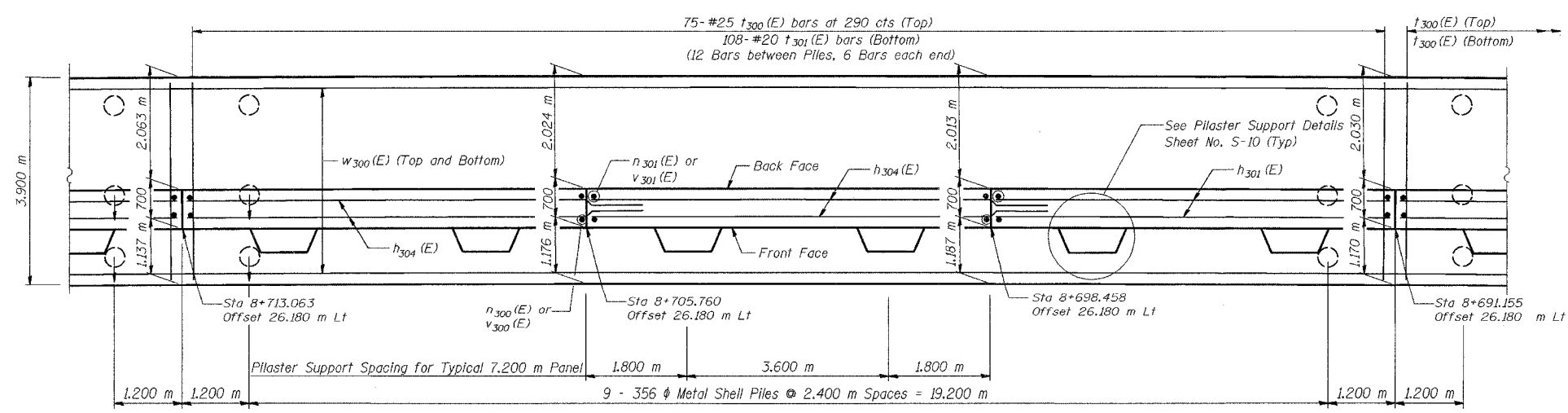
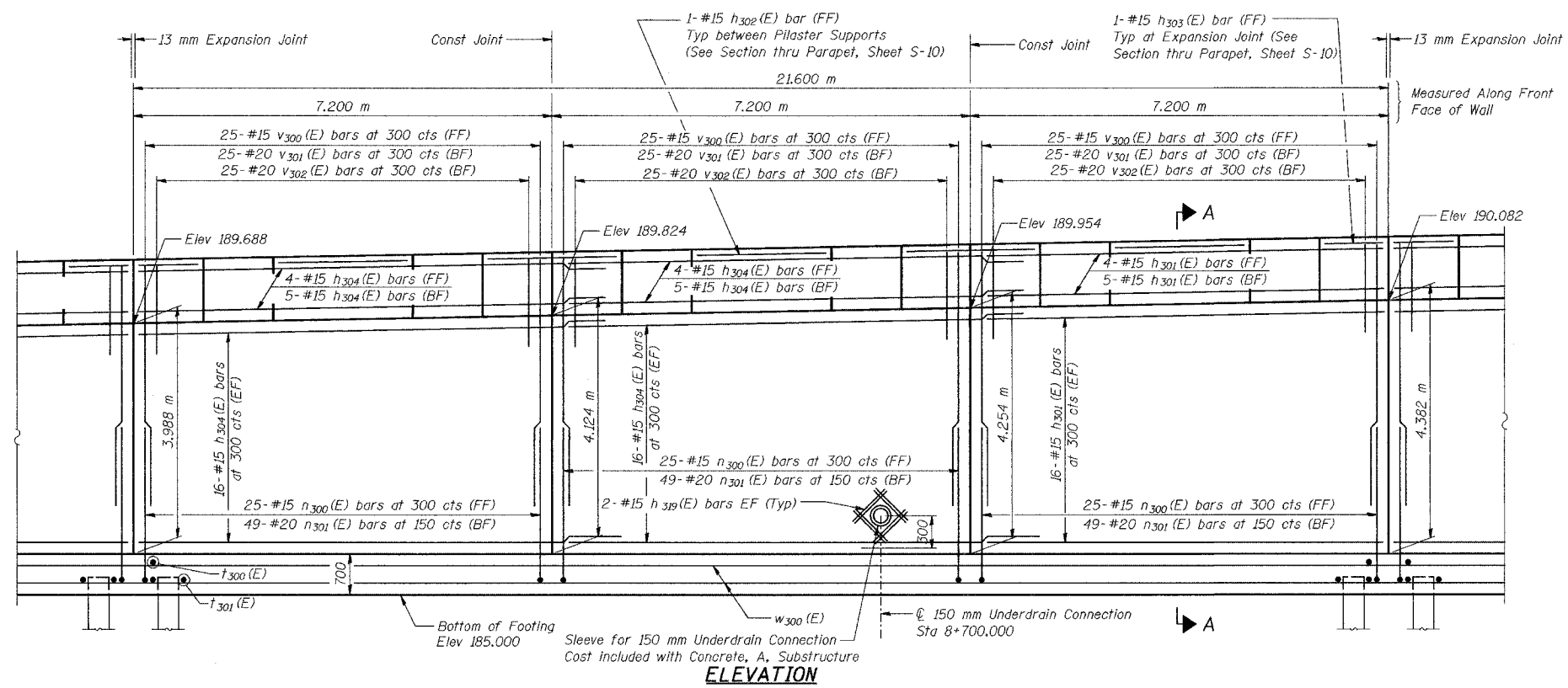


ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. S-4
2626.2-R-2	2626.2-R-2	LAKE COUNTY, INDIANA	1207	901	19 SHEETS
CONTRACT NO. 62114		INDOT DES. NO. 0100987			



NOTES:
 See Sheet S-10 for Section A-A.
 See Sheet S-11 for Expansion Joint Detail and Bill of Material.
 See Sheet S-12 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

FOOTING PLAN

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

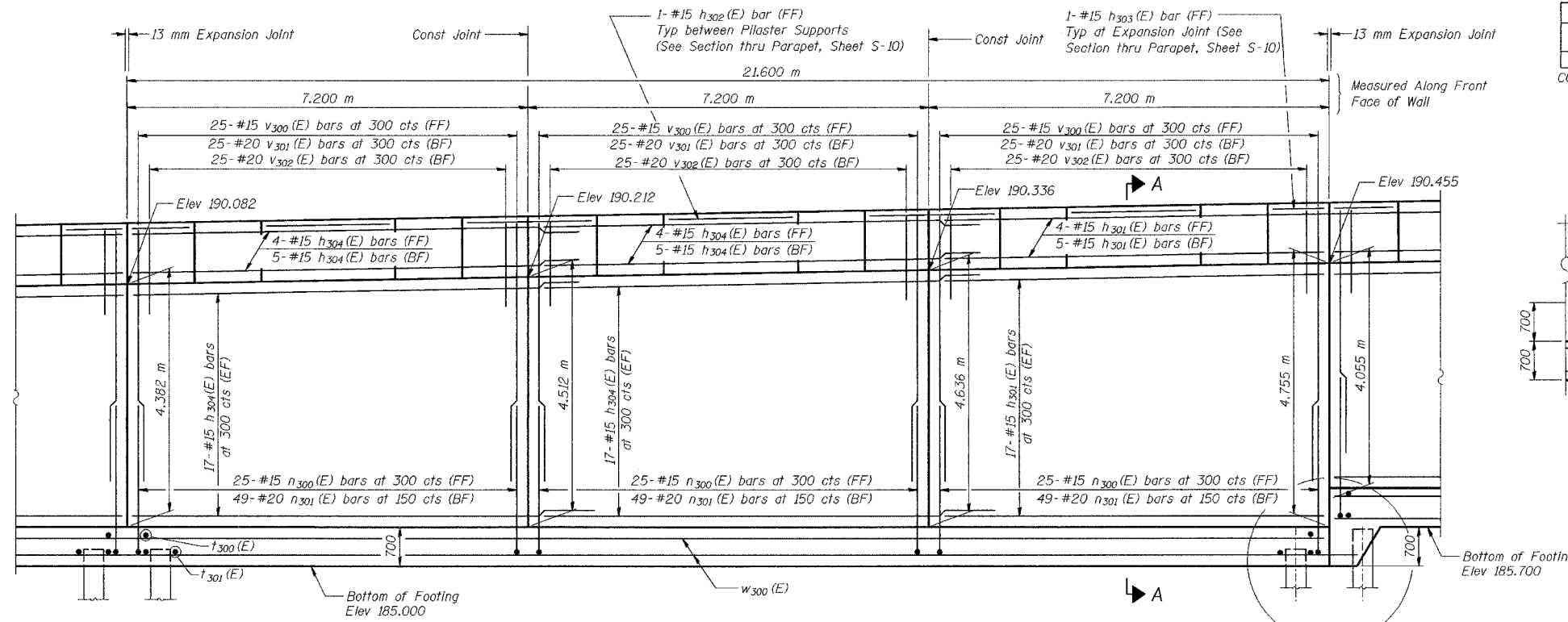
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (2 OF 7)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+581.326 TO STATION 8+733.961
 STRUCTURE NO. 016-W860
 DATE 09/05

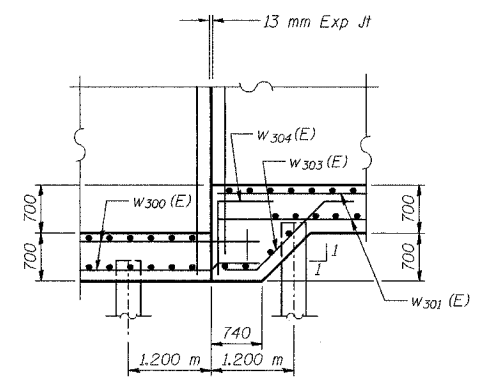
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-5
66/74	ENGINEER-02	LAKE COUNTY, INDIANA	1207	902	19 SHEETS
BLDG. NO.		FED. AID PROJECT			

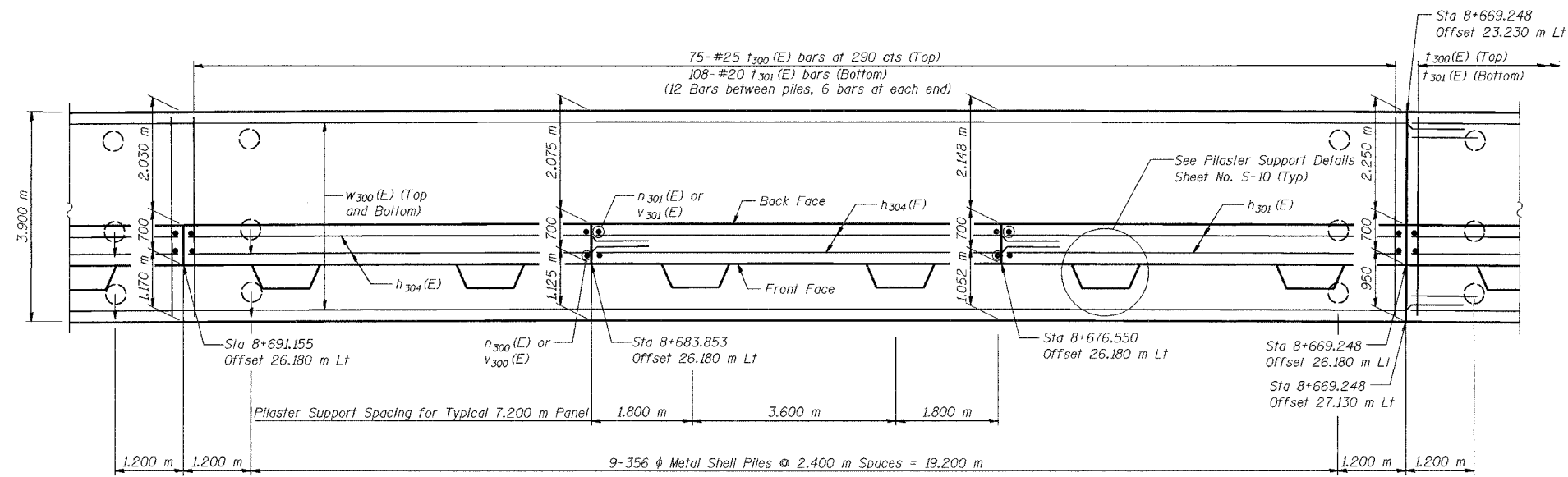
CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



DETAIL A



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-10 for Section A-A.
See Sheet S-11 for Expansion Joint Detail and Bill of Material.
See Sheet S-12 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.

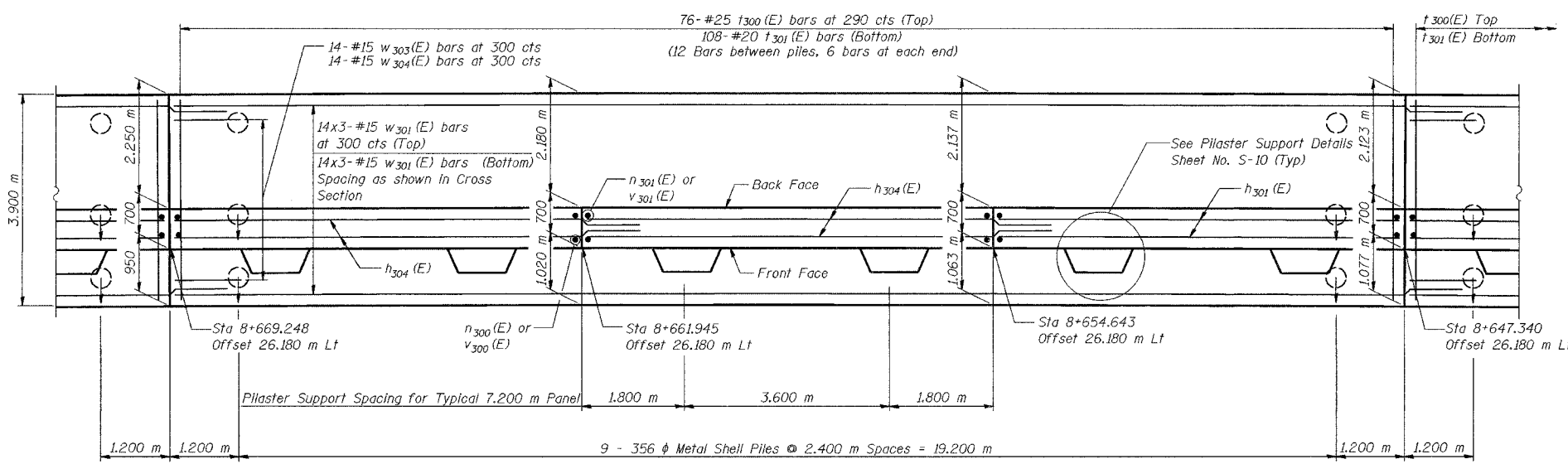
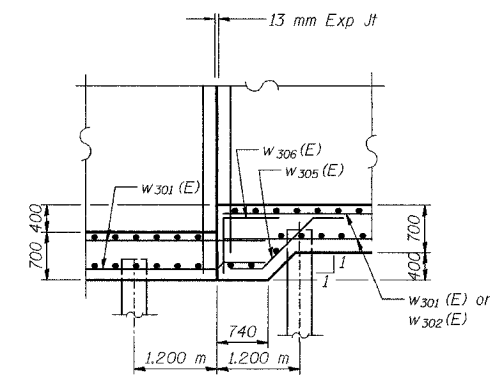
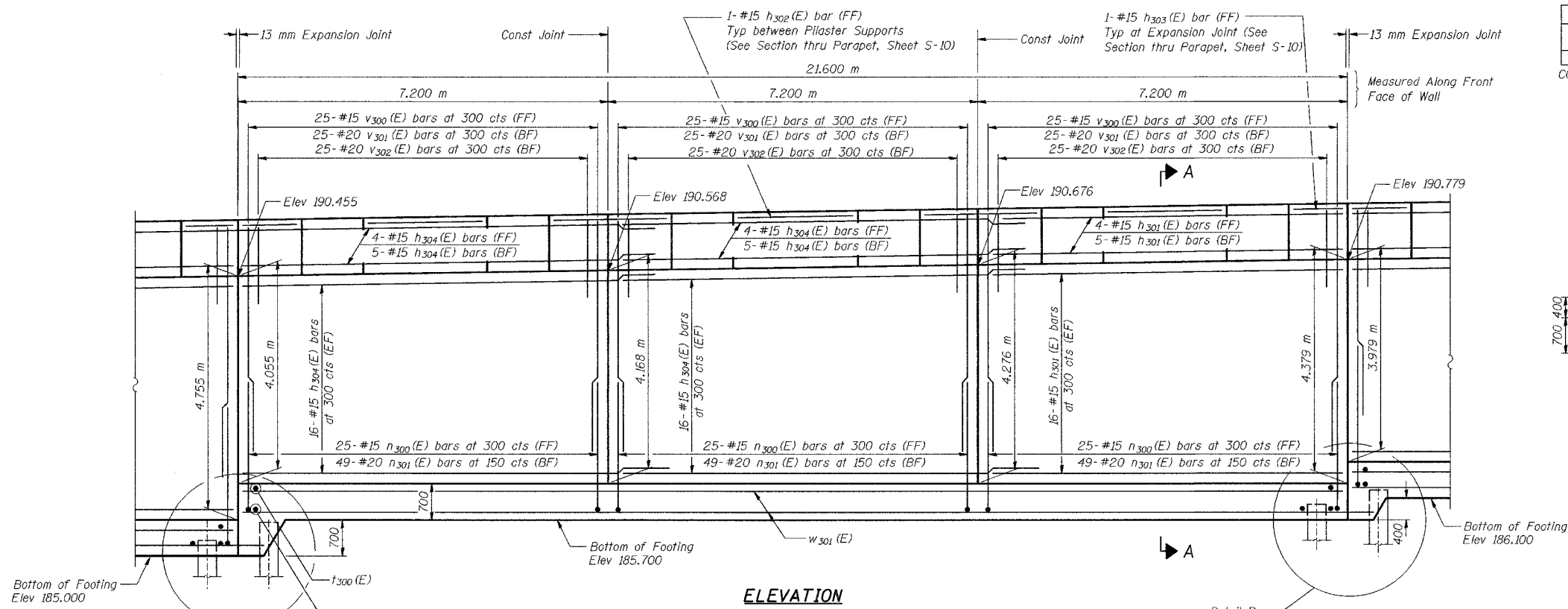
ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PLAN AND ELEVATION (3 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860

DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. S-6 19 SHEETS
F.A.S. 88/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	903	
ILLINOIS DEPARTMENT OF TRANSPORTATION					
CONTRACT NO. 62114					INDOT DES. NO. 0100987



NOTES:
 See Sheet S-10 for Section A-A.
 See Sheet S-11 for Expansion Joint Detail and Bill of Material.
 See Sheet S-12 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

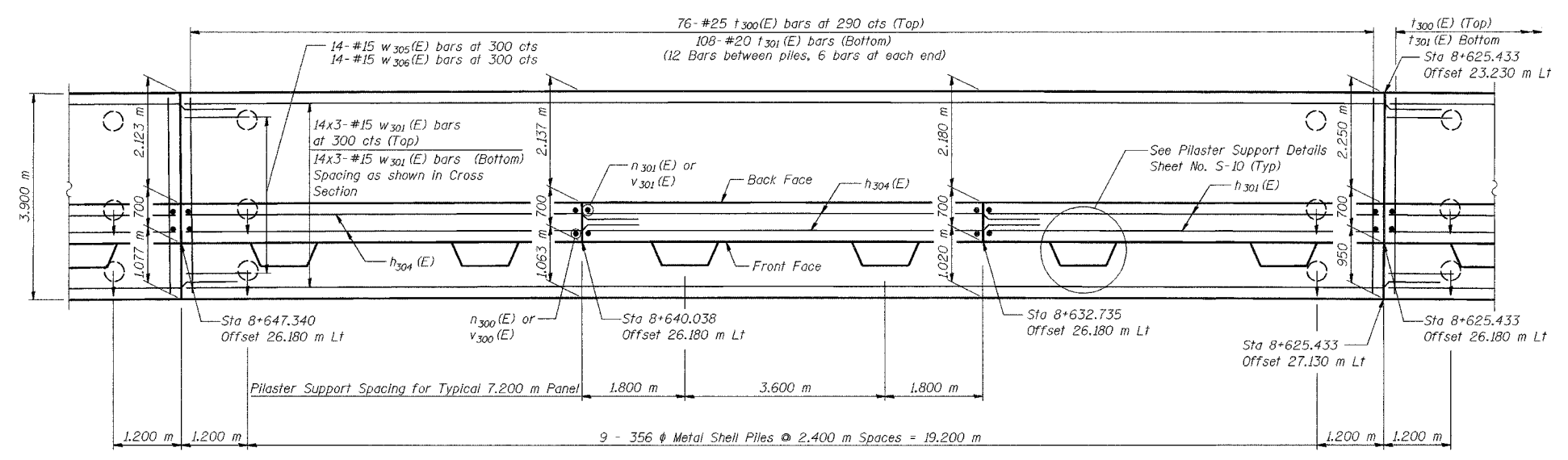
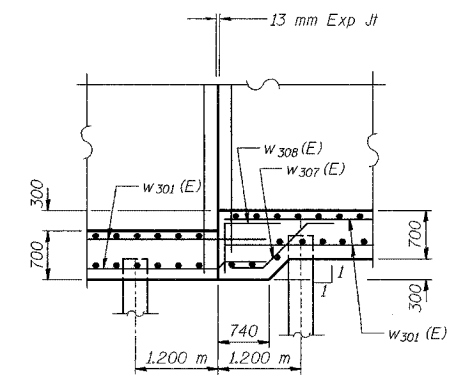
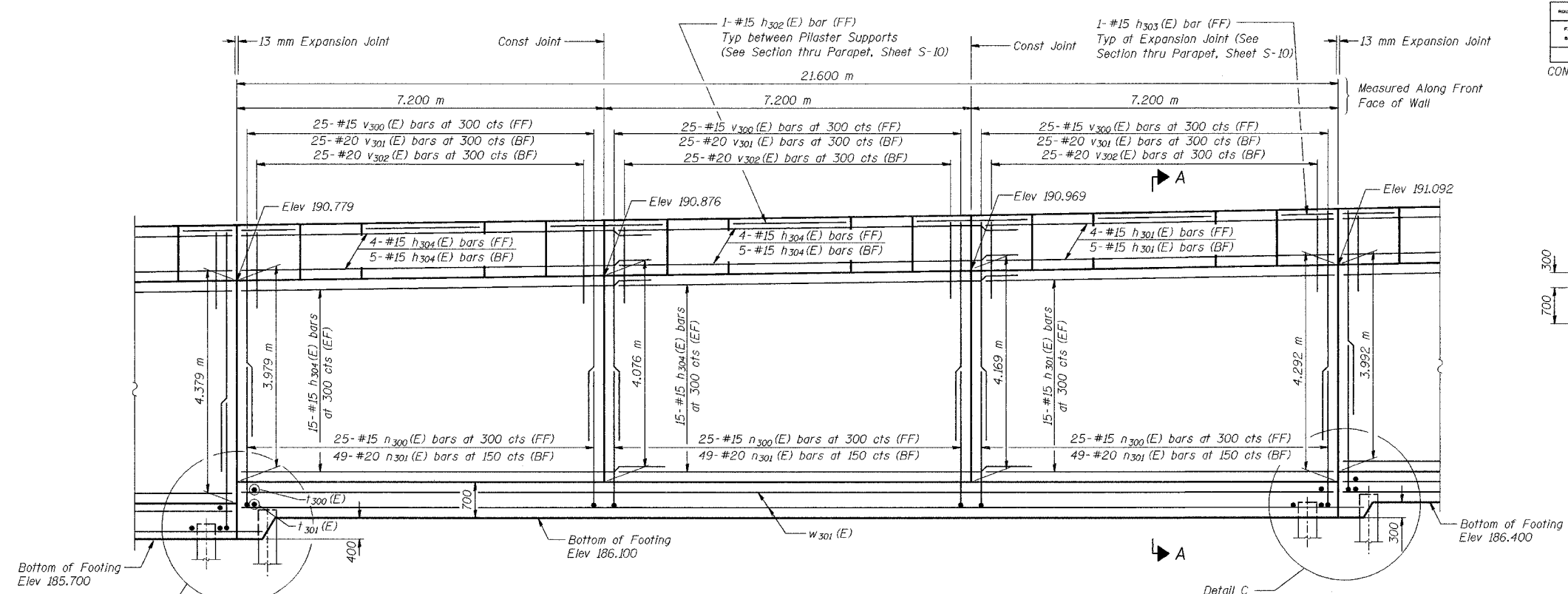
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (4 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-7 19 SHEETS
P.A.L. 88-74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	904	
CONTRACT NO. 62114		INDOT DES. NO. 0100987			



NOTES:

See Sheet S-10 for Section A-A.

See Sheet S-11 for Expansion Joint Detail and Bill of Material.

See Sheet S-12 for Rustication details.

Stations are referenced to Q 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

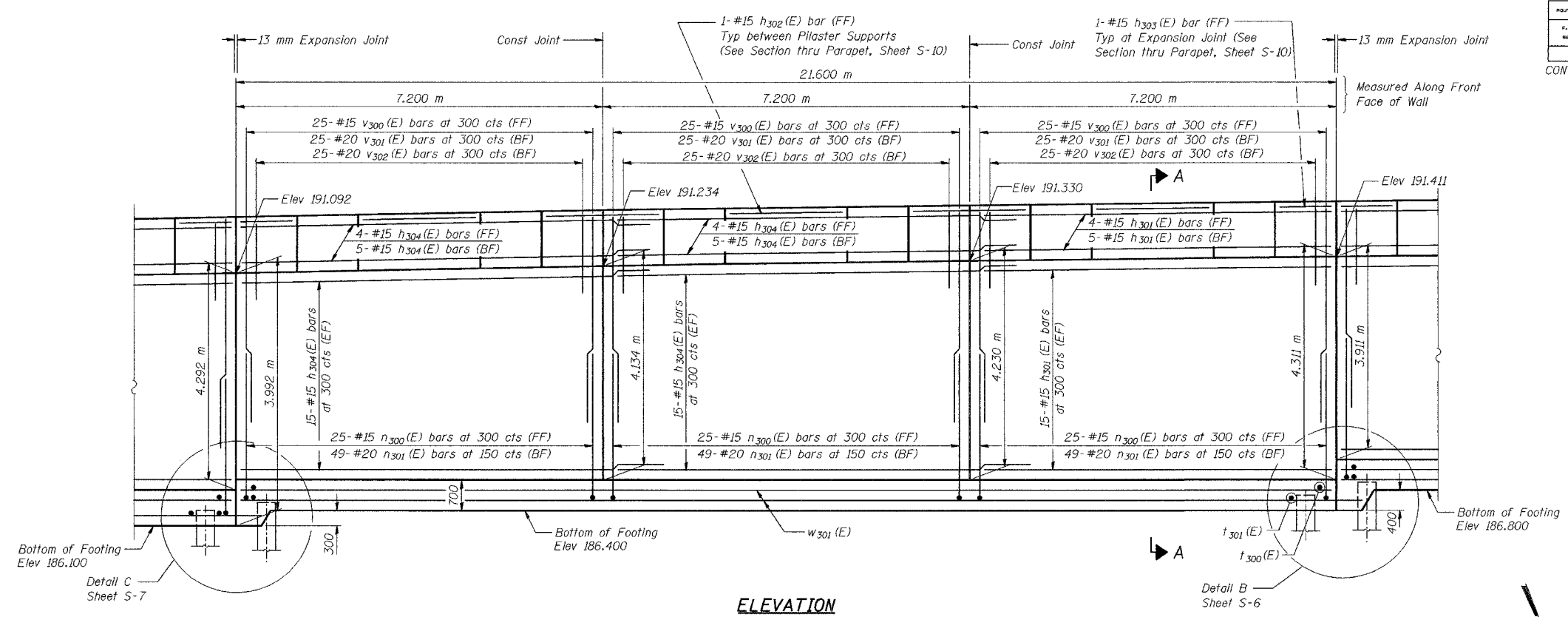
PLAN AND ELEVATION (5 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860

DATE 09/05

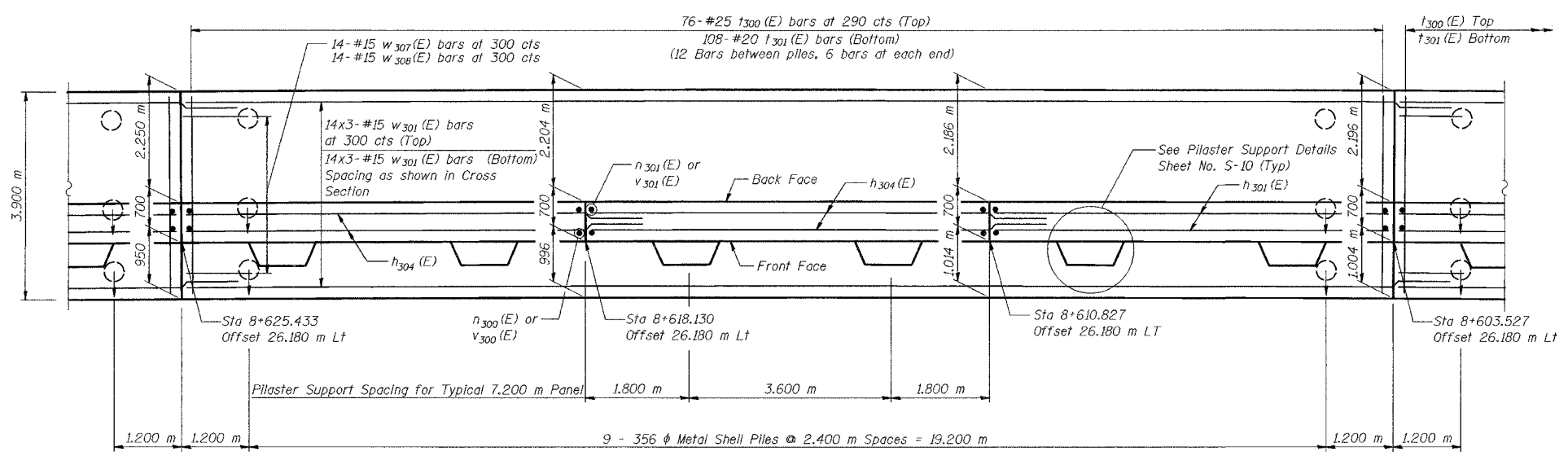
AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	POST MILE	SHEET NO.	SHEET TOTAL
I-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	905	19 SHEETS
ILLINOIS		FEDERAL PROJECT			

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



FOOTING PLAN

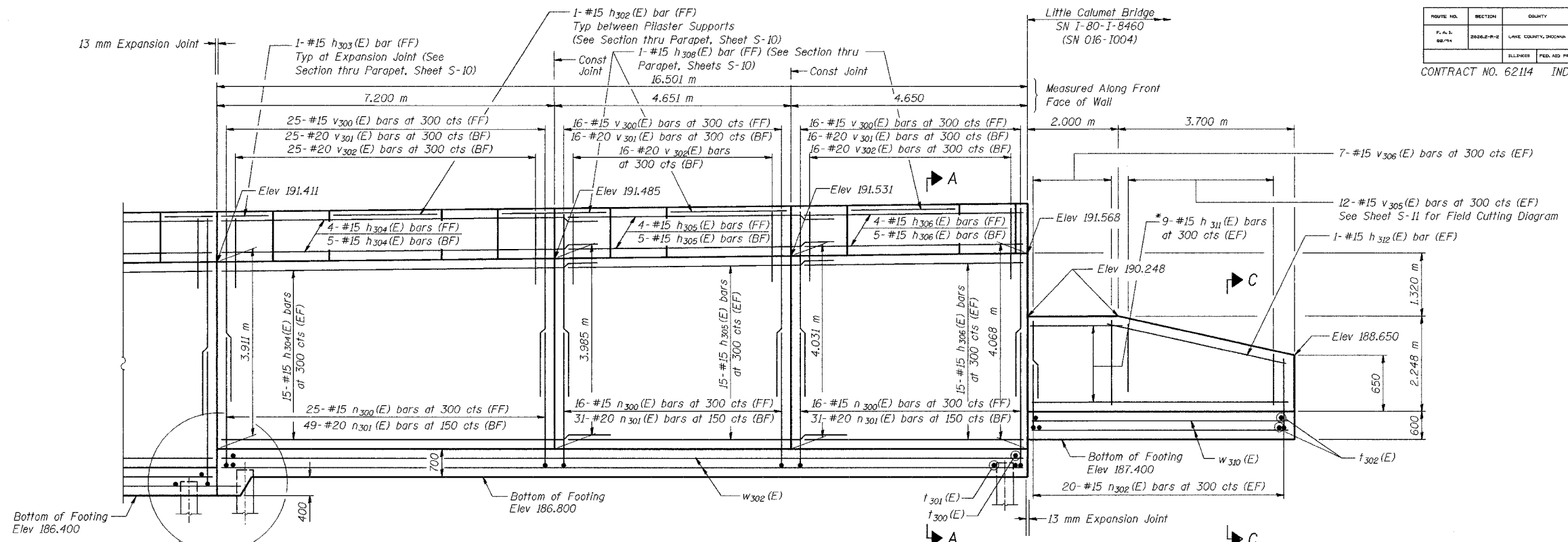
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

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

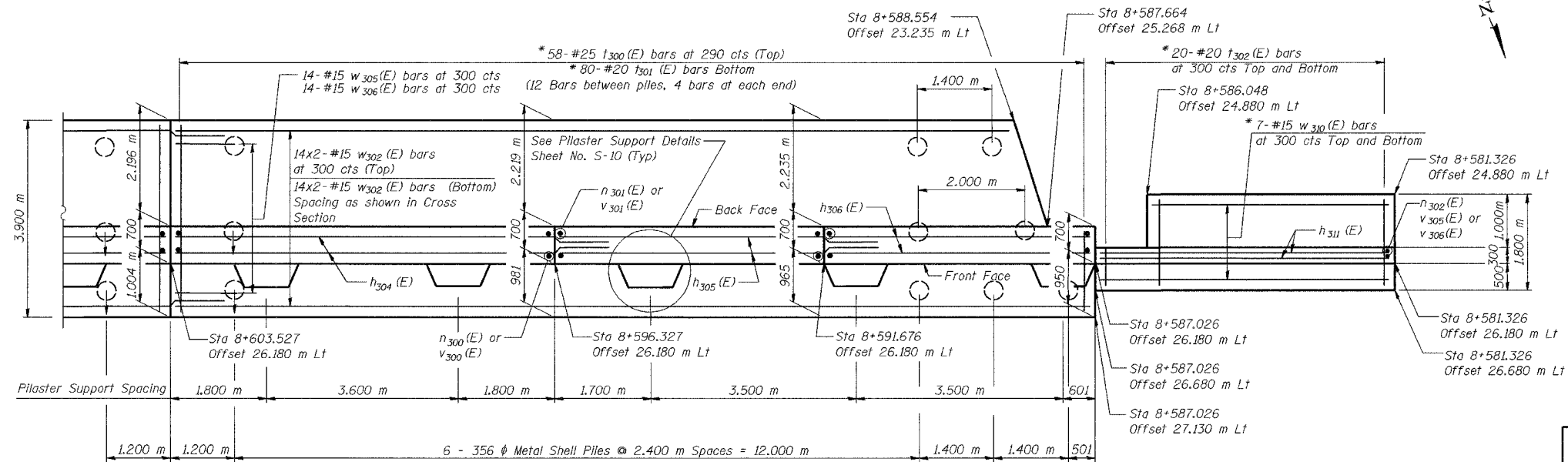
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

NOTES:
 See Sheet S-10 for Section A-A.
 See Sheet S-11 for Expansion Joint Detail and Bill of Material.
 See Sheet S-12 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.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (6 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS



ELEVATION



FOOTING PLAN

MINIMUM BAR LAPS

#15 bars = 640
#20 bars = 790

LEGEND

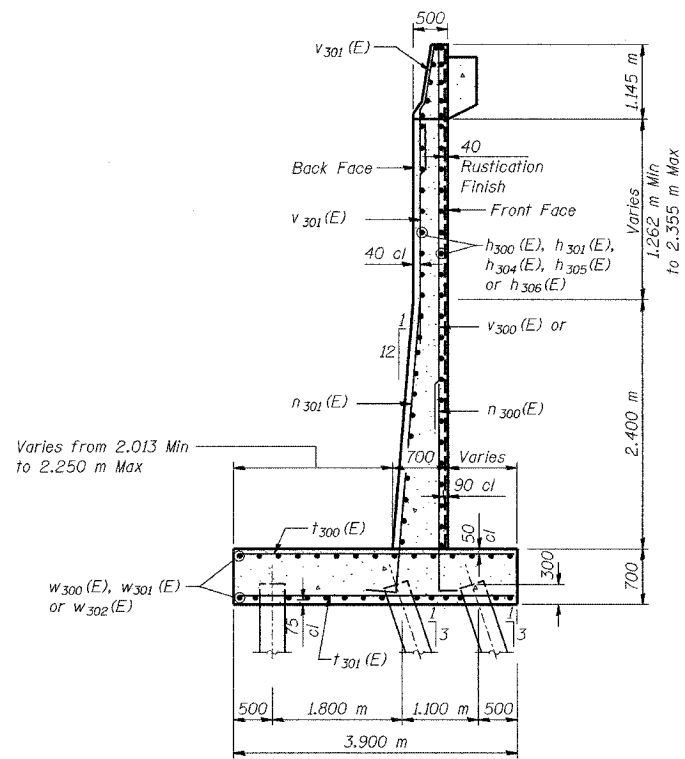
BF = Back Face
FF = Front Face
EF = Each Face

NOTES:

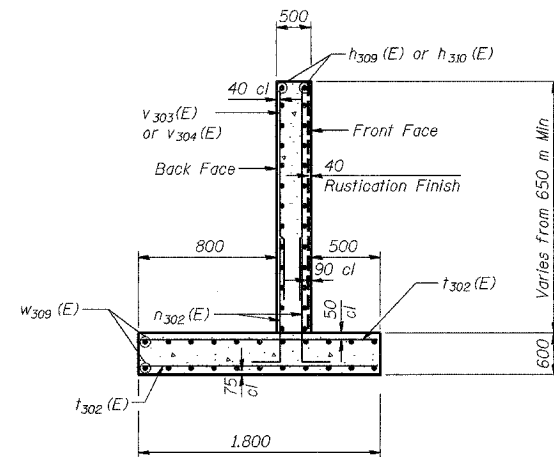
- See Sheet S-10 for Section A-A.
- See Sheet S-11 for Expansion Joint Detail and Bill of Material.
- See Sheet S-12 for Rustication details.
- Stations are referenced to @ I-80/94.
- Reinforcement bars designated (E) shall be epoxy coated.
- All dimensions are in millimeters (mm) except as noted.
- Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
- * Cut to fit.

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

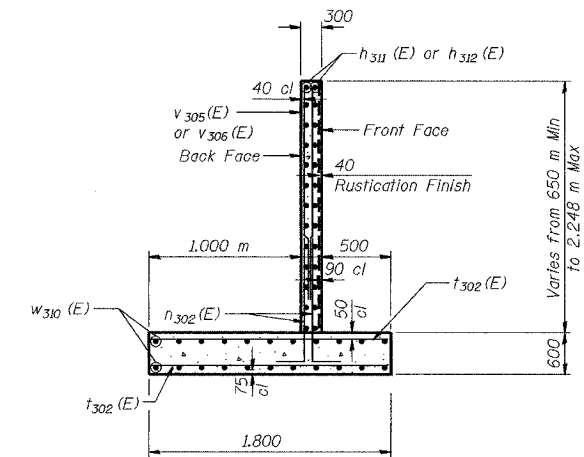
ILLINOIS DEPARTMENT OF TRANSPORTATION
1-80/94/US 6
KINCERY-BORNHAY EXPRESSWAY
BURNHAM ROAD TO US 41
PLAN AND ELEVATION (7 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860
DATE 09/05
AMERICAN
CONSULTING ENGINEERS



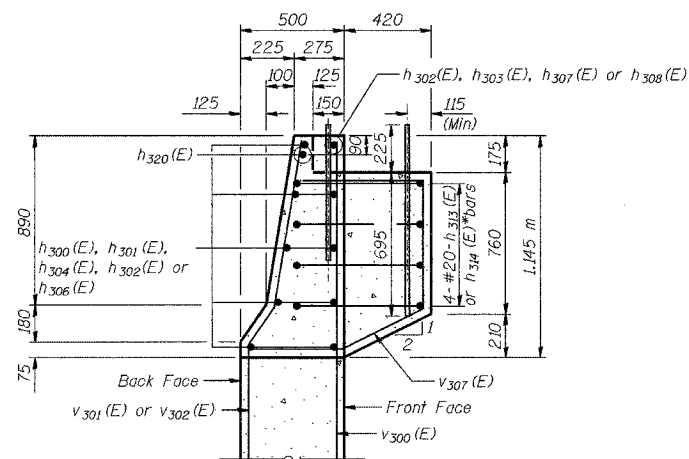
SECTION A-A



SECTION B-B

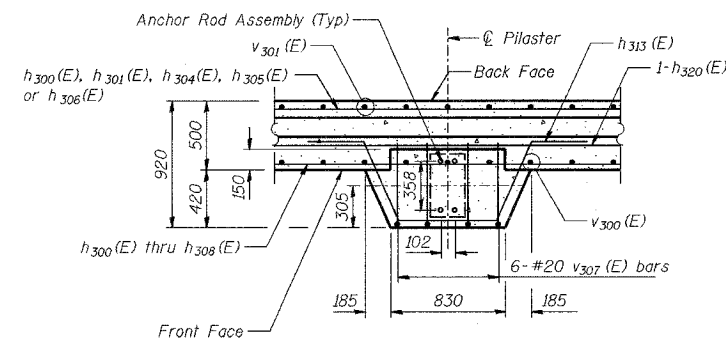


SECTION C-C



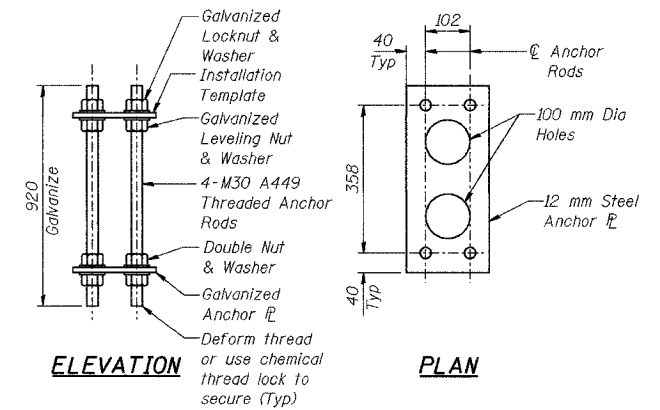
SECTION THRU PARAPET

* h314(E) bars to be placed in pilasters at Sta 8+587.026 and Sta 8+728.922



PILASTER SUPPORT - PLAN VIEW

(40 Locations)



ELEVATION

PLAN

NOISE ABATEMENT WALL ANCHOR ROD ASSEMBLY

(40 Req'd)

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

PILE DATA

Type - 356 ϕ Metal Shell
Capacity - 500 kN
Est. Length - 15.0 m
No. Req'd - 174
Test Piles - 4

NOTES:

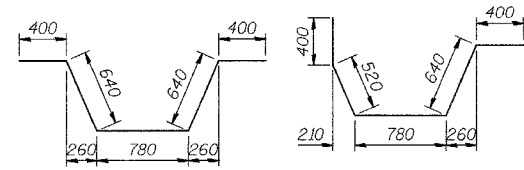
See Sheet S-11 for Expansion Joint details and Bill of Material
See Sheet S-12 for Rustication details.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
See Typical Section on Sheet S-2 for Drainage Details and Surface Seal Limits.

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

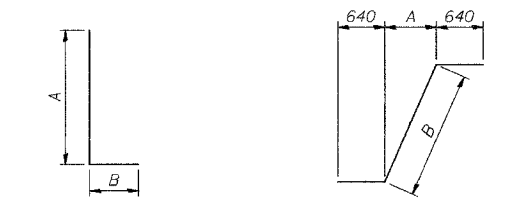
WALL SECTIONS AND DETAILS (1 OF 2)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860

DATE 09/05

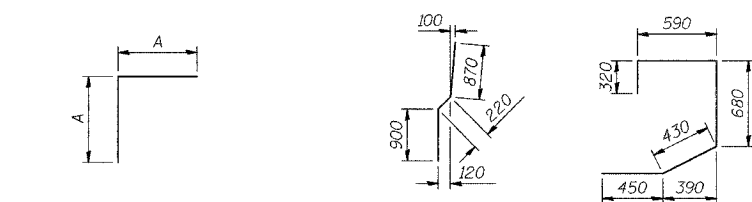
AMERICAN
CONSULTING ENGINEERS



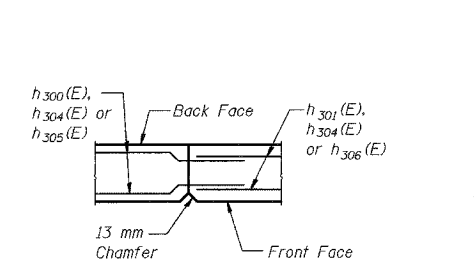
BAR h 313 (E) **BAR h 314 (E)**



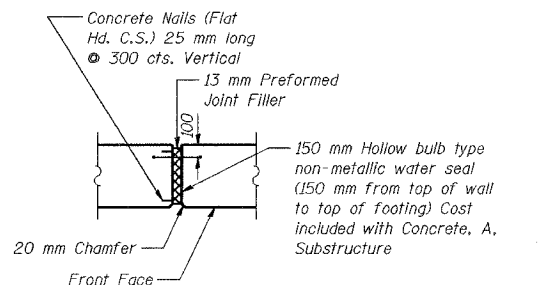
BARS n 300 (E) thru n 302 (E) **BARS w 303 (E), w 305 (E) or w 307 (E)**



BARS w 304 (E), w 306 (E) or w 308 (E) **BARS v 302 (E)** **BAR v 307 (E)**



CONSTRUCTION JOINT DETAIL



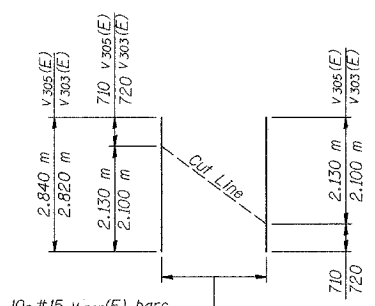
13 MM EXPANSION JOINT DETAIL

BAR DIMENSIONS

Bar	A	B
n 300 (E)	2.46 m	260
n 301 (E)	3.42 m	320
n 302 (E)	1.22 m	260
w 303 (E)	1.27 m	1.80 m
w 304 (E)	1.27 m	-
w 305 (E)	970	1.37 m
w 306 (E)	970	-
w 307 (E)	870	1.23 m
w 308 (E)	870	-

BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h 300 (E)	37	#15	9.15	—
h 301 (E)	240	#15	7.10	—
h 302 (E)	27	#15	2.30	—
h 303 (E)	12	#15	1.10	—
h 304 (E)	445	#15	7.84	—
h 305 (E)	39	#15	5.29	—
h 306 (E)	39	#15	4.55	—
h 307 (E)	3	#15	1.94	—
h 308 (E)	3	#15	2.20	—
h 309 (E)	16	#15	4.80	—
h 310 (E)	2	#15	3.39	—
h 311 (E)	18	#15	5.60	—
h 312 (E)	2	#15	3.94	—
h 313 (E)	152	#20	2.86	—
h 314 (E)	8	#20	2.74	—
h 319 (E)	16	#15	0.60	—
h 320 (E)	40	#15	2.11	—
n 300 (E)	486	#15	2.72	—
n 301 (E)	952	#20	3.74	—
n 302 (E)	74	#15	1.48	—
v 300 (E)	491	#25	3.80	—
v 301 (E)	704	#20	3.80	—
v 302 (E)	74	#15	1.70	—
v 300 (E)	486	#15	4.65	—
v 301 (E)	486	#20	2.70	—
v 302 (E)	486	#20	1.99	—
v 303 (E)	10	#15	2.82	—
v 304 (E)	12	#15	2.12	—
v 305 (E)	12	#15	2.84	—
v 306 (E)	14	#15	2.15	—
v 307 (E)	240	#20	2.47	—
w 300 (E)	196	#15	8.48	—
w 301 (E)	252	#15	7.82	—
w 302 (E)	56	#15	8.52	—
w 303 (E)	14	#15	3.08	—
w 304 (E)	14	#15	2.54	—
w 305 (E)	28	#15	2.65	—
w 306 (E)	28	#15	1.94	—
w 307 (E)	14	#15	2.51	—
w 308 (E)	14	#15	1.74	—
w 309 (E)	14	#15	4.80	—
w 310 (E)	14	#15	5.60	—
Test Pile, 356 mm	Each		4	
Excavation, Foundation, Unclassified	m ³		2,475.5	
Concrete, A, Substructure	m ³		791.6	
Reinforcing Bars, Epoxy Coated	kg		53,100	
Surface Seal	L Sum		0.02	
Pile, Concrete, Steel Shell Encased, 6.35 mm, 356 mm	m		2,670.0	
Geocomposite Wall Drain	m ²		529	
Pipe, Underdrain, Perf., 1.63 mm, 150 mm	m		151.0	
Noise Abatement Wall Anchor Rod Assembly	Each		40	
B Borrow	m ³		276.3	
Structural Backfill	m ³		1762.3	
Masonry Coating	L Sum		0.04	



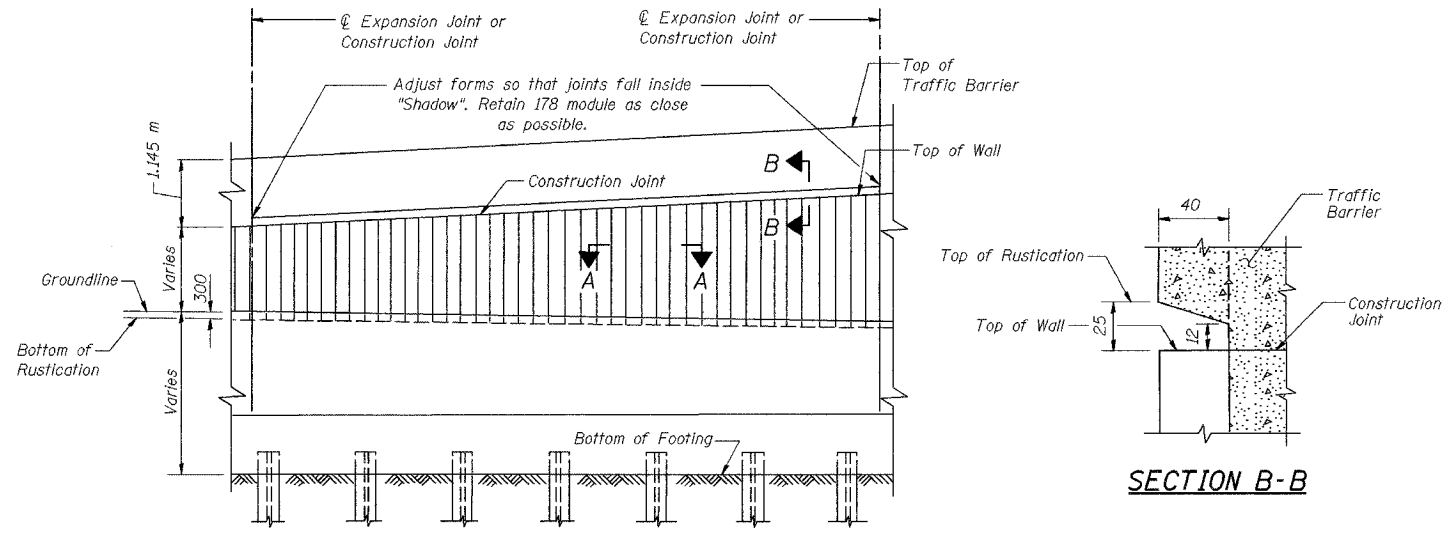
FIELD CUTTING DIAGRAM

Order v 303 (E) or v 305 (E) bars full length. Cut as shown and use remainder of bars in opposite face.

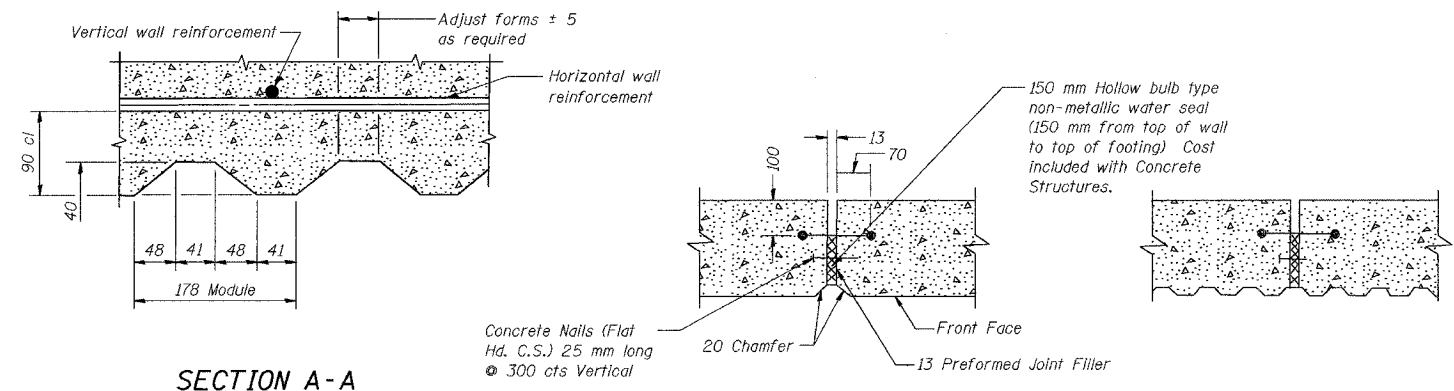
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

NOTES:
 See Sheet S-10 for Wall and Parapet Sections and Anchor Rod Assembly Details
 See Sheet S-12 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 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS



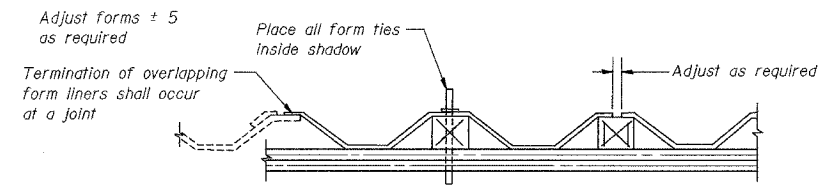
FRONT FACE ELEVATION-TYPICAL ARCHITECTURAL FINISH



SECTION A-A

EXPANSION JOINT DETAIL

CONSTRUCTION JOINT DETAIL



SUGGESTED FORMWORK DETAIL

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

RUSTICATION LIMITS

STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION
8+581.326	188.650	188.300
8+585.026	190.248	188.300
8+587.026	190.248	188.300
8+587.026	191.568	187.800
8+591.676	191.531	187.800
8+596.327	191.485	187.800
8+603.527	191.411	187.800
8+603.527	191.411	187.400
8+610.827	191.330	187.400
8+618.130	191.234	187.400
8+625.433	191.092	187.400
8+625.433	191.092	187.100
8+632.735	190.969	187.100
8+640.038	190.876	187.100
8+647.340	190.779	187.100
8+647.340	190.779	186.700
8+654.643	190.676	186.700
8+661.945	190.568	186.700
8+669.248	190.455	186.700
8+669.248	190.455	186.000
8+676.550	190.336	186.000
8+683.853	190.212	186.000
8+691.155	190.082	186.000
8+698.458	189.954	186.000
8+705.760	189.824	186.000
8+713.063	189.688	186.000
8+720.365	189.547	186.000
8+728.992	189.362	186.000
8+728.992	187.662	185.700
8+730.817	187.662	185.700
8+733.961	186.050	185.700

BILL OF MATERIAL

Item	Unit	Total
Rustication Finish	m ²	559

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

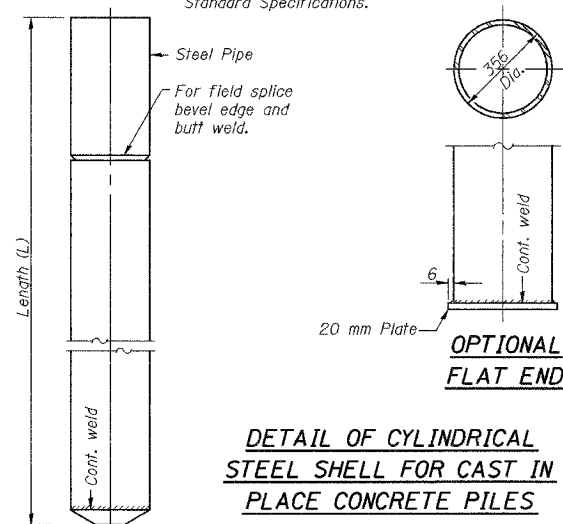
ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

RUSTICATION FINISH DETAILS
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860

DATE 09/05

AMERICAN
CONSULTING ENGINEERS

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 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AB-20 (1 OF 3)

BORING NO. AB-20 (2 OF 3)

BORING NO. AB-20 (3 OF 3)

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

BORING LOG AB-20
 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: 190.76 m
 North: 545251.92 m
 East: 367988.88 m
 Station: 84589.07
 Offset: 20.16 LT

Page 1 of 3

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 Addison, IL 60101
 Telephone: 630 458-0700
 Fax: 630 458-0900

BORING LOG AB-20
 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: 190.76 m
 North: 545251.92 m
 East: 367988.88 m
 Station: 84589.07
 Offset: 20.16 LT

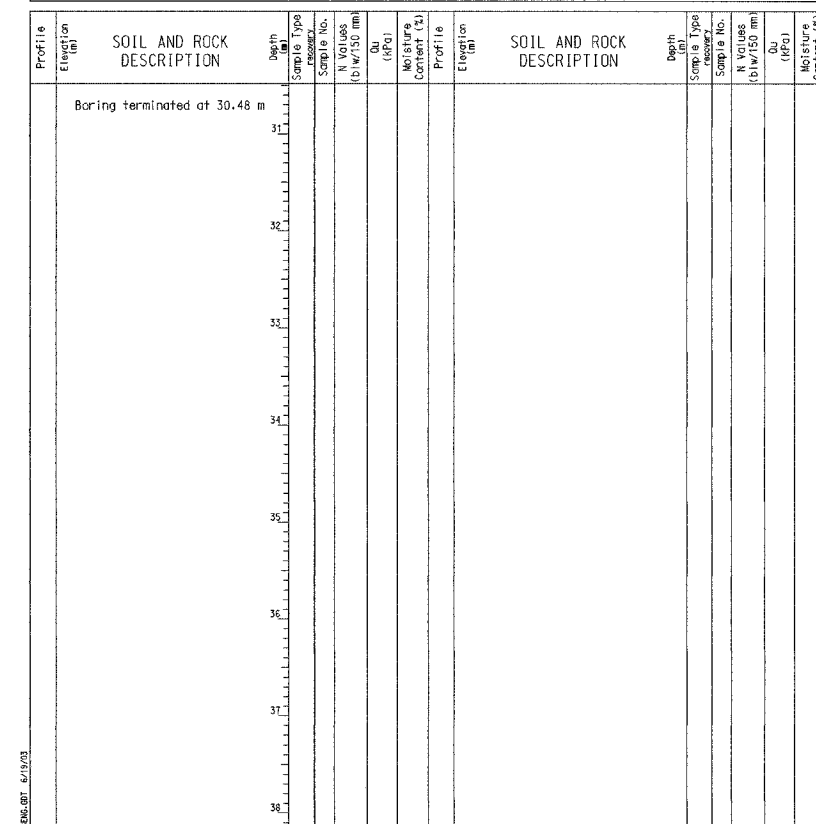
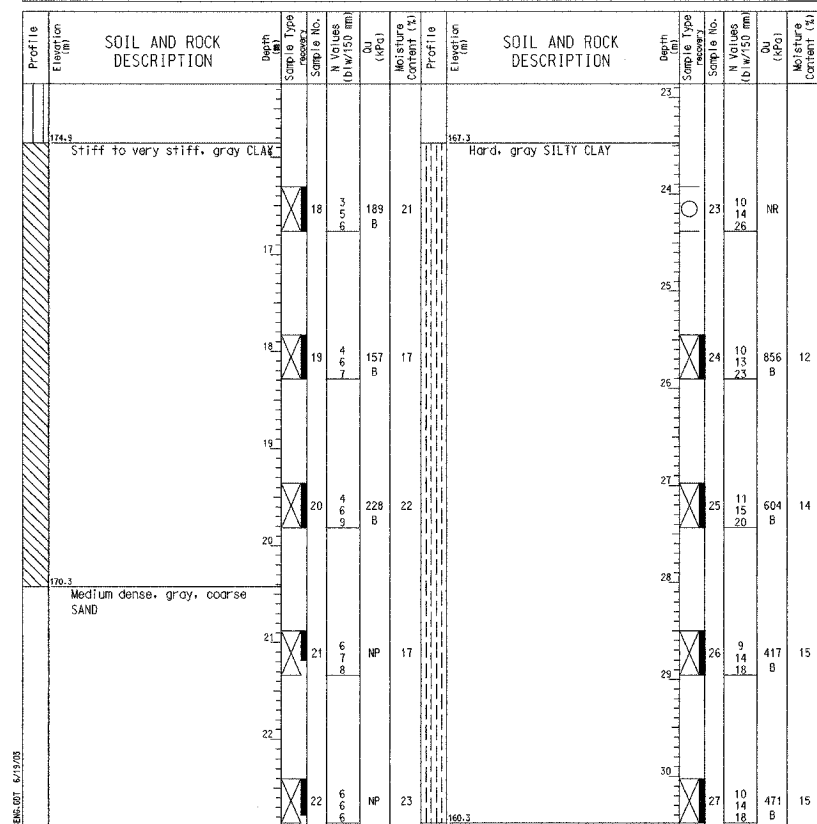
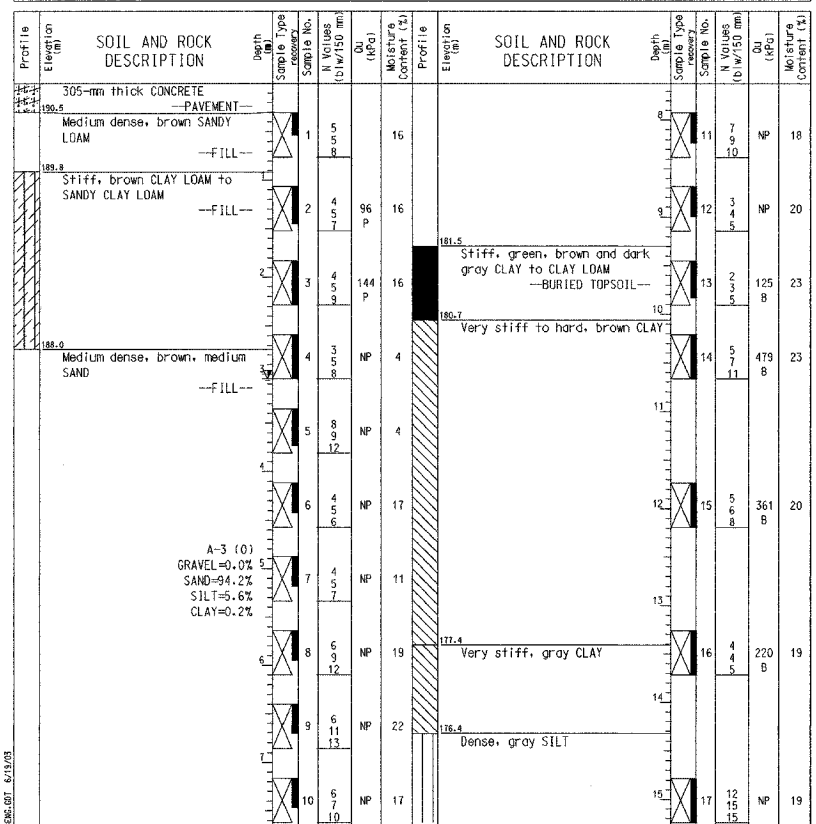
Page 2 of 3

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

BORING LOG AB-20
 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: 190.76 m
 North: 545251.92 m
 East: 367988.88 m
 Station: 84589.07
 Offset: 20.16 LT

Page 3 of 3



GENERAL NOTES

Begin Drilling 01-17-2002 Complete Drilling 01-18-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J Logger B. Fugiel Checked by E. Datz
 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 3.05 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 01-17-2002 Complete Drilling 01-18-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J Logger B. Fugiel Checked by E. Datz
 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 3.05 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin Drilling 01-17-2002 Complete Drilling 01-18-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J Logger B. Fugiel Checked by E. Datz
 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 3.05 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 (1 OF 6)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AB-25 (1 OF 2)

BORING NO. AB-25 (2 OF 2)

BORING NO. AR-102 (1 OF 2)

BORING LOG AB-25 Page 1 of 2
 Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
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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: 188.21 m
 North: 545213.17 m
 East: 368115.52 m
 Station: 84722.88
 Offset: 22.22 LT

BORING LOG AB-25 Page 2 of 2
 Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
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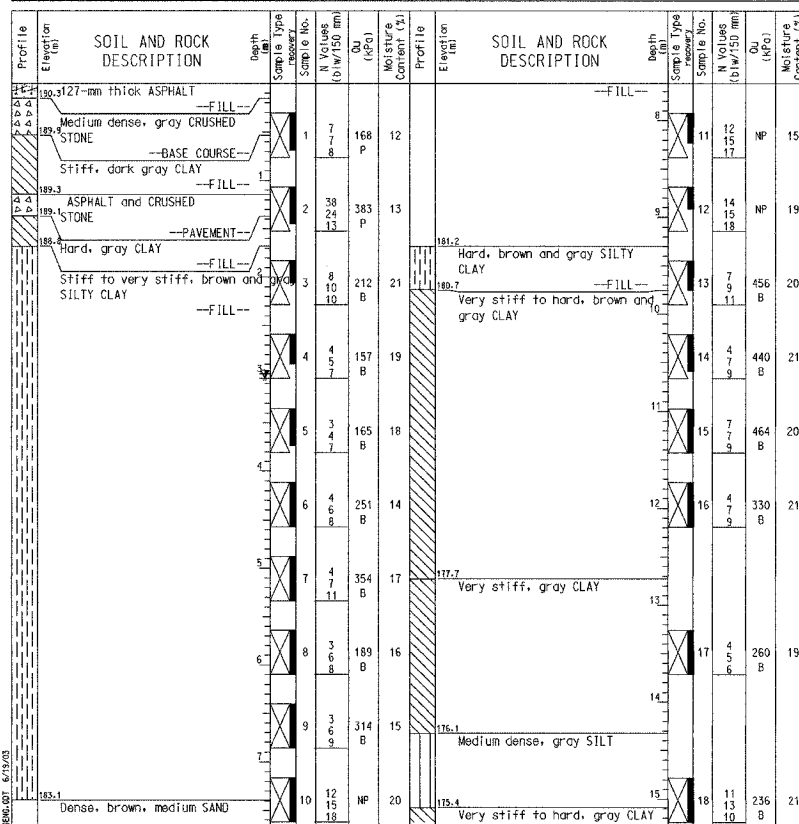
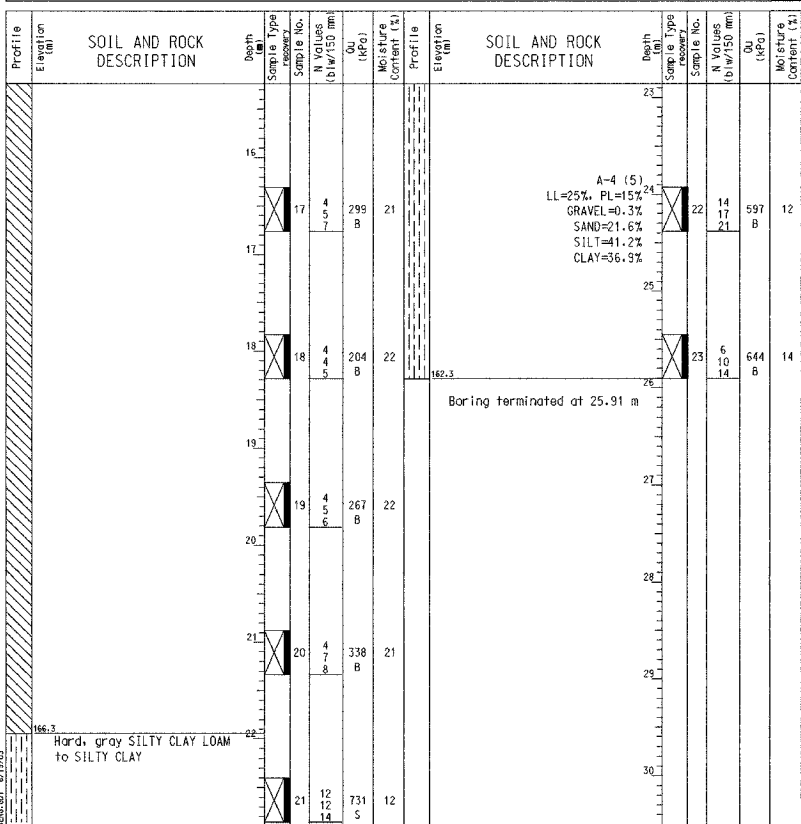
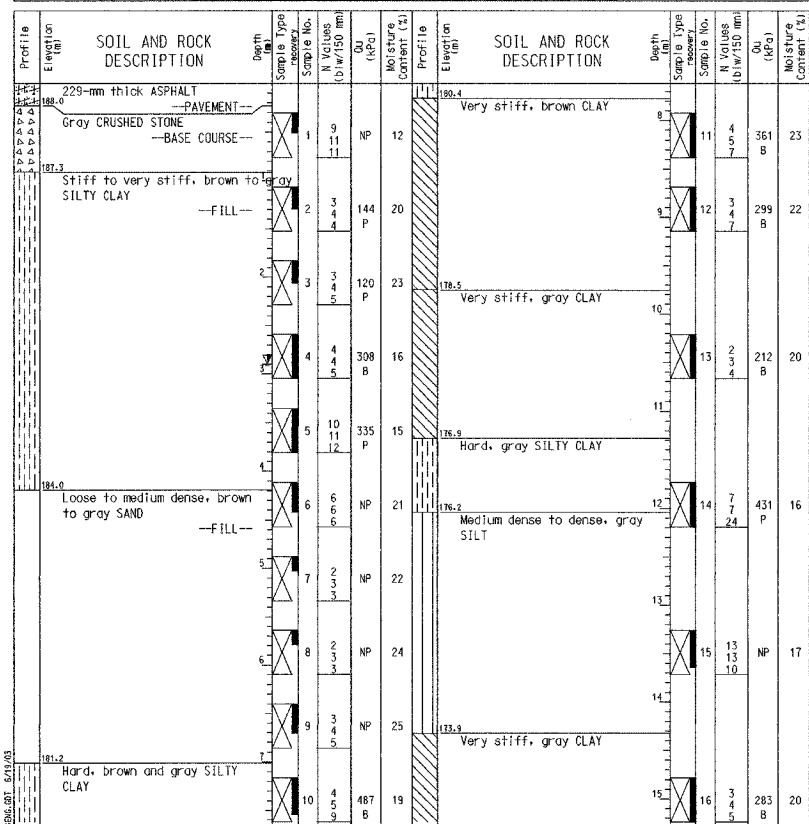
WEI Job No.: 255-08-01
 Client: American Consulting Engineers
 Project: FAI 80/94, I-294 to US 41
 Location: s13 T36N R10W & s29 R15E T36N

Datum: NGVD
 Elevation: 188.21 m
 North: 545213.17 m
 East: 368115.52 m
 Station: 84722.88
 Offset: 22.22 LT

BORING LOG AR-102 Page 1 of 2
 Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
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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: NGVD
 Elevation: 190.46 m
 North: 545245.52 m
 East: 368006.74 m
 Station: 84608.09
 Offset: 20.09 LT



GENERAL NOTES
 Begin Drilling 02-18-2002 Complete Drilling 02-19-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&A 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 2.90 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES
 Begin Drilling 02-18-2002 Complete Drilling 02-19-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&A 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 2.90 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES
 Begin Drilling 04-16-2002 Complete Drilling 04-16-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J Logger H. Suhail Checked by B. Fugiel
 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 3.05 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 (2 OF 6)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+581.326 TO STATION 8+733.961
 STRUCTURE NO. 016-W860

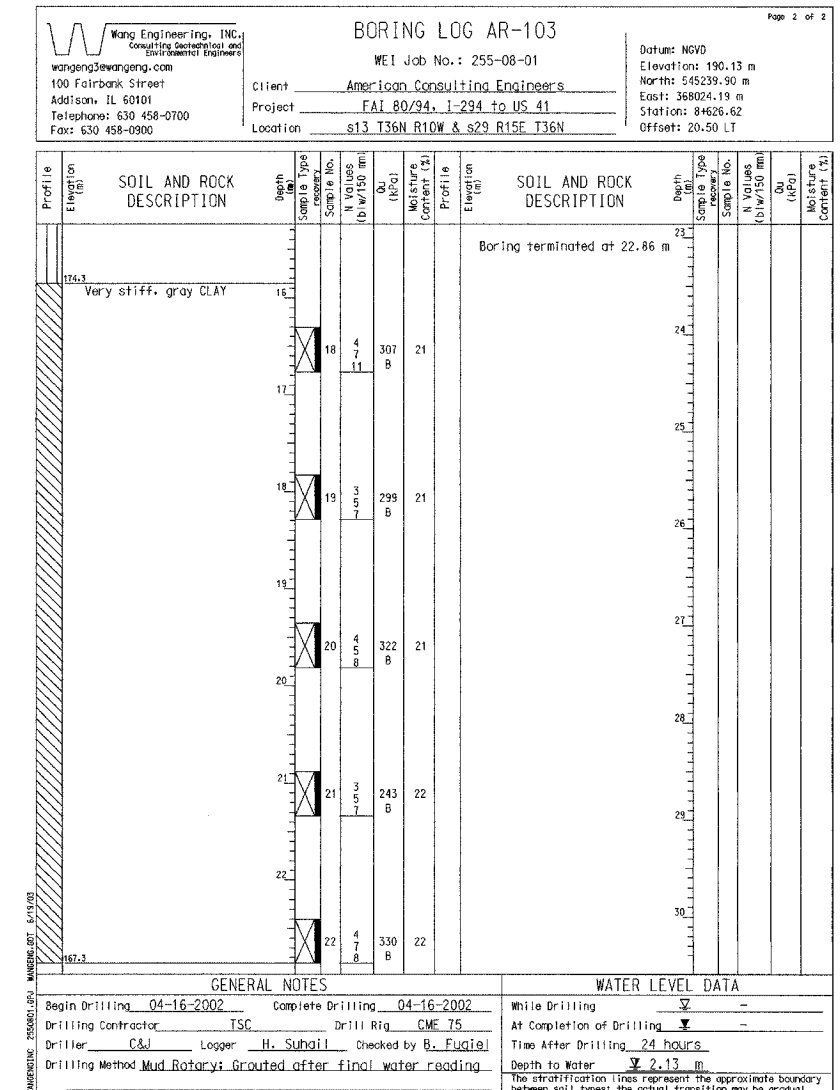
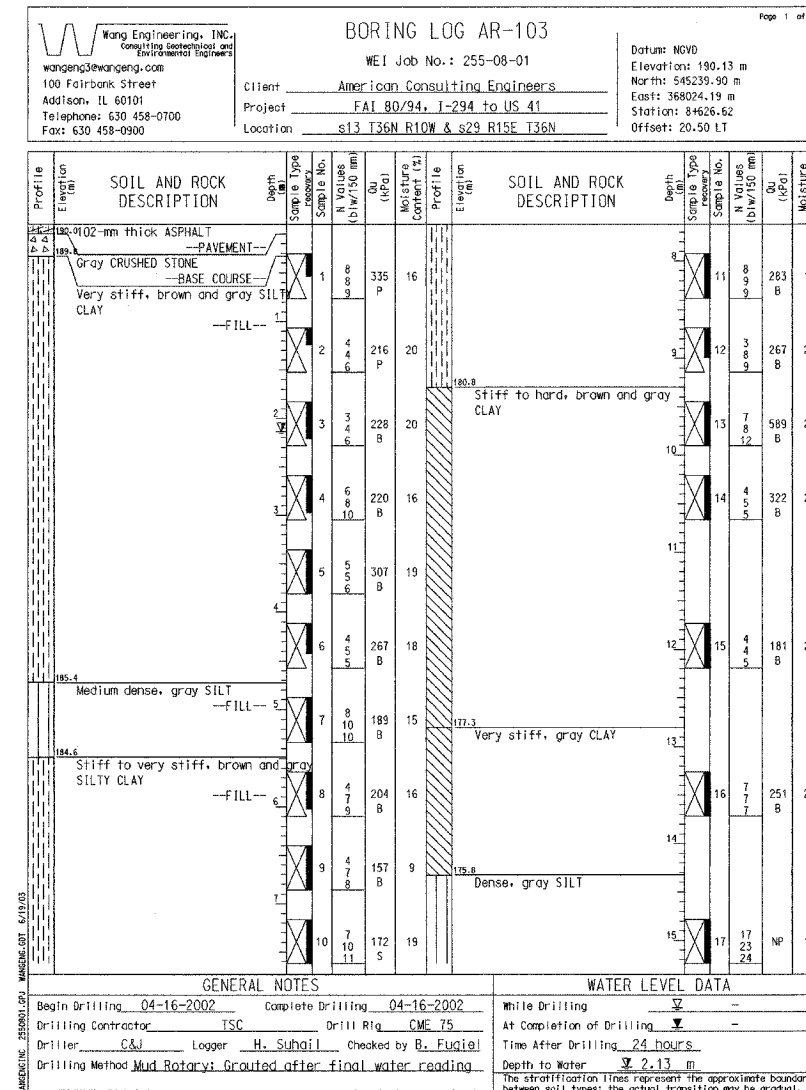
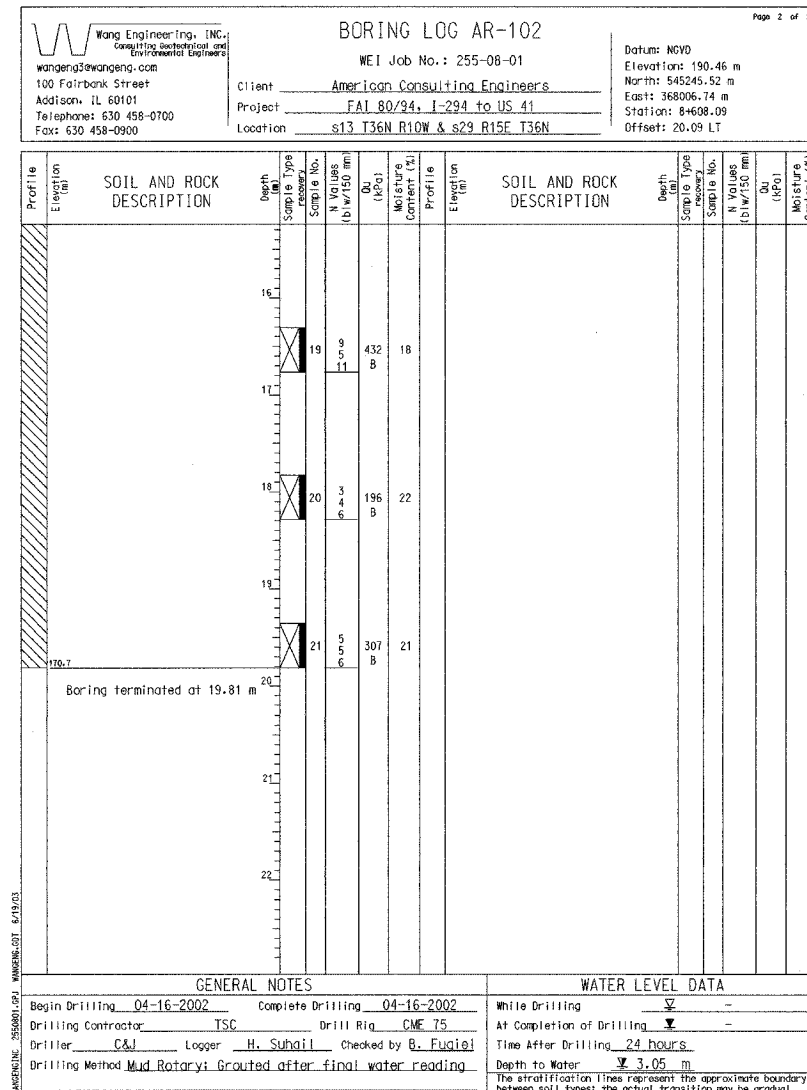
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AR-102 (2 OF 2)

BORING NO. AR-103 (1 OF 2)

BORING NO. AR-103 (2 OF 2)



DESIGNED	KFA
CHECKED	BPS
DRAWN	CAK/JB
CHECKED	GSP

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

BORING LOGS (3 OF 6)
SECTION 262.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AR-104 (1 OF 2)

BORING NO. AR-104 (2 OF 2)

BORING NO. AR-105 (1 OF 2)

BORING LOG AR-104 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: NGVD
Elevation: 189.82 m
North: 545234.05 m
East: 368042.00 m
Station: 8+645.58
Offset: 20.61 LT

BORING LOG AR-104 Page 2 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

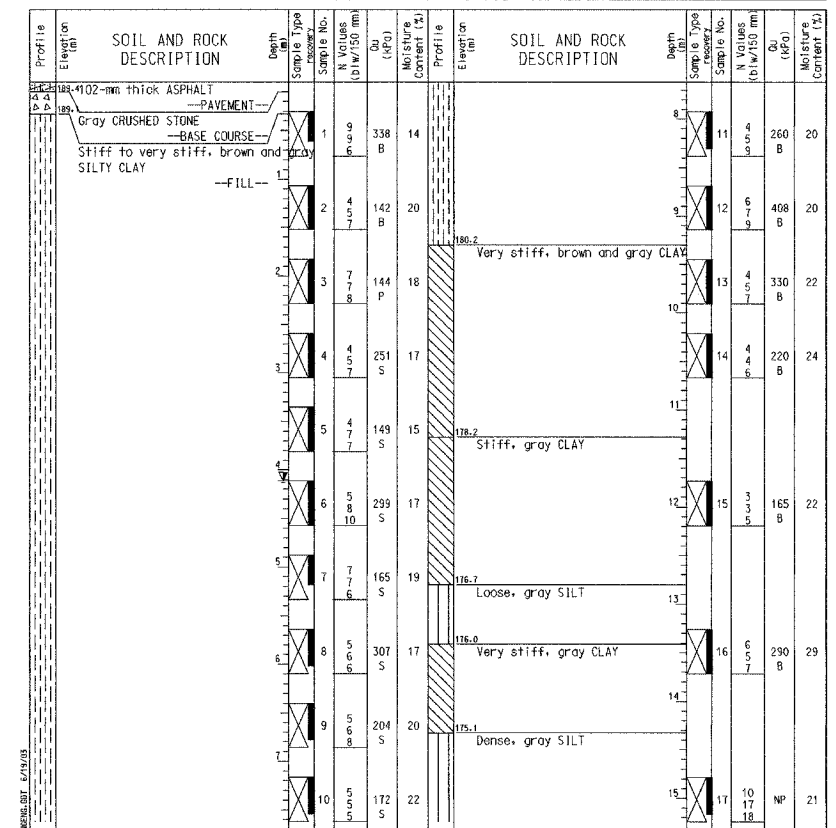
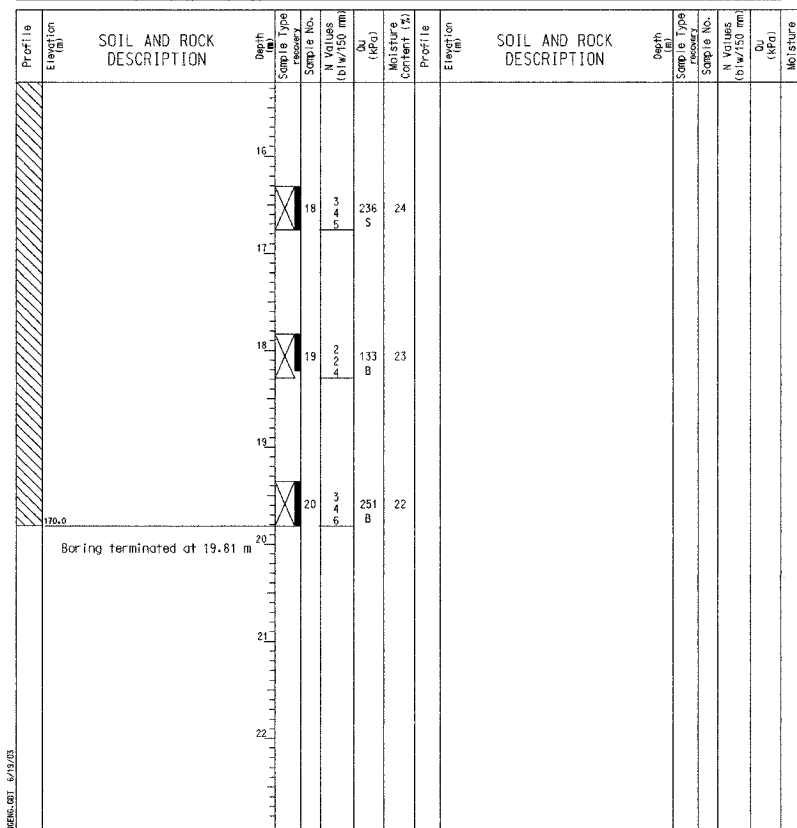
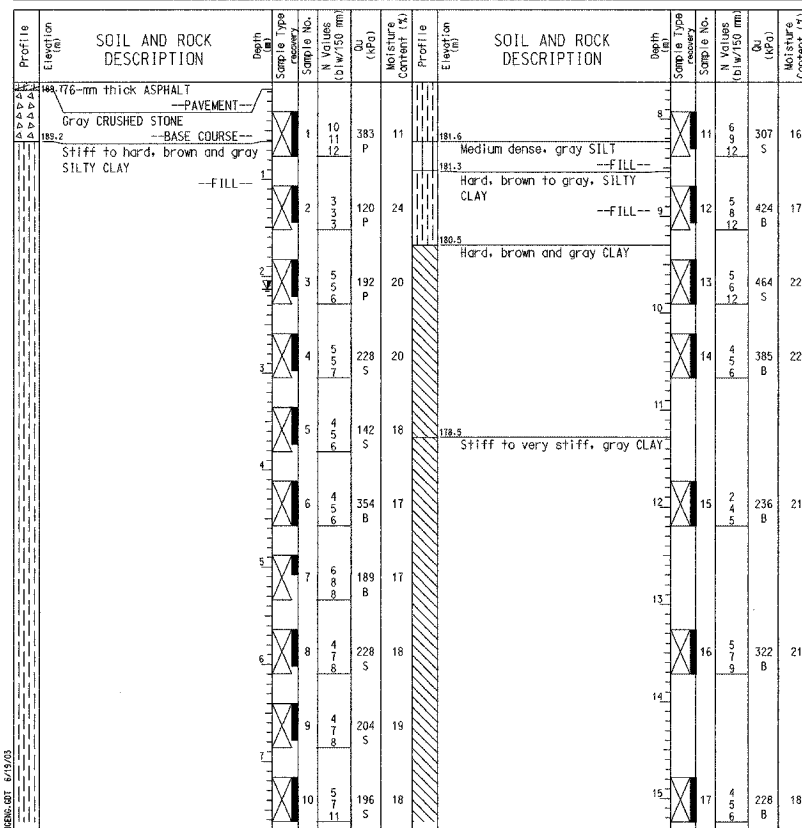
Datum: NGVD
Elevation: 189.82 m
North: 545234.05 m
East: 368042.00 m
Station: 8+645.58
Offset: 20.61 LT

BORING LOG AR-105 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 T36N R10W & s29 R15E T36N

Datum: NGVD
Elevation: 189.46 m
North: 545228.28 m
East: 368060.50 m
Station: 8+665.17
Offset: 20.82 LT



BORING NO. AR-105 (2 OF 2)

BORING NO. AR-106 (1 OF 2)

BORING NO. AR-106 (2 OF 2)

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BORING LOG AR-105
 WEI Job No.: 255-08-01
 Datum: NGVD
 Elevation: 189.46 m
 North: 545228.28 m
 East: 368060.50 m
 Station: 8+665.17
 Offset: 20.82 LT

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

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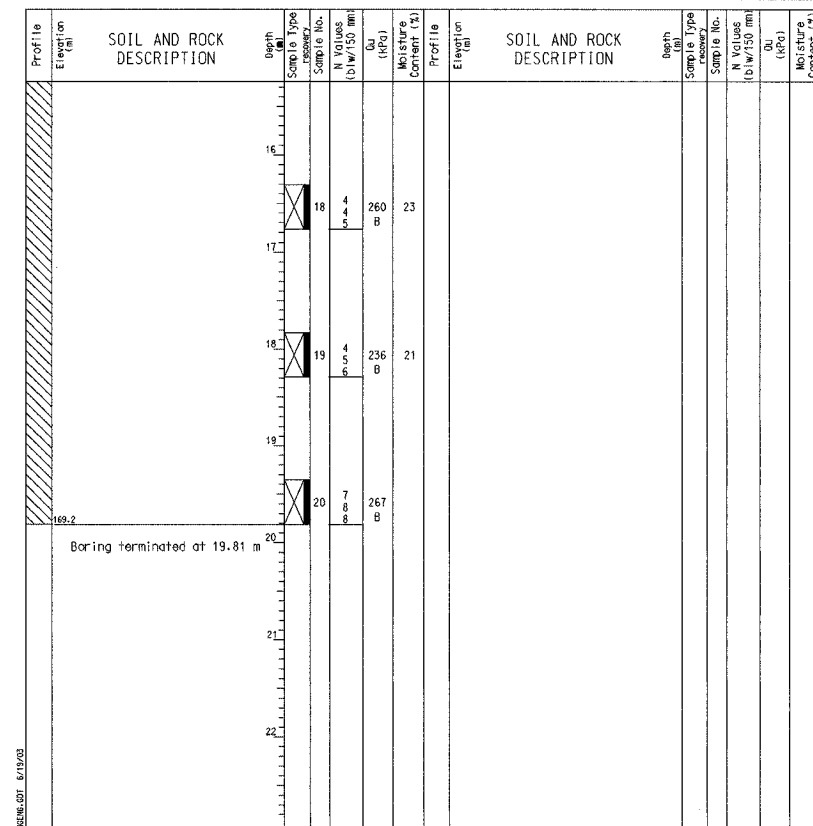
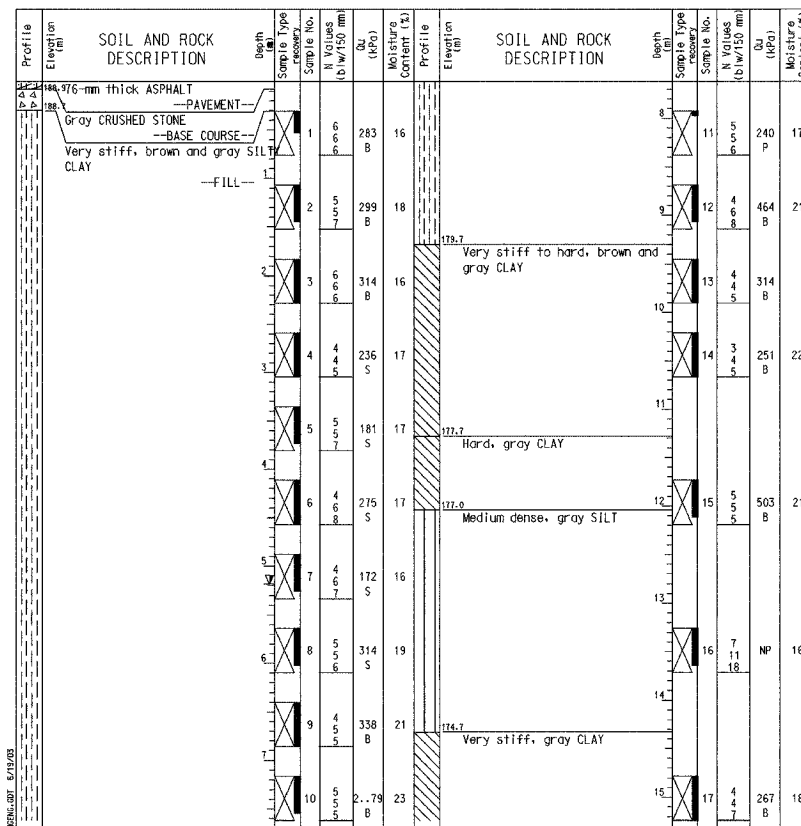
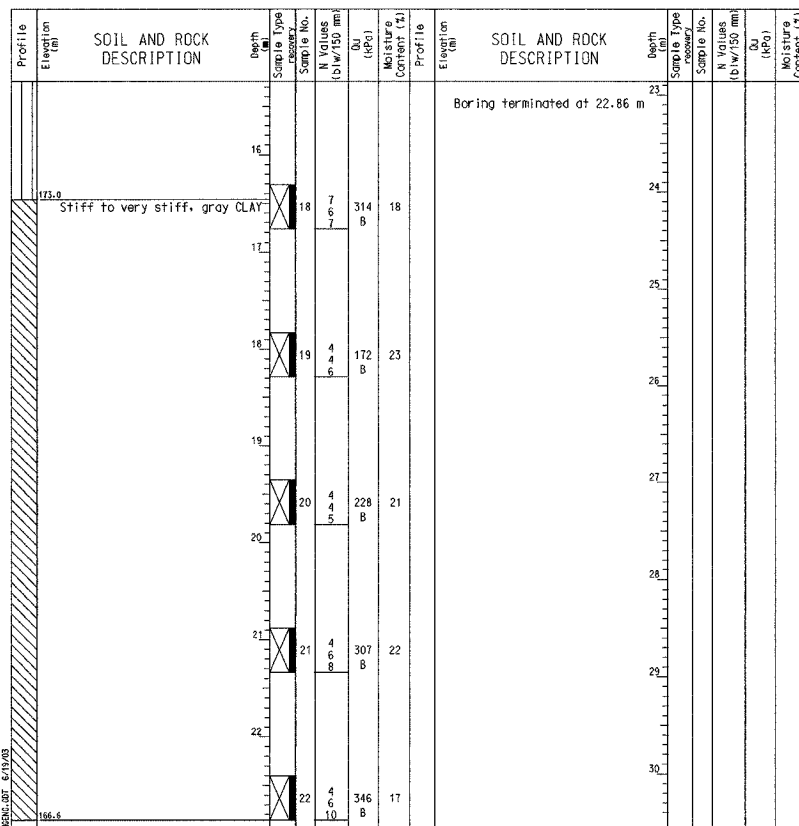
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 WEI Job No.: 255-08-01
 Datum: NGVD
 Elevation: 189.02 m
 North: 545222.31 m
 East: 368080.74 m
 Station: 8+686.51
 Offset: 21.15 LT

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

Wang Engineering, INC.
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 Telephone: 630 458-0700
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BORING LOG AR-106
 WEI Job No.: 255-08-01
 Datum: NGVD
 Elevation: 189.02 m
 North: 545222.31 m
 East: 368080.74 m
 Station: 8+686.51
 Offset: 21.15 LT

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



GENERAL NOTES
 Begin Drilling 04-11-2002 Complete Drilling 04-11-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J Logger H. Suhail Checked by B. Fugiel
 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 4.11 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES
 Begin Drilling 04-10-2002 Complete Drilling 04-10-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J Logger H. Suhail Checked by B. Fugiel
 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 5.18 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES
 Begin Drilling 04-10-2002 Complete Drilling 04-10-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J Logger H. Suhail Checked by B. Fugiel
 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 5.18 m
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	KFA
CHECKED	BPS
DRAWN	CAHJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 41
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
BORING LOGS (5 OF 6)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+581.326 TO STATION 8+733.961
STRUCTURE NO. 016-W860
 DATE 09/05
AMERICAN CONSULTING ENGINEERS

BORING NO. AR-107 (1 OF 2)

BORING NO. AR-107 (2 OF 2)

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 Fax: 630 458-0900

BORING LOG AR-107 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: NGVD
 Elevation: 188.60 m
 North: 545217.08 m
 East: 368099.20 m
 Station: 8+705.91
 Offset: 21.44 LT

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

BORING LOG AR-107 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: NGVD
 Elevation: 188.60 m
 North: 545217.08 m
 East: 368099.20 m
 Station: 8+705.91
 Offset: 21.44 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Moisture Content (%)
188.6	152-mm thick ASPHALT PAVEMENT	0				188.6		0			
188.4	Gray CRUSHED STONE BASE COURSE	1	6	431		188.4		1	11	479	432
188.2	Stiff to hard, brown and gray SILTY CLAY to CLAY FILL	2	2	144		188.2	Very stiff to hard, brown and gray CLAY	2	12	446	322
188.0		3	6	142		188.0		3	13	355	165
187.8		4	3	267		187.8	Stiff to hard, gray CLAY	4	14	346	176
187.6		5	5	260		187.6		5	15	356	358
187.4		6	5	314		187.4		6	16	343	118
187.2		7	4	220				7			
187.0		8	8	299				8			
186.8		9	5	267				9			
186.6		10	4	307				10			

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Moisture Content (%)
188.6		0				188.6		0			
188.4		1				188.4		1			
188.2		2				188.2	Boring terminated at 22.86 m	2			
188.0		3				188.0		3			
187.8		4				187.8		4			
187.6		5				187.6		5			
187.4		6				187.4		6			
187.2		7				187.2		7			
187.0		8				187.0		8			
186.8		9				186.8		9			
186.6		10				186.6		10			
186.4		11				186.4		11			
186.2		12				186.2		12			
186.0		13				186.0		13			
185.8		14				185.8		14			
185.6		15				185.6		15			
185.4		16				185.4		16			
185.2		17				185.2		17			
185.0		18				185.0		18			
184.8		19				184.8		19			
184.6		20				184.6		20			
184.4		21				184.4		21			
184.2		22				184.2		22			
184.0		23				184.0		23			
183.8		24				183.8		24			
183.6		25				183.6		25			
183.4		26				183.4		26			
183.2		27				183.2		27			
183.0		28				183.0		28			
182.8		29				182.8		29			
182.6		30				182.6		30			
182.4		31				182.4		31			
182.2		32				182.2		32			

GENERAL NOTES

Begin Drilling 04-09-2002 Complete Drilling 04-09-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J 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 24 hours
 Depth to Water 2.90 m

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

GENERAL NOTES

Begin Drilling 04-09-2002 Complete Drilling 04-09-2002
 Drilling Contractor TSC Drill Rig CME 75
 Driller C&J 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 24 hours
 Depth to Water 2.90 m

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

DESIGNED	KFA
CHECKED	BPS
DRAWN	CAK/JB
CHECKED	GSP

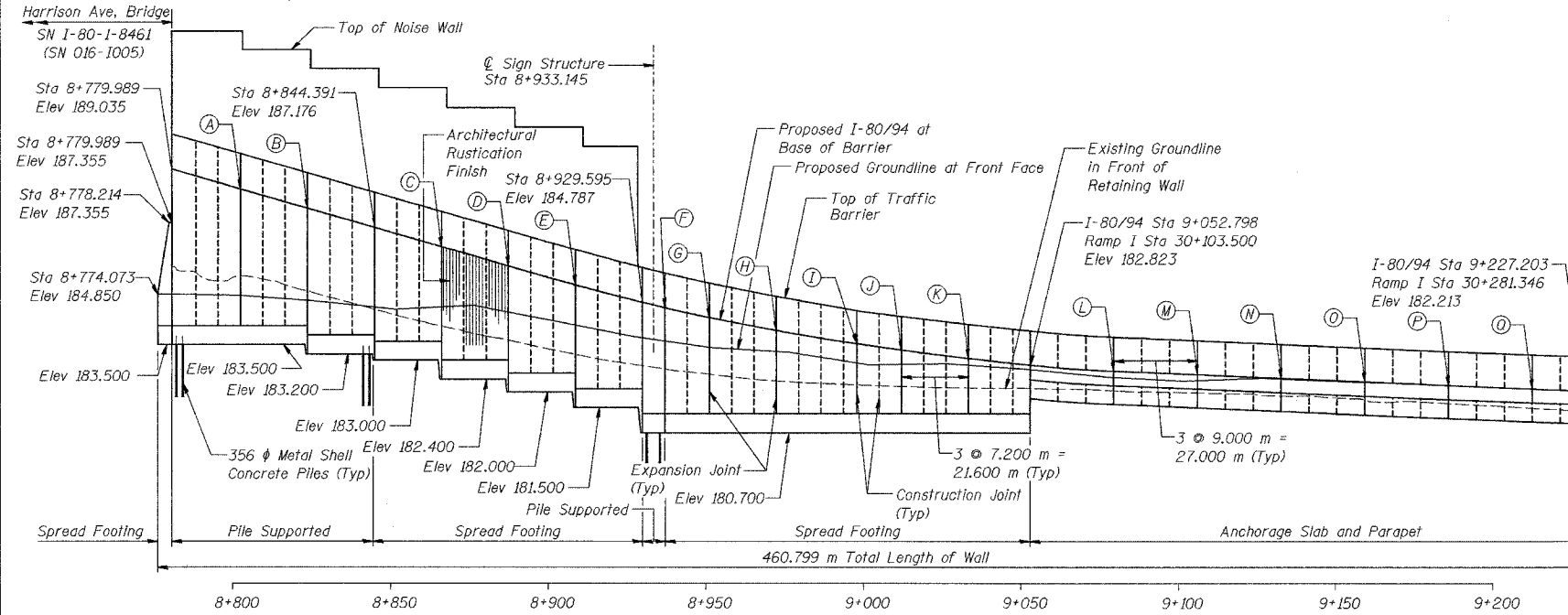
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURHAM ROAD TO US 41

BORING LOGS (6 OF 6)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+581.326 TO STATION 8+733.961
 STRUCTURE NO. 016-W860

DATE 09/05

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: Remove Existing Mechanically Stabilized Earth Wall
 All dimensions in millimeters (mm) except as noted.



Station	Elevation
A 8+801.789	188.412
B 8+823.091	187.794
C 8+865.692	186.558
D 8+886.993	185.940
E 8+908.294	185.335
F 8+936.695	184.617
G 8+950.895	184.311
H 8+972.197	183.896
I 8+997.775	183.491
J 9+011.969	183.290
K 9+033.244	183.029
L 9+079.330	182.656
M 9+105.815	182.544
N 9+132.272	182.427
O 9+158.706	182.310
P 9+185.118	182.304
Q 9+211.506	182.284

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
1207	2626.2-R-2	LAKE COUNTY, INDIANA	917	29 SHEETS

CONTRACT NO. 62114 INDOT DES. NO. 0100987

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 = 140 kPa

DESIGN SPECIFICATIONS

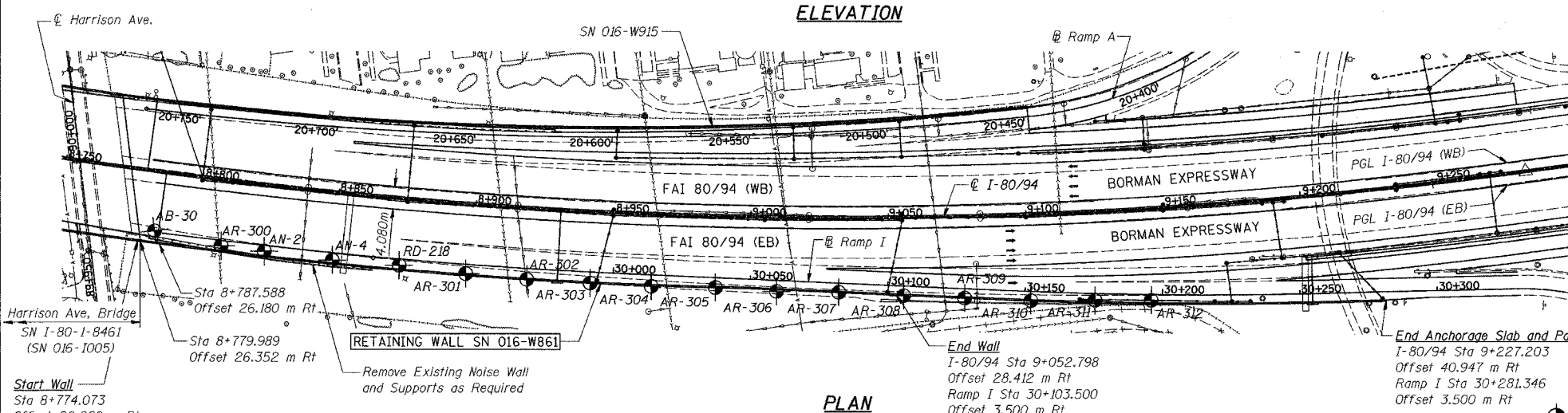
AASHTO 2002 Standard Specifications for Highway Bridges
 AASHTO 1989 Guide Specifications for Structural Design of Sound Barriers and 1992 Interims

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 %

CURVE DATA RAMP I

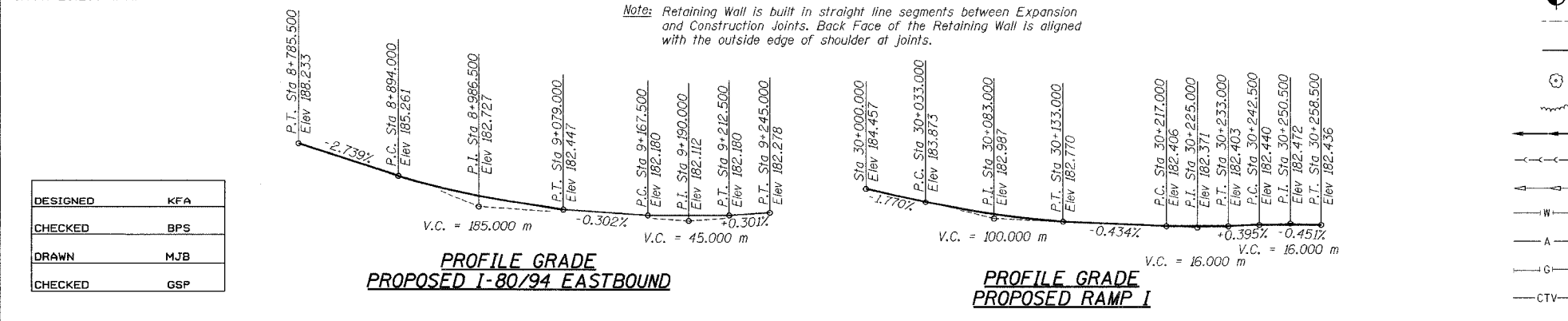
$\Delta = 3^\circ-52'-42"$
 $R = 1,649.000 \text{ m}$
 $T = 55.833 \text{ m}$
 $L = 111.623 \text{ m}$
 $E = 0.945 \text{ m}$
 P.C. Sta = 30+143.900
 P.I. Sta = 30+199.733
 P.T. Sta = 30+255.523
 S.E. = 2.0 %



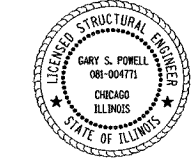
ELEVATION

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



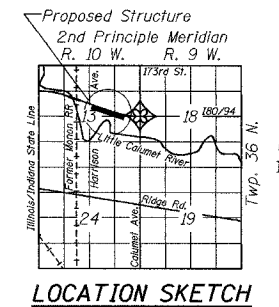
Gary S. Powell
 GARY S. POWELL, S.E.
 IL. LIC. NO. 081-004771
 EXP 11-30-2006
 DATE 09-12-2005

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

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Adams
 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



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 8+774.073 TO STATION 9+227.203
 STRUCTURE NO. 016-W861
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-2
P.A.L. 88/74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	918	29 SHEETS
BIDDING		FEE AND PROJECT			

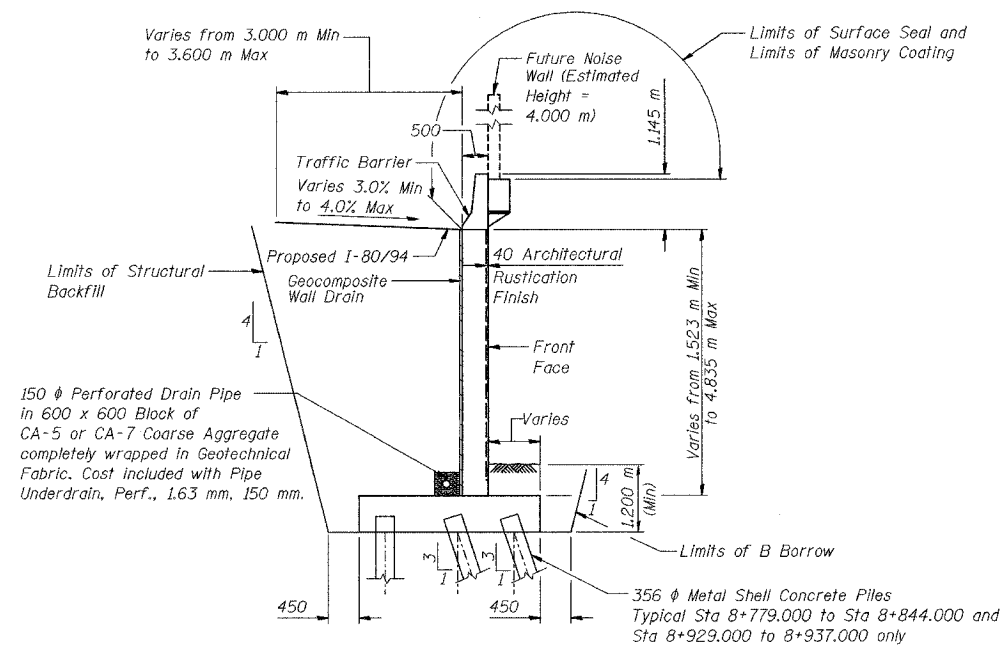
CONTRACT NO. 62114 INDOT DES. NO. 0100987

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	Parapet and Anchorage Slab (1 of 3)
S-17	Parapet and Anchorage Slab (2 of 3)
S-18	Parapet and Anchorage Slab (3 of 3)
S-19	Wall Sections and Details (1 of 2)
S-20	Wall Sections and Details (2 of 2)
S-21	Rustication Finish Details
S-22	Concrete Pile Details
S-23	Boring Logs (1 of 7)
S-24	Boring Logs (2 of 7)
S-25	Boring Logs (3 of 7)
S-26	Boring Logs (4 of 7)
S-27	Boring Logs (5 of 7)
S-28	Boring Logs (6 of 7)
S-29	Boring Logs (7 of 7)

GENERAL NOTES

- Reinforcement bars shall conform to the requirements of AASHTO M 31M or M322M Grade 400.
- The Contractor shall drive 3 test piles in permanent locations spaced approximately 60 m apart, as directed by the Engineer before ordering the remainder of the piles.
- All dimensions are in millimeters (mm) except as noted.
- All construction joints shall be bonded.
- Removal of Existing Mechanically Stabilized Earth Wall required from Sta 9+052.680 to Sta 9+169.310. See Roadway Cross Sections.



TYPICAL SECTION

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
(IN) Test Pile, 356 mm	Each	3
(IN) Excavation, Foundation, Unclassified	m ³	1,879.3
(IN) Concrete, A, Substructure	m ³	1,635.6
(IN) Rustication Finish	m ²	758
(IN) Reinforcing Bars, Epoxy Coated	kg	127,720
(IN) Surface Seal	L	0.08
(IN) Pile, Concrete, Steel Shell Encased, 6.35 mm, 356 mm	m	1,421.5
(IN) Geocomposite Wall Drain	m ²	700
(IN) Pipe, Underdrain, Perf., 1.63 mm, 150 mm	m	282.7
(IN) Noise Abatement Wall Anchor Rod Assembly	Each	43
(IN) Overhead Sign Structure Span Anchor Rod Assembly	Each	2
(IN) B Borrow	m ³	620.3
(IN) Structural Backfill	m ³	1,997.7
(IN) Remove Mechanically Stabilized Earthwall	m ²	161
(IN) Masonry Coating	L	0.20

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

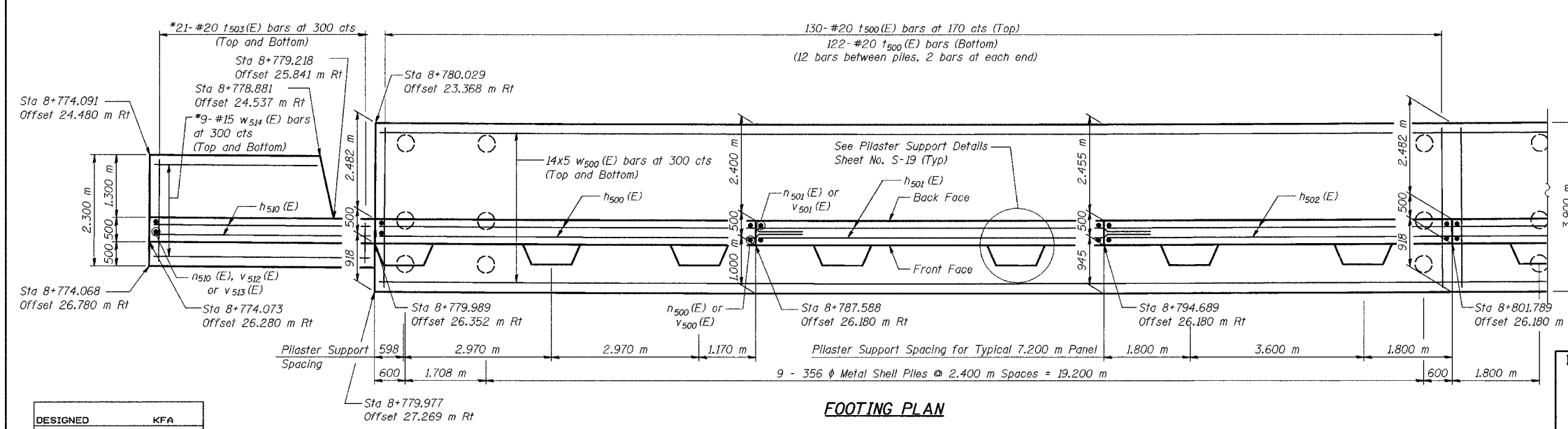
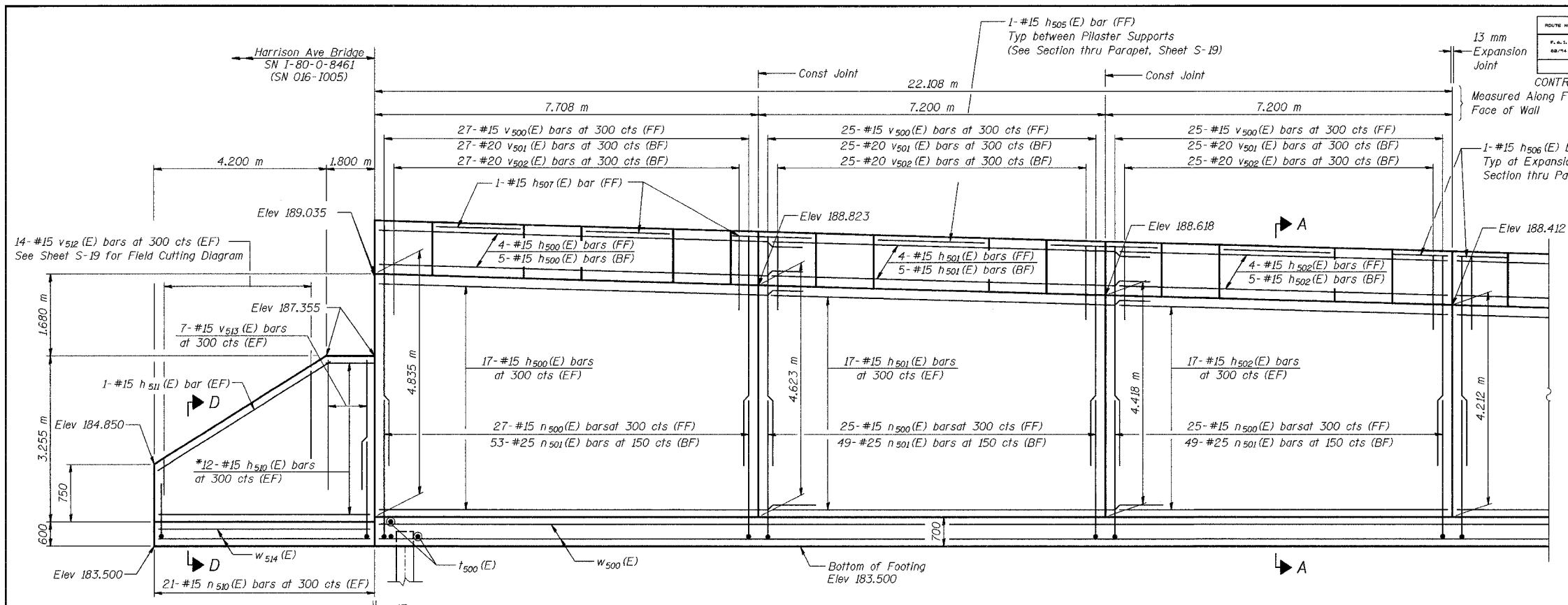
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

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-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-3
68-14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	919	29 SHEETS

CONTRACT NO. 62114 INDOT DES. NO. 0100987



NOTES:

See Sheet S-19 for Section A-A and Section D-D.
See Sheet S-20 for Expansion Joint Detail and Bill of Material.
See Sheet S-21 for Rustication details.
Stations are referenced to 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.
*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

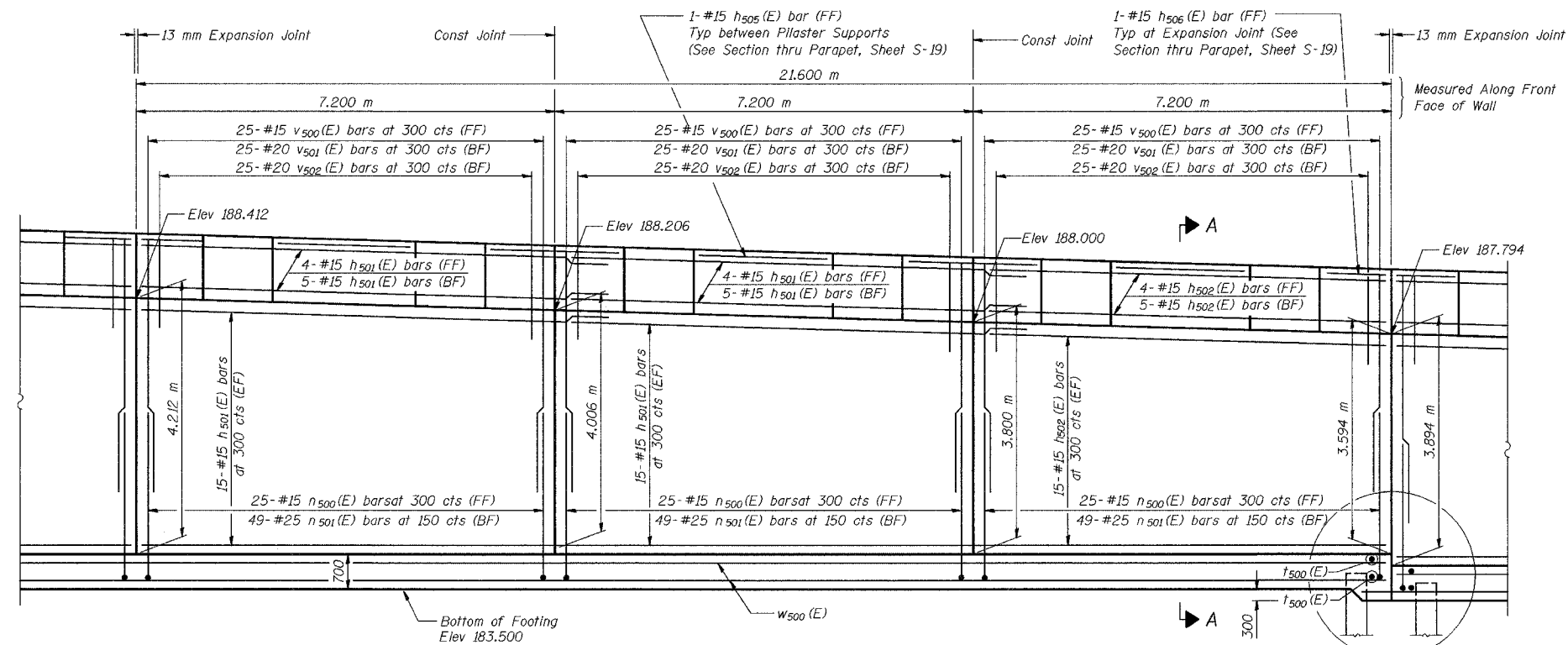
PLAN AND ELEVATION (1 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

DATE 09/05

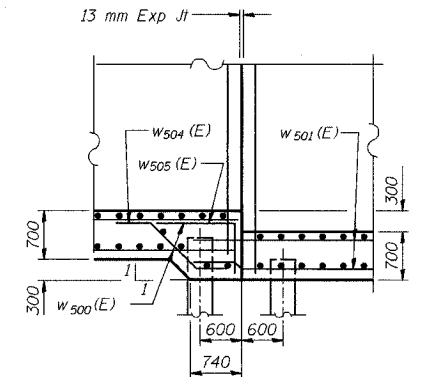
AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. S-4 29 SHEETS
F.A.S. NO./A	SECTION-R-2	LAKE COUNTY, INDIANA	1207	920	
BLANKS		FIELD ASSEMBLY			

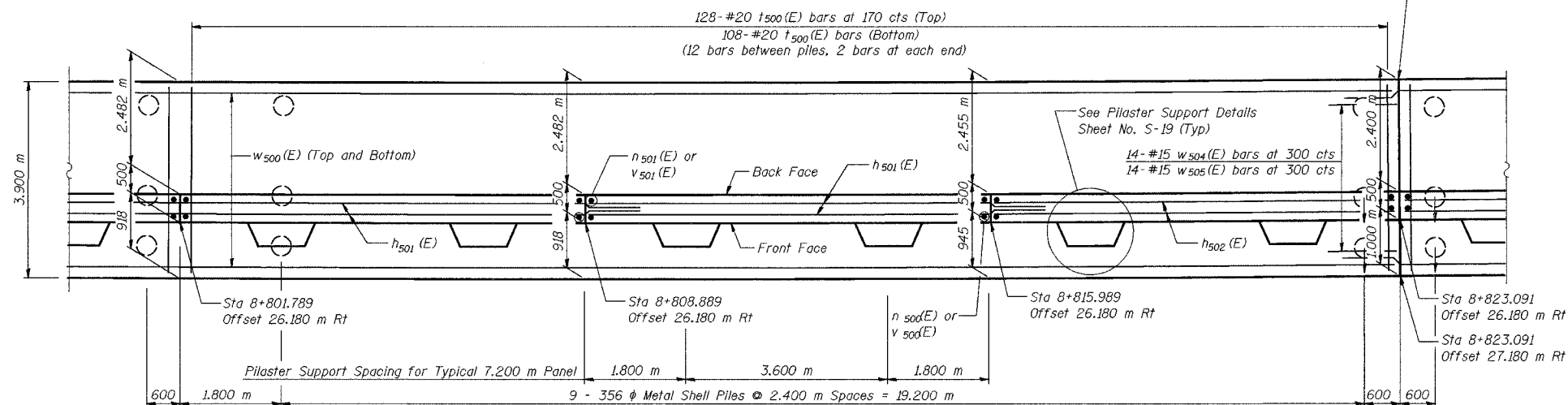
CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



DETAIL A



FOOTING PLAN

NOTES:

- See Sheet S-19 for Section A-A.
- See Sheet S-20 for Expansion Joint Detail and Bill of Material.
- See Sheet S-21 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

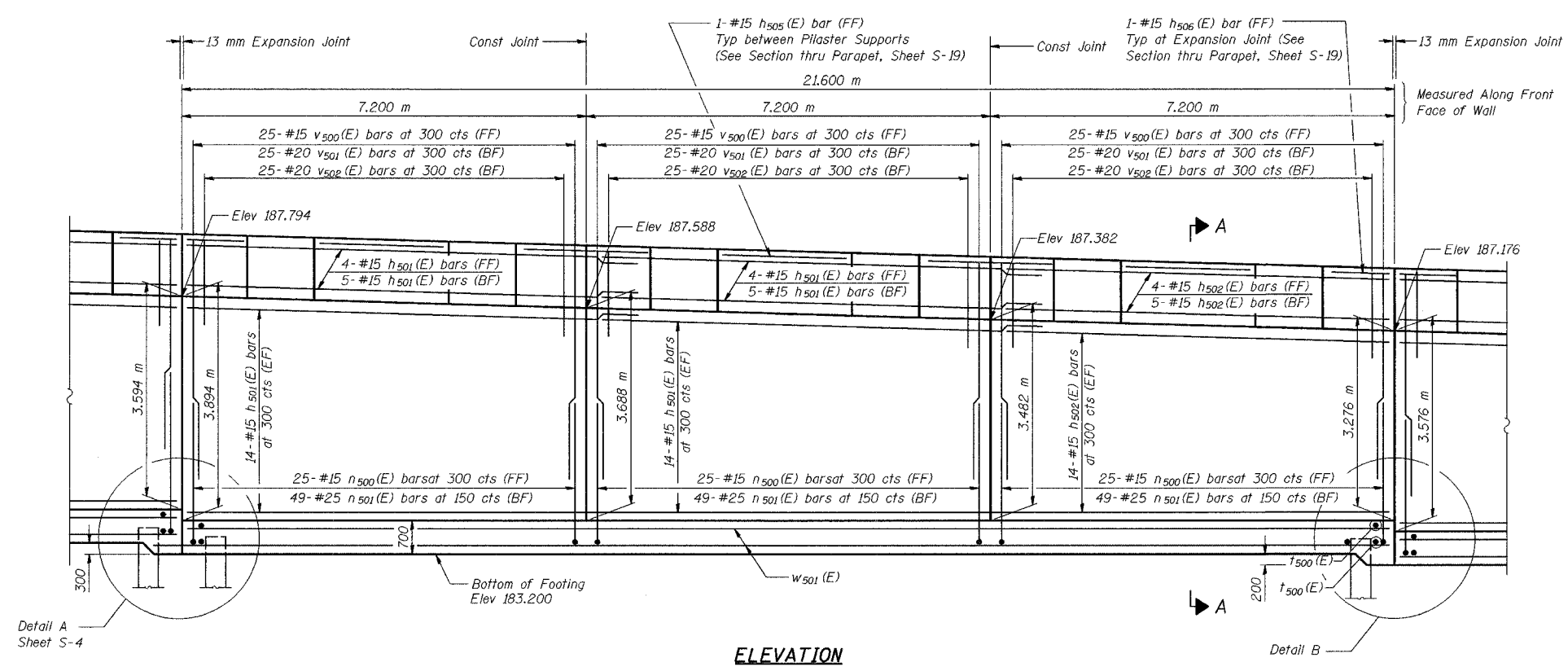
LEGEND

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

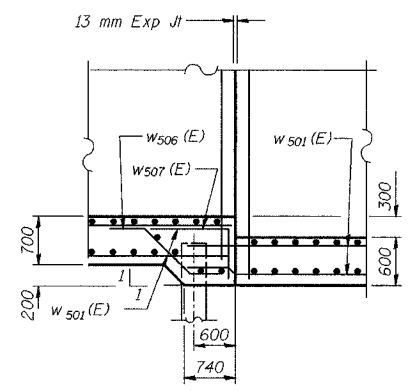
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINCERY-BORMAN EXPRESSWAY
 BURHAM ROAD TO US 41
PLAN AND ELEVATION (2 OF 13)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+774.073 TO STATION 9+227.203
 STRUCTURE NO. 016-W861
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-5
66/74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	921	29 SHEETS
OWNER		DESIGNED BY			
INDOT		KFA			

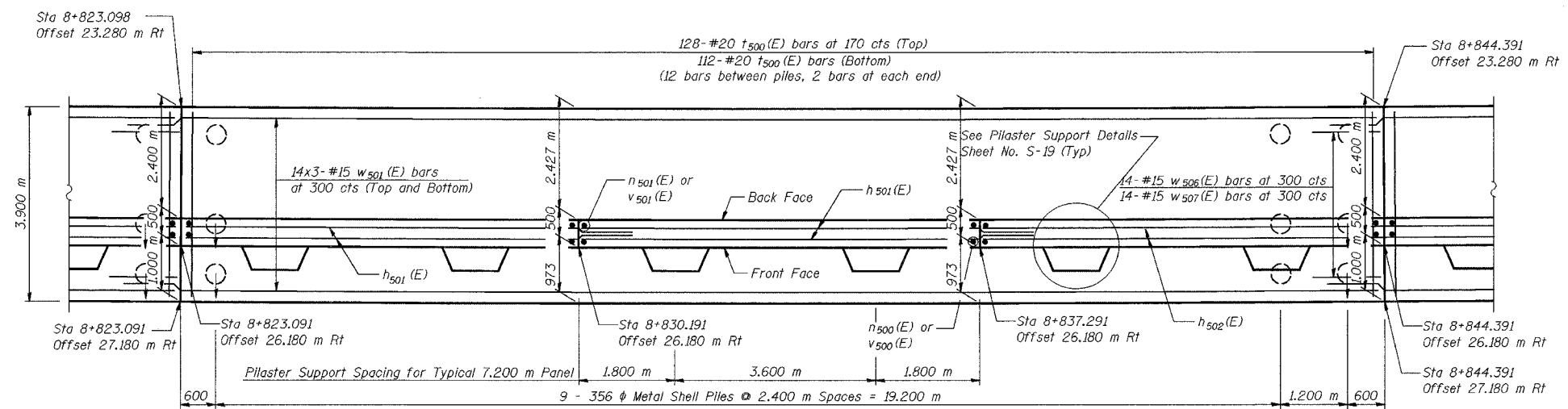
CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



DETAIL B



FOOTING PLAN

NOTES:
 See Sheet S-19 for Section A-A.
 See Sheet S-20 for Expansion Joint Detail and Bill of Material.
 See Sheet S-21 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

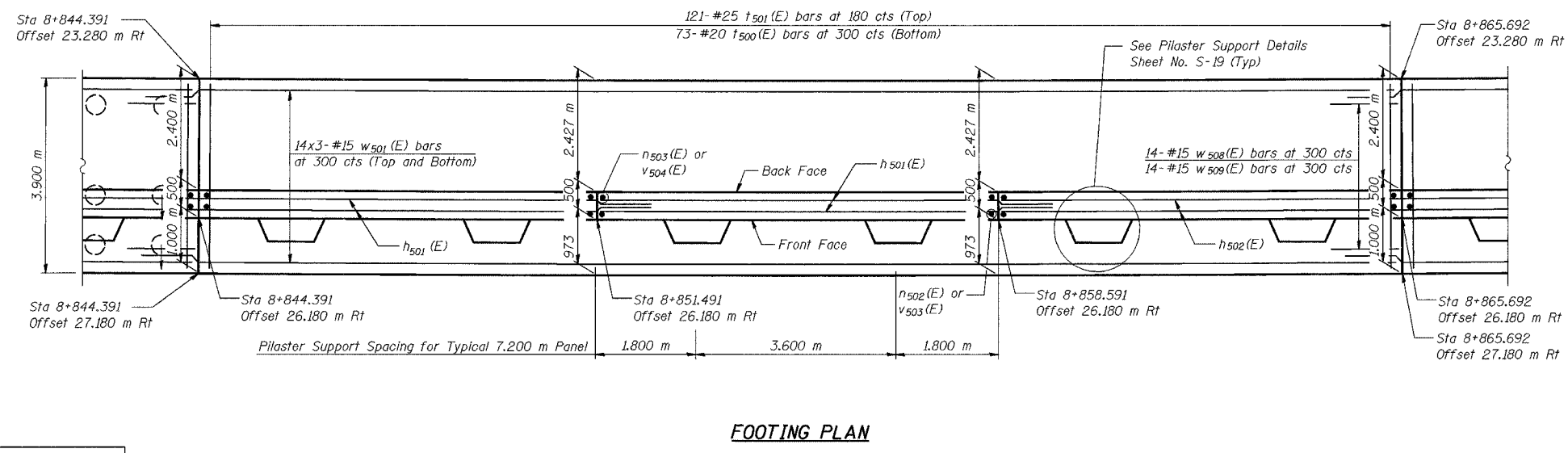
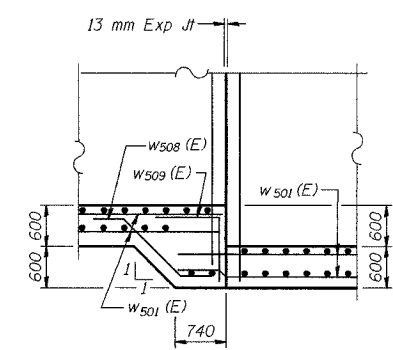
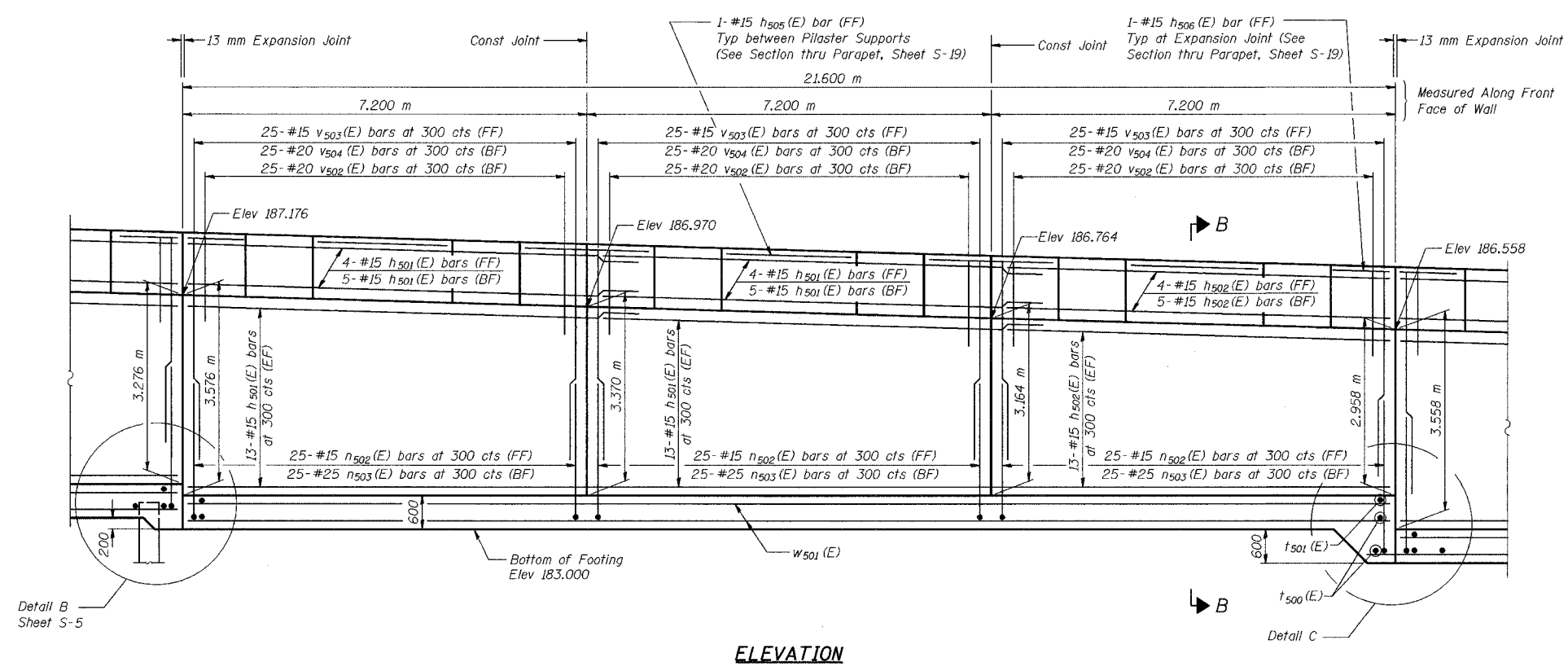
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (3 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	POST	SHEET NO. S-6 29 SHEETS
F.A.L.L. 86/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	922	
ILLINOIS FEDERAL PROJECT					CONTRACT NO. 62114 INDOT DES. NO. 0100987



NOTES:

See Sheet S-19 for Section B-B.

See Sheet S-20 for Expansion Joint Detail and Bill of Material.

See Sheet S-21 for Rustication details.

Stations are referenced to $\text{C} \perp$ 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

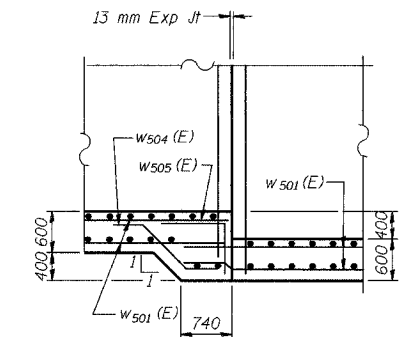
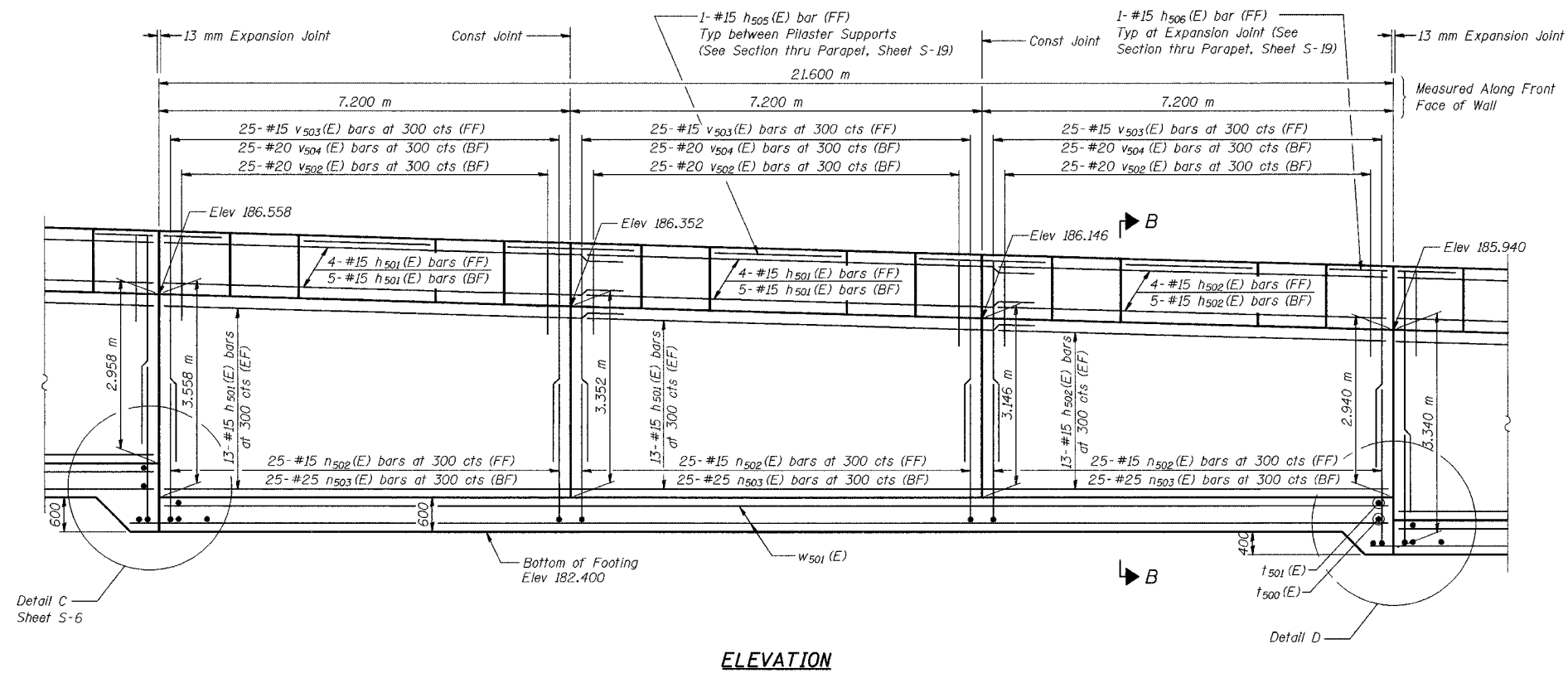
ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PLAN AND ELEVATION (4 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

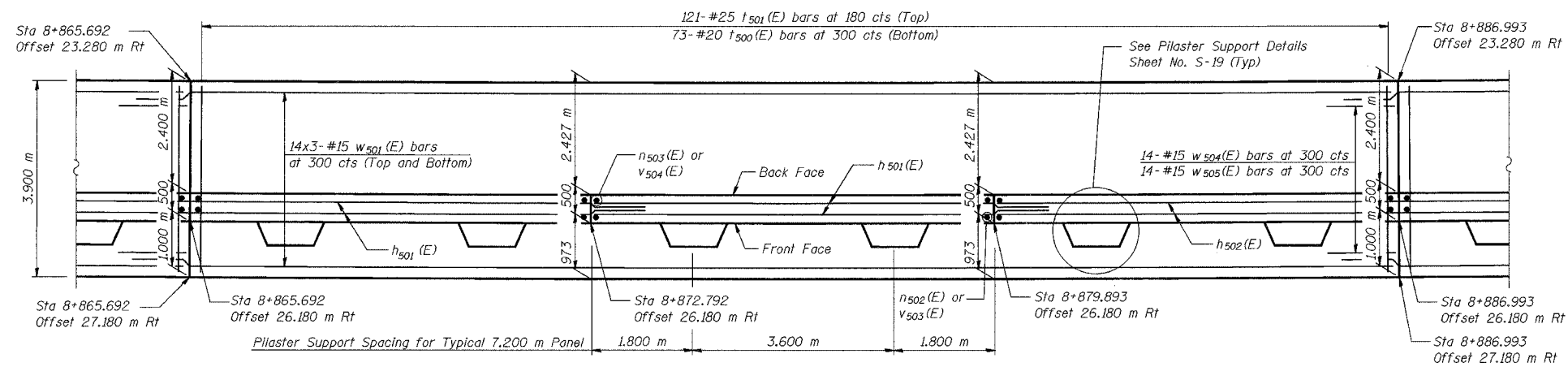
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. S-7 29 SHEETS
F.A.L. 88-74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	923	
DRAWN BY		DESIGNED BY		CONTRACT NO. 62114 INDOT DES. NO. 0100987	



DETAIL D



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-19 for Section B-B.
- See Sheet S-20 for Expansion Joint Detail and Bill of Material.
- See Sheet S-21 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.

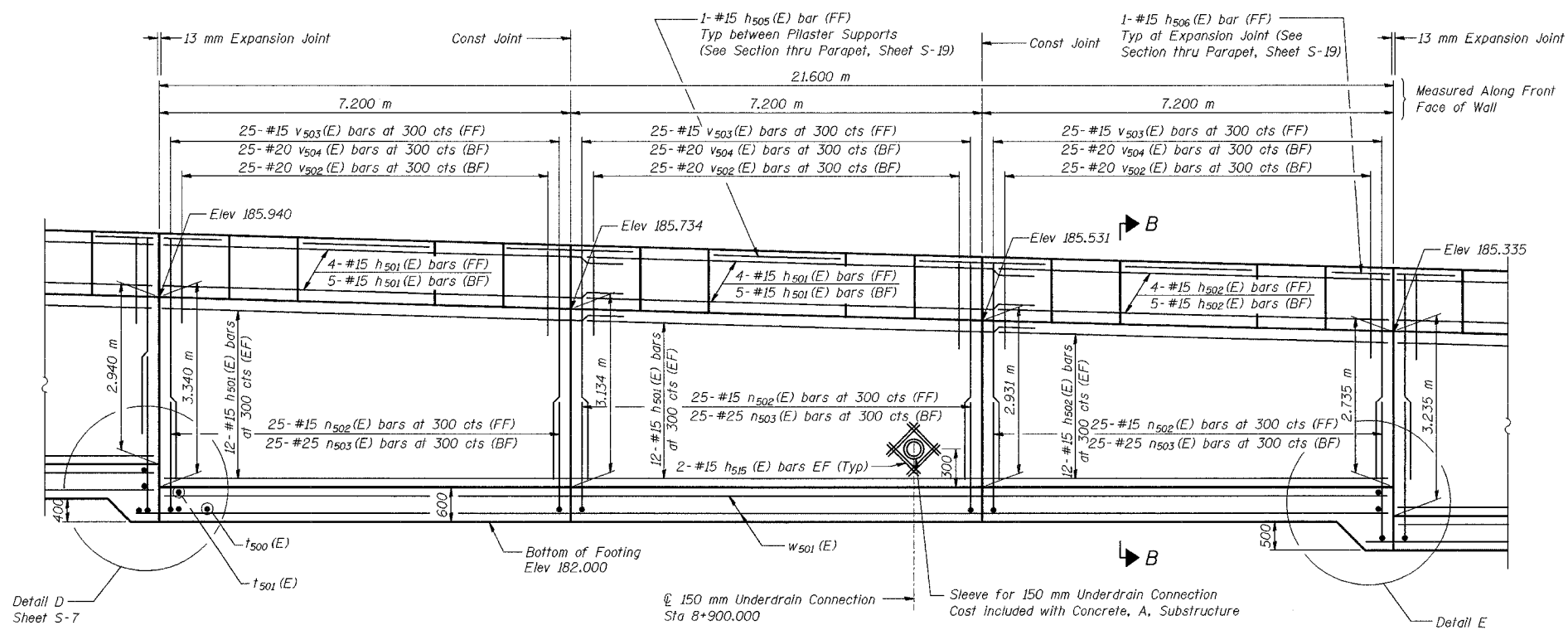
ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PLAN AND ELEVATION (5 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

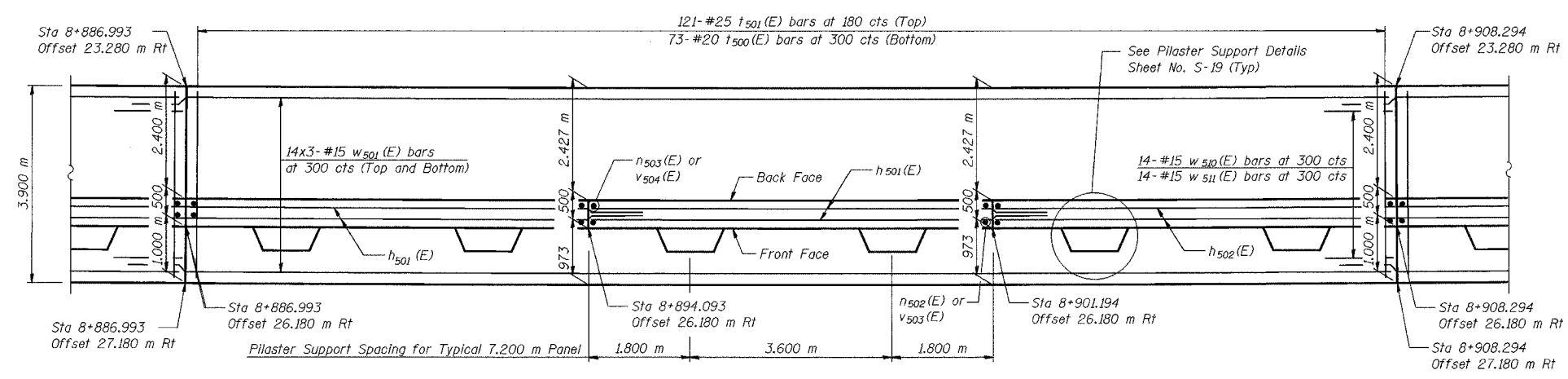
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

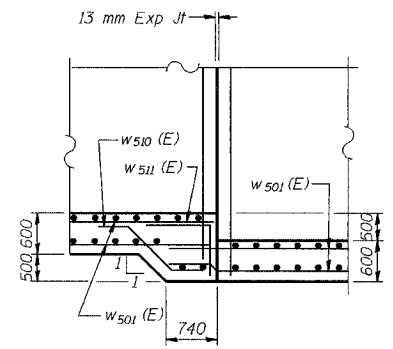
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62-114	2626.2-R-2	LAKE COUNTY, INDIANA	1207	924	
CONTRACT NO. 62114 INDOT DES. NO. 0100987					



ELEVATION



FOOTING PLAN



DETAIL E

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

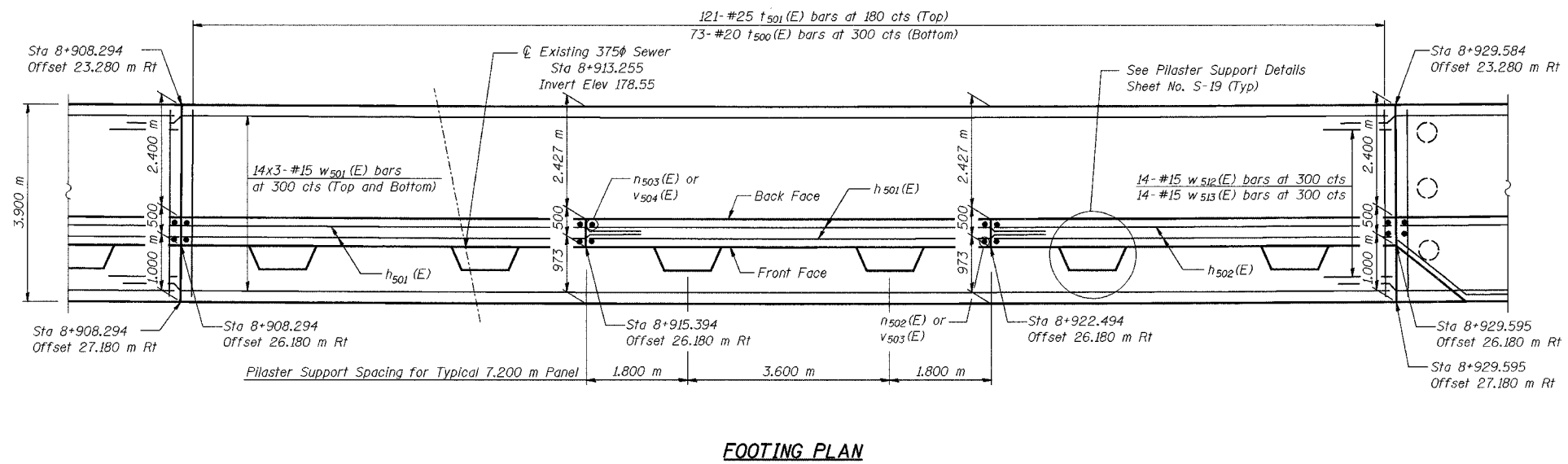
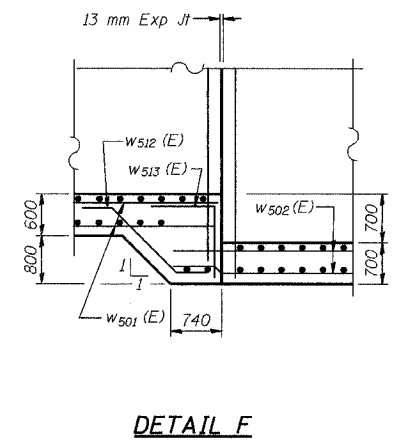
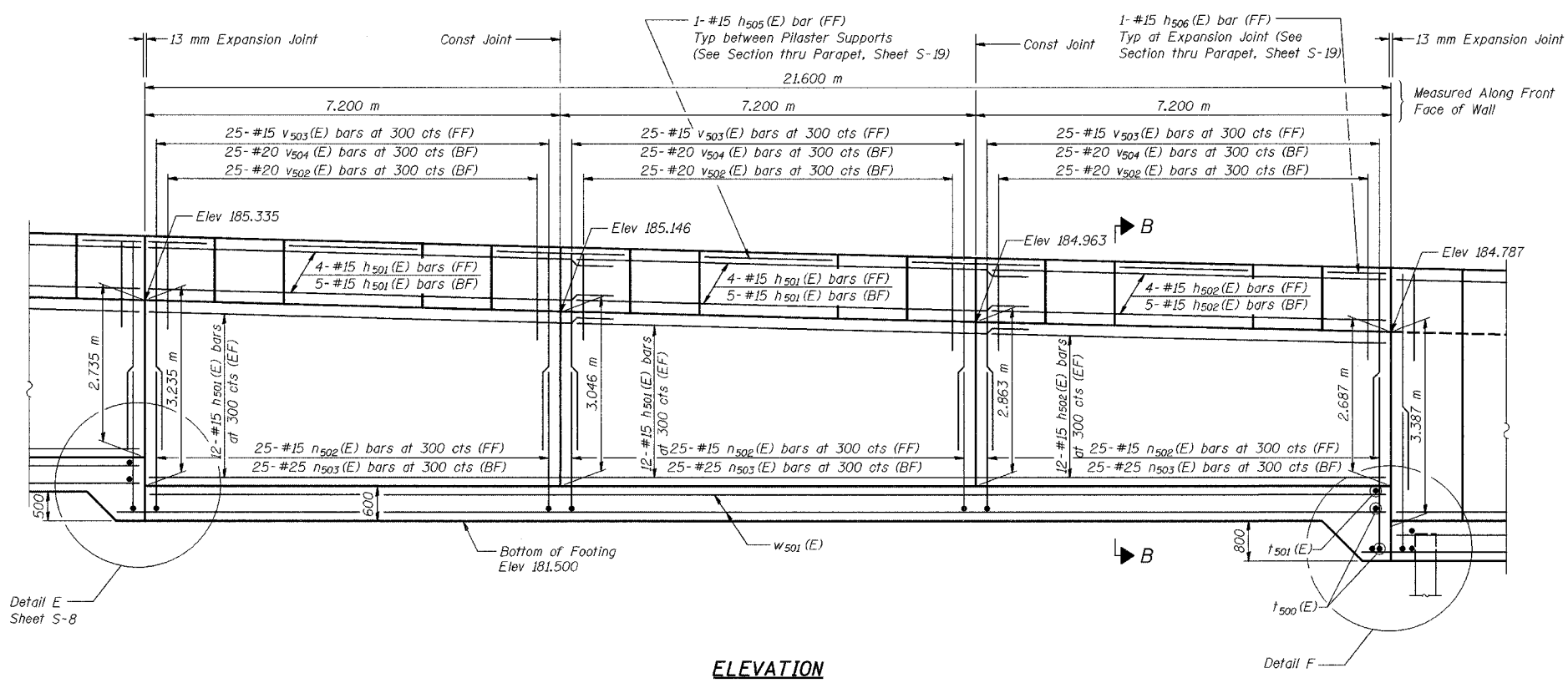
MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

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

NOTES:
 See Sheet S-19 for Section B-B.
 See Sheet S-20 for Expansion Joint Detail and Bill of Material.
 See Sheet S-21 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.

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+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-9 29 SHEETS
F.A.L. 88-74	2626.2-R-2	LAKE COUNTY, INDIANA	1207	925	
DRAWN		PER. AND PROJECT		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-19 for Section B-B.
See Sheet S-20 for Expansion Joint Detail and Bill of Material.
See Sheet S-21 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.

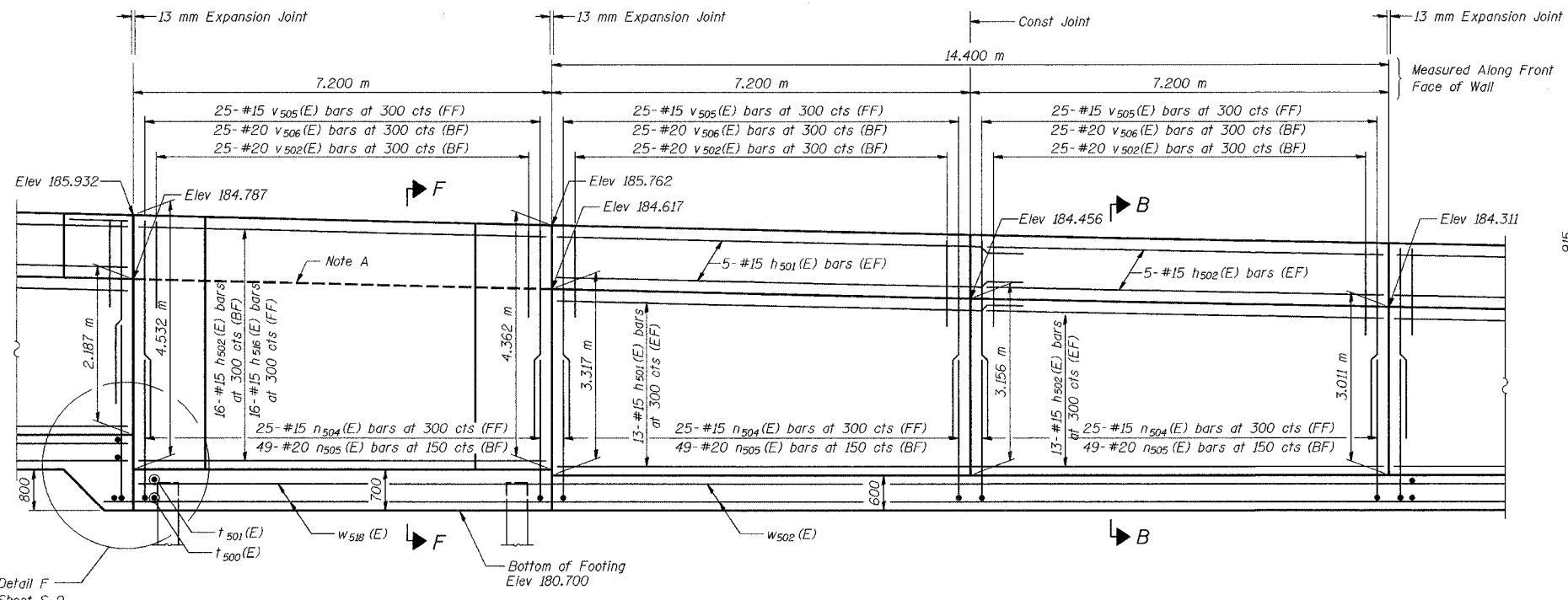
ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PLAN AND ELEVATION (7 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

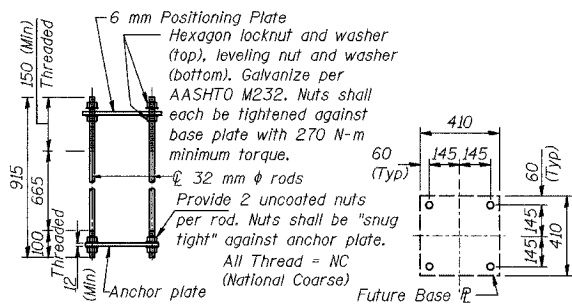
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. S-10
I-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	926	29 SHEETS
ILLINOIS			INDOT DES. NO. 0100987		



ELEVATION

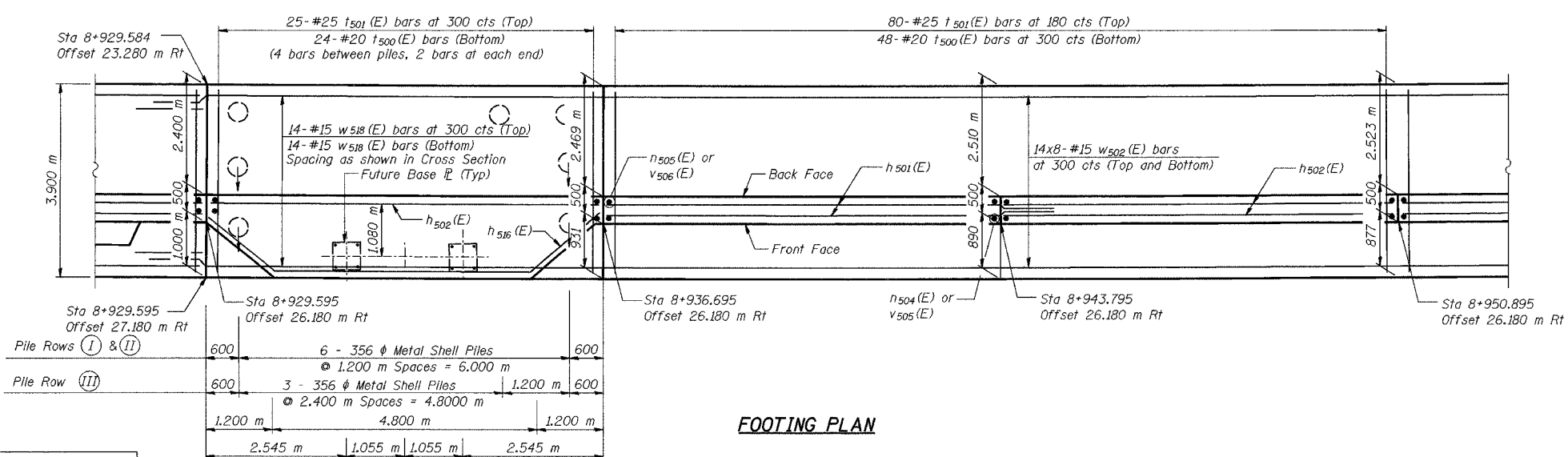


ANCHOR ROD DETAIL

ANCHOR BOLT LAYOUT

ANCHOR ROD NOTE:
Anchor rods conform to AASHTO M314M Grade 250 or 380 (36 or 55) and meet Charpy V-Notch (CVN) energy of 20 J at 5°C. Galvanize per AASHTO M232. No welding shall be permitted on rods.

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.



FOOTING PLAN

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

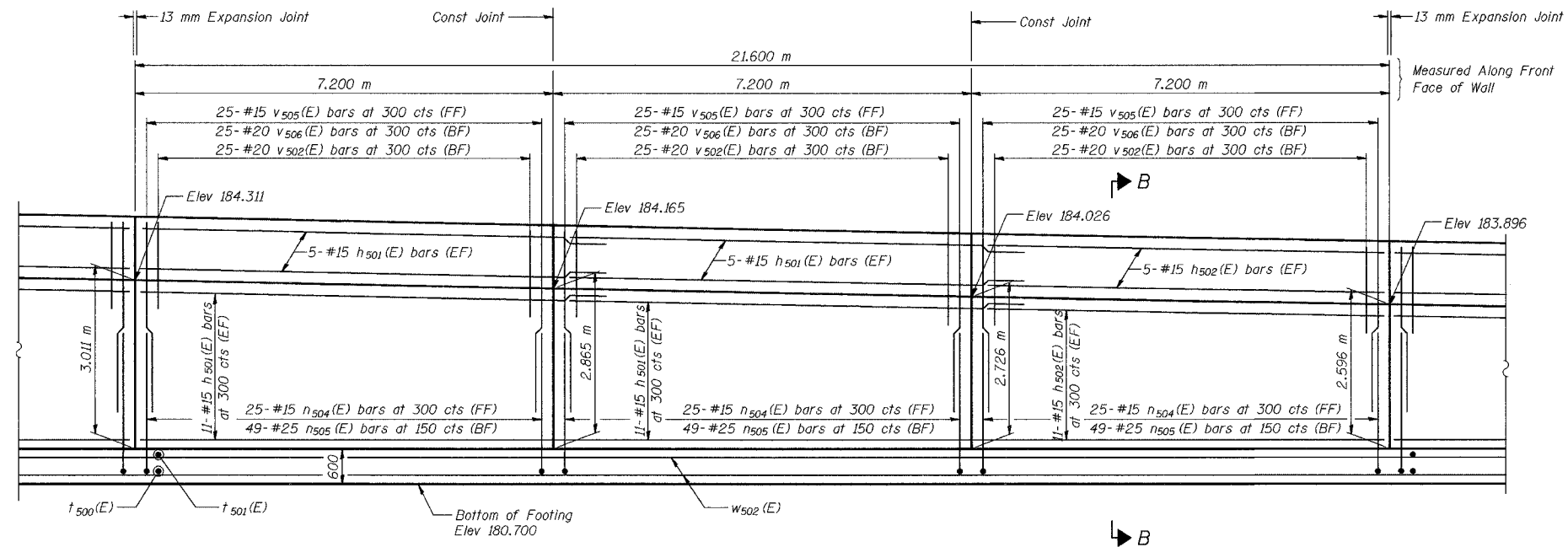
MINIMUM BAR LAPS
#15 bars = 640
#20 bars = 790

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

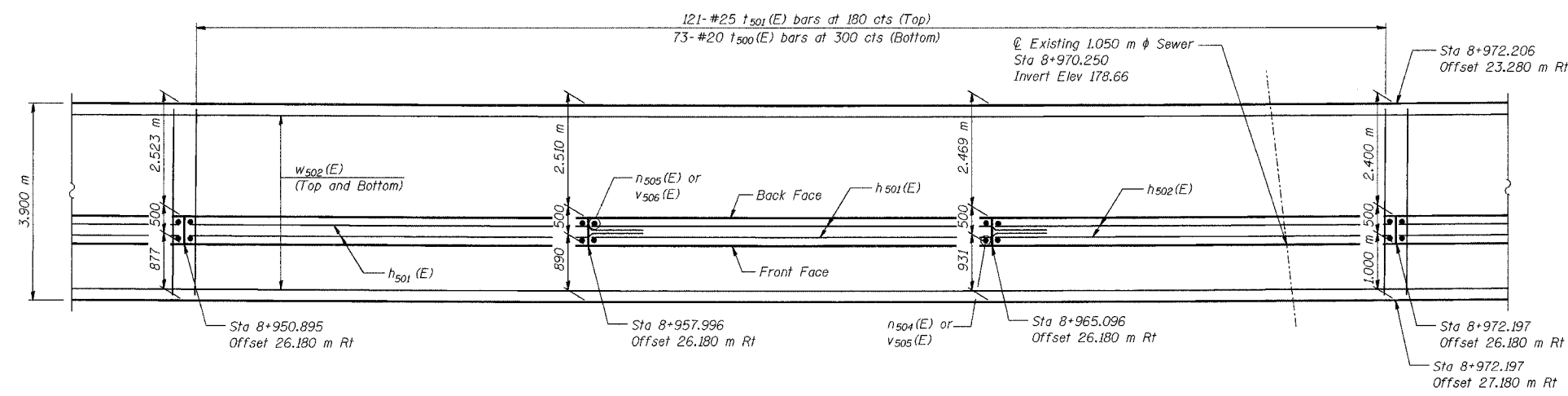
NOTES:
See Sheet S-19 for Section B-B and Section F-F.
See Sheet S-20 for Expansion Joint Detail and Bill of Material.
See Sheet S-21 for Rustication details.
Stations are referenced to \pm 1-80/94.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
Bars indicated thus 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 (8 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861
DATE 09/05
AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-11 29 SHEETS
F.A.L. 86/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	927	
SCHEDULE		PROJECT		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

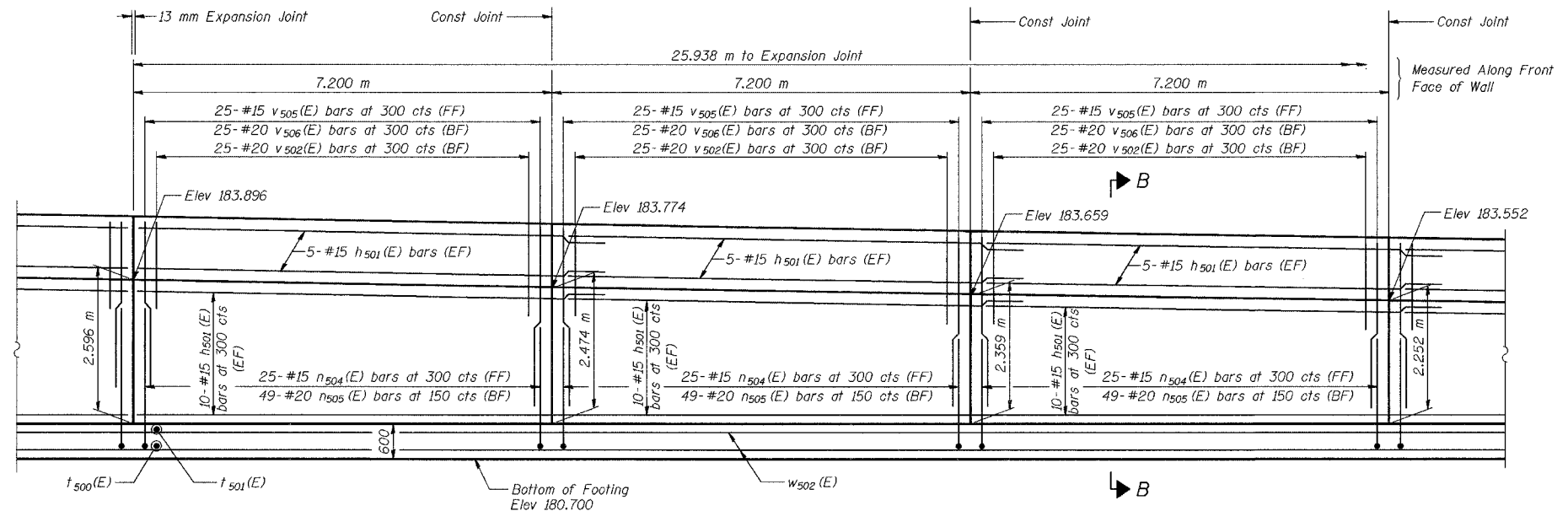
NOTES:
 See Sheet S-19 for Section B-B.
 See Sheet S-20 for Expansion Joint Detail and Bill of Material.
 See Sheet S-21 for Rustication details.
 Stations are referenced to ϕ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
 See Electrical Drawings for Junction Box and Conduit Details.

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+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

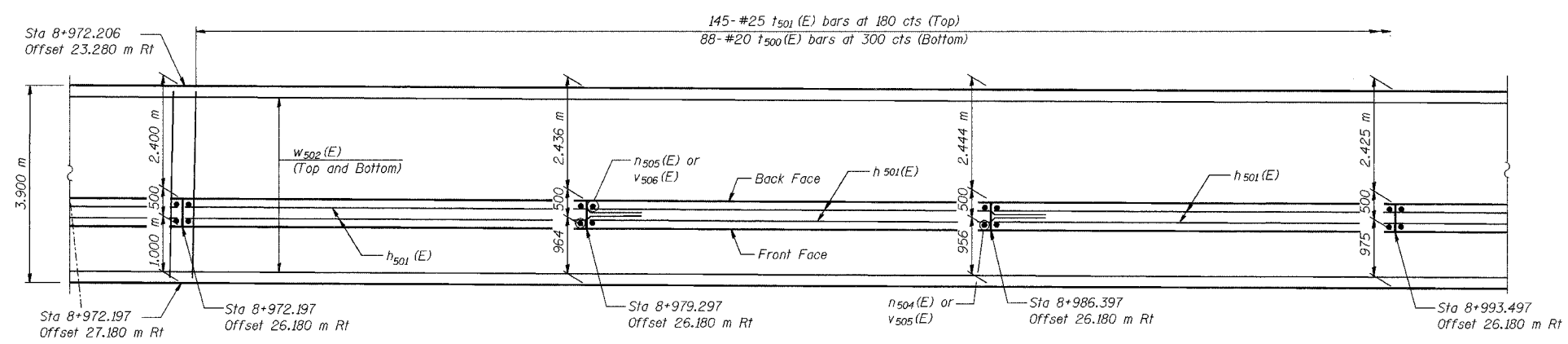
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
2626.2-R-2	2626.2-R-2	LAKE COUNTY, INDIANA	1207	928
BLINDS		FED. RD. PROGRAM		

SHEET NO. S-12
29 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-19 for Section B-B.
 See Sheet S-20 for Expansion Joint Detail and Bill of Material.
 See Sheet S-21 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.

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

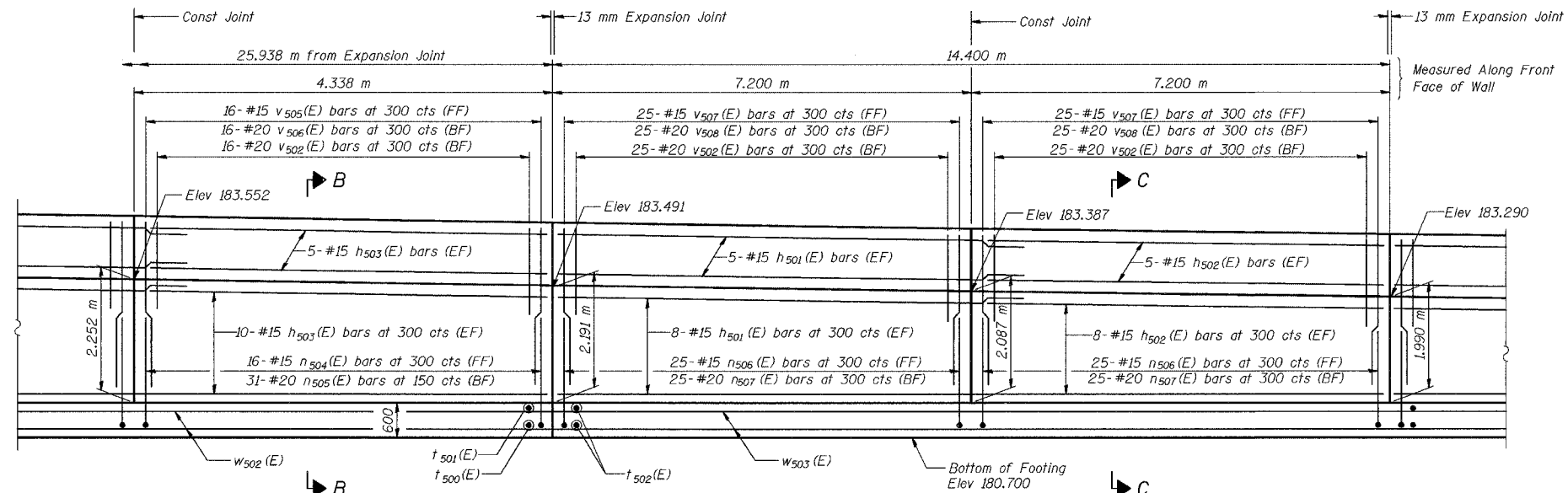
PLAN AND ELEVATION (10 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

DATE 09/05

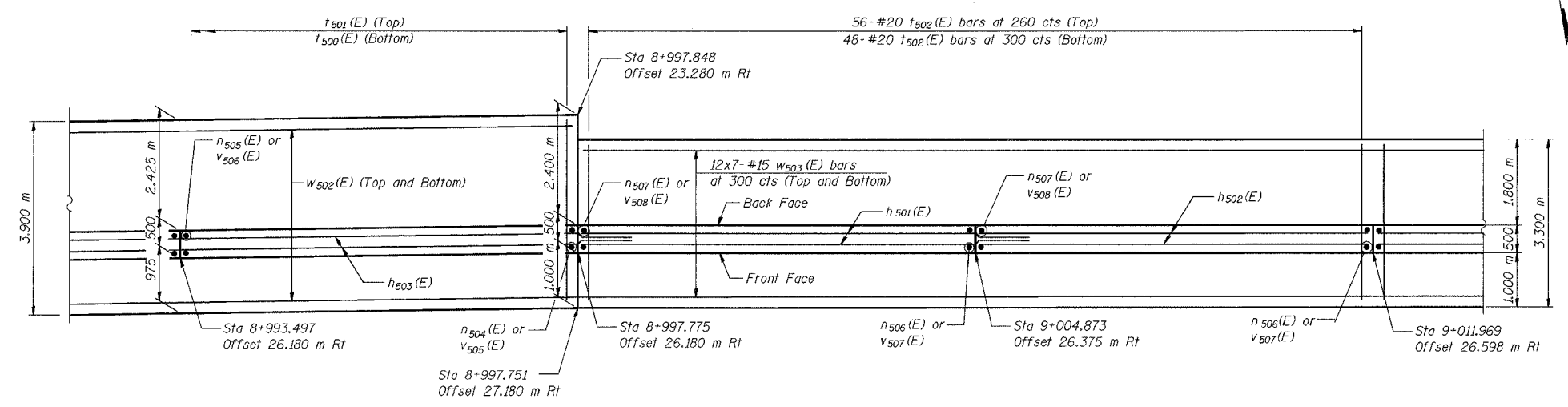
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-13
I-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	929	29 SHEETS
DRAWN		FED. AID PROJECT:			

CONTRACT NO. 62114 INDOT DES. NO. 0100987



ELEVATION



FOOTING PLAN

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

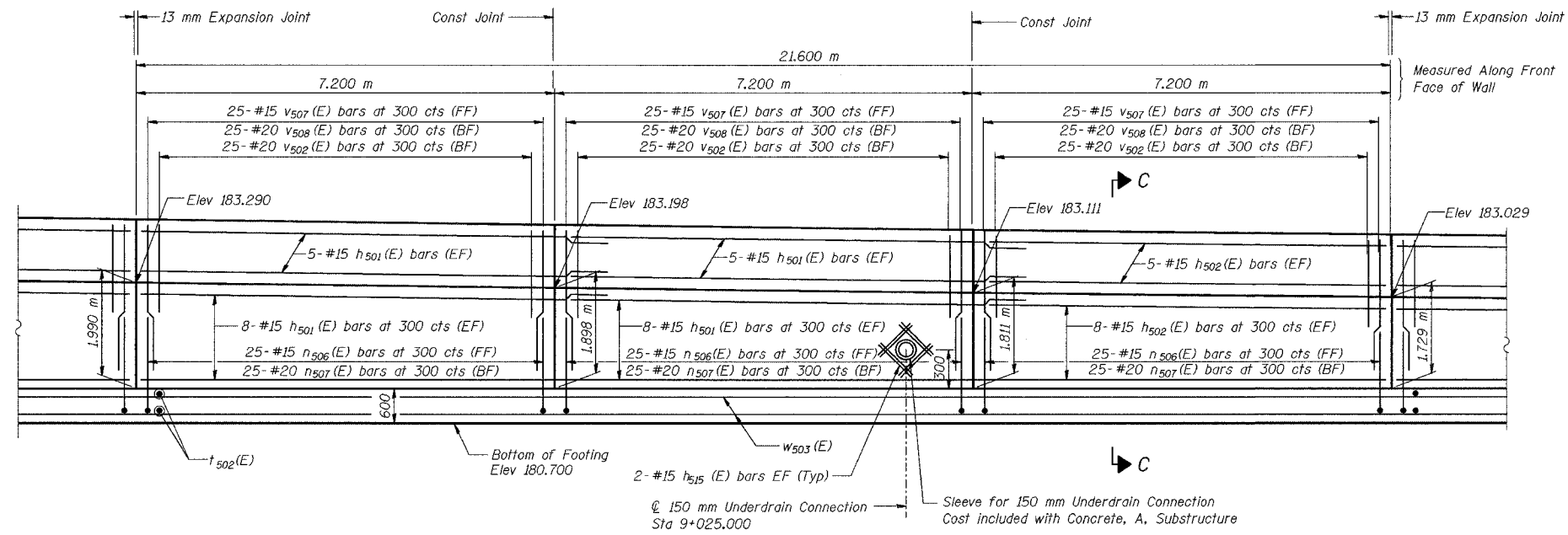
MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790

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

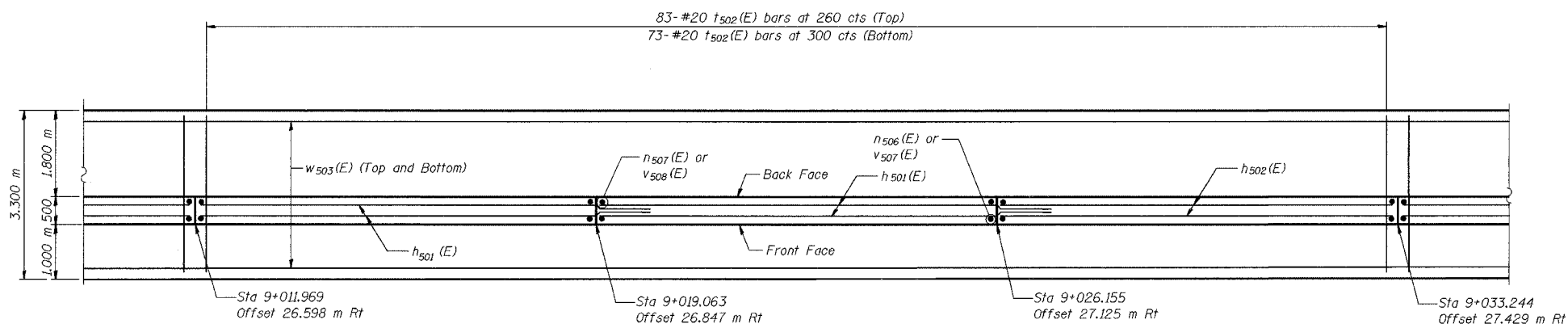
NOTES:
 See Sheet S-19 for Section B-B and section C-C.
 See Sheet S-20 for Expansion Joint Detail and Bill of Material.
 See Sheet S-21 for Rustication details.
 Stations are referenced to @ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PLAN AND ELEVATION (11 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-14 29 SHEETS
66-14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	930	
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-19 for Section C-C.
 See Sheet S-20 for Expansion Joint Detail and Bill of Material.
 See Sheet S-21 for Rustication details.
 Stations are referenced to 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.

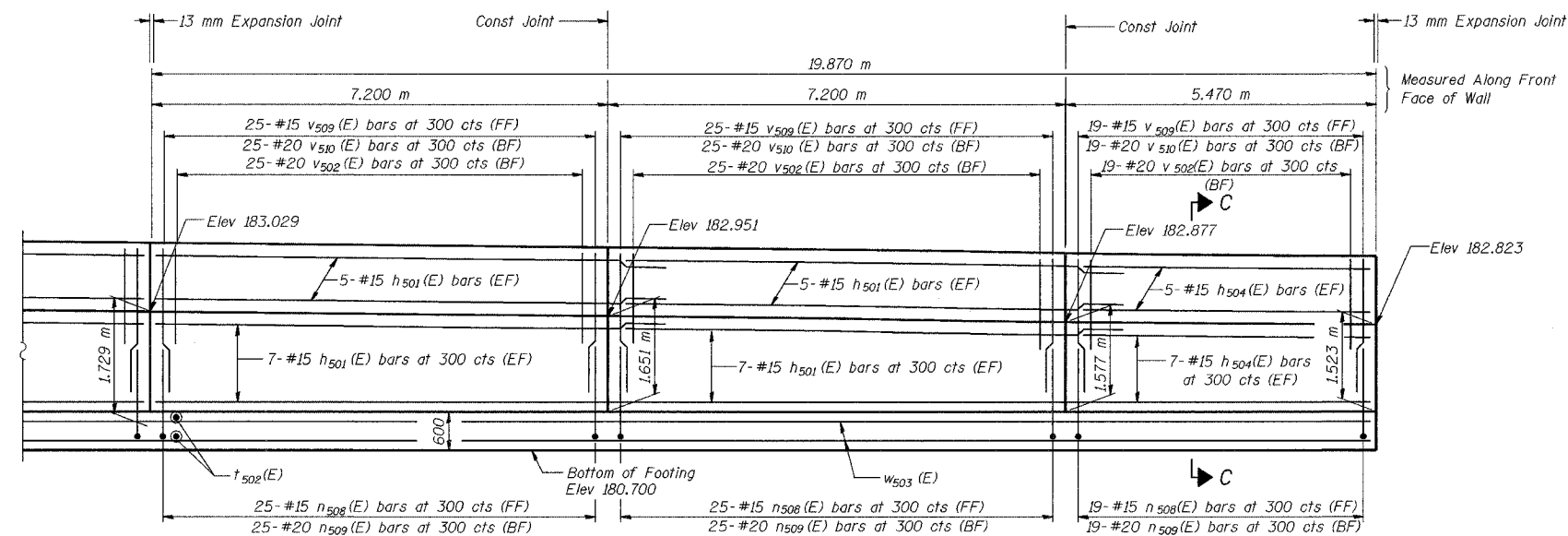
ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41

PLAN AND ELEVATION (12 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

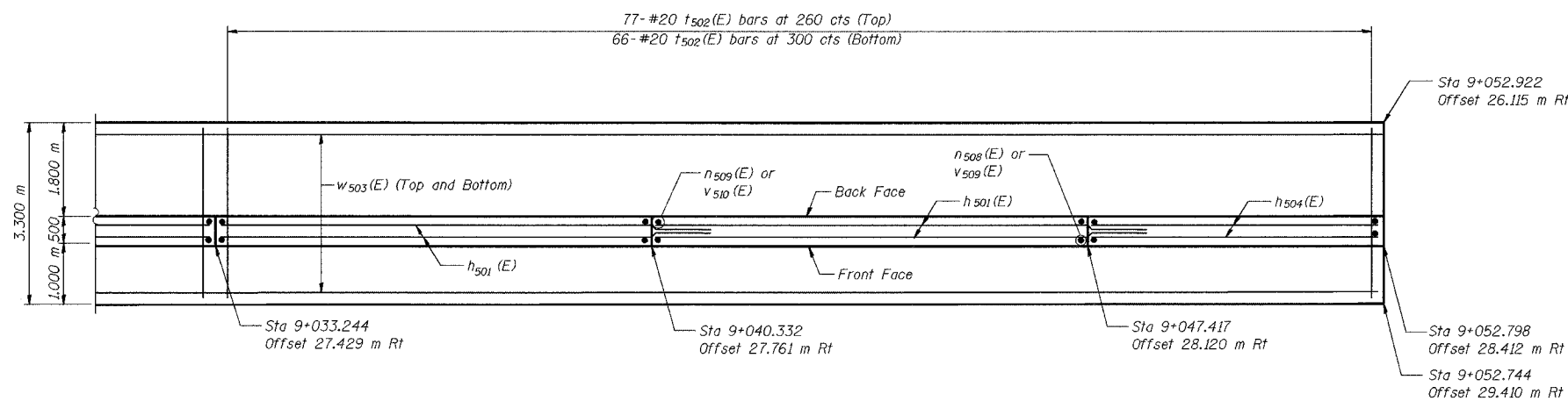
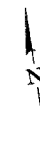
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL	SHEET NO. S-15 29 SHEETS
66-71	2626.2-R-2	LAKE COUNTY, INDIANA	1207	931	
DRAWN		PER-AD PROJECT		CONTRACT NO. 62114 INDOT DES. NO. 0100987	



ELEVATION



FOOTING PLAN

NOTES:

- See Sheet S-19 for Section C-C.
- See Sheet S-20 for Expansion Joint Detail and Bill of Material.
- See Sheet S-21 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.

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

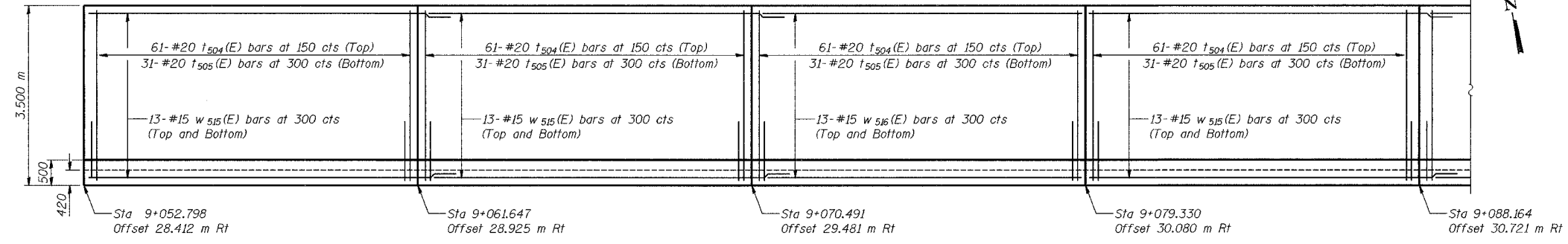
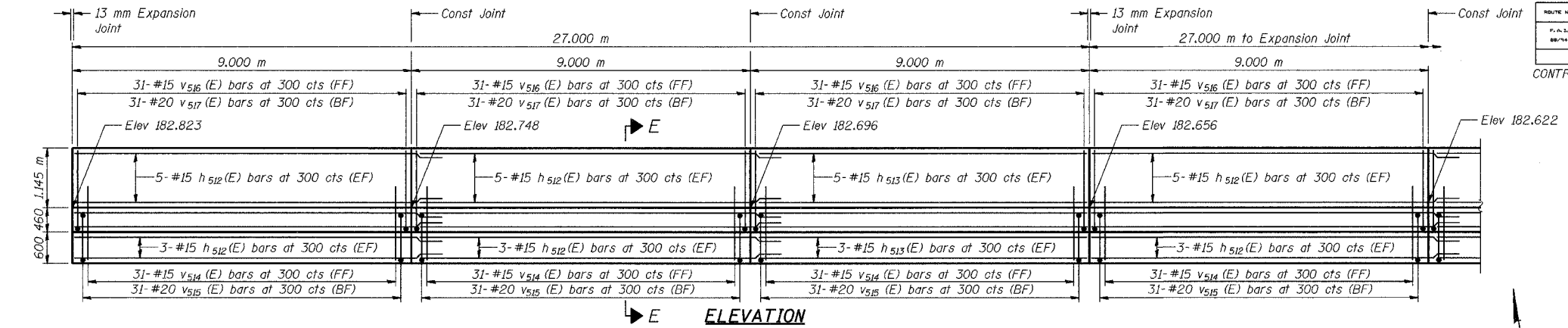
ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PLAN AND ELEVATION (13 OF 13)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

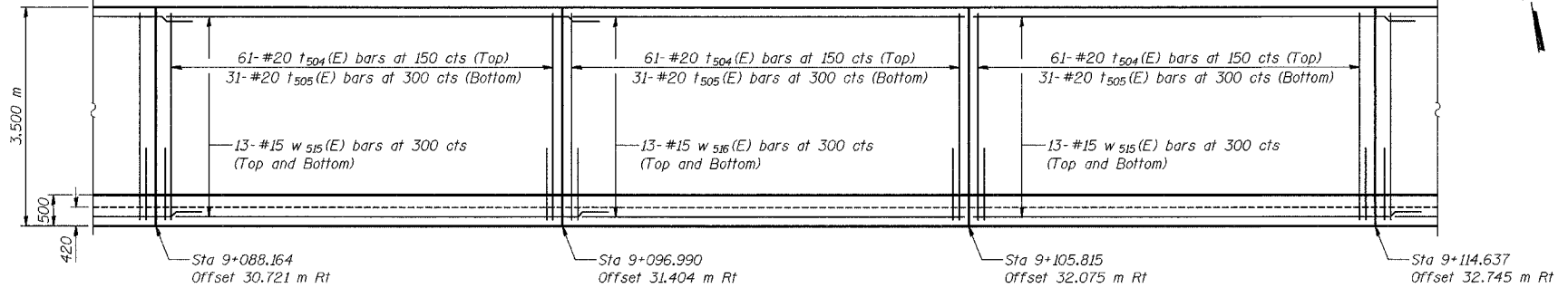
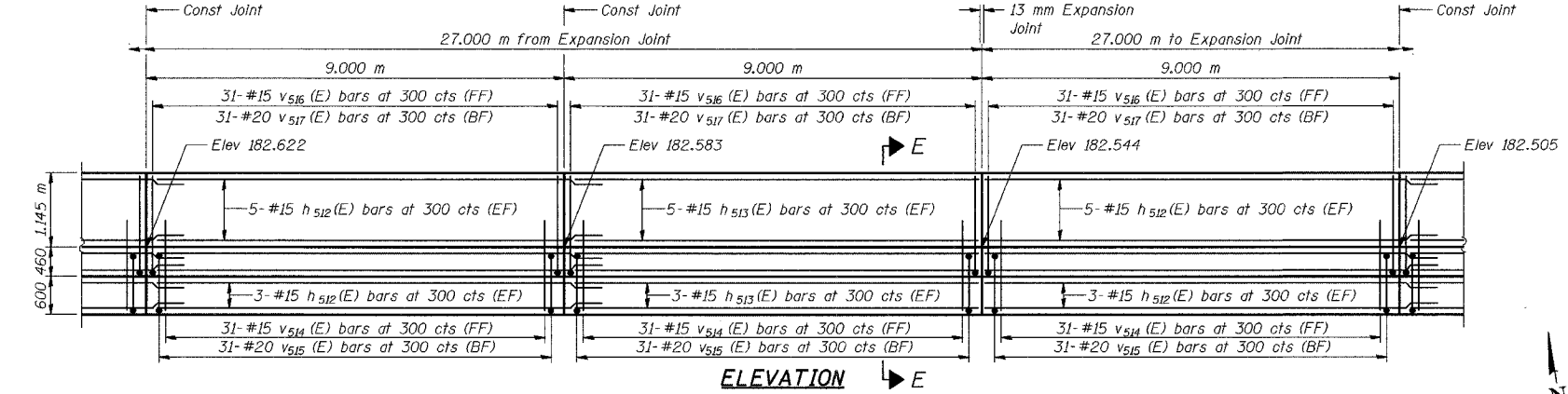
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	PROJECT	SHEET NO. S-16 29 SHEETS
1-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	932	
CONTRACT NO. 62114 INDOT DES. NO. 0100987					



ANCHORAGE SLAB PLAN



ANCHORAGE SLAB PLAN

MINIMUM BAR LAPS

#15 bars = 640
#20 bars = 790

LEGEND

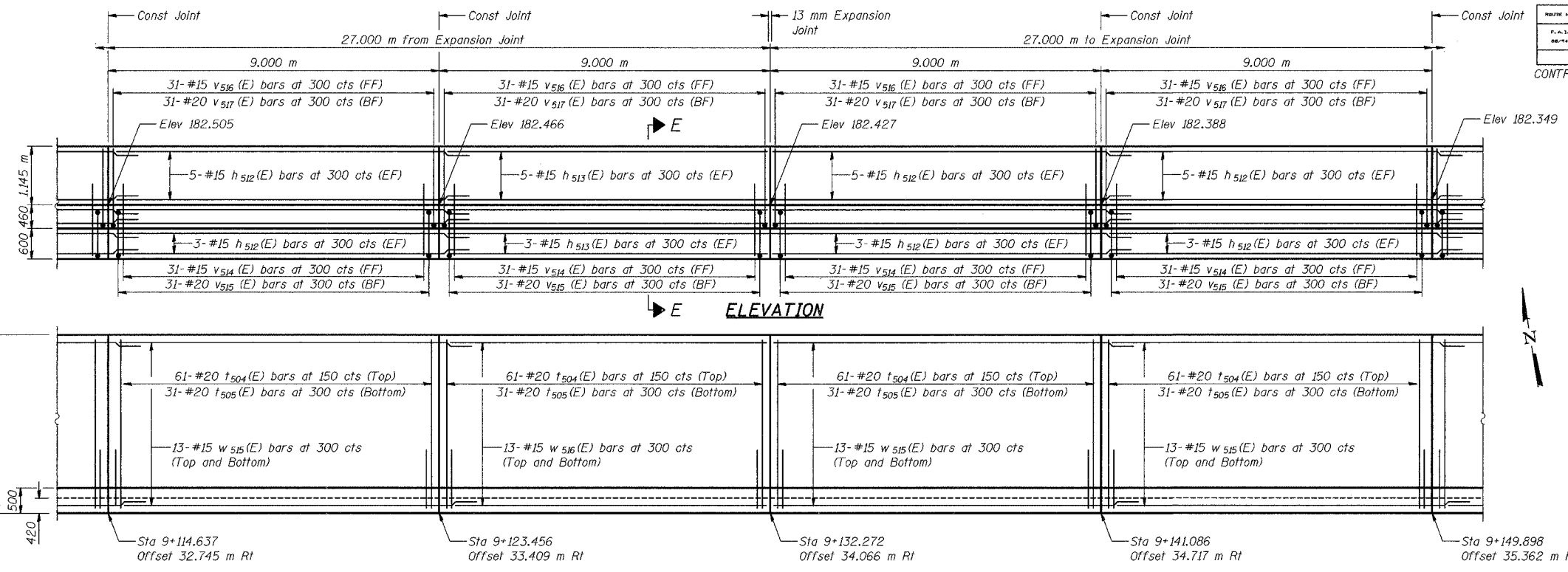
BF = Back Face
FF = Front Face
EF = Each Face

NOTES:
See Sheet S-19 for Section E-E.
See Sheet S-20 for Expansion Joint Detail and Bill of Material.
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.

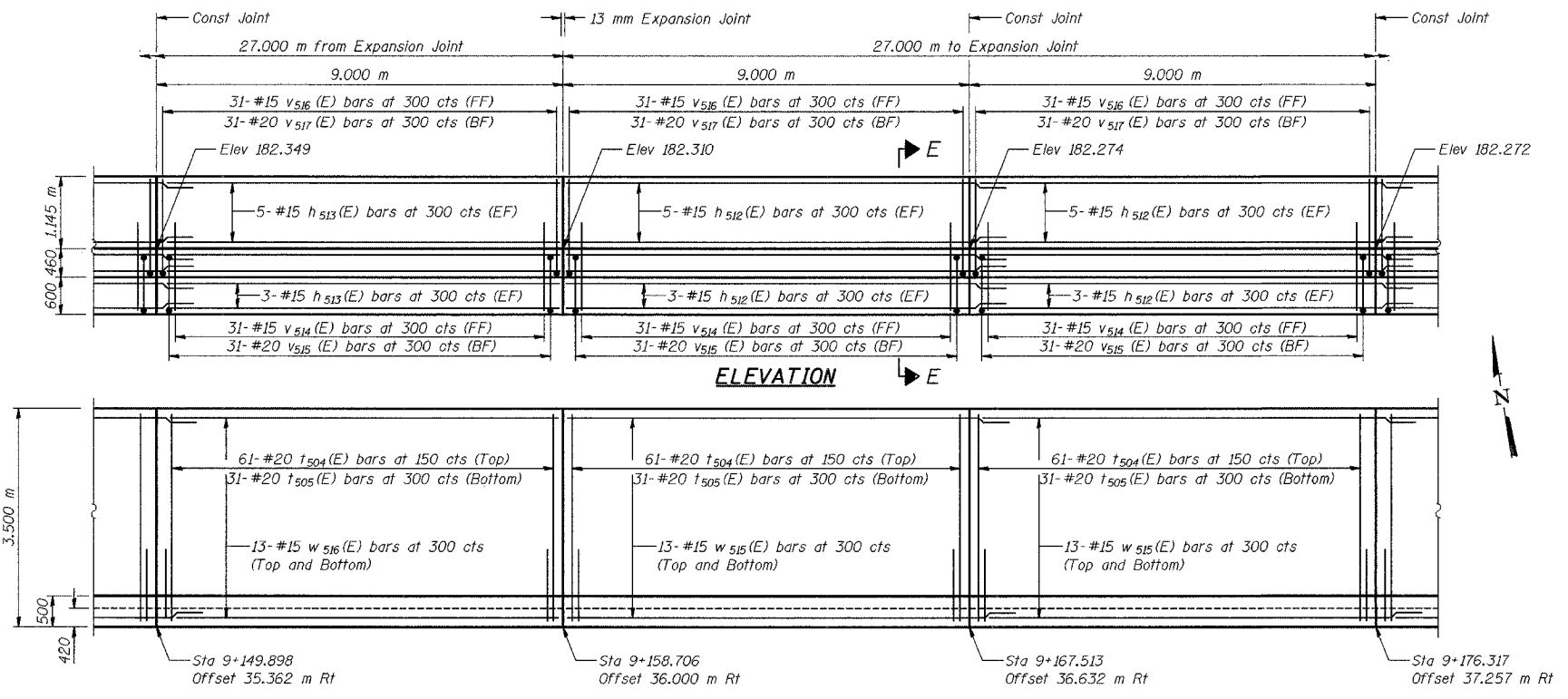
DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION
1-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41
PARAPET AND ANCHORAGE SLAB (1 OF 3)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861
DATE 09/05
AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-17 29 SHEETS
1-80/94	2626.2-R-2	LAKE COUNTY, INDIANA	1207	933	
CONTRACT NO. 62114		INDOT DES. NO. 0100987			



ANCHORAGE SLAB PLAN



ANCHORAGE SLAB PLAN

MINIMUM BAR LAPS

#15 bars = 640
#20 bars = 790

LEGEND

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

NOTES:

See Sheet S-19 for Section E-E.

See Sheet S-20 for Expansion Joint Detail and Bill of Material.

Stations are referenced to \odot 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

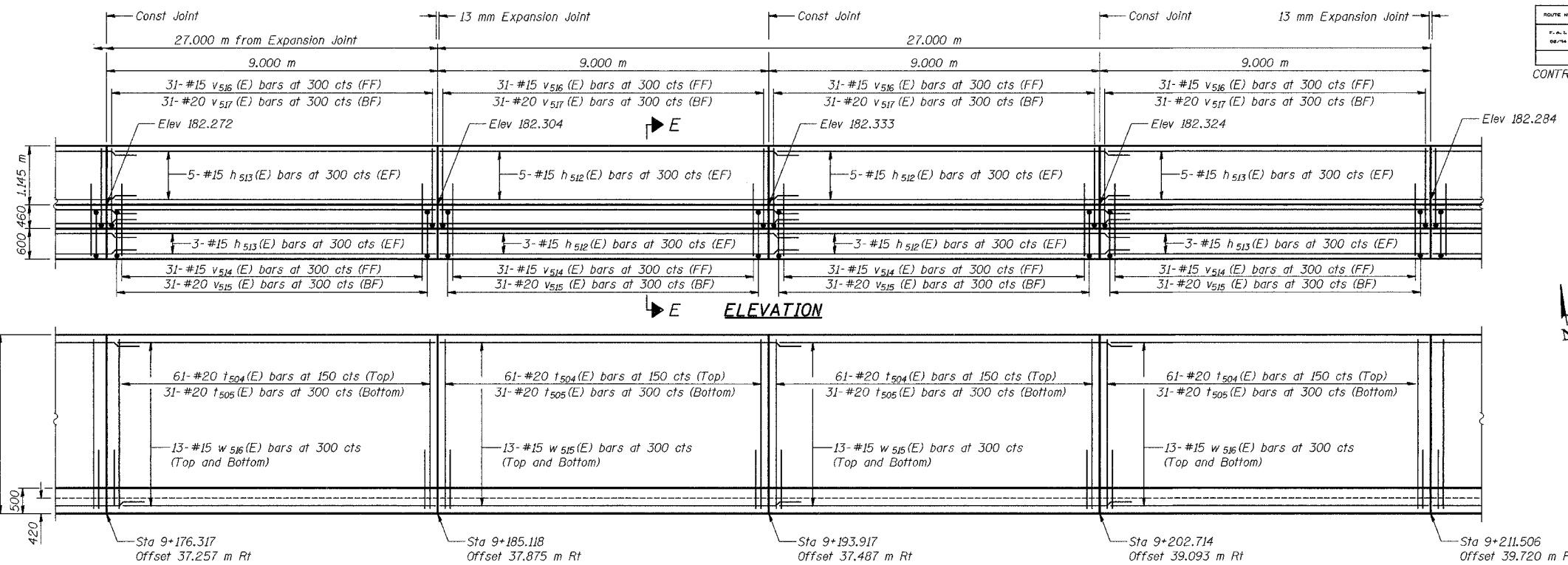
ILLINOIS DEPARTMENT OF TRANSPORTATION
1-80/94/US 6
KINGERY-BORMAN EXPRESSWAY
BURNHAM ROAD TO US 41

PARAPET AND ANCHORAGE SLAB (2 OF 3)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

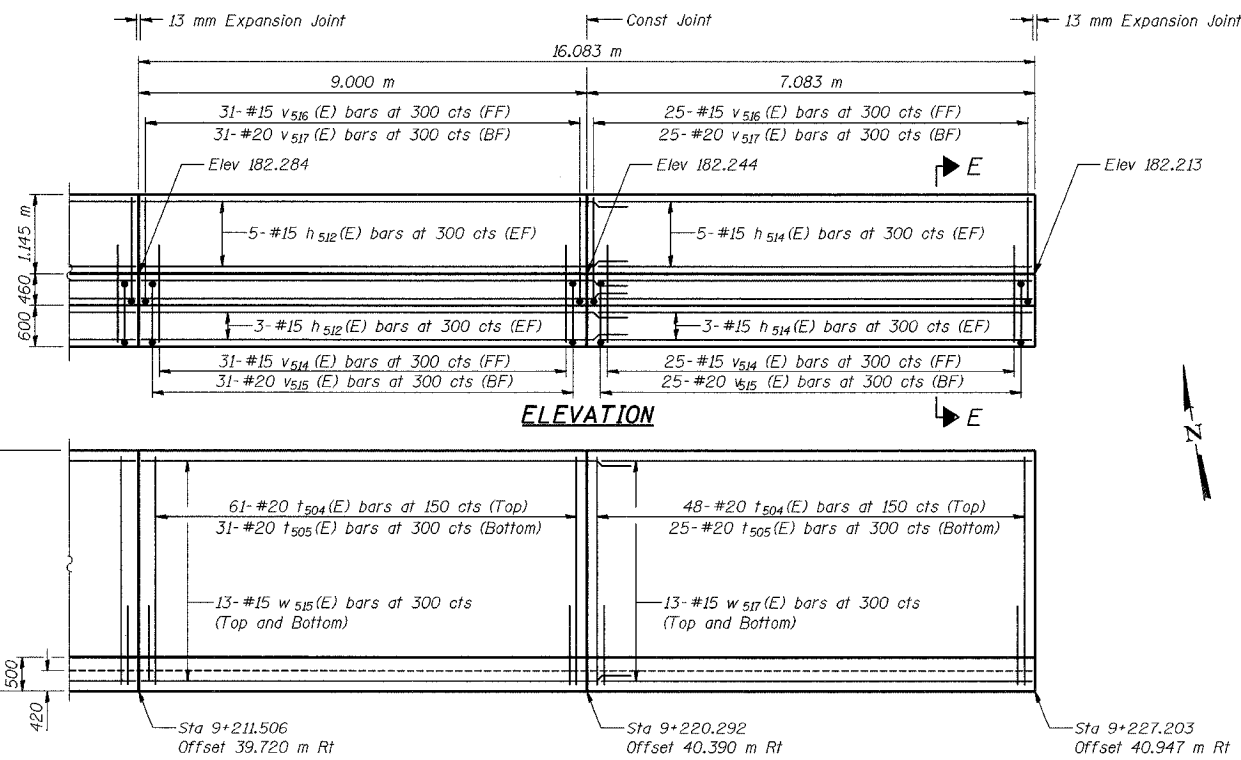
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-18
1207	934	LAKE COUNTY, INDIANA	29 SHEETS	
CONTRACT NO. 62114		INDOT DES. NO. 0100987		



ANCHORAGE SLAB PLAN



ANCHORAGE SLAB PLAN

NOTES:
 See Sheet S-19 for Section E-E.
 See Sheet S-20 for Expansion Joint Detail and Bill of Material.
 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

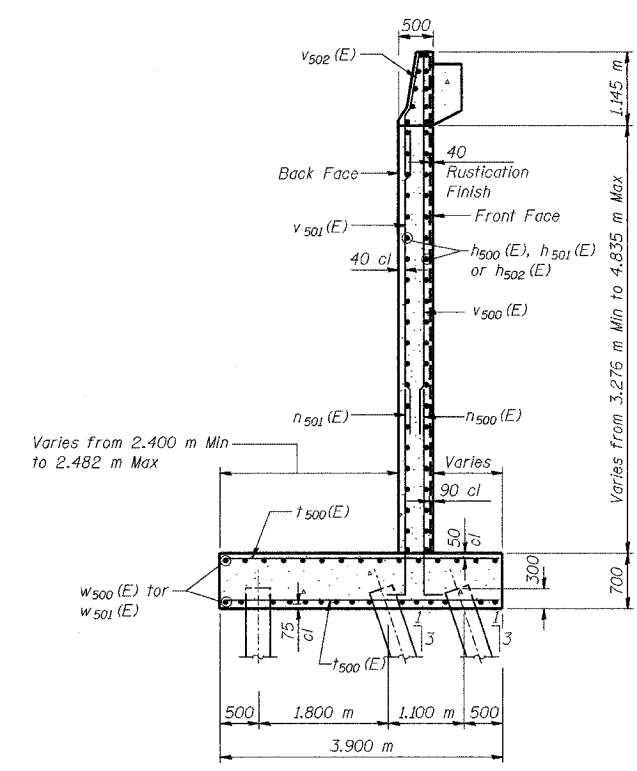
BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-80/94/US 6
 KINGERY-BORMAN EXPRESSWAY
 BURNHAM ROAD TO US 41
PARAPET AND ANCHORAGE SLAB (3 OF 3)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+774.073 TO STATION 9+227.203
 STRUCTURE NO. 016-W861
 DATE 09/05
AMERICAN
 CONSULTING ENGINEERS

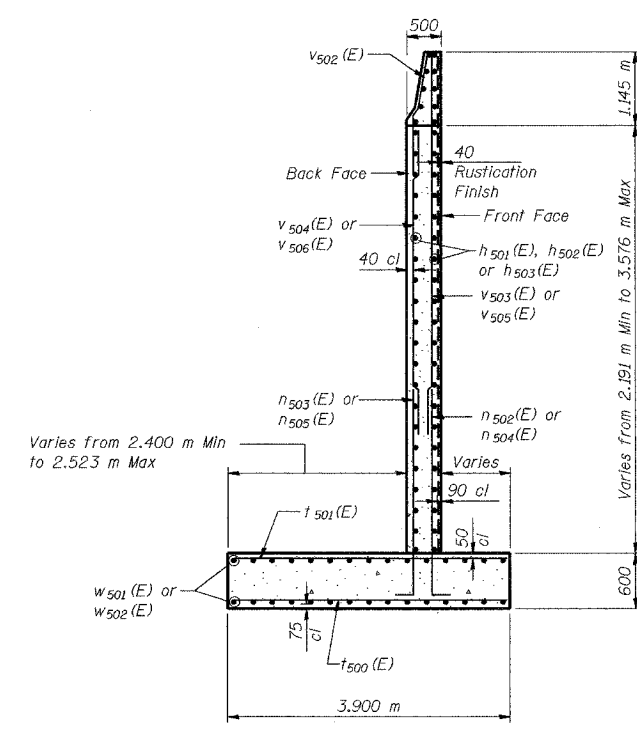
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-19
F.A.T.	2626.2-R-2	LAKE COUNTY, INDIANA	1207	935
DATE				29 SHEETS

CONTRACT NO. 62114 INDOT DES. NO. 0100987

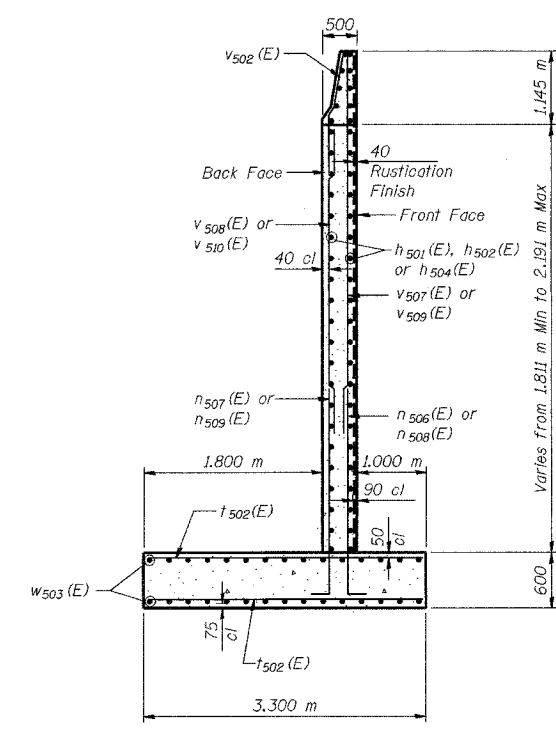
Future Overhead Structure - Span 500.1000 m Elev 185.587



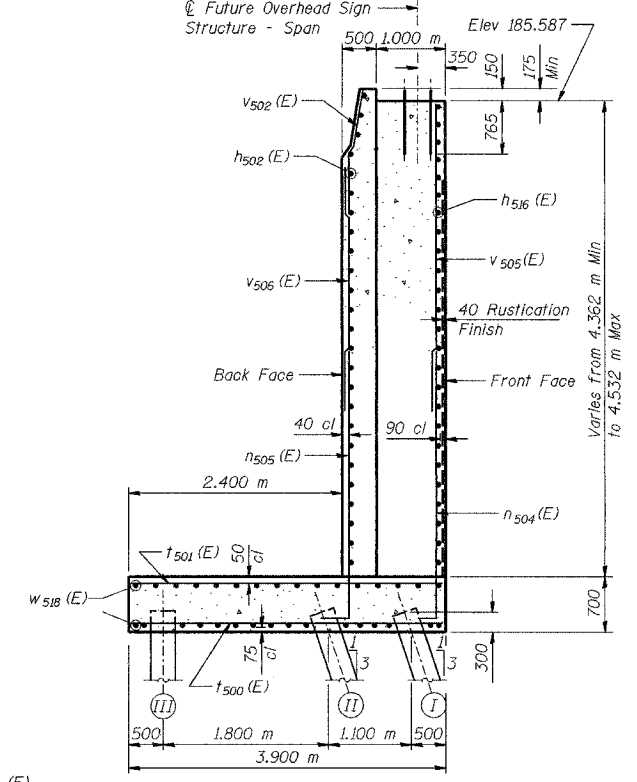
SECTION A-A



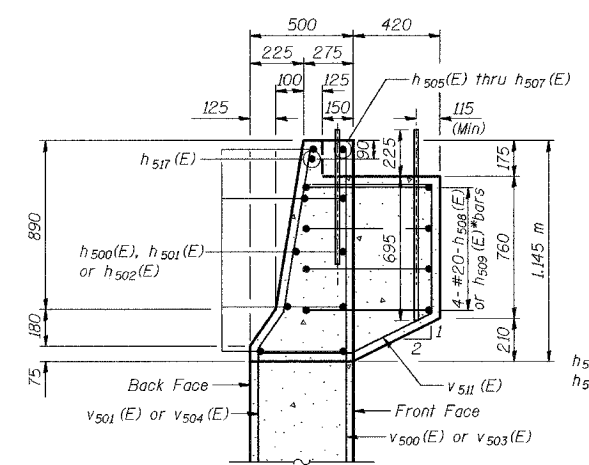
SECTION B-B



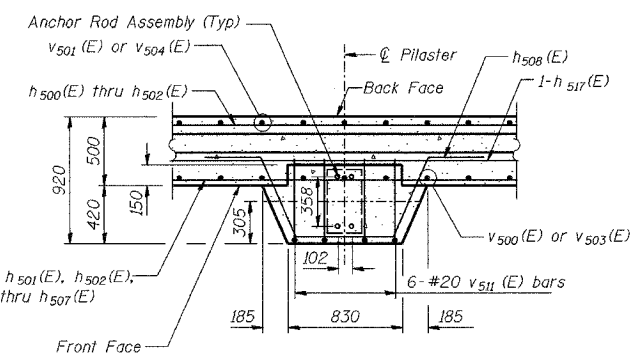
SECTION C-C



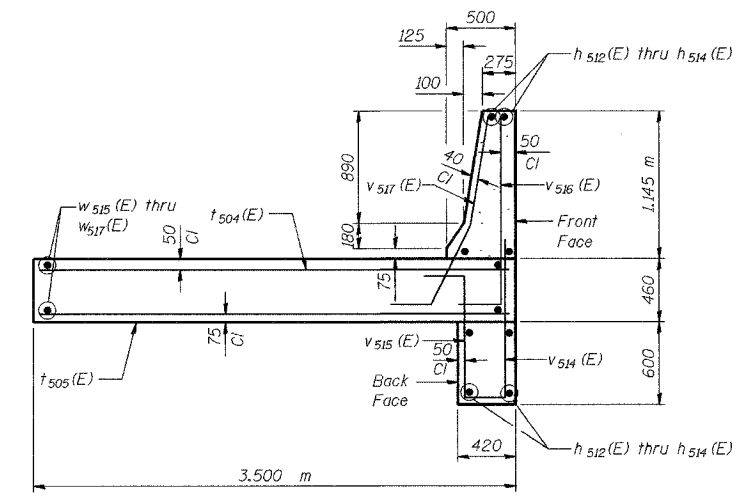
SECTION F-F



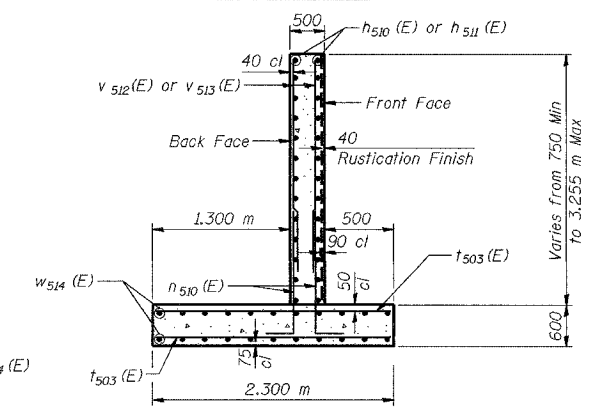
SECTION THRU PARAPET



PILASTER SUPPORT - PLAN VIEW
(43 Locations)



SECTION E-E



SECTION D-D

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

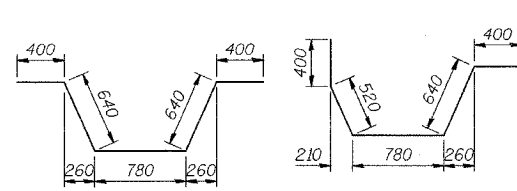
PILE DATA

Type - 356 φ Metal Shell
Capacity - 500 kN
Est. Length - 13.8 m
No. Req'd. - 100
Test Piles - 3

NOTES:

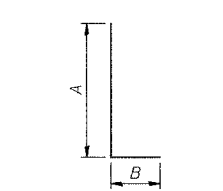
See Sheet S-20 for Anchor Rod Assembly Details, Expansion Joint details and Bill of Material.
See Sheet S-21 for Rustication details.
Reinforcement bars designated (E) shall be epoxy coated.
All dimensions are in millimeters (mm) except as noted.
See Typical Section on Sheet S-2 for Drainage Details 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 (1 OF 2)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861
DATE 09/05
AMERICAN
CONSULTING ENGINEERS

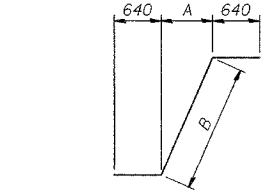


BAR h508(E)

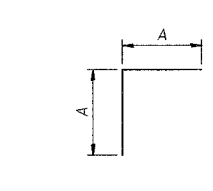
BAR h509(E)



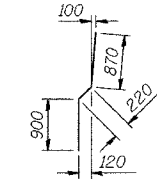
BARS n500(E) thru n510(E), t504(E) or v516(E)



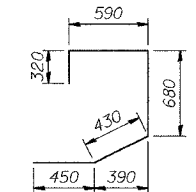
BARS w504(E), w506(E), w508(E), w510(E) or w512(E)



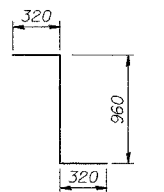
BARS w505(E), w507(E), w509(E), w511(E) or w513(E)



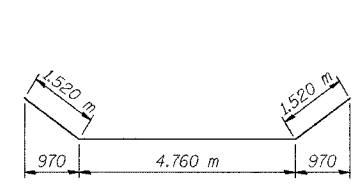
BARS v502(E)



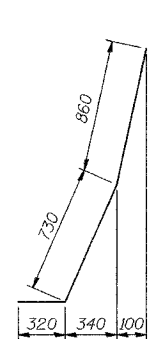
BAR v511(E)



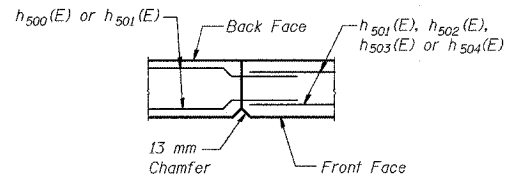
BAR v515(E)



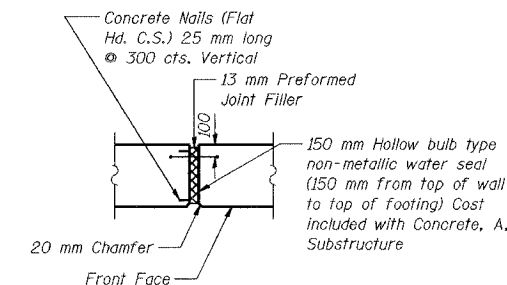
BAR h516(E)



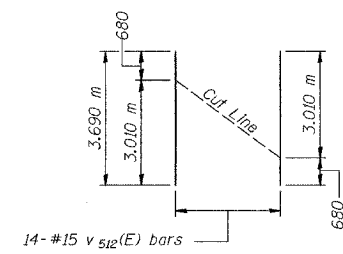
BAR v517(E)



CONSTRUCTION JOINT DETAIL

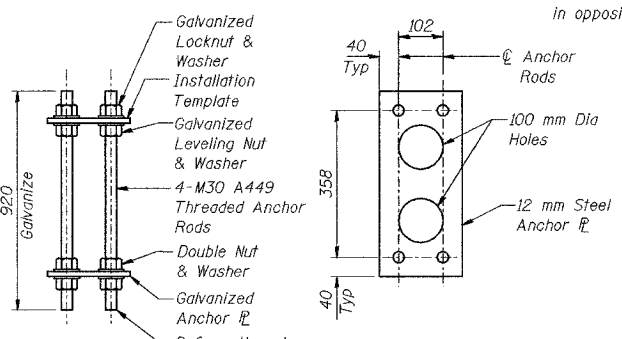


13 MM EXPANSION JOINT DETAIL



FIELD CUTTING DIAGRAM

Order v512(E) bars full length. Cut as shown and use remainder of bars in opposite face.



NOISE ABATEMENT WALL ANCHOR ROD ASSEMBLY

(43 Req'd)

DESIGNED	KFA
CHECKED	BPS
DRAWN	MJB
CHECKED	GSP

BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h500(E)	43	#15	8.35	—
h501(E)	783	#15	7.84	—
h502(E)	391	#15	7.10	—
h503(E)	30	#15	4.24	—
h504(E)	24	#15	5.37	—
h505(E)	33	#15	2.30	—
h506(E)	13	#15	1.10	—
h507(E)	3	#15	1.67	—
h508(E)	168	#20	2.86	—
h509(E)	4	#20	2.74	—
h510(E)	2	#15	5.90	—
h511(E)	208	#15	9.64	—
h512(E)	96	#15	8.90	—
h513(E)	16	#15	6.98	—
h514(E)	32	#15	0.60	—
h515(E)	16	#15	7.80	—
h516(E)	43	#15	2.11	—
n500(E)	227	#15	4.12	—
n501(E)	445	#25	4.26	—
n502(E)	300	#15	2.70	—
n503(E)	300	#25	2.84	—
n504(E)	241	#15	2.92	—
n505(E)	472	#20	2.98	—
n506(E)	125	#15	2.01	—
n507(E)	125	#20	2.07	—
n508(E)	69	#15	1.83	—
n509(E)	69	#20	1.89	—
n510(E)	42	#15	1.47	—
t500(E)	1253	#20	3.80	—
t501(E)	855	#25	3.80	—
t502(E)	403	#20	3.20	—
t503(E)	42	#20	2.20	—
t504(E)	1207	#20	3.72	—
t505(E)	614	#20	3.40	—
v500(E)	227	#15	3.33	—
v501(E)	227	#20	2.34	—
v502(E)	962	#20	1.99	—
v503(E)	300	#15	3.40	—
v504(E)	300	#20	2.40	—
v505(E)	241	#15	3.09	—
v506(E)	241	#20	2.09	—
v507(E)	125	#15	2.70	—
v508(E)	125	#20	1.71	—
v509(E)	69	#15	2.42	—
v510(E)	69	#20	1.42	—
v511(E)	318	#20	2.47	—
v512(E)	14	#15	3.69	—
v513(E)	14	#15	3.16	—
v514(E)	614	#15	1.24	—
v515(E)	614	#20	1.60	—
v516(E)	614	#15	1.77	—

BAR DIMENSIONS

Bar	A	B
n500(E)	3.86 m	260
n501(E)	3.86 m	400
n502(E)	2.44 m	260
n503(E)	2.44 m	400
n504(E)	2.66 m	260
n505(E)	2.66 m	320
n506(E)	1.75 m	260
n507(E)	1.75 m	320
n508(E)	1.57 m	260
n509(E)	1.57 m	320
n510(E)	1.21 m	260
t504(E)	3.40 m	320
v516(E)	1.51 m	260
w504(E)	870	1.23 m
w505(E)	870	-
w506(E)	770	1.09 m
w507(E)	770	-
w508(E)	1.07 m	1.51 m
w509(E)	1.07 m	-
w510(E)	970	1.37 m
w511(E)	970	-
w512(E)	1.27 m	1.80 m
w513(E)	1.27 m	-

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.L.	2626.2-R-2	LAKE COUNTY, INDIANA	1207	936
DATE	SHEET NO. S-20			29 SHEETS

CONTRACT NO. 62114 INDOT DES. NO. 0100987

Bar	No.	Size	Length (m)	Shape
v517(E)	614	#15	1.91	—
w500(E)	140	#15	9.24	—
w501(E)	420	#15	7.85	—
w502(E)	224	#15	8.39	—
w503(E)	168	#15	8.62	—
w504(E)	28	#15	2.51	—
w505(E)	28	#15	1.74	—
w506(E)	14	#15	2.37	—
w507(E)	14	#15	1.54	—
w508(E)	14	#15	2.79	—
w509(E)	14	#15	2.14	—
w510(E)	14	#15	2.65	—
w511(E)	14	#15	1.94	—
w512(E)	14	#15	3.08	—
w513(E)	14	#15	2.54	—
w514(E)	18	#15	5.90	—
w515(E)	338	#15	9.64	—
w516(E)	156	#15	8.90	—
w517(E)	26	#15	6.98	—
w518(E)	28	#15	7.10	—

Test Pile, 356 mm	Each	3
Excavation, Foundation, Unclassified	m ³	1,879.3
Concrete, A, Substructure	m ³	1,635.6
Reinforcing Bars, Epoxy Coated	kg	127,720
Surface Seal	L Sum	0.08
Pile, Concrete, Steel Shell Encased, 6.35 mm, 356 mm	m	1,421.5
Geocomposite Wall Drain	m ²	700
Pipe, Underdrain, Perf, 1.63 mm, 150 mm	m	282.7
Noise Abatement Wall Anchor Rod Assembly	Each	43
Overhead Sign Structure - Span, Anchor Rod Assembly	Each	2
B Borrow	m ³	620.3
Structural Backfill	m ³	1997.7
Masonry Coating	L Sum	0.20

The estimated Surface Seal area is 1304.1 m²
The estimated Masonry Coating area is 1304.1 m²

NOTES:

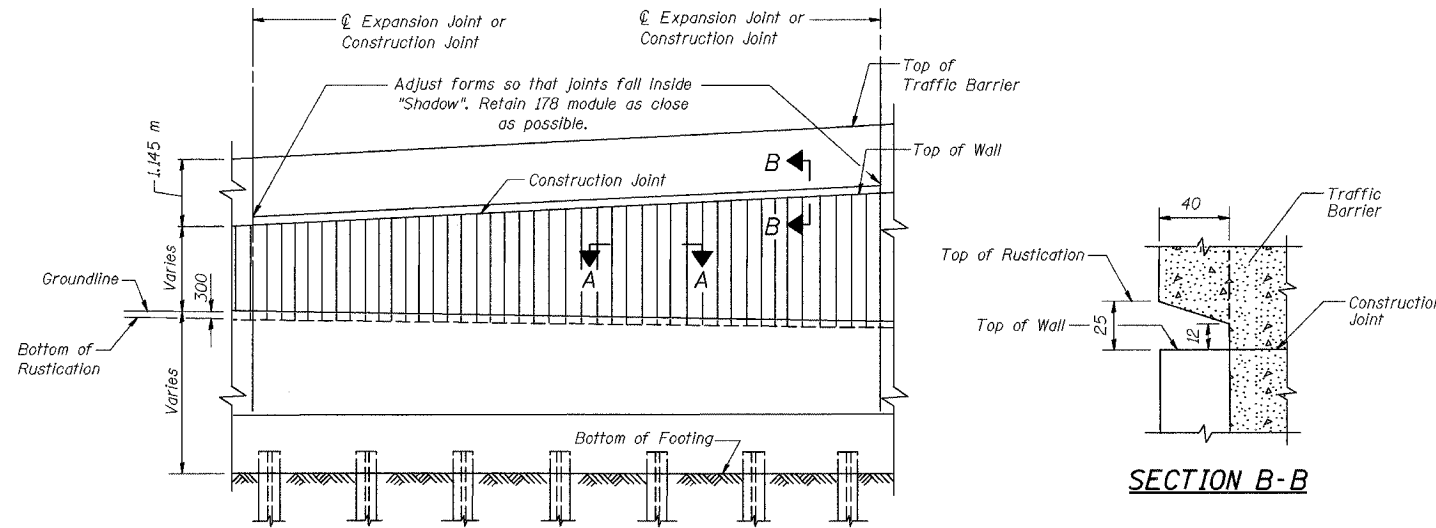
- See Sheet S-19 for Wall and Parapet Sections
- See Sheet S-21 for Rustication details.
- Reinforcement bars designated (E) shall be epoxy coated.
- All dimensions are in millimeters (mm) except as noted.
- See Typical Section on Sheet S-2 for Drainage Details and Surface Seal Limits.

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

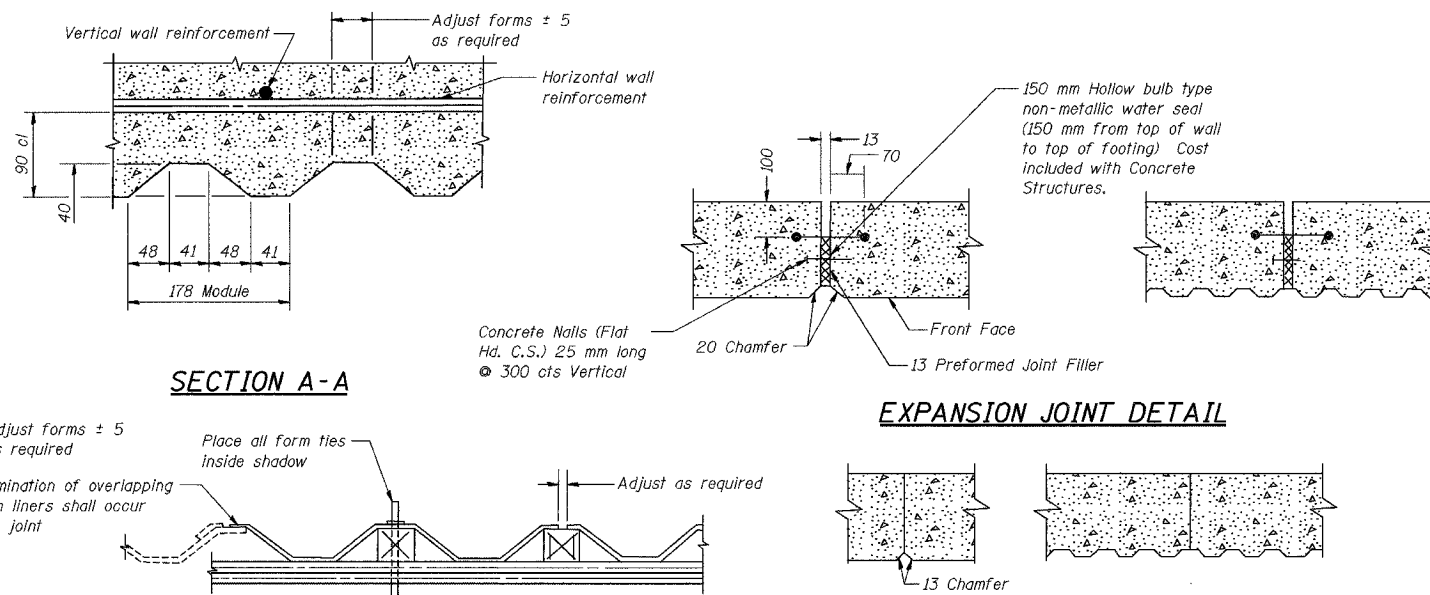
WALL SECTIONS AND DETAILS (2 OF 2)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

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
8+774.073	184.850	184.400
8+778.214	187.355	184.400
8+779.989	187.355	184.400
8+779.989	189.035	184.500
8+787.588	188.823	184.500
8+794.689	188.618	184.500
8+801.789	188.412	184.500
8+808.889	188.206	184.500
8+815.989	188.000	184.500
8+823.091	187.794	184.500
8+823.091	187.794	184.200
8+830.191	187.588	184.200
8+837.291	187.382	184.200
8+844.391	187.176	184.200
8+844.391	187.176	183.900
8+851.491	186.970	183.900
8+858.591	186.764	183.900
8+865.692	186.558	183.900
8+865.692	186.558	183.300
8+872.792	186.352	183.300
8+879.893	186.146	183.300
8+886.993	185.940	183.300
8+886.993	185.940	182.900
8+894.093	185.734	182.900
8+901.194	185.528	182.900
8+908.294	185.322	182.900
8+908.294	185.322	182.400
8+915.394	185.116	182.400
8+922.494	184.910	182.400
8+929.595	184.704	182.400
8+929.595	184.704	181.600
8+936.695	184.498	181.600
8+943.795	184.292	181.600
8+950.895	184.086	181.600
8+957.996	183.880	181.600
8+965.096	183.674	181.600
8+972.197	183.468	181.600
8+979.297	183.262	181.600
8+986.397	183.056	181.600
8+993.497	182.850	181.600
8+997.775	182.644	181.600
9+004.873	182.438	181.600
9+011.969	182.232	181.600
9+019.063	182.026	181.600
9+026.155	181.820	181.600
9+033.244	181.614	181.600
9+040.332	181.408	181.600
9+047.417	181.202	181.600
9+052.798	180.996	181.600

BILL OF MATERIAL

Item	Unit	Total
Rustication Finish	m ²	758

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-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

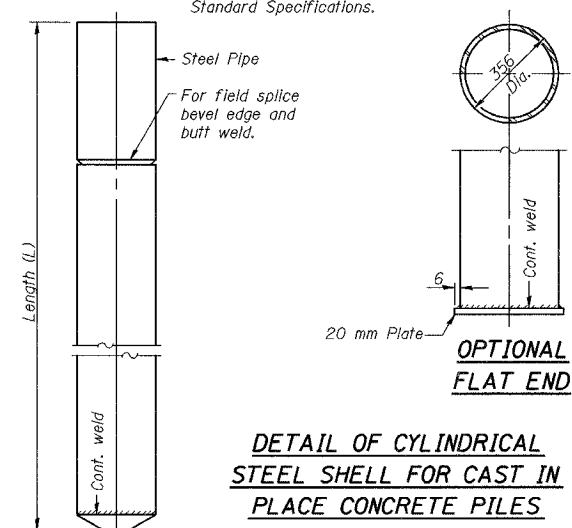
DATE 09/05

AMERICAN
CONSULTING ENGINEERS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL	SHEET NO.
P.A.L. 08/14	2626.2-R-2	LAKE COUNTY, INDIANA	1207	938	29 SHEETS
BLANKS		REVISED 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.



DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES

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 8+774.073 TO STATION 9+227.203
 STRUCTURE NO. 016-W861

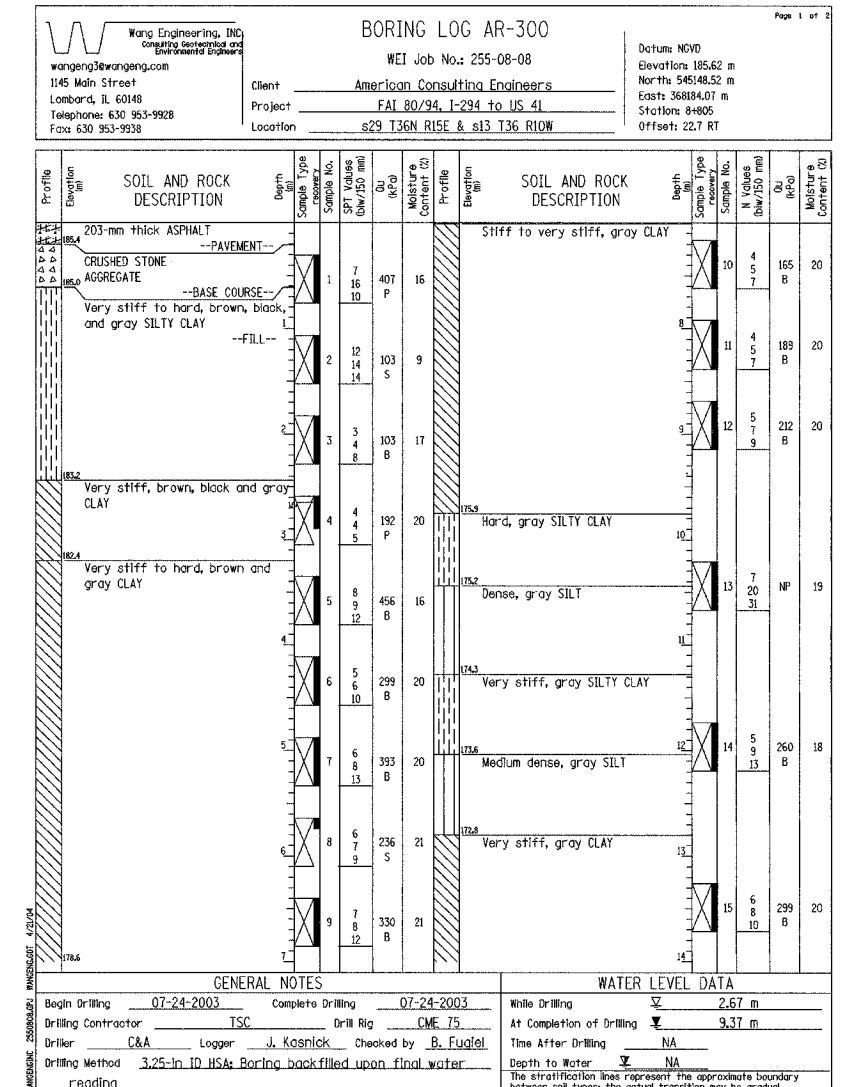
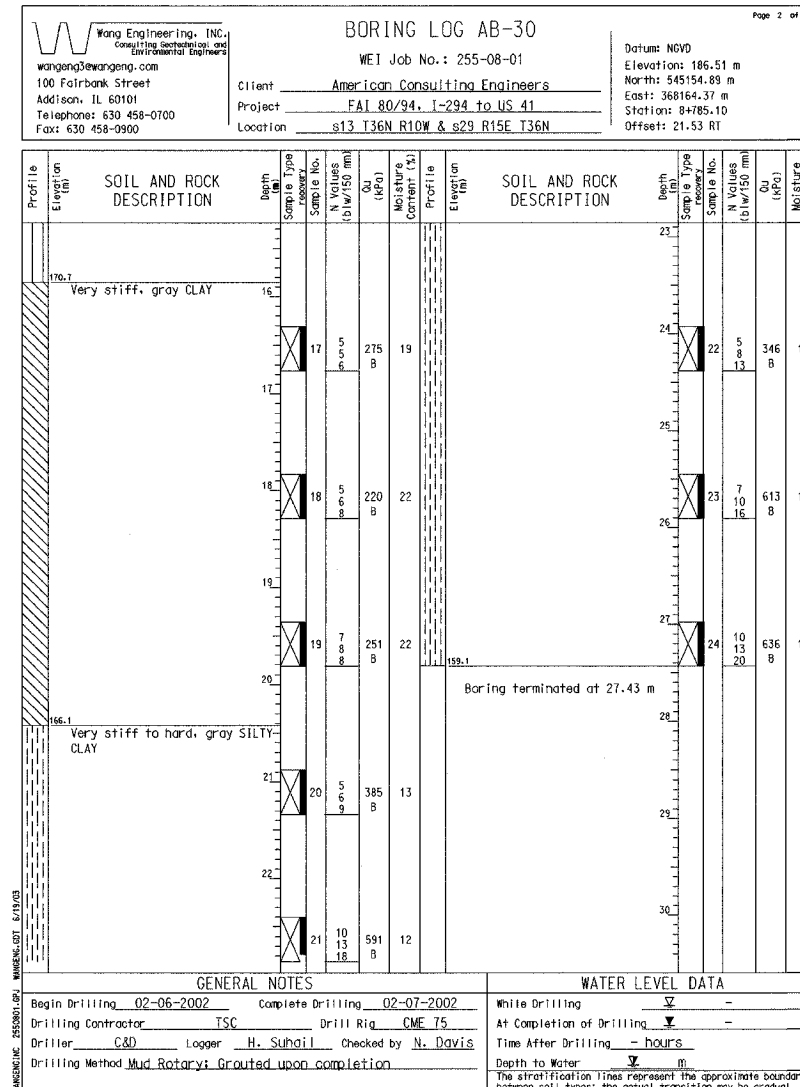
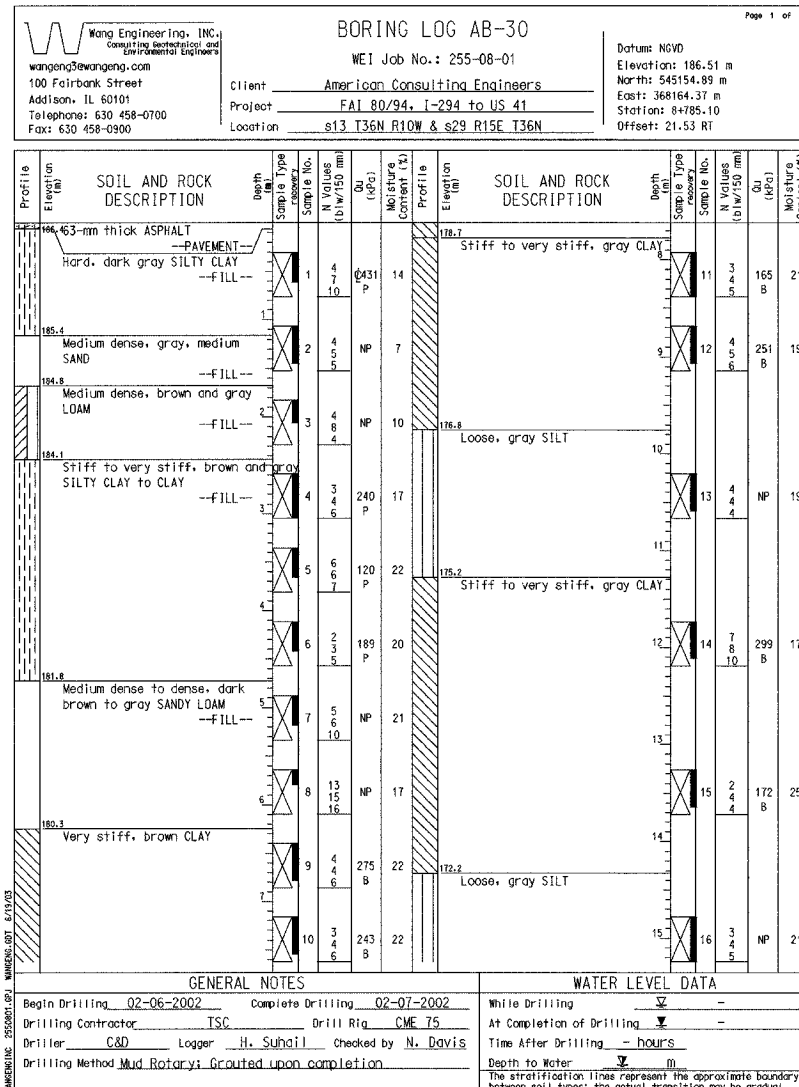
DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AB-30 (1 OF 2)

BORING NO. AB-30 (2 OF 2)

BORING NO. AR-300 (1 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 (1 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

DATE 09/05

AMERICAN
CONSULTING ENGINEERS

BORING NO. AR-300 (2 OF 2)

BORING NO. AR-301 (1 OF 2)

BORING NO. AR-301 (2 OF 2)

BORING LOG AR-300 Page 2 of 2

Wang Engineering, INC.
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

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

Date: NVD
Elevation: 185.62 m
North: 545148.52 m
East: 368184.07 m
Station: 8+805
Offset: 22.7 RT

BORING LOG AR-301 Page 1 of 2

Wang Engineering, INC.
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

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

Date: NVD
Elevation: 183.43 m
North: 545126.84 m
East: 368274.25 m
Station: 8+897.03
Offset: 25.64 RT

BORING LOG AR-301 Page 2 of 2

Wang Engineering, INC.
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

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

Date: NVD
Elevation: 183.43 m
North: 545126.84 m
East: 368274.25 m
Station: 8+897.03
Offset: 25.64 RT

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/150 mm)	Moisture Content (%)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/150 mm)	Moisture Content (%)
15.24	Boring terminated at 15.24 m	15.24	16	478	251					

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/150 mm)	Moisture Content (%)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/150 mm)	Moisture Content (%)
18.4	76-mm thick GRAVEL	18.4	1	345	103	Stiff to very stiff, black, brown and gray SILTY CLAY with interbedded sand seams	18.4	11	6914	354
17.4	Shoulder Aggregate	17.4	2	216	16	Very stiff, gray SILTY CLAY	17.4	12	778	260
16.7	Stiff to very stiff, brown and gray CLAY	16.7	4	279	22	Very stiff, gray CLAY	16.7	13	6913	354
15.7	Very stiff, gray SILTY CLAY	15.7	9	338	18		15.7	16	558	260

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/150 mm)	Moisture Content (%)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Value (blows/150 mm)	Moisture Content (%)
16.76	Boring terminated at 16.76 m	16.76	17	610	346					

GENERAL NOTES

Begin Drilling: 07-24-2003 Complete Drilling: 07-24-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fugate
 Drilling Method: 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling: 2.67 m
 At Completion of Drilling: 9.37 m
 Time After Drilling: NA
 Depth to Water: NA

GENERAL NOTES

Begin Drilling: 07-29-2003 Complete Drilling: 07-29-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fugate
 Drilling Method: 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling: 1.98 m
 At Completion of Drilling: DRY
 Time After Drilling: 24 hours
 Depth to Water: 10.06 m

GENERAL NOTES

Begin Drilling: 07-29-2003 Complete Drilling: 07-29-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fugate
 Drilling Method: 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling: 1.98 m
 At Completion of Drilling: DRY
 Time After Drilling: 24 hours
 Depth to Water: 10.06 m

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 + 774.073 TO STATION 9 + 227.203
STRUCTURE NO. 016-W861

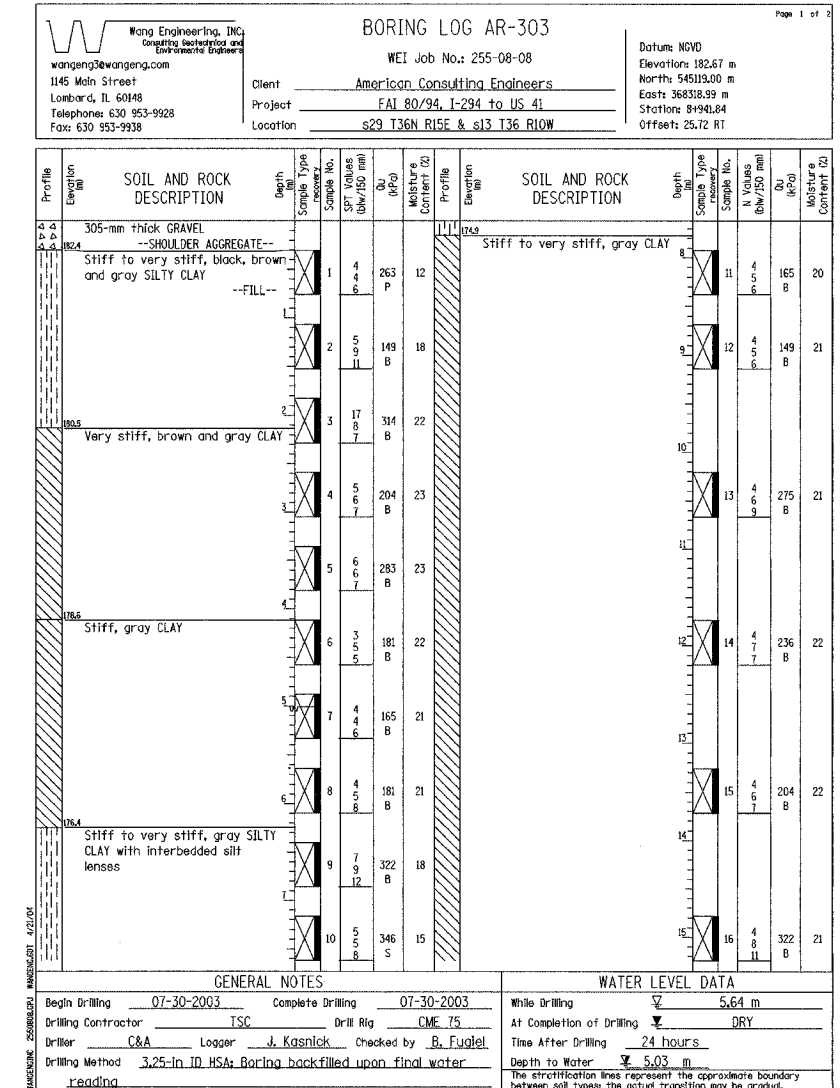
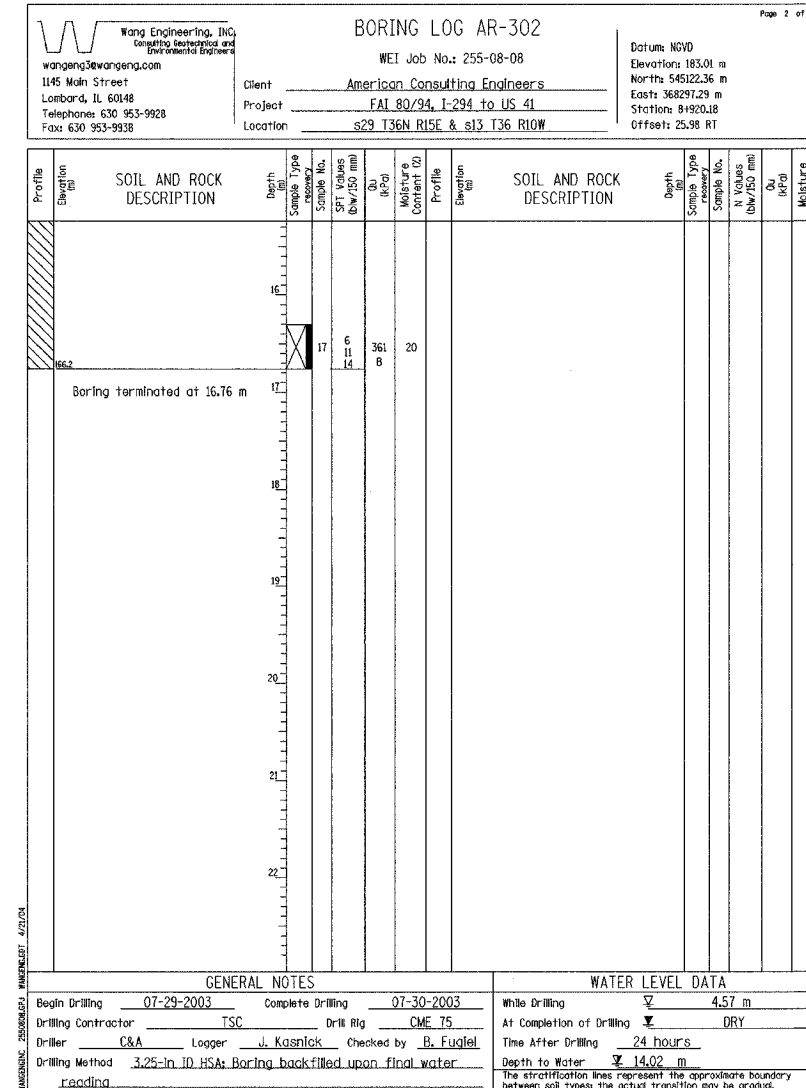
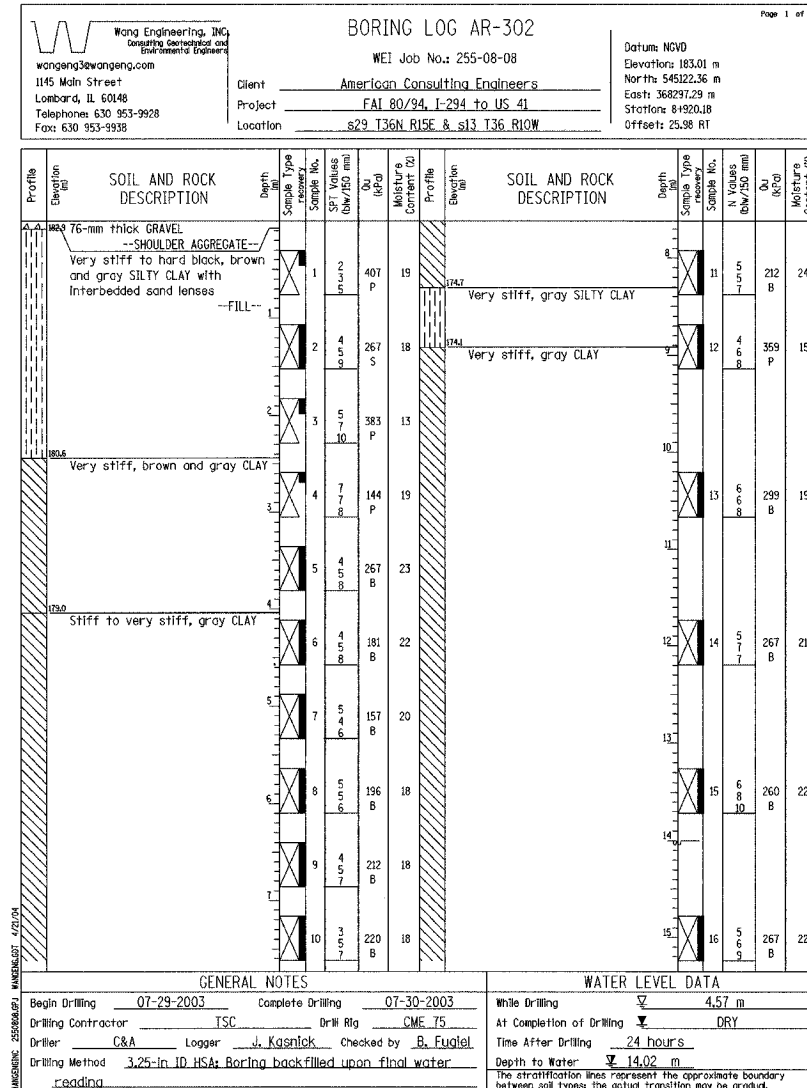
DATE: 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AR-302 (1 OF 2)

BORING NO. AR-302 (2 OF 2)

BORING NO. AR-303 (1 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 (3 OF 7)
 SECTION 2626.2-R-2
 LAKE COUNTY, INDIANA
 STATION 8+774.073 TO STATION 9+227.203
 STRUCTURE NO. 016-W861

DATE 09/05

AMERICAN CONSULTING ENGINEERS

BORING NO. AR-303 (2 OF 2)

BORING NO. AR-304 (1 OF 2)

BORING NO. AR-304 (2 OF 2)

BORING LOG AR-303 Page 2 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
wangeng3@waneng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

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

Date: NGVD
Elevation: 182.67 m
North: 545119.00 m
East: 368318.99 m
Station: 8+941.84
Offset: 25.72 RT

BORING LOG AR-304 Page 1 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
wangeng3@waneng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

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

Date: NGVD
Elevation: 182.42 m
North: 545115.11 m
East: 368341.33 m
Station: 8+964.2
Offset: 26.15 RT

BORING LOG AR-304 Page 2 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
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1145 Main Street
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Telephone: 630 953-9928
Fax: 630 953-9938

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

Date: NGVD
Elevation: 182.42 m
North: 545115.11 m
East: 368341.33 m
Station: 8+964.2
Offset: 26.15 RT

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Values (blows/300 mm)	W (g)	L (mm)	Moisture Content (%)	Soil Description	Depth (m)	Sample No.	SPT Values (blows/300 mm)	W (g)	L (mm)	Moisture Content (%)
17.0	Very stiff, gray SILTY CLAY	16.76	17	6 12 15	668	14								
16.76	Boring terminated at 16.76 m													

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Values (blows/300 mm)	W (g)	L (mm)	Moisture Content (%)	Soil Description	Depth (m)	Sample No.	SPT Values (blows/300 mm)	W (g)	L (mm)	Moisture Content (%)
182.42	355-mm thick GRAVEL --SHOULDER AGGREGATE--													
182.1	Stiff to very stiff, black, brown and gray SILTY CLAY --FILL--	11	11	5 6 8	287	P								
181.1	Stiff to hard, brown and gray CLAY	18	2	18 16 13	287	P								
180.4	Stiff to very stiff, gray CLAY	20	3	6 8 9	440	B								
179.8	Stiff, gray CLAY	25	4	3 4 6	142	B								
178.8	Stiff, gray CLAY	23	5	5 5 6	172	B								
178.4	Very stiff, gray SILTY CLAY with interbedded silt lenses	19	6	5 4 7	133	B								
		19	7	5 6 13	338	B								
		18	8	7 7 11	243	B								
		19	9	6 9 10	251	B								
		15	10	4 6 7	172	B								

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample No.	SPT Values (blows/300 mm)	W (g)	L (mm)	Moisture Content (%)	Soil Description	Depth (m)	Sample No.	SPT Values (blows/300 mm)	W (g)	L (mm)	Moisture Content (%)
182.42	Medium dense, gray SILT	16	11	3 6 8	172	B								
181.6	Stiff to very stiff, gray CLAY	16	12	9 6 6	149	B								
181.7	Boring terminated at 16.76 m													
180.7		21	17	6 8 9	314	B	21							
179.7		21	14	4 6 8	236	B								
178.7		22	15	3 6 9	212	B								
177.7		22	16	4 6 9	275	B								

GENERAL NOTES	WATER LEVEL DATA
Begin Drilling 07-30-2003 Complete Drilling 07-30-2003	While Drilling <input checked="" type="checkbox"/> 5.64 m
Drilling Contractor TSC Drill Rig CME 75	At Completion of Drilling <input checked="" type="checkbox"/> DRY
Driller C&A Logger J. Kasnick checked by B. Fuglel	Time After Drilling 24 hours
Drilling Method 3.25-in ID HSA; Boring backfilled upon final water reading	Depth to Water 5.03 m

GENERAL NOTES	WATER LEVEL DATA
Begin Drilling 07-30-2003 Complete Drilling 07-31-2003	While Drilling <input checked="" type="checkbox"/> 8.15 m
Drilling Contractor TSC Drill Rig CME 75	At Completion of Drilling <input checked="" type="checkbox"/> DRY
Driller C&A Logger J. Kasnick checked by B. Fuglel	Time After Drilling 24 hours
Drilling Method 3.25-in ID HSA; Boring backfilled upon final water reading	Depth to Water m

GENERAL NOTES	WATER LEVEL DATA
Begin Drilling 07-30-2003 Complete Drilling 07-31-2003	While Drilling <input checked="" type="checkbox"/> 8.15 m
Drilling Contractor TSC Drill Rig CME 75	At Completion of Drilling <input checked="" type="checkbox"/> DRY
Driller C&A Logger J. Kasnick checked by B. Fuglel	Time After Drilling 24 hours
Drilling Method 3.25-in ID HSA; Boring backfilled upon final water reading	Depth to Water m

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+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

DATE 09/05

AMERICAN
CONSULTING ENGINEERS

BORING NO. AR-305 (1 OF 2)

BORING NO. AR-305 (2 OF 2)

BORING NO. AR-306 (1 OF 1)

BORING LOG AR-305 Page 1 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
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Fax: 630 953-9938

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

Date: NGVD
Elevation: 182.28 m
North: 54511.52 m
East: 368363.89 m
Station: 8+986.72
Offset: 26.53 RT

BORING LOG AR-305 Page 2 of 2

Wang Engineering, INC. Consulting Geotechnical and Environmental Engineers
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Telephone: 630 953-9928
Fax: 630 953-9938

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

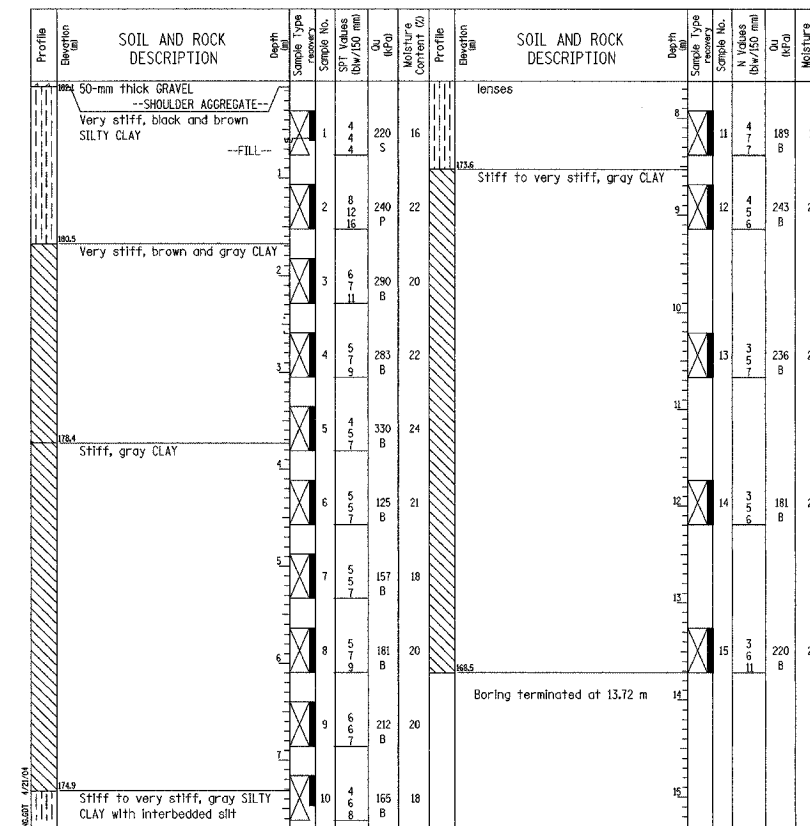
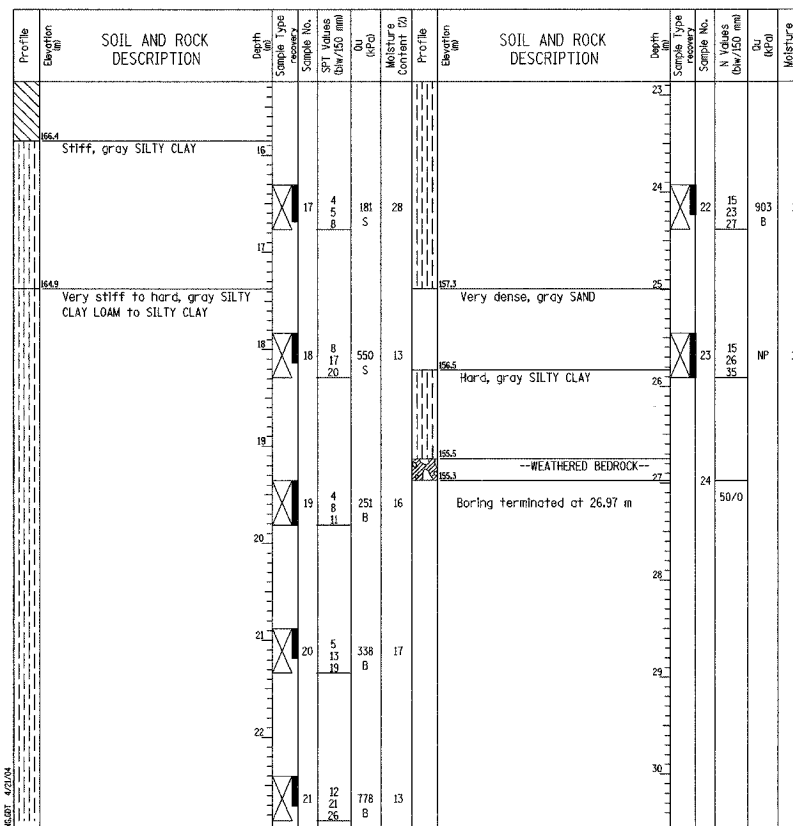
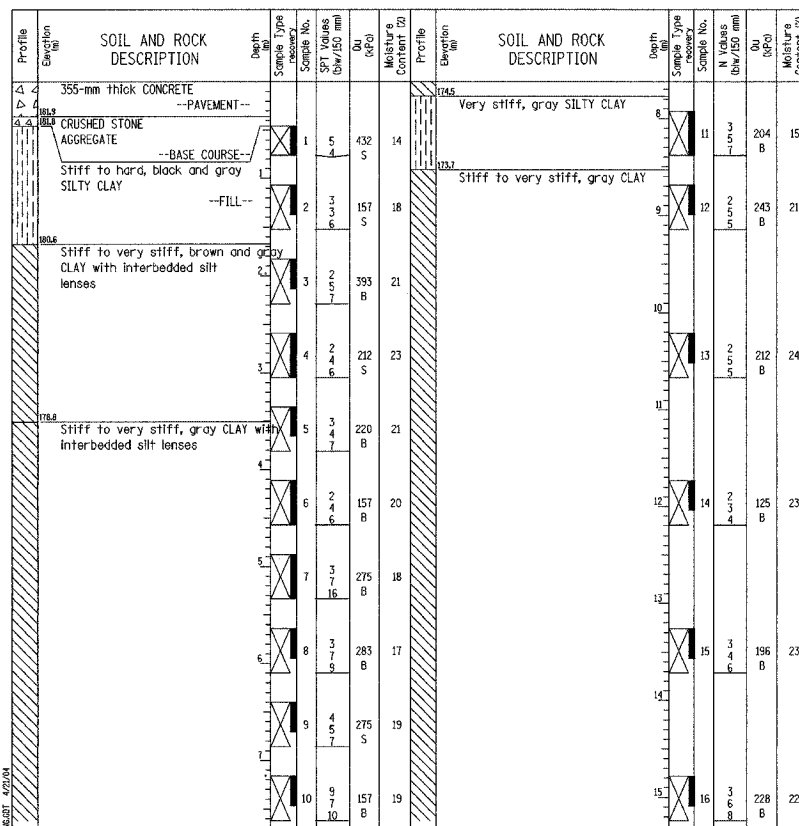
Date: NGVD
Elevation: 182.28 m
North: 54511.52 m
East: 368363.89 m
Station: 8+986.72
Offset: 26.53 RT

BORING LOG AR-306 Page 1 of 1

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Telephone: 630 953-9928
Fax: 630 953-9938

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

Date: NGVD
Elevation: 182.17 m
North: 54510.45 m
East: 368386.06 m
Station: 9+008.91
Offset: 21.69 RT



GENERAL NOTES

Begin Drilling: 07-13-2003 Complete Drilling: 07-14-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fugalel
 Drilling Method: Mud rotary; Backfilled with bentonite chips after 24-hour water reading

WATER LEVEL DATA

While Drilling: 7.16 m
 At Completion of Drilling: 1.98 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.

GENERAL NOTES

Begin Drilling: 07-13-2003 Complete Drilling: 07-14-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fugalel
 Drilling Method: Mud rotary; Backfilled with bentonite chips after 24-hour water reading

WATER LEVEL DATA

While Drilling: 7.16 m
 At Completion of Drilling: 1.98 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.

GENERAL NOTES

Begin Drilling: 07-29-2003 Complete Drilling: 07-29-2003
 Drilling Contractor: TSC Drill Rig: CME 75
 Driller: C&A Logger: J. Kasnick Checked by: B. Fugalel
 Drilling Method: 3.25-in ID HSA; Boring backfilled upon final water reading

WATER LEVEL DATA

While Drilling: 2.44 m
 At Completion of Drilling: 2.59 m
 Time After Drilling: 24 hours
 Depth to Water: 0.61 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 (5 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

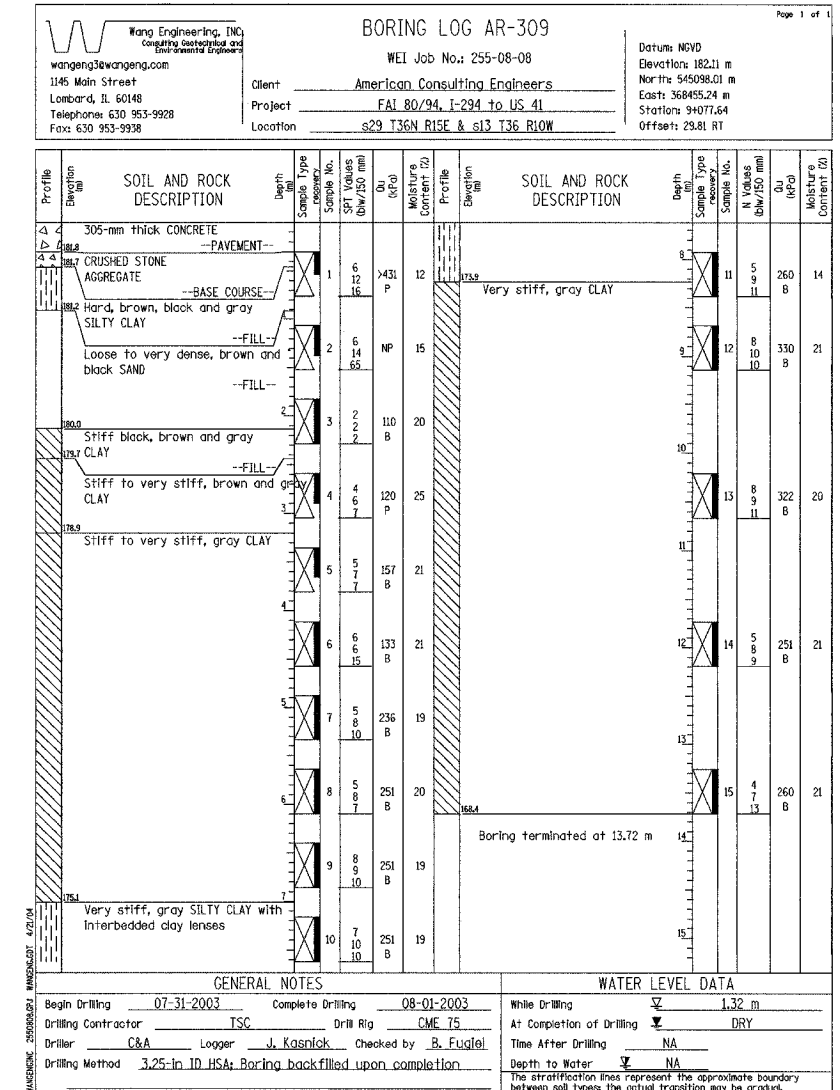
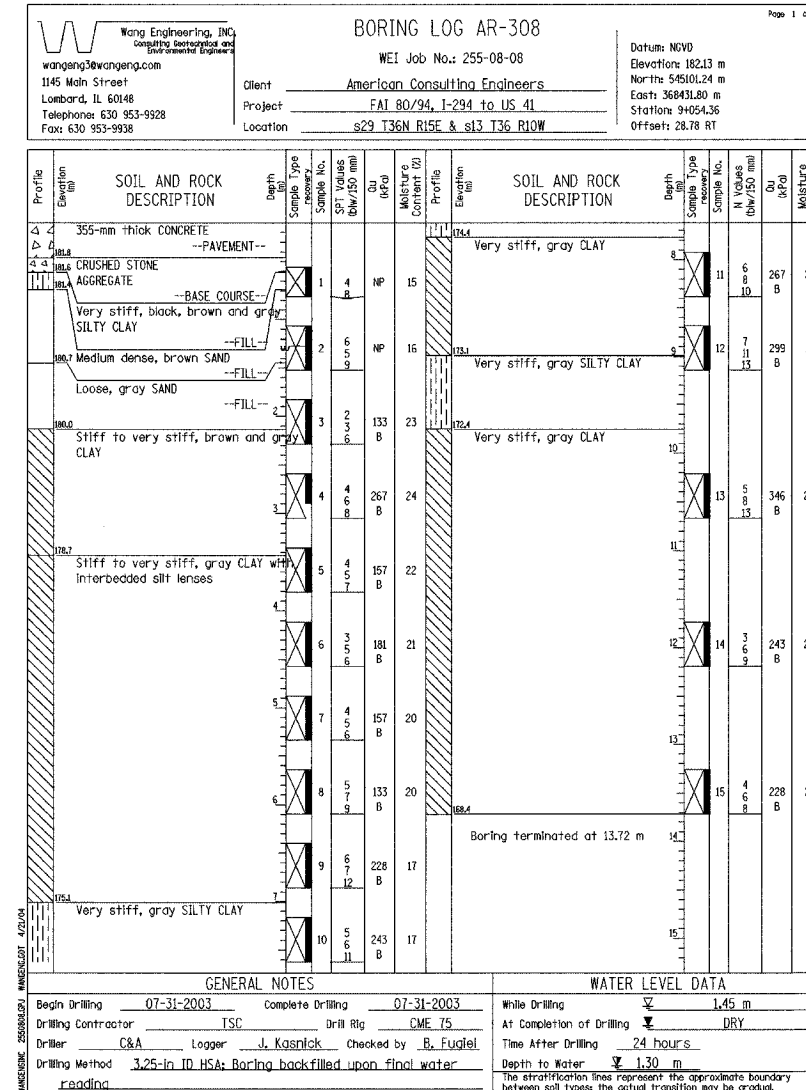
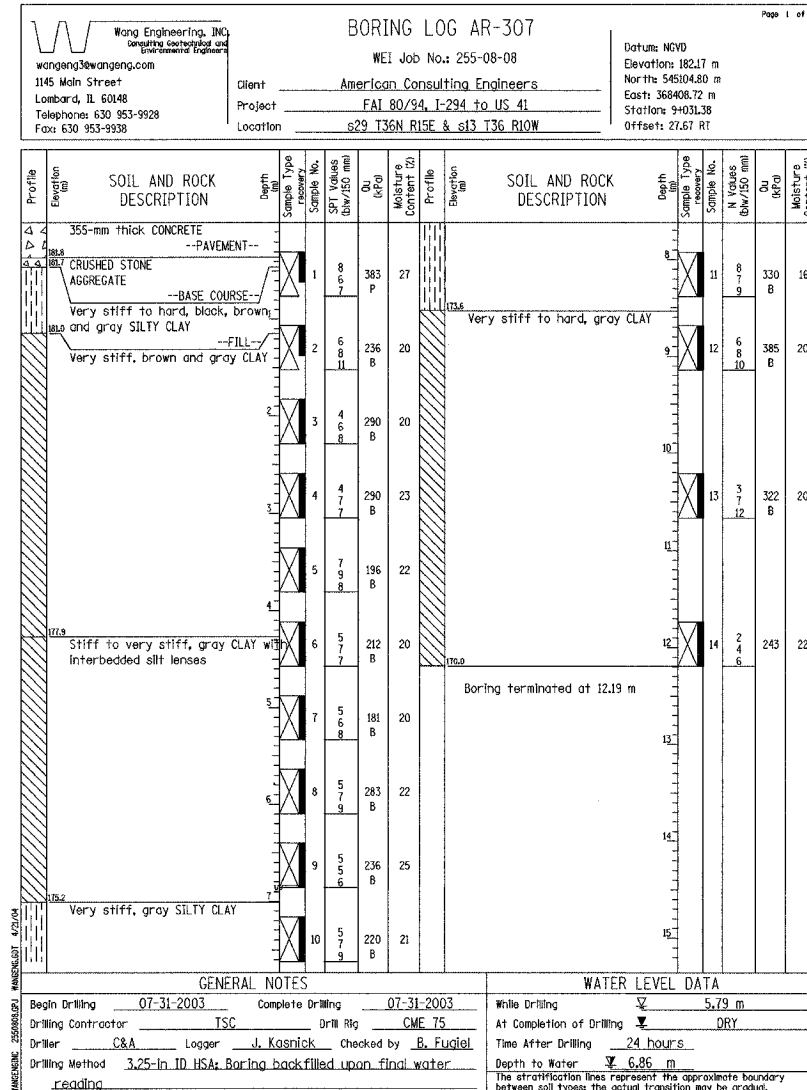
DATE 09/05

AMERICAN CONSULTING ENGINEERS

BORING NO. AR-307 (1 OF 1)

BORING NO. AB-308 (1 OF 1)

BORING NO. AR-309 (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 (6 OF 7)
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

DATE 09/05

AMERICAN
 CONSULTING ENGINEERS

BORING NO. AR-310 (1 OF 1)

BORING NO. AR-311 (1 OF 1)

BORING NO. AR-312 (1 OF 1)

BORING LOG AR-310 Page 1 of 1

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

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

Datum: NGVD
Elevation: 182.10 m
North: 545092.47 m
East: 368478.16 m
Station: 94100.34
Offset: 30.78 RT

BORING LOG AR-311 Page 1 of 1

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

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

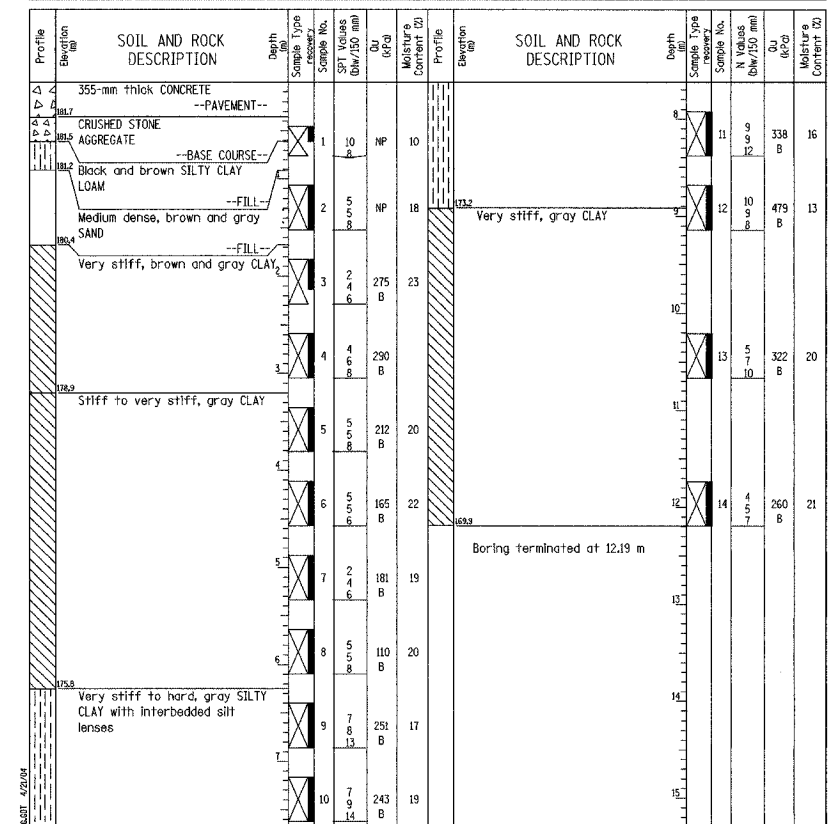
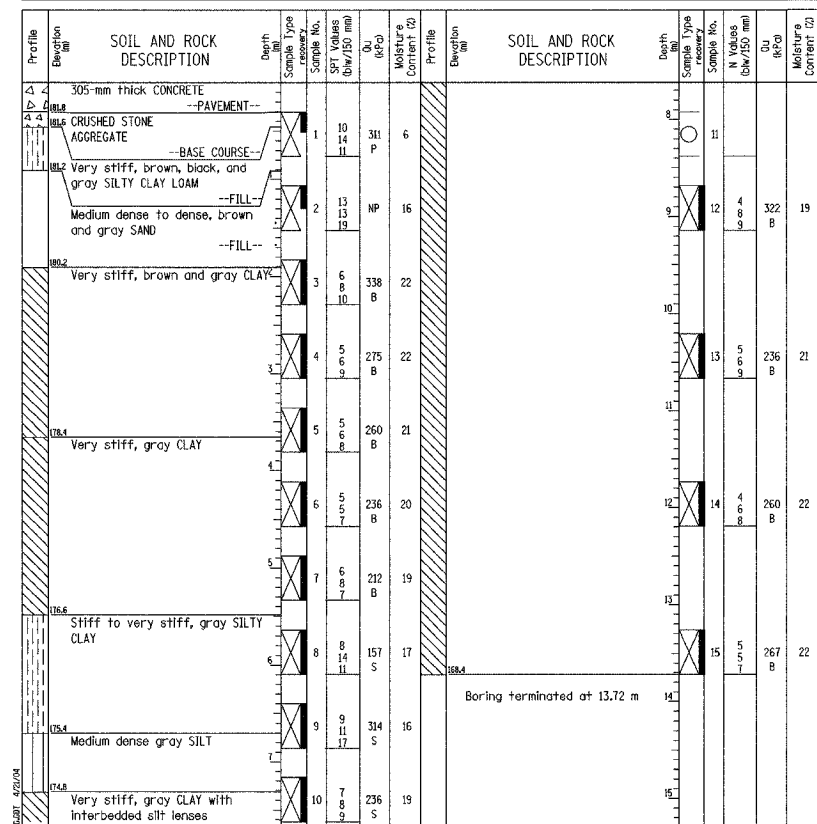
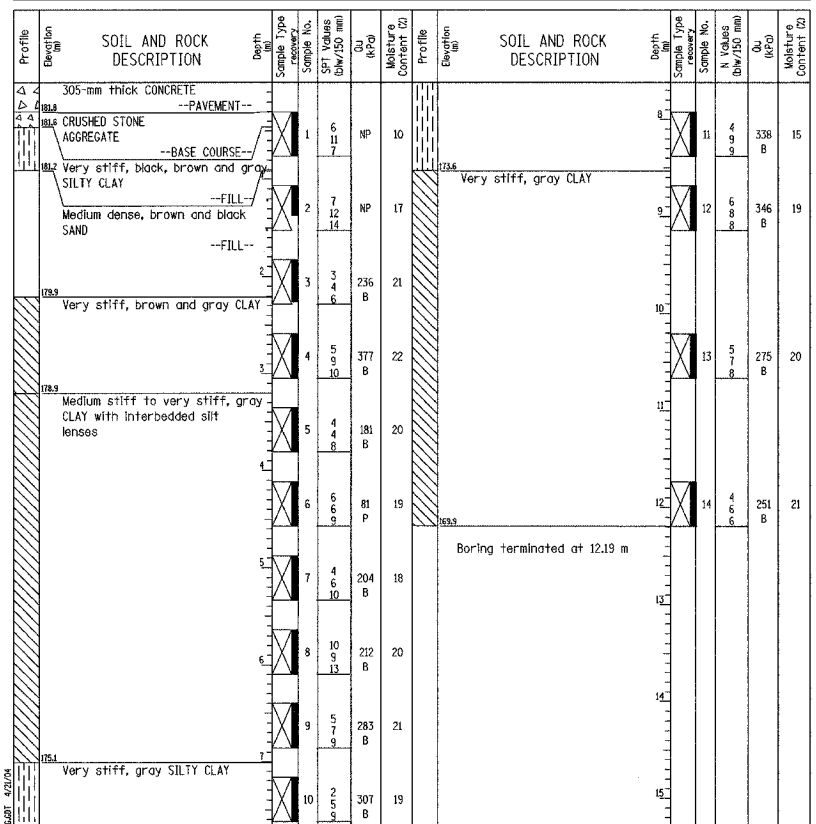
Datum: NGVD
Elevation: 182.10 m
North: 545092.47 m
East: 368500.78 m
Station: 94122.72
Offset: 31.94 RT

BORING LOG AR-312 Page 1 of 1

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

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

Datum: NGVD
Elevation: 182.08 m
North: 545090.14 m
East: 368522.41 m
Station: 94144.07
Offset: 33.04 RT



GENERAL NOTES

Begin Drilling: 08-01-2003 Complete Drilling: 08-01-2003
 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 completion

WATER LEVEL DATA

While Drilling: 1.22 m
 At Completion of Drilling: 1.52 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.

GENERAL NOTES

Begin Drilling: 08-03-2003 Complete Drilling: 08-03-2003
 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 completion

WATER LEVEL DATA

While Drilling: 1.68 m
 At Completion of Drilling: 1.45 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.

GENERAL NOTES

Begin Drilling: 08-04-2003 Complete Drilling: 08-04-2003
 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 completion

WATER LEVEL DATA

While Drilling: 1.32 m
 At Completion of Drilling: 1.45 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	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+774.073 TO STATION 9+227.203
STRUCTURE NO. 016-W861

DATE 09/05

AMERICAN CONSULTING ENGINEERS

Benchmark: Chiseled "x" on north bolt of fire hydrant located on north side of 175th ± 5 m east of the west line of Henry Avenue. Elev = 182.450

Existing Structure: None
All dimensions in millimeters (mm) except as noted.

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 = 92 kPa

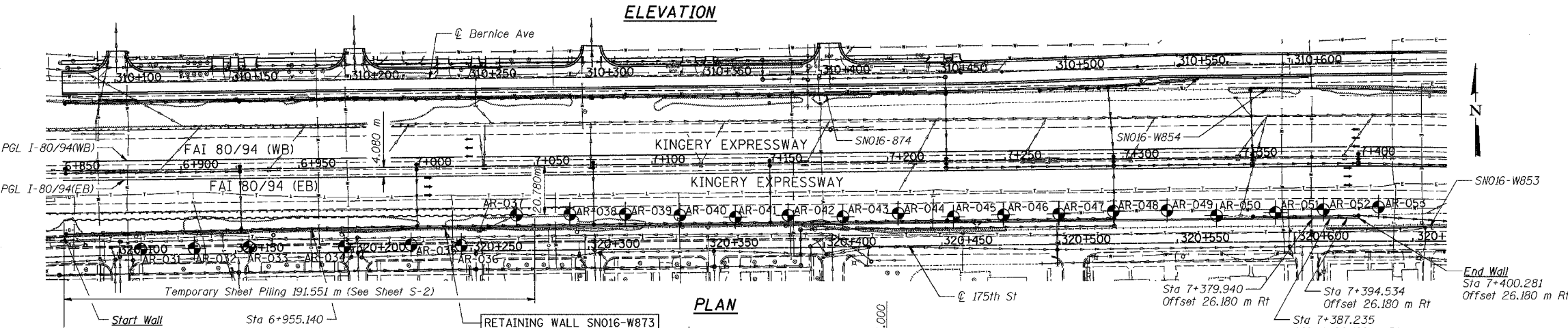
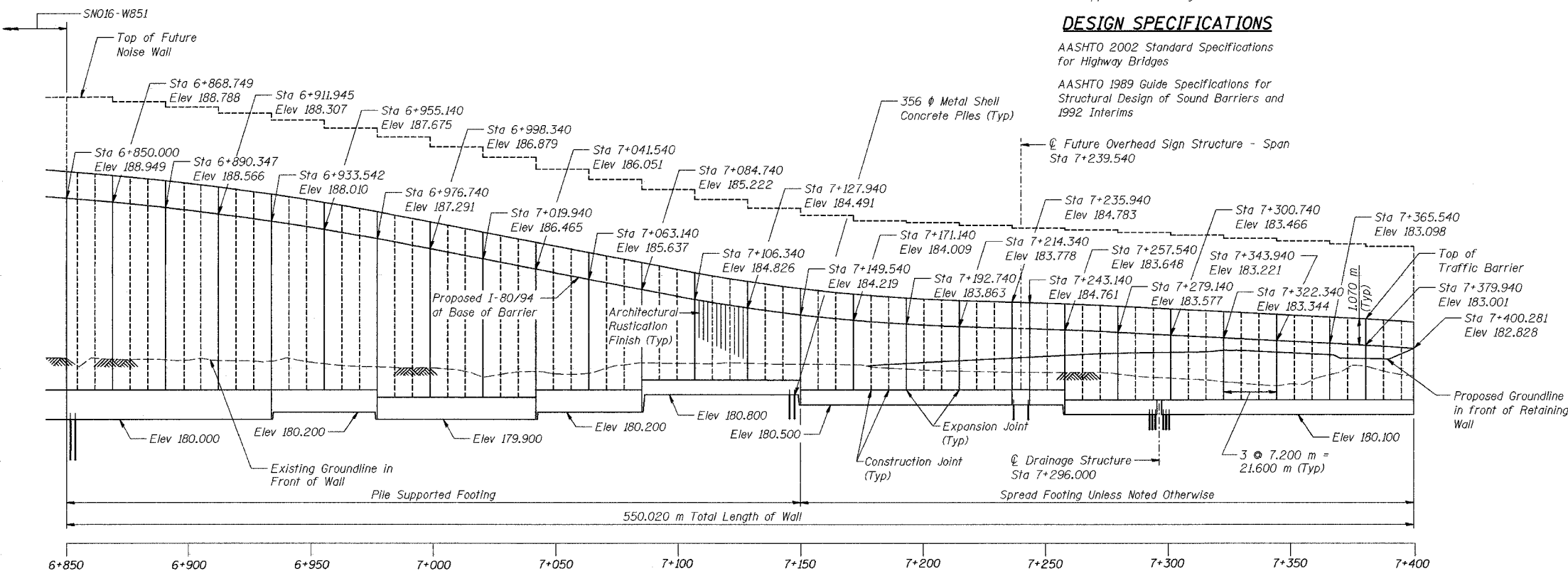
DESIGN SPECIFICATIONS

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

ROUTE NO.	SECTION	COUNTY	SHEET	SET	SHEET NO. S-1
F.A.I. 80/94	2001-167R	COOK COUNTY	1207	946	37 SHEETS
ILLINOIS	FED. AID PROJECT	CHICAGO	ILLINOIS	STATE OF ILLINOIS	CONTRACT No. 62114

LEGEND

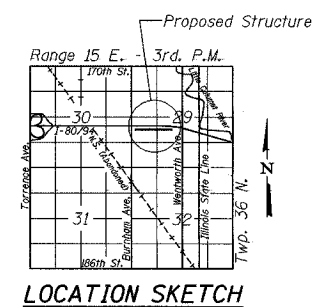
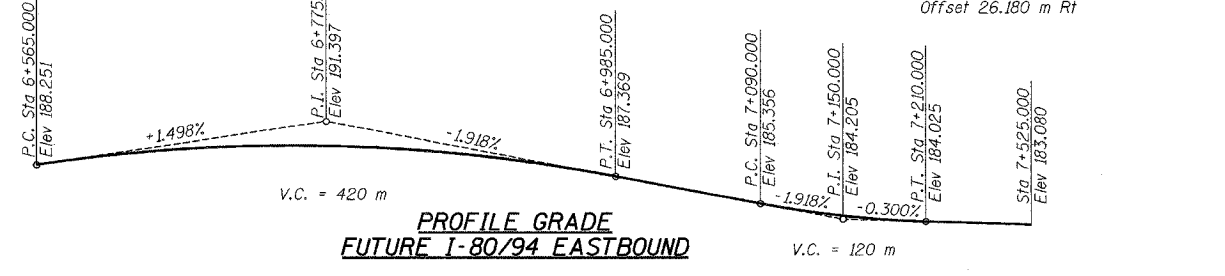
- Soil Boring Location
- Existing Roadway/Structure
- Proposed Roadway/Structure
- Tree
- Shrubs/Brush
- Proposed Storm Sewer
- Existing Storm Sewer
- Existing Water Main
- Existing Electricity Line
- Existing Telephone Line



CURVE DATA I-80/94

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

$\Delta = 20^\circ - 11' - 25''$
 $D = 2.979^\circ$
 $R = 1923.6$
 $T = 342.476$
 $L = 677.849$
 $E = 30.249$
 $P.C. = 7+380.276$
 $P.I. = 7+722.751$
 $P.T. = 8+058.125$
 $S.E. = 2.9\%$



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

GENERAL PLAN SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873

DATE 07/05

AMERICAN CONSULTING ENGINEERS

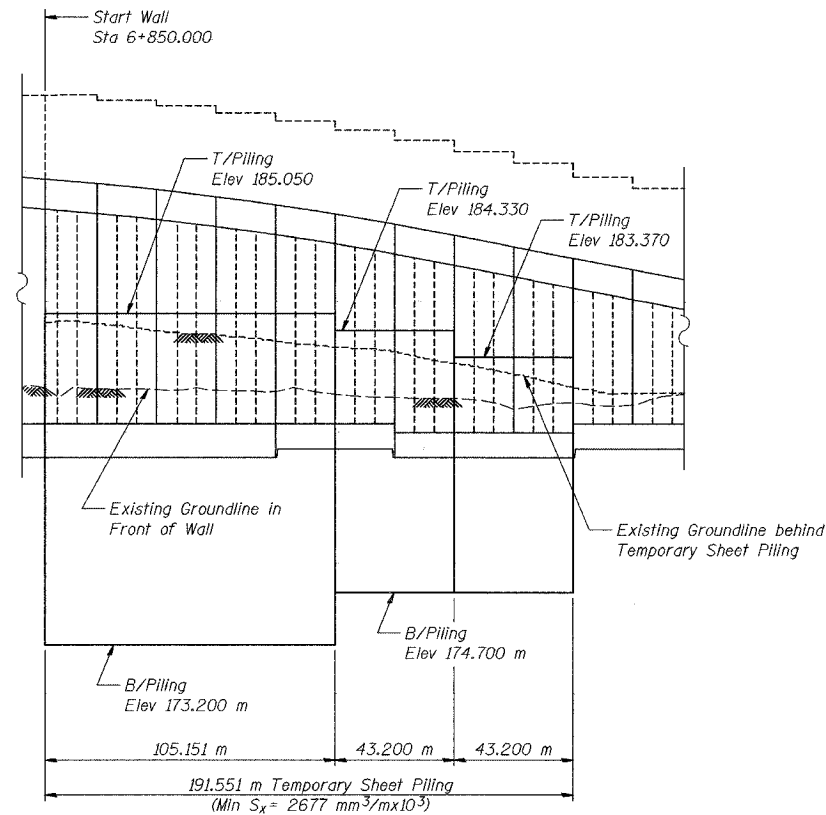
FOR INFORMATION ONLY

GENERAL NOTES

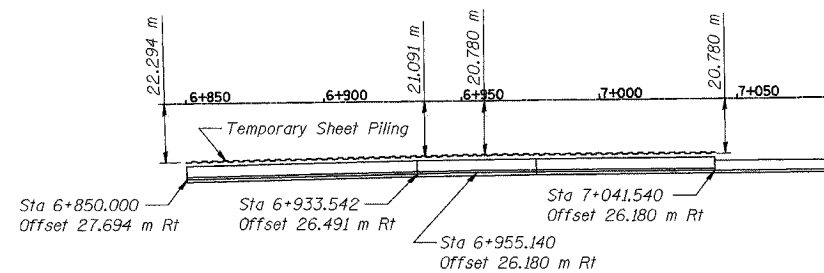
1. Reinforcement bars shall conform to the requirements of AASHTO M 31M or M32M Grade 400.
2. The Contractor shall drive 8 test piles in permanent locations spaced approximately 60 m apart, as directed by the Engineer before ordering the remainder of the piles.
3. All dimensions are in millimeters (mm) except as noted.
4. All construction joints shall be bonded. I

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 19)
S-4	Plan and Elevation (2 of 19)
S-5	Plan and Elevation (3 of 19)
S-6	Plan and Elevation (4 of 19)
S-7	Plan and Elevation (5 of 19)
S-8	Plan and Elevation (6 of 19)
S-9	Plan and Elevation (7 of 19)
S-10	Plan and Elevation (8 of 19)
S-11	Plan and Elevation (9 of 19)
S-12	Plan and Elevation (10 of 19)
S-13	Plan and Elevation (11 of 19)
S-14	Plan and Elevation (12 of 19)
S-15	Plan and Elevation (13 of 19)
S-16	Plan and Elevation (14 of 19)
S-17	Plan and Elevation (15 of 19)
S-18	Plan and Elevation (16 of 19)
S-19	Plan and Elevation (17 of 19)
S-20	Plan and Elevation (18 of 19)
S-21	Plan and Elevation (19 of 19)
S-22	Wall Sections and Details
S-23	Rustication Finish Details
S-24	Concrete Pile Details
S-25	Boring Logs (1 of 13)
S-26	Boring Logs (2 of 13)
S-27	Boring Logs (3 of 13)
S-28	Boring Logs (4 of 13)
S-29	Boring Logs (5 of 13)
S-30	Boring Logs (6 of 13)
S-31	Boring Logs (7 of 13)
S-32	Boring Logs (8 of 13)
S-33	Boring Logs (9 of 13)
S-34	Boring Logs (10 of 13)
S-35	Boring Logs (11 of 13)
S-36	Boring Logs (12 of 13)
S-37	Boring Logs (13 of 13)

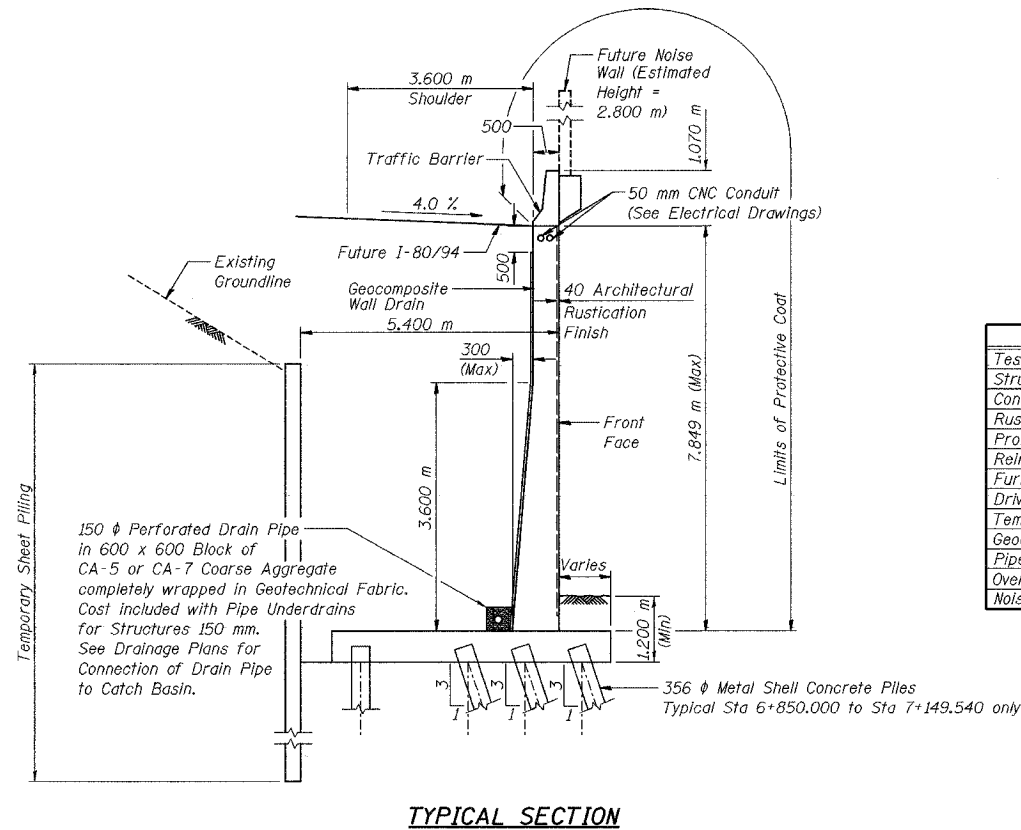


TEMPORARY SHEET PILING - ELEVATION



TEMPORARY SHEET PILING - PLAN

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP



TYPICAL SECTION

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Test Pile Metal Shells	Each	8
Structure Excavation	m³	6,404
Concrete Structures	m³	3,456.0
Rustication Finish	m²	1,812
Protective Coat	m²	3,979
Reinforcement Bars, Epoxy Coated	kg	246,500
Furnishing Metal Pile Shells, 356 mm	m	10,157.0
Driving and Filling Shells	m	10,157.0
Temporary Sheet Piling	m²	2,037
Geocomposite Wall Drain	m²	2,354
Pipe Underdrains for Structures 150 mm	m	555.5
Overhead Sign Structure - Span, Anchor Rod Assembly	Each	2
Noise Abatement Wall Anchor Rod Assembly	Each	153

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION
**INDEX OF SHEETS, GENERAL NOTES
 AND TOTAL BILL OF MATERIAL**
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+400.281
 STRUCTURE NO. 016-W873
 DATE 07/05

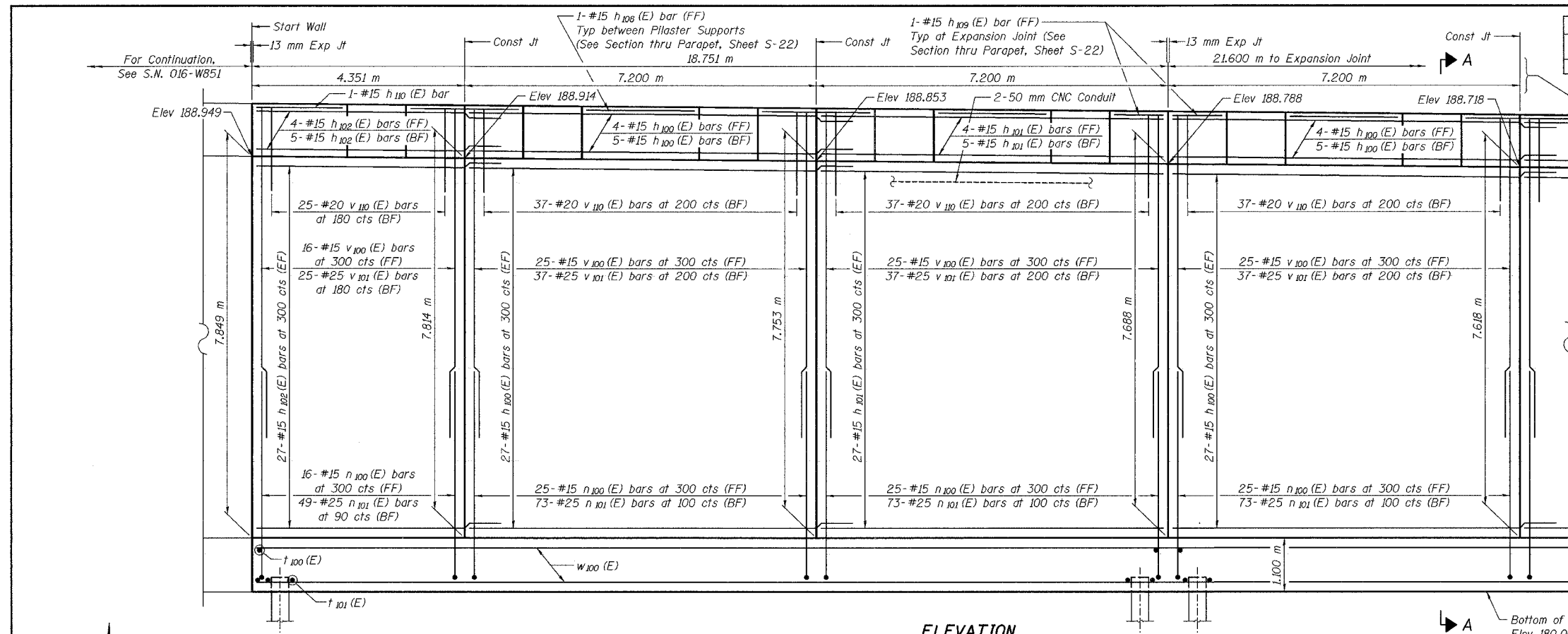
AMERICAN
 CONSULTING ENGINEERS

I REVISED KFA 10-22-04

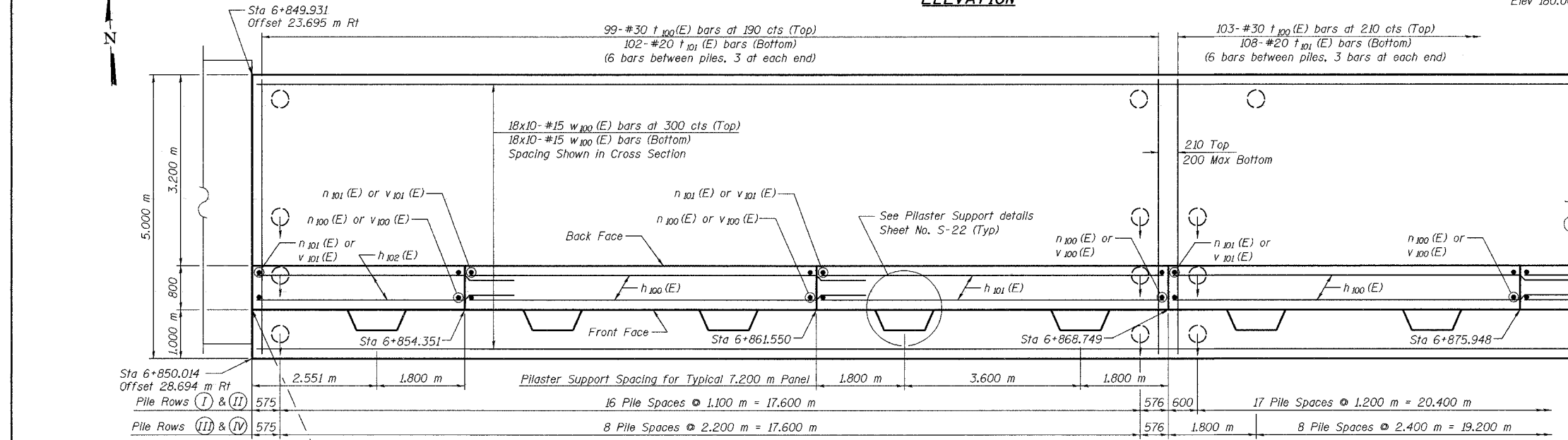
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.L. 80-94	2001-167R	COOK COUNTY	1207	948
CONTRACT No. 62114				

SHEET NO. S-3
37 SHEETS



ELEVATION



FOOTING PLAN

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

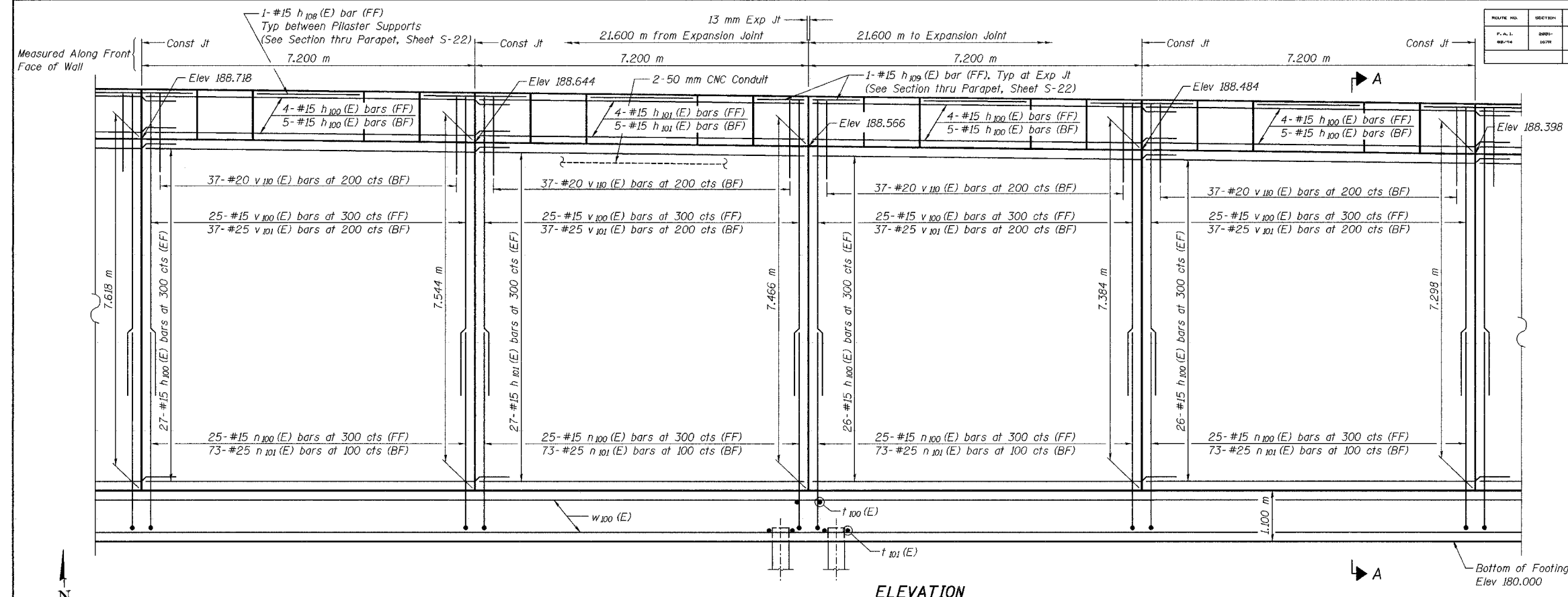
MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790
 #25 bars = 1320

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

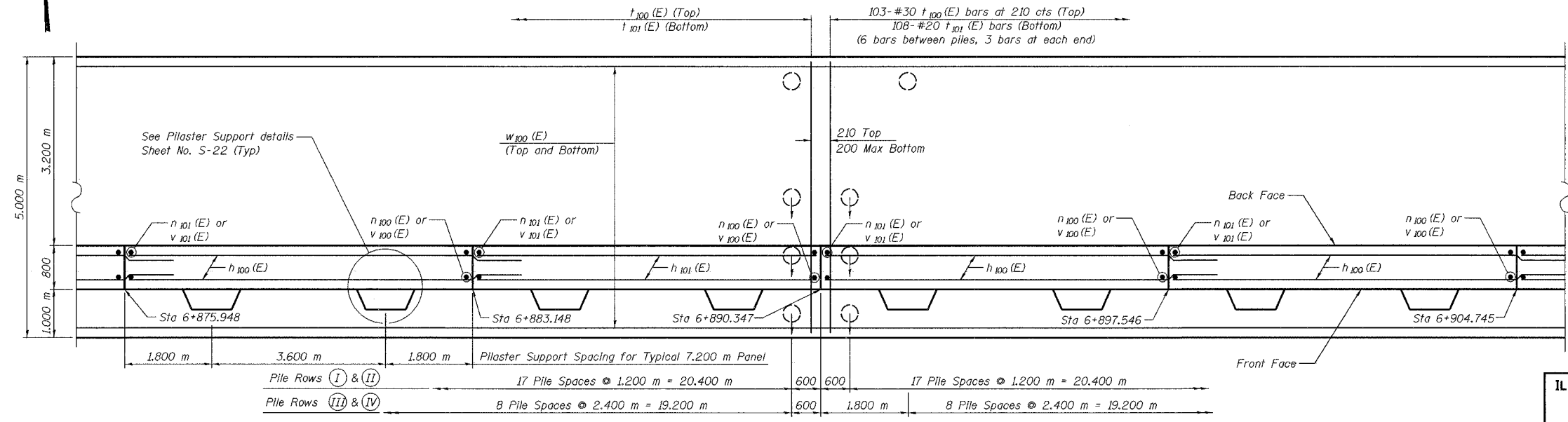
NOTES:
 See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to @ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 See Electrical Drawings for Junction Box and Conduit Details.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION
 PLAN AND ELEVATION (1 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 TO STATION 7+400.281
 STRUCTURE NO. 016-W873
 DATE 07/05
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY



ELEVATION



FOOTING PLAN

NOTES:

- See Sheet S-22 for Section A-A, 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.

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

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

PLAN AND ELEVATION (2 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873
 DATE 07/05

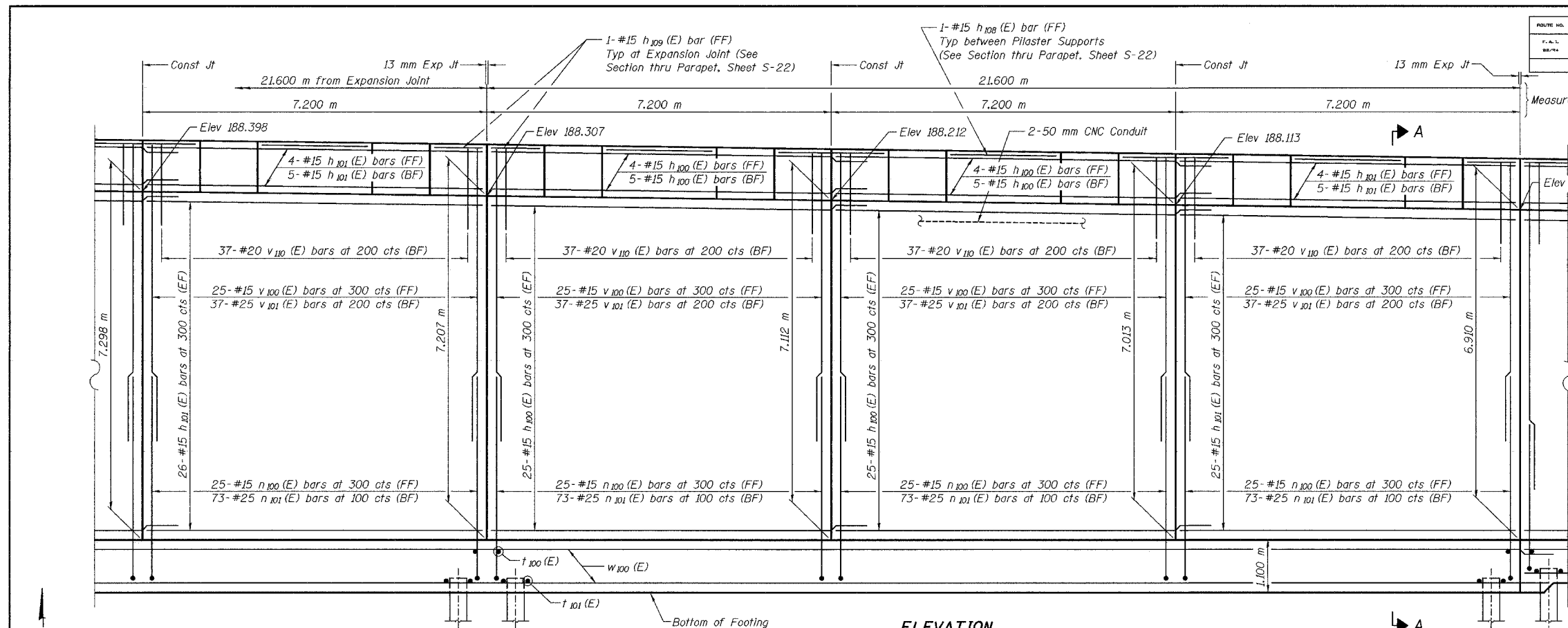
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 CONSULTING ENGINEERS

FOR INFORMATION ONLY

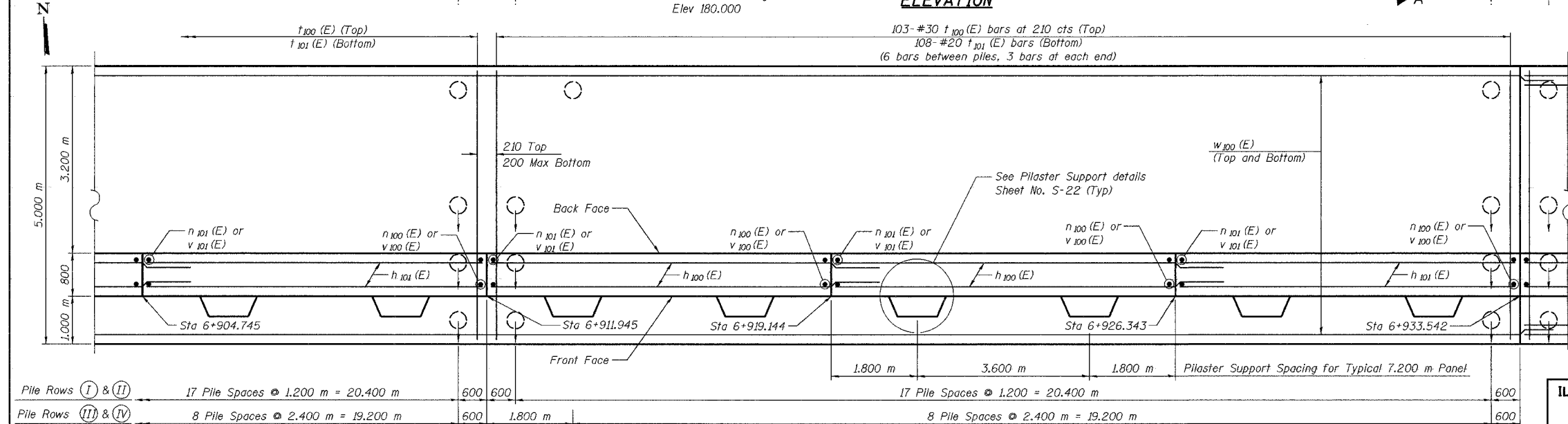
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-5 37 SHEETS
F.A.L. 88/94	2001- 167R	COOK COUNTY	1207	950	

CONTRACT No. 62114

Measured Along Front Face of Wall



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 A-A, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to § 1-80/94.
 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.L. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (3 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 TO STATION 7+400.281
 STRUCTURE NO. 016-W873
 DATE 07/05

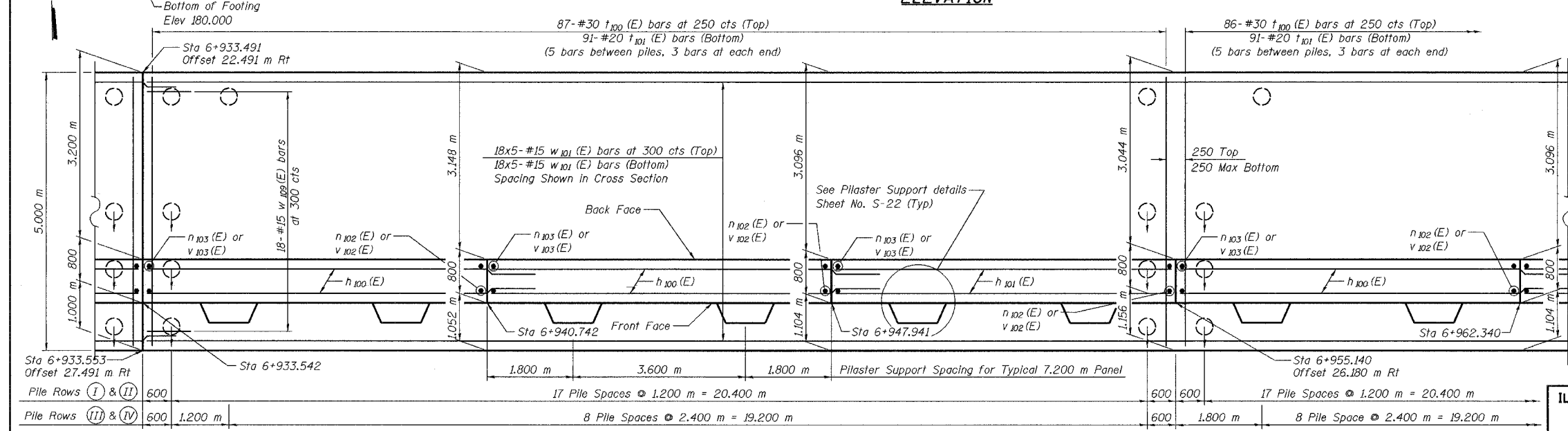
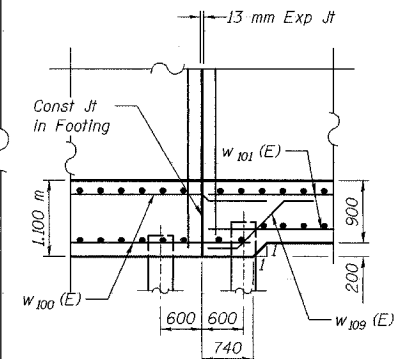
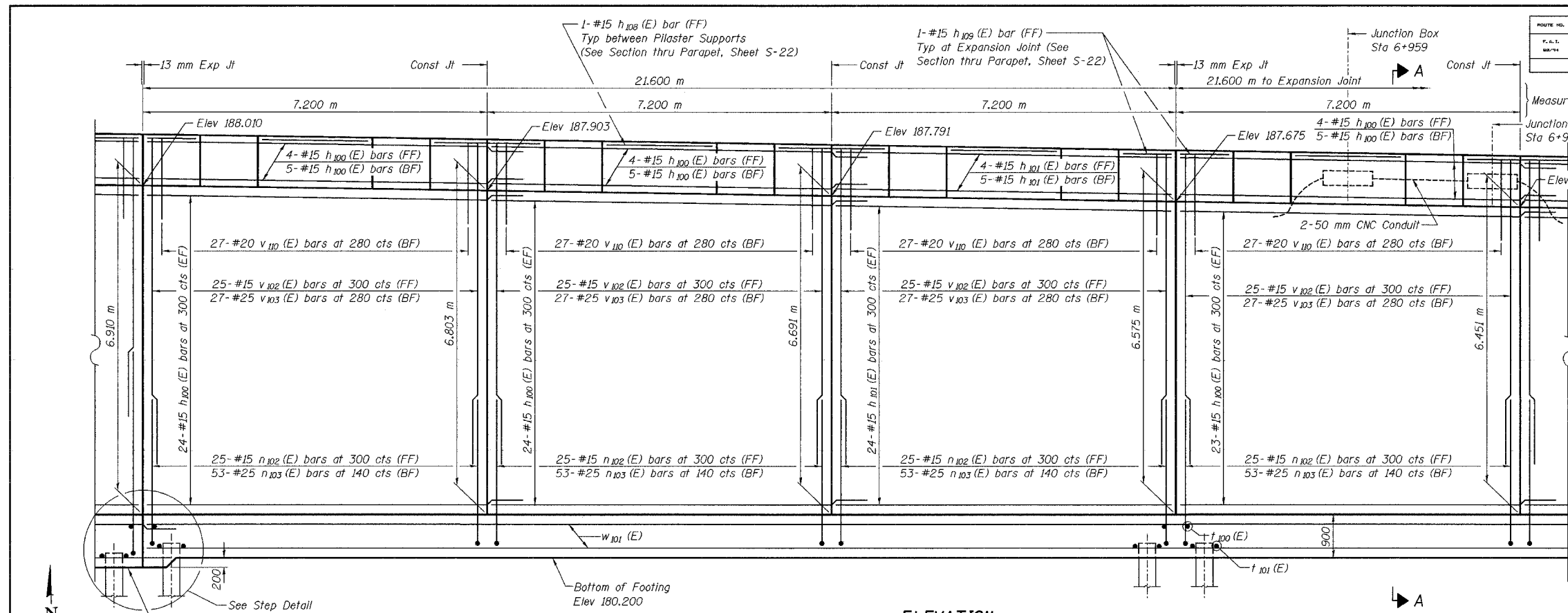
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.L.	2001-167R	COOK COUNTY	1207	951
BLISSIDE	FED. AID PROJECT	C-16-951-44		

SHEET NO. S-6
37 SHEETS

CONTRACT No. 62114



NOTES:

See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material.

See Sheet S-23 for Rustication details and Expansion Joint Detail.

Stations are referenced to C 1-80/94.

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.

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.L. ROUTE 80/94 AND U.S. ROUTE 6 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (4 OF 19)

SECTION 2001-167R

COOK COUNTY

STATION 6+850.000 to STATION 7+400.281

STRUCTURE NO. 016-W873

DATE 07/05

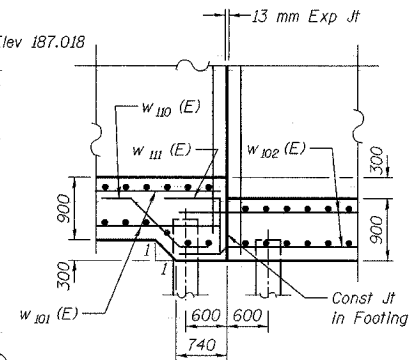
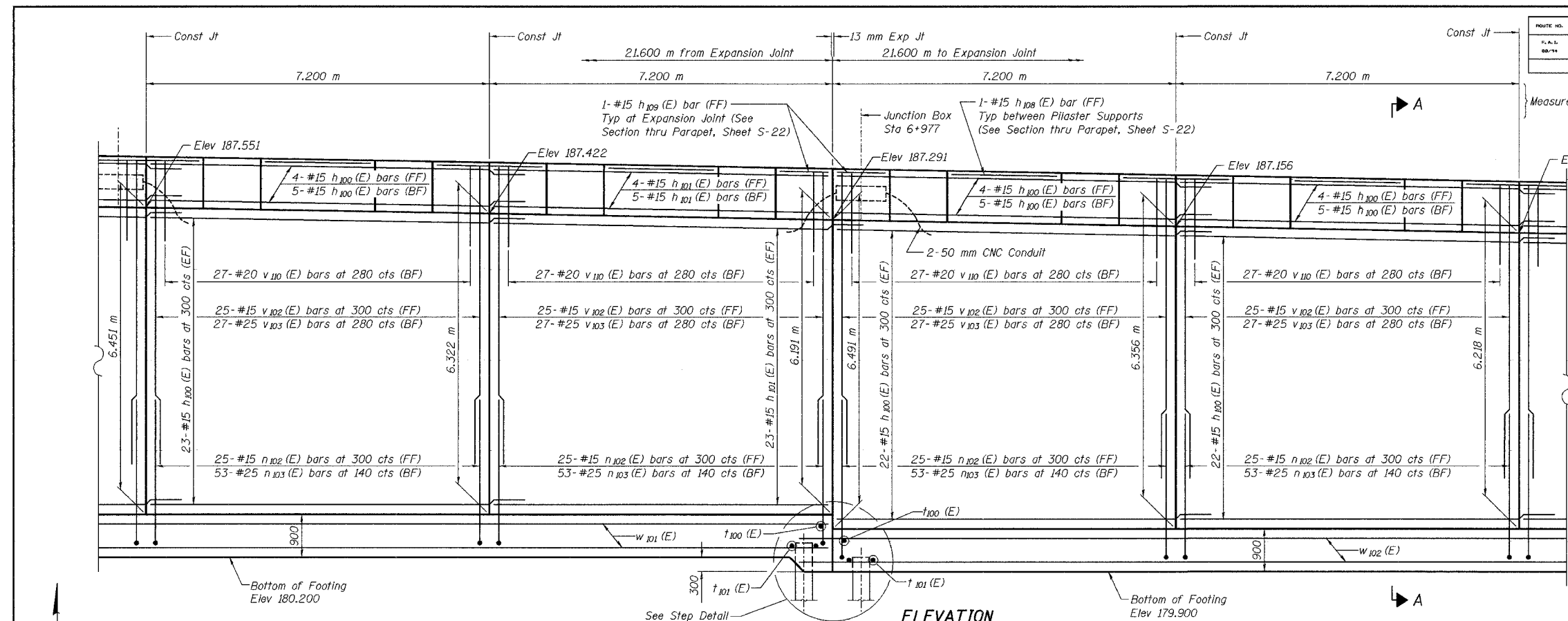
AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
66-11	2001-167R	COOK COUNTY	1207 952	37 SHEETS

CONTRACT No. 62114

Measured Along Front Face of Wall



NOTES:

See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material. See Sheet S-23 for Rustication details and Expansion Joint Detail.

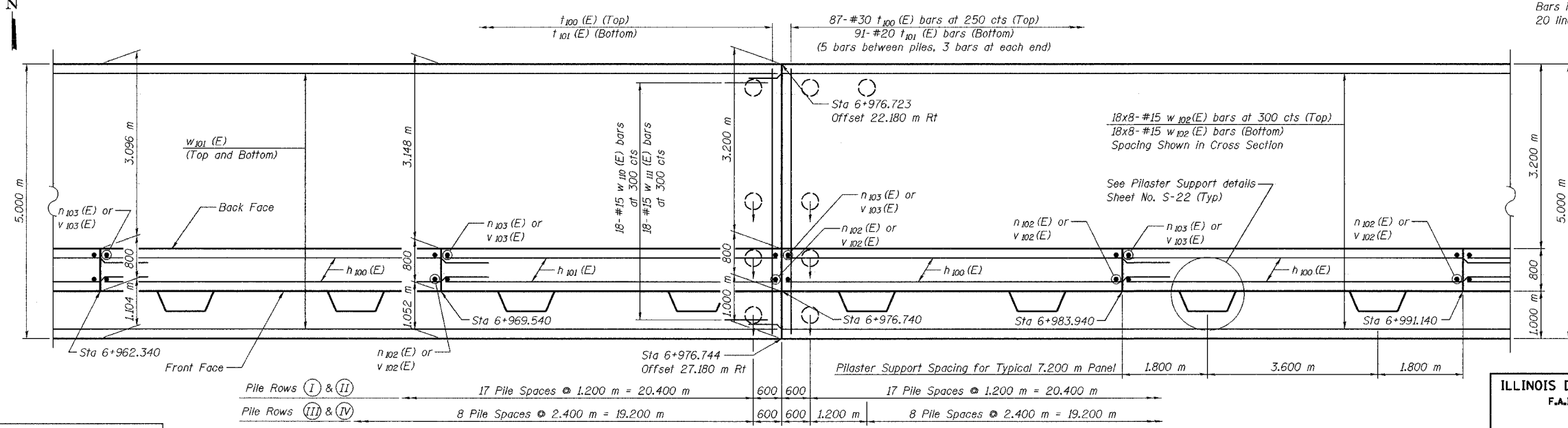
Stations are referenced to @ I-80/94.

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.

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



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

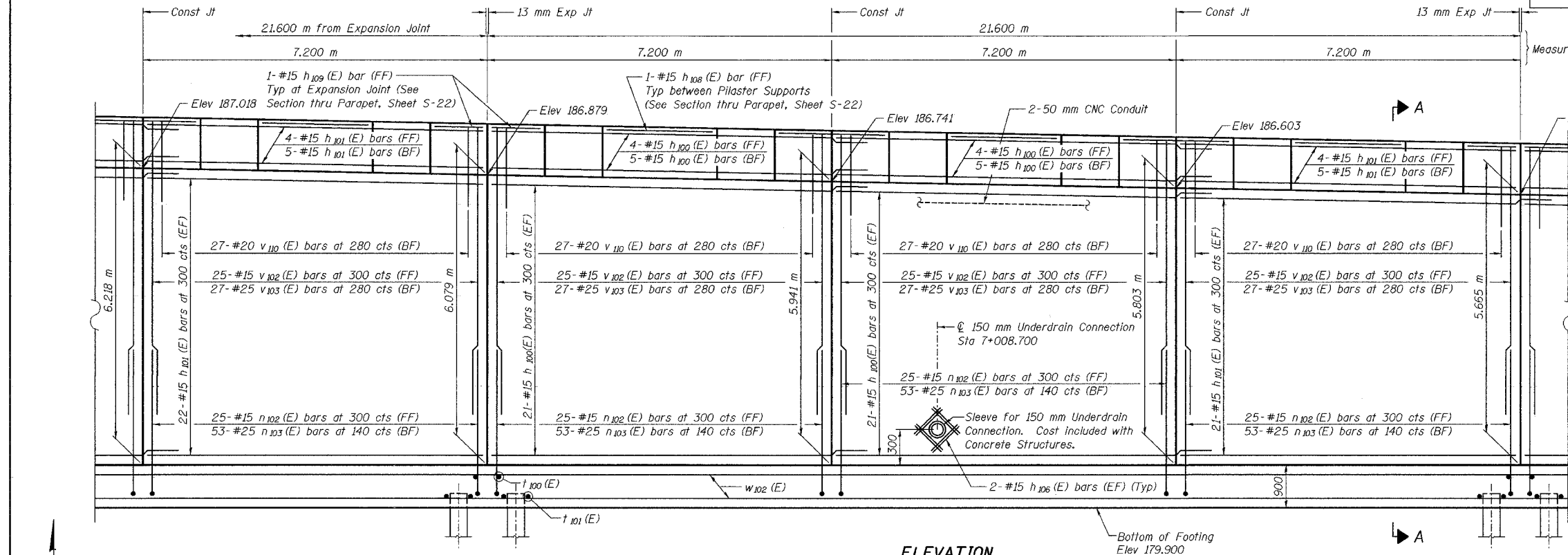
**PLAN AND ELEVATION (5 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+400.281
 STRUCTURE NO. 016-W873**

DATE 07/05

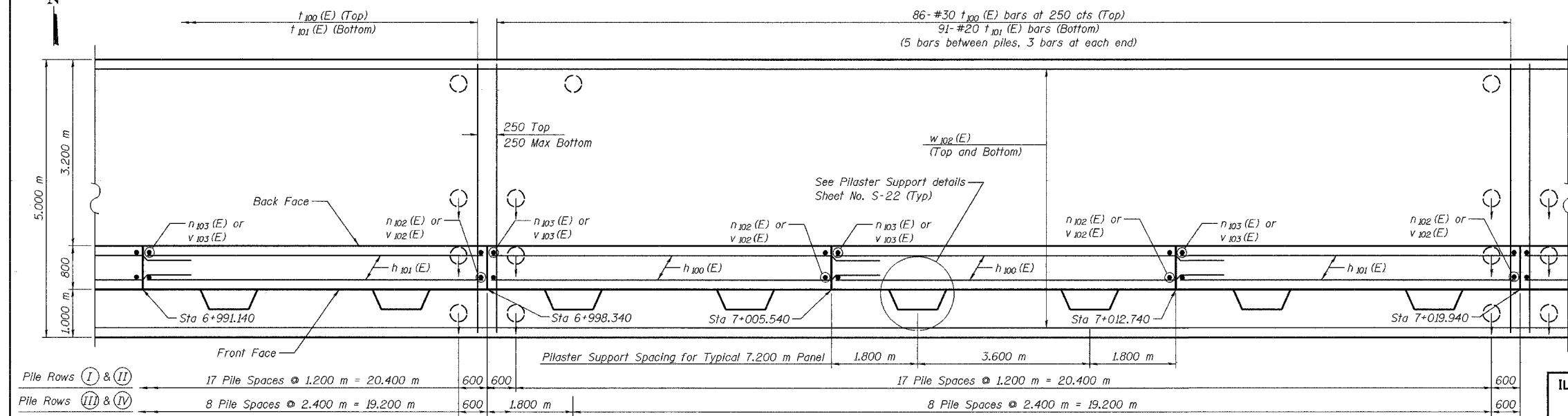
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.L. 86-94	2001-167R	COOK COUNTY	1207	953
CONTRACT No. 62114			SHEET NO. S-8	
			37 SHEETS	



ELEVATION



FOOTING PLAN

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

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

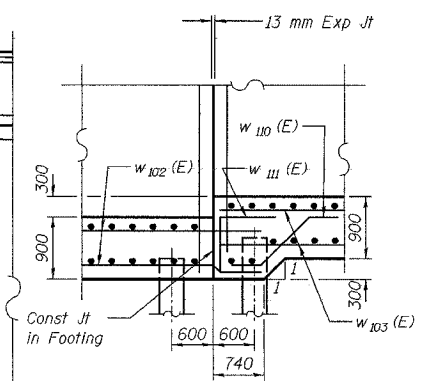
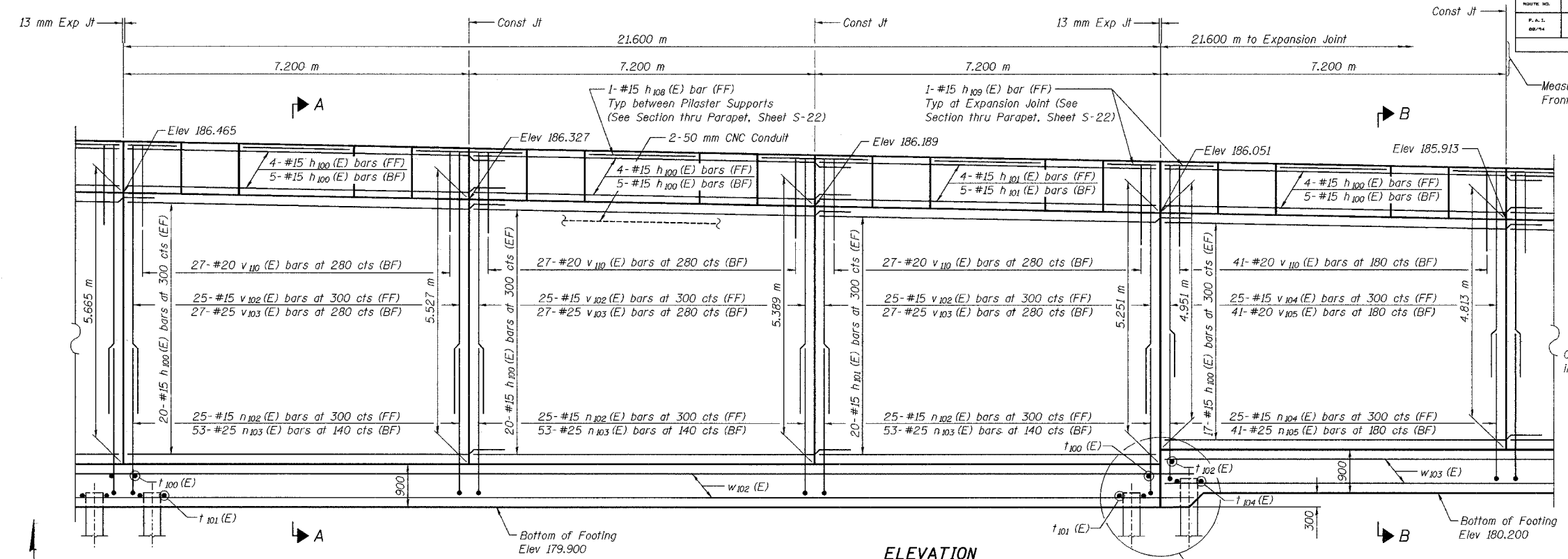
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

NOTES:
 See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material. See Sheet S-23 for Rustication details and Expansion Joint Detail. Stations are referenced to @ 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. See Drainage Drawings for Underdrain Connection to Catch Basin.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 AND U.S. ROUTE 6 LOCAL ROAD RECONSTRUCTION
PLAN AND ELEVATION (6 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+400.281
 STRUCTURE NO. 016-W873
 DATE 07/05
AMERICAN CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-9
F.A.L.	2001-167R	COOK COUNTY	1207	954	37 SHEETS
CONTRACT No. 62114					



NOTES:

See Sheet S-22 for Section A-A, Section B-B, Pilaster Support details, and Bill of Material.

See Sheet S-23 for Rustication details and Expansion Joint Detail.

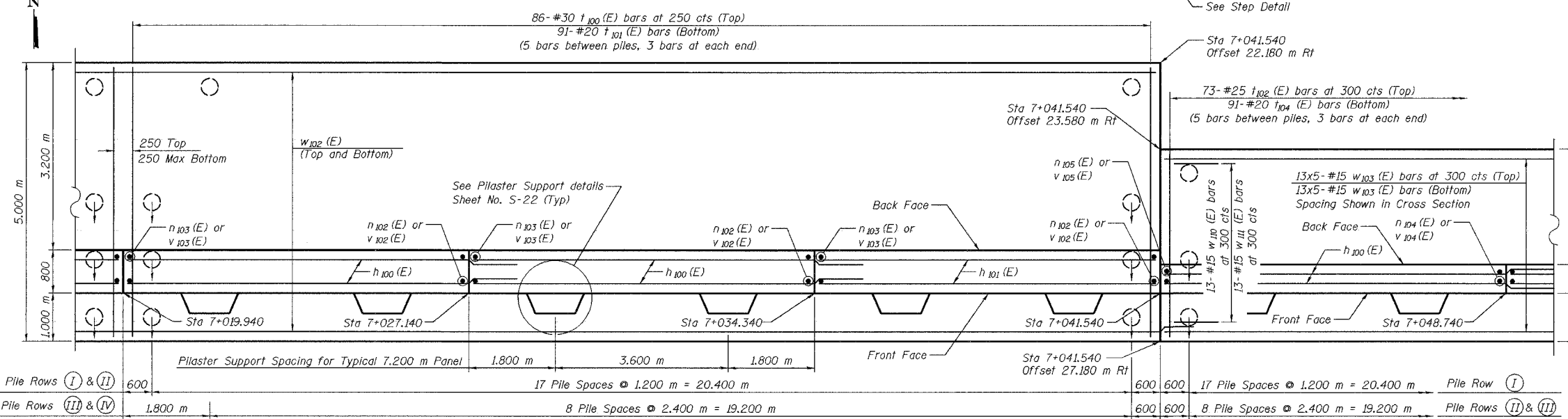
Stations are referenced to \odot I-80/94.

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.

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



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

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.L. ROUTE 80/94 AND U.S. ROUTE 6

LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (7 OF 19)

SECTION 2001-167R

COOK COUNTY

STATION 6+850.000 to STATION 7+400.281

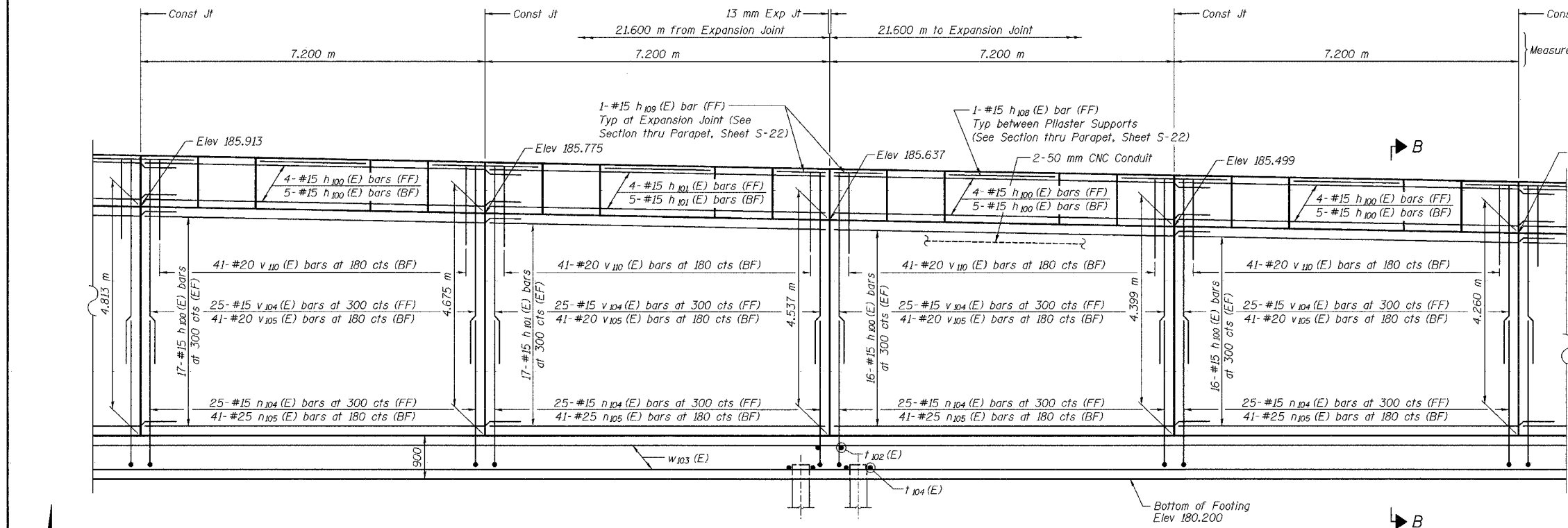
STRUCTURE NO. 016-W873

DATE 07/05

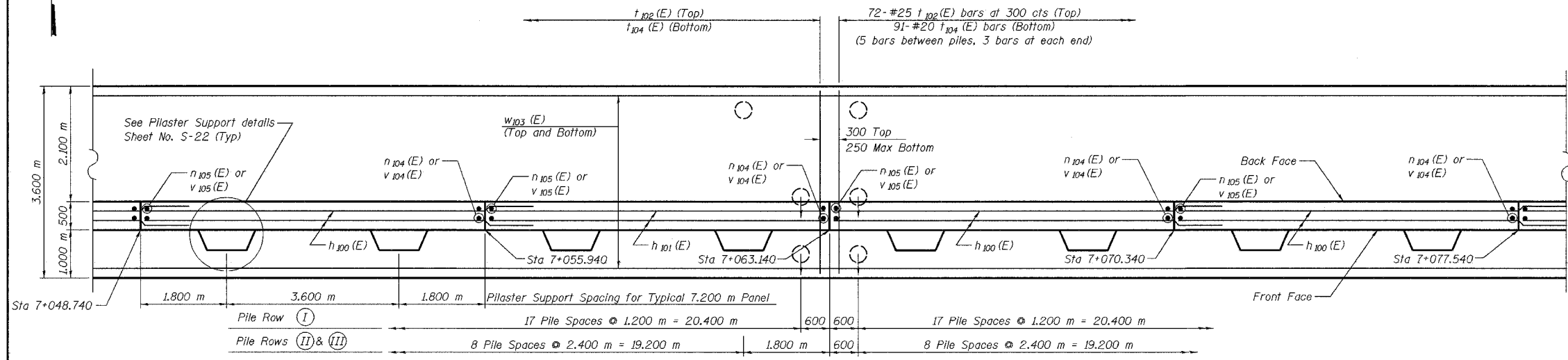
AMERICAN

CONSULTING ENGINEERS

FOR INFORMATION ONLY



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-22 for Section B-B, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to 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.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS	LEGEND
#15 bars = 640	BF = Back Face
#20 bars = 790	FF = Front Face
#25 bars = 1320	EF = Each Face

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

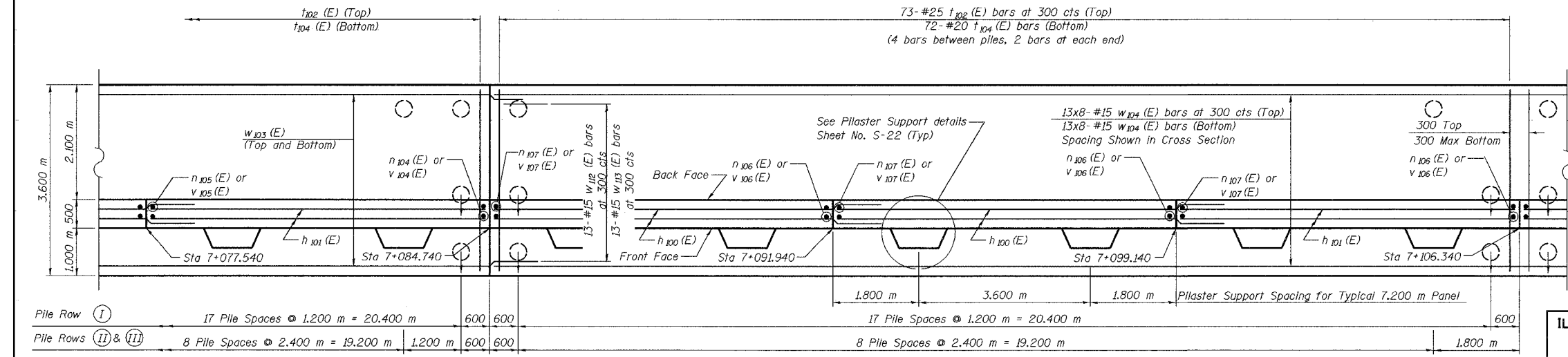
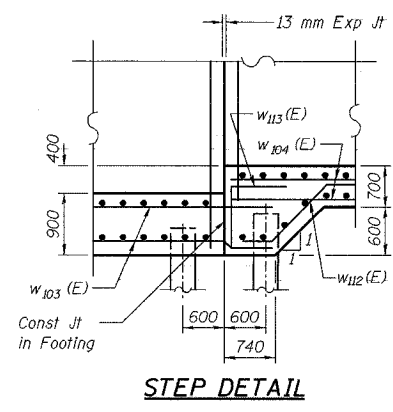
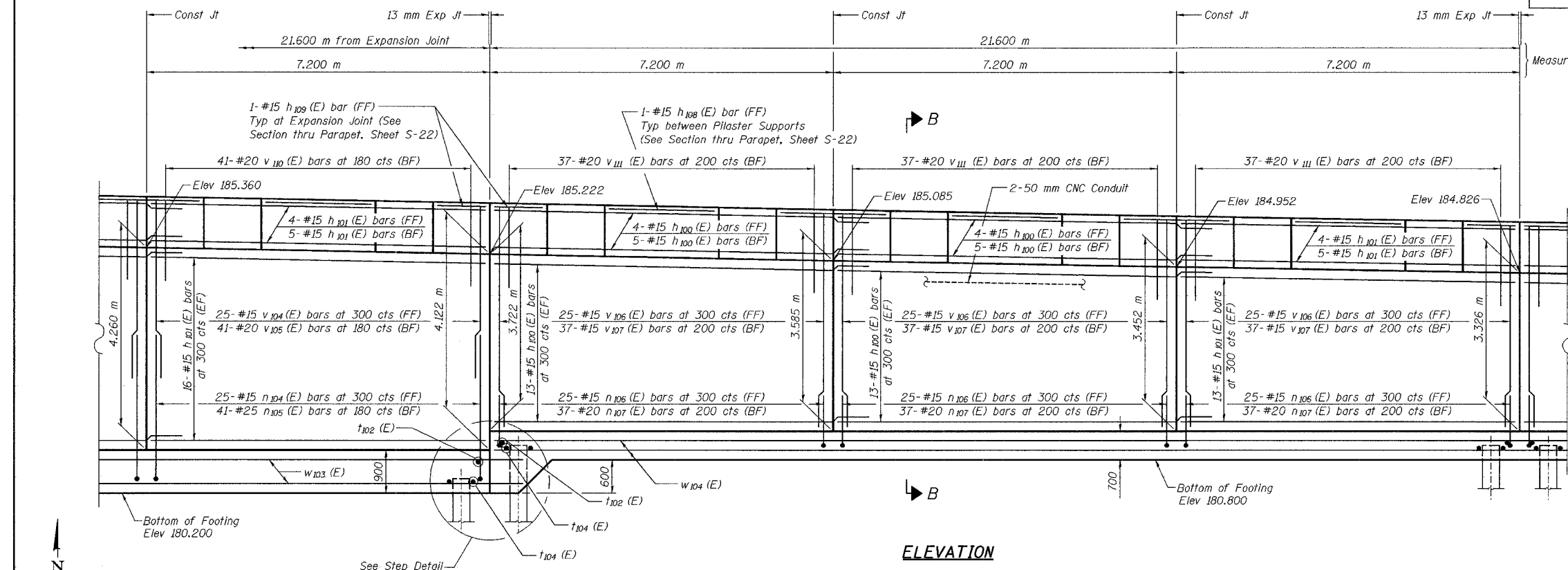
PLAN AND ELEVATION (8 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.L. 80/94	2001-167R	COOK COUNTY	1207	956
CONTRACT No. 62114				

SHEET NO. S-11
37 SHEETS



NOTES:

- See Sheet S-22 for Section B-B, Pilaster Support details, and Bill of Material.
- See Sheet S-23 for Rustication details and Expansion Joint Detail.
- Stations are referenced to @ 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.
- Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

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

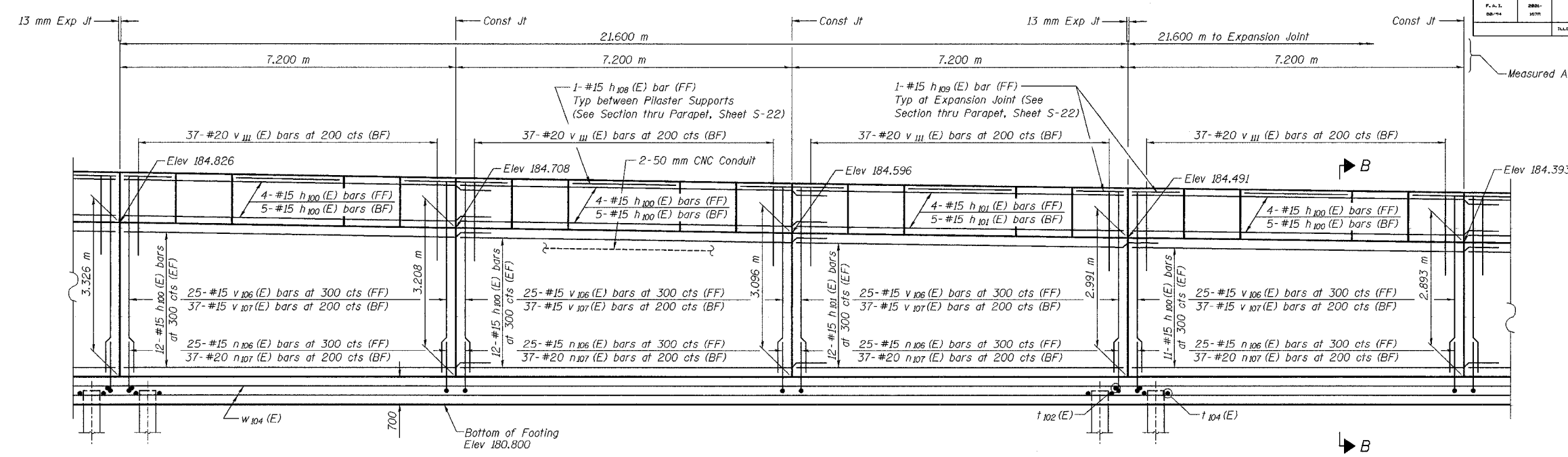
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (9 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+400.281
 STRUCTURE NO. 016-W873
 DATE 07/05

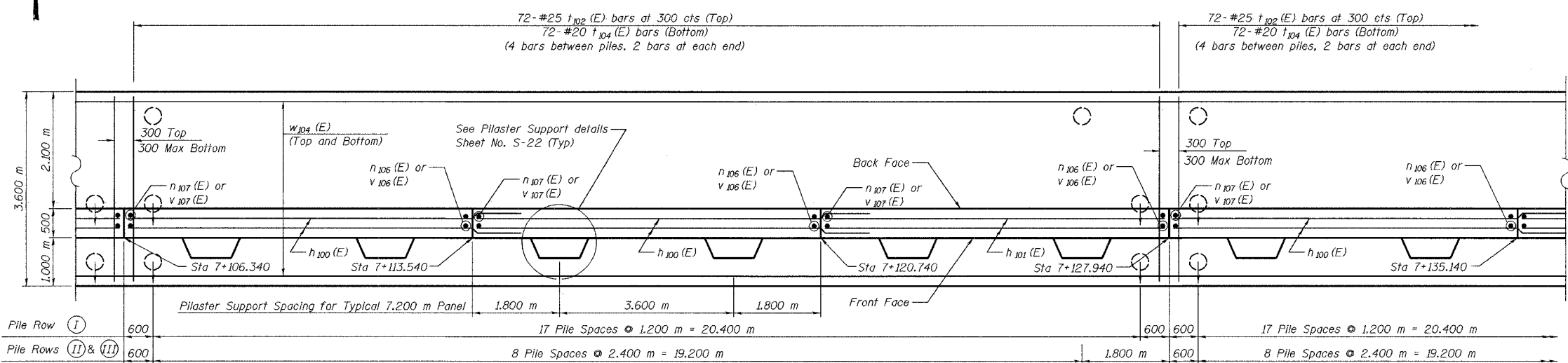
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	PROJECT	SHEET NO. S-12 37 SHEETS
F.A.L.	2001-167R	COOK COUNTY	1207	957	
DATE	08/14				
CONTRACT No. 62114					



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-22 for Section B-B, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to @ 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

MINIMUM BAR LAPS	LEGEND
#15 bars = 640	BF = Back Face
#20 bars = 790	FF = Front Face
#25 bars = 1320	EF = Each Face

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

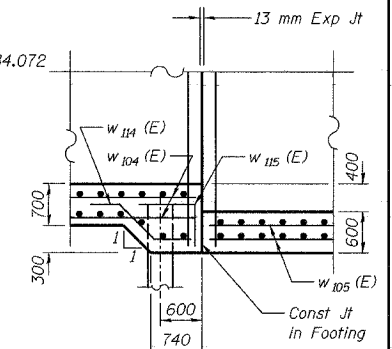
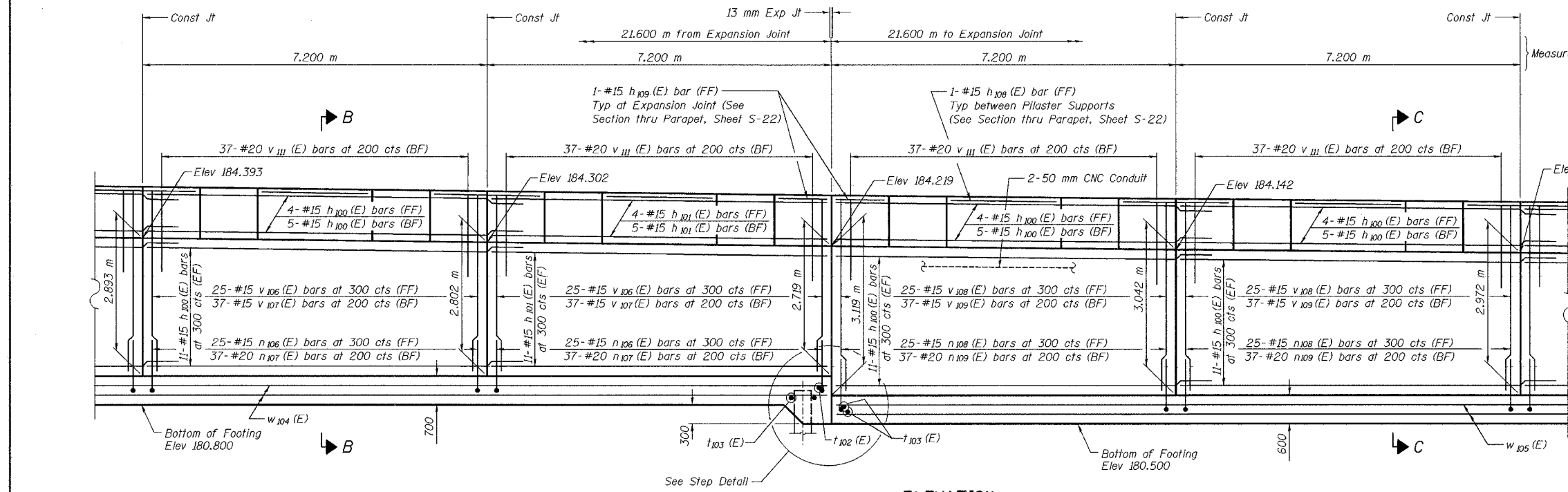
**PLAN AND ELEVATION (10 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+400.281
 STRUCTURE NO. 016-W873**

DATE 07/05

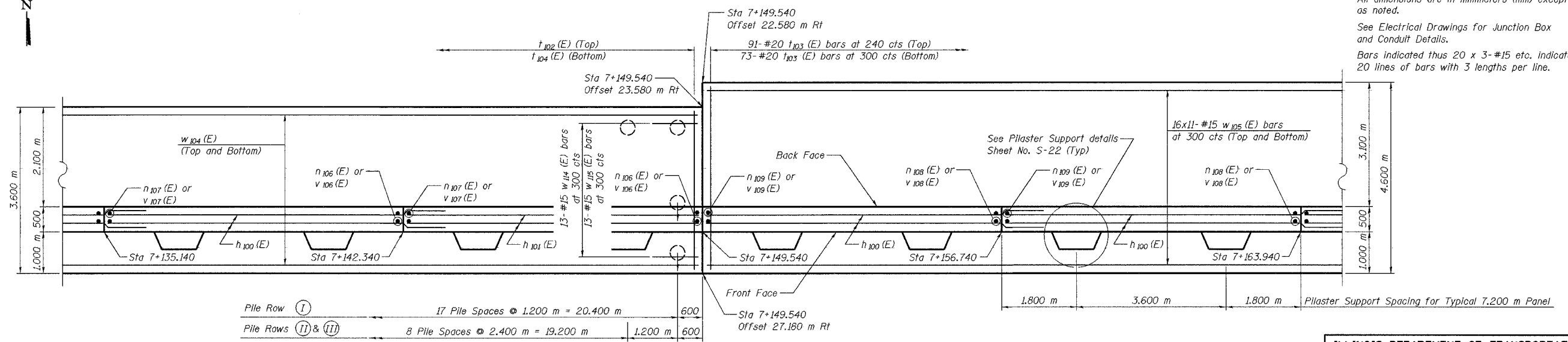
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	PROJECT	SHEET NO. S-13
F.A.L. 80/94	2001-167R	COOK COUNTY	1207	958	37 SHEETS
ILLINOIS	FED. AID PROJECT-	C-74-451-44	CONTRACT No. 62114		



NOTES:
 See Sheet S-22 for Section B-B, 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{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.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.



DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

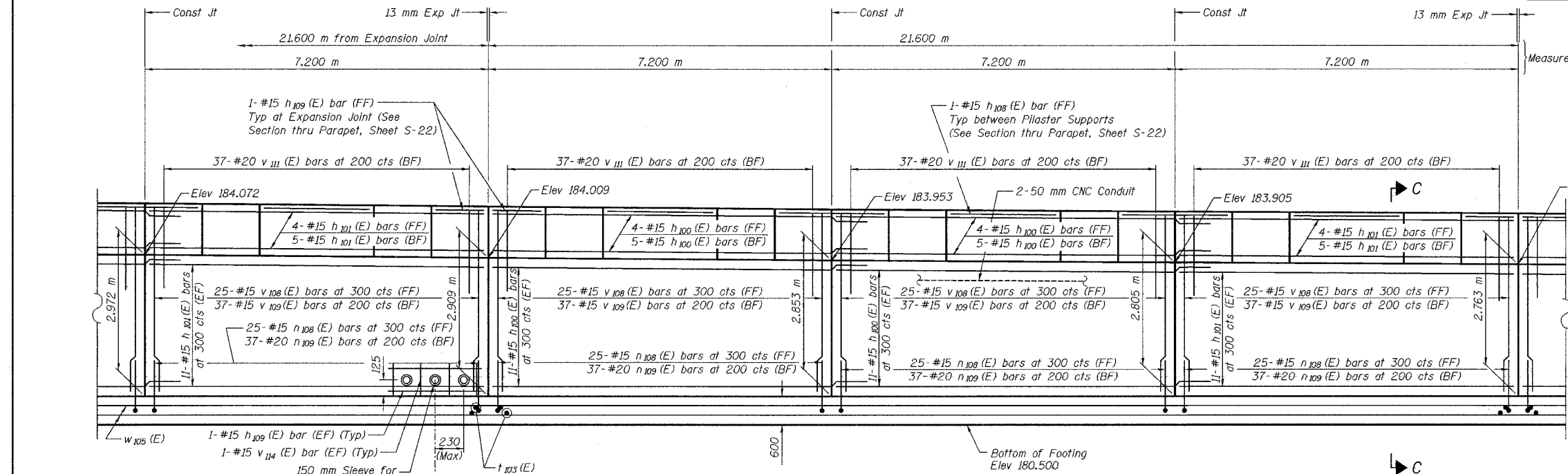
MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790
 #25 bars = 1320

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

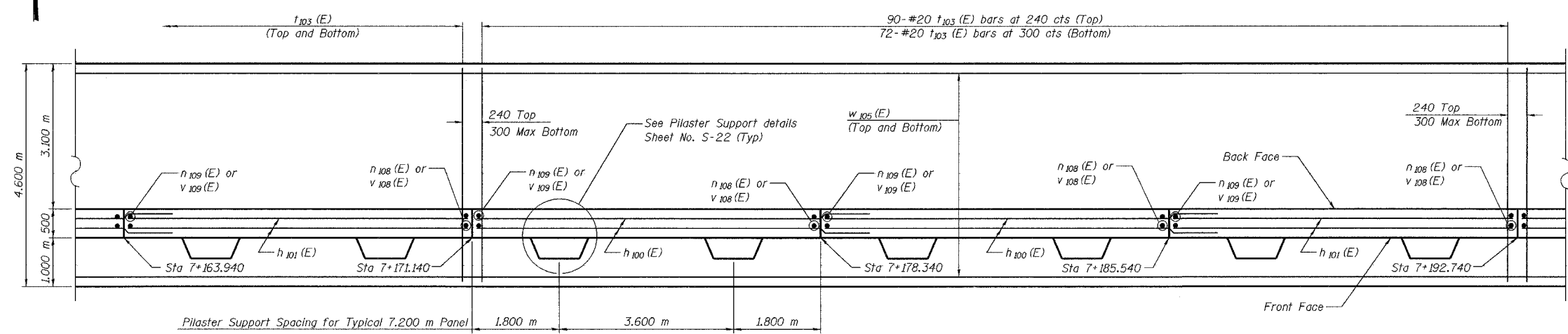
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION
PLAN AND ELEVATION (11 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 TO STATION 7+400.281
STRUCTURE NO. 016-W873
 DATE 07/05
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. S-14 37 SHEETS
F.A.L.	DATE	COOK COUNTY	1207	959	
DATE	PROJECT	CONTRACT No. 62114			
ILLINOIS DEPARTMENT OF TRANSPORTATION					



ELEVATION



FOOTING PLAN

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 $\text{C} \pm$ 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

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

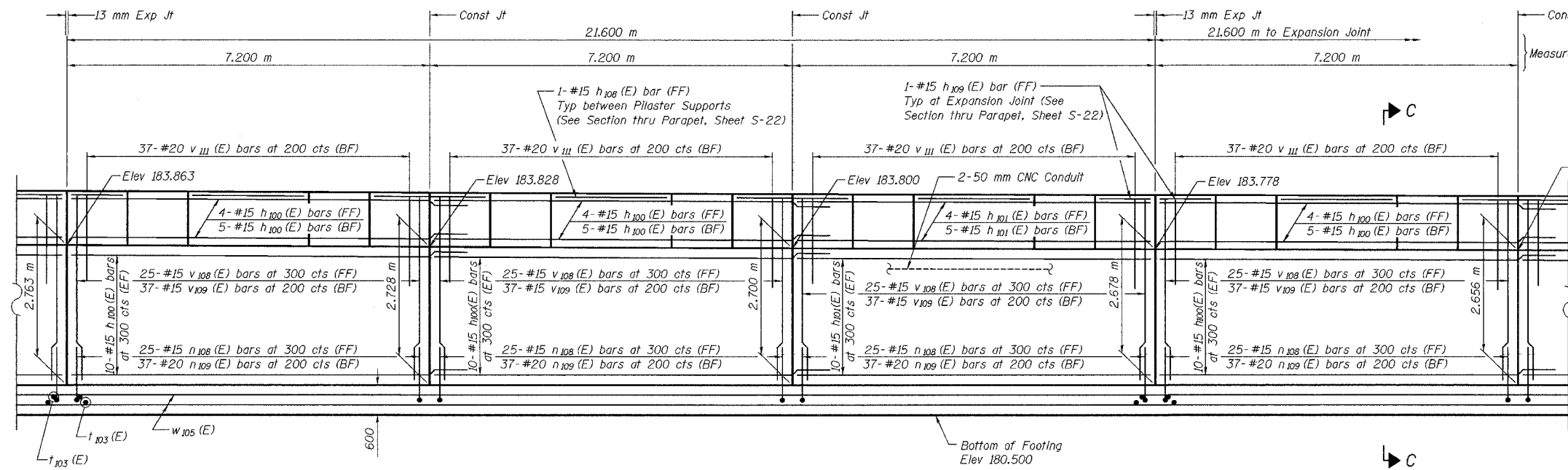
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

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

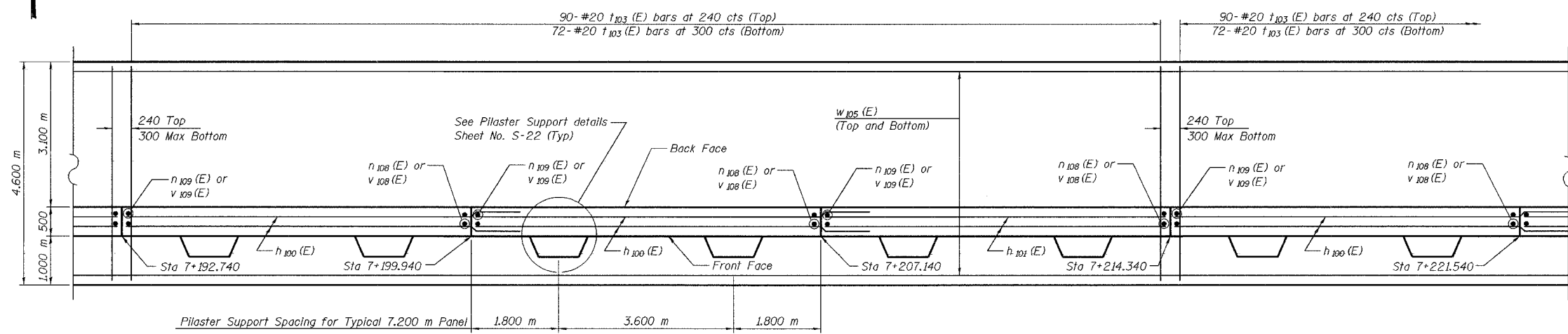
PLAN AND ELEVATION (12 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY



ELEVATION



FOOTING PLAN

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.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

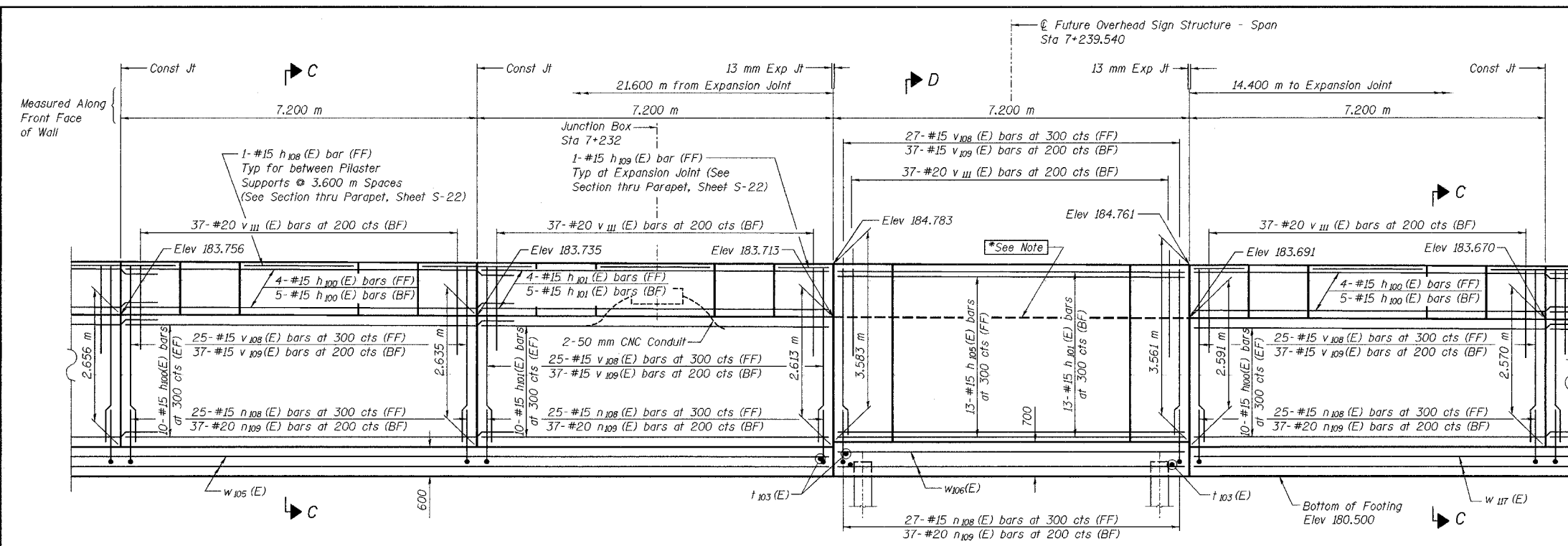
MINIMUM BAR LAPS
 #15 bars = 640
 #20 bars = 790
 #25 bars = 1320

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

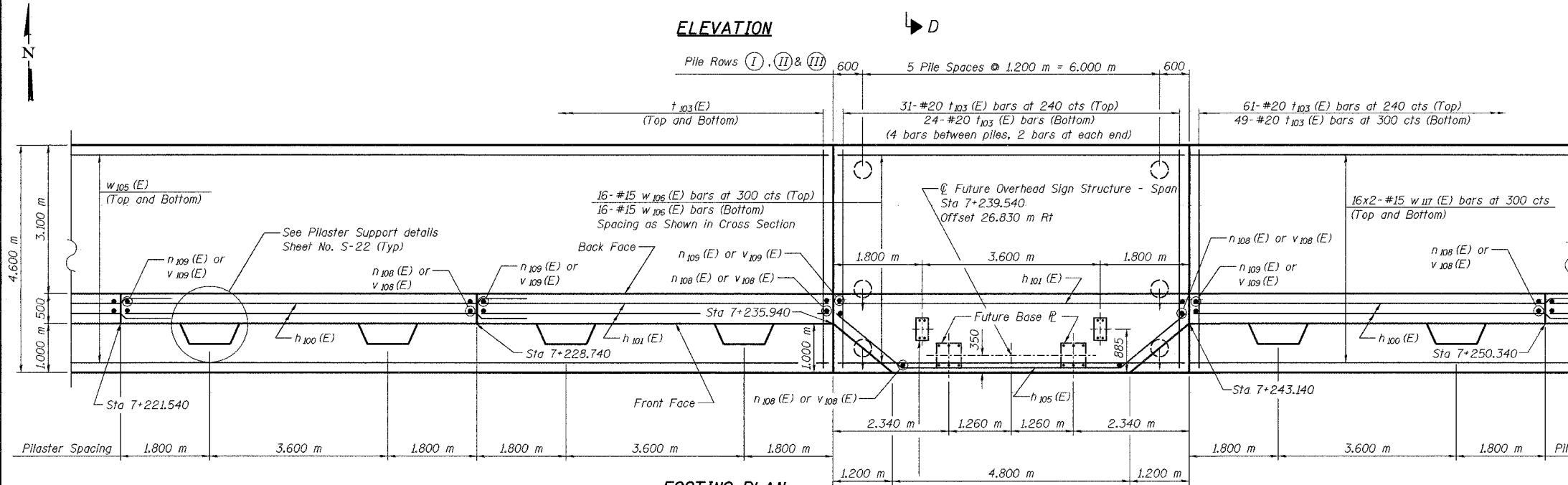
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION
PLAN AND ELEVATION (13 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+400.281
 STRUCTURE NO. 016-W873
 DATE 07/05
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

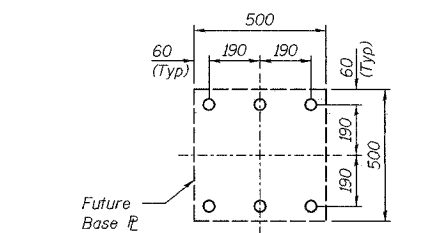
ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
F.A.L. 06-74	2001-167R	COOK COUNTY	1207 961	37 SHEETS
ILLINOIS DEPARTMENT OF TRANSPORTATION				CONTRACT No. 62114



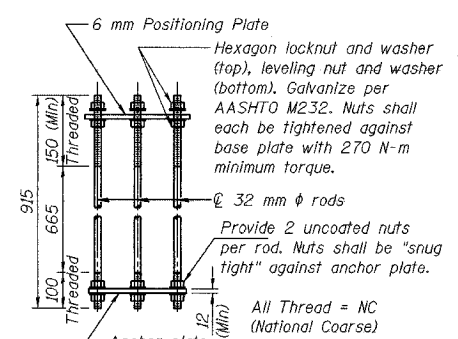
ELEVATION



FOOTING PLAN



ANCHOR BOLT LAYOUT



ANCHOR ROD DETAIL

(Overhead Sign Structure - Span, Anchor Rod Assembly, 2 Req'd)

ANCHOR ROD NOTE:
Anchor rods shall conform to AASHTO M314M Grade 250 or 380 (36 or 55) and meet Charpy V-Notch (CVN) energy of 20 J at 5°C. Galvanize per AASHTO M232. No welding shall be permitted on rods.

NOTES:
See Sheet S-22 for Section C-C, Section D-D, Pilaster Support details, and Bill of Material.
See Sheet S-23 for Rustication details and Expansion Joint Detail.
Stations are referenced to 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.
Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

***NOTE:**
Construction Joint 1.070 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.

MINIMUM BAR LAPS

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

LEGEND

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

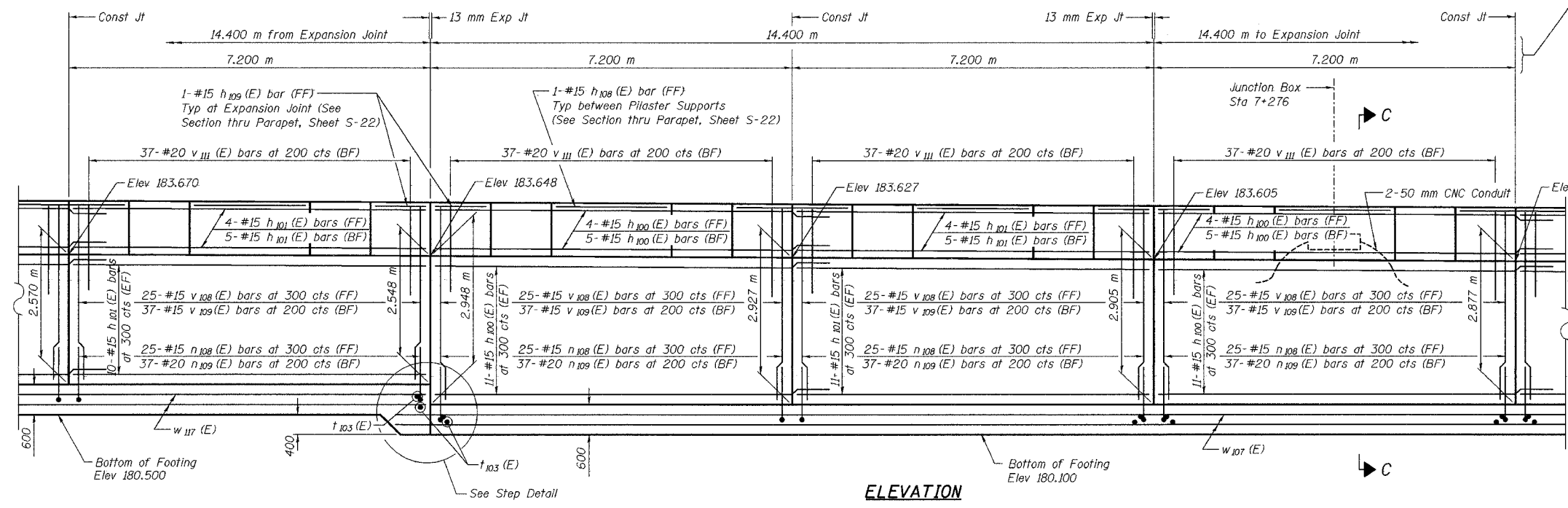
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (14 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873
DATE 07/05

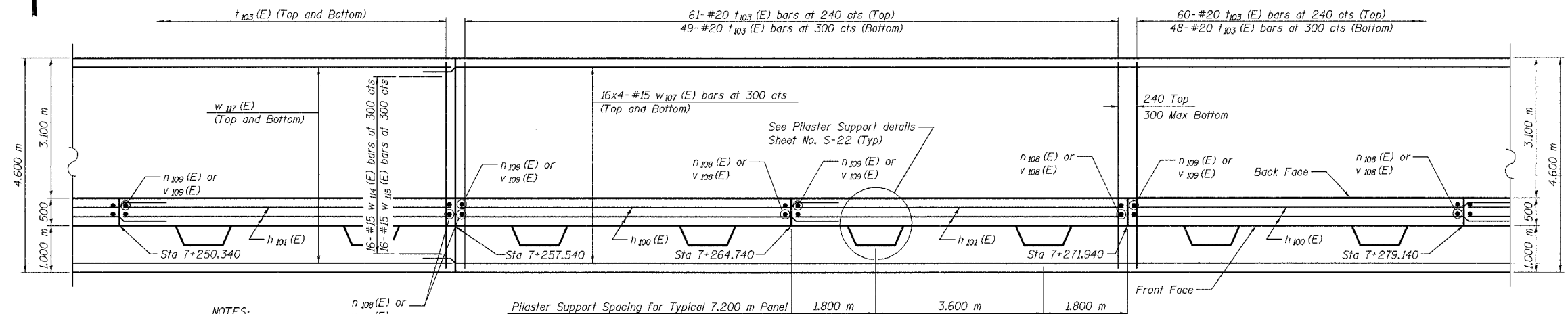
AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-17
1207	2001-167R	COOK COUNTY	962	37 SHEETS
CONTRACT No. 62114				



ELEVATION



FOOTING PLAN

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

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

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

PLAN AND ELEVATION (15 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6 + 850.000 to STATION 7 + 400.281
STRUCTURE NO. 016-W873
 DATE 07/05

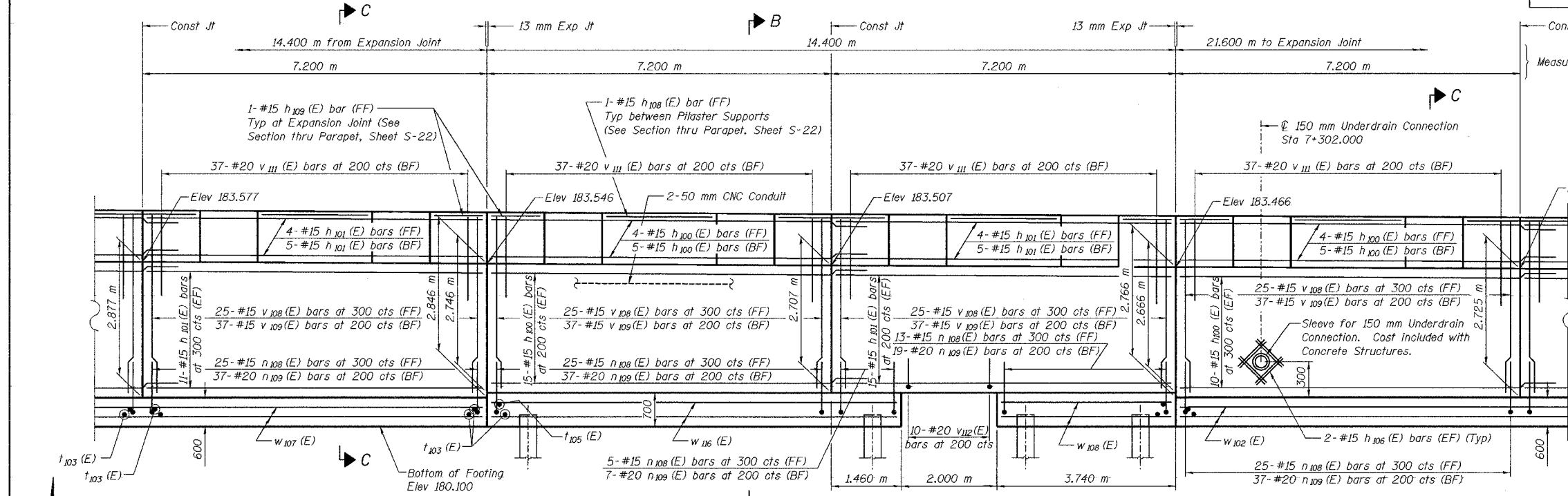
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.L. 80-94	2001-167R	COOK COUNTY	1207	963
ILLINOIS		FEDERAL PROJECT	C-70-811-91	

SHEET NO. S-18
37 SHEETS

CONTRACT No. 62114



NOTES:

See Sheet S-22 for Section B-B, 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 $\text{C} \perp$ I-80/94.

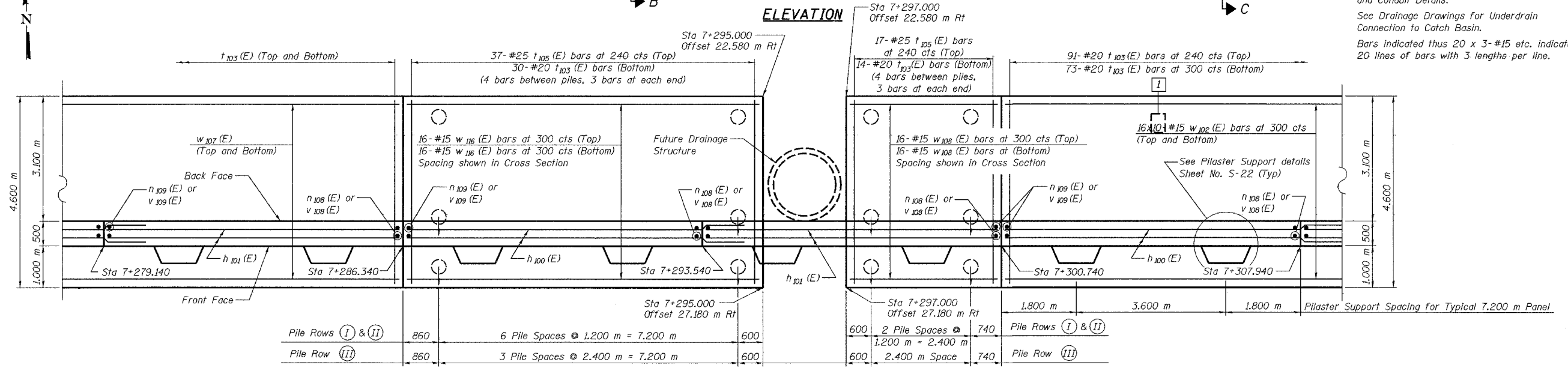
Reinforcement bars designated (E) shall be epoxy coated.

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

See Electrical Drawings for Junction Box and Conduit Details.

See Drainage Drawings for Underdrain Connection to Catch Basin.

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



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

1 REVISED 06-21-04 KFA

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

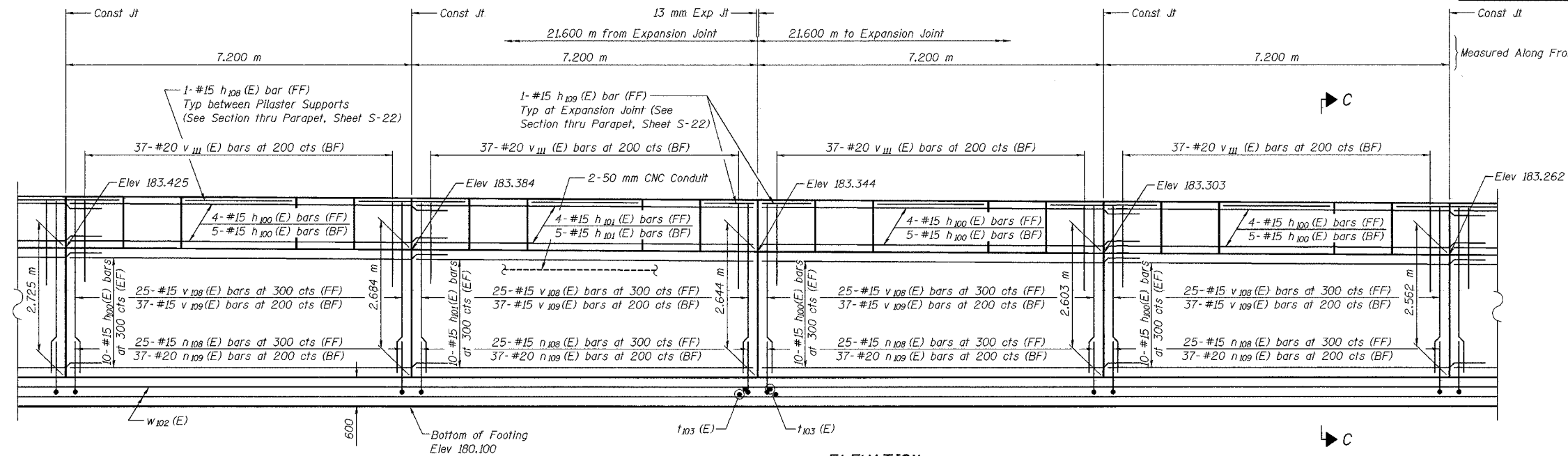
PLAN AND ELEVATION (16 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873

DATE 07/05

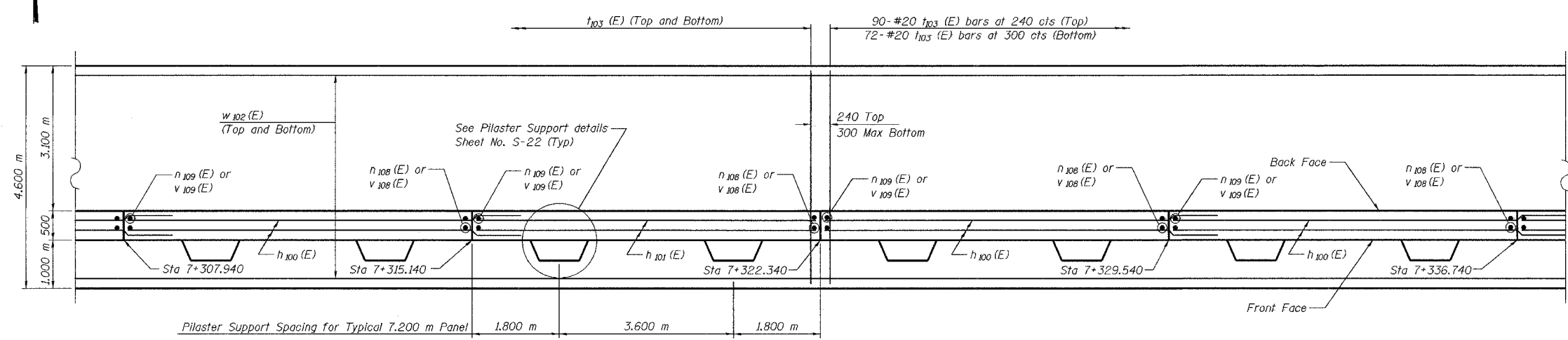
AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-19
F.A.L. 88-74	200-167R	COOK COUNTY	1207 964	37 SHEETS
BLANKED	FED. AID PROJECT-	CITY-STATE	CONTRACT No. 62114	



ELEVATION



FOOTING PLAN

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.

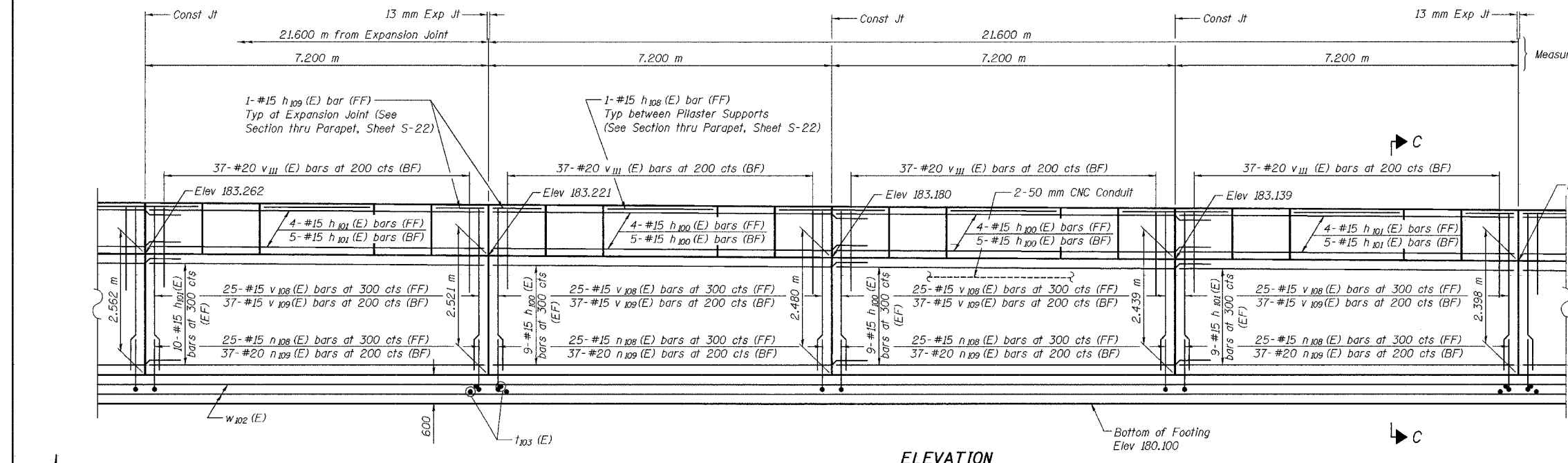
DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

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

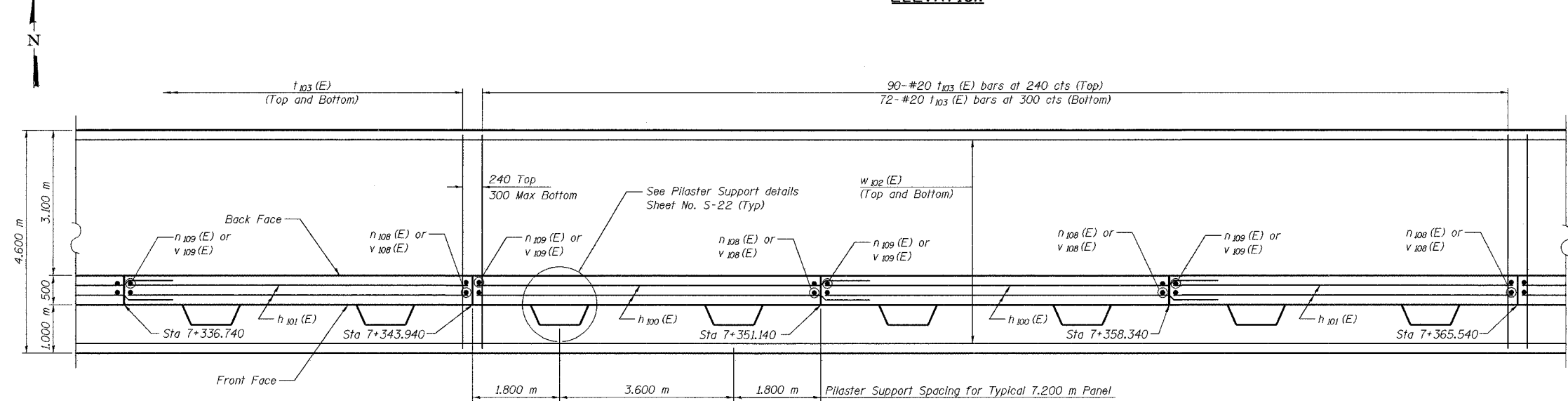
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.L. 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+400.281
STRUCTURE NO. 016-W873
 DATE 07/05
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY



ELEVATION



FOOTING PLAN

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 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

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

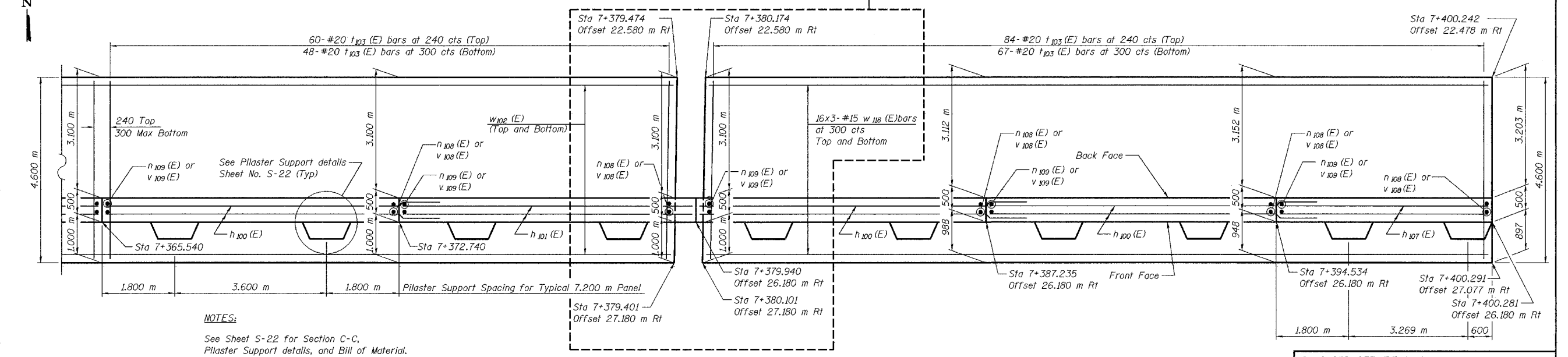
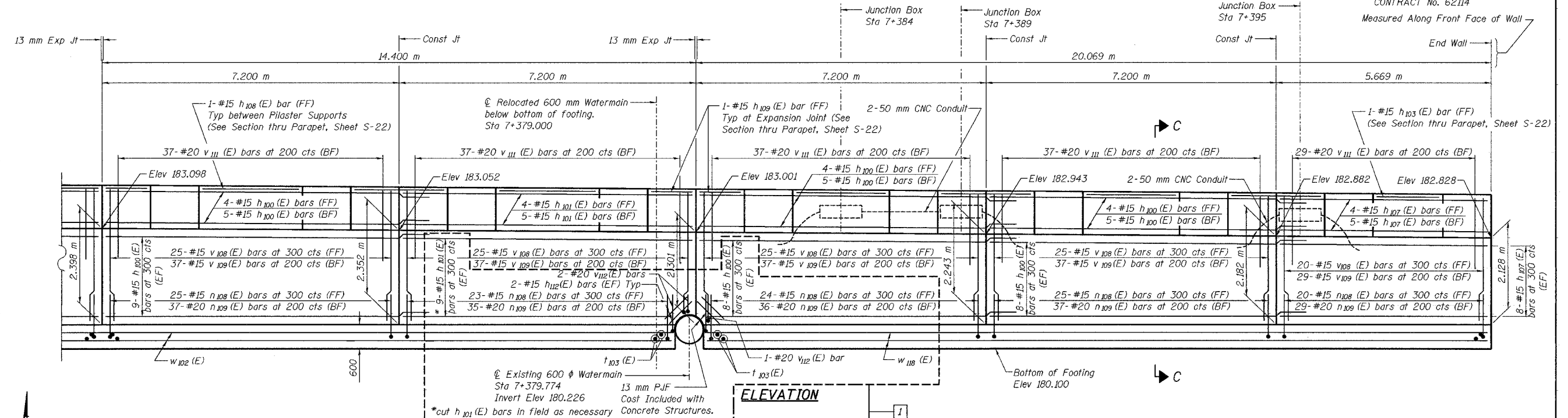
PLAN AND ELEVATION (18 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 TO STATION 7+400.281
STRUCTURE NO. 016-W873
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. S-21 37 SHEETS
F.A.L. 80/94	167R	COOK COUNTY	1207	966	

CONTRACT No. 62114
Measured Along Front Face of Wall



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 $\text{C} \cdot \text{I}-80/94$.
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

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

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

REVISED 10-22-04 KFA

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

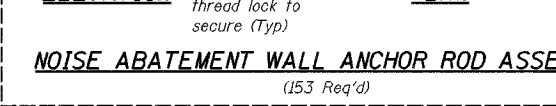
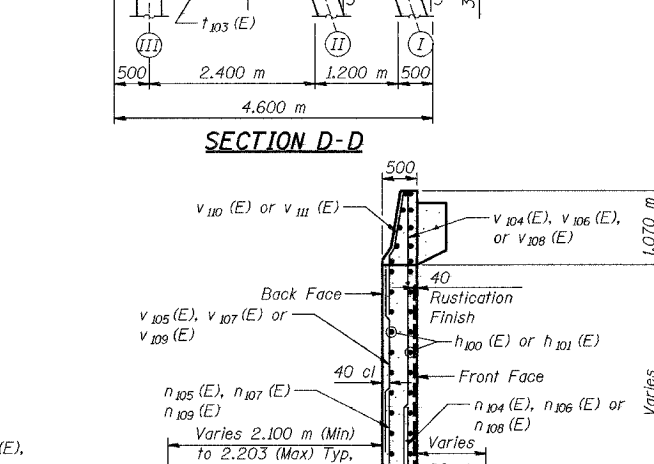
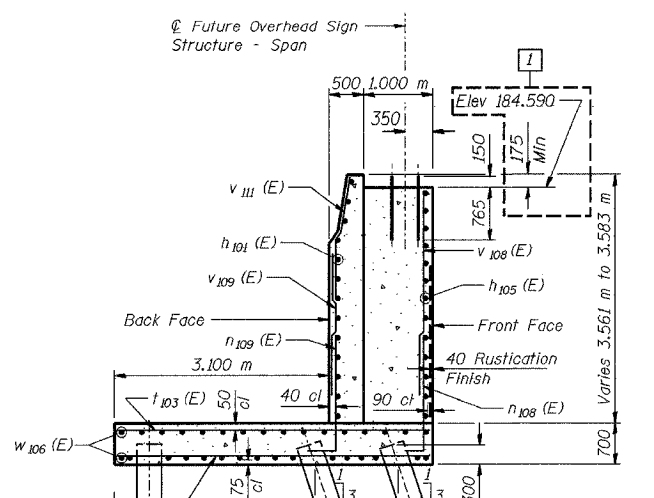
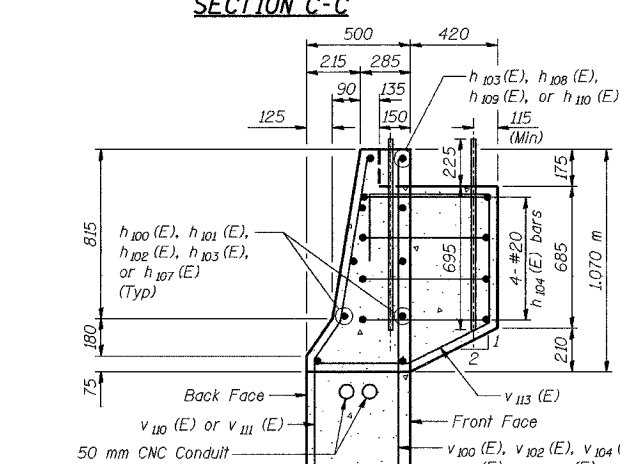
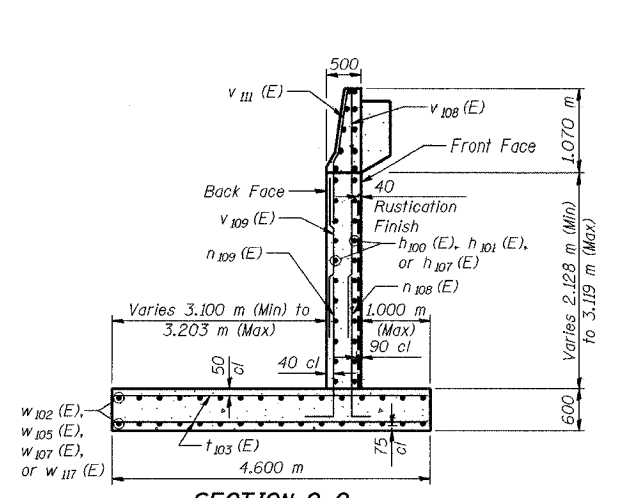
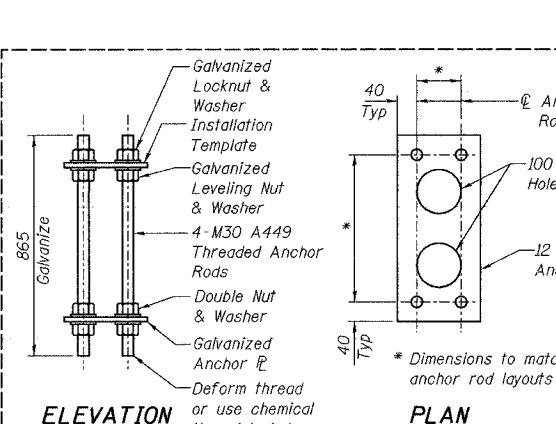
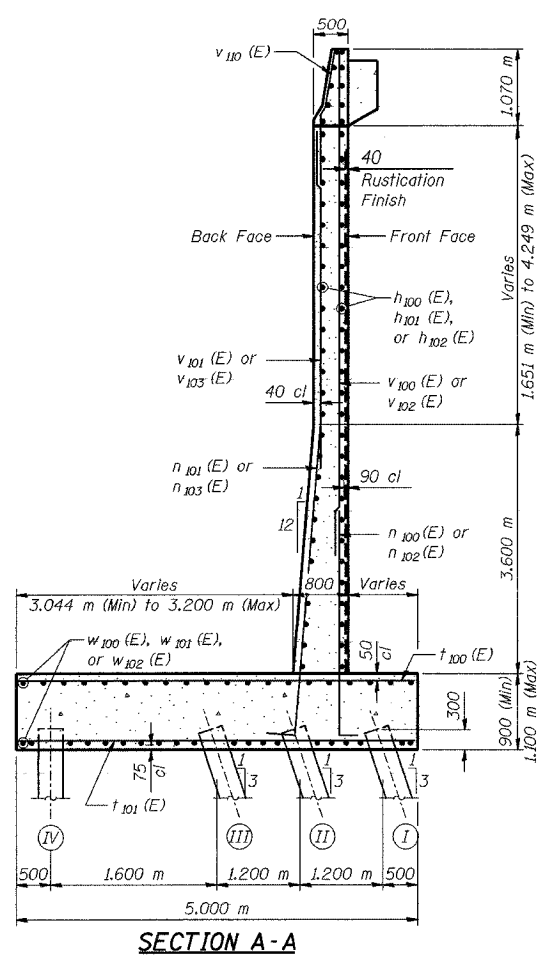
**PLAN AND ELEVATION (19 OF 19)
SECTION 2001-167R
COOK COUNTY**

**STATION 6+850.000 TO STATION 7+400.281
STRUCTURE NO. 016-W873**

DATE 07/05

AMERICAN
CONSULTING ENGINEERS

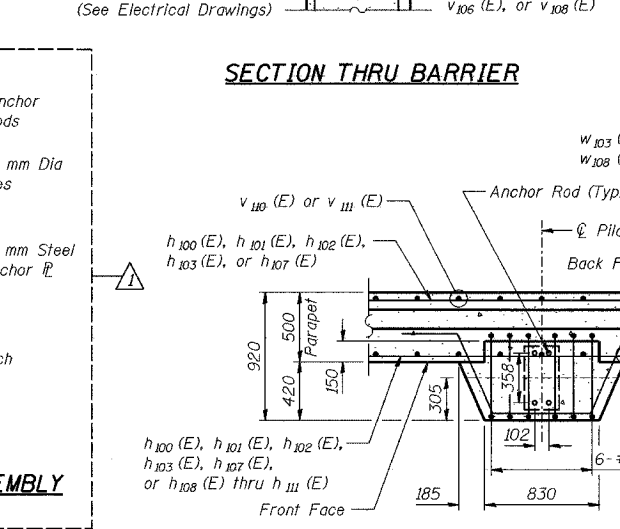
FOR INFORMATION ONLY



DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

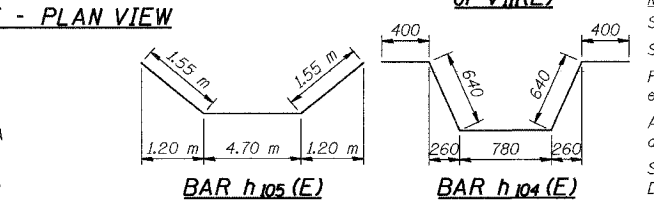
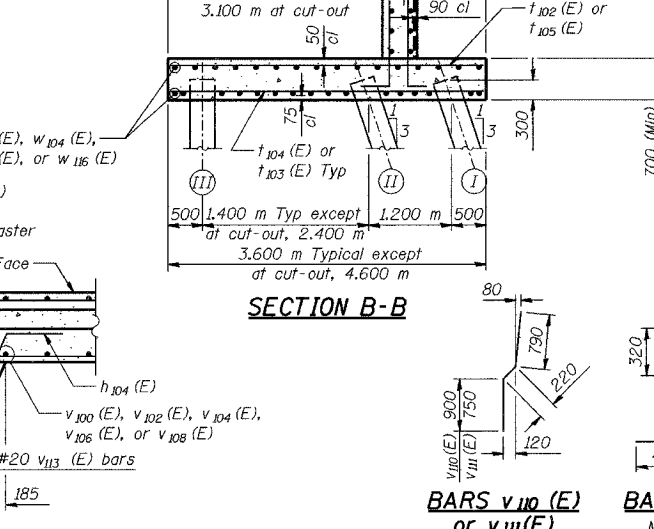
PILE DATA
 Type - 356 φ Metal Shell
 Capacity - 500 kN
 Est. Length - 13.8 m
 No. Req'd - 736
 Test Piles - 8

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



REVISIONS:

1	REVISED 10-22-04 KFA
2	REVISED 05-25-04 KFA



BILL OF MATERIAL I

Bar No.	Size	Length (m)	Shape
h ₁₀₀ (E)	2,021	#15	7.84
h ₁₀₁ (E)	1,069	#15	7.10
h ₁₀₂ (E)	63	#15	5.00
h ₁₀₃ (E)	1	#15	1.96
h ₁₀₄ (E)	604	#20	2.86
h ₁₀₅ (E)	13	#15	7.80
h ₁₀₆ (E)	32	#15	0.60
h ₁₀₇ (E)	25	#15	5.56
h ₁₀₈ (E)	123	#15	2.30
h ₁₀₉ (E)	56	#15	1.10
h ₁₁₀ (E)	1	#15	1.85
h ₁₁₁ (E)	8	#15	0.80
n ₁₀₀ (E)	291	#15	2.92
n ₁₀₁ (E)	852	#25	5.69
n ₁₀₂ (E)	375	#15	3.64
n ₁₀₃ (E)	795	#25	5.49
n ₁₀₄ (E)	150	#15	2.60
n ₁₀₅ (E)	246	#25	3.20
n ₁₀₆ (E)	225	#15	2.49
n ₁₀₇ (E)	333	#20	2.55
n ₁₀₈ (E)	865	#15	2.47
n ₁₀₉ (E)	1,276	#20	2.53
t ₁₀₀ (E)	840	#30	4.90
t ₁₀₁ (E)	881	#20	4.90
t ₁₀₂ (E)	362	#25	3.50
t ₁₀₃ (E)	1,824	#20	4.50
t ₁₀₄ (E)	398	#20	3.50
t ₁₀₅ (E)	54	#25	4.50
v ₁₀₀ (E)	291	#15	7.88
v ₁₀₁ (E)	432	#25	5.52
v ₁₀₂ (E)	375	#15	6.22
v ₁₀₃ (E)	405	#25	4.58
v ₁₀₄ (E)	150	#15	5.09
v ₁₀₅ (E)	246	#20	3.72
v ₁₀₆ (E)	225	#15	3.68
v ₁₀₇ (E)	333	#15	2.61
v ₁₀₈ (E)	872	#15	3.09
v ₁₀₉ (E)	1,287	#15	2.02
v ₁₁₀ (E)	1,083	#20	1.94
v ₁₁₁ (E)	1,620	#20	1.79
v ₁₁₂ (E)	15	#20	3.06
v ₁₁₃ (E)	906	#20	2.39
v ₁₁₄ (E)	8	#15	0.60

Bar No.	Size	Length (m)	Shape
w ₁₀₀ (E)	360	#15	9.00
w ₁₀₁ (E)	180	#15	9.14
w ₁₀₂ (E)	608	#15	8.85
w ₁₀₃ (E)	130	#15	9.28
w ₁₀₄ (E)	208	#15	8.65
w ₁₀₅ (E)	352	#15	8.43
w ₁₀₆ (E)	32	#15	7.10
w ₁₀₇ (E)	128	#15	7.84
w ₁₀₈ (E)	32	#15	3.64
w ₁₀₉ (E)	18	#15	2.65
w ₁₁₀ (E)	31	#15	2.79
w ₁₁₁ (E)	31	#15	2.14
w ₁₁₂ (E)	13	#15	2.93
w ₁₁₃ (E)	13	#15	2.34
w ₁₁₄ (E)	29	#15	2.51
w ₁₁₅ (E)	29	#15	1.74
w ₁₁₆ (E)	32	#15	8.56
w ₁₁₇ (E)	64	#15	7.47
w ₁₁₈ (E)	96	#15	7.03

Test Pile Metal Shells	Each	8
Structure Excavation	m ³	6,404
Concrete Structures	m ³	3,456.0
Protective Coat	m ²	3,979
Reinforcement Bars, Epoxy Coated	kg	246,500
Furnishing Metal Pile Shells, 356 φ	m	10,157.0
Driving and Filling Shells	m	10,157.0
Geocomposite Wall Drain	m ²	2,354
Pipe Underdrains for Structures 150 mm	m	555.5
Overhead Sign Structure - Span	Each	2
Anchor Rod Assembly	Each	153
Noise Abatement Wall Anchor Rod Assembly	Each	153

BAR DIMENSIONS

Bar	A	B
n ₁₀₀ (E)	2.66m	260
n ₁₀₁ (E)	5.29m	400
n ₁₀₂ (E)	3.38m	260
n ₁₀₃ (E)	5.09m	400
n ₁₀₄ (E)	2.34m	260
n ₁₀₅ (E)	2.80m	400
n ₁₀₆ (E)	2.23m	260
n ₁₀₇ (E)	2.23m	320
n ₁₀₈ (E)	2.21m	260
n ₁₀₉ (E)	2.21m	320
w ₁₀₉ (E)	970	1.37m
w ₁₁₀ (E)	1.07m	1.51m
w ₁₁₁ (E)	1.07m	---
w ₁₁₂ (E)	1.17m	1.65m
w ₁₁₃ (E)	1.17m	---
w ₁₁₄ (E)	870	1.23m
w ₁₁₅ (E)	870	---

BARS n₁₀₀ (E) thru n₁₀₉ (E)

BARS w₁₀₉ (E), w₁₁₀ (E), w₁₁₂ (E), or w₁₁₄ (E)

BARS v₁₁₀ (E) or v₁₁₁ (E)

BAR v₁₁₃ (E)

BAR v₁₁₂ (E)

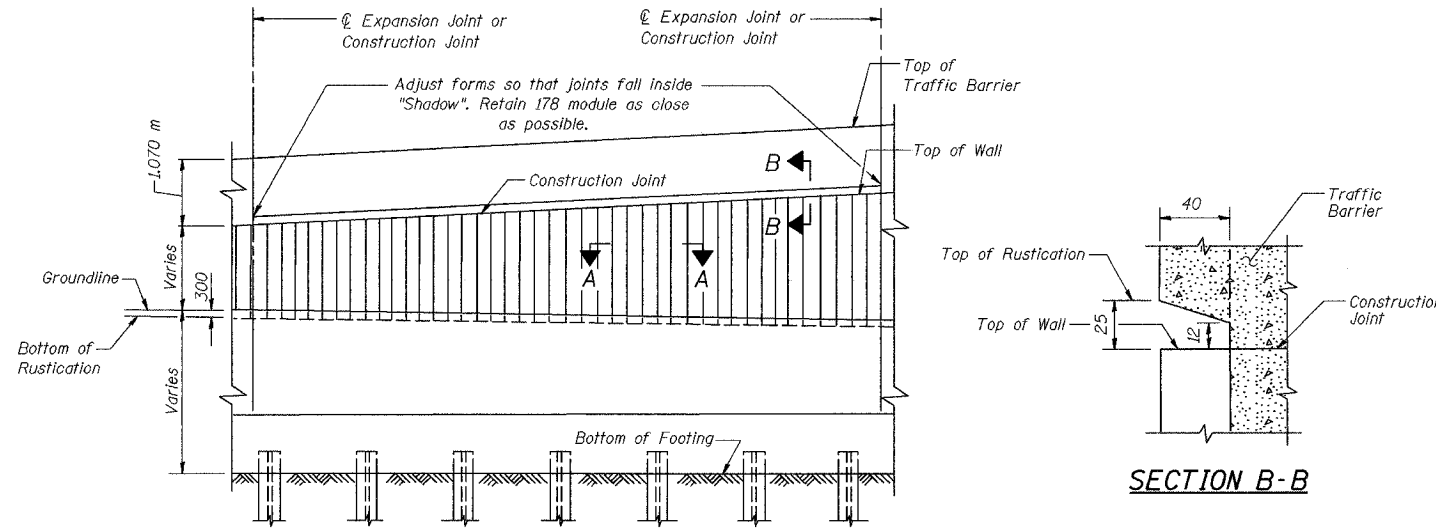
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

**WALL SECTIONS AND DETAILS
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 TO STATION 7+400.281
 STRUCTURE NO. 016-W873**

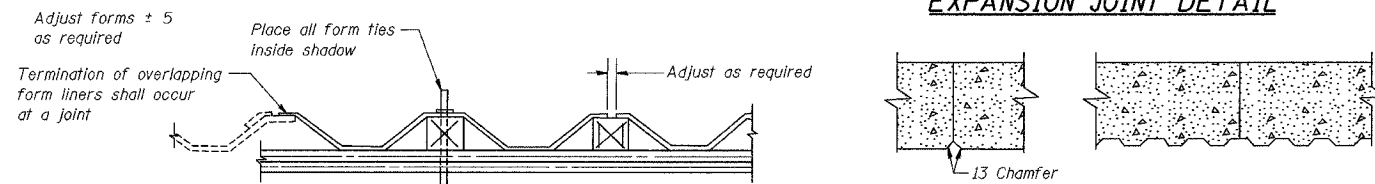
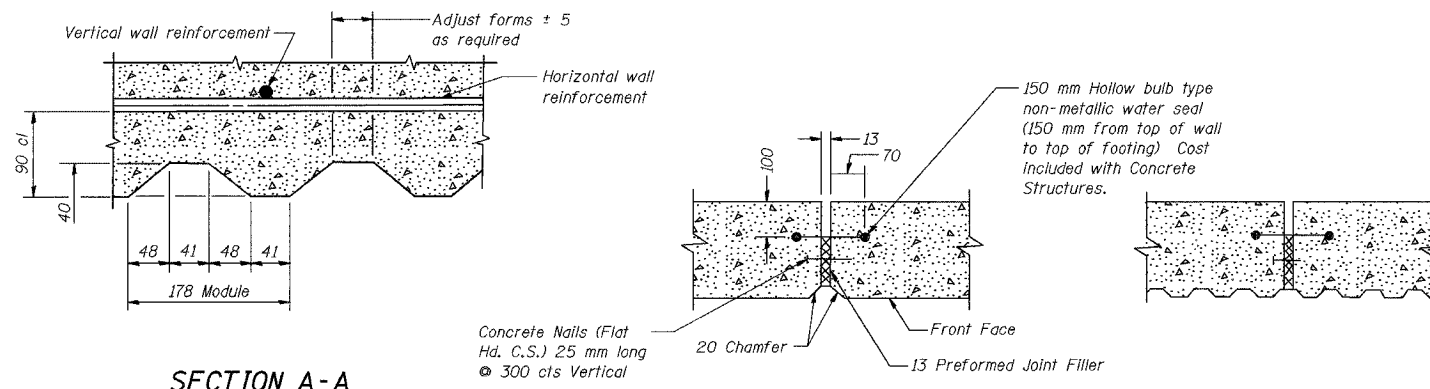
DATE 07/05

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FRONT FACE ELEVATION-TYPICAL ARCHITECTURAL FINISH



RUSTICATION LIMITS

STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION	STATION	TOP OF WALL ELEVATION	BOTTOM OF RUSTICATION ELEVATION
6+850.000	188.949	182.120	7+178.340	183.953	181.815
6+854.350	188.914	181.817	7+185.540	183.905	181.865
6+861.550	188.853	182.125	7+192.740	183.863	181.902
6+886.749	188.788	182.083	7+199.940	183.828	181.940
6+875.948	188.718	182.064	7+207.140	183.800	181.977
6+883.147	188.644	182.080	7+214.340	183.778	182.013
6+890.347	188.566	182.062	7+221.540	183.756	182.049
6+897.456	188.484	182.035	7+228.740	183.735	182.085
6+904.745	188.398	182.121	7+235.940	183.713	182.121
6+911.944	188.307	182.026	7+239.540	183.713	182.140
6+919.144	188.212	182.010	7+243.140	183.691	182.158
6+926.343	188.113	182.000	7+250.340	183.670	182.194
6+933.542	188.010	181.995	7+257.540	183.648	182.230
6+940.741	187.903	182.119	7+264.740	183.627	182.266
6+947.941	187.791	181.983	7+271.940	183.605	182.297
6+955.140	187.675	181.895	7+279.140	183.577	182.318
6+962.340	187.551	181.820	7+286.340	183.546	182.337
6+969.540	187.422	181.782	7+293.540	183.507	182.348
6+976.740	187.291	181.769	7+300.740	183.466	182.358
6+983.940	187.156	181.737	7+307.940	183.425	182.369
6+991.140	187.018	181.720	7+315.140	183.384	182.380
6+998.340	186.879	181.725	7+322.340	183.344	182.437
7+005.540	186.741	181.680	7+329.540	183.303	182.428
7+012.740	186.603	181.578	7+336.740	183.262	182.394
7+019.940	186.465	181.340	7+343.940	183.221	182.360
7+027.140	186.327	181.454	7+351.140	183.180	182.326
7+034.340	186.189	181.552	7+358.340	183.139	182.292
7+041.540	186.051	181.573	7+365.540	183.098	182.259
7+048.740	185.913	181.482	7+372.740	183.052	182.119
7+055.940	185.775	181.459	7+379.940	183.001	182.105
7+063.140	185.637	181.499	7+387.235	182.943	182.091
7+070.340	185.499	181.712	7+394.534	182.882	182.298
7+077.540	185.360	181.847	7+400.281	182.828	182.516
7+084.740	185.222	181.931			
7+091.940	185.085	181.915			
7+099.140	184.952	181.897			
7+106.340	184.826	181.898			
7+113.540	184.708	181.896			
7+120.740	184.596	181.932			
7+127.940	184.491	181.917			
7+135.140	184.393	181.893			
7+142.340	184.302	181.875			
7+149.540	184.219	181.873			
7+156.740	184.142	181.871			
7+163.940	184.072	181.864			
7+171.140	184.009	181.853			

BILL OF MATERIAL

Item	Unit	Total
Rustication Finish	m ²	1812

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

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

RUSTICATION FINISH DETAILS
 SECTION 2001-167R
 COOK COUNTY

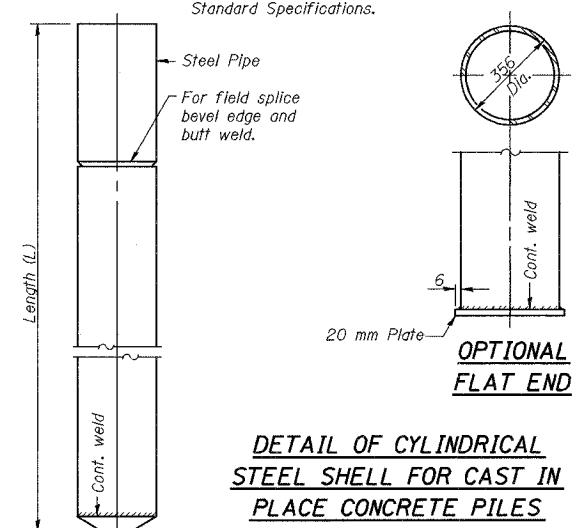
STATION 6+850.000 to STATION 7+400.281
 STRUCTURE NO. 016-W873

DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

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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 + 400.281
STRUCTURE NO. 016-W873

DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

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BORING NO. AR-031 (1 OF 2)

BORING NO. AR-031 (2 OF 2)

BORING NO. AR-032 (1 OF 2)

BORING LOG AR-031 Page 1 of 2

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

Datum: USGS
Elevation: 181.87 m
North: 545481.90 m
East: 366319.31 m
Station: 6 +882.62
Offset: 33.51 RT

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

BORING LOG AR-031 Page 2 of 2

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

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

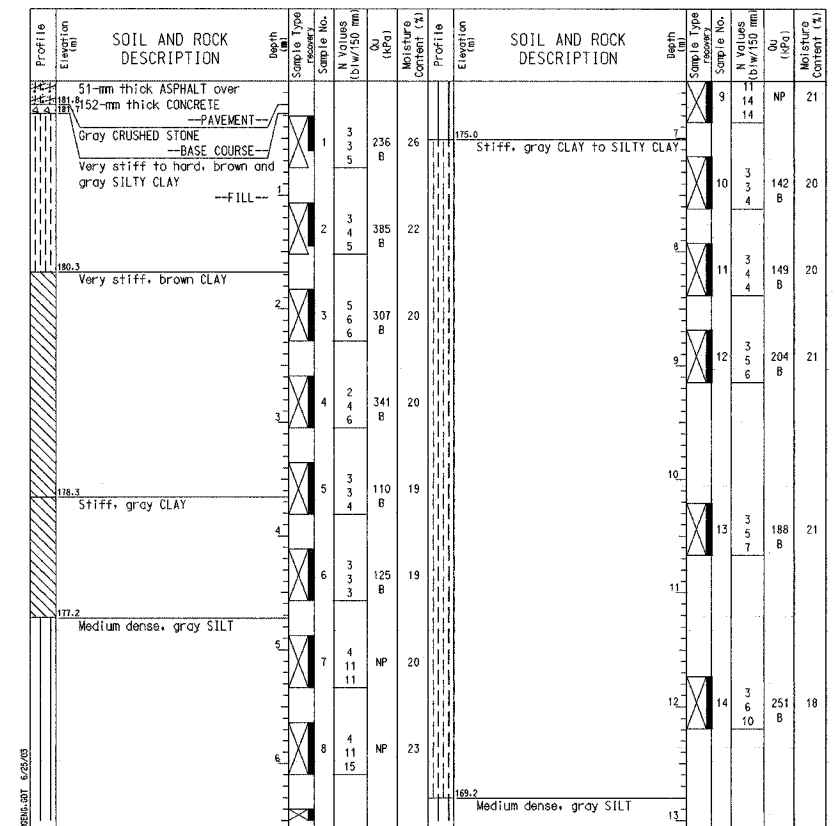
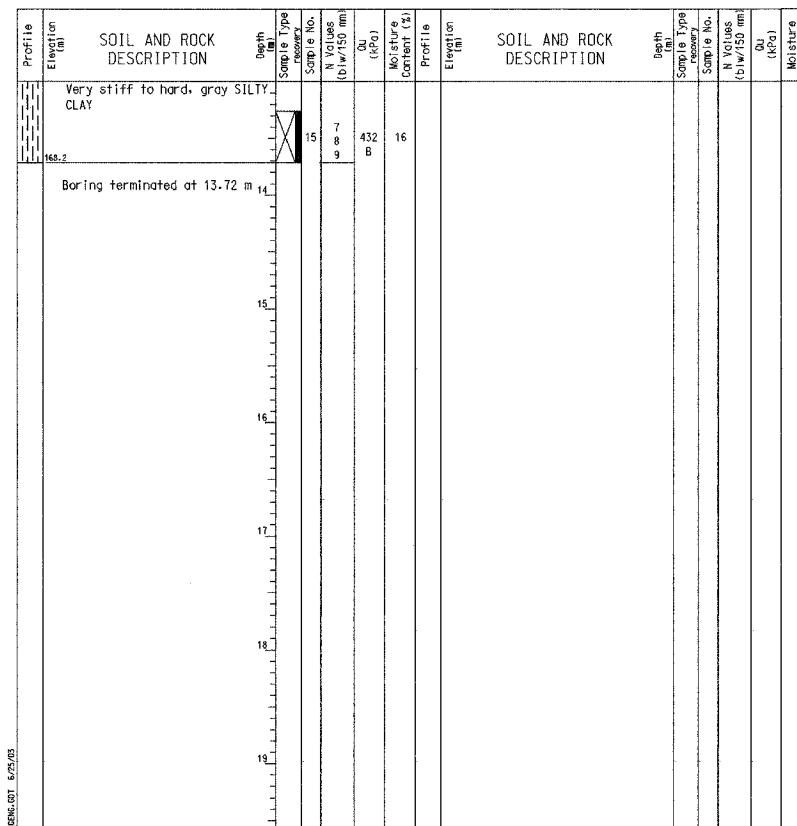
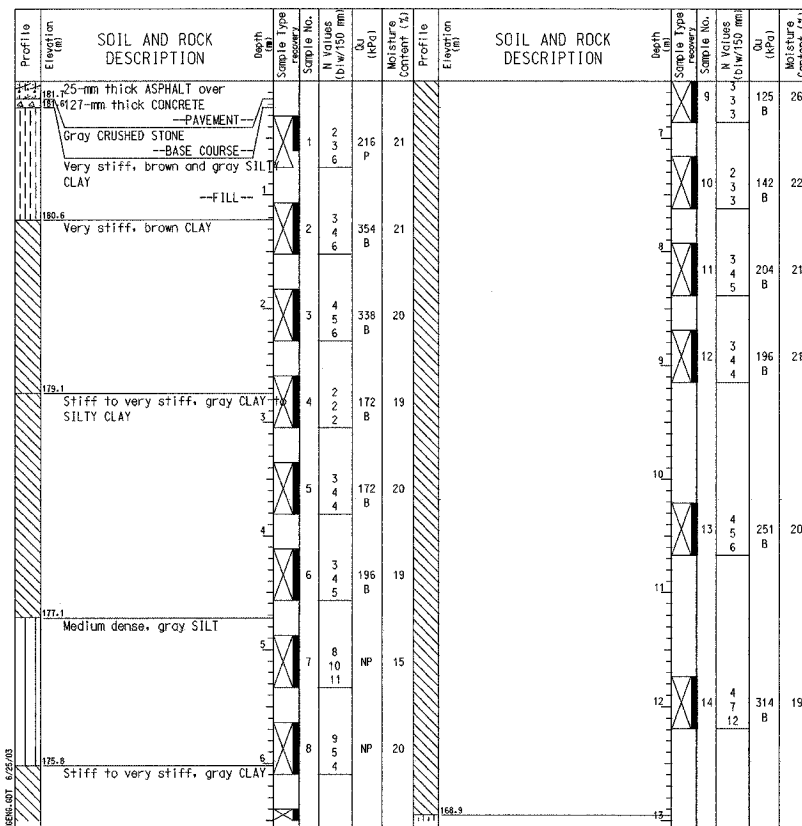
BORING LOG AR-032 Page 1 of 2

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

Datum: USGS
Elevation: 181.97 m
North: 545482.27 m
East: 366341.94 m
Station: 6 +905.26
Offset: 33.39 RT

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



GENERAL NOTES

Begin Drilling 09-25-2001 Complete Drilling 09-25-2001

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 09-25-2001 Complete Drilling 09-25-2001

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 09-24-2001 Complete Drilling 09-24-2001

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.L. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

BORING LOGS (1 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6 + 850.000 to STATION 7 + 400.281
STRUCTURE NO. 016-W873

DATE 07/05

AMERICAN
CONSULTING ENGINEERS

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BORING NO. AR-032 (2 OF 2)

BORING NO. AR-033 (1 OF 2)

BORING NO. AR-033 (2 OF 2)

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

BORING LOG AR-032
 WEI Job No.: 255-08-01
 Datum: USGS
 Elevation: 181.97 m
 North: 545482.27 m
 East: 366341.94 m
 Station: 6 +905.26
 Offset: 33.39 RT

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

Page 2 of 2

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

BORING LOG AR-033
 WEI Job No.: 255-08-01
 Datum: USGS
 Elevation: 182.03 m
 North: 545482.82 m
 East: 366365.11 m
 Station: 6 +928.43
 Offset: 33.11 RT

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

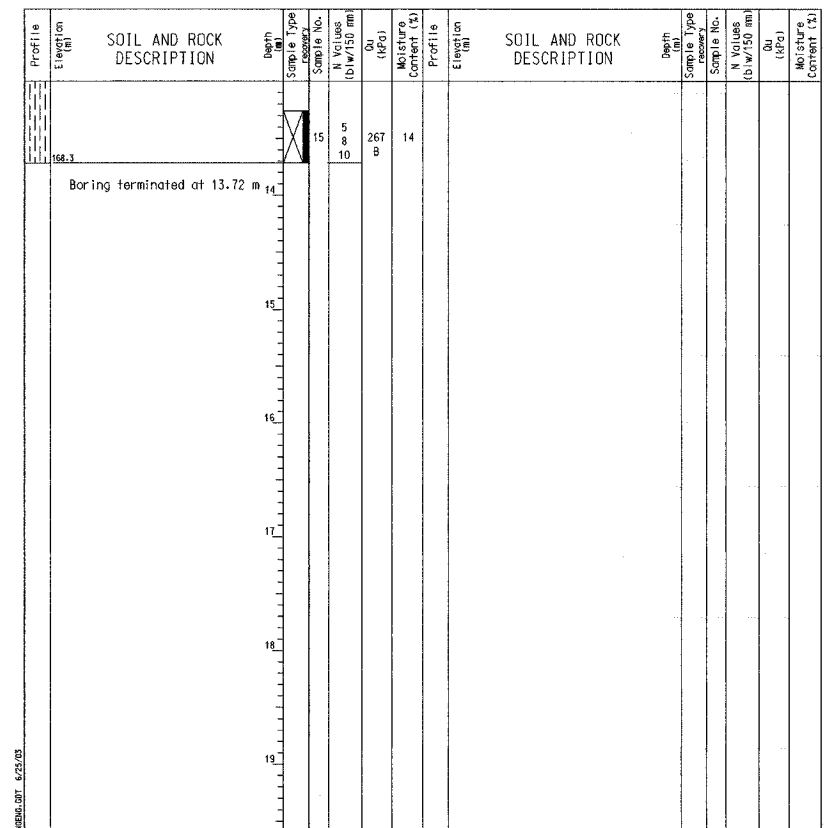
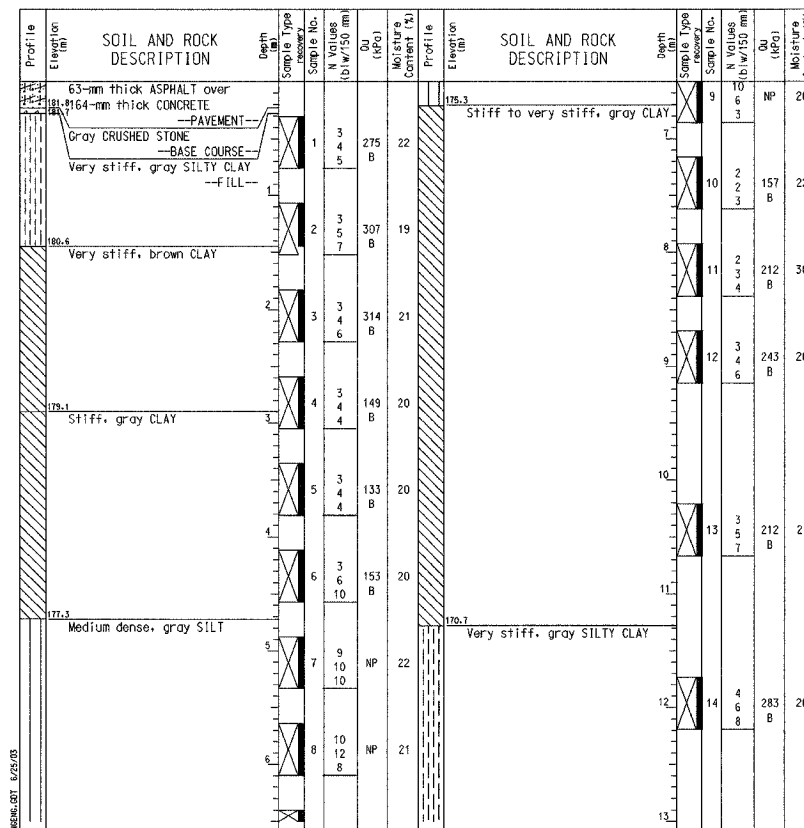
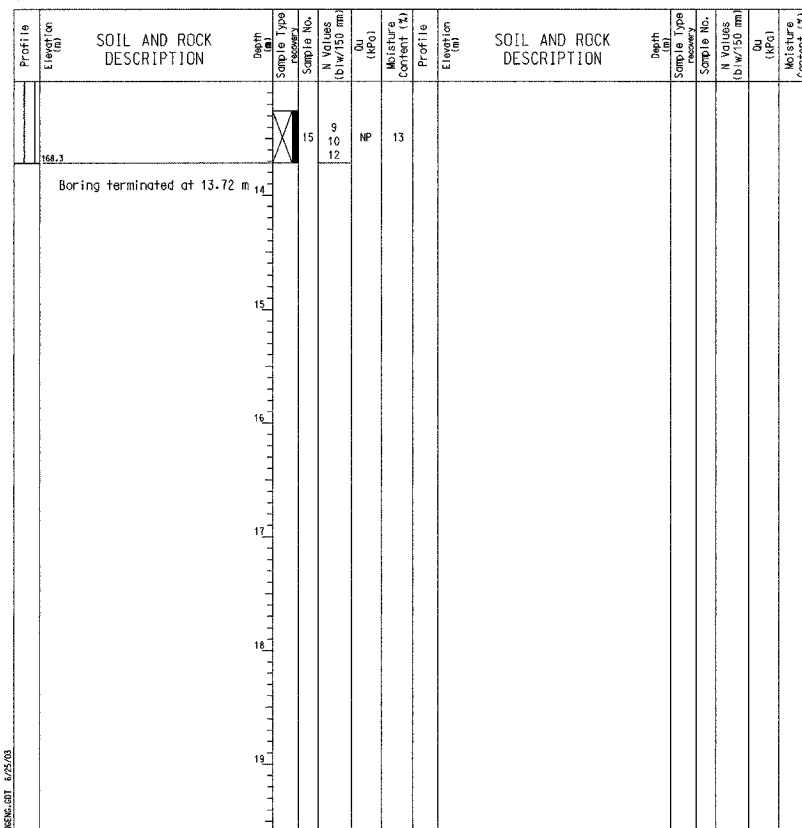
Page 1 of 2

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

BORING LOG AR-033
 WEI Job No.: 255-08-01
 Datum: USGS
 Elevation: 182.03 m
 North: 545482.82 m
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 Station: 6 +928.43
 Offset: 33.11 RT

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

Page 2 of 2



GENERAL NOTES Begin Drilling 09-24-2001 Complete Drilling 09-24-2001 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 <input checked="" type="checkbox"/> DRY At Completion of Drilling <input checked="" type="checkbox"/> DRY Time After Drilling NA Depth to Water <input checked="" type="checkbox"/> NA <small>The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.</small>
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GENERAL NOTES Begin Drilling 09-21-2001 Complete Drilling 09-21-2001 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 <input checked="" type="checkbox"/> DRY At Completion of Drilling <input checked="" type="checkbox"/> DRY Time After Drilling NA Depth to Water <input checked="" type="checkbox"/> NA <small>The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.</small>
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GENERAL NOTES Begin Drilling 09-21-2001 Complete Drilling 09-21-2001 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 <input checked="" type="checkbox"/> DRY At Completion of Drilling <input checked="" type="checkbox"/> DRY Time After Drilling NA Depth to Water <input checked="" type="checkbox"/> NA <small>The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.</small>
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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 (2 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873
 DATE 07/05
AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-034 (1 OF 1)

BORING NO. AR-035 (1 OF 2)

BORING NO. AR-035 (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	BORING LOG AR-034 WEI Job No.: 255-08-01	Datum: USGS Elevation: m North: m East: m Station: m Offset:
	Client: American Consulting Engineers	Project: FAI 80/94, I-294 to US 41
	Location: s13 T36N R10W & s29 R15E T36N	
	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	BORING LOG AR-035 WEI Job No.: 255-08-01	Datum: USGS Elevation: 181.83 m North: 545483.03 m East: 366405.58 m Station: 6 +968.9 Offset: 33.36 RT
	Client: American Consulting Engineers	Project: FAI 80/94, I-294 to US 41
	Location: s13 T36N R10W & s29 R15E T36N	
	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	BORING LOG AR-035 WEI Job No.: 255-08-01	Datum: USGS Elevation: 181.83 m North: 545483.03 m East: 366405.58 m Station: 6 +968.9 Offset: 33.36 RT
	Client: American Consulting Engineers	Project: FAI 80/94, I-294 to US 41
	Location: s13 T36N R10W & s29 R15E T36N	
	Page 2 of 2	

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Su (kPa)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Su (kPa)	Moisture Content (%)
188.1	Boring terminated at 0.00 m	0.00											

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Su (kPa)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Su (kPa)	Moisture Content (%)
188.4	37-mm thick ASPHALT over	0.00	1	307	19		188.4	37-mm thick ASPHALT over	0.00	1	307	19	
188.1	240-mm thick CONCRETE PAVEMENT	0.10	2				188.1	240-mm thick CONCRETE PAVEMENT	0.10	2			
188.1	Gray CRUSHED STONE BASE COURSE	0.50	3				188.1	Gray CRUSHED STONE BASE COURSE	0.50	3			
188.1	Very stiff, brown and gray SILTY CLAY	1.00	5				188.1	Very stiff, brown and gray SILTY CLAY	1.00	5			
188.6	FILL	1.50	2				188.6	FILL	1.50	2			
188.6	Very stiff to hard, brown CLAY	2.00	3				188.6	Very stiff to hard, brown CLAY	2.00	3			
188.6		2.50	4				188.6		2.50	4			
188.6		3.00	5				188.6		3.00	5			
188.6		3.50	6				188.6		3.50	6			
188.6	Stiff, gray CLAY	4.00	7				188.6	Stiff, gray CLAY	4.00	7			
188.6		4.50	8				188.6		4.50	8			
188.6		5.00	9				188.6		5.00	9			
188.6		5.50	10				188.6		5.50	10			
188.6		6.00	11				188.6		6.00	11			
188.6		6.50	12				188.6		6.50	12			
188.6	Medium dense, gray SILT	7.00	13				188.6	Medium dense, gray SILT	7.00	13			
188.6		7.50	14				188.6		7.50	14			
188.6		8.00	15				188.6		8.00	15			
188.6		8.50	16				188.6		8.50	16			
188.6		9.00	17				188.6		9.00	17			
188.6		9.50	18				188.6		9.50	18			
188.6		10.00	19				188.6		10.00	19			
188.6		10.50	20				188.6		10.50	20			
188.6	Very stiff to hard, gray SILTY CLAY	11.00	21				188.6	Very stiff to hard, gray SILTY CLAY	11.00	21			
188.6		11.50	22				188.6		11.50	22			
188.6		12.00	23				188.6		12.00	23			
188.6		12.50	24				188.6		12.50	24			
188.6	Stiff, gray CLAY to SILTY CLAY	13.00	25				188.6	Stiff, gray CLAY to SILTY CLAY	13.00	25			
188.6		13.50	26				188.6		13.50	26			
188.6		14.00	27				188.6		14.00	27			
188.6		14.50	28				188.6		14.50	28			
188.6		15.00	29				188.6		15.00	29			
188.6		15.50	30				188.6		15.50	30			
188.6		16.00	31				188.6		16.00	31			
188.6		16.50	32				188.6		16.50	32			
188.6		17.00	33				188.6		17.00	33			
188.6		17.50	34				188.6		17.50	34			
188.6		18.00	35				188.6		18.00	35			
188.6		18.50	36				188.6		18.50	36			
188.6		19.00	37				188.6		19.00	37			

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Su (kPa)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blows/150 mm)	Su (kPa)	Moisture Content (%)
188.1	Boring terminated at 13.72 m	13.72											

GENERAL NOTES Begin Drilling: Complete Drilling Drilling Contractor: Drill Rig Driller: Logger Checked by Drilling Method	WATER LEVEL DATA While Drilling: <input checked="" type="checkbox"/> At Completion of Drilling: <input checked="" type="checkbox"/> 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: 09-21-2001 Complete Drilling: 09-21-2001 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: <input checked="" type="checkbox"/> DRY At Completion of Drilling: <input checked="" type="checkbox"/> 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: 09-21-2001 Complete Drilling: 09-21-2001 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: <input checked="" type="checkbox"/> DRY At Completion of Drilling: <input checked="" type="checkbox"/> 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 (3 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6 + 850.000 TO STATION 7 + 400.281
STRUCTURE NO. 016-W873
 DATE 07/05

FOR INFORMATION ONLY

BORING NO. AR-036 (1 OF 2)

BORING NO. AR-036 (2 OF 2)

BORING NO. AR-037 (1 OF 2)

BORING LOG AR-036 Page 1 of 2

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Telephone: 630 458-0700
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WEI Job No.: 255-08-01

Datum: USGS
Elevation: 181.92 m
North: 545483.76 m
East: 366433.97 m
Station: 6 +997.3
Offset: 32.95 RT

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

BORING LOG AR-036 Page 2 of 2

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

WEI Job No.: 255-08-01

Datum: USGS
Elevation: 181.92 m
North: 545483.76 m
East: 366433.97 m
Station: 6 +997.3
Offset: 32.95 RT

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

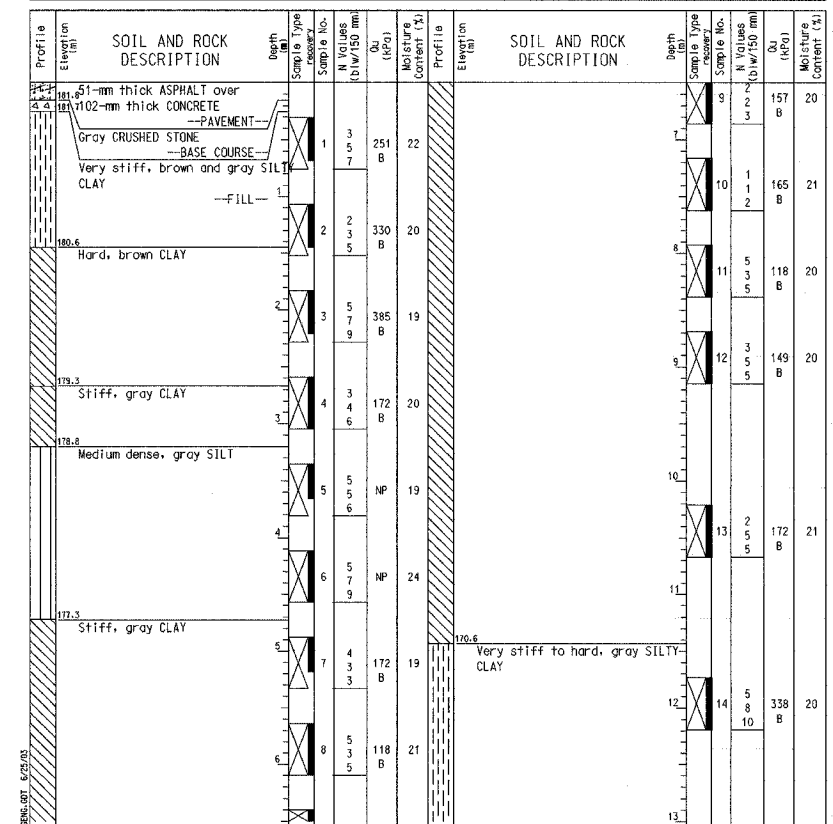
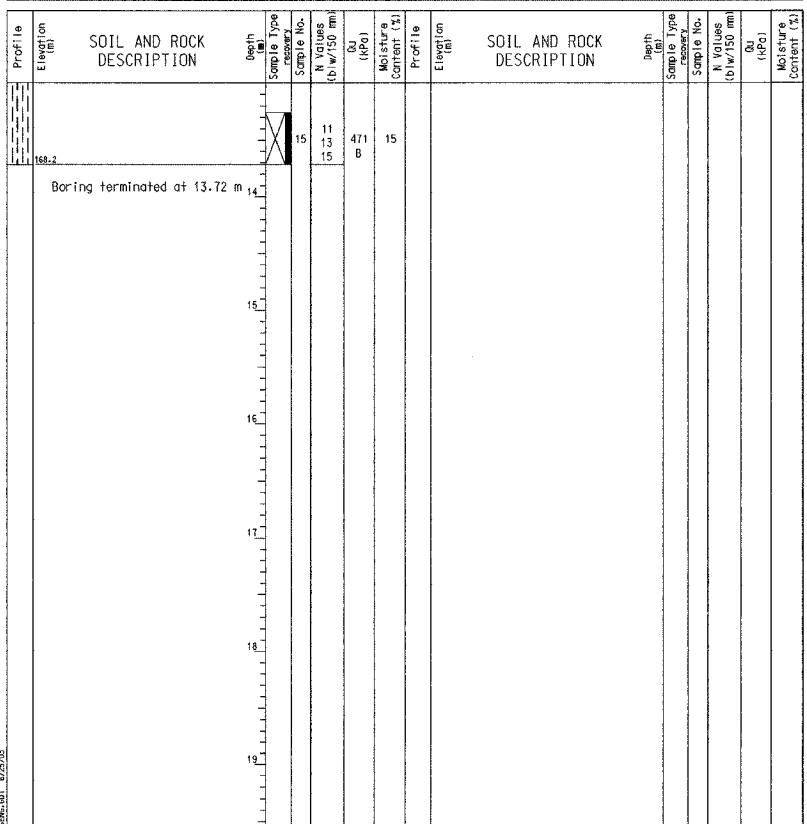
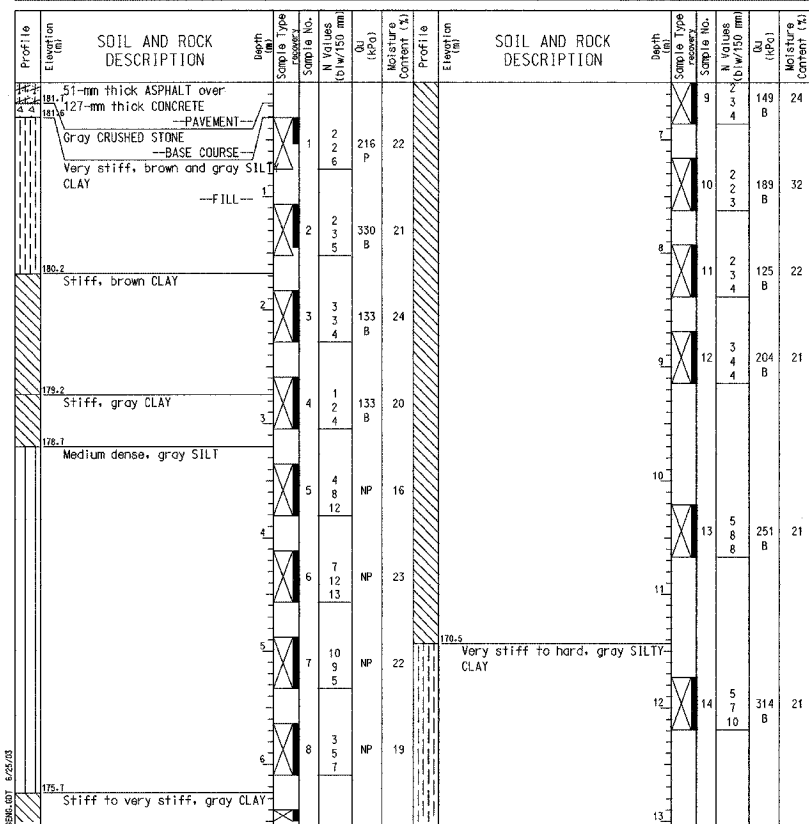
BORING LOG AR-037 Page 1 of 2

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

WEI Job No.: 255-08-01

Datum: USGS
Elevation: 182.00 m
North: 545483.49 m
East: 366455.29 m
Station: 7 +408.61
Offset: 33.47 RT

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



GENERAL NOTES

Begin Drilling 09-24-2001 Complete Drilling 09-24-2001

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 09-24-2001 Complete Drilling 09-24-2001

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 09-21-2001 Complete Drilling 09-21-2001

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 (4 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873

DATE 07/05

AMERICAN CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-037 (2 OF 2)

BORING NO. AR-038 (1 OF 2)

BORING NO. AR-038 (2 OF 2)

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BORING LOG AR-037
 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: 182.00 m
 North: 545483.49 m
 East: 366455.29 m
 Station: 7 +018.61
 Offset: 33.41 RT

Page 2 of 2

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BORING LOG AR-038
 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: 182.60 m
 North: 545496.54 m
 East: 366478.65 m
 Station: 7 +042.12
 Offset: 20.69 RT

Page 1 of 2

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BORING LOG AR-038
 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: 182.60 m
 North: 545496.54 m
 East: 366478.65 m
 Station: 7 +042.12
 Offset: 20.69 RT

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Qu (kPa)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Qu (kPa)	Moisture Content (%)
188.3		15	5	7	417	14							
		10	7	10									
	Boring terminated at 13.72 m	14											

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Qu (kPa)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Qu (kPa)	Moisture Content (%)
188.2	Very stiff, dark gray to brown and gray SILTY CLAY LOAM to SILTY CLAY	1	2	4	204	20							
	--FILL--	1	3	4									
		1	4	5									
		1	5										
		2	2	3	330	18							
		2	5	7									
		2	3	5	354	18							
		2	5	7									
188.2	Hard, brown CLAY	3	2	3	385	19							
		3	3	5									
		3	5	7									
178.1	Stiff to very stiff, gray CLAY SILTY CLAY	4	2	5	181	20							
		4	5	7									
		4	2	3	157	19							
		4	3	6									
		4	7	3	157	20							
		4	3	5									
		4	3	4	157	18							
		4	4	5									
		4	8										

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Qu (kPa)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Qu (kPa)	Moisture Content (%)
188.3		15	4	5	299	19							
		15	5	8									
	Hard, gray SILTY CLAY	15											
187.4		16	6	10	440	12							
		16	10	11									
	Boring terminated at 15.24 m	16											

GENERAL NOTES
 Begin Drilling 09-21-2001 Complete Drilling 09-21-2001
 Drilling Contractor TSC Drilling 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 10-22-2001 Complete Drilling 10-22-2001
 Drilling Contractor TSC Drilling 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 10-22-2001 Complete Drilling 10-22-2001
 Drilling Contractor TSC Drilling 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 (5 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-039 (1 OF 2)

BORING NO. AR-039 (1 OF 2)

BORING NO. AR-040 (1 OF 2)

BORING LOG AR-039 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: 182.49 m
 North: 545496.84 m
 East: 366501.39 m
 Station: 7 +064.86
 Offset: 20.65 RT

BORING LOG AR-039 Page 2 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: 182.49 m
 North: 545496.84 m
 East: 366501.39 m
 Station: 7 +064.86
 Offset: 20.65 RT

BORING LOG AR-040 Page 1 of 2

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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: 182.45 m
 North: 545496.94 m
 East: 366524.89 m
 Station: 7 +088.36
 Offset: 20.82 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	N Values (blows/150 mm)	CU (kPa)	Moisture Content (%)
182.4	Very stiff, dark brown to brown and gray SILTY CLAY LOAM to SILTY CLAY --FILL--	1	3	2	192	24	19
182.4		2	4	4			
182.4		3	5	5			
180.8	Very stiff to hard, brown CLAY	2	2	6	369	19	
180.8		3	4	6			
180.8		4	5	5			
178.3	Stiff, gray CLAY	3	3	5	267	22	
178.3		4	5	7			
178.5	Medium dense, gray SILT	4	3	5	181	21	
178.5		5	8	8			
177.8	Loose, gray SANDY LOAM	5	3	5	NP	22	
177.8		6	7	7			
177.0	Medium dense, gray SILT	6	3	5	NP	20	
177.0		7	6	6			
176.2	Medium stiff to very stiff, gray CLAY to SILTY CLAY	7	2	8	NP	20	
176.2		8	7	7			

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	N Values (blows/150 mm)	CU (kPa)	Moisture Content (%)
182.4	Stiff to very stiff, gray SILTY CLAY	1	15	4	260	20	
182.4		2	5	6			
182.4		3	6	6			
181.3	Boring terminated at 15.24 m	15	16	3	354	14	
181.3		16	7	7			

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	N Values (blows/150 mm)	CU (kPa)	Moisture Content (%)
181.7	Medium dense, black LOAM --FILL--	1	4	4	263	20	
181.7		2	5	5			
181.7		3	6	6			
175.1	Hard, brown and gray SILTY CLAY --FILL--	2	3	4	440	18	
175.1		3	5	5			
175.1		4	6	6			
180.3	Very stiff, brown CLAY	3	2	2	251	20	
180.3		3	3	3			
179.7	Stiff, gray CLAY	4	3	5	178	19	
179.7		4	7	7			
178.5	Medium dense, gray SILT	5	2	5	178	19	
178.5		5	8	8			
178.5		6	9	11	NP	23	
177.0	Stiff, gray CLAY	6	6	5	NP	21	
177.0		6	6	6			
177.0		7	5	6			
177.0		8	3	3	157	25	
177.0		8	3	3			

GENERAL NOTES

Begin Drilling 09-28-2001 Complete Drilling 09-28-2001
 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 09-28-2001 Complete Drilling 09-28-2001
 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 09-28-2001 Complete Drilling 09-28-2001
 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 (6 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6 + 850.000 to STATION 7 + 400.281
STRUCTURE NO. 016-W873
 DATE 07/05

AMERICAN
 CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-040 (2 OF 2)

BORING NO. AR-041 (1 OF 1)

BORING NO. AR-042 (1 OF 1)

BORING LOG AR-040 Page 2 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: 182.45 m
North: 545496.94 m
East: 366524.89 m
Station: 7 +088.36
Offset: 20.82 RT

BORING LOG AR-041 Page 1 of 1

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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: 182.26 m
North: 545496.46 m
East: 366548.10 m
Station: 7 +111.57
Offset: 21.56 RT

BORING LOG AR-042 Page 1 of 1

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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: 182.06 m
North: 545495.60 m
East: 366571.65 m
Station: 7 +135.1
Offset: 22.69 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Moisture Content (%)
188.7			15	7	307						
			8	8	B						
			8	8	B						
	Boring terminated at 13.72 m										

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Moisture Content (%)
181.5	Very stiff, black SILTY LOAM	1	2	220	27						
			5	5	B						
			5	5	B						
180.5	Very stiff, gray and black SILTY CLAY	2	3	275	21						
			4	4	B						
			4	4	B						
180.6	Hard, brown CLAY	3	2	393	20						
			4	4	B						
			4	4	B						
179.6	Stiff, gray CLAY	4	3	179	19						
			4	4	B						
			4	4	B						
			5	3	172	22					
			5	3	B						
			5	3	B						
			6	3	165	18					
			6	4	B						
			6	4	B						
			7	3	125	21					
			7	4	B						
			7	4	B						
			8	2	157	21					
			8	3	B						
			8	4	B						
	Boring terminated at 6.10 m										

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	N Values (blow/150 mm)	Moisture Content (%)
180.4	Very stiff, brown and gray SILTY CLAY	1	2	228	21						
			3	3	B						
			3	3	B						
			5	5	B						
180.4	Very stiff to hard, brown CLAY	2	3	283	22						
			3	3	B						
			3	3	B						
			5	3	393	23					
			5	5	B						
			5	5	B						
178.9	Medium stiff to stiff, gray CLAY	3	3	337	21						
			4	3	B						
			4	3	B						
			5	3	149	19					
			5	5	B						
			5	5	B						
			6	3	142	18					
			6	5	B						
			6	5	B						
			7	2	94	21					
			7	3	B						
			7	3	B						
			8	3	110	29					
			8	3	B						
			8	4	B						
	Boring terminated at 6.10 m										

GENERAL NOTES

Begin Drilling 09-28-2001 Complete Drilling 09-28-2001
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 09-28-2001 Complete Drilling 09-28-2001
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 09-20-2001 Complete Drilling 09-20-2001
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.

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 13)
SECTION 2001-167R
COOK COUNTY
STATION 6 + 850.000 to STATION 7 + 400.281
STRUCTURE NO. 016-W873
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-043 (1 OF 2)

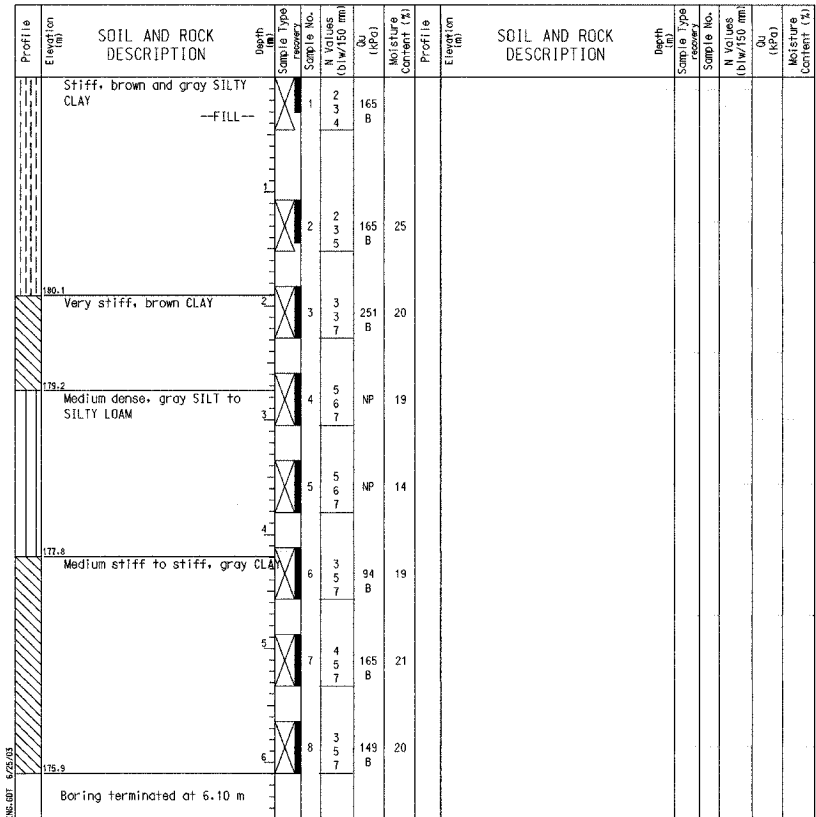
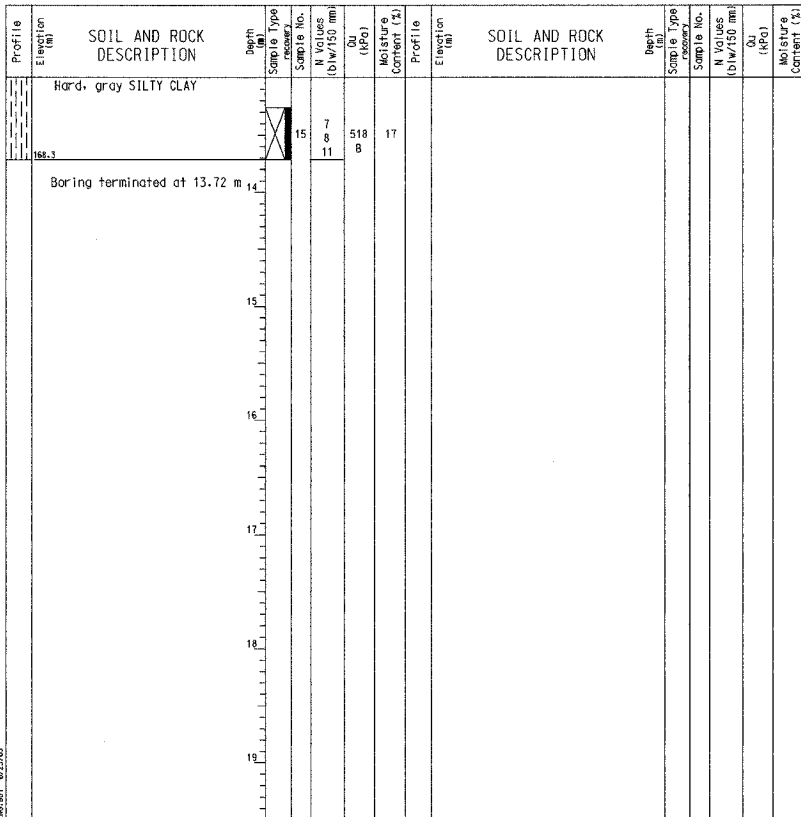
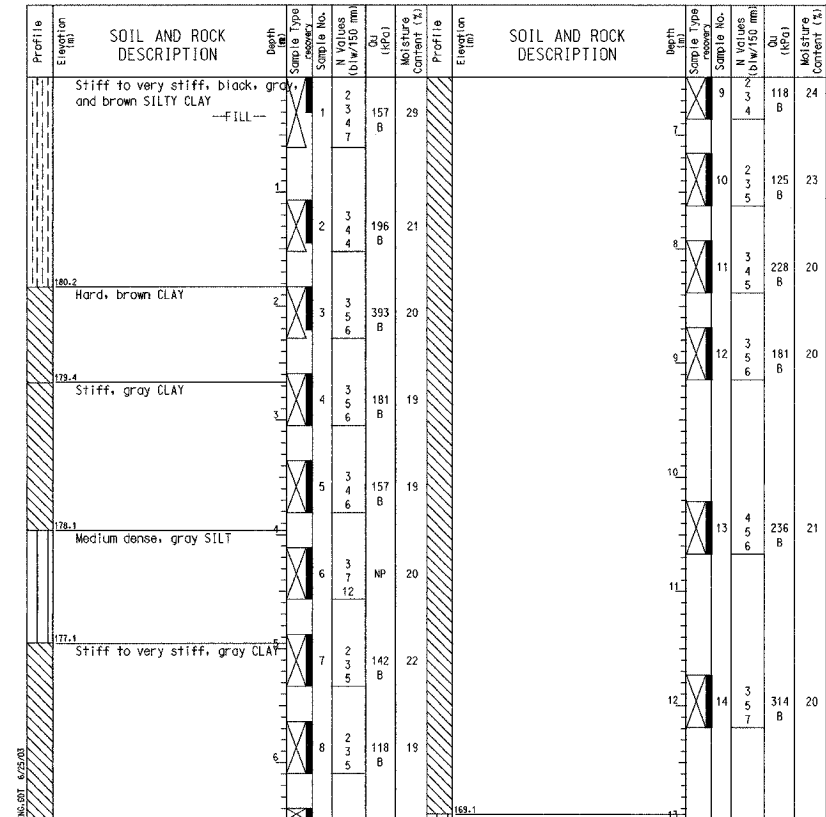
BORING NO. AR-043 (2 OF 2)

BORING NO. AR-044 (1 OF 1)

<p>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</p>	BORING LOG AR-043		Page 1 of 2
	WEI Job No.: 255-08-01		Datum: USGS
	Client: American Consulting Engineers	Address: 100 Fairbank Street, Addison, IL 60101	Elevation: 182.04 m
	Project: FAI 80/94- J-294 to US 41	Location: s13 T36N R10W & s29 R15E T36N	North: 545496.41 m East: 366594.04 m Station: 7 +157.5 Offset: 22.14 RT

<p>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</p>	BORING LOG AR-043		Page 2 of 2
	WEI Job No.: 255-08-01		Datum: USGS
	Client: American Consulting Engineers	Address: 100 Fairbank Street, Addison, IL 60101	Elevation: 182.04 m
	Project: FAI 80/94- J-294 to US 41	Location: s13 T36N R10W & s29 R15E T36N	North: 545496.41 m East: 366594.04 m Station: 7 +157.5 Offset: 22.14 RT

<p>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</p>	BORING LOG AR-044		Page 1 of 1
	WEI Job No.: 255-08-01		Datum: USGS
	Client: American Consulting Engineers	Address: 100 Fairbank Street, Addison, IL 60101	Elevation: 181.98 m
	Project: FAI 80/94- J-294 to US 41	Location: s13 T36N R10W & s29 R15E T36N	North: 545495.81 m East: 366617.32 m Station: 7 +180.78 Offset: 23.00 RT



GENERAL NOTES Begin Drilling 10-22-2001 complete Drilling 10-22-2001 Drilling Contractor TSC Drill Rig B-61 Driller GSF Logger B. Fugiel checked by B. Fugiel Drilling Method 3.25-in. HSA; Grouted		WATER LEVEL DATA While Drilling <input checked="" type="checkbox"/> DRY At Completion of Drilling <input checked="" type="checkbox"/> DRY Time After Drilling NA Depth to Water <input checked="" type="checkbox"/> NA <small>The stratification Times represent the approximate boundary between soil types; the actual transition may be gradual.</small>	
--	--	---	--

GENERAL NOTES Begin Drilling 10-22-2001 complete Drilling 10-22-2001 Drilling Contractor TSC Drill Rig B-61 Driller GSF Logger B. Fugiel checked by B. Fugiel Drilling Method 3.25-in. HSA; Grouted		WATER LEVEL DATA While Drilling <input checked="" type="checkbox"/> DRY At Completion of Drilling <input checked="" type="checkbox"/> DRY Time After Drilling NA Depth to Water <input checked="" type="checkbox"/> NA <small>The stratification Times represent the approximate boundary between soil types; the actual transition may be gradual.</small>	
--	--	---	--

GENERAL NOTES Begin Drilling 09-20-2001 complete Drilling 09-20-2001 Drilling Contractor TSC Drill Rig B-61 Driller GSF Logger B. Fugiel checked by B. Fugiel Drilling Method 2.25-in. SSA; Backfilled		WATER LEVEL DATA While Drilling <input checked="" type="checkbox"/> DRY At Completion of Drilling <input checked="" type="checkbox"/> DRY Time After Drilling NA Depth to Water <input checked="" type="checkbox"/> NA <small>The stratification Times represent the approximate boundary between soil types; the actual transition may be gradual.</small>	
---	--	---	--

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 (8 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873

DATE 07/05

FOR INFORMATION ONLY

BORING NO. AR-045 (1 OF 2)

BORING NO. AR-045 (2 OF 2)

BORING NO. AR-046 (1 OF 1)

BORING LOG AR-045 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: 182.07 m
North: 545497.27 m
East: 366640.78 m
Station: 7 +204.25
Offset: 21.81 RT

BORING LOG AR-045 Page 2 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

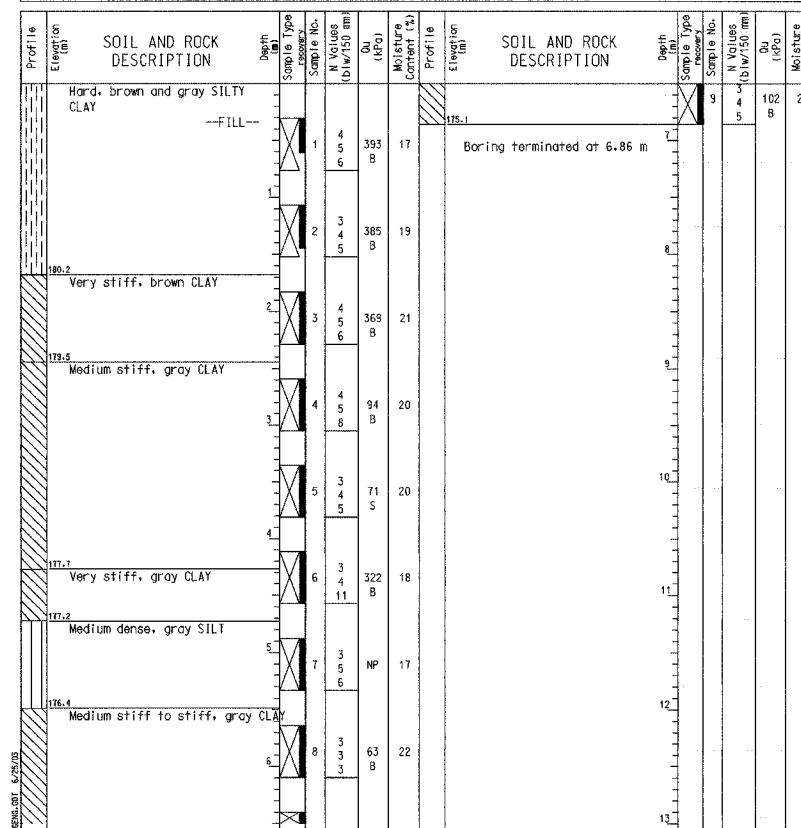
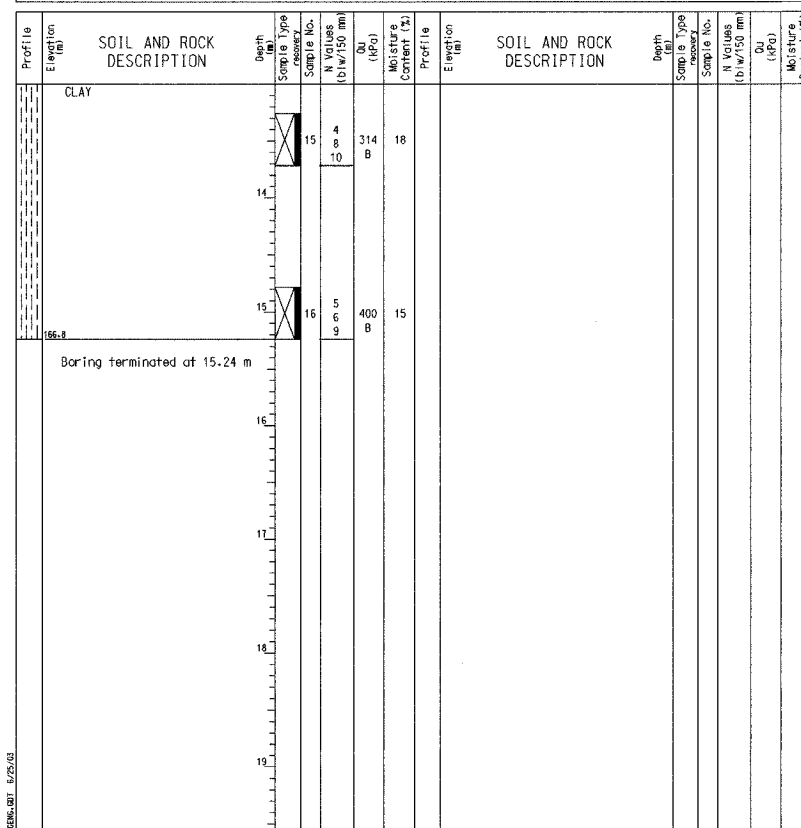
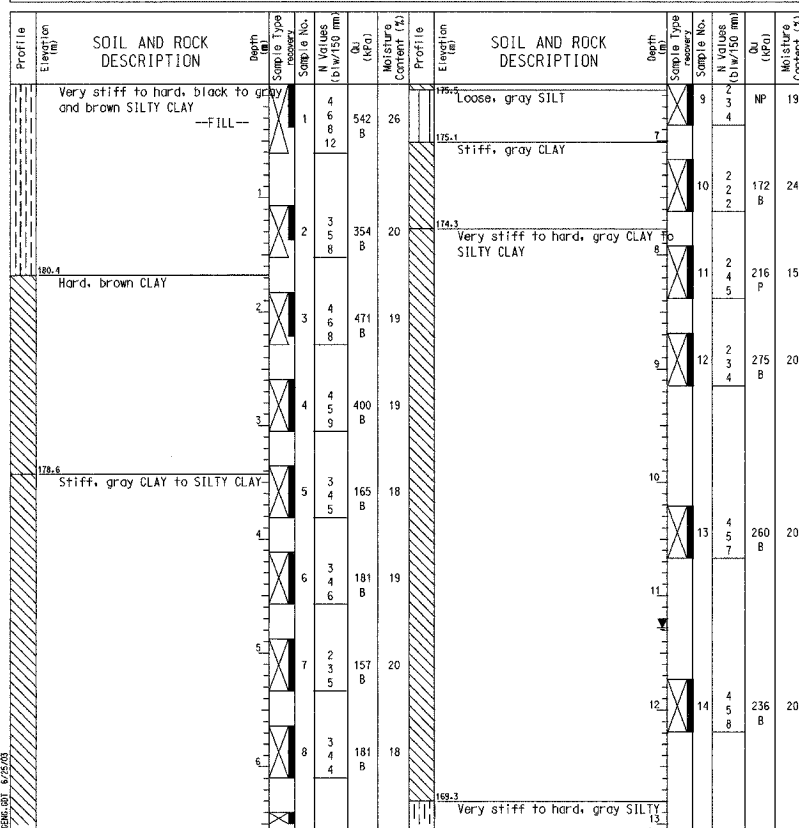
Datum: USGS
Elevation: 182.07 m
North: 545497.27 m
East: 366640.78 m
Station: 7 +204.25
Offset: 21.81 RT

BORING LOG AR-046 Page 1 of 1

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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: 181.92 m
North: 545495.72 m
East: 366664.21 m
Station: 7 +227.66
Offset: 23.63 RT



GENERAL NOTES

Begin Drilling 10-18-2001 Complete Drilling 10-18-2001

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 11.28 m

At Completion of Drilling 11.28 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.

GENERAL NOTES

Begin Drilling 10-18-2001 Complete Drilling 10-18-2001

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 11.28 m

At Completion of Drilling 11.28 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.

GENERAL NOTES

Begin Drilling 09-20-2001 Complete Drilling 09-20-2001

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.

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 (9 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6 + 850.000 to STATION 7 + 400.281
STRUCTURE NO. 016-W873

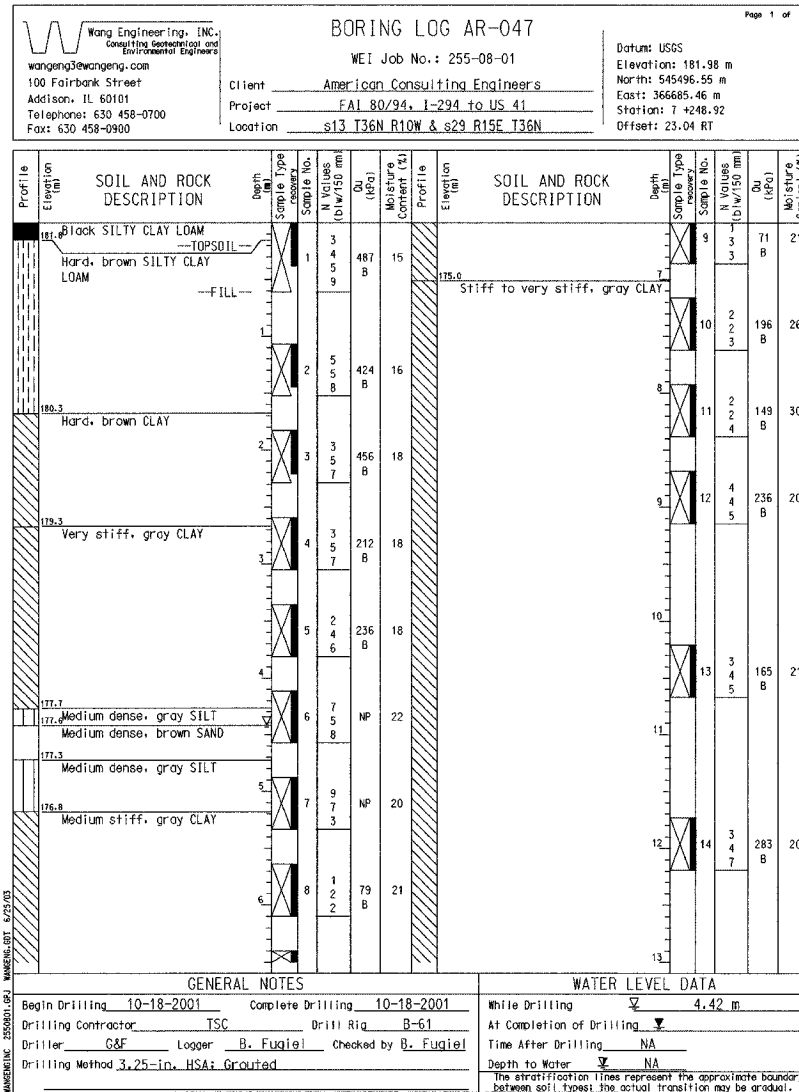
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

BORING NO. AR-047 (1 OF 2)

BORING NO. AR-047 (2 OF 2)

BORING NO. AR-048 (1 OF 1)



BORING NO. AR-049 (1 OF 2)

BORING NO. AR-049 (2 OF 2)

BORING NO. AR-050 (1 OF 1)

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Fax: 630 458-0900

BORING LOG AR-049 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: 182.19 m
North: 545498.14 m
East: 366732.12 m
Station: 7 +295.59
Offset: 21.98 RT

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Consulting Geotechnical and Environmental Engineers
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Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

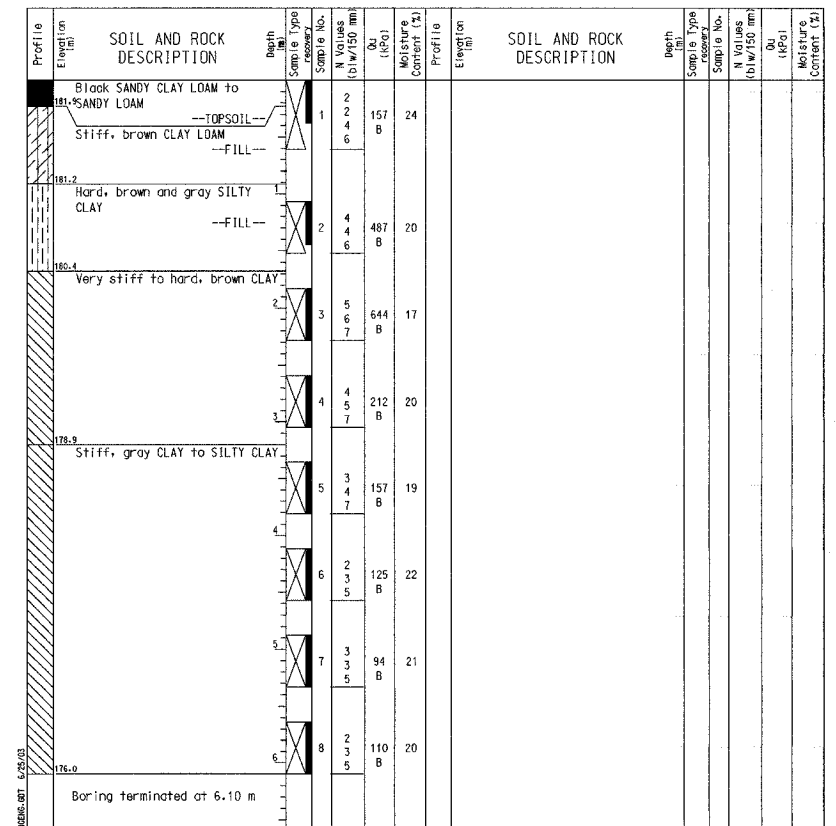
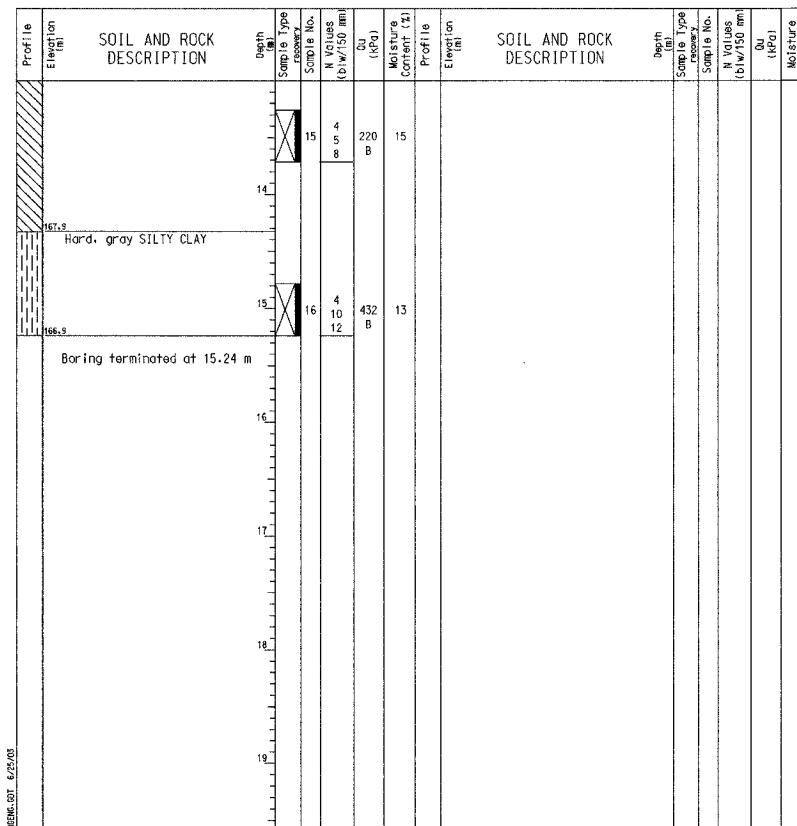
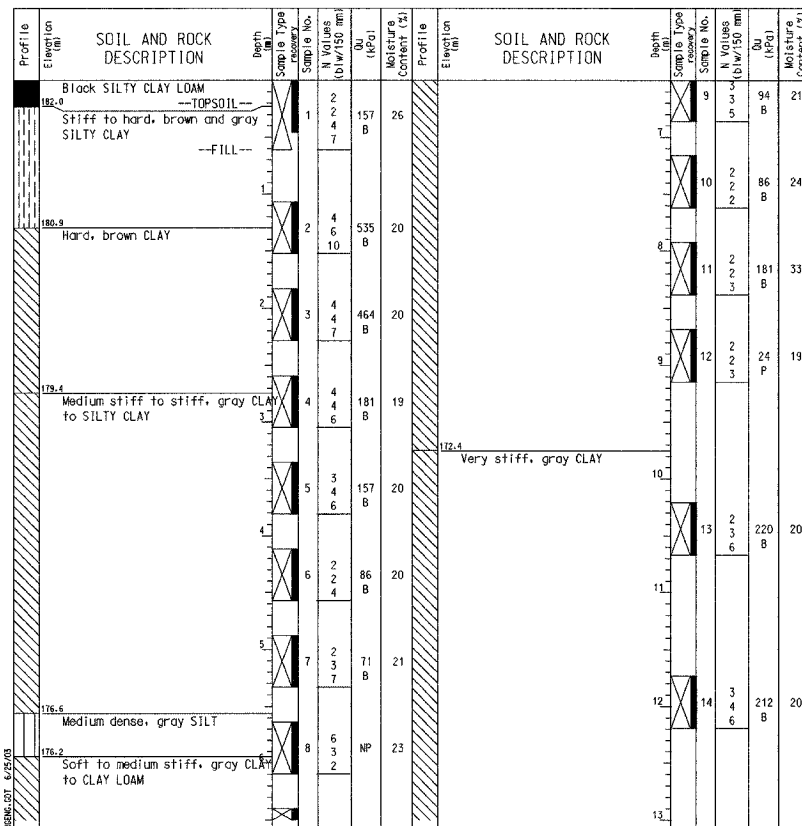
BORING LOG AR-049 Page 2 of 2
WEI Job No.: 255-08-01
Client: American Consulting Engineers
Project: FAI 80/94, I-294 to US 41
Location: s13 T36N R10W & s29 R15E T36N

Datum: USGS
Elevation: 182.19 m
North: 545498.14 m
East: 366732.12 m
Station: 7 +295.59
Offset: 21.98 RT

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BORING LOG AR-050 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: 182.11 m
North: 545498.37 m
East: 366754.95 m
Station: 7 +318.43
Offset: 22.01 RT



GENERAL NOTES
Begin Drilling 10-09-2001 Complete Drilling 10-09-2001
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 10-09-2001 Complete Drilling 10-09-2001
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 10-09-2001 Complete Drilling 10-09-2001
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.

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 (11 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

BORING NO. AR-051 (1 OF 2)

BORING NO. AR-051 (2 OF 2)

BORING NO. AR-052 (1 OF 1)

W Wang Engineering, INC.
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wangeng3@wawang.com
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Addison, IL 60101
Telephone: 630 458-0700
Fax: 630 458-0900

BORING LOG AR-051
WEI Job No.: 255-08-01
Datum: USGS
Elevation: 181.55 m
North: 545496.16 m
East: 366776.01 m
Stations: 7+439.45
Offset: 24.46 RT

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

Page 1 of 2

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Fax: 630 458-0900

BORING LOG AR-051
WEI Job No.: 255-08-01
Datum: USGS
Elevation: 181.55 m
North: 545496.16 m
East: 366776.01 m
Stations: 7+439.45
Offset: 24.46 RT

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

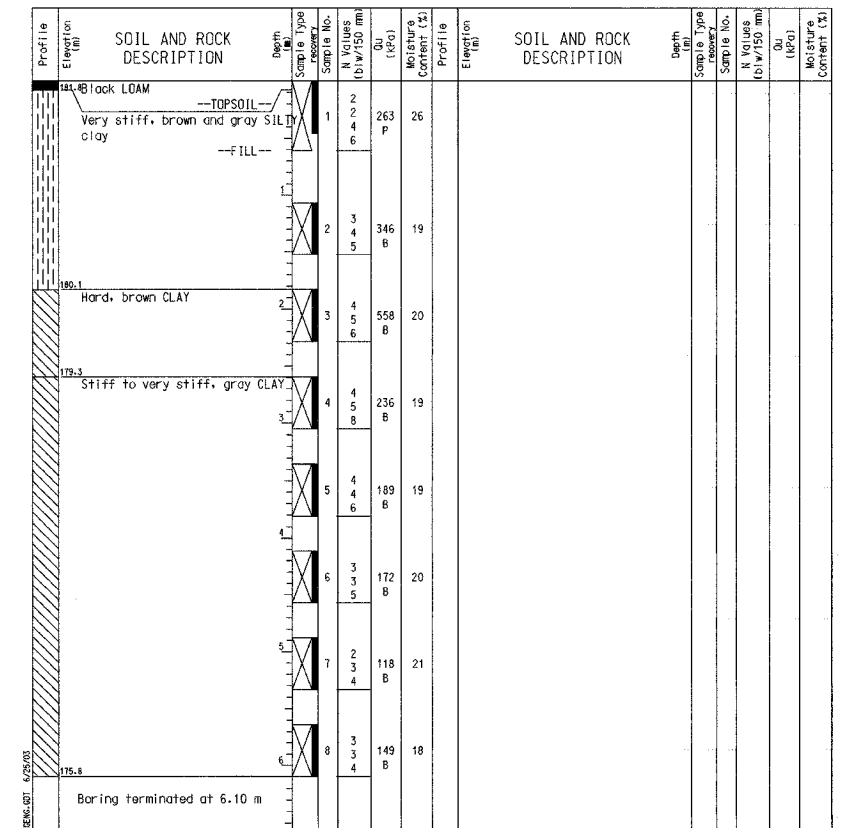
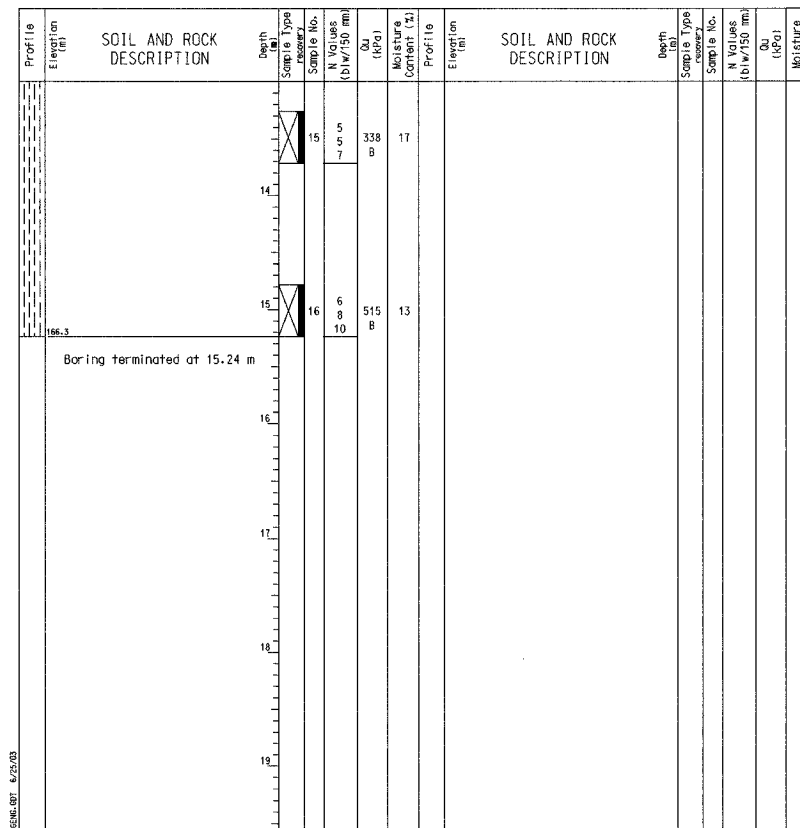
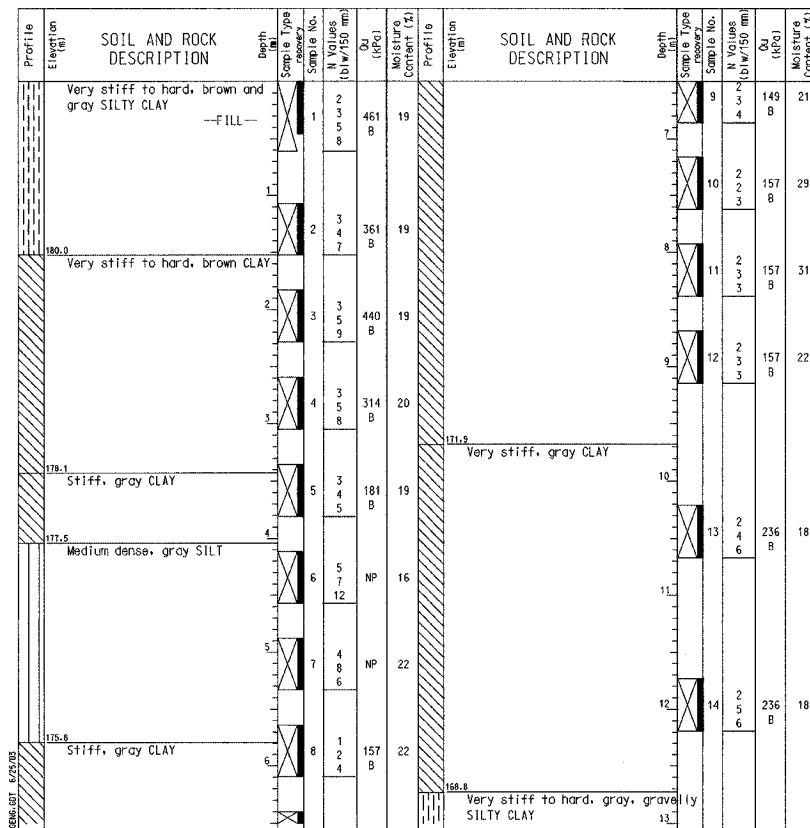
Page 2 of 2

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Telephone: 630 458-0700
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BORING LOG AR-052
WEI Job No.: 255-08-01
Datum: USGS
Elevation: 181.90 m
North: 545497.52 m
East: 366801.02 m
Stations: 7+464.48
Offset: 23.39 RT

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

Page 1 of 1



GENERAL NOTES
Begin Drilling 10-09-2001 Complete Drilling 10-09-2001
Drilling Contractor TSC Drill Rig B-61
Driller G&F Logger B. Fugiel checked by L. Jardache
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 10-09-2001 Complete Drilling 10-09-2001
Drilling Contractor TSC Drill Rig B-61
Driller G&F Logger B. Fugiel checked by L. Jardache
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 09-20-2001 Complete Drilling 09-20-2001
Drilling Contractor TSC Drill Rig B-61
Driller G&F Logger B. Fugiel checked by L. Jardache
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 (12 OF 13)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+400.281
STRUCTURE NO. 016-W873
DATE 07/05


AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY

1:\projects\016_w873\07_05_05\07_05_05_02_33_02.dwg

BORING NO. AR-053 (1 OF 2)


BORING NO. AR-053 (2 OF 2)


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BORING LOG AR-053
 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: 182.09 m
 North: 545498.73 m
 East: 366821.34 m
 Station: 7 +384.87
 Offset: 22.40 RT

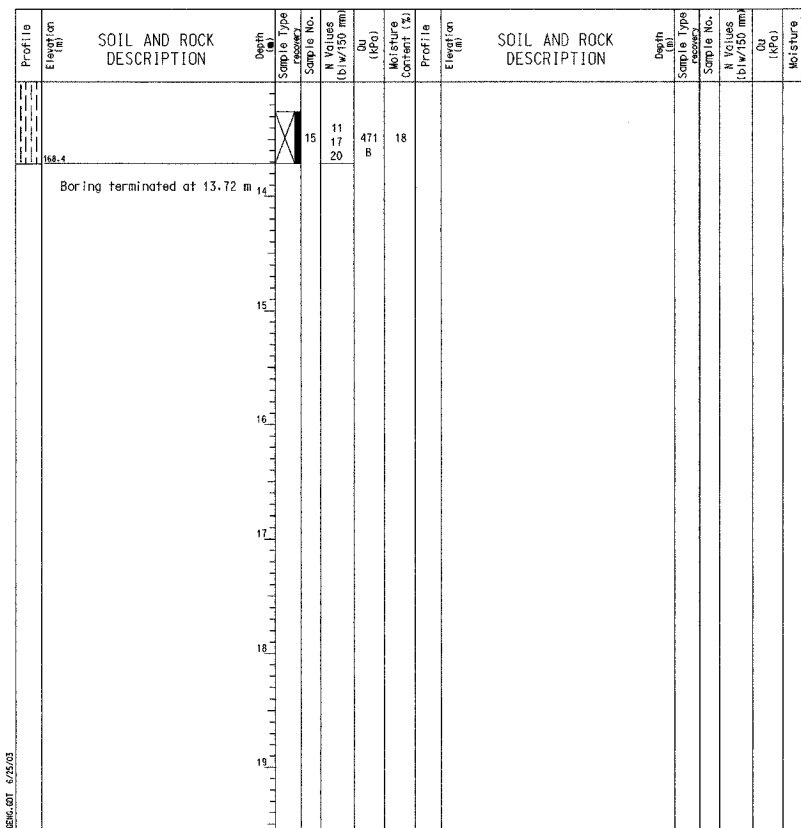
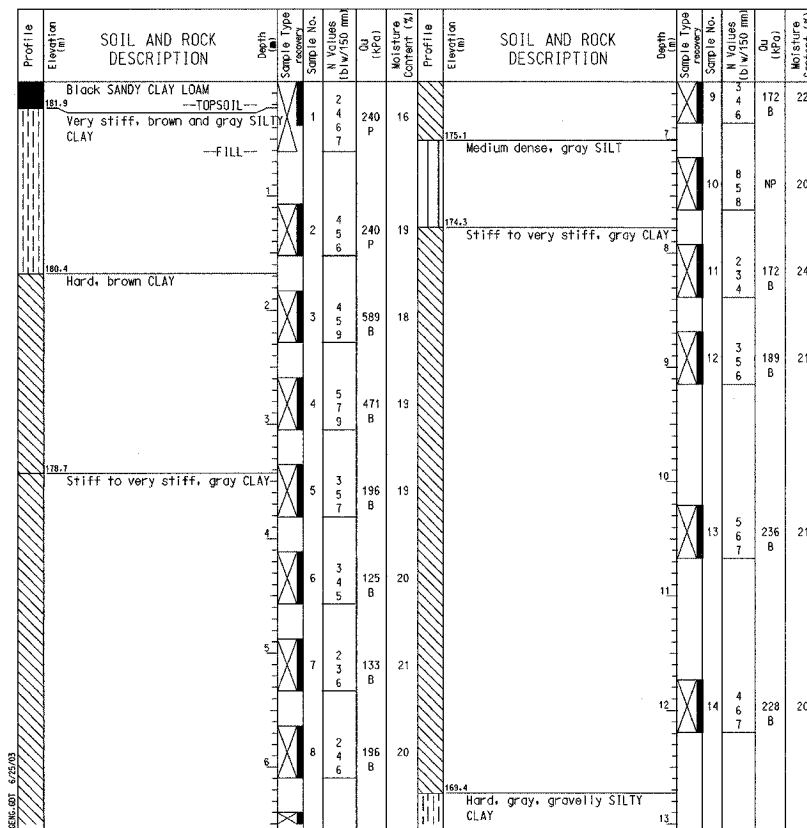
Page 1 of 2


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 Fax: 630 458-0900

BORING LOG AR-053
 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: 182.09 m
 North: 545498.73 m
 East: 366821.34 m
 Station: 7 +384.87
 Offset: 22.40 RT

Page 2 of 2




GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling 10-22-2001	Complete Drilling 10-22-2001	White Drilling	DRY
Drilling Contractor TSC	Drill Rig B-61	At Completion of Drilling	DRY
Driller G&F	Logger B. Fugiel	Time After Drilling	NA
Checked by L. Iordache		Depth to Water	NA
Drilling Method 3.25-in. HSA; Grouted		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling 10-22-2001	Complete Drilling 10-22-2001	White Drilling	DRY
Drilling Contractor TSC	Drill Rig B-61	At Completion of Drilling	DRY
Driller G&F	Logger B. Fugiel	Time After Drilling	NA
Checked by L. Iordache		Depth to Water	NA
Drilling Method 3.25-in. HSA; Grouted		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

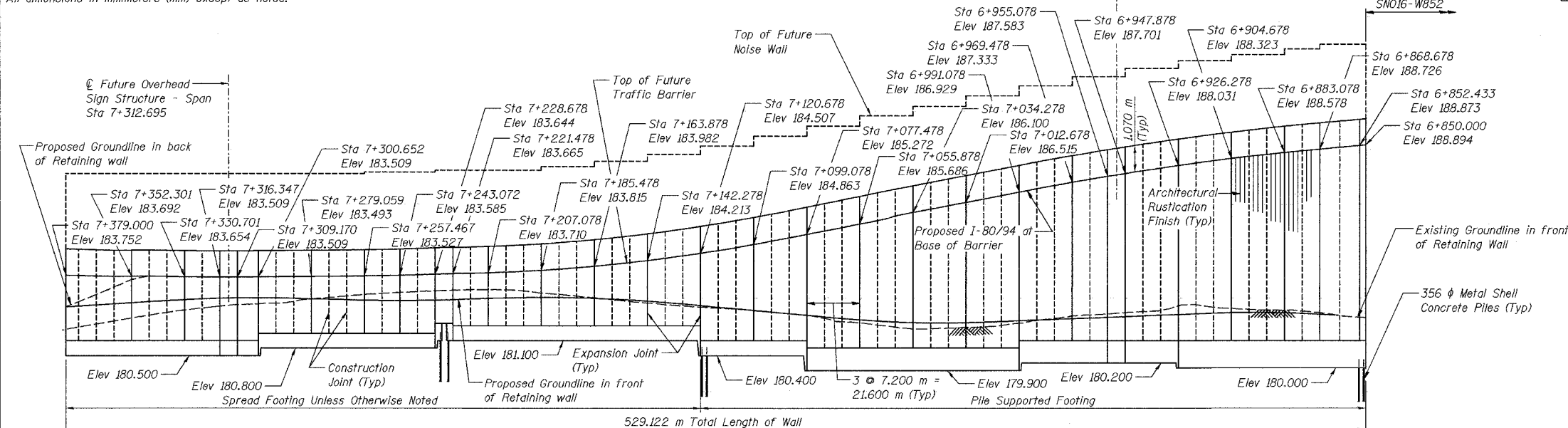
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION
BORING LOGS (13 OF 13)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6 + 850.000 to STATION 7 + 400.281
 STRUCTURE NO. 016-W873
 DATE 07/05



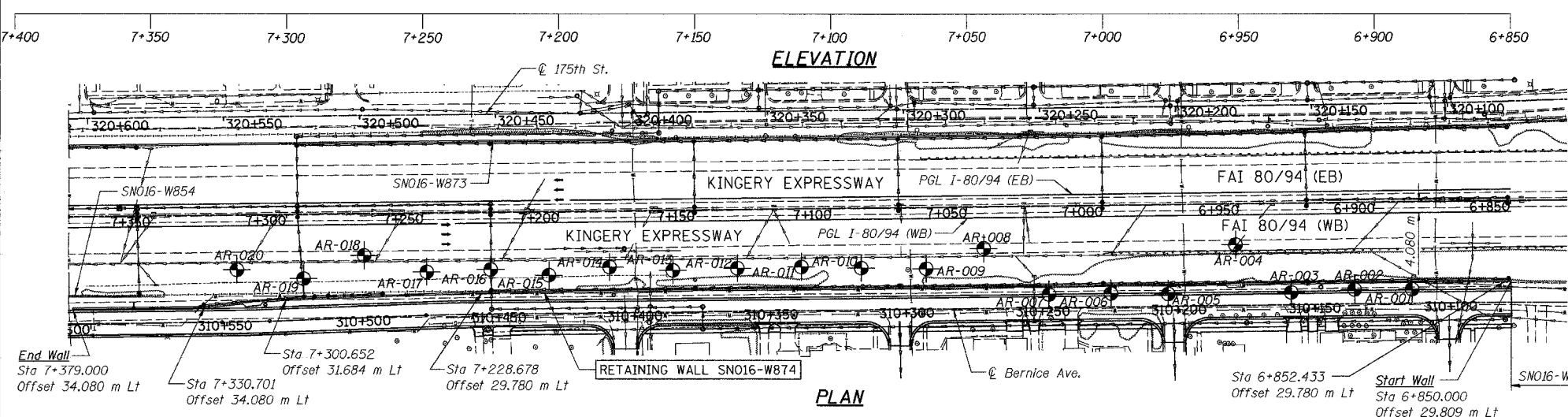
FOR INFORMATION ONLY

Benchmark: Chiseled "x" on sign bolt (SW). Sign reads "Calumet City Lansing Exit 161" westbound I-80 across from mile marker 163.01, Elev. = 182.212
 Existing Structure: None
 All dimensions in millimeters (mm) except as noted.

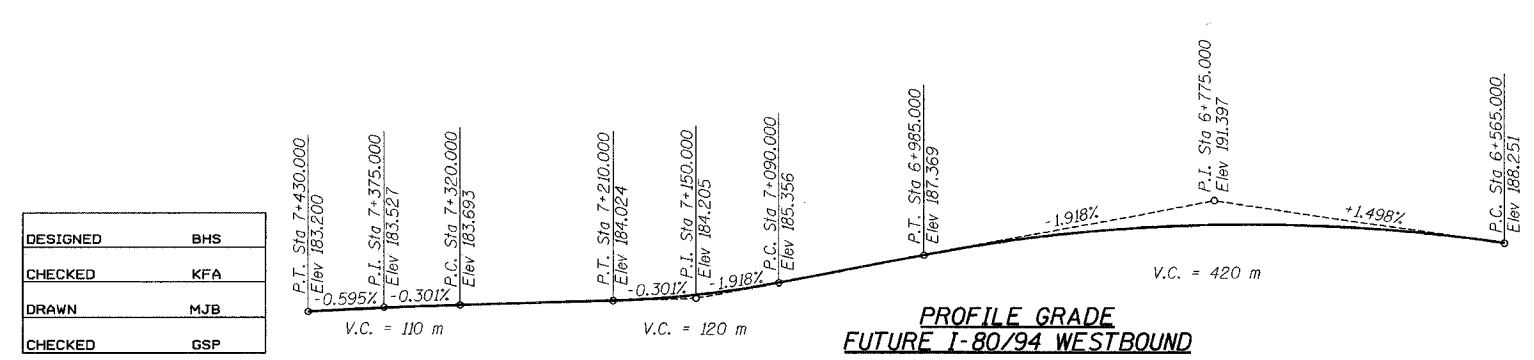
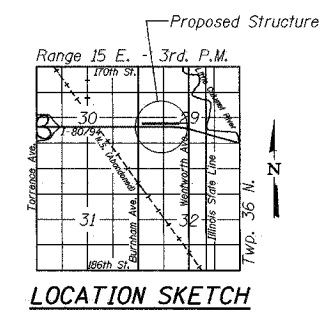
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. S-1 35 SHEETS
F.A.I.	2001-167R	COOK	1207	983	
CONTRACT No. 62114					



- LEGEND**
- ⊙ - Soil Boring Location
 - - - Existing Roadway/Structure
 - Proposed Roadway/Structure
 - ⊙ - Tree
 - Shrubs/Brush
 - Proposed Storm Sewer
 - Existing Storm Sewer
 - Existing Water Main
 - Existing Electricity Line
 - Existing Telephone Line



GARY S. POWELL, S.E.
 IL. LIC. NO. 081-004771
 EXP _____
 DATE _____



LOADING
 Wind Load on Future Noise Wall = 1.7 kPa

DESIGN STRESSES
 FIELD UNITS
 f'c = 24 MPa
 fy = 400 MPa (Reinf.)
 Maximum Applied Soil Bearing Pressure = 79 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
 Δ = 20°-11'-25°
 D = 2.979°
 R = 1923.6
 T = 342.476
 L = 677.849
 E = 30.249
 P.C. = 7+380.276
 P.I. = 7+722.751
 P.T. = 8+058.125
 S.E. = 2.9%

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
GENERAL PLAN
 SECTION 2001-167R
 COOK COUNTY
STATION 6+850.000 TO STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05
AMERICAN
 CONSULTING ENGINEERS

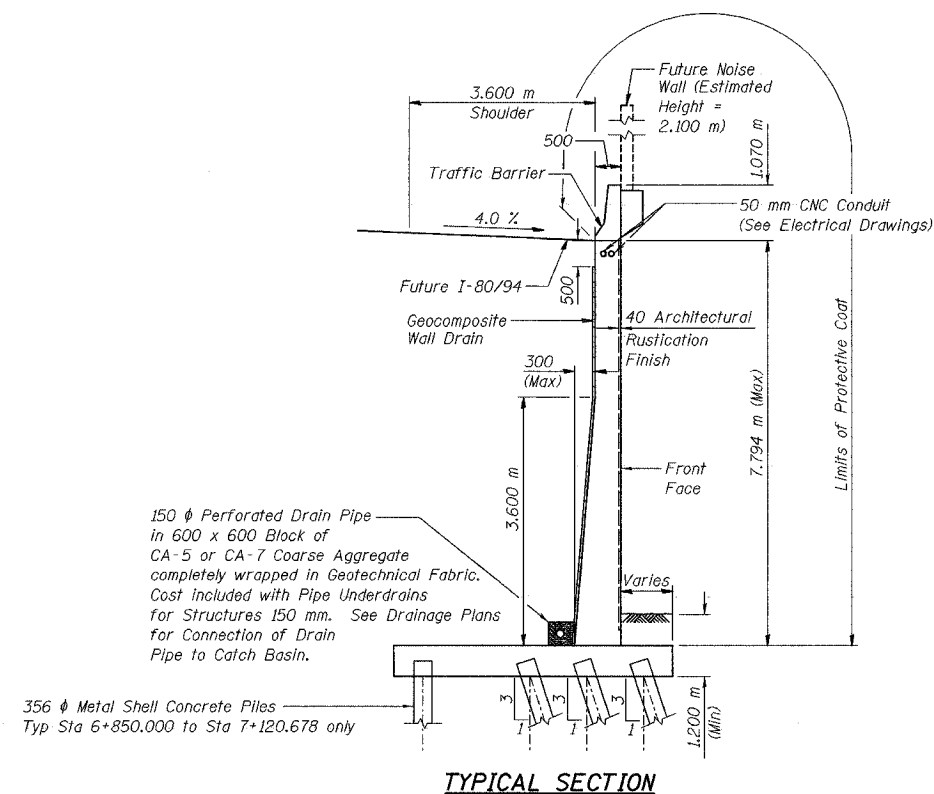
FOR INFORMATION ONLY

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of AASHTO M 31M or M322M Grade 400.
2. The Contractor shall drive 7 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. 1

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 19)
S-4	Plan and Elevation (2 of 19)
S-5	Plan and Elevation (3 of 19)
S-6	Plan and Elevation (4 of 19)
S-7	Plan and Elevation (5 of 19)
S-8	Plan and Elevation (6 of 19)
S-9	Plan and Elevation (7 of 19)
S-10	Plan and Elevation (8 of 19)
S-11	Plan and Elevation (9 of 19)
S-12	Plan and Elevation (10 of 19)
S-13	Plan and Elevation (11 of 19)
S-14	Plan and Elevation (12 of 19)
S-15	Plan and Elevation (13 of 19)
S-16	Plan and Elevation (14 of 19)
S-17	Plan and Elevation (15 of 19)
S-18	Plan and Elevation (16 of 19)
S-19	Plan and Elevation (17 of 19)
S-20	Plan and Elevation (18 of 19)
S-21	Plan and Elevation (19 of 19)
S-22	Wall Sections and Details
S-23	Rustication Finish Details
S-24	Concrete Pile Details
S-25	Boring Logs (1 of 11)
S-26	Boring Logs (2 of 11)
S-27	Boring Logs (3 of 11)
S-28	Boring Logs (4 of 11)
S-29	Boring Logs (5 of 11)
S-30	Boring Logs (6 of 11)
S-31	Boring Logs (7 of 11)
S-32	Boring Logs (8 of 11)
S-33	Boring Logs (9 of 11)
S-34	Boring Logs (10 of 11)
S-35	Boring Logs (11 of 11)



TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Test Pile Metal Shells	Each	7
Structure Excavation	m ³	5,280 1
Concrete Structures	m ²	3,418.0
Rustication Finish	m ²	1,731
Protective Coat	m ²	3,758
Reinforcement Bars, Epoxy Coated	kg	231,070
Furnishing Metal Pile Shells, 356 mm	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

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

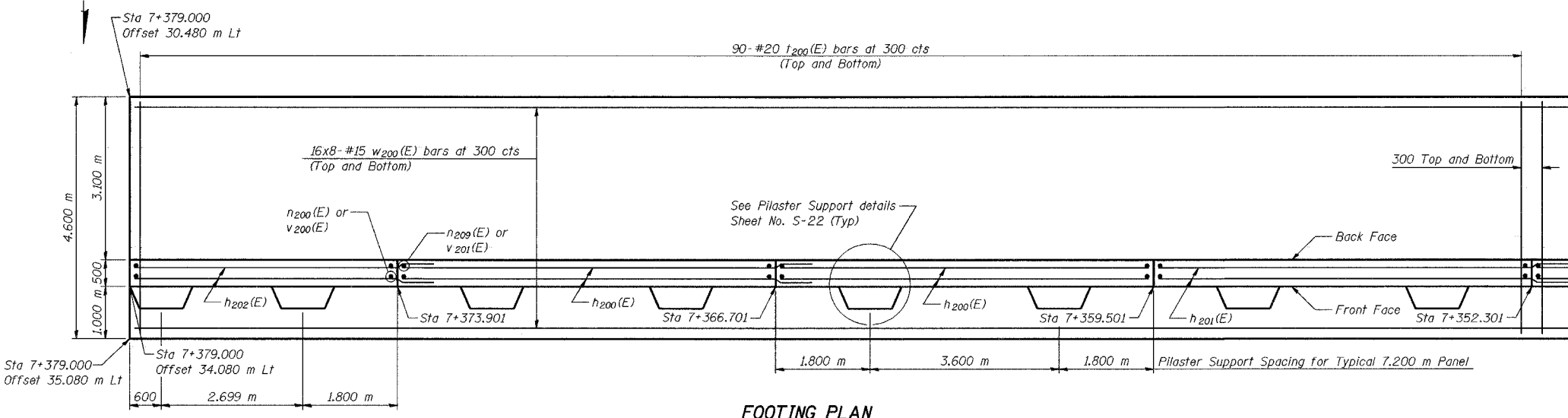
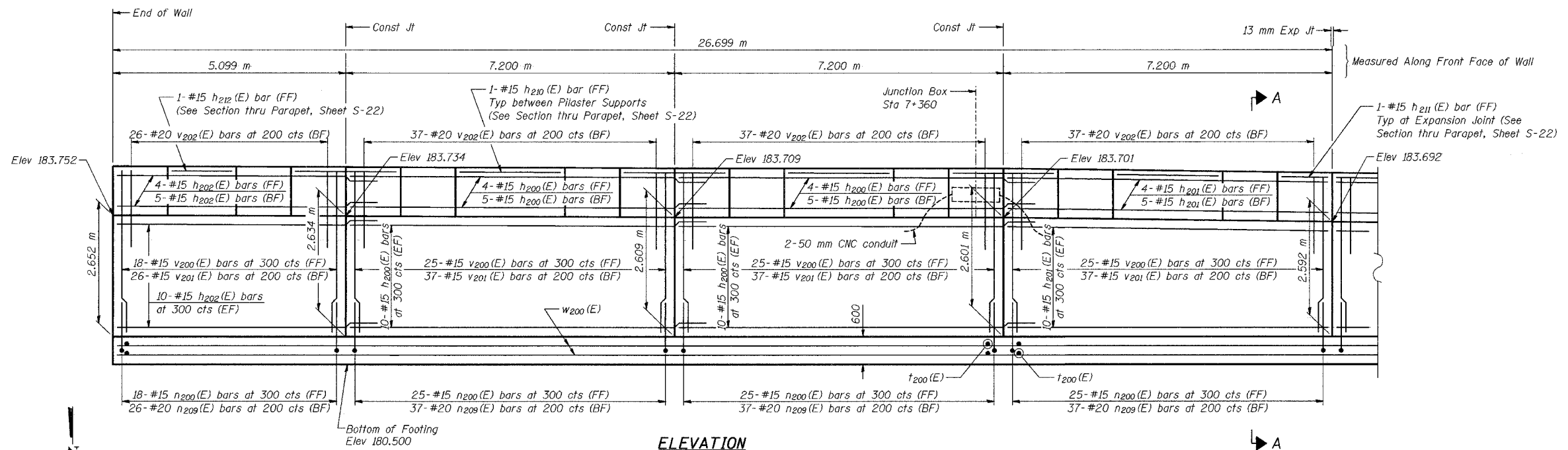
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION
**INDEX OF SHEETS, GENERAL NOTES
 AND TOTAL BILL OF MATERIAL**
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+379.000
 STRUCTURE NO. 016-W874
 DATE 07/05

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1 REVISED KFA 10-22-04

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.L. 80/94	2001-167R	COOK	1207	985
CONTRACT No. 62114				SHEET NO. S-3 35 SHEETS



NOTES:

See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material.

See Sheet S-23 for Rustication details and Expansion Joint Detail.

Stations are referenced to @ 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.

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

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

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

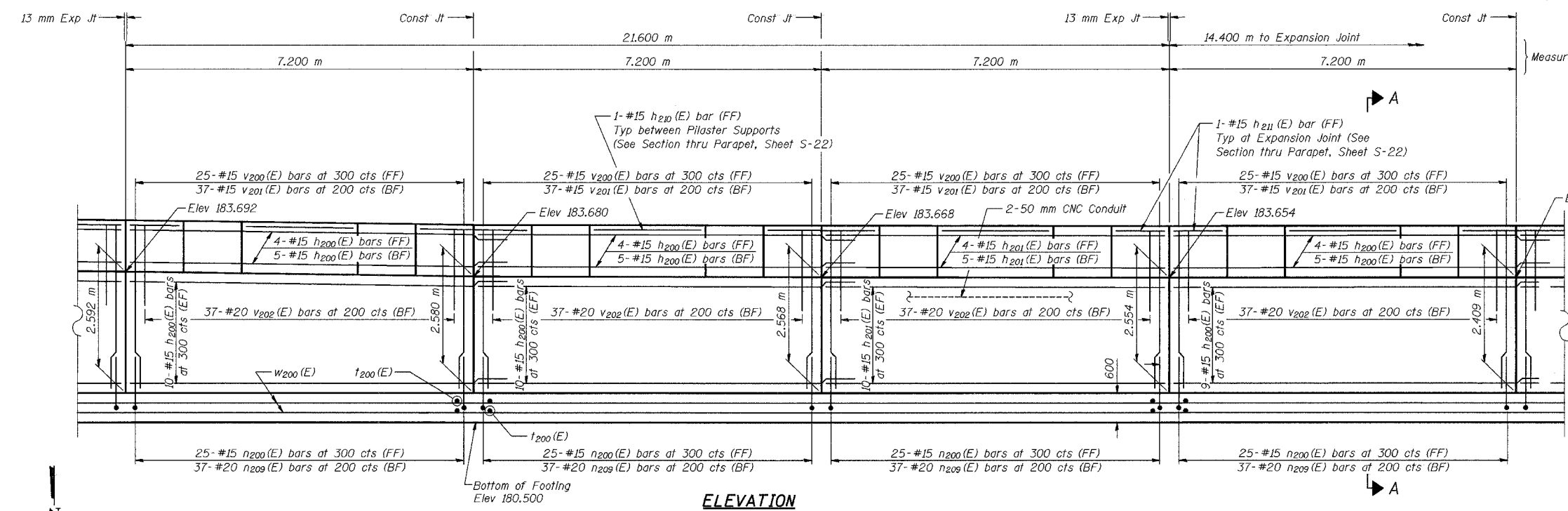
**PLAN AND ELEVATION (1 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+379.000
 STRUCTURE NO. 016-W874**

DATE 07/05

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ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. S-4
F.A.L.	2001-167R	COOK	1207	986	35 SHEETS
ILLINOIS FEDERAL PROJECT: C-99-011-01					CONTRACT No. 62114



NOTES:

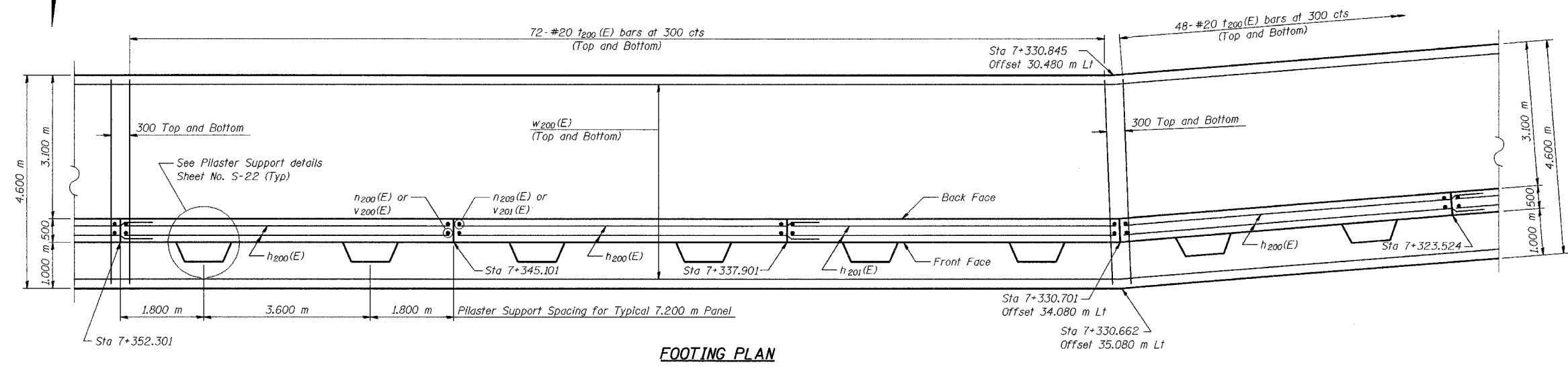
See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material. See Sheet S-23 for Rustication details and Expansion Joint Detail.

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.



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

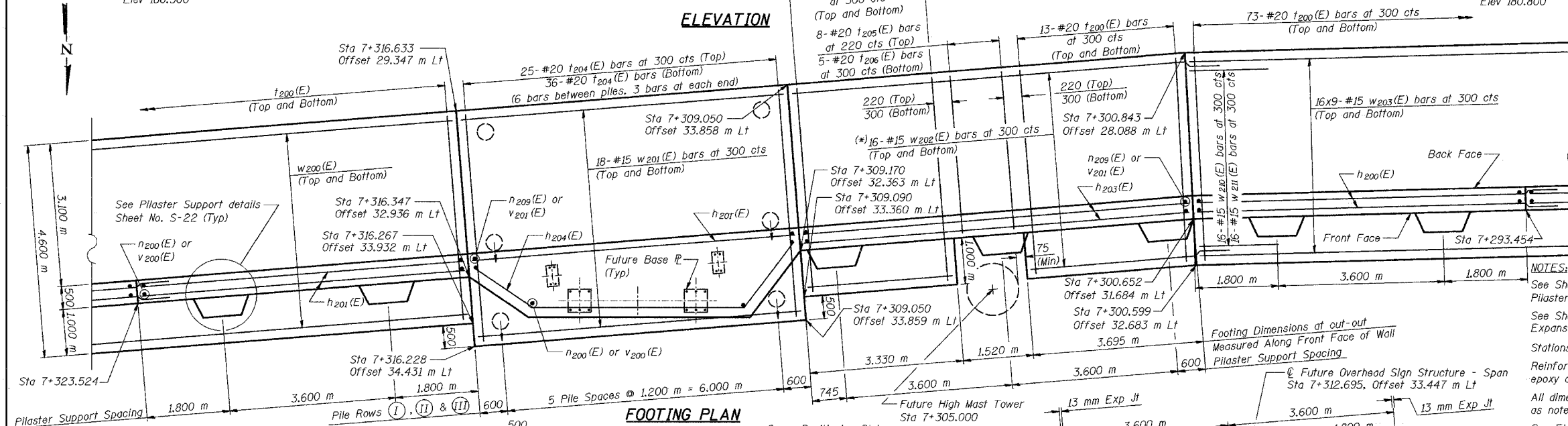
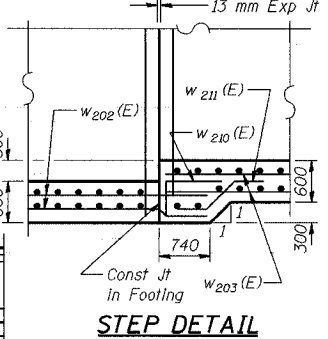
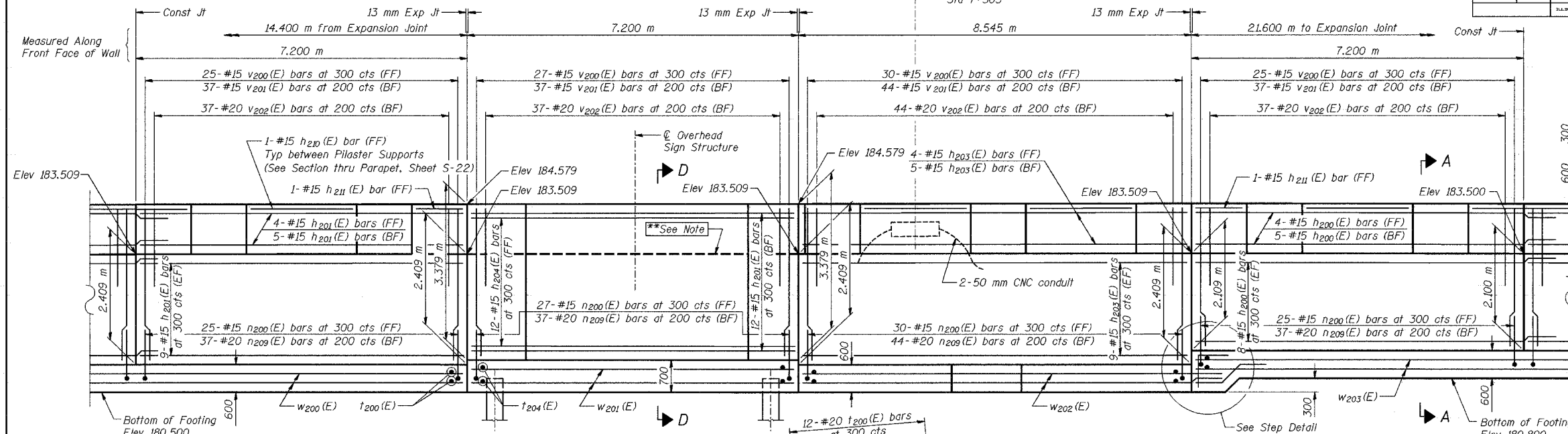
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (2 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05

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FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-5
F.A.L. 88/94	2001-167R	COOK	1207 987	35 SHEETS
ILLINOIS DEPARTMENT OF TRANSPORTATION				CONTRACT No. 62114



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

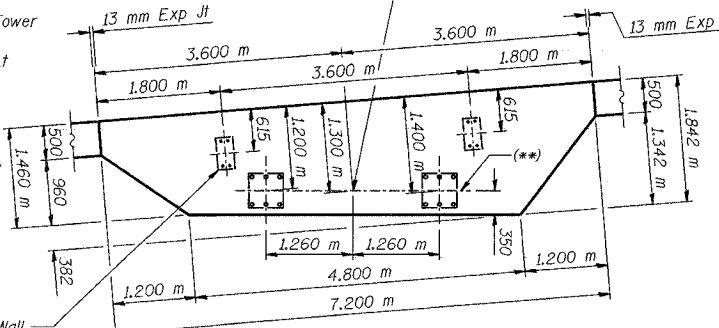
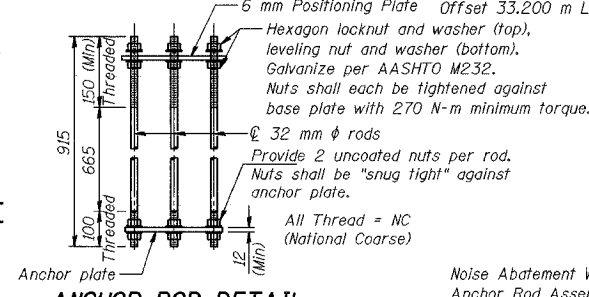
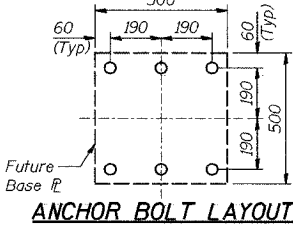
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

NOTES:
 See Sheet S-22 for Section A-A, Section D-D, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 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.
 See Electrical Drawings for Junction Box and Conduit Details.
 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.

****NOTE:**
 Construction Joint 1.070 m below top of parapet shall not be continued thru section of wall supporting the cantilever sign. Finished appearance of front face of wall in this section shall be the same as that in the adjacent sections of wall.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

ANCHOR ROD NOTE:
 Anchor rods shall conform to AASHTO M314M Grade 250 or 380 (36 or 55) and meet Charpy V-Notch (CVN) energy of 20 J at 5°C. Galvanize upper 305 mm per AASHTO M232. No welding shall be permitted on rods.

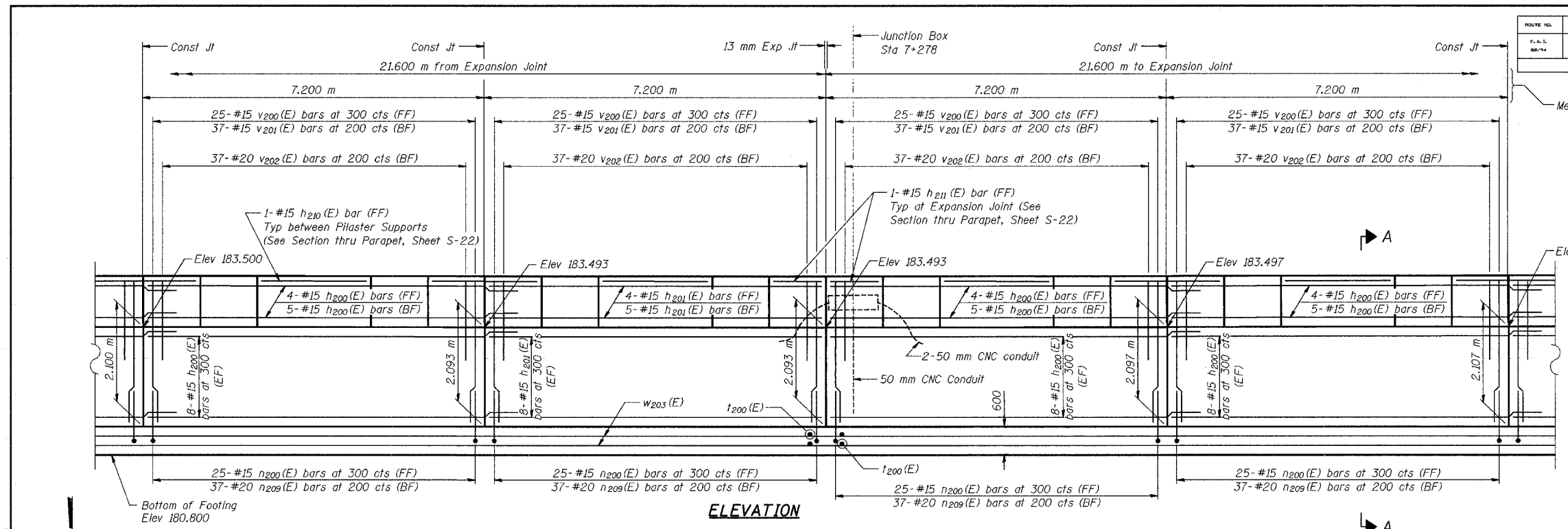


ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

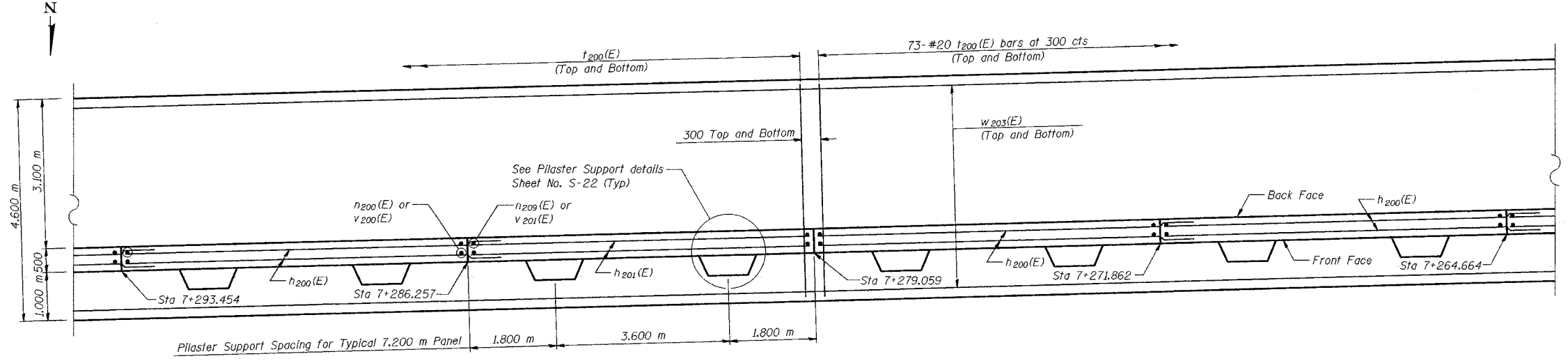
PLAN AND ELEVATION (3 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 TO STATION 7+379.000
 STRUCTURE NO. 016-W874
 DATE 07/05

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ELEVATION



FOOTING PLAN

NOTES:

See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material.

See Sheet S-23 for Rustication details and Expansion Joint Detail.

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.

See Electrical Drawings for Junction Box and Conduit Details.

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

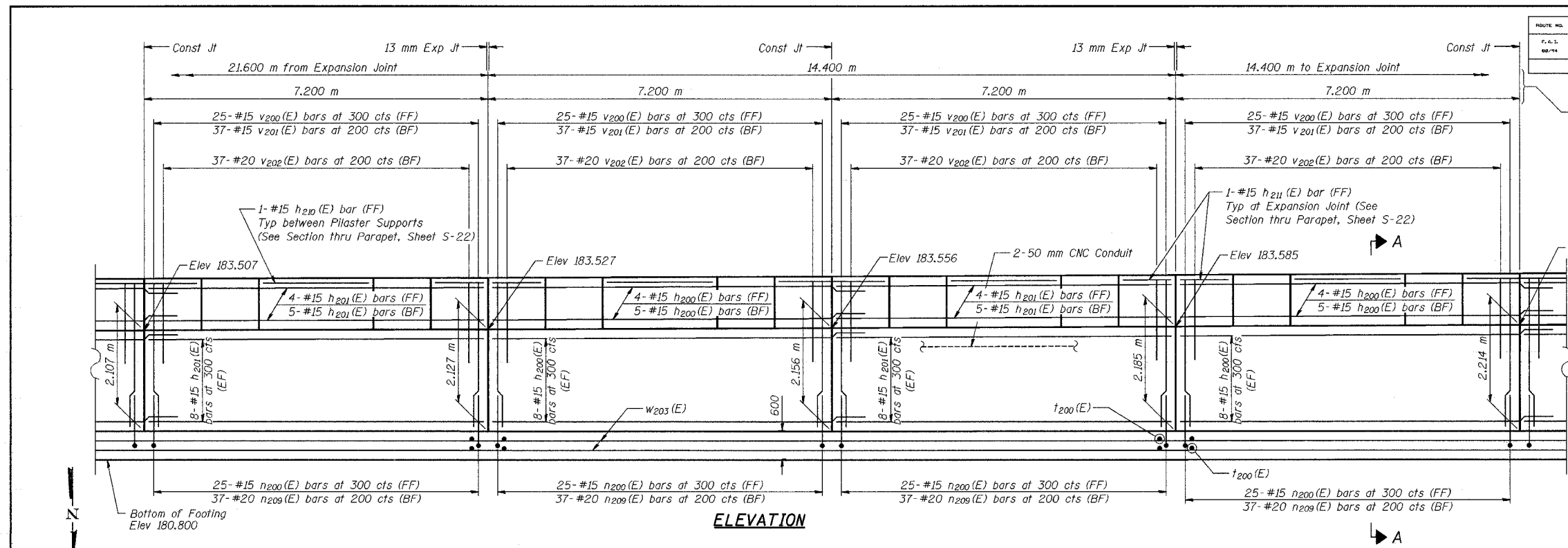
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.L. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (4 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
DATE 07/05

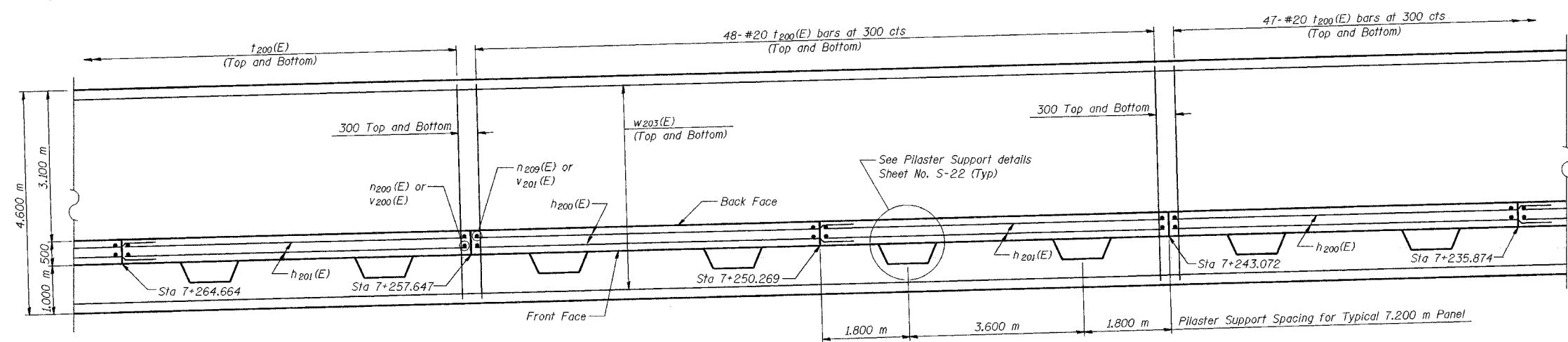
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ROUTE NO.	DISTRICT	COUNTY	SHEET	SHEET	SHEET NO. S-7 35 SHEETS
F.A.I.	2001-167R	COOK	1207	989	
CONTRACT No. 62114					



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-22 for Section A-A, 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.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

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

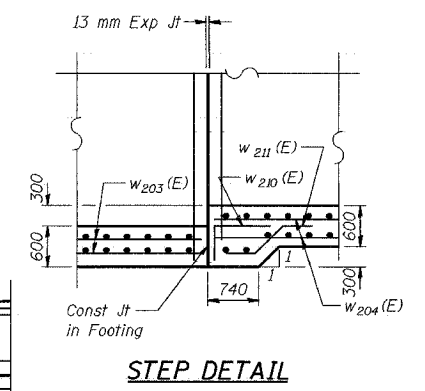
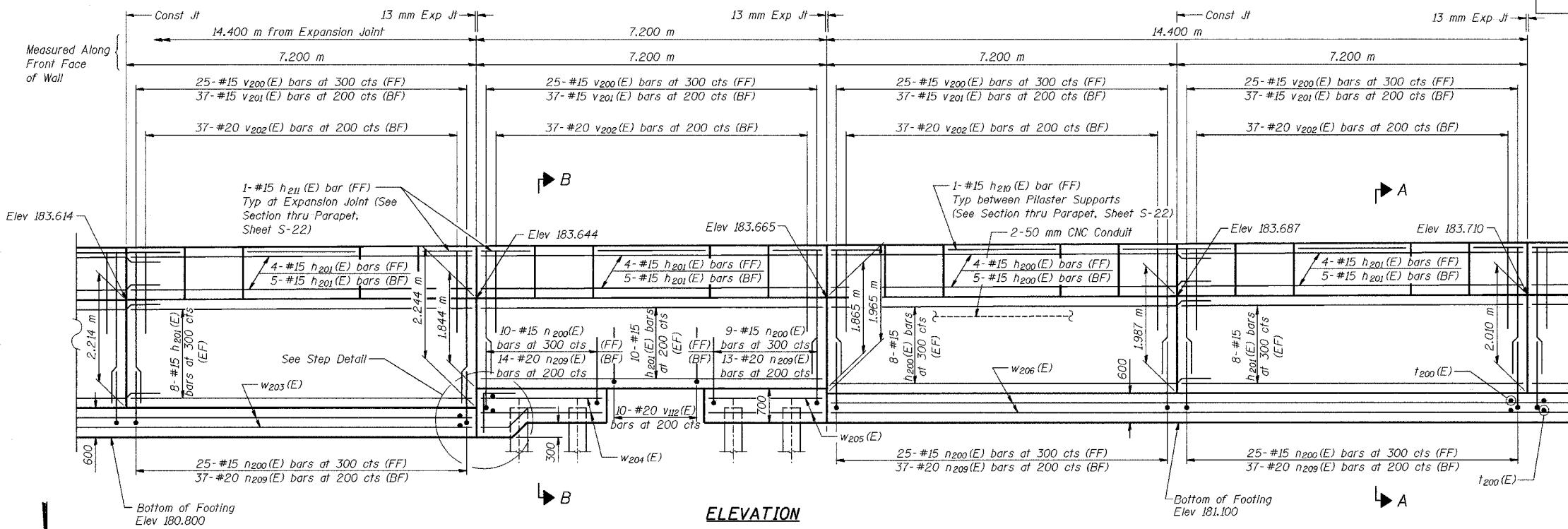
LEGEND
 BF = Back Face
 FF = Front Face
 EF = Each Face

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

PLAN AND ELEVATION (5 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05

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NOTES:

See Sheet S-22 for Section A-A, Section B-B, Pilaster Support details, and Bill of Material.

See Sheet S-23 for Rustication details and Expansion Joint Detail.

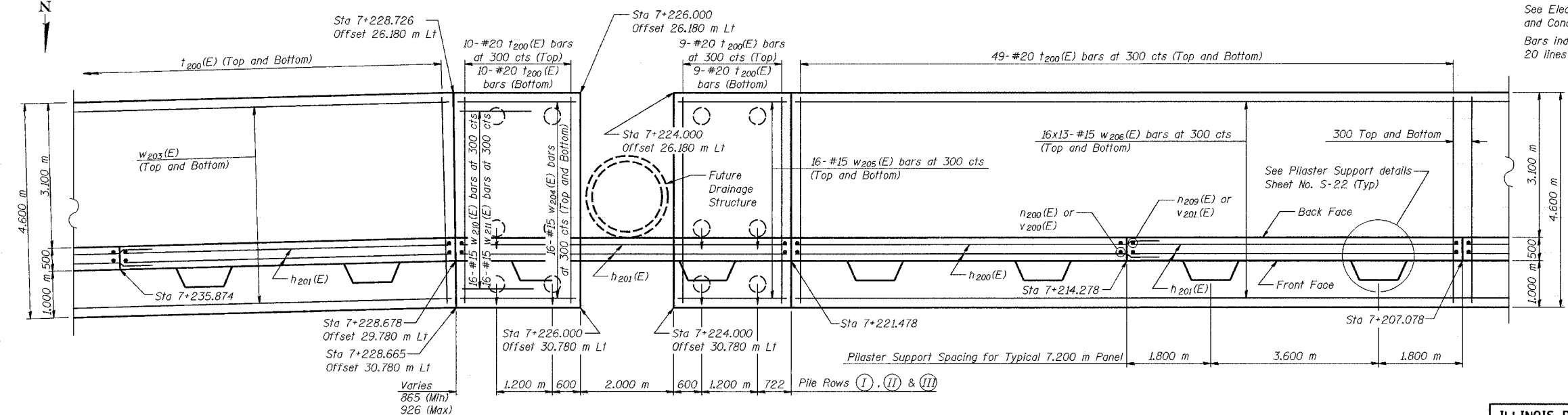
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Reinforcement bars designated (E) shall be epoxy coated.

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

See Electrical Drawings for Junction Box and Conduit Details.

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



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

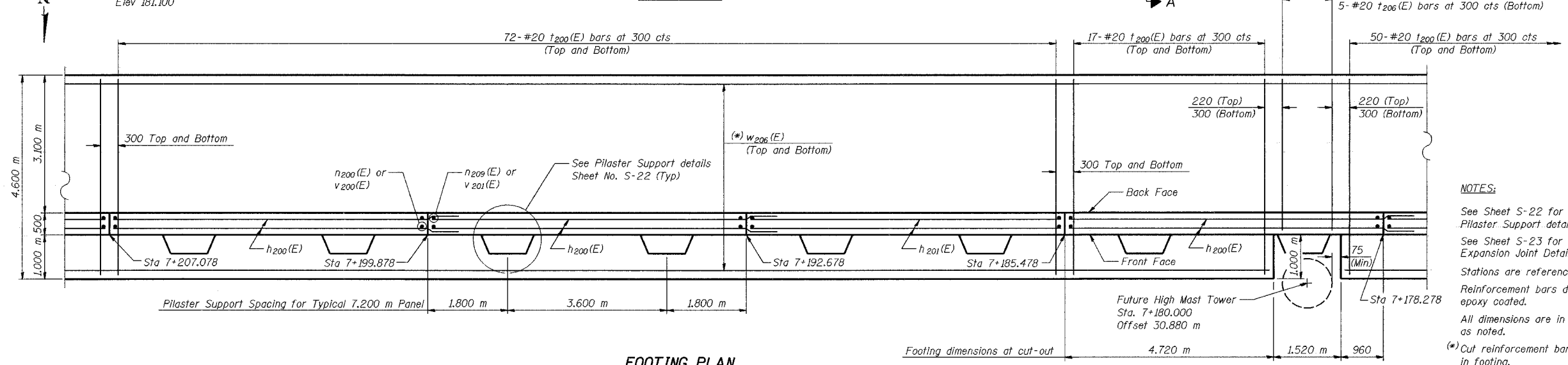
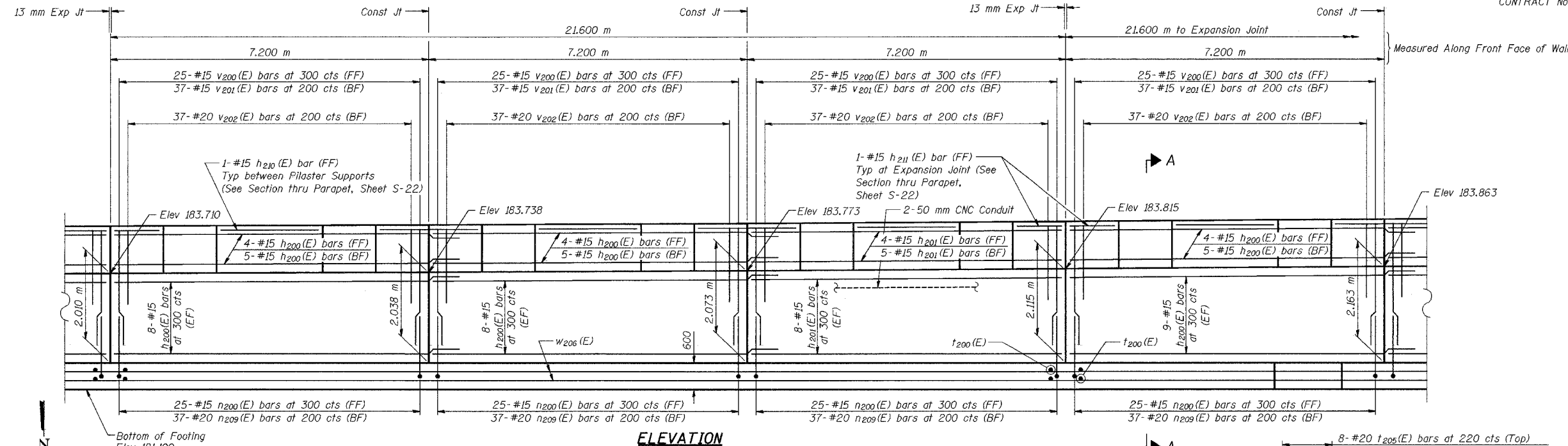
PLAN AND ELEVATION (6 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 TO STATION 7+379.000
 STRUCTURE NO. 016-W874

DATE 07/05

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ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET
F.A.L.	2001-167R	COOK	1207	991	991
CONTRACT No. 62114					SHEET NO. S-9
					35 SHEETS



NOTES:

See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material.

See Sheet S-23 for Rustication details and Expansion Joint Detail.

Stations are referenced to ℓ I-80/94.

Reinforcement bars designated (E) shall be epoxy coated.

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

(*) Cut reinforcement bars to avoid cut-out in footing.

See Electrical Drawings for Junction Box and Conduit Details.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. ROUTE 80/94 AND U.S. ROUTE 6 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (7 OF 19)

SECTION 2001-167R

COOK COUNTY

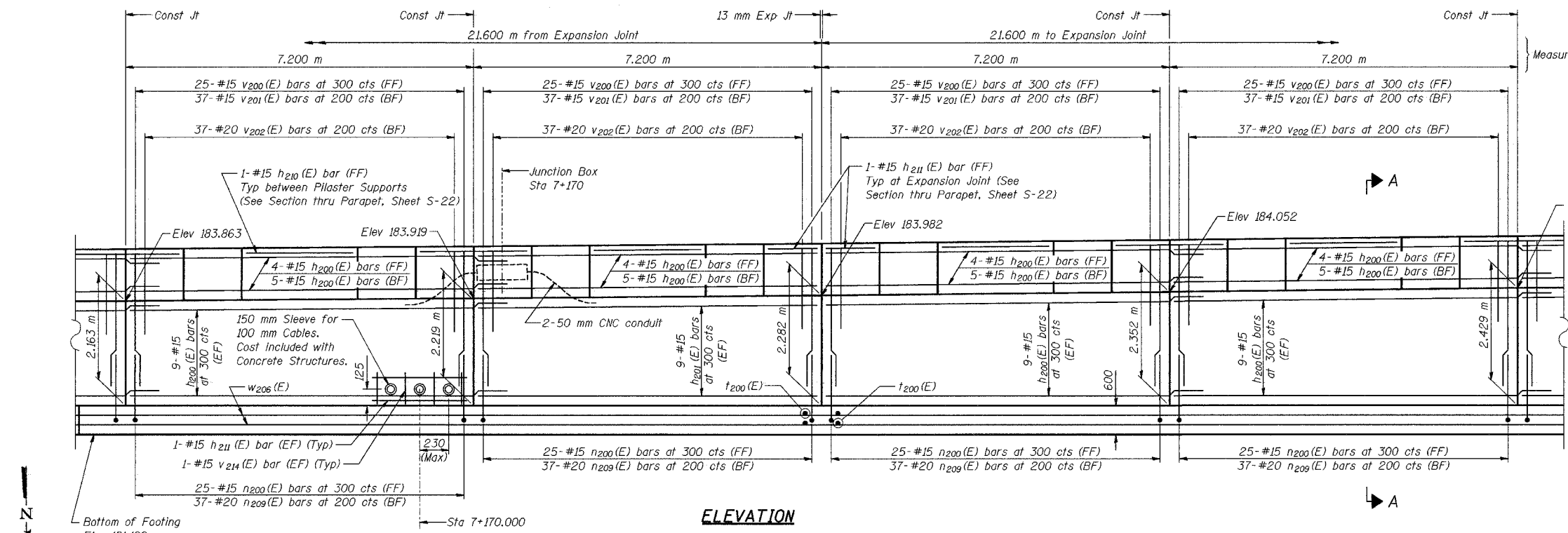
STATION 6+850.000 TO STATION 7+379.000

STRUCTURE NO. 016-W874

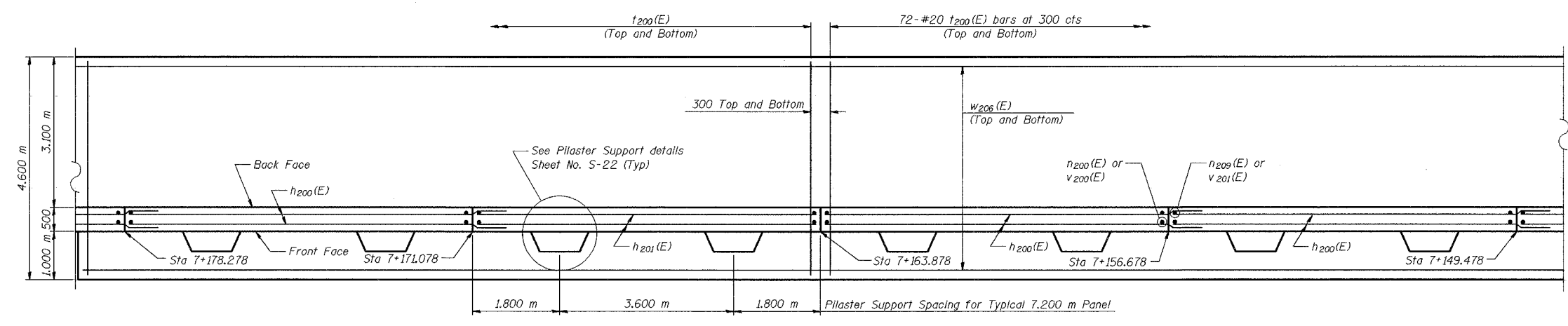
DATE 07/05

AMERICAN
CONSULTING ENGINEERS

FOR INFORMATION ONLY



ELEVATION



FOOTING PLAN

NOTES:
 See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to 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.

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

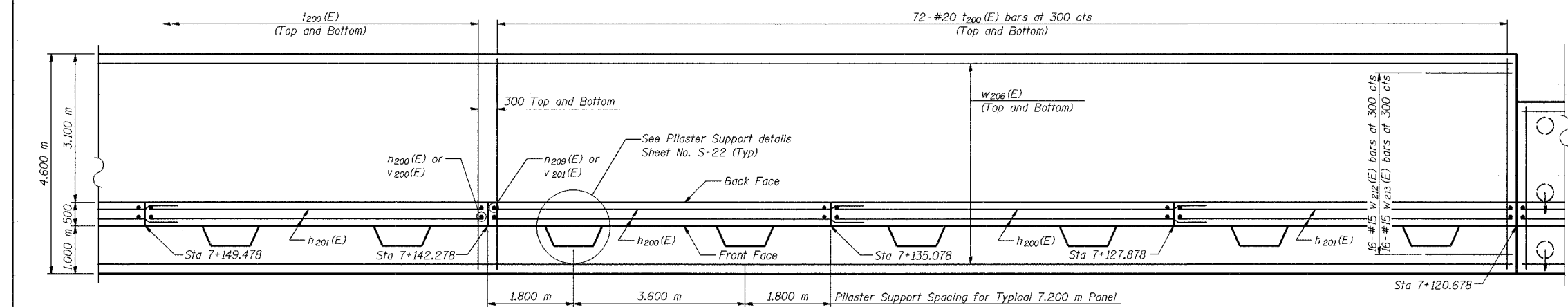
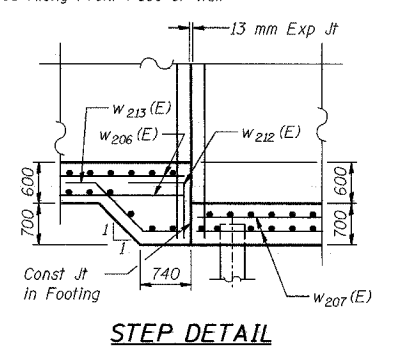
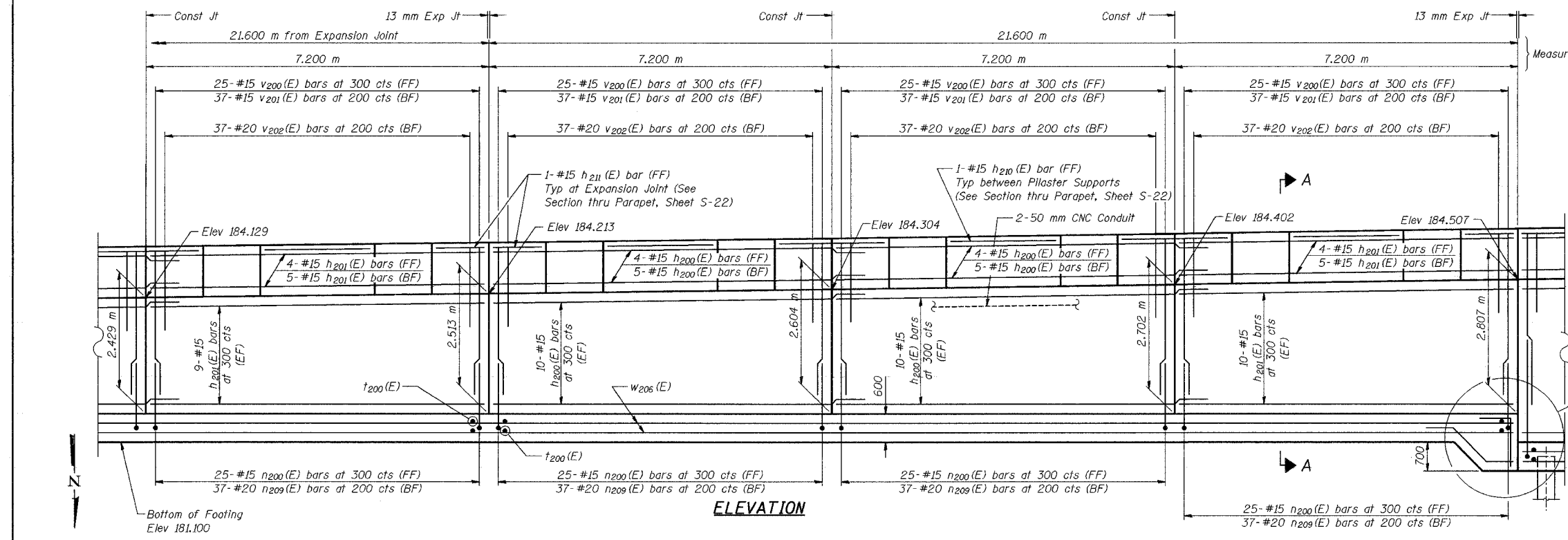
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (8 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	SHEET NO. S-11
F.A.I. 80/94	2001-167R	COOK	1207	993	35 SHEETS
SHEET NO.		SHEET NO.		SHEET NO.	
SHEET NO.		SHEET NO.		SHEET NO.	
CONTRACT No. 62114					



NOTES:

See Sheet S-22 for Section A-A, Pilaster Support details, and Bill of Material.
 See Sheet S-23 for Rustication details and Expansion Joint Detail.
 Stations are referenced to @ 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

MINIMUM BAR LAPS

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

LEGEND

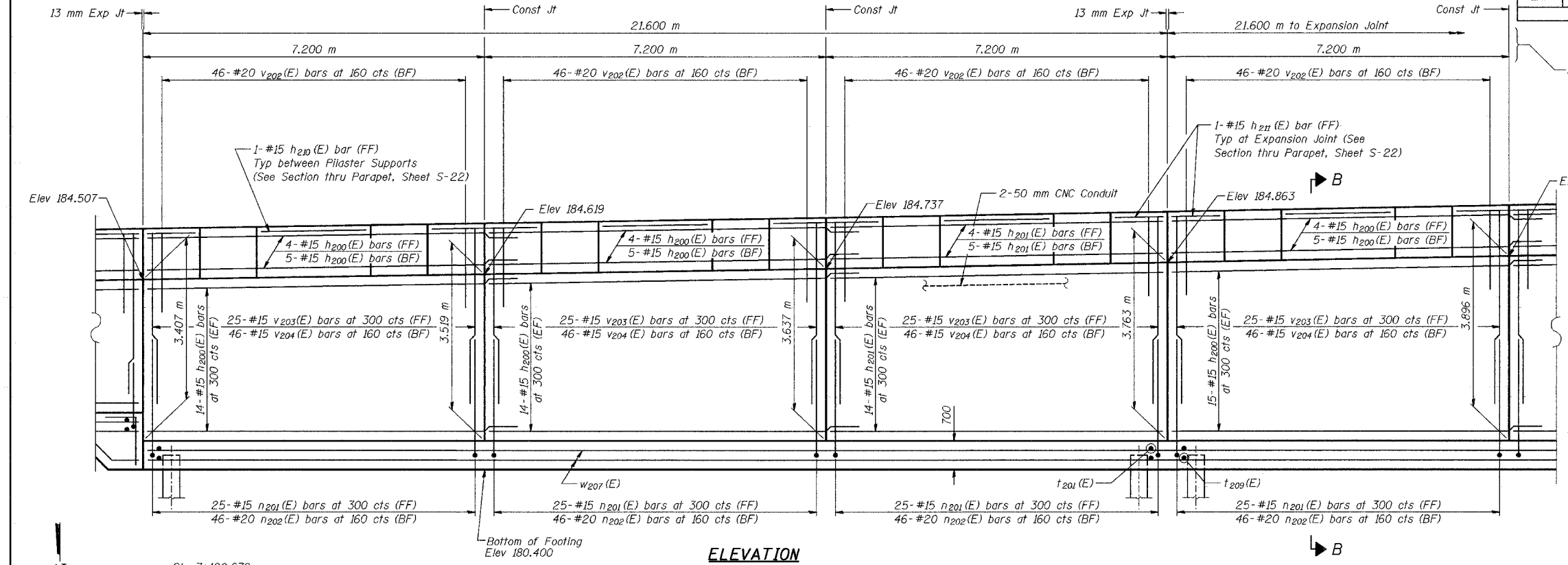
BF = Back Face
 FF = Front Face
 EF = Each Face

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

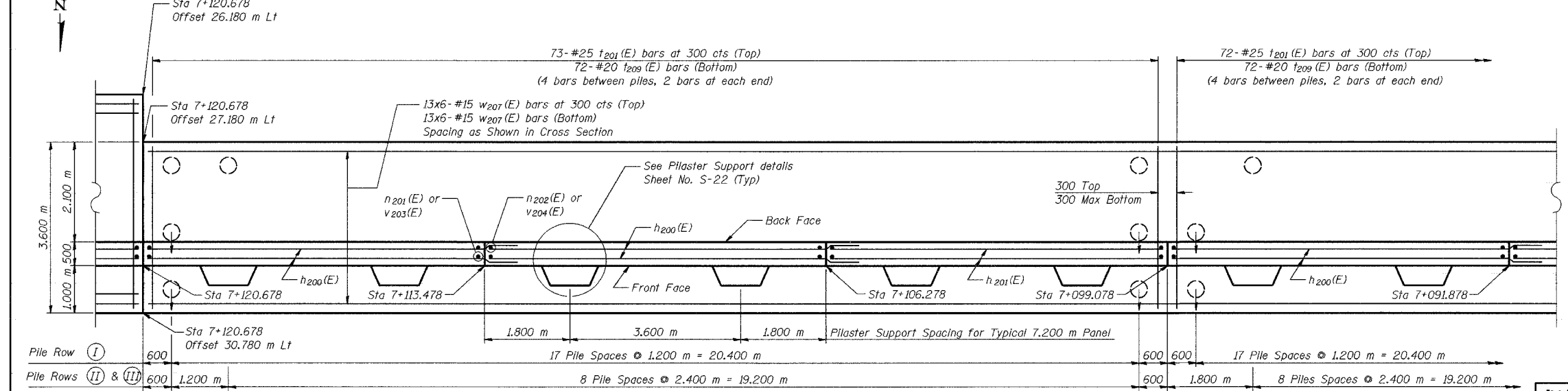
PLAN AND ELEVATION (9 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05

AMERICAN
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ELEVATION



FOOTING PLAN

NOTES:

- See Sheet S-22 for Section B-B, 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.
- Bars indicated thus 20 x 3-#15 etc. Indicates 20 lines of bars with 3 lengths per line.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

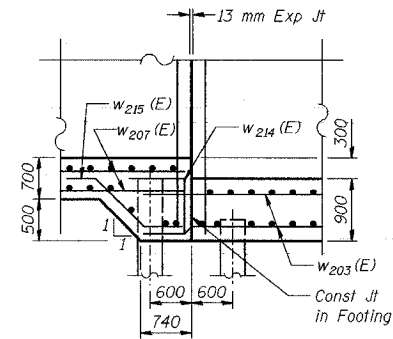
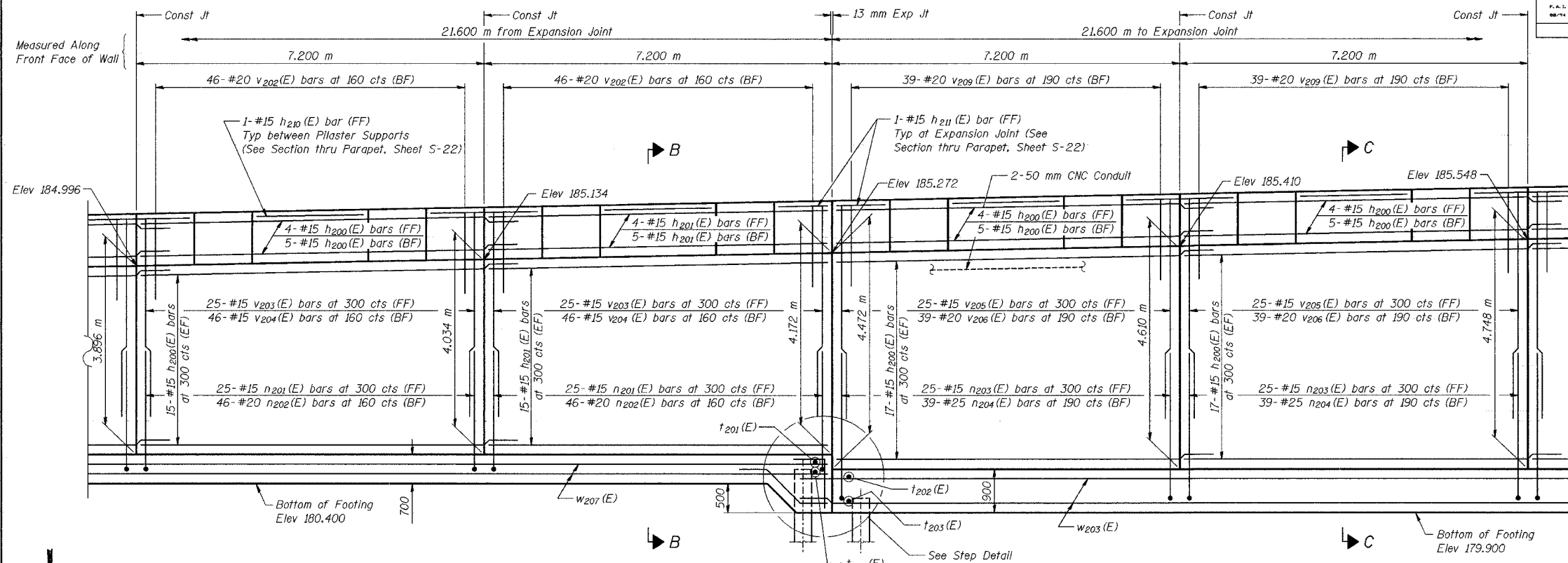
MINIMUM BAR LAPS	LEGEND
#15 bars = 640	BF = Back Face
#20 bars = 790	FF = Front Face
#25 bars = 1320	EF = Each Face

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

PLAN AND ELEVATION (10 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



NOTES:

See Sheet S-22 for Section B-B, Section C-C, Pilaster Support details, and Bill of Material.

See Sheet S-23 for Rustication details and Expansion Joint Detail.

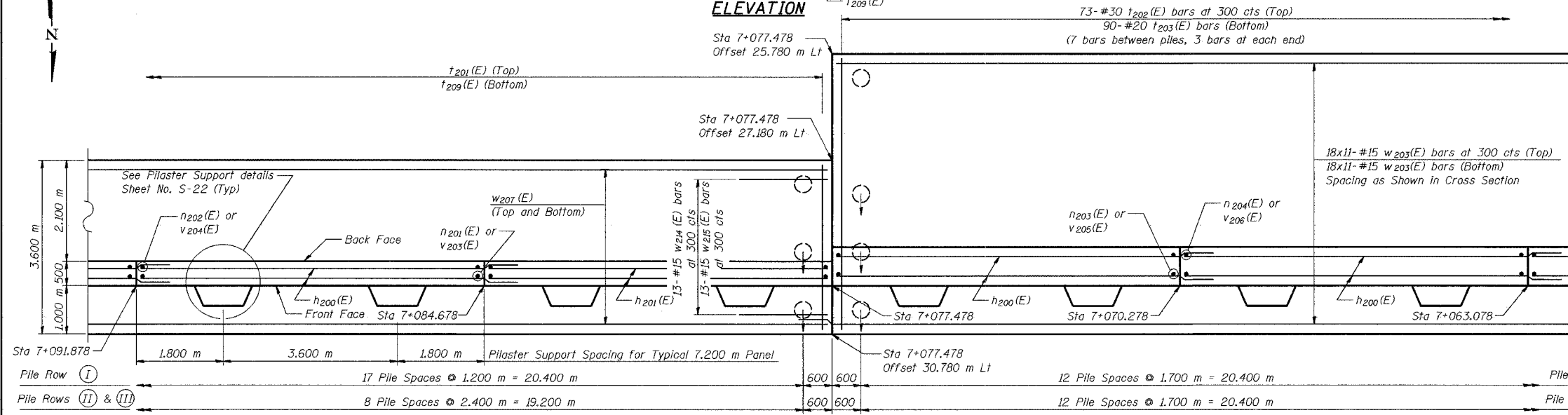
Stations are referenced to \odot I-80/94.

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.

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



DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

FOOTING PLAN

MINIMUM BAR LAPS

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

LEGEND

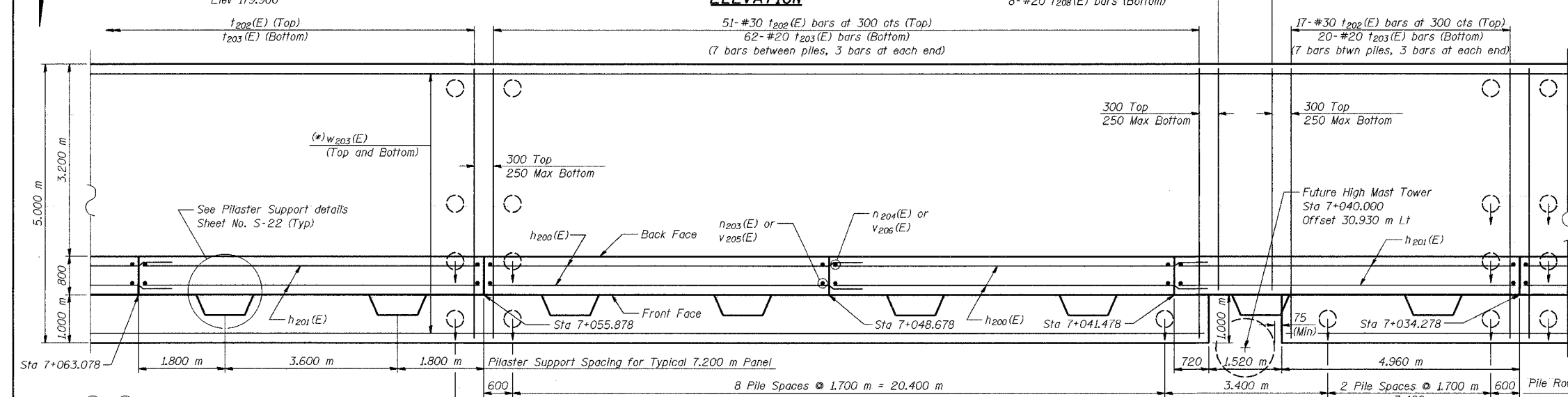
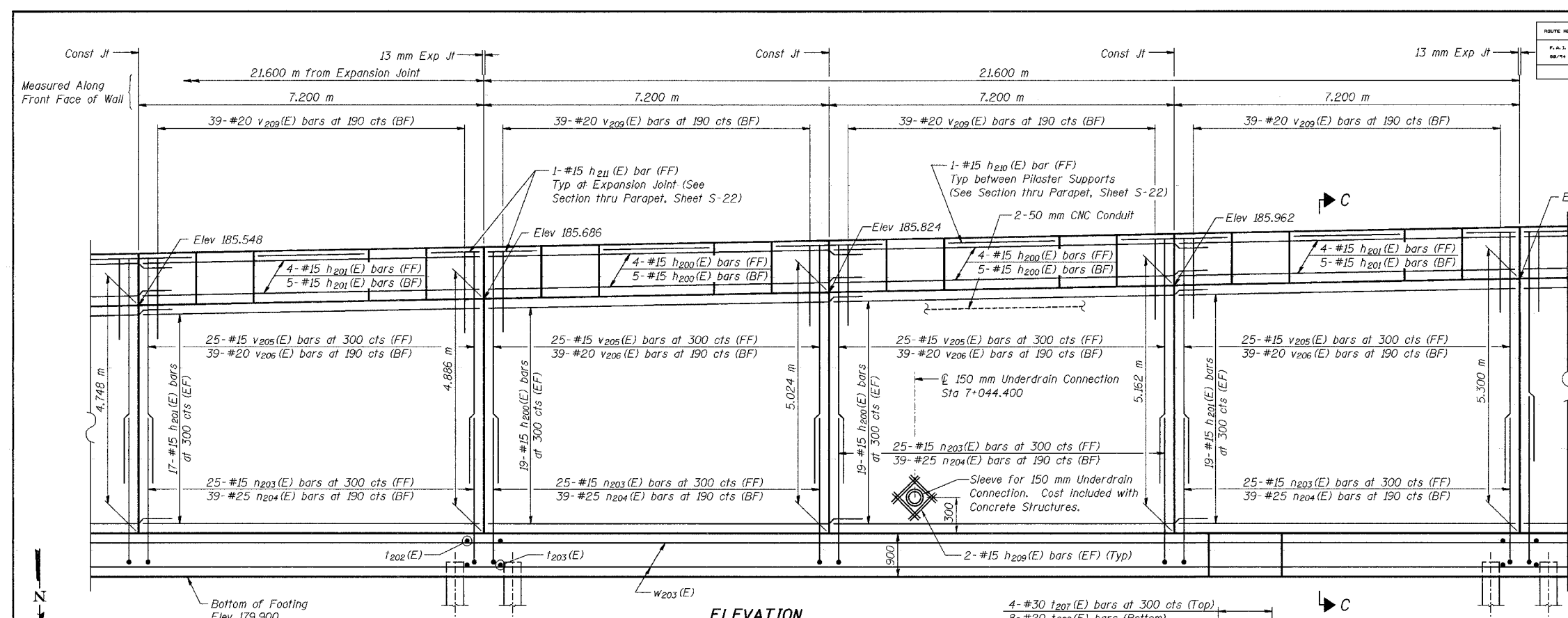
BF = Back Face
 FF = Front Face
 EF = Each Face

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

PLAN AND ELEVATION (11 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



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

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 Δ I-80/94.
 Reinforcement bars designated (E) shall be epoxy coated.
 All dimensions are in millimeters (mm) except as noted.
 (*) Cut reinforcement bars to avoid cut-out in footing.
 See Electrical Drawings for Junction Box and Conduit Details.
 See Drainage Drawings for Underdrain Connection to Catch Basin.

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

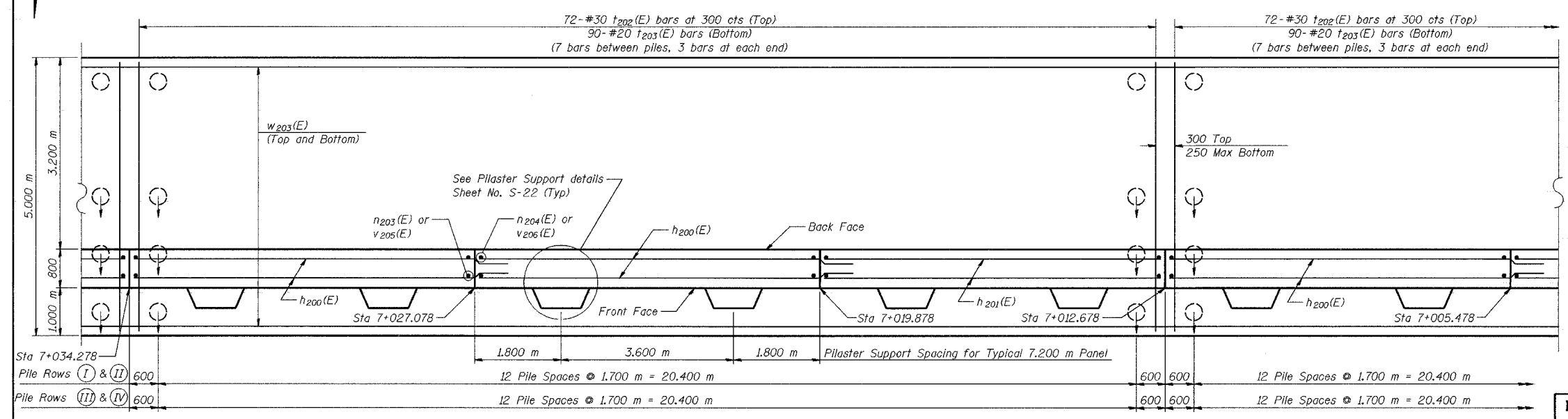
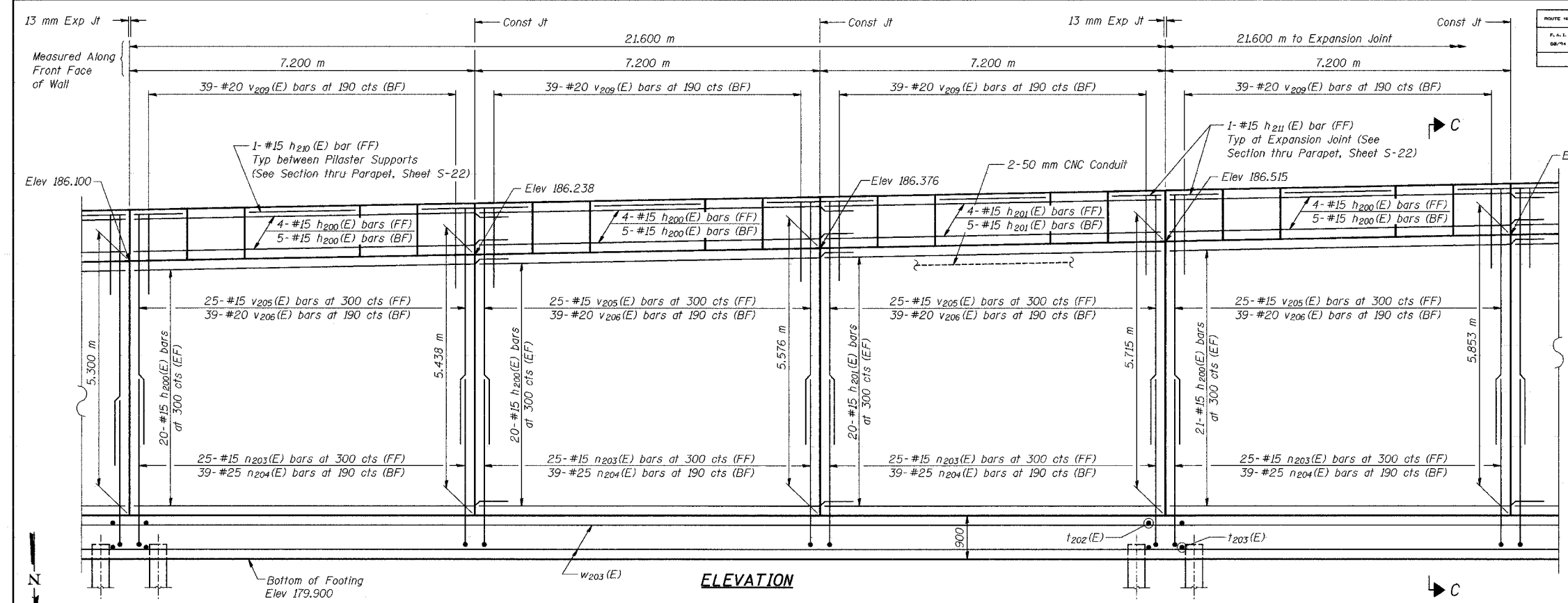
PLAN AND ELEVATION (12 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 TO STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05

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ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
F.A.I.	2001-167R	COOK	1207	997
DATE	08/94			

CONTRACT No. 62114



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 \varnothing 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.

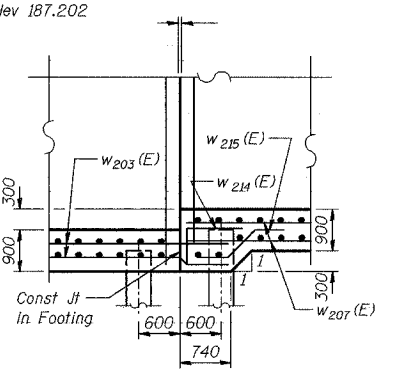
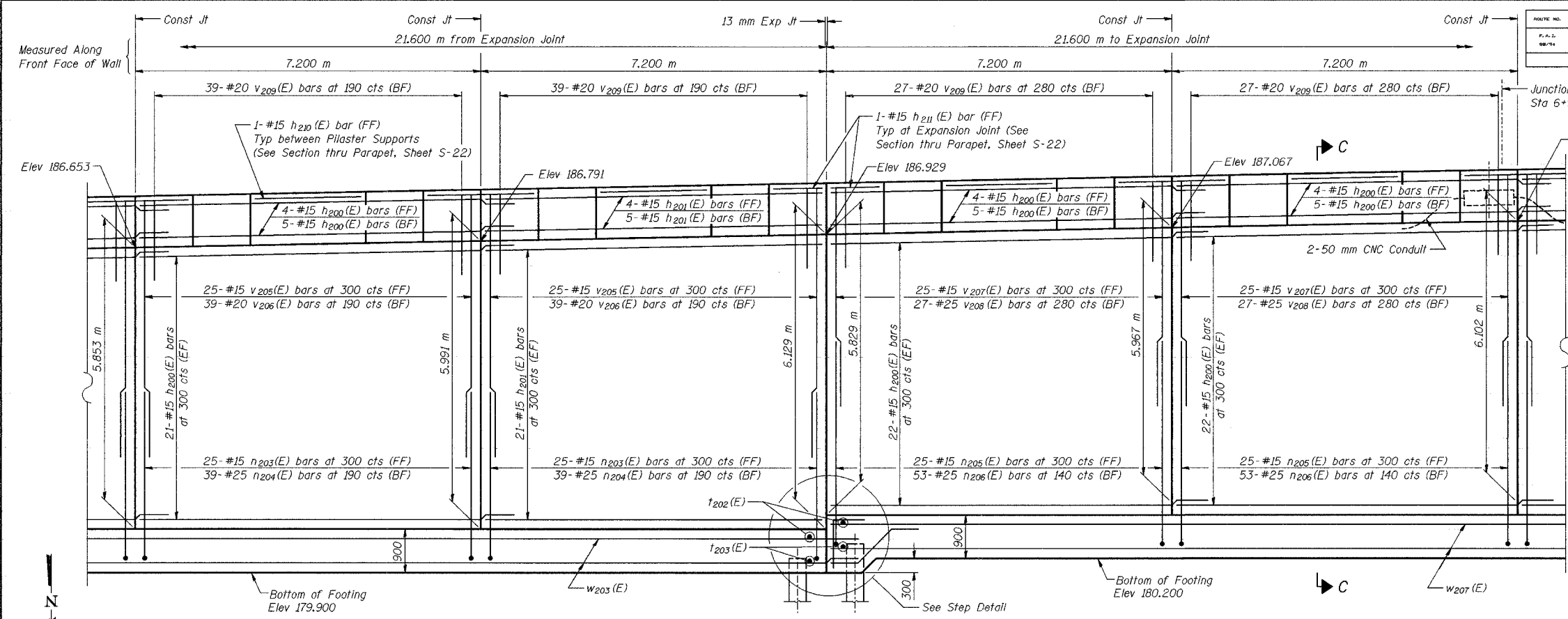
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (13 OF 19)
SECTION 2001-167R
COOK COUNTY
STATION 6+850.000 to STATION 7+379.000
STRUCTURE NO. 016-W874
 DATE 07/05

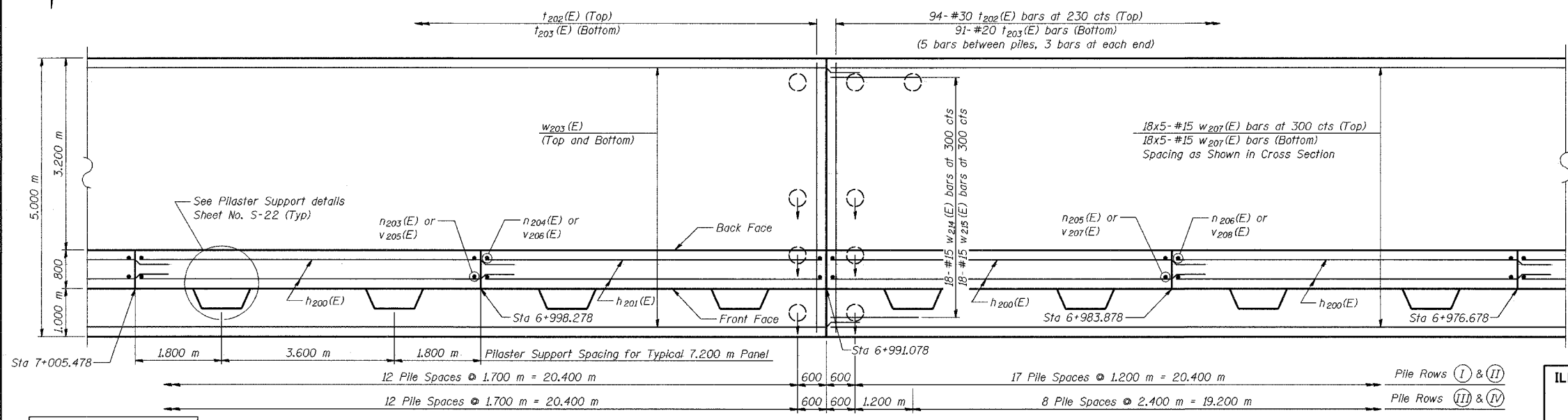
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FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. S-16
F.A.L.	2001-167R	COOK	1207	998
DATE	10/94			35 SHEETS
ILLINOIS DEPARTMENT OF TRANSPORTATION				CONTRACT No. 62114



ELEVATION



FOOTING PLAN

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

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

MINIMUM BAR LAPS	LEGEND
#15 bars = 640	BF = Back Face
#20 bars = 790	FF = Front Face
#25 bars = 1320	EF = Each Face

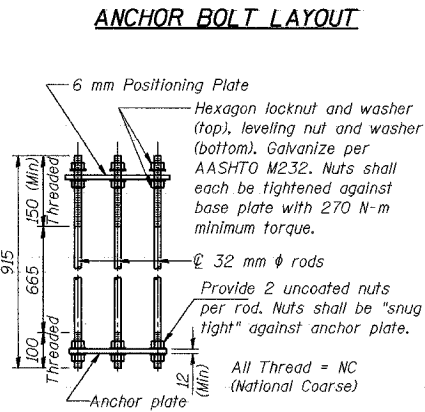
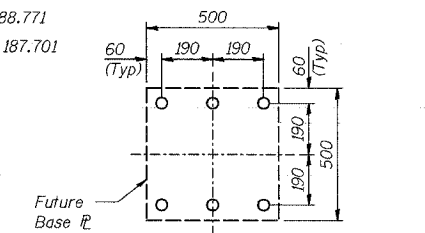
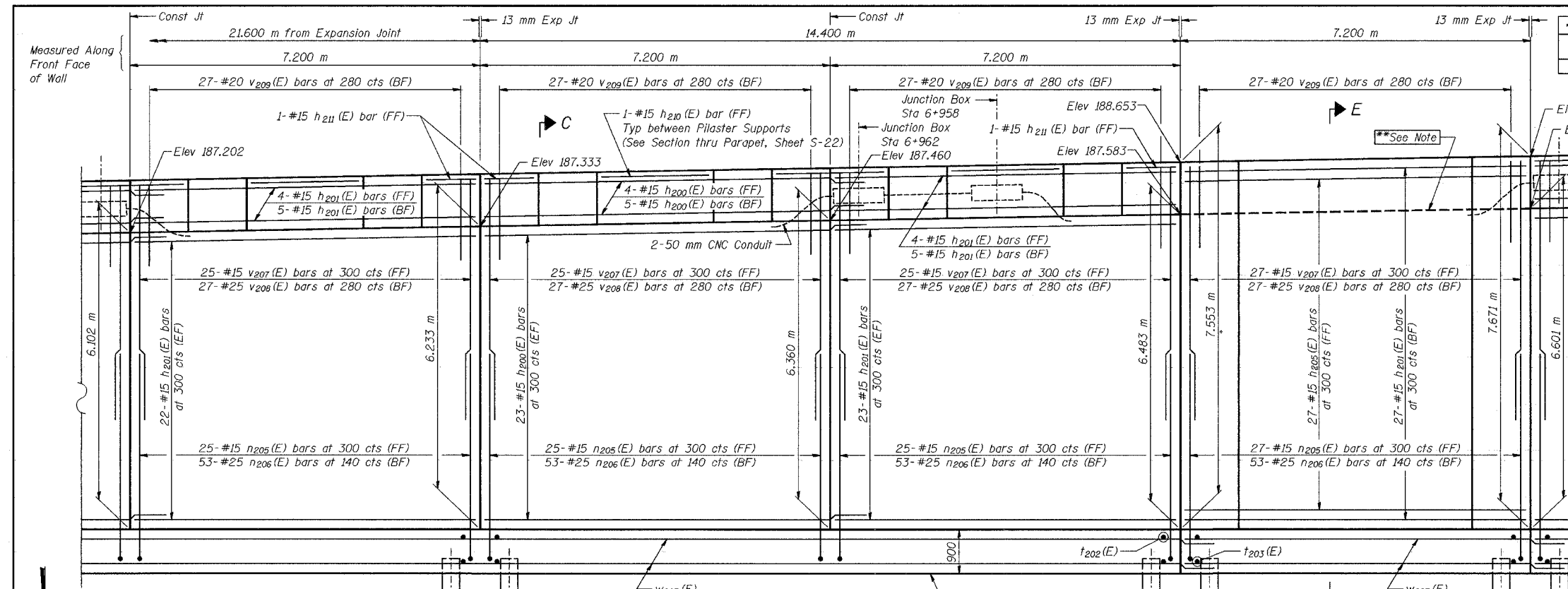
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
 LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (14 OF 19)
 SECTION 2001-167R
 COOK COUNTY
 STATION 6+850.000 to STATION 7+379.000
 STRUCTURE NO. 016-W874
 DATE 07/05

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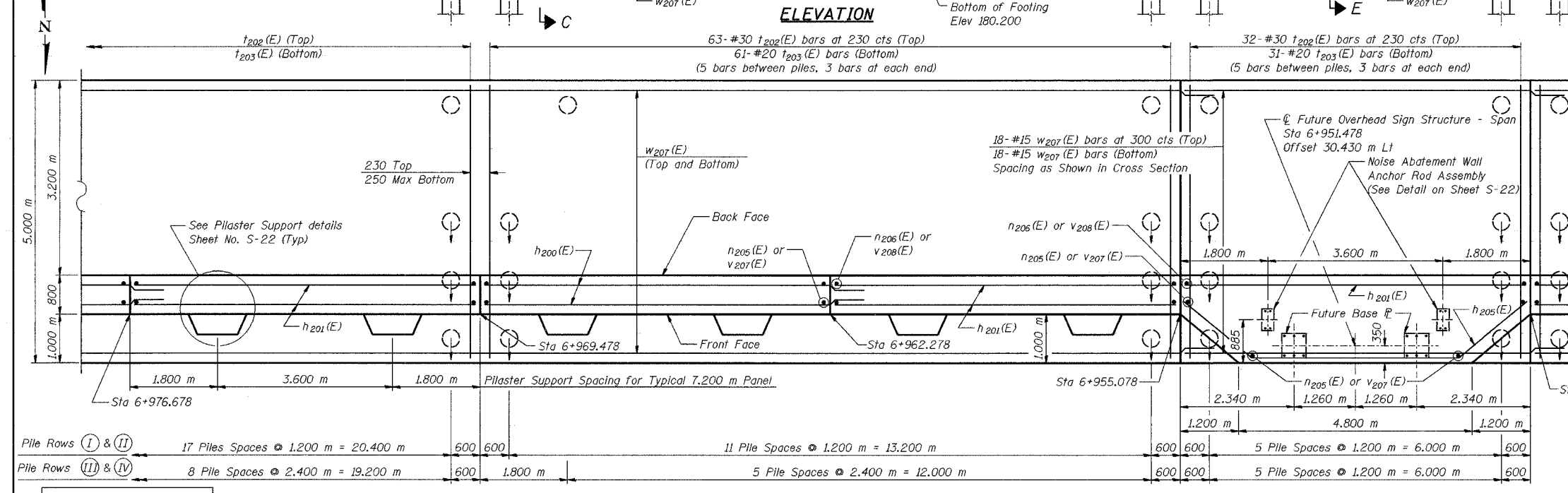
ROUTE NO.	SHEET	COUNTY	DATE	SHEET NO.
F.A.I.	1207	COOK	1207	999
REV.				
CONTRACT No. 62114				



ANCHOR ROD DETAIL
(Overhead Sign Structure - Span, Anchor Rod Assembly, 2 Req'd)

ANCHOR ROD NOTE:
Anchor rods shall conform to AASHTO M314M Grade 250 or 380 (36 or 55) and meet Charpy V-Notch (CVN) energy of 20 J at 5°C. Galvanize per AASHTO M232. No welding shall be permitted on rods.

NOTES:
See Sheet S-22 for Section C-C, Section E-E, Pilaster Support details, and Bill of Material.
See Sheet S-23 for Rustication details and Expansion Joint Detail.
Stations are referenced to § 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

****NOTE:**
Construction Joint 1.070 m below top of parapet shall not be continued thru section of wall supporting the cantilever sign. Finished appearance of front face of wall in this section shall be the same as that in the adjacent sections of wall.

FOOTING PLAN

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

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

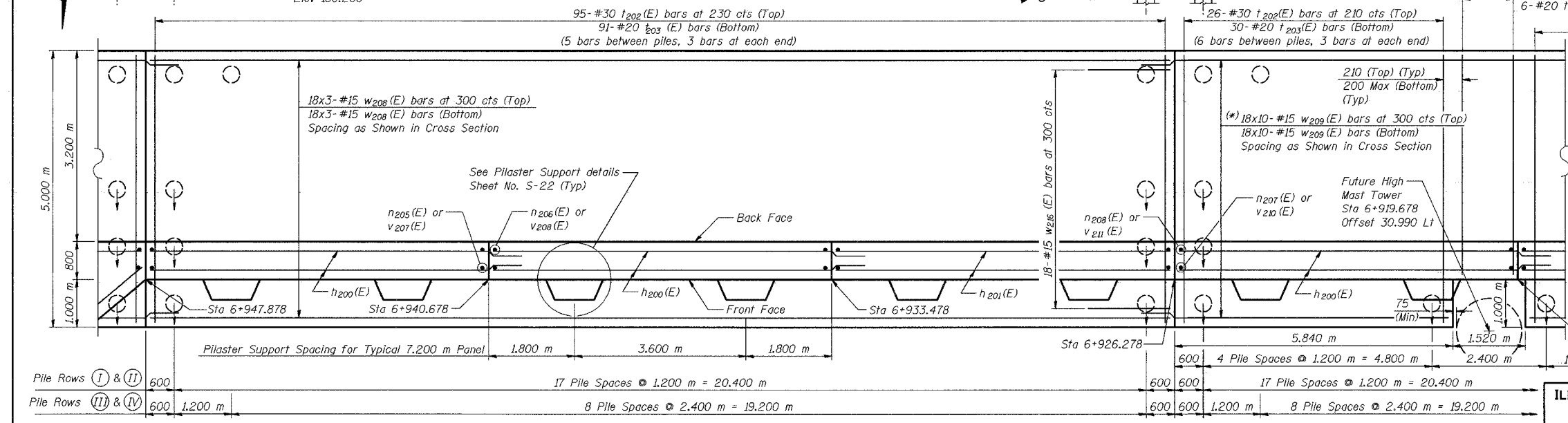
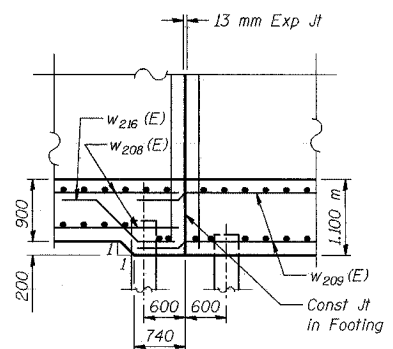
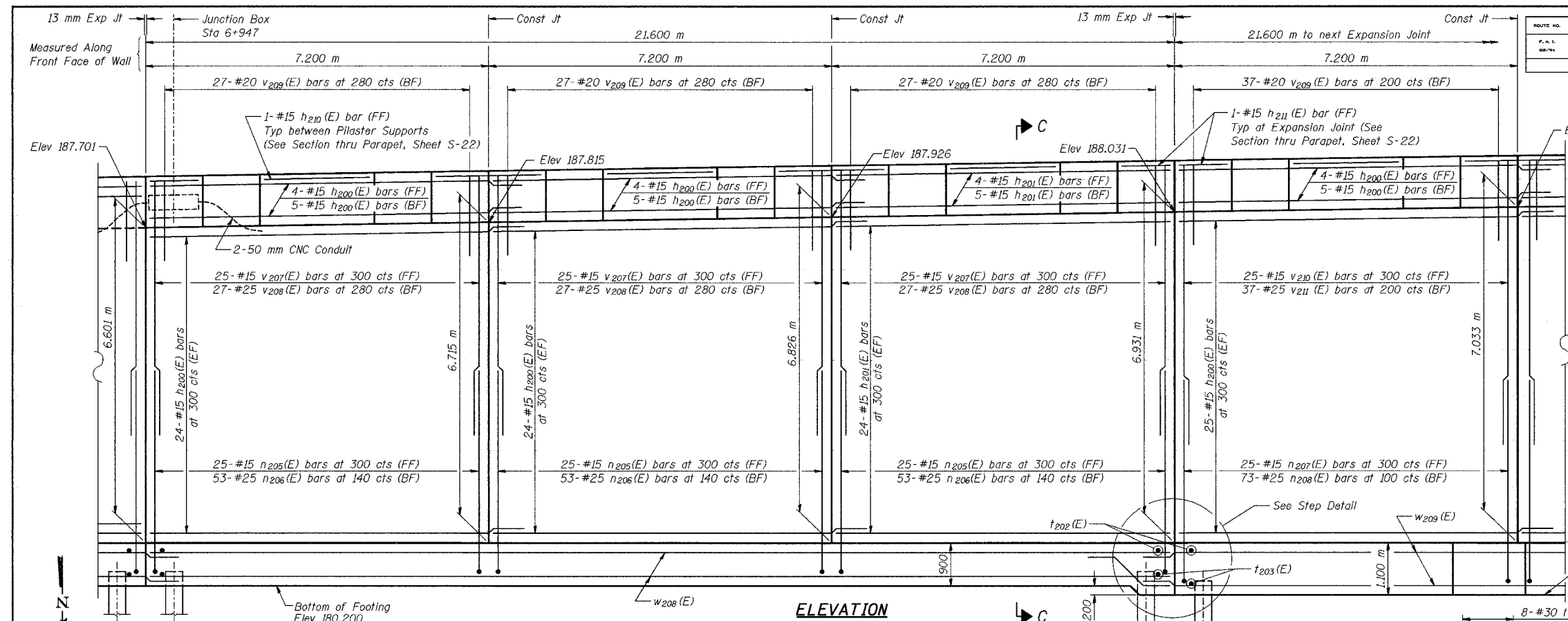
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 AND U.S. ROUTE 6
LOCAL ROAD RECONSTRUCTION

PLAN AND ELEVATION (15 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	SHEET NO. S-18
F.A.I.	2001-167R	COOK	1207	1000
DATE	10/71	CONTRACT	62114	35 SHEETS
ILLINOIS DEPARTMENT OF TRANSPORTATION				
CONTRACT No. 62114				



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.
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 Bars indicated thus 20 x 3-#15 etc. indicates 20 lines of bars with 3 lengths per line.
 Sta 6+919.078

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

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

LEGEND
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 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 (16 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

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