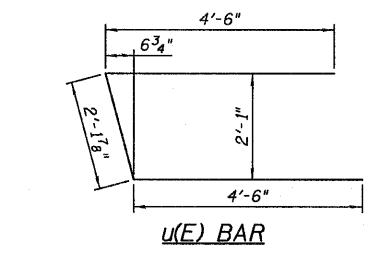
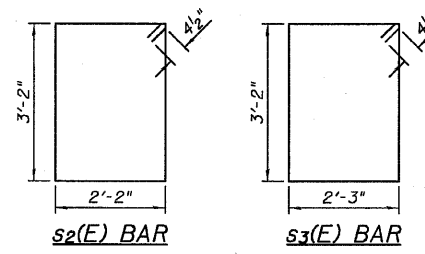


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	10'-1"	—
h1(E)	20	#5	10'-4"	—
p(E)	20	#7	16'-10"	—
sp2(E)	32	#4	11'-5"	□
s3(E)	4	#4	11'-7"	□
u(E)	6	#6	11'-2"	—
v1(E)	63	#5	4'-4"	—
v2(E)	12	#5	6'-5"	—
v3(E)	12	#5	10'-9"	—

Item	Unit	Quantity
Porous Granular Embankment, Special	Cu. Yd.	49
Structure Excavation	Cu. Yd.	64
Concrete Structures	Cu. Yd.	15.3
Concrete Encasement	Cu. Yd.	3.3
Reinforcement Bars, Epoxy Coated	Pound	1,990
Bar Splicers	Each	10
Furnishing Steel Piles HP14x73	Foot	138
Driving Piles	Foot	138
Pile Shoes	Each	1
Geocomposite Wall Drain	Sq. Yd.	28
Pipe Underdrains for Structures 4"	Foot	71

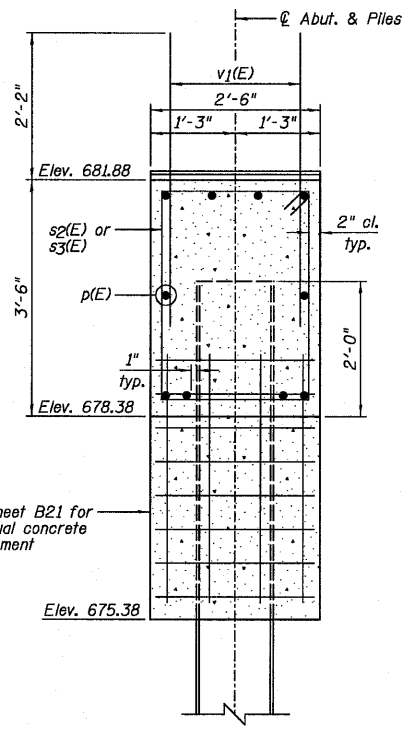
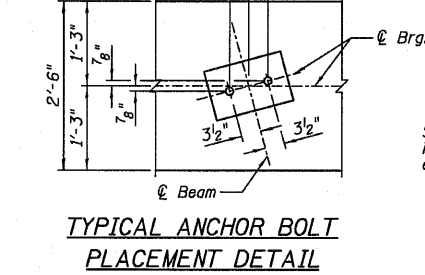


BAR CUTTING DIAGRAM

BAR	A	B	C	D	E	F	L
v3(E)	6'-1"	4'-8"	6'-1"	4'-8"	2	6	10'-9"

EXISTING FOOTING INFORMATION

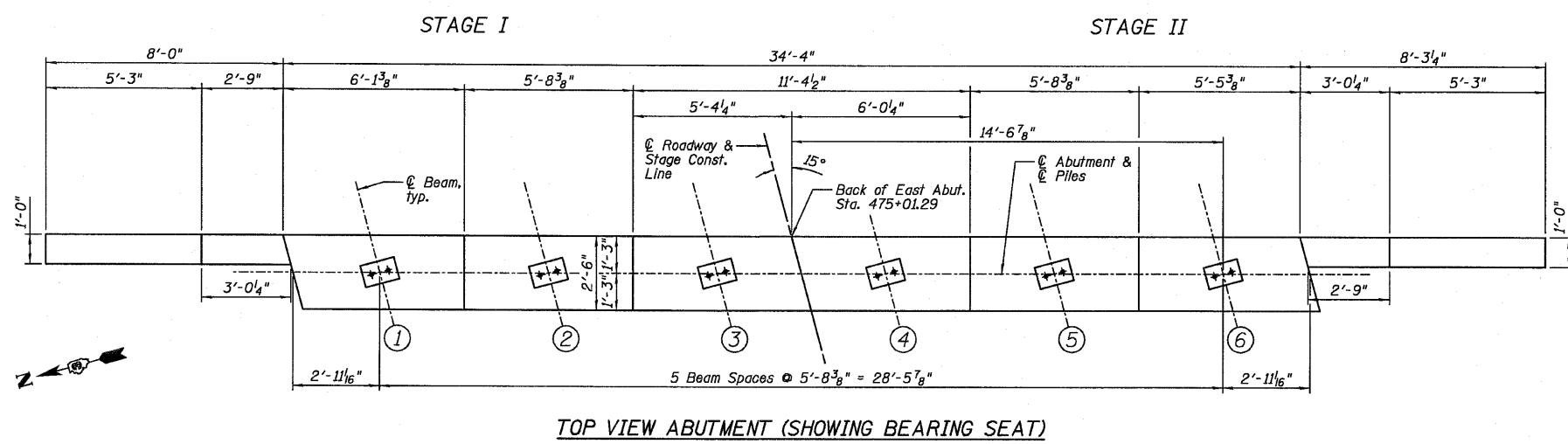
Footing Thickness	2 Feet
Top Reinforcement	#5 bars @ 12" cts.
	#5 bars @ 10" cts.
Bottom Reinforcement	#5 bars @ 12" cts.
	#7 bars @ 10" cts.



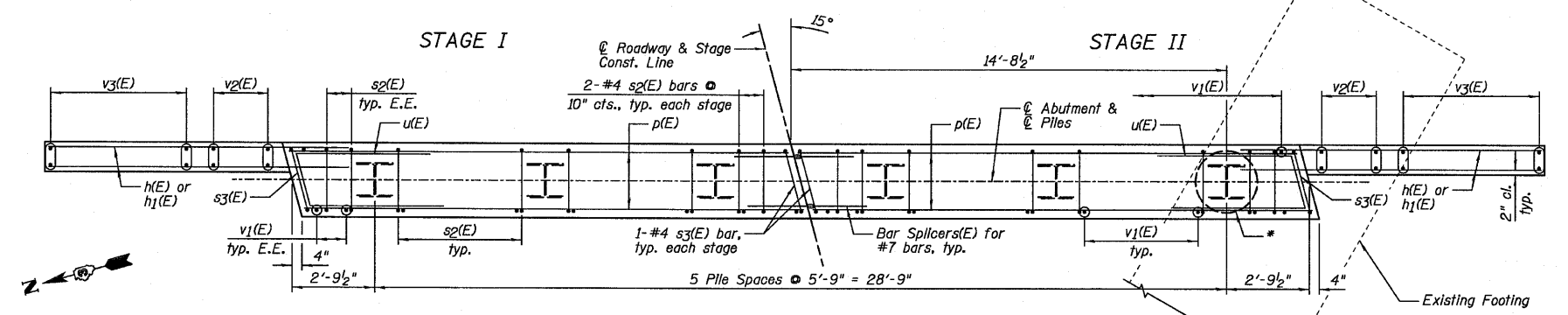
- NOTES:**
- 1.) Pour steps monolithically with cap.
 - 2.) Order v3(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of bars in opposite face of wingwall.
 - 3.) Bend or cut h(E) bars to miss piles.
 - 4.) E.E. denotes Each End, F.F. denotes Front Face, B.F. denotes Back Face and E.F. denotes Each Face.
 - 5.) See Sheet B22 for Bar Splicer Details.
 - 6.) *Pile location coincides with the limits of the existing footing. This pile should be driven through a 2" diameter precored hole in the existing footing extending to elevation 663.50 according to Article 512.09(c). Cost included in Driving Piles. A pile shoe is required for this pile.

EAST ABUTMENT
STRUCTURE NO. 053-0188

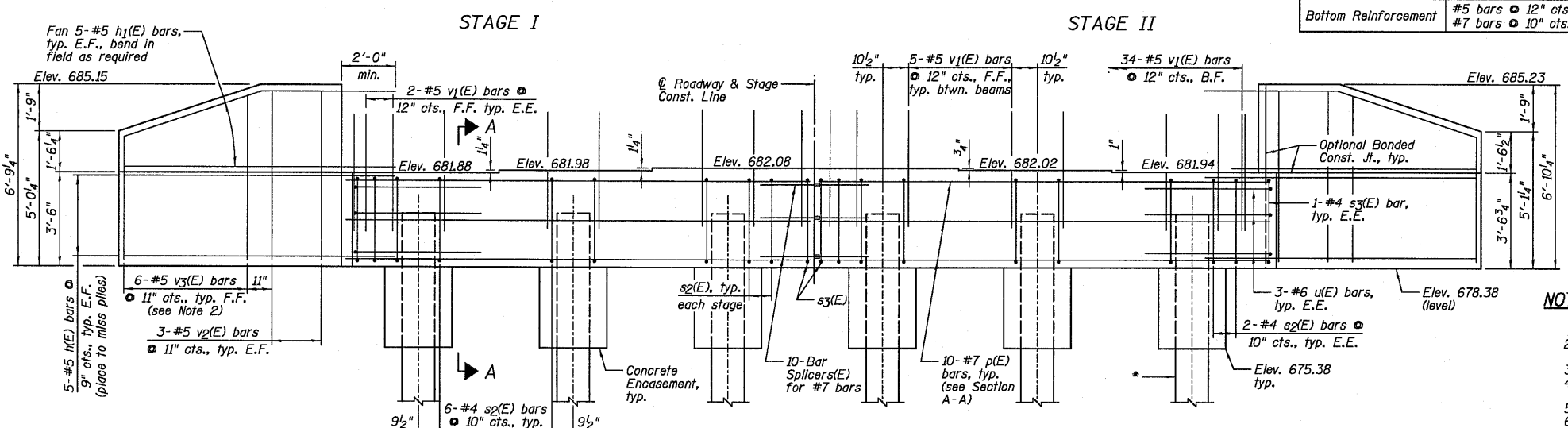
<p>Farnsworth GROUP, INC. 2709 McGraw Drive Bloomington, Illinois 61704 309/663-8435, 309/663-1571 fax</p>	SHEET NO. B18 26 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		317	(25)BR-2	LIVINGSTON	58	41
CONTRACT NO. 66823						
		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TOP VIEW ABUTMENT (SHOWING BEARING SEAT)



PLAN - PILE CAP



ELEVATION (Looking East)

PILE DATA:

Pile Type and Size	Steel - HP14x73
Nominal Required Bearing	302 kips
Factored Resistance Available	166 kips
Estimated Pile Length	23 Feet
Number of Production Piles	6
Number of Test Piles	0

DESIGNED	SDH
CHECKED	JML
DRAWN	DJM
CHECKED	MSW

DATE 08/13/10