

ESTIMATE OF QUANTITIES - FLUME BELL JOINTS

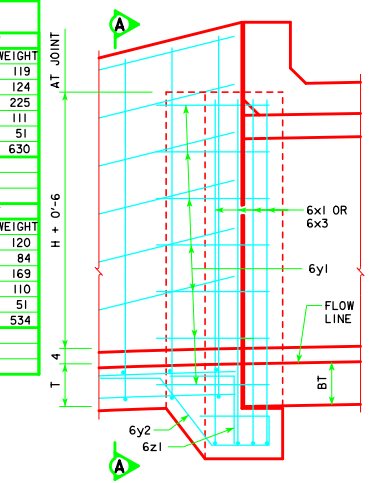
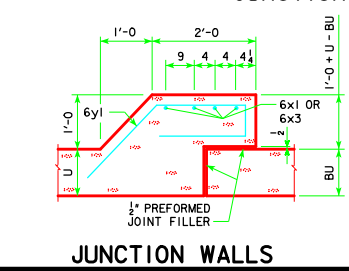
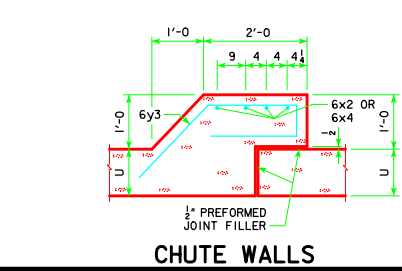
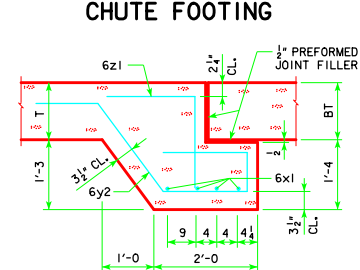
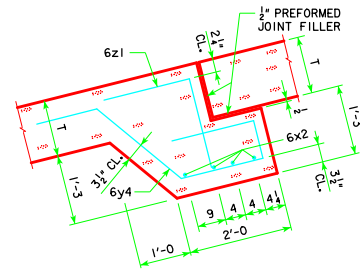
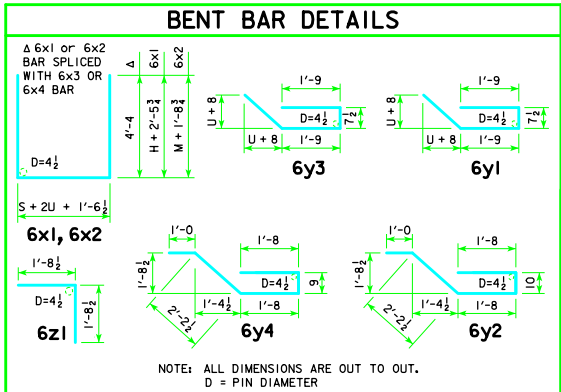
JUNCTION BELL JOINT			8' x 4'		8' x 5'		8' x 6'		8' x 7'		8' x 8'		8' x 9'		8' x 10'									
BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT							
6x1	WALLS & FLOOR		4	19'-7"	118	4	19'-7"	118	4	19'-7"	118	4	19'-9"	119	4	19'-9"	119	4	19'-11"	120				
6x3	WALLS VERT.		8	4'-4"	52	8	5'-4"	64	8	7'-4"	88	8	8'-4"	100	8	10'-4"	112	8	10'-4"	112				
6y1	WALLS HORIZ.		12	6'-2"	111	14	6'-2"	130	16	6'-2"	148	18	6'-2"	167	20	6'-3"	188	22	6'-3"	207	24	6'-3"	225	
6y2	FLOOR VERT.		10	7'-5"	111	10	7'-5"	111	10	7'-5"	111	10	7'-5"	111	10	7'-5"	111	10	7'-5"	111	10	7'-5"	111	
6z1	FLOOR VERT.		10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	
TOTAL WEIGHT (LBS.)			443		474		504		535		569		600		630									
CONCRETE (CY)			FOOTING 1.6		1.6		1.6		1.6		1.6		1.6		1.6									
			WALLS 0.8		1.0		1.2		1.4		1.6		1.8		1.9									
TOTAL			2.4		2.6		2.8		3.0		3.2		3.4		3.5									

CHUTE BELL JOINT			8' x 4'		8' x 5'		8' x 6'		8' x 7'		8' x 8'		8' x 9'		8' x 10'									
BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT							
6x2	WALLS & FLOOR		4	20'-6"	123	4	22'-0"	132	4	19'-9"	119	4	19'-9"	119	4	19'-11"	120	4	19'-11"	120				
6x4	WALLS VERT.		8	4'-0"	48	8	4'-0"	48	8	4'-9"	57	8	5'-6"	66	8	6'-3"	75	8	7'-0"	84				
6y3	WALLS HORIZ.		8	6'-2"	74	10	6'-2"	93	12	6'-2"	111	14	6'-3"	131	16	6'-3"	150	18	6'-3"	169	20	6'-3"	188	
6y4	FLOOR VERT.		10	7'-4"	110	10	7'-4"	110	10	7'-4"	110	10	7'-4"	110	10	7'-4"	110	10	7'-4"	110	10	7'-4"	110	
6z1	FLOOR VERT.		10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	10	3'-5"	51	
TOTAL WEIGHT (LBS.)			358		386		439		448		478		506		534									
CONCRETE (CY)			FOOTING 1.5		1.5		1.5		1.5		1.6		1.6		1.6									
			WALLS 0.5		0.6		0.8		0.9		1.0		1.2		1.3									
TOTAL			2.0		2.1		2.3		2.4		2.6		2.8		2.9									

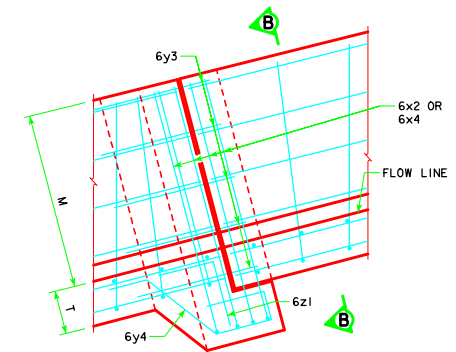
BARREL & CHUTE DIMENSIONS

S x H	M	T	U	BT	BU
8' x 4'	3'-0"	1'-0"	0'-9"	0'-11"	0'-9"
8' x 5'	3'-9"	1'-0"	0'-9"	0'-11"	0'-9"
8' x 6'	4'-6"	1'-0"	0'-9"	0'-11"	0'-9"
8' x 7'	5'-3"	1'-0"	0'-9"	0'-11"	0'-9"
8' x 8'	6'-0"	1'-0"	0'-10"	0'-11"	0'-9"
8' x 9'	6'-9"	1'-0"	0'-10"	0'-11"	0'-9"
8' x 10'	7'-6"	1'-0"	0'-10"	0'-11"	0'-9"

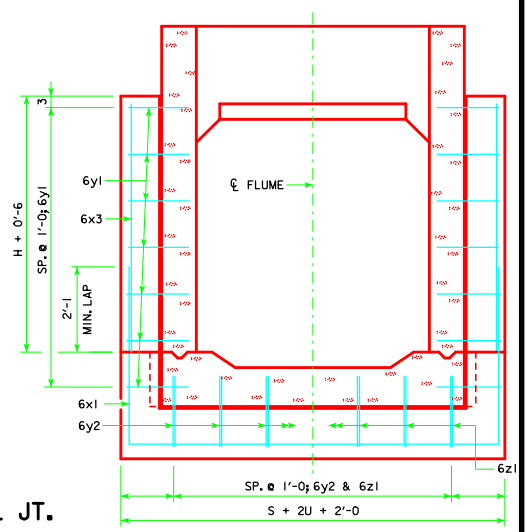
S = CULVERT SPAN
H = CULVERT HEIGHT



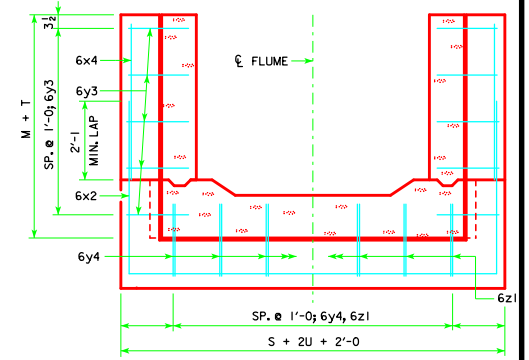
PART ELEV. - JUNCTION BELL JT.



PART ELEVATION - CHUTE BELL JT.



SECTION A-A



SECTION B-B

NOTES:

1. DIMENSIONS AND QUANTITIES SHOWN BASED ON 'U' FLUME WALLS, 'BU' BARREL WALLS, 'T' FLUME FLOOR AND 'BT' BARREL FLOOR THICKNESSES.
2. CHANGE LENGTHS OF BARS 6x1 AND ADJUST REINFORCING STEEL AND CONCRETE QUANTITIES ACCORDINGLY FOR WALL AND FLOOR THICKNESSES OTHER THAN SHOWN.
3. FLOOR BARS MI ARE TO BE SHORTENED 6" AT BELL JOINTS.
4. SEE STANDARD SHEET RCF-01-12 FOR GENERAL INFORMATION.

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN REINFORCED CONCRETE BOX CULVERTS APRIL, 2012
		FLUME BELL JOINT DETAILS 8' SPAN
		FBJ-03-12