

A1 SIZE (594 mm x 841 mm) | Plotfile: N:\winchester_24_2017 at 12:54:01 PM | Last saved by: d6c:iff | File: P:\2017\17M-00806-00 - Truro Creek Culvert Replacements\MM Drawings\17M-00806-00 Truro Creek Culvert Replacements DD Winchester 21 bill of materials.dwg | Layout: 23 Bill of Reinforcing Steel (Sheet 3 of 3)

BILL OF REINFORCING STEEL FOR RETAINING WALL

MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS	BENDING DIAGRAM
R1001	BENT	65	1 030	54	87.32	
R1501	STR		13 380	70	1 470.46	
R1502	BENT	95	2 180	67	229.31	
R1503	BENT	95	3 925	67	412.87	
R1504	BENT	95	1 515	54	128.44	
R1505	BENT	95	1 975	54	167.44	
R2001	BENT	120	2 880	67	454.42	
R2002	BENT	120	4 405	54	560.18	
R2003-1	BENT	120	2 010	6	28.40	
R2003-2	BENT	120	1 790	6	25.29	
R2003-3	BENT	120	1 570	6	22.18	
R2003-4	BENT	120	1 350	6	19.08	

CONTINUED →

BILL OF REINFORCING STEEL FOR RETAINING WALL

MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS	BENDING DIAGRAM
R2003-5	BENT	120	1 135	6	16.04	
R2003-6	BENT	120	915	6	12.93	
R2004	BENT	120	3 415	6	48.25	
R2005	BENT	120	3 195	6	45.15	
R2006	BENT	120	905	6	12.79	
R2007-1	BENT	120	2 545	6	35.96	
R2007-2	BENT	120	2 205	6	31.16	
R2007-3	BENT	120	1 860	6	26.28	
R2007-4	BENT	120	1 520	6	21.48	
R2007-5	BENT	120	1 175	6	16.60	
R2007-6	BENT	120	830	6	11.73	

TOTAL MASS OF REINFORCING STEEL: 3 883.76 kg

BILL OF REINFORCING STEEL FOR TWO APPROACH SLABS

MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS	BENDING DIAGRAM
A1001	STR		4 680	4	14.70	
A1501	BENT	95	4 895	76	584.07	
A1502	STR		3 675	96	553.90	
A1503	BENT	95	900	76	107.39	
A1504	BENT	95	1 300	148	302.07	
A1505	BENT	95	1 585	120	298.61	
A2001	STR	120	7 500	80	1 413.00	
A2501	BENT	120	5 045	120	2 376.20	

TOTAL MASS OF REINFORCING STEEL: 5 649.94 kg

BILL OF REINFORCING STEEL FOR TWO TRANSITION BARRIERS

MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS	BENDING DIAGRAM
B1501	STR		2 130	66	220.71	
B1502	STR		2 880	48	217.04	
B2001-1	STR		1 000	4	9.42	
B2001-2	STR		950	4	8.95	
B2001-3	STR		900	4	8.48	
B2001-4	STR		850	4	8.01	
B2001-5	STR		800	4	7.54	
B2001-6	STR		750	4	7.07	
B2001-7	STR		700	4	6.59	
B2001-8	STR		650	4	6.12	
B2001-9	STR		600	4	5.65	
B2001-10	STR		550	4	5.18	
B2001-11	STR		510	4	4.80	
B2001-12	STR		460	4	4.33	
B2001-13	STR		410	4	3.86	
B2001-14	STR		360	4	3.39	
B2001-15	STR		310	4	2.92	

TOTAL MASS OF REINFORCING STEEL: 530.06 kg

NOTE: These design documents are prepared solely for the use by the party with whom the design professional has entered into a contract and there are no representations of any kind made by the design professional to any party with whom the design professional has not entered into a contract.



LOCATIONS APPROVED UNDERGROUND STRUCTURES

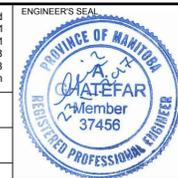
SIGNED BY: _____ DATE: _____

LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING

G.B.M. = TOP NUT OF FIRST HYDRANT SOUTH OF INTERSECTION BETWEEN NESS AVENUE AND LINWOOD STREET			
ELEV. = 233.659			
0 ISSUED FOR TENDER	17.11.23	JL	
No. REVISIONS	DATE	BY	DATE



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THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Winnipeg

TRURO CREEK CULVERT REPLACEMENT AT WINCHESTER STREET

CONSULTANT PROJECT No. 17M-00806-00

CITY DRAWING NUMBER: C322-17-23
BID OPPORTUNITY NUMBER: 1014-2017
SHEET OF: 23 OF 25
REV 0

BILL OF REINFORCING STEEL (SHEET 3 OF 3)