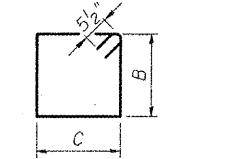


BARS s24(E), s25(E) & s27(E)

Bar	A
s24(E)	2'-6 1/2"
s25(E)	2'-2"
s27(E)	2'-11 1/4"



BARS s26(E) & s28(E) thru s31(E)

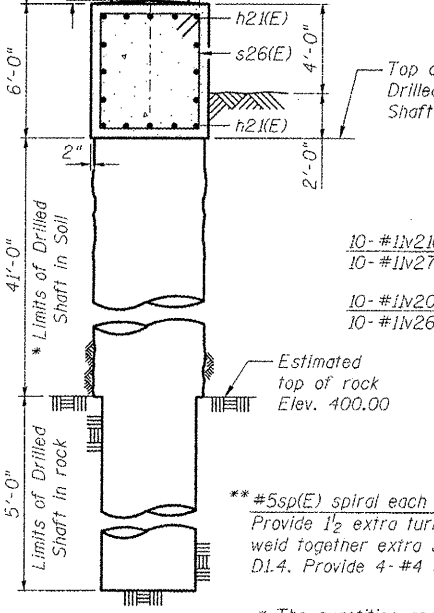
Bar	B	C
s26(E)	5'-8"	5'-0"
s28(E)	3'-4 1/2"	2'-7"
s29(E)	3'-11 1/2"	2'-7"
s30(E)	3'-9 3/4"	2'-7"
s31(E)	3'-7 1/4"	2'-7"

MINIMUM BAR LAP
 #5(E) Bar = 3'-3"
 #6(E) Bar = 3'-10"
 #7(E) Bar = 5'-2"
 #8(E) Bar = 6'-9"

Cast steps monolithically with cap.
 Space cap reinforcement to miss anchor bolts.
 ** Length is height of spiral.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h20(E)	24	#5	25'-9"	
h21(E)	48	#5	22'-8"	
p20(E)	32	#8	31'-9"	
s25(E)	16	#8	20'-9"	
p22(E)	8	#7	33'-2"	
p23(E)	16	#7	24'-0"	
p24(E)	4	#5	12'-7"	
p27(E)	4	#5	11'-5"	
p28(E)	4	#5	16'-0"	
s24(E)	32	#5	7'-8"	
s25(E)	12	#5	6'-11"	
s26(E)	61	#5	22'-3"	
s27(E)	44	#5	8'-6"	
s28(E)	28	#5	12'-10"	
s29(E)	58	#5	14'-0"	
s30(E)	22	#5	13'-9"	
s31(E)	16	#5	13'-4"	
sp(E)	5	#5	47'-9"	~
sp1(E)	5	#5	24'-7"	~
u20(E)	7	#5	11'-10"	
u21(E)	10	#5	15'-4"	
v20(E)	50	#11	24'-0"	
v21(E)	50	#11	25'-7"	
v23(E)	100	#11	28'-3"	
v26(E)	50	#11	21'-0"	
v27(E)	50	#11	28'-7"	
Structure Excavation		Cu. Yd.	48.0	
Concrete Structures		Cu. Yd.	321.1	
Reinforcement Bars, Epoxy Coated		Pound	53,900	
Mechanical Splicers		Each	100	
Drilled Shaft in Soil		Cu. Yd.	149.1	
Drilled Shaft in Rock		Cu. Yd.	14.7	

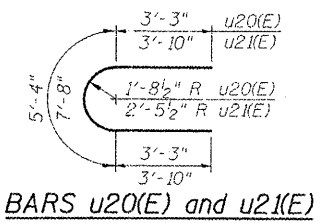


SECTION C-C

* 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.

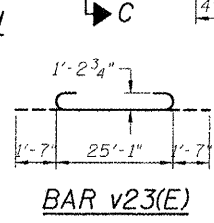
** Allowable substitution: Provide 1/2 extra turns top and bottom with 135° standard hook into core at ends of spiral.

*** Splicing of reinforcement will not be allowed in this region.

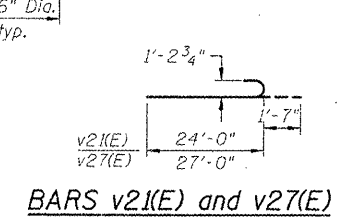


BARS u20(E) and u21(E)

ELEVATION (Looking East)



BAR p23(E)



BARS v23(E) and v27(E)

CMT
 CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

USER NAME = Gary Davis	DESIGNED - MCC	REVISED - REVISED SHEET
	CHECKED - ATI	REVISED - 2/24/12
PLOT SCALE =	DRAWN - GLD	REVISED -
PLOT DATE = 1/31/2012	CHECKED - ATI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 100-0093 (W.B.)

SHEET NO. S-310F S-41 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1X-1)VB-1	WILLIAMSON	367	197
			CONTRACT NO. 98859	
ILLINOIS FED. AID PROJECT				

FILE NAME = I:\data\98859\310f\w\cedd\shwa\struc\plans\enaf_r\bridge\PIER 2.R BRIDGE.dgn