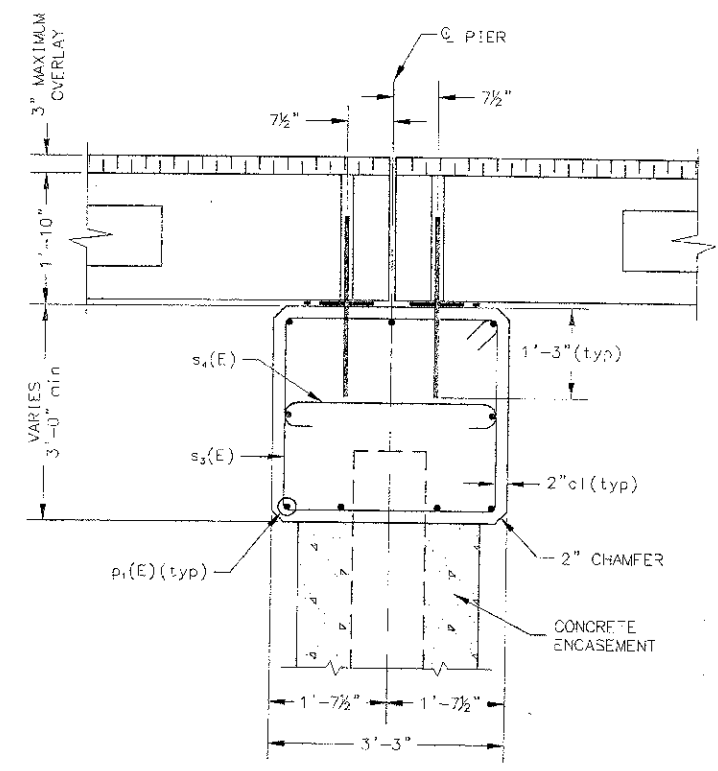
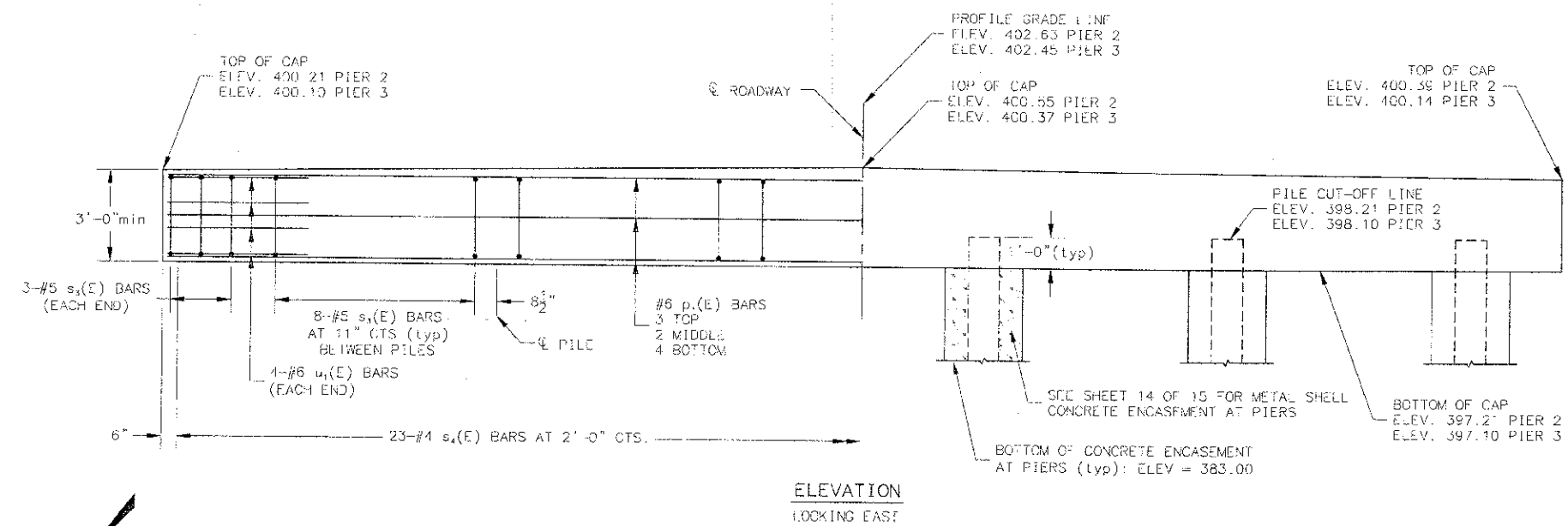
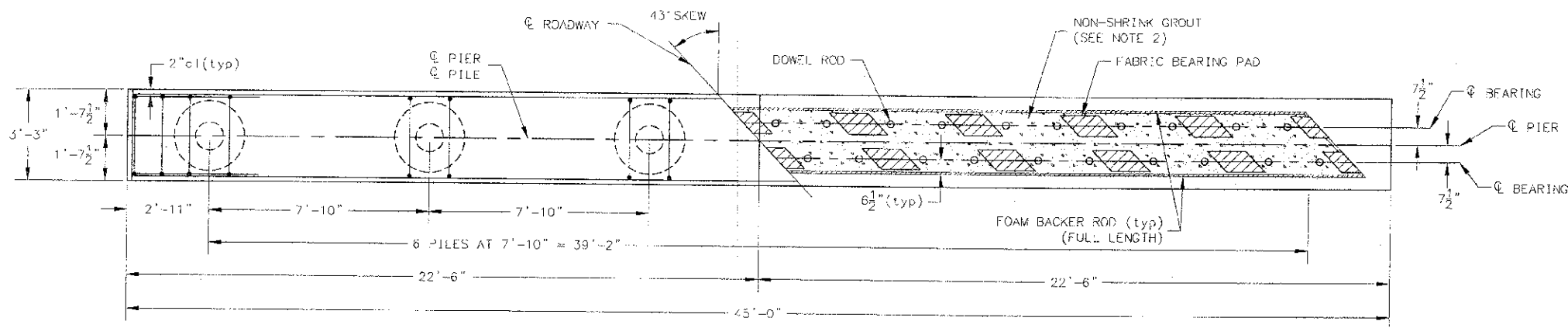


SECTION NO.	COUNTY HIGHWAY	COUNTY	SHEET OF SHEETS
08-00087-05-BR	CH 48	ST. CLAIR	12 OF 15
FHWA REG. NO. 7	ILLINOIS	PROJ: BROS-0163(051)	
PIER DETAILS		CONTRACT 97525	

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



SECTION THRU PIER
(AT RIGHT ANGLES)



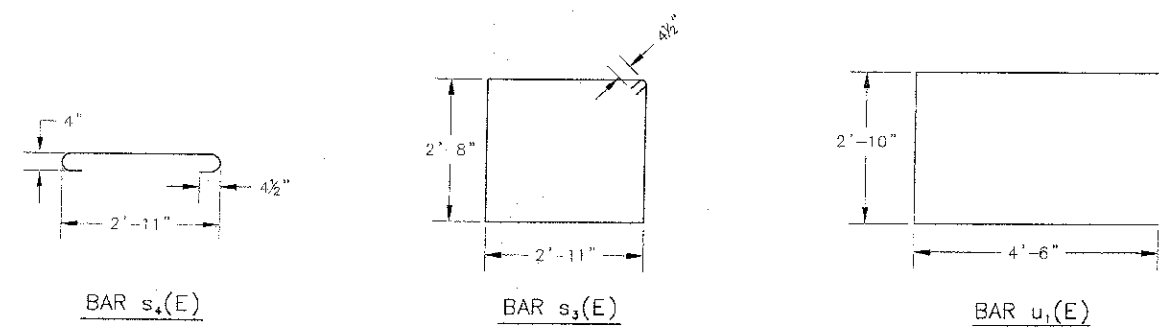
PLAN

- NOTES**
1. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 GRADE 60 (1L MODIFIED)
 2. THE AREA BETWEEN THE BOTTOM OF THE DECK BEAMS AND TOP OF THE PIER 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\"/>

PILE DATA

TYPE & SIZE	METAL SHELL 12X0.250
NOMINAL REQUIRED BEARING	328 KIPS
FACTORED RESISTANCE AVAILABLE	179 KIPS
ESTIMATED LENGTH (PIER #2 & #3)	66 FT
NO. OF PRODUCTION PILES	11
NO. OF TEST PILE (PIER #3)	1

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



BILL OF MATERIAL FOR ONE PIER

BAR	NO.	SIZE	LENGTH	SHAPE
p1(E)	9	#6	44'-8"	—
s2(E)	46	#5	11'-11"	□
s3(E)	23	#4	4'-1"	—
s1(E)	8	#6	11'-10"	—
CONCRETE STRUCTURES			17.3	CU YD
REINFORCEMENT BARS, EPOXY COATED			1381	LBS
CONCRETE ENCASMENT			13.0	CJ YD

NOTE: ALL REINFORCEMENT BARS SHOWN SHALL BE EPOXY COATED

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

PIER DETAILS