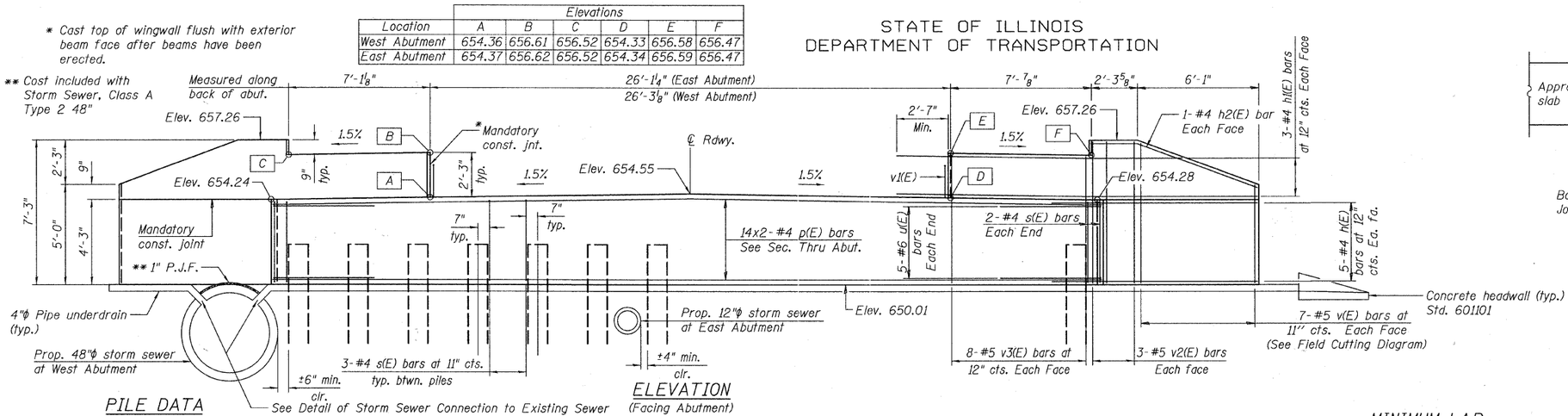
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Cast top of wingwall flush with exterior beam face after beams have been erected.

** Cost included with Storm Sewer, Class A Type 2 48"

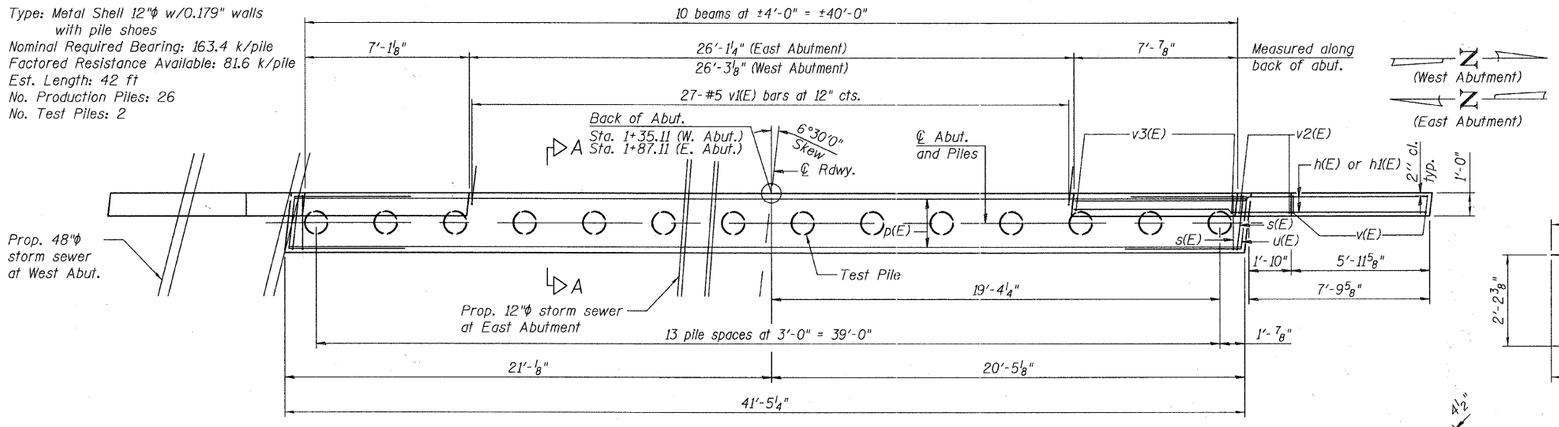
Location	Elevations A	B	C	D	E	F
West Abutment	654.36	656.61	656.52	654.33	656.58	656.47
East Abutment	654.37	656.62	656.52	654.34	656.59	656.47



ELEVATION
(Facing Abutment)

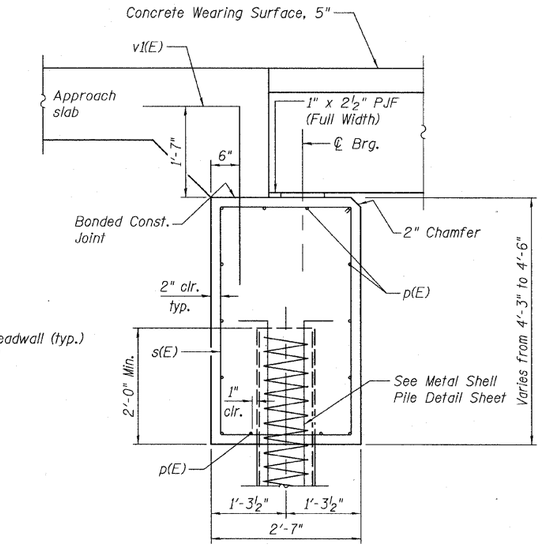
PILE DATA

Type: Metal Shell 12"ϕ w/0.179" walls with pile shoes
Nominal Required Bearing: 163.4 k/pile
Factored Resistance Available: 81.6 k/pile
Est. Length: 42 ft
No. Production Piles: 26
No. Test Piles: 2



PLAN

MINIMUM LAP
#4 bar = 2'-7"

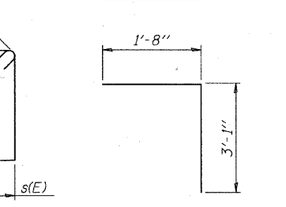


SECTION A-A
(Dimensions are at Rt. L's)

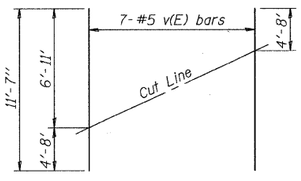
BILL OF MATERIAL - 2 ABUTS.

	Bar	No.	Size	Length	Shape
	h(E)	40	#4	10'-3"	
	h1(E)	24	#4	17'-11"	
	h2(E)	8	#4	8'-7"	
	p(E)	56	#4	21'-11"	
	s(E)	86	#4	12'-9"	
	u(E)	20	#6	12'-4"	
	v(E)	28	#5	11'-7"	
	v1(E)	54	#5	4'-9"	
	v2(E)	48	#5	6'-11"	
	v3(E)	64	#5	6'-2"	
	Structure Excavation		Cu. Yd.	88	
	Concrete Structures		Cu. Yd.	47.7	
*	Reinforcement Bars, Epoxy Coated		Pound	3,900	
	Geocomposite Wall Drain		Sq. Yd.	56	
	Furnishing Metal Shell Piles 12"x0.179"		Foot	1,092	
	Driving Piles		Foot	1,092	
	Test Pile Metal Shell		Each	2	
	Pile Shoes		Each	28	
	Concrete Headwall for Pipe Drains		Each	3	
*	Porous Granular Embankment, Special		Cu. Yd.	75	
*	Pipe Underdrain for Structure, 4"		Feet	130	

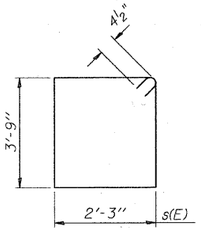
*See Special Provisions



BAR h2(E)

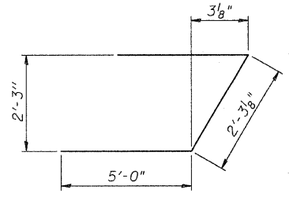


FIELD CUTTING DIAGRAM
Order v(E) full length. Cut as shown and use remainder of bars in opposite face.



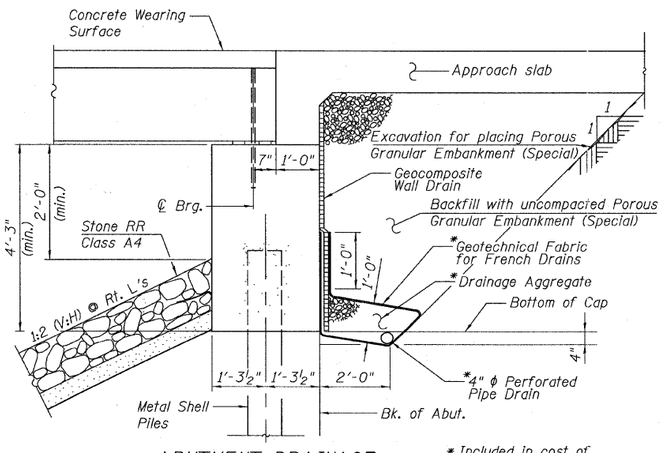
BARS s(E)

BAR v1(E)



BAR u(E)

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.



ABUTMENT DRAINAGE
(Horiz. dim. ℄ Rt. L's)

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

DESIGNED	DYS
CHECKED	JPB
DRAWN	DYS
CHECKED	JPB

URS
100 South Wacker Drive, Suite 500
Chicago, IL 60606
Tel: 312.939.1000
Fax: 312.939.4198

ABUTMENT PLAN & DETAILS
STRUCTURE NO. 049-6161

SHEET NO. S-7	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS		09-00085-00-BR	LAKE	22	15
			CONTRACT NO. 63584		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		