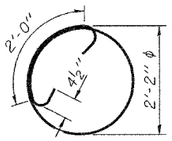
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

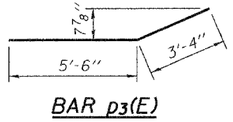
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 869	(101VB) B-1	FRANKLIN	48	45
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 16
18 SHEETS

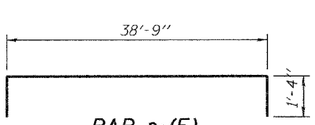
Contract No. 98821



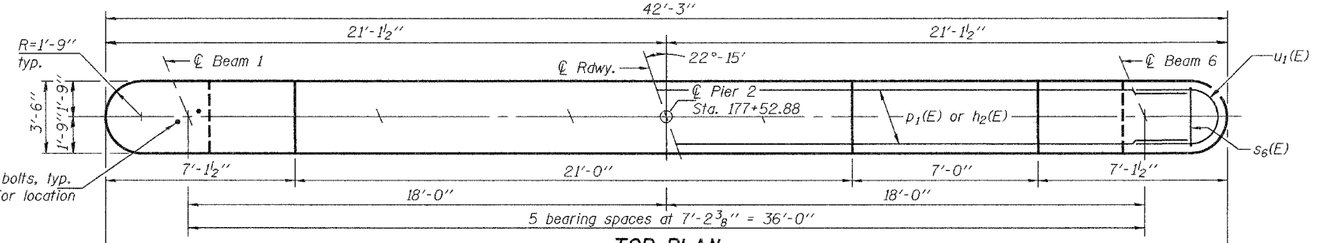
BAR s_{10} (E)



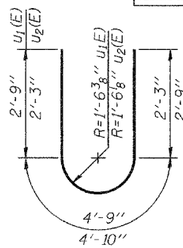
BAR p_3(E)



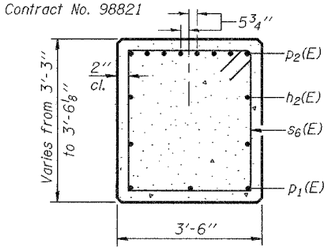
BAR p_2(E)



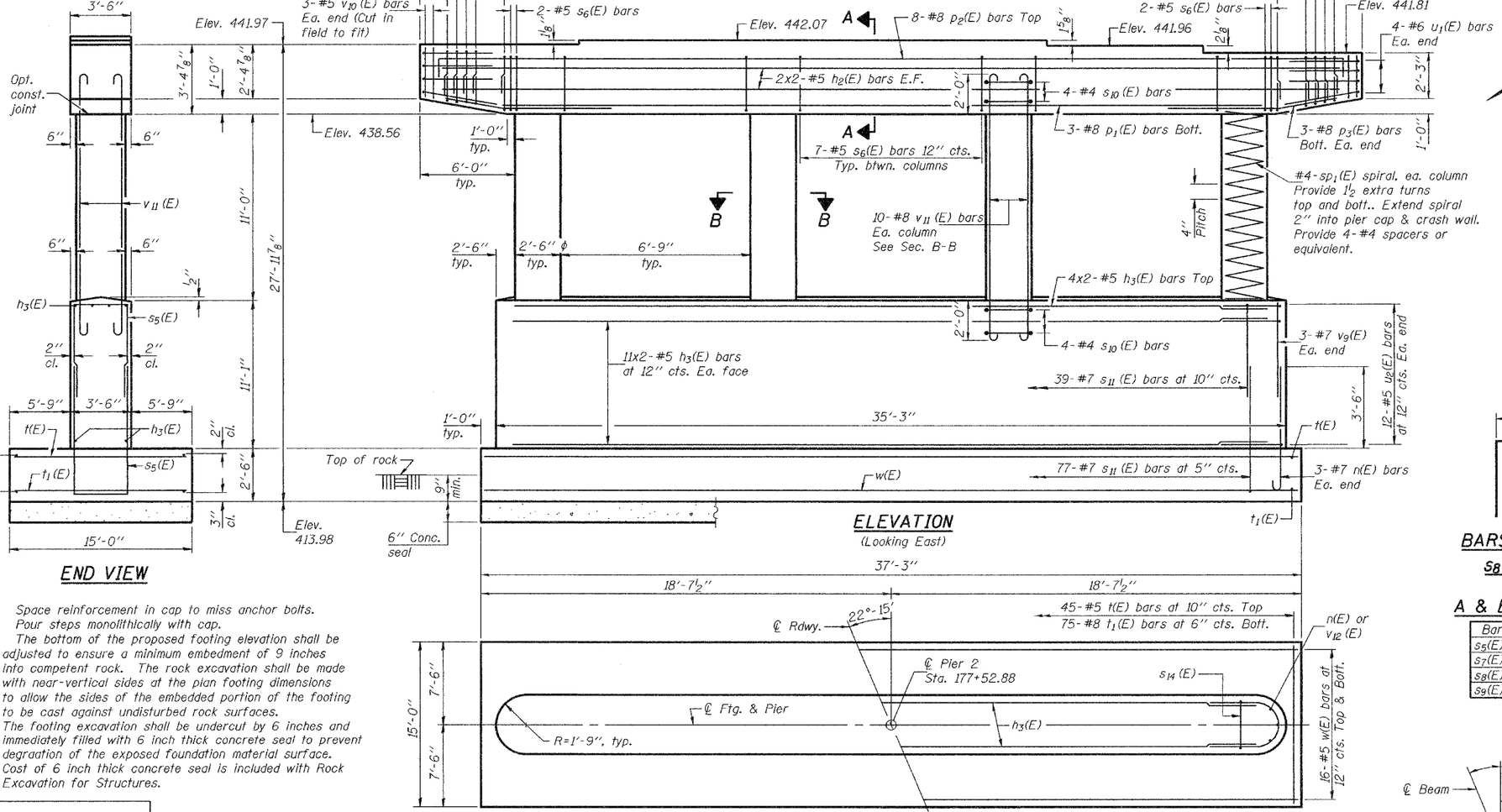
TOP PLAN



BARS u_1(E) & u_2(E)



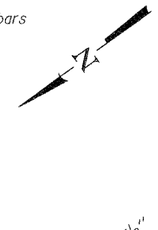
SEC. A-A



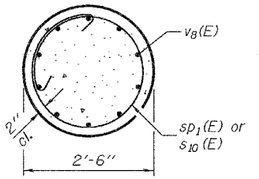
END VIEW

ELEVATION
(Looking East)

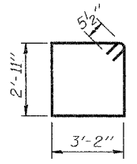
FOOTING PLAN



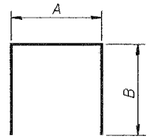
BAR n(E)



SEC. B-B



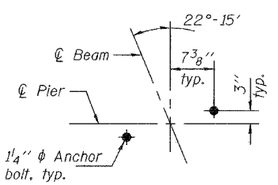
BAR s_6(E)



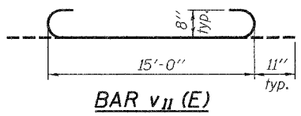
BARS s_5(E), s_7(E), s_8(E) & s_9(E)

A & B DIMENSIONS

Bar	A	B
s_5(E)	3'-2"	8'-9"
s_7(E)	3'-2"	2'-6"
s_8(E)	3'-2"	2'-4"
s_9(E)	3'-2"	2'-3"



DETAIL A



BAR v_{11} (E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_2(E)	8	#5	20'-6"	—
h_3(E)	52	#5	17'-0"	—
n(E)	6	#7	6'-7"	⊃
p_1(E)	3	#8	30'-3"	—
p_2(E)	8	#8	41'-5"	⊓
p_3(E)	6	#8	8'-10"	—
s_6(E)	25	#5	13'-1"	◪
s_7(E)	16	#5	8'-2"	⊓
s_8(E)	8	#5	7'-10"	⊓
s_9(E)	4	#5	7'-8"	⊓
s_{10} (E)	32	#4	9'-10"	◔
s_{11} (E)	116	#7	18'-8"	⊓
* sp_1(E)	4	#4	11'-4"	∿∿∿
t(E)	45	#5	14'-8"	—
t_1(E)	75	#8	14'-6"	—
u_1(E)	8	#6	10'-4"	⊃
u_2(E)	24	#5	9'-3"	⊃
v_{10} (E)	6	#5	2'-4"	—
v_{11} (E)	40	#8	16'-10"	⊂
v_{12} (E)	6	#7	10'-10"	—
w(E)	32	#5	36'-9"	—
Structure Excavation		Cu. Yd.	288	
Concrete Structures		Cu. Yd.	127.3	
Reinforcement Bars, Epoxy Coated		Pound	15580	
Rock Excavation for Structures		Cu. Yd.	26	
Anchor Bolts, 1¼"		Each	12	

*Length is height of spiral.

Notes: Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
The bottom of the proposed footing elevation shall be adjusted to ensure a minimum embedment of 9 inches into competent rock. The rock excavation shall be made with near-vertical sides at the plan footing dimensions to allow the sides of the embedded portion of the footing to be cast against undisturbed rock surfaces.
The footing excavation shall be undercut by 6 inches and immediately filled with 6 inch thick concrete seal to prevent degradation of the exposed foundation material surface.
Cost of 6 inch thick concrete seal is included with Rock Excavation for Structures.

DESIGNED	Dewey H. Coultas
CHECKED	Ray Ahanchi
DRAWN	h.t. duong
CHECKED	DHC/GRA

Nov. 30, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

MIN. BAR LAPS
#4 bar = 1'-8"
#5 bar = 2'-2"
#6 bar = 2'-7"
#7 bar = 3'-5"
#8 bar = 4'-6"

Maximum Applied Service = 9.53 Kips/ft²
Bearing Pressure (Q_{max})

PIER 2
F.A.P. RTE. 869 - SEC. (101VB)B-1
FRANKLIN COUNTY
STATION 177+17.38
STRUCTURE NO. 028-0077

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