

ABBREVIATIONS

WWS	WASTE WATER SEWER
CS	COMBINED SEWER
LDS	LAND DRAINAGE SEWER
℄	PROPERTY LINE
℄	CENTER LINE
G.I.S.	GEOGRAPHIC INFORMATION SYSTEM
B.M.	BENCH MARK
TH	TEST HOLE
ELEV	ELEVATION
INV	INVERT
MIN	MINIMUM
MAX	MAXIMUM
SL	STREET LIGHTING
TS	TRAFFIC SIGNALS
ABAND	ABANDONED
BLDG	BUILDING
HSE	HOUSE
CRN	CORNER
OPP	OPPOSITE
C/S OR S/C	CURB STOP
MTS	MANITOBA TELEPHONE SYSTEM
R.O.W.	RIGHT-OF-WAY
WM	WATER MAIN
CULV	CULVERT
MH	MANHOLE
CB	CATCH BASIN
CI	CURB INLET
VERT.	VERTICAL
HORZ.	HORIZONTAL
I.B.	IRON BAR
FIBRE	FIBRE OPTIC
TYP	TYPICAL
X-ING	CROSSING
HYD	HYDRANT
EXIST	EXISTING
N	NORTH
E	EAST
S	SOUTH
W	WEST
W/	WITH
C/W	CONSTRUCTED WITH
CONC	CONCRETE
AC	ASBESTOS CEMENT
VC OR CLAY	VITRIFIED CLAY
CI	CAST IRON
DI	DUCTILE IRON
PVC	POLYVINYL CHLORIDE
HDPE	HIGH DENSITY POLYETHYLENE
PCCP	PRESTRESSED CONCRETE CYLINDER PIPE

LEGEND

DESCRIPTION	PROFILE		DESCRIPTION	PLAN VIEW	
	EXISTING	PROPOSED		EXISTING	PROPOSED
WATER PIPE			WATER PIPE		
HYDRANT TOP			FIRE HYDRANT		
VALVE			VALVE		
TEE OR CROSS			CURB STOP		
COUPLING OR BEND			REDUCER		
REDUCER			COUPLING OR SLIDER		
END OF PIPE			CROSS		
SEWER PIPE			BEND - 11.25', 22.5', 45', 90'		
UNPAVED GROUND SURFACE			TEE		
PAVED GROUND SURFACE - ℄ PIPE			VERTICAL BEND		
GUTTER (NORTH AND WEST)			WALL HYDRANT		
GUTTER (SOUTH AND EAST)			ANODE		
℄ DITCH (NORTH AND WEST)			REPAIR MARKER		
℄ DITCH (SOUTH AND EAST)			PLUG		
STRUCTURE			SEWER PIPE		
MANHOLE OR CATCH BASIN			MANHOLE		
			CATCH BASIN		
			CURB INLET		
			GAS METER BOLLARDS		
			JUNCTION		
			℄ DITCH		
			CULVERT		
			SURVEY BAR		
			SURVEY MONUMENT		
			TREE - DECIDUOUS		
			TREE - CONIFEROUS		
			HYDRO		
			HYDRO POLE		
			LAMP STANDARD		
			HYDRO POLE W/STREET LIGHTING		
			POLE		
			GUY ANCHOR		
			M.T.S. POLE		
			PEDESTAL OR BOX		
			CABINET		
			M.T.S., SHAW, OR VIDEON		
			TRAFFIC SIGNALS		
			TRAFFIC LIGHT STANDARD		
			GAS		
			STEAM		
			FIBRE OPTIC		
			FENCE		
			EDGE OF PAVEMENT OR GUTTER		
			EDGE UNPAVED OR GRAVEL ROAD		
			℄		
			PROJECTED ℄		
			LOT LINE		
			EASEMENT		
			EDGE OF BUILDING		
			MAILBOX		
			PARKING METER		
			TEST HOLE		
			TREE LINE OR BUSH		

DRAWING INDEX

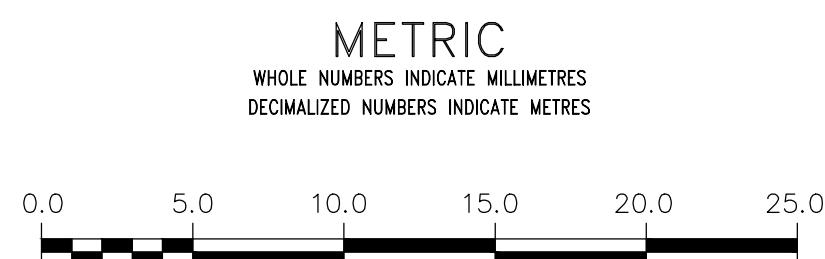
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2	D-15408	INDEX PAGE - DRAWING INDEX, DESIGN NOTES, LEGEND & ABBREVIATIONS
3	D-15409	McARTHUR STREET - DEWDNEY AVENUE TO HIGGINS AVENUE
4	D-15410	DEWDNEY AVENUE - McARTHUR STREET TO GRACE STREET
5	D-15411	BOYLE STREET - DEWDNEY AVENUE TO HIGGINS AVENUE
6	D-15412	GRACE STREET - DEWDNEY AVENUE TO 80m N OF DEWDNEY AVENUE
7	D-15413	GRACE STREET - 67m S OF POINT DOUGLAS AVENUE TO POINT DOUGLAS AVENUE
8	D-15414	POINT DOUGLAS AVENUE - HIGGINS AVENUE TO GRACE STREET
9	D-15415	HIGGINS AVENUE - MORDAUNT STREET TO SUTHERLAND AVENUE
10	D-15416	ROCH STREET - LARSEN AVENUE TO 63m S OF JAMISON AVENUE
11	D-15417	ROCH STREET - 63m S OF JAMISON AVENUE TO JAMISON AVENUE
12	D-15418	BOWMAN AVENUE - ROCH STREET TO 75m E OF ROCH STREET
13	D-15419	BOWMAN AVENUE - 75m E OF ROCH STREET TO 180m E OF ROCH STREET
14	D-15420	UNION AVENUE W - WATT STREET TO 90m E OF WATT STREET
15	D-15421	UNION AVENUE W - 90m E OF WATT STREET TO RIGHT OF WAY
16	D-15422	RIGHT OF WAY - UNION AVENUE W TO MARTIN AVENUE
17	D-15423	RIGHT OF WAY - MARTIN AVENUE W TO HARBISON AVENUE W
18	D-15424	GATEWAY ROAD - UNION AVENUE E TO MARTIN AVENUE E
19	D-15425	WASHINGTON AVENUE - 10m W OF RALEIGH STREET TO GATEWAY ROAD

HATCH PATTERNS

EXISTING	PROPOSED	DESCRIPTION
		EARTH OR GROUND ABOVE PIPE
		SAND OR OTHER FINE MATERIAL
		CONCRETE
		WASHED STONE OR GRANULAR MATERIAL
		INTERLOCKING STONE (NOT SHOWN AT 1:250 SCALE FOR CLARITY)
		METAL
		GRAVEL OR STONE

CONSTRUCTION NOTES

1. EXPOSE EXISTING WATER MAIN & CONFIRM INVERTS PRIOR TO CONSTRUCTION.
2. LOCATION OF ALL SERVICES TO BE CONFIRMED IN THE FIELD.
3. INSTALL WATER MAIN BY TRENCHLESS METHODS.
4. TRENCHES AND EXCAVATIONS WITHIN 1 METRE OF A PAVED AREA INCLUDING SIDEWALKS SHALL BE CLASS 3 BACKFILL.
5. ALL MATERIALS SHALL CONFORM TO THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS.
6. MINIMUM COVER TO TOP OF WATER MAIN SHALL BE 2.4m.
7. EXPOSE ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM DEPTHS. ANY CONFLICTS WITH PROPOSED WATER MAINS AND EXISTING UNDERGROUND UTILITIES SHALL BE REPORTED TO THE CONTRACT ADMINISTRATOR PRIOR TO INSTALLATION.
8. REPLACE ALL EXISTING LEAD SERVICES FROM PROPOSED WATER MAIN TO ℄.
9. NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES 24 HOURS IN ADVANCE OF ANY WATER SHUTDOWNS OR DISRUPTION OF SERVICE.



WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

- 1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
- 2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.

SEE PROVINCIAL REGULATION 210/72 FOR DETAILS

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE DATE

NOTE:

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 WITH CONSTRUCTION.

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	19/03/29	GSK
A	ISSUED FOR REVIEW	19/03/15	GSK

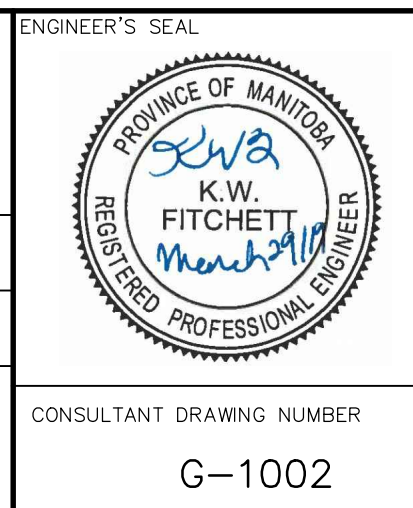
AECOM

DESIGNED BY: JP CHECKED BY: GSK

DRAWN BY: JP APPROVED BY:

SCALE: HORIZONTAL 1:250 VERTICAL 1:50

DATE: 2019/03/15



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

2019 WATER MAIN RENEWALS
CONTRACT 7

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G-1002