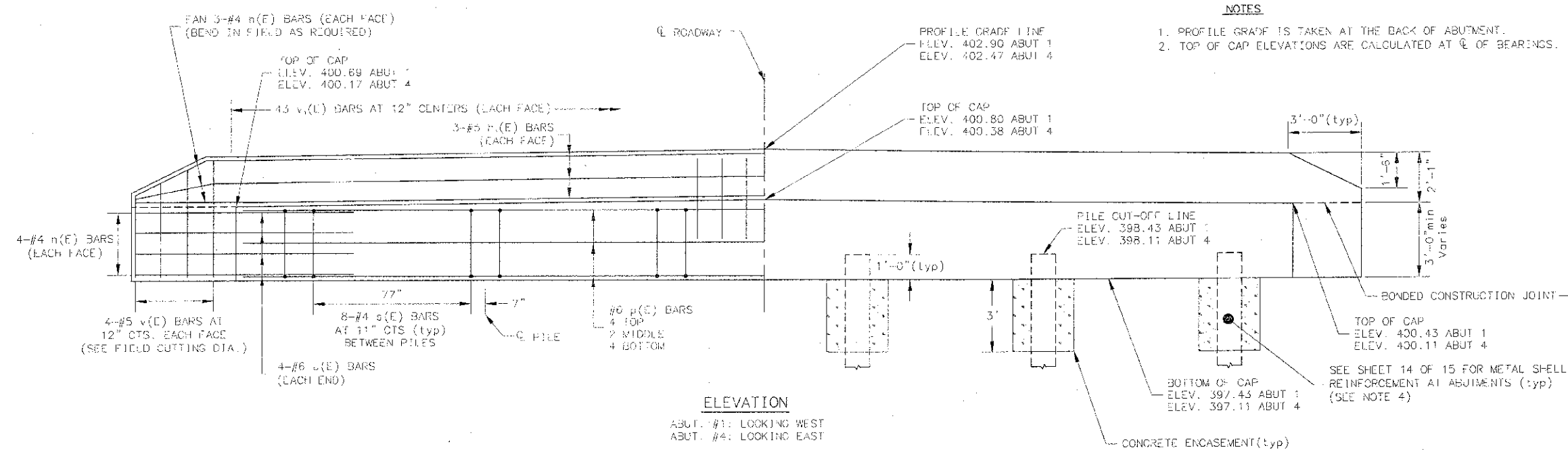
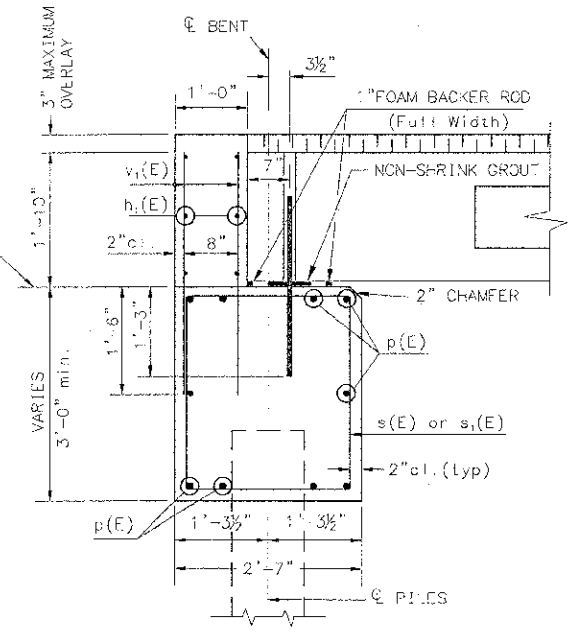


SECTION NO.	COUNTY HIGHWAY	COUNTY	SHEET OF SHEETS
88-0087-06-BR	CH 48	ST. CLAIR	11 OF 15
FHWA REG. NO. 7	ILLINOIS	PROJ. BROS-0163(031)	
ABUTMENT DETAILS		CONTRACT 97525	

- NOTES**
1. PROFILE GRADE IS TAKEN AT THE BACK OF ABUTMENT.
 2. TOP OF CAP ELEVATIONS ARE CALCULATED AT ϕ OF BEARINGS.



ELEVATION
 ABUT. #1: LOOKING WEST
 ABUT. #4: LOOKING EAST

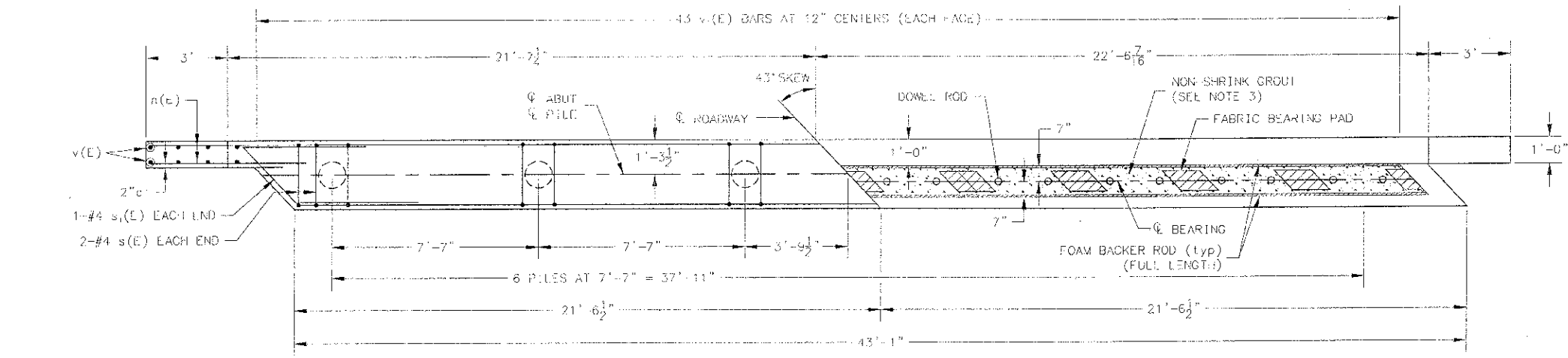


SECTION THRU ABUTMENT
 (AT RIGHT ANGLES)

BILL OF MATERIAL FOR ONE ABUTMENT

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	28	#4	5'-9"	---
n ₁ (E)	6	#5	42'-7"	---
p(E)	10	#6	42'-7"	---
s(F)	44	#4	10'-7"	□
s ₁ (E)	2	#4	12'-1"	□
u(E)	8	#6	12'-0"	---
v(E)	8	#5	8'-1"	---
v ₁ (E)	56	#4	3'-4"	---
CONCRETE ENCASMENT			2.8 CU YD	
CONCRETE STRUCTURES			17.8 CU YD	
REINFORCEMENT BARS, EPOXY COATED			1744 LBS	

NOTE: ALL REINFORCEMENT BARS SHOWN SHALL BE EPOXY COATED

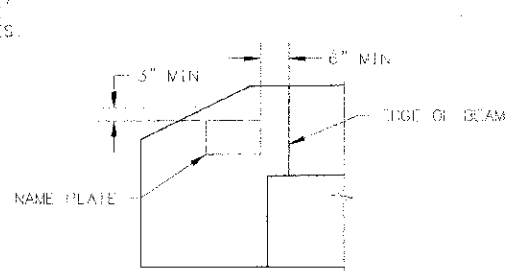


PLAN

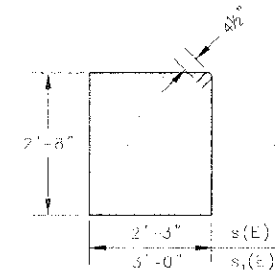
- NOTES**
1. THE BACKWALL AND THE PORTION OF THE WINGWALLS ABOVE THE BONDED CONSTRUCTION JOINT SHALL BE CAST AGAINST THE IN-PLACE BEAMS.
 2. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 GRADE 60 (UL MODIFIED).
 3. THE AREA BETWEEN THE BOTTOM OF THE DECK BEAMS AND TOP OF THE ABUTMENT CAPS SHALL BE FILLED WITH NON-SHRINK GROUT TO PREVENT THE BEAMS FROM ROCKING. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE COST OF PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH).
 4. THE COST OF REINFORCEMENT OF ABUTMENT PILING SHALL BE INCIDENTAL TO THE COST OF FURNISHING METAL SHELL PILES.

PILE DATA

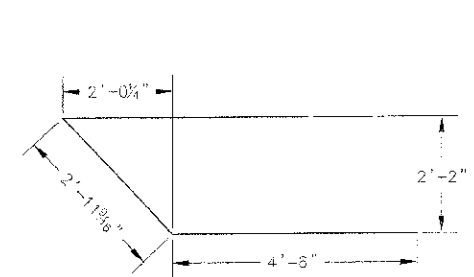
TYPE & SIZE: METAL SHELL 12X0.250
 NOMINAL REQUIRED BEARING: 158 KIPS
 FACTORED RESISTANCE AVAILABLE: 87 KIPS
 ESTIMATED LENGTH (ABUT #1 & #4): 51 FT
 NO. OF PRODUCTION PILES: 11
 NO. OF TEST PILE (ABUTMENT #1): 1



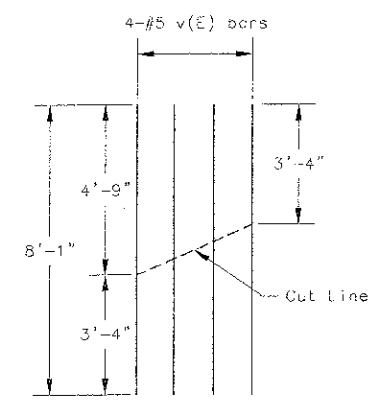
NAME PLATE LOCATION
 (LOCATE AT SW WINGWALL OF BRIDGE)



BAR s(E) & s₁(E)



BAR u(E)



FIELD CUTTING DIAGRAM

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

ABUTMENT DETAILS

PL 85-0416-4/13

	INITIALS	DATE
DESIGNED	WES	10/12
CHECKED	AMC	3/13
DRAWN	WES	10/12
CHECKED	AMC	3/13
PREPARED BY ST. CLAIR COUNTY		
CADD DRAWING FILE: ABUTMENT		

DESIGN STRESS
 f'c = 3,500 psi
 fy = 60,000 psi