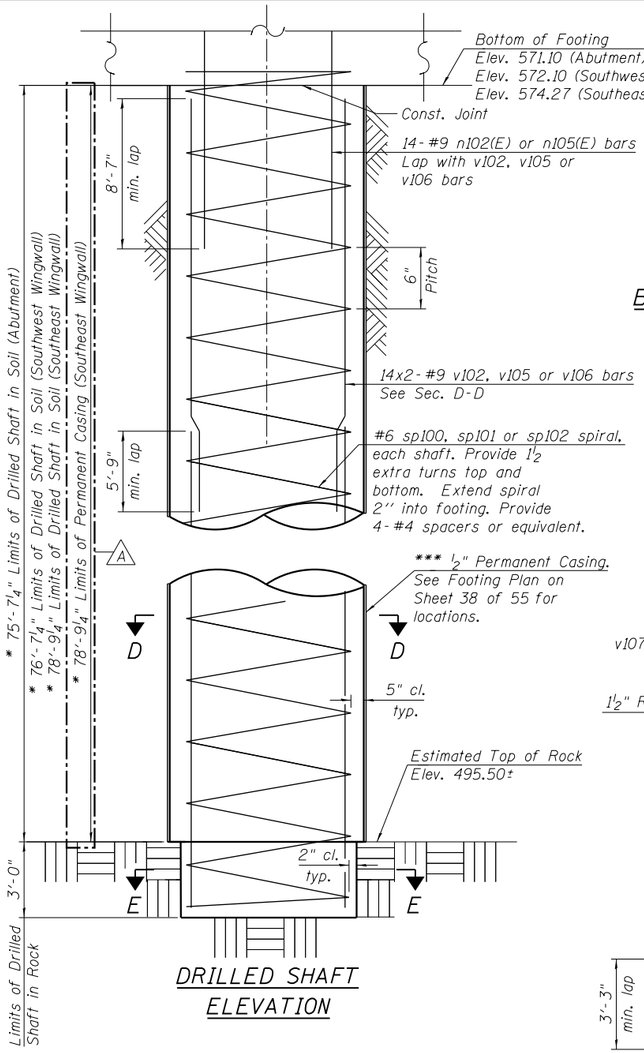
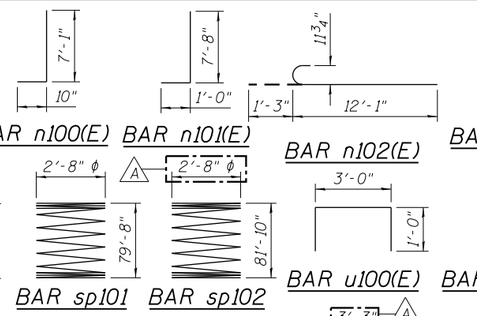
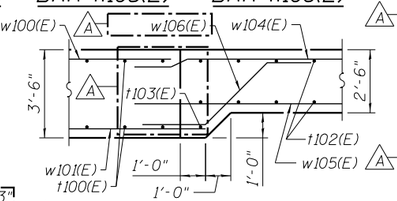
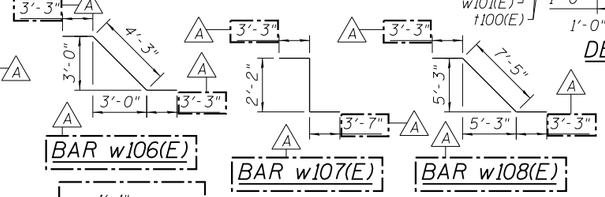


DRILLED SHAFT ELEVATION

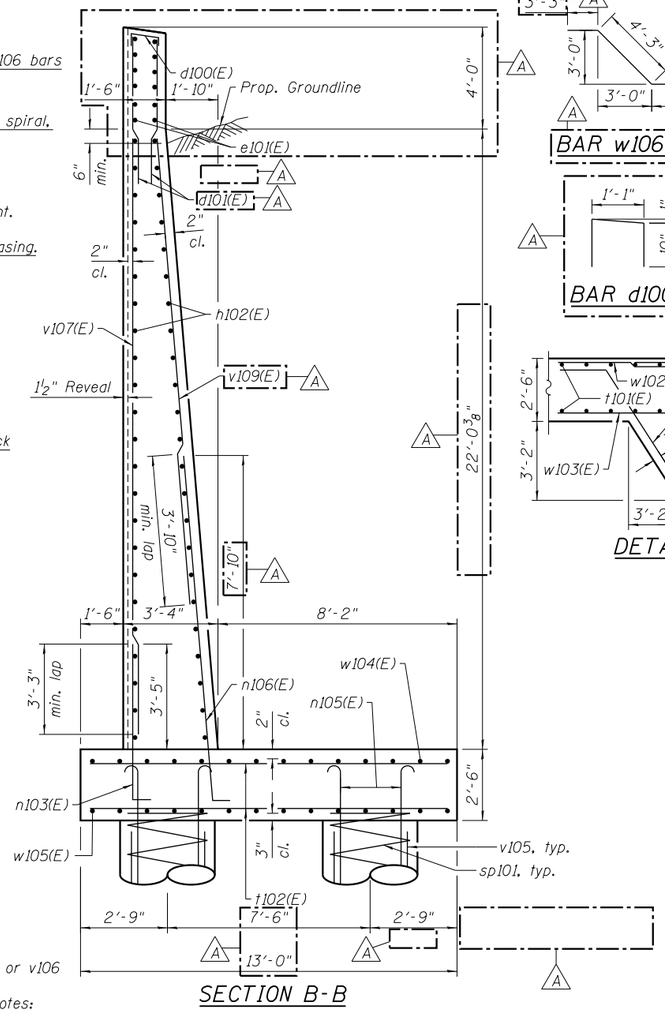




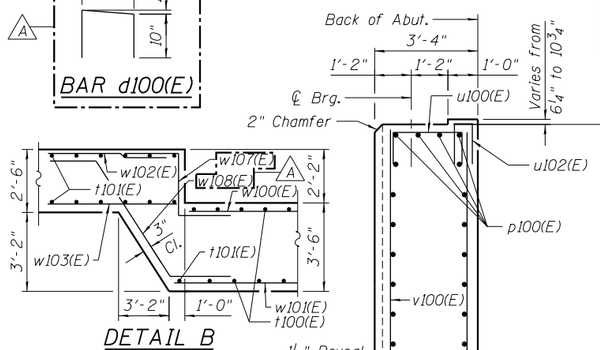
DETAIL A



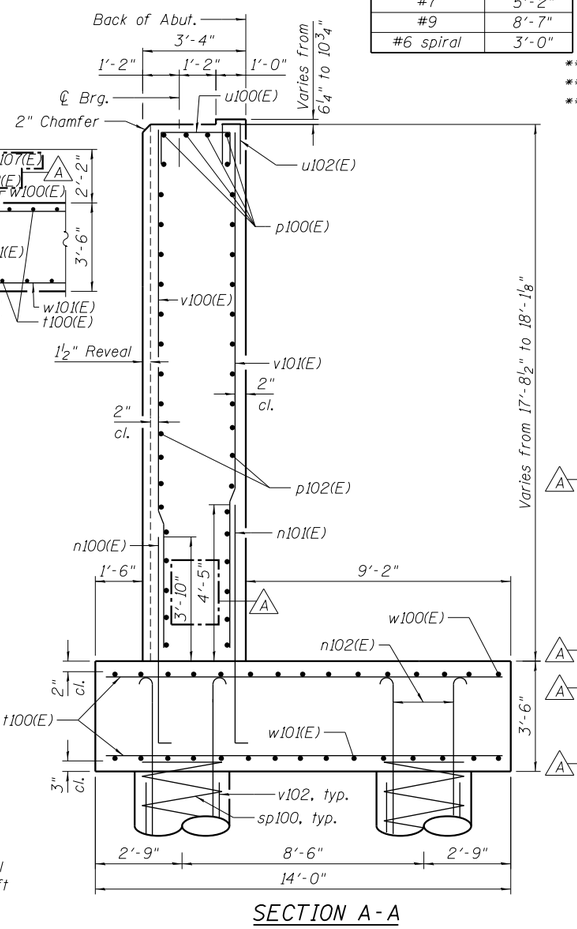
Minimum Bar Laps	
Bar	Lap
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#9	8'-7"
#6 spiral	3'-0"



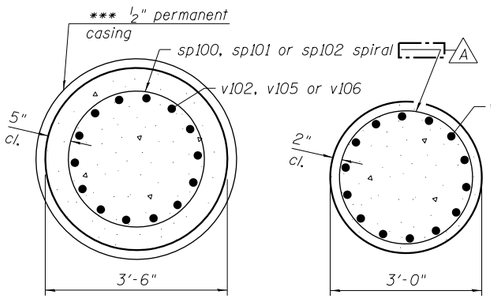
SECTION B-B



DETAIL B



SECTION A-A



SECTION D-D

SECTION E-E

Notes:
Apply Concrete Sealer to all exposed concrete surfaces of the abutment and wingwalls.
Pour steps monolithically with cap.
Space p100(E), u100(E) and u101(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
d100(E)	54	#5	2'-10"	
d101(E)	108	#5	5'-4"	
e100(E)	12	#5	28'-8"	
e101(E)	12	#5	23'-0"	
h100(E)	42	#5	28'-8"	
h102(E)	46	#5	23'-0"	
h104(E)	4	#5	2'-0"	
n100(E)	57	#5	7'-11"	
n101(E)	136	#6	8'-8"	
n102(E)	140	#9	13'-4"	
n103(E)	54	#5	6'-6"	
n104(E)	59	#7	7'-11"	
n105(E)	112	#9	12'-4"	
n106(E)	47	#7	11'-3"	
p100(E)	4	#6	56'-0"	
p101(E)	3	#6	5'-11"	
p102(E)	36	#5	56'-0"	
** sp100	10	#6	78'-8"	
** sp101	4	#6	79'-8"	
** sp102	4	#6	81'-10"	
t100(E)	272	#6	13'-8"	
t101(E)	119	#7	12'-4"	
t102(E)	84	#7	12'-8"	
t103(E)	21	#7	12'-11"	
u100(E)	57	#6	5'-0"	
u101(E)	7	#6	4'-0"	
u102(E)	57	#5	2'-8"	
v100(E)	57	#5	17'-4"	
v101(E)	136	#6	17'-4"	
v102	280	#9	42'-0"	
v103(E)	30	#5	19'-6"	
v104(E)	59	#6	19'-0"	
v105	112	#9	42'-6"	
v106	112	#9	43'-8"	
v107(E)	24	#5	21'-8"	
v108(E)	6	#5	1'-8"	
v109(E)	47	#6	17'-10"	
w100(E)	15	#5	56'-0"	
w101(E)	15	#5	58'-0"	
w102(E)	14	#5	28'-8"	
w103(E)	38	#9	28'-8"	
w104(E)	14	#5	25'-4"	
w105(E)	32	#8	27'-2"	
w106(E)	14	#5	10'-9"	
w107(E)	14	#5	9'-0"	
w108(E)	14	#5	13'-11"	

Structure Excavation	Cu. Yd.	1577
Concrete Structures	Cu. Yd.	392.2
Concrete Superstructure	Cu. Yd.	11.4
Reinforcement Bars	Pound	108,920
Reinforcement Bars, Epoxy Coated	Pound	51,640
Permanent Casing	Foot	315
Drilled Shaft in Soil	Cu. Yd.	490.9
Drilled Shaft in Rock	Cu. Yd.	14.3
Concrete Sealer	Sq. Ft.	2079
Geocomposite Wall Drain	Sq. Yd.	239
Granular Backfill for Structures	Cu. Yd.	308

Bars indicated thus, 1x15-#5 etc., indicates 1 line of bars with 15 lengths per line.
** Length is height of spiral.

TranSystems

USER NAME = jrmickow	DESIGNED JRM	REVISED A 1/20/2014 JRM/WJC	
	CHECKED SAS	REVISED	
PLOT SCALE = 0:2.0000 ':' / in.	DRAWN RLS	REVISED	
PLOT DATE = 1/21/2014	CHECKED WJC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS 1
STRUCTURE NO. 016-1708
SHEET NO. 39 OF 55 SHEETS

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2090	2013-011R	COOK	356	171
		CONTRACT NO. 60W29		
	ILLINOIS FED. AID PROJECT			

9:56:50 AM
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