



**Minimum Bar Laps**

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

Bar	No.	Size	Length	Shape
h100(E)	36	#5	28'-8"	—
h101(E)	4	#5	28'-9"	—
h102(E)	42	#5	23'-0"	—
h103(E)	4	#5	23'-1"	—
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	8'-6"	—
n104(E)	59	#7	9'-11"	—
n105(E)	112	#9	12'-4"	—
n106(E)	47	#7	12'-1"	—
p100(E)	4	#6	56'-0"	—
p101(E)	3	#6	5'-11"	—
p102(E)	38	#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)	123	#7	12'-4"	—
t102(E)	95	#7	12'-8"	—
t103(E)	16	#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	17'-6"	—
v104(E)	106	#6	17'-0"	—
v105	112	#9	42'-6"	—
v106	112	#9	43'-8"	—
v107(E)	24	#5	19'-11"	—
v108(E)	6	#5	1'-8"	—
w100(E)	15	#5	56'-0"	—
w101(E)	15	#5	58'-0"	—
w102(E)	14	#5	28'-8"	—
w103(E)	31	#9	28'-8"	—
w104(E)	14	#5	23'-0"	—
w105(E)	27	#8	23'-0"	—
w106(E)	14	#5	4'-4"	—
w107(E)	14	#5	8'-7"	—
w108(E)	14	#5	6'-8"	—
w109(E)	14	#5	11'-9"	—
Structure Excavation		Cu. Yd.	1577	
Concrete Structures		Cu. Yd.	384.0	
Reinforcement Bars		Pound	108,920	
Reinforcement Bars, Epoxy Coated		Pound	49,220	
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.	235	
Granular Backfill for Structures		Cu. Yd.	308	

**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.

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

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USER NAME = BAWIort	DESIGNED	JRM	REVISED
	CHECKED	SAS	REVISED
PLOT SCALE = 0x2.0000 '1' / in.	DRAWN	RLS	REVISED
PLOT DATE = 10/28/2013	CHECKED	MDS	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				