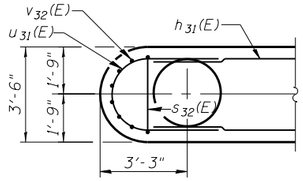
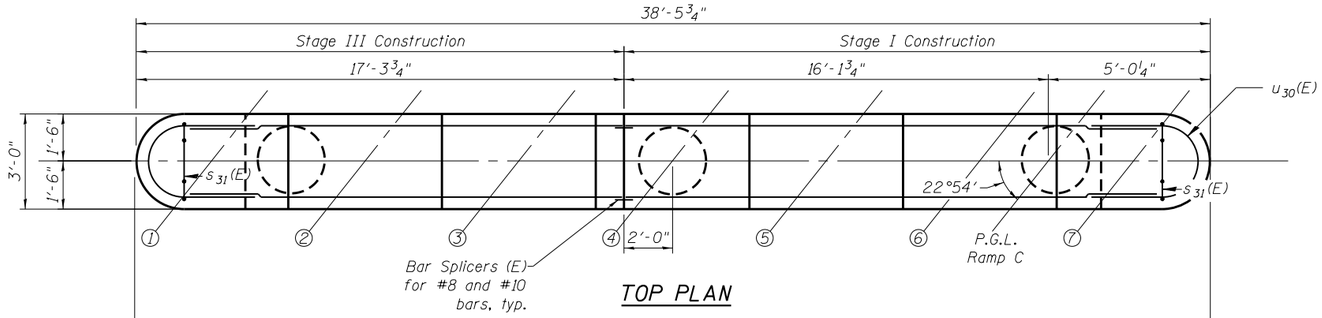
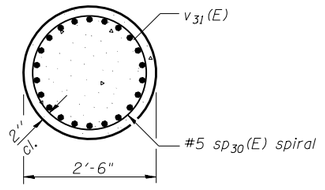


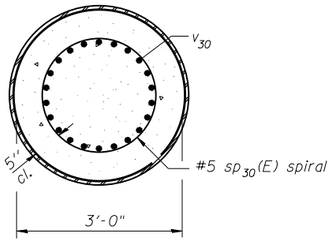
SECTION D-D



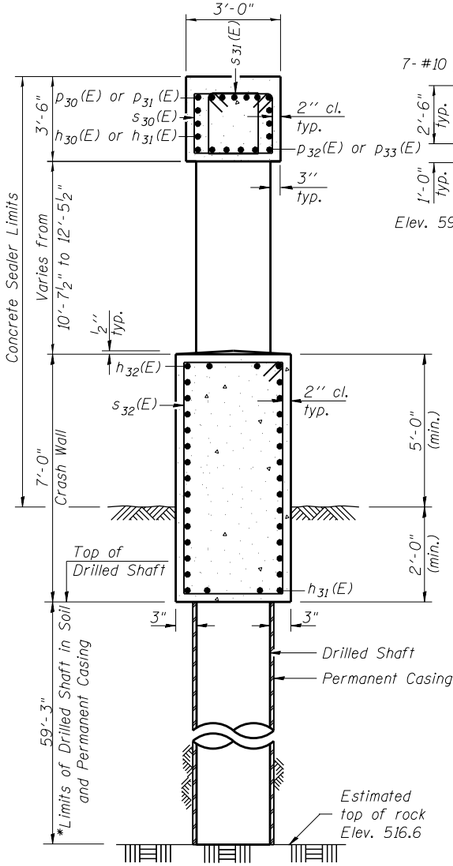
TOP PLAN



SECTION A-A

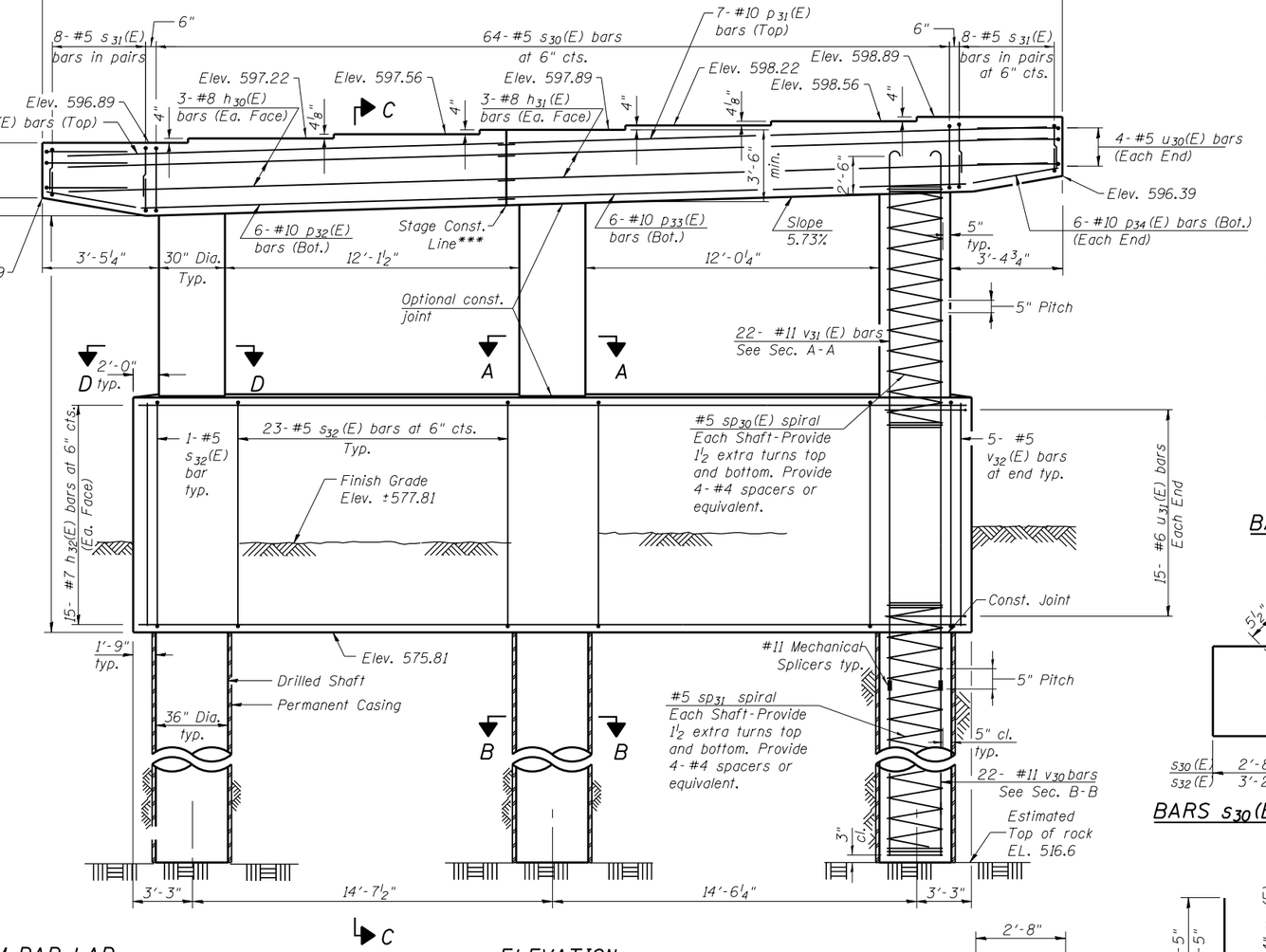


SECTION B-B



SECTION C-C

*** South portion of pier cap only to be completed following existing structure removal

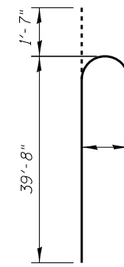


ELEVATION
(Looking West)

* The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation. The casing thickness shall be 1/2", typ. See Article S16.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.

MINIMUM BAR LAP

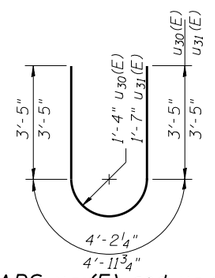
(E) bars
#5 bar = 3'-3"
#6 bar = 3'-10"
#8 bar = 6'-9"
#10 bar = 10'-10"



BAR $v_{31}(E)$

BAR $s_{31}(E)$

BARS $s_{30}(E)$ & $s_{32}(E)$



BARS $u_{30}(E)$ and $u_{31}(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_{30}(E)$	6	#8	16'-9"	—
$h_{31}(E)$	6	#8	20'-8"	—
$h_{32}(E)$	30	#7	35'-1"	—
$p_{30}(E)$	7	#10	16'-9"	—
$p_{31}(E)$	7	#10	20'-8"	—
$p_{32}(E)$	6	#10	13'-5"	—
$p_{33}(E)$	6	#10	17'-4"	—
$p_{34}(E)$	12	#10	2'-8"	—
$s_{30}(E)$	64	#5	12'-7"	⊐
$s_{31}(E)$	32	#5	7'-0"	⊔
$s_{32}(E)$	48	#5	20'-7"	⊐
** $sp_{30}(E)$	3	#5	14'-0"	∿∿∿
** sp_{31}	3	#5	60'-0"	∿∿∿
$u_{30}(E)$	8	#5	11'-0"	⊃⊃
$u_{31}(E)$	30	#6	11'-10"	⊃⊃
v_{30}	66	#11	44'-0"	—
$v_{31}(E)$	66	#11	37'-11"	⊂
$v_{32}(E)$	10	#5	6'-8"	—
Concrete Sealer			Sq. Ft.	418
Concrete Structures			Cu. Yd.	54.5
Reinforcement Bars			Pound	18,500
Reinforcement Bars, Epoxy Coated			Pound	21,640
Drilled Shaft in Soil			Cu. Yd.	46.6
Permanent Casing			Foot	178

** Length is height of spiral.

Notes:
Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 2'-6"
Concrete Sealer applied to roadside face of Pier only.
For Anchor Bolt and Bearing Plate locations, see sheets S29 thru S31 of S49.
See sheet S43 of S49 for Bar Splicer Details.

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ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

USER NAME =	DESIGNED - MAH	REVISED
	CHECKED - LDB	REVISED
PLOT SCALE =	DRAWN - DR	REVISED
PLOT DATE =	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 016-1322
SHEET NO. S38 OF S49 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	230
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			