

DRAWING INDEX

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ABBREVIATIONS

WWS	WASTE WATER SEWER
CS	COMBINED SEWER
LDS	LAND DRAINAGE SEWER
ℙ	PROPERTY LINE
ℭ	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
FM	FEEDERMAIN
FCM	FORCE MAIN (PRESSURIZED SEWER MAIN)

LEGEND

PLAN VIEW			
DESCRIPTION	ABANDONED	EXISTING	PROPOSED
WATER PIPE	----	----	=====
FIRE HYDRANT		⊕	⊕
VALVE	⊗	⊗	⊗
CURB STOP	⊕	⊕	⊕
REDUCER	⊏	⊏	⊏
COUPLING OR SLUDDER		X	X
CROSS	⊗	⊗	⊗
BEND – 11.25°, 22.5°, 45°, 90°	⋈ ⋈ ⋈ ⋈	⋈ ⋈ ⋈ ⋈	⋈ ⋈ ⋈ ⋈
TEE	⋈	⋈	⋈
VERTICAL BEND	H	H	H
ANODE		⤿	⤿
REPAIR MARKER		⦿	
PLUG	J	J	J
SEWER PIPE	----	----	=====
MANHOLE	○	○	●
CATCH BASIN	□	□	■
CURB INLET	▽	▽	▼
JUNCTION	└┐	└┐	└┐
ℭ 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		----	-----
ℭ		----	=====
PROJECTED ℭ		-----	-----
LOT LINE		----	=====
SIDEWALK – PATHWAY		----	=====
EASEMENT		-----	-----
EDGE OF BUILDING		▬▬▬▬▬▬▬▬▬▬	
MAILBOX		⊕	
PARKING METER		⊕	
TEST HOLE		⊕	⊕
TREE LINE OR BUSH		----	=====

CONSTRUCTION NOTES

- ALL UNDERGROUND WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION OF THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS.
- ALL EXISTING UNDERGROUND SERVICES SHOWN ON DRAWINGS ARE APPROXIMATE ONLY.
- CONTRACTOR TO VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AND SERVICES PRIOR TO START OF CONSTRUCTION. HYDROVAC TO CONFIRM DEPTHS AND LOCATIONS OF ALL EXISTING UTILITIES ALONG WWS SEWER ALIGNMENT.
- FOR MANHOLE DETAILS SEE DWG. 13681, 13682, 13683, 13684 & 13685.
- 1200Ø AND 1500Ø MANHOLES WITH MODIFIED STANDARD DETAIL (SEE DRAWING 13685) ARE THE FOLLOWING:  
MH1-1, MH1-2, MH1-3, MH1-4, MH1-5, MH1-7, MH1-8, MH1-9, MH1-10, MH1-11, MH1-12, MH1-13, MH1-17, MH1-18, MH1-19, MH1-20, MH1-24, MH1-25, MH1-26, MH1-31, MH1-33, MH1-35, MH1-38, MH1-45 AND MH1-49
- STANDARD DROP MANHOLE SHALL COMPLY WITH C.O.W. DETAIL SD-010D.
- ALL MANHOLES TO BE INSTALLED IN THE PAVEMENT OF LEILA AVENUE (BETWEEN McPHILLIPS STREET AND McGREGOR STREET) AND McGREGOR STREET SHALL HAVE 300 HIGH 750mm DIA. MANHOLE BARREL SECTION PLUS A 50mm ADJUSTING RING UNDER THE FRAME TO ALLOW FOR CHANGE IN THE MANHOLE RIM ELEVATION FOR THE FUTURE PUBLIC WORKS STREET RENEWAL PROJECT ON LEILA AVENUE AND McGREGOR STREET.

- ALL MANHOLES TO BE INSTALLED IN TRENCHLESS INSTALLATION SHAFTS SHALL HAVE MINIMUM 150 THICK TYPE 3 BEDDING FILL IN ACCORDANCE WITH CW2030.
- ALL NEW CATCH BASINS LEADS TO BE 250Ø PVC SDR35 PIPES (AS SHOWN ON THE DRAWINGS).
- ALL NEW WASTEWATER SERVICES WITH SIZES 150Ø AND UNDER TO BE PVC SDR28 PIPES AND ABOVE 150Ø TO BE PVC SDR35 PIPES.
- ALL PIPE SHALL HAVE CLASS B BEDDING WHEN INSTALLED BY TRENCH METHOD.
- BACKFILL UNDER PAVEMENT & WITHIN 1.0 OF PAVEMENT ON REGIONAL STREETS TO BE CLASS 1. HOWEVER, FOR THE STREETS FALLING WITHIN THE SCOPE OF THE FUTURE PUBLIC WORKS STREET RENEWAL PROJECT, WHICH ARE LEILA AVENUE (BETWEEN McPHILLIPS STREET AND McGREGOR STREET) AND McPHILLIPS STREET, THE BACKFILL SHALL BE CLASS 1 (MODIFIED).
- BACKFILL UNDER PAVEMENT & WITHIN 1.0 OF PAVEMENT ON OTHER ROADWAYS TO BE CLASS 3.
- BACKFILL IN BOULEVARDS TO BE CLASS 5.
- EXISTING SEWER AND WATER SERVICES TO BE REGRADED AS REQUIRED FOR CONSTRUCTION OF THE NEW WWS AND LDS PIPING.
- CONTRACTOR TO INSTALL SEWER SERVICE RISERS TO AN ELEVATION WHERE MINIMUM SLOPE OF 1.0% IS MAINTAINED FOR ALL SERVICES.
- WHEN REDIRECTING EXISTING SEWER SERVICES TO THE NEW WWS ALL NEW SERVICE PIPE SIZE TO MATCH EXISTING SERVICE SIZE.
- CONTRACTOR SHALL MITIGATE IMPACTS TO THE WORK AREA FROM SITE SURFACE RUNOFF.

- PEDESTRIAN ACCESS MUST BE MAINTAINED DURING CONSTRUCTION AT ALL TIMES UNLESS OTHERWISE STATED.
- RESTORE ALL EXISTING SURFACES AND STRUCTURES, INCLUDING, BUT NOT LIMITED TO PAVEMENT, CURBS, SIDEWALKS, SOD TO PRECONSTRUCTION CONDITIONS OR BETTER. HOWEVER FOR THE ROADS FALLING WITHIN THE SCOPE OF THE FUTURE STREET RENEWAL PROJECT, WHICH ARE LEILA AVENUE (BETWEEN McPHILLIPS STREET AND McGREGOR STREET) AND McPHILLIPS STREET, THE PAVEMENT, CURBS AND SIDEWALKS SHALL BE RESTORED WITH TEMPORARY ASPHALT, OR WITH TEMPORARY CONCRETE (IF DONE IN COLD WEATHER).
- FOR ANY EXISTING GAS LINES THAT ARE IN CONFLICT WITH OR IN CLOSE PROXIMITY TO EXCAVATIONS AND SHAFTS THE CONTRACTOR SHALL ENSURE THAT SUITABLE TEMPORARY SUPPORT OF THE GAS LINES IS PROVIDED AS PER MANITOBA HYDRO STANDARD DETAIL "TEMPORARY SUPPORT FOR EXCAVATED GAS PIPELINES" (SD.610.10).



LOCATION APPROVED UNDERGROUND STRUCTURES		VERTICAL DATUM: CGVD28 (HT2.0 Geoid)	
HORIZONTAL DATUM: NAD83 (June 1990), Zone 14			
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.			
0	ISSUED FOR CONSTRUCTION	2026/03/10	MJD
NO.	REVISIONS	DATE (YYYY/MM/DD)	BY

KGS GROUP	
DESIGNED BY	MID
CHECKED BY	TLE
DRAWN BY	GEL
APPROVED BY	PRO
SCALE:	
HORIZONTAL	AS NOTED
VERTICAL	AS NOTED
RELEASED FOR CONSTRUCTION	Duane Baker
DATE	March 12th, 2026

ENGINEER'S SEAL
CONSULTANT DRAWING NUMBER
C1-02

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING SERVICES DIVISION	
ARMSTRONG SEWER RELIEF WORKS CONTRACT 1	SHEET 2 OF 46 CITY DRAWING NUMBER
INDEX SHEET & GENERAL NOTES	13643