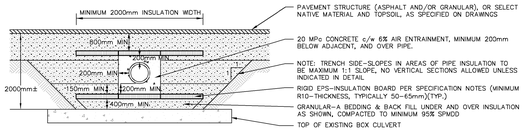
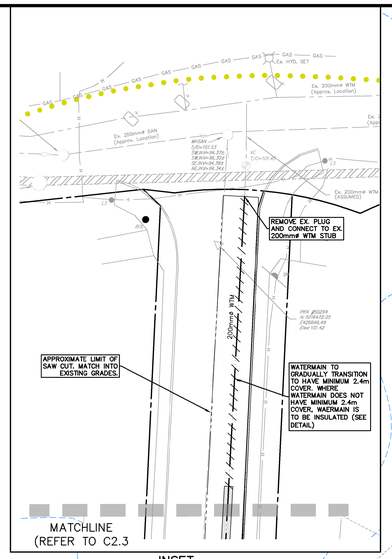
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CONCRETE ENCASED WATERMAIN DETAIL
N.T.S.



INSET
1:250

LEGEND OF EXISTING FEATURES

- SITE BOUNDARY
- MVCA SHAPEFILE (APPROX. ONLY) – REGULATION LIMIT
- MVCA SHAPEFILE (APPROX. ONLY) – 100 YEAR FLOODPLAIN
- PATERSON GROUP – TOP OF SLOPE
- PATERSON GROUP – LIMIT OF HAZARD LANDS
- MVCA CROSS SECTION MAP PDF (APPROX. ONLY) – STREAM
- Ex. 300mm# SAN — Ex. MH — EXISTING SANITARY SEWER
- Ex. 200mm# WTM — Ex. HYD. SET — EXISTING WATERMAIN
- Ex. 375mm# STM — Ex. MH — EXISTING STORM SEWER
- EXISTING FENCE
- 14.0m MTO SETBACK

LEGEND OF PROPOSED FEATURES

- EMBANKMENT (TOP / BOTTOM)
- SANITARY SEWER — MH — 14.6m–200mm# SAN @ 1.5%
- STORM SEWER — MH — 21.3m–300mm# STM @ 1.3%
- WATERMAIN — 200mm# WTM — HYD. SET — TEE
- PROPOSED BUILDING
- OVERHEAD DOOR
- MAN DOOR
- CONCRETE CURB (FLUSH CURB) (DROP CURB)
- RETAINING WALL
- SHALLOW PIPE INSULATION (SEE DETAIL)
- SEWER CROSSING (REFER TO CROSSING CHART) — X1

SEWER CROSSING CHART

NOTE:
1) Maintain minimum 0.5m vertical clearance between all watermains and sewers Where watermain is deflected, ensure 2.4m cover is achieved or watermain is insulated.
2) Maintain vertical clearance at all other crossings.
3) Elevations are approximate and subject to asymmetric only. Notify Design Engineer of any discrepancies.
4) Contractor to verify all existing invert elev prior to product ordering. Notify Design Engineer of any discrepancies.

CROSSING #	SEWER TYPE	SEWER SIZE (mm#)	CROSSING ELEVATION	NOTES
X1	WTM	200	INV=99.30 ±	ENSURE WTM HAS MIN. 2.4m COVER.
	SAN	200	OBV=97.170	
X2	STM	375	INV=100.092	
	SAN	200	OBV=97.185	
X3	STM	375	INV=100.080	ENSURE WTM HAS MIN. 2.4m COVER AND MAINTAIN MIN. 0.5m VERTICAL CLEARANCE FROM STM.
	WTM	200	OBV=99.50 ±	
X4	WTM	150	INV=99.60 ±	ENSURE WTM HAS MIN. 2.4m COVER.
	SAN	200	OBV=97.134	
X5	STM	375	INV=100.107	MAINTAIN MIN. 0.5m VERTICAL CLEARANCE BETWEEN STM AND WTM. DEFLECT WTM BELOW STM AS REQUIRED.
	WTM	150	OBV=96.60 ±	
X6	WTM	200	INV=99.50 ±	ENSURE WTM HAS MIN. 2.4m COVER.
	SAN	200	OBV=97.464	
X7	STM	375	INV=100.263	
	SAN	200	OBV=97.598	
X8	STM	375	INV=100.297	ENSURE WTM HAS MIN. 2.4m COVER AND MAINTAIN MIN. 0.5m VERTICAL CLEARANCE FROM STM. DEFLECT WTM BELOW STM AS REQUIRED.
	WTM	200	OBV=99.70 ±	
X9	WTM	200	INV=99.70 ±	ENSURE WTM HAS MIN. 2.4m COVER
	SAN	200	OBV=97.960	
X10	STM	375	INV=100.152	
	SAN	200	OBV=98.115	
X11	WTM	200	INV=99.20 ±	ENSURE WTM HAS MIN. 2.4m COVER.
	SAN	200	OBV=97.901	
X12	STM	150	INV=100.457	ENSURE WTM HAS MIN. 2.4m COVER AND MAINTAIN MIN. 0.5m VERTICAL CLEARANCE FROM STM.
	WTM	200	OBV=99.15 ±	
X13	STM	150	INV=100.487	
	SAN	200	OBV=97.409	
X14	STM	150	INV=100.258	
	SAN	200	OBV=96.907	
X15	STM	150	INV=100.228	ENSURE WTM HAS MIN. 2.4m COVER AND MAINTAIN MIN. 0.5m VERTICAL CLEARANCE FROM STM.
	WTM	200	OBV=99.25 ±	
X16	STM	TRENCH DRAIN	INV=101.17 ±	
	WTM	200	OBV=98.43 ±	

NOTE: WATERMAIN TO HAVE MINIMUM 2.4m COVER AT ALL LOCATIONS. REFER TO SEWER CROSSING CHART FOR SPECIFIC INVERTS/OBVERTS AT CROSSINGS.

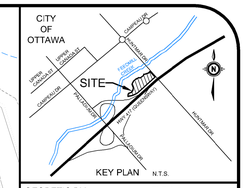
NOTE: PRIOR TO CONSTRUCTION, CONTRACTOR TO VERIFY CONDITION, DEPTH AND LOCATION OF EXISTING SERVICES AND NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING STRUCTURES.

NOTE: INSTALL FOUR RUNS OF 3m–100mm# PERFORATED SUBDRAIN AT EACH CB AND CBMH PROPOSED IN HARD SURFACES. REFER TO DETAIL AND RECOMMENDATIONS IN THE LATEST GEOTECHNICAL REPORT BY PATERSON GROUP. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND REVIEW THE LATEST COPY OF THE MENTIONED GEOTECHNICAL REPORT.

NOTE: CONTRACTOR TO REFER TO LATEST GEOTECHNICAL REPORT BY PATERSON GROUP FOR ADDITIONAL INFORMATION REGARDING PIPE BEDDING AND BACKFILL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND REVIEW THE LATEST COPY OF THE GEOTECHNICAL REPORT.

NOTE: ALL SANITARY STRUCTURES TO BE EXTERNALLY WRAPPED WITH WATERPROOF MEMBRANE PLACED EXTERNALLY AROUND ALL PRECAST JOINTS, INCLUDING JOINTS BELOW THE MH FRAME AND COVER, WITH A MINIMUM 300mm WIDE STRIP. SANITARY SEWER PIPES, PIPE JOINTS, AND CONNECTIONS SHALL BE DESIGNED TO WITHSTAND A PRESSURE OF AT LEAST 45 PSI WITHOUT LEAKAGE. SANITARY SEWERS SHALL MEET REQUIREMENTS OF OPSS 410 FOR LASER PROFILE OR MANDREL DEFLECTION TESTING OF PIPE SEWERS, LOW PRESSURE AIR TESTING (35 kPA) AND INFILTRATION TESTING (ALLOWABLE INFILTRATION SHALL BE 0.075 L/mm DIA/100m OF PIPE SEWER/HOUR).

PIN 04508 – 0196



GEODETIC BM ELEV. = m
REFER TO SURVEY COMPLETED BY STANTEC, DATED JANUARY 23, 2026

SITE BENCHMARK ELEV. = m
REFER TO ABOVE.

NOTE TO CONTRACTOR :

DO NOT SCALE DRAWINGS.

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THE OWNER/ARCHITECT/CONTRACTOR IS ADVISED THAT M.T.E. CONSULTANTS INC. CANNOT CERTIFY ANY COMPONENT OF THE SITE WORKS NOT INSPECTED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY M.T.E. CONSULTANTS INC. PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR INSPECTION.

NOTE:

1. **PROPERTY LINE IS APPROXIMATE ONLY AND SHOULD NOT BE USED FOR DETERMINING SETBACKS OR LAYOUT.**
2. **EXISTING TOPOGRAPHICAL INFORMATION PROVIDED BY STANTEC, DATED JANUARY 23, 2026.**
3. **ALL MVCA LINEWORK SHOWN ON THIS PLAN IS TAKEN FROM SHAPEFILE PROVIDED BY STANTEC AND IS APPROXIMATE ONLY.**
4. **INVERTS DENOTED WITH "±" ARE TAKEN FROM AS–BUILT PLAN AND PROFILE DRAWINGS COMPLETED BY IBI GROUP, DATED OCTOBER 7, 2015, AND GENERAL PLAN OF SERVICES PLAN PREPARED BY IBI GROUP, DATED AUGUST 21, 2013 AND ARE CONSIDERED APPROXIMATE ONLY. CONTRACTOR TO FIELD VERIFY AND REPORT ANY DISCREPANCIES TO ENGINEER.**
5. **THIS PLAN IS PART OF A SET OF PLANS WHICH COMPRISE OF THE FOLLOWING: C1.1, C1.2, C2.0, C2.1, C2.2, C2.3, C2.4, C2.5 AND C2.6.**

No.	REVISION	BY	YYYY-MM-DD
3	RE-ISSUED FOR SITE PLAN CONTROL	AXS	2026-10-30
2	ISSUED FOR PRICING	AXS	2026-09-22
1	ISSUED FOR SITE PLAN CONTROL	AXS	2026-04-01

MTE Engineers, Scientists, Surveyors.

LICENSED PROFESSIONAL ENGINEER L.E. INGRAM 100120779 2026-10-30 PROVINCE OF ONTARIO

CLIENT
IRONCLAD DEVELOPMENTS
101-5715B SYMINGTON RD 2OE SPRINGFIELD, MB

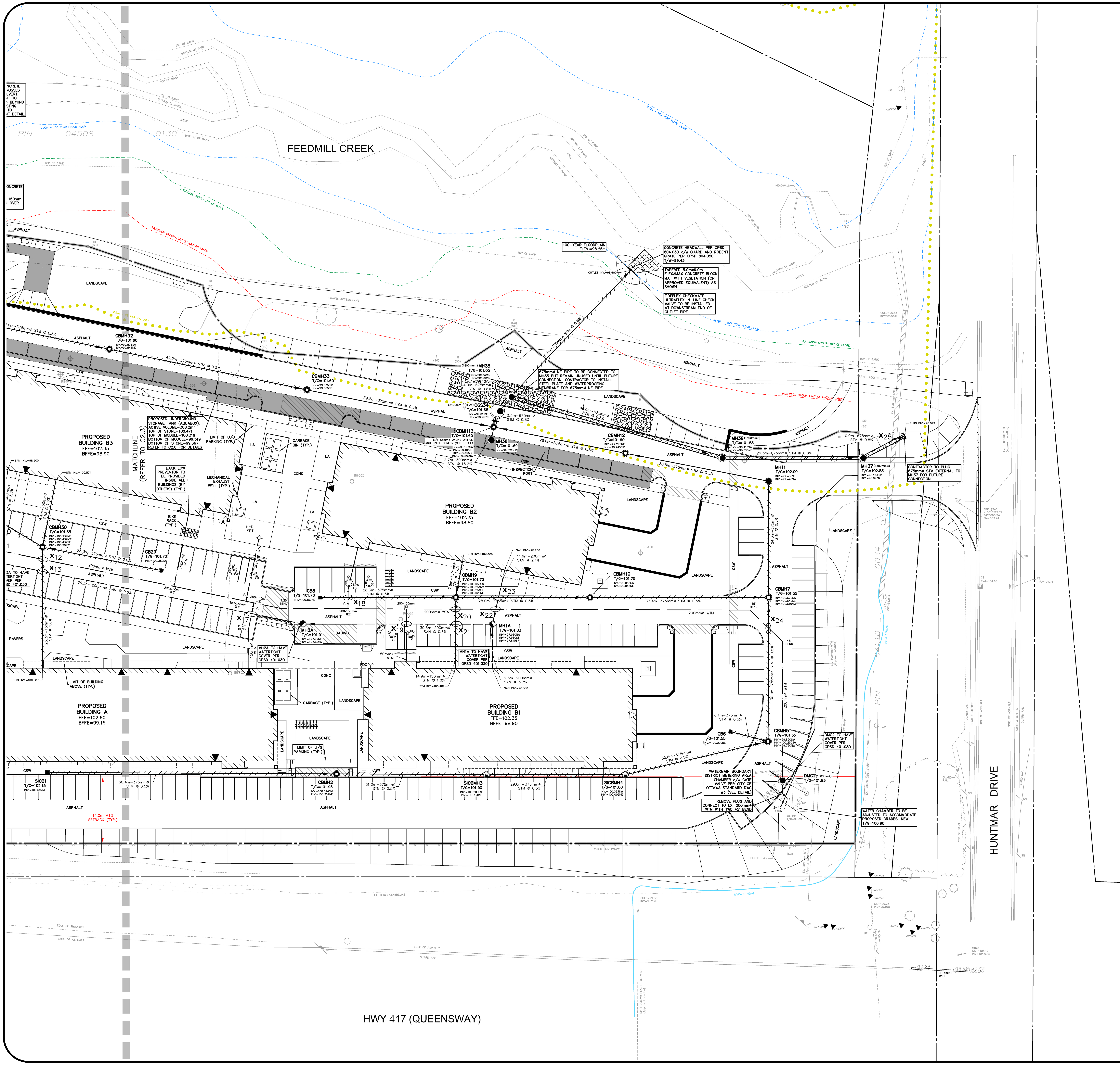
PROJECT
319 HUNTMAR DRIVE
STITTSVILLE, ON

DRAWING
SITE SERVICING PLAN 1

Design By: DXN / LEI	Project Manager: A. SAWATSKY
Drawn By: DAC	Project No.: 65860_001
Checked By: DXN / LEI	Drawing No.: C2.3
Date (yyyy-mm-dd): 2026-02-12	Sheet 6 of 9
Scale: 1:250	

FILE # D07-12-26-0037
PLAN #. 19483

October 30, 2026 - 11:57:07 AM - Plotted By: Dan Na



LEGEND OF EXISTING FEATURES

- SITE BOUNDARY
- MVCA SHAPEFILE (APPROX. ONLY) – REGULATION LIMIT
- MVCA SHAPEFILE (APPROX. ONLY) – 100 YEAR FLOODPLAIN
- PATERSON GROUP – TOP OF SLOPE
- PATERSON GROUP – LIMIT OF HAZARD LANDS
- MVCA CROSS SECTION MAP PDF (APPROX. ONLY) – STREAM
- EXISTING SANITARY SEWER (Ex. 300mmø SAN, Ex. MH)
- EXISTING WATERMAIN (Ex. 200mmø WTM, Ex. HYD. SET)
- EXISTING STORM SEWER (Ex. 375mmø STM, Ex. MH)
- EXISTING FENCE
- 14.0m MTO SETBACK

LEGEND OF PROPOSED FEATURES

- EMBANKMENT ((TOP), (BOTTOM))
- SANITARY SEWER (MH 14.6m–200mmø SAN @ 1.5%)
- STORM SEWER (MH 21.3m–300mmø STM @ 1.3%)
- WATERMAIN (200mmø WTM V. HYD. SET TEE)
- PROPOSED BUILDING
- OVERHEAD DOOR
- MAN DOOR
- CONCRETE CURB ((FLUSH CURB) (DROP CURB))
- RETAINING WALL
- SHALLOW PIPE INSULATION (SEE DETAIL)
- SEWER CROSSING (REFER TO CROSSING CHART)

NOTE: PRIOR TO CONSTRUCTION, CONTRACTOR TO VERIFY CONDITION, DEPTH AND LOCATION OF EXISTING SERVICES AND NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING STRUCTURES.

NOTE: INSTALL FOUR RUNS OF 3m–100mmø PERFORATED SUBDRAIN AT EACH CB AND CBMH PROPOSED IN HARD SURFACES. REFER TO DETAIL AND RECOMMENDATIONS IN THE LATEST GEOTECHNICAL REPORT BY PATERSON GROUP. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND REVIEW THE LATEST COPY OF THE MENTIONED GEOTECHNICAL REPORT.

NOTE: WATERMAIN TO HAVE MINIMUM 2.4m COVER AT ALL LOCATIONS. REFER TO SEWER CROSSING CHART FOR SPECIFIC INVERTS/OBVERTS AT CROSSINGS.

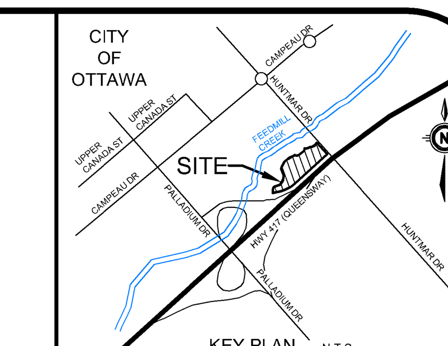
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SEWER CROSSING CHART

NOTE:
1) Maintain minimum 0.5m vertical clearance between all watermains and sewers. Where watermain is deflected, ensure 2.4m cover is achieved or watermain is insulated.
2) Maintain vertical clearance at all other crossings.
3) Existing and proposed watermain depths are approximate only. Notify Design Engineer of any discrepancies.
4) Contractor to verify all existing inverts prior to product ordering. Notify Design Engineer of any discrepancies.

CROSSING #	SEWER TYPE	SEWER SIZE (mmø)	CROSSING ELEVATION	NOTES
X17	WTM	150	INV=99.50 ±	ENSURE WTM HAS MIN. 2.4m COVER.
	SAN	200	OBV=97.676	
X18	STM	375	INV=100.172	ENSURE WTM HAS MIN. 2.4m COVER AND MAINTAIN MIN. 0.5m VERTICAL CLEARANCE FROM STM.
	WTM	150	OBV=99.30 ±	
X19	WTM	150	INV=99.50 ±	ENSURE WTM HAS MIN. 2.4m COVER.
	SAN	200	OBV=97.902	
X20	STM	150	INV=100.282	ENSURE WTM HAS MIN. 2.4m COVER AND MAINTAIN MIN. 0.5m VERTICAL CLEARANCE FROM STM.
	WTM	200	OBV=99.30 ±	
X21	STM	150	INV=100.312	
	SAN	200	OBV=97.965	
X22	WTM	200	INV=99.15 ±	ENSURE WTM HAS MIN. 2.4m COVER.
	SAN	200	OBV=98.228	
X23	STM	375	INV=99.985	
	SAN	200	OBV=98.276	
X24	STM	375	INV=99.672	MAINTAIN MIN. 0.5m VERTICAL CLEARANCE BETWEEN STM AND WTM. DEFLECT WTM UNDER STM AS REQUIRED.
	WTM	200	OBV=99.10 ±	
X25	STM	675	INV=98.033	
	Ex. STM	800	Ex. OBV=97.24±	

NOTE: ALL SANITARY STRUCTURES TO BE EXTERNALLY WRAPPED WITH WATERPROOF MEMBRANE PLACED EXTERNALLY AROUND ALL PRECAST JOINTS, INCLUDING JOINTS BELOW THE MH FRAME AND COVER, WITH A MINIMUM 300mm WIDE STRIP. SANITARY SEWER PIPES, PIPE JOINTS, AND CONNECTIONS SHALL BE DESIGNED TO WITHSTAND A PRESSURE OF AT LEAST 45 PSI WITHOUT LEAKAGE. SANITARY SEWERS SHALL MEET REQUIREMENTS OF OPSS 410 FOR LASER PROFILE OR MANDREL DEFLECTION TESTING OF PIPE SEWERS, LOW PRESSURE AIR TESTING (35 KPA) AND INFILTRATION TESTING (ALLOWABLE INFILTRATION SHALL BE 0.075 L/mm DIA/100m OF PIPE SEWER/HOUR).



KEY PLAN N.T.S.

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REFER TO SURVEY COMPLETED BY STANTEC, DATED JANUARY 23, 2026

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No.	REVISION	BY	YYYY-MM-DD
3.	RE-ISSUED FOR SITE PLAN CONTROL	AXS	2026-10-30
2.	ISSUED FOR PRICING	AXS	2026-09-22
1.	ISSUED FOR SITE PLAN CONTROL	AXS	2026-04-01

MTE Engineers, Scientists, Surveyors.

LICENSED PROFESSIONAL ENGINEER L. E. INGRAM 100120779 2026-10-30 PROVINCE OF ONTARIO

CLIENT
IRONCLAD DEVELOPMENTS
101-57158 SYMINGTON RD 20E SPRINGFIELD, MB

PROJECT
319 HUNTMAR DRIVE
STITTSVILLE, ON

DRAWING
SITE SERVICING PLAN 2

Design By	DXN / LEI	Project Manager	A. SAWATSKY
Drawn By	DAC	Project No.	65860_001
Checked By	DXN / LEI	Drawing No.	C2.4
Date (yyyy-mm-dd)	2026-02-12		
Scale	1:250		Sheet 7 of 9

FILE # D07-12-26-0037
PLAN #: 19483

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October 30, 2026 - 11:40:36 AM - Plotted By: Dain Na