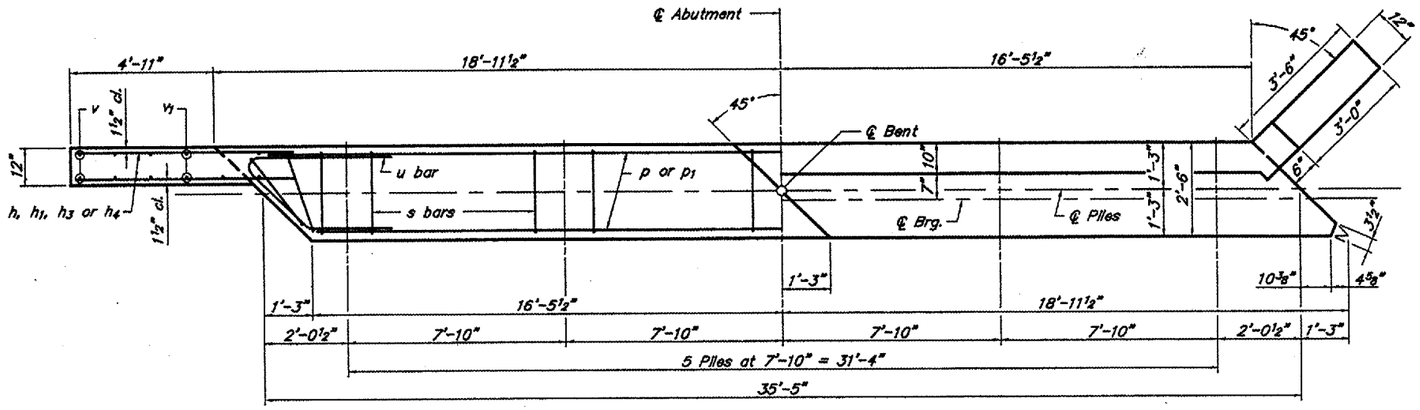
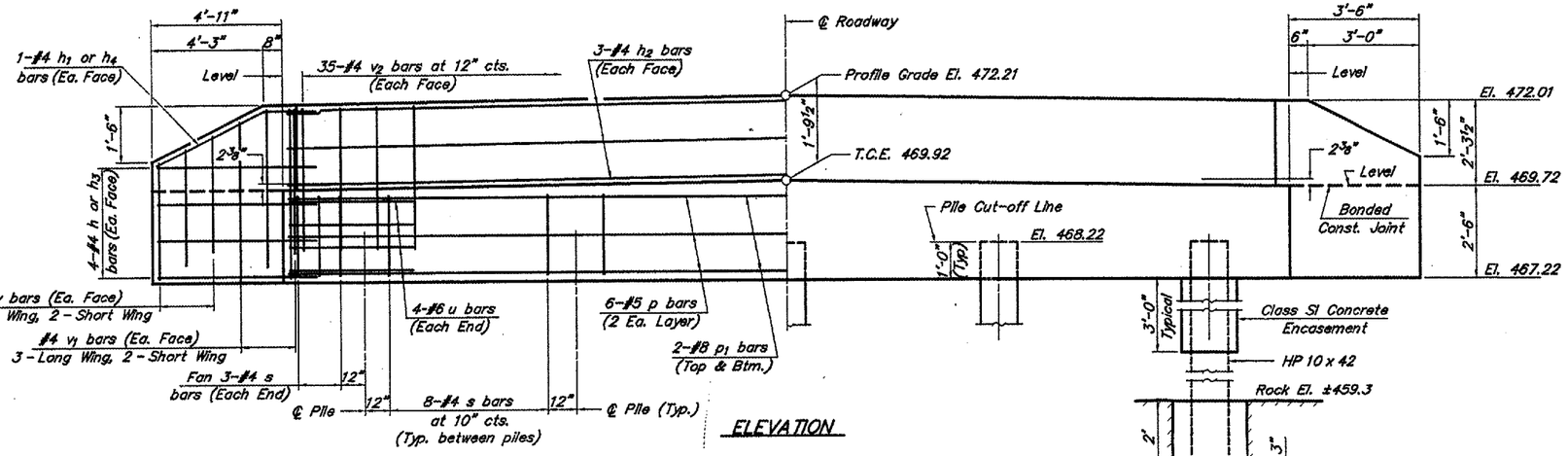
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 1	02-00092-00-BR	UNION	10	6
PROJECT NO. BROS-181(18)			CONTRACT NO. 99207	

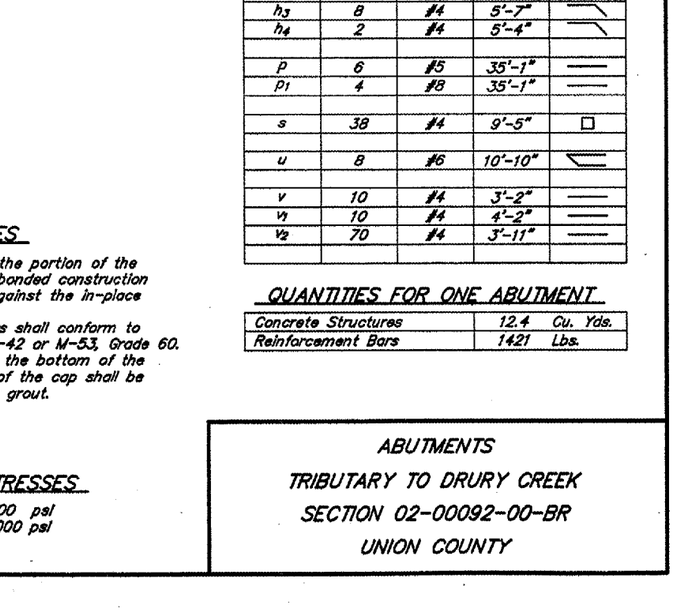


PLAN

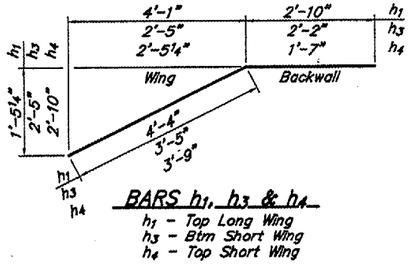


ELEVATION

SETTING PILES IN ROCK

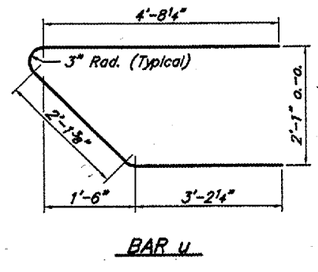


SECTION THRU ABUT.
(At Right Angles)

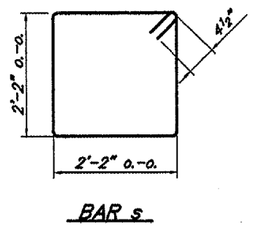


BARS h_1, h_3 & h_4

h_1 - Top Long Wing
h_3 - Btm Short Wing
h_4 - Top Short Wing



BAR u



BAR s

BAR LIST FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	8	#4	7'-1"	
h1	2	#4	7'-2"	
h2	6	#4	35'-1"	
h3	8	#4	5'-7"	
h4	2	#4	5'-4"	
p	6	#5	35'-1"	
p1	4	#8	35'-1"	
s	38	#4	9'-5"	
u	8	#6	10'-10"	
v	10	#4	3'-2"	
v1	10	#4	4'-2"	
v2	70	#4	3'-11"	

QUANTITIES FOR ONE ABUTMENT

Concrete Structures	12.4	Cu. Yds.
Reinforcement Bars	1421	Lbs.

NOTES

1. The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
2. Reinforcement bars shall conform to A.A.S.H.T.O. M-31, M-42 or M-53, Grade 60.
3. The area between the bottom of the beams and the top of the cap shall be filled with non-shrink grout.

DESIGN STRESSES

$f'c$ = 3,500 psi
fy = 60,000 psi

ABUTMENTS
TRIBUTARY TO DRURY CREEK
SECTION 02-00092-00-BR
UNION COUNTY