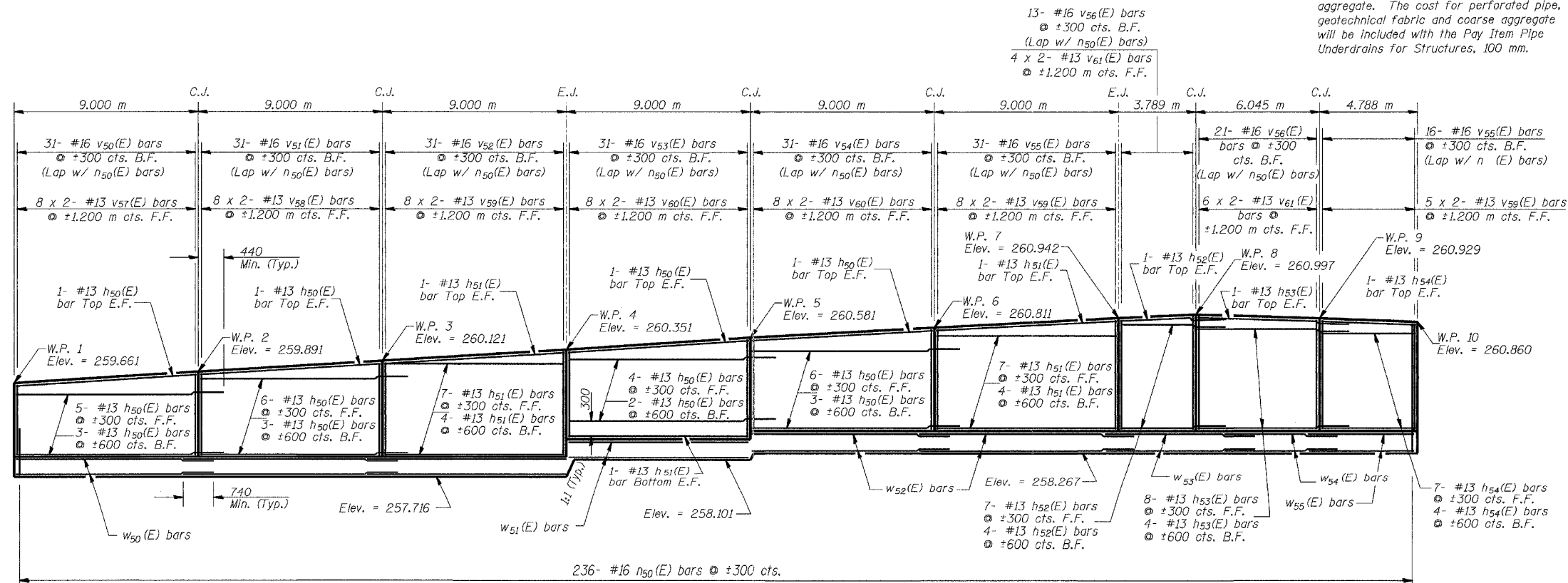


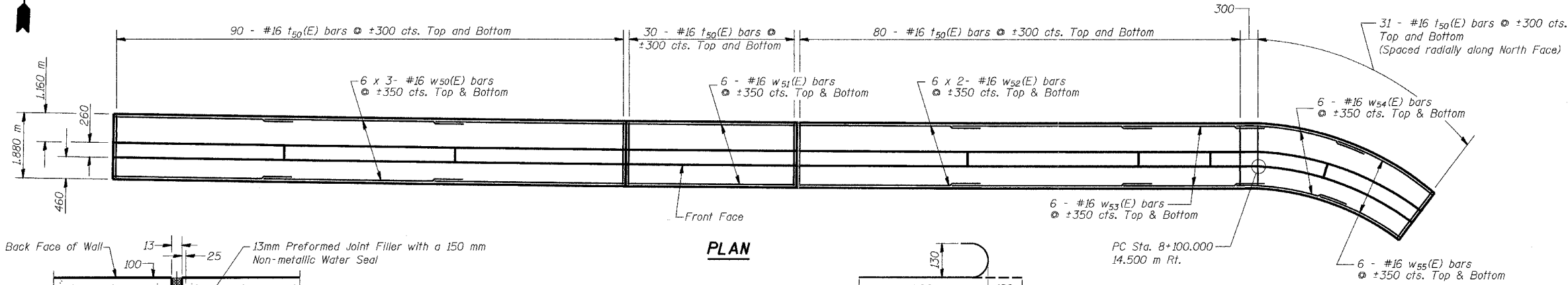
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* 100 mm ϕ perforated pipe drain according to Section 601 of the Standard Specifications, encased in 450 mm of CA-5 or CA-7 coarse aggregate. The cost for perforated pipe, geotechnical fabric and coarse aggregate will be included with the Pay Item Pipe Underdrains for Structures, 100 mm.

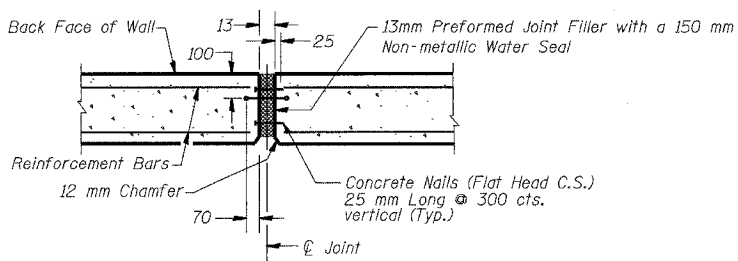
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 337 (IL 22)	19R-1	LAKE	806	550
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		



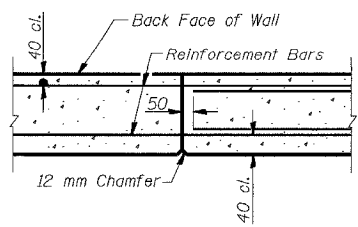
ELEVATION
(Measured along the Front Face)



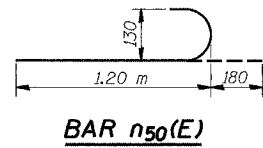
PLAN



EXPANSION JOINT DETAIL
No Reinforcement to pass thru joint

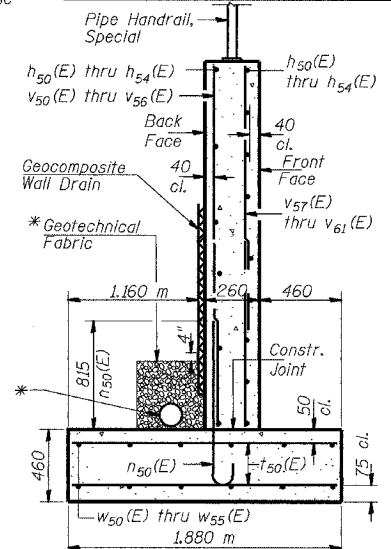


CONSTRUCTION JOINT DETAIL
Reinforcement to pass thru joint



NOTES

- All dimensions are in millimeters (mm) except as noted.
- Bars indicated thus 6 x 3- #16 etc. indicates 6 lines of bars with 3 lengths per line.



TYPICAL SECTION
BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h50(E)	40	#13	9.39	
h51(E)	26	#13	8.90	
h52(E)	13	#13	4.18	
h53(E)	14	#13	6.45	
h54(E)	13	#13	4.68	
n50(E)	236	#16	1.38	
t50(E)	462	#16	1.78	
v50(E)	31	#16	1.37	
v51(E)	31	#16	1.60	
v52(E)	31	#16	1.83	
v53(E)	31	#16	1.67	
v54(E)	31	#16	1.74	
v55(E)	47	#16	1.88	
v56(E)	34	#16	1.94	
v57(E)	16	#13	1.05	
v58(E)	16	#13	1.16	
v59(E)	42	#13	1.29	
v60(E)	32	#13	1.23	
v61(E)	20	#13	1.32	
w50(E)	36	#16	9.46	
w51(E)	12	#16	8.85	
w52(E)	24	#16	9.70	
w53(E)	12	#16	4.89	
w54(E)	12	#16	6.77	
w55(E)	12	#16	5.51	
Pipe Underdrains for Structures, 100 mm		m	68.7	
Concrete Structures		cu m	95.5	
Reinforcement Bars, Epoxy Coated		kg	4760	
Structure Excavation		cu m	289	
Pipe Handrail, Special		m	68.7	
Geocomposite Wall Drain		sq m	137.9	

WALL DETAILS

Date	Designed	ACW	F.A.P. RTE. 337 (IL. RTE. 22) SECTION 19R-1 WEST OF U.S. 12 TO EAST OF BEUSCHING ROAD LAKE COUNTY STATION 8+040.000 TO 8+107.650	Sheet No.	
Revisions	Drawn	BKN		2	of 3
	Checked	ACW			
	Approved	KWB			
			URS Job No. 210001385.01		