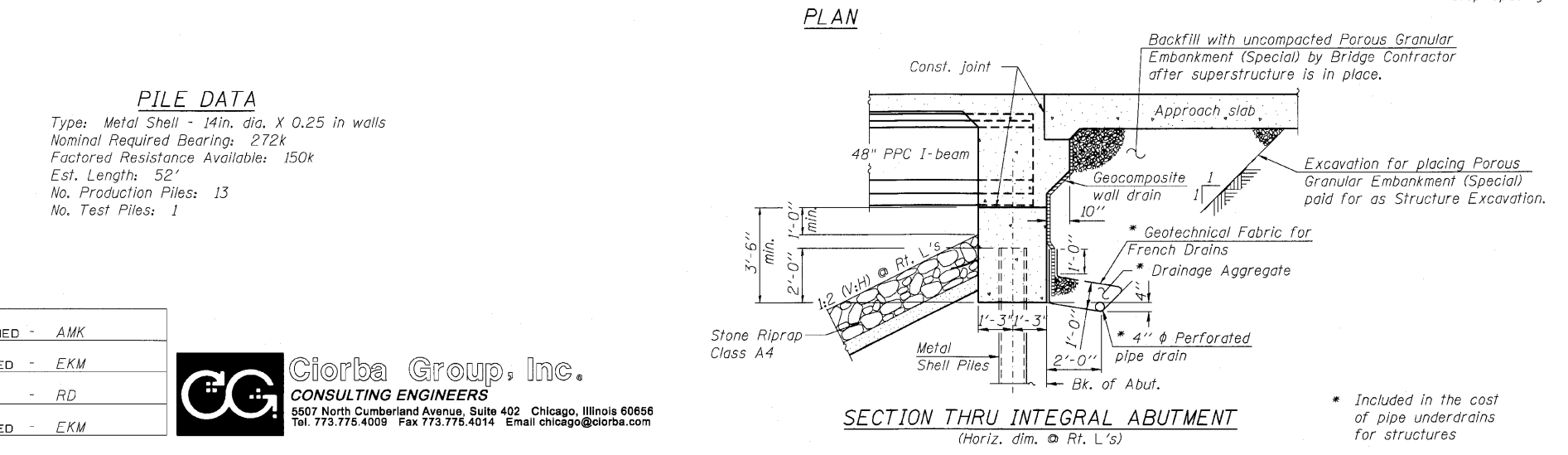
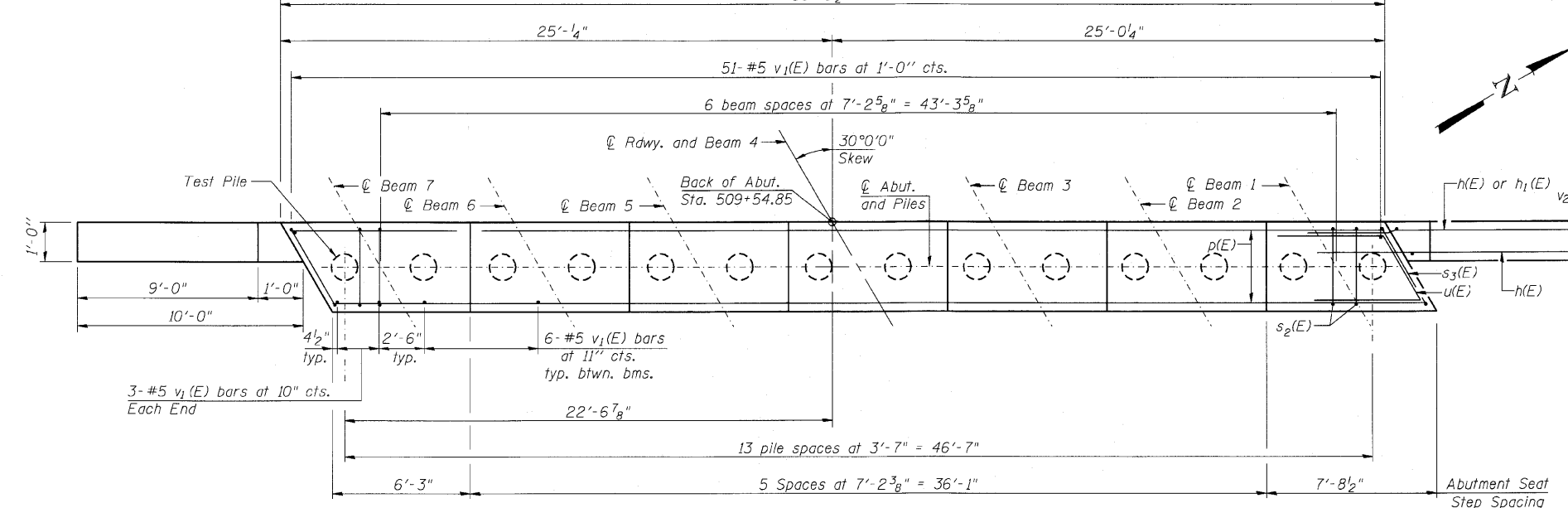
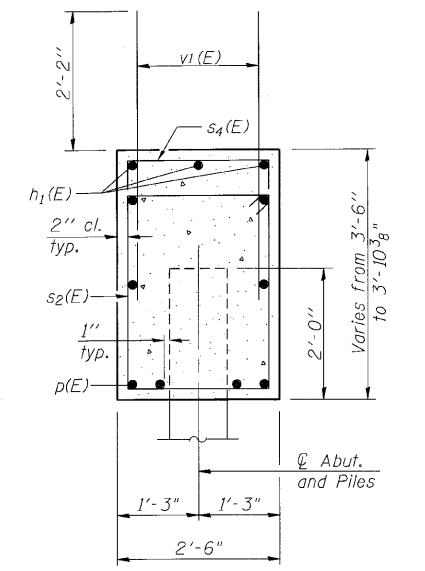
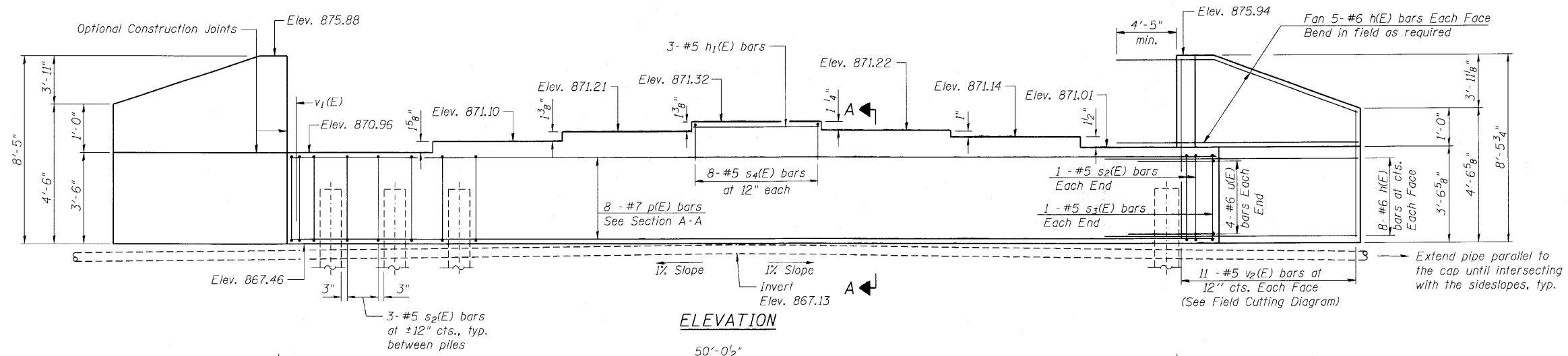


McHENRY COUNTY
DIVISION OF TRANSPORTATION



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	52	#6	14'-3"	—
h1(E)	3	#5	6'-10"	—
p(E)	8	#7	49'-8"	—
s2(E)	41	#5	11'-7"	□
s3(E)	2	#5	12'-3"	□
s4(E)	8	#5	4'-2"	□
u(E)	8	#6	11'-3"	∟
v1(E)	93	#5	4'-4"	—
v2(E)	22	#5	12'-3"	—
Porous Granular Embankment (Special)		Cu. Yd.	80	
Structure Excavation		Cu. Yd.	120	
Concrete Structures		Cu. Yd.	22.0	
Reinforcement Bars, Epoxy Coated		Pound	3,340	
Furnishing Metal Shell Piles, 14"x 0.25"		Foot	676	
Driving Piles		Foot	676	
Test Pile Metal Shells		Each	1	
Geocomposite Wall Drain		Sq. Yd.	57	
Pipe Underdrain for Structures, 4"		Foot	89	

NOTES:

- For details of Bar Splicers, see Sheet S-18.
- For details of piles, see Sheet S-17.
- Pour steps monolithic with cap.
- For Abutment diaphragm details, see Sheet S-8.
- For details of bars s2(E), s3(E), s4(E), and u(E), see sheet S-16.
- All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standards 601101)

PILE DATA
 Type: Metal Shell - 14in. dia. X 0.25 in walls
 Nominal Required Bearing: 272k
 Factored Resistance Available: 150k
 Est. Length: 52'
 No. Production Piles: 13
 No. Test Piles: 1

WEST ABUTMENT
STRUCTURE NO. 056-3179

SHEET NO.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-15	1233	06-00321-00-BR	McHENRY	48	33
CONTRACT NO. 63516					
ILLINOIS FED. AID PROJECT					

rdanleyj 8/22/2018 8/22/2018 \\s\proj\3381\3381\01\k\design\structural\road\3381_01_15_West_Abutment.dgn

DESIGNED -	AMK
CHECKED -	EKM
DRAWN -	RD
CHECKED -	EKM

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* Included in the cost of pipe underdrains for structures