F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	465 VB-R-1	COOK	103	76
STA. 173+50	TO STA. 195+00			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract # 60407 SHEET NO. S43 of S60

PIER 11 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	8	#5	20'-6"	
h2(E)	8	#5	16'-7"	
h11(E)	104	#5	47'-2	
n3(E)	234	#11	12'-7"	
s15(E)	96	#5	7'-2"	
t1(E)	120	#8	11'-8"	
t2(E)	120	#5	11'-8"	
u8(E)	54	#5	10'-2"	
v11(E)	234	#8	24'-0"	
w4(E)	48	#5	49'-10"	

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	45,048
Concrete Structures	Cu. Yd.	308.4
Structure Excavation	Cu. Yd.	308.1

PIER 12 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	8	#5	20'-6"	
h2(E)	8	#5	16'-7"	
h11(E)	88	#5	47'-2	
n3(E)	234	#11	12'-7"	
s15(E)	96	#5	7'-2"	
t1(E)	120	#8	11'-8"	
t2(E)	120	#5	11'-8"	
u8(E)	50	#5	10'-2"	
v12(E)	234	#8	20'-0"	
w4(E)	48	#5	49'-10"	

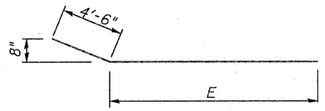
Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	41,720
Concrete Structures	Cu. Yd.	272.4
Structure Excavation	Cu. Yd.	277.3
Concrete Sealer	Sq. Ft.	552

PIER 13 BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h(E)	20	#5	46'-10"	
	h1(E)	10	#5	20'-6"	
	h2(E)	10	#5	16'-7"	
	h3(E)	36	#5	46'-0"	
	n(E)	6	#5	5'-4"	
	n2(E)	90	#8	7'-3"	
	p(E)	30	#9	46'-8"	
	p1(E)	12	#8	47'-1"	
	s(E)	210	#6	15'-4"	
	s1(E)	44	#6	8'-8"	
	s2(E)	70	#5	8'-6"	
	s3(E)	92	#6	18'-6"	
	s4(E)	92	#6	13'-2"	
	t1(E)	98	#8	11'-8"	
	t2(E)	98	#5	11'-8"	
	u(E)	28	#5	12'-10"	
	u1(E)	12	#5	10'-10"	
	v13(E)	90	#8	9'-11"	
	v14(E)	6	#5	7'-7"	
	w(E)	48	#5	48'-8"	
*	sp13(E)	6	#4	8'-3"	

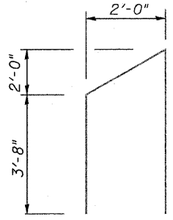
Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	32,053
Concrete Structures	Cu. Yd.	262.9
Structure Excavation	Cu. Yd.	332.4
Concrete Sealer	Sq. Ft.	552

*Length is height of spiral.

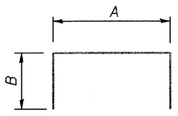


BARS p1(E) & p4(E) DIMENSIONS

BAR	E
p1(E)	42'-7"
p4(E)	7'-0"

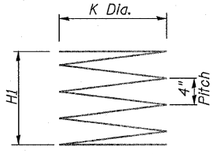


BAR u5(E)



BARS s1(E) thru s5(E), s7(E), s8(E), s10(E), s12(E), s13(E), s15(E), u1(E), u3(E), u4(E) & u7(E) DIMENSIONS

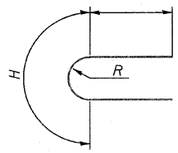
BAR	A	B
s1(E)	3'-6"	2'-7"
s2(E)	3'-6"	2'-6"
s3(E)	3'-6"	7'-7"
s4(E)	3'-6"	4'-10"
s5(E)	4'-0"	9'-10"
s7(E)	3'-0"	3'-1"
s8(E)	4'-4"	3'-0"
s10(E)	4'-0"	5'-10"
s12(E)	4'-0"	8'-10"
s13(E)	2'-0"	3'-10"
s15(E)	2'-2"	2'-6"
u1(E)	3'-6"	3'-8"
u3(E)	4'-0"	3'-8"
u4(E)	2'-0"	3'-8"
u7(E)	4'-4"	3'-8"



K=2'-9" for Sp1(E) thru Sp6(E) and Sp9(E), sp10(E) & Sp13(E)

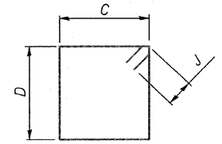
K=3'-3" for Sp7(E) and Sp8(E)

BARS sp1(E) THRU sp10(E) & sp13(E) (SPIRAL)



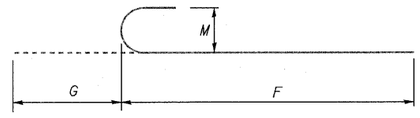
BARS u(E) & u2(E) u6(E) & u8(E) DIMENSIONS

BAR	R	H
u(E)	1'-9"	5'-6"
u2(E)	2'-0"	6'-3"
u6(E)	2'-2"	6'-8"
u8(E)	1'-1"	3'-4"



BARS s(E), s6(E), s9(E), s11(E) & s14(E) DIMENSIONS

BAR	C	D	J
s(E)	3'-6"	3'-6"	8"
s6(E)	3'-0"	3'-11"	5½"
s9(E)	2'-0"	5'-3"	8"
s11(E)	2'-0"	5'-1"	8"
s14(E)	4'-4"	3'-6"	8"



BARS n(E), n1(E), n2(E), & n3(E) DIMENSIONS

BAR	F	G	M
n(E)	4'-9"	7"	5"
n1(E)	5'-9"	7"	5"
n2(E)	6'-4"	11"	8"
n3(E)	11'-0"	1'-7"	1'-2¾"

Notes:

1. Work this sheet with Sheets S35-S43.
2. Work this sheet with Sheet S20 for bar splicer details.

REVISIONS	
NAME	DATE

EARTH TECH | AECOM

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIERS 11-13

REINFORCEMENT DETAILS

FAP 330 US 12/45 (MANNHEIM RD.) OVER SOO LINE RR & FRANKLIN AVE.

STRUCTURE NO. 016-2815

SECTION 465 VB-R-1 COOK COUNTY

STA. 183+33.30 DRAWN BY DEV

DATE 7/2009 CHECKED BY CLS

7/8/2009 $FILES$