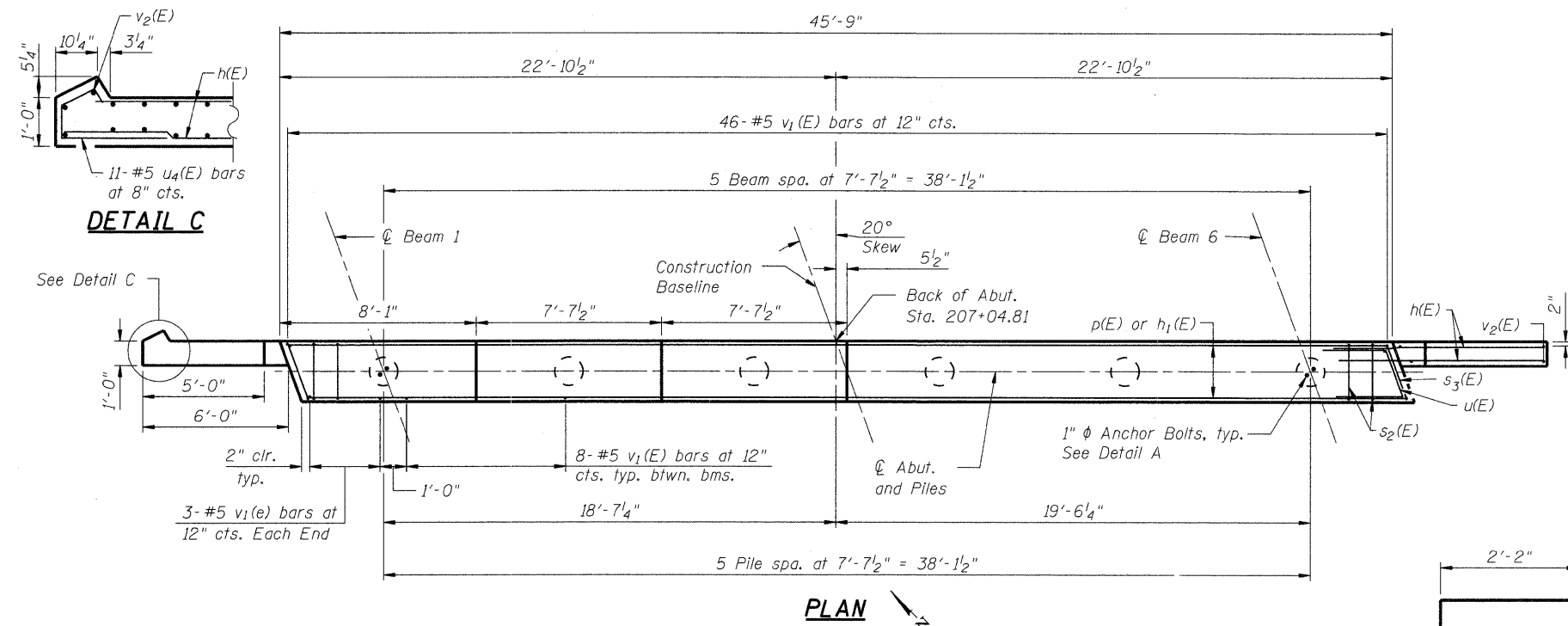


**ELEVATION**  
(Looking North)

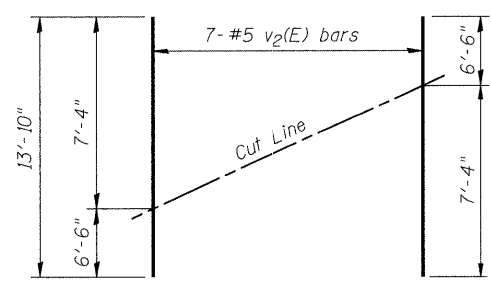
Notes:  
Four steps monolithically with cap.



**PLAN**

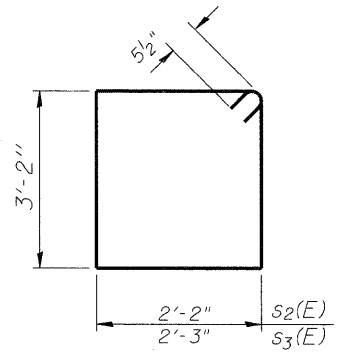
**PILE DATA**

Type and Size: Metal Shell - 14 in. dia. x 0.25 in. walls  
Nominal Required Bearing: 390K  
Factored Resistance Available: 130K  
Est. Length: 66'  
No. Production Piles: 5  
No. Test Piles: 1

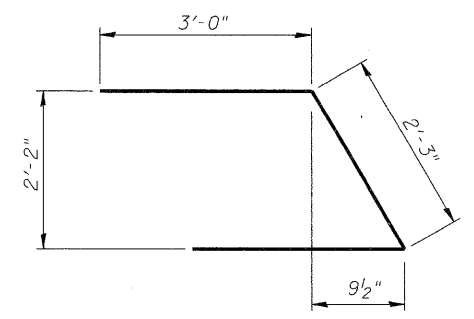


**FIELD CUTTING DIAGRAM**

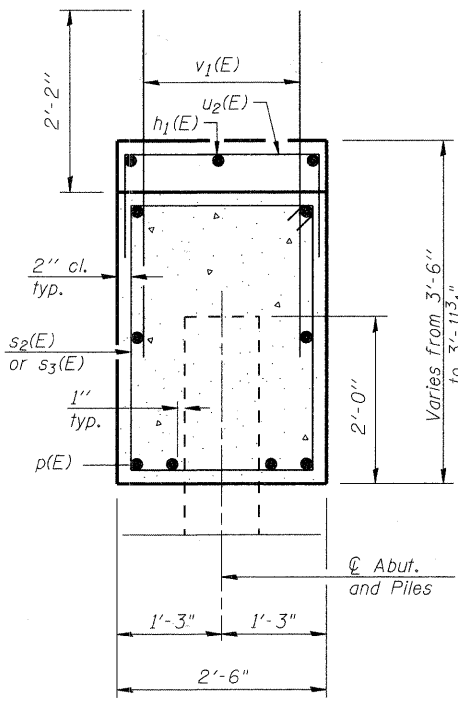
Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



**BARS s2(E) & s3(E)**



**BAR u(E)**

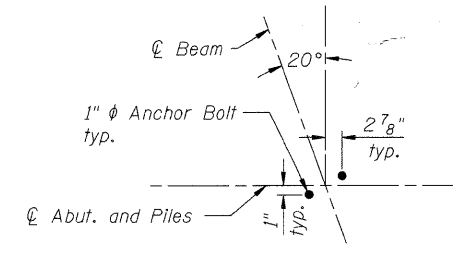


**SEC. THRU ABUT.**

**BAR u4(E)**

BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
h(E)	24	# 5	8'-0"	—
h1(E)	3	# 5	30'-2"	—
h2(E)	20	# 5	8'-0"	—
p(E)	18	#7	25'-2"	—
s2(E)	41	# 5	11'-7"	□
s3(E)	2	# 5	11'-9"	□
u(E)	8	#6	8'-3"	—
u2(E)	31	#4	4'-2"	—
u4(E)	11	#5	3'-11"	—
v1(E)	92	#5	4'-4"	—
v2(E)	14	#5	13'-10"	—
Structure Excavation		Cu. Yd.	138	
Concrete Structures		Cu. Yd.	19.1	
Reinforcement Bars, Epoxy Coated		Pound	2,760	
Furnishing Metal Shell Piles, 14" x 0.250"		Foot	330	
Driving Piles		Foot	330	
Test Pile, Metal Shell Pile, 14" x 0.250"		Each	1	

For details of Bar Splicers, see sheet S-22.  
For details of piles and Concrete Encasement, see sheet S-23.  
See sheet S-3 and S-4 for retaining wall details.



**DETAIL A**

**NORTH ABUTMENT DETAILS**  
THOMPSON ROAD  
OVER NIPPERSINK CREEK  
SECTION NO. 06-00005-00-BR  
McHENRY COUNTY  
STATION 206+30.48  
STRUCTURE NO. 056-6006

DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

SHEET NO. S-19 S-25 SHEETS	F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	30
CONTRACT NO. 63409					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

Illinois Professional Design Firm # 184-000108  
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FILE NAME: 060563.North.dgn/20/2009  
PLOT DRIVER: pdf.plt  
PEN TABLE: standard-trans.tbl