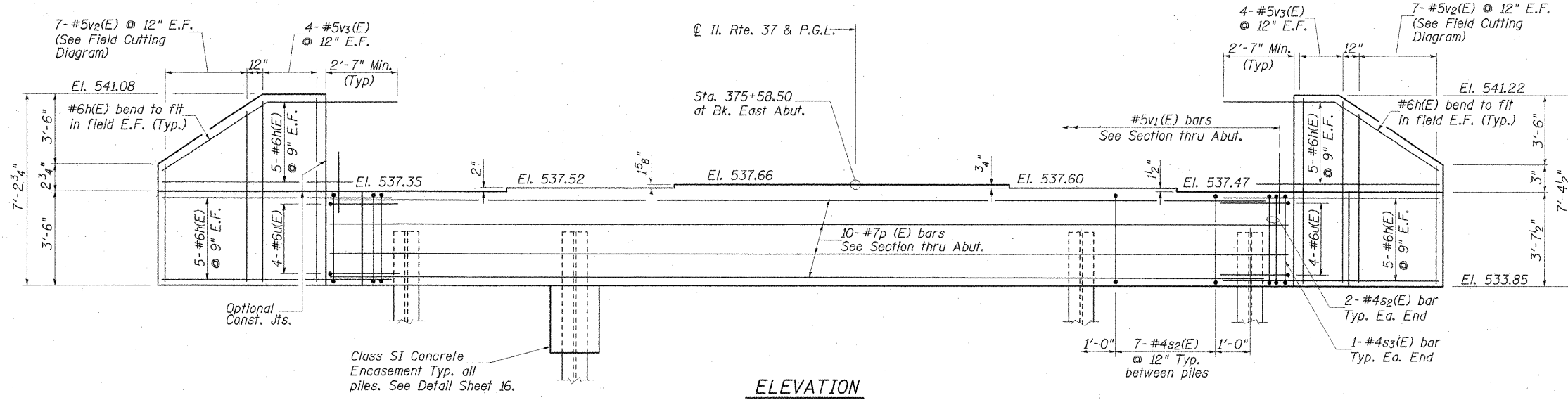
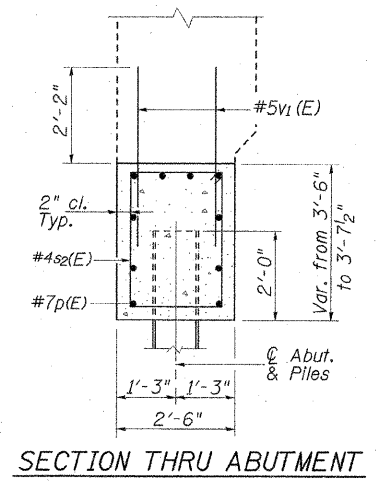


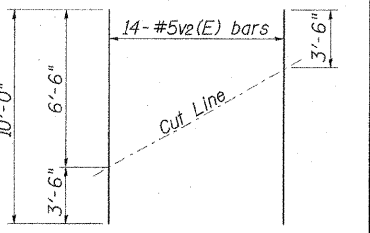
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2905	113B-1	WILLIAMSON	87	42
STA.	TO STA.			
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT	
Contract 98777			SHEET 11 OF 18	



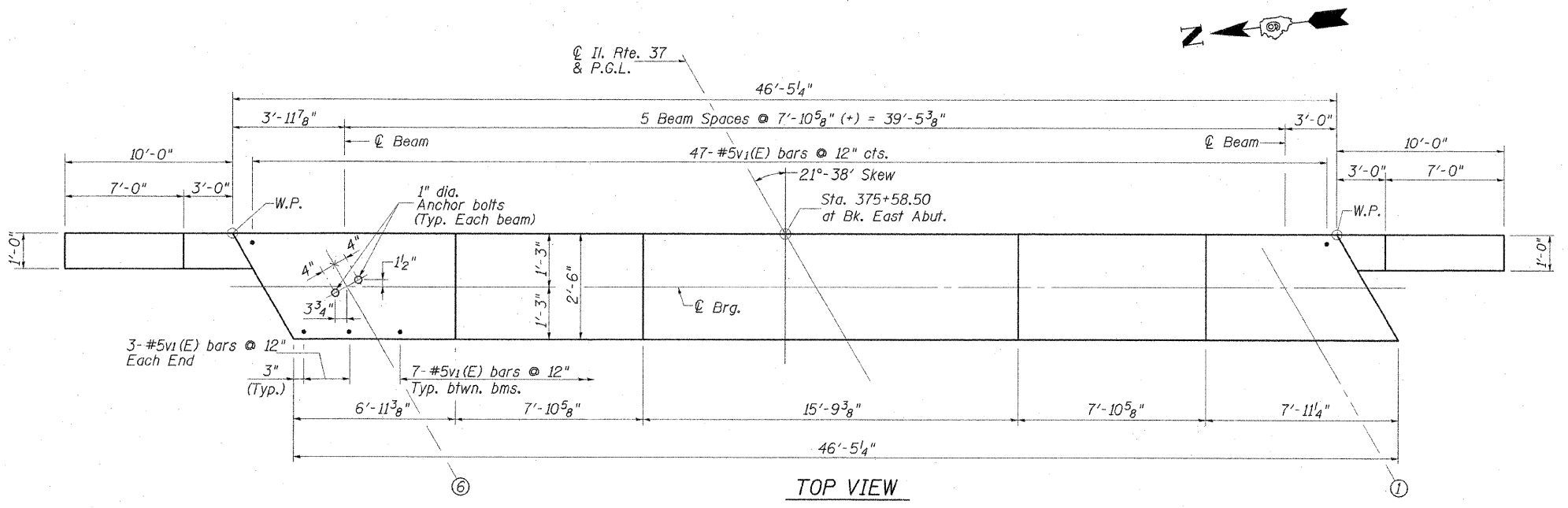
ELEVATION



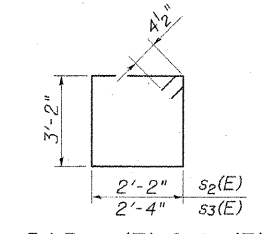
SECTION THRU ABUTMENT



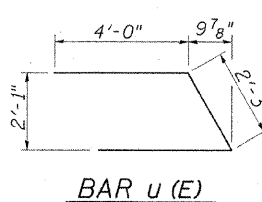
FIELD CUTTING DIAGRAM
Order v₂(E) full length. Cut as shown and use remainder of bars in opposite face.



TOP VIEW



BAR s₂(E) & s₃(E)



BAR u(E)

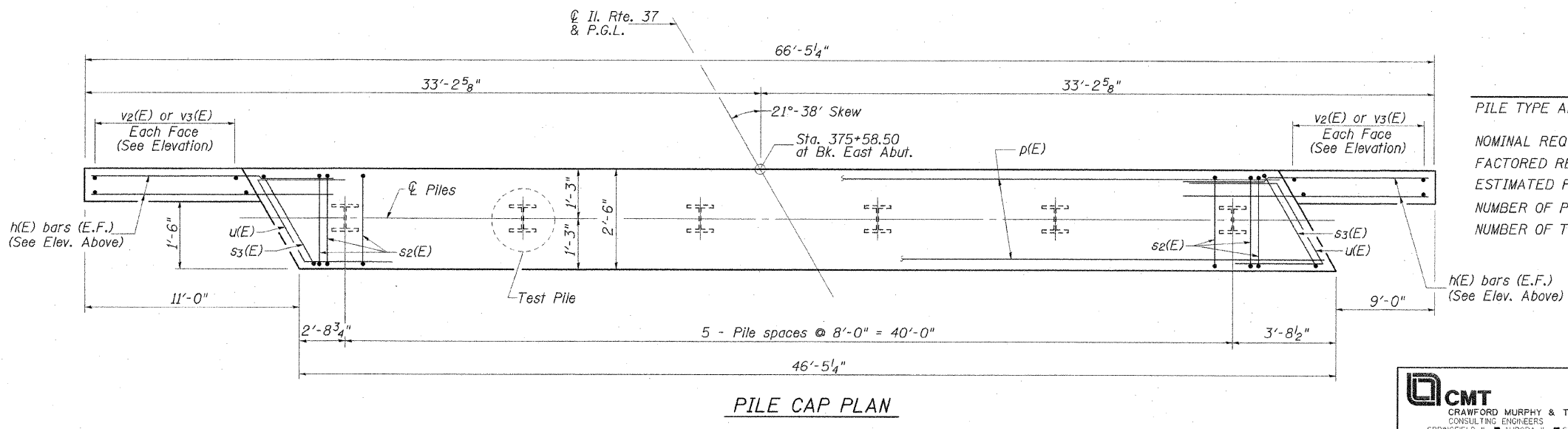
EAST ABUT. BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
h(E)	40	#6	13'-0"	—	
p(E)	10	#7	46'-1"	—	
s ₂ (E)	39	#4	11'-5"	□	
s ₃ (E)	2	#4	11'-9"	□	
u(E)	8	#6	10'-3"	▴	
v ₁ (E)	88	#5	4'-4"	—	
v ₂ (E)	14	#5	10'-0"	—	
v ₃ (E)	16	#5	6'-11"	—	
Concrete Structures				Cu. Yd.	20.4
Concrete Encasement				Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated				Pound	2820
Structure Excavation				Cu. Yd.	142
Furnishing Steel Piles HP 10x42				Foot	180
Driving Piles				Foot	180
Test Pile Steel HP 10x42				Each	1
Pile Shoes				Each	6

PILE DATA

PILE TYPE AND SIZE:	HP 10x42 with Metal Shoes
NOMINAL REQUIRED BEARING:	335 kips
FACTORED RESISTANCE AVAILABLE:	167 kips
ESTIMATED PILE LENGTH:	36.0 Ft.
NUMBER OF PRODUCTION PILES:	5
NUMBER OF TEST PILES:	1

- NOTES:**
1. Pour steps monolithically with cap.
 2. Space reinforcement to miss anchor bolts.
 3. See Sheet 2 of 18 for abutment backfill requirements.
 4. See Sheet 16 of 18 for steel H-pile details.



PILE CAP PLAN

REVISIONS	
NAME	DATE

CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

ILLINOIS DEPARTMENT OF TRANSPORTATION
EAST ABUTMENT
F.A.S. ROUTE 2905 (IL. RTE. 37)
ILLINOIS ROUTE 37 OVER
BN/SF RAILROAD
SECTION 113B-1 STA. 376+46.00
STR. NO. 100-0090 - WILLIAMSON COUNTY
SCALE: NONE
DATE: 12/14/07
DRAWN BY: GLD
CHECKED BY: WLB

I:\DDOT\060660\SN\1000090\Drawings\sheet15\EAABUTMENT.dgn 12/15/2007