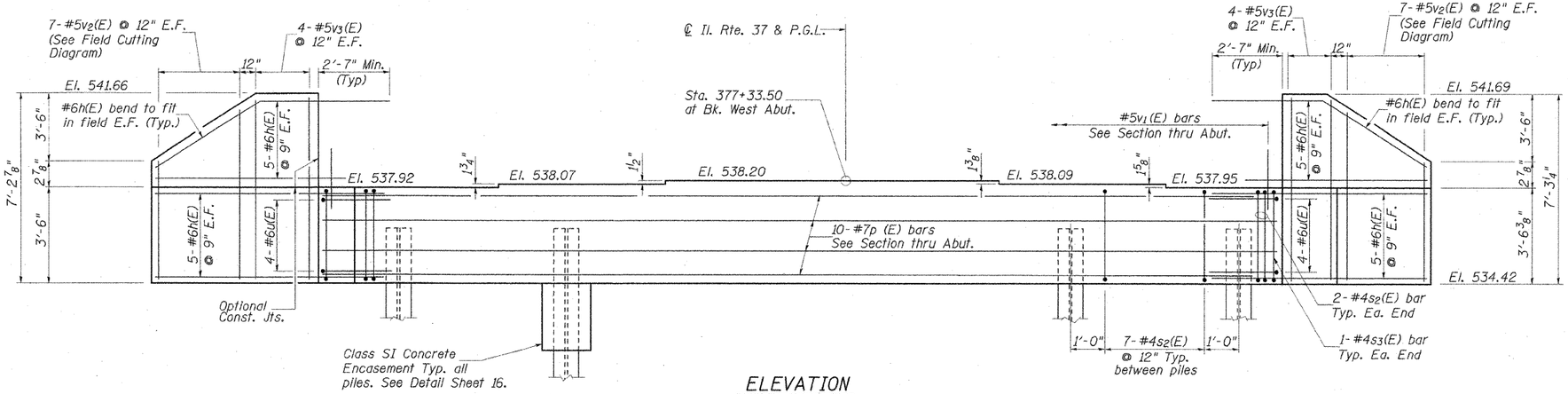
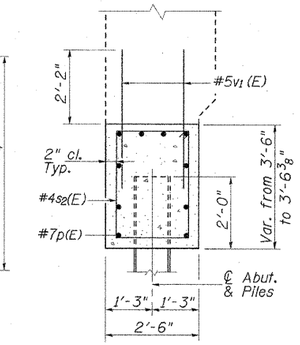
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2905	113B-1	WILLIAMSON	87	43
STA.		TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

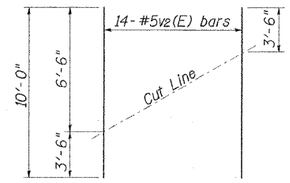
Contract 98777 SHEET 12 OF 18



ELEVATION

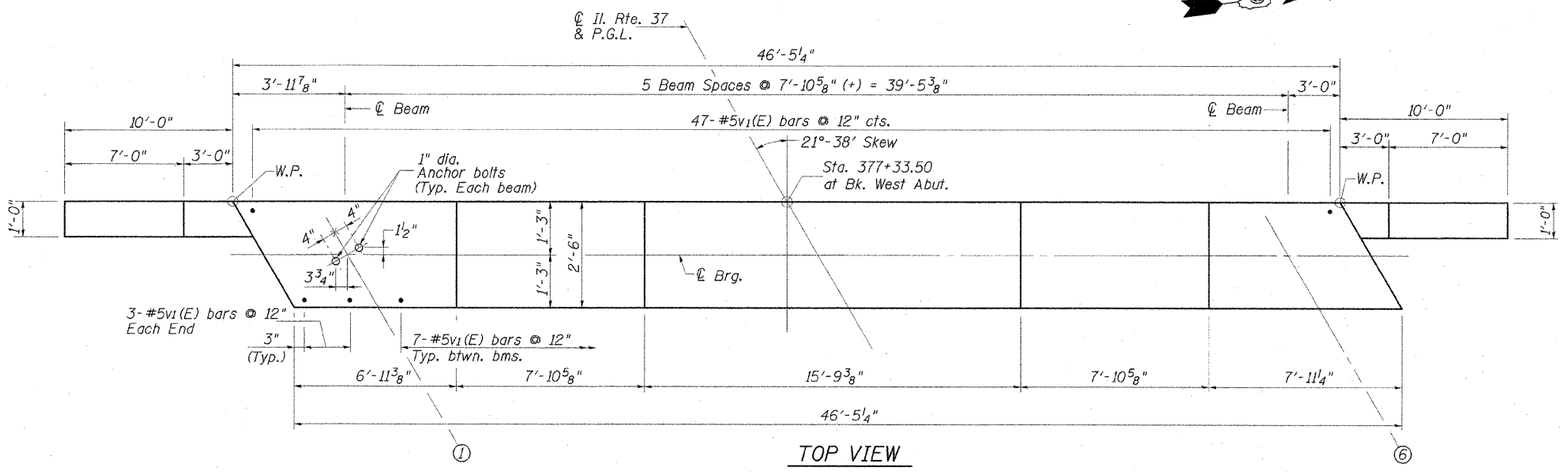


SECTION THRU ABUTMENT

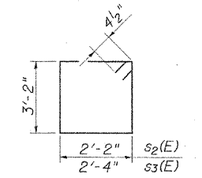


FIELD CUTTING DIAGRAM

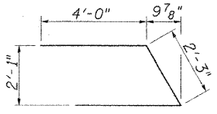
Order $v_2(E)$ full length. Cut as shown and use remainder of bars in opposite face.



TOP VIEW



BAR $s_2(E)$ & $s_3(E)$

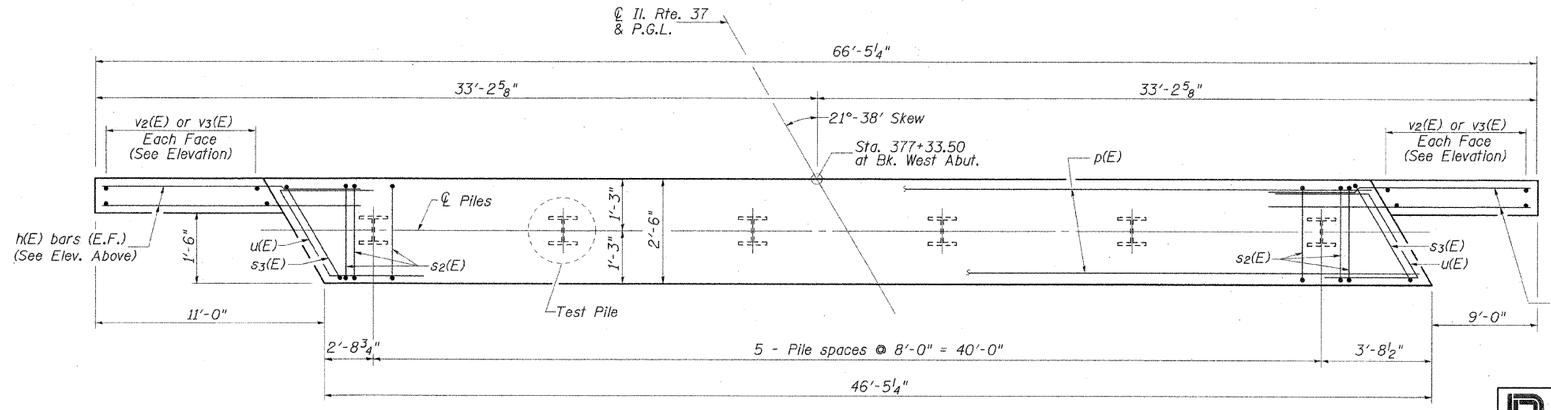


BAR u (E)

WEST 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.	20.2
Concrete Encasement	Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated	Pound	2820
Structure Excavation	Cu. Yd.	141
Furnishing Steel Piles HP 10x42	Foot	213
Driving Piles	Foot	213
Test Pile Steel HP 10x42	Each	1
Pile Shoes	Each	6



PILE CAP PLAN

PILE DATA

PILE TYPE AND SIZE:	HP 10x42 with Metal Shoes
NOMINAL REQUIRED BEARING:	335 kips
FACTORED RESISTANCE AVAILABLE:	167 kips
ESTIMATED PILE LENGTH:	42.5 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.

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

WEST 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 DRAWN BY: GLD
DATE: 12/14/07 CHECKED BY: WLB

L:\IDOT\060660\SN.1000090\draw\sheets\WEST ABUMENT.dgn
12/5/2007