

PART A - BRIDGE WORK

CITY OF WPG. DRAWING NUMBER	TETRA TECH DRAWING NUMBER	DRAWING DESCRIPTION
B248-17-001	1600070700-DWG-S0001	COVER SHEET
B248-17-002	1600070700-DWG-S0002	DESIGN DATA AND LIST OF DRAWINGS
B248-17-003	1600070700-DWG-S0003	SITE PLAN - SCOPE OF WORK
B248-17-004	1600070700-DWG-S0004	GENERAL ARRANGEMENT PLAN
B248-17-005	1600070700-DWG-S0005	GENERAL ARRANGEMENT ELEVATION AND CROSS SECTION
B248-17-006	1600070700-DWG-S0006	BOREHOLE LOCATIONS
B248-17-007	1600070700-DWG-S0007	BOREHOLE LOGS SHEET 1 OF 2
B248-17-008	1600070700-DWG-S0008	BOREHOLE LOGS SHEET 2 OF 2
B248-17-009	1600070700-DWG-S0009	CULVERT DEMOLITION - PLAN AND SECTIONS
B248-17-010	1600070700-DWG-S0010	EMBANKMENT AND CHANNEL WORKS EMBANKMENT DETAILS
B248-17-011	1600070700-DWG-S0011	EMBANKMENT AND CHANNEL WORKS EXISTING CULVERT REMOVAL AND EMBANKMENT SECTIONS
B248-17-012	1600070700-DWG-S0012	EMBANKMENT AND CHANNEL WORKS EXISTING CULVERT REMOVAL AND EMBANKMENT SECTIONS
B248-17-013	1600070700-DWG-S0013	EMBANKMENT AND CHANNEL WORKS EXISTING CULVERT REMOVAL AND EMBANKMENT SECTIONS
B248-17-014	1600070700-DWG-S0014	PIILING LAYOUT AND DETAILS
B248-17-015	1600070700-DWG-S0015	WEST ABUTMENT - CONCRETE DETAILS SHEET 1 OF 2
B248-17-016	1600070700-DWG-S0016	WEST ABUTMENT - CONCRETE DETAILS SHEET 2 OF 2
B248-17-017	1600070700-DWG-S0017	EAST ABUTMENT - CONCRETE DETAILS SHEET 1 OF 2
B248-17-018	1600070700-DWG-S0018	EAST ABUTMENT - CONCRETE DETAILS SHEET 2 OF 2
B248-17-019	1600070700-DWG-S0019	EAST AND WEST ABUTMENT REINFORCING DETAILS SHEET 1 OF 5
B248-17-020	1600070700-DWG-S0020	WEST ABUTMENT SOUTH WINGWALL REINFORCING DETAILS SHEET 2 OF 5
B248-17-021	1600070700-DWG-S0021	WEST ABUTMENT NORTH WINGWALL REINFORCING DETAILS SHEET 3 OF 5
B248-17-022	1600070700-DWG-S0022	EAST ABUTMENT SOUTH WINGWALL REINFORCING DETAILS SHEET 4 OF 5
B248-17-023	1600070700-DWG-S0023	EAST ABUTMENT NORTH WINGWALL REINFORCING DETAILS SHEET 5 OF 5
B248-17-024	1600070700-DWG-S0024	EAST AND WEST PIER CONCRETE DETAILS
B248-17-025	1600070700-DWG-S0025	EAST AND WEST PIER REINFORCING DETAILS SHEET 1 OF 2
B248-17-026	1600070700-DWG-S0026	EAST AND WEST PIER REINFORCING DETAILS SHEET 2 OF 2
B248-17-027	1600070700-DWG-S0027	PRECAST PRESTRESSED BOX GIRDER LAYOUT AND DETAILS
B248-17-028	1600070700-DWG-S0028	PRECAST PRESTRESSED BOX GIRDER PRESTRESSING STRAND DETAILS
B248-17-029	1600070700-DWG-S0029	PRECAST PRESTRESSED BOX GIRDER GIRDERS Mk. G1, G1A, G3 AND G3A CONCRETE DETAILS
B248-17-030	1600070700-DWG-S0030	PRECAST PRESTRESSED BOX GIRDER GIRDERS Mk. G2, G2A, G2B, G4, G4A AND G4B CONCRETE DETAILS
B248-17-031	1600070700-DWG-S0031	PRECAST PRESTRESSED BOX GIRDER REINFORCING DETAILS SHEET 1 OF 2
B248-17-032	1600070700-DWG-S0032	PRECAST PRESTRESSED BOX GIRDER REINFORCING DETAILS SHEET 2 OF 2
B248-17-033	1600070700-DWG-S0033	BEARING LAYOUT AND DETAILS
B248-17-034	1600070700-DWG-S0034	BRIDGE DECK - CONCRETE PLAN, SECTION AND DETAIL
B248-17-035	1600070700-DWG-S0035	BRIDGE DECK - CONCRETE SECTIONS AND DETAILS
B248-17-036	1600070700-DWG-S0036	SIDEWALK, BARRIER AND CURB PLAN, SECTIONS AND DETAILS
B248-17-037	1600070700-DWG-S0037	DECK - REINFORCING DETAILS
B248-17-038	1600070700-DWG-S0038	BACKWALL - REINFORCING DETAILS
B248-17-039	1600070700-DWG-S0039	SIDEWALK, BARRIER AND CURB REINFORCING DETAILS
B248-17-040	1600070700-DWG-S0040	PEDESTRIAN HANDRAIL/BICYCLE RAIL ELEVATION AND DETAILS
B248-17-041	1600070700-DWG-S0041	PEDESTRIAN HANDRAIL/BICYCLE RAIL SECTIONS AND DETAILS
B248-17-042	1600070700-DWG-S0042	PEDESTRIAN HANDRAIL/BICYCLE RAIL SECTIONS AND DETAILS
B248-17-043	1600070700-DWG-S0043	EAST AND WEST APPROACH SLAB CONCRETE DETAILS
B248-17-044	1600070700-DWG-S0044	EAST AND WEST APPROACH SLAB REINFORCING DETAILS
B248-17-045	1600070700-DWG-S0045	REINFORCING SCHEDULE SHEET 1 OF 3
B248-17-046	1600070700-DWG-S0046	REINFORCING SCHEDULE SHEET 2 OF 3
B248-17-047	1600070700-DWG-S0047	REINFORCING SCHEDULE SHEET 3 OF 3

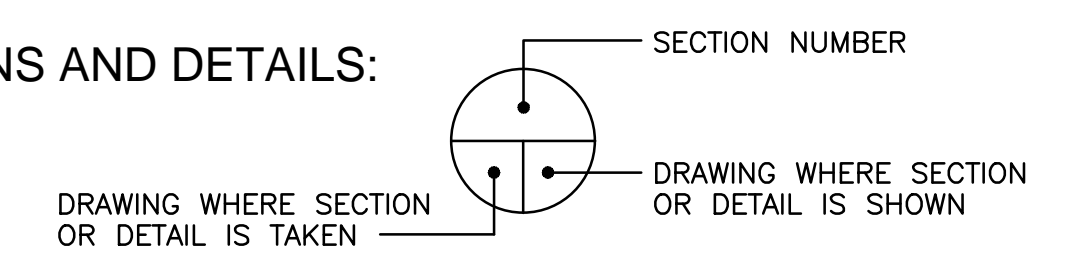
PART B - ROADWORKS

CITY OF WPG. DRAWING NUMBER	TETRA TECH DRAWING NUMBER	DRAWING DESCRIPTION
P-3487-17-001	1600070700-DWG-C0048	KEY PLAN, LEGEND, GENERAL NOTES AND DRAWING LIST
P-3487-17-101	1600070700-DWG-C0049	PLAN, PROFILE & UTILITIES - STA 0+061.905 TO STA 0+250
P-3487-17-102	1600070700-DWG-C0050	PLAN, PROFILE & UTILITIES - STA 0+250 TO STA 0+430
P-3487-17-103	1600070700-DWG-C0051	PLAN, PROFILE & UTILITIES - STA 0+430 TO STA 0+600
P-3487-17-104	1600070700-DWG-C0052	PLAN, PROFILE & UTILITIES - STA 0+600 TO STA 0+720
P-3487-17-105	1600070700-DWG-C0053	PLAN, PROFILE & UTILITIES - STA 0+720 TO STA 0+910
P-3487-17-106	1600070700-DWG-C0054	PLAN, PROFILE & UTILITIES - STA 0+910 TO STA 1+100
P-3487-17-107	1600070700-DWG-C0055	PLAN, PROFILE & UTILITIES - STA 1+100 TO STA 1+231.848
P-3487-17-108	1600070700-DWG-C0056	DRAINAGE STRUCTURE & LOCATION SCHEDULE
P-3487-17-201	1600070700-DWG-C0057	TYPICAL SECTIONS
P-3487-17-202	1600070700-DWG-C0058	TYPICAL ROADWAY DETAILS
P-3487-17-203	1600070700-DWG-C0059	TYPICAL UTILITY DETAILS
P-3487-17-301	1600070700-DWG-C0060	HORIZONTAL GEOMETRY
P-3487-17-302	1600070700-DWG-C0061	LANING & SIGNING - STA 0+061.905 TO STA 0+430
P-3487-17-303	1600070700-DWG-C0062	LANING & SIGNING - STA 0+430 TO STA 0+720
P-3487-17-304	1600070700-DWG-C0063	LANING, GEOMETRICS AND SIGNING - STA 0+720 TO STA 1+231.848
P-3487-17-501	1600070700-DWG-C0064	TRAFFIC MANAGEMENT PLAN
P-3487-17-502	1600070700-DWG-C0065	TRAFFIC MANAGEMENT PLAN: STAGE ONE
P-3487-17-503	1600070700-DWG-C0066	TRAFFIC MANAGEMENT PLAN: STAGE TWO
P-3487-17-504	1600070700-DWG-C0067	CONSTRUCTION STAGING PLAN (1 OF 2)
P-3487-17-505	1600070700-DWG-C0068	CONSTRUCTION STAGING PLAN (2 OF 2)
P-3487-17-506	1600070700-DWG-C0069	CAVALIER INTERSECTION STAGING PLAN

DESIGN DATA:

DESIGN SPECIFICATIONS:	CANADIAN HIGHWAY BRIDGE DESIGN CODE CAN/CSA-S6-14
LIVE LOADING:	CHBDC CL-625 TRUCK AND LANE LOAD
STRUCTURAL CONCRETE:	<ul style="list-style-type: none"> ABUTMENT FOOTINGS AND WINGWALLS <ul style="list-style-type: none"> CSA A23.1, EXPOSURE CLASS S-1 f'c= 35MPa @ 28 DAYS AIR CONTENT CATEGORY 2 PIER CAPS, PIPE PILES <ul style="list-style-type: none"> CSA A23.1, EXPOSURE CLASS C-1 f'c= 35MPa @ 28 DAYS AIR CONTENT CATEGORY 1 GIRDERS <ul style="list-style-type: none"> CSA A23.1, EXPOSURE CLASS C-1 f'c= 45MPa @ 28 DAYS PRE-TENSIONING FORCES AT TIME OF TRANSFER f'ci = 36MPa AIR CONTENT CATEGORY 1 SUPERSTRUCTURE (DECK, TRAFFIC BARRIERS, CURBS, ABUTMENT BACKWALL, DIAPHRAGMS, APPROACH SLABS) <ul style="list-style-type: none"> CSA A23.1, EXPOSURE CLASS C-1 f'c= 35MPa @ 28 DAYS AIR CONTENT CATEGORY 1 SYNTHETIC FIBRES (MACRO)
REINFORCING STEEL:	CONCRETE COVER SHALL BE 60mm UNLESS OTHERWISE NOTED ALL REINFORCING TO BE ASTM A655, 300 SERIES, MINIMUM GRADE 420, UNS S32205, UNS S32304 OR UNS S31653 EXCEPT, ABUTMENTS, PIERS, WINGWALLS AND GIRDERS - CSA G30.18, GRADE 400W MINIMUM LAP LENGTH (UNLESS OTHERWISE NOTED): 15M OR 16SS - 600mm 20M OR 19SS - 800mm 25M OR 25SS - 1200mm 30M OR 30SS - 1600mm 35M OR 35SS - 2000mm
STRUCTURAL STEEL:	<ul style="list-style-type: none"> ALL STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40.21-M GRADE 300W UNLESS NOTED OTHERWISE
PRESTRESSING STRAND:	12.7mmØ SEVEN WIRE LOW RELAXATION, UNCOATED STEEL STRANDS JACKING FORCE PER 12.7mm DIAMETER SEVEN WIRE STRAND Pj = 138.0 kN MINIMUM ULTIMATE STRENGTH fpu = 1860 MPa GIRDER DIMENSIONAL TOLERANCE = LENGTH ±6mm, CROSS SECTION ±3mm
MISCELLANEOUS METAL:	<ul style="list-style-type: none"> ALL STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA G40.21M GRADE 300W UNLESS NOTED OTHERWISE MISCELLANEOUS METAL TO BE HOT DIP GALVANIZED AND SHALL CONFORM TO CAN/CSA G164M TO A NET RETENTION OF 610g/m²
LATERAL POST TENSIONING TENDON:	<ul style="list-style-type: none"> 12.7mmØ SEVEN WIRE LOW RELAXATION, UNCOATED STEEL STRANDS, TWO STRANDS PER DUCT JACKING FORCE PER 12.7mm DIAMETER SEVEN WIRE STRAND = 93.45 kN MINIMUM ULTIMATE STRENGTH fpu = 1860 MPa
PILES:	<ul style="list-style-type: none"> HP PILES SHALL CONFORM TO CAN/CSA-G40.21 GRADE 350W PIPE PILES SHALL BE METALIZED AND CONFORM TO ASTM A252 GRADE 3 ABUTMENTS <ul style="list-style-type: none"> HP 360x132 STEEL PILES SLS PILE CAPACITY = 700 kN ULS PILE CAPACITY = 1450 kN PIERS <ul style="list-style-type: none"> Ø10x12.7 CONCRETE FILLED STEEL PIPE PILES, GRADE 3, 310 MPa SLS PILE CAPACITY = 950 kN ULS PILE CAPACITY = 1900 kN
HYDRAULIC DESIGN DATA:	DESIGN DISCHARGE Q = 76 m³/s FOR 1% FLOOD DISCHARGE V = 1.4 m/s FOR 1% FLOOD DISCHARGE
SOIL FOUNDATION DATA:	UNIT WEIGHT OF BACKFILL = 18 kN/m³ ACTIVE EARTH PRESSURE COEFFICIENT OF BACKFILL (Ka) = 0.3
ROADWAY GEOMETRY:	CONFORM TO REQUIREMENTS OF THE LATEST CITY OF WINNIPEG STREET AND TRANSPORTATION STANDARD MANUAL, TRANSPORTATION ASSOCIATION OF CANADA (TAC) OR AASHTO

SECTIONS AND DETAILS:



	DESIGNED BY	D.M.	CHECKED BY	J.Z.			
	DRAWN BY	B.M.	APPROVED BY	E.F.S.			
	HOR. SCALE:	AS NOTED	ACCEPTED BY	DATE			
	VERTICAL:		ORIGINAL DRAWING SIGNED BY	D. MUHURDAREVIC, P.ENG.			
	DATE	17.10.04	DATE	17.10.04			
NO. REVISIONS		DATE	17.10.04	DATE	17.10.04	CONSULTANT DRAWING NO.	1600070700-DWG-S0002

SASKATCHEWAN AVE AT STURGEON CREEK BRIDGE CONSTRUCTION	CITY DRAWING NUMBER	B248-17-002
	SHEET	2 OF 69
DESIGN DATA AND LIST OF DRAWINGS		2