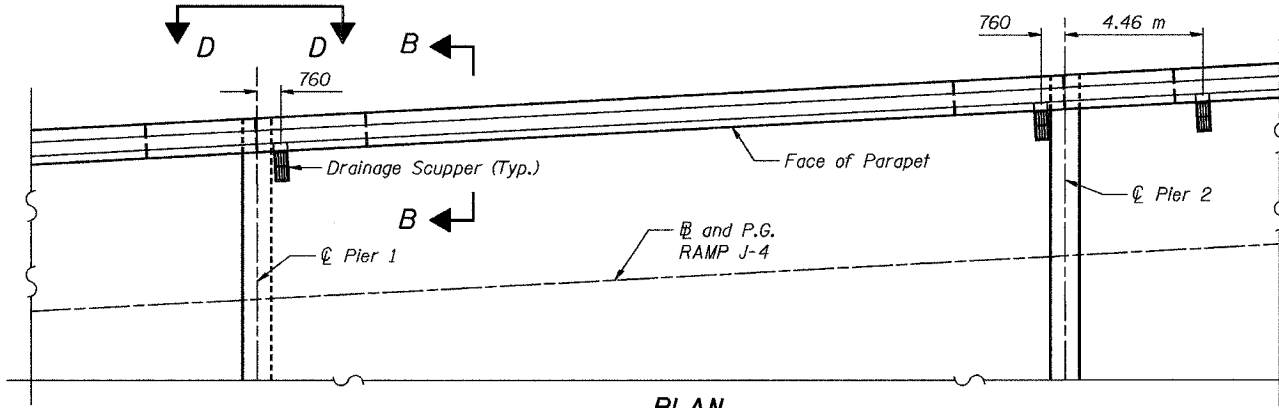
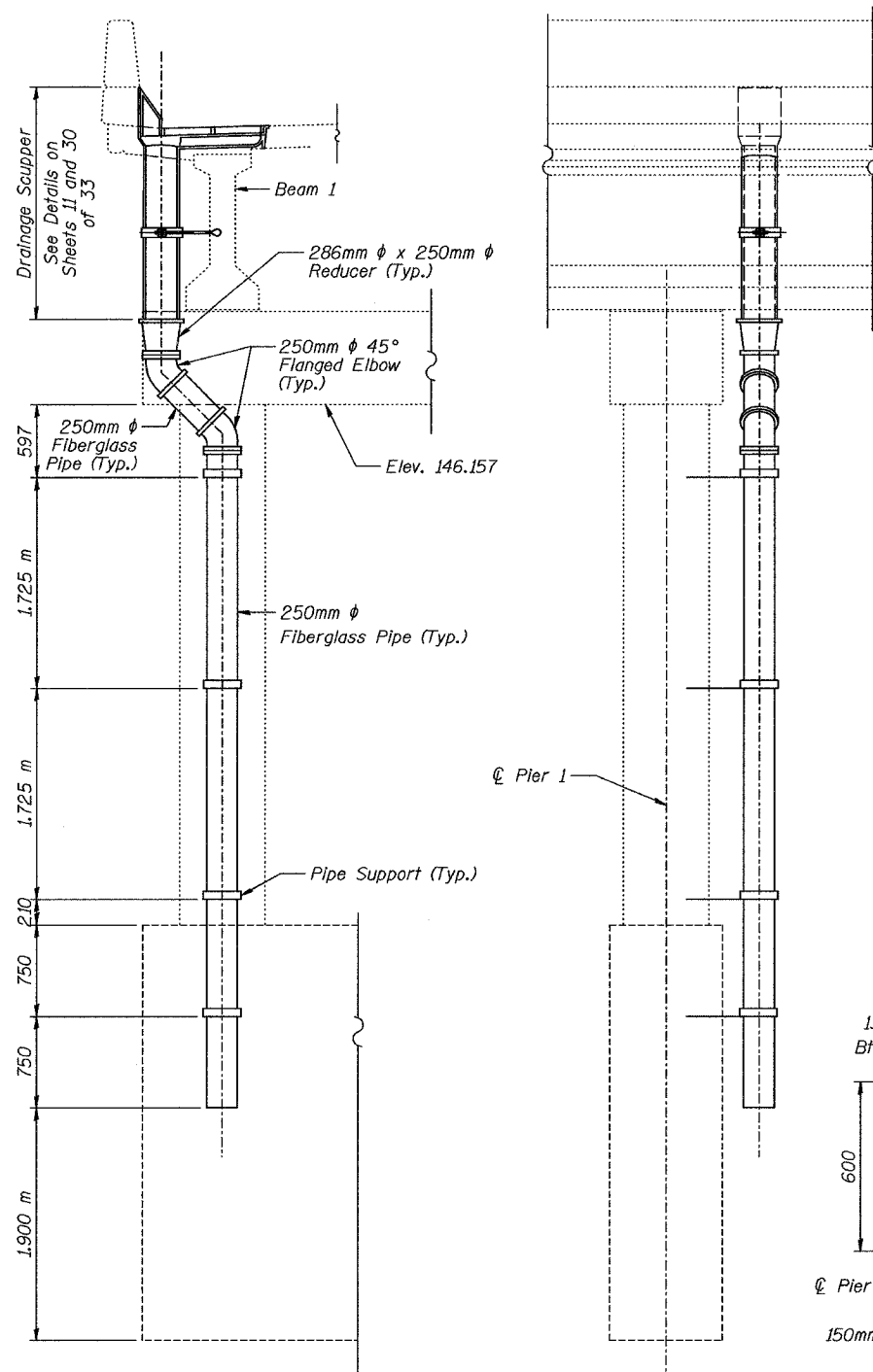


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

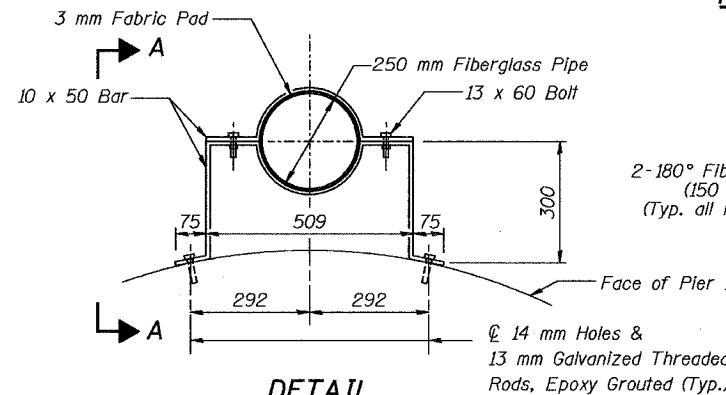
**BILL OF MATERIAL  
PIER 1**

Bar	No.	Size	Length	Shape
$h_1(E)$	8	#15	9.87	—
$h_2(E)$	4	#15	12.81	—
$h_3(E)$	4	#15	2.15	—
$h_4(E)$	32	#20	7.47	—
$h_5(E)$	32	#20	8.42	—
$h_6(E)$	32	#20	8.67	—
$p(E)$	24	#25	13.16	—
$s_4(E)$	65	#15	3.47	□
$s_5(E)$	63	#15	1.75	□
$u_1(E)$	82	#20	3.39	—
$v_3(E)$	66	#25	1.26	—
$v_4(E)$	118	#15	3.30	—
Structure Excavation			m <sup>3</sup>	67
Concrete Structures			m <sup>3</sup>	101.6
Reinforcement Bars, Epoxy Coated			kg	5430
Furn. Steel Piles HP 360 x 174			meter	299.2
Driving Steel Piles			meter	299.2
Test Pile HP 360 x 174			Ea.	1

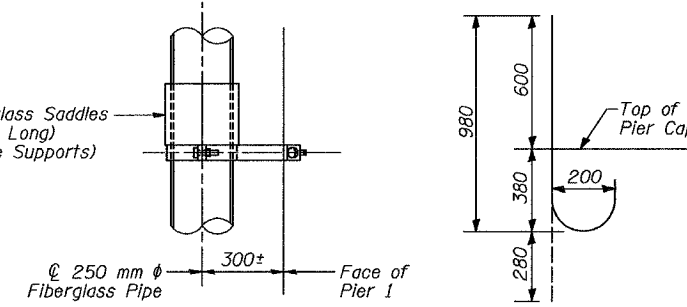
Reinforcement bars designated (E) shall be epoxy coated.



PLAN

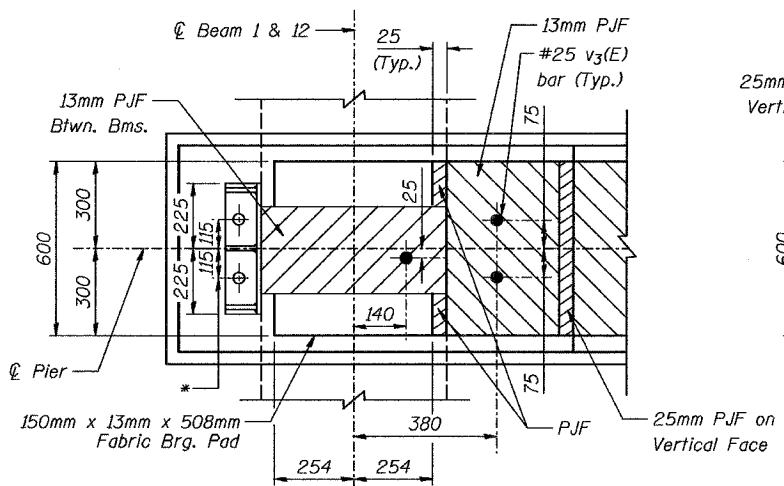


DETAIL  
PIPE SUPPORT AT PIERS



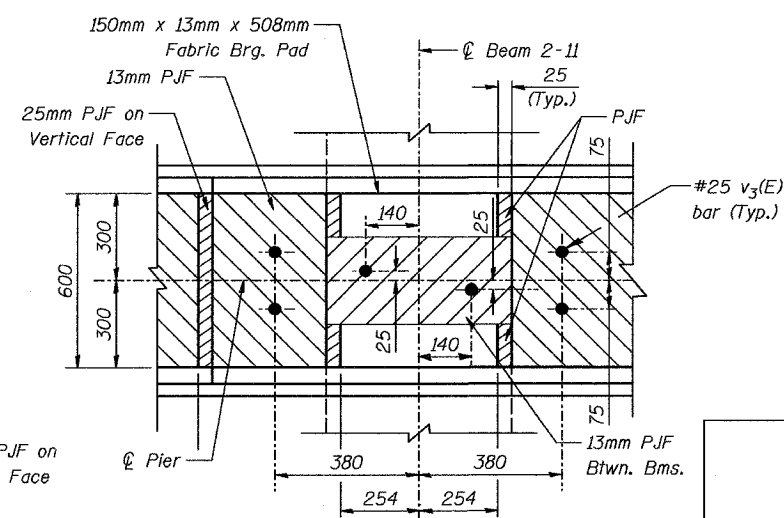
VIEW A-A

v3(E) DOWEL BAR



DETAIL "A"

Typ. at Exterior Bms.



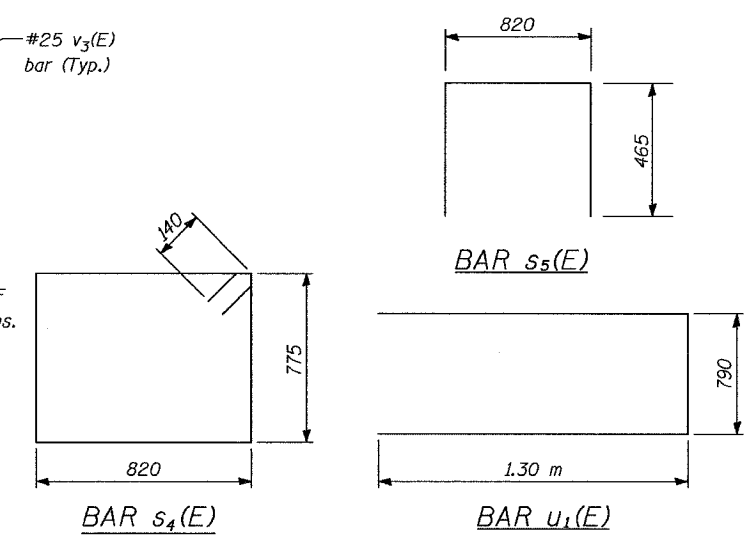
DETAIL "B"

Typ. at Interior Bms.

**DETAILS OF PIER CAP SHOWING  
BEARINGS, PREFORMED JOINT FILLER  
AND DOWEL BARS**

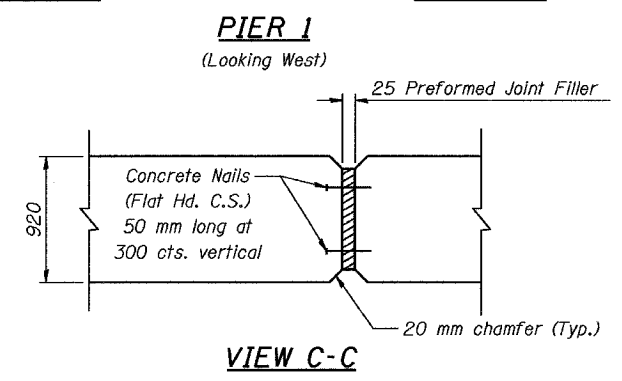
\*  $\varnothing$  M36 x 450 mm Anchor Bolts with 75 x 75 x 8 mm  $\varnothing$  washer under nut. Holes in cap to be drilled after beams are in place. Cost is included in Concrete Structures.

Notes:  
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 200 MPa minimum. The surface of the fiberglass pipe shall be free of bond inhibiting agents. Bolts, nuts, rods, and washers for "Drainage System" shall conform to the requirements of ASTM A307. The pay item "Drainage System" shall include providing and installing fiberglass pipe, tees, reducers, elbows, cleanouts, inserts, anchors, hangers, clamps, saddles and all other items necessary to complete the underdeck drainage system (See Special Provisions). For Drainage Scupper Details See Sheet 11 & 30 of 33. Locate anchors to miss reinforcement. All dimensions are in millimeters (mm) except as noted.



**PIER 1 DETAILS**

Date	Designed	JML	INTERSTATE 74 AND RAMPS J-4 OVER ALTORFER LANE AND TP&W R.R. F.A.I. RTE. 74 SECTION (90-11VB)BR TAWZELL COUNTY STATION 152+685.353 STRUCTURE NO. 090-0159 (WB)	Sheet No.
Revisions	Drawn	KDK		24
	Checked	RME		of 33
	Approved	DLC		URS Job No. 2100001243.02
Date: 7-21-04				



VIEW C-C

PIER 1  
(Looking West)

SECTION B-B

VIEW D-D