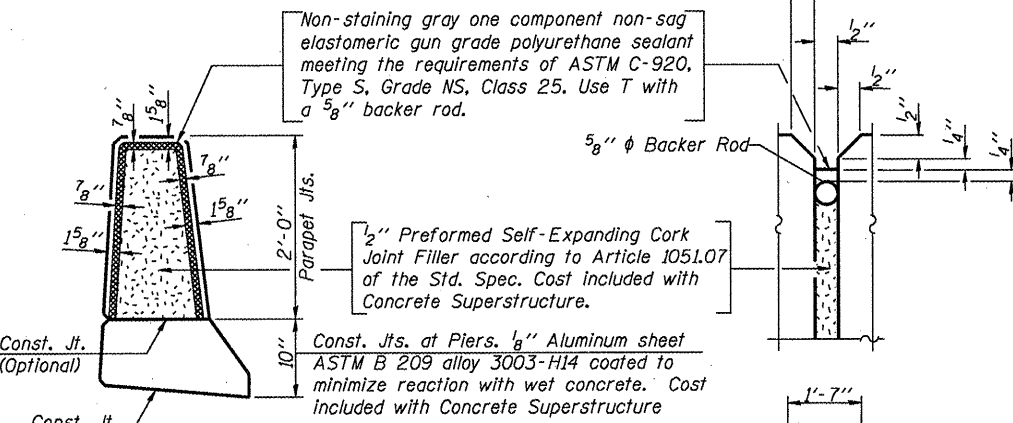


**INSIDE ELEVATION OF PARAPET**



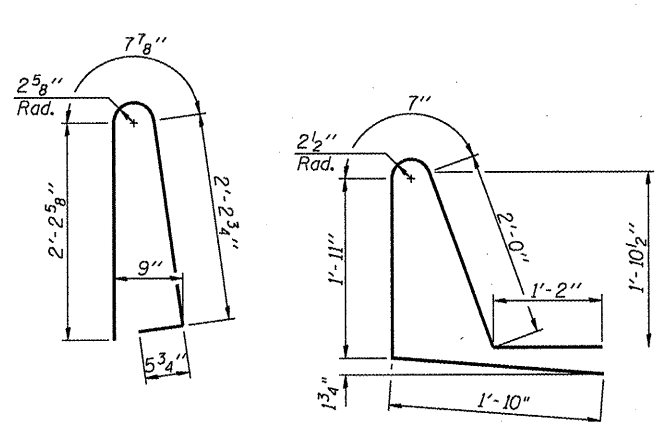
Notes:  
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.  
The exterior surfaces of the floor drains shall be coated or pigmented by the manufacturer with a color that matches the concrete.  
The clamping device and inserts shall be galvanized according to AASHTO M 232. Cost of clamping device and inserts included with Floor Drains.  
Drains shall be located clear of all diaphragms.

**SUPERSTRUCTURE BILL OF MATERIAL**

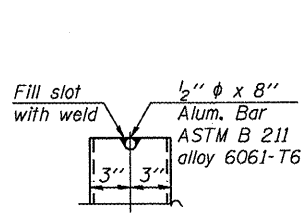
Bar	No.	Size	Length	Shape
a(E)	1,626	#5	17'-2"	
a <sub>1</sub> (E)	814	#6	6'-6"	
a <sub>2</sub> (E)	1,128	#5	16'-5"	
a <sub>3</sub> (E)	24	#5	5'-0"	
a <sub>4</sub> (E)	12	#5	2'-4"	
a <sub>5</sub> (E)	4	#5	13'-10"	
a <sub>6</sub> (E)	32	#5	1'-6"	
b(E)	646	#5	30'-4"	
b <sub>1</sub> (E)	136	#7	50'-0"	
b <sub>2</sub> (E)	756	#5	28'-9"	
b <sub>3</sub> (E)	136	#7	56'-0"	
d(E)	1,036	#5	5'-7"	
d <sub>1</sub> (E)	1,036	#5	7'-6"	
e(E)	112	#4	19'-8"	
e <sub>1</sub> (E)	96	#4	10'-9"	
e <sub>2</sub> (E)	112	#4	17'-0"	
e <sub>3</sub> (E)	32	#4	13'-6"	
e <sub>4</sub> (E)	70	#4	16'-3"	
e <sub>5</sub> (E)	12	#8	30'-0"	
e <sub>6</sub> (E)	12	#8	10'-9"	
e <sub>7</sub> (E)	12	#8	26'-5"	
e <sub>8</sub> (E)	4	#8	13'-6"	
e <sub>9</sub> (E)	8	#8	24'-6"	
e <sub>10</sub> (E)	12	#4	27'-11"	
e <sub>11</sub> (E)	12	#4	24'-3"	
e <sub>12</sub> (E)	6	#4	28'-9"	
m(E)	96	#6	4'-7"	
m <sub>1</sub> (E)	48	#6	2'-4"	
m <sub>2</sub> (E)	32	#6	3'-7"	
m <sub>3</sub> (E)	16	#6	1'-8"	
m <sub>4</sub> (E)	24	#8	5'-10"	
s(E)	104	#4	13'-0"	U
x(E)	60	#6	7'-5"	
Concrete Superstructure		Cu. Yds.	612.3	
Reinforcement Bars, Epoxy Coated		Lbs.	154,170	

Bars indicated thus 1 x 3-#5 etc. indicates 1 line of bars with 3 lengths per line.

**PARAPET JOINT DETAILS**

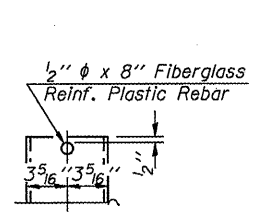


**BAR d(E)**



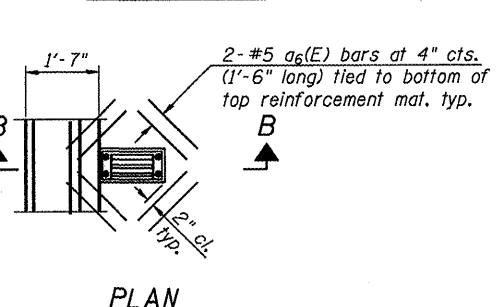
**ALUMINUM TUBE**

**BAR d<sub>1</sub>(E)**



**FIBERGLASS PIPE**

**SECTION B-B**

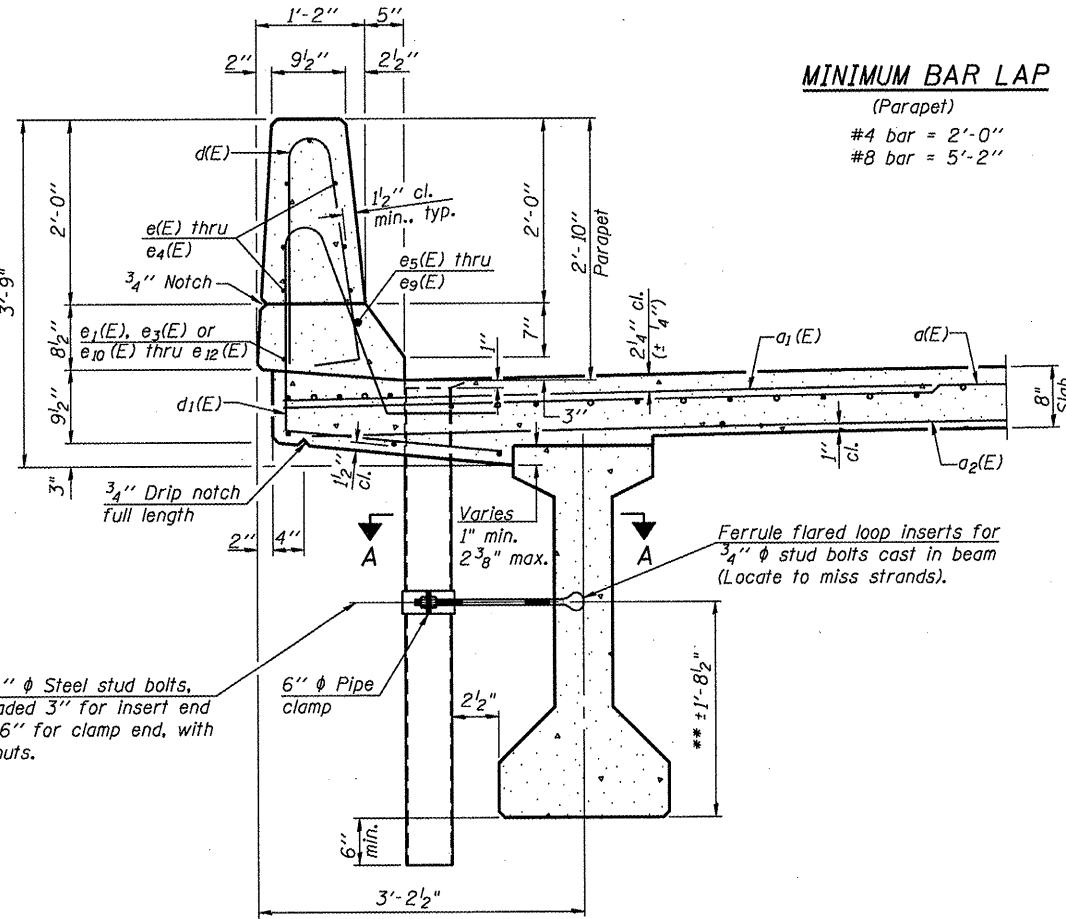


**PLAN**

Note: Cut longitudinal reinforcement to clear drainage scuppers.

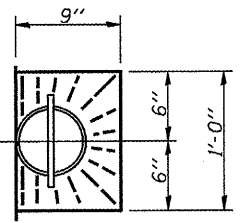
**MINIMUM BAR LAP**

(Parapet)  
#4 bar = 2'-0"  
#8 bar = 5'-2"

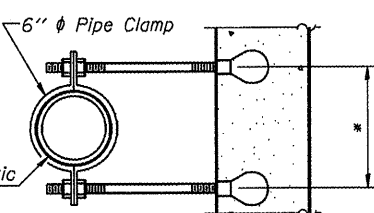


**SECTION THRU PARAPET**

\*\*For insert locations See sheet 20 and 21 of 41.

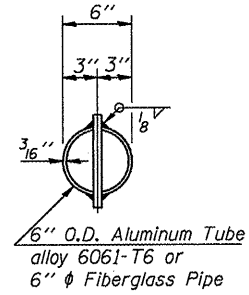


**TOP PLAN**



**SECTION A-A**

\*Dimension as required by Pipe Clamp



**TOP PLAN**

(Showing Aluminum Tube)

USER NAME = flowry	DESIGNED = BRD/FLL	REVISED = 1/24/11
FILE NAME = 0550083-68482.dgn	CHECKED = SDS/JHP	REVISED =
PLOT DATE = 1/31/2011	DRAWN = DLH	REVISED =
PLOT TIME = 3:34:18 PM	CHECKED = CWC/SDS	REVISED =

**WHKS & CO.**  
ENGINEERING

7018 KINGSMILL CT.,  
SPRINGFIELD, IL  
(217) 483-9457  
DESIGN FIRM #184001036

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS**  
**S.N. 055-0083**  
SHEET NO. 13 OF 41 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
542	105BR-1	MCDONOUGH	117	53
			CONTRACT NO. 68482	
ILLINOIS FED. AID PROJECT				