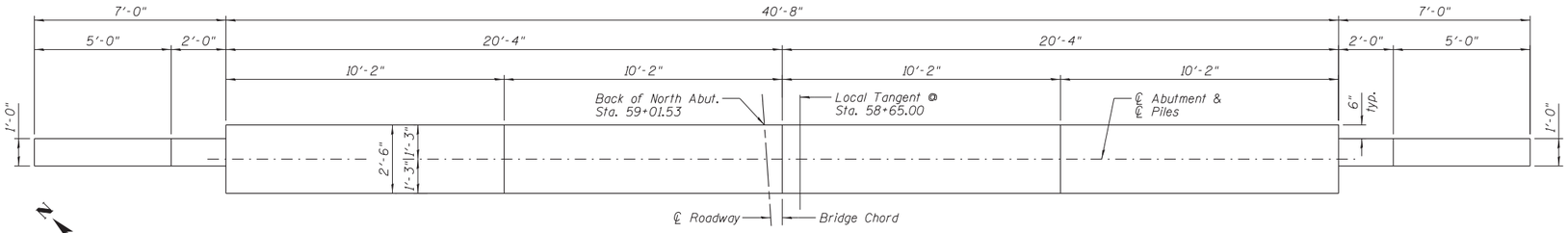
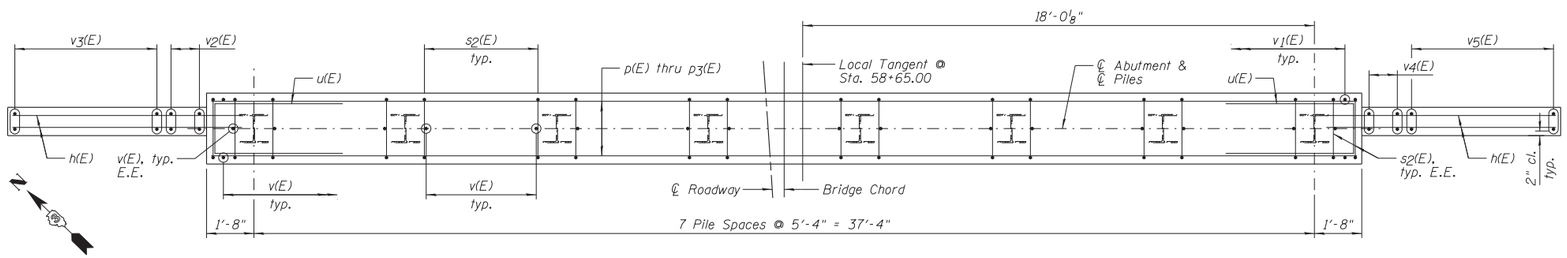
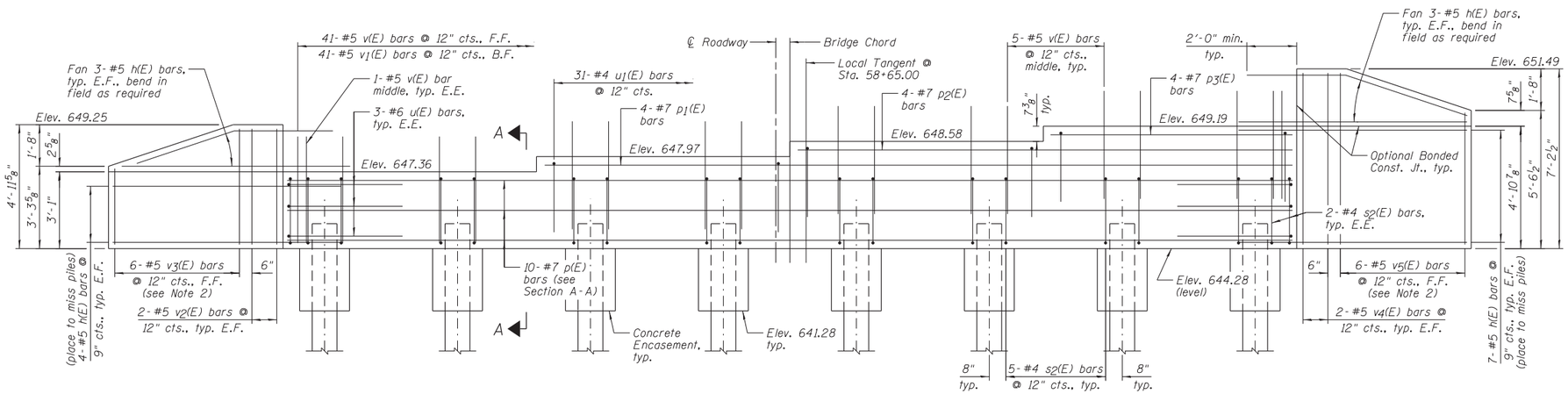


TOP VIEW ABUTMENT (SHOWING STEPS)

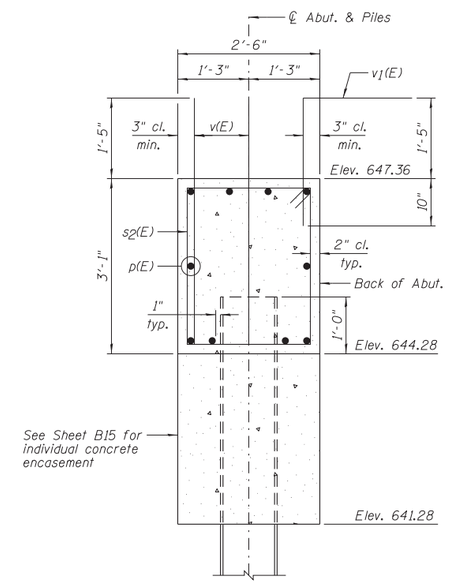


PLAN - PILE CAP



ELEVATION

(Looking North)

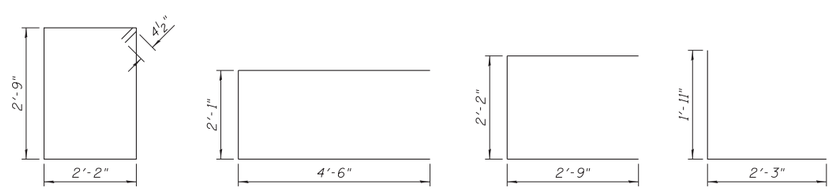


SECTION A-A

NORTH ABUTMENT BILL OF MATERIAL

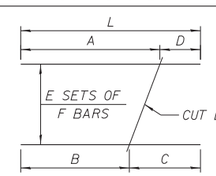
Bar	No.	Size	Length	Shape
h(E)	34	#5	9'-1"	
p(E)	10	#7	40'-4"	
p1(E)	4	#7	30'-2"	
p2(E)	4	#7	20'-0"	
p3(E)	4	#7	9'-10"	
s2(E)	39	#4	10'-7"	
u(E)	6	#6	11'-1"	
u1(E)	31	#4	7'-8"	
v(E)	78	#5	4'-4"	
v1(E)	41	#5	4'-2"	
v2(E)	4	#5	4'-6"	
v3(E)	6	#5	7'-2"	
v4(E)	4	#5	6'-9"	
v5(E)	6	#5	11'-9"	

Item	Unit	Quantity
Porous Granular Embankment, Special	Cu. Yd.	44
Structure Excavation	Cu. Yd.	95
Concrete Structures	Cu. Yd.	17.9
Concrete Encasement	Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated	Pound	2,870
Furnishing Steel Piles HP12x63	Foot	400
Driving Piles	Foot	400
Geocomposite Wall Drain	Sq. Yd.	23
Pipe Underdrains for Structures 4"	Foot	80



s2(E) BAR u(E) BAR u1(E) BAR v1(E) BAR

BAR CUTTING DIAGRAM



BAR	A	B	C	D	E	F	L
v3(E)	4'-6"	2'-8"	4'-6"	2'-8"	1	6	7'-2"
v5(E)	6'-9"	5'-0"	6'-9"	5'-0"	1	6	11'-9"

PILE DATA:

Pile Type and Size	Steel-HP 12x63
Nominal Required Bearing	376 kips
Factored Resistance Available	207 kips
Estimated Pile Length	50 Feet
Number of Production Piles	8
Number of Test Piles	0

NOTES:

1.) Pour steps monolithically with cap.
2.) Order v3(E) and v5(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of bars in back face.
3.) Bend or cut h(E) bars to miss piles.
4.) E.E. denotes Each End, F.F. denotes Front Face, B.F. denotes Back Face and E.F. denotes Each Face.

Farnsworth GROUP, INC.
2709 McGraw Drive
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309/663-8435, 309/663-1571 fax

	DESIGNED - TCR	REVISED
	CHECKED - JML	REVISED
	DRAWN - JWK	REVISED
DATE - 11/27/12	CHECKED - MSW	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT
STRUCTURE NO. 053-0191

SHEET NO. B11 OF 17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(113 BR)BR & (113 BR-1)BR	LIVINGSTON	123	99
		CONTRACT NO. 66832		
		ILLINOIS FED. AID PROJECT		

24-8740