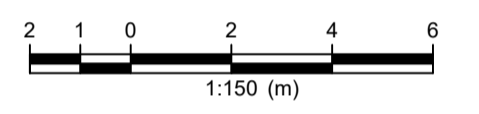


- NOTES:
1. TOPOGRAPHIC SURVEY COMPLETED BY VAN HARTEN SURVEYING, DATED APR. 30, 2024.
 2. LEGAL INFORMATION, EXISTING GAS UTILITIES AND EXISTING HYDRO UTILITIES PROVIDED IN TOPOGRAPHIC SURVEY BY VAN HARTEN SURVEYING, DATED APR. 30, 2024.
 3. EXISTING INFRASTRUCTURE INFORMATION FOR STORM SEWERS, SANITARY SEWERS AND WATERMAIN ON ARTHUR STREET DERIVED FROM CITY OF GUELPH DRAWING N-834, AS-CONSTRUCTED DATED AUG. 31, 1993.
 4. MONITORING WELL INFORMATION PROVIDED IN GEOTECHNICAL REPORT BY CMT ENGINEERING, DATED MAR. 11, 2024.
 5. SITE PLAN PREPARED BY VAN HARTEN SURVEYING, DATED JAN. 9, 2025.



BENCHMARKS FROM TOPOGRAPHIC SURVEY:
ELEVATIONS ARE BASED ON GNSS OBSERVATIONS FROM PERMANENT REFERENCE STATIONS IN THE NAD83 (CSRS-2010) COORDINATE SYSTEM, WITH HEIGHTS CONVERTED TO ORTHOMETRIC ELEVATIONS ON THE CGVD28 DATUM (1978 ADJUSTMENT) WITH GEOID MODEL HTv2.0, AS SUPPLIED BY NATURAL RESOURCES CANADA.

SITE BENCHMARK:

1. CUT CROSS IN SIDEWALK ON NORTH SIDE OF MITCHELL STREET HAVING AN ELEVATION OF 324.48 METRES.
2. SPIKE IN HYDRO POLE ON SOUTH SIDE ARTHUR STREET HAVING AN ELEVATION OF 322.07 METRES.

THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM.



NO.	DATE	REVISION DESCRIPTION	CHKD.
3	2025-01-15	REVISED AND RE-ISSUED FOR APPROVAL	A.E.K.
2	2024-06-12	ISSUED FOR APPROVAL	A.E.K.
1	2024-06-03	ISSUED FOR REVIEW	A.E.K.

LEGEND

	PROPERTY LINE
	EX. SANITARY SEWER
	EX. STORM SEWER
	EX. CATCH BASIN
	EX. WATERMAIN
	EX. OVERHEAD HYDRO
	EX. GAS LINE
	EX. FENCE LINE
	EX. CONTOURS
	VEGETATION TO BE REMOVED

GEI Consultants

8 MITCHELL STREET
MEZCON CONSTRUCTION LTD.

CITY OF GUELPH
EXISTING CONDITIONS
AND REMOVALS PLAN

DRAWN BY: P.L.	APPROVED BY: A.E.K.	PROJECT NO.: 424051	DRAWING NO.: EX-1
DESIGNED BY: P.L.	DATE: MAY 2024	SCALE: 1:150	

THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF MEZCON CONSTRUCTION LTD. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF MEZCON CONSTRUCTION LTD.

GENERAL NOTES

- CHANGES AND ALTERATIONS TO THE STORMWATER MANAGEMENT OR SITE SERVICING DESIGN FOLLOWING MUNICIPAL APPROVAL WILL REQUIRE RESUBMISSION OF THE SITE PLAN APPLICATION PRIOR TO CONSTRUCTION.
- ALL PIPING, STRUCTURES AND INSTALLATION TO CONFORM TO LATEST CITY OF CAMBRIDGE SPECIFICATIONS, ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND THE ONTARIO BUILDING CODE - 2012.
- BUILDING CONNECTIONS FOR WATER, SANITARY SEWERS, WEEPING TILES AND DOWNSPOUT HEADERS TO BE AS PER THE ONTARIO BUILDING CODE - 2012 OR THE CITY OF CAMBRIDGE STANDARD SPECIFICATIONS.
- STORM MAINTENANCE HOLES TO BE OPSD 701 SERIES c/w FRAME AND COVER AS PER OPSD 401.01 TYPE B.
- STORM CATCHBASIN MAINTENANCE HOLES TO BE OPSD 701 SERIES c/w FRAME AND GRATE AS PER OPSD 400.100. SINGLE CATCHBASINS TO BE OPSD 705.010. ALL CATCHBASIN MAINTENANCE HOLES AND CATCHBASINS WITH PIPES 4500 AND SMALLER REQUIRE A 600mm SUMP. ALL STORM MAINTENANCE HOLES ARE TO BE BENCHED.
- STORM SEWER TO BE PVC SDR35 OR ONE OF THE FOLLOWING: IPEX "ULTRA RIB", Loc Pipe "Loc PVC", CONCRETE; HDPE Big "O" Boss Polyfile, Royal Rib "Korflo". ALL PIPES 4500 AND GREATER ARE TO BE CONCRETE (CSA A257.2). ALL PVC STORM CONNECTIONS TO STRUCTURES TO BE MADE WITH KOR-N-SEAL CONNECTIONS.
- ALL PIPE BEDDING AND EXCAVATIONS SHALL CONFORM TO OPSD 802.010, 802.013, 802.030, 802.031, 802.032, 802.033 AS REQUIRED. ALL PIPE BEDDING AND COVER MATERIAL SHALL BE GRANULAR 'A'.
- PROPOSED SEWERS WITH LESS THAN 1.5m COVER ARE TO BE INSULATED WITH 50mm RIGID STYROFOAM H.I. 40 INSULATION 200mm ABOVE PIPE. MINIMUM WIDTH 1.5m.
- SANITARY MAINTENANCE HOLES TO BE OPSD 701.010 c/w FRAME AND COVER AS PER OPSD 401.010 TYPE A (TYPICAL) AND KOR-N-SEAL CONNECTIONS.
- ALL SANITARY PIPE TO BE PVC SDR35, IN STANDARD BEDDING WITH NATIVE BACKFILL INSTALLATION AS PER CITY OF CAMBRIDGE SS-100.
- FOUNDATION DRAINS CONNECTED TO INTERNAL SUMPS SHALL BE FITTED WITH A BACKFLOW PREVENTER.
- WATER SERVICES SHALL BE 50mmØ TYPE 'K' SOFT COPPER IN STANDARD BEDDING. INSTALLATION AS PER CITY OF CAMBRIDGE SS-200. MINIMUM COVER SHALL BE 2.0m.
- WATERMAIN PIPE TO BE PVC SDR-18CL 150 CONFIRMING TO CSA B137.3 INCLUDING 12 GAUGE 7 STRAND COPPER TRACER WIRE BETWEEN HYDRANTS OR OTHER CONDUCTING APPURTENANCES. PIPE SHALL HAVE A MINIMUM COVER OF 2.0m. ALL WATERMAIN JOINTS TO BE APPROVED PUSH ON MECHANICAL OR FLANGE TYPE AS REQUIRED FOR 1000 Kpa RATED PRESSURE. CORROSION PROTECTION IS REQUIRED FOR ALL FITTINGS, VALVES AND HYDRANTS (HYPROTEC OR EQUAL). ON-SITE HYDRANTS ARE TO HAVE A RED BARREL AND GREEN PORTS AND CAP.
- ALL GATE VALVES SHALL BE RESILIENT SEAT NON-RISING STEM, 50mm OPERATING NUT AND CONFORM TO AWWA C509. VALVES SHALL OPEN COUNTER CLOCKWISE.
- APPROPRIATE BACKFLOW PREVENTION DEVICE TO BE INSTALLED ON THE DISCHARGE SIDE OF WATER METER, TO THE SATISFACTION OF THE CITY OF CAMBRIDGE PLUMBING INSPECTOR.
- THE CONSTRUCTION OF ALL PLUMBING WORK SHALL BE CARRIED OUT BY A DRAIN CONTRACTOR OR PLUMBING CONTRACTOR LICENSED BY THE CITY OF CAMBRIDGE TO PERFORM PLUMBING WORK.
- GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE CITY OF CAMBRIDGE BUILDING DEPARTMENT TO COMPLETE THE REQUIRED INSPECTIONS ON THE INSTALLATION OF STORM, SANITARY AND WATER SERVICES.
- IT IS THE OWNER'S RESPONSIBILITY TO CONDUCT ROUTINE INSPECTION AND MAINTENANCE OF ALL SITE SERVICES CONSTRUCTED ON THE OWNER'S PROPERTY.
- THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR THE SUPPLY, INSTALLATION, MAINTENANCE, REMOVAL/DISPOSAL AND REMOVAL/RE-INSTALLATION OF ALL SEDIMENT AND EROSION CONTROL DEVICES DETAILED ON THIS PLAN UNTIL THE COMPLETION OF CONSTRUCTION.
- SEDIMENT AND EROSION CONTROLS TO BE INSTALLED AS FOLLOWS:
 - ALL CATCHBASIN GRATES TO BE WRAPPED IN FILTER FABRIC
 - SILT FENCING AS PER DETAIL TO BE INSTALLED ALONG PERIMETER OF THE SITE PRIOR TO THE START OF CONSTRUCTION
- THE SITE WORKS CONTRACTOR WILL BE RESPONSIBLE FOR THE RESTORATION OF ALL DISTURBED AREAS WITHIN THE LIMITS OF CONSTRUCTION.
- IT IS THE OWNER'S RESPONSIBILITY TO CONDUCT ROUTINE INSPECTION AND MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES INSTALLED OR CONSTRUCTED ON THE OWNER'S PROPERTY.
- ALL WORKS ON MUNICIPAL EASEMENTS OR THE MUNICIPAL RIGHT-OF-WAY, INCLUDING CURB CUTS OR FILLS, CULVERT SIZING AND PLACEMENT AND SERVICE LATERALS TO THE PROPERTY LINE TO BE PERFORMED BY CITY FORCES UPON APPLICATION BY THE OWNER OR HIS AGENT.
- REGION OF WATERLOO WORK PERMIT REQUIRED FOR ALL WORKS WITHIN THE RIGHT OF WAY.

GRADING

- THE GRADING PLAN IS TO BE READ WITH THE SITE SERVICES DRAWINGS.
- CONTRACTOR TO RESTORE AREAS ON PUBLIC R.O.W. OR ADJACENT LANDS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.
- ALL DRIVEWAY AND GRADING MATERIAL AND CONSTRUCTION METHODS MUST CONFORM TO CURRENT CITY STANDARDS AND SPECIFICATIONS.
- ALL FILL WITHIN THE SITE TO BE COMPACTED TO A MIN. OF 98% Std. PROCTOR DRY DENSITY. ALL FILL WITHIN THE SITE PARKING AREA TO BE COMPACTED TO A MIN. OF 95% SPD. THE SUITABILITY OF ALL FILL MATERIALS ARE TO BE CONFIRMED BY A RECOGNIZED SOILS CONSULTANT TO THE DIRECTOR OF PUBLIC WORKS PRIOR TO INSTALLATION OF ANY ROAD BASE MATERIALS.
- LANDSCAPING SHALL NOT ENCROACH ON BOULEVARD NOR SHALL BOULEVARD GRADES BE ALTERED.
- SILT FENCE(S) TO BE INSTALLED AND MAINTAINED TO PREVENT SILT FLOWING ONTO ADJACENT LANDS. SILTATION CONTROL SHALL BE ERECTED PRIOR TO ANY GRADING OR CONSTRUCTION AND SHALL BE IN GOOD REPAIR THROUGHOUT THE CONSTRUCTION AND GRADING PHASES.
- ANY CHANGES IN GRADES, CATCH BASINS, SERVICES LATERALS, STORM AND SANITARY SEWERS REQUIRE THE APPROVAL OF GM BLUEPLAN ENGINEERING LIMITED.
- THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF GM BLUEPLAN ENGINEERING LIMITED.
- ALL LANDSCAPING TO BE INSTALLED AS SOON AS POSSIBLE OR PRIOR TO THE END OF THE FIRST GROWING SEASON. LANDSCAPING TO BE MAINTAINED UNTIL IT IS ESTABLISHED.
- ALL COMPACTION TO BE CERTIFIED BY A GEOTECHNICAL CONSULTANT.
- ALL CURBS ARE TO BE 150mm ABOVE THE PROPOSED GUTTER LINE (GL) UNLESS NOTED OTHERWISE.
- PAVEMENT GRADE SHALL BE MIN. 0.5%, MAX. 8%.
- DRAINAGE SWALE GRADE SHALL BE MIN. 2%, MAX. 6%.
- SLOPES IN LANDSCAPE AREAS AND ON BERMS SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL, UNLESS NOTED OTHERWISE.

GENERAL TESTING & INSPECTION NOTES

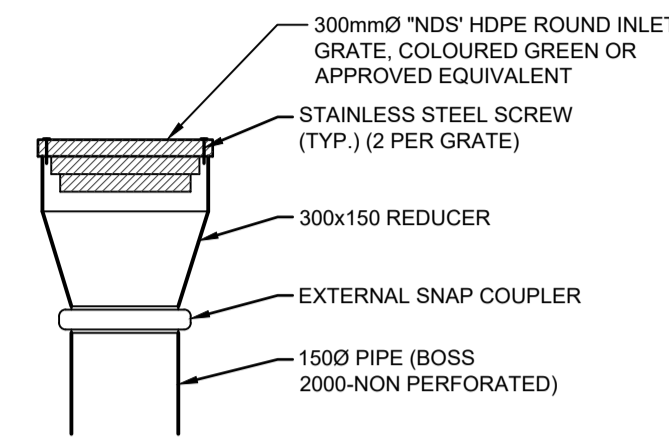
- TESTING OF ALL SERVICES BY GENERAL CONTRACTOR.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONTACTING GM BLUEPLAN ENGINEERING LIMITED FOR THE COMPLETION OF ALL REQUIRED SITE INSPECTIONS.
- ALL STORM SEWERS ARE TO BE MANDREL TESTED PRIOR TO FINAL ACCEPTANCE BY THE ENGINEER. ALL MANDREL TESTING AS PER OPS 410.
- ALL STORM REQUIRE FIELD INSPECTION BY THE SITE SERVICING ENGINEERING DURING INSTALLATION INSPECTION SERVICES REQUIRE A MINIMUM OF 4 HOURS NOTICE.

SERVICING NOTES - SANITARY

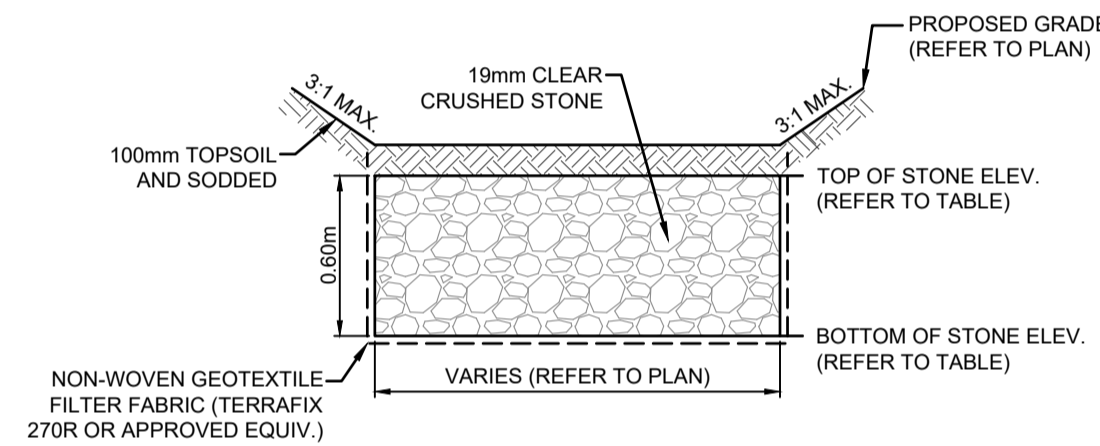
- ALL SANITARY SEWERS ARE TO BE PVC-DR 35 IN ACCORDANCE WITH CSA-B182.2, ASTM D-2779 AND ASTM D-3034 OR LATEST REVISIONS, RUBBER GASKET. SERVICES TO BE PVC-DR 26.
- EXISTING SEWER INVERTS, MATERIAL TYPE, AND SIZE TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL RELOCATION, RECONSTRUCTION AND RESTORATION TO BE PERFORMED TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
- PROVIDE WATER TIGHT COVERS FOR SANITARY MANHOLES LOCATED IN PONDING AREAS.
- PRECAST MANHOLES TO BE MANUFACTURED TO REQUIREMENTS OF CSA A257.4 AND A.S.T.M. DESIGNATION C478M. 1200Ø MANHOLES AS PER OPSD 701.010, 1500Ø MANHOLES AS PER OPSD 701.011 MANHOLE FRAMES AND COVERS AS PER OPSD 401.010 TYPE 'A'.
- BENCHING AS PER SD-44, TO SPRING LINE OF PIPE.
- BEDDING FOR PVC SANITARY SEWERS AS PER SD-29. GRANULAR 'A' COMPACTED TO 95% SPMD.
- ALL CONNECTIONS WITH PAVED PORTIONS OF EXISTING ROADS TO BE BACKFILLED WITH GRANULAR MATERIAL OR LATEST CITY SPECIFICATIONS AND COMPACTED TO 95% SPMD.
- ALL TESTING OF SANITARY SERVICES TO BE IN ACCORDANCE WITH O.B.C. - 2012 AND CITY SPECIFICATIONS.
- ALL CONNECTIONS TO SANITARY MANHOLES TO BE MADE WITH A KOR-N-SEAL ADAPTOR.

SERVICING NOTES - WATER

- WATER SERVICE PIPE TO BE PVC-DR 18 CL 150 CONFORMING TO CSA B137.3, INCLUDING 12 GAUGE 7 STRAND TRACER WIRE BETWEEN HYDRANTS OR OTHER CONDUCTING APPURTENANCES. PIPE SHALL HAVE A MINIMUM COVER OF 2.0m. ALL WATERMAIN JOINTS TO BE APPROVED PUSH-ON, MECHANICAL OR FLANGE TYPE JOINTS AS REQUIRED FOR 1000 Kpa RATED PRESSURE. CORROSION PROTECTION FOR ALL FITTINGS, VALVES AND HYDRANTS (HYPROTEC OR EQUAL).
- BEDDING AS PER SD-29, TYPE 1 & 2, GRANULAR 'A' COMPACTED TO 98% SPMD.
- ALL WATERMAIN FITTINGS AND APPURTENANCES TO BE SELECTED FROM THE CITY'S APPROVED MATERIAL LIST FOR WATERMANS.
- WATERMANS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 0.5m AND HORIZONTAL SEPARATION OF 2.4m BETWEEN ANY SEWER OR MANHOLE.
- ALL WORKS WITHIN CITY RIGHT-OF-WAY TO BE PERFORMED BY CITY FORCES UPON APPLICATION.
- CONTRACTOR TO CONFIRM THE SIZE, LOCATION AND MATERIAL TYPE OF EXISTING WATER SERVICE AND WATERMAIN PRIOR TO COMMENCING ANY WORK.
- EXISTING WATERMAIN OBVERTS TO BE CONFIRMED ON SITE AT THE TIME OF CONSTRUCTION.
- ALL RELOCATION, RECONSTRUCTION AND RESTORATION TO BE PERFORMED TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
- ALL CONNECTIONS WITH PAVED PORTIONS OF EXISTING ROADS TO BE BACKFILLED WITH GRANULAR 'A' MATERIAL OR AS PER LATEST CITY SPECIFICATIONS.
- FLUSHING, SWABBING, AND TESTING OF WATERMAIN AS PER ONTARIO PROVINCIAL STANDARD SPECIFICATIONS.
- VALVE AND BOX TO BE INSTALLED AS PER SD-24.
- HYDRANTS SHALL CONFORM TO STD-W3 AND SHALL BE DARLING CENTURY STYLE BY CANADA VALVE COMPANY LIMITED OR McAVITY STYLE M-67 BY CRANE (CANADA) LIMITED AND SHALL BE INSTALLED AS PER SD-25.
- HYDRANTS SHALL OPEN COUNTER CLOCKWISE AND BE YELLOW WITH GREEN BONNETS AND HOSE CAPS.
- ALL WATERMAIN MATERIALS, INSTALLATION METHODS AND TESTING SHALL CONFORM TO OBC-2012 AND CITY SPECIFICATIONS.

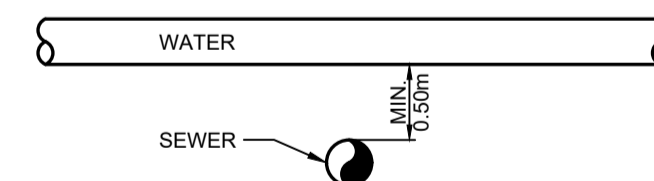


INLINE DRAIN DETAIL
N.T.S.

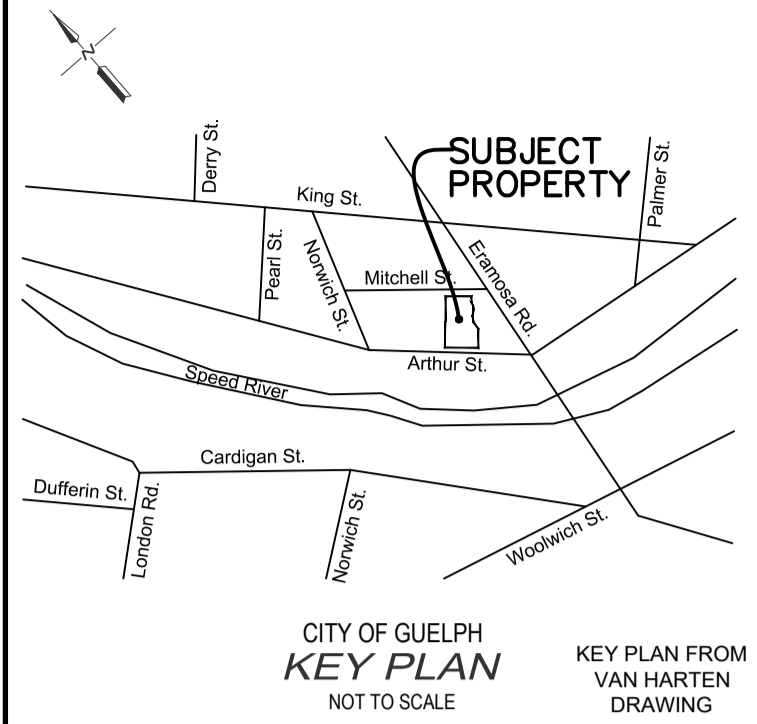


BIOSWALE DETAIL
N.T.S.

BIOSWALE TABLE				
PARCEL	SIZE OF BIOSWALE L x W x D (m)	TOP OF STONE ELEVATION (m)	BOTTOM OF STONE ELEVATION (m)	BEDROCK ELEVATION (m)
1	6.0 x 2.0 x 0.6	322.32	321.72	319.45
2	7.2 x 2.0 x 0.6	322.30	321.70	319.45
3	7.2 x 2.0 x 0.6	321.74	321.14	319.45
4	3.2 x 2.0 x 0.6	321.74	321.14	319.45



TYP. PIPE CROSSING DETAIL
N.T.S.



- NOTES :**
- TOPOGRAPHIC SURVEY COMPLETED BY VAN HARTEN SURVEYING, DATED APR. 30, 2024.
 - LEGAL INFORMATION, EXISTING GAS UTILITIES AND EXISTING HYDRO UTILITIES PROVIDED IN TOPOGRAPHIC SURVEY BY VAN HARTEN SURVEYING, DATED APR. 30, 2024.
 - EXISTING INFRASTRUCTURE INFORMATION FOR STORM SEWERS, SANITARY SEWERS AND WATERMAIN ON ARTHUR STREET DERIVED FROM CITY OF GUELPH DRAWING N-834, AS-CONSTRUCTED DATED AUG. 31, 1993.
 - MONITORING WELL INFORMATION PROVIDED IN GEOTECHNICAL REPORT BY CMT ENGINEERING, DATED MAR. 11, 2024.
 - SITE PLAN PREPARED BY VAN HARTEN SURVEYING, DATED JAN. 9, 2025.

BENCH MARKS FROM TOPOGRAPHIC SURVEY:
ELEVATIONS ARE BASED ON GNSS OBSERVATIONS FROM PERMANENT REFERENCE STATIONS IN THE NAD83 (CSRS-2010) COORDINATE SYSTEM, WITH HEIGHTS CONVERTED TO ORTHOMETRIC ELEVATIONS ON THE CGVD28 DATUM (1978 ADJUSTMENT) WITH GEOID MODEL HTv2.0, AS SUPPLIED BY NATURAL RESOURCES CANADA.

- SITE BENCHMARK:**
- CUT CROSS IN SIDEWALK ON NORTH SIDE OF MITCHELL STREET HAVING AN ELEVATION OF 324.48 METRES.
 - SPIKE IN HYDRO POLE ON SOUTH SIDE ARTHUR STREET HAVING AN ELEVATION OF 322.07 METRES.

THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.
BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM.



NO.	DATE	REVISION DESCRIPTION	CHKD
3	2025-01-15	REVISED AND RE-ISSUED FOR APPROVAL	A.E.K.
2	2024-06-12	ISSUED FOR APPROVAL	A.E.K.
1	2024-06-03	ISSUED FOR REVIEW	A.E.K.



8 MITCHELL STREET
MEZCON CONSTRUCTION LTD.

CITY OF GUELPH

NOTES & DETAILS PLAN

DRAWN BY :	APPROVED BY :	PROJECT NO. :	DRAWING NO. :
P.L.	A.E.K.	424051	ND-1
DESIGNED BY :	DATE :	SCALE :	
P.L.	MAY 2024	1:150	

FILE # 2024-06-12 MEZCON CONSTRUCTION COMPANY, 1500 DUFFERIN STREET, GUELPH, ONTARIO, CANADA
 ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF MEZCON CONSTRUCTION COMPANY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF MEZCON CONSTRUCTION COMPANY.