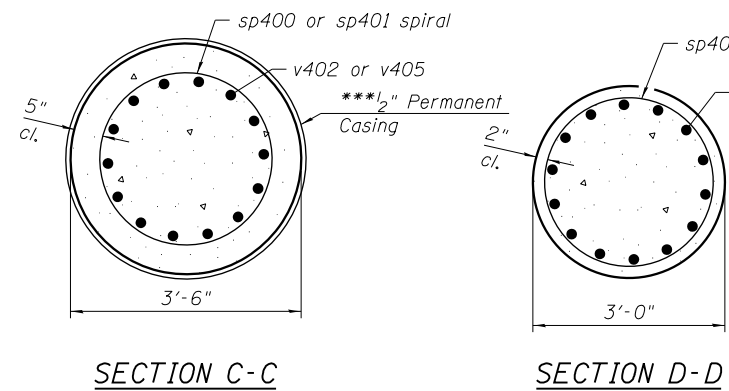


DRILLED SHAFT ELEVATION

Minimum Bar Laps	
Bar	Lap
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#9	8'-7"
#6 Spiral	3'-0"



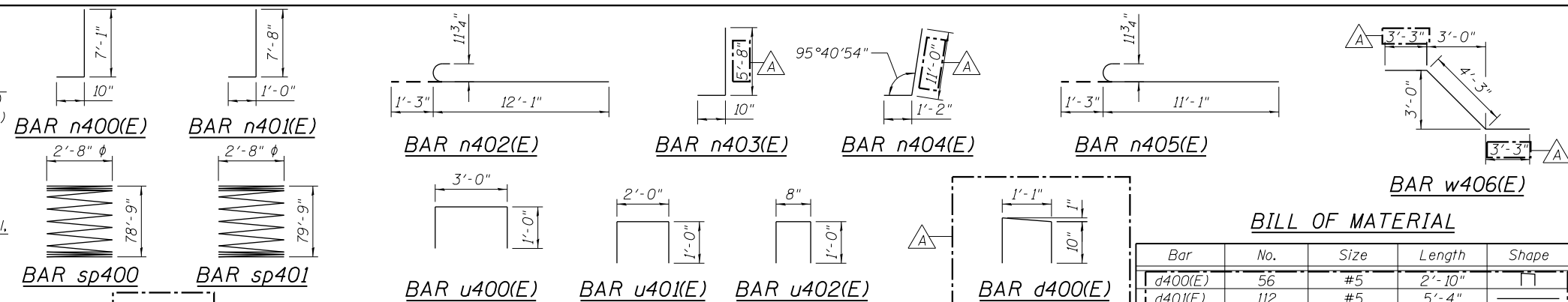
Notes:

Apply Concrete Sealer to all exposed concrete surfaces of the abutment and wingwalls. Pour steps monolithically with cap.

Space p400(E), u400(E) and u401(E) bars to miss anchor bolts.

* The quantities and detailing are based on the estimated elevations shown on the plans. The actual elevations may differ at each shaft and corresponding adjustments shall be made to the drilled shaft and reinforcement quantities and payment limits.

*** Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of the casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.



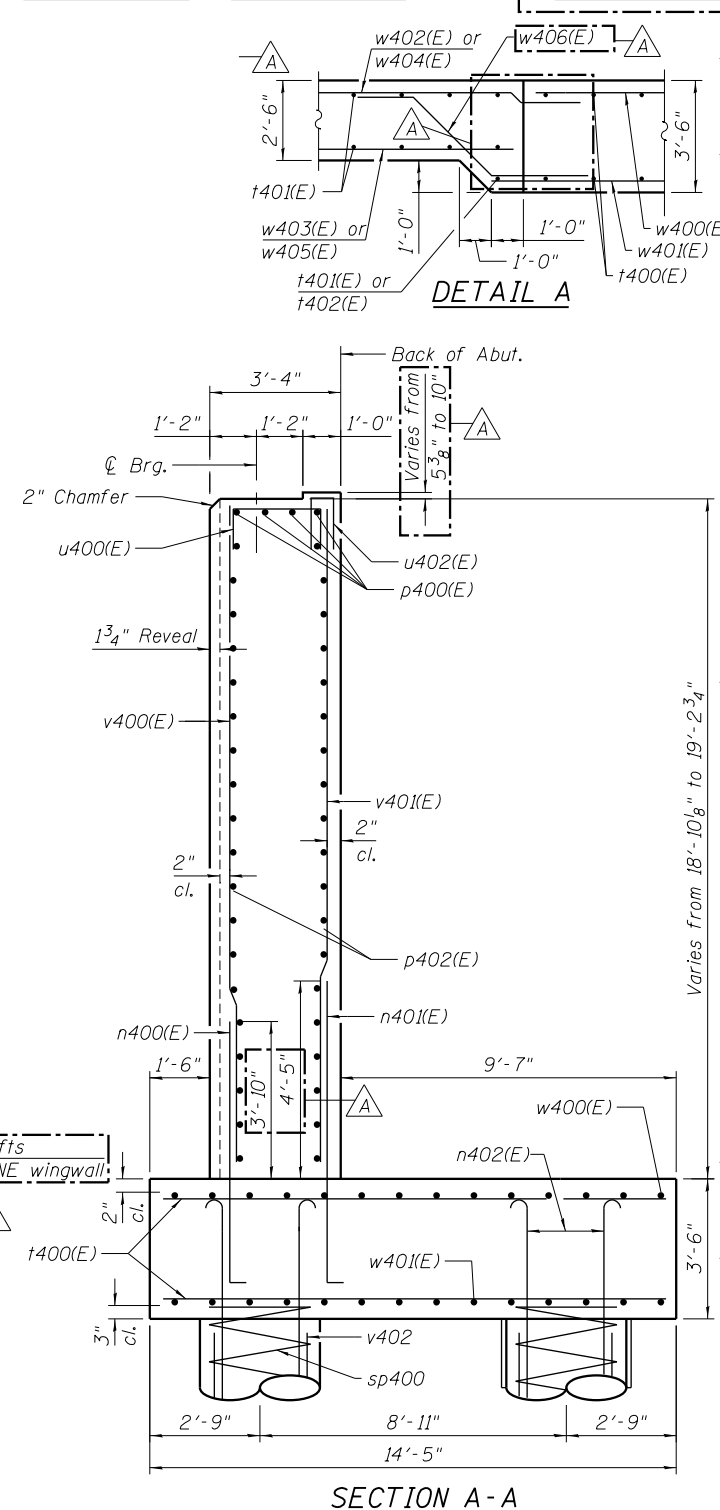
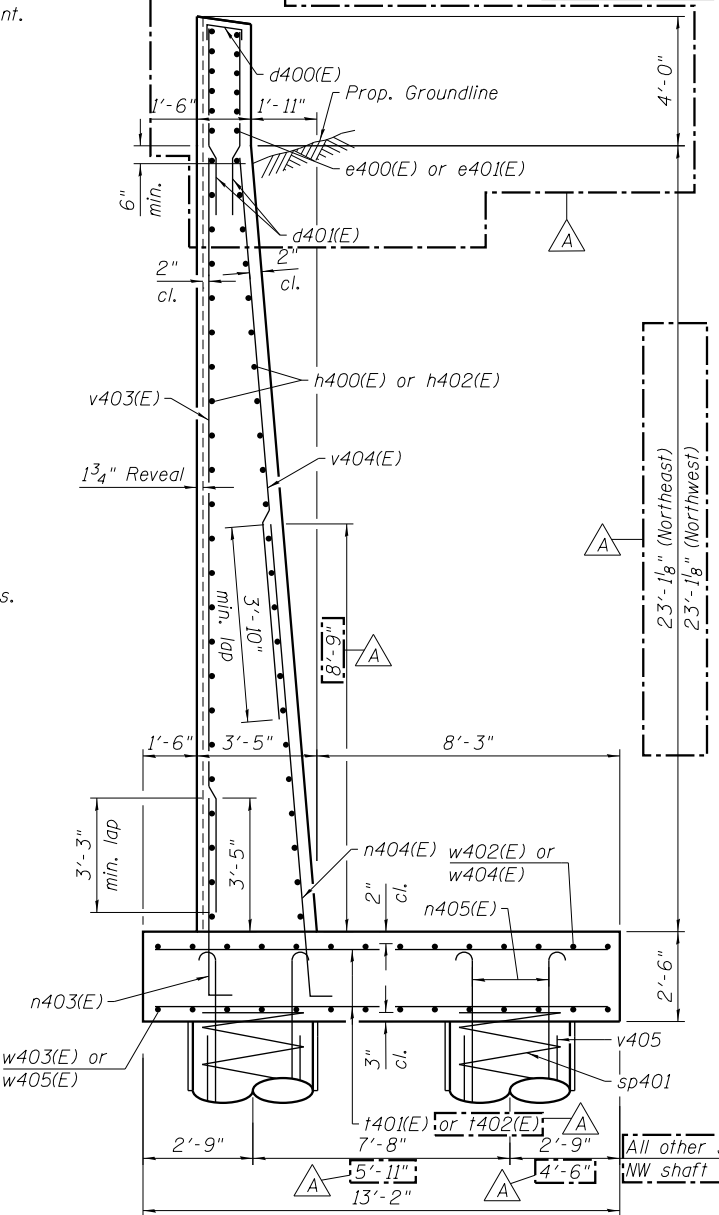
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d400(E)	56	#5	2'-10"	
d401(E)	112	#5	5'-4"	
e400(E)	12	#5	24'-8"	
e401(E)	12	#5	28'-8"	
h400(E)	48	#5	24'-8"	
h402(E)	48	#5	28'-8"	
h404(E)	4	#5	2'-0"	
n400(E)	57	#5	7'-11"	
n401(E)	136	#6	8'-8"	
n402(E)	140	#9	13'-4"	
n403(E)	56	#5	6'-6"	
n404(E)	111	#7	12'-2"	
n405(E)	112	#9	12'-4"	
p400(E)	4	#6	56'-0"	
p401(E)	3	#6	5'-11"	
p402(E)	38	#5	56'-0"	
sp400	10	#6	78'-9"	
sp401	8	#6	79'-9"	
t400(E)	272	#6	14'-1"	
t401(E)	221	#7	12'-10"	
t402(E)	6	#7	12'-11"	
t403(E)	1	#7	12'-8"	
u400(E)	57	#6	5'-0"	
u401(E)	7	#6	4'-0"	
u402(E)	57	#5	2'-8"	
v400(E)	57	#5	18'-6"	
v401(E)	136	#6	18'-6"	
v402	280	#9	42'-1"	
v403(E)	56	#5	22'-9"	
v404(E)	111	#6	18'-0"	
v405	224	#9	42'-7"	
v406(E)	6	#5	1'-7"	
w400(E)	15	#5	56'-0"	
w401(E)	15	#5	58'-0"	
w402(E)	14	#5	27'-0"	
w403(E)	32	#9	29'-11"	
w404(E)	14	#5	32'-4"	
w405(E)	40	#9	35'-3"	
w406(E)	28	#5	10'-9"	

Structure Excavation	Cu. Yd.	1638
Concrete Structures	Cu. Yd.	420.3
Concrete Superstructure	Cu. Yd.	11.7
Reinforcement Bars	Pound	108,440
Reinforcement Bars, Epoxy Coated	Pound	55,740
Permanent Casing	Foot	763
Drilled Shaft in Soil	Cu. Yd.	488.3
Drilled Shaft in Rock	Cu. Yd.	14.3
Concrete Sealer	Sq. Ft.	2062
Geocomposite Wall Drain	Sq. Yd.	259
Granular Backfill for Structures	Cu. Yd.	339

Bars indicated thus, 1x15-#5 etc., indicates 1 line of bars with 15 lengths per line.

** Length is height of spiral.



SECTION A-A

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT DETAILS 1
STRUCTURE NO. 016-1708

SHEET NO. 42 OF 55 SHEETS

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2090	2013-011R	COOK	356	174
ILLINOIS FED. AID PROJECT			CONTRACT NO.	60W29

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USER NAME = jrmickow	DESIGNED	JRM	REVISED	1/20/2014	JRM
	CHECKED	SAS	REVISED		
PLOT SCALE = 0x2.0000 '1" / in.	DRAWN	RLS	REVISED		
PLOT DATE = 1/21/2014	CHECKED	WJC	REVISED		