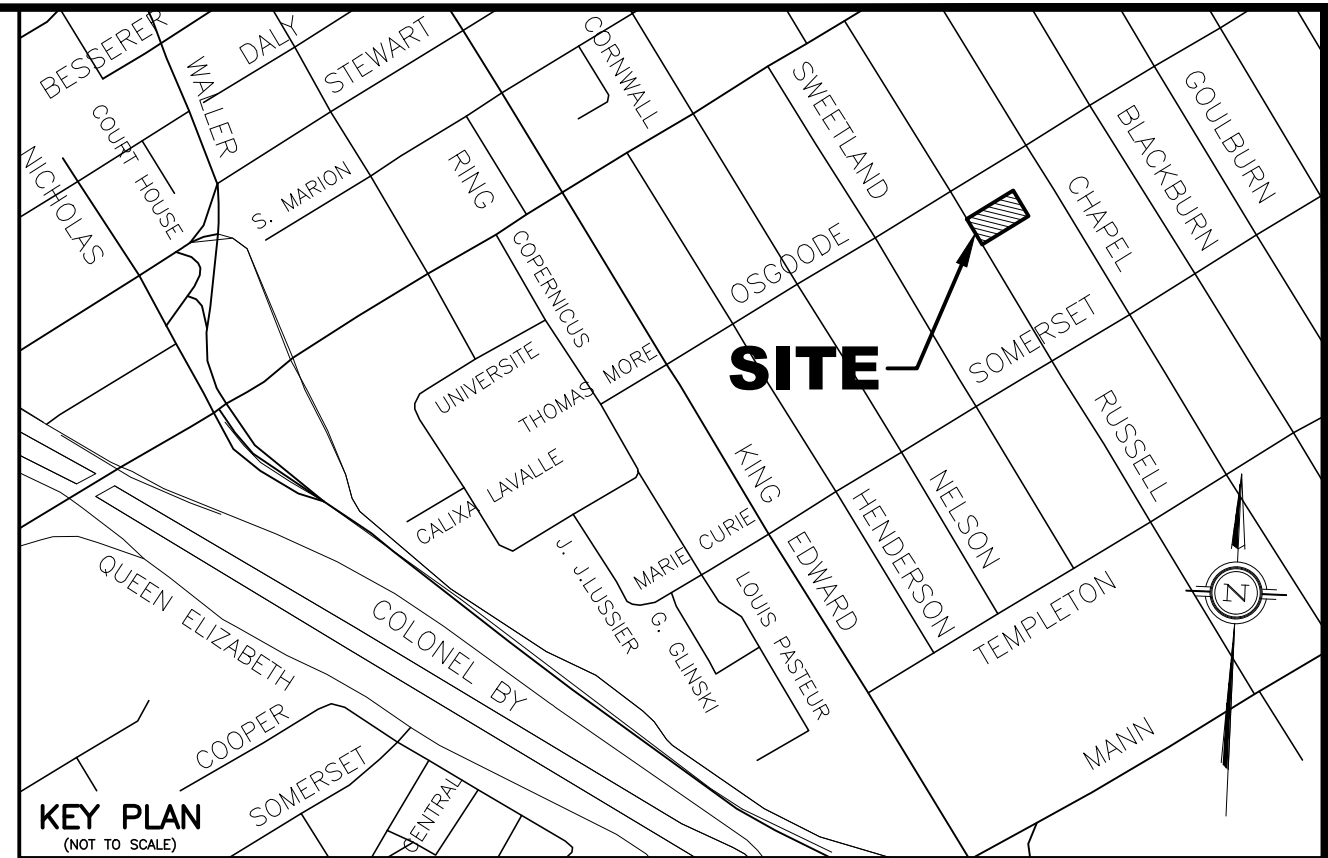
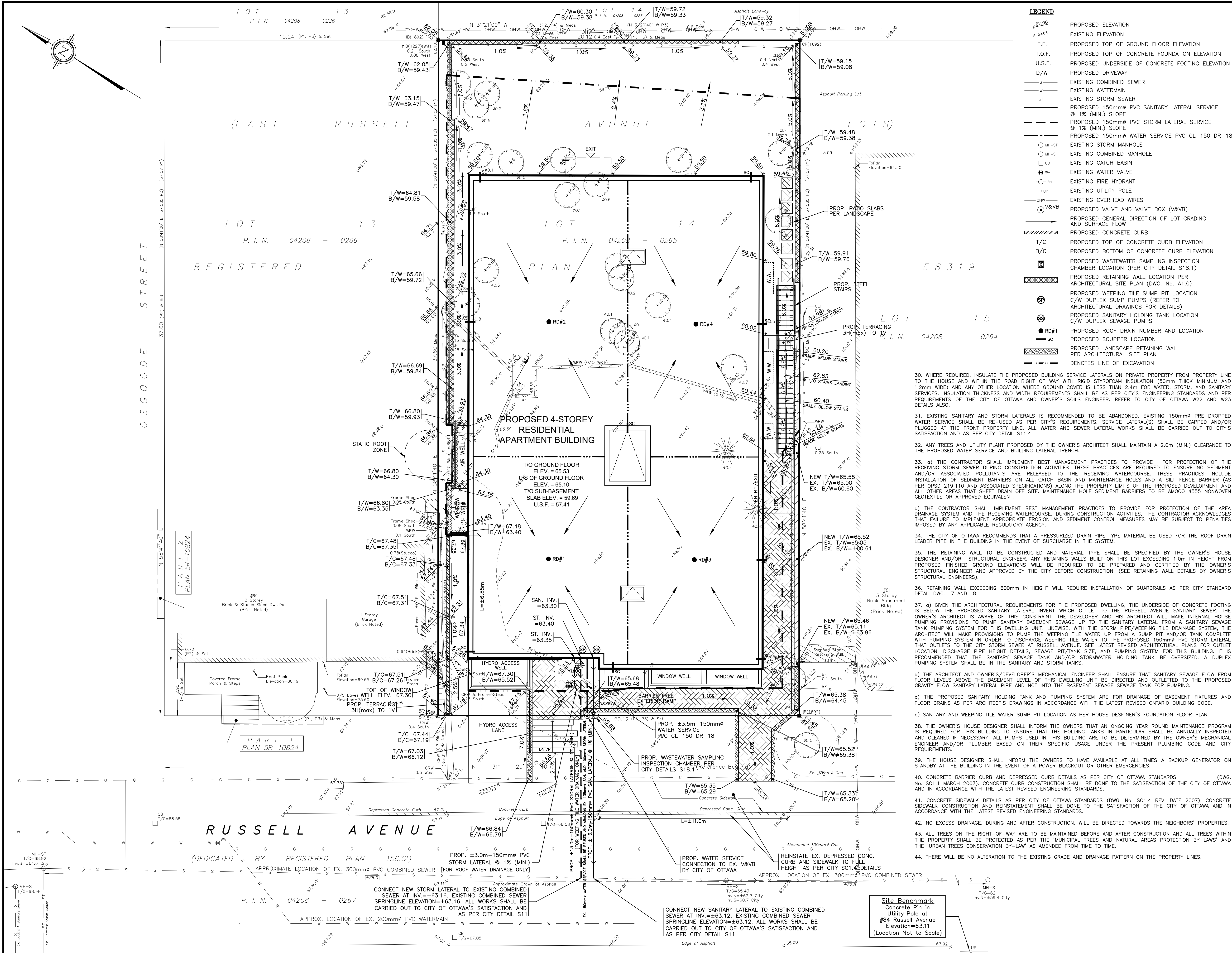
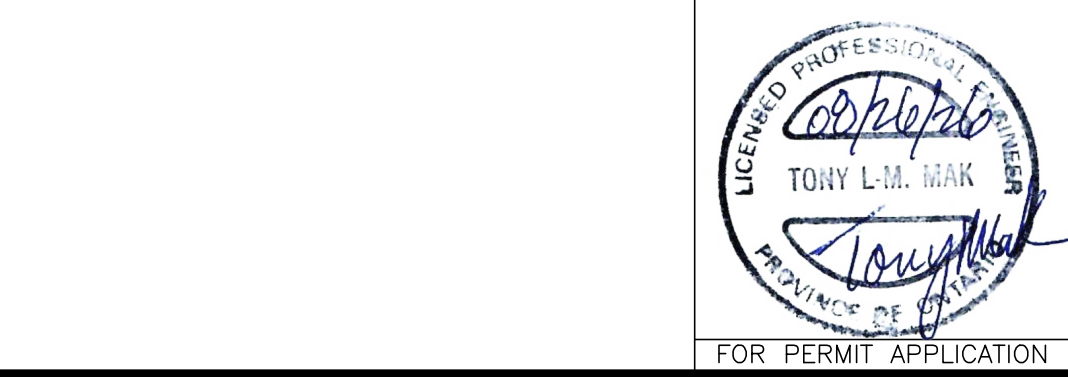




- NOTES**
- EXISTING SERVICES AND UTILITIES SHOWN ON THIS DRAWING WERE TAKEN FROM THE BEST AVAILABLE RECORDS BUT ARE NOT COMPLETE. CONTRACTOR IS REQUESTED TO CHECK IN THE FIELD FOR LOCATION AND ELEVATION OF PIPES, UNDERGROUND STRUCTURES, ETC. AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING.
  - CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS AS DEEMED NECESSARY, BEFORE POURING OF CONCRETE FOOTING AND FOUNDATION. THE OWNER AND/OR CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SUBGRADE ON THIS LOT IS SUFFICIENT TO SUPPORT PROPOSED RESIDENTIAL BUILDING. REFER ALSO TO THE SITE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY THE OWNER'S GEOTECHNICAL CONSULTANTS, THE PATTERSON GROUP, ENTITLED "GEOTECHNICAL INVESTIGATIONS - PROPOSED MULTI-STORY BUILDING 71 RUSSELL AVENUE" (REPORT No. PG7696-1 DATED SEPTEMBER 16, 2025).
  - SITTING DETAILS FOR THE PROPOSED RESIDENTIAL BUILDING WERE PROVIDED BY LAWRENCE ARCHITECTS AS DETAILED ON THEIR SITE PLAN (DWG. No. A1.0 REV. 9 DATED APRIL 2, 2026) RECEIVED ON APRIL 2, 2026 AND UPDATED PER E-MAIL OF AUGUST 21, 2026. BUILDING ELEVATIONS THAT ARE SHOWN TOP OF GROUND FLOOR, TOP OF FOUNDATION, TOP OF BASEMENT FLOOR, AND USF) ARE REFERENCED FROM ARCHITECT'S "ELEVATIONS" PLAN (DWG. No. A4.2 REV. 9 DATED APRIL 2, 2026) RECEIVED ON APRIL 2, 2026 AND UPDATED PER E-MAIL OF JULY 13, 2026.
  - EXISTING HORIZONTAL AND VERTICAL SURVEY DATA SHOWN ON THIS PLAN INCLUDING SITE BENCHMARK, ROAD ELEVATIONS, SEWER INVERTS, SEWER LOCATIONS AND TOPOGRAPHICAL INFORMATION OF THE LOT WERE PROVIDED BY FARLEY SMITH AND DENIS SURVEYING LTD. AS DEPICTED ON THEIR TOPOGRAPHICAL SURVEY PLAN (FILE No. 259-25 COMPLETED ON SEPTEMBER 8, 2025) RECEIVED ON NOVEMBER 17, 2025. THE CONTRACTOR SHALL ALSO REFER TO THE CITY OF OTTAWA PLAN AND PROFILE DRAWING ENTITLED "RUSSELL AVENUE" STA. 34+080 TO STA. 34+160, DWG. No. 022 SHEET 22 OF 54 REV. 7 DATED SEPTEMBER 23, 2024. T.L. MAK ENGINEERING CONSULTANTS LTD. DOES NOT TAKE ANY RESPONSIBILITY FOR THE SURVEY INFORMATION SHOWN HERE.
  - ALL GRADES SHOWN ARE GEODETIC AND METRIC (SEE FARLEY SMITH AND DENIS SURVEYING LTD.'S TOPOGRAPHICAL PLAN).
  - PIPE SIZES SHOWN ON THIS PLAN ARE METRIC.
  - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY EQUIPMENT, LABOUR AND MATERIALS RELATING TO ALL CIVIL WORKS REQUIRED FOR THIS SITE AND BY THE CITY OF OTTAWA TO CONNECT INTO THE WATERMAIN.
  - ALL GRADING SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA.
  - CONNECTION OF THE NEW 150mm WATER SERVICE TO THE EXISTING AT THE EX. V&VB ON RUSSELL AVENUE (ROAD RIGHT-OF-WAY) SHALL BE PROVIDED BY THE CITY OF OTTAWA ENGINEERS, STANDARDS AND REQUIREMENTS. ALL EXCAVATION, BACKFILLING AND REINSTATEMENT SHALL BE CARRIED OUT BY THE OWNER'S CONTRACTOR. ALL WATERWORKS TO BE CONSTRUCTED TO CITY OF OTTAWA WATER ENGINEERING STANDARDS AND SPECIFICATIONS.
  - CONSTRUCT ALL WATERMAIN, WATER SERVICES, SANITARY AND STORM SEWER SYSTEMS IN ACCORDANCE WITH CITY OF OTTAWA'S LATEST REVISED STANDARD OTHERWISE AS PER OPSS REQUIREMENT AND DONE TO THE SATISFACTION OF THE CITY.
  - BEDDING AND HAUNCHING MATERIAL FOR SEWER INSTALLATIONS TO BE GRANULAR "A" INSTALLED AND COMPACTED AS PER CITY STANDARD DETAIL DWG. No. 56 AND 57.
  - STORM AND SANITARY LATERALS SHALL BE PVC DR-28 OR EQUIVALENT. SEWER CONNECTION DETAILS PER CITY DETAIL S11.1 FOR FLEXIBLE PIPES AND S11.2 FOR RIGID PIPES.
  - ALL WATER SERVICES/MAINS SHALL HAVE 2.4m COVER (MIN.). THE 150mm WATER SERVICE SHALL BE PVC CL 150 DR-18. WATER SERVICE AND WATERMAIN TRENCH DETAILS AS PER CITY OF OTTAWA W17. THRUST BLOCK DETAILS PER CITY DETAIL S11.1. FITTINGS SHALL CONFORM TO APPROVED AWWA AND/OR CSA STANDARDS. CATHODIC PROTECTION FOR NEW WATERMAIN AND SERVICE AS PER CITY DETAIL W40 REV. DATE MARCH 2005.
  - IF WATER SERVICE IS LESS THAN 2.0m FROM SEWER, MANHOLE OR CATCHBASIN, CONTRACTOR IS REQUESTED TO INSULATE BETWEEN THEM WITH S/M RIGID INSULATION (SEE CITY DETAIL DRAWING No. W23).
  - STORM MANAGEMENT NOTES**
    - REFER TO PROPOSED ROOFTOP STORMWATER MANAGEMENT PLAN (DWG. No. 825-96 SWM-1) FOR ROOFTOP 2-YEAR AND 100-YEAR HWL.
    - SEE STORM DRAINAGE REPORT No. R-825-96 DATED DECEMBER 2025 ALSO FOR DETAILS.
    - CONTROLLED ROOF DRAIN FLOW RATE FOR EACH DRAIN SHALL BE 0.316 L/s OR 5.0 U.S. GAL/MIN.
  - ALL PROPOSED BUILDING SANITARY, STORM AND WATER SERVICES SHALL TERMINATE ±1.0m OUTSIDE THE FOUNDATION WALL AND CONNECTION TO PLUMBING BY OTHERS.
  - IT IS REQUIRED THAT A CITY APPROVED BACKWATER VALVE BE INSTALLED AT THE NEW 150mm DIA. (FOUNDATION DRAINS) STORM LATERAL SERVICE AND A FULL PORT BACKWATER VALVE BE INSTALLED FOR THE NEW 150mm SANITARY LATERAL SERVICE AS PER CITY DETAIL S14, S14.1, AND S14.2.
  - FOR PROTECTION OF THE CONCRETE FOOTING AND FOUNDATION POURING, THE OWNERS AND/OR CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SUBGRADE ON THIS LOT IS SUFFICIENT TO SUPPORT THE PROPOSED BUILDING.
  - FOR DEVELOPMENT OF THIS LOT, THE CONTRACTOR MUST FIRST CONSTRUCT THE UNDERGROUND SANITARY, STORM AND WATER SERVICES TO SERVICE THE ENTIRE PROPERTY. PRIOR TO SERVICE THE SANITARY, STORM AND WATER CONCRETE FOUNDATION POURING, THE CONTRACTOR SHALL VERIFY SEWER DEPTHS TO ENSURE THAT SEWER LATERALS CAN ACHIEVE A SLOPE OF 1% (MIN.) AND STILL BE BELOW PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION. IF THIS IS FOUND NOT POSSIBLE, THE CONTRACTOR SHALL CONTACT THE OWNER TO REPORT THE FINDING IN ORDER TO ADJUST THE BUILDING FOUNDATION GRADES PRIOR TO CONCRETE POURING.
  - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY EQUIPMENT, LABOUR AND MATERIALS RELATING TO THE CIVIL WORKS REQUIRED FOR INSTALLATION OF NEW SITE SERVICES. PERSONAL HEALTH AND SAFETY REGULATIONS MUST BE FOLLOWED DURING CONSTRUCTION.
  - IT IS THE RESPONSIBILITY OF THE SITE SERVICES CONTRACTOR TO OBTAIN AND CONSTRUCT THE WORKS TO MEET THE LATEST REVISIONS IN CURRENT CIRCULATION OF THE CITY OF OTTAWA'S ENGINEERING STANDARDS, OPSS AND OPSS STANDARDS, AND OTTAWA BUILDING/PLUMBING CODES, WHERE THE LATEST REVISION OFFERS FROM THE REQUIREMENTS SET OUT IN THIS PLAN. THE CONTRACTOR SHALL PRICE THE WORKS TO MEET LATEST REVISED STANDARDS. ALL WORK TO BE CARRIED OUT BY THE CONTRACTOR ON THE PROPOSED ASPHALT ACCESS LANEWAY AND PRIVATE DRIVEWAY STRUCTURE SHALL BE APPROVED BY SOILS ENGINEER ON SITE PRIOR TO CONSTRUCTION.
  - CONCRETE BARRIER CURB AND CONCRETE SIDEWALK DETAILS AS PER CITY OF OTTAWA STANDARDS (DWG. No. SC1.4 REV. DATE MARCH 2007). CONCRETE CURB AND CONCRETE SIDEWALK CONSTRUCTION AND REINSTATEMENT SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA AND IN ACCORDANCE WITH THE LATEST REVISED CITY ENGINEERING STANDARDS.
  - THE EXISTING CONCRETE CURB AND SIDEWALK ON RUSSELL AVENUE AND ANY DISTURBED AREA IN THE RIGHT OF WAY DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REINSTATED BY THE CONTRACTOR TO THE SATISFACTION OF THE CITY OF OTTAWA AND IN ACCORDANCE WITH THE LATEST REVISED CITY ENGINEERING STANDARDS.
  - THE CONTRACTOR, UPON COMPLETION OF THE NEW SERVICES SHALL RESTORE THE EXISTING RUSSELL AVENUE ROADWAY BOULEVARD DISTURBED BY CONSTRUCTION WORKS ON THIS PROPERTY. ADDITIONALLY, THE ROADWAY GRADING SHALL BE RESTORED AND REGRADED TO DRAIN POSITIVELY TO EXISTING STORMWATER OUTLET AS REQUIRED BY THE CITY INSPECTOR.
  - EXISTING DRIVEWAY TO BE REMOVED WILL BE REINSTATED WITH SOFT LANDSCAPE MATERIAL, WHERE APPLICABLE.
  - WHERE FROST COVER FROM UNDERSIDE OF BUILDING CONCRETE FOOTING TO PROPOSED FINISHED GROUND ELEVATION IS LESS THAN 1.55m, THE CONTRACTOR SHALL PROVIDE INSULATION (50mm THICK) MINIMUM BE INSTALLED AT THE BUILDING FOOTING AND FOUNDATION TO PROVIDE SUFFICIENT FROST COVER FOR THE FOUNDATION STRUCTURES. THE FOOTINGS WILL NEED TO BE REINFORCED FOR INSULATION BY THE OWNER'S SOILS ENGINEER. EXACT INSULATION REQUIREMENTS SHALL BE AS PER ARCHITECT'S INSULATION DETAILS AS SHOWN ON THEIR ARCHITECTURAL DRAWINGS AND CONFIRMED BY THE OWNER'S SITE SOILS ENGINEER.

| No. | REVISION                                                                                                                                     | DATE     | BY  | No. | REVISION                                                                                                   | DATE     | BY  | No. | REVISION                                                                                                | DATE     | BY  |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|-----|------------------------------------------------------------------------------------------------------------|----------|-----|-----|---------------------------------------------------------------------------------------------------------|----------|-----|
| 7   | REVISIONS TO RELOCATE PROPOSED RETAINING WALL PER MARKED-UP DETAILS PROVIDED ON MAY 5, 2026 AND AS PER TEAMS MEETING OF MAY 5, 2026          | 05/05/26 | TLM | 14  | REVISIONS AS PER ARCHITECT'S LATEST REVISED SITE PLAN AND REVIEW COMMENTS OF JULY 8, 2026                  | 07/16/26 | TLM |     |                                                                                                         |          |     |
| 6   | REVISIONS AS PER STRUCTURAL AND ARCHITECTURAL COMMENTS OF APRIL 23, 2026 AND APRIL 27, 2026                                                  | 04/28/26 | TLM | 13  | REVISIONS AS PER ARCHITECT'S REVIEW COMMENTS OF JUNE 30, 2026 AND PER TEAMS MEETING OF JULY 2, 2026        | 07/02/26 | TLM |     |                                                                                                         |          |     |
| 5   | REVISIONS AS PER ARCHITECT'S REVIEW COMMENTS OF APRIL 15, 2026                                                                               | 04/15/26 | TLM | 12  | REVISIONS AS PER ARCHITECT'S LATEST REVISED SITE PLAN OF APRIL 15, 2026                                    | 06/26/26 | TLM |     |                                                                                                         |          |     |
| 4   | REVISIONS AS PER ARCHITECT'S REVIEW COMMENTS AND REVISED SITE PLAN OF APRIL 10, 2026                                                         | 04/14/26 | TLM | 11  | REVISIONS AS PER ARCHITECT'S LATEST REVISED SITE PLAN AND REVIEW COMMENTS OF MAY 21, 2026 AND MAY 26, 2026 | 05/27/26 | TLM |     |                                                                                                         |          |     |
| 3   | REVISIONS AS PER ARCHITECT'S REVIEW COMMENTS AND ARCHITECTURAL DRAWINGS OF APRIL 2, 2026 AND CITY REVIEW COMMENTS RECEIVED ON MARCH 26, 2026 | 04/10/26 | TLM | 10  | REVISIONS TO LOWER REAR OF BUILDING GRADES AS PER ARCHITECT'S REQUEST OF MAY 20, 2026                      | 05/21/26 | TLM |     |                                                                                                         |          |     |
| 2   | REVISIONS AS PER ARCHITECT'S REVIEW COMMENTS OF JANUARY 22, 2026                                                                             | 01/22/26 | TLM | 9   | ISSUED FOR BUILDING PERMIT                                                                                 | 05/15/26 | TLM | 16  | REVISIONS AS PER ARCHITECT'S REVIEW COMMENTS OF AUGUST 24, 2026 OF LOCATION AND REAR OF WELL ELEVATIONS | 08/25/26 | TLM |
| 1   | REVISIONS AS PER ARCHITECT'S REVISED SITE PLAN AND ARCHITECTURAL DRAWINGS OF DECEMBER 23, 2025                                               | 01/07/26 | TLM | 8   | REVISIONS AS PER ARCHITECT'S REVIEW COMMENTS OF MAY 8, 2026                                                | 05/13/26 | TLM | 15  | REVISIONS AS PER ARCHITECT'S REVISED SITE PLAN OF AUGUST 21, 2026                                       | 08/24/26 | TLM |



| DESIGN   | T.L.M. | PROJECT       | 71 RUSSELL AVENUE<br>LOT 14<br>EAST SIDE OF RUSSELL AVENUE<br>REGISTERED PLAN 58319<br>CITY OF OTTAWA |
|----------|--------|---------------|-------------------------------------------------------------------------------------------------------|
| CHECKED  | T.L.M. | DRAWING TITLE | PROPOSED LOT GRADING<br>AND SERVICING PLAN                                                            |
| DRAWN BY | P.M.   | PROJECT No.   | 825-96                                                                                                |
| CHECKED  | T.L.M. | DATE          | NOVEMBER 2025                                                                                         |
| APPROVED | T.L.M. | DRAWING No.   | G-1                                                                                                   |

**T.L. MAK ENGINEERING CONSULTANTS LTD.**  
CONSULTING ENGINEERS

PROJECT No. 825-96

DATE NOVEMBER 2025

DRAWING No. G-1

#19441