

BRIDGE QUANTITY



DESCRIPTIONS			TOTALS			SUMMARY OF ESTIMATED QUANTITIES																		
						STA. 2+217.500			STA. 2+483.000			STA. 3+148.500			STA. 3+627.500			STA. 6+189.250			STA. 8+744.500			
ITEM NO.	ITEMS	UNIT	GRAND TOTAL	ROUND	FINAL	HDWL 2 (LT)	PIPE	HDWL 1(RT)	HDWL 2 (LT)	BOX	HDWL 1(RT)	HDWL 2 (LT)	PIPE	HDWL 1(RT)	HDWL 2 (LT)	BOX	HDWL 1(RT)	HDWL 2 (LT)	PIPE	HDWL 1(RT)	HDWL 2 (LT)	PIPE	HDWL 1(RT)	
203.27	UNCLASSIFIED CHANNEL EXCAVATION	CM	80	4			14,8			8,9			20,5			9,8			10,6				11,4	
204.20	TRENCH EXCAVATION OF EARTH	CM	20	EST.			7,0																	13,0
204.25	STRUCTURE EXCAVATION	CM	1625	25.7		60.8	147.5	68.7	50.6	188.9	60.8	52.2	196.7	66.8	58.5	139.4	60.1	57.7	90.7	77.9	62.8	105.6	53.6	
204.30	GRANULAR BACKFILL FOR STRUCTURES	CM	1630	9.1		59.2	164.6	56.9	59.4	206.7	58.5	54.3	167.2	58.6	51.3	189.4	55.6	49.2	138.7	48.5	40.2	119.1	43.7	
404.45	TAR EMULSION	L	110	EST.						60						50								
501.34	CONCRETE, HIGH PERFORMANCE CLASS B	CM	210	1.56		17.75		17.75	16.78		16.78	17.29		17.04	16.83		16.78	17.99		17.82	17.89		17.72	
507.15	REINFORCING STEEL	KG	15000	42		1230		1230	1300		1300	1186		1186	1264		1264	1236		1236	1263		1263	
514.10	WATER REPELLENT (MOD - SILANE)	L	60	EST.		5		5	5		5	5		5	5		5	5		5	5		5	
519.20	SHEET MEMBRANE WATERPROOFING	SM	110	0.3						60.5						49.2								
540.10	PRECAST CONCRETE BOX (STA. 2+483.000 - 1850x1850x19900)	LS	1	-						1														
540.10	PRECAST CONCRETE BOX (STA. 3+627.500 - 1850x1850x16800)	LS	1	-												1								
601.0542	1800 mm PCCSP (MOD - 3,51mm (75 mm x 25 mm))	M	68.75	-			18.30						19.70						14.00				16.75	
613.11	STONE FILL, TYPE II	CM	135	1.6			24.0			18.3			17.8			17.9			27.7				27.7	
614.10	TEMPORARY RELOCATION OF STREAM (STA. 2+217,250)	LS	1	-			1																	
614.10	TEMPORARY RELOCATION OF STREAM (STA. 2+483,000)	LS	1	-						1														
614.10	TEMPORARY RELOCATION OF STREAM (STA. 3+148,500)	LS	1	-									1											
614.10	TEMPORARY RELOCATION OF STREAM (STA. 3+627,500)	LS	1	-												1								
614.10	TEMPORARY RELOCATION OF STREAM (STA. 6+189,250)	LS	1	-															1					
614.10	TEMPORARY RELOCATION OF STREAM (STA. 8+744,500)	LS	1	-																			1	
649.31	GEOTEXTILE UNDER STONE FILL	SM	310	7			57			42			41			42			70				51	
651.40	GRUBBING MATERIAL	SM	110	5			9			11			16			14			30				25	
654.10	EROSION MATTING (JUTE)	SM	270	2		21		23	21		20	34		31	15		18	18		18	26		23	

GENERAL NOTES

- 1) ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2001, AND THE LATEST AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
- 2) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS AND CLEARANCES ASSOCIATED WITH THE WORK REQUIRED IN THE TEMPORARY RELOCATION OF THE STREAM
- 3) IN-STREAM CONSTRUCTION SHALL BE RESTRICTED TO JUNE 1 TO OCTOBER 1, UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE AGENCY OF NATURAL RESOURCES TO DO WORK OUTSIDE OF THAT TIME FRAME.
- 4) THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE, INTO ANY BROOK, STREAM, OR RIVER.
- 5) WHEN TRAFFIC OF ANY FORM IS MAINTAINED OVER THE NEW PIPES OR BOXES, THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 1000 mm OF COMPACTED MATERIAL.
- 6) THE FOLLOWING TABLE OF ALLOWABLE STRESSES AND WEIGHTS APPLY TO THESE PLANS FOR DESIGN PURPOSES:

CONCRETE, HIGH PERFORMANCE CLASS B:	$f_c = 25 \text{ MPa}$	$f_c = 10 \text{ MPa}$
ALL CONCRETE MUST BE PRODUCED WITH CEMENTITIOUS MATERIALS EXHIBITING MODERATE SULFATE RESISTANCE		
REINFORCING STEEL:	$F_1 = 166 \text{ MPa}$	GRADE 420
SOIL UNIT WEIGHT:	2250 kg/m ³	
DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL:	190 KPa	
- 7) THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT, ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.
- 8) ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 25mm BY 25mm.

- 9) JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 10) ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).

REINFORCING PLACEMENT TOLERANCES SHALL BE:

SPACING	$\pm 25 \text{ mm}$
CLEARANCE	$\pm 5 \text{ mm}$
- 11) MINIMUM COVER FOR REINFORCING STEEL SHALL BE FIFTY (50) MILLIMETERS ALONG THE BACK FACES OF WALLS AGAINST EARTH, AND EIGHTY (80) MILLIMETERS ELSEWHERE, UNLESS OTHERWISE NOTED.
- 12) ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 20 DEGREES CELSIUS UNLESS OTHERWISE NOTED.
- 13) ALL EROSION MATTING (JUTE) SHALL BE USED IN AND AROUND THE CHANNEL AT THE STRUCTURE INLETS AND OUTLETS. AT THESE SAME LOCATIONS NO FERTILIZER SHALL BE USED IN CONJUNCTION WITH THE SEEDING OF GRUBBING MATERIAL AND DISTURBED EARTH.
- 14) NO MATERIAL IS REQUIRED TO BE PLACED IN THE PIPE OR BOX INVERTS. ONCE FLOW IS RETURNED TO THESE STRUCTURES IT IS ANTICIPATED THE DEPOSITION OF NATURAL STREAMBED MATERIAL WILL FILL THE 300mm BURIED INVERTS.
- 15) ESTIMATED QUANTITIES FOR ITEM 204.20, TRENCH EXCAVATION OF EARTH HAVE BEEN INCLUDED FOR PAYMENT OF THE REMOVAL OF THE EXISTING PIPES WHERE THEY FALL OUTSIDE OF THE LIMITS OF STRUCTURE EXCAVATION FOR THE 1800 mm PCCSP @ STA 2+217.500 AND 8+744.500.

BRIDGE QUANTITY & GENERAL NOTES SHEET

PROJECT NAME: HIGHGATE-FRANKLIN	
PROJECT NUMBER: STP RS 0301(D)SA	
FILE NAME: /85c060/str/s85c060ww.dgn	PLOT DATE: 09-MAY-2005
PROJECT LEADER: S. FARNSWORTH	DRAWN BY: R. PELLETT
DESIGNED BY: M. FOWLER	CHECKED BY: G. SPILAK
sc060qty.j	SHEET 225 OF 450