Notes: Space reinforcement in cap to miss dowel rods.
For details of piles, see sheet 11 of 14.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

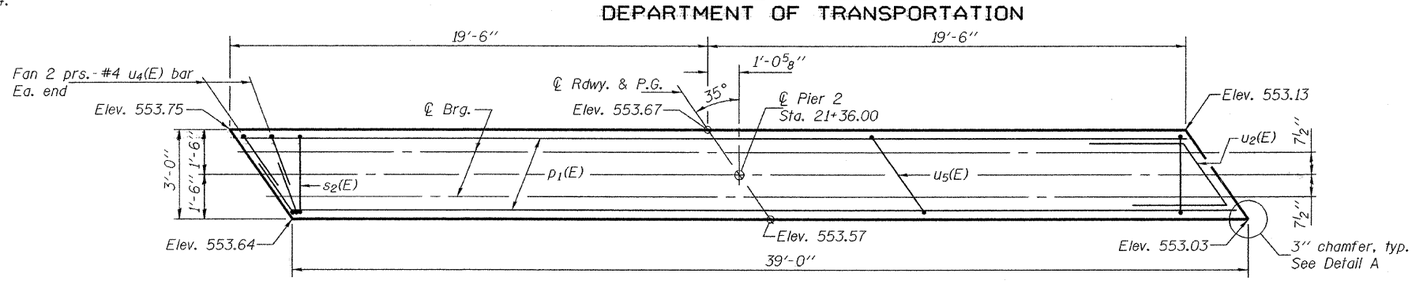
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 653	04-00256-00-BR	SHELBY	40	36
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 10
14 SHEETS

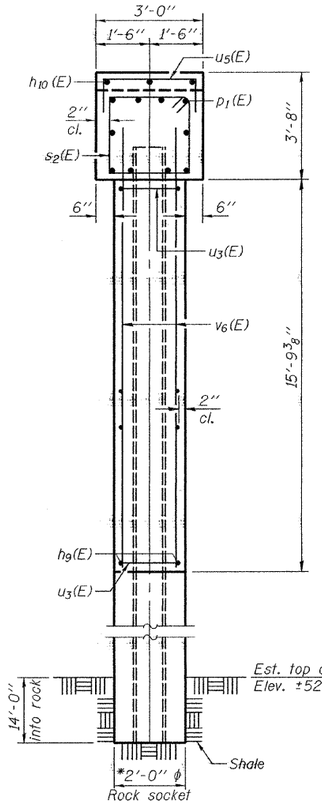
Contract No. 95555

PILE DATA

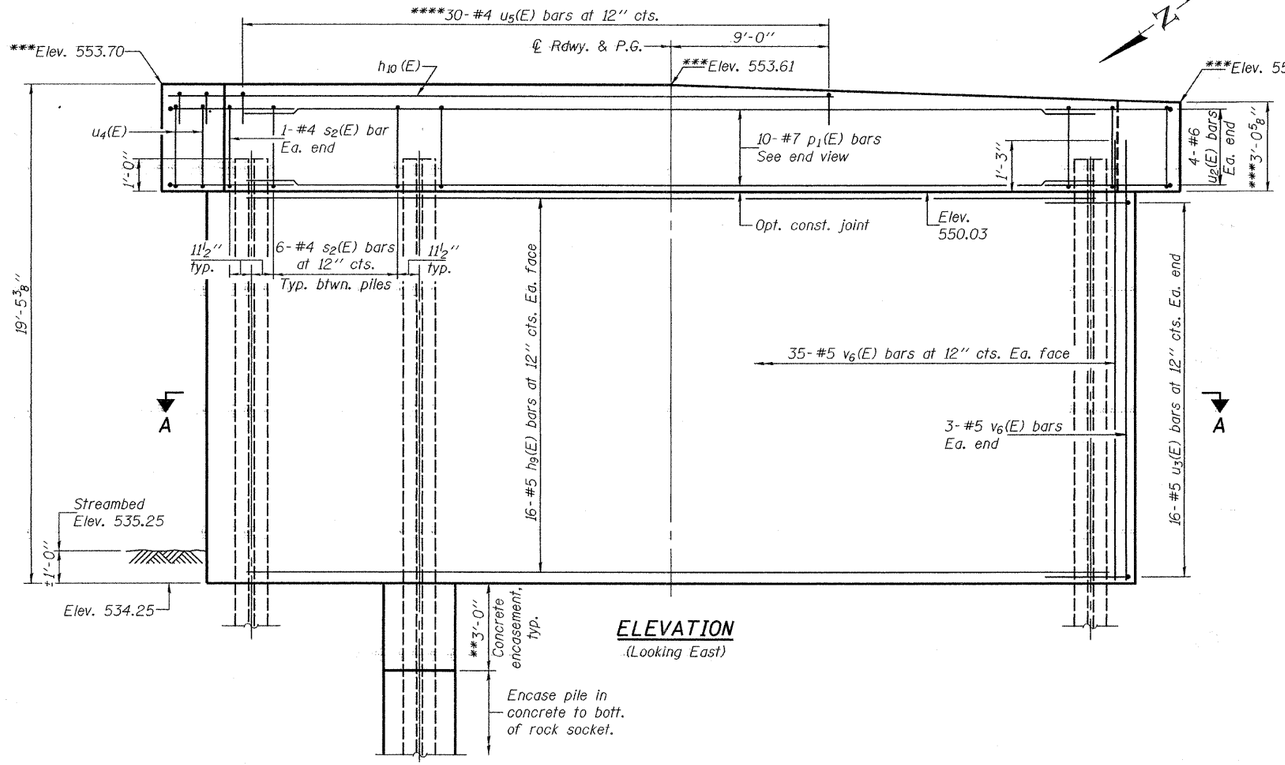
Type: Steel HP12x74
Nominal Required Bearing: Set in rock
Factored Resistance Available: 275 Kips
Est. Length: 36'
No. Production Piles: 6
No. Test Piles: 0
Est. Top of Rock Elevation: 529.71
Rock Socket Depth: 14'
Rock Socket Diameter: 2'



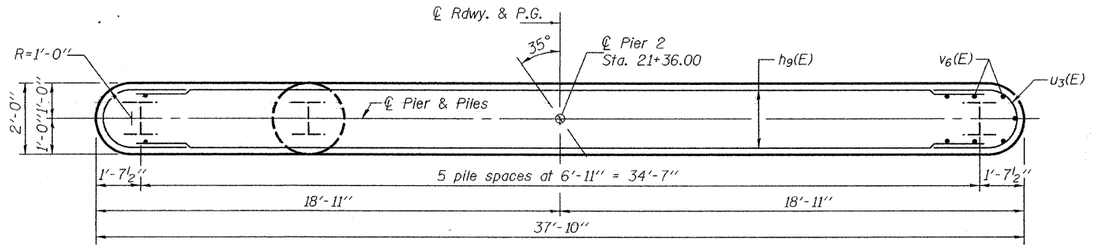
TOP PLAN



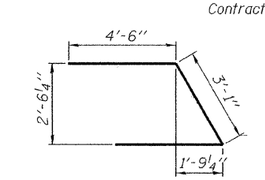
END VIEW



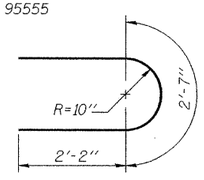
ELEVATION
(Looking East)



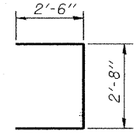
SECTION A-A



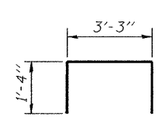
BAR u2(E)



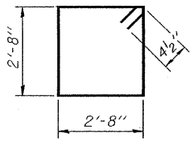
BAR u3(E)



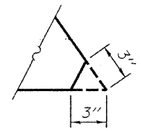
BAR u4(E)



BAR u5(E)



BAR s2(E)



DETAIL A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h9(E)	32	#5	35'-10"	——
h10(E)	3	#5	28'-4"	——
p1(E)	10	#7	38'-7"	——
s2(E)	32	#4	11'-5"	□
u2(E)	8	#6	12'-1"	⊐
u3(E)	32	#5	6'-11"	⊐
u4(E)	8	#4	7'-8"	⊐
u5(E)	30	#4	5'-11"	⊓
v6(E)	76	#5	16'-10"	——
Structure Excavation			Cu. Yd.	9
Concrete Structures			Cu. Yd.	58.8
Reinforcement Bars, Epoxy Coated			Pound	4190
Furnishing Steel Piles, HP12x74			Foot	216
Concrete Encasement			Cu. Yd.	2.1
Setting Piles in Rock			Each	6
Underwater Structure Excavation Protection, Location 2			Each	1

*Pile shall be completely encased in concrete from the bottom of the wall to the bottom of the rock socket. The top 3'-0" of concrete encasement shall be paid for as Concrete Encasement. The remaining encasement shall be included with Setting Piles in Rock. Concrete shall be placed the same day as the rock socket excavation in order to minimize deterioration of the shale.
**Forms shall be placed below Elev. 534.25 after excavation for pier walls. Reinforcement and concrete encasement may be placed underwater into forms. The cost of concrete encasement, reinforcement, form excavation and furnishing and placing forms is included with Concrete Encasement. If a portion of the pier wall is under water, concrete shall be trimmed under water into forms according to Article 503.08 of the Std. Spec's. Concrete shall be trimmied to an Elev. 1'-0" above water level at the time of construction.
***Elevations or dimensions at centerline of pier.
****u_5(E) bars shall be placed along the skew.

DESIGNED	Jay D. Edwards
CHECKED	Nick R. Barnett
DRAWN	h.t. duong
CHECKED	JDE/NRB/GRA

Sep. 4. 2008
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

PIER 2
F.A.S. RTE. 653 - SEC. 04-00256-00-BR
SHELBY COUNTY
STATION 21+06.00
STRUCTURE NO. 087-3563