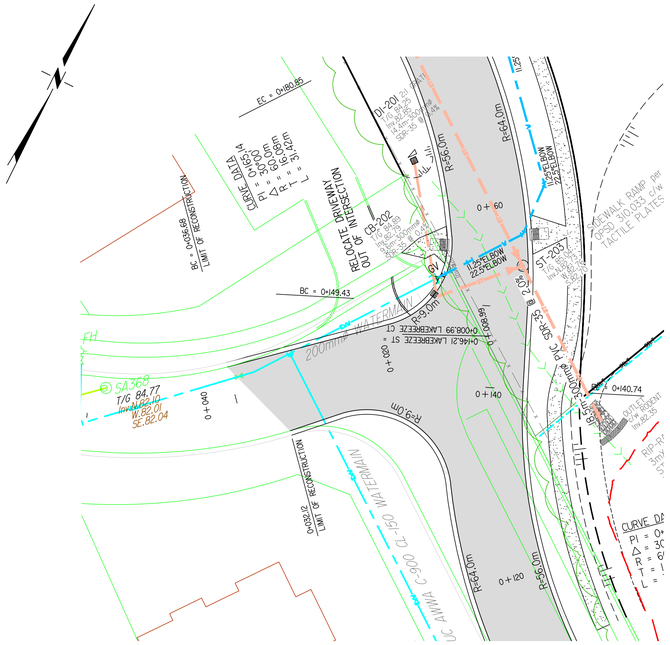
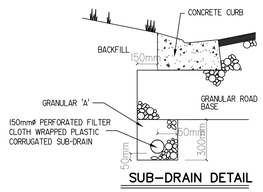
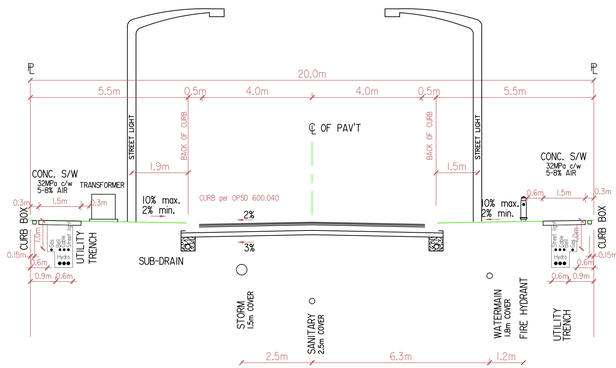




SUB-DRAIN DETAIL



LOCAL RESIDENTIAL ROAD

20m ROAD ALLOWANCE PSD-019 N.T.S.

NOTES

SANITARY SYSTEMS
- BEDDING SHALL BE PER OPSD's 802.010, 802.013 (GRAN A MATERIAL) FOR FLEXIBLE PIPES AND OPSD's 802.030, 802.031, 802.032, 802.033 CLASS 'B' BEDDING (GRAN 'A' MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY.
- MAXIMUM DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY CSA, OPS OR MANUFACTURER RECOMMENDED SPECIFICATIONS.
- PVC AND CONCRETE PIPE SHALL HAVE RUBBER GASKET TYPE JOINTS AND SHALL BE CERTIFIED TO CONFORM TO ALL CURRENT CSA SPECIFICATIONS.
- MINIMUM PIPE CLASS FOR REINFORCED CONCRETE SANITARY SEWERS SHALL BE 65-D.
- MAINTENANCE HOLE TOPS (FRAMES) ARE TO BE SET TO BASE ASPHALT GRADE THEN ADJUSTED TO FINAL GRADE WHEN TOP LIFT OF ASPHALT IS PLACED.
- DROP STRUCTURES SHALL BE PER OPSD 1003.020

SANITARY SERVICE LATERALS
- LOCATION OF LATERAL TO BE MARKED 2m PAST PROPERTY LINE WITH A 50mmX100mm WOODEN STAKE PAINTED GREEN, EXTENDED FROM THE INVERT OF THE SERVICE LATERAL TO 300mm ABOVE GROUND LEVEL.
- PIPE TO BE GREEN PVC SDR28, RUBBER GASKET TYPE JOINTS SHALL CONFORM TO CSA (B-182.2).
- MINIMUM 100mmØ PVC SDR28 FOR RESIDENTIAL AND MINIMUM 150mmØ PVC SDR28 FOR INDUSTRIAL/COMMERCIAL
- MINIMUM DEPTH OF LATERAL AT PROPERTY LINE SHALL BE 2.3m MEASURED FROM THE SEWER OBVERT TO FINISHED GROUND ELEVATION UNLESS NOTED OTHERWISE
- ALL CONNECTION TO NEW SANITARY MAINS SHALL BE PRE-MANUFACTURED, FABRICATED TEES
- CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE WITH APPROVED FACTORY MADE TEES OR APPROVED SADDLES IN STRICT CONFORMANCE WITH MANUFACTURERS RECOMMENDATIONS.
- MINIMUM PIPE SLOPE TO BE 1.0%, RECOMMENDED 2.0% (SEE OPSD 1006.010)

WATER SYSTEMS
- CONTRACTORS SHALL INFORM THE PRINCE EDWARD COUNTY WATER OPERATIONS DEPARTMENT A MINIMUM OF 48hrs IN ADVANCE OF THEIR INTENTIONS TO PERFORM WORK ON WATER INFRASTRUCTURE.
- MINIMUM COVER OVER WATERMAIN SHALL BE 1.8m. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS SHALL BE 2.5m. WHERE WATERMAIN CONFLICTS WITH SEWER PIPE, DEFLECT WATERMAIN HORIZONTALLY OR VERTICALLY WHILE PROVIDING A MINIMUM 0.5m CLEARANCE BETWEEN WATERMAIN AND SEWERS
- MAINTAIN MINIMUM DEPTH OF COVER AT ALL TIMES.
- BEDDING SHALL BE PER OPSD's 802.010, 802.013 (GRAN A MATERIAL) FOR FLEXIBLE PIPES AND OPSD's 802.030, 802.031, 802.032, 802.033 CLASS 'B' BEDDING (GRAN 'A' MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY. COMPACTION TESTING SHALL INCLUDE THE EMBEDEMENT ENVELOPE (HAUNCHES, BEDDING, TOP OF PIPE AND COVER)
- RESTRAINING SHALL BE REQUIRED AT ALL HYDRANTS, THRUST BLOCKS SHALL BE OPSD's 1103.010 AND 1103.020.
- TRACING WIRE SHALL BE #12 AWG HIGH STRENGTH COPPER CLAD (HS-CSS) AND SHALL BE INSTALLED ON THE TOTAL TOTAL LENGTH OF WATERMAIN AND BROUGHT UP TO EACH FIRE HYDRANT AND CONNECTED TO THE FLANGE BOLT.
- ALL SPLICES TO UTILIZE CONNECTORS AS PER MANUFACTURER'S RECOMMENDATIONS.
- SERVICE TAP SHALL BE PLACED AT MINIMUM SEPARATION OF 1.0m FROM JOINTS.
- ALL NEW CURB BOXES TO BE PLACED OUT OF DRIVEWAYS AND SIDEWALKS.
- ALL WATERMAIN PUBLIC AND PRIVATE SHALL BE BLUE IN COLOR.

STORM SYSTEMS
- STORM SEWERS SHALL BE PROVIDED ON ALL ROADS WITH CURB AND GUTTER, MINIMUM SIZE TO BE 300mmØ.
- CATCH BASIN LATERAL SIZE AND GRADE MINIMUM: 300mm @ 1.0% FOR SINGLE, 375mmØ @ 0.7% FOR DOUBLE
- MINIMUM DEPTH OF COVER SHALL BE 1.5m.
- ALL CONNECTIONS TO STORM SEWER MAIN, MAINTENANCE HOLES AND CATCH BASINS SHALL BE MADE AS PER OPSD's 708.010, 708.020 AND 708.030.
- BEDDING SHALL BE PER OPSD's 802.010, 802.013 (GRAN A MATERIAL) FOR FLEXIBLE PIPES AND OPSD's 802.030, 802.031, 802.032, 802.033 CLASS 'B' BEDDING (GRAN 'A' MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY.
- MINIMUM PIPE CLASS FOR REINFORCED CONCRETE STORM SEWERS SHALL BE 65-D.
- MAINTENANCE HOLE TOPS (FRAMES) ARE TO BE SET TO BASE ASPHALT GRADE THEN ADJUSTED TO FINAL GRADE WHEN TOP LIFT OF ASPHALT IS PLACED.
- STORM SYSTEM PVC PIPE SHALL BE WHITE IN COLOR.

1. ALL DIMENSIONS AND NOTES MUST BE VERIFIED ON JOB SITE BY CONTRACTOR. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER.
2. BOUNDARY INFORMATION BASED ON REGISTERED PLAN OF SURVEY 47R-1603 BY HUME & PICKARD JUNE 29, 1978.
3. LOCATION OF SERVICES ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY VARIOUS UTILITY COMPANIES AS PER REQUIREMENTS PRIOR TO COMMENCEMENT OF ANY WORK.
4. A ROAD OCCUPANCY PERMIT SHALL BE REQUIRED PRIOR TO COMMENCEMENT OF WORKS WITHIN THE MUNICIPAL ROW.
5. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT PRINCE EDWARD COUNTY DRAWINGS (PSD) & ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD). ORDER OF PRECEDENCE SHALL BE FIRSTLY PSD AND SECONDLY OPSD.

Urban Local Road, 20m Right of Way Standard Utility Locations	Spec. PSD-019
Light Duty Silt Fence Barrier	O.P.S.D. 219.110
Concrete Sidewalk	O.P.S.D. 310.010
150mm of granular fill to be placed under the sidewalk	
Crossfall slope on the sidewalk is to be 2%	
Concrete Sidewalk Ramps at Unsignalized Intersections	O.P.S.D. 310.033
Concrete Sidewalk Ramps Tactile Walking Surface Indicator Component	O.P.S.D. 310.039
Cast Iron, Square Frame w/ Square Flat Grate for Catch Basins, Herring Bone Openings	O.P.S.D. 400.020
Cast Iron, Square Frame with Circular Closed or Open Cover for Maintenance Holes	O.P.S.D. 401.010
Type 'A' Closed Cover.	
Galvanized Steel, Honey Comb Grating for Ditch Inlet	O.P.S.D. 403.010
Aluminum Safety Platform for Circular Maintenance Hole	O.P.S.D. 404.020
Maintenance Hole Steps, Hollow	O.P.S.D. 405.010
Do not use "Rectangular Stainless Steel" step details	
Concrete Barrier Curb with Standard Gutter for Flexible Pavement (Mountable)	O.P.S.D. 600.040
Drop back of curb 75mm unless otherwise noted, with no additional drop at entrances.	
Concrete Barrier Curb	O.P.S.D. 600.110
Precast Concrete Maintenance Hole, 1200mm Diameter	O.P.S.D. 701.010
Use a Precast monolithic base only.	
Maintenance Hole Benching and Pipe Opening Details	O.P.S.D. 701.021
Pipe 300mmØ or less benching is to be constructed to the obvert of the pipe, ie D/max	
Pipe greater than 300mmØ benching is to be constructed to three quarter height	
Flow channels shall have steel trowel finish while benching to have wood float finish	
Benching slope shall be 8:1 towards the channel.	
Precast Concrete Adjustment Units for Maintenance Holes, Catch Basins and Valve Chambers	O.P.S.D. 704.010
High Density Polyethylene Adjustment Units for Maintenance Holes, Catch Basins & Valve Chambers	O.P.S.D. 704.011
Precast Concrete Catch Basin, 600mmX600mm	O.P.S.D. 705.010
Precast Concrete Ditch Inlet, 600mmX600mm	O.P.S.D. 705.030
Support for Pipe at Catch Basin or Maintenance Hole	O.P.S.D. 708.020
Catch Basin Connection for Flexible Pipe Sewer	O.P.S.D. 708.030

ALL PIPE BEDDING TO CONFORM TO THE FOLLOWING OPSD INCLUDING FLEXIBLE PIPE:

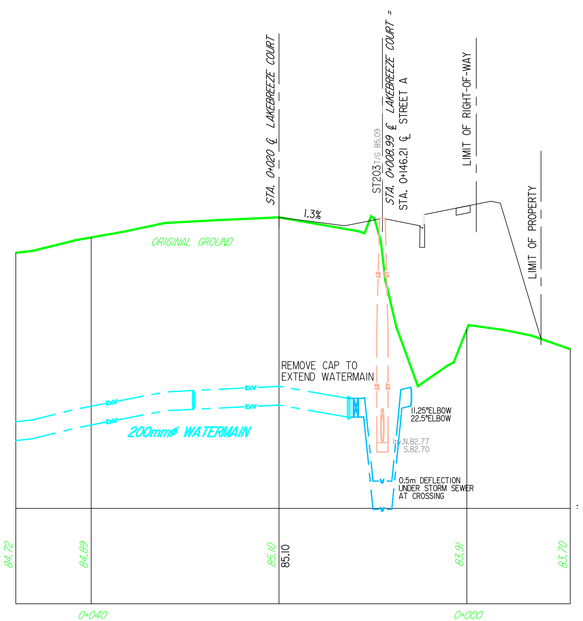
Rigid Pipe Bedding, Cover and Backfill	O.P.S.D. 802.030
Use "CLASS B-BEDDING" detail only for all pipe bedding.	
The "granular bedding material" is to be 'Granular A' crushed material.	
"Cover material" is to be sand fill.	
Minimum bedding depth to be 225mm	
For a 'wet trench' condition as determined by the City Engineer	
-the "compact granular bedding material" is to be an "HL8 Coarse" gradation crushed limestone material.	
-the "cover material" is to be either limestone screenings or 'Granular A' crushed material.	
Standard Cleanout Detail	Spec. PSD-007
Pipe Protection Against Heavy Equipment	O.P.S.D. 808.01
Sewer Service Connections for Flexible Main Pipe Sewer	O.P.S.D. 1006.020
The laterial is to be GREEN 135mmØ PVC SDR 28 pipe or as specified.	

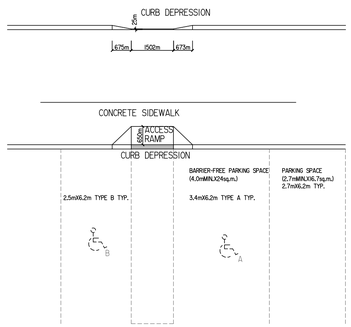
6. WHEREVER THE COVER OVER THE SANITARY SEWER IS 1.5m OR LESS, IT IS TO BE INSULATED WITH 50mm THICKx1.2m WIDE STYROFOAM BRAND HI. TYPE IV INSULATION. THE INSULATION IS TO BE PLACE IN TWO 50mm LAYERS c/w STAGGERED JOINTS.
7. ALL SANITARY, STORM SEWERS AND WATERMAINS INSTALLED ON PRIVATE PROPERTY ARE TO BE DONE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
8. THE REINSTATEMENT OF ASPHALT ROADWAYS, CONCRETE SIDEWALKS AND CURBS ON THE CITY ROAD ALLOWANCE IS TO BE DONE BY THE OWNER IN ACCORDANCE WITH THE CITY SPECIFICATIONS AT THE OWNER'S EXPENSE.
9. EXISTING SUBDRAINS ALONG THE CURB WHICH ARE DISTURBED ARE TO BE RESTORED TO THEIR ORIGINAL CONDITION AT THE OWNERS EXPENSE. NEW SUBDRAINS ARE TO BE CONSTRUCTED AS SHOWN ON PLANS.
10. ALL BOULEVARDS THAT DO NOT FRONT A LOT ARE TO BE FINISHED WITH 75mm TOPSOIL AND SOD FROM THE BACK OF THE CURB TO THE LIMIT OF THE ROAD ALLOWANCE.
11. ALL EXISTING TOPSOIL, ORGANIC AND HETEROGENEOUS FILL MATERIALS TO BE REMOVED FROM BENEATH PROPOSED PAVEMENT AND SIDEWALK AREAS, EXPOSING THE NATIVE SILTY CLAY/GLACIAL TILL.
12. EXCAVATION THROUGH FILL MATERIALS SHOULD BE BACKSLOPED 1:1.
13. CONCRETE SIDEWALKS TO BE 32MPa c/w 5-8% AIR ENTRAINMENT.
14. REQUIRED PAVEMENT DESIGN EARTH:

CONSTRUCTED ON EARTH:	
ASPHALTIC CONCRETE - HL.3 SURFACE HOT MIX	40mm
- HL.8 BINDER HOT MIX	50mm
BASE - GRANULAR 'A' (CRUSHED QUARRIED LIMESTONE)	150mm
SUBBASE - GRANULAR 'B' (CRUSHED QUARRIED LIMESTONE)	300mm
ALL IN ACCORDANCE WITH GEOTECHNICAL CONSULTANT'S RECOMMENDATIONS AND MUNICIPALITY	
CONSTRUCTED ON ROCK:	
ASPHALTIC CONCRETE - HL.3 SURFACE HOT MIX	40mm
- HL.8 BINDER HOT MIX	50mm
BASE - GRANULAR 'A' (CRUSHED QUARRIED LIMESTONE)	150mm
SUBBASE - GRANULAR 'B' (CRUSHED QUARRIED LIMESTONE)	150mm
ROCK SHATTER	300mm
ALL IN ACCORDANCE WITH GEOTECHNICAL CONSULTANT'S RECOMMENDATIONS AND MUNICIPALITY	

15. DRIVEWAYS TO BE CONSTRUCTED WITH 150mm GRANULAR 'A' AND 40mm HL3 ASPHALT WHEN PAVED
16. EXCAVATION THROUGH FILL MATERIALS SHOULD BE BACKSLOPED 1:1.
17. SUITABLE BACKFILL FREE OF LARGE LUMPS, STONES, ROOTS & OTHER FOREIGN MATTER IS TO BE PLACED AT THE BACK OF CURBS AND ALONG BOTH SIDES OF SIDEWALK WITHIN 72 hrs OF THE PLACEMENT OF CONCRETE. THIS BACKFILL IS TO BE LEVEL WITH THE TOP OF THE CURB AND SIDEWALK FOR A DISTANCE OF 0.3m AND THEN GRADED TO THE EXISTING GROUND WITH A MAXIMUM SLOPE OF 3:1. BEFORE ACCEPTANCE OF THE ABOVE GROUND WORKS, THE REMAINDER OF THE BOULEVARD BETWEEN SIDEWALK AND DITCH, ROAD SHOULDER OR CURB SHALL BE BACKFILLED AND GRADED AS DRAINAGE REQUIRES.
18. SEDIMENT CONTROL TO BE PROVIDED AT CATCHBASINS AS DIRECTED BY MUNICIPAL ENGINEER.
19. THE OWNER COVENANTS AND AGREES NOT TO MAKE A MATERIAL CHANGE OR CAUSE A MATERIAL CHANGE TO BE MADE TO A PLAN, SPECIFICATIONS, DOCUMENT OR OTHER INFORMATION, ON THE BASIS OF WHICH THESE DRAWINGS WERE APPROVED BY THE CITY, WITHOUT NOTIFYING, FILING DETAILS WITH AND OBTAINING THE WRITTEN AUTHORIZATION OF THE MUNICIPALITY.
20. NATIVE MATERIAL USED FOR BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
21. GRANULAR MATERIAL USED FOR BACKFILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 150mm AND COMPACTED TO 98% STANDARD PROCTOR DRY DENSITY.
22. ALL SILT CONTROL AND EROSION PROTECTION DEVICES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND THE GRASS HAS ESTABLISHED GROWTH, SUBJECT TO APPROVAL BY THE MUNICIPALITY.
23. ALL DISTURBED AREAS SHALL BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE MUNICIPALITY.

LAKEBREEZE COURT





LAKEBREEZE COURT
PLAN/PROFILE Sta. 0+000 to 0+045
NOTES AND DETAILS
DRAWING Map/80-04

REGISTERED PROFESSIONAL ENGINEER
A. H. VANDERMEER
APR. 26/24
PROVINCE OF ONTARIO

SCALE: H:1:300 V:1:30
DESIGNED: A.H.V.
DRAWN: S.D.S.
DATE: 21-NOV-09
FILE: \\Drawings\PRINCE EDWARD\Maple St_Wellington\...
FILE NAME: 80 Maple St_24-04-24.dwg

No.	Date	Description	By	Ck'd By
		REVISIONS		
	APR. 26/24	MUNICIPAL COMMENTS FEB. 22/24 & ARCHITECT REVISIONS	S.D.S.	
	SEPT. 15/22	MUNICIPAL REVIEW & APPROVAL	S.D.S.	

80 MAPLE STREET DEVELOPMENT
MUNICIPALITY OF PRINCE EDWARD COUNTY
SZAM CAPITAL PARTNERS - OWNER

VAN MEER LIMITED
LAND DEVELOPMENT - PROJECT MANAGEMENT - ENGINEERING
83 Main Street, Picton, ON K0K 2T0 Tel: 613-393-3777