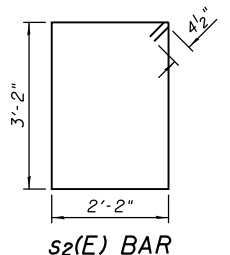
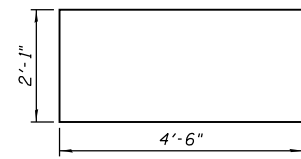


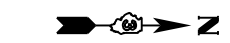
TOP VIEW ABUTMENT (SHOWING BEARING SEAT)



s2(E) BAR

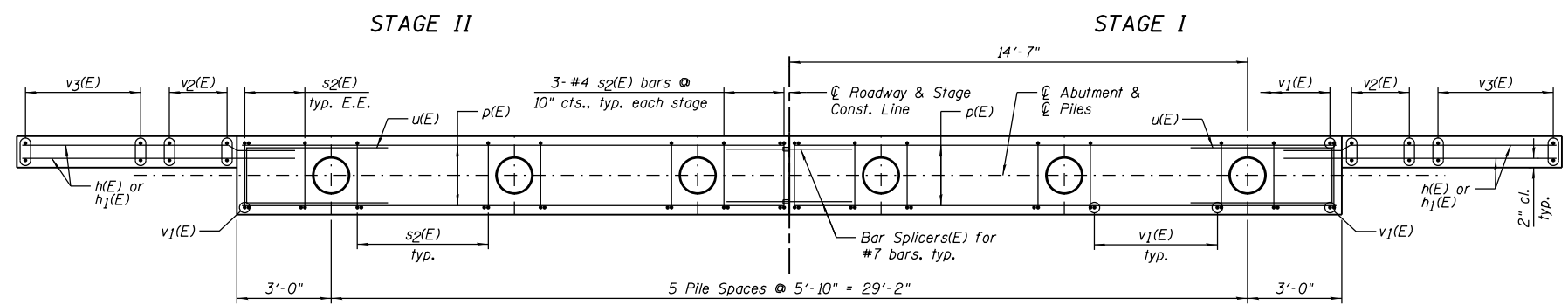


u(E) BAR

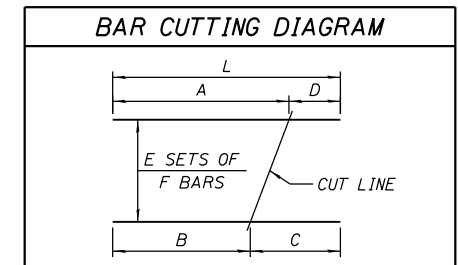


WEST ABUTMENT
BILL OF MATERIAL

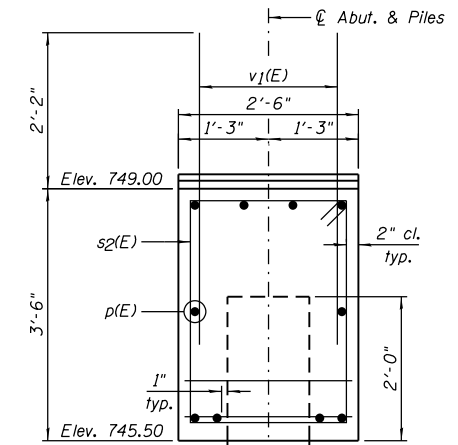
Bar	No.	Size	Length	Shape
h(E)	20	#5	8'-10"	—
h1(E)	20	#5	9'-1"	—
p(E)	20	#7	17'-3"	—
s2(E)	32	#4	11'-5"	□
u(E)	6	#6	11'-1"	□
v1(E)	68	#5	4'-4"	—
v2(E)	12	#5	6'-8"	—
v3(E)	10	#5	11'-8"	—
Item	Unit	Quantity		
Structure Excavation	Cu. Yd.	86		
Concrete Structures	Cu. Yd.	15.0		
Reinforcement Bars, Epoxy Coated	Pound	1,930		
Furnishing Metal Shell Piles 14" x 0.312"	Foot	145		
Driving Piles	Foot	145		
Test Pile Metal Shells	Each	1		
Pile Shoes	Each	6		
Geocomposite Wall Drain	Sq. Yd.	30		
Pipe Underdrains for Structures 4"	Foot	82		
Porous Granular Embankment, Special	Cu. Yd.	51		



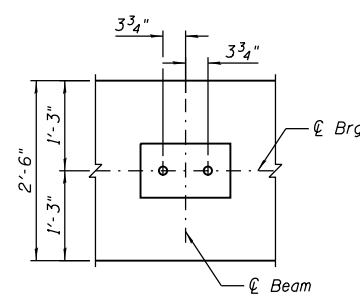
PLAN - PILE CAP



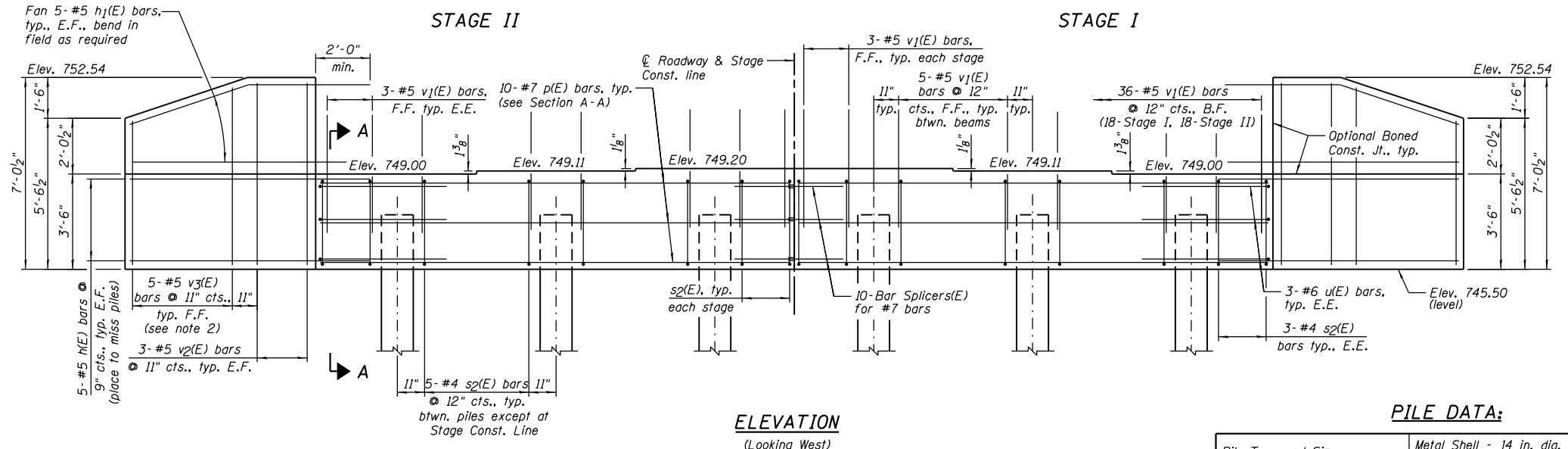
BAR	A	B	C	D	E	F	L
v3(E)	6'-7"	5'-1"	6'-7"	5'-1"	2	5	11'-8"



SECTION A-A



TYPICAL ANCHOR BOLT PLACEMENT DETAIL



ELEVATION
(Looking West)

PILE DATA:

Pile Type and Size	Metal Shell - 14 in. dia. x 0.312 in. walls with pile shoes
Nominal Required Bearing	470 kips
Factored Resistance Available	258 kips
Estimated Pile Length	29 Feet
Number of Production Piles	5
Number of Test Piles	1

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 B19 for Bar Splicer Details.

Farnsworth GROUP, INC.
2709 McGraw Drive
Bloomington, Illinois 61704
309/663-8435, 309/663-1571 fax

DESIGNED - TCR	REVISION
CHECKED - JML	REVISION
DRAWN - JWK	REVISION
CHECKED - MSW	REVISION
DATE - 8/10/12	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
STRUCTURE NO. 027-0101

SHEET NO. B17 OF 30 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	19BR	FORD	61	39
CONTRACT NO. 66A12				
ILLINOIS FED. AID PROJECT				