



- NOTES**
- EXISTING SERVICES AND UTILITIES SHOWN ON THIS DRAWING WERE TAKEN FROM THE BEST AVAILABLE RECORDS. CONTRACTOR IS ADVISED TO CHECK IN THE FIELD FOR LOCATION AND ELEVATION OF PIPES, UNDERGROUND STRUCTURES AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING.
 - CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS AS DEEMED NECESSARY. REFER TO THE SITE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY THE OWNER'S SOILS ENGINEER PATERSON GROUP (REPORT NO. PG4210-LET-01 DATED AUGUST 29, 2017).
 - EXISTING HORIZONTAL AND VERTICAL SURVEY DATA SHOWN ON THIS PLAN INCLUDING GEODETIC SITE BENCHMARK, ROAD ELEVATIONS, SEWER LOCATION, AND THE TOPOGRAPHICAL INFORMATION OF THE LOT WERE PROVIDED BY J.D. BARNES LTD. AS SHOWN ON THEIR TOPOGRAPHICAL SURVEY PLAN (REF. NO. 17-10-060-00) RECEIVED ON AUGUST 2, 2017. T.L. MAK ENGINEERING CONSULTANTS LTD. DOES NOT TAKE ANY RESPONSIBILITY FOR THE SURVEY INFORMATION SHOWN HEREIN FOR INFORMATION ABOUT THE STORM AND SANITARY INVERT ELEVATION AT MANHOLES AND WATERMAIN LOCATION AND SIZE. THE CONTRACTOR SHALL FIELD CHECK EXISTING SANITARY SEWER, STORM SEWER, AND WATERMAIN DEPTH TO THEIR SATISFACTION AND REFER TO CITY OF OTTAWA'S PLAN AND PROFILE PLAN ENTITLED "ROOSEVELT AVENUE" STORM SEWER CH. 0+175 TO 3+50 (CONTRACT NO. 88-52) PLAN NO. 2179 SHEET 4 OF 11 FOR ADDITIONAL DETAILS.
 - SITE LAYOUT AND DETAILS FOR GRADING AND SWM DESIGN WERE PROVIDED BY THE OWNER'S ARCHITECT, PROJECT 1 STUDIO INC. AS DETAILED ON THEIR SITE PLAN (DWG. NO. SP-01 JOB NO. 2405) RECEIVED ON MAY 16, 2024. BUILDING ELEVATIONS WERE TAKEN FROM THE SITE PLAN DETAILS SHOWN ON PROJECT 1 STUDIO INC.'S DWG. NO. A301 RECEIVED FROM THE ARCHITECT ON MAY 16, 2024 REGARDING TOP OF GROUND FLOOR, TOP OF FOUNDATION, TOP OF BASEMENT SLAB, TOP OF FOOTING AND U.S.F. ELEVATIONS FOR THE MAIN BUILDING.
 - ALL GRADES SHOWN ARE GEODETIC AND METRIC (SEE J.D. BARNES LTD.'S TOPOGRAPHICAL PLAN). ALL GRADING SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA.
 - 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.
 - CONNECTION OF THE 150mm^Ø WATER SERVICE TO THE EXISTING ROOSEVELT AVENUE WATERMAIN SHALL BE BY THE CITY OF OTTAWA. EXCAVATION, BACKFILLING, AND RESTORATION SHALL BE CARRIED OUT BY THE CONTRACTOR. CONNECTION SHALL BE CARRIED OUT AS PER CITY OF OTTAWA DWG. NO. W501 DETAILS. ALL WATERWORKS TO BE CONSTRUCTED TO THE CITY OF OTTAWA WATER ENGINEERING STANDARDS AND SPECIFICATIONS.
 - INSULATE BUILDING SERVICE LATERALS AND STORM PIPES WITH PRIVATE PROPERTY AND ROAD RIGHT OF WAY WHERE GROUND COVER FOR FROST PROTECTION IS LESS THAN 2.4m FOR WATER SERVICE AND 2.4m FOR SANITARY AND STORM GRAVITY SEWERS. MINIMUM GROUND COVER OVER HOUSES SHALL BE LESS THAN 2.0m. EXACT INSULATION THICKNESS SHALL BE DETERMINED BY CITY INSPECTOR ON-SITE AND/OR OWNER'S SOILS ENGINEER. ALL INSULATION WORKS SHALL BE CARRIED OUT AS PER CITY OF OTTAWA'S CURRENT ENGINEERING STANDARDS DETAILS W22 AND W23.
 - CONSTRUCT ALL WATERMAINS, 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. S6 AND S7.
 - STORM AND SANITARY LATERALS (150mm^Ø) SHALL BE PVC DR-28 OR EQUIVALENT.
 - ALL WATER SERVICES/MAINS SHALL HAVE 2.4m COVER (min.). THE 150mm^Ø WATER SERVICE SHALL BE PVC CL 150 DR-18. WATER SERVICE AND WATERMAIN TRENCH DETAILS AS PER CITY OF OTTAWA W17 AND W22. THRUST BLOCK DETAILS AS PER CITY DETAIL W25.3 DATED MAY 2001. FITTINGS SHALL CONFORM TO APPROVED AWWA AND/OR CSA STANDARDS. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN A MINIMUM OF 1.0m COVER OVER ALL WATER SERVICE LATERALS. THE 150mm^Ø WATER SERVICE SHALL HAVE A MINIMUM OF 2.4m OF GROUND COVER.
 - IF WATER SERVICE IS LESS THAN 1.0m FROM SEWER, MANHOLE OR CATCHBASIN, CONTRACTOR IS REQUESTED TO INSULATE BETWEEN THEM WITH 5/8" RIGID INSULATION (SEE CITY DETAIL DRAWING NO. W23).
 - STORMWATER MANAGEMENT NOTES:
 - SEE STORM DRAINAGE REPORT NO. R-824-83 DATED AUGUST 2024 ALSO FOR DETAILS.
 - CONTROLLED ROOF DRAIN MAXIMUM FLOW RATE SHALL BE 0.95 L/s OR 15.0 U.S. GAL./MIN. PER EX. DRAIN.
 - TWO (2) CONTROLLED ROOF DRAINS ARE PROPOSED AT THE FLAT ROOF TOP OF THIS BUILDING.
 - ALL PROPOSED BUILDING SANITARY, STORM AND WATER SERVICES SHALL TERMINATE ± 1.0m OUTSIDE THE FOUNDATION WALL AND CONNECTION TO PLUMBING BY OTHERS.
 - SANITARY BUILDING DRAIN TO BE EQUIPPED WITH A FULL PORT BACKWATER VALVE AND BE 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 FROM THE SEWER AND WATERMAIN TO SERVICE THE ENTIRE PROPERTY. PRIOR TO BUILDING 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. PROVINCIAL 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 ONTARIO BUILDING/PLUMBING CODES. WHERE THE LATEST REVISION DIFFERS FROM THE REQUIREMENTS SET OUT IN THIS PLAN, THE CONTRACTOR SHALL PRICE THE WORKS TO MEET LATEST REVISED STANDARDS IN HIS PRICE BID FOR THIS PROJECT. THE CONTRACTOR SHALL INFORM THE ENGINEERS OF ANY CHANGES PRIOR TO COMMENCEMENT OF THE WORKS.
 - PROPOSED TOP OF ENTRY, TOP OF FOUNDATION, TOP OF BASEMENT SLAB, UNDERSIDE OF FOOTING ELEVATIONS SHALL BE REVIEWED AND APPROVED BY PROJECT 1 STUDIO INC. PRIOR TO CONSTRUCTION.
 - IF EXISTING GRADES ALONG ANY EXISTING ADJUTING PROPERTY LIMITS EXCEED THE PROPOSED GRADES ON THIS PROPERTY BY A HEIGHT DIFFERENTIAL THAT EXCEEDS TERRACING OF 3H TO 1V, THEN INSTALL A RETAINING WALL AS PER OWNER'S REQUIREMENTS.
 - SITE SERVICING BEDDING, BACKFILL REQUIREMENTS ALONG WITH ROADWAY AND PARKING LOT PAVEMENT STRUCTURES SHALL MEET RECOMMENDATIONS AND REQUIREMENTS SET OUT IN THE OWNER'S SOILS ENGINEER REPORT. ALL WORKS 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.
 - THE CONTRACTOR, UPON COMPLETION OF THE NEW SERVICES, SHALL RESTORE THE EXISTING ROOSEVELT AVENUE ROADWAY BOUNDARY 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.

REVISION				DATE	BY
1	REVISION AS PER CITY'S REVIEW COMMENTS OF SEPTEMBER 23, 2023 TO DETAIL 6.0m BASEMENT FOR PROTECTION OF CITY TRUNK SEWER AND HIGH PRESSURE WATERMAIN	10/17/25	TLM		

SCALE
0 1 2 3 4 5m
1:100
HORIZONTAL
VERTICAL

DESIGN	PROJECT
T.L.M.	342 ROOSEVELT AVENUE LOT 36 REGISTERED PLAN 114 CITY OF OTTAWA
DRAWN BY	DRAWING TITLE
P.M.	PROPOSED SITE GRADING AND SERVICING PLAN
CHECKED	DATE
T.L.M.	824-83
APPROVED	DRAWING No.
T.L.M.	G-1