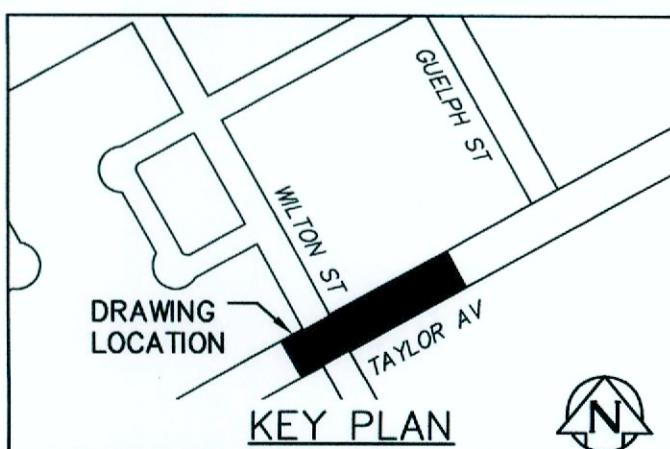


WARNING
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 1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
 2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.
 SEE PROVINCIAL REGULATION 210/72 FOR DETAILS

PROPERTY LIMITS DELINEATION
 DELINEATION OF PROPERTY LIMITS AS SHOWN ON THIS DRAWING DOES NOT REPRESENT A "LEGAL SURVEY". JACOBS AND KGS GROUP MAKE NO REPRESENTATION OR WARRANTY AS TO THE ACCURACY OF PROPERTY LIMITS DELINEATED ON THIS DRAWING, NOR ON THE DIMENSIONAL ACCURACY OF DRAWING FEATURES RELATIVE TO THOSE PROPERTY LIMITS.

- SEWER AND WATER SERVICES SHOWN ON DRAWING ARE APPROXIMATE ONLY.
- LOCATION OF ALL SEWER AND WATER LINES TO BE CONFIRMED IN FIELD BY CONTRACTOR.
- INSTALL NEW SEWER BY TRENCHLESS METHODS, UNLESS OTHERWISE NOTED.
- HYDRO EXCAVATE UTILITIES PRIOR TO CONSTRUCTION.
- ALL SIZING FOR SHAFTS ARE SHOWN FOR PLANNING ONLY. CONTRACTOR TO DETERMINE REQUIRED SHAFT SIZE BASED ON SELECTED METHODOLOGY.
- CASING PIPE SHOWN FOR CONVENTIONAL TWO-PASS TUNNELLING OPTION ONLY. DISREGARD FOR PIPE JACKING.
- FOR TWO-PASS MAINTAIN A MINIMUM 250mm CLEARANCE BETWEEN TUNNEL AND CARRIER PIPE.
- SHORING REQUIRED TO FACILITATE THE CONSTRUCTION OF THE 2100 STUB OUT SHALL BE DESIGNED TO ALLOW FUTURE CONNECTION. SHAFT TO BE FULLY BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (MAX 1MPa).
- LIMITS OF TEMPORARY SHAFT ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

SEE DWG LD-8894 FOR CONTINUATION



150 WM	WATER MAIN	150 WM	HYDRO	150 WM	WATER MAIN	150 WM
+	HYDRANT	+	M.T.S.	+	HYDRANT, VALVE	+
○	VALVE	○	CONCRETE	○	LAND DRAINAGE SEWER	○
○	LAND DRAINAGE SEWER	○	ASPHALT	○	WASTE WATER SEWER	○
○	WASTE WATER SEWER	○	SIDEWALK	○	CENTRELINE	○
○	MANHOLE	○	PLANNING	○	NORTH/WEST GUTTER	○
○	CATCH BASIN	○	PROPERTY LINE	○	SOUTH/EAST GUTTER	○
○	CURB INLET	○	SURVEY BAR	○	N/W, S/E P'S	○
○	BEND	○	GAS	○		○
○	REDUCER	○	CURB STOP	○		○
○	LEGEND-PLAN	○	TEE	○		○
○	PROPOSED	○	EXISTING	○	LEGEND-PROFILE	○
○	EXISTING	○	PROPOSED	○	EXISTING	○

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE DATE

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0	ISSUED FOR TENDER	01/2019	JBC
NO.	REVISIONS	DATE	BY

KGS GROUP CONSULTING ENGINEERS

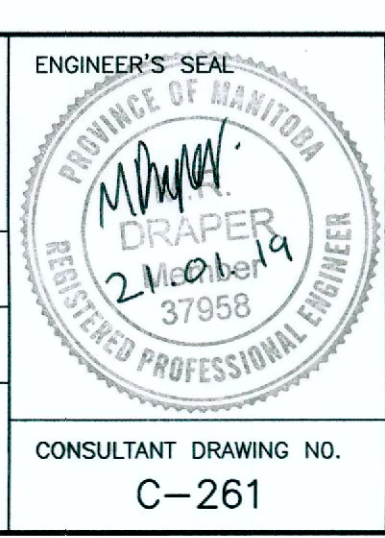
JACOBS

DESIGNED BY: SDG
 DRAWN BY: JBC

CHECKED BY: MD
 APPROVED BY: RBO (KGS Group)

HOR. SCALE: 1:250
 VERTICAL: 1:50

RELEASED FOR CONSTRUCTION: 01/23/19



THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

PROJECT TITLE
 COCKBURN AND CALROSSIE COMBINED SEWER RELIEF WORKS - CONTRACT 5

TAYLOR AVENUE
 FROM STA 1+980 TO STA 2+090

SHEET OF 4 OF 19
 COMPUTER FILE NAME C-261.dwg
 CITY DRAWING NUMBER LD-8893

File Name C:\pwworkdir\ch2mhill_wbg\icortez\10443046\

DRAWING INDEX

SHEET NUMBER	CITY OF WINNIPEG DRAWING NUMBER	DRAWING TITLE
1	LD-8594	COVER SHEET
2	LD-8595	GENERAL INFORMATION - DRAWING INDEX, CONSTRUCTION NOTES, LEGEND - MANHOLE SCHEDULE & TESTHOLE SCHEDULE
3	LD-8596	WILTON STREET - TAYLOR AVENUE TO GRANT AVENUE - TAYLOR AVENUE TO STA 2+20
4	LD-8597	WILTON STREET - TAYLOR AVENUE TO GRANT AVENUE - STA 2+20 TO STA 3+60
5	LD-8598	WILTON STREET - TAYLOR AVENUE TO GRANT AVENUE - STA 3+60 TO STA 4+95
6	LD-8599	WILTON STREET - TAYLOR AVENUE TO GRANT AVENUE - STA 4+95 TO STA GRANT AVENUE
7	LD-8600	WILTON BAY/EBBY AVENUE - WILTON STREET TO GUELPH STREET - WILTON BAY WEST LEG TO STA 2+25
8	LD-8601	EBBY AVENUE - WILTON STREET TO GUELPH STREET - STA 2+25 TO GUELPH STREET
9	LD-8602	HECTOR AVENUE - HECTOR BAY EAST TO GUELPH STREET - HECTOR BAY EAST TO STA 2+10
10	LD-8603	HECTOR AVENUE - HECTOR BAY EAST TO GUELPH STREET - STA 2+10 TO STA 3+25
11	LD-8604	HECTOR AVENUE - HECTOR BAY EAST TO GUELPH STREET - STA 3+25 TO STA 4+40
12	LD-8605	HECTOR AVENUE - HECTOR BAY EAST TO GUELPH STREET - STA 4+40 TO GUELPH STREET
13	LD-8606	HECTOR BAY EAST - WEST LEG
14	LD-8607	HECTOR BAY EAST - SOUTH LEG
15	LD-8608	HECTOR BAY EAST - EAST LEG
16	LD-8609	CARTER AVENUE - WILTON STREET TO GUELPH STREET - WILTON STREET TO STA 1+80
17	LD-8610	CARTER AVENUE - WILTON STREET TO GUELPH STREET - STA 1+80 TO ±30m EAST OF GUELPH STREET
18	LD-8611	WEATHERDON AVENUE - WILTON STREET TO GUELPH STREET - WILTON STREET TO STA 2+05
19	LD-8612	WEATHERDON AVENUE - WILTON STREET TO GUELPH STREET - STA 2+05 TO ±40m EAST OF GUELPH STREET
20	LD-8613	MANHOLE DETAILS (MUNICIPAL)
21	LD-8614	MANHOLE/TRANSITION CHAMBER MH-01 - PLAN AND SECTIONS (STRUCTURAL)
22	LD-8632	MANHOLE/TRANSITION CHAMBER MH-01 - SECTIONS AND DETAILS (STRUCTURAL)

CONSTRUCTION NOTES

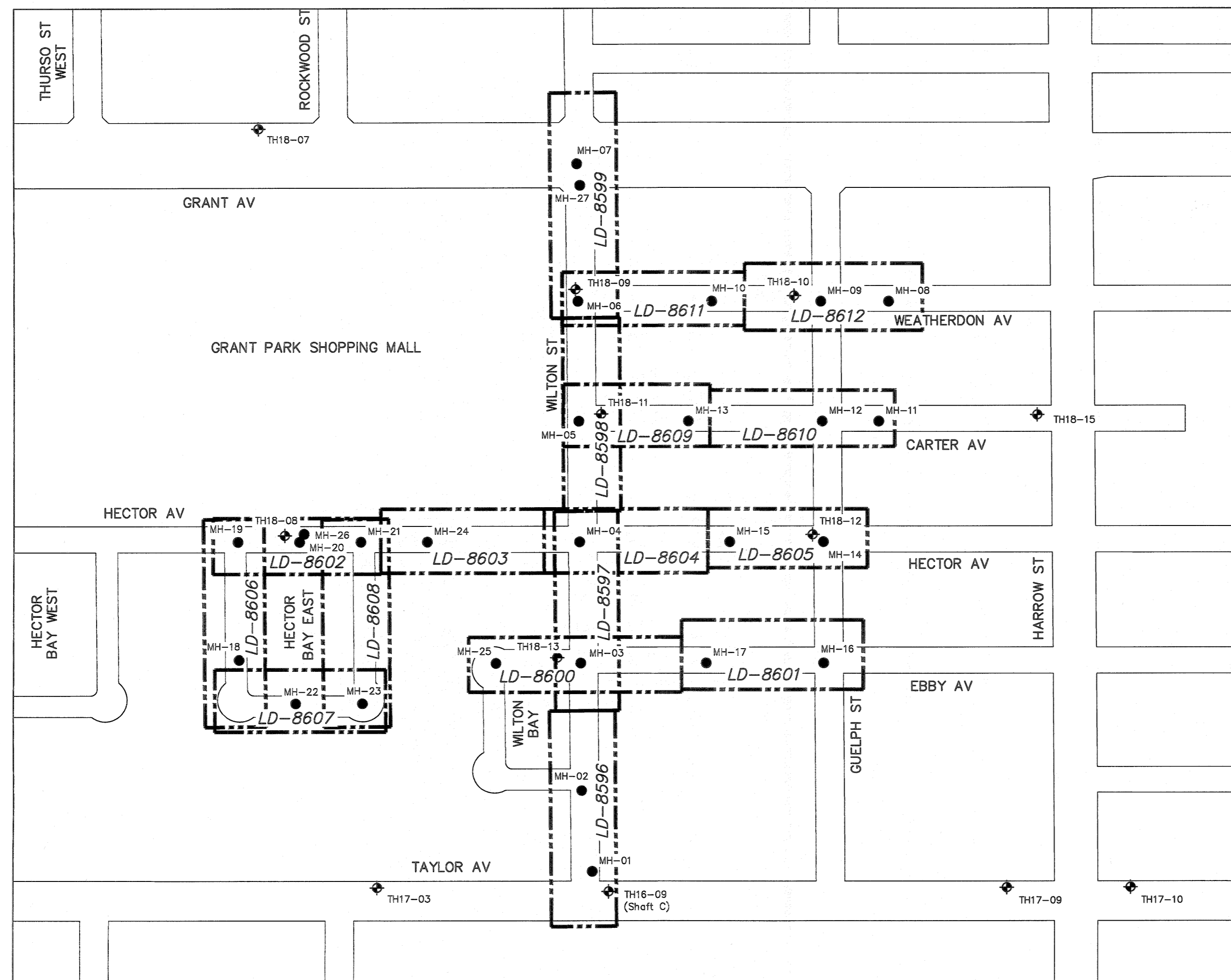
- ALL UNDERGROUND WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION OF THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS.
- ALL EXISTING UNDERGROUND SERVICES SHOWN ON DRAWINGS ARE APPROXIMATE ONLY.
- CONTRACTOR TO VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AND SERVICES PRIOR TO START OF CONSTRUCTION.
- PIPE MATERIAL FOR ALL PIPES INSTALLED WITH 3.5 OR DEEPER OF COVER, SHALL BE REINFORCED CONCRETE TO ASTM C78 WITH STRENGTH CLASS TYPE INDICATED ON DRAWINGS.
- PIPE MATERIAL FOR PIPES HAVING LESS THAN 3.5 OF COVER CAN BE REINFORCED CONCRETE TO ASTM C76 OR SDR 35 PVC.
- FOR DETAILS OF STANDARD MANHOLE, LARGE DIAMETER MANHOLE AND LARGE DIAMETER DROP MANHOLE SEE DWG. LD-8613.
- STANDARD DROP MANHOLE SHALL COMPLY WITH C.O.W. DETAIL SD-010D.
- ALL NEW CATCH BASINS LEADS TO BE 250Ø PVC SDR 35 PIPES.
- ALL PIPE SHALL HAVE CLASS B BEDDING WHEN INSTALLED BY TRENCH METHOD.
- CONTRACTOR TO INSTALL SEWER BY TRENCHLESS METHODS.
- BACKFILL UNDER PAVEMENT & WITHIN 1.0 OF PAVEMENT ON REGIONAL STREETS TO BE CLASS 1.
- BACKFILL UNDER PAVEMENT & WITHIN 1.0 OF PAVEMENT ON OTHER ROADWAYS TO BE CLASS 3.
- BACKFILL IN BOULEVARD TO BE CLASS 5.
- CONTRACTOR TO INSTALL SEWER SERVICE RISERS TO AN ELEVATION WHERE MINIMUM SLOPE OF 2% IS MAINTAINED FOR ALL SERVICES.
- SHAFT LOCATIONS SHOWN ON DRAWINGS ARE FOR PLANNING PURPOSES ONLY. ACTUAL SHAFT LOCATIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO MEET THEIR CONSTRUCTION MEANS AND METHODS.
- CONTRACTOR SHALL MITIGATE IMPACTS TO THE WORK AREA FROM SITE SURFACE RUNOFF.
- PEDESTRIAN ACCESS MUST BE MAINTAINED DURING CONSTRUCTION AT ALL TIMES.
- EXISTING SEWER AND WATER SERVICES TO BE REGRADED AS REQUIRED FOR CONSTRUCTION OF THE NEW LDS PIPING.
- EXISTING SERVICES OF THE CS TO BE ABANDONED SHALL BE INSPECTED IN ADVANCE OF ABANDONING TO CONFIRM THAT NO REMAINING SERVICE CONNECTIONS EXIST.

ABBREVIATIONS

WWS	WASTE WATER SEWER
CS	COMBINED SEWER
LDS	LAND DRAINAGE SEWER
ℙ	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	OPOSITE
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/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
JCT	JUNCTION

LEGEND

DESCRIPTION	PLAN VIEW	
	EXISTING	PROPOSED
WATER PIPE	---	---
FIRE HYDRANT	⊕	⊕
VALVE	⊗	⊗
CURB STOP	⊕	⊕
REDUCER	⊕	⊕
COUPLING OR SLIDER	X	X
CROSS	⊕	⊕
BEND - 11.25', 22.5', 45', 90'	⊕	⊕
TEE	⊕	⊕
VERTICAL BEND	H	H
ANODE	⊕	⊕
REPAIR MARKER	⊕	⊕
PLUG	J	J
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 VIDEO	---	---
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	---	---



MANHOLE & TESTHOLE LOCATION PLAN
SCALE: N.T.S.

REFERENCE	NORTHING	EASTING
MH-01	5524249.64	632277.14
MH-02	5524296.04	632243.31
MH-03	5524374.87	632199.17
MH-04	5524448.70	632157.82
MH-05	5524522.07	632116.70
MH-06	5524595.71	632075.44
MH-07	5524670.71	632033.41
MH-08	5524700.73	632266.99
MH-09	5524678.02	632225.57
MH-10	5524641.09	632158.21
MH-11	5524623.52	632301.62
MH-12	5524604.40	632266.69
MH-13	5524559.25	632184.41
MH-14	5524531.12	632308.13
MH-15	5524499.39	632250.28
MH-16	5524457.04	632349.02
MH-17	5524417.34	632276.62
MH-18	5524261.04	631987.74
MH-19	5524333.18	631947.17
MH-20	5524354.07	631985.25
MH-21	5524374.68	632022.84
MH-22	5524253.25	632037.39
MH-23	5524275.81	632078.38
MH-24	5524397.06	632063.65
MH-25	5524346.19	632146.86
MH-26	5524356.51	631985.13
MH-27	5524666.48	632038.18

REFERENCE	NORTHING	EASTING
TH16-09	5524243.0	632294.0
TH17-03	5524167.0	632150.0
TH17-09	5524380.0	632538.0
TH17-10	5524422.0	632614.0
TH18-07	5524594.0	631820.0
TH18-08	5524353.0	631974.0
TH18-09	5524602.0	632070.0
TH18-10	5524672.0	632207.0
TH18-11	5524534.0	632128.0
TH18-12	5524532.0	632299.0
TH18-13	5524370.0	632183.0
TH18-15	5524681.0	632397.0

DESCRIPTION	PROFILE	
	EXISTING	PROPOSED
WATER PIPE	---	---
HYDRANT TOP	+	+
VALVE	X	X
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	---	---

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
KGS Group
No. 245

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE DATE

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B.M. ELEV.

ISSUED FOR CONSTRUCTION

DATE

BY

NO.

REVISIONS

DATE

BY

DATE

BY

KGS GROUP
CONSULTING ENGINEERS

DESIGNED BY MID

CHECKED BY *Jm*

DRAWN BY GEL

APPROVED BY *R30*

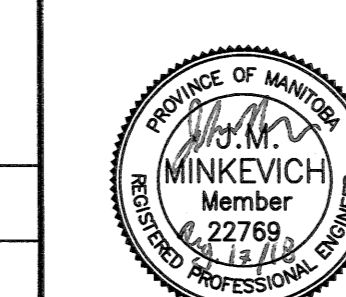
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VERTICAL

DATE 2018 08 17

PLOT DATE: 2018 08 17

ENGINEER'S SEAL



CONSULTANT DRAWING NUMBER

11-0107-18-C11_LD-8595

BID OPPORTUNITY: 640-2018

CONTRACT NUMBER: 11

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

COCKBURN & CALROSSIE SEWER RELIEF WORKS

CONTRACT 11

GENERAL INFORMATION

DRAWING INDEX, CONSTRUCTION NOTES, LEGEND, MANHOLE SCHEDULE & TESTHOLE SCHEDULE

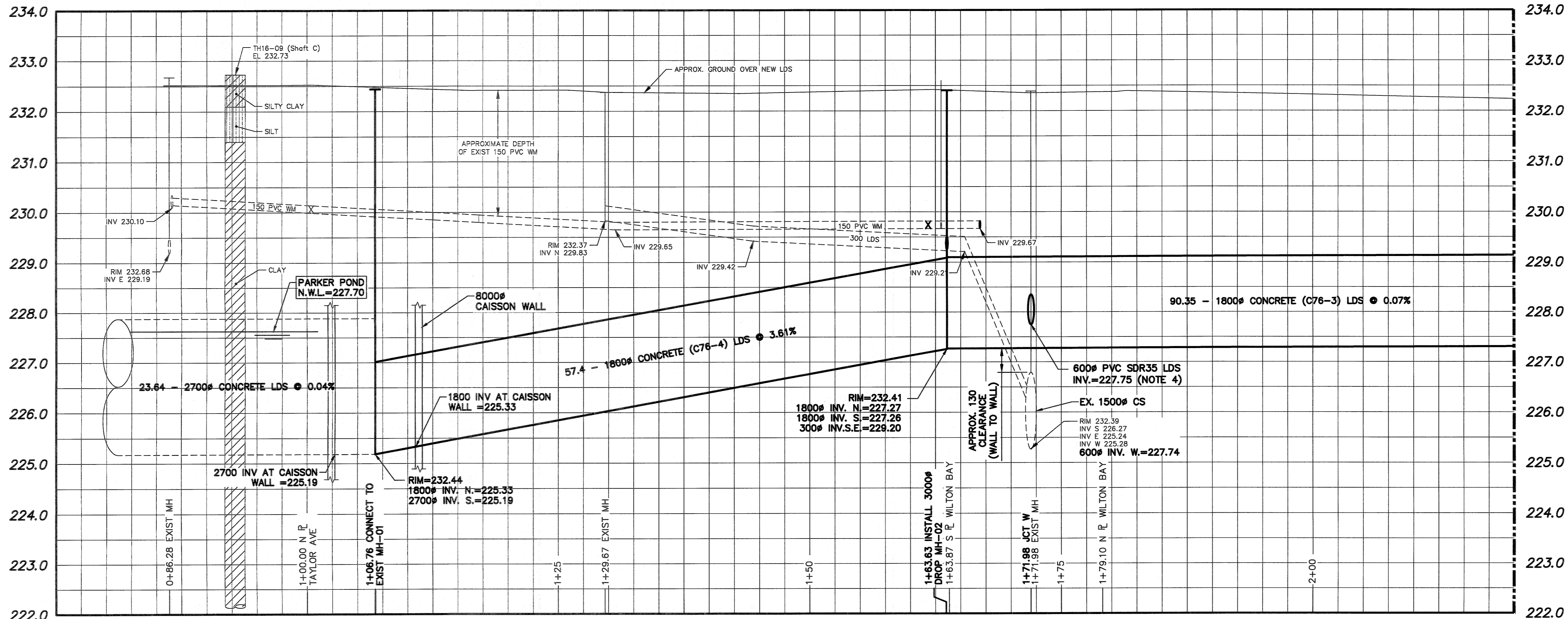
LD-8595

SHEET 2 OF 22

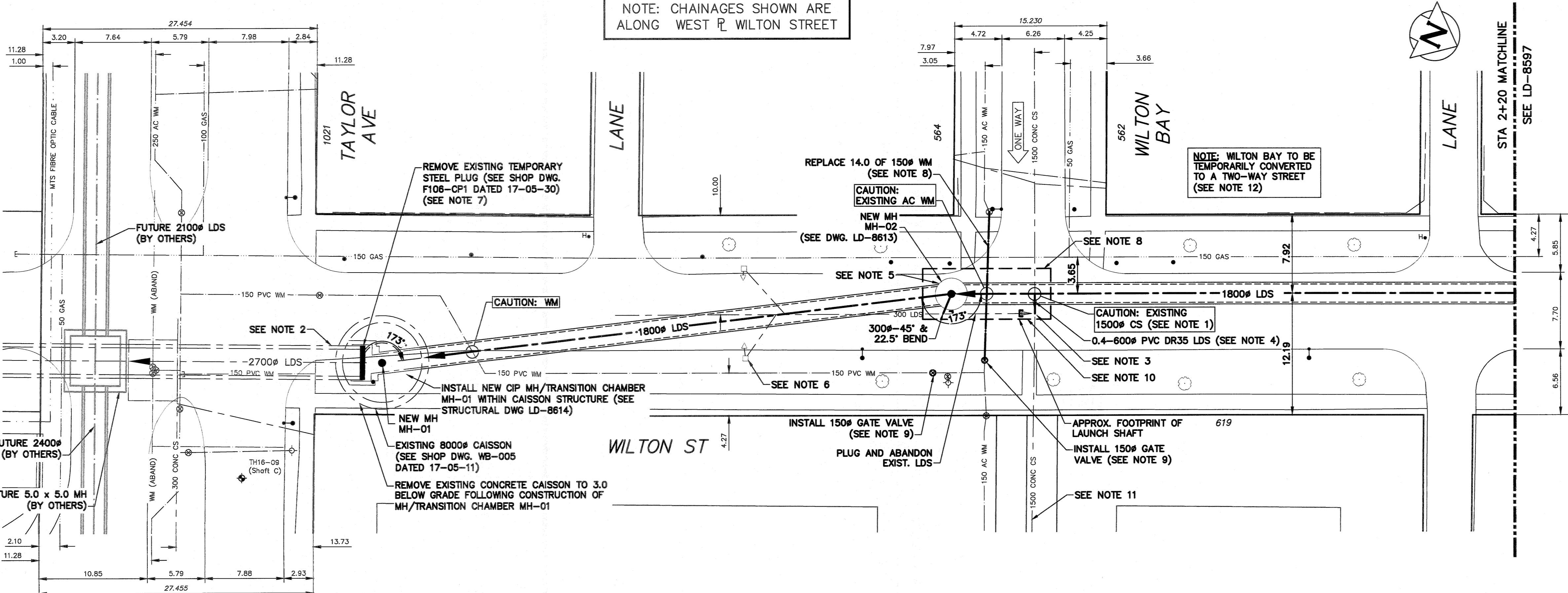
CITY DRAWING NUMBER

FILE PATH: P:\Projects\2011\11-0107-18\Drawings\Mun\C11 - WILTON-TAYLOR TO GRANT\

FILE NAME: 11-0107-18-C11_INDEX SHEET.dwg



- NOTES:**
- SOFT DIG AT THE CROSSING WITH THE 1500# COMBINED SEWER TO CONFIRM DEPTH PRIOR TO START OF TRENCHLESS INSTALLATION OF NEW 1800# CONCRETE LDS.
 - INSTALL A TEMPORARY PLUG IN DOWNSTREAM 2700# PIPE AT THE SOUTH SIDE OF MH-01 AND DEWATER THE CAISSON BEFORE START OF CONSTRUCTION.
 - RENEW RISERS OF THE EXISTING COMBINED SEWER MANHOLE IN THE OPEN EXCAVATION IF SHAFT LOCATION ENCLOSES ON TO THE 1500# CS.
 - TEMPORARY CONNECTION BETWEEN THE COMBINED SEWER AND NEW 1800# LDS. THE CONNECTION WILL BE USED FOR PUMPED DEWATERING OF THE NEW LDS SYSTEM DURING CONSTRUCTION. CONTRACTOR TO INSTALL REMOVABLE PLUG IN 600# AT END OF PROJECT.
 - MANHOLE MH-02 TO HAVE 1.0 DEEP TEMPORARY DRAINAGE SUMP THAT MAY BE USED FOR PUMPING DURING CONSTRUCTION. SUMP TO BE FILLED WITH CONCRETE AT END OF PROJECT.
 - EXISTING LDS PIPES AND CB TO REMAIN AND BE REROUTED INTO MH-02.
 - CONTRACTOR TO SUPPORT EXISTING 2700# PLUG DURING EXCAVATION OF BACKFILL IN EXISTING CAISSON. PLUG IS NOT INTENDED TO SUPPORT DOWNSTREAM WATER LEVEL. REMOVAL OF EXISTING PLUG SHALL BE UNDERTAKEN IN CONJUNCTION WITH CONTRACTOR'S DEWATERING AND DRAINAGE PLAN.
 - MIN 1.0 CLEARANCE TO BE MAINTAINED BETWEEN SHAFT SHORING AND 150# MAIN GAS LINE.
 - PRIOR TO LAUNCH SHAFT EXCAVATION INSTALL TWO NEW 150# VALVES TO PROVIDE UNDISTURBED WATER SUPPLY FOR ALL PROPERTIES. WATERMAIN SECTION WITHIN THE SHAFT LIMITS CAN BE REMOVED AND RENEWED AFTER MANHOLE MH-02 IS INSTALLED.
 - SHORING DESIGN FOR SHAFT TO CONSIDER LOADING OF EXISTING 1500# COMBINED SEWER IF SHAFT LOCATION ENCLOSES ON TO THE 1500# CS.
 - COMPLETE PRE-/POST-CONSTRUCTION CCTV INSPECTION OF EXISTING 1500# CS FROM 1ST. MANHOLE WEST OF WILTON ST. TO THE 1ST. MANHOLE EAST OF WILTON ST.
 - CONTRACTOR TO COORDINATE WITH CONTRACT ADMINISTRATOR AND THE CITY TO ARRANGE FOR HECTOR BAY TO TEMPORARILY BE MODIFIED TO A TWO-WAY STREET.

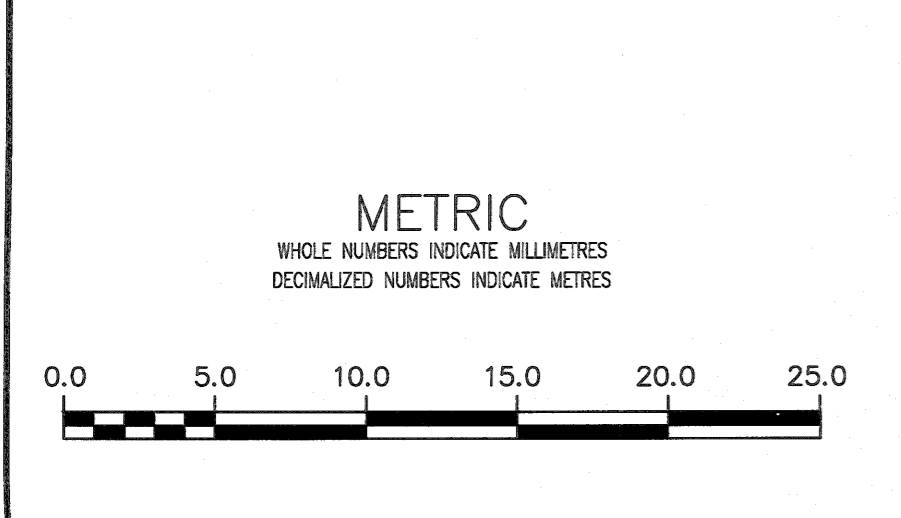


NOTE: CHAINAGES SHOWN ARE ALONG WEST R/W WILTON STREET

NOTE: WILTON BAY TO BE TEMPORARILY CONVERTED TO A TWO-WAY STREET (SEE NOTE 12)

**ENGINEERS
GEOSCIENTISTS
MANITOBA**

Certificate of Authorization
KGS Group
No. 245



**PROPERTY LIMITS
DELINEATION**
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DATE
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B.M. ELEV.			
0	ISSUED FOR CONSTRUCTION	2018 08 17	
NO.	REVISIONS	DATE	BY

KGS GROUP CONSULTING ENGINEERS

DESIGNED BY MID
DRAWN BY GEL
SCALE: HORIZONTAL 1:250
VERTICAL 1:50
DATE 2018 08 17

CHECKED BY
APPROVED BY
RELEASED FOR CONSTRUCTION
DATE 08-17-18

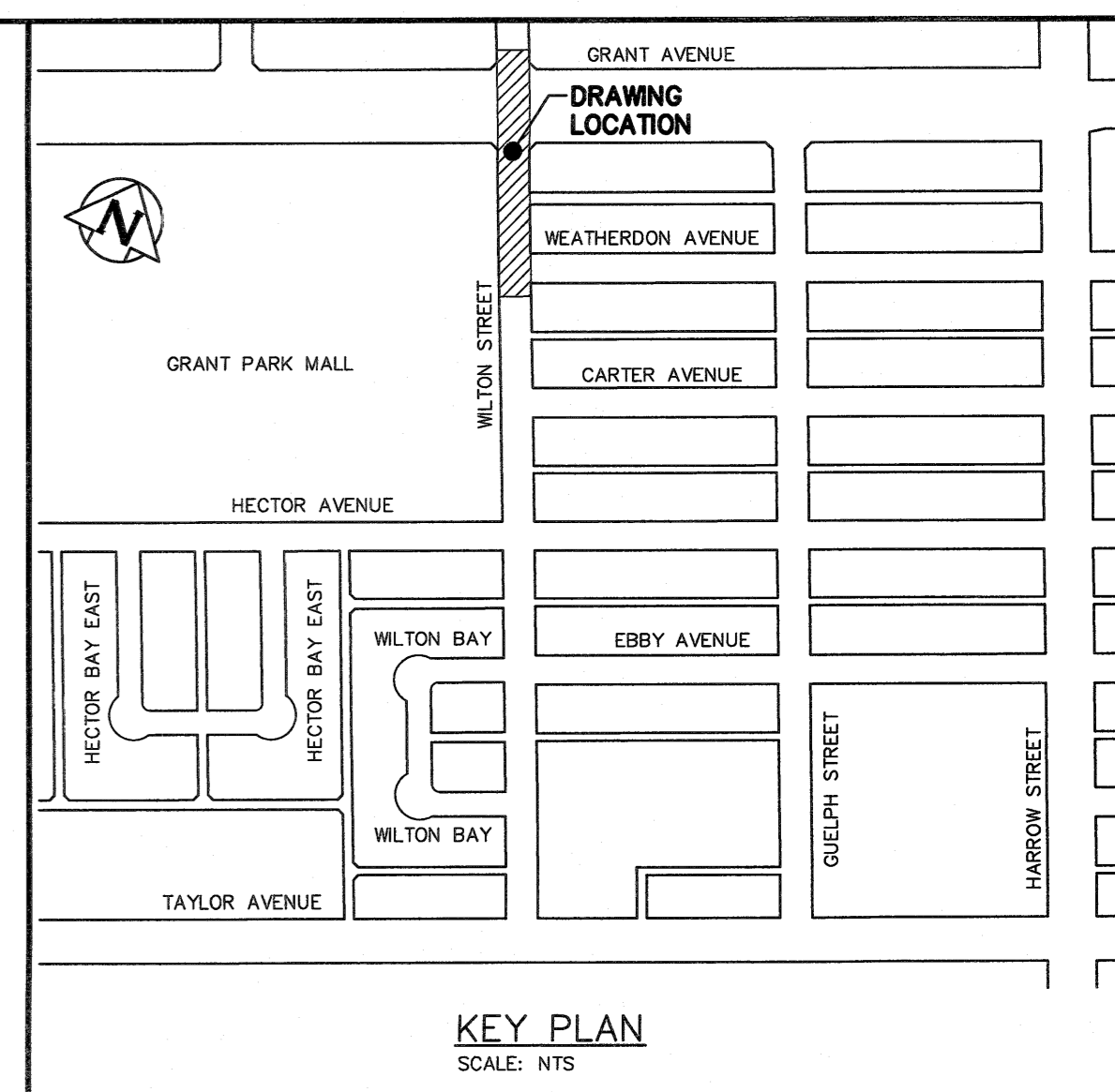
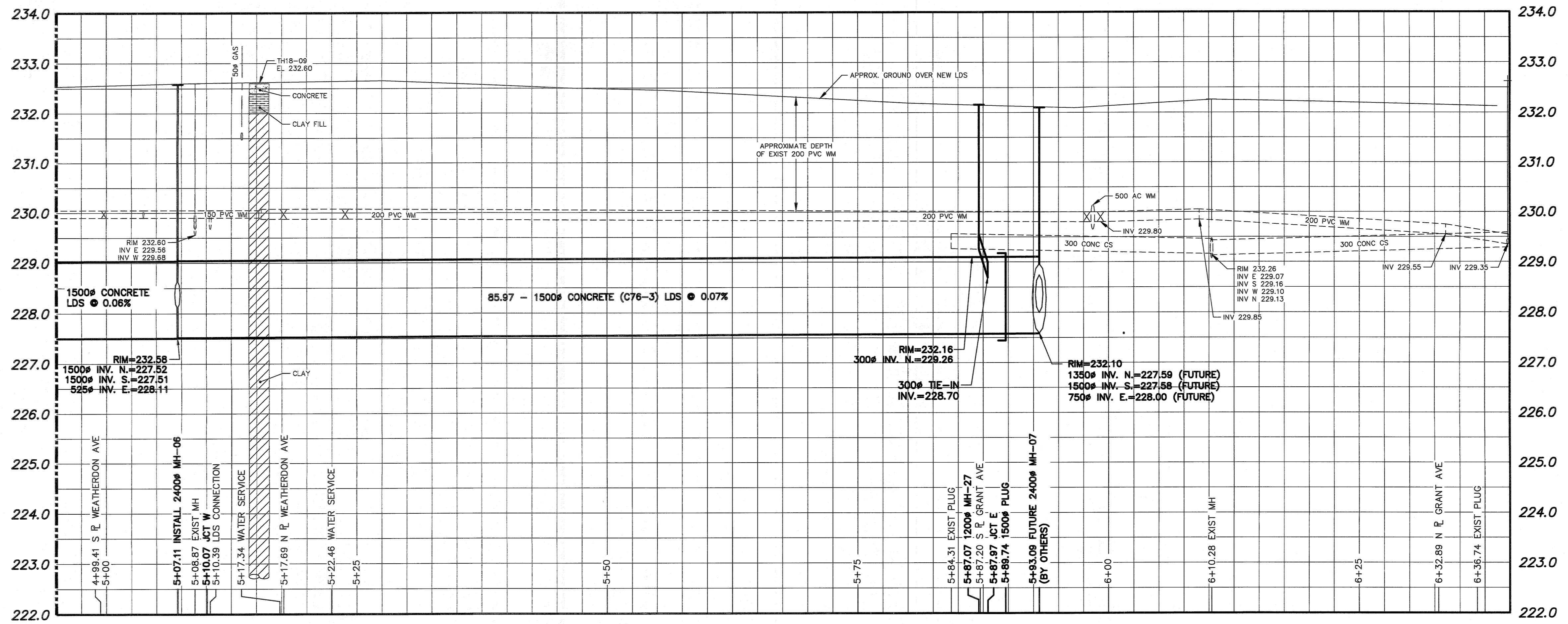
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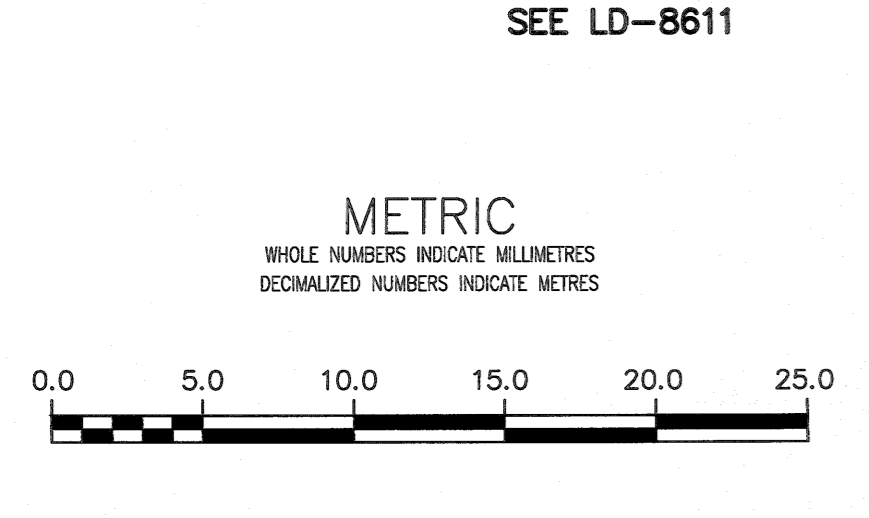
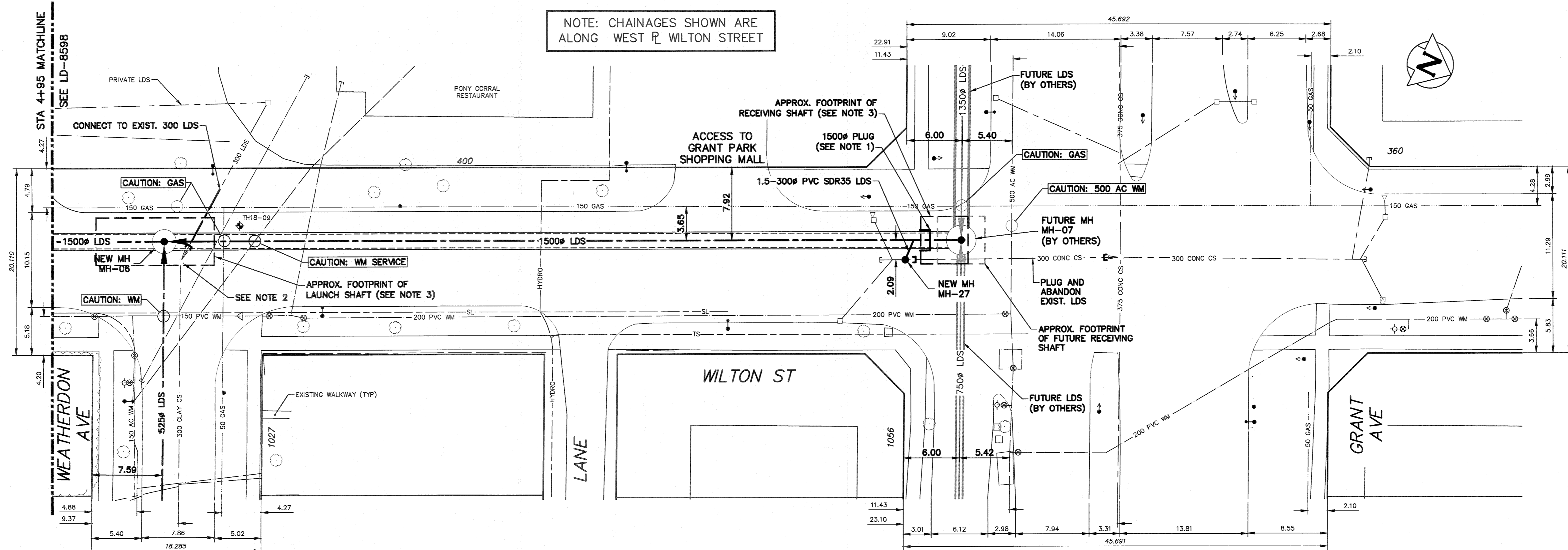
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

COCKBURN & CALROSSIE SEWER RELIEF WORKS
CONTRACT 11
WILTON STREET
TAYLOR AVENUE TO GRANT AVENUE
TAYLOR AVENUE TO STA 2+20

SHEET 3 OF 22
CITY DRAWING NUMBER
LD-8596



- NOTES:**
1. INSTALL PLUG AS SHOWN. MH-07 WILL BE INSTALLED BY OTHERS IN THE FUTURE.
 2. RENEW RISERS OF THE EXISTING COMBINED SEWER MANHOLE IN THE OPEN EXCAVATION IF SHAFT LOCATION ENCROACHES ON TO THE CS.
 3. MIN 1.0 CLEARANCE TO BE MAINTAINED BETWEEN SHAFT SHORING AND 150# MAIN GAS LINE.



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 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.	ISSUED FOR CONSTRUCTION	DATE	BY
	0	ISSUED FOR CONSTRUCTION	2018 08 17	AN
		REVISIONS	DATE	BY

KGS GROUP CONSULTING ENGINEERS

DESIGNED BY	MID	CHECKED BY	<i>JN</i>
DRAWN BY	GEL	APPROVED BY	<i>ABO</i>
SCALE:	HORIZONTAL 1:250	RELEASED FOR CONSTRUCTION	<i>[Signature]</i>
	VERTICAL 1:50	DATE	2018 08 17
		DATE	08-17-18

ENGINEER'S SEAL

CONSULTANT DRAWING NUMBER
11-0107-18-C11_LD-8599

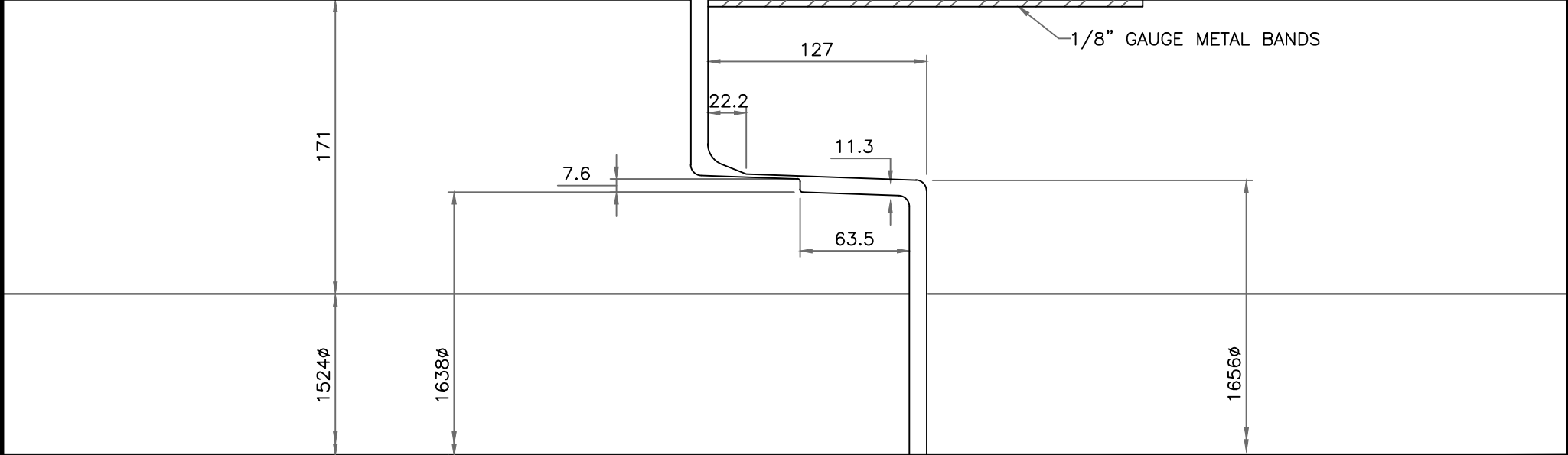
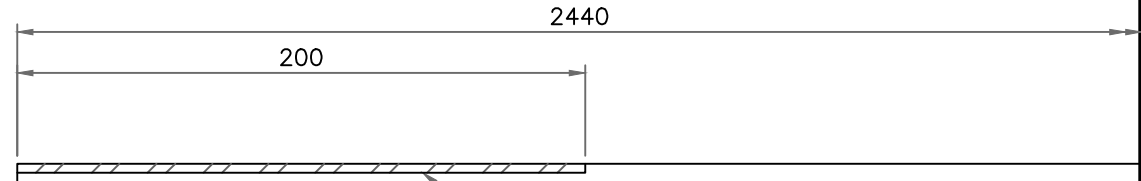
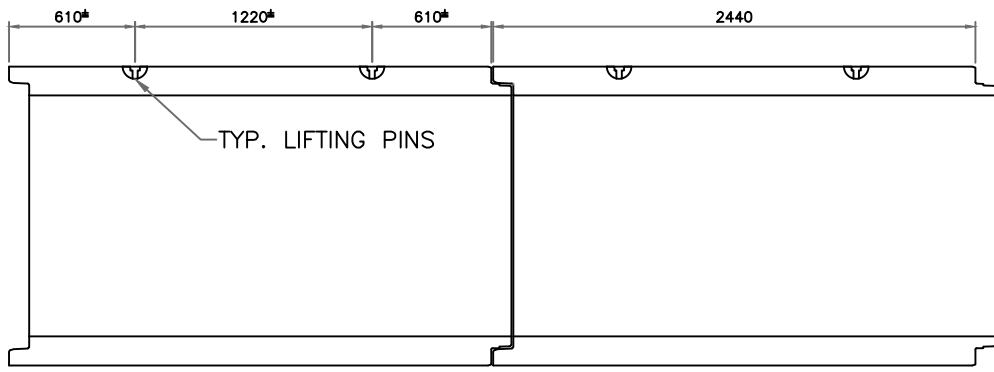
THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 ENGINEERING DIVISION

COCKBURN & CALROSSIE SEWER RELIEF WORKS
 CONTRACT 11
WILTON STREET
 TAYLOR AVENUE TO GRANT AVENUE
 STA 4+95 TO GRANT AVENUE

SHEET 6 OF 22
 CITY DRAWING NUMBER
LD-8599

KGS GROUP
 ENGINEERS
 GEOSCIENTISTS
 MANITOBA
 Certificate of Authorization
 KGS Group
 No. 245

PIPE CLASS		CONCRETE STRENGTH Mpa	D-Load 0.3mm Crack N/m-mm	D-Load Ultimate N/m-mm	Inner Cage Area of Steel cm ² /m	Outer Cage Area of Steel cm ² /m	WEIGHT kgs/m	NOTES:
ASTM C76-3	CSA A257.2-3	27.6	65.0	100.0	5.3	3.2	2360	-DIMENSIONS ARE IN MILLIMETERS -LIFTING DEVICES FOR PIPE ARE 2 - 4TM LIFTING CLUTCHES



PROJECT: 640-2018 COCKBURN & CALROSSIE
PROJECT: SEWER RELIEF CONTRACT 11
CUSTOMER: NELSON RIVER CONSTRUCTION

**1500 X 2.44
JACKING PIPE**

WALL: WALL C	
PROJECT#: M0918017	DRAWN BY: M.J.

SPECIFICATION: ASTM C76	
DATE: 07-MAR-19	REV No.: 00



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