

**GENERAL NOTES:**

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXISTING UTILITIES, SEWERS AND WATERMANS (WHETHER OR NOT SHOWN ON THIS DRAWING).
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF:
  - \$5,000,000.00 INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
  - RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND EXCAVATIONS TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
  - REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER, EXCAVATE AND REMOVE TO AN APPROVED LOCATION AND DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO ARCHITECTS' AND LANDSCAPE ARCHITECTS' DRAWINGS FOR BUILDING AND LANDSCAPE ASPECTS AND DIMENSIONS.
- REFER TO SITE PLAN FOR WATERMANS AND DIMENSIONS. (SECTION 17.00-17.10).
- PROVIDE 1.5% MINIMUM SLOPE TO ALL ROAD CUTS AND ASPHALT TIE-INS AT THE PAVED SIDE OF THE ROAD.
- PROVIDE UNPAVED PARKING.
- CONDUCT WORK TO CONFORM WITH CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. INFORMATION MUST INCLUDE PIPE MATERIALS, SIZES, LENGTHS, SLOPES, INVERT ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.
- DESIGN AS PER BY-LAW REGULATIONS, CITY STANDARDS AND GOOD ENGINEERING PRACTICE.

**SEWER NOTES:**

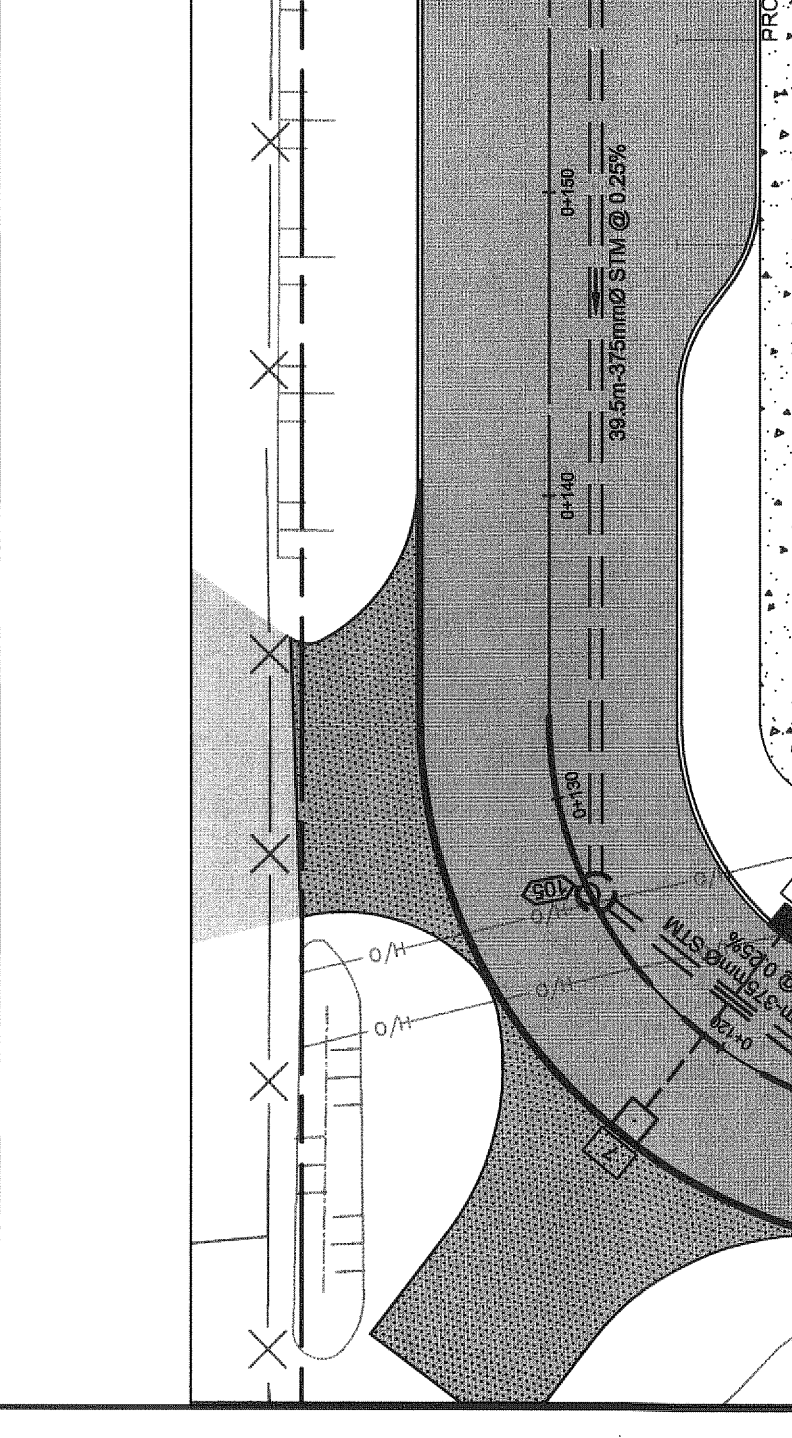
- SPECIFICATIONS:
  - SEWER (400mm)
  - CATCH-BASIN (SLOPE 1:5)
  - CE FLOOR & COVER (AS PER CITY OF OTTAWA SPECIFICATIONS)
  - SEWER TRENCH: BEDDING (GRAVEL) AND COVER (GRAVEL OR GRANULAR TYPE 1, COVER WITH MAXIMUM PARTICLE SIZE OF 20MM)
  - STORM SEWER (300mm)
  - SANITARY SEWER (150mm)
  - CATCH-BASIN (SLOPE 1:5)
  - INSULATION: 150MM POLYSTYRENE INSULATION (150MM) WITH 10% MINIMUM SLOPE OF 1.0%
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  - PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 98% OF MAXIMUM DENSITY (AS PER CITY OF OTTAWA SPECIFICATIONS) FOR ALL EXCAVATIONS OF CLEAR CRUSHED STONE AS BEDDING. EXCAVATIONS ARE NOT TO BE PERMITTED FOR THE PIPE CAN BE ELIMINATED.
  - FOR PIPE CONNECTIONS TO EXISTING PIPES, TO MANHOLES (FOR EXAMPLE KON-SEAL, PSK, POSITIVE SEAL AND GARSEAL), THE CONCRETE SHALL BE REPAIRED TO ORIGINAL CONDITION.
  - THE OWNER SHALL REQUIRE THAT THE SITE SERVING CONTRACTOR PERFORM FIELD AND LABORATORY TESTING TO VERIFY THE QUALITY OF ALL SANITARY SERVICES TO BE INSTALLED AND PROVIDE A REPORT TO THE ENGINEER. ALL TESTING SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
  - STORM MANHOLES AND COVER ARE TO HAVE 500MM SLUMPS UNLESS OTHERWISE INDICATED.
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**WATERMAIN NOTES:**

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  - WATERMAIN TRENCHING (AS PER CITY OF OTTAWA SPECIFICATIONS)
  - WATERMAIN INSULATION IN SHALLOW TRENCHES (AS PER CITY OF OTTAWA SPECIFICATIONS)
  - WATERMAN PRESSURE RELIEF SEWER (AS PER CITY OF OTTAWA SPECIFICATIONS)
  - PVC DR 18
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**PROPOSED BUILDINGS - ROOF & AREA DRAIN TABLE**

ROOF OR AREA DRAIN	POST DEVELOPMENT CONDITIONS		
	15 YEAR EVENT	100 YEAR EVENT	100 YEAR EVENT
ROOF 1 (3.0m x 15.0m)	0.12	0.13	0.14
AD 1 (2.0m x 3.0m)	0.08	0.09	0.10
TOTAL	0.20	0.22	0.24



**NOTE:** THE POSITION OF ALL POLE LINES, CONDUITS, UNDERGROUND AND ABOVE-GROUND 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

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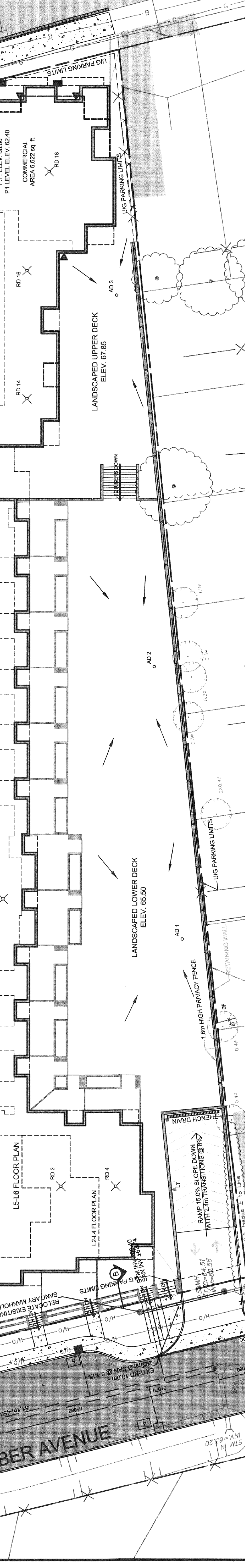
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**NOVATECH ENGINEERING & CONSULTANTS LTD.**  
 175 RICHMOND ROAD  
 OTTAWA, ONTARIO K1P 0V6  
 TEL: 451-2222 FAX: 451-1222

**FOR REVIEW ONLY**

REVISION: 

NO.	DATE
1.	OCT. 08/11

**PROFESSIONAL ENGINEER**

111130-GP

**GENERAL PLAN OF SERVICES**

111130-GP

**CLARIDGE HOMES**

CLARIDGE HOMES  
 SUITE 2001,  
 210 GLADSTONE AVENUE,  
 OTTAWA, ONTARIO  
 K2P 0V6

**NOTE:** CONTRACTOR TO CONFIRM ELEVATIONS OF INFRASTRUCTURE IN THE STREET PRIOR TO EXTENDING SERVICES INTO THE SITE AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.

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