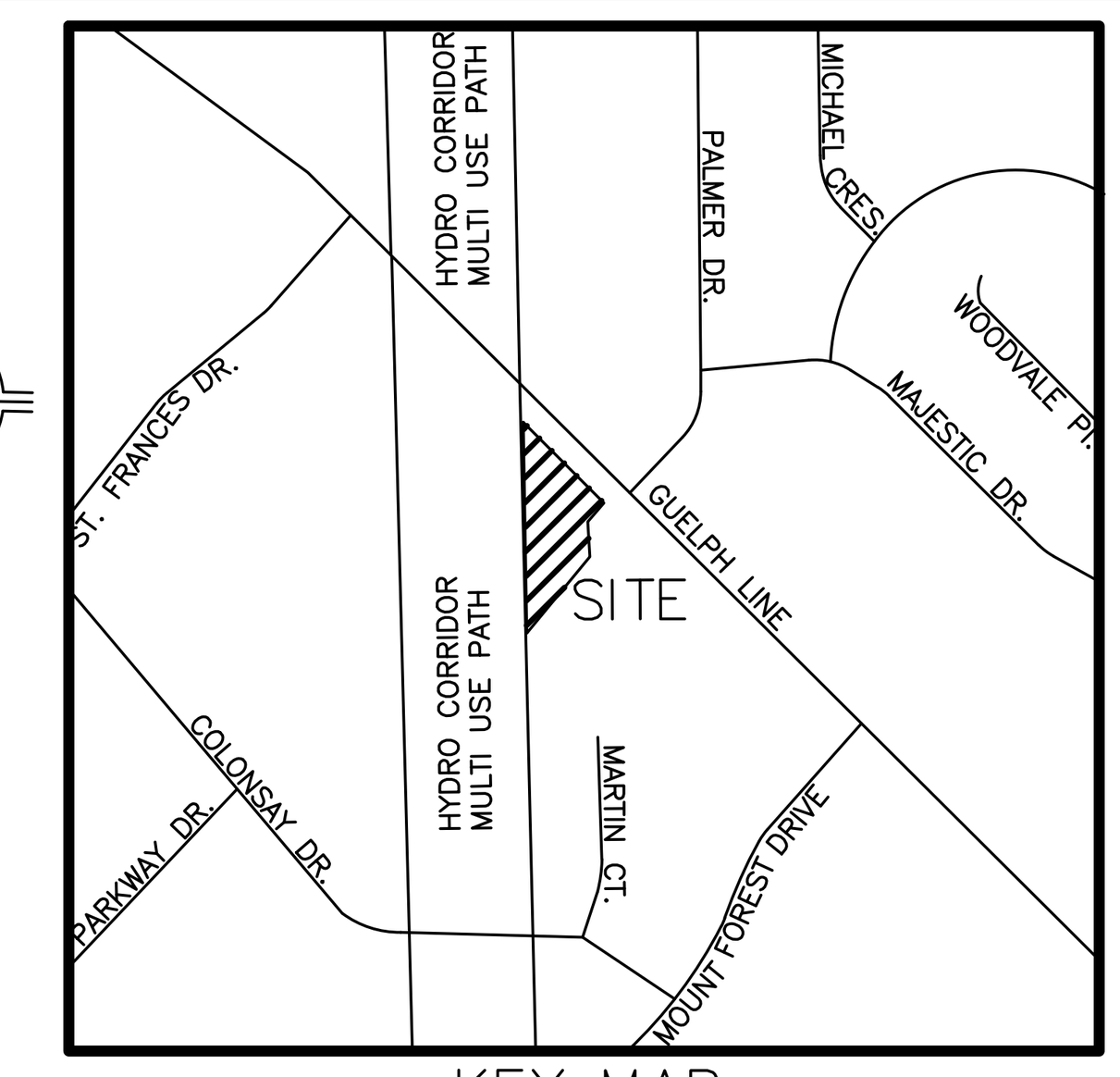


LEGEND:

- EXISTING GROUND ELEVATION
- (209.00) PROPOSED GROUND ELEVATION
- 209.00EX PROPOSED ELEVATION TO MATCH EXISTING
- 2.0% PROPOSED DIRECTION OF SHEET FLOW
- EXISTING CATCHBASIN
- EXISTING STORM/SANITARY MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED STORM/SANITARY MANHOLE
- PROPOSED GATE VALVE
- EXISTING DIRECTION OF DRAINAGE
- PROPOSED EMERGENCY OVERLAND FLOW ROUTE
- PROPOSED DRAINAGE BREAK LINE
- PROPOSED SILTATION CONTROL FENCE
- PROPOSED CATCHBASIN SILT SACK
- PROPOSED SWALE
- PROPOSED SWALE WITH SUBDRAIN



KEY MAP
N.T.S.

BENCH MARK NOTE:

CITY OF BURLINGTON BENCHMARK NO.397

BRASS PLAQUE ON THE EASTERLY FACE OF POSTAL STATION "B" ON THE WEST SIDE GUELPH LINE OPPOSITE PALMER DRIVE. PLAQUE IS LOCATED ,.25M SOUTH WESTERLY FROM THE SOUTHEAST CORNER AND 0.45 M ABOVE GRADE.

ELEVATION = 131.500M (DATUM CGVD 1928:1978)

NOTES TO CONTRACTOR:

1. INSPECTION
CONTRACTOR IS RESPONSIBLE FOR CONTACTING ENGINEER 48 HRS PRIOR TO COMMENCING WORK TO ARRANGE FOR INSPECTION. ENGINEER TO DETERMINE DEGREE OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF UNDERGROUND SERVICE INSTALLATION AS MANDATED BY ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
2. CONFIRMATION OF EXISTING INVERTS
72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING UTILITIES AND EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED.

NO.	DATE	BY	REVISIONS

NOTES TO CONTRACTOR:

1. CONTRACTORS AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING.
2. ANY INCONSISTENCIES AND OMISSIONS FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE COMMENCING THE WORK.
3. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ALL FINDINGS TO THE ENGINEER. ONCE CONSTRUCTION HAS COMMENCED, THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS.
4. THE POSITIONS OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVER-GROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEMSELVES OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
5. ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED, REUSED, OR REVISED WITHOUT THE WRITTEN CONSENT OF S. LLEWELLYN AND ASSOCIATES LIMITED.

DESIGN	YM	CHK'D	SN	DATE
DRAWN	YM	CHK'D	SN	MAR. 10, 22

SCALE 1:200 (0 5 10 20)

APPROVALS

STAMP: LICENSED PROFESSIONAL ENGINEER — S. J. NELSON — 100228748 — Mar.11/22 — PROVINCE OF ONTARIO

S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS
Tel. (905) 631-6978
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3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

CLIENTS
INFINITY DEVELOPMENT GROUP
2275 UPPER MIDDLE ROAD, OAKVILLE, ON

PROJECT NAME
1396 GUELPH LINE
BURLINGTON, ON

TITLE
PRELIMINARY GRADING AND EROSION CONTROL PLAN

PROJECT No.	DRAWING No.
22024	C101

S:\22024\WORKING\Current\22024-Grading and Servicing Plan.dwg

SAWCUT, REMOVE & RESTORE EX. ASPHALT, CONCRETE & LANDSCAPED AREAS TO EXISTING CONDITION OR BETTER (TYP.) (AS PER CITY OF BURLINGTON STANDARD S-114, S114A & S114B OR S-115 & S-115A IF CONCRETE ROAD BASE IS PRESENT)

PROP. ASPHALT LAP JOINT (TYP.)

CONNECT PROP. 30.0m-250mmø STM @ 1.0% TO EX. 750mmø STM
EX. INV=128.09±
PROP. INV=129.32

EX. 75mmø HYDRO (UNDERGROUND)

EX. CONCRETE CURB

EX. 100mmø BELL

EX. GAS MAIN

EX. 400mmø WTM

EX.CB
T/G 130.80

PROP. DEPRESSED CURB & GUTTER AS PER OPSD 600.040

GUELPH LINE

EX. 350mmø CI WTM (ABANDONED)

EX. 86.9m-750mmø STM @ 0.9%

PROP. MH1
(HYDROSTORM HS6)
T/G 131.30
NE.INV.=129.62
S.INV.=129.65

PROP. 4.5m-250mmø STM @ 1.0%
INV. 129.70

CONNECT PROP. 150mmø FIRE WTM TO EX. 400mmø WTM
(TAP BY HALTON REGION FORCES ONLY)

PROX. CENTRE LINE OF ROAD

ABANDON EX. WATER SERVICE AS PER CITY OF BURLINGTON STANDARDS

PROP. CAST-IN-PLACE STORMWATER STORAGE TANK C/W ACCESS LID, PUMP & 140mmø OUTLET (DESIGN BY OTHERS)
TOTAL VOLUME=161m³
100-YEAR REQ'D VOLUME=117m³
TOP OF TANK=130.35
140mmø OUTLET INVERT=129.70
BOTTOM OF TANK=127.79

PROP. 100mmø DOM. WTM

EX. PARKING LOT

MECH. & ELEC.

EX. CONCRETE WALKWAY

EX. HYDRANT

EX. MH

EX. LS

EX. BELL MANHOLE
T/G=131.00

EX. BELL MANHOLE
T/G=131.05

EX. BELL

EX. WTM (APPROX. LOCATION)

EX. 75mmø HYDRO (UNDERGROUND)

EX. 100mmø BELL

EX. GAS MAIN

CONNECT PROP. 12.0m-200mmø SAN @ 1.0% TO EX. SAN MH INCLUDING RE-BENCHING
PROP. INV=127.62

EX. SANMH
T/G=130.49
SE INV. 127.56

EX. STMMH
T/G=130.66
W INV. 127.57
E INV. 127.54

EX. 65.7m 825mmø STM @ 0.9%

EX. 400mmø WTM

EX. 200mmø SAN

EX.CB
T/G 130.40

EX. BUS SHELTER

EX. CABLE TV BOX

EX. STOP LIGHT

EX. TP

EX. 300mmø WTM

EX. SIGN

EX.VC
T/G 130.56

EX. CURB CUT

EX. BOARD FENCE

PROP. AD1
(NYLOPLAST C/W FLEXSTORM FILTER)
T/G 130.95

EX. ASPHALT

EX. ASPHALT PARKING

PROP. BUILDING OVERHANG

PROP. AD2
(NYLOPLAST C/W FLEXSTORM FILTER)
T/G 131.95

EX. CONCRETE WALKWAY

450mmø NYLOPLAST INSPECTION PORT C/W SUMP INSERT
T/G=130.90
SW INV. 127.75
NE INV. 127.74
(CONTRACTOR TO PROVIDE SHOP DRAWINGS)

EX. LANDSCAPED AREA

CONCRETE BARRIER CURB (AS PER OPSD 600.110)

EX. BF

F.F.E

PROP. 1.5m- 200mmø SAN @ 1.0% INV=127.77

LIMIT OF UNDERGROUND

EX. CONCRETE

EX. CONCRETE CURB (TO BE REMOVED)

EX. ASPHALT AREA (TO BE REMOVED)

PROP. 11-STOREY RESIDENTIAL BUILDING
FFE=131.45
P1=127.79
P2=124.74
P2=121.69

#1396
EX. 1 STOREY BRICK BUILDING

PROP. AD7
(NYLOPLAST)
T/G 131.20

PROP. CB1
(OPSD 705.010)
T/G 130.05
E.INV.=128.55

EX. ASPHALT

EX. SIDEWALK

EX. BRICK

EX.CB
T/G=130.25
E. INV. 129.43
(TO BE REMOVED)

PROP. 1.0m- 250mmø STM @ 1.0% INV=128.54
(TO CONNECT TO INTERNAL MECHANICAL SYSTEM AND BE PUMPED TO THE 250mmø STORM SERVICE, BYPASSING THE STORAGE TANK)

PROP. AD3
(NYLOPLAST C/W FLEXSTORM FILTER)
T/G 130.95

EX. CONCRETE CURB

EX. 0.3ø DT

EX. CONCRETE DOCK

EX. ROOF OVERHANG

EX. CONCRETE CURB

EX. CHAIN LINK FENCE (TO BE REMOVED)

EX.CB
T/G=130.27

MECH. & ELEC.

EX. 0.4ø DT

EX. 0.3ø DT

EX. 0.2ø DT

EX. 0.5ø DT

EX. 0.2ø CT

EX. LS

EX. ASPHALT

EX. PAD MOUNTED TRANSFORMER (TO BE REMOVED)

EX. CB
T/G=129.68

EX.CB
(NOT SURVEYED)
T/G=129.31
S.INV.=128.78

#1380
EX. 2 STOREY BRICK TOWNHOMES

PROP. AD5
(NYLOPLAST)
T/G 131.30

EX. CHAIN LINK FENCE (TO BE REMOVED)

MECH. & ELEC.

EX. CB
T/G=129.88

EX. 0.4ø DT

EX. 0.3ø DT

PROP. CONCRETE RAMP (TO BE HEATED)

PROP. BUILDING OVERHANG

PROP. AD4
(NYLOPLAST C/W FLEXSTORM FILTER)
T/G 131.00

EX. CHAIN LINK FENCE

EX. TREE

EX. ASPHALT

EX. CONCRETE CURB

PROP. RETAINING WALL
(DESIGN BY OTHERS)
(C/W RAILING)

EX. 0.3ø DT

EX. 2 STOREY BRICK TOWNHOMES
F.F.E=150.82

EX. RESIDENTIAL LANDS

EX. BOARD FENCE

EX. LS

EX. ASPHALT

PROP. RETAINING WALL
(DESIGN BY OTHERS)
(C/W RAILING)

PROP. RETAINING WALL TO TIE INTO THE UNDERGROUND
(DESIGN BY OTHERS)

LIMIT OF UNDERGROUND

EX. EDGE BRUSH

EX. CONCRETE CURB

EX. 0.25ø DT

EX. 0.25ø DT

EX. 0.25ø DT

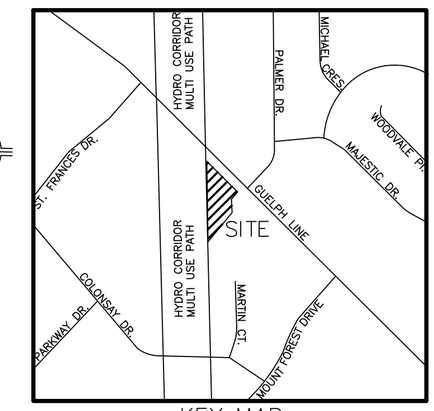
EX. 0.25ø DT

EX. FRAME SHED

EX. FRAME GARAGE
F.F.E=130.22

EX. CB
T/G=129.45

EX. HYDRO CORRIDOR



KEY MAP
N.T.S.

LEGEND:

- EXISTING CATCHBASIN
- EXISTING STORM/SANITARY MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED STORM/SANITARY MANHOLE
- PROPOSED GATE VALVE
- PROPOSED WATER METER
- PROPOSED BACKFLOW PREVENTOR
- SEWER CROSSING
- PROPOSED SEWER INSULATION
- PROPOSED ROAD RESTORATION

BENCH MARK NOTE:

CITY OF BURLINGTON BENCHMARK NO.397

BRASS PLAQUE ON THE EASTERLY FACE OF POSTAL STATION "B" ON THE WEST SIDE GUELPH LINE OPPOSITE PALMER DRIVE. PLAQUE IS LOCATED ,.25M SOUTH WESTERLY FROM THE SOUTHEAST CORNER AND 0.45 M ABOVE GRADE.

ELEVATION = 131.500M (DATUM CGVD 1928:1978)

NO.	DATE	BY	REVISIONS

NOTES TO CONTRACTOR:

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NOTES TO CONTRACTOR:

1. INSPECTION
   CONTRACTOR IS RESPONSIBLE FOR CONTACTING ENGINEER 48 HRS PRIOR TO COMMENCING WORK TO ARRANGE FOR INSPECTION. ENGINEER TO DETERMINE DEGREE OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF UNDERGROUND SERVICE INSTALLATION AS MANDATED BY ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
2. CONFIRMATION OF EXISTING INVERTS
   72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING UTILITIES AND EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED.

DESIGN	YM	CHK'D	SN
DRAWN	YM	CHK'D	SN

DATE: MAR. 10, 22

SCALE 1:200 (0, 5, 10, 20)

APPROVALS

STAMP: LICENSED PROFESSIONAL ENGINEER — Scott Nelson — S. J. NELSON — 100228748 — Mar.11/22 — PROVINCE OF ONTARIO

S. LLEWELLYN & ASSOCIATES LIMITED
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3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

CLIENTS

INFINITY DEVELOPMENT GROUP

2275 UPPER MIDDLE ROAD, OAKVILLE, ON

PROJECT NAME

1396 GUELPH LINE
BURLINGTON, ON

TITLE

PRELIMINARY SERVICING PLAN

PROJECT No.	DRAWING No.
22024	C102

S:\22024\WORKING\Current\22024-Grading and Servicing Plan.dwg

GENERAL NOTES:

1. CONSTRUCTION OF SEWERS, AND RELATED APPURTENANCES SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE CURRENT STANDARD DRAWINGS OF THE CITY OF BURLINGTON, THE REGIONAL MUNICIPALITY OF HALTON AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD). THE TOWN AND THE REGION'S DRAWINGS SHALL TAKE PRECEDENCE OVER THE OPSD DRAWINGS.
2. ONTARIO PROVINCIAL STANDARD DRAWINGS TO BE READ IN CONJUNCTION WITH THE REGION OF HALTON REVISIONS.
3. RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE CONSTRUCTED AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR CONSTRUCTION.
5. FOR ALL SEWERS AND WATERMAIN IN FILL SECTIONS, THE COMPACTION SHALL BE VERIFIED PRIOR TO LAYING OF PIPE.
6. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE REGIONAL ENGINEER, CITY OF BURLINGTON OR THE ENGINEER.
7. ALL EXCAVATIONS TO BE BACKFILLED WITH SELECT NATIVE MATERIAL, APPROVED BY THE ENGINEER, TO 95% SPD.
8. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING SILT CONTROL DEVICES AS SHOWN ON THE DRAWINGS AND AS DIRECTED BT THE ENGINEER.
9. TREE PROTECTION PROCEDURES TO BE IMPLEMENTED IN ACCORDANCE WITH CITY OF BURLINGTON STANDARDS.
10. THESE PLANS ARE NOT TO BE USED FOR CONSTRUCTION UNTIL SEALED BY THE ENGINEER AND INDICATED ISSUED FOR CONSTRUCTION ON THE DRAWING.
11. THIS/THESE PLAN(S) IS/ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF S. LLEWELLYN AND ASSOCIATES LIMITED.
12. INFORMATION REGARDING ANY EXISTING SERVICES AND/OR UTILITIES SHOWN ON THE APPROVED SET OF CONSTRUCTION DRAWINGS ARE FURNISHED AS THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL INTERPRET THIS INFORMATION AS HE SEES FIT WITH THE UNDERSTANDING THAT THE OWNER AND HIS AGENTS DISCLAIM ALL RESPONSIBILITY FOR ITS ACCURACY AND /OR SUFFICIENCY. THE CONTRACTOR SHALL ASSUME LIABILITY FOR ANY DAMAGE TO EXISTING WORKS.
13. SITE PLAN INFORMATION TAKEN FROM PLANS PREPARED BY ZEDD ARCHITECTURE.
14. THIS/THESE PLAN(S) TO BE READ IN CONJUNCTION WITH THE FUNCTIONAL SERVICING REPORT (FSR) PREPARED BY S. LLEWELLYN AND ASSOCIATES LIMITED.
15. THIS PLAN TO BE USED FOR SERVICING AND GRADING ONLY, FOR BUILDING LOCATION REFER TO TO THE SITE PLAN.
16. MUNICIPAL APPROVAL OF THESE DRAWINGS IS FOR MATERIAL AND COMPLIANCE WITH CITY OF BURLINGTON AND PROVINCIAL SPECIFICATIONS AND STANDARDS ONLY. APPROVAL AND INSPECTION OF THE WORKS BY THE CITY OF BURLINGTON STAFF DOES NOT CERTIFIY THE LINE AND GRADE OF THE WORKS NOR RELIEVE THE CONTRACTOR OF CERTIFICATION OF ALL WORKS BY THE OWNER'S ENGINEER.
17. ALTERNATE MATERIALS MAY BE ACCEPTABLE PROVIDED WRITTEN APPROVAL HAS FIRST BEEN OBTAINED FROM THE CITY OF BURLINGTON AND THE THE ENGINEER.
18. THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNER'S BONDED CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS NORMALLY REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING:
    - ROAD CUT PERMITS
    - SEWER PERMITS
    - APPROACH APPROVAL PERMITS
    - RELOCATION OF SERVICES
    - COMMITTEE OF ADJUSTMENT
    - ENCROACHMENT AGREEMENTS
20. PRIOR TO CONSTRUCTION THE CONTRACTOR MUST:
    i. CHECK AND VERIFIY ALL DIMENSIONS AND EXISTING ELEVATIONS WHICH INCLUDE BUT ARE NOT LIMITED TO THE BENCHMARK ELEVATIONS, EXISTING SERVICE CONNECTIONS, EXISTING INVERTS AND REPORT FINDING IN WRITING TO THE ENGINEER.
    ii. OBTAIN ALL UTILITY LOCATES AND REQUIRED PERMITS AND LICENSES.
    iii. VERIFY ALL FINISHED FLOOR ELEVATIONS AND BASEMENT FLOOR ELEVATIONS WHICH MY APPEAR ON THESE PLANS COMPLY WITH THE FINAL ARCHITECTURAL DRAWINGS.
    iv. CONFIRM ALL DRAWINGS USED FOR CONSTRUCTION ARE OF THE MOST RECENT REVISION.
    v. NOTIFY THE ENGINEER OF THE PROPOSED CONSTRUCTION SCHEDULE FOR COORDINATION OF NECESSARY INSPECTIONS.
21. **THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ENGINEER 48 HOURS PRIOR TO THE COMMENCING SITE WORKS TO ARRANGE FOR INSPECTION. THE ENGINEER SHALL DETERMINE THE EXTENT OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF THE UNDERGROUND SERVICE INSTALLATION AS MANDATED BY THE ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO MAKE SUITABLE ARRANGEMENTS FOR INSPECTION WILL LEAD TO POST CONSTRUCTION TESTING AND INSPECTION AS DETERMINED BY THE ENGINEER, THE COSTS OF WHICH INCLUDING ANY DELAYS IN CONSTRUCTION SHALL BE BOURNE BY THE CONTRACTOR. FULL PAYMENT FOR UN-INSPECTED WORKS MAY BE WITHHELD UNTIL THE COMPLETION OF THE POST CONSTRUCTION INSPECTION AND TESTING TO THE SATISFACTION OF THE ENGINEER.**
22. INSPECTION BY THE OWNER'S ENGINEER IS FOR CERTIFICATION AND GENERAL CONFORMANCE PURPOSES AND DOES NOT CERTIFY LINE AND GRADE OR IMPLY AN ASSURANCE OF QUALITY CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THE INSTALLATION OF THE WORKS TO PROPER LINE, GRADE AND QUALITY TO CURRENT INDUSTRY STANDARDS.
23. ANY UTILITY RELOCATIONS AND RESTORATIONS DUE TO THE DEVELOPMENT TO BE UNDERTAKEN AT THE EXPENSE OF THE OWNER/DEVELOPER AND SHALL BE COORDINATED BY THE CONTRACTOR.
24. ALL RESTORATIONS AND RECONSTRUCTIONS SHALL BE TO COMPLETED TO MATCH EXISTING CONDITIONS OR BETTER AND ARE TO BE PERFORMED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF BURLINGTON.
25. SERVICING CONTRACTOR TO MAINTAIN A "CONFINED TRENCH CONDITION" IN ALL SEWER AND WATERMAIN INSTALLATION TRENCHES.
26. THE SITE SERVICING CONTRACTOR SHALL TERMINATE ALL SERVICES 1.0m FROM THE BUILDING FACE.
27. NO BLASTING WILL BE PERMITTED.

ROADWORKS:

1. APPROVED FILL, FREE OF DELETERIOUS AND ORGANIC MATERIAL AND BOULDERS SHALL BE COMPACTED TO A DRY DENSITY NOT LESS THAN 95% THAN THE STANDARD PROCTOR DENSITY. AFTER COMPACTION, SOIL DENSITY TESTS SHALL BE CONDUCTED TO ENSURE ADEQUATE COMPACTION AND STABILITY OF THE FILL AND TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER.
2. SUBGRADE TO BE PROOF ROLLED PRIOR TO PLACEMENT OF SUB BASE. UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED WITH SELECT FILL OR GRANULAR "B" AND COMPACTED TO 98% SPD.
3. ASPHALTIC CONCRETE TO BE COMPACTED TO 97% MARSHALL DENSITY.
4. PAVEMENT STRUCTURE FOR INTERNAL ROADS SHALL CONSIST OF COMPACTED THICKNESSES OF: 40mm HL3 SURFACE ASPHALT 60mm HL8 BASE BINDER ASPHALT 150mm GRANULAR "A" BASE COURSE 250mm GRANULAR "B" SUB-BASE COURSE
5. BOULEVARDS TO BE SODDED WITH #1 NURSERY SOD ON A MINIMUM 150mm OF SELECT TOPSOIL.
6. MANHOLE FRAMES AND COVERS AND WATER VALVE BOXES SHALL BE SET FLUSH WITH BASE COURSE ASPHALT AND ADJUSTED TO FINAL GRADE AFTER INSTALLATION OF SURFACE ASPHALT AS PER CITY OF BURLINGTON STANDARD DRAWINGS S-130.
7. TRAFFIC CONTROL SHALL BE MAINTAINED AT ALL TIMES FOR WORKS ON EXISTING ROADWAYS TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING. THE EXPENSE FOR THE ERECTION OF SIGNS, DELINEATORS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE BORNE BY THE CONTRACTOR.
8. STANDARD PARKING SPACES SHALL BE 2.6mx5.6m.

SANITARY SEWERS:

1. SANITARY SEWERS SHALL BE PVC. PVC PIPE IS TO BE BELL AND SPIGOT AND COMPLY TO ASTM D-3034 WITH MINIMUM SDR 35.
2. MINIMUM BEDDING REQUIREMENTS FOR ALL SANITARY SEWER MAINS AND RELATED CONNECTIONS IN A SINGLE TRENCH SHALL BE CLASS B GRANULAR BEDDING AS PER OPSD 802.010 UNLESS OTHERWISE NOTED.
3. SANITARY SEWER MANHOLES FRAME AND COVER AS PER OPSD 401.010.
4. TAPPING AT EXISTING SANITARY SEWERS SHALL BE UNDERTAKEN IN ACCORDANCE WITH REGION OF HALTON REQUIREMENTS.
5. ALL SEWERS TO BE VIDEO INSPECTED.
6. ALL SEWERS TO BE FLUSHED PRIOR TO VIDEO INSPECTION.
7. ALL PVC SEWERS ARE TO BE TESTED FOR DEFLECTION (MANDREL PASSAGE) AFTER INSTALLATION. SANITARY SEWERS SHALL ALSO BE TESTED FOR LEAKAGE (LOW AIR PRESSURE). PRIOR TO ASSUMPTION BY THE CITY, PIPE DEFLECTION TESTING SHALL BE REPEATED.

STORM SEWERS:

1. 300mm-450mm STORM SEWERS SHALL BE PVC, BELL AND SPIGOT AND SHALL COMPLY TO ASTM D-3034 WITH MINIMUM SDR 35.
2. MINIMUM BEDDING REQUIREMENTS FOR ALL SINGLE STORM SEWER MAINS AND ALL RELATED CONNECTIONS SHALL BE HIGH PERFORMANCE CLEAR STONE (HL-8 GRADED) AS PER CITY OF BURLINGTON STANDARD DRAWINGS S-188.
3. STORM SEWER MANHOLES SHALL BE IN ACCORDANCE WITH OPSD 701.010. AND 703.010. FRAME AND COVER AS PER OPSD 401.01 TYPE A. FRAMES TO BE STAMPED "DANGER" AND "STORM".
4. CATCHBASINS SHALL BE IN ACCORDANCE WITH OPSD 705.010. CATCHBASIN MANHOLES SHALL BE IN ACCORDANCE WITH OPSD 701.010 AND 701.030 UNLESS OTHERWISE SPECIFIED. CATCHBASINS TO LOCATED WITHIN LANDSCAPED AREAS TO BE SUMPLESS. FRAME AND COVER FOR CATCHBASINS AND CATCHBASIN MANHOLES SHALL BE AS PER OPSD 400.100 (ROADS) AND PER CITY OF BURLINGTON STANDARD DRAWING S-176 (REAR YARDS).
5. DOUBLE CATCH BASINS SHALL BE IN ACCORDANCE WITH OPSD 705.020 WITH 250mm DIA. LEAD. FRAMES AND COVERS TO BE OPSD 400.11 (ROADS) AND CITY OF BURLINGTON STD. S-176 (REAR YARDS). LEADS TO BE PVC SDR 35.
6. CATCH BASIN AND MANHOLE TOPS SHALL BE INITIALLY SET TO BASE COURSE ASPHALT ELEVATION AND ADJUSTED TO GRADE PRIOR TO PLACEMENT OF TOP LIFT OF ASPHALT.
7. ALL TRENCH EXCAVATIONS ARE TO BE BACKFILLED WITH SELECT NATIVE MATERIAL PLACED IN MAXIMUM 200mm LIFT THICKNESSES WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT AND COMPACTED TO A MINIMUM OF 95% SPD, UNLESS OTHERWISE SPECIFIED.
8. INVERTS OF ALL SWALES TO BE SODDED TO A MINIMUM WIDTH OF 3.0m. ALL OTHER DISTURBED AREAS TO BE TOPSOILED AND SEEDED. SOD SHALL BE #1 NURSERY LAID ON A MINIMUM OF 150mm OF TOPSOIL.
9. ALL SEWERS TO BE VIDEO INSPECTED.
10. ALL SEWERS TO BE FLUSHED PRIOR TO VIDEO INSPECTION.
11. ALL PVC SEWERS (SANITARY AND STORM) ARE TO BE TESTED FOR DEFLECTION (MANDREL PASSAGE) AFTER INSTALLATION. PRIOR TO ASSUMPTION BY THE CITY, PIPE DEFLECTION TESTING SHALL BE REPEATED.

RESTORATIONS:

1. ALL TRENCH EXCAVATIONS WITHIN EXISTING ROAD ALLOWANCES SHALL BE AS BACKFILLED AS PER CITY OF BURLINGTON STANDARD DRAWING S-114 AND S-114A, OR S-115 AND S-115A WHERE CONCRETE ROAD BASE IS PRESENT.
2. EXISTING PRIVATE FENCING IS TO BE MAINTAINED THROUGHOUT CONSTRUCTION. WHERE REMOVAL OR RELOCATION OF FENCING IS NECESSARY IT SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITIONS OR BETTER UNDER THE DIRECTION OF THE ENGINEER.
3. DAMAGED CURB, GUTTER AND SIDEWALK TO BE REPLACED WITH 28 MPa CONCRETE TO EXISTING CONDITIONS OR BETTER.
4. PAVEMENT SURFACE ON EXISTING PLAINS ROAD EAST TO BE REPAIRED BY CONTRACTOR AT THEIR EXPENSE IF DAMAGED BY CONSTRUCTION TRAFFIC.

GRADING NOTES

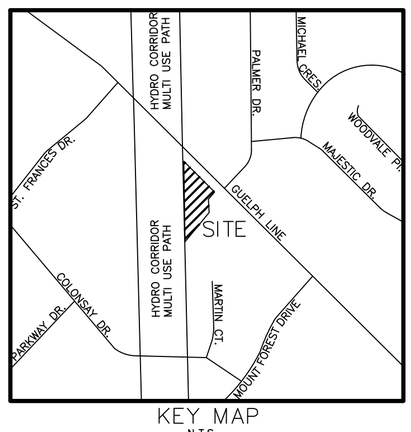
1. ALONG ADJOINING PROPERTIES GRADE TO MEET EXISTING OR PROPOSED ELEVATIONS WITH SODDED SLOPES (MIN. 3H TO 1V) AND/OR RETAINING WALLS AS SPECIFIED.
2. ALL RETAINING WALLS, WALKWAYS, CURBS, ETC., SHALL BE PLACED A MIN. OF 0.3m OFF THE PROPERTY LINE. ALL WALLS 1.0m OR HIGHER SHALL BE DESIGNED BY A P.ENG.
3. SHOULD A RETAINING WALL BE REQUIRED, THE TOP OF WALL ELEVATIONS SHALL BE SET 150mm ABOVE THE PROPOSED SIDE YARD SWALES.
4. RETAINING WALLS 0.6m IN HEIGHT OR GREATER REQUIRE CONSTRUCTION OF A FENCE OR GUARD RAIL AT THE TOP OF THE REAR OF THE WALL. GUARDS FOR RETAINING WALLS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF EXTERIOR GUARDS AS CONTAINED IN THE ONTARIO BUILDING CODE.
5. TOP OF FOUNDATION WALLS FOR BUILDINGS SHALL BE 150mm (MIN) ABOVE FINISHED GRADE.
6. DRIVEWAY SLOPES SHALL NOT BE LESS THAN 2% AND NOT MORE THAN 7.0%. REVERSED SLOPED DRIVEWAYS IN NEW DEVELOPMENTS ARE NOT PERMITTED.
7. IF GRADING IS REQUIRED ON LANDS ADJACENT TO THE DEVELOPMENT WHICH ARE NOT OWNED BY THE DEVELOPER, THEN THE DEVELOPER MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER TO ALLOW THE DEVELOPER TO GRADE ON THE ADJACENT LANDS, OTHERWISE RETAINING WALLS MUST BE USED.
8. THE WRITTEN PERMISSION REQUIRED FROM THE ADJACENT LANDOWNER SHALL BE OBTAINED PRIOR TO ENTERING THE LANDS. SHOULD PERMISSION NOT BE OBTAINED OR IS WITHDRAWN PRIOR TO COMMENCING THE WORK, THEN THE DEVELOPER SHALL LIMIT HIS ACTIVITIES TO THE LIMITS OF THE DEVELOPMENT SITE.
9. DRIVEWAY AND DRIVEWAY APPROACHES SHALL BE LOCATED SUCH THAT HYDRO VAULTS AND OTHER STREET FURNITURE ARE A MIN. OF 1.2m FROM THE DRIVEWAY ENTRANCE CURB RADII.
10. ANY CHANGES IN GRADES AND CATCH BASINS REQUIRE THE APPROVAL OF THE CITY'S MANAGER OF DEVELOPMENT ENGINEERING.
11. ALL DRIVEWAYS FROM PROPERTY LINES FOR THE FIRST 7.5m SHALL BE WITHIN 5% MAXIMUM GRADE, THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 10% MAXIMUM GRADES.

SILTATION AND EROSION CONTROL

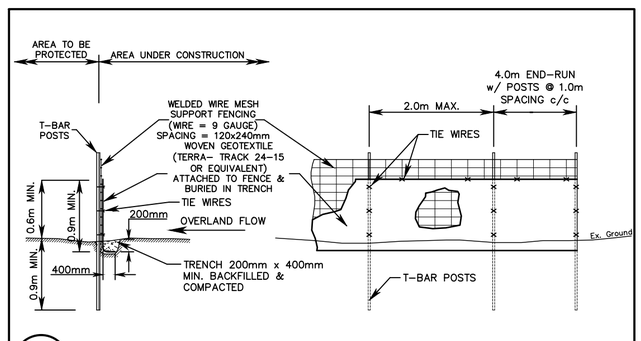
1. SILTATION CONTROL BARRIERS SHALL BE PLACED AS DETAILED.
2. ALL SILTATION CONTROL MEASURES SHALL BE CLEANED AND MAINTAINED AFTER EACH RAINFALL AS DIRECTED AND TO THE SATISFACTION OF THE CITY OF BURLINGTON AND/OR THE HALTON CONSERVATION AUTHORITY.
3. ADDITIONAL SILT CONTROL LOCATIONS MAY BE REQUIRED AS DETERMINED BY THE ENGINEER, THE CITY OF BURLINGTON AND/OR THE HALTON CONSERVATION AUTHORITY.

WATERMAINS:

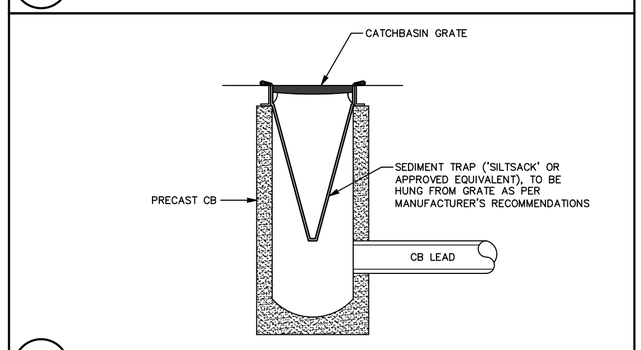
1. FLEXIBLE WATERMAIN PIPE UP TO 300mm DIAMETER TO BE P.V.C. DR-18 AND CONFORM TO A.W.W.A. C-900 WITH MECHANICAL JOINTS AS PER A.W.W.A. C-110, AND TO BE INSTALLED WITH A 10 GAUGE TRACER WIRE.
2. FLEXIBLE PIPE BEDDING TO BE OPSD 802.010 WITH COMPACTED GRANULAR B MATERIAL.
3. MINIMUM COVER TO BE 1.7m TO TOP OF PIPE.
4. DEFLECTION AT JOINTS NOT TO EXCEED 2.5 DEGREES AND SHALL BE EQUAL AT ALL JOINTS.
5. GATE VALVES AND BOXES FOR 150mm DIAMETER WATERMAINS AS PER A.W.W.A. STANDARD C-500 AND ARE TO OPEN TO THE LEFT (COUNTER CLOCKWISE).
6. HYDRANTS SHALL MEET THE REQUIREMENTS OF A.W.W.A. STANDARD C-502 AND SHALL BE SET IN ACCORDANCE WITH REGION OF HALTON, AND CITY OF BURLINGTON BUILDING DEPARTMENT STANDARDS, COMPLETE WITH STEAMER CONNECTIONS. THE 100mm STEAMER PORT SHALL FACE THE FIRE ROUTE AND SHALL BE UNOBSTRUCTED BY ANY PROPOSED LANDSCAPING.
7. ALL FITTINGS TO HAVE MECHANICAL RESTRAINTS THAT MEET UNI-B-13-92.
8. ALL TEMPORARY AND PERMANENT WATERMAIN PLUGS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 1103.01.
9. TAPPING AT EXISTING WATERMAINS SHALL BE UNDERTAKEN IN ACCORDANCE WITH REGION OF HALTON REQUIREMENTS.
10. ALL WATER CUSTOMERS SUPPLIED BY A WATERMAIN TO BE SHUT DOWN SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST 48 HOURS IN ADVANCE OF THE SHUT DOWN AS PER REGION OF HALTON SPECIFICATIONS. NOTIFICATION SHALL TAKE PLACE UNDER THE ENGINEER'S DIRECTION.
11. MINIMUM HORIZONTAL SEPERATION BETWEEN WATERMAINS (INCLUDING PRIVATE SERVICES) AND STORM AND SANITARY SEWERS SHALL BE 2.5m. WATERMAINS MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 500mm BETWEEN ALL OTHER UTILITIES WHEN CROSSING.



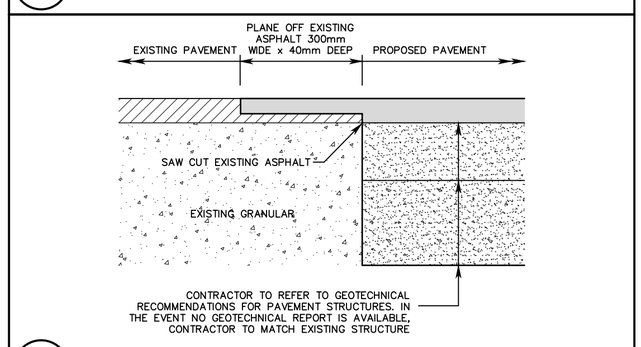
KEY MAP
N.T.S.



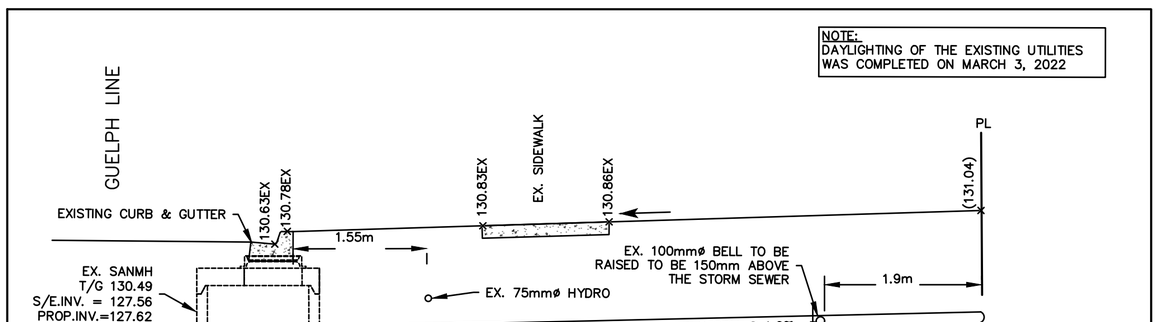
DETAIL 3 HEAVY-DUTY SILT FENCE (PER OPSD 219.130)
SCALE: N.T.S.



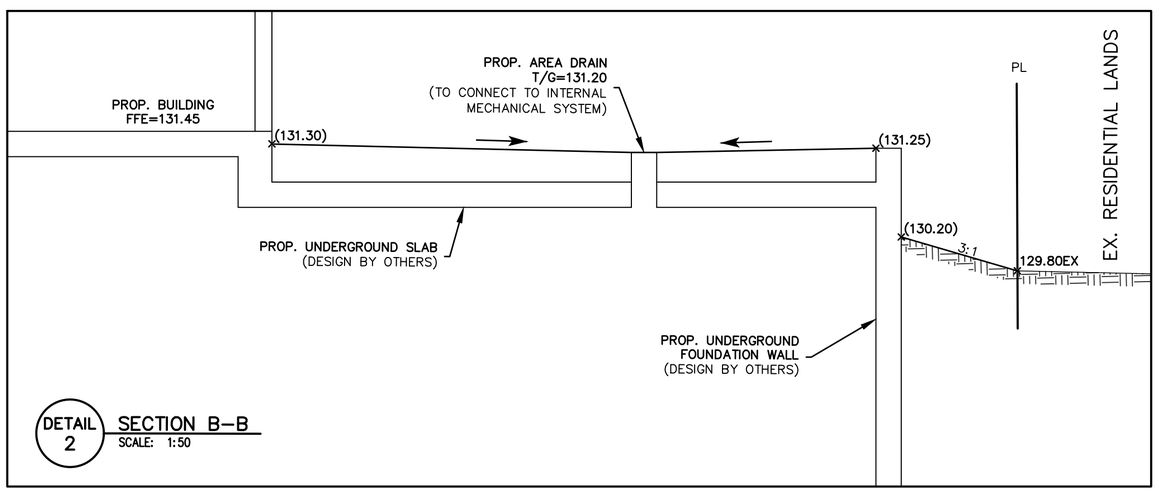
DETAIL 4 CATCH BASIN SEDIMENT TRAP
SCALE: N.T.S.



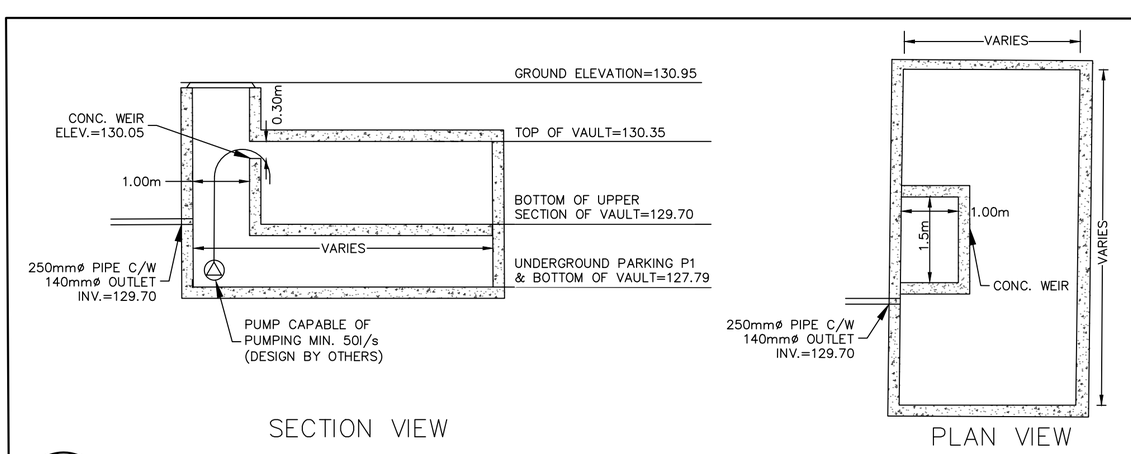
DETAIL 5 ASPHALT LAP JOINT
SCALE: N.T.S.



DETAIL 1 SECTION A-A
SCALE: 1:50



DETAIL 2 SECTION B-B
SCALE: 1:50



DETAIL 6 STORMWATER STORAGE VAULT (DESIGN BY OTHERS)
SCALE: N.T.S.

BENCH MARK NOTE:
CITY OF BURLINGTON BENCHMARK NO.397

BRASS PLAQUE ON THE EASTERLY FACE OF POSTAL STATION "B" ON THE WEST SIDE GUELPH LINE OPPOSITE PALMER DRIVE. PLAQUE IS LOCATED ,.25M SOUTH WESTERLY FROM THE SOUTHEAST CORNER AND 0.45 M ABOVE GRADE.

ELEVATION = 131.500M (DATUM CGVD 1928:1978)

NO.	DATE	BY	REVISIONS

NOTES TO CONTRACTOR:

1. CONTRACTORS AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING.
2. ANY INCONSISTENCIES AND OMISSIONS FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE COMMENCING THE WORK.
3. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ALL FINDINGS TO THE ENGINEER. ONCE CONSTRUCTION HAS COMMENCED, THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS.
4. THE POSITIONS OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVER-GROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEMSELVES OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
5. ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED, REUSED, OR REVISED WITHOUT THE WRITTEN CONSENT OF S. LLEWELLYN AND ASSOCIATES LIMITED.

DESIGN	YM	CHK'D	SN	DATE MAR. 10, 22
DRAWN	YM	CHK'D	SN	

SCALE 1:200 (0, 5, 10, 20)

APPROVALS

STAMP: LICENSED PROFESSIONAL ENGINEER — Scott Nelson — S. J. NELSON — 100228748 — Mar.11/22 — PROVINCE OF ONTARIO

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email: info@sla.on.ca
3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

CLIENTS
INFINITY DEVELOPMENT GROUP
2275 UPPER MIDDLE ROAD, OAKVILLE, ON

PROJECT NAME
1396 GUELPH LINE
BURLINGTON, ON

TITLE
PRELIMINARY NOTES & DETAILS

PROJECT No. 22024
DRAWING No. C103