

**DRAWING INDEX**

SHEET NUMBER	CITY OF WINNIPEG DRAWING NUMBER	DRAWING TITLE
1	D-14646	COVER PAGE
2	D-14647	DRAWING INDEX, DESIGN NOTES, LEGEND, & ABBREVIATIONS
3	D-14648	BELMONT AVENUE - ANDREWS STREET TO 158 E OF ANDREWS STREET
4	D-14649	BELMONT AVENUE - 158 E OF ANDREWS STREET TO 93 E OF POWERS STREET
5	D-14650	POWERS STREET - HARTFORD AVENUE TO 145 E OF HARTFORD AVENUE
6	D-14651	JEFFERSON AVENUE - ADSUM DRIVE TO 90 N OF ADSUM DRIVE
7	D-14652	JEFFERSON AVENUE - 90 N OF ADSUM DRIVE TO HIDDLESTON CRESCENT
8	D-14653	LOGAN AVENUE - PATRICK STREET TO 138 E OF PATRICK STREET
9	D-14654	LOGAN AVENUE - 138 E OF PATRICK STREET TO FOUNTAIN STREET
10	D-14655	SALTER STREET - AT BANNERMAN AVENUE, ATLANTIC AVENUE AND LUXTON AVENUE WEST

**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	WATERMAIN
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	PLAN VIEW	
	EXISTING	PROPOSED
WATER PIPE	—	—
FIRE HYDRANT	⊕	⊕
VALVE	⊗	⊗
CURB STOP	⊕	⊕
REDUCER	⊕	⊕
COUPLING OR SLIDDER	⊕	⊕
CROSS	⊕	⊕
BEND - 11.25', 22.5', 45', 90'	⊕	⊕
TEE	⊕	⊕
VERTICAL BEND	⊕	⊕
ANODE	⊕	⊕
REPAIR MARKER	⊕	⊕
PLUG	⊕	⊕
SEWER PIPE	—	—
MANHOLE	⊕	⊕
CATCH BASIN	⊕	⊕
CURB INLET	⊕	⊕
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	⊕	⊕
SIDEWALK - PATHWAY	⊕	⊕
EASEMENT	⊕	⊕
EDGE OF BUILDING	⊕	⊕
MAILBOX	⊕	⊕
PARKING METER	⊕	⊕
TEST HOLE	⊕	⊕
TREE LINE OR BUSH	⊕	⊕

**PROFILE**

DESCRIPTION	PROFILE	
	EXISTING	PROPOSED
WATER PIPE	—	—
HYDRANT TOP	⊕	⊕
VALVE	⊕	⊕
TEE OR CROSS	⊕	⊕
COUPLING OR BEND	⊕	⊕
REDUCER	⊕	⊕
END OF PIPE	⊕	⊕
SEWER PIPE	—	—
UNPAVED GROUND SURFACE	⊕	⊕
PAVED GROUND SURFACE - ℄ PIPE	⊕	⊕
GUTTER (NORTH AND WEST)	⊕	⊕
GUTTER (SOUTH AND EAST)	⊕	⊕
℄ DITCH (NORTH AND WEST)	⊕	⊕
℄ DITCH (SOUTH AND EAST)	⊕	⊕
STRUCTURE	⊕	⊕
MANHOLE OR CATCH BASIN	⊕	⊕

**CONSTRUCTION NOTES**

1. EXPOSE EXISTING WATERMAIN & CONFIRM INVERTS PRIOR TO CONSTRUCTION.
2. LOCATION OF ALL SERVICES TO BE CONFIRMED IN THE FIELD.
3. INSTALL WATERMAIN 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 WATERMAIN SHALL BE 2.4 m.
7. REPLACE ALL EXISTING LEAD SERVICES FROM PROPOSED WATERMAIN TO ℄.
8. NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES 24 HOURS IN ADVANCE OF ANY WATER SHUTDOWNS OR DISRUPTION OF SERVICE.

**HATCH PATTERNS**

EXISTING	PROPOSED	DESCRIPTION
		EARTH OR GROUND ABOVE PIPE
		SAND OR OTHER FINE MATERIAL
		CONCRETE
		WASHED STONE OR GRANULAR MATERIAL
		INTERLOCKING STONE
		METAL
		GRAVEL OR STONE

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.		B.M. ELEV. NO. REVISIONS DATE BY	DESIGNED BY: MJK CHECKED BY: SC DRAWN BY: BL APPROVED BY: KZ SCALE: HORIZONTAL 1:250 VERTICAL 1:50 DATE: 2017 04 26 PLOT DATE: 2017 04 26	ENGINEER'S SEAL ORIGINAL SIGNED BY S.J.R. COURNOYER 17/04/26 CONSULTANT DRAWING NUMBER: —	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION 2017 WATER MAIN RENEWALS CONTRACT 5 INDEX PAGE	SHEET 2 OF 10 CITY DRAWING NUMBER D-14647
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