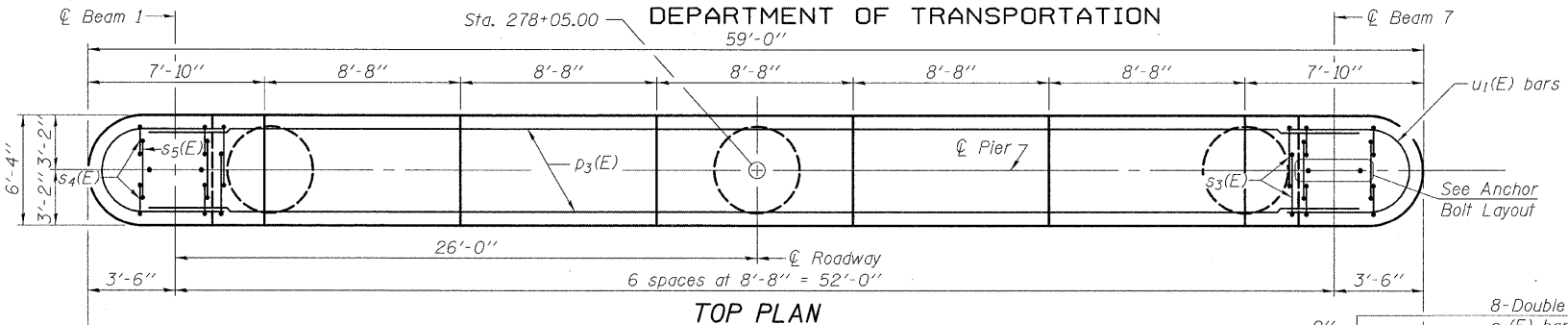
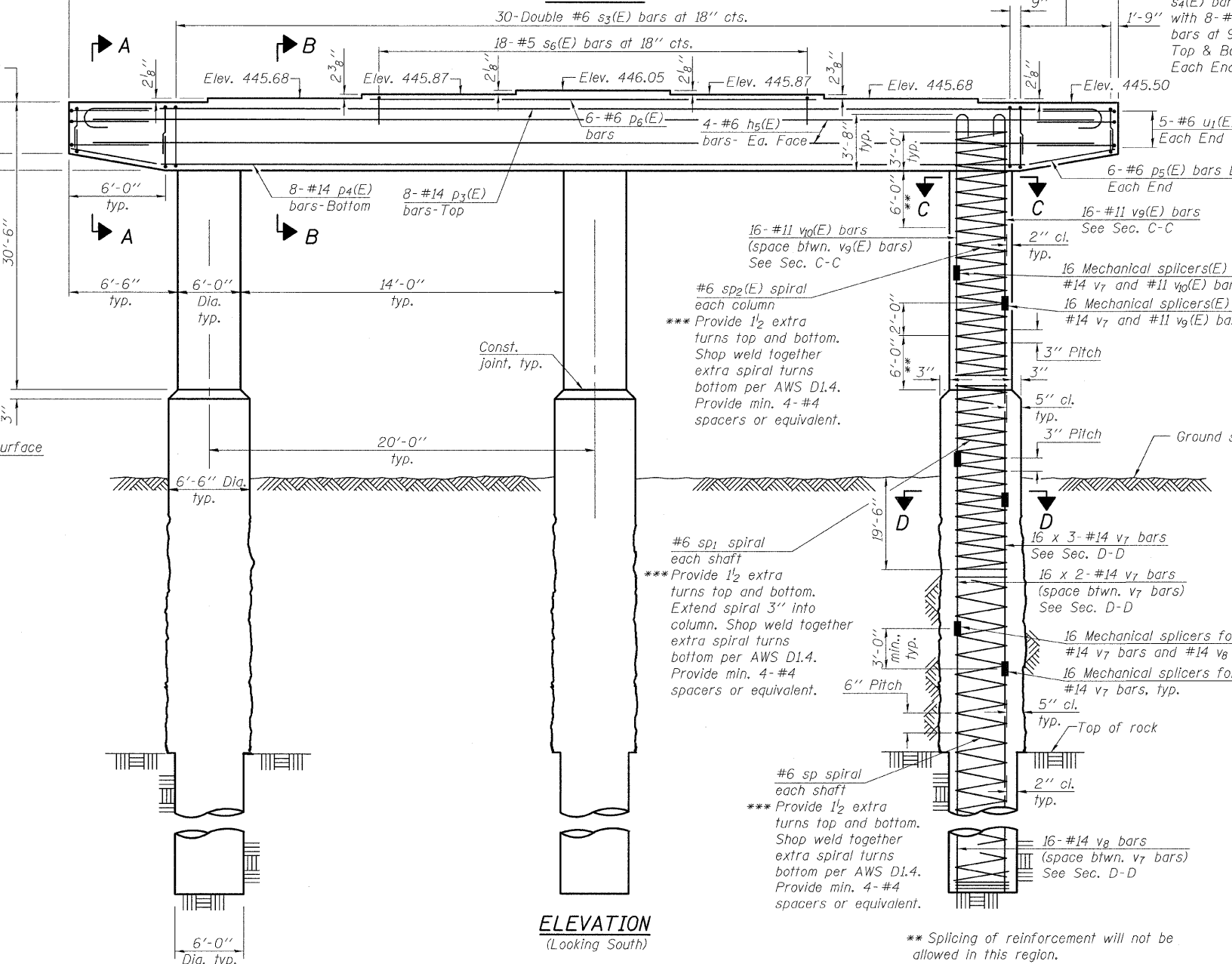


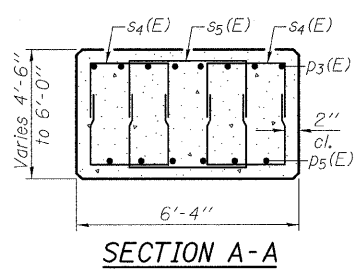
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



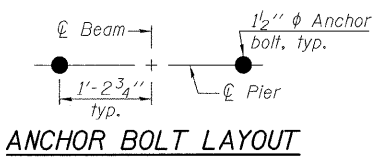
TOP PLAN



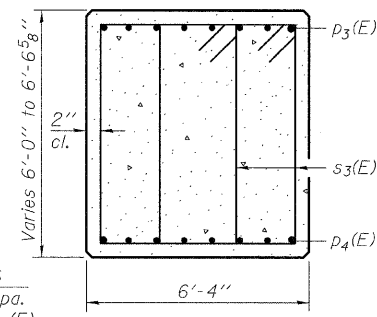
ELEVATION
(Looking South)



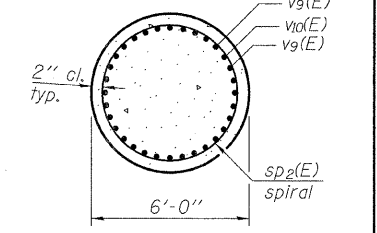
SECTION A-A



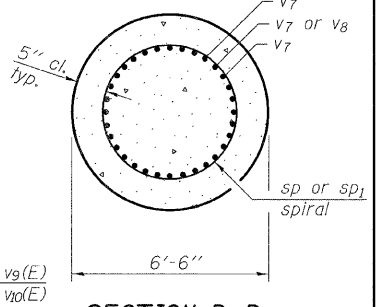
ANCHOR BOLT LAYOUT



SECTION B-B

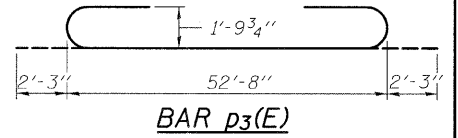


SECTION C-C

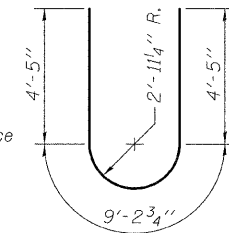


SECTION D-D

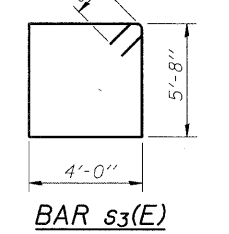
BARS v9(E) & v10(E)



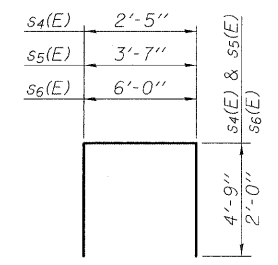
BAR p3(E)



BAR u1(E)



BAR s3(E)



BARS s4(E), s5(E) & s6(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h5(E)	8	#6	52'-8"	—
p3(E)	8	#14	57'-2"	U
p4(E)	8	#14	47'-0"	—
p5(E)	12	#6	6'-0"	—
p6(E)	6	#6	25'-8"	—
s3(E)	60	#6	20'-8"	□
s4(E)	64	#6	11'-11"	□
s5(E)	32	#6	13'-1"	□
s6(E)	18	#5	10'-0"	□
sp	3	#6	103'-0"	~
sp1	3	#6	30'-0"	~
sp2(E)	3	#6	27'-0"	~
u1(E)	10	#6	18'-1"	U
v7	240	#14	47'-0"	—
v8	48	#14	50'-0"	—
v9(E)	48	#11	21'-9"	—
v10(E)	48	#11	18'-9"	—
Concrete Structures			Cu. Yd.	167.7
Reinforcement Bars			Pounds	131,290
Reinforcement Bars, Epoxy Coated			Pound	30,680
Drilled Shaft in Soil			Cu. Yd.	442.4
Drilled Shaft in Rock			Cu. Yd.	40.8
Mechanical Splicers			Each	288

**** Cast steps monolithically with cap. Space cap reinforcement to miss anchor bolts. **** Length is height of spiral. Bars indicated thus 16 x 2-#14 etc. indicates 16 lines of bars with 2 lengths per line.

PIER 1
STRUCTURE NO. 082-0038

DESIGNED	EML
CHECKED	KAK
DRAWN	AJF
CHECKED	KAK

Note:
When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

** Splicing of reinforcement will not be allowed in this region.
*** Allowable substitution:
Provide 1/2 extra turns top and bottom with 135° standard hook into core at ends of spiral.

HORNER & SHIFRIN, INC.
ENGINEERS

SHEET NO. 39 48 SHEETS	F.A.P. RTE. 312	SECTION 64-1VBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 91
	CONTRACT NO. 76882				
ILLINOIS FED. AID PROJECT					