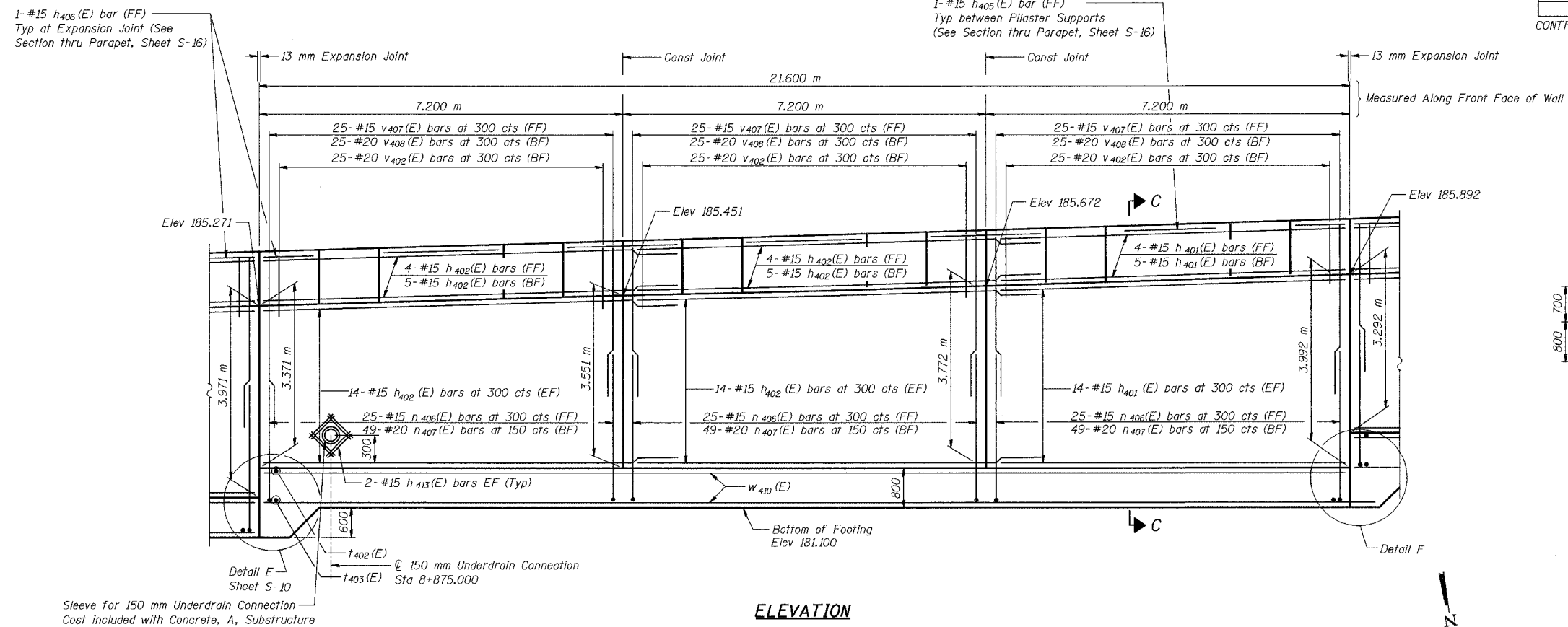
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

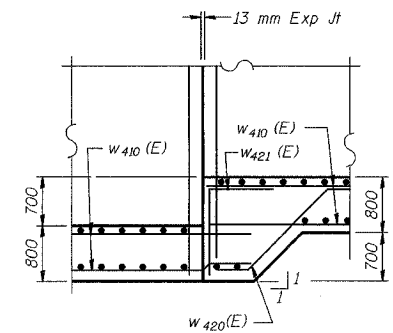
PLAN AND ELEVATION (8 OF 13)
SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+762.750 TO STATION 9+101.839
 STRUCTURE NO. 016-W915

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

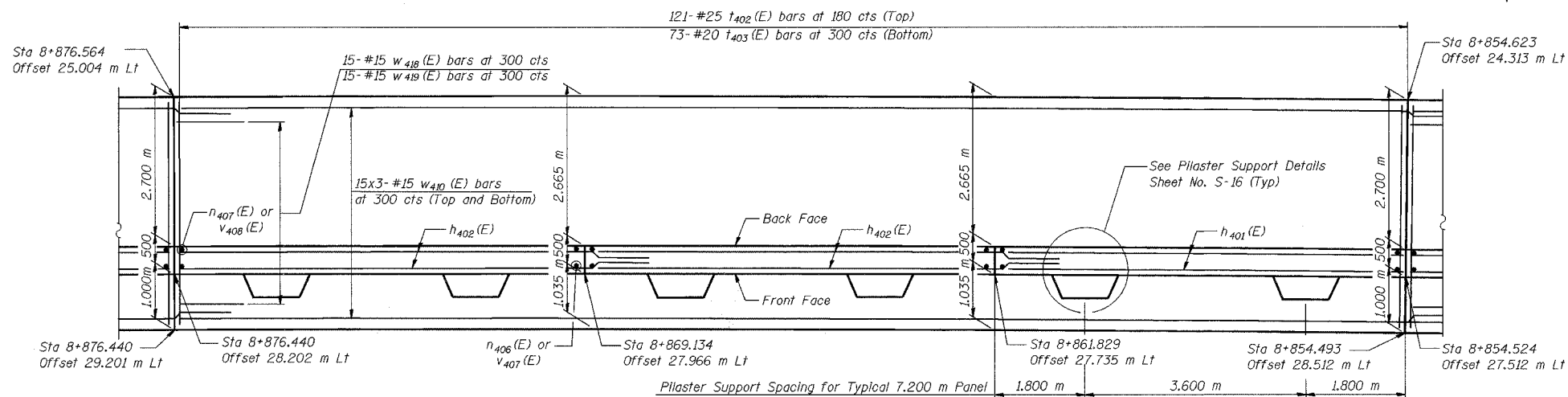


ELEVATION



DETAIL F

NOTES:
 See Sheet S-16 for Section C-C.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \pm I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.



FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

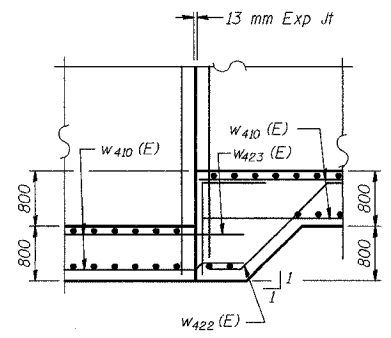
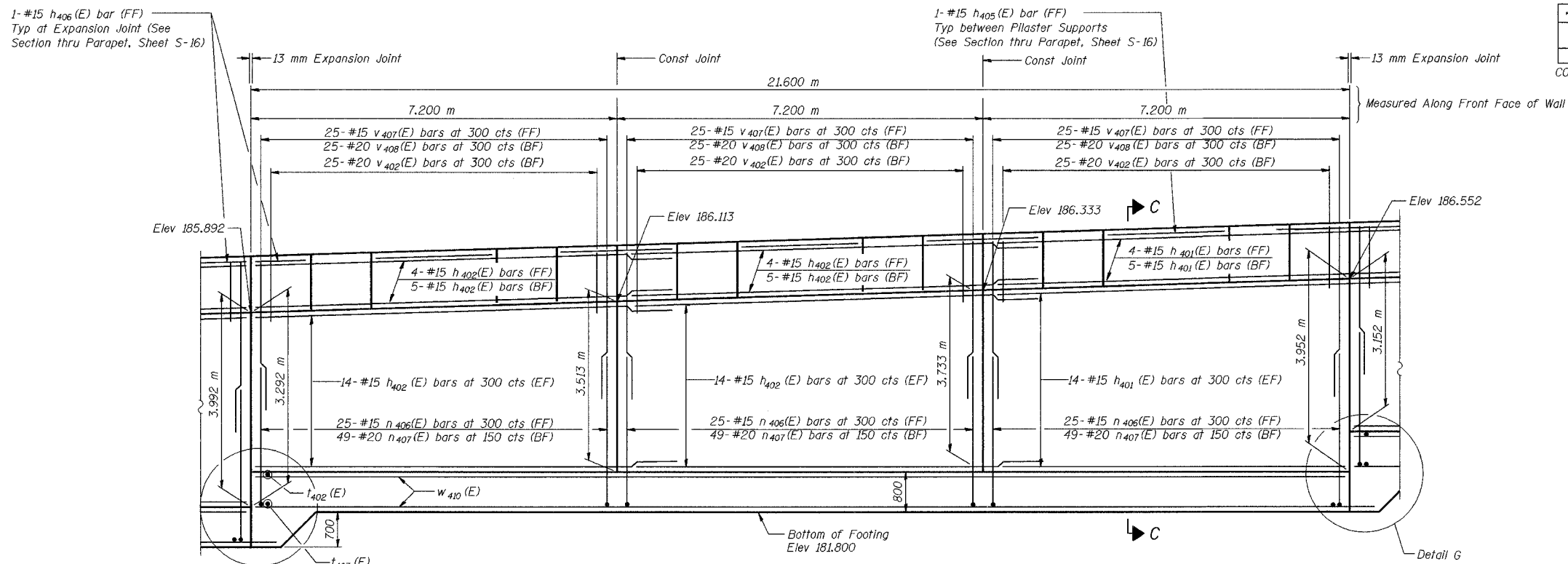
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (9 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

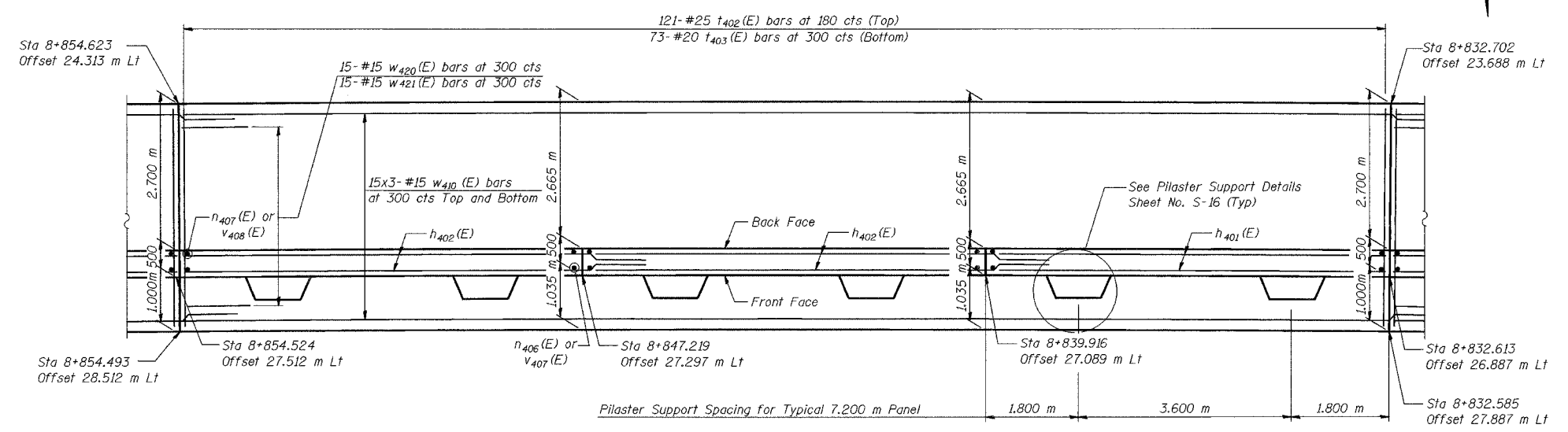
COUNTY NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-12
F.A.L. 000/74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1029	25 SHEETS
S.D. NO.		FED. AID PROJECT		CONTRACT NO. 62114 INDOT DES. NO. 0100987	



DETAIL G

NOTES:
 See Sheet S-16 for Section C-C.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

ELEVATION



MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

FOOTING PLAN

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

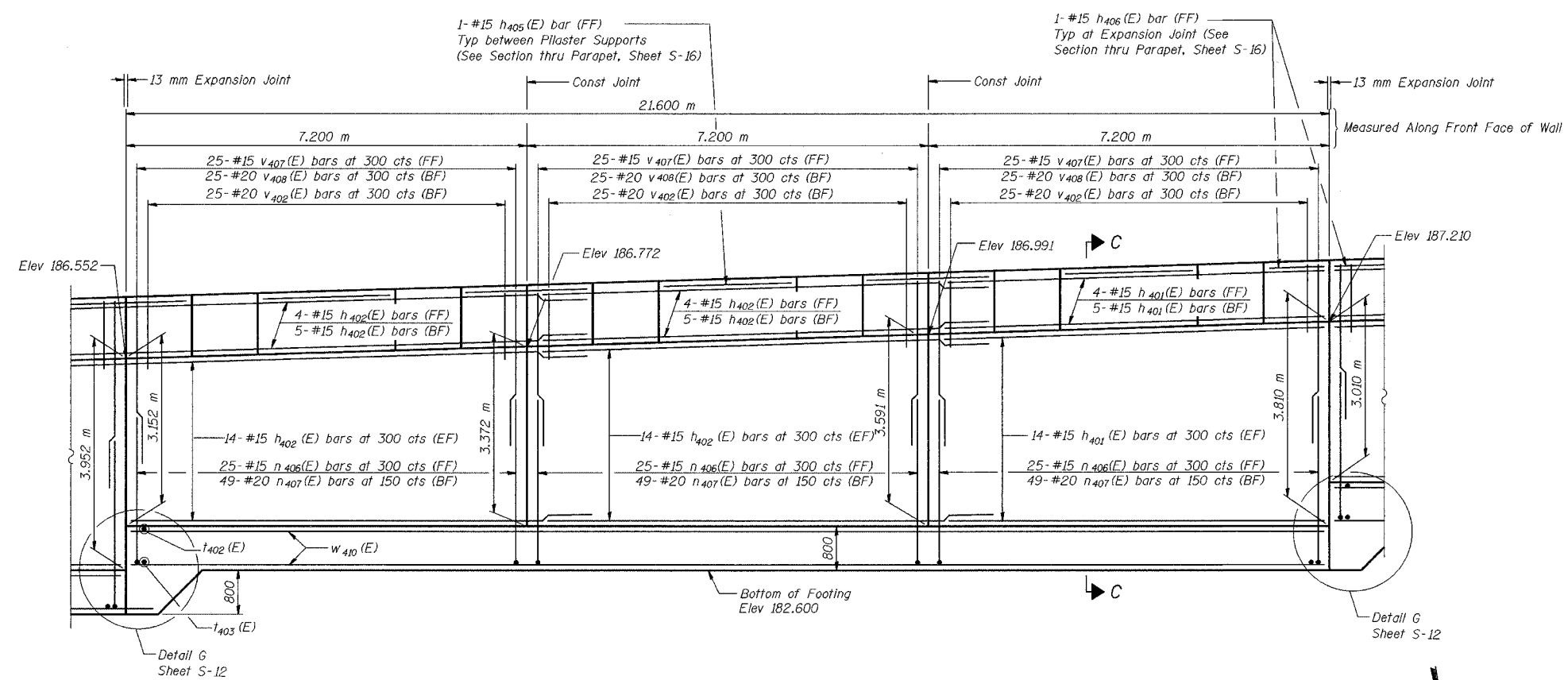
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (10 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

DATE 09/05

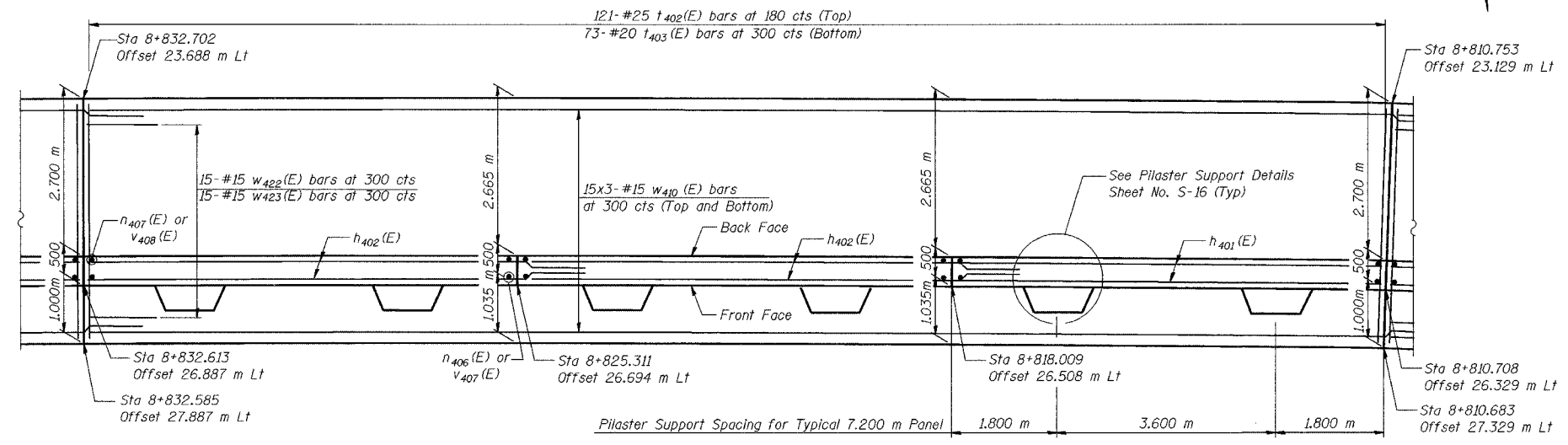
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. S-13
F.A.L. 100/14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1030	25 SHEETS
SHEET NO.		CONTRACT NO. 62114 INDOT DES. NO. 0100987			



ELEVATION

NOTES:
 See Sheet S-16 for Section C-C.
 See Sheet S-17 for Expansion Joint Detail and Bill of Material.
 See Sheet S-18 for Rustication details.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.



FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

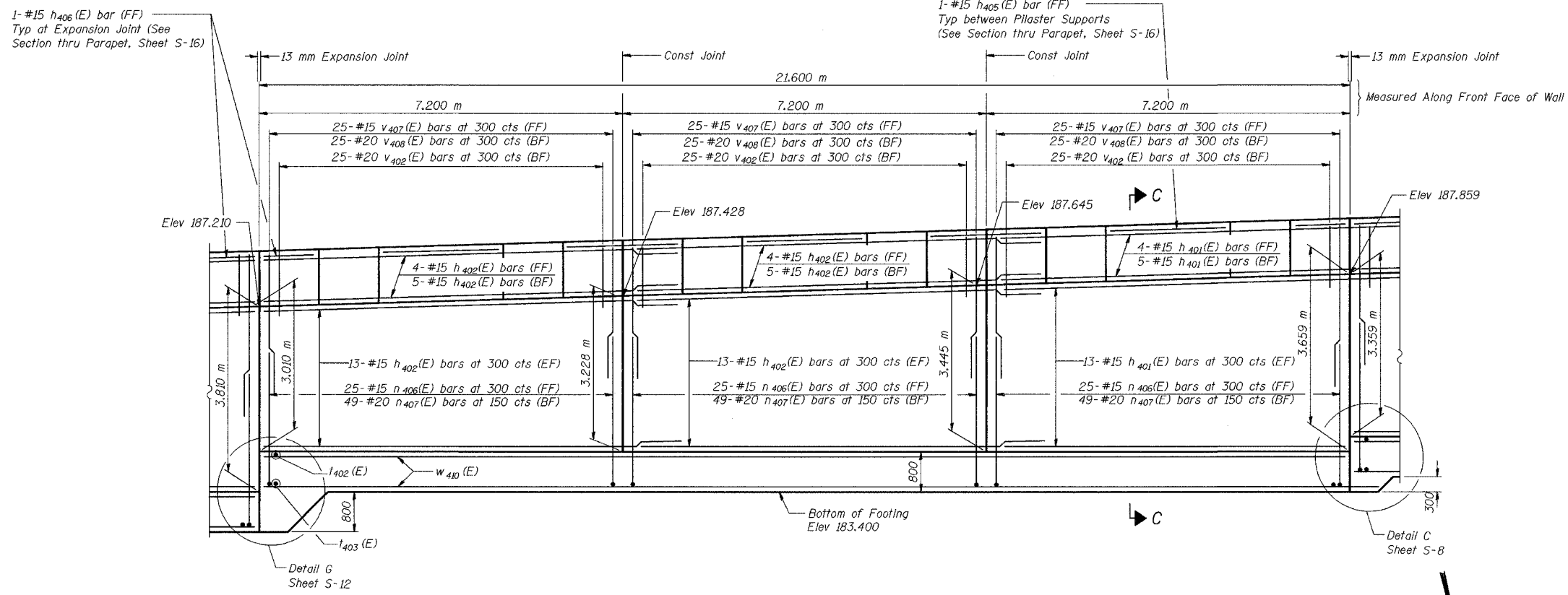
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORHAM EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (11 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.T.	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1031
DATE				

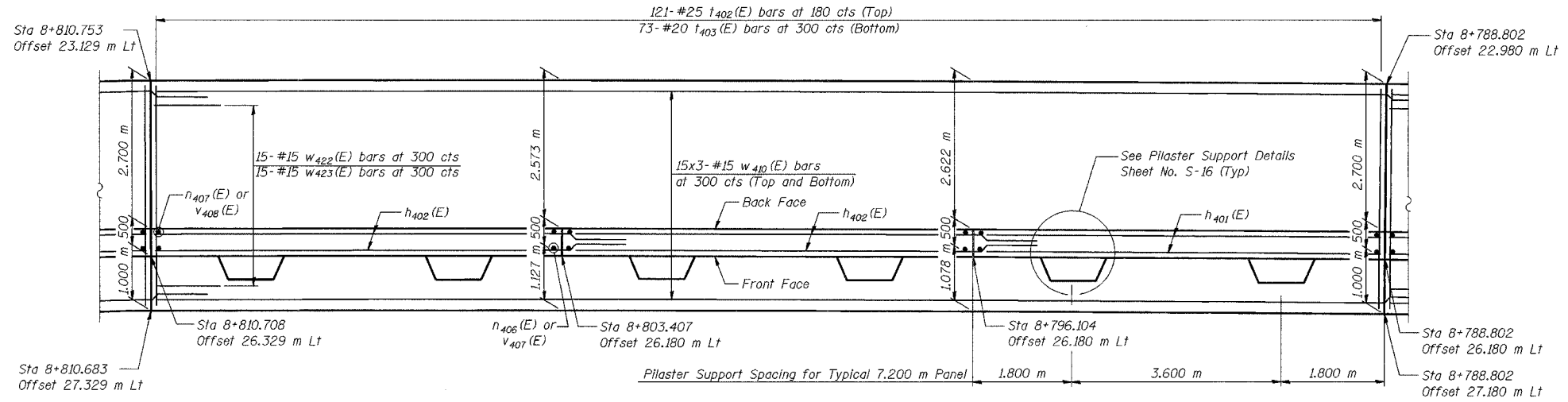
SHEET NO. S-14
25 SHEETS

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION

NOTES:
See Sheet S-16 for Section C-C.
See Sheet S-17 for Expansion Joint Detail and Bill of Material.
See Sheet S-18 for Rustication details.
Stations are referenced to CL I-80/94 .
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.



FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
#20 bars = 790

LEGEND

BF = Back Face
FF = Front Face
EF = Each Face

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PLAN AND ELEVATION (12 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

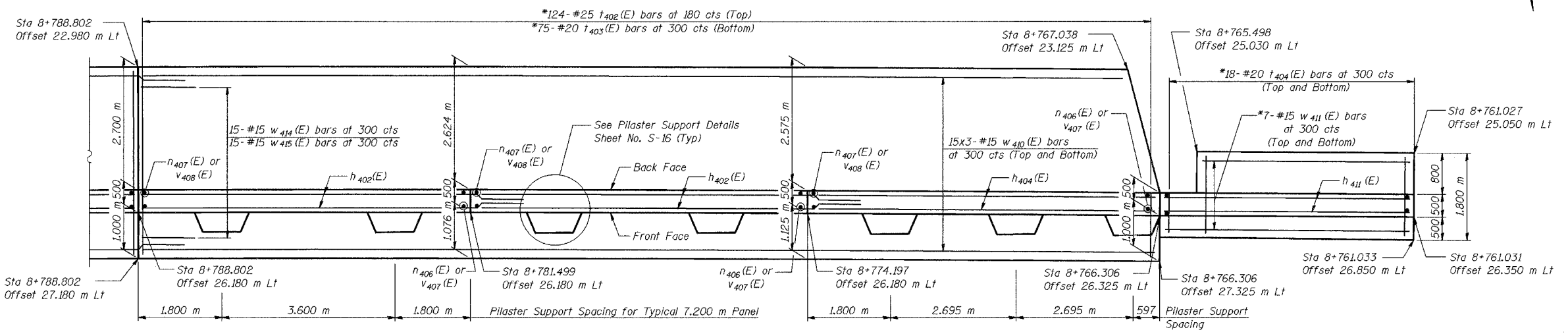
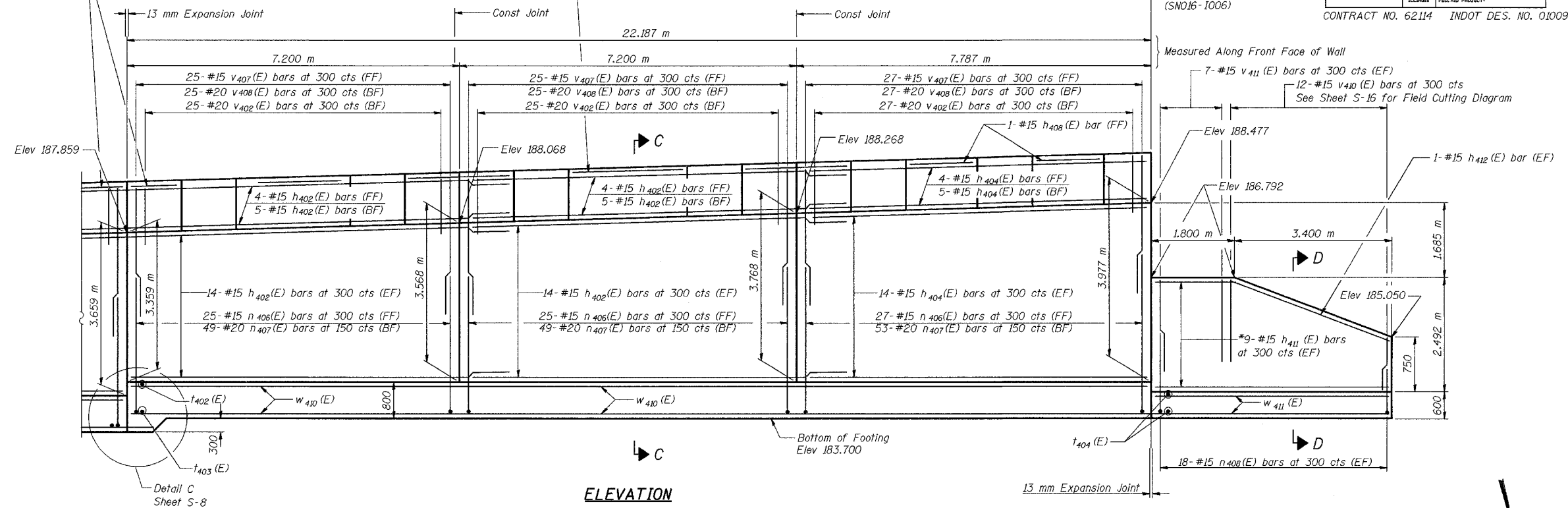
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

1-#15 h₄₀₆(E) bar (FF)
Typ at Expansion Joint (See
Section thru Parapet, Sheet S-16)

1-#15 h₄₀₅(E) bar (FF)
Typ between Pilaster Supports
(See Section thru Parapet, Sheet S-16)

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-15
I-80	R-2	LAKE COUNTY, INDIANA	1207	1032	25 SHEETS
CONTRACT NO. 62114 INDOT DES. NO. 0100987					



DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS

#15 bars = 640
#20 bars = 790

LEGEND

BF = Back Face
FF = Front Face
EF = Each Face

NOTES:

See Sheet S-16 for Section C-C and Section D-D.

See Sheet S-17 for Expansion Joint Detail and Bill of Material.

See Sheet S-18 for Rustication details.

Stations are referenced to \odot I-80/94.

Reinforcement bars designated (E) shall be epoxy coated.

All dimensions are in millimeters (mm) except as noted.

Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

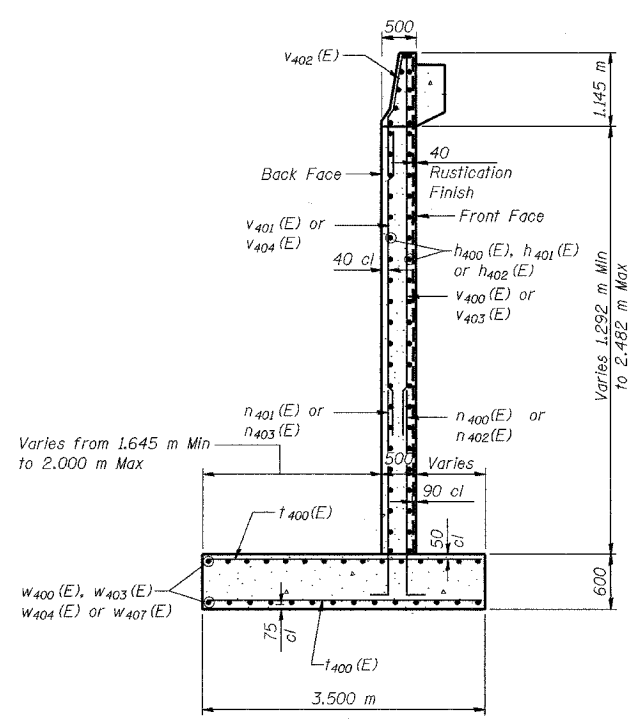
* Cut to Fit.

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

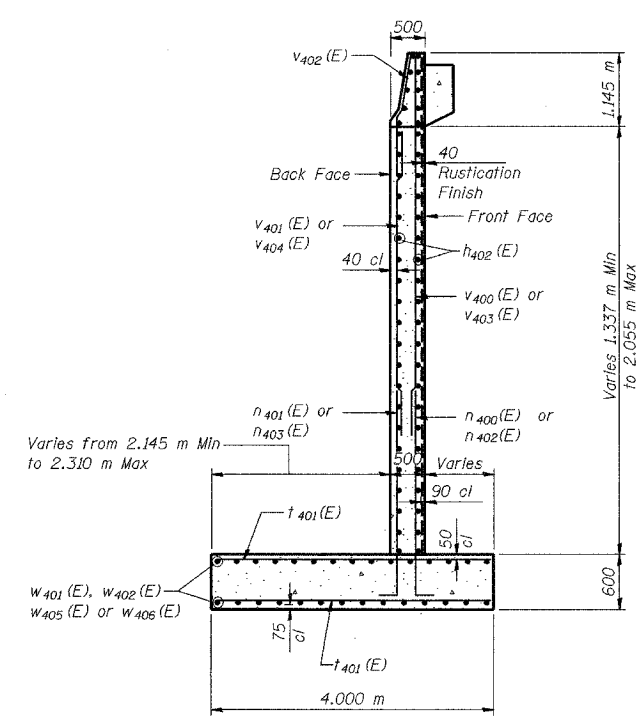
PLAN AND ELEVATION (13 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

DATE 09/05

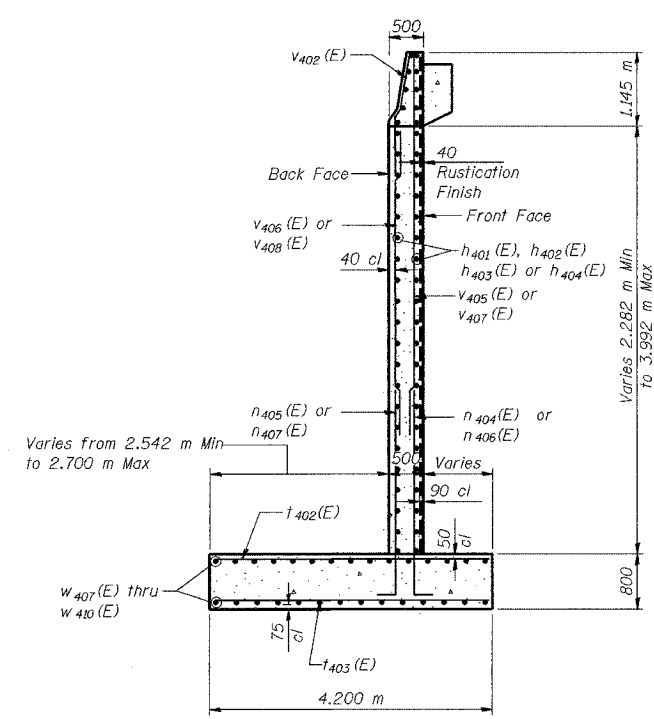
AMERICAN
CONSULTING ENGINEERS



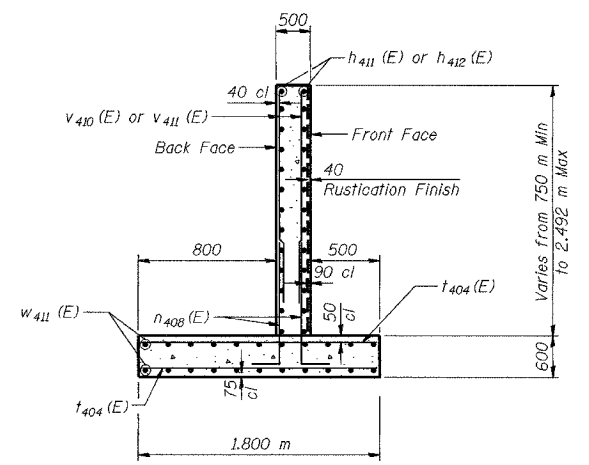
SECTION A-A



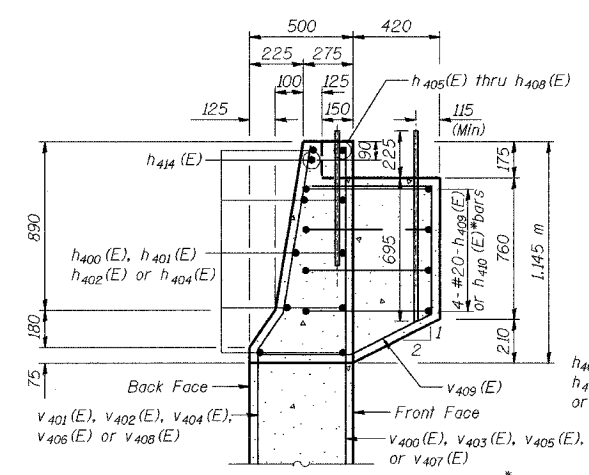
SECTION B-B



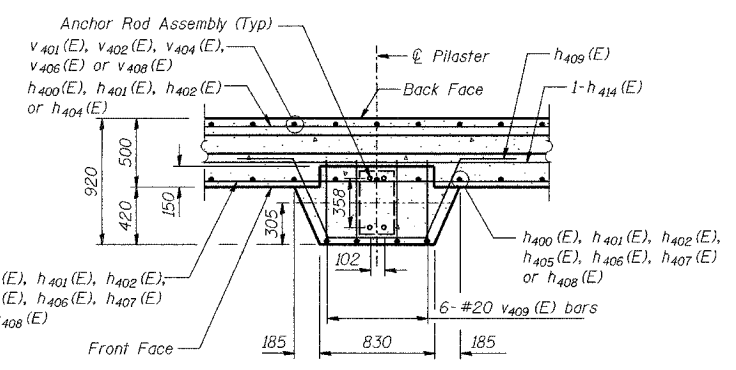
SECTION C-C



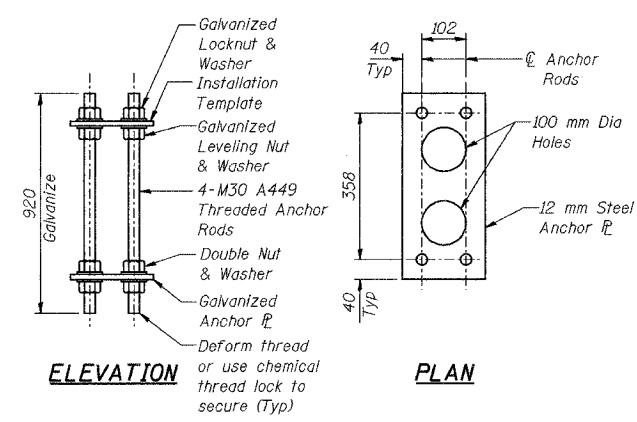
SECTION D-D



SECTION THRU PARAPET



PILASTER SUPPORT - PLAN VIEW
(93 Locations)



NOISE ABATEMENT WALL ANCHOR ROD ASSEMBLY
(93 Req'd)

NOTES:
See Sheet S-17 for Expansion Joint Detail and Bill of Material.
See Sheet S-18 for Rustication details.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
See Typical Section on Sheet S-2 for Drainage Details and Surface Seal Limits.

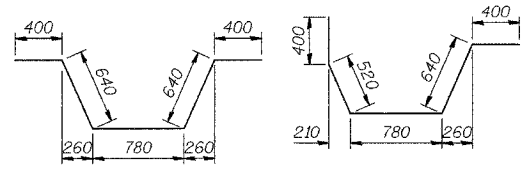
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

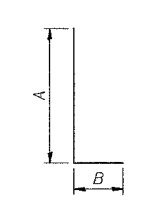
WALL SECTIONS AND DETAILS (1 OF 2)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

DATE 09/05

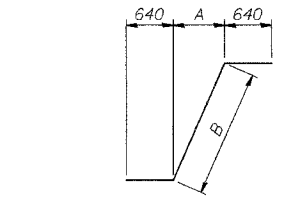
AMERICAN
CONSULTING ENGINEERS



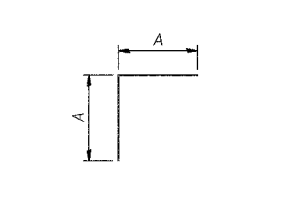
BAR h409(E) **BAR h410(E)**



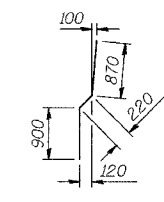
BARS n400(E) thru n408(E)



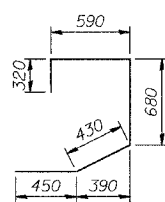
BARS w412(E), w414(E), w416(E), w418(E), w420(E) or w422(E)



BARS w413(E), w415(E), w417(E), w419(E), w421(E) or w423(E)



BARS v402(E)



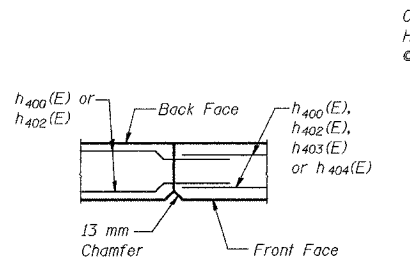
BAR v409(E)

BAR DIMENSIONS

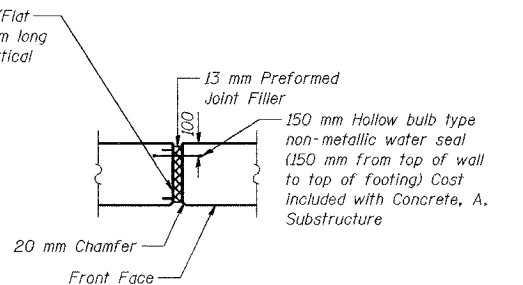
Bar	A	B
n400(E)	1.58 m	260
n401(E)	1.58 m	320
n402(E)	2.14 m	260
n403(E)	2.14 m	320
n404(E)	2.29 m	260
n405(E)	2.29 m	320
n406(E)	3.16 m	260
n407(E)	3.16 m	320
n408(E)	1.21 m	260
w412(E)	670	950
w413(E)	670	-
w414(E)	970	1.37 m
w415(E)	970	-
w416(E)	1.17 m	1.65 m
w417(E)	1.17 m	-
w418(E)	1.27 m	1.80 m
w419(E)	1.27 m	-
w420(E)	1.37 m	1.93 m
w421(E)	1.37 m	-
w422(E)	1.47 m	2.08 m
w423(E)	1.47 m	-

BILL OF MATERIAL

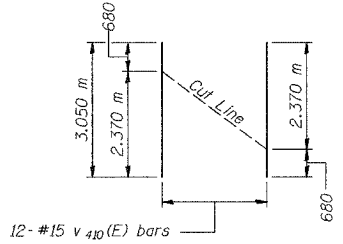
Bar	No.	Size	Length (m)	Shape
h400(E)	21	#15	6.32	—
h401(E)	427	#15	7.10	—
h402(E)	933	#15	7.84	—
h403(E)	20	#20	7.10	—
h404(E)	37	#15	7.69	—
h405(E)	74	#15	2.30	—
h406(E)	30	#15	1.10	—
h407(E)	1	#15	1.98	—
h408(E)	2	#15	1.40	—
h409(E)	364	#20	2.86	—
h410(E)	8	#15	2.74	—
h411(E)	18	#15	5.10	—
h412(E)	2	#15	3.82	—
h413(E)	32	#15	0.60	—
h414(E)	93	#15	2.11	—
n400(E)	189	#15	1.84	J
n401(E)	189	#20	1.90	J
n402(E)	218	#15	2.40	J
n403(E)	218	#20	2.46	J
n404(E)	119	#15	2.55	J
n405(E)	232	#20	2.61	J
n406(E)	602	#15	3.42	J
n407(E)	1180	#20	3.48	J
n408(E)	36	#15	1.47	J
t400(E)	775	#20	3.40	—
t401(E)	213	#20	3.90	—
t402(E)	1163	#25	4.10	—
t403(E)	702	#20	4.10	—
t404(E)	36	#20	1.70	—
v400(E)	195	#15	2.19	—
v401(E)	195	#20	1.19	—
v402(E)	1147	#20	1.99	—
v403(E)	225	#15	2.60	—
v404(E)	225	#20	1.61	—
v405(E)	125	#15	3.17	—
v406(E)	125	#20	2.18	—
v407(E)	602	#15	3.29	—
v408(E)	602	#20	2.30	—
v409(E)	558	#20	2.47	J
v410(E)	12	#15	3.05	—
v411(E)	14	#15	2.39	—



CONSTRUCTION JOINT DETAIL



13 MM EXPANSION JOINT DETAIL



FIELD CUTTING DIAGRAM

Order v410(E) bars full length. Cut as shown and use remainder of bars in opposite face.

Bar	No.	Size	Length (m)	Shape
w400(E)	78	#15	7.24	—
w401(E)	6	#15	7.53	—
w402(E)	6	#15	4.68	—
w403(E)	104	#15	8.86	—
w404(E)	104	#15	7.72	—
w405(E)	6	#15	6.58	—
w406(E)	6	#15	5.62	—
w407(E)	254	#15	9.29	—
w408(E)	60	#15	8.79	—
w409(E)	60	#15	9.02	—
w410(E)	540	#15	7.89	—
w411(E)	14	#15	5.10	—
w412(E)	13	#15	2.23	J
w413(E)	26	#15	1.34	J
w414(E)	30	#15	2.65	J
w415(E)	30	#15	1.94	J
w416(E)	15	#15	2.93	J
w417(E)	15	#15	2.34	J
w418(E)	15	#15	3.08	J
w419(E)	15	#15	2.54	J
w420(E)	15	#15	3.21	J
w421(E)	15	#15	2.74	J
w422(E)	30	#15	5.36	J
w423(E)	30	#15	2.94	J

Excavation, Foundation, Unclassified	m ³	3,844.5
Concrete, A, Substructure	m ³	1563.8
Reinforcing Bars, Epoxy Coated	kg	109,610
Surface Seal	L Sum	0.04
Geocomposite Wall Drain	m ²	742
Pipe, Underdrain, Perf, 1.63 mm, 150 mm	m	335.5
Noise Abatement Wall Anchor Rod Assembly	Each	93
B Borrow	m ³	487.9
Structural Backfill	m ³	2421.0
Masonry Coating	L Sum	0.09

The estimated Surface Seal area is 586.4 m²
The estimated Masonry Coating area is 586.4 m²

NOTES:
See Sheet S-16 for Wall and Parapet Sections and Anchor Rod Assembly Details
See Sheet S-18 for Rustication details.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
See Typical Section on Sheet S-2 for Drainage Details and Surface Seal Limits.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

WALL SECTIONS AND DETAILS (2 OF 2)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

DATE 09/05

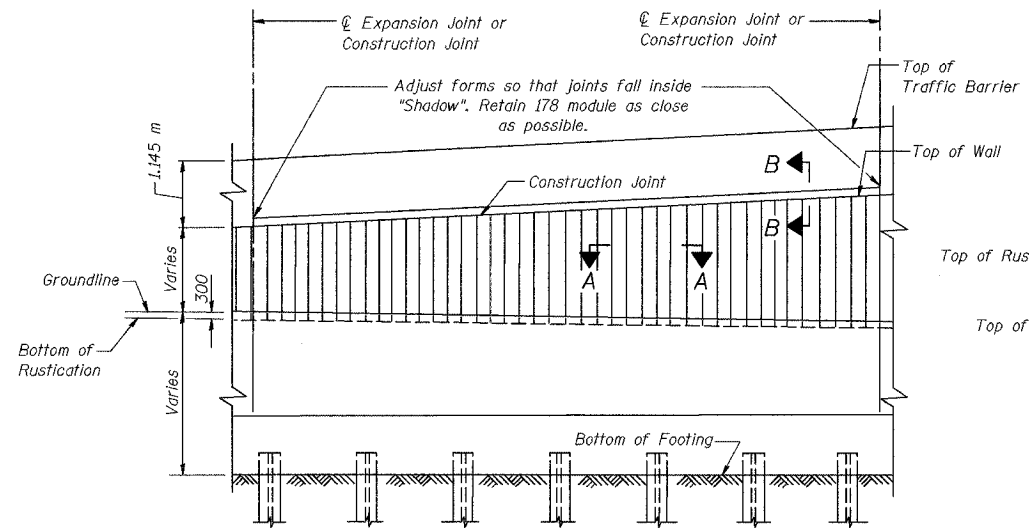
AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-18
P.A. 1	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1035	25 SHEETS
SILNERS		FED. AID PROJECT			

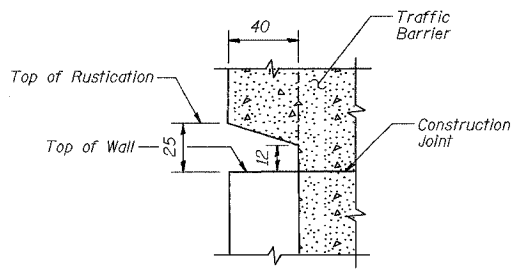
CONTRACT NO. 62114 INDOT DES. NO. 0100987

RUSTICATION LIMITS

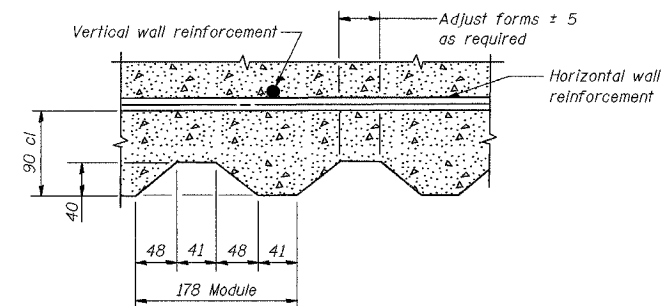
STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION
8+761.031	185.050	184.600
8+764.480	186.792	184.600
8+766.306	186.792	184.600
8+766.306	188.477	184.800
8+774.197	188.268	184.800
8+781.499	188.068	184.800
8+788.802	187.859	184.800
8+788.802	187.859	184.500
8+796.104	187.645	184.500
8+803.407	187.428	184.500
8+810.708	187.210	184.500
8+810.708	187.210	183.700
8+818.009	186.991	183.700
8+825.311	186.772	183.700
8+832.613	186.552	183.700
8+832.613	186.552	182.900
8+839.916	186.333	182.900
8+847.219	186.113	182.900
8+854.524	185.892	182.900
8+854.524	185.892	182.200
8+861.829	185.672	182.200
8+869.134	185.451	182.200
8+876.440	185.271	182.200
8+876.440	185.271	181.600
8+883.747	185.061	181.600
8+891.055	184.851	181.600
8+898.363	184.641	181.600
8+905.671	184.432	181.600
8+912.982	184.230	181.600
8+920.292	184.035	181.600
8+920.292	184.035	181.100
8+927.604	183.850	181.100
8+934.917	183.672	181.100
8+942.230	183.502	181.100
8+942.230	183.502	180.800
8+949.544	183.342	180.800
8+956.860	183.189	180.800
8+964.176	183.045	180.800
8+971.493	182.909	180.800
8+978.811	182.782	180.800
8+978.811	182.782	180.600
8+986.129	182.663	180.600
8+993.450	182.552	180.600
9+000.771	182.449	180.600
9+008.093	182.355	180.600
9+015.416	182.269	180.600
9+022.741	182.192	180.600
9+030.067	182.123	180.600
9+037.394	182.062	180.600
9+044.722	182.009	180.600
9+044.722	182.009	180.800
9+052.051	181.965	180.800
9+059.381	181.930	180.800
9+066.713	181.902	180.800
9+074.046	181.880	180.800
9+081.381	181.859	180.800
9+088.716	181.837	180.800
9+096.053	181.816	180.800
9+101.839	181.792	180.800



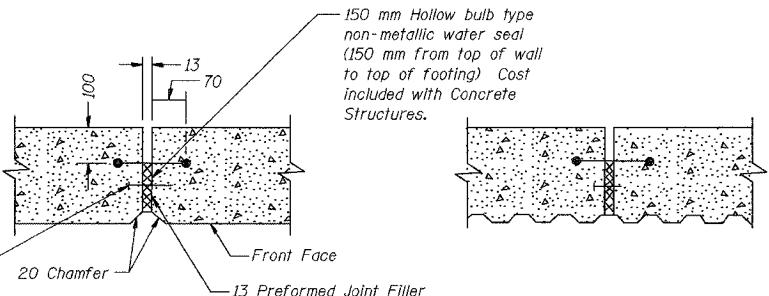
FRONT FACE ELEVATION-TYPICAL ARCHITECTURAL FINISH



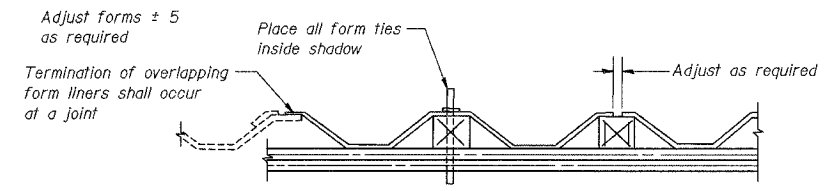
SECTION B-B



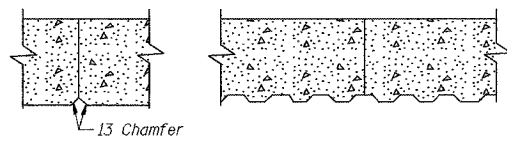
SECTION A-A



EXPANSION JOINT DETAIL



SUGGESTED FORMWORK DETAIL



CONSTRUCTION JOINT DETAIL

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

BILL OF MATERIAL

Item	Unit	Total
Rustication Finish	m ²	809

Note: All dimensions are in millimeters (mm) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

RUSTICATION FINISH DETAILS
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+762.750 TO STATION 9+101.839
 STRUCTURE NO. 016-W915

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AB-26 (1 OF 2)

BORING NO. AB-26 (2 OF 2)

BORING NO. AN-1 (1 OF 2)

Wang Engineering, INC.
 Consulting Geotechnical and Environmental Engineers
 wangeng3ewangeng.com
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 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG AB-26
 WEI Job No.: 255-08-08
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s29 T36N RISE & s13 T36 RIOW

Datum: NGVD
 Elevation: 186.75 m
 North: 545193.41 m
 East: 368169.43 m
 Station: 8+773.19
 Offset: 22.89 LT

Page 1 of 2

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BORING LOG AB-26
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 Location: s29 T36N RISE & s13 T36 RIOW

Datum: NGVD
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 North: 545193.41 m
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 Station: 8+773.19
 Offset: 22.89 LT

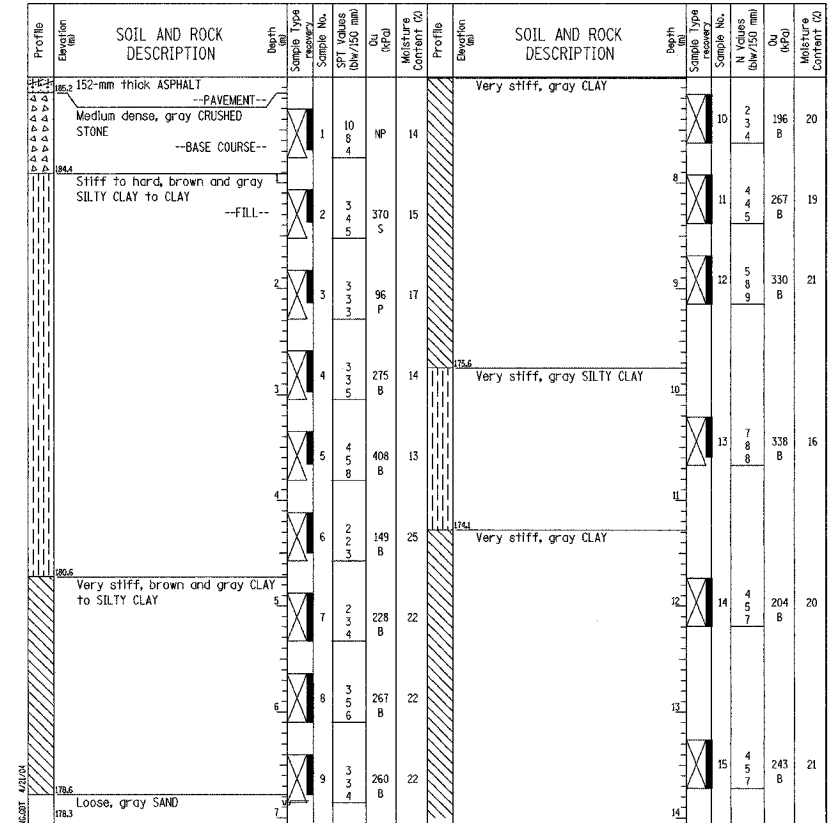
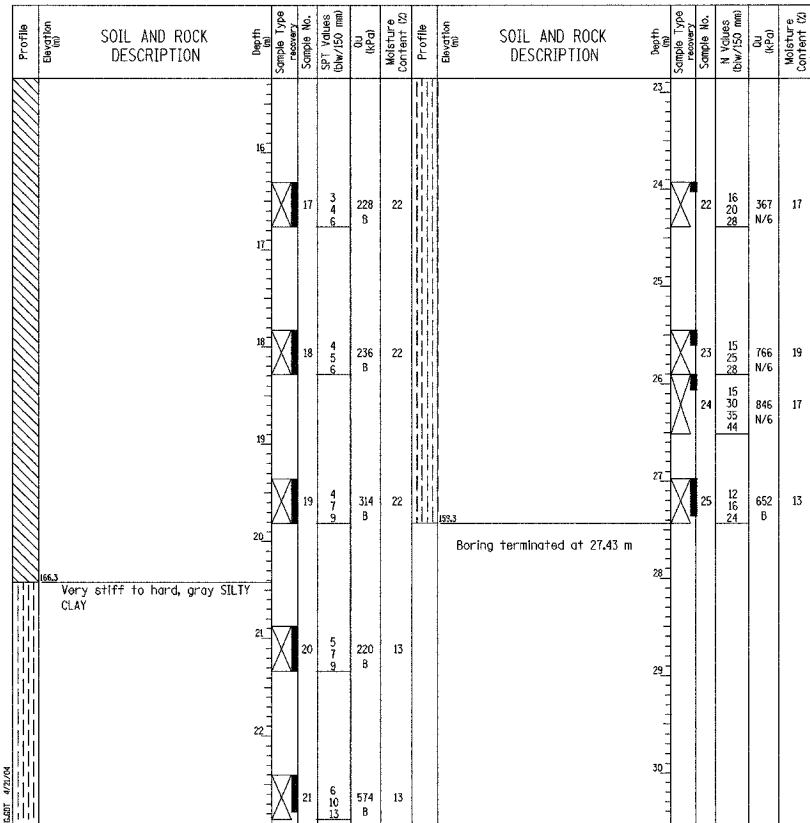
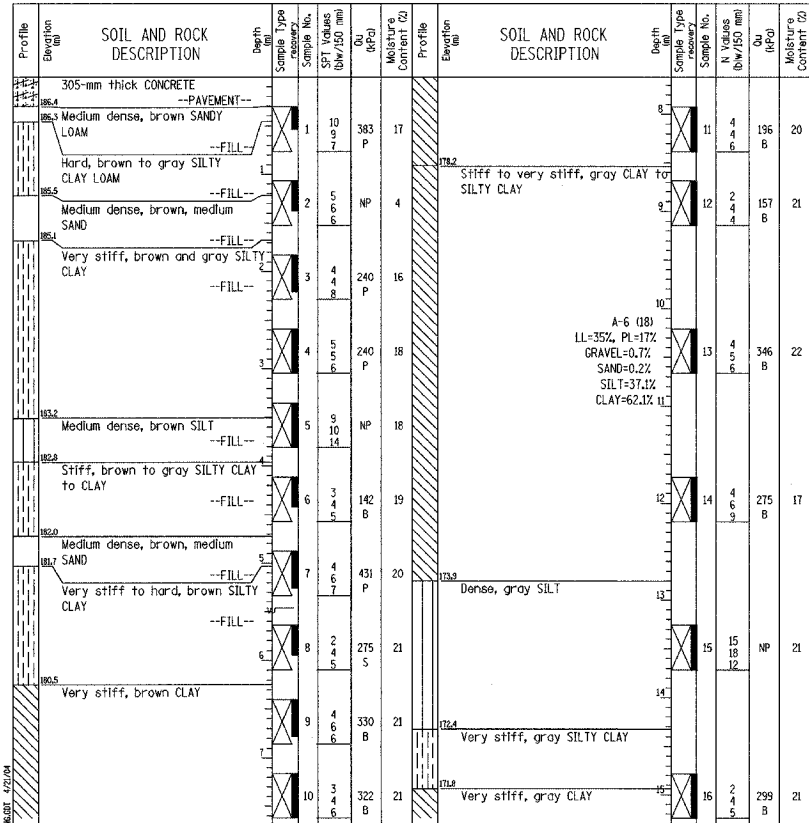
Page 2 of 2

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 1145 Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG AN-1
 WEI Job No.: 255-08-08
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s29 T36N RISE & s13 T36 RIOW

Datum: NGVD
 Elevation: 185.36 m
 North: 545190.35 m
 East: 368213.02 m
 Station: 8+824.27
 Offset: 24.22 LT

Page 1 of 2



GENERAL NOTES

Begin Drilling: 02-14-2002 Complete Drilling: 02-14-2002
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: B. Fugiel Checked by: N. Davis
 Drilling Method: Mud Rotary; Grouted after final water reading

WATER LEVEL DATA

While Drilling: -
 At Completion of Drilling: -
 Time After Drilling: 24 hours
 Depth to Water: w-5.49 m

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling: 02-14-2002 Complete Drilling: 02-14-2002
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: B. Fugiel Checked by: N. Davis
 Drilling Method: Mud Rotary; Grouted after final water reading

WATER LEVEL DATA

While Drilling: -
 At Completion of Drilling: -
 Time After Drilling: 24 hours
 Depth to Water: w-5.49 m

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling: 06-05-2002 Complete Drilling: 06-05-2002
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: R&M Logger: H. Suhall Checked by: -
 Drilling Method: 3.25-inch ID HSA; Boring grouted after completion

WATER LEVEL DATA

While Drilling: w-6.86 m
 At Completion of Drilling: DRY
 Time After Drilling: NA
 Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

BORING LOGS (1 OF 7)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+762.750 TO STATION 9+101.839
 STRUCTURE NO. 016-W915

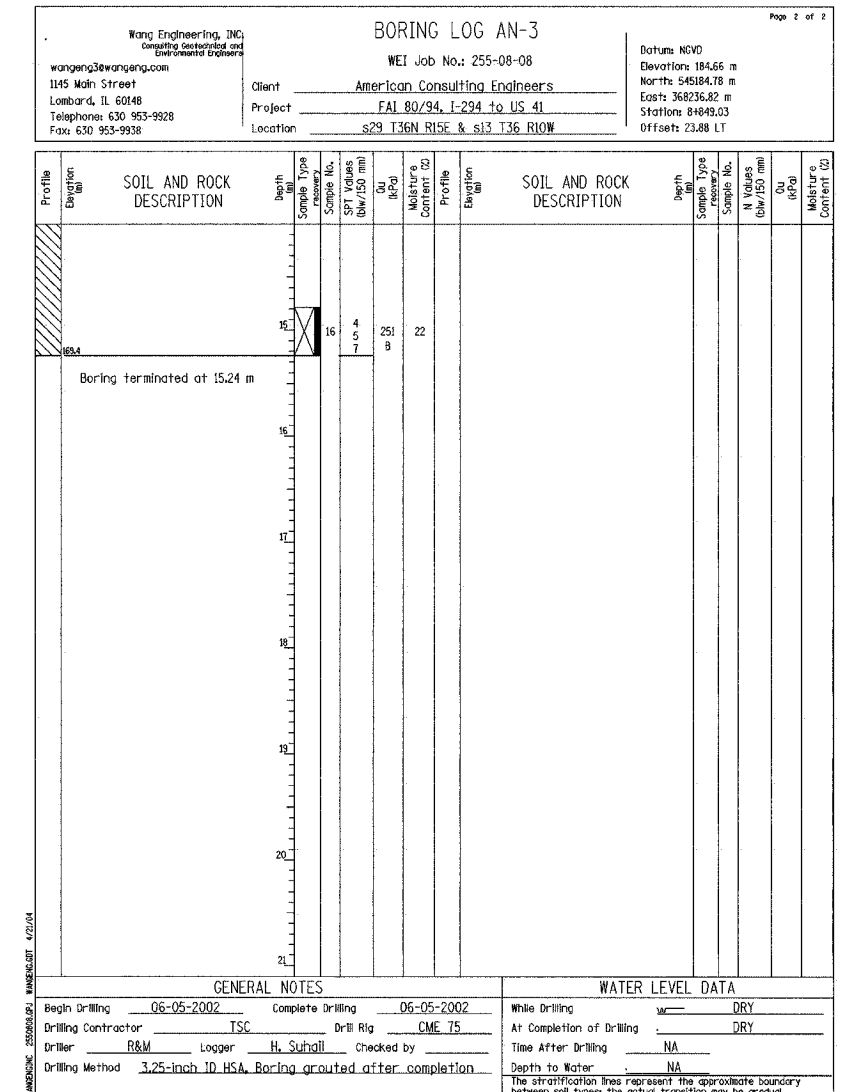
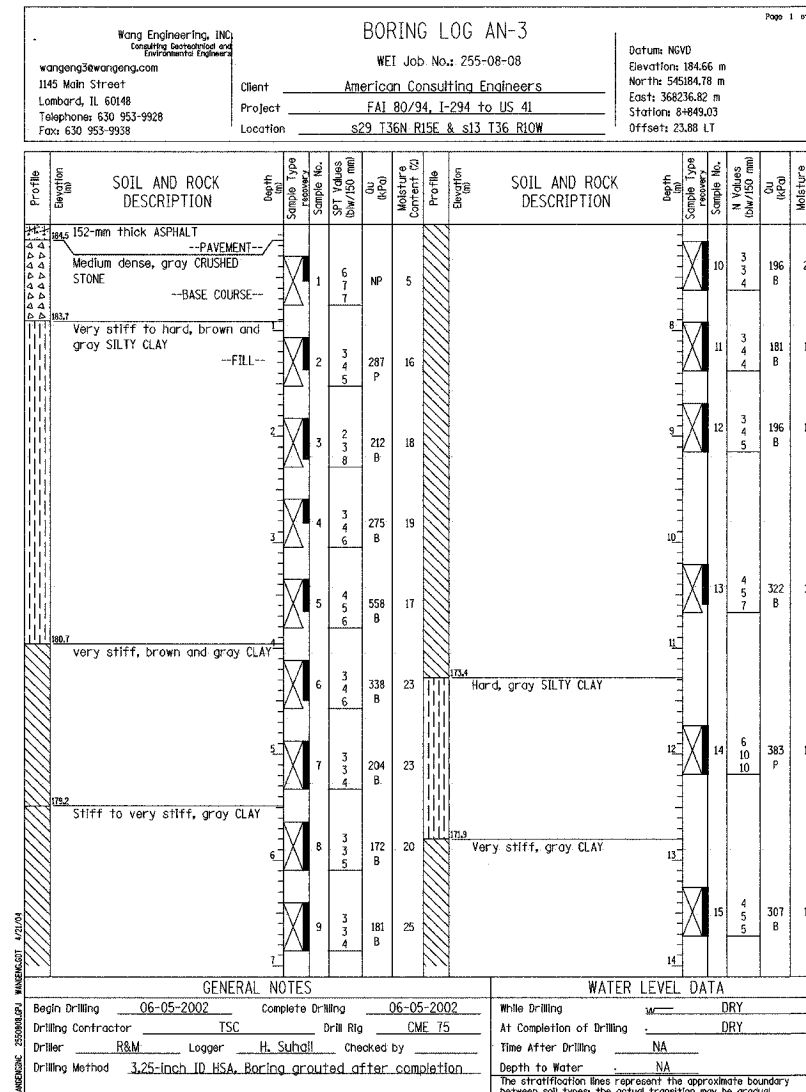
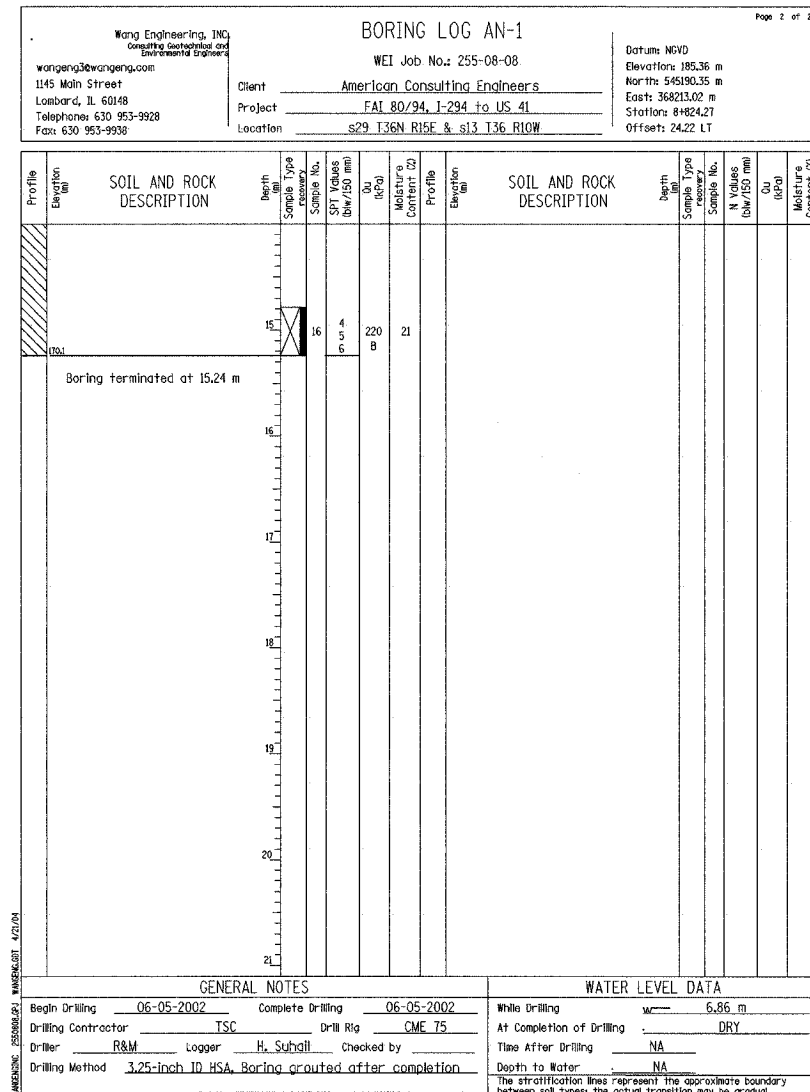
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AN-1 (2 OF 2)

BORING NO. AN-3 (1 OF 2)

BORING NO. AN-3 (2 OF 2)



DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

BORING LOGS (2 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

DATE 09/05

AMERICAN
CONSULTING ENGINEERS

BORING NO. AR-313 (1 OF 2)

BORING NO. AR-313 (2 OF 2)

BORING NO. AR-314 (1 OF 2)

BORING LOG AR-313 Page 1 of 2

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Fax: 630 953-9938

WEI Job No.: 255-08-08

Datum: NGVD
Elevation: 183.50 m
North: 545177.01 m
East: 368283.08 m
Station: 8+696.54
Offset: 25.3 LT

Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s29 T36N R15E & s13 T36 R10W

BORING LOG AR-313 Page 2 of 2

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WEI Job No.: 255-08-08

Datum: NGVD
Elevation: 183.50 m
North: 545177.01 m
East: 368283.08 m
Station: 8+696.54
Offset: 25.3 LT

Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s29 T36N R15E & s13 T36 R10W

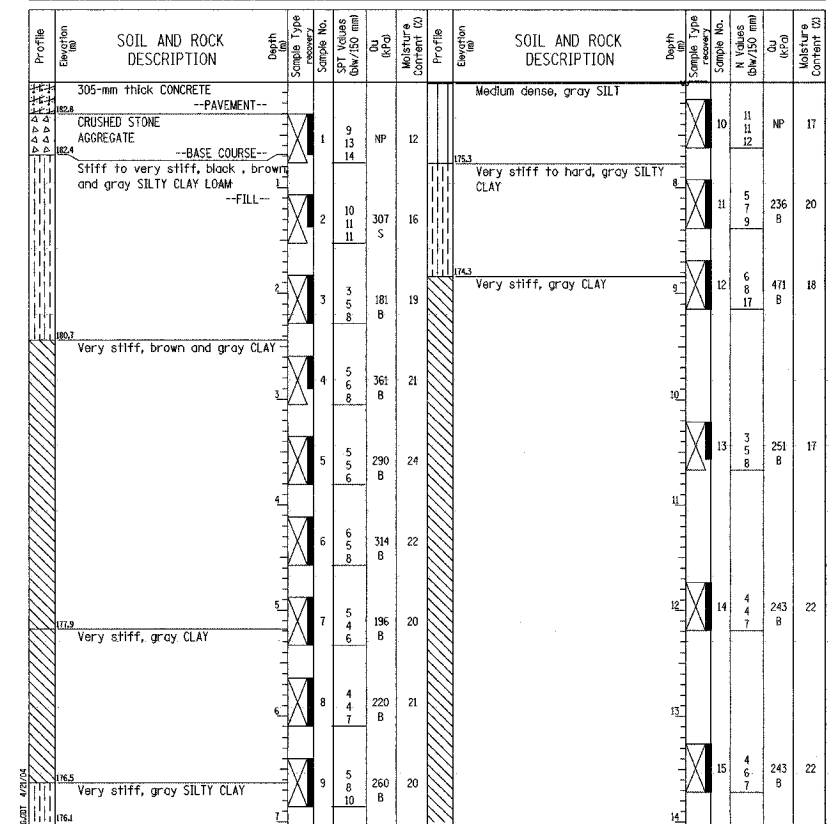
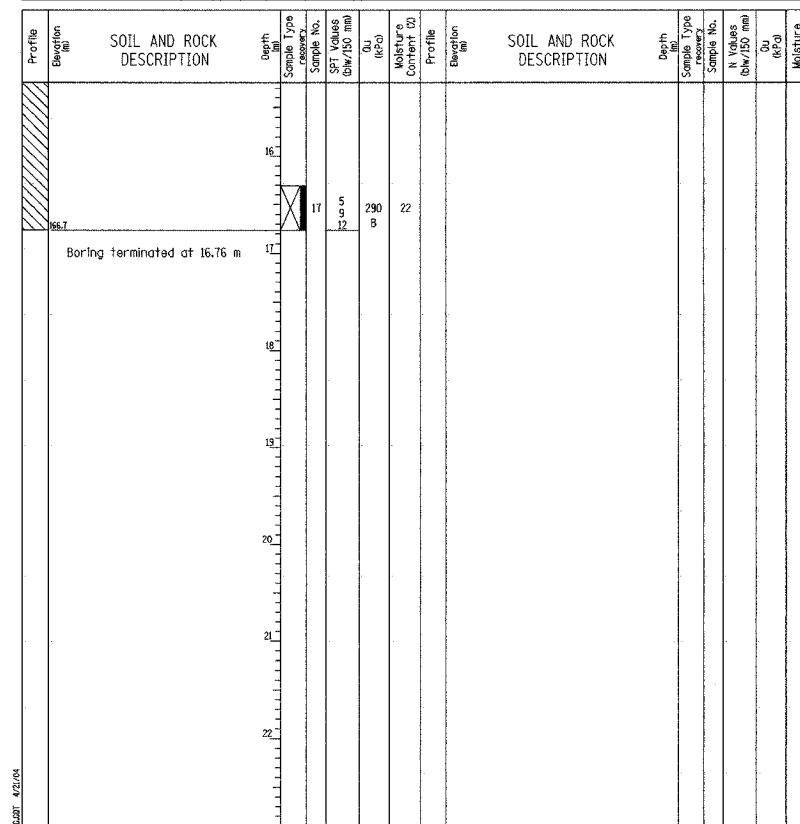
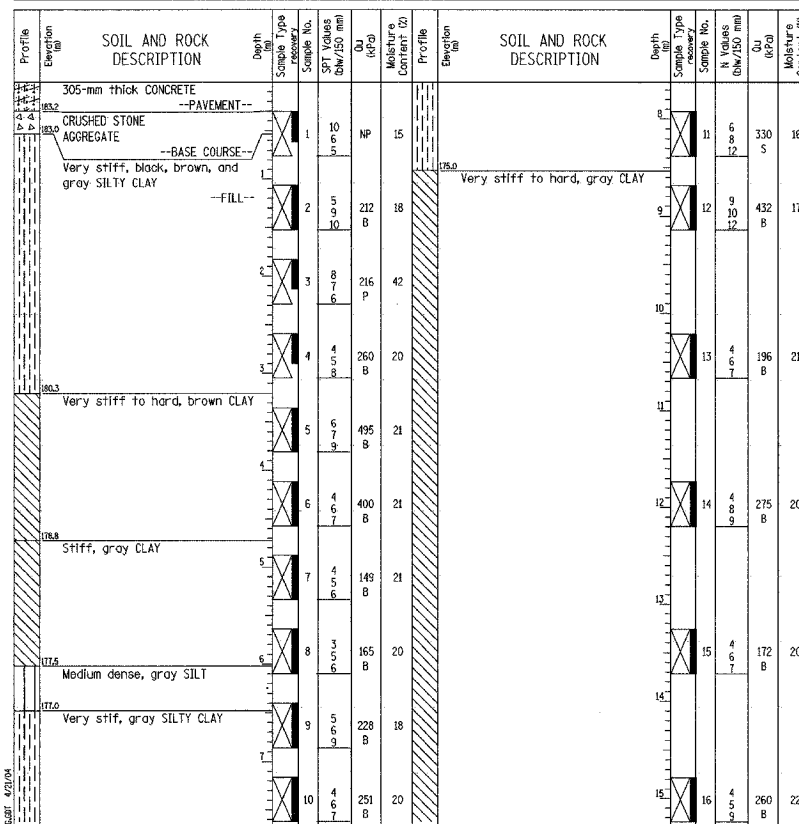
BORING LOG AR-314 Page 1 of 2

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wangeng@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 255-08-08

Datum: NGVD
Elevation: 183.51 m
North: 545173.51 m
East: 368305.99 m
Station: 8+920.03
Offset: 25.3 LT

Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s29 T36N R15E & s13 T36 R10W



GENERAL NOTES

Begin Drilling 07-23-2003 Complete Drilling 07-23-2003

Drilling Contractor TSC Drill Rig CME 75

Driller C&A Logger J. Kasnick Checked by B. Fuglel

Drilling Method 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling 6.25 m

At Completion of Drilling DRY

Time After Drilling 24 hours

Depth to Water 0 m

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 07-23-2003 Complete Drilling 07-23-2003

Drilling Contractor TSC Drill Rig CME 75

Driller C&A Logger J. Kasnick Checked by B. Fuglel

Drilling Method 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling 6.25 m

At Completion of Drilling DRY

Time After Drilling 24 hours

Depth to Water 0 m

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 07-23-2003 Complete Drilling 07-23-2003

Drilling Contractor TSC Drill Rig CME 75

Driller C&A Logger J. Kasnick Checked by B. Fuglel

Drilling Method 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling 7.01 m

At Completion of Drilling DRY

Time After Drilling 24 hours

Depth to Water 0 m

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

BORING LOGS (3 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915


DATE 09/05

AMERICAN
CONSULTING ENGINEERS

BORING NO. AR-314 (2 OF 2)

BORING NO. AR-315 (1 OF 2)

BORING NO. AR-315 (2 OF 2)



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BORING LOG AR-314

WEI Job No.: 255-08-08
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s29 T36N R15E & s13 T36 R10W

Datum: NGVD
 Elevation: 183.11 m
 North: 545173.51 m
 East: 368305.99 m
 Station: 8+920.03
 Offset: 25.9 LT

Page 2 of 2



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BORING LOG AR-315

WEI Job No.: 255-08-08
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s29 T36N R15E & s13 T36 R10W

Datum: NGVD
 Elevation: 182.76 m
 North: 545170.63 m
 East: 368328.60 m
 Station: 8+943.13
 Offset: 26.78 LT

Page 1 of 2


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BORING LOG AR-315

WEI Job No.: 255-08-08
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s29 T36N R15E & s13 T36 R10W

Datum: NGVD
 Elevation: 182.76 m
 North: 545170.63 m
 East: 368328.60 m
 Station: 8+943.13
 Offset: 26.78 LT

Page 2 of 2

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/300 mm)	Moisture Content (%)	Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/300 mm)	Moisture Content (%)
187.9		15.24	16	4	314						
		16		6							
		17		10							
		18									
		19									
		20									
		21									
		22									

Boring terminated at 15.24 m

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/300 mm)	Moisture Content (%)	Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/300 mm)	Moisture Content (%)
186.5	305-mm thick CONCRETE										
182.5	CRUSHED STONE AGGREGATE	15.25	15	15							
181.5	Medium dense, brown SAND	16.15	1	NP	7						
180.5	SHff to very SHff, brown CLAY	17.15	2	NP	4						
179.5	SHff to very SHff, brown CLAY	18.15	3	NP	21						
178.5	SHff to very SHff, gray CLAY	19.15	4	275	22						
177.5	SHff to very SHff, gray CLAY	20.15	5	157	23						
176.5	SHff to very SHff, gray CLAY	21.15	6	267	23						
175.5	SHff to very SHff, gray CLAY	22.15	7	181	22						
174.5	SHff to very SHff, gray CLAY	23.15	8	103	21						
173.5	SHff to very SHff, gray CLAY	24.15	9	220	18						
172.5	SHff to very SHff, gray CLAY	25.15	10	NP	16						
171.5	Medium dense, gray SILT	26.15									

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/300 mm)	Moisture Content (%)	Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/300 mm)	Moisture Content (%)
186.0		16.76	17	6	487						
		17		11							
		18									
		19									
		20									
		21									
		22									

Boring terminated at 16.76 m

GENERAL NOTES

Begin Drilling: 07-23-2003 Complete Drilling: 07-23-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fuglel
 Drilling Method: 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling: 2.01 m
 At Completion of Drilling: DRY
 Time After Drilling: 24 hours
 Depth to Water: 2.01 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling: 07-22-2003 Complete Drilling: 07-23-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fuglel
 Drilling Method: 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling: 2.06 m
 At Completion of Drilling: 11.58 m
 Time After Drilling: 24 hours
 Depth to Water: 2.06 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.


GENERAL NOTES

Begin Drilling: 07-22-2003 Complete Drilling: 07-23-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fuglel
 Drilling Method: 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling: 2.06 m
 At Completion of Drilling: 11.58 m
 Time After Drilling: 24 hours
 Depth to Water: 2.06 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

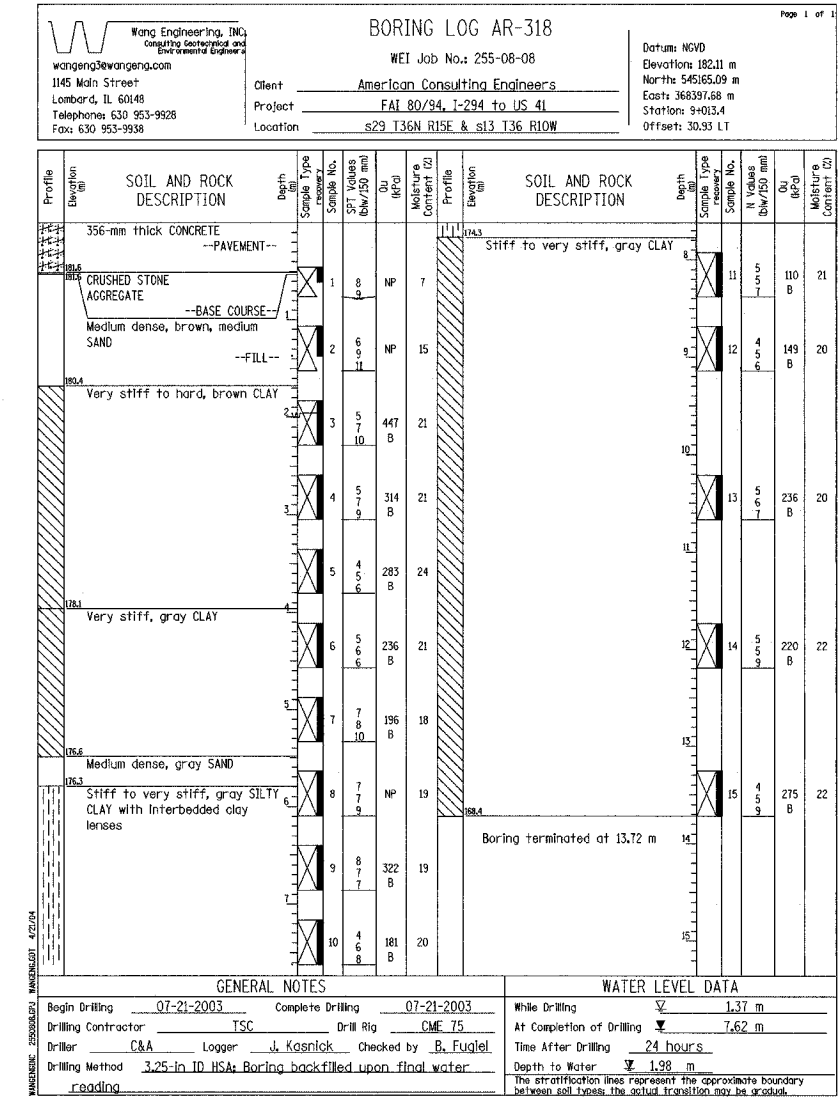
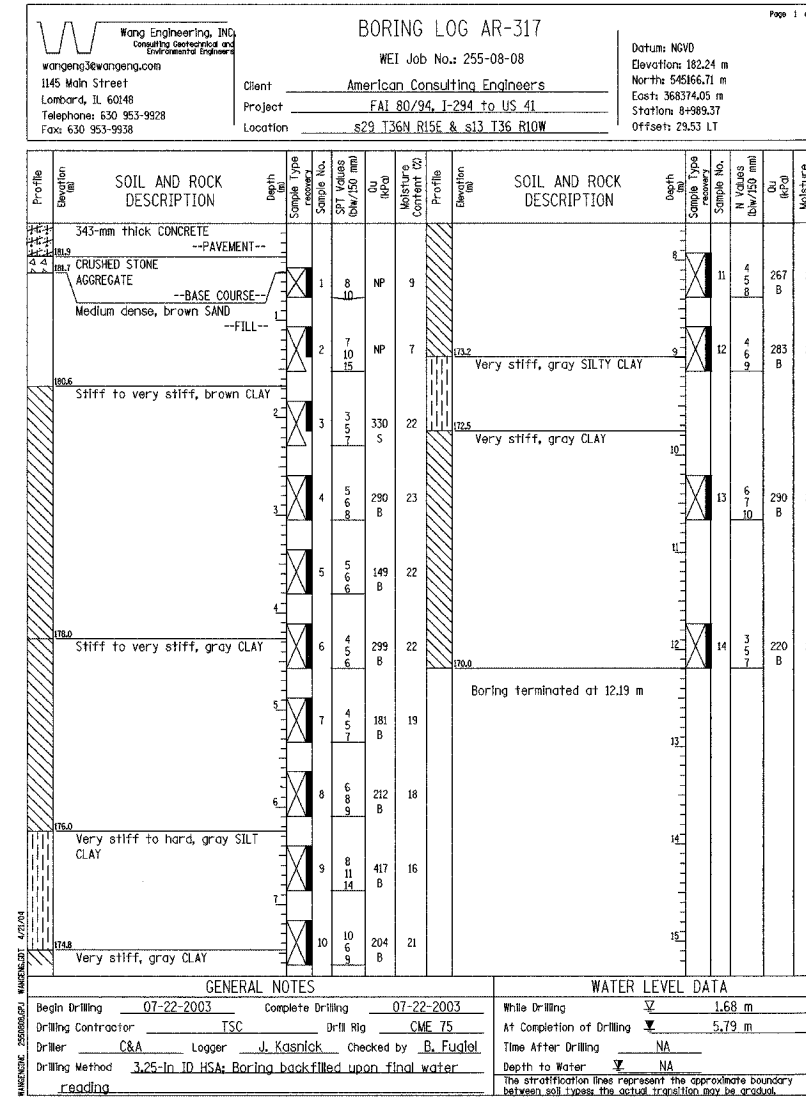
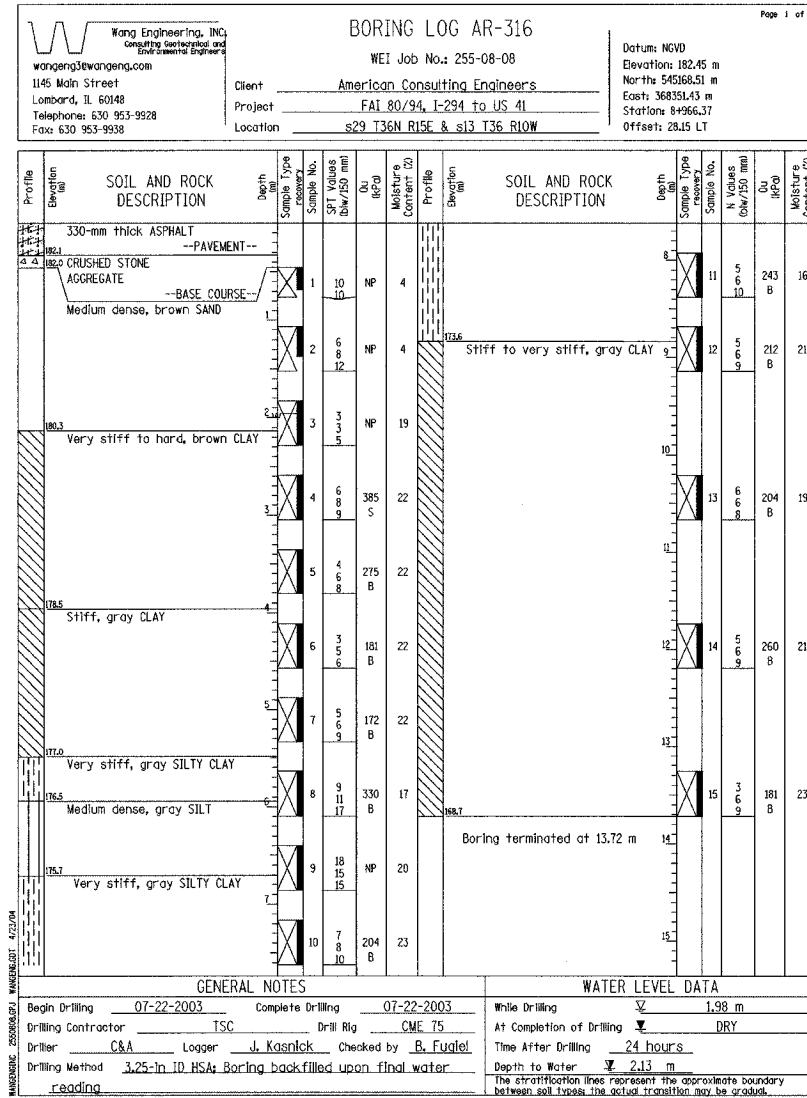
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
BORING LOGS (4 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915
 DATE 09/05


BORING NO. AR-316 (1 OF 1)

BORING NO. AR-317 (1 OF 1)

BORING NO. AR-318 (1 OF 1)



DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORHAM EXPRESSWAY
 BURNHAM ROAD TO US 41

BORING LOGS (5 OF 7)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+762.750 TO STATION 9+101.839
 STRUCTURE NO. 016-W915

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AR-319 (1 OF 1)

BORING NO. AR-320 (1 OF 1)

BORING NO. AR-321 (1 OF 1)

BORING LOG AR-319 Page 1 of 1
 WEI Job No.: 255-08-08
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s29 T36N R15E & s13 T36 R10W
 Datum: NVD
 Elevation: 182.03 m
 North: 545163.91 m
 East: 368420.13 m
 Station: 94036.25
 Offset: 32.34 LT


BORING LOG AR-320 Page 1 of 1
 WEI Job No.: 255-08-08
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s29 T36N R15E & s13 T36 R10W
 Datum: NVD
 Elevation: 182.01 m
 North: 545163.08 m
 East: 368442.96 m
 Station: 94059.43
 Offset: 33.85 LT

BORING LOG AR-321 Page 1 of 1
 WEI Job No.: 255-08-08
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s29 T36N R15E & s13 T36 R10W
 Datum: NVD
 Elevation: 181.98 m
 North: 545162.81 m
 East: 368466.53 m
 Station: 94083.38
 Offset: 35.71 LT

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Values (blows/150 mm)	Moisture Content (%)	Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Values (blows/150 mm)	Moisture Content (%)
182.03	305-mm thick CONCRETE	0				182.03	305-mm thick CONCRETE	0			
181.7	CRUSHED STONE AGGREGATE	0.3	1	6		181.7	CRUSHED STONE AGGREGATE	0.3	1	6	
181.4	CRUSHED STONE AGGREGATE	0.6	2	8		181.4	CRUSHED STONE AGGREGATE	0.6	2	8	
181.1	CRUSHED STONE AGGREGATE	0.9	3	8		181.1	CRUSHED STONE AGGREGATE	0.9	3	8	
180.8	Very stiff to hard, brown CLAY	1.2	4	275		180.8	Very stiff to hard, brown CLAY	1.2	4	275	
180.5	Very stiff to hard, brown CLAY	1.5	5	424		180.5	Very stiff to hard, brown CLAY	1.5	5	424	
180.2	Stiff to very stiff, gray CLAY	1.8	6	165		180.2	Stiff to very stiff, gray CLAY	1.8	6	165	
179.9	Stiff to very stiff, gray CLAY	2.1	7	204		179.9	Stiff to very stiff, gray CLAY	2.1	7	204	
179.6	Stiff to very stiff, gray CLAY	2.4	8	157		179.6	Stiff to very stiff, gray CLAY	2.4	8	157	
179.3	Stiff to very stiff, gray CLAY	2.7	9	251		179.3	Stiff to very stiff, gray CLAY	2.7	9	251	
179.0	Stiff to very stiff, gray CLAY	3.0	10	142		179.0	Stiff to very stiff, gray CLAY	3.0	10	142	
178.7	Stiff to very stiff, gray CLAY	3.3	11	212		178.7	Stiff to very stiff, gray CLAY	3.3	11	212	
178.4	Stiff to very stiff, gray CLAY	3.6	12	243		178.4	Stiff to very stiff, gray CLAY	3.6	12	243	
178.1	Stiff to very stiff, gray CLAY	3.9	13	196		178.1	Stiff to very stiff, gray CLAY	3.9	13	196	
177.8	Stiff to very stiff, gray CLAY	4.2	14	236		177.8	Stiff to very stiff, gray CLAY	4.2	14	236	
177.5	Stiff to very stiff, gray CLAY	4.5	15	228		177.5	Stiff to very stiff, gray CLAY	4.5	15	228	
177.2	Stiff to very stiff, gray CLAY	4.8	16	228		177.2	Stiff to very stiff, gray CLAY	4.8	16	228	
176.9	Stiff to very stiff, gray CLAY	5.1	17	142		176.9	Stiff to very stiff, gray CLAY	5.1	17	142	
176.6	Stiff to very stiff, gray CLAY	5.4	18	212		176.6	Stiff to very stiff, gray CLAY	5.4	18	212	
176.3	Stiff to very stiff, gray CLAY	5.7	19	212		176.3	Stiff to very stiff, gray CLAY	5.7	19	212	
176.0	Stiff to very stiff, gray CLAY	6.0	20	212		176.0	Stiff to very stiff, gray CLAY	6.0	20	212	
175.7	Stiff to very stiff, gray CLAY	6.3	21	212		175.7	Stiff to very stiff, gray CLAY	6.3	21	212	
175.4	Stiff to very stiff, gray CLAY	6.6	22	212		175.4	Stiff to very stiff, gray CLAY	6.6	22	212	
175.1	Stiff to very stiff, gray CLAY	6.9	23	212		175.1	Stiff to very stiff, gray CLAY	6.9	23	212	
174.8	Stiff to very stiff, gray CLAY	7.2	24	212		174.8	Stiff to very stiff, gray CLAY	7.2	24	212	
174.5	Stiff to very stiff, gray CLAY	7.5	25	212		174.5	Stiff to very stiff, gray CLAY	7.5	25	212	
174.2	Stiff to very stiff, gray CLAY	7.8	26	212		174.2	Stiff to very stiff, gray CLAY	7.8	26	212	
173.9	Stiff to very stiff, gray CLAY	8.1	27	212		173.9	Stiff to very stiff, gray CLAY	8.1	27	212	
173.6	Stiff to very stiff, gray CLAY	8.4	28	212		173.6	Stiff to very stiff, gray CLAY	8.4	28	212	
173.3	Stiff to very stiff, gray CLAY	8.7	29	212		173.3	Stiff to very stiff, gray CLAY	8.7	29	212	
173.0	Stiff to very stiff, gray CLAY	9.0	30	212		173.0	Stiff to very stiff, gray CLAY	9.0	30	212	
172.7	Stiff to very stiff, gray CLAY	9.3	31	212		172.7	Stiff to very stiff, gray CLAY	9.3	31	212	
172.4	Stiff to very stiff, gray CLAY	9.6	32	212		172.4	Stiff to very stiff, gray CLAY	9.6	32	212	
172.1	Stiff to very stiff, gray CLAY	9.9	33	212		172.1	Stiff to very stiff, gray CLAY	9.9	33	212	
171.8	Stiff to very stiff, gray CLAY	10.2	34	212		171.8	Stiff to very stiff, gray CLAY	10.2	34	212	
171.5	Stiff to very stiff, gray CLAY	10.5	35	212		171.5	Stiff to very stiff, gray CLAY	10.5	35	212	
171.2	Stiff to very stiff, gray CLAY	10.8	36	212		171.2	Stiff to very stiff, gray CLAY	10.8	36	212	
170.9	Stiff to very stiff, gray CLAY	11.1	37	212		170.9	Stiff to very stiff, gray CLAY	11.1	37	212	
170.6	Stiff to very stiff, gray CLAY	11.4	38	212		170.6	Stiff to very stiff, gray CLAY	11.4	38	212	
170.3	Stiff to very stiff, gray CLAY	11.7	39	212		170.3	Stiff to very stiff, gray CLAY	11.7	39	212	
170.0	Stiff to very stiff, gray CLAY	12.0	40	212		170.0	Stiff to very stiff, gray CLAY	12.0	40	212	
169.7	Stiff to very stiff, gray CLAY	12.3	41	212		169.7	Stiff to very stiff, gray CLAY	12.3	41	212	
169.4	Stiff to very stiff, gray CLAY	12.6	42	212		169.4	Stiff to very stiff, gray CLAY	12.6	42	212	
169.1	Stiff to very stiff, gray CLAY	12.9	43	212		169.1	Stiff to very stiff, gray CLAY	12.9	43	212	
168.8	Stiff to very stiff, gray CLAY	13.2	44	212		168.8	Stiff to very stiff, gray CLAY	13.2	44	212	
168.5	Stiff to very stiff, gray CLAY	13.5	45	212		168.5	Stiff to very stiff, gray CLAY	13.5	45	212	
168.2	Stiff to very stiff, gray CLAY	13.8	46	212		168.2	Stiff to very stiff, gray CLAY	13.8	46	212	
167.9	Stiff to very stiff, gray CLAY	14.1	47	212		167.9	Stiff to very stiff, gray CLAY	14.1	47	212	
167.6	Stiff to very stiff, gray CLAY	14.4	48	212		167.6	Stiff to very stiff, gray CLAY	14.4	48	212	
167.3	Stiff to very stiff, gray CLAY	14.7	49	212		167.3	Stiff to very stiff, gray CLAY	14.7	49	212	
167.0	Stiff to very stiff, gray CLAY	15.0	50	212		167.0	Stiff to very stiff, gray CLAY	15.0	50	212	
166.7	Stiff to very stiff, gray CLAY	15.3	51	212		166.7	Stiff to very stiff, gray CLAY	15.3	51	212	
166.4	Stiff to very stiff, gray CLAY	15.6	52	212		166.4	Stiff to very stiff, gray CLAY	15.6	52	212	
166.1	Stiff to very stiff, gray CLAY	15.9	53	212		166.1	Stiff to very stiff, gray CLAY	15.9	53	212	
165.8	Stiff to very stiff, gray CLAY	16.2	54	212		165.8	Stiff to very stiff, gray CLAY	16.2	54	212	
165.5	Stiff to very stiff, gray CLAY	16.5	55	212		165.5	Stiff to very stiff, gray CLAY	16.5	55	212	
165.2	Stiff to very stiff, gray CLAY	16.8	56	212		165.2	Stiff to very stiff, gray CLAY	16.8	56	212	
164.9	Stiff to very stiff, gray CLAY	17.1	57	212		164.9	Stiff to very stiff, gray CLAY	17.1	57	212	
164.6	Stiff to very stiff, gray CLAY	17.4	58	212		164.6	Stiff to very stiff, gray CLAY	17.4	58	212	
164.3	Stiff to very stiff, gray CLAY	17.7	59	212		164.3	Stiff to very stiff, gray CLAY	17.7	59	212	
164.0	Stiff to very stiff, gray CLAY	18.0	60	212		164.0	Stiff to very stiff, gray CLAY	18.0	60	212	
163.7	Stiff to very stiff, gray CLAY	18.3	61	212		163.7	Stiff to very stiff, gray CLAY	18.3	61	212	
163.4	Stiff to very stiff, gray CLAY	18.6	62	212		163.4	Stiff to very stiff, gray CLAY	18.6	62	212	
163.1	Stiff to very stiff, gray CLAY	18.9	63	212		163.1	Stiff to very stiff, gray CLAY	18.9	63	212	
162.8	Stiff to very stiff, gray CLAY	19.2	64	212		162.8	Stiff to very stiff, gray CLAY	19.2	64	212	
162.5	Stiff to very stiff, gray CLAY	19.5	65	212		162.5	Stiff to very stiff, gray CLAY	19.5	65	212	
162.2	Stiff to very stiff, gray CLAY	19.8	66	212		162.2	Stiff to very stiff, gray CLAY	19.8	66	212	
161.9	Stiff to very stiff, gray CLAY	20.1	67	212		161.9	Stiff to very stiff, gray CLAY	20.1	67	212	
161.6	Stiff to very stiff, gray CLAY	20.4	68	212		161.6	Stiff to very stiff, gray CLAY	20.4	68	212	
161.3	Stiff to very stiff, gray CLAY	20.7	69	212		161.3	Stiff to very stiff, gray CLAY	20.7	69	212	
161.0	Stiff to very stiff, gray CLAY	21.0	70	212		161.0	Stiff to very stiff, gray CLAY	21.0	70	212	
160.7	Stiff to very stiff, gray CLAY	21.3	71	212		160.7	Stiff to very stiff, gray CLAY	21.3	71	212	
160.4	Stiff to very stiff, gray CLAY	21.6	72	212		160.4	Stiff to very stiff, gray CLAY	21.6	72	212	
160.1	Stiff to very stiff, gray CLAY	21.9	73	212		160.1	Stiff to very stiff, gray CLAY	21.9	73	212	
159.8	Stiff to very stiff, gray CLAY	22.2	74	212		159.8	Stiff to very stiff, gray CLAY	22.2	74	212	
159.5	Stiff to very stiff, gray CLAY	22.5	75	212		159.5	Stiff to very stiff, gray CLAY	22.5	75	212	
159.2	Stiff to very stiff, gray CLAY	22.8	76	212		159.2	Stiff to very stiff, gray CLAY	22.8	76	212	
158.9	Stiff to very stiff, gray CLAY	23.1	77	212		158.9	Stiff to very stiff, gray CLAY	23.1	77	212	
158.6	Stiff to very stiff, gray CLAY	23.4	78	212		158.6	Stiff to very stiff, gray CLAY	23.4	78	212	
158.3	Stiff to very stiff, gray CLAY	23.7	79	212		158.3	Stiff to very stiff, gray CLAY	23.7	79	212	
158.0	Stiff to very stiff, gray CLAY	24.0	80	212		158.0	Stiff to very stiff, gray CLAY	24.0	80	212	
157.7	Stiff to very stiff, gray CLAY	24.3	81	212		157.7	Stiff to very stiff, gray CLAY	24.3	81	212	
157.4	Stiff to very stiff, gray CLAY	24.6	82	212		157.4	Stiff to very stiff, gray CLAY	24.6	82	212	
157.1	Stiff to very stiff, gray CLAY	24.9	83	212		157.1	Stiff to very stiff, gray CLAY	24.9	83	212	
156.8	Stiff to very stiff, gray CLAY	25.2	84	212		156.8	Stiff to very stiff, gray CLAY	25.2	84	212	
156.5	Stiff to very stiff, gray CLAY	25.5	85	212		156.5	Stiff to very stiff, gray CLAY	25.5	85	212	
156.2	Stiff to very stiff, gray CLAY	25.8	86	212		156.2	Stiff to very stiff, gray CLAY	25.8	86	212	
155.9	Stiff to very stiff, gray CLAY	26.1	87	212		155.9	Stiff to very stiff, gray CLAY	26.1	87	212	
155.6	Stiff to very stiff, gray CLAY	26.4	88	212		155.6	Stiff to very stiff, gray CLAY	26.4	88	212	
155.3	Stiff to very stiff, gray CLAY	26.7	89	212		155.3	Stiff to very stiff, gray CLAY	26.7	89	212	
155.0	Stiff to very stiff, gray CLAY	27.0	90	212		155.0	Stiff to very stiff, gray CLAY	27.0	90	212	
154.7	Stiff to very stiff, gray CLAY	27.3	91	212		154					

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.S. 08/04	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1042
SHEET NO. S-25		25 SHEETS		
CONTRACT NO. 62114		INDOT DES. NO. 0100987		

BORING NO. AR-322 (1 OF 1)

 Wang Engineering, Inc. Consulting, Geotechnical and Environmental Engineers wangeng@wangeng.com 1145 Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	BORING LOG AR-322 WEI Job No.: 255-08-08		Datum: NGVD Elevations 181.85 m Nor'te: 545162.90 m East: 368489.47 m Station: 9+106.7 Offset: 37.57 LT
	Client: <u>American Consulting Engineers</u>		
	Project: <u>FAI 80/94, I-294 to US 41</u>		
	Location: <u>s29 T36N R15E & s13 T36 R10W</u>		

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type	Sample No.	SPT (blows/50 mm)	Moisture Content (%)	Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type	Sample No.	SPT (blows/50 mm)	Moisture Content (%)
181.85	381-mm thick CONCRETE --PAVEMENT--	0					181.85		0				
181.3	CRUSHED STONE AGGREGATE --BASE COURSE--	0.5	1	8	NP	7	181.3		0.5	11	7	346	22
180.2	Medium dense, brown SAND --FILL--	1	2	7	NP	17	180.2		1	12	6	314	20
178.2	Medium stiff to very stiff, brown CLAY	2	3	2	71	B	178.2		2	13	5	220	21
176.2	Stiff to very stiff, gray CLAY	3	4	2	228	B	176.2		3	14	5	275	21
174.2	Very stiff, gray SILTY CLAY	4	5	4	267	B	174.2		4	15	4	243	22
172.2	Very stiff, gray CLAY	5	6	4	212	B							
170.2	Very stiff, gray CLAY	6	7	4	189	B							
168.2	Very stiff, gray CLAY	7	8	5	236	S							
166.1	Boring terminated at 13.72 m	13.72	9	7	354	B							
164.1	Very stiff, gray CLAY	14	10	4	236	B							


GENERAL NOTES Begin Drilling <u>07-15-2003</u> Complete Drilling <u>07-15-2003</u> Drilling Contractor <u>TSC</u> Drill Rig <u>CME 75</u> Driller <u>C&A</u> Logger <u>J. Kasnick</u> Checked by <u>B. Fuglel</u> Drilling Method <u>3.25-in ID HSA; Boring backfilled upon final water reading</u>		WATER LEVEL DATA While Drilling <u>1.68 m</u> At Completion of Drilling <u>DRY</u> Time After Drilling <u>24 hours</u> Depth to Water <u>1.30 m</u> <small>The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.</small>	
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DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

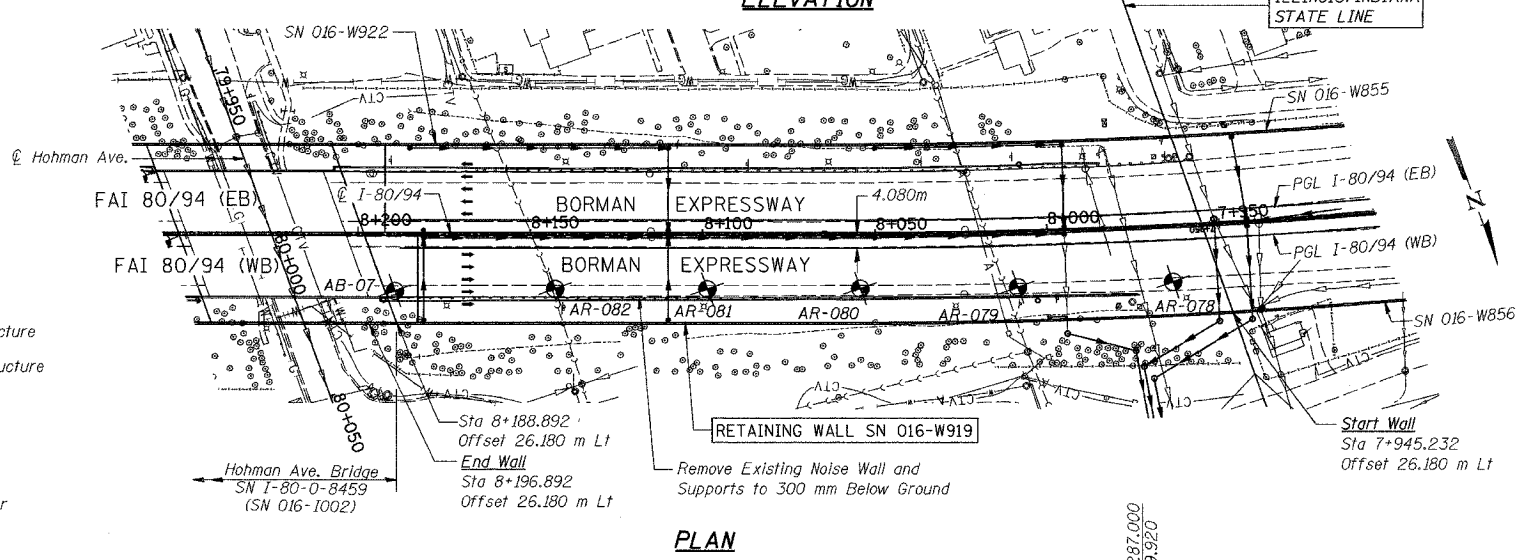
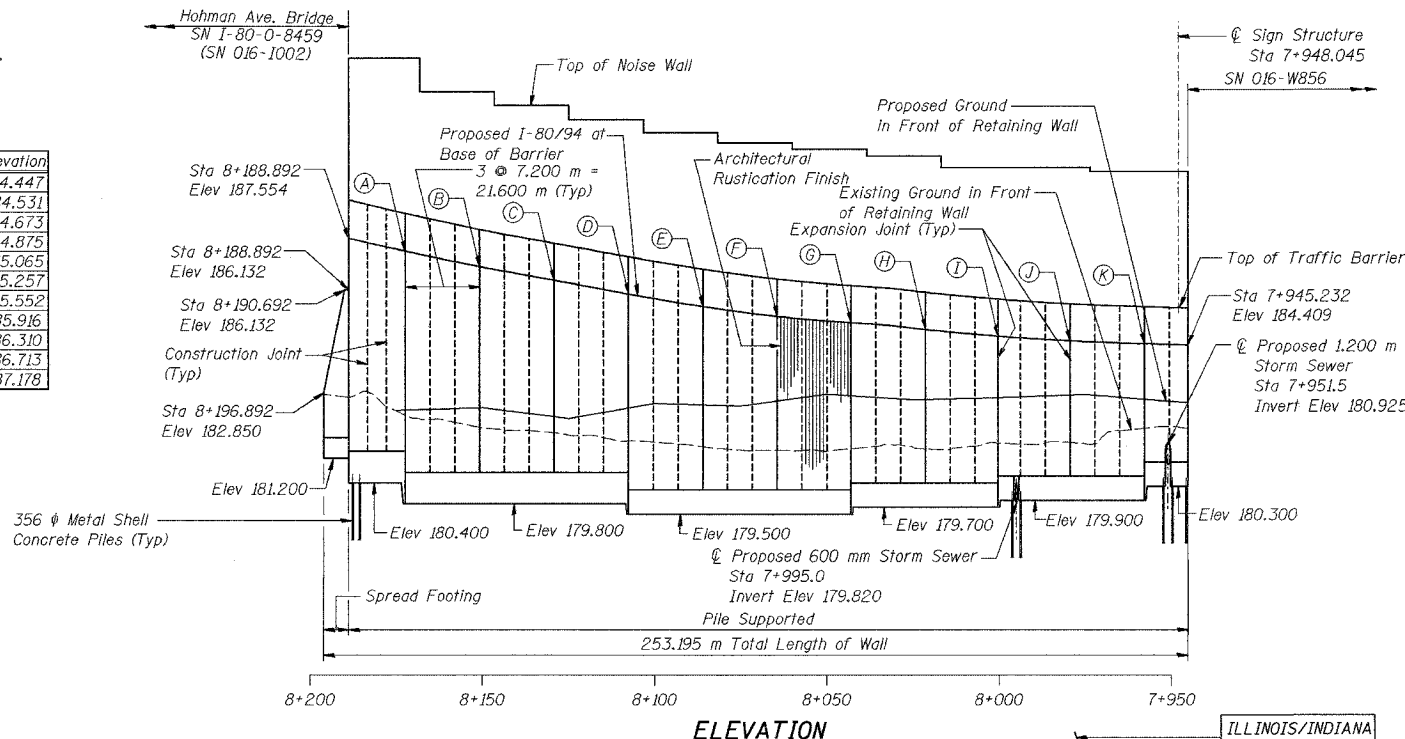
BORING LOGS (7 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+762.750 TO STATION 9+101.839
STRUCTURE NO. 016-W915

DATE 09/05

 **AMERICAN**
 CONSULTING ENGINEERS

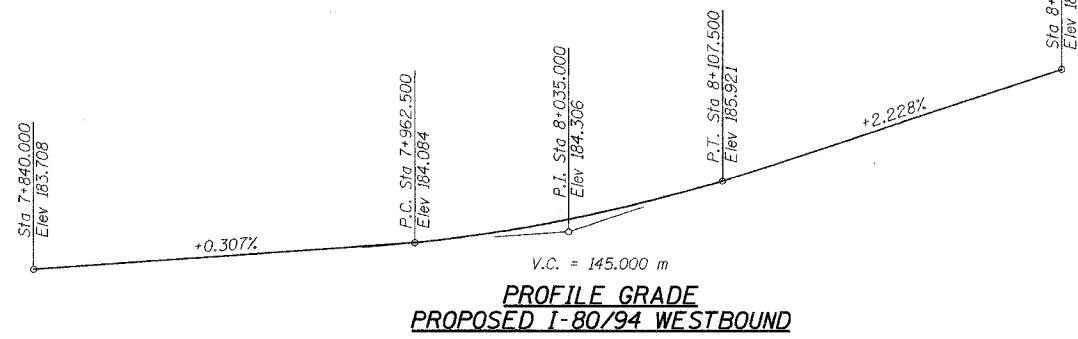
Benchmark: Chiseled box at SW corner of NW wingwall over Little Calumet River Bridge.
 Westbound I-80 +/- 70m east of mile marker 0.2.
 Elevation = 191.662
 Existing Structure: None
 All dimensions in millimeters (mm) except as noted.

Station	Elevation
K 7+957.757	184.447
J 7+979.067	184.531
I 8+000.377	184.673
H 8+021.687	184.875
G 8+042.997	185.065
F 8+064.391	185.257
E 8+085.991	185.552
D 8+107.591	185.916
C 8+129.191	186.310
B 8+150.791	186.713
A 8+172.391	187.178



- LEGEND**
- ⊕ - Soil Boring Location
 - - - Existing Roadway/Structure
 - Proposed Roadway/Structure
 - - Tree
 - ~ ~ ~ Shrubs/Brush
 - Proposed Storm Sewer
 - - - Existing Sanitary Sewer
 - Existing Storm Sewer
 - CTV - Existing Cable TV
 - G - Existing Gas Line
 - W - Existing Water Main
 - A - Electrical Aerial Cable

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP



CURVE DATA I-80/94

$\Delta = 20^\circ - 11' - 25''$
 $R = 1,923.600 \text{ m}$
 $T = 342.476 \text{ m}$
 $L = 677.849 \text{ m}$
 $E = 30.249 \text{ m}$
 P.C. Sta = 7+380.276
 P.I. Sta = 7+722.751
 P.T. Sta = 8+058.125
 S.E. = 2.9%

LOADING

Wind Load on Noise Wall = 1.7 kPa

DESIGN STRESSES

FIELD UNITS

$f'_c = 24 \text{ MPa}$
 $f_y = 400 \text{ MPa (Reinf.)}$

Maximum Applied Soil Bearing Pressure = 100 kPa

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges

AASHTO 1989 Guide Specifications for Structural Design of Sound Barriers and 1992 Interims

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-1
I-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1043	20 SHEETS

CONTRACT NO. 62114 INDOT DES. NO. 0100987

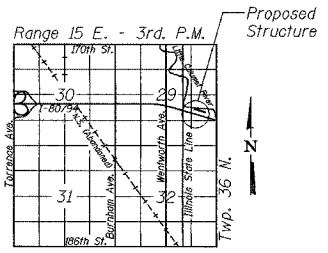


Gary S. Powell
 GARY S. POWELL, S.E.
 IL. LIC. NO. 081-004771
 EXP 11-30-2006
 DATE 09-12-2005



APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES

Gary S. Powell
 GARY S. POWELL, P. E.
 IN. LIC. NO. 10403944
 EXP 07-31-2006
 DATE 09-12-2005



LOCATION SKETCH

Note: Retaining Wall is built in straight line segments between Expansion and Construction Joints. Back Face of the Retaining Wall is aligned with the outside edge of shoulder at joints.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
 GENERAL PLAN
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 7+945.232 TO STATION 8+196.892
 STRUCTURE NO. 016-W919
 DATE 09/05



ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-2
F.A.S. 68/74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1044	20 SHEETS
ILLINOIS		FED. AID PROJECT			

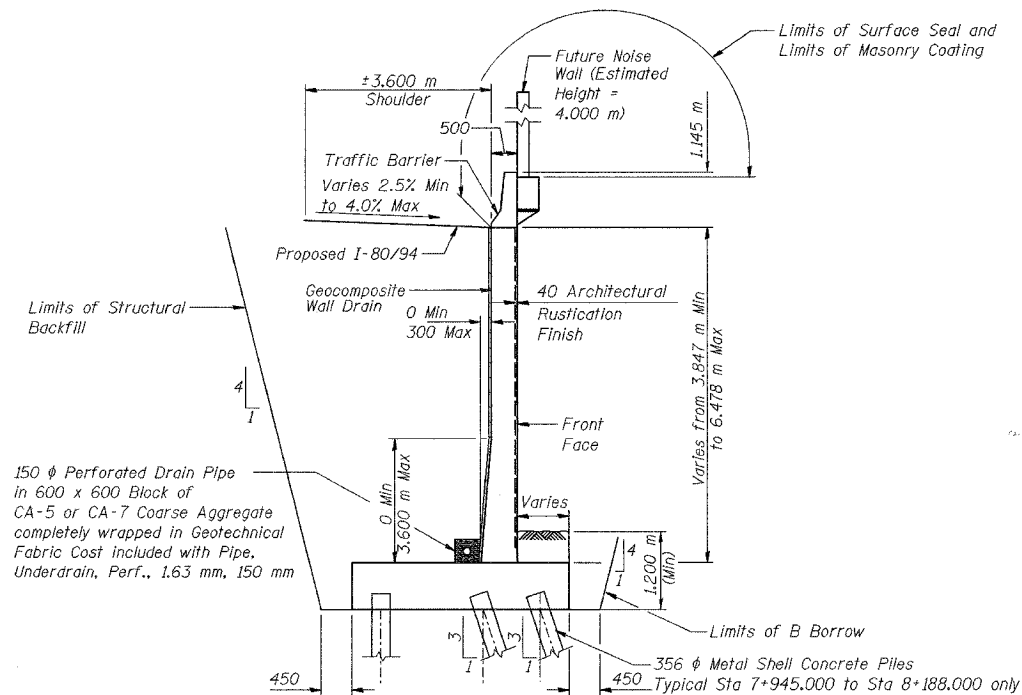
CONTRACT NO. 62114 INDOT DES. NO. 0100987

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of AASHTO M 31M or M32.2M Grade 400.
2. The Contractor shall drive 5 test piles in permanent locations spaced approximately 60 m apart, as directed by the Engineer before ordering the remainder of the piles.
3. All dimensions are in millimeters (mm) except as noted.
4. All construction joints shall be bonded.

INDEX OF SHEETS

SHEET NO.	TITLE
S-1	General Plan
S-2	Index of Sheets, General Notes and Total Bill of Material
S-3	Plan and Elevation (1 of 11)
S-4	Plan and Elevation (2 of 11)
S-5	Plan and Elevation (3 of 11)
S-6	Plan and Elevation (4 of 11)
S-7	Plan and Elevation (5 of 11)
S-8	Plan and Elevation (6 of 11)
S-9	Plan and Elevation (7 of 11)
S-10	Plan and Elevation (8 of 11)
S-11	Plan and Elevation (9 of 11)
S-12	Plan and Elevation (10 of 11)
S-13	Plan and Elevation (11 of 11)
S-14	Wall Sections and Details (1 of 2)
S-15	Wall Sections and Details (2 of 2)
S-16	Rustication Finish Details
S-17	Concrete Pile Details
S-18	Boring Logs (1 of 3)
S-19	Boring Logs (2 of 3)
S-20	Boring Logs (3 of 3)



TYPICAL SECTION

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

TOTAL BILL OF MATERIAL

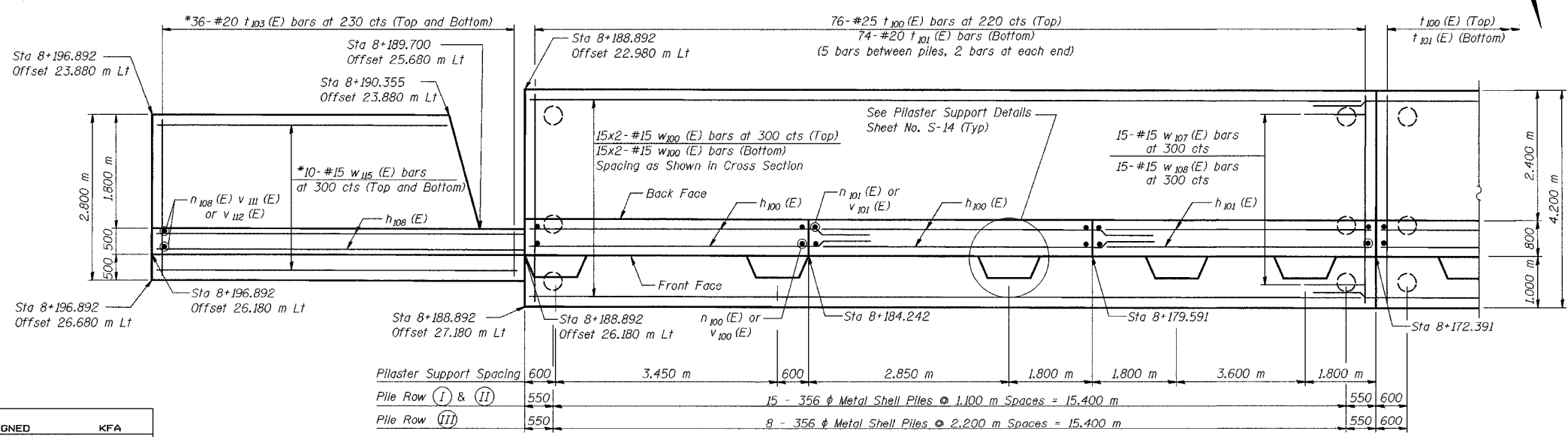
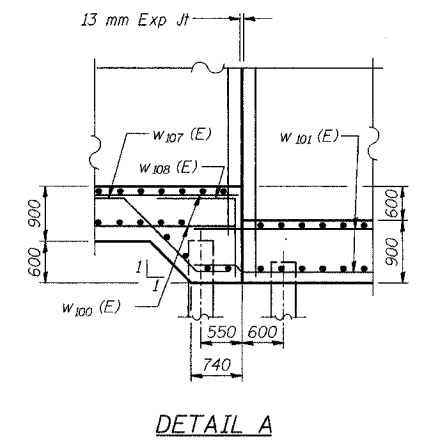
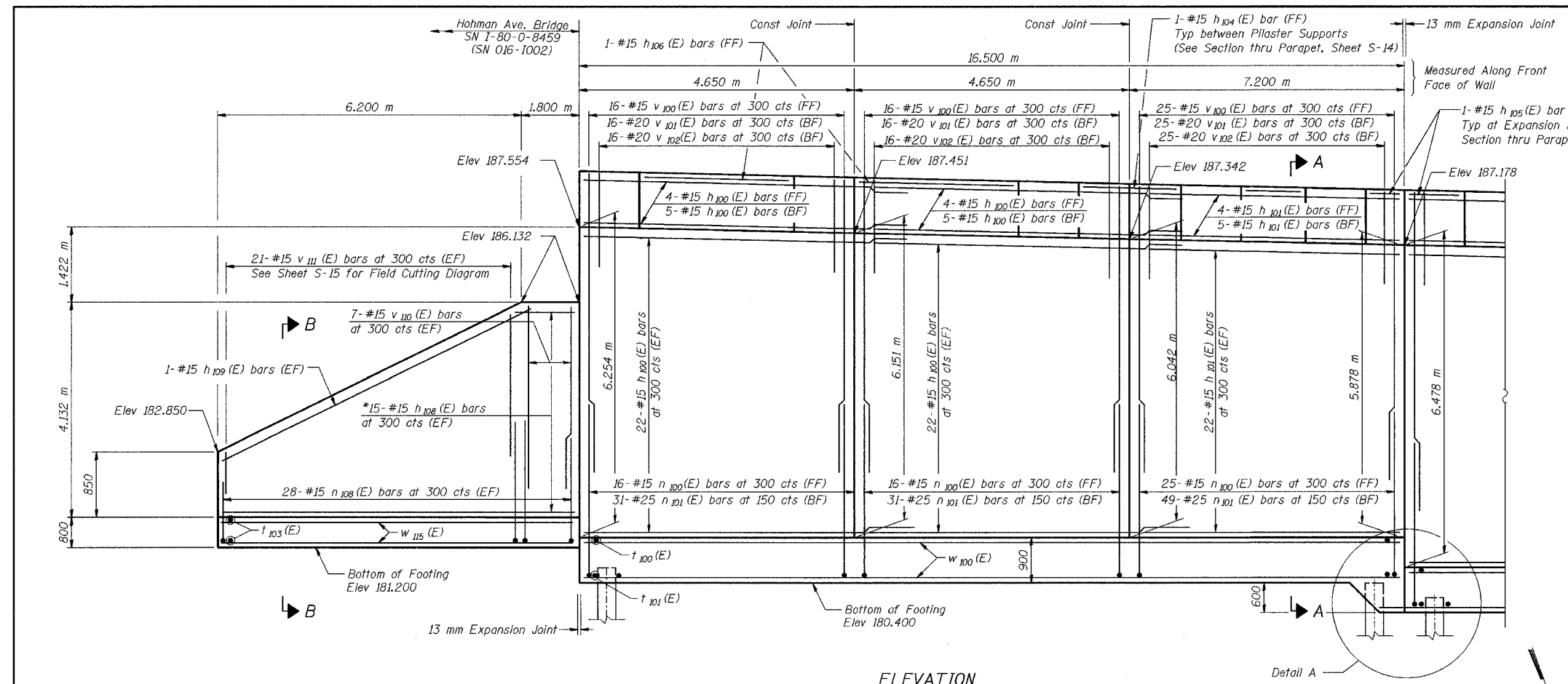
ITEM	UNIT	QUANTITY
(IN) Test Pile, 356 mm	Each	5
(IN) Excavation, Foundation, Unclassified	m ³	2,794.1
(IN) Concrete, A, Substructure	m ³	1,609.4
Rustication Finish	m ²	1,173
(IN) Reinforcing Bars, Epoxy Coated	kg	107,030
(IN) Surface Seal	L Sum	0.03
(IN) Pile, Concrete, Steel Shell Encased, 6.35 mm, 356 mm	m	8,190.5
Geocomposite Wall Drain	m ²	1,119
(IN) Pipe, Underdrain, Perf., 1.63 mm, 150 mm	m	253.5
Noise Abatement Wall Anchor Rod Assembly	Each	69
Overhead Sign Structure-Span Anchor Rod Assembly	Each	2
(IN) B Borrow	m ³	840.2
(IN) Structural Backfill	m ³	3,988.3
(IN) Masonry Coating	L Sum	0.07

(IN) Indiana Pay Items, denoted by "(Indiana)" in Special Provisions and Summary of Quantities.

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41
**INDEX OF SHEETS, GENERAL NOTES
AND TOTAL BILL OF MATERIAL**
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-3
1-80-0-8459	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1045
CONTRACT NO. 62114				INDOT DES. NO. 0100987



DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
#15 bars = 640
#20 bars = 790

LEGEND
BF = Back Face
FF = Front Face
EF = Each Face

NOTES:

See Sheet S-14 for Section A-A and Section B-B.
 See Sheet S-15 for Expansion Joint Detail and Bill of Material.
 See Sheet S-16 for Rustication details.
 Stations are referenced to @ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
 * Cut to Fit

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

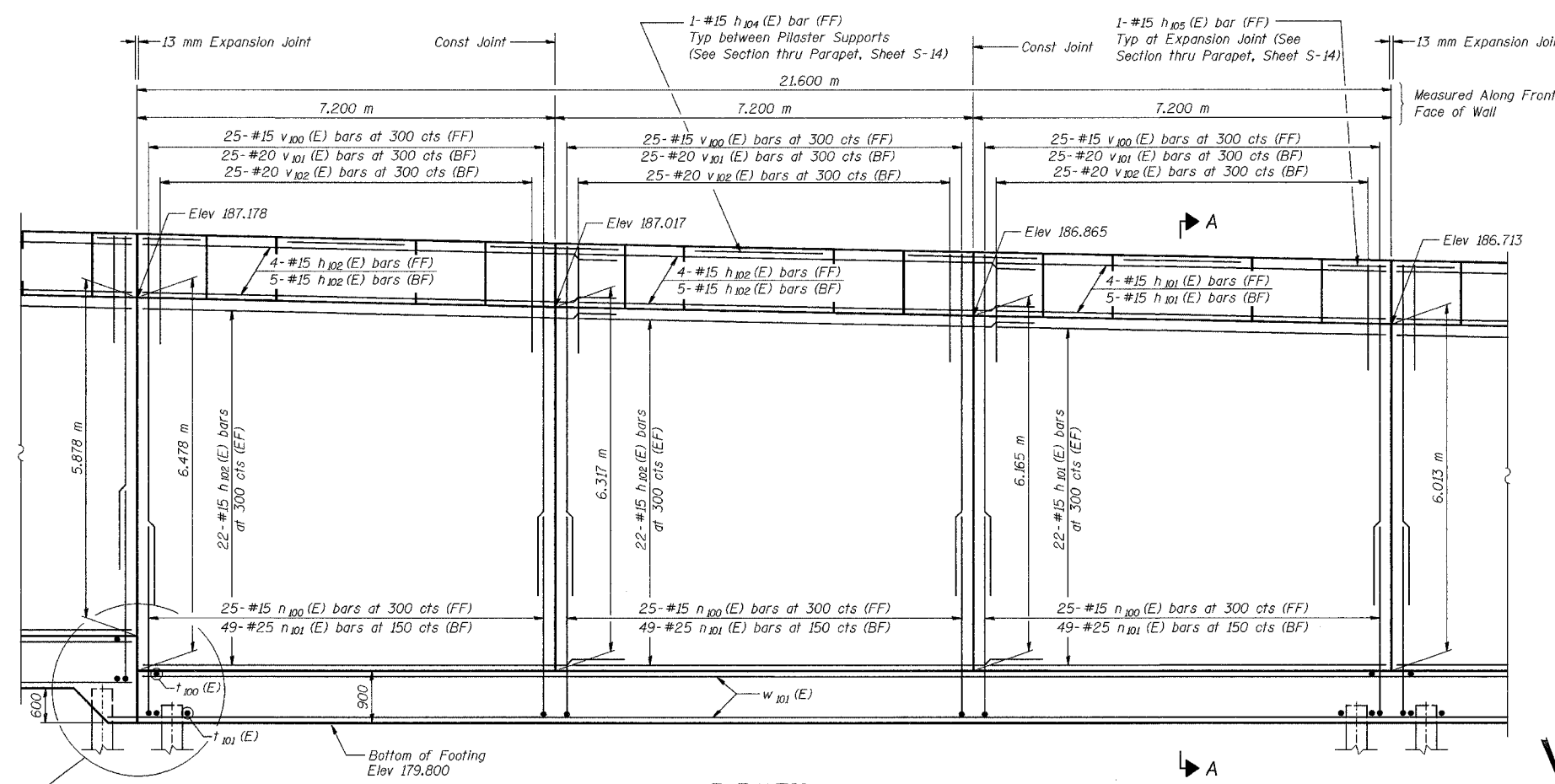
PLAN AND ELEVATION (1 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

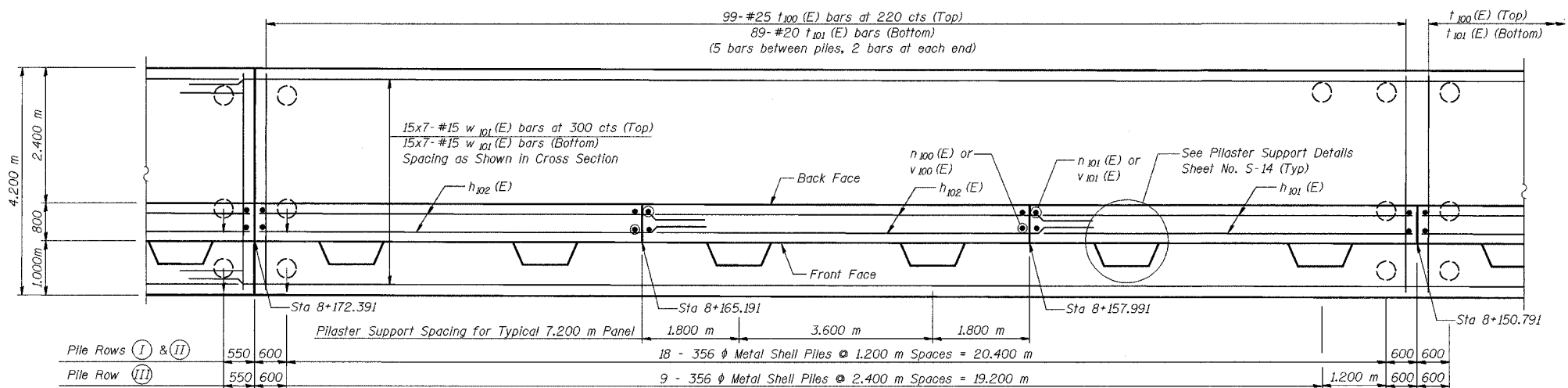
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
94/14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1046
PROJECT TITLE		CONTRACT NO. 62114 INDOT DES. NO. 0100987		

SHEET NO. S-4
20 SHEETS



ELEVATION



FOOTING PLAN

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
#15 bars = 640
#20 bars = 790

LEGEND
BF = Back Face
FF = Front Face
EF = Each Face

NOTES:
See Sheet S-14 for Section A-A.
See Sheet S-15 for Expansion Joint Detail and Bill of Material.
See Sheet S-16 for Rustication details.
Stations are referenced to $\text{C} \text{ I-80/94}$.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

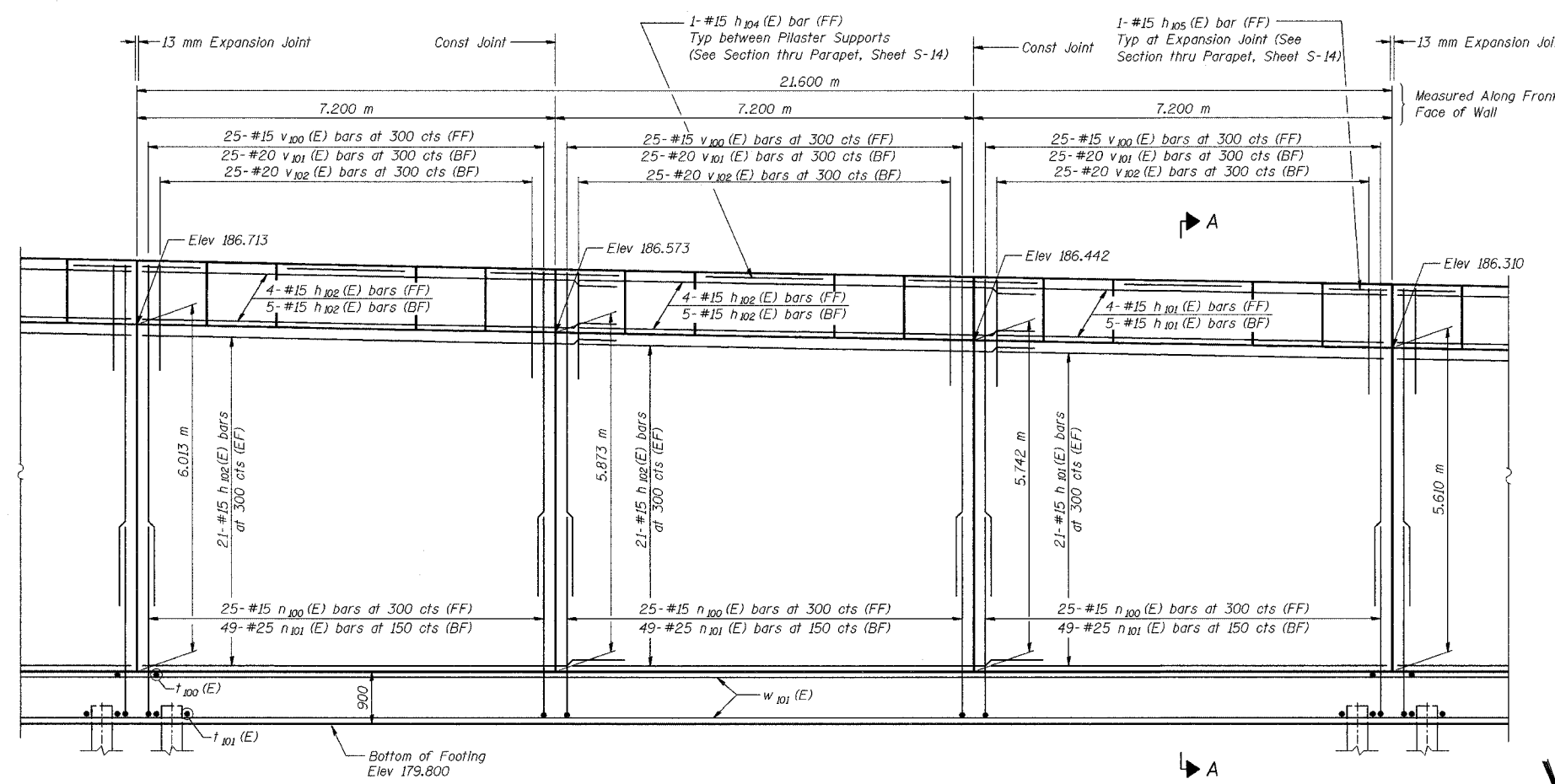
ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PLAN AND ELEVATION (2 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

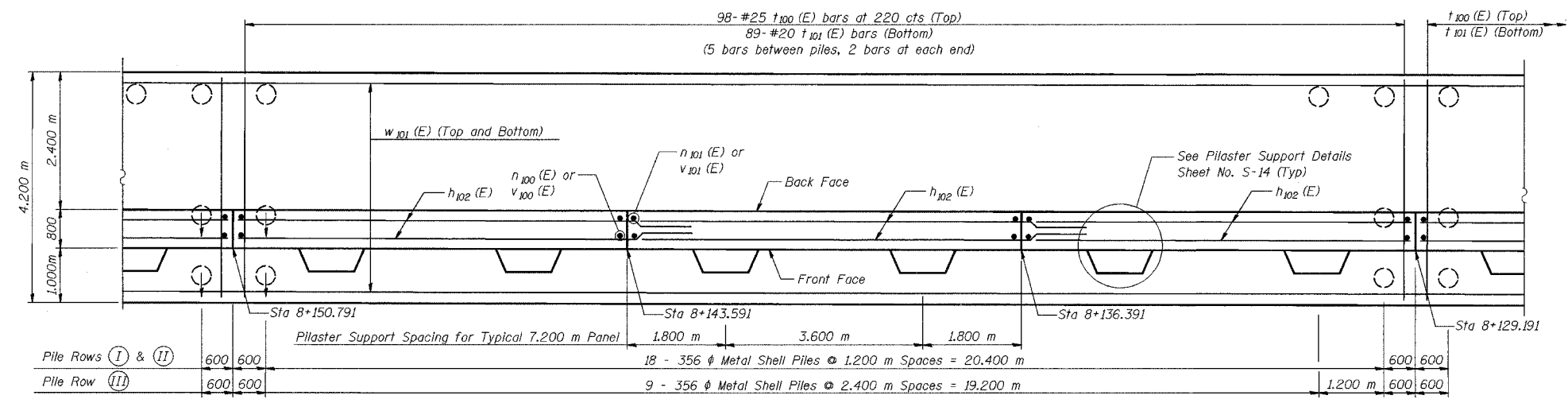
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL	SHEET NO. S-5 20 SHEETS
104	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1047	
CONTRACT NO. 62114 INDOT DES. NO. 0100987					



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-14 for Section A-A.
 See Sheet S-15 for Expansion Joint Detail and Bill of Material.
 See Sheet S-16 for Rustication details.
 Stations are referenced to $\text{C} \cdot 1-80/94$.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

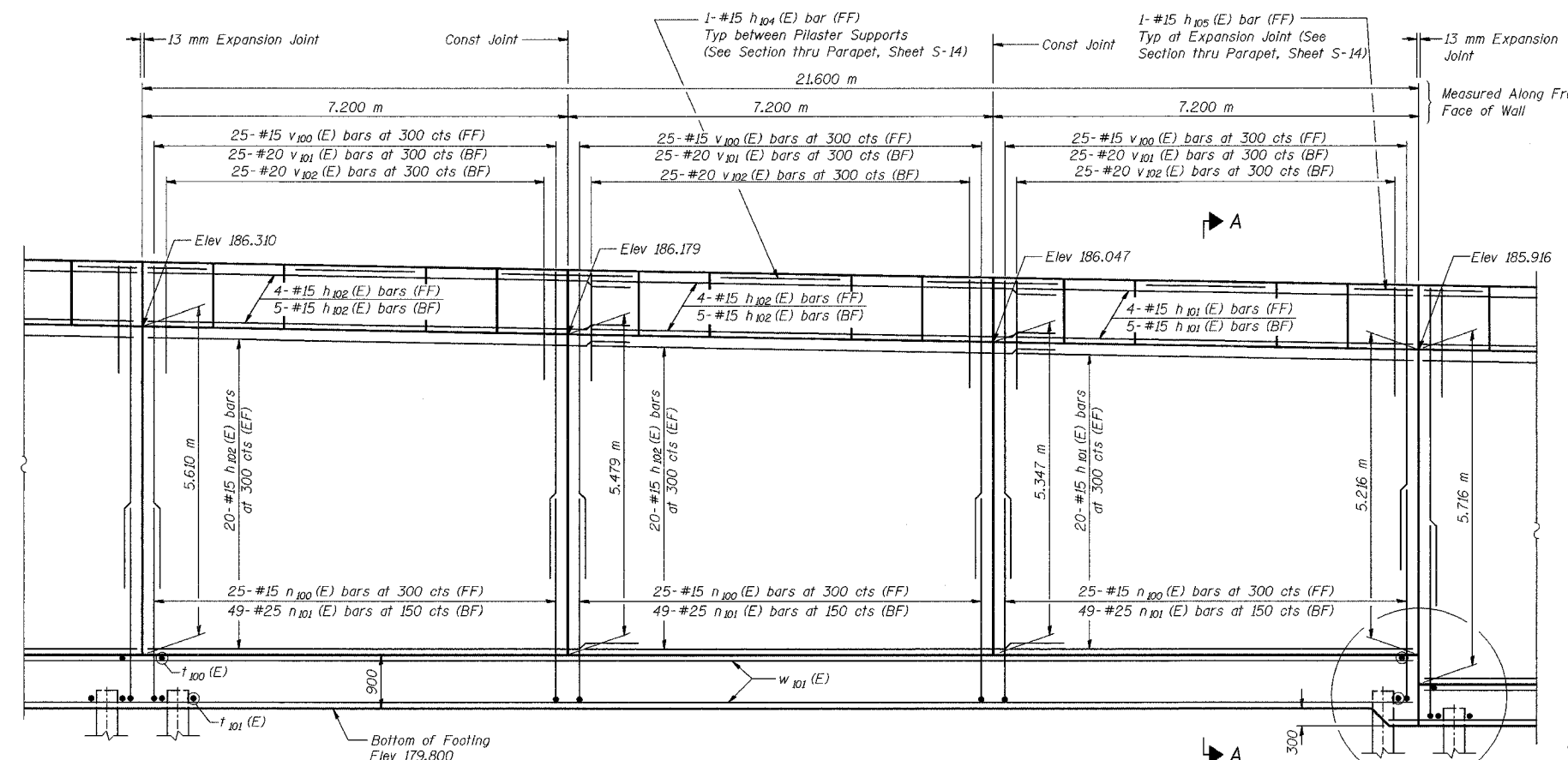
PLAN AND ELEVATION (3 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

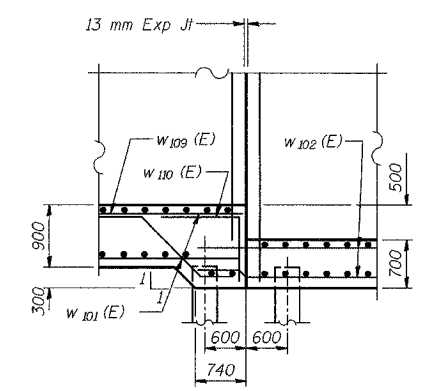
AMERICAN
 CONSULTING ENGINEERS

FIGURE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-6
F.A.L. 88/74	2626.2-R-2	LAKE COUNTY, INDIANA	1207 1048	20 SHEETS
OWNER		DESIGNED PROJECT		

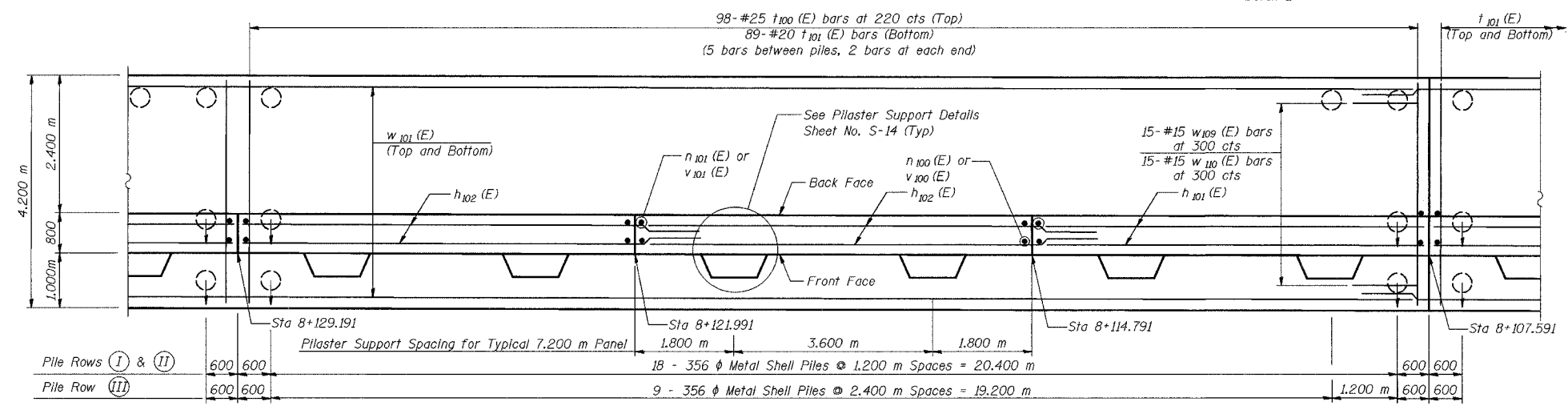
CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



DETAIL B



FOOTING PLAN

NOTES:
 See Sheet S-14 for Section A-A.
 See Sheet S-15 for Expansion Joint Detail and Bill of Material.
 See Sheet S-16 for Rustication details.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (4 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

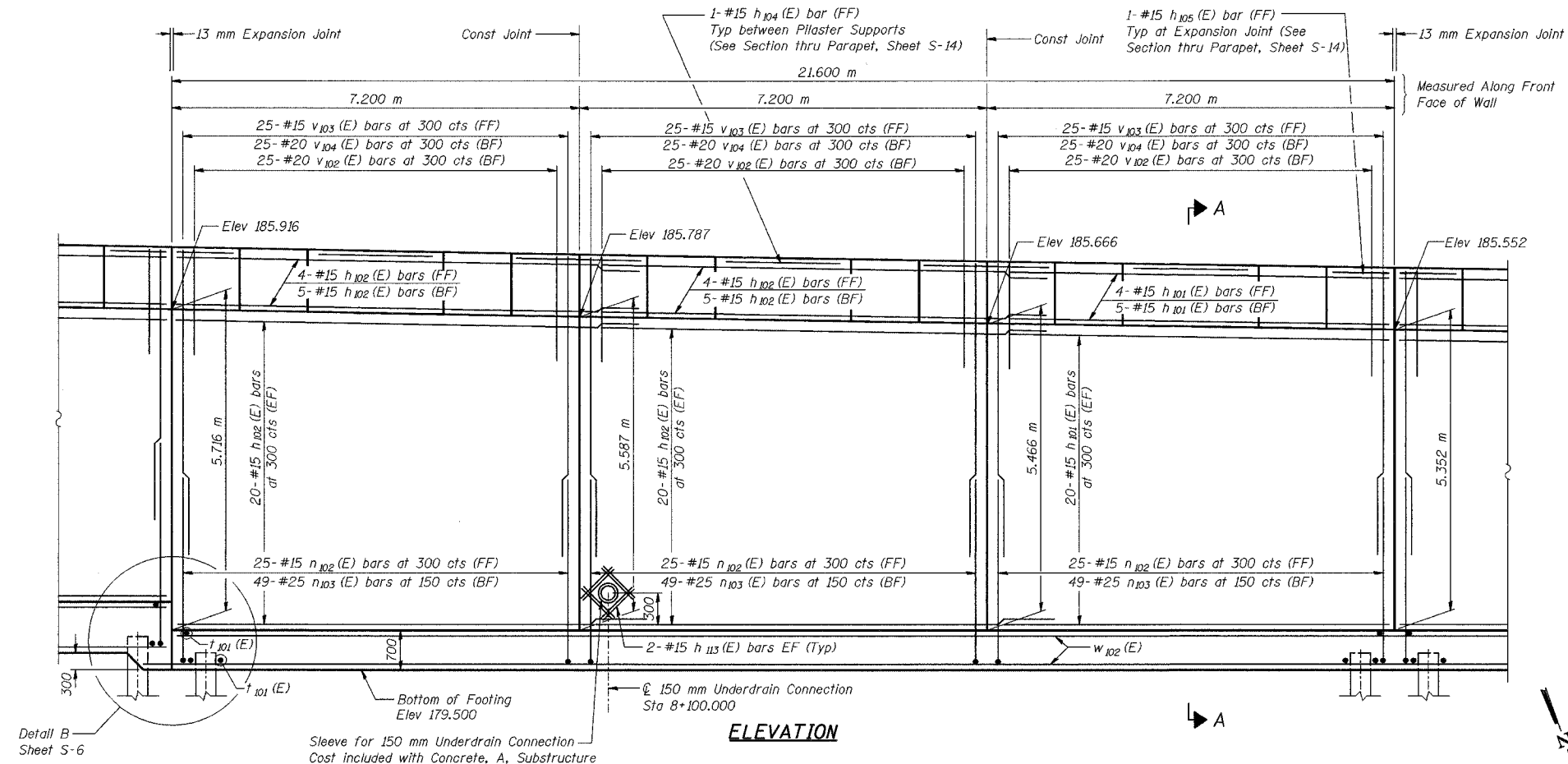
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

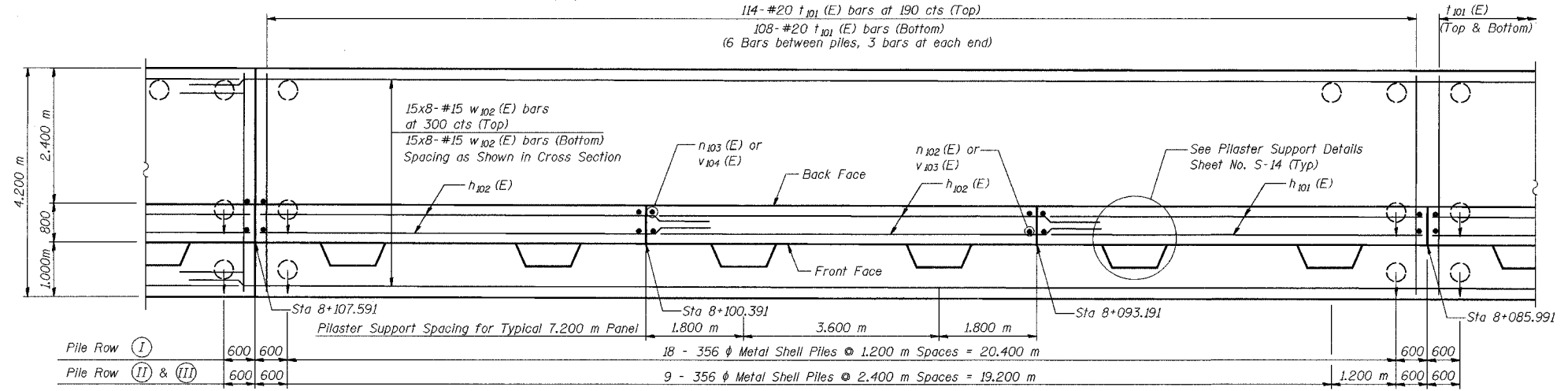
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
66/14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1049
ILLINOIS		FED. AID PROJECT		

SHEET NO. S-7
20 SHEETS

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



FOOTING PLAN

NOTES:
See Sheet S-14 for Section A-A.
See Sheet S-15 for Expansion Joint Detail and Bill of Material.
See Sheet S-16 for Rustication details.
Stations are referenced to @ I-80/94.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
#15 bars = 640
#20 bars = 790

LEGEND
BF = Back Face
FF = Front Face
EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

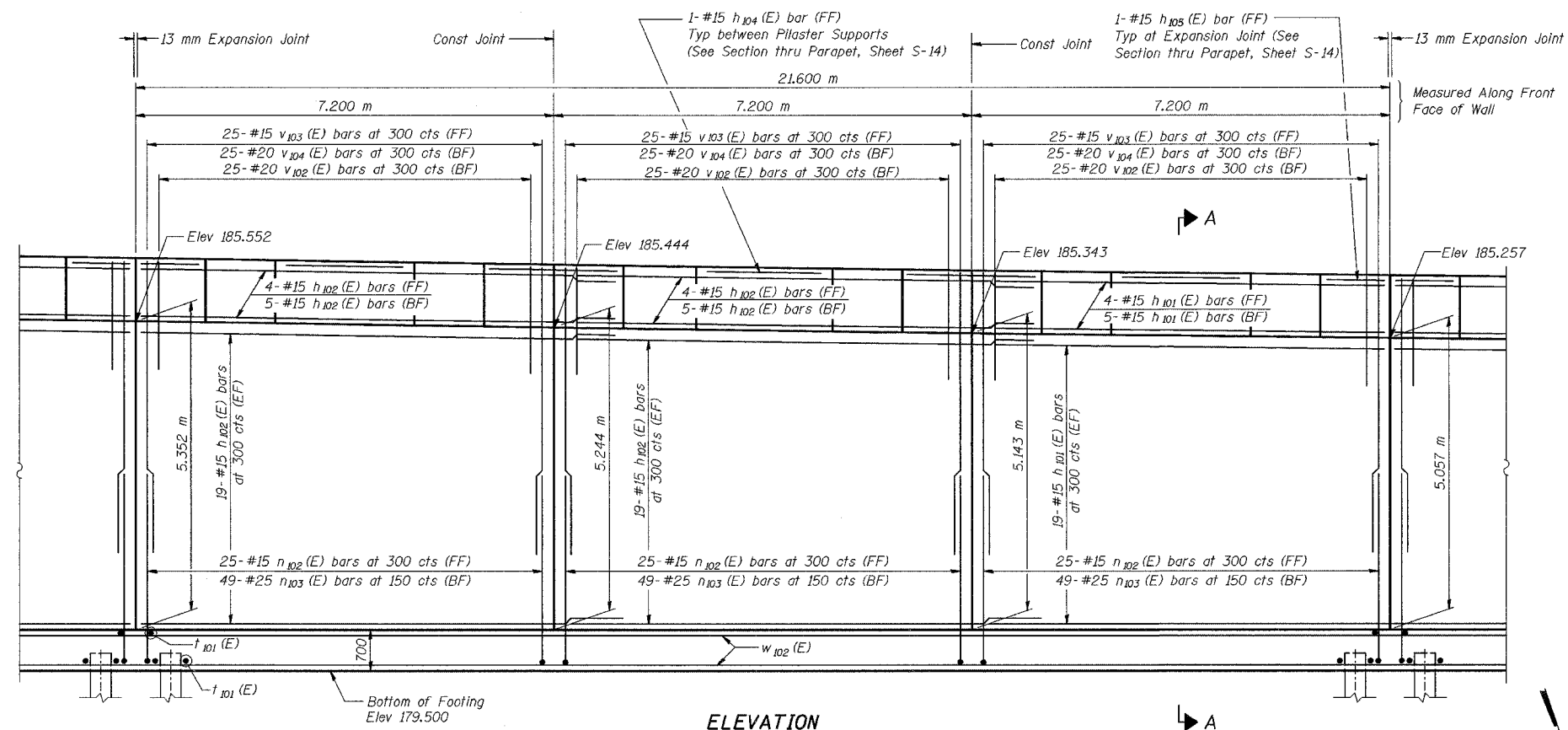
PLAN AND ELEVATION (5 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

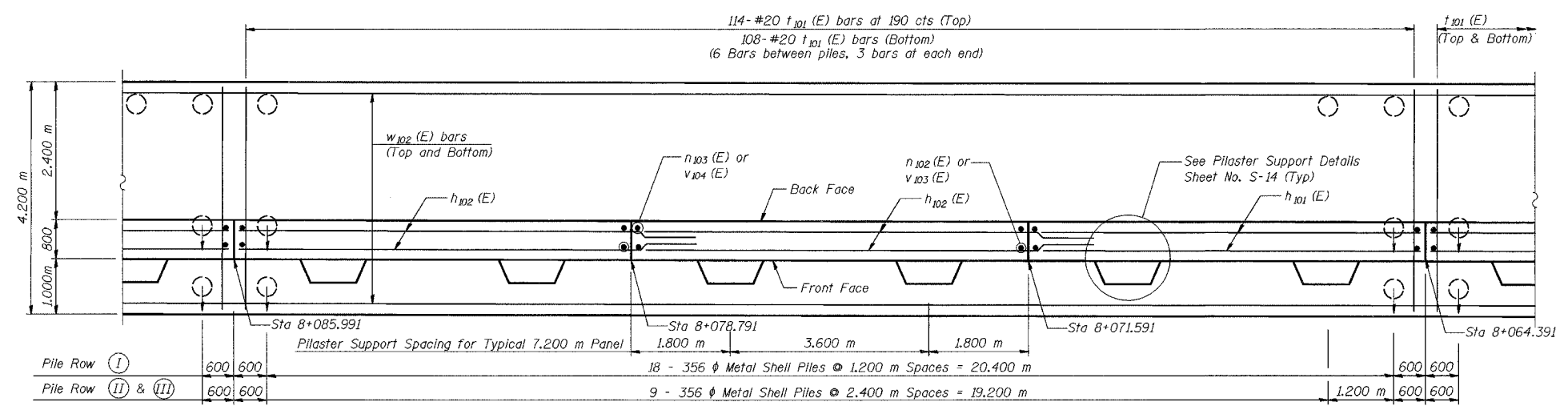
AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
108-14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1050
SHEET NO. S-8		20 SHEETS		

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



FOOTING PLAN

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
#15 bars = 640
#20 bars = 790

LEGEND
BF = Back Face
FF = Front Face
EF = Each Face

NOTES:
See Sheet S-14 for Section A-A.
See Sheet S-15 for Expansion Joint Detail and Bill of Material.
See Sheet S-16 for Rustication details.
Stations are referenced to $\text{C} \text{ I-80/94}$.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

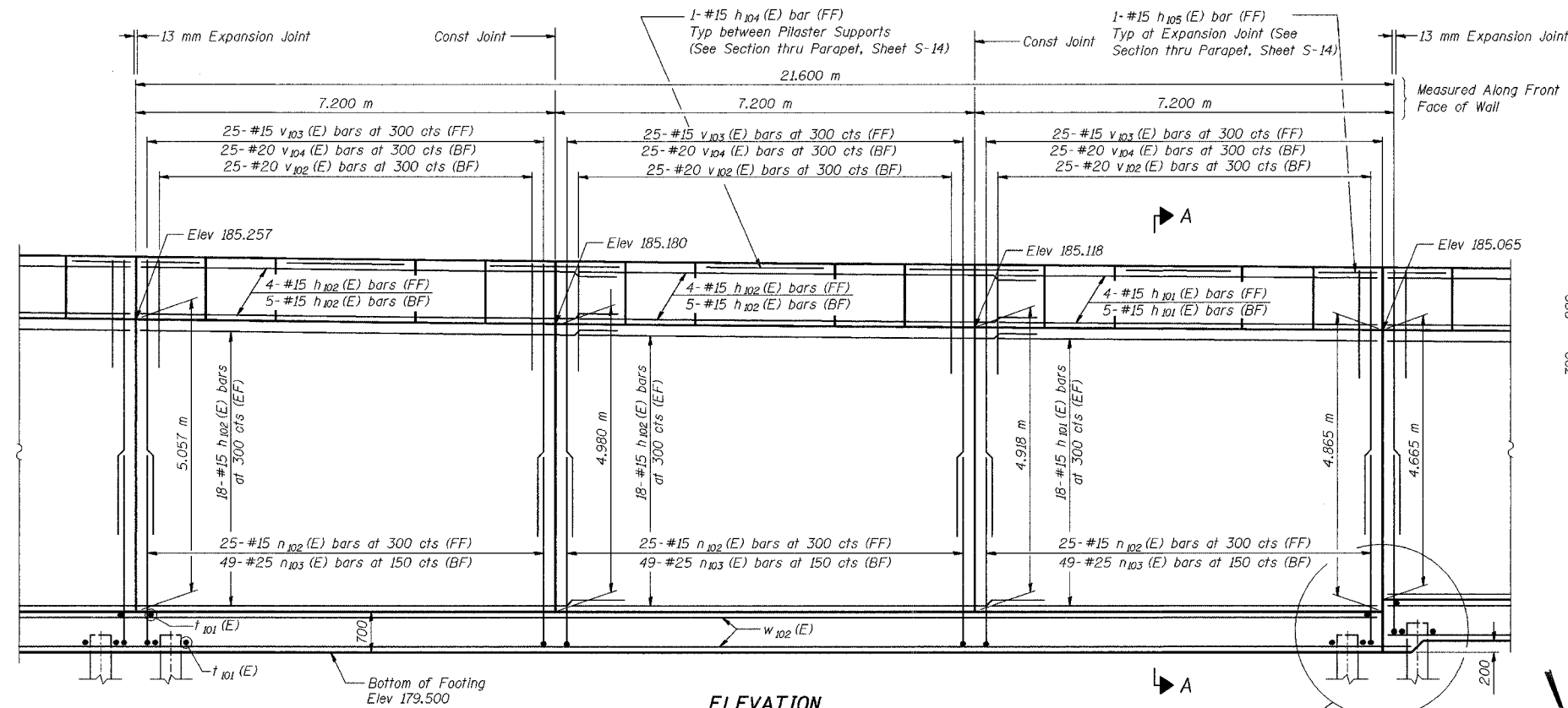
PLAN AND ELEVATION (6 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

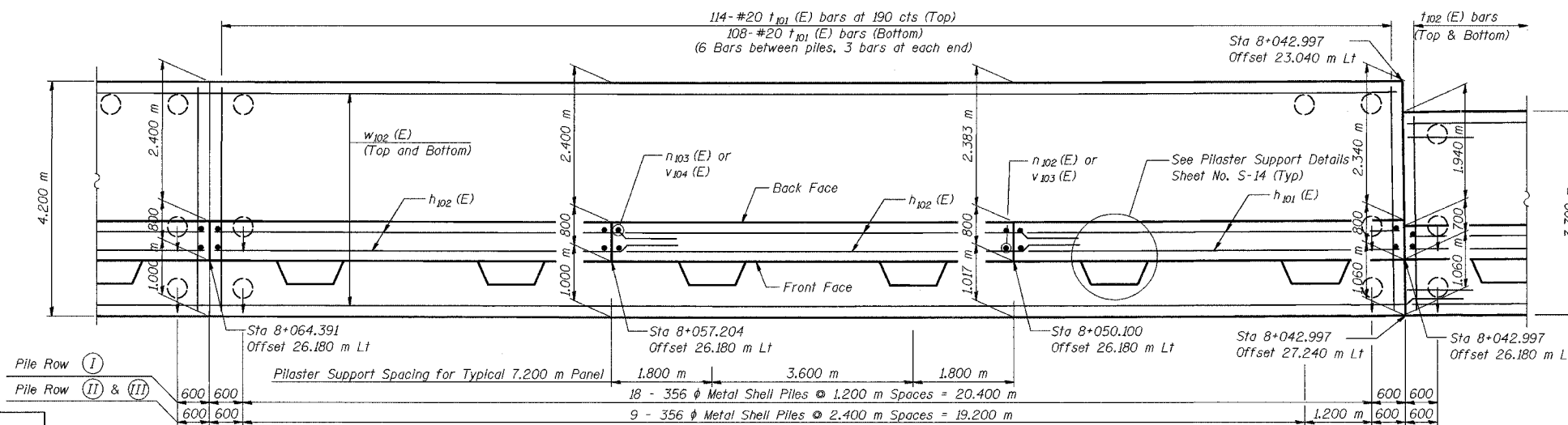
AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-9
1207	1051	LAKE COUNTY, INDIANA	1207	1051
ILLINOIS				FED. AID PROJECT

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-14 for Section A-A.
 See Sheet S-15 for Expansion Joint Detail and Bill of Material.
 See Sheet S-16 for Rustication details.
 Stations are referenced to \mathcal{C} I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

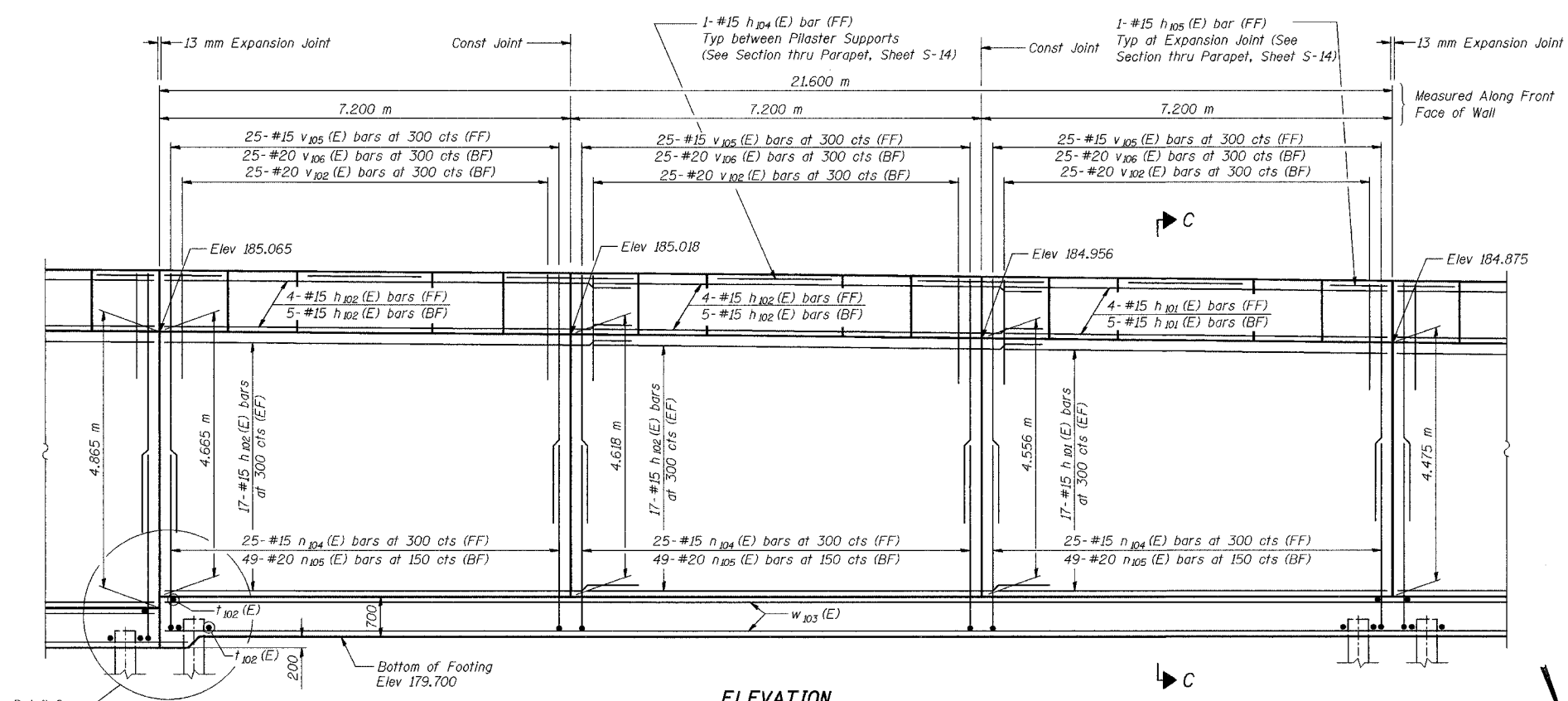
BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

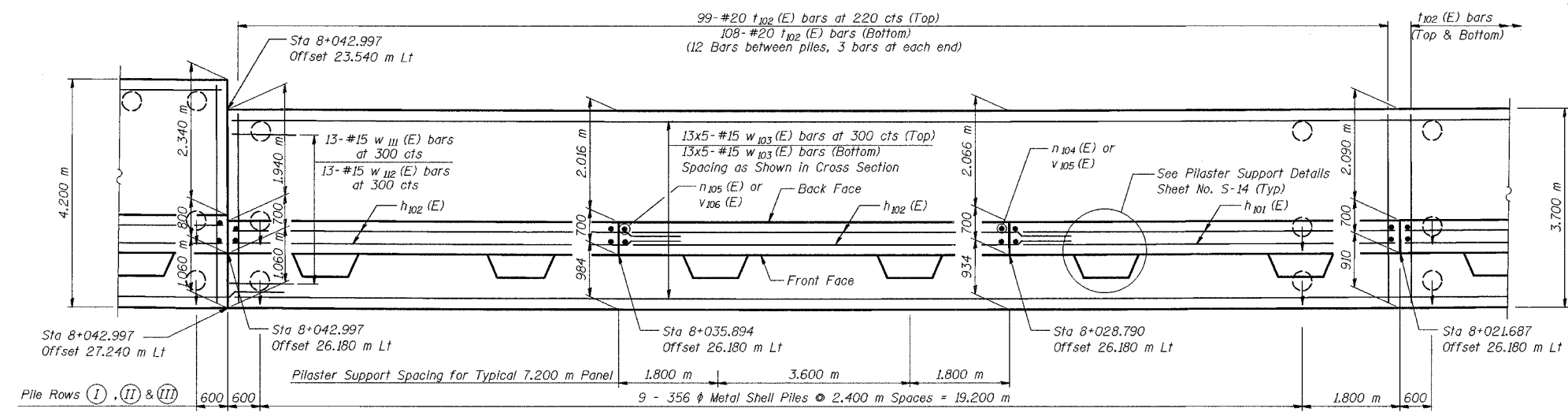
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SECTION 262.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-14 for Section C-C.
 See Sheet S-15 for Expansion Joint Detail and Bill of Material.
 See Sheet S-16 for Rustication details.
 Stations are referenced to @ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

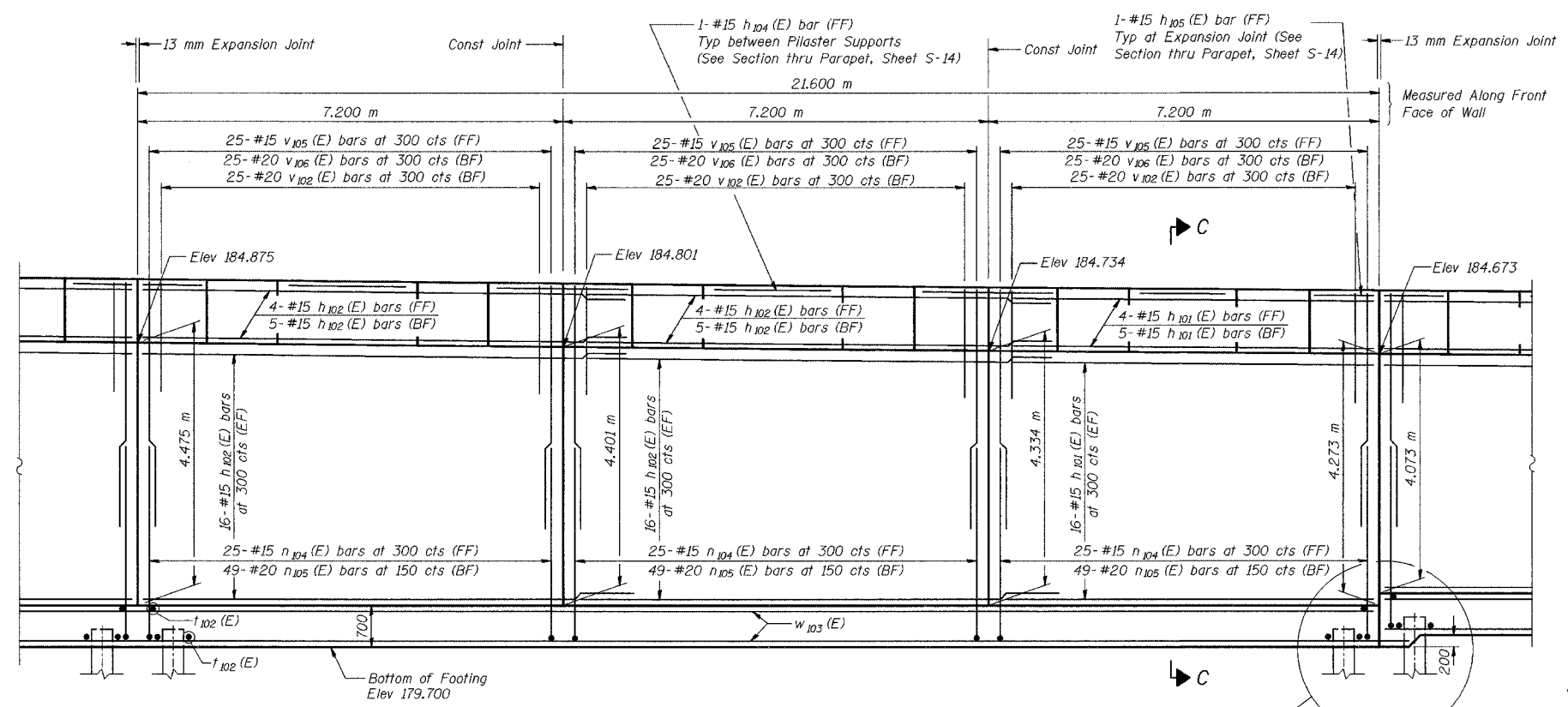
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

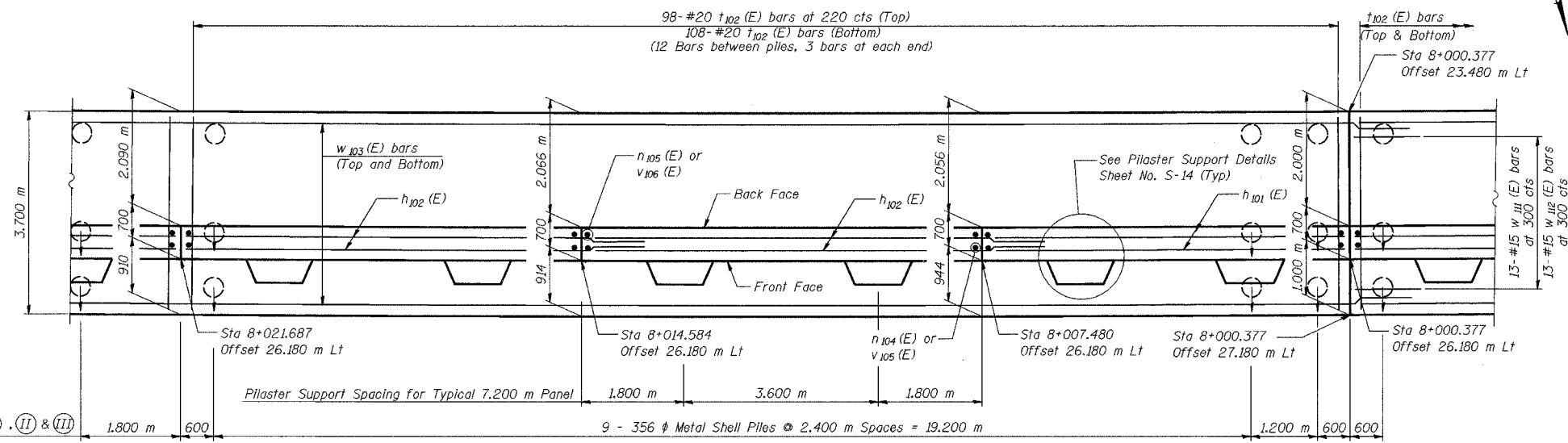
PLAN AND ELEVATION (8 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-14 for Section C-C.
 See Sheet S-15 for Expansion Joint Detail and Bill of Material.
 See Sheet S-16 for Rustication details.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

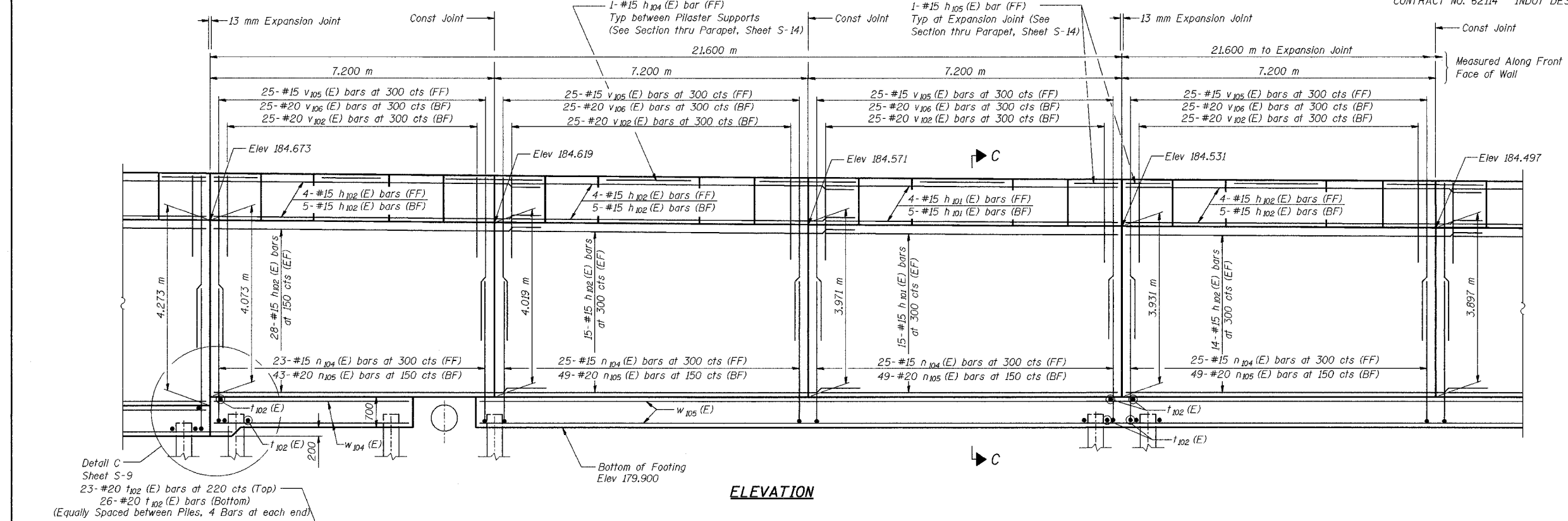
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

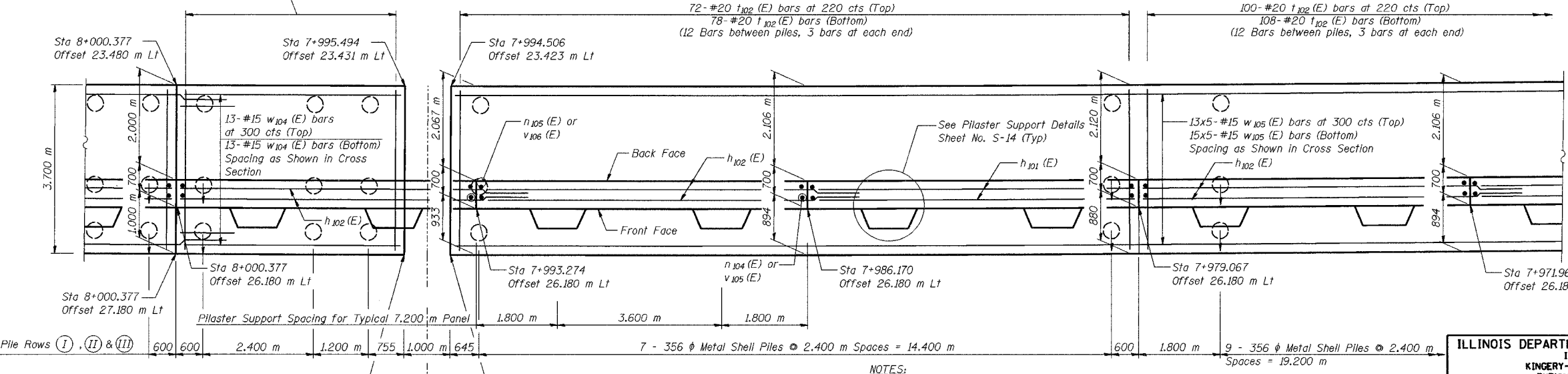
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (9 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-12 20 SHEETS
F.A.S. 08/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1054	
ILLINOIS		INDOT PROJ. NO. 0100987			



ELEVATION



FOOTING PLAN

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

NOTES:
 See Sheet S-14 for Section C-C.
 See Sheet S-15 for Expansion Joint Detail and Bill of Material.
 See Sheet S-16 for Rustication details.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.

All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

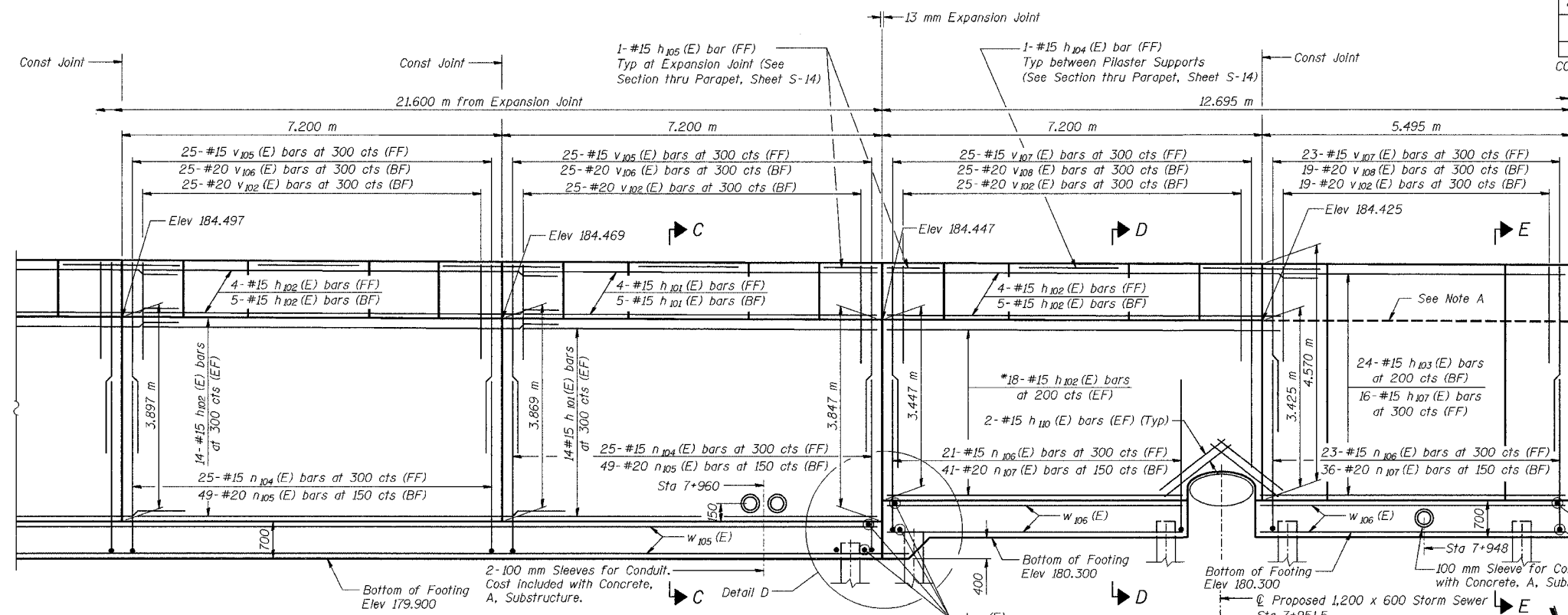
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (10 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

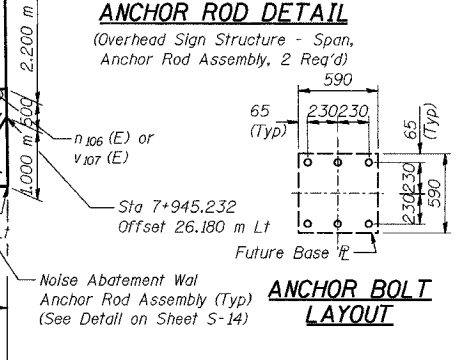
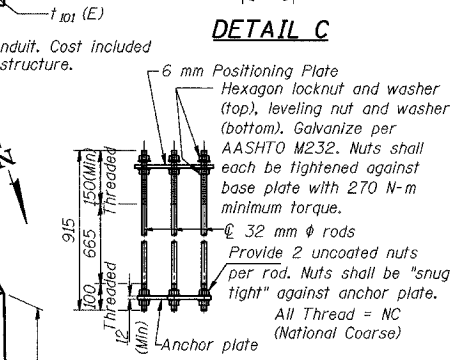
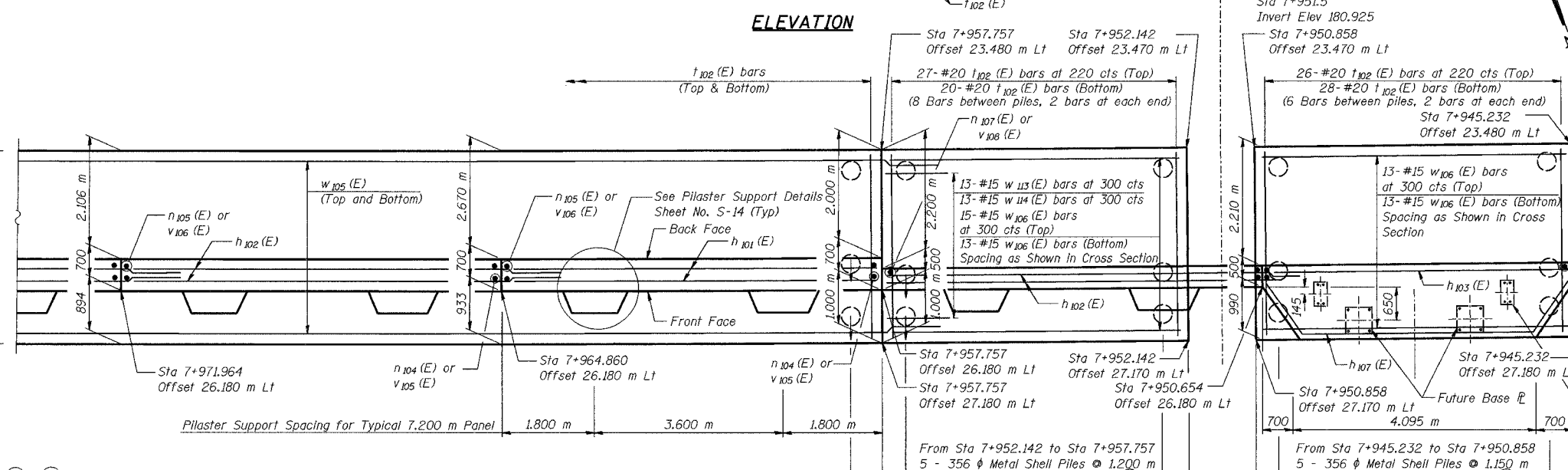
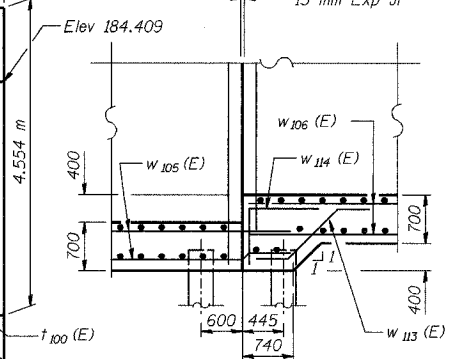
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-13
F.A.L.	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1055
CONTRACT NO. 62114 INDOT DES. NO. 0100987				20 SHEETS
SN 016-W856				



NOTE A
Construction Joint 1.145 m below top of parapet shall not be continued thru section of wall supporting the Overhead Sign Structure - Span. Finished appearance of front face of wall in this section shall be the same as that in the adjacent sections of wall.



DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

NOTES:
See Sheet S-14 for Section A-A, Section D-D and Section E-E.
See Sheet S-15 for Expansion Joint Detail and Bill of Material.
See Sheet S-16 for Rustication details.
Stations are referenced to \odot I-80/94.
Reinforcement bars designated (E) shall be epoxy coated.

All dimensions are in millimeters (mm) except as noted.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
See Electrical Drawings for Junction Box and Conduit Details.
* Cut to Fit

FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
#20 bars = 790

LEGEND

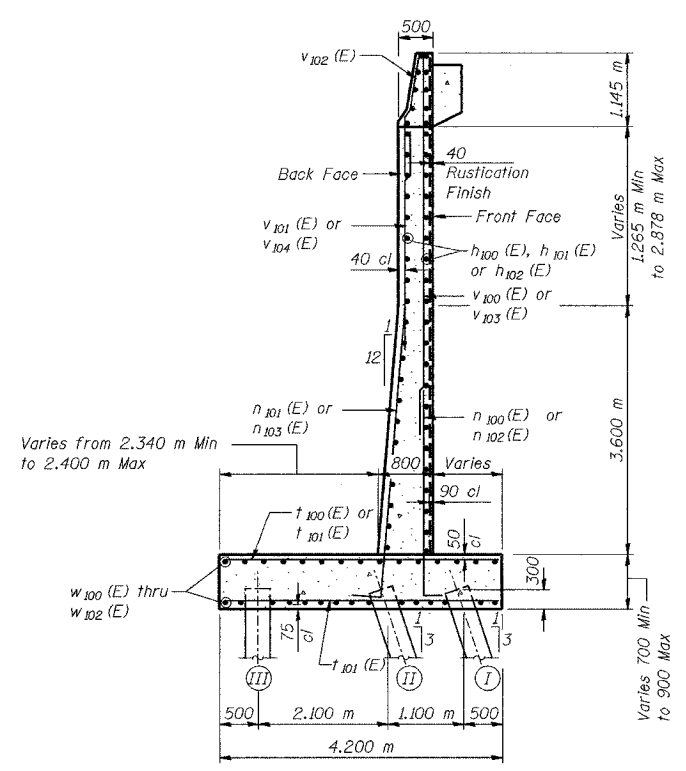
BF = Back Face
FF = Front Face
EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41
PLAN AND ELEVATION (11 OF 11)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919
DATE 09/05
AMERICAN CONSULTING ENGINEERS

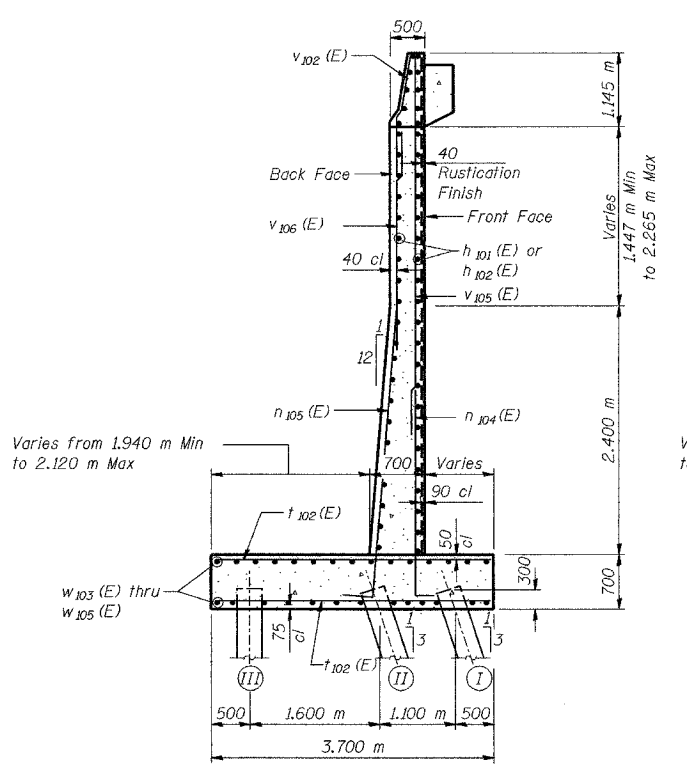
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69/14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1056
SHEET NO. S-14				20 SHEETS

CONTRACT NO. 62114 INDOT DES. NO. 0100987

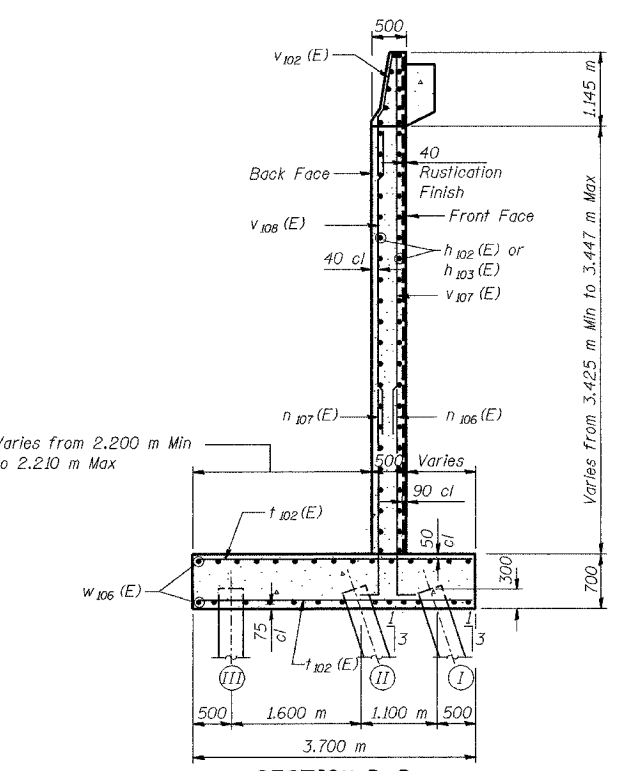
Future Overhead Sign Structure - Span 500, 1000 m
Elev 185.379



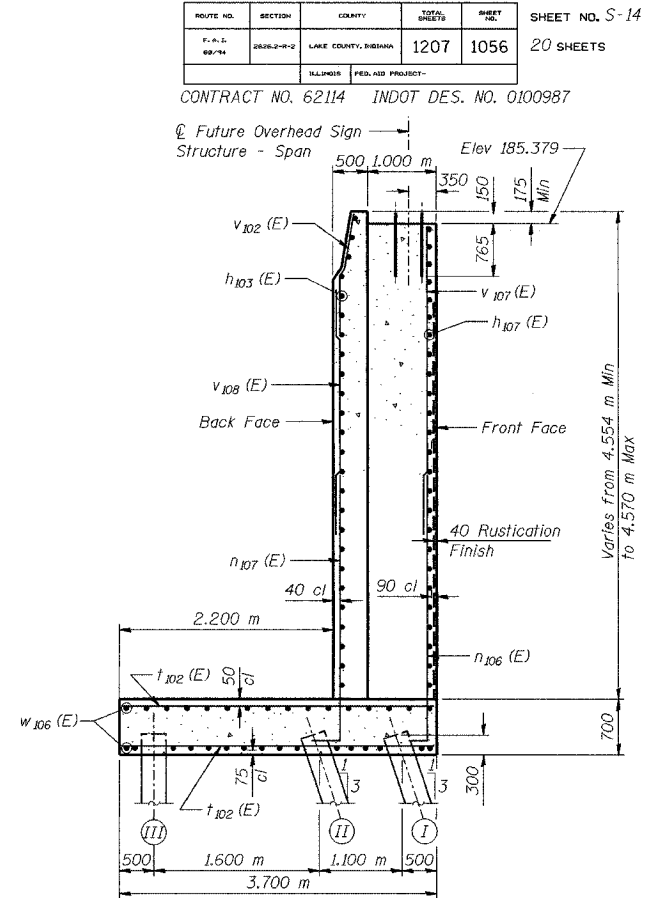
SECTION A-A



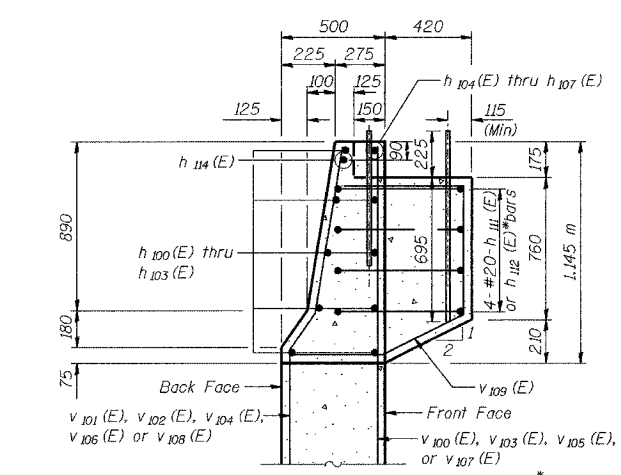
SECTION C-C



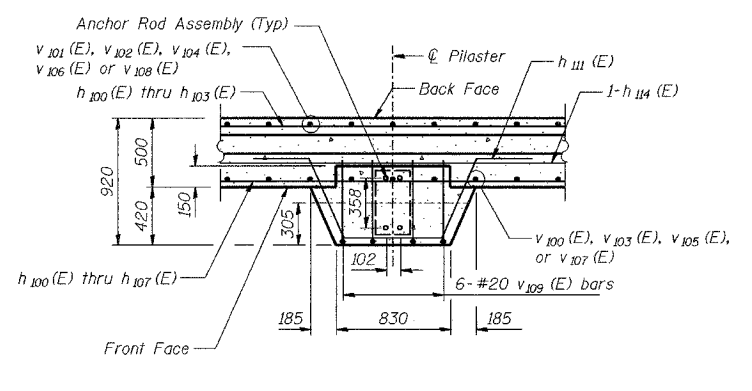
SECTION D-D



SECTION E-E

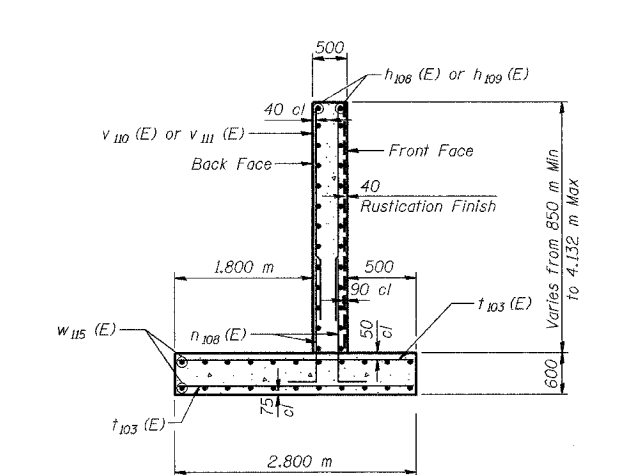


SECTION THRU PARAPET

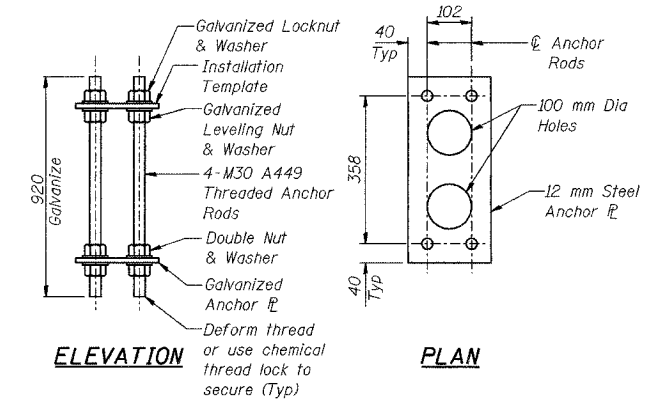


PILASTER SUPPORT - PLAN VIEW

(67 Locations)



SECTION B-B



ELEVATION

PLAN

NOISE ABATEMENT WALL ANCHOR ROD ASSEMBLY

(69 Req'd)

PILE DATA

Type - 356 ϕ Metal Shell
Capacity - 500 kN
Est. Length - 18.8 m from Sta 7+945.000 to Sta 8+000.000
21.1 m from Sta 8+000.000 to Sta 8+188.000
No. Req'd - 421
Test Piles - 5

NOTES:

See Sheet S-15 for Expansion Joint details and Bill of Material
See Sheet S-16 for Rustication details.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
See Typical Section on Sheet S-2 for Drainage Details and Surface Seal Limits.

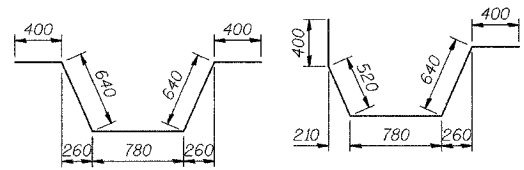
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

WALL SECTIONS AND DETAILS (1 OF 2)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

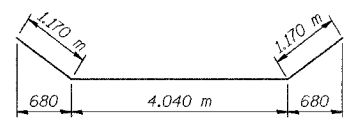
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

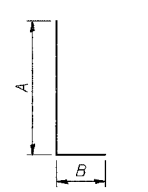


BAR h 111 (E)

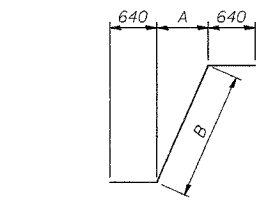
BAR h 112 (E)



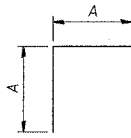
BAR h 107 (E)



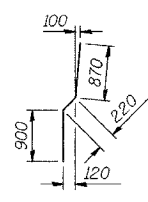
BARS n 100 (E) thru n 108 (E)



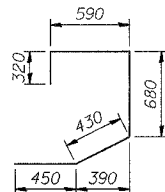
BARS w 107 (E), w 109 (E), w 111 (E) or w 113 (E)



BARS w 108 (E), w 110 (E), w 112 (E) or w 114 (E)



BARS v 102 (E)



BAR v 109 (E)

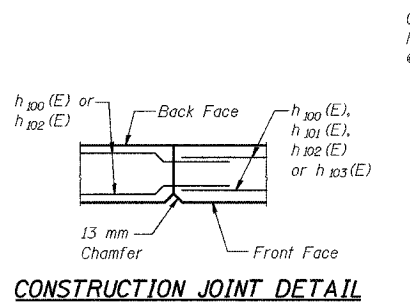
BAR DIMENSIONS

Bar	A	B
n 100 (E)	482 m	260
n 101 (E)	4.82 m	400
n 102 (E)	4.62 m	260
n 103 (E)	4.62 m	400
n 104 (E)	3.42 m	260
n 105 (E)	3.42 m	320
n 106 (E)	2.06 m	260
n 107 (E)	2.06 m	320
n 108 (E)	1.21 m	260
w 107 (E)	1.37 m	1.94 m
w 108 (E)	1.37 m	-
w 109 (E)	1.07 m	1.51 m
w 110 (E)	1.07 m	-
w 111 (E)	770	1.09 m
w 112 (E)	770	-
w 113 (E)	970	1.37 m
w 114 (E)	970	-

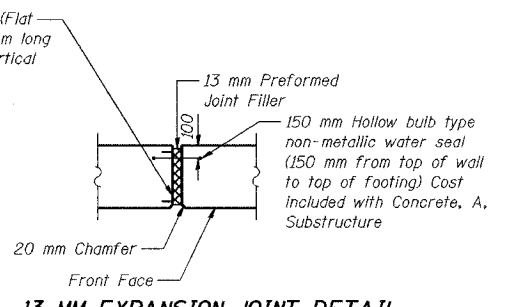
BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
n 100 (E)	106	#15	5.29	—
n 101 (E)	507	#15	7.10	—
n 102 (E)	979	#15	7.84	—
n 103 (E)	24	#15	5.40	—
n 104 (E)	54	#15	2.30	—
n 105 (E)	22	#15	1.10	—
n 106 (E)	2	#15	2.15	—
n 107 (E)	16	#15	6.38	—
n 108 (E)	30	#15	7.90	—
n 109 (E)	2	#15	6.93	—
n 110 (E)	8	#15	0.90	—
n 111 (E)	272	#20	2.86	—
n 112 (E)	4	#20	2.74	—
n 113 (E)	16	#15	0.60	—
n 114 (E)	67	#15	2.11	—
n 100 (E)	282	#15	5.08	J
n 101 (E)	552	#25	5.22	J
n 102 (E)	225	#15	4.88	J
n 103 (E)	441	#25	5.02	J
n 104 (E)	298	#15	3.68	J
n 105 (E)	582	#20	3.74	J
n 106 (E)	44	#15	2.32	J
n 107 (E)	77	#20	2.38	J
n 108 (E)	56	#15	1.47	J
v 100 (E)	371	#25	4.10	—
v 101 (E)	1007	#20	4.10	—
v 102 (E)	921	#20	3.70	—
v 103 (E)	72	#20	2.70	—
v 100 (E)	282	#15	4.22	—
v 101 (E)	282	#20	3.28	—
v 102 (E)	851	#20	1.99	I
v 103 (E)	225	#15	3.46	—
v 104 (E)	225	#20	2.52	—
v 105 (E)	300	#15	3.60	—
v 106 (E)	300	#20	2.66	—
v 107 (E)	48	#15	3.75	—
v 108 (E)	44	#20	2.75	—
v 109 (E)	402	#20	2.47	J
v 110 (E)	14	#15	4.03	—
v 111 (E)	21	#15	4.73	—
w 100 (E)	60	#15	8.52	—
w 101 (E)	210	#15	9.90	—
w 102 (E)	240	#15	8.84	—
w 103 (E)	130	#15	9.29	—
w 104 (E)	26	#15	4.85	—
w 105 (E)	130	#15	8.10	—
w 106 (E)	52	#15	5.59	—
w 107 (E)	15	#15	3.22	J
w 108 (E)	15	#15	2.74	J
w 109 (E)	15	#15	2.79	J
w 110 (E)	15	#15	2.14	J
w 111 (E)	26	#15	2.37	J
w 112 (E)	26	#15	1.54	J
w 113 (E)	13	#15	2.65	J
w 114 (E)	13	#15	1.94	J
w 115 (E)	20	#15	7.90	—
Test Pile, 356 mm	Each	5		
Excavation, Foundation, Unclassified	m ³	2,794.1		
Concrete, A, Substructure	m ³	1,609.4		
Reinforcing Bars, Epoxy Coated	kg	107,030		
Surface Seal	L Sum	0.03		
Pipe, Concrete, Steel Shell Encased, 6.35 mm, 356 mm	m	8,190.5		
Geocomposite Wall Drain	m ²	1,119		
Pipe, Underdrain, Perf, 1.63 mm, 150 mm	m	253.5		
Noise Abatement Wall Anchor Rod Assembly	Each	69		
Span Anchor Rod Assembly	Each	2		
B Borrow	m ³	840.2		
Structural Backfill	m ³	3,988.3		
Masonry Coating	L Sum	0.07		

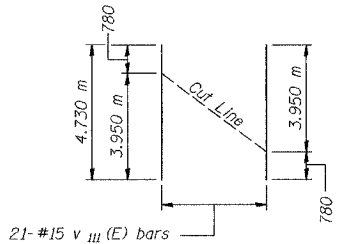
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68-14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1057
SHEET NO. S-15				
20 SHEETS				
CONTRACT NO. 62114 INDOT DES. NO. 0100987				



CONSTRUCTION JOINT DETAIL



13 MM EXPANSION JOINT DETAIL



FIELD CUTTING DIAGRAM

Order v 111 (E) bars full length. Cut as shown and use remainder of bars in opposite face.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

The estimated Surface Seal area is 440.2 m²
The estimated Masonry Coating area is 440.2 m²

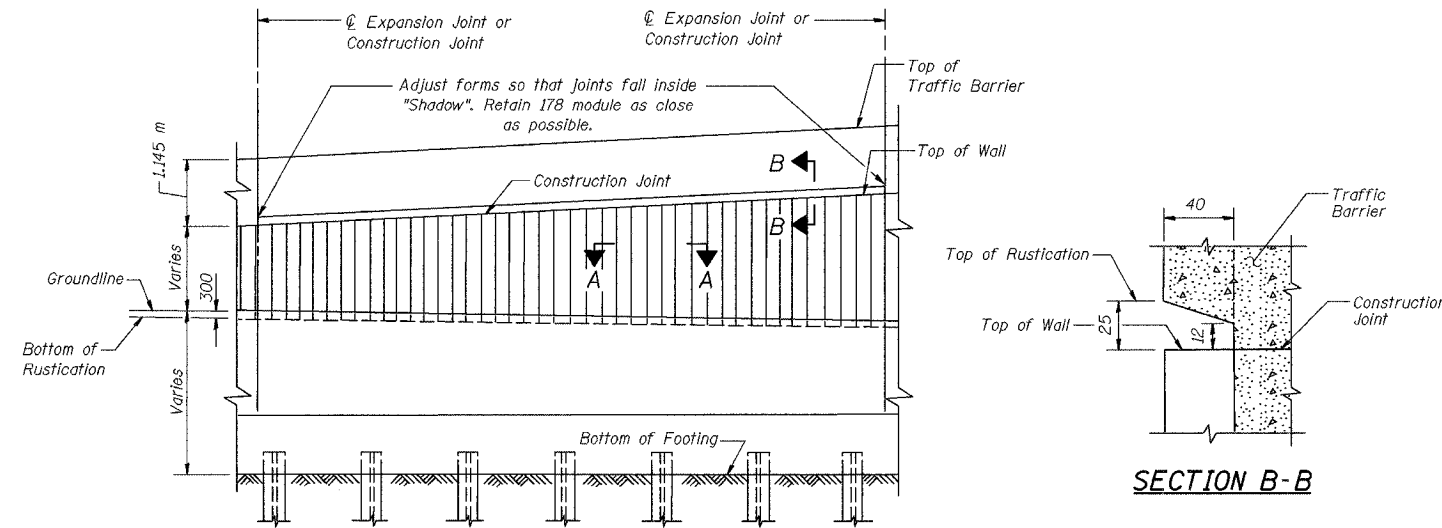
NOTES:
See Sheet S-14 for Wall and Parapet Sections and Anchor Rod Assembly Details
See Sheet S-16 for Rustication details.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
See Typical Section on Sheet S-2 for Drainage Details and Surface Seal Limits.

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

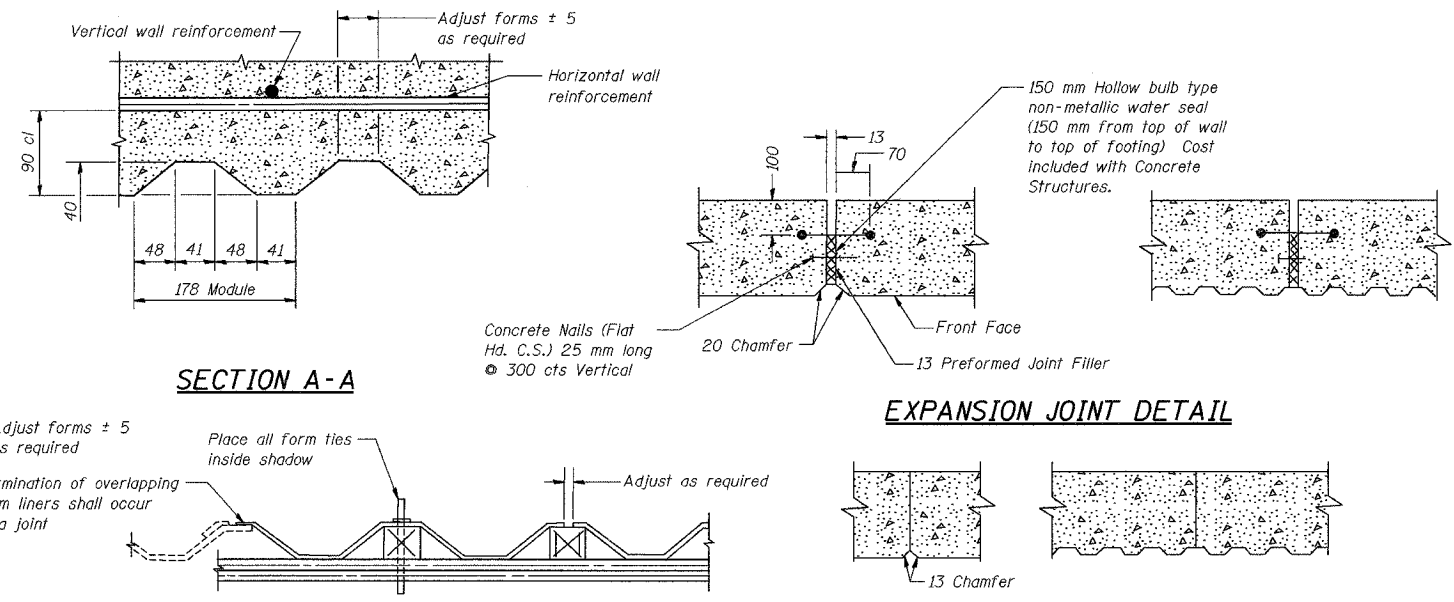
WALL SECTIONS AND DETAILS (2 OF 2)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

AMERICAN
CONSULTING ENGINEERS



FRONT FACE ELEVATION-TYPICAL ARCHITECTURAL FINISH



SECTION A-A

EXPANSION JOINT DETAIL

SUGGESTED FORMWORK DETAIL

CONSTRUCTION JOINT DETAIL

RUSTICATION LIMITS

STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION
7+945.232	184.409	181.300
7+950.654	184.425	181.300
7+957.757	184.447	181.300
7+957.757	184.447	180.900
7+964.860	184.469	180.900
7+971.964	184.497	180.900
7+979.067	184.531	180.900
7+986.170	184.571	180.900
7+993.274	184.619	180.900
8+000.377	184.673	180.900
8+000.377	184.673	180.700
8+007.480	184.734	180.700
8+014.584	184.801	180.700
8+021.687	184.875	180.700
8+028.790	184.956	180.700
8+035.894	185.018	180.700
8+042.997	185.065	180.700
8+042.997	185.065	180.500
8+050.100	185.118	180.500
8+057.204	185.180	180.500
8+064.391	185.257	180.500
8+071.591	185.343	180.500
8+078.791	185.444	180.500
8+085.991	185.552	180.500
8+093.191	185.666	180.500
8+100.391	185.787	180.500
8+107.591	185.916	180.500
8+107.591	185.916	181.000
8+114.791	186.047	181.000
8+121.991	186.179	181.000
8+129.191	186.310	181.000
8+136.391	186.442	181.000
8+143.591	186.573	181.000
8+150.791	186.713	181.000
8+157.991	186.865	181.000
8+165.191	187.017	181.000
8+172.391	187.178	181.000
8+172.391	187.178	181.600
8+179.591	187.342	181.600
8+184.242	187.451	181.600
8+188.892	187.554	181.600
8+188.892	186.132	182.300
8+190.692	186.132	182.300
8+196.892	182.850	182.300

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

BILL OF MATERIAL

Item	Unit	Total
Rustication Finish	m ²	1,173

Note: All dimensions are in millimeters (mm) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

RUSTICATION FINISH DETAILS
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

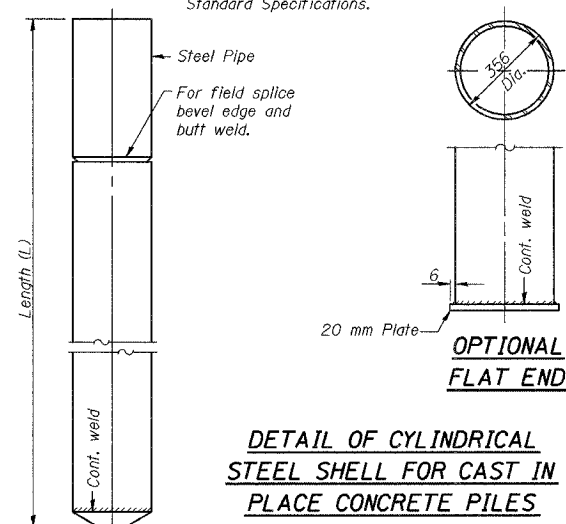
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL	SHEET NO. 5-17
F.A.T. 80/74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1059	20 SHEETS
TOLLBOOTH		FED. AID PROJECT			

CONTRACT NO. 62114 INDOT DES. NO. 0100987

Notes: Driving and bearing ends of pipe shall be cut square. The thickness of the shell shall be 6.35 mm with a tolerance of 5%. The shell shall be according to Article 1006.05(a) of the Standard Specifications.



DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

X-PB (M) 4-30-97 (All dimensions are in millimeters (mm) except as noted.)

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

CONCRETE PILE DETAILS
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 7+945.232 TO STATION 8+196.892
 STRUCTURE NO. 016-W919

DATE 09/05

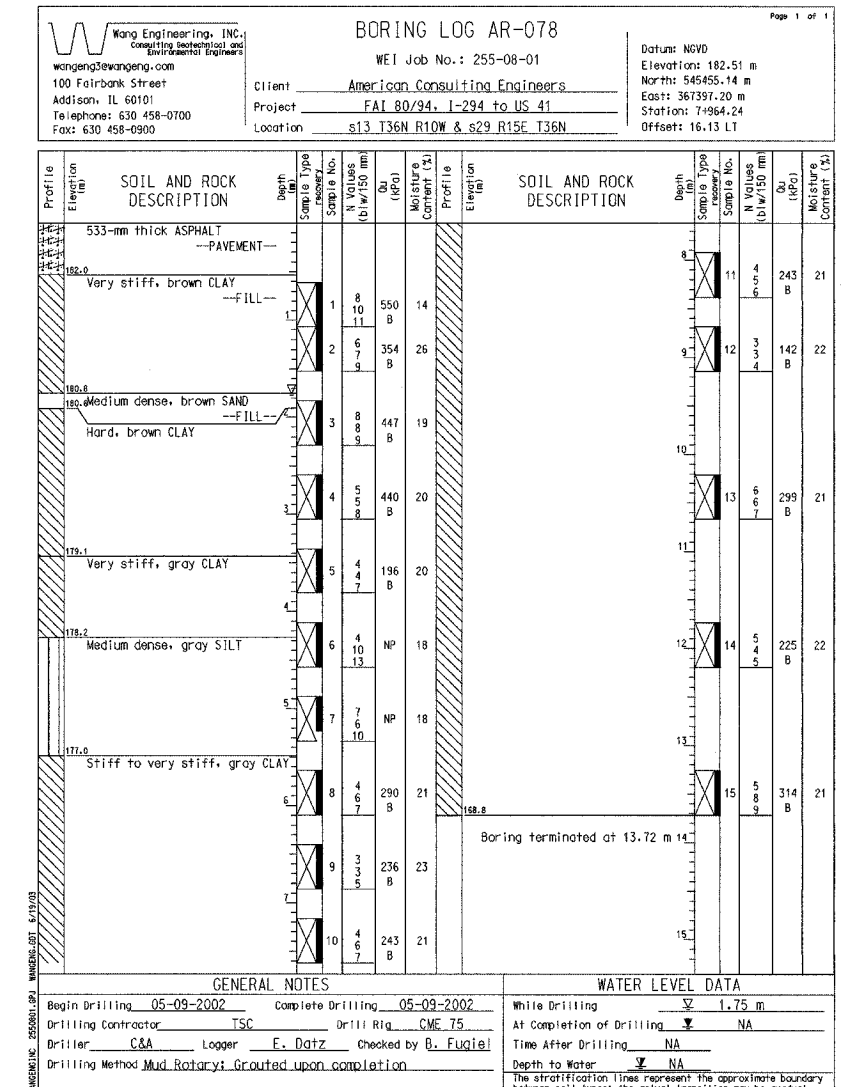
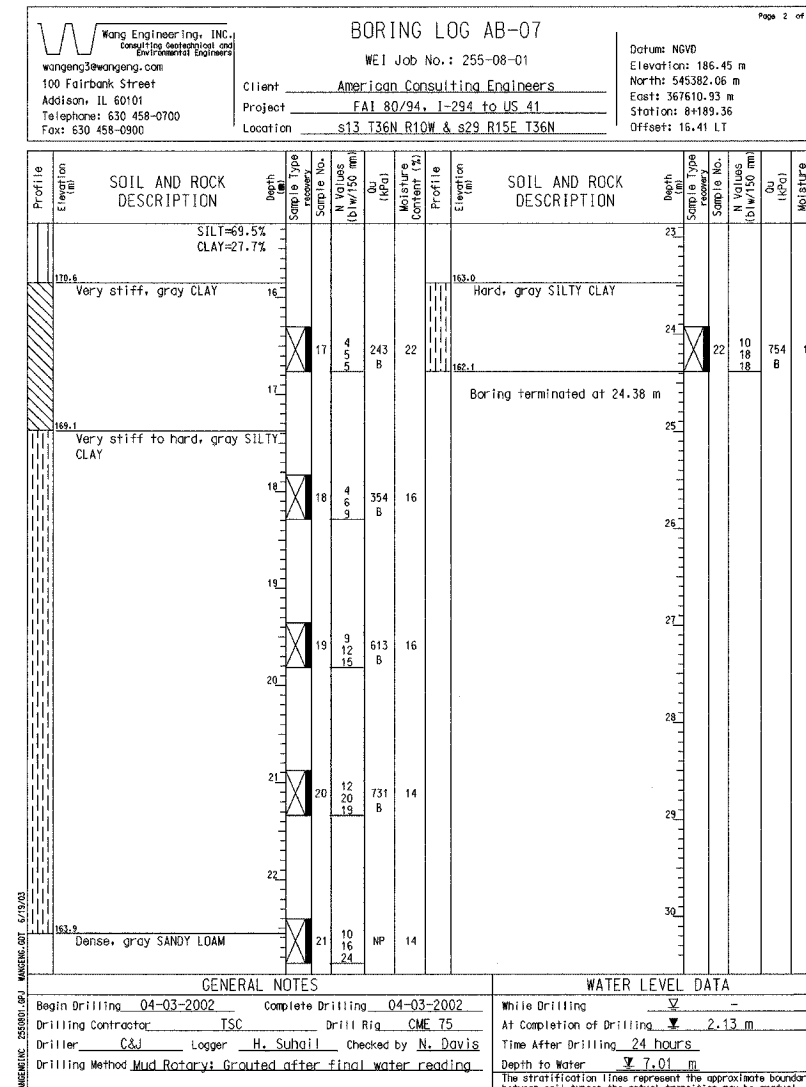
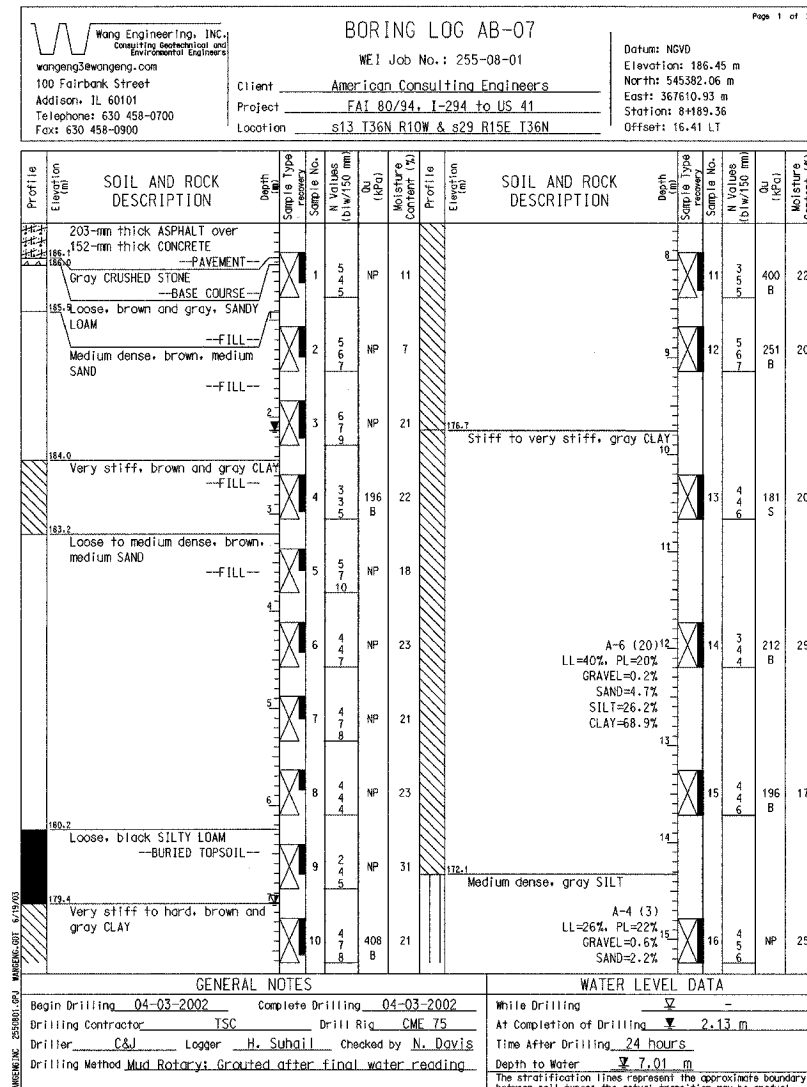
AMERICAN
 CONSULTING ENGINEERS

DATE PLOTTED: 09/27/05 08:48:31 AM

BORING NO. AB-07 (1 OF 2)

BORING NO. AB-07 (2 OF 2)

BORING NO. AR-078 (1 OF 1)



DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

BORING LOGS (1 OF 3)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

AMERICAN
CONSULTING ENGINEERS

BORING NO. AR-079 (1 OF 2)

BORING NO. AR-079 (2 OF 2)

BORING NO. AR-080 (1 OF 1)

BORING LOG AR-079 Page 1 of 2

Wang Engineering, INC.
Client: American Consulting Engineers
Project: I-80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 182.74 m
North: 545441.53 m
East: 367440.13 m
Station: 8+008.91
Offset: 15.99 LT

BORING LOG AR-079 Page 2 of 2

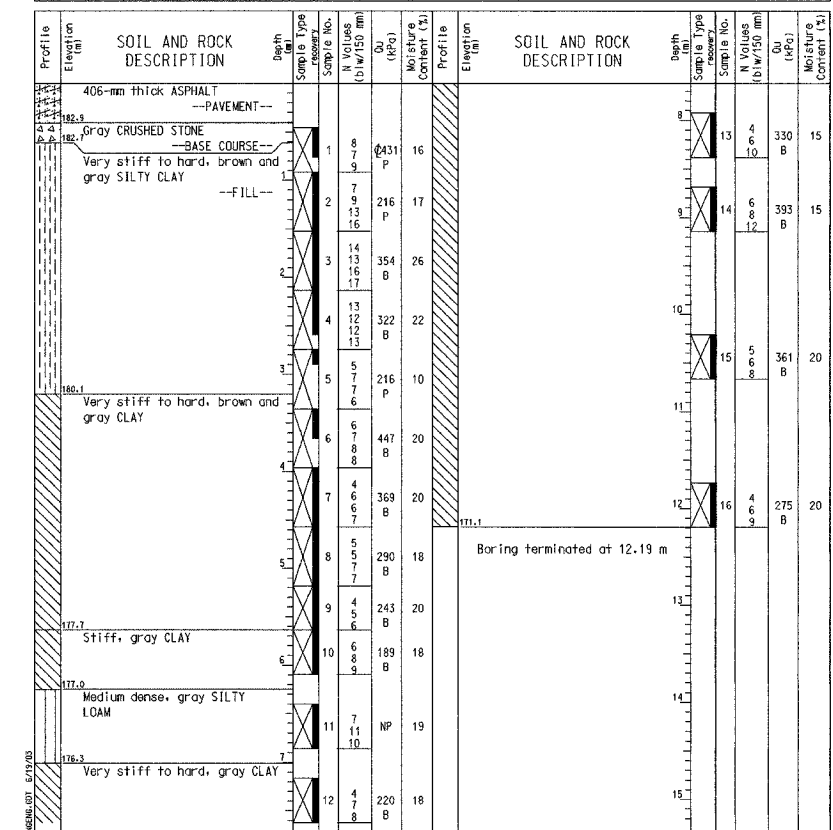
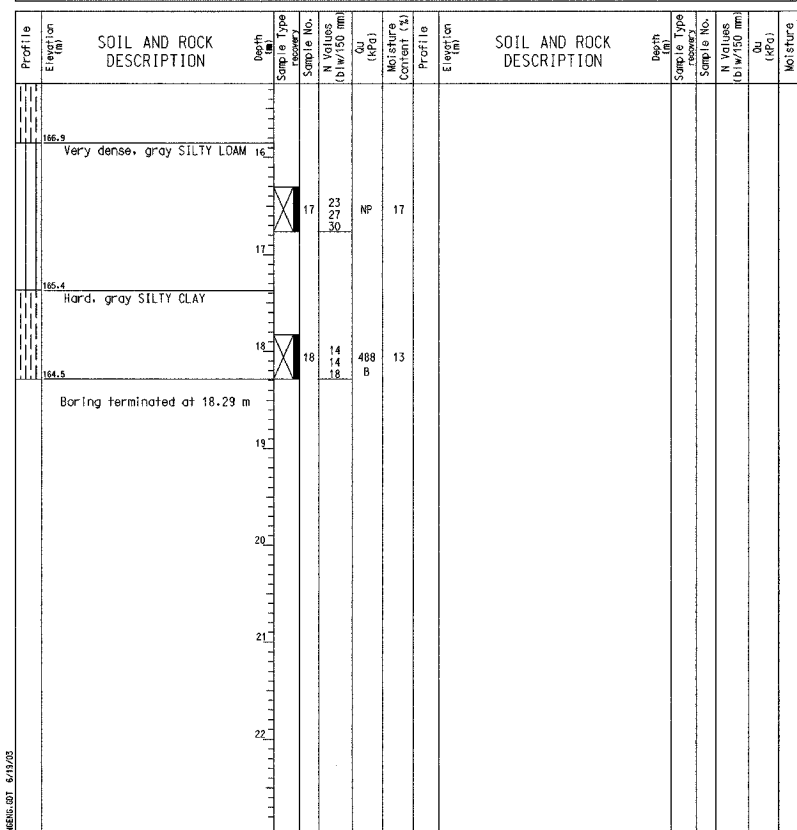
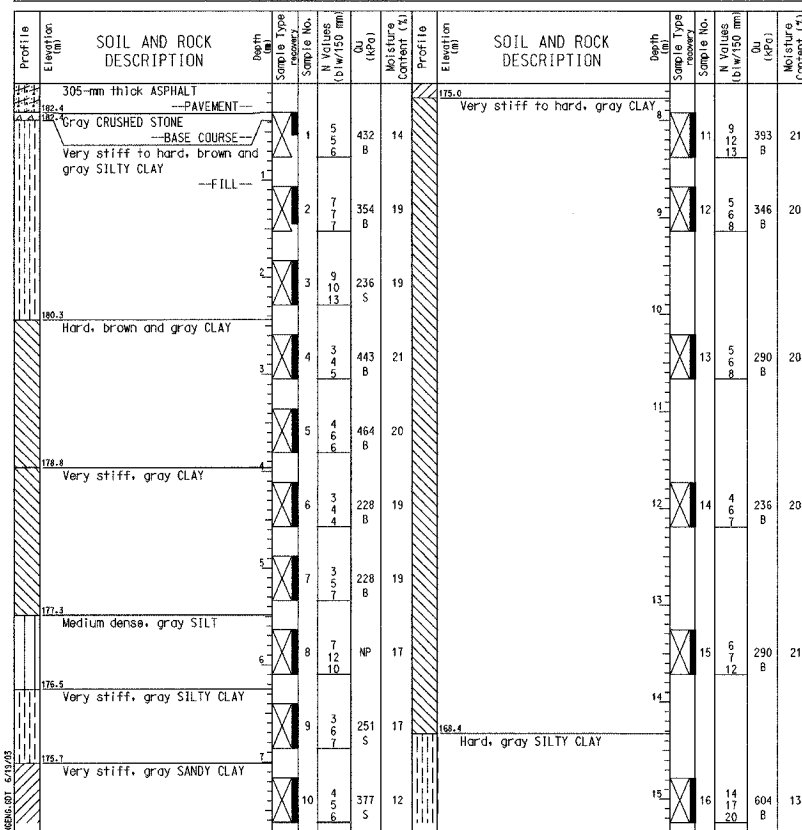
Wang Engineering, INC.
Client: American Consulting Engineers
Project: I-80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 182.74 m
North: 545441.53 m
East: 367440.13 m
Station: 8+008.91
Offset: 15.99 LT

BORING LOG AR-080 Page 1 of 1

Wang Engineering, INC.
Client: American Consulting Engineers
Project: I-80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 183.30 m
North: 545426.58 m
East: 367483.38 m
Station: 8+054.29
Offset: 15.73 LT



GENERAL NOTES

Begin Drilling 05-01-2002 Complete Drilling 05-01-2002

Drilling Contractor TSC Drill Rig CME 75

Driller C&A Logger H. Suhail Checked by B. Fugiel

Drilling Method 3.25-in. HSA; Grouted upon completion

WATER LEVEL DATA

While Drilling DRY

At Completion of Drilling DRY

Time After Drilling NA

Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 05-01-2002 Complete Drilling 05-01-2002

Drilling Contractor TSC Drill Rig CME 75

Driller C&A Logger H. Suhail Checked by B. Fugiel

Drilling Method 3.25-in. HSA; Grouted upon completion

WATER LEVEL DATA

While Drilling DRY

At Completion of Drilling DRY

Time After Drilling NA

Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 05-01-2002 Complete Drilling 05-01-2002

Drilling Contractor TSC Drill Rig CME 75

Driller C&A Logger H. Suhail Checked by B. Fugiel

Drilling Method 3.25-in. HSA; Grouted upon completion

WATER LEVEL DATA

While Drilling DRY

At Completion of Drilling DRY

Time After Drilling NA

Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	KFA
CHECKED	BPS
DRAWN	CAH/JB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

BORING LOGS (2 OF 3)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

AMERICAN
CONSULTING ENGINEERS

BORING NO. AR-081 (1 OF 1)

BORING NO. AR-082 (1 OF 1)

BORING LOG AR-081 Page 1 of 1

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 184.11 m
North: 545411.89 m
East: 367525.27 m
Station: 8+444.4
Offset: 15.89 LT

BORING LOG AR-082 Page 1 of 1

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 185.22 m
North: 545396.67 m
East: 367568.40 m
Station: 8+444.4
Offset: 15.97 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
184.4	457-mm thick ASPHALT --PAVEMENT--										
183.6	Gray CRUSHED STONE --BASE COURSE--		1	7	604						
181.4	Very stiff to hard, brown and gray CLAY, trace gravel --FILL--		2	6	480						
181.4	Hard, dark brown and black CLAY --FILL--		3	7	283						
181.1	Boring terminated at 5.33 m		4	34	383						

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
184.4	457-mm thick ASPHALT --PAVEMENT--										
184.8	Gray CRUSHED STONE --BASE COURSE--		1	8	12						
184.4	Medium dense, brown SAND --FILL--		2	6	192						
181.4	Stiff to very stiff, brown and gray SILTY CLAY --FILL--		3	8	220						
181.4	Very stiff to hard, brown and gray CLAY --FILL--		4	3	157						
181.6	Very stiff to hard, brown and gray CLAY --FILL--		5	2	240						
179.9	Boring terminated at 5.33 m		6	3	417						
			7	2	275						

GENERAL NOTES

Begin Drilling 04-30-2002 Complete Drilling 04-30-2002
Drilling Contractor TSC Drill Rig CME 75
Driller CAA Logger H. Suhail Checked by B. Fugiel
Drilling Method Mud Rotary; Grouted upon completion

WATER LEVEL DATA

While Drilling DRY
At Completion of Drilling DRY
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 04-30-2002 Complete Drilling 04-30-2002
Drilling Contractor TSC Drill Rig CME 75
Driller CAA Logger H. Suhail Checked by B. Fugiel
Drilling Method Mud Rotary; Grouted upon completion

WATER LEVEL DATA

While Drilling DRY
At Completion of Drilling DRY
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	KFA
CHECKED	BPS
DRAWN	CAW/JB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

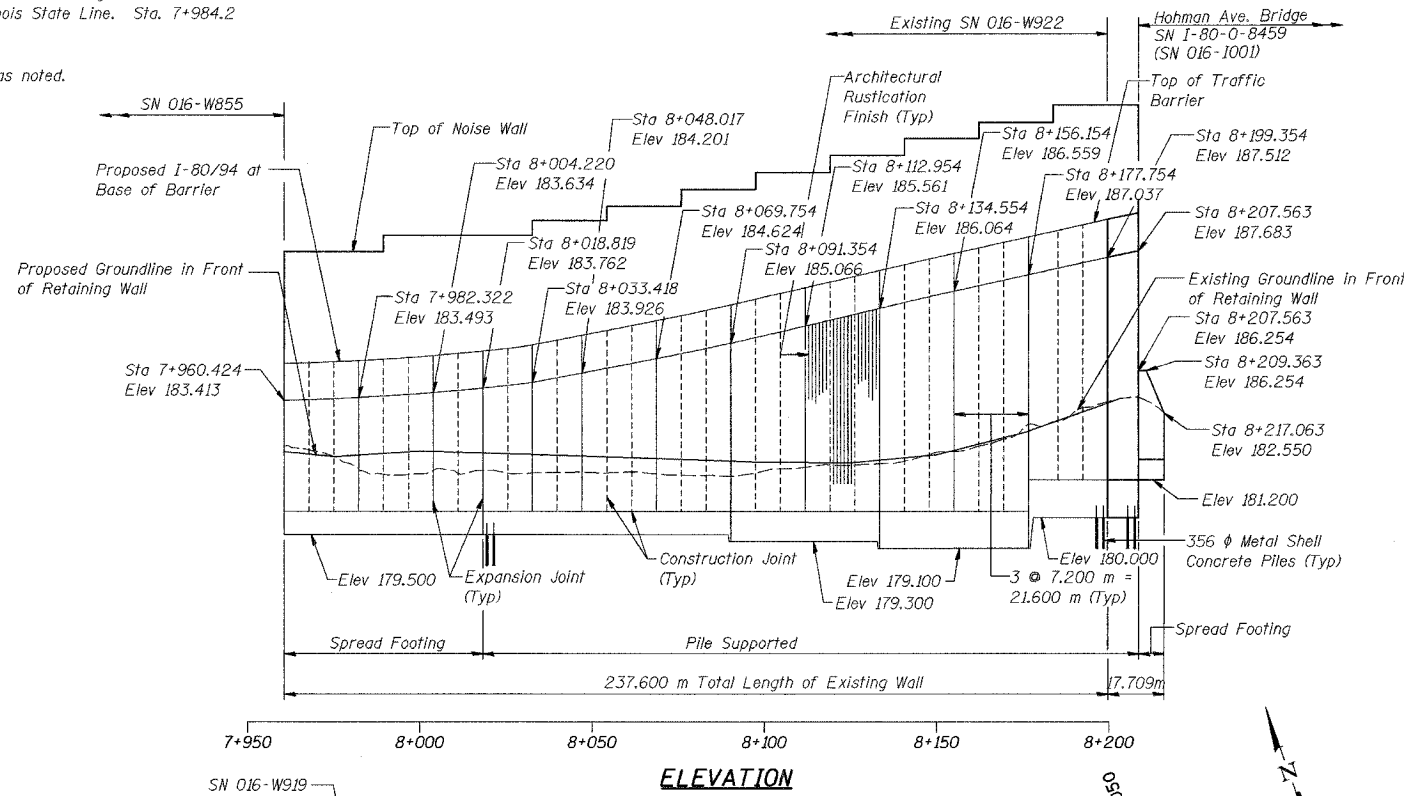
BORING LOGS (3 OF 3)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 7+945.232 TO STATION 8+196.892
STRUCTURE NO. 016-W919

DATE 09/05

AMERICAN
CONSULTING ENGINEERS

Benchmark: Chiseled box on Northeast corner of concrete Retaining Wall foundation on South side of I-80 +/- 50M East of Illinois State Line. Sta. 7+984.2
 Offset 22.2 Rt. Elevation = 182.386
 Existing Structure: None
 All dimensions in millimeters (mm) except as noted.

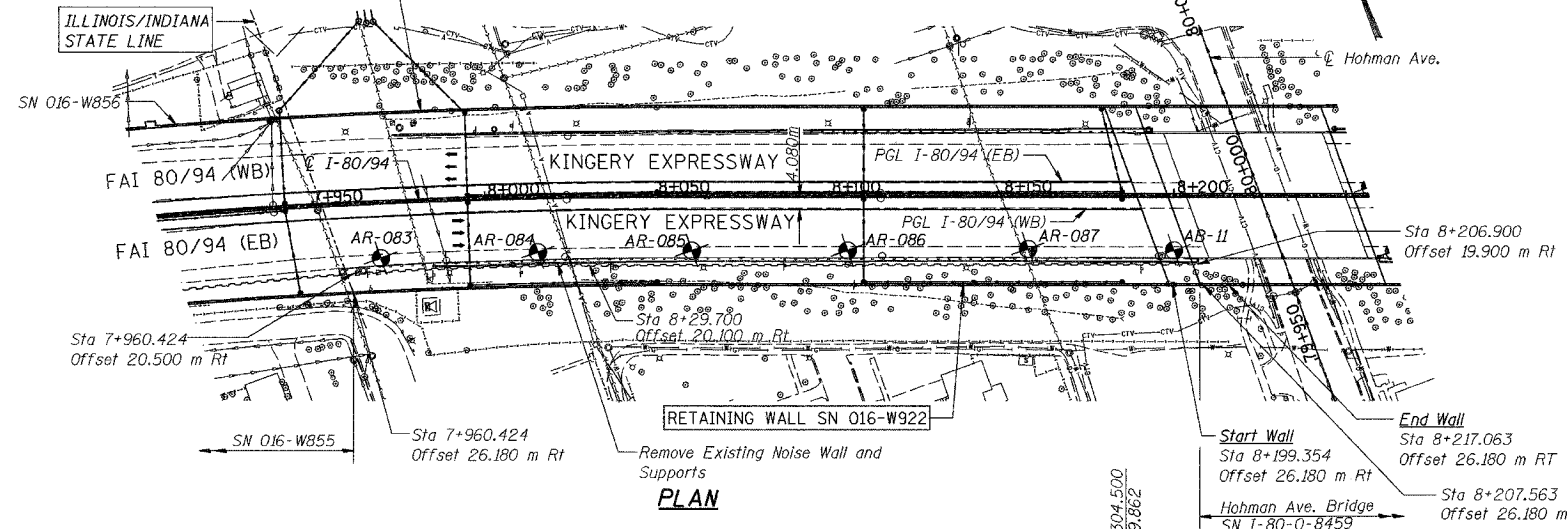
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88/94	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1063
CONTRACT NO. 62114		INDOT DES. NO. 0100987		



LOADING
 Wind Load on Future Noise Wall = 1.7 kPa

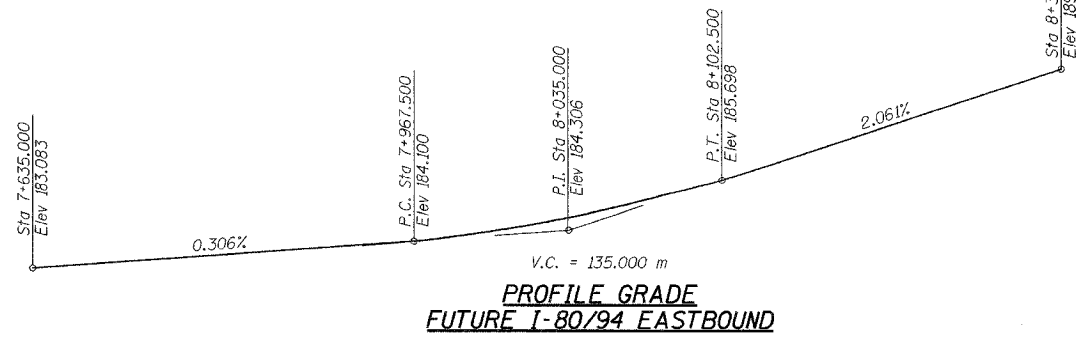
DESIGN STRESSES
 FIELD UNITS
 $f'_c = 24 \text{ MPa}$
 $f_y = 400 \text{ MPa (Reinf.)}$
 Maximum Applied Soil Bearing Pressure = 170 kPa (Phase 2)
 95 kPa (Phase 3)

DESIGN SPECIFICATIONS
 AASHTO 2002 Standard Specifications for Highway Bridges
 AASHTO 1989 Guide Specifications for Structural Design of Sound Barriers and 1992 Interims



- LEGEND**
- ⊕ - Soil Boring Location
 - - - Existing Roadway/Structure
 - Proposed Roadway/Structure
 - - Tree
 - ⊙ - Shrubs/Brush
 - Proposed Storm Sewer
 - - - Existing Sanitary Sewer
 - - - Existing Storm Sewer
 - CTV - Existing Cable TV
 - - - Existing Gas Line
 - - - Existing Water Main
 - - - Electrical Aerial Cable
 - - - Temporary Sheet Piling

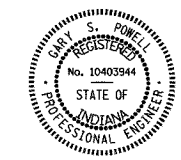
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP



CURVE DATA I-80/94

$\Delta = 20^\circ - 11' - 25''$
 $R = 1.923.600 \text{ m}$
 $T = 342.476 \text{ m}$
 $L = 677.849 \text{ m}$
 $E = 30.249 \text{ m}$
 $P.C. \text{ Sta} = 7+380.276$
 $P.T. \text{ Sta} = 7+722.751$
 $P.T. \text{ Sta} = 8+058.125$
 $S.E. = 2.9\%$

Note: Retaining Wall is built in straight line segments between Expansion and Construction Joints. Back Face of the Retaining Wall is aligned with the outside edge of shoulder at joints.

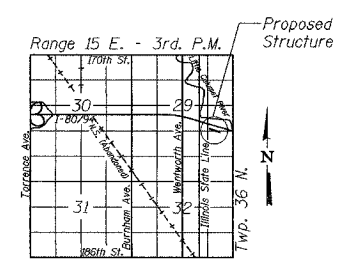


Gary S. Powell
 GARY S. POWELL, S.E.
 IL. LIC. NO. 081-00471
 EXP 11-30-2006
 DATE 09-12-2005

Gary S. Powell
 GARY S. POWELL, P. E.
 IN. LIC. NO. 10403944
 EXP 07-31-2006
 DATE 09-12-2005

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Adams
 ENGINEER OF BRIDGES AND STRUCTURES

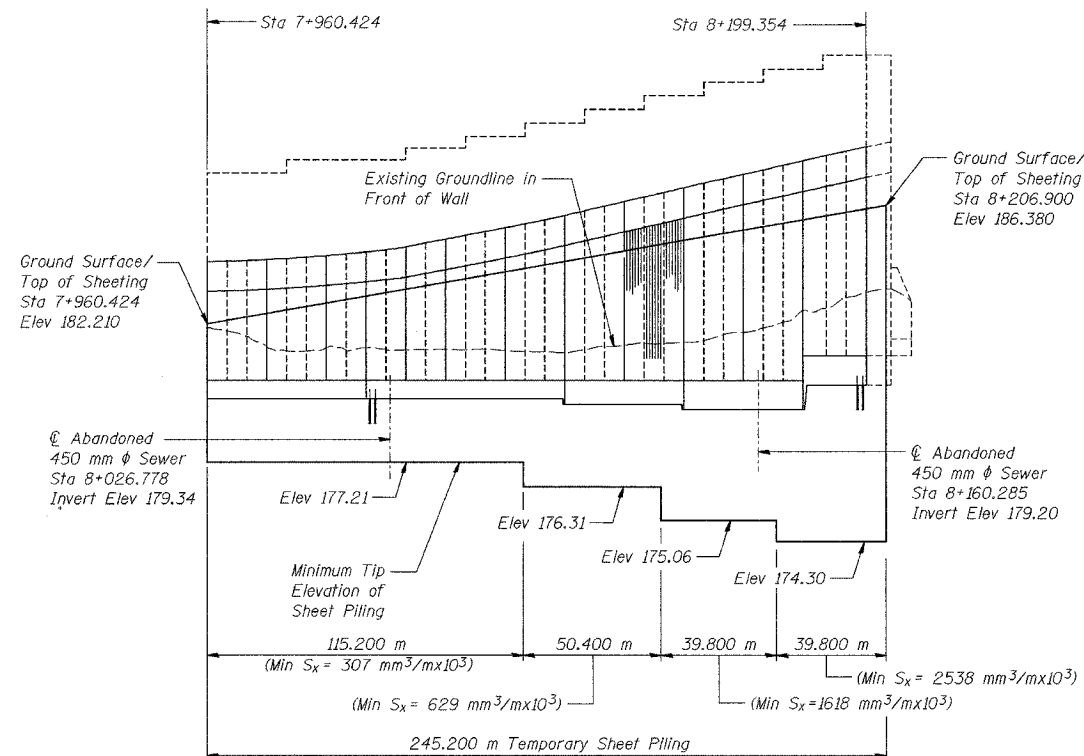


ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

**GENERAL PLAN
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 8+199.354 TO STATION 8+215.315
 STRUCTURE NO. 016-W922**

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS



*** TEMPORARY SHEET PILING - ELEVATION**

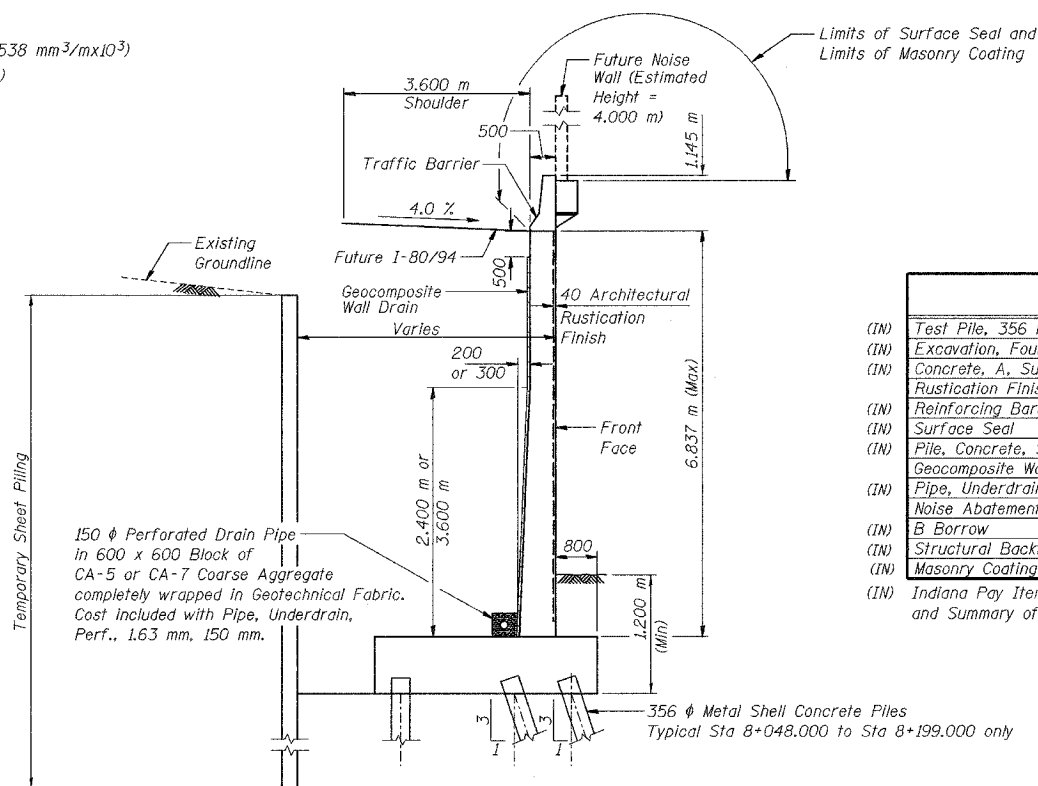
Estimated Area = 1,985 m²
 The cost of Temporary Sheet Piling is included with Excavation, Foundation, Unclassified.

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of AASHTO M 31M or M322M Grade 400.
2. The Contractor shall drive 4 test piles in permanent locations spaced approximately 60 m apart, as directed by the Engineer before ordering the remainder of the piles.
3. All dimensions are in millimeters (mm) except as noted.
4. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
5. All construction joints shall be bonded.
6. Construction for Retaining Wall SNO16-W922 will be let in separate contracts (Phase 2 and Phase 3), with each contract responsible for construction to the limits shown.
7. Masonry Coating should be applied from Sta 7+960.424 to Sta 8+207.563

INDEX OF SHEETS

SHEET NO.	TITLE
S-1	General Plan
S-2	Index of Sheets, General Notes and Total Bill of Material
* S-3	Plan and Elevation (1 of 11)
* S-4	Plan and Elevation (2 of 11)
* S-5	Plan and Elevation (3 of 11)
* S-6	Plan and Elevation (4 of 11)
* S-7	Plan and Elevation (5 of 11)
* S-8	Plan and Elevation (6 of 11)
* S-9	Plan and Elevation (7 of 11)
* S-10	Plan and Elevation (8 of 11)
* S-11	Plan and Elevation (9 of 11)
* S-12	Plan and Elevation (10 of 11)
S-13	Plan and Elevation (11 of 11)
S-14	Wall Sections and Details
S-15	Rustication Finish Details
S-16	Concrete Pile Details
S-17	Boring Logs (1 of 3)
S-18	Boring Logs (2 of 3)
S-19	Boring Logs (3 of 3)



TYPICAL SECTION

TOTAL BILL OF MATERIAL

ITEM	UNIT	PHASE 2 QUANTITY	PHASE 3 QUANTITY
(IN) Test Pile, 356 mm	Each	4	-
(IN) Excavation, Foundation, Unclassified	m ³	4,173	491.4
(IN) Concrete, A, Substructure	m ³	1,550.7	99.8
(IN) Rustication Finish	m ²	1,061	76
(IN) Reinforcing Bars, Epoxy Coated	kg	101,320	6,190
(IN) Surface Seal	L Sum	0.11	0.01
(IN) Pile, Concrete, Steel Shell Encased, 6.35 mm, 356 mm	m	4,014.0	244.0
(IN) Geocomposite Wall Drain	m ²	1,013	73
(IN) Pipe, Underdrain, Perf., 1.63 mm, 150 mm	m	246.0	17.7
(IN) Noise Abatement Wall Anchor Rod Assembly	Each	66	3
(IN) B Borrow	m	-	76.7
(IN) Structural Backfill	m ³	-	479.3
(IN) Masonry Coating	L Sum	-	0.06

(IN) Indiana Pay Items, denoted by "(Indiana)" in Special Provisions and Summary of Quantities.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
**INDEX OF SHEETS, GENERAL NOTES
 AND TOTAL BILL OF MATERIAL**
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 8+199.354 TO STATION 8+215.315
 STRUCTURE NO. 016-W922

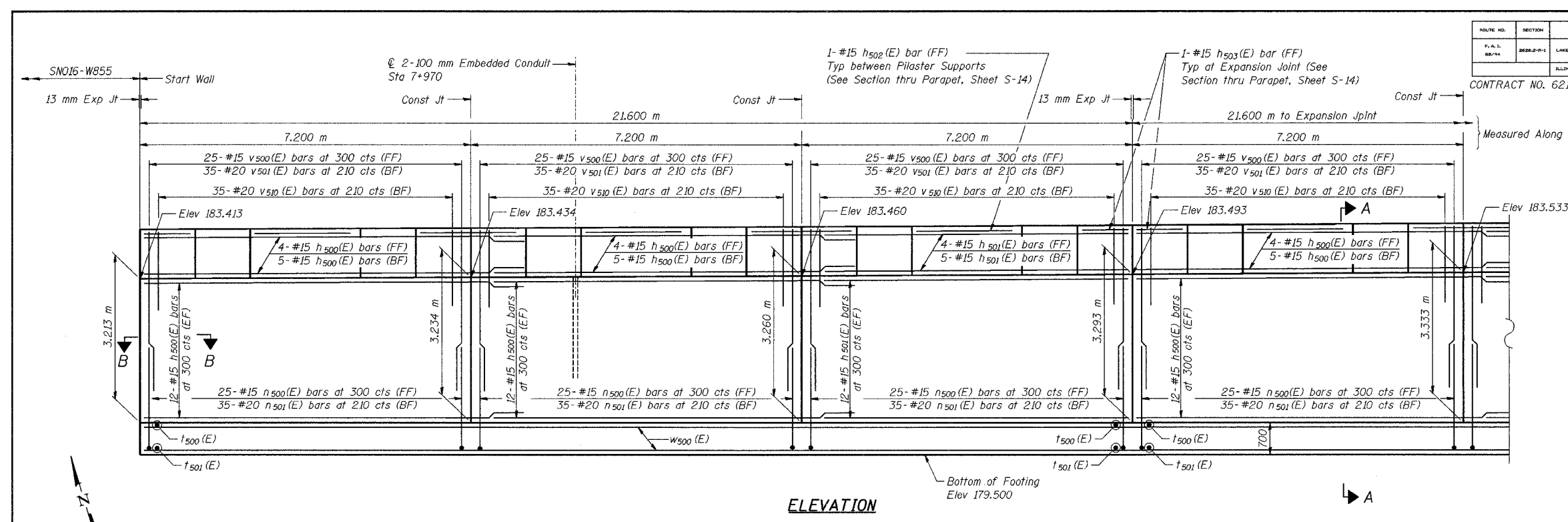
DATE 09/05



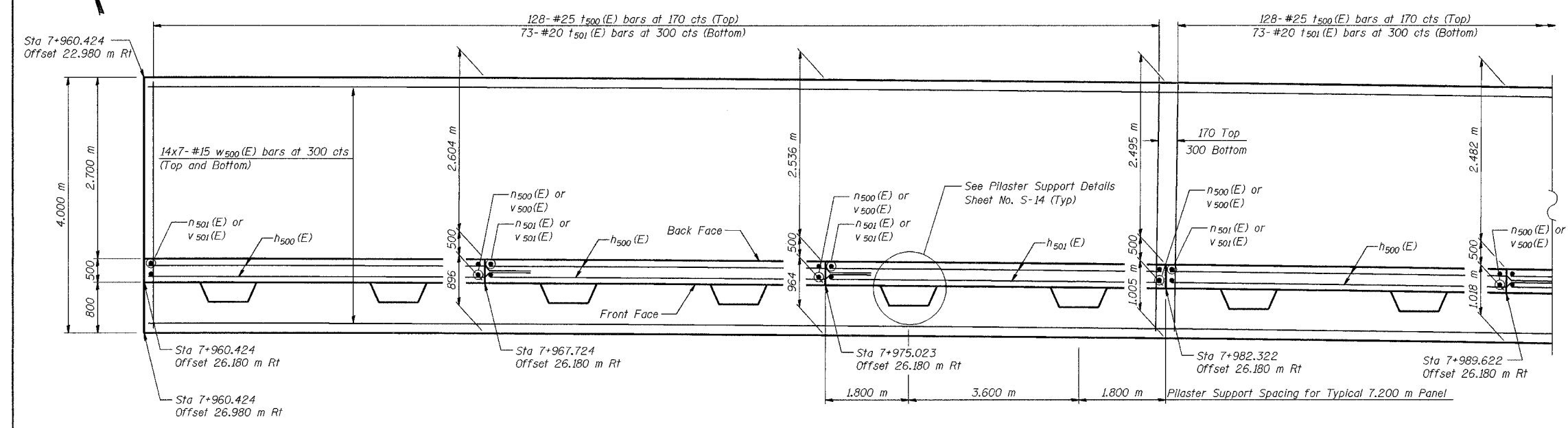
* FOR INFORMATION ONLY

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F.A.L. 88/74	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1065
ILLINOIS		INDOT DES. NO. 0100987		

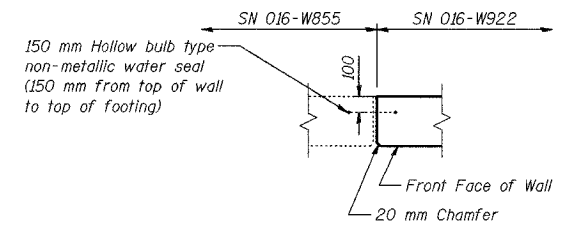
SHEET NO. S-3
19 SHEETS



ELEVATION



FOOTING PLAN



SECTION B-B

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
#15 bars = 640
#20 bars = 790

LEGEND
BF = Back Face
FF = Front Face
EF = Each Face

NOTES:
See Sheet S-14 or Section A-A, Expansion Joint Detail, and Bill of Material.
See Sheet S-15 for Rustication details.
Stations are referenced to \pm 1-80/94.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
Bars indicated thus 20x3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
See Electrical Drawings for Conduit Details

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PLAN AND ELEVATION (1 OF 11)
SECTION 2626.2-R-1
LAKE COUNTY, INDIANA
STATION 7+960.424 TO STATION 8+199.354
STRUCTURE NO. 016-W922

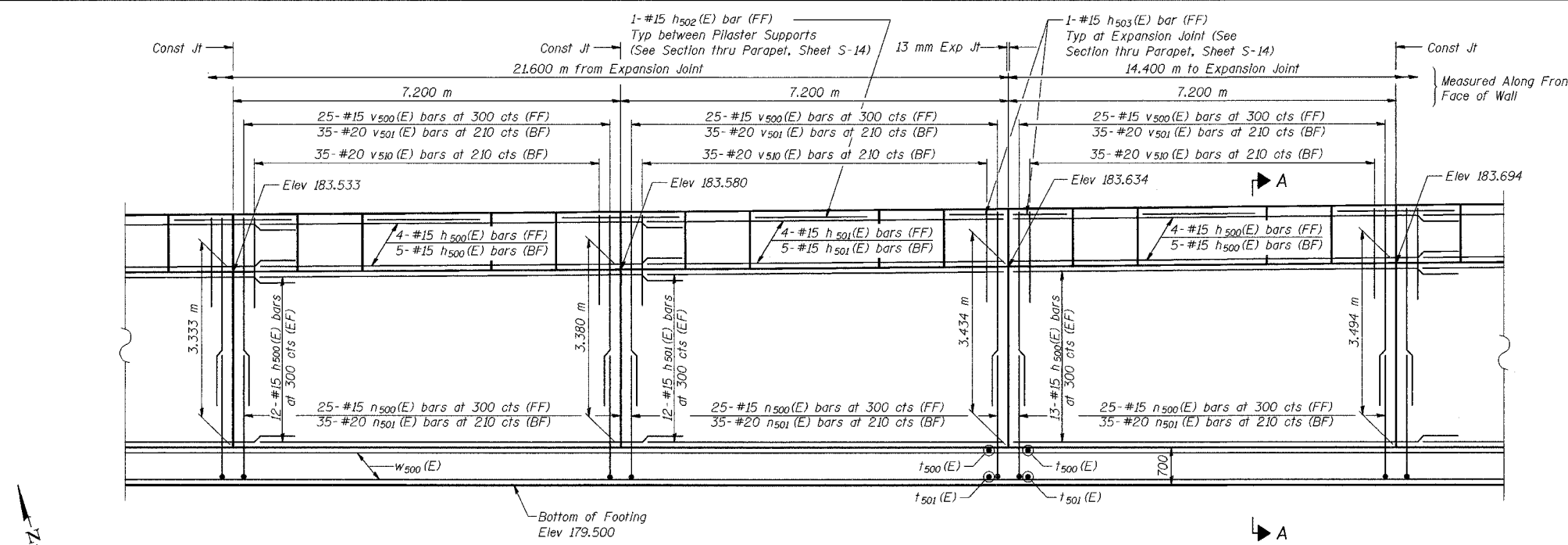
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

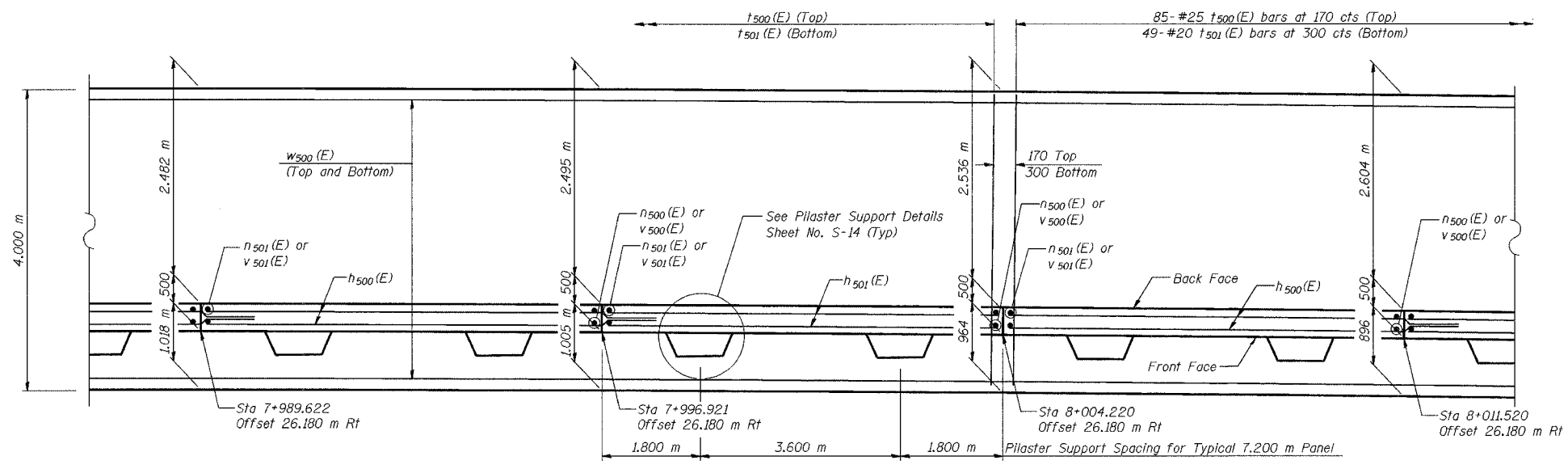
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. S-4
F.A.L.	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1066	19 SHEETS
DATE	DESIGNED BY	DRAWN BY	CHECKED BY	DATE	
08/14					

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



FOOTING PLAN

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

NOTES:
 See Sheet S-14 for Section A-A, Expansion Joint Detail, and Bill of Material.
 See Sheet S-15 for Rustication details.
 Stations are referenced to \mathcal{L} I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (2 OF 11)
SECTION 2626.2-R-1
LAKE COUNTY, INDIANA
STATION 7+960.424 TO STATION 8+199.354
STRUCTURE NO. 016-W922

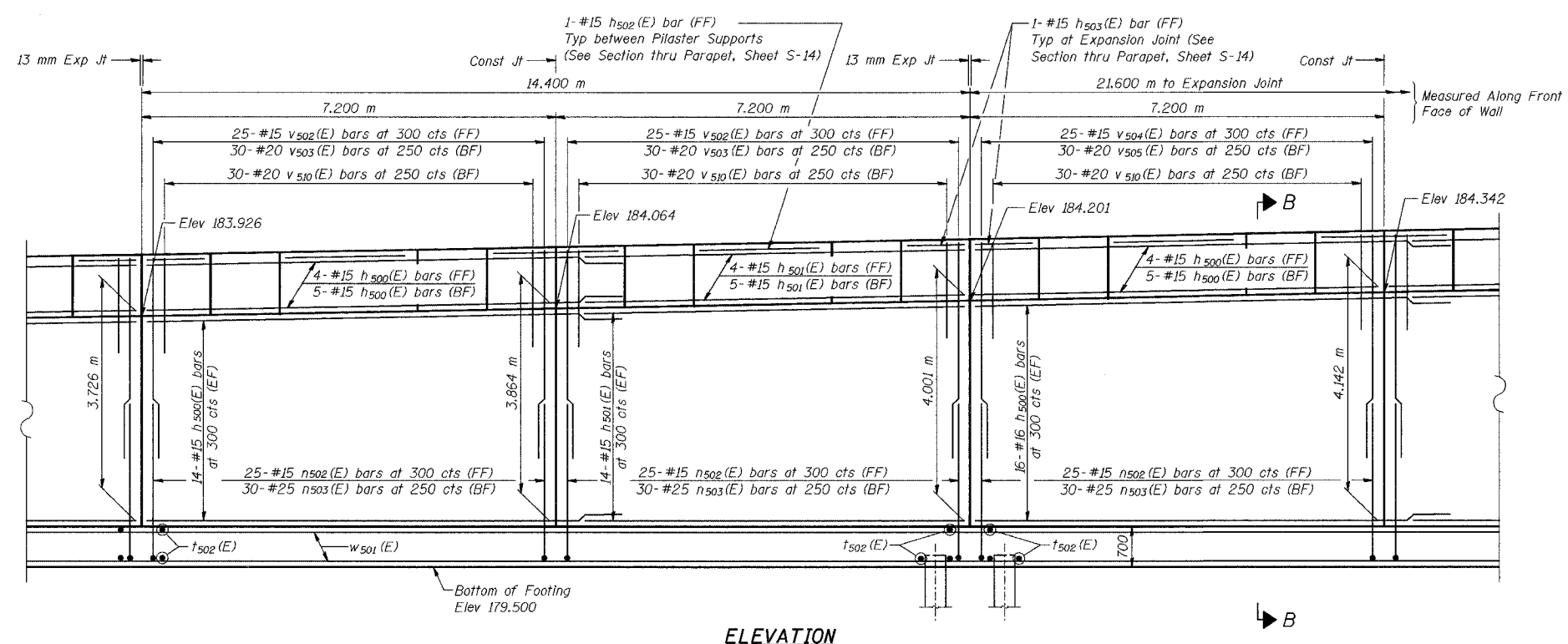
DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

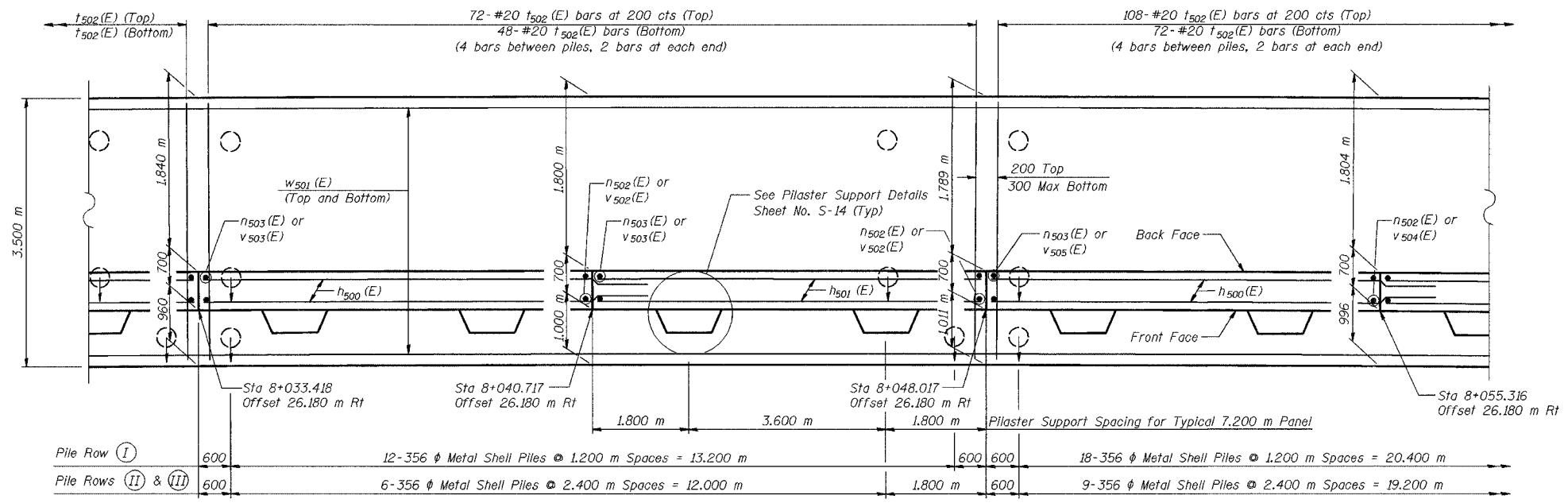
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-6
66/74	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1068
ILLINOIS		INDOT PROJECT		

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
#20 bars = 790

LEGEND

BF = Back Face
FF = Front Face
EF = Each Face

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

NOTES:

See Sheet S-14 for Section B-B, Expansion Joint Detail, and Bill of Material.
See Sheet S-15 for Rustication details.
Stations are referenced to \mathcal{E} I-80/94.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.

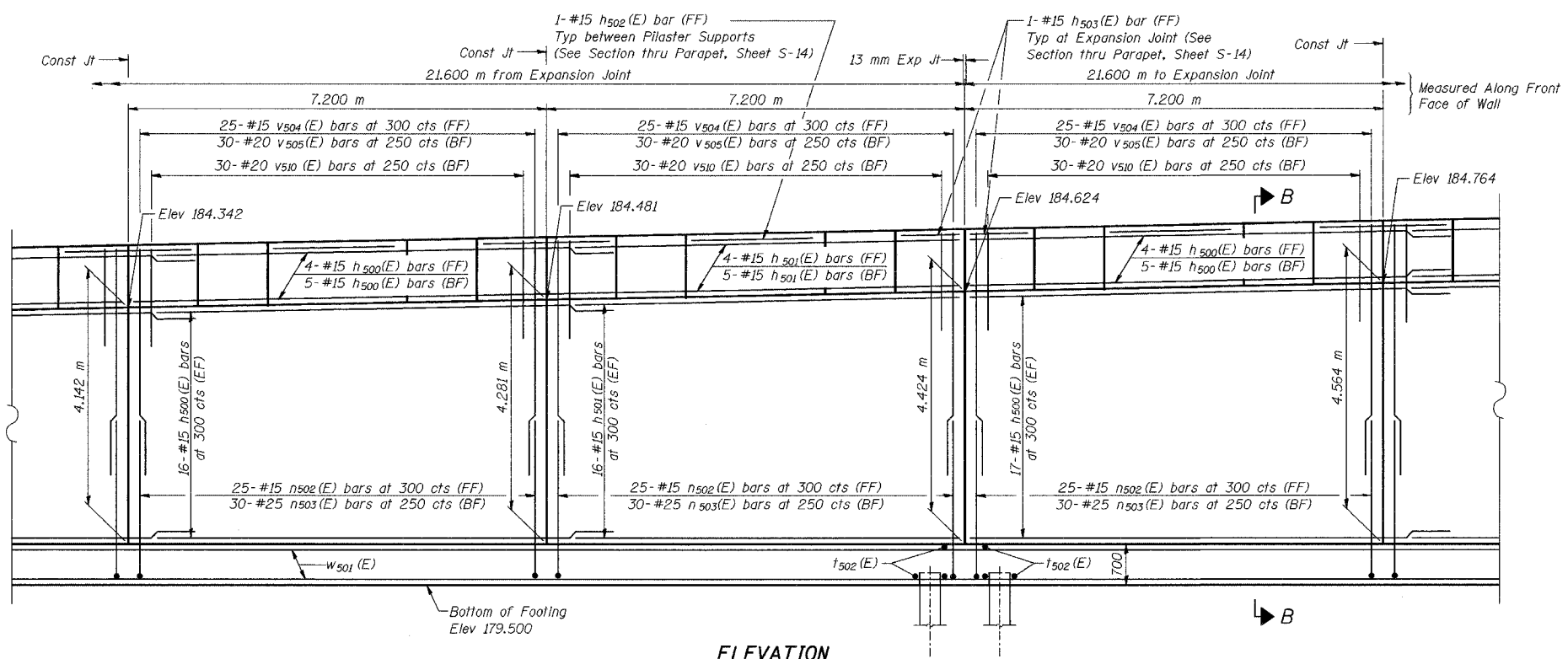
ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41
PLAN AND ELEVATION (4 OF 11)
SECTION 2626.2-R-1
LAKE COUNTY, INDIANA
STATION 7+960.424 TO STATION 8+199.354
STRUCTURE NO. 016-W922
DATE 07/05



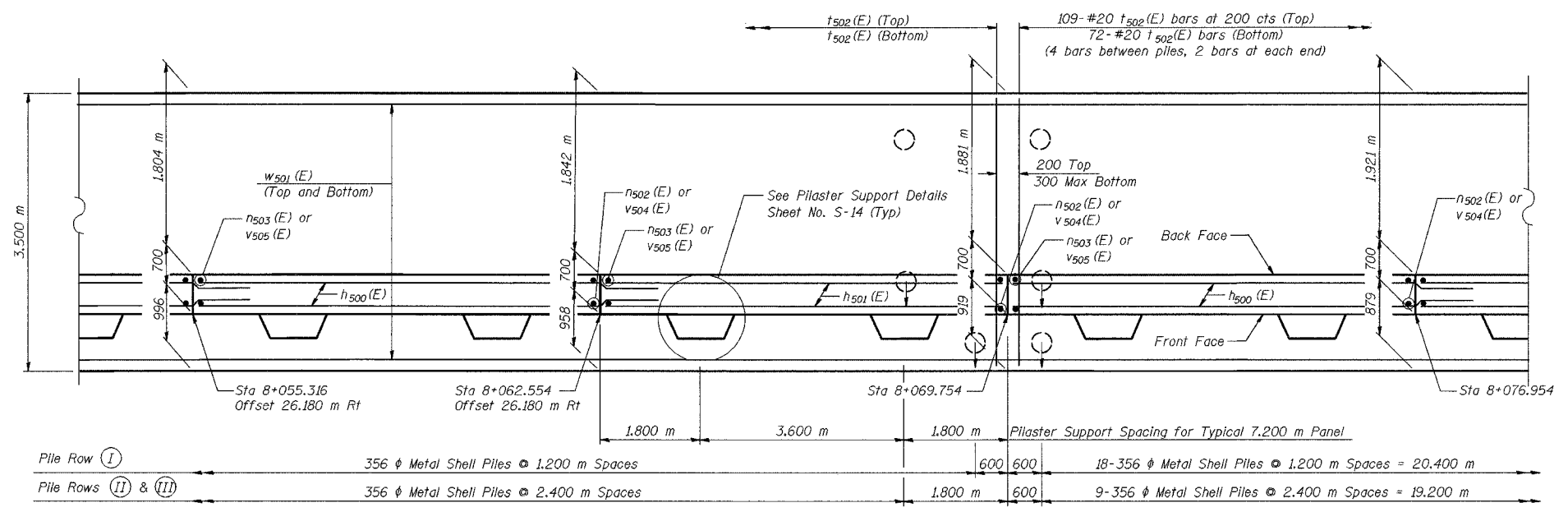
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-7
F.A.L.	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1069	19 SHEETS
ILLINOIS		INDOT PROJECT			

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-14 for Section B-B, Expansion Joint Detail, and Bill of Material.
 See Sheet S-15 for Rustication details.
 Stations are referenced to ∇ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

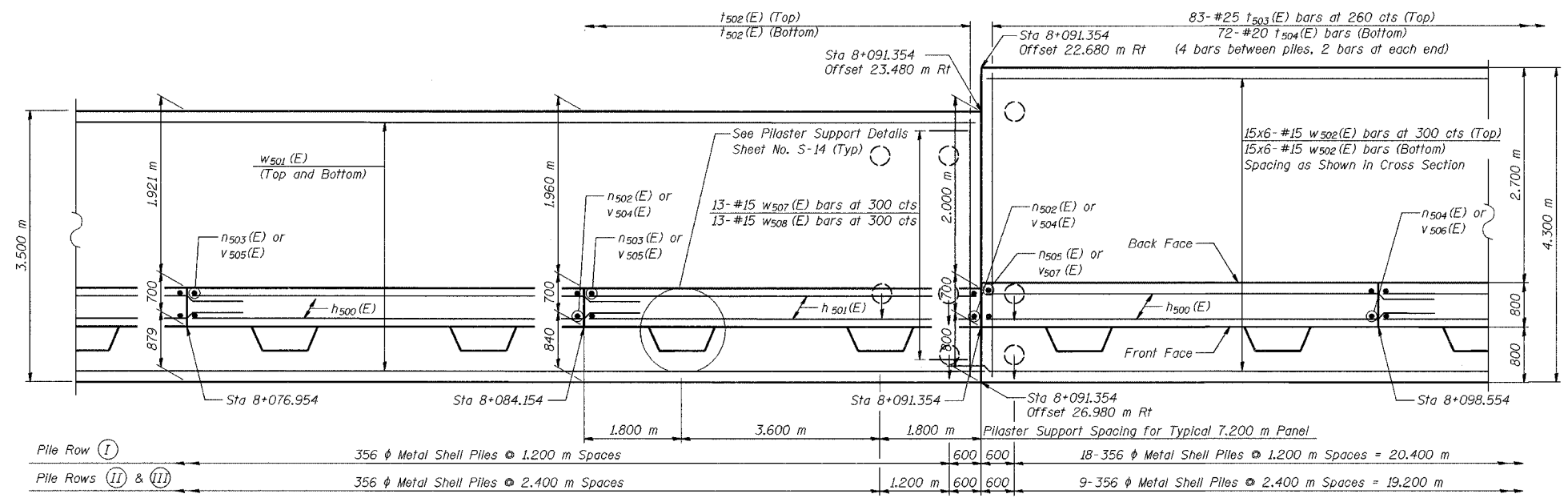
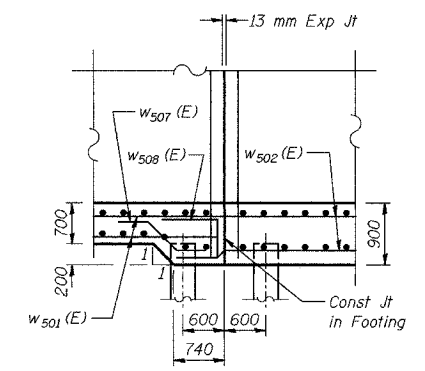
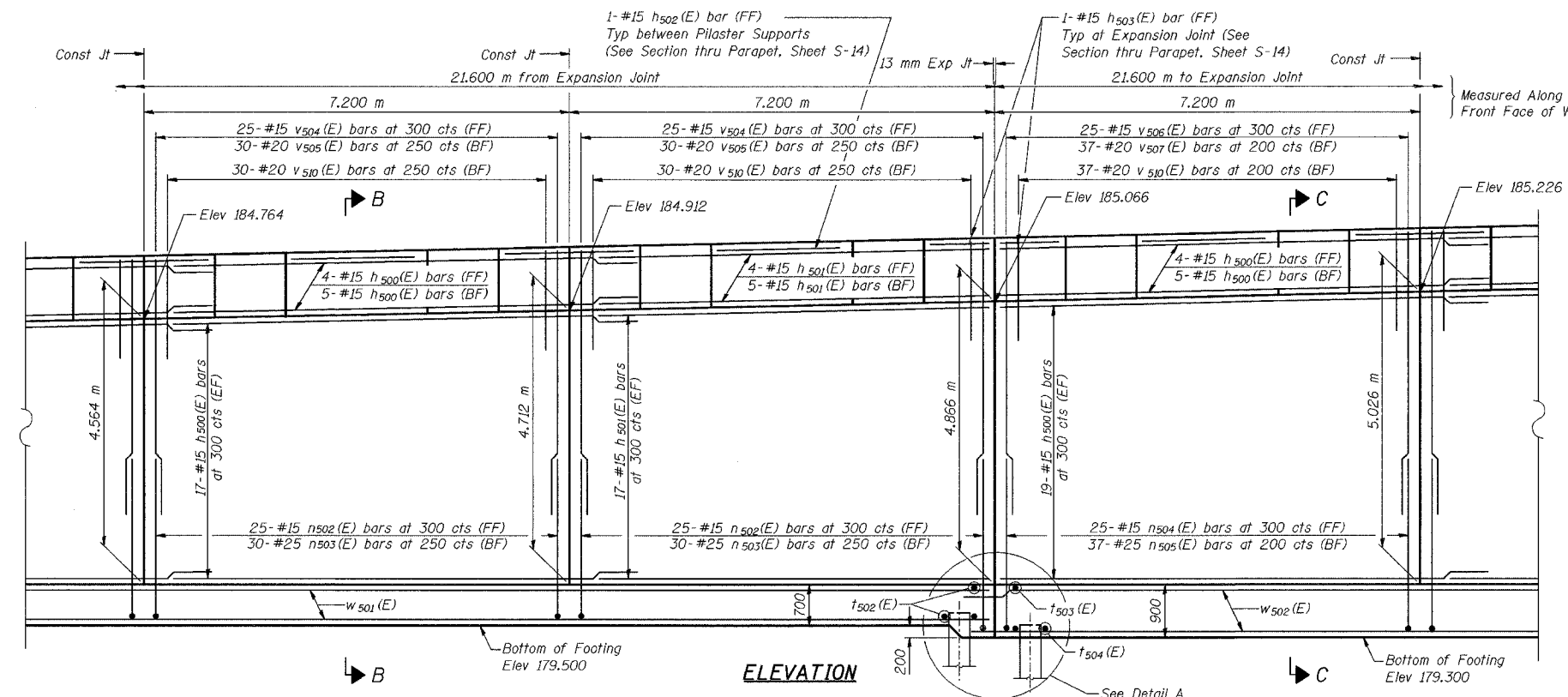
MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (5 OF 11)
SECTION 2626.2-R-1
LAKE COUNTY, INDIANA
STATION 7+960.424 TO STATION 8+199.354
STRUCTURE NO. 016-W922
 DATE 07/05
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-8
66-14	2626.2-R-1	LAKE COUNTY, INDIANA	1207	19 SHEETS
SHEET NO.		CONTRACT NO. 62114 INDOT DES. NO. 0100987		



NOTES:
 See Sheet S-14 for Section B-B, Section C-C, Expansion Joint Detail, and Bill of Material.
 See Sheet S-15 for Rustication details.
 Stations are referenced to ∇ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20x3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

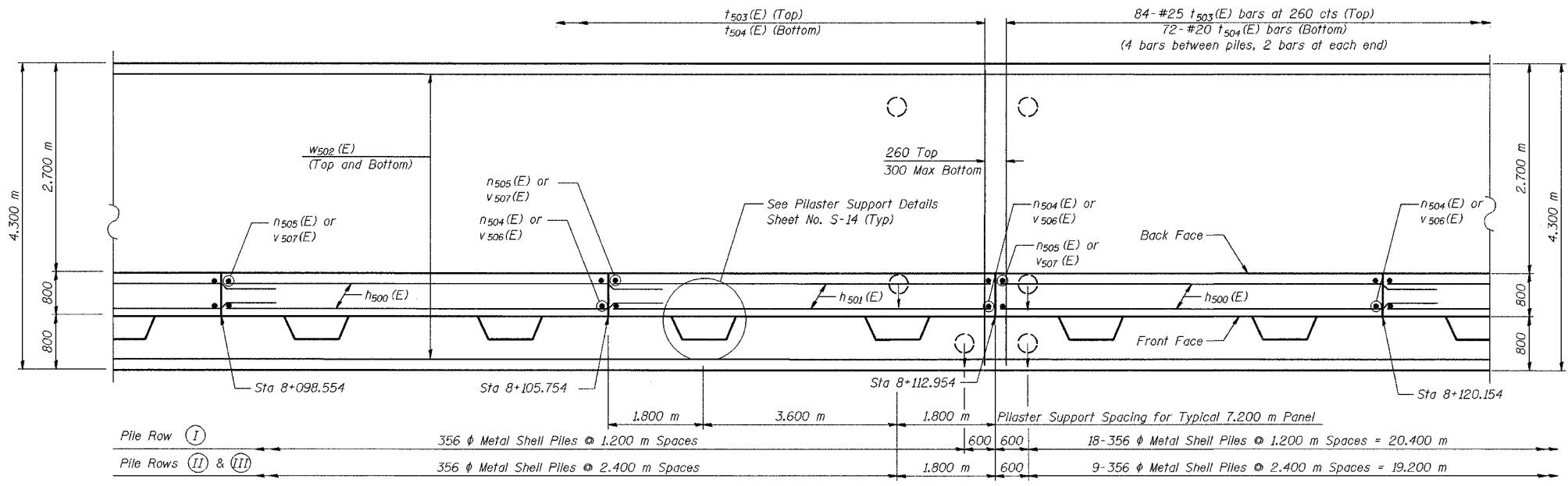
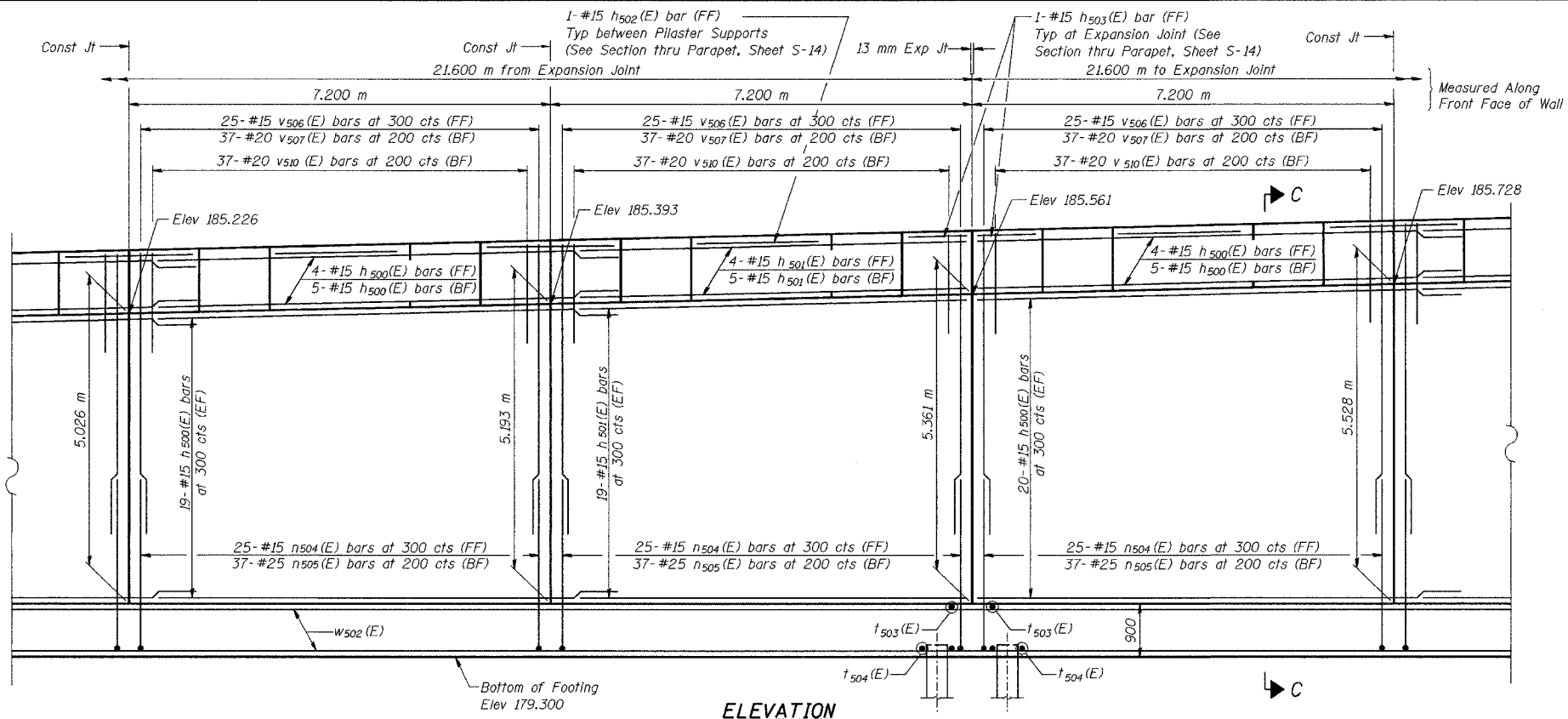
PLAN AND ELEVATION (6 OF 11)
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 7+960.424 TO STATION 8+199.354
 STRUCTURE NO. 016-W922

DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-9
F.A.S. 88/14	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1071
SHEET		19 SHEETS		
CONTRACT NO. 62114		INDOT DES. NO. 0100987		



NOTES:
 See Sheet S-14 for Section C-C, Expansion Joint Detail, and Bill of Material.
 See Sheet S-15 for Rustication details.
 Stations are referenced to \mathcal{L} I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

FOOTING PLAN

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

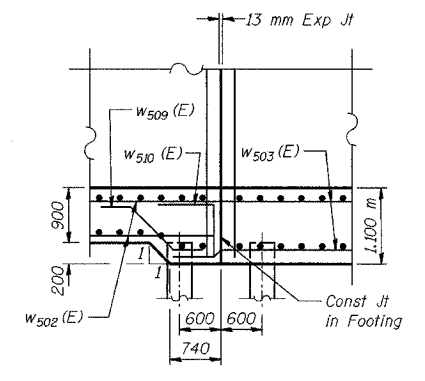
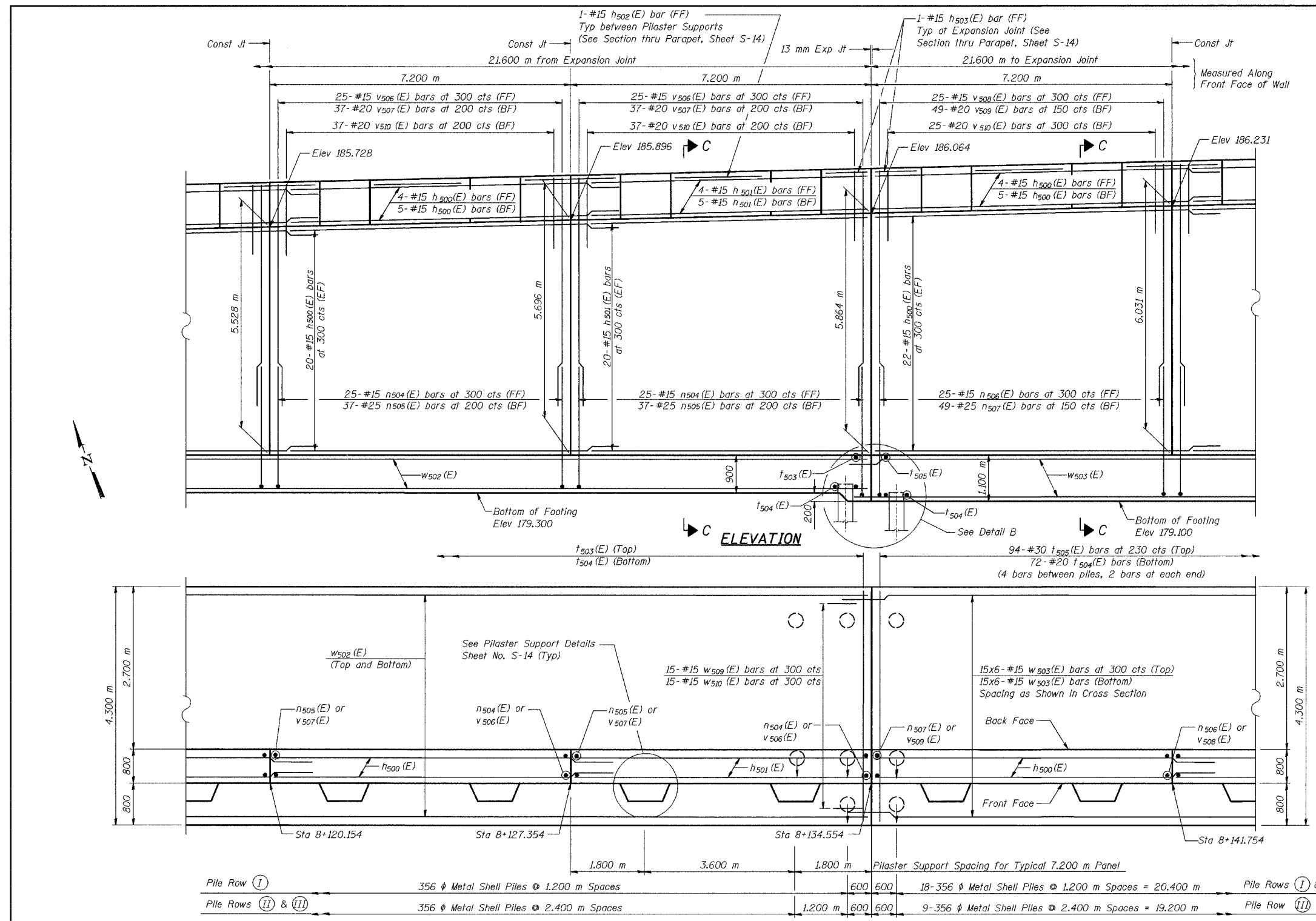
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (7 OF 11)
SECTION 2626.2-R-1
LAKE COUNTY, INDIANA
STATION 7+960.424 TO STATION 8+199.354
STRUCTURE NO. 016-W922
 DATE 07/05
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-10
F.A.S.	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1072
1987/94				19 SHEETS
ILLINOIS		FED-USD PROJECT		

CONTRACT NO. 62114 INDOT DES. NO. 0100987



DETAIL B

NOTES:
 See Sheet S-14 for Section C-C, Expansion Joint Detail, and Bill of Material.
 See Sheet S-15 for Rustication details.
 Stations are referenced to \pm 1-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20x3-#15 etc., indicates 20 lines of bars with 3 lengths per line.

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
 #20 bars = 790

LEGEND

BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

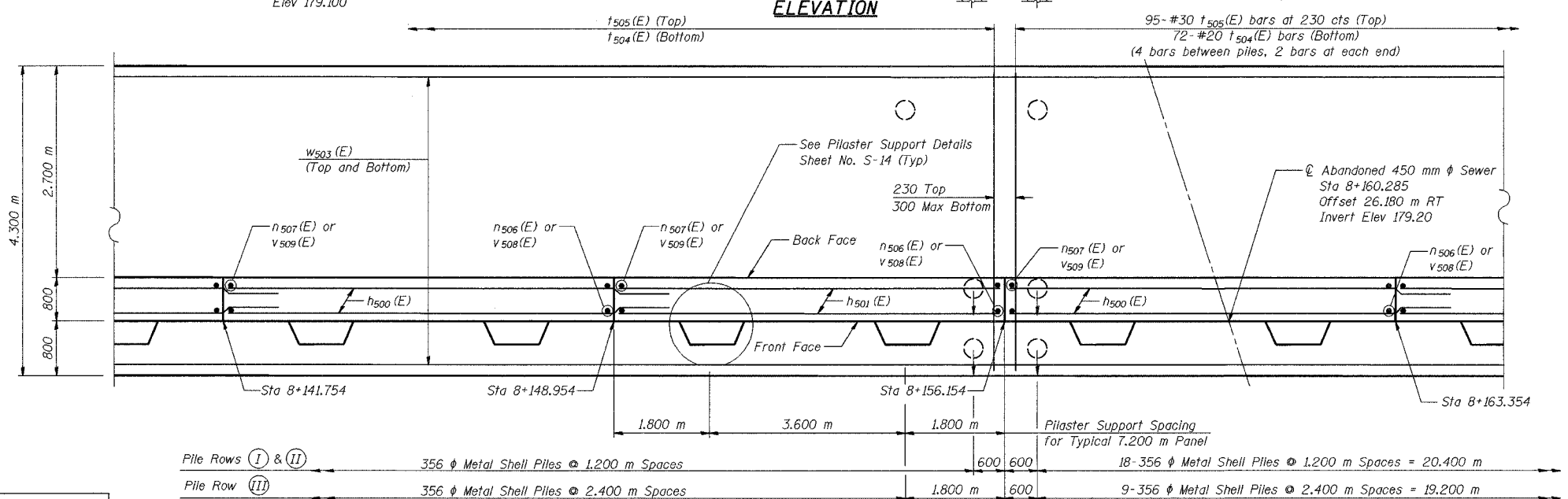
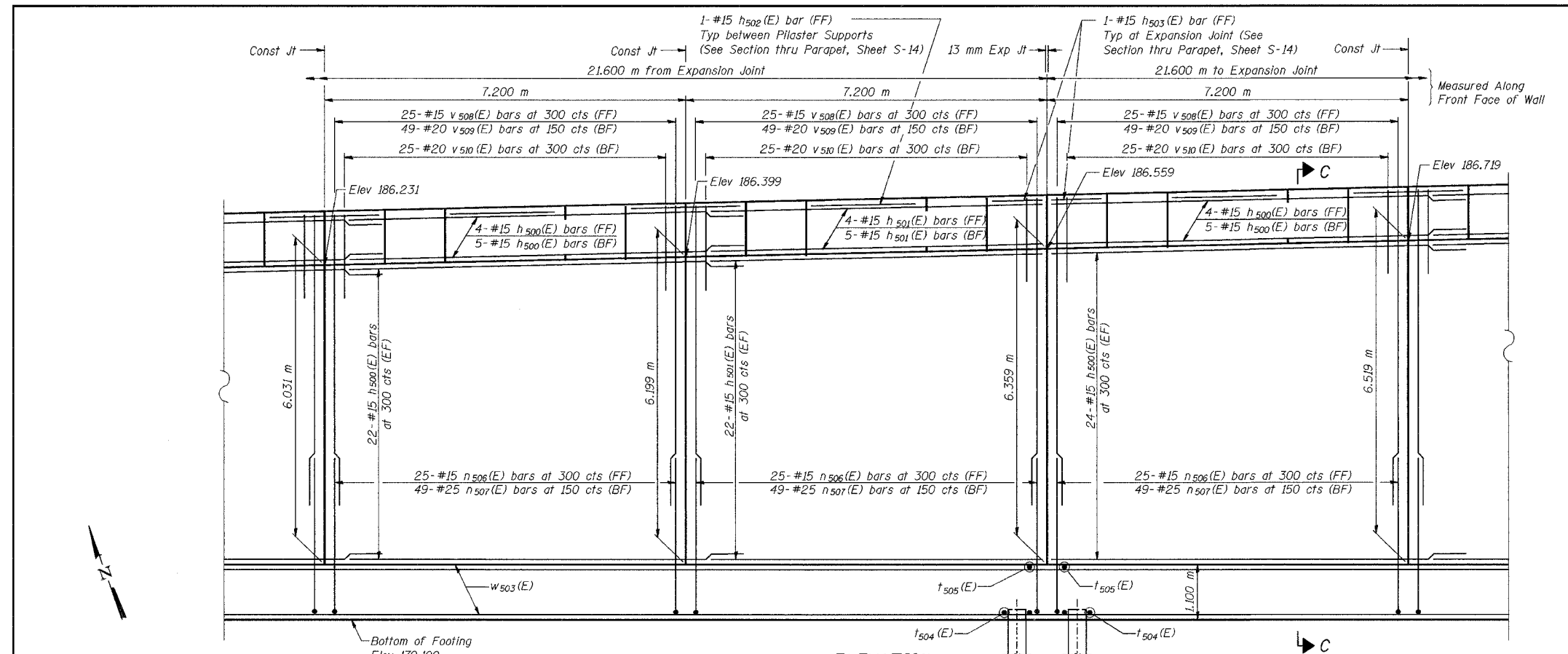
PLAN AND ELEVATION (8 OF 11)
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 7+960.424 TO STATION 8+199.354
 STRUCTURE NO. 016-W922

DATE 07/05

AMERICAN
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FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-11
66-74	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1073
BLDG. NO.		PROJ. NO.		19 SHEETS
				CONTRACT NO. 62114 INDOT DES. NO. 0100987



DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

FOOTING PLAN

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

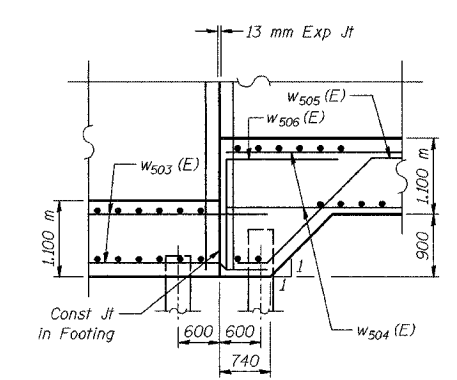
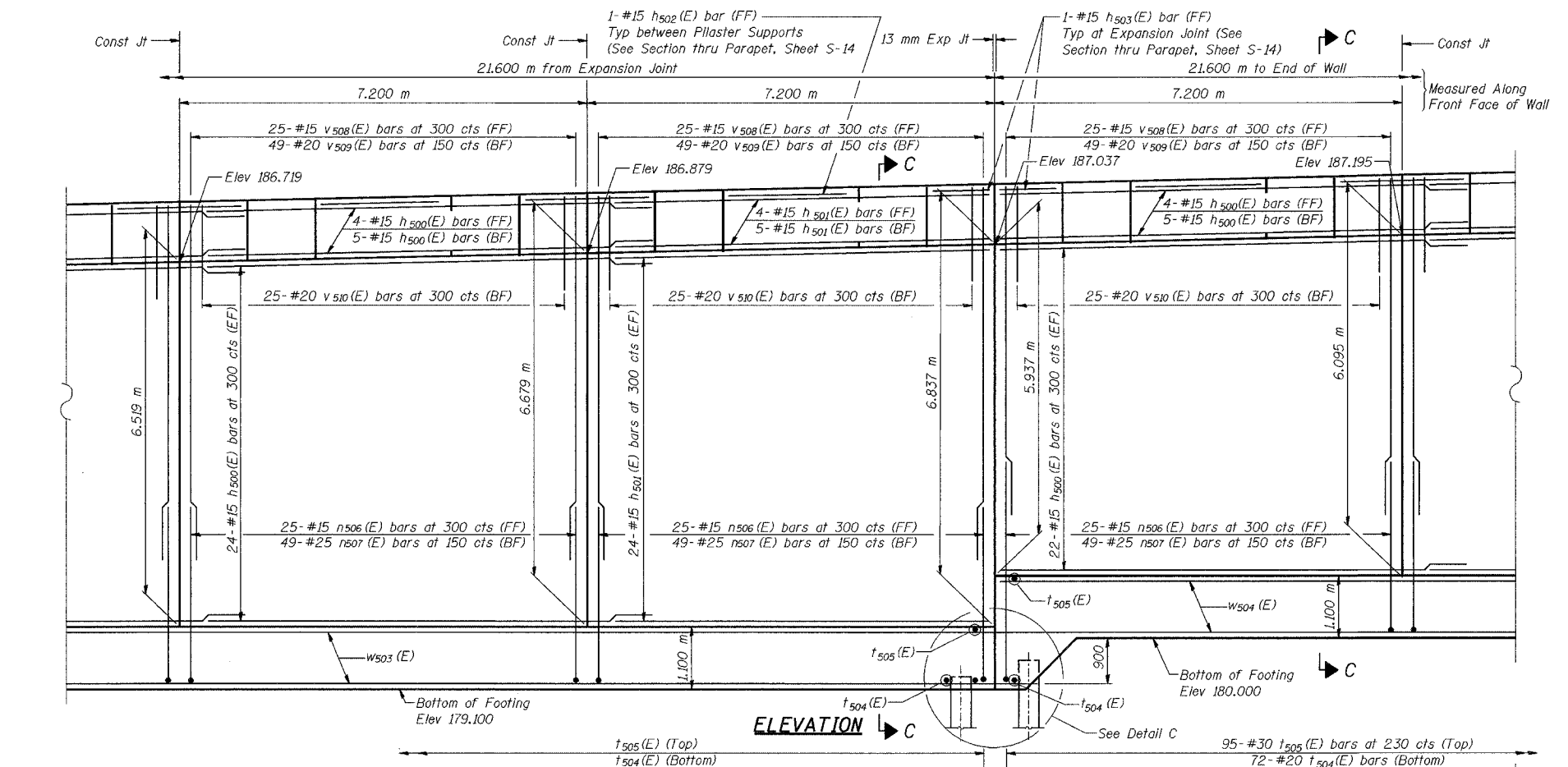
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

NOTES:
 See Sheet S-14 for Section C-C, Expansion Joint Detail, and Bill of Material.
 See Sheet S-15 for Rustication details.
 Stations are referenced to \odot I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.

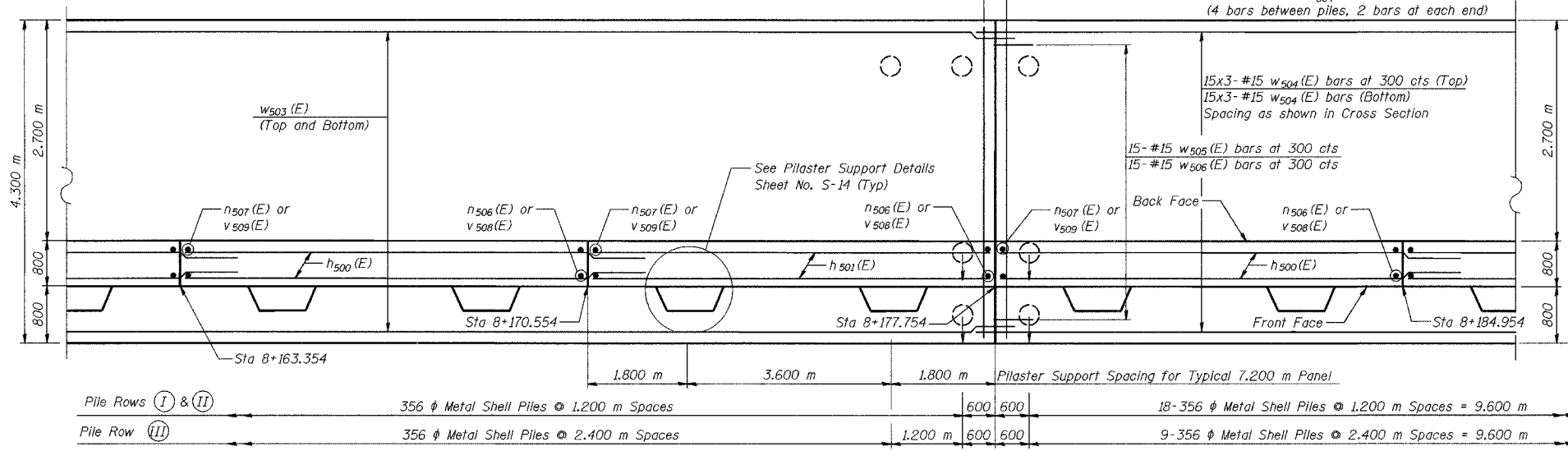
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (9 OF 11)
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 7+960.424 TO STATION 8+199.354
 STRUCTURE NO. 016-W922
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY



DETAIL C



FOOTING PLAN

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

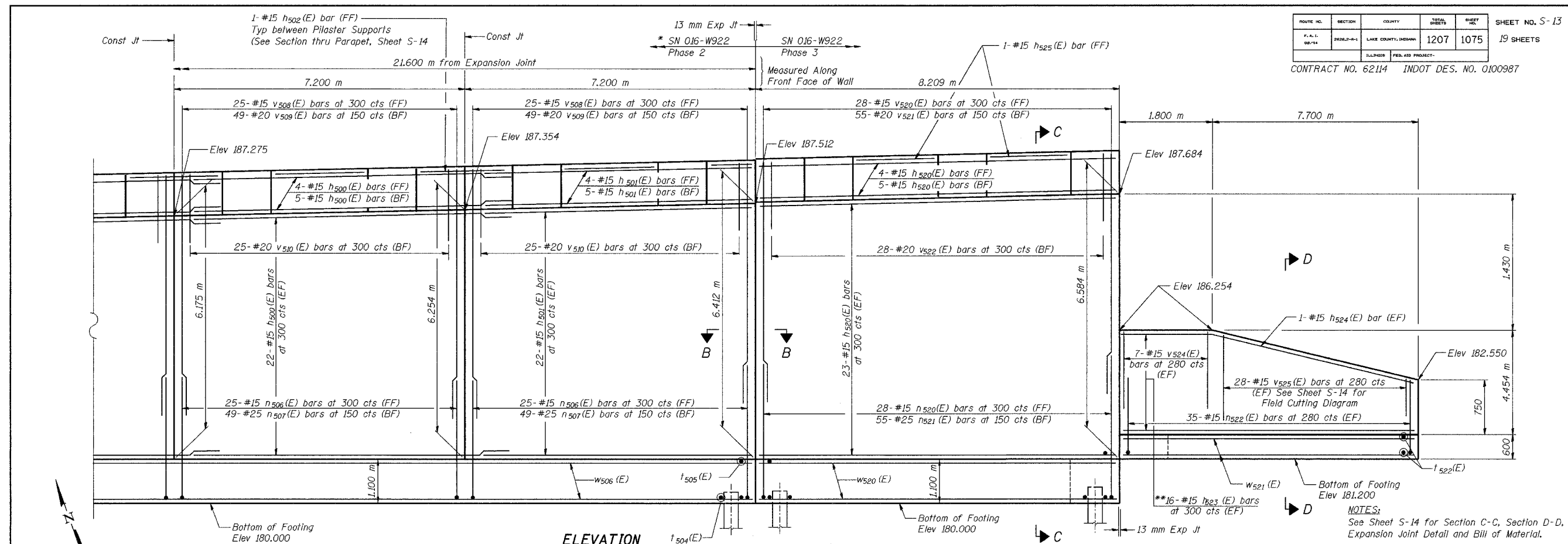
NOTES:
 See Sheet S-14 for Section C-C, Expansion Joint Detail, and Bill of Material.
 See Sheet S-15 for Rustication details.
 Stations are referenced to § 1-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20x3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

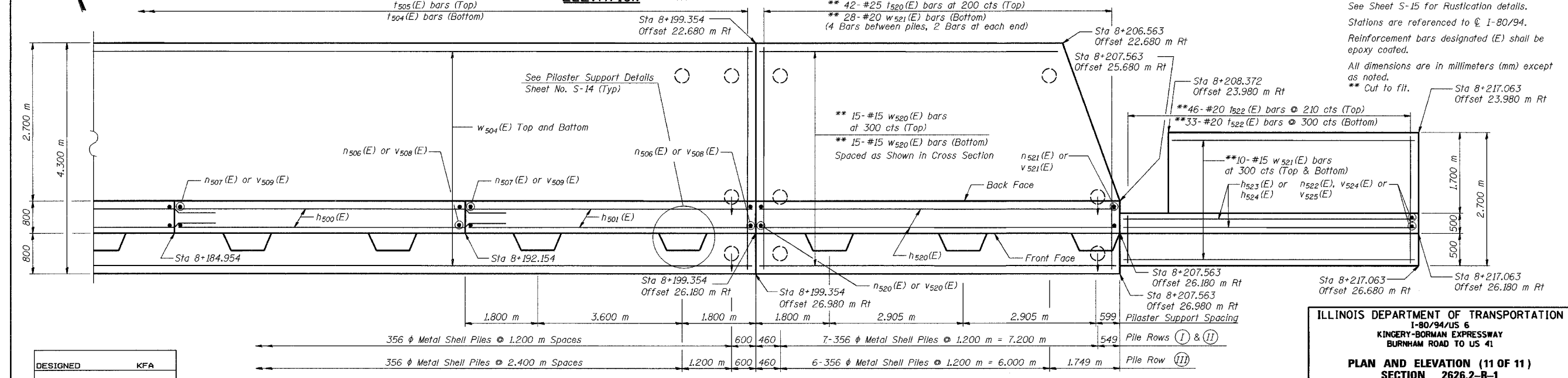
PLAN AND ELEVATION (10 OF 11)
SECTION 2626.2-R-1
LAKE COUNTY, INDIANA
STATION 7+960.424 TO STATION 8+199.354
STRUCTURE NO. 016-W922
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY



NOTES:
 See Sheet S-14 for Section C-C, Section D-D, Expansion Joint Detail and Bill of Material.
 See Sheet S-15 for Rustication details.
 Stations are referenced to ϕ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 ** Cut to fit.



DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (11 OF 11)
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 8+199.354 TO STATION 8+215.315
 STRUCTURE NO. 016-W922

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

* FOR INFORMATION ONLY

CONTRACT NO. 62114 INDOT DES. NO. 0100987

BILL OF MATERIAL (PHASE 3) **BILL OF MATERIAL (PHASE 2)**

Bar	No.	Size	Length (m)	Shape
h520(E)	55	#15	8.11	—
h521(E)	8	#20	2.86	—
h522(E)	4	#20	2.74	—
h523(E)	32	#15	9.40	—
h524(E)	2	#15	8.46	—
h525(E)	2	#15	9.46	—
h526(E)	3	#15	2.11	—
n520(E)	28	#15	5.09	L
n521(E)	55	#25	5.23	L
n522(E)	70	#15	1.47	L
t520(E)	42	#25	3.80	—
t521(E)	28	#20	3.80	—
t522(E)	79	#20	3.20	—
v520(E)	28	#15	4.52	—
v521(E)	55	#20	3.52	—
v522(E)	28	#20	1.99	—
v523(E)	18	#20	2.47	—
v524(E)	14	#15	4.36	—
v525(E)	28	#15	4.99	—
w520(E)	30	#15	8.11	—
w521(E)	24	#15	9.40	—

Bar	No.	Size	Length (m)	Shape
h500(E)	925	#15	7.84	—
h501(E)	516	#15	7.10	—
h502(E)	54	#15	2.30	—
h503(E)	24	#15	1.10	—
h504(E)	264	#20	2.86	—
n500(E)	200	#15	2.01	L
n501(E)	280	#20	2.07	L
n502(E)	250	#15	3.49	L
n503(E)	300	#25	3.63	L
n504(E)	150	#15	4.89	L
n505(E)	222	#25	5.03	L
n506(E)	225	#15	5.09	L
n507(E)	441	#25	5.23	L
t500(E)	341	#25	3.90	—
t501(E)	195	#20	3.90	—
t502(E)	601	#20	3.40	—
t503(E)	167	#25	4.20	—
t504(E)	360	#20	4.20	—
t505(E)	284	#30	4.20	—
v500(E)	200	#15	4.08	—
v501(E)	280	#20	3.08	—
v502(E)	100	#15	3.14	—
v503(E)	120	#20	2.14	—
v504(E)	150	#15	4.00	—
v505(E)	180	#20	3.01	—
v506(E)	150	#15	3.80	—
v507(E)	222	#20	2.80	—
v508(E)	225	#15	4.77	—
v509(E)	441	#20	3.77	—
v510(E)	802	#20	1.99	—
v511(E)	396	#20	2.47	—
w500(E)	196	#15	8.78	—
w501(E)	234	#15	8.57	—
w502(E)	180	#15	7.82	—
w503(E)	180	#15	7.93	—
w504(E)	90	#15	7.60	—
w505(E)	15	#15	3.93	—
w506(E)	15	#15	3.76	—
w507(E)	13	#15	2.38	—
w508(E)	13	#15	1.56	—
w509(E)	15	#15	2.66	—
w510(E)	15	#15	1.96	—

Excavation, Foundation, Unclassified	m ³	491.4
Concrete, A, Substructure	m ³	99.8
Reinforcing Bars, Epoxy Coated	kg	6,190
Surface Seal	L Sum	0.01
Pile, Concrete, Steel Shell Encased, 6.35 mm, 356 mm Geocomposite Wall Drain	m ²	244.0
Pipe, Underdrain, Perf. 1.63 mm, 150 mm Noise Abatement Wall Anchor Rod Assembly	m	17.7
B Borrow	m ³	76.7
Structural Backfill	m ³	479.3
Masonry Coating	L Sum	0.06

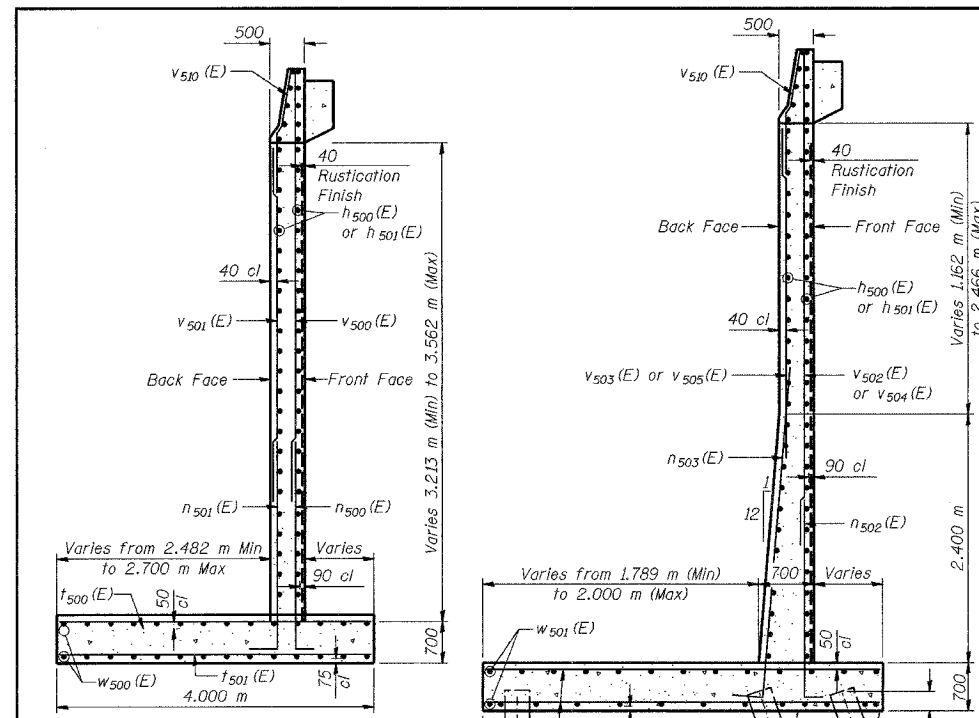
The estimated Phase 3 Masonry Coating area is 375.9 m²
 The estimated Phase 3 Surface Seal area is 14.9 m²

BAR DIMENSIONS - PHASE 3

Bar	A	B
n500(E)	1.75 m	260
n501(E)	1.75 m	320
n502(E)	3.23 m	260
n503(E)	3.23 m	400
n504(E)	4.63 m	260
n505(E)	4.63 m	400
n506(E)	4.83 m	260
n507(E)	4.83 m	400
w505(E)	2.65 m	1.88 m
w506(E)	1.88 m	-
w507(E)	1.10 m	780
w508(E)	780	-
w509(E)	1.38 m	980
w510(E)	980	-

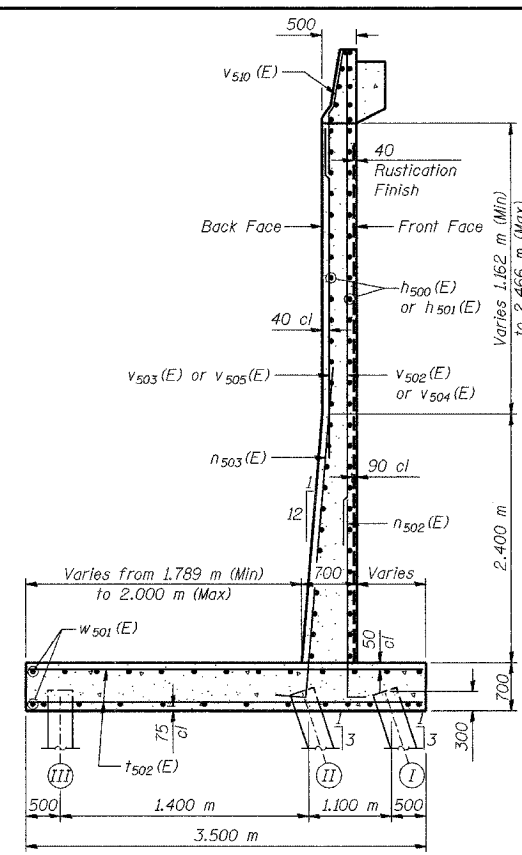
The estimated Phase 2 Surface Seal area is 361 m²

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
WALL SECTIONS AND DETAILS
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 8+199.354 TO STATION 8+215.315
 STRUCTURE NO. 016-W922
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

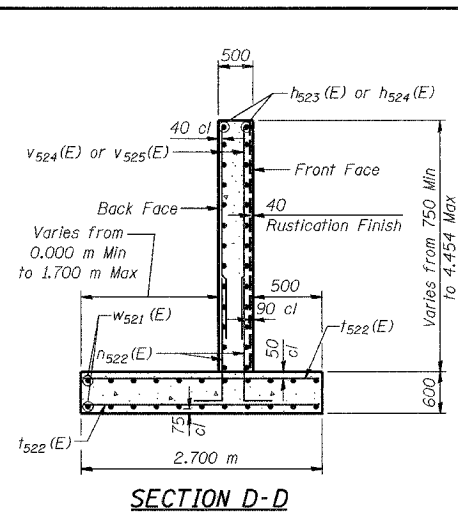


SECTION A-A

NOTES:
 See Sheet S-15 for Rustication details.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 See Typical Section on Sheet S-2 for Drainage Details and Surface Seal Limits.



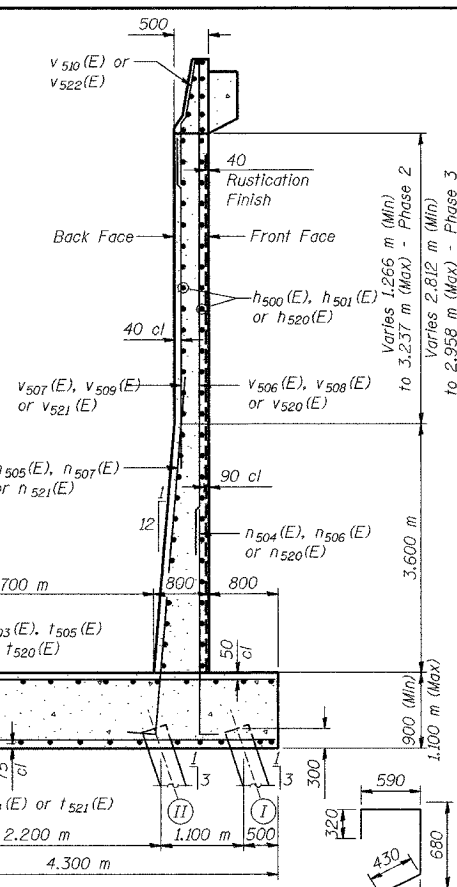
SECTION B-B



SECTION D-D

PILE DATA
 Type - 356 ϕ Metal Shell
 Capacity - 500 kN
 Est. Length - 12.2 m
 No. Req'd - 329 (Phase 2)
 - 20 (Phase 3)
 Test Piles - 4

BARS w506(E), w508(E) or w510(E)



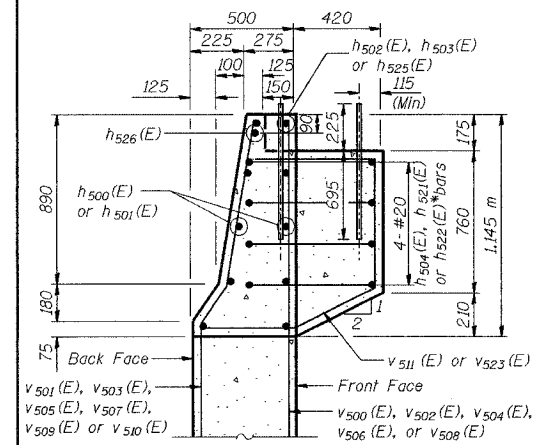
SECTION C-C

BARS n500(E) thru n507(E) or n520(E) thru n522(E)
BARS w505(E), w507(E) or w509(E)

BAR v511(E) or v523(E)

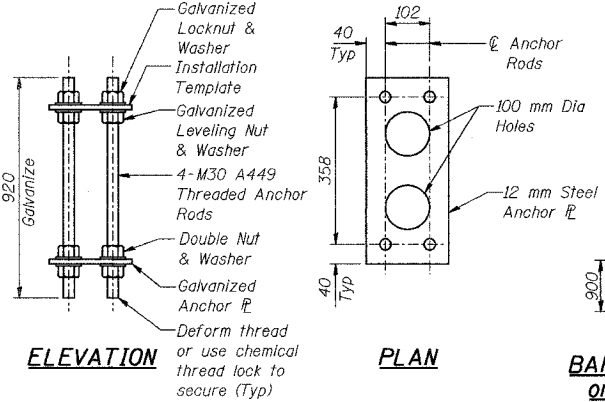
BAR DIMENSIONS PHASE 2

Bar	A	B
n500(E)	1.75 m	260
n501(E)	1.75 m	320
n502(E)	3.23 m	260
n503(E)	3.23 m	400
n504(E)	4.63 m	260
n505(E)	4.63 m	400
n506(E)	4.83 m	260
n507(E)	4.83 m	400
w505(E)	2.65 m	1.88 m
w506(E)	1.88 m	-
w507(E)	1.10 m	780
w508(E)	780	-
w509(E)	1.38 m	980
w510(E)	980	-



SECTION THRU PARAPET

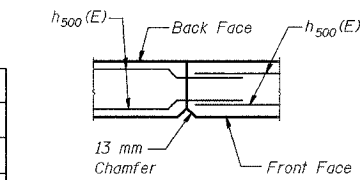
* h522(E) bars robe placed in pilaster at Sta 8+207.563



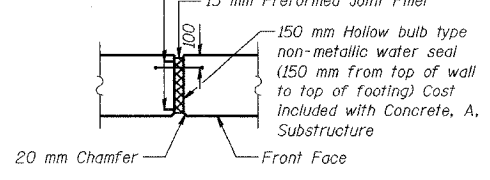
NOISE ABATEMENT WALL ANCHOR ROD ASSEMBLY

(66 Req'd Phase 2)
 (3 Req'd Phase 3)

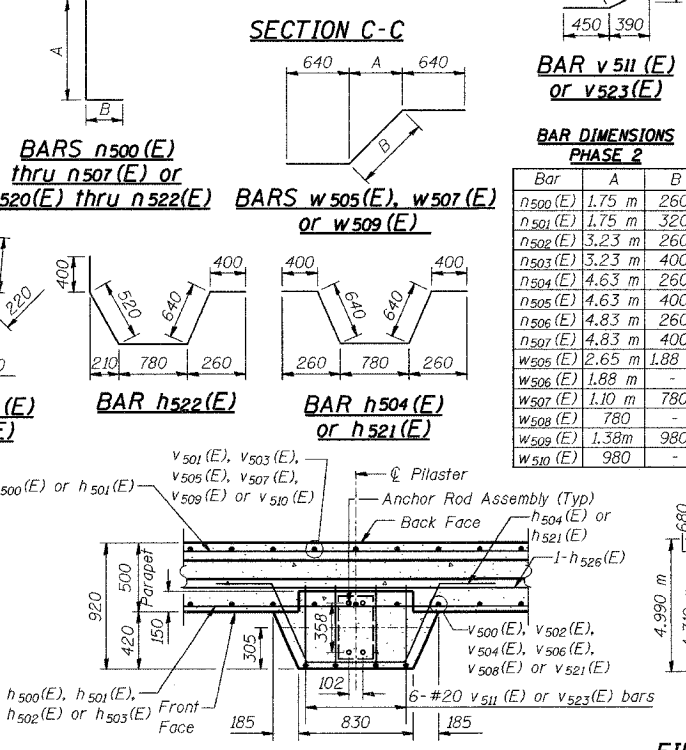
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP



CONSTRUCTION JOINT DETAIL



13 MM EXPANSION JOINT DETAIL



TYPICAL PILASTER SUPPORT - PLAN VIEW

(66 Locations - Phase 2)
 (3 Locations - Phase 3)

FIELD CUTTING DIAGRAM

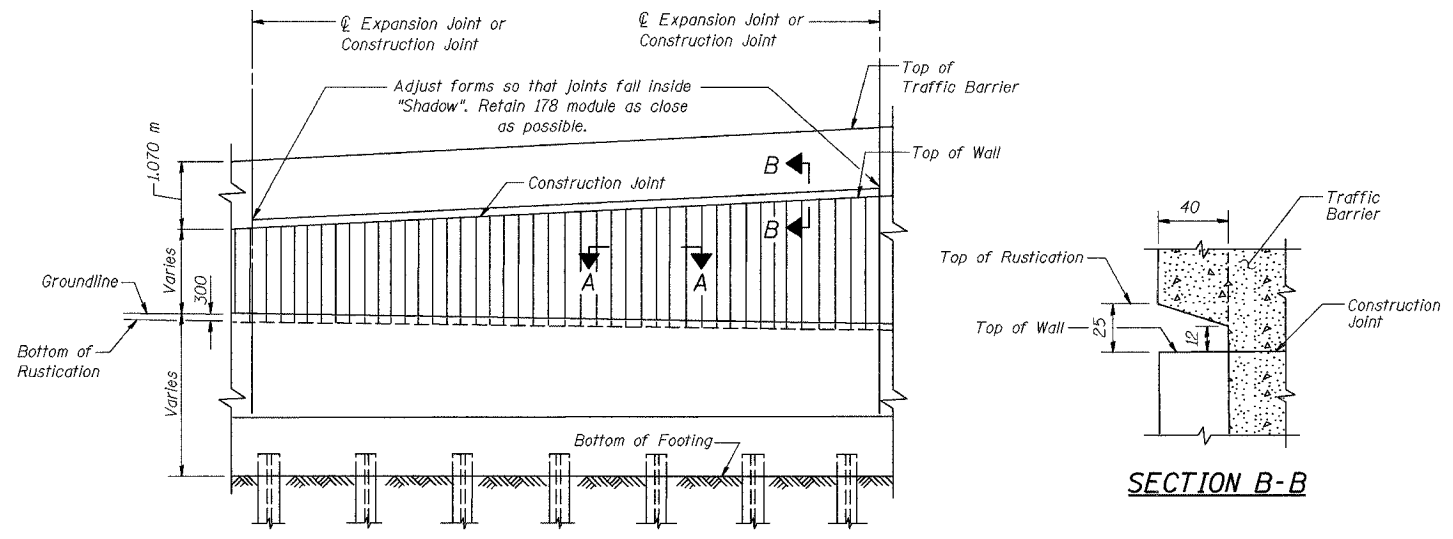
Order bars full length. Cut to fit as shown. Use remainder of bars in opposite face.

**PHASE 2
RUSTICATION LIMITS**

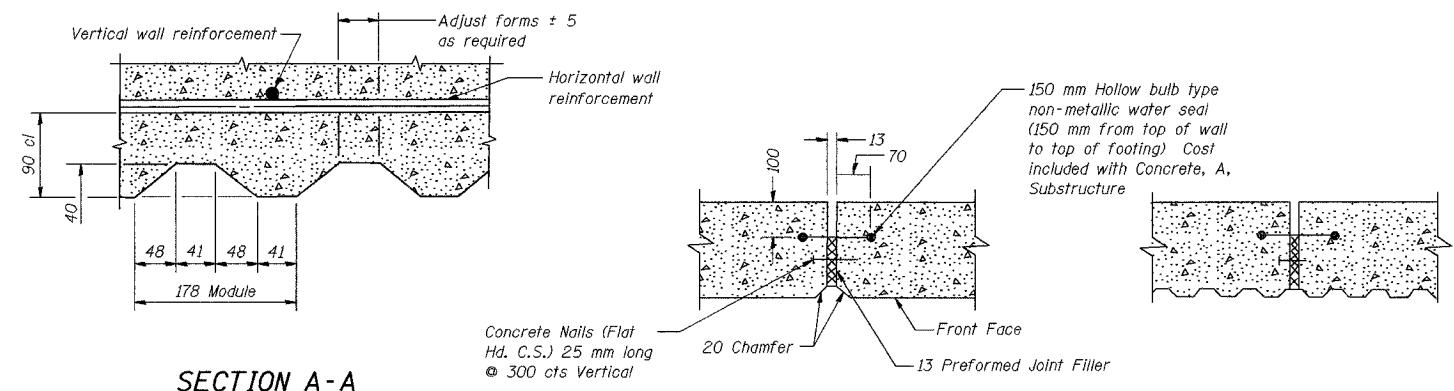
STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION
7+960.424	183.413	180.500
7+967.724	183.434	180.500
7+975.023	183.460	180.500
7+982.322	183.493	180.500
7+989.622	183.533	180.500
7+996.921	183.580	180.500
8+004.220	183.634	180.500
8+011.520	183.694	180.500
8+018.819	183.762	180.500
8+026.118	183.836	180.500
8+033.418	183.926	180.500
8+040.717	184.064	180.500
8+048.017	184.201	180.500
8+055.316	184.342	180.500
8+062.554	184.481	180.500
8+069.754	184.624	180.500
8+076.954	184.764	180.500
8+084.154	184.912	180.500
8+091.354	185.066	180.500
8+098.554	185.226	180.500
8+105.754	185.393	180.500
8+112.954	185.561	180.500
8+120.154	185.728	180.500
8+127.354	185.896	180.500
8+134.554	186.064	180.500
8+141.754	186.231	180.500
8+148.954	186.399	180.500
8+156.154	186.559	180.500
8+163.354	186.719	180.500
8+170.554	186.879	180.500
8+177.754	187.037	180.500
8+177.754	187.037	181.400
8+184.954	187.195	181.400
8+192.154	187.354	181.400
8+199.354	187.512	181.400

**PHASE 3
RUSTICATION LIMITS**

STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION
8+199.354	187.512	181.400
8+207.563	187.684	181.400
8+207.563	186.254	182.100
8+209.363	186.254	182.100
8+217.063	182.550	182.100

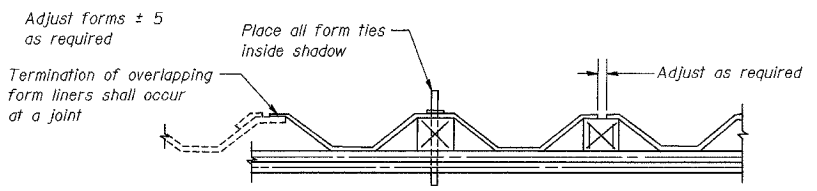


FRONT FACE ELEVATION-TYPICAL ARCHITECTURAL FINISH

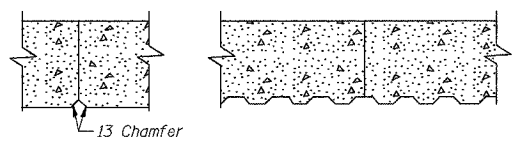


SECTION A-A

EXPANSION JOINT DETAIL



SUGGESTED FORMWORK DETAIL



CONSTRUCTION JOINT DETAIL

BILL OF MATERIAL

Item	Unit	Phase 2 Total	Phase 3 Total
Rustication Finish	m ²	1,061	76

Note: All dimensions are in millimeters (mm) unless otherwise noted.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

RUSTICATION FINISH DETAILS
SECTION 2626.2-R-1
LAKE COUNTY, INDIANA
STATION 8+199.354 TO STATION 8+215.315
STRUCTURE NO. 016-W922

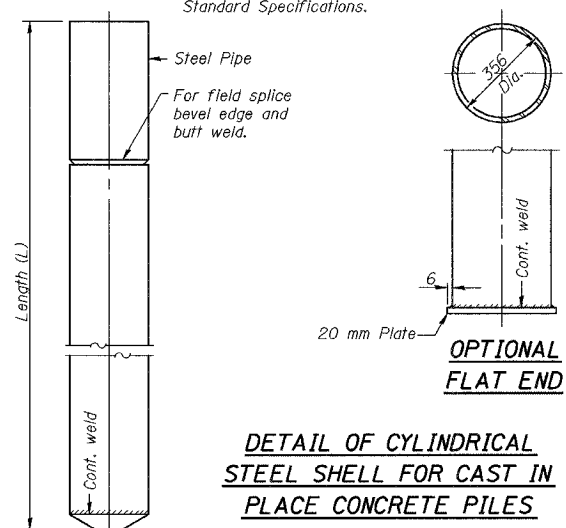
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL	SHEET NO.
F.A.S. 08/14	2626.2-R-1	LAKE COUNTY, INDIANA	1207	1078	19 SHEETS
SHEET NO. S-16					

CONTRACT NO. 62114 INDOT DES. NO. 0100987

Notes: Driving and bearing ends of pipe shall be cut square. The thickness of the shell shall be 6.35 mm with a tolerance of 5%. The shell shall be according to Article 1006.05(a) of the Standard Specifications.



DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

X-PB (M) 4-30-97 (All dimensions are in millimeters (mm) except as noted.)

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

CONCRETE PILE DETAILS
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 7+960.424 TO STATION 8+199.354
 STRUCTURE NO. 016-W922

DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AR-083 (1 OF 1)

BORING NO. AR-084 (1 OF 1)

BORING NO. AR-085 (1 OF 1)

BORING LOG AR-083 Page 1 of 1

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
wangeng3ewangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 182.51 m
North: 545422.85 m
East: 367392.43 m
Station: 7+969.02
Offset: 16.16 RT

BORING LOG AR-084 Page 1 of 1

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
wangeng3ewangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 182.77 m
North: 545409.24 m
East: 367435.92 m
Station: 8+014.98
Offset: 16.02 RT

BORING LOG AR-085 Page 1 of 1

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
wangeng3ewangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 183.31 m
North: 545394.77 m
East: 367478.25 m
Station: 8+060.07
Offset: 15.98 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
182.5	381-mm thick ASPHALT --PAVEMENT--	0				174.7	Very stiff, gray SANDY CLAY	8	11	4	330 B
182.1	Gray CRUSHED STONE --BASE COURSE--	1	1	12		174.0	Very stiff, gray CLAY	9	12	5	290 B
181.5	Hard brown and gray SILTY CLAY	2	2	7	432 B			10	3	275 B	
180.8	Hard, brown CLAY	3	3	8	511 B			11	4	275 B	
179.3	Stiff to very stiff, gray CLAY	4	4	6	542 B			12	5	283 B	
		5	5	3	251 B			13	6	251 B	
		6	6	3	220 B			14	7	204 B	
		7	7	4	189 B			15	8	236 B	
		8	8	4	204 B			16	9	251 B	
		9	9	4	236 B			17	10	251 B	
		10	10	5	251 B						

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
182.4	355-mm thick ASPHALT --PAVEMENT--	0				176.6	Boring terminated at 12.19 m				
182.0	Gray CRUSHED STONE --BASE COURSE--	1	1	8	383 B			1	11	4	417 B
181.7	Very stiff to hard, brown and gray SILTY CLAY --FILL--	2	2	5	228 B			2	12	5	369 B
		3	3	7	275 B			3	7	8	212 B
180.3	Very stiff to hard, brown CLAY	4	4	6	447 B			4	13	4	307 B
		5	5	7	464 B			5	5	6	558 B
178.8	Very stiff to hard, gray CLAY	6	6	3	228 B			6	3	4	263 B
		7	7	3	267 B			7	3	4	220 B
		8	8	4	251 B			8	3	5	228 B
		9	9	3	299 B			9	10	6	251 B
		10	10	4	244 B			10	10	9	204 B

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blw/150 mm)	Moisture Content (%)
182.4	381-mm thick ASPHALT --PAVEMENT--	0				171.3	Boring terminated at 12.19 m				
182.0	Gray CRUSHED STONE --BASE COURSE--	1	1	9	240 B			1	11	6	228 B
181.7	Very stiff, brown and gray SILTY CLAY	2	2	7	307 B			2	12	3	260 B
		3	3	7	212 B			3	3	5	260 B
180.9	Hard, brown CLAY	4	4	5	613 B			4	13	4	290 B
		5	5	6	558 B			5	4	7	290 B
178.3	Very stiff, gray CLAY	6	6	3	263 B			6	4	5	283 B
		7	7	3	220 B			7	3	4	220 B
		8	8	3	228 B			8	3	5	228 B
177.1	Medium dense, gray SILT	9	9	10	251 B			9	10	6	251 B
176.8	Very stiff, gray SILTY CLAY	10	10	10	204 B			10	9	8	204 B
176.3	Medium dense, gray SILT										
175.9	Very stiff, gray CLAY										

GENERAL NOTES

Begin Drilling 05-13-2002 Complete Drilling 05-13-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&A Logger H. Suhail Checked by B. Fugate
 Drilling Method Mud Rotary; Grouted after final water reading

WATER LEVEL DATA

While Drilling
 At Completion of Drilling
 Time After Drilling 48 hours
 Depth to Water 0.30 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 05-14-2002 Complete Drilling 05-14-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&A Logger H. Suhail Checked by B. Fugate
 Drilling Method Mud Rotary; Grouted after final water reading

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 At Completion of Drilling
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 Depth to Water 0.30 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

BORING LOGS (1 OF 3)
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 7+960.424 TO STATION 8+199.354
 STRUCTURE NO. 016-W922

DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AR-086 (1 OF 2)

BORING NO. AR-086 (2 OF 2)

BORING NO. AR-087 (1 OF 2)

BORING LOG AR-086 Page 1 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 184.17 m
North: 545379.73 m
East: 367520.86 m
Station: 8+105.26
Offset: 15.90 RT

BORING LOG AR-086 Page 2 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
100 Fairbank Street
Addison, IL 60101
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Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

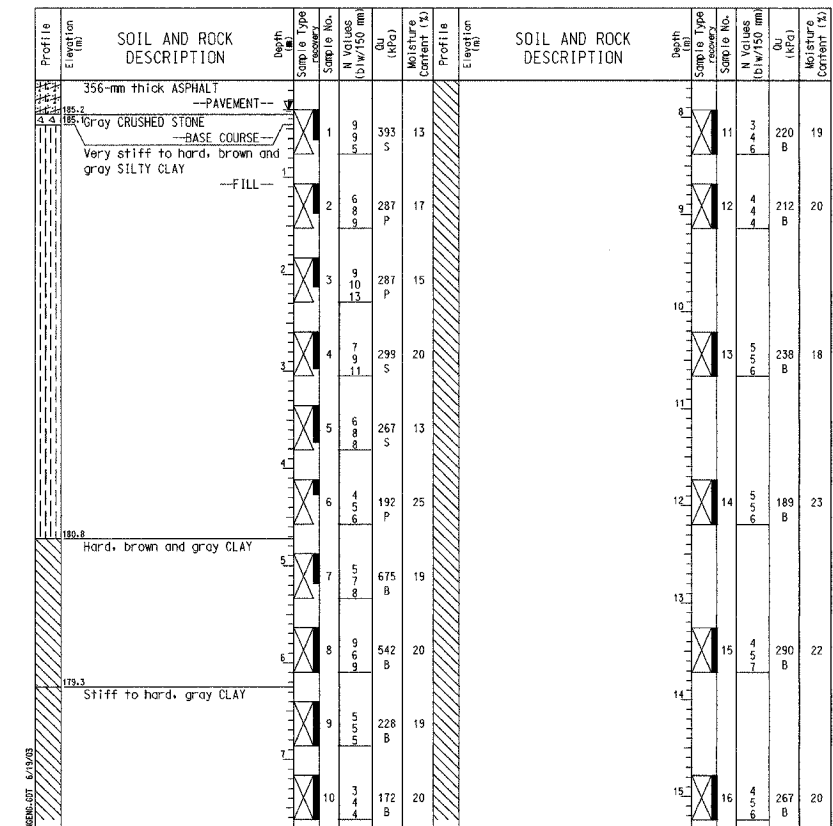
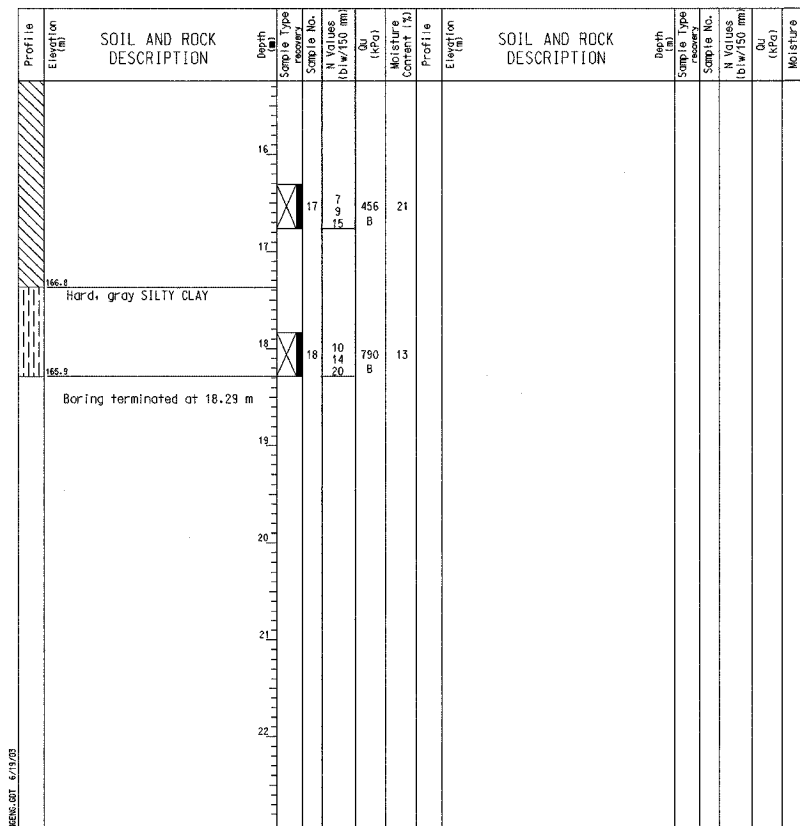
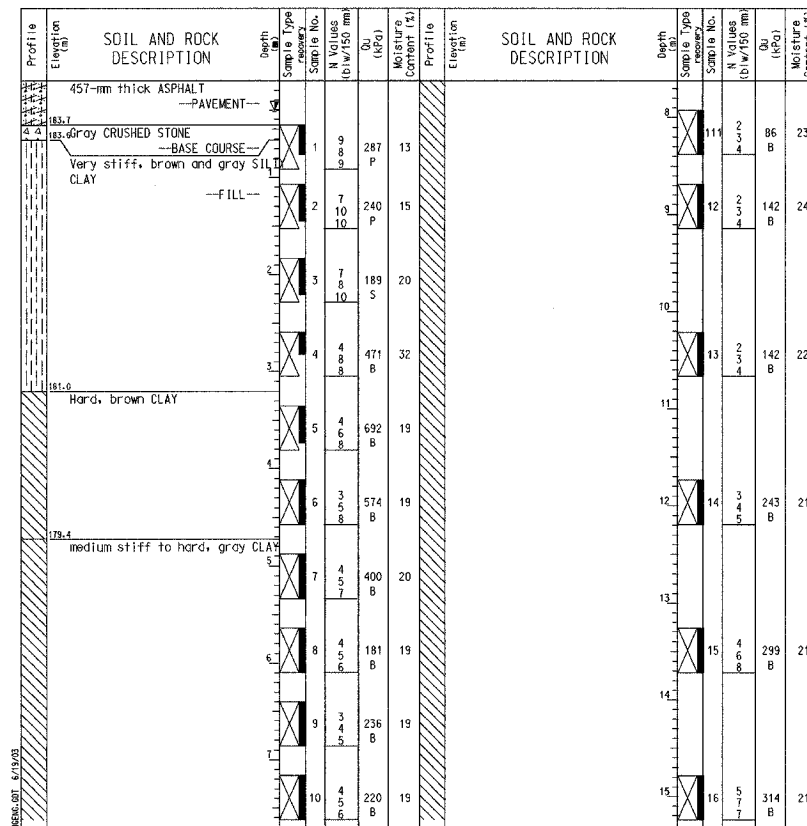
Datum: NGVD
Elevation: 184.17 m
North: 545379.73 m
East: 367520.86 m
Station: 8+105.26
Offset: 15.90 RT

BORING LOG AR-087 Page 1 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
100 Fairbank Street
Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 185.53 m
North: 545362.60 m
East: 367510.38 m
Station: 8+151.65
Offset: 15.48 RT



GENERAL NOTES

Begin Drilling 05-14-2002 Complete Drilling 05-14-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller CAA Logger H. Suhail Checked by B. Fugale
 Drilling Method Mud Rotary; Grouted after final water reading

WATER LEVEL DATA

While Drilling -
 At Completion of Drilling -
 Time After Drilling 48 hours
 Depth to Water 0.30 m
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GENERAL NOTES

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 Drilling Contractor TSC Drill Rig CME 75
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 Depth to Water 0.30 m
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 Drilling Contractor TSC Drill Rig CME 75
 Driller CAA Logger H. Suhail Checked by B. Fugale
 Drilling Method Mud Rotary; Grouted after final water reading

WATER LEVEL DATA

While Drilling -
 At Completion of Drilling -
 Time After Drilling 48 hours
 Depth to Water 0.30 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

BORING LOGS (2 OF 3)
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 7+960.424 TO STATION 8+199.354
 STRUCTURE NO. 016-W922

DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AR-087 (2 OF 2)

BORING NO. AB-011 (1 OF 2)

BORING NO. AB-011 (2 OF 2)

BORING LOG AR-087 Page 2 of 2

Wang Engineering, INC.
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 185.53 m
North: 545362.60 m
East: 367570.38 m
Station: 8+157.65
Offset: 15.48 RT

BORING LOG AB-11 Page 1 of 2

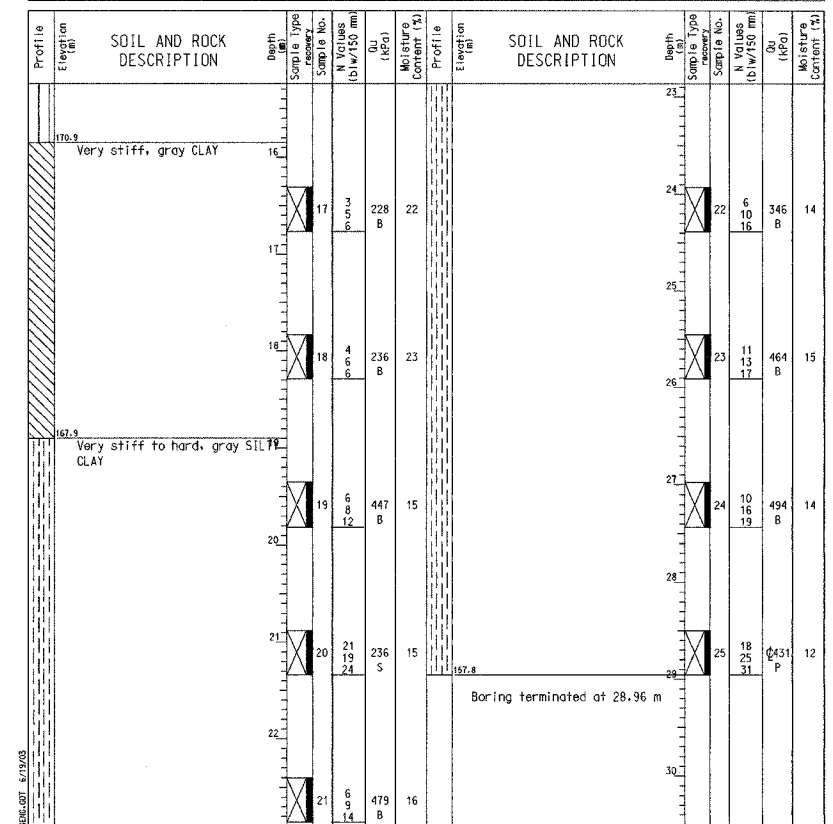
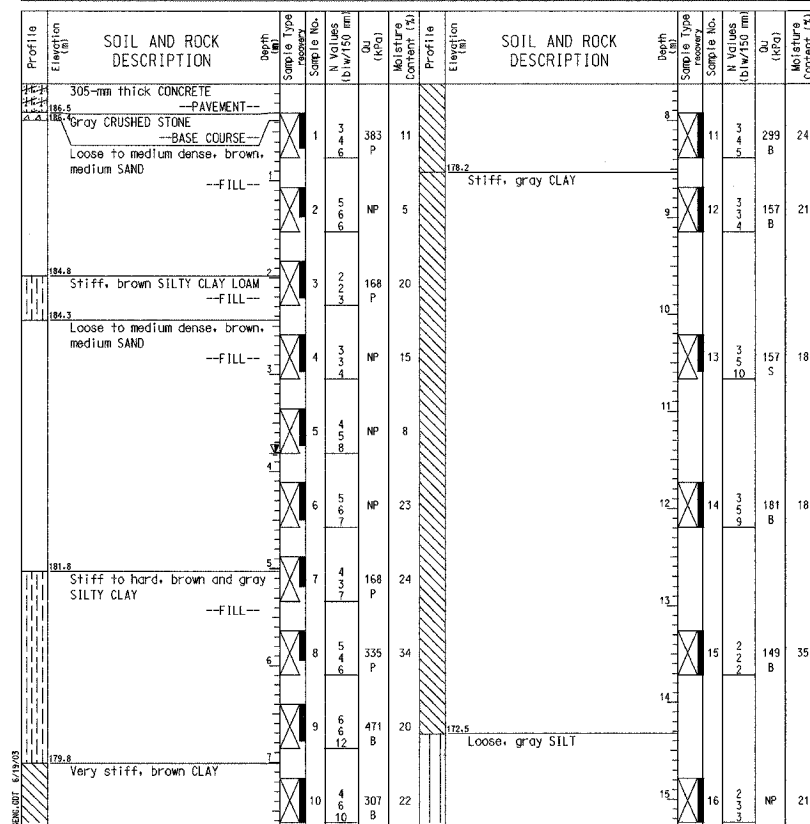
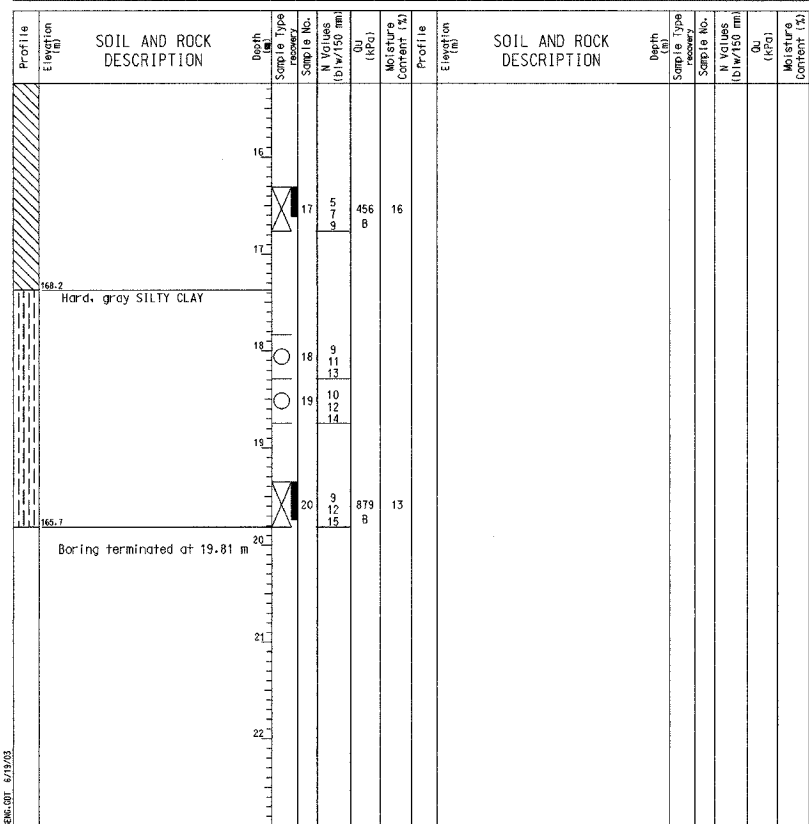
Wang Engineering, INC.
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 186.78 m
North: 545348.04 m
East: 367610.15 m
Station: 8+200.00
Offset: 15.9 RT

BORING LOG AB-11 Page 2 of 2

Wang Engineering, INC.
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 186.78 m
North: 545348.04 m
East: 367610.15 m
Station: 8+200.00
Offset: 15.9 RT



GENERAL NOTES

Begin Drilling 05-15-2002 Complete Drilling 05-15-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller CAA Logger H. Suhail Checked by B. Fugate
 Drilling Method Mud Rotary; Grouted after final water reading.

WATER LEVEL DATA

While Drilling
 At Completion of Drilling
 Time After Drilling 48 hours
 Depth to Water 0.30 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 02-04-2002 Complete Drilling 02-05-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller CAD Logger H. Suhail Checked by N. Davis
 Drilling Method Mud Rotary; Grouted after final water reading.

WATER LEVEL DATA

While Drilling
 At Completion of Drilling
 Time After Drilling 24 hours
 Depth to Water 3.81 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 02-04-2002 Complete Drilling 02-05-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller CAD Logger H. Suhail Checked by N. Davis
 Drilling Method Mud Rotary; Grouted after final water reading.

WATER LEVEL DATA

While Drilling
 At Completion of Drilling
 Time After Drilling 24 hours
 Depth to Water 3.81 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	MJW
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

BORING LOGS (3 OF 3)
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 7+960.424 TO STATION 8+199.354
 STRUCTURE NO. 016-W922

DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

Benchmark: Chiseled box on Northeast corner of Northeast Wingwall over Little Calumet River
 Bridge Westbound I-80 mile marker 0.4, Elevation = 191.662
 Existing Structure: None
 All dimensions in millimeters (mm) except as noted.

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-1
F.A.L. 88-74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1082	2 SHEETS
ILLINOIS PROJECT					CONTRACT NO. 62114 INDOT DES. NO. 0100987

DESIGN STRESSES

FIELD UNITS
 $f'_c = 24 \text{ MPa}$
 $f_y = 400 \text{ MPa (Reinf.)}$
 Maximum Applied Soil Bearing Pressure = 105 kPa

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges

AASHTO 1989 Guide Specifications for Structural Design of Sound Barriers and 1992 Interims

CURVE DATA I-80/94

$\Delta = 20^\circ 51' 41''$
 $R = 1,864.600 \text{ m}$
 $T = 343.250 \text{ m}$
 $L = 678.899 \text{ m}$
 $E = 31.331 \text{ m}$
 $P.C. Sta = 8+603.684$
 $P.I. Sta = 8+946.934$
 $P.T. Sta = 9+282.583$
 $S.E. = 3.0 \%$

INDEX OF SHEETS

SHEET NO.	TITLE
S-1	General Plan
S-2	Plan and Elevation

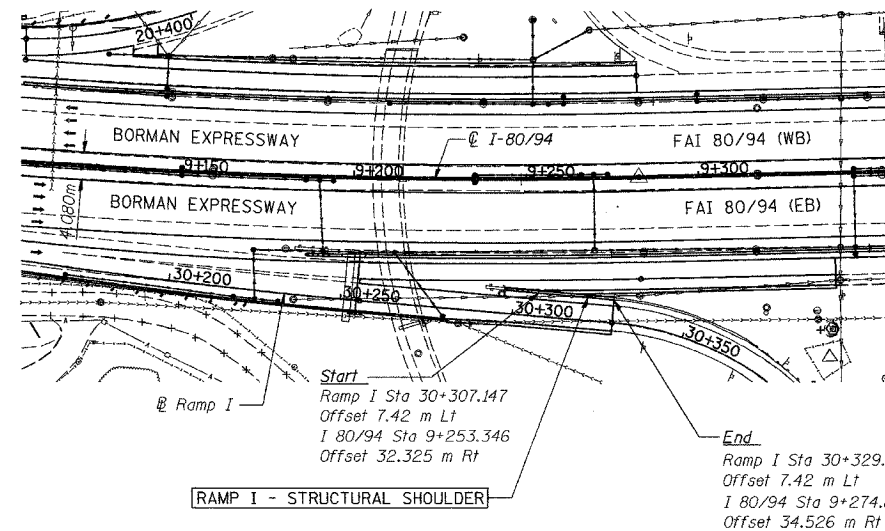
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
(IN) Concrete, A, Substructure	m ³	49.2
(IN) Reinforcing Bars, Epoxy Coated	kg	3,740
(IN) Surface Seal	L Sum	0.01
(IN) Masonry Coating	L Sum	0.01

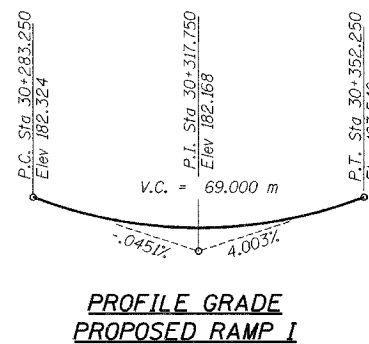
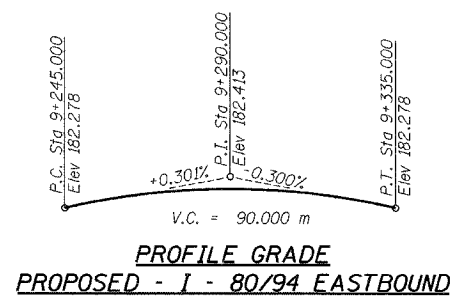
(IN) Indiana Pay Items, denoted by "(Indiana)" in Special Provisions and Summary of Quantities.

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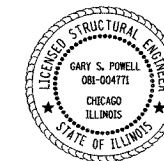
- Existing Roadway/Structure
- Proposed Roadway/Structure
- ⊙ Tree
- ~ Shrubs/Brush
- Proposed Storm Sewer
- Existing Sanitary Sewer
- Existing Storm Sewer
- Existing Water Main
- Electrical Aerial Cable
- Existing Gas Line
- Existing Cable TV



PLAN



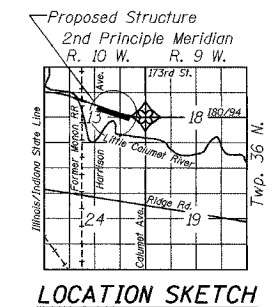
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP



Gary S. Powell
 GARY S. POWELL, S.E.
 IL. LIC. NO. 081-004771
 EXP 11-30-2006
 DATE 09-12-2005



Gary S. Powell
 GARY S. POWELL, P. E.
 IN. LIC. NO. 10403944
 EXP 07-31-2006
 DATE 09-12-2005



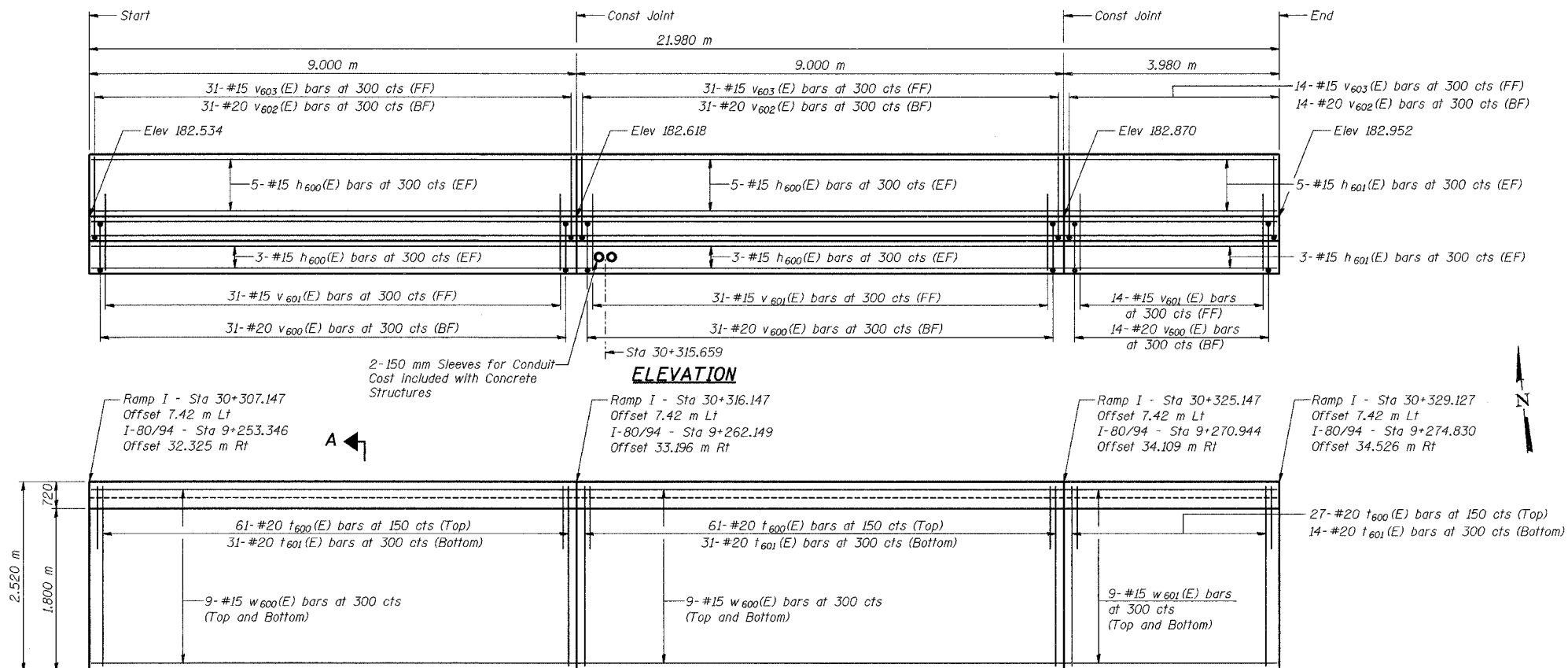
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

**GENERAL PLAN
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 RAMP I - STRUCTURAL SHOULDER
 STA 9+253.346 TO STA 9+274.830**

DATE 09/05

**AMERICAN
 CONSULTING ENGINEERS**

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-2
I-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	1083	2 SHEETS
SHEET NO.		CONTRACT NO. 62114		INDOT DES. NO. 0100987	



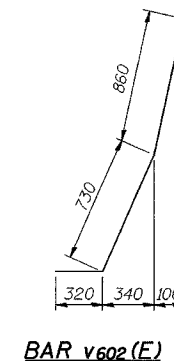
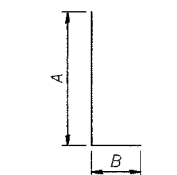
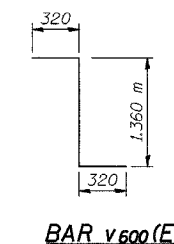
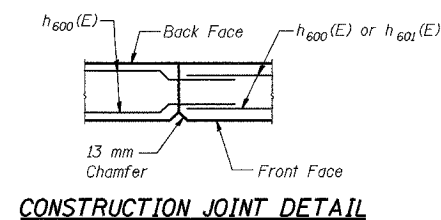
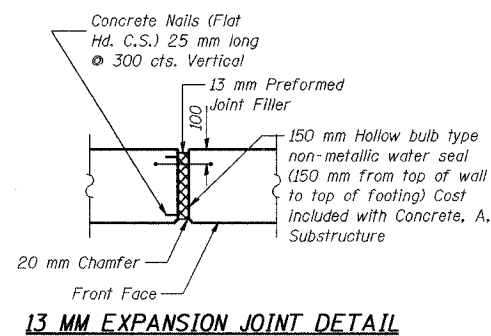
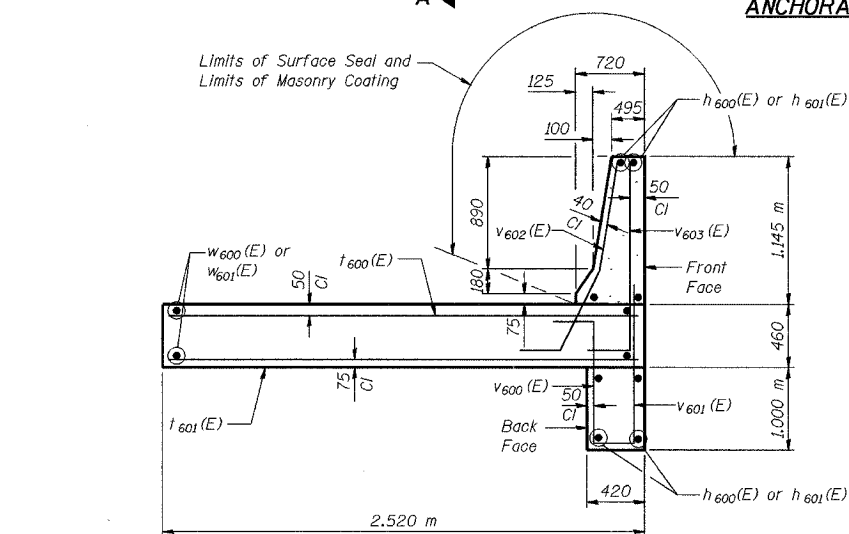
BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h ₆₀₀ (E)	32	15	9.64	—
h ₆₀₁ (E)	16	15	3.88	—
t ₆₀₀ (E)	149	20	2.74	L
t ₆₀₁ (E)	76	20	2.42	—
v ₆₀₀ (E)	76	20	2.00	L
v ₆₀₁ (E)	76	15	1.64	—
v ₆₀₂ (E)	76	20	1.91	L
v ₆₀₃ (E)	76	15	1.77	L
w ₆₀₀ (E)	36	15	9.64	—
w ₆₀₁ (E)	18	15	3.88	—
Concrete, A, Substructure		m ³	49.2	
Reinforcing Bars, Epoxy Coated		kg	3,740	
Surface Seal		L Sum	0.01	
Masonry Coating		L Sum	0.01	

BAR DIMENSIONS

Bar	A	B
t ₆₀₀ (E)	2.42 m	320
v ₆₀₃ (E)	1.51 m	260

ANCHORAGE SLAB PLAN



MINIMUM BAR LAPS

#15 bars = 640
#20 bars = 790

LEGEND

BF = Back Face
FF = Front Face
EF = Each Face

The estimated Surface Seal area is 75.6 m²
The estimated Masonry Coating area is 75.6 m²

NOTES:

Reinforcement bars shall conform to the requirements of AASHTO M 31M or M322M Grade 400.
Stations are referenced to I-80/94 and Ramp I
Reinforcing bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
All construction joints shall be bonded.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

**PLAN AND ELEVATION
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
RAMP I - STRUCTURAL SHOULDER
STA 9+253.346 TO STA 9+274.830**

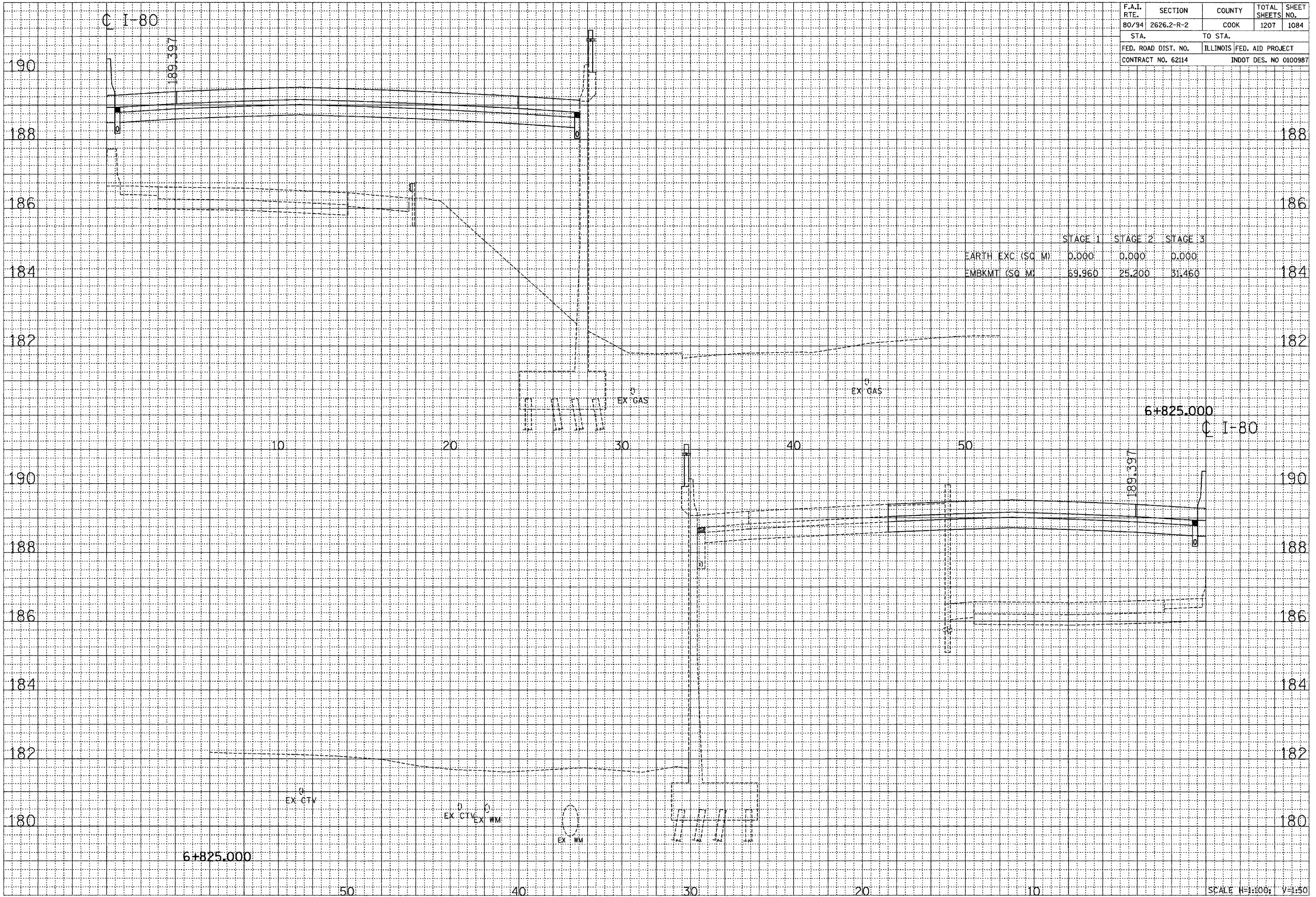
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	2626.2-R-2	COOK	1207	1084
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62114		INDOT DES. NO 0100987		

BY	DATE
ORIGINAL SURVEY	DATE
NOTED SURVEY	DATE
AREAS CHECKED	

BY	DATE
ORIGINAL SURVEY	DATE
NOTED SURVEY	DATE
AREAS CHECKED	



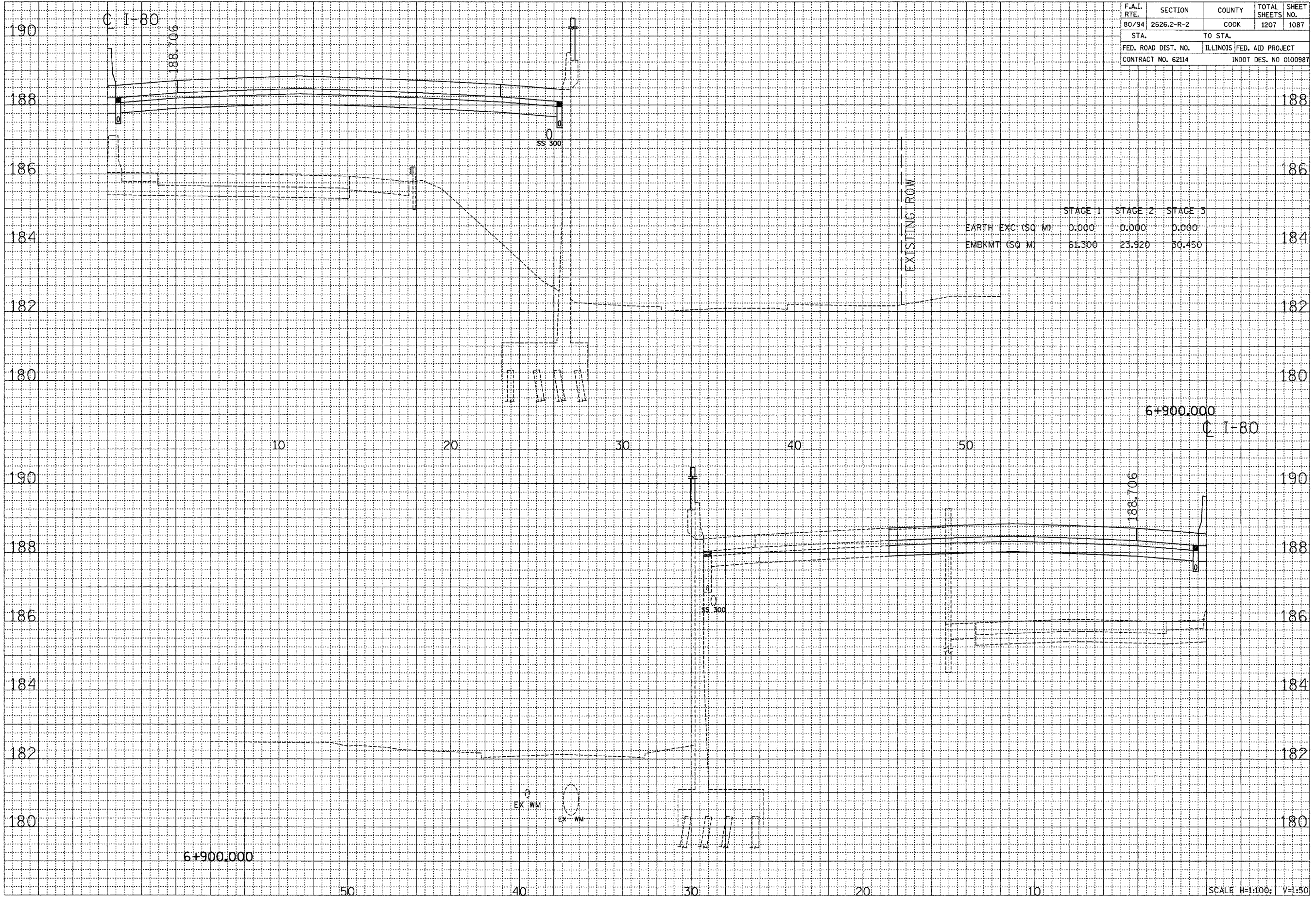
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Scale: H=1:100; V=1:50

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80/94	2626.2-R-2	COOK	1207	1087
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62114		INDOT DES. NO 0100987		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		



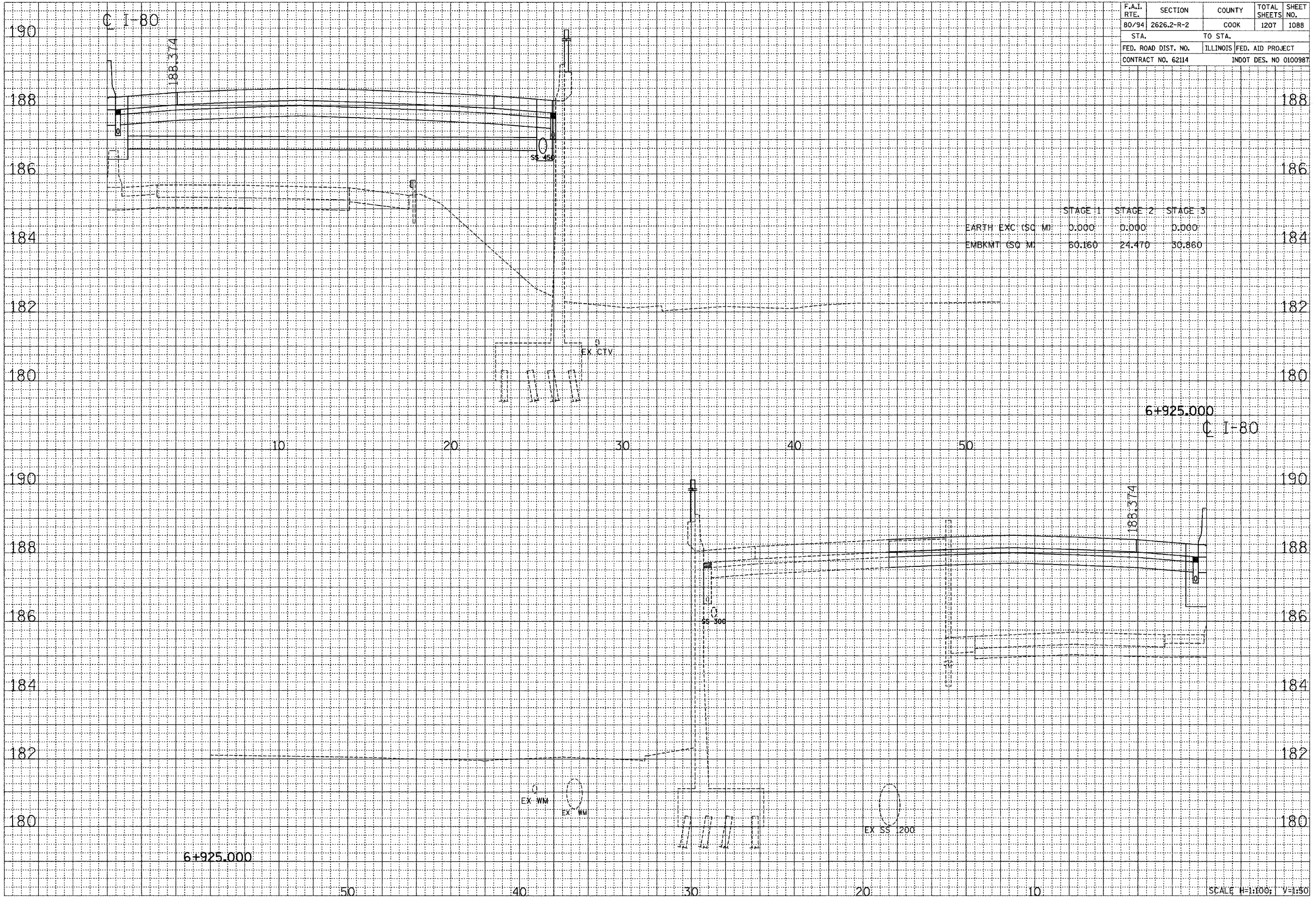
CROSS SECTION - I-80/94/US 6

SCALE H=1:100; V=1:50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62114		INDOT DES. NO 0100987		

FINAL	DATE
REVISED	BY
PLOTTED	
AREA	
CHECKED	
NO.	

ORIGINAL	DATE
REVISED	BY
PLOTTED	
AREA	
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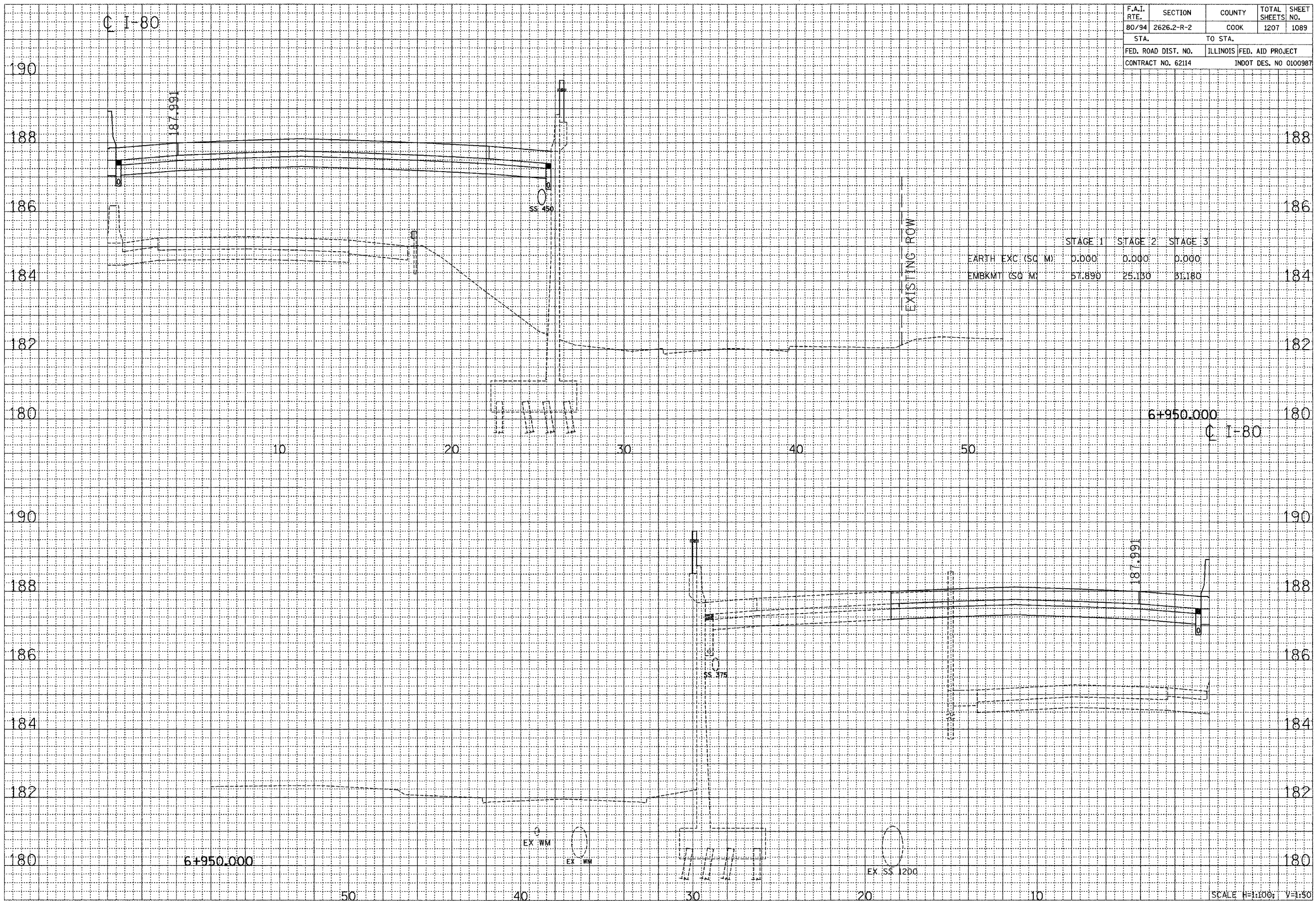
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	2626.2-R-2	COOK	1207	1089
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62114		INDOT DES. NO 0100987		

FINAL SURVEY	BY	DATE
SURVEYED		
NOTE BOOK		
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AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
NOTE BOOK		
NO.		
AREAS CHECKED		

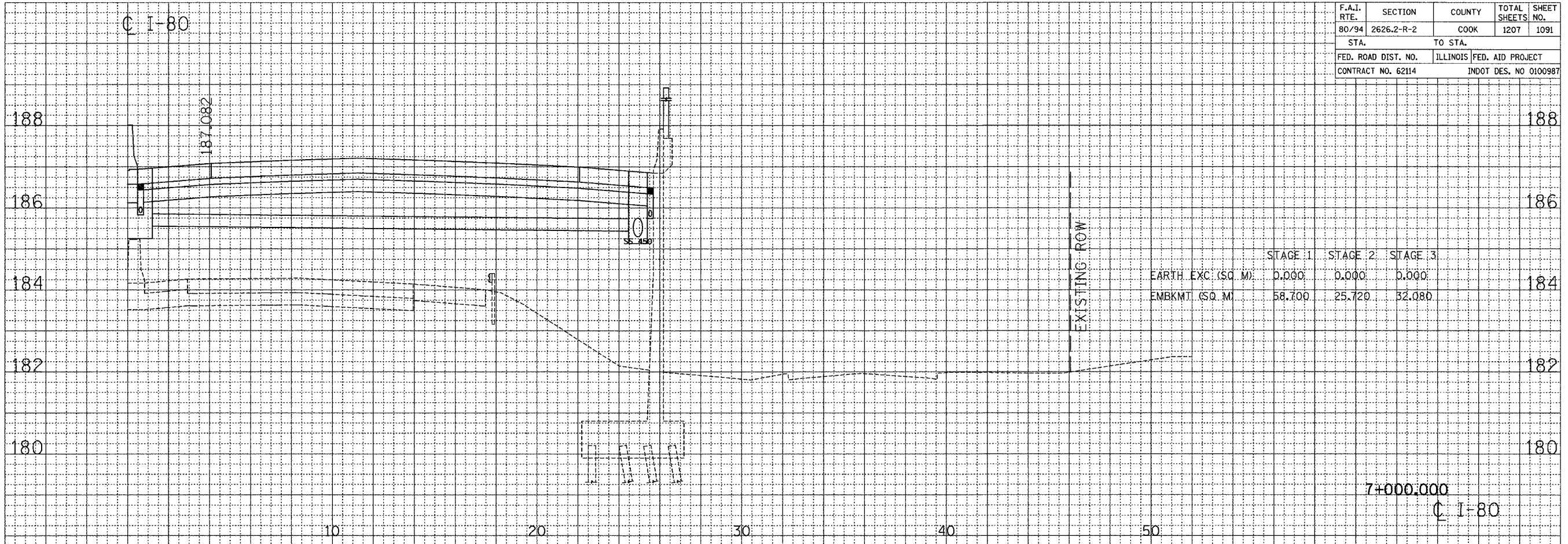


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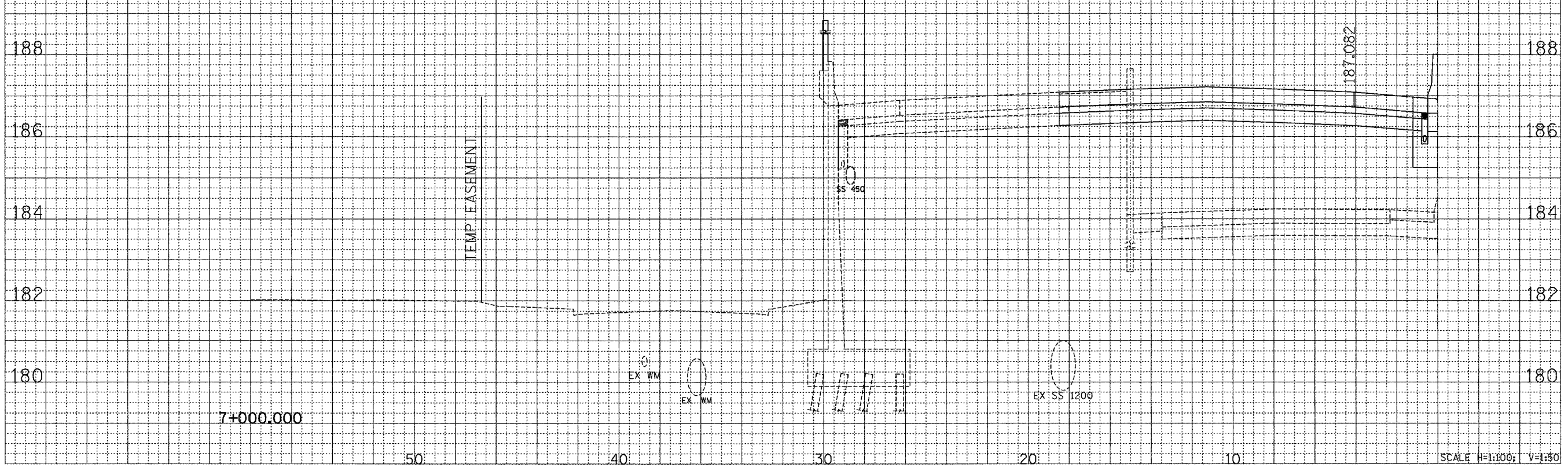
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STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62114		INDOT DES. NO 0100987		

BY	DATE
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED



BY	DATE
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED

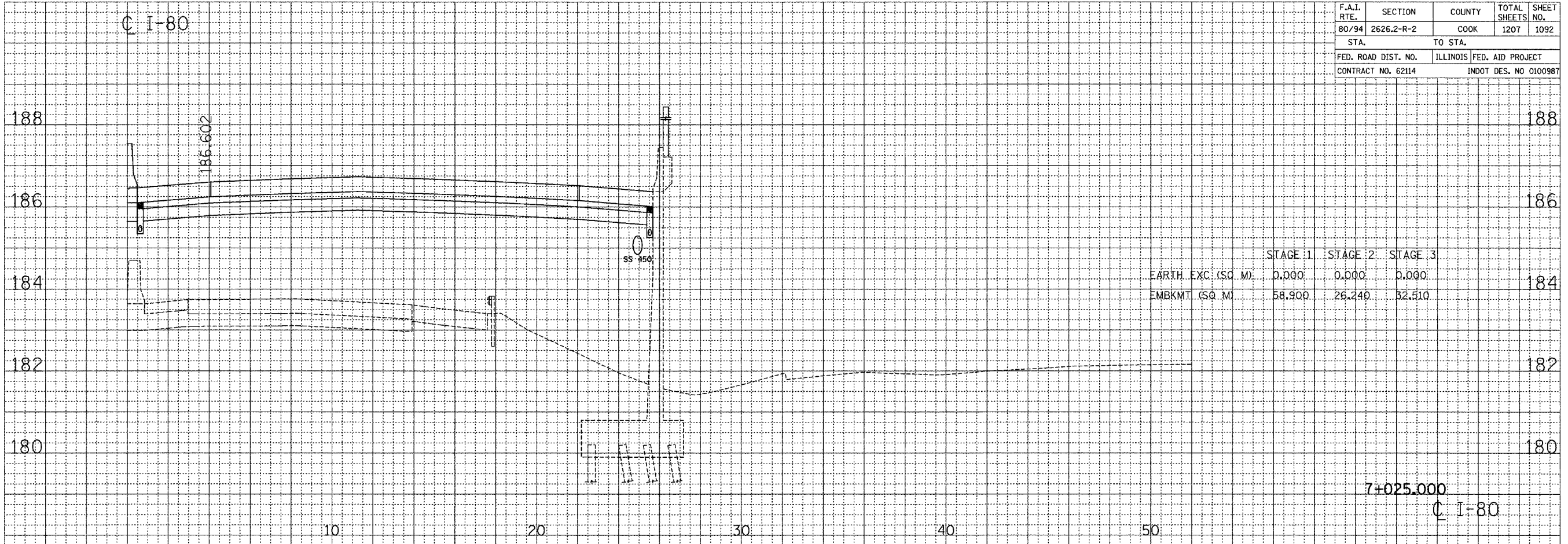


CROSS SECTION - I-80/94/US 6

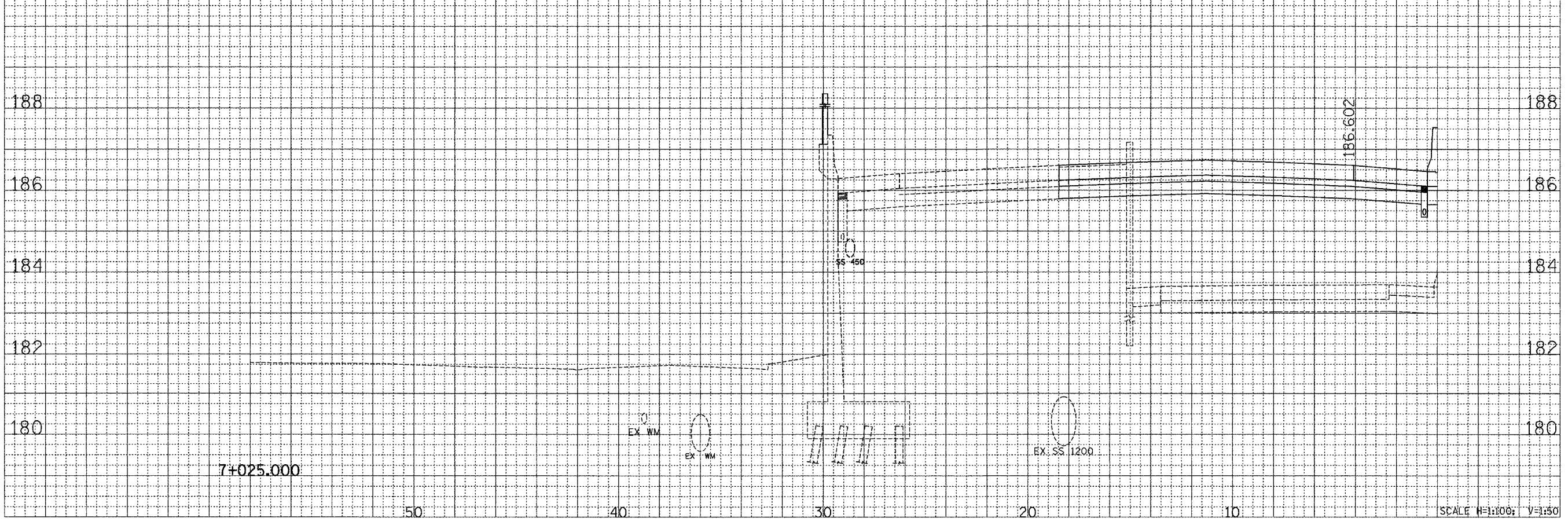
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STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62114		INDOT DES. NO 0100987		

FINAL SURVEY	DATE
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	



ORIGINAL SURVEY	DATE
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

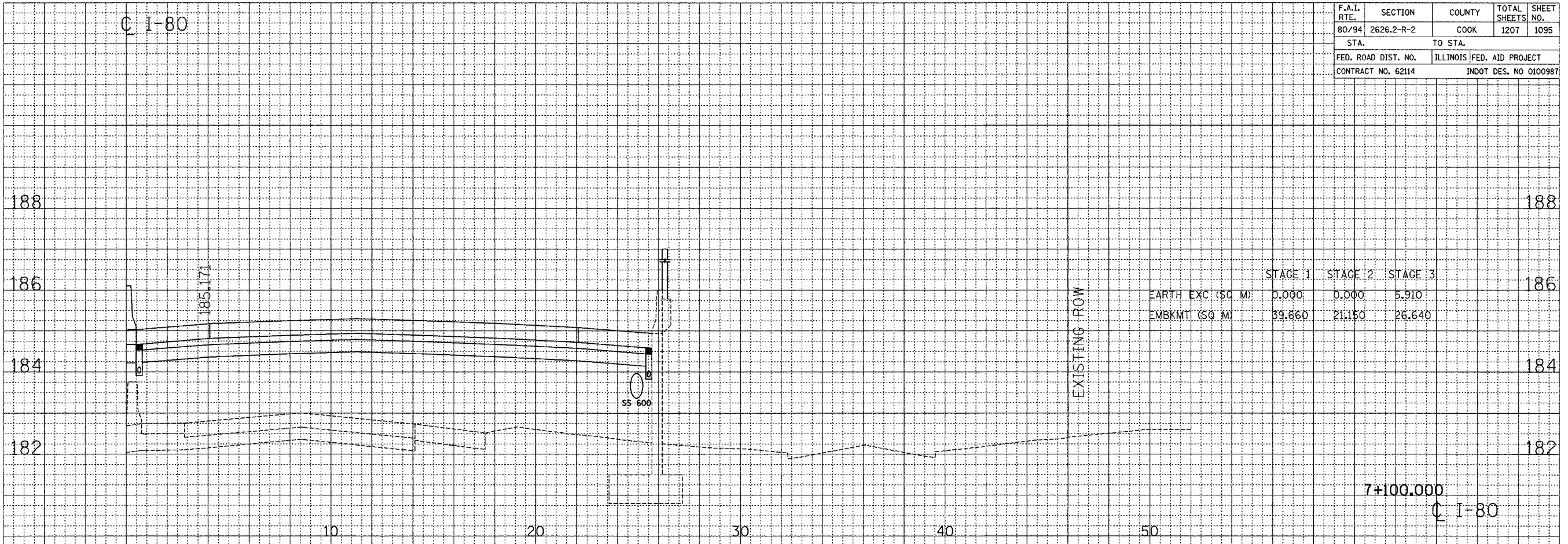


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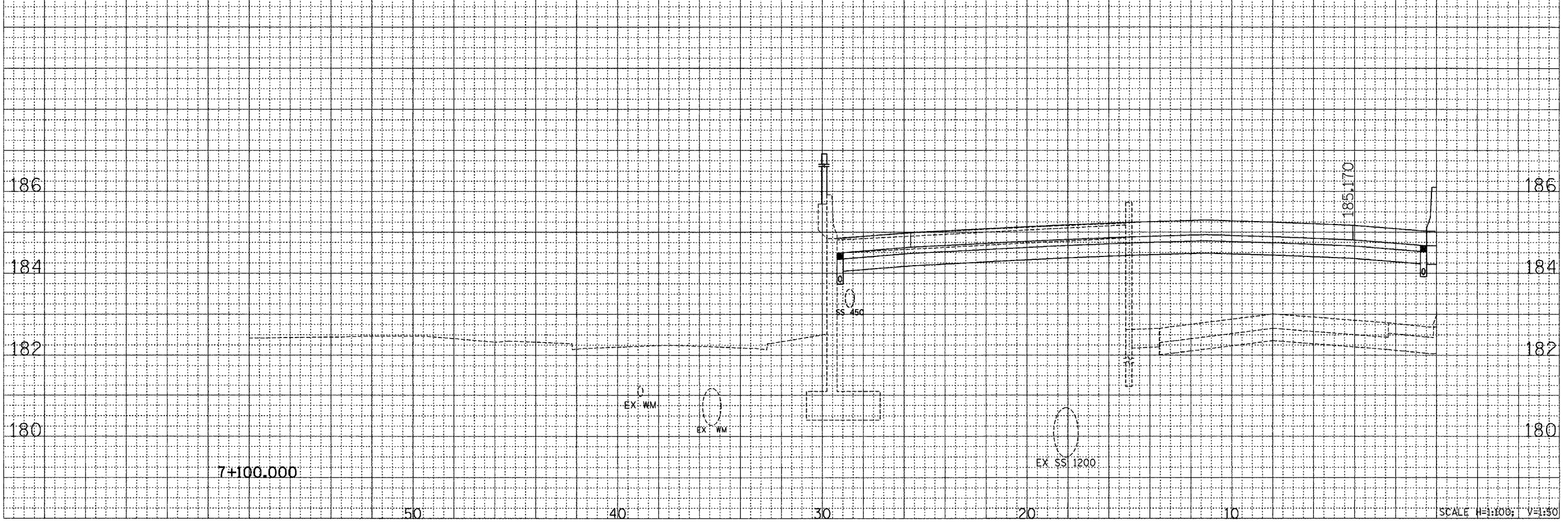
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	2626.2-R-2	COOK	1207	1095
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62114		INDOT DES. NO 0100987		

BY	DATE
FINAL SURVEY	SHAWNEE
NOTE BOOK NO.	PLOTTED DATE
	AREAS CHECKED



BY	DATE
ORIGINAL SURVEY	SHAWNEE
NOTE BOOK NO.	PLOTTED DATE
	AREAS CHECKED

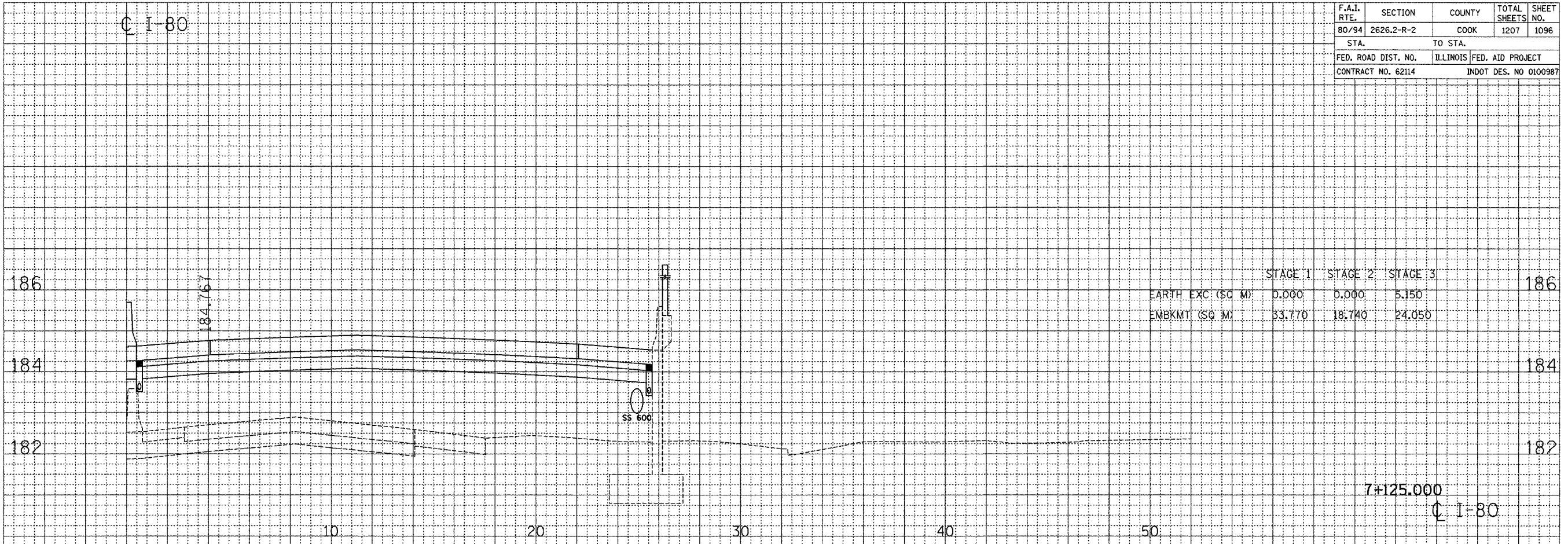


CROSS SECTION - I-80/94/US 6

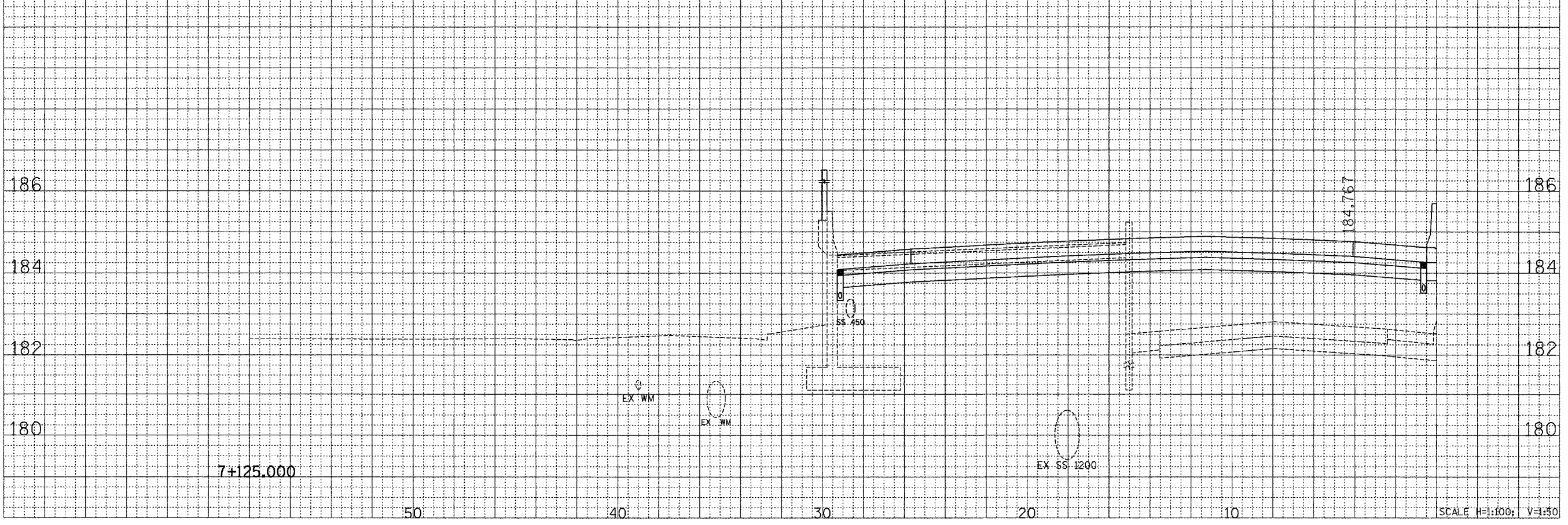
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	2626.2-R-2	COOK	1207	1096
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62114		INDOT DES. NO 0100987		

BY _____ DATE _____
 ORIGINAL SURVEY DRAWING
 SURVEY PLOTTED
 NOTE BOOK NO. _____
 AREAS CHECKED _____



BY _____ DATE _____
 ORIGINAL SURVEY DRAWING
 SURVEY PLOTTED
 NOTE BOOK NO. _____
 AREAS CHECKED _____



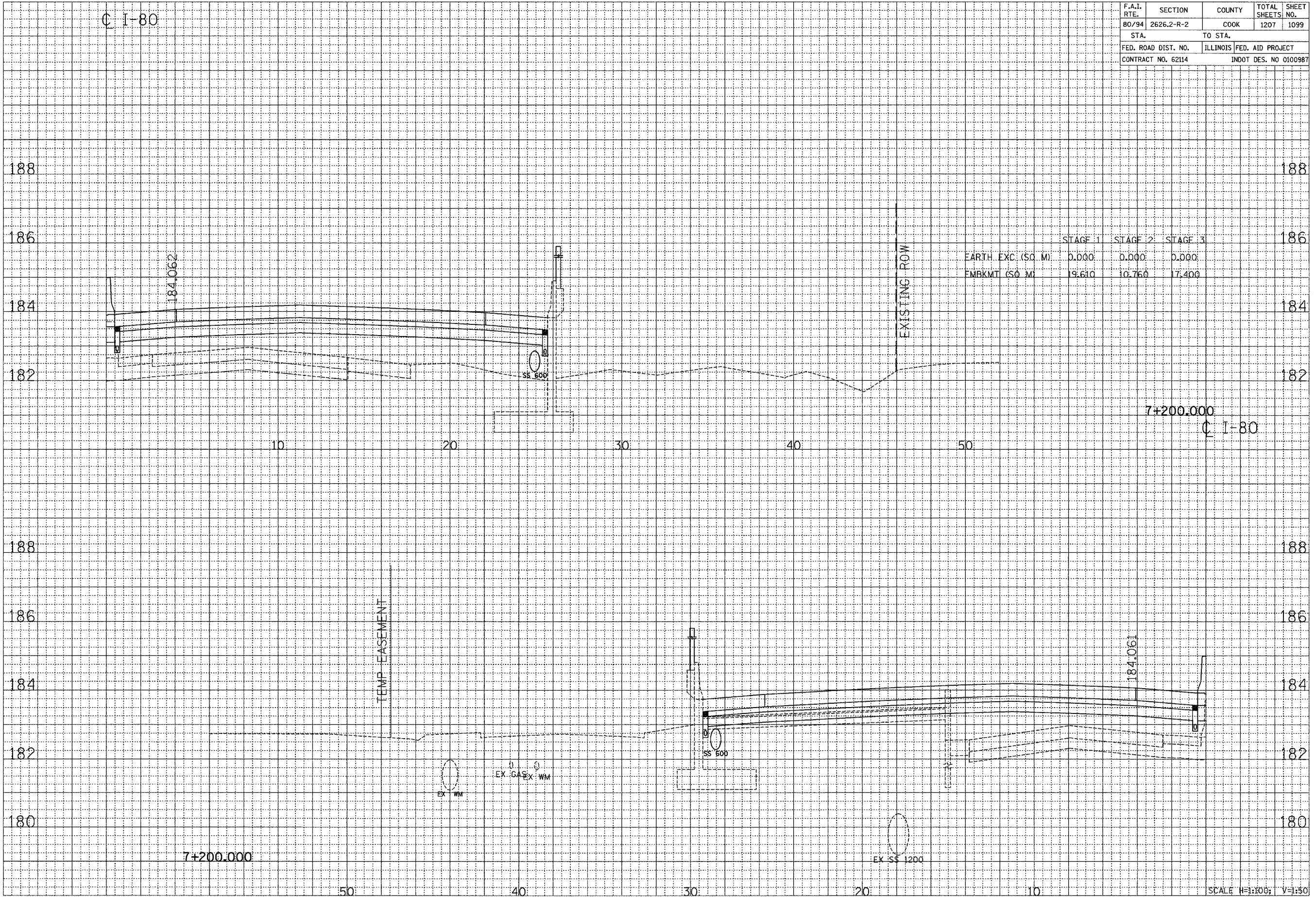
CROSS SECTION - I-80/94/US 6

1:1000 H=1:100 V=1:50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	2626.2-R-2	COOK	1207	1099
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62114		INDOT DES. NO 0100987		

FINA	DATE
SURVEYED	BY
PLOTTED	
NOTE BOOK	
AREAS	
CHECKED	

ORIGNA	DATE
SURVEYED	BY
PLOTTED	
NOTE BOOK	
AREAS	
CHECKED	



CROSS SECTION - I-80/94/US 6

SCALE H=1:100; V=1:50

