CONTRACT NO. 72693

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
777	405RS-8	MONTGOMERY	75	59
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LOCATION	DESCRIPTION	PLATE DIMENSIONS X (INCH)	Y (INCH)	Z (INCH)	VOLUME / PLATE (CU FT)	WEIGHT / PLATE (POUND)	# OF PLATES / BRACKET (EACH)	TOTAL WEIGHT OF PLATES (POUND)	SUBTOTAL WEIGHT OF BRACKETS (POUND)	MULTIPLY BY # OF BRACKETS (EACH)	TOTAL WEIGHT OF BRACKETS (POUND)
STA. 145+08.90 (RT/LT)	HEADWALL BRACKET	6.75	4.25	0.25	0.0042	2.03	2	4.07	6.24	7 X 2	87.36
		5.75	3.75	0.25	0.0031	1.53	1	1.53			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	WINGWALL BRACKET (EAST)	11.25	4.75	0.25	0.0077	3.78	1	3.78	7.12	2 X 2	28.48
		4.00	4.75	0.25	0.0027	1.35	1	1.35			
		4.00	4.75	0.25	0.0027	1.35	1	1.35			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	WINGWALL BRACKET (WEST)	7.75	4.75	0.25	0.0053	2.60	1	2.60	5.94	2 X 2	23.76
		4.00	4.75	0.25	0.0027	1.35	1	1.35			
		4.00	4.75	0.25	0.0027	1.35	1	1.35			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	END OF WINGWALL BRACKET	10.00	10.00	0.25	0.0145	7.11	1	7.11	7.75	2 X 2	31.00
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
STA. 192+00.00 (RT/LT)	HEADWALL BRACKET	6.75	4.25	0.25	0.0042	2.03	2	4.07	6.24	7 X 2	87.36
		5.75	3.75	0.25	0.0031	1.53	1	1.53			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	WINGWALL BRACKET	**9.25**	4.75	0.25	0.0064	3.14	1	3.14	7.68	2 X 2	30.72
		7.50	4.75	0.25	0.0052	2.55	1	2.55			
		4.00	4.75	0.25	0.0027	1.35	1	1.35			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	END OF WINGWALL BRACKET	10.00	10.00	0.25	0.0145	7.11	1	7.11	7.75	2 X 2	31.00
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
STA. 268+53.50 (RT/LT)	HEADWALL BRACKET	6.75	4.25	0.25	0.0042	2.03	2	4.07	6.24	7 X 2	87.36
		5.75	3.75	0.25	0.0031	1.53	1	1.53			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	WINGWALL BRACKET	**9.25**	4.75	0.25	0.0064	3.14	1	3.14	7.68	6 X 2	92.16
		7.50	4.75	0.25	0.0052	2.55	1	2.55			
		4.00	4.75	0.25	0.0027	1.35	1	1.35			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	END OF WINGWALL BRACKET	10.00	10.00	0.25	0.0145	7.11	1	7.11	7.75	2 X 2	31.00
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
STA. 358+28.00 (RT/LT)	HEADWALL BRACKET	6.75	4.25	0.25	0.0042	2.03	2	4.07	6.24	7 X 2	87.36
		5.75	3.75	0.25	0.0031	1.53	1	1.53			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	WINGWALL BRACKET (EAST)	**12.50**	4.75	0.25	0.0086	4.21	1	4.21	9.58	2 X 2	38.32
		10.00	4.75	0.25	0.0069	3.38	1	3.38			
		4.00	4.75	0.25	0.0027	1.35	1	1.35			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	WINGWALL BRACKET (WEST)	**7.25**	4.75	0.25	0.0050	2.45	1	2.45	6.55	4 X 2	52.40
		6.25	4.75	0.25	0.0043	2.11	1	2.11			
		4.00	4.75	0.25	0.0027	1.35	1	1.35			
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
	END OF WINGWALL BRACKET	10.00	10.00	0.25	0.0145	7.11	1	7.11	7.75	2 X 2	31.00
		3.00	3.00	0.25	0.0013	0.64	1	0.64			
TOTAL WEIGHT OF PLATES:											**739.28**

LOCATION	DESCRIPTION	PLATE DIMENSIONS X (INCH)	Y (INCH)	Z (INCH)	LENGTH (INCH)	WEIGHT / FOOT LENGTH (LB/FT)	WEIGHT / ANGLE (POUND)	# OF ANGLES (EACH)	SUBTOTAL WEIGHT OF ANGEL (POUND)
STA. 145+08.90 (RT/LT)	END OF WINGWALL BRACKET ANGEL	6.00	6.00	0.75	11.0	28.7	26.31	2 X 2	105.24
	MAIN SUPPORT ANGEL	5.00	5.00	0.75	168.1	23.6	330.60	1 X 2	661.20
	CENTER SUPPORT ANGEL	6.00	6.00	0.75	14.0	28.7	33.48	1 X 2	66.96
STA. 192+00.00 (RT/LT)	END OF WINGWALL BRACKET ANGEL	6.00	6.00	0.75	11.0	28.7	26.31	2 X 2	105.24
	MAIN SUPPORT ANGEL	5.00	5.00	0.75	127.0	23.6	249.77	1 X 2	499.54
	CENTER SUPPORT ANGEL	6.00	6.00	0.75	14.0	28.7	33.48	1 X 2	66.96
STA. 268+53.50 (RT/LT)	END OF WINGWALL BRACKET ANGEL	6.00	6.00	0.75	11.0	28.7	26.31	2 X 2	105.24
	MAIN SUPPORT ANGEL	5.00	5.00	0.75	161.0	23.6	316.63	1 X 2	633.26
	CENTER SUPPORT ANGEL	6.00	6.00	0.75	14.0	28.7	33.48	1 X 2	66.96
STA. 358+28.00 (RT/LT)	END OF WINGWALL BRACKET ANGEL	6.00	6.00	0.75	11.0	28.7	26.31	2 X 2	105.24
	MAIN SUPPORT ANGEL	5.00	5.00	0.75	167.0	23.6	328.43	1 X 2	656.86
	CENTER SUPPORT ANGEL	6.00	6.00	0.75	14.0	28.7	33.48	1 X 2	66.96
TOTAL WEIGHT OF ANGLES:									**3,139.66**

LOCATION	LENGTH OF PIPE / WINGWALL END (FOOT)	MULTIPLY BY # OF ENDS (EACH)	SUBTOTAL LENGTH OF PIPE (FOOT)
STA. 145+08.90 RT & LT	39.09	2	78.18
STA. 192+00.00 RT & LT	24.29	2	48.58
STA. 268+53.50 RT & LT	43.13	2	86.26
STA. 358+28.00 RT & LT	38.82	2	77.64
TOTAL LENGTH OF PIPE			290.66
(MULTIPLY BY POUNDS PER FOOT OF PIPE)			(X 10.69)
TOTAL WEIGHT OF PIPE (POUNDS)			**3,107.16**

DESCRIPTION	TOTAL WEIGHT OF ITEMS (POUND)
PIPE	3,107.16
PLATE	739.28
ANGLE	3,139.66
TOTAL WEIGHT OF STEEL	**6,986.10**

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GRATE, SPECIAL DETAIL

F.A.U. Route 777 (IL 185)
Section 405RS-4
MONTGOMERY COUNTY

SCALE: VERT.
HORIZ.
DATE: AUGUST 10, 2006

DRAWN BY: JWC
CHECKED BY: RSC

PLOT DATE = 12/8/2006
FILE NAME = c:\projects\d656802\shtmiscdetails.dgn
PLOT SCALE = 1.000000 / IN.
USER NAME = cox_j

D6 PROJECT: D656802 FILE: SHTMISCDETAILS.DGN