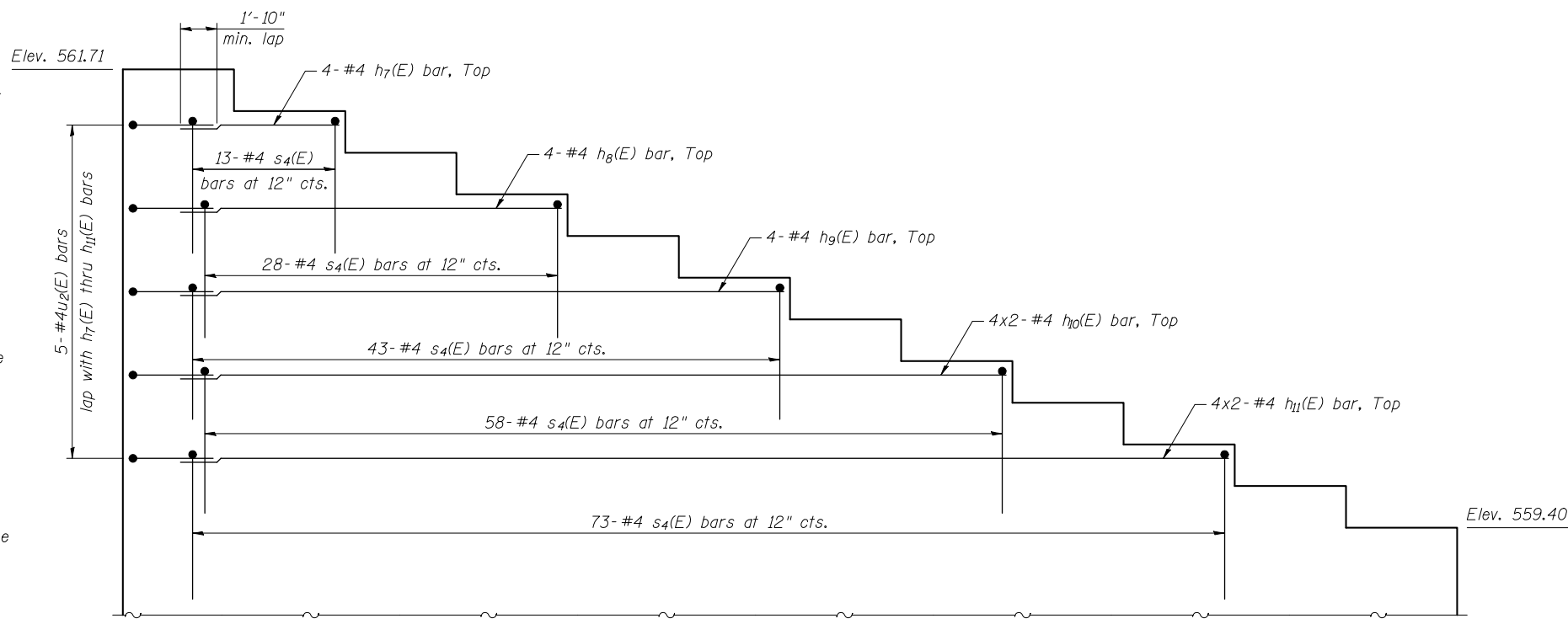
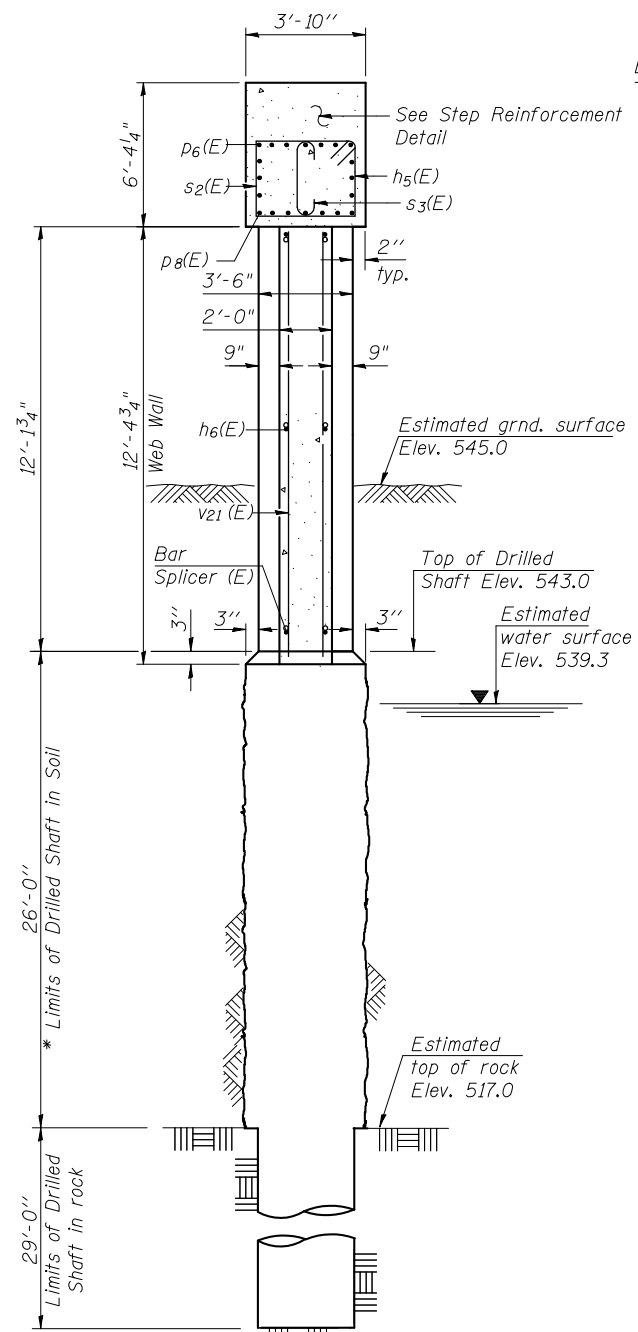


Contract #72789

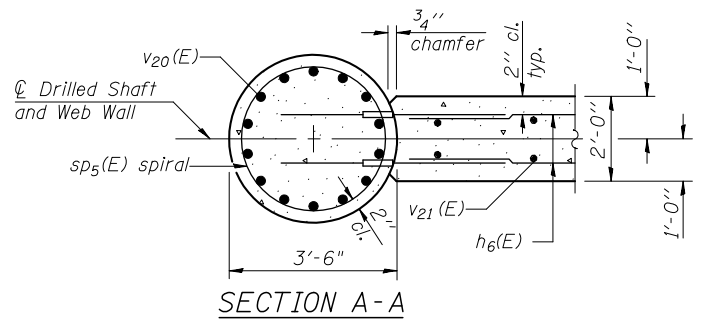
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₅ (E)	18	#6	30'-10"	—
h ₆ (E)	156	#5	8'-5"	—
h ₇ (E)	4	#4	11'-7"	—
h ₈ (E)	4	#4	26'-7"	—
h ₉ (E)	4	#4	41'-7"	—
h ₁₀ (E)	8	#4	29'-3"	—
h ₁₁ (E)	8	#4	36'-9"	—
p ₆ (E)	16	#9	28'-10"	⌋
p ₇ (E)	8	#9	48'-0"	—
p ₈ (E)	16	#9	46'-2"	—
s ₂ (E)	127	#6	16'-2"	⌋
s ₃ (E)	127	#6	5'-3"	⌋
s ₄ (E)	215	#4	6'-6"	⌋
sp ₆	7	#4	55'-0"	⌋
sp ₇ (E)	7	#4	12'-4"	⌋
u ₁ (E)	10	#6	14'-1"	⌋
u ₂ (E)	5	#4	11'-1"	⌋
v ₈ (E)	98	#8	13'-10"	—
v ₉	98	#8	55'-0"	—
v ₂₀ (E)	98	#8	16'-6"	—
v ₂₁ (E)	120	#5	12'-1"	—
Concrete Structures		Cu. Yd.	148.2	
Reinforcement Bars		Pound	19,650	
Reinforcement Bars, Epoxy Coated		Pound	25,310	
Structure Excavation		Cu. Yd.	44	
Drilled Shaft in Soil		Cu. Yd.	84.7	
Drilled Shaft in Rock		Cu. Yd.	72.3	

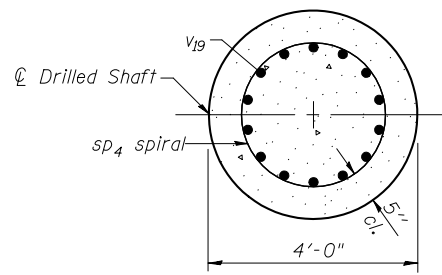
** Length is height of spiral.



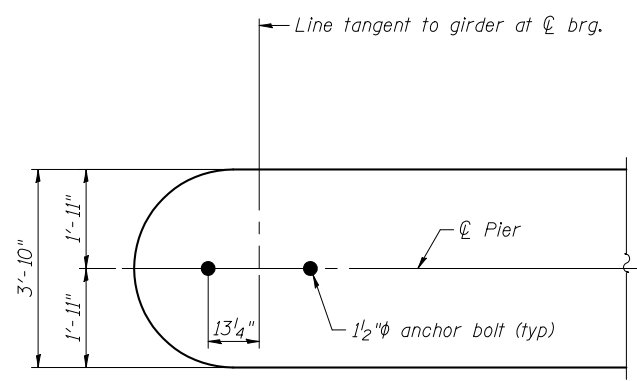
STEP REINFORCEMENT DETAIL



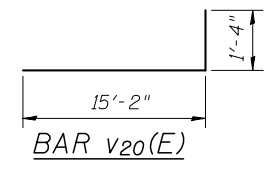
SECTION A-A



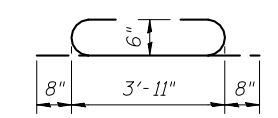
SECTION B-B



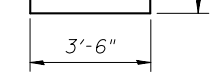
ANCHOR BOLT LOCATION DETAIL



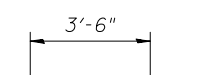
BAR v20(E)



BAR s3(E)



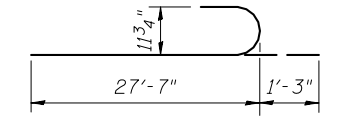
BAR p6(E)



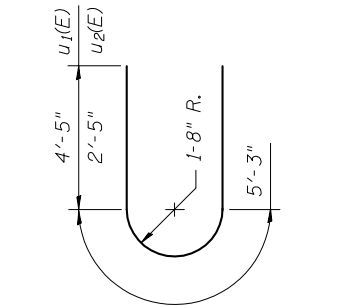
BAR s2(E)



BAR s4(E)



BAR p6(E)



BARS u1(E) & u2(E)

* 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.

CONSTRUCTION SEQUENCE FOR WEB WALL

1. Excavate between shafts to elevation of web wall base and set web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
2. Place the web wall reinforcement cage into the forms using spacers to maintain proper clearances.
3. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
4. Construct Columns.
5. Construct web walls.

DESIGNED	CME
CHECKED	MCB
DRAWN	TFG
CHECKED	MCB

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002708

PIER 4 DETAILS
F.A.U. ROUTE 7706 - SECTION 23(B-1)
LOGAN COUNTY
STATION 99+46.00
STRUCTURE NO. 054-0512