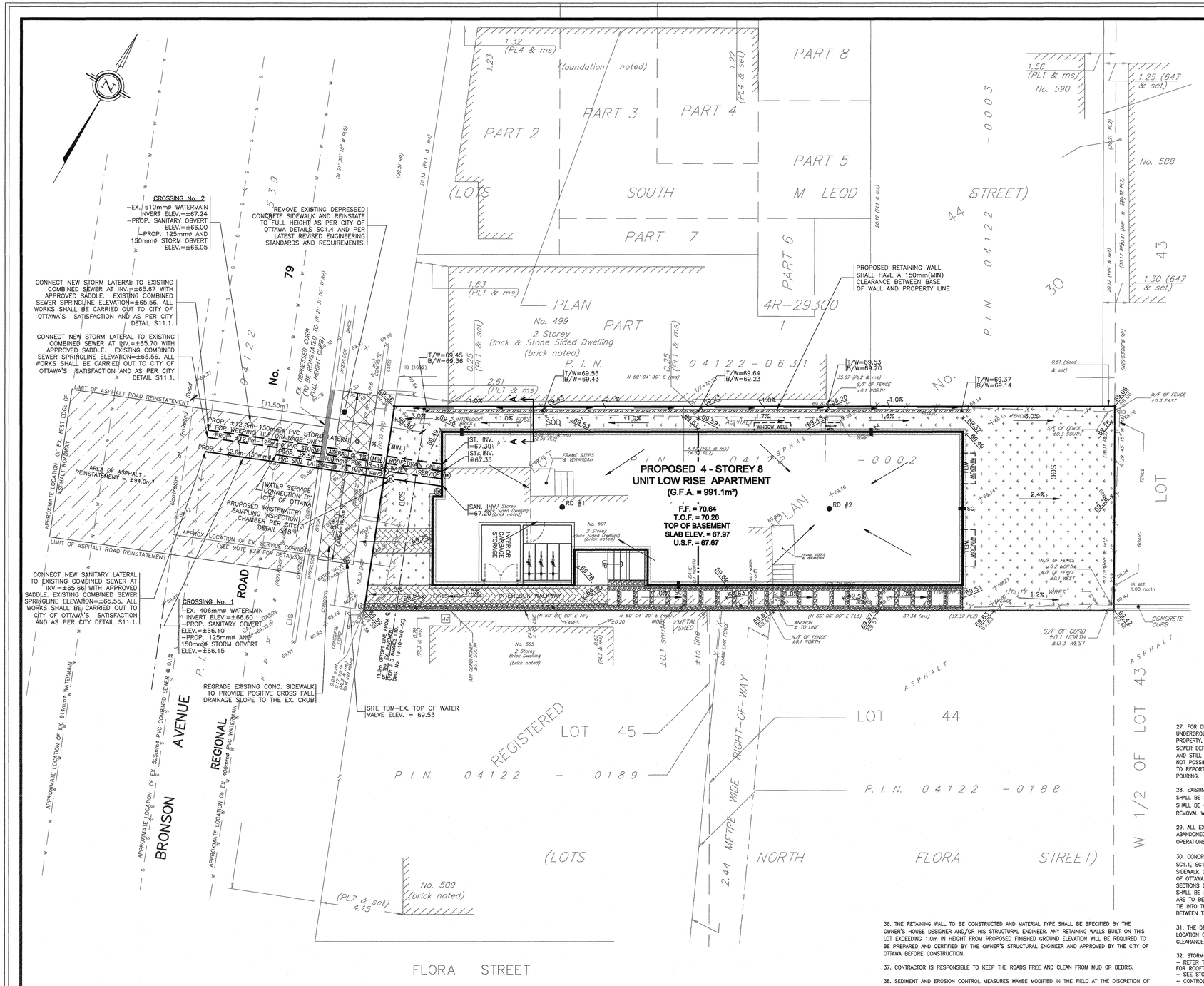

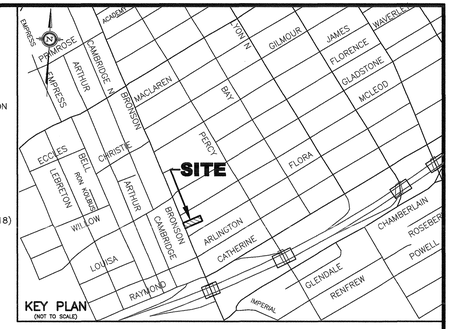

LEGEND

- ±69.56 — PROPOSED ELEVATION
- x 69.40 — EXISTING ELEVATION
- F.F. — PROPOSED TOP OF FIRST GROUND FLOOR ELEVATION
- T.O.F. — PROPOSED TOP OF CONCRETE FOUNDATION ELEVATION
- U.S.F. — PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION
- D/W — PROPOSED DRIVEWAY
- S — EXISTING COMBINED SEWER
- ST — EXISTING STORM SEWER
- W — EXISTING WATERMAIN
- PROPOSED 125mmø PVC SANITARY LATERAL SERVICE @ 1% (MIN.) SLOPE
- PROPOSED 100mmø PVC STORM LATERAL SERVICE @ 1% (MIN.) SLOPE
- PROPOSED 100mmø WATER SERVICE (PVC CL150 DR-18)
- MH-SAN — EXISTING SANITARY MANHOLE
- MH-STM — EXISTING STORM MANHOLE
- CB — EXISTING CATCH BASIN
- EXISTING WATER VALVE
- FH — EXISTING FIRE HYDRANT
- UP — EXISTING UTILITY POLE
- OHW — EXISTING OVERHEAD WIRES
- V&VB — PROPOSED VALVE AND VALVE BOX (V&VB)
- PROPOSED GENERAL DIRECTION OF LOT GRADING AND SURFACE FLOW
- PROPOSED CONCRETE TYPE RETAINING WALL
- T/W — PROPOSED TOP OF RETAINING WALL ELEVATION
- B/W — PROPOSED BOTTOM OF RETAINING WALL ELEVATION
- PROPOSED HIGH RIDGE LINE
- RD #1 — PROPOSED ROOF DDRAIN
- SC — PROPOSED ROOF SCUPPER LOCATION
- PROPOSED RIGID STYROFOAM INSULATION 50mm THICK (MIN.)
- PROPOSED WATER METER LOCATION
- RM — PROPOSED REMOTE WATER METER LOCATION
- DENOTES EX. DEPRESSED CONCRETE SIDEWALK AREA AND RE-INSTATEMENT AREA TO BE CONSTRUCTED TO FULL HEIGHT AS PER CITY DETAIL S1.4
- PROPOSED WASTEWATER SAMPLING INSPECTION CHAMBER LOCATION (PER CITY DETAIL S18.1)
- DENOTES ASPHALT ROADWAY AREA TO BE REINSTATED FROM CURB TO CURB AS PER CITY DETAIL R10

NOTES

1. EXISTING SERVICES AND UTILITIES SHOWN ON THIS DRAWING WERE TAKEN FROM THE BEST AVAILABLE RECORDS, BUT ARE INCOMPLETE. CONTRACTOR IS REQUIRED TO CHECK IN THE FIELD FOR LOCATION AND ELEVATION OF PIPES, AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING.

2. CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS AS DEEMED NECESSARY.

3. SITING DETAILS FOR THE PROPOSED BUILDING WERE TAKEN FROM THE SITE/LANDSCAPING PLAN (DWG. No. SL1.1 REV. #2 DATED FEBRUARY 20, 2019) RECEIVED ON JANUARY 7, 2020 AND PREPARED BY MIROCA DESIGN INC. THE GROUND FLOOR, TOP OF FOUNDATION, LOWER LEVEL SLAB, TOP OF CONCRETE FOOTING, AND UNDERSIDE OF CONCRETE FOOTING ELEVATIONS WERE PROVIDED BY THE OWNER'S HOUSE DESIGNER. SEE ARCHITECTURAL ELEVATION PLANS (DWG. No. A1.3, A2.3, AND A3.3 DATED FEBRUARY 20, 2019) FOR DETAILS.

4. EXISTING HORIZONTAL AND VERTICAL SURVEY DATA SHOWN ON THIS PLAN INCLUDING SITE BENCHMARK, ROAD ELEVATIONS, SEWER INVERT ELEVATIONS, AND THE TOPOGRAPHICAL INFORMATION OF THE LOT WERE PROVIDED BY PAYNETTE SURVEYING, AS DEPICTED ON THEIR TOPOGRAPHICAL SURVEY PLAN (REFERENCE #18-024 COMPLETED ON JULY 3, 2018). T.L. MAK ENGINEERING CONSULTANTS LTD. DOES NOT TAKE ANY RESPONSIBILITY FOR THE SURVEY INFORMATION SHOWN HERE. FOR INFORMATION REGARDING THE EXISTING BRONSON AVENUE WATERMAIN AND COMBINED SEWER, THE CONTRACTOR SHALL REFER TO THE CITY OF OTTAWA "AS-BUILT" PLAN AND PROFILE ENTITLED "BRONSON AVENUE RECONSTRUCTION LAURIER AVENUE TO ARLINGTON AVENUE" DWG. #021, REV #6 CONTRACT No. 1S10-5195.

5. ALL GRADING SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA. ALL GRADES SHOWN ARE METRIC AND GEODETIC. EXISTING AND PROPOSED GRADES SHOWN ON THIS DRAWING ARE BASED ON A BENCHMARK REFERENCED FROM J.D. BARNES LIMITED'S ELEVATION CERTIFICATE OF DECEMBER 12, 2019 (JOB #19-10-149-00).

6. PROPOSED SURFACE GRADE SHALL BE 7% MAXIMUM. WHERE THE GROUND DROPS OFF STEEPLY, TERRACE THE GROUND AT 3H MAXIMUM TO 1V AS NECESSARY TO MEET CITY OF OTTAWA'S GRADING REQUIREMENTS AND THE OWNER'S CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM FOUNDATIONS.

7. THE PROPOSED 100MM DIAMETER WATER SERVICE SHALL BE PVC-CL-150 DR-18.

8. ALL WATERWORKS SHALL BE CONSTRUCTED TO CITY OF OTTAWA'S LATEST REVISED STANDARDS ON APPROVAL BY THE CITY.

9. CONSTRUCT ALL SANITARY AND STORM PIPES IN ACCORDANCE WITH CITY OF OTTAWA'S LATEST REVISED STANDARD OTHERWISE AS PER OPSS AND OPSD SPECIFICATIONS.

10. ALL WORKS CONSTRUCTED BY THE CONTRACTOR SHALL MEET CITY OF OTTAWA'S CURRENT ENGINEERING STANDARDS AND AS PER CITY'S REQUIREMENTS. ALL WATERMAIN SERVICE AND FITTINGS SHALL CONFORM TO APPROVED AWWA AND/OR CSA STANDARDS. WATER SERVICE AND WATERMAIN TRENCH DETAILS AS PER CITY W17 DETAIL.

11. THE CONTRACTOR SHALL CONSTRUCT AND ENSURE THAT THE 100mm DIAMETER WATER SERVICE ON THIS LOT SHALL HAVE A MINIMUM OF 2.4m OF GROUND COVER. THE WATER SERVICE PIPE MATERIAL SHALL BE PVC CL-150 DR-18 AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST CITY OF OTTAWA STANDARDS.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS TO COMPLETE THE WORKS.

13. EXISTING LOCATION OF BRONSON AVENUE WATERMAIN AND COMBINED SEWER SHOWN ON THIS PLAN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY IN THE FIELD TO CONFIRM ITS EXACT LOCATION PRIOR TO EXCAVATION. (SEE NOTE #26 ALSO).

14. WATER SERVICE CONNECTION ON BRONSON AVENUE SHALL BE DONE BY THE CITY. ALL CONNECTIONS AND OTHER RELATED WORKS TO WATERMAIN SHALL BE MADE BY THE CITY AND EXCAVATION, BACKFILLING, AND REINSTATEMENTS BY CONTRACTOR. ALL WATERWORKS SHALL BE CARRIED OUT TO THE CITY'S SATISFACTION.

15. IF WATER SERVICE IS LESS THAN 2.4m FROM SEWER, MANHOLE, OR CATCH BASIN, CONTRACTOR IS REQUESTED TO INSULATE BETWEEN THEM WITH S/M PIGID INSULATION (AS PER CITY DETAIL W22 and W23).

16. PIPE SIZES SHOWN ON THIS PLAN ARE METRIC.

17. PROPOSED SANITARY AND STORM SERVICE LATERALS (120mm DIAMETER AND 150mm DIAMETER) SHALL BE PVC-DR-28 OR EQUIVALENT AND CONNECTION TO THE EXISTING SEWER SHALL BE AS PER CITY OF OTTAWA'S LATEST REVISED ENGINEERING STANDARDS.

18. SANITARY AND STORM SEWER SERVICE BENDS AND RISERS USED MUST BE CONSTRUCTED TO THE CITY'S SATISFACTION.

19. PIPE MATERIAL AND INSTALLATION METHODS FOR THE TRENCHING AND OUTLET PIPING AT THE SLOPED AREAS WILL BE SUBJECT TO THE SOILS ENGINEER'S REVIEW AND APPROVAL PRIOR TO CONSTRUCTION DUE TO GEOTECHNICAL CONSIDERATIONS OF THIS SITE. CONSTRUCT CLAY DYKES AT LOCATIONS SPECIFIED IN THIS DRAWING AND INSTALL AS PER OWNER'S GEOTECHNICAL ENGINEER'S REPORT RECOMMENDATIONS.

20. BEDDING FOR SEWERS AND WATERMAIN INSTALLATION SHALL BE TYPE "B" COMPACTED TO 95% DRY PROCTOR DENSITY. FOR THE SEWER LATERALS USE 300mm THICK APPROVED GRANULAR COVER MATERIAL COMPACT TO 95% DRY PROCTOR DENSITY. TRENCH BACKFILL WITH NATIVE MATERIAL AND COMPACT TO 95% DRY PROCTOR DENSITY MINIMUM. NO FROZEN MATERIALS ARE TO BE USED AS BACKFILL IN THE SERVICING TRENCHES.

21. INSULATE THE BUILDING SERVICE LATERALS AND WATER SERVICE WITHIN THE ROAD RIGHT OF WAY WHERE GROUND COVER IS LESS THAN 2.4m FOR WATER SERVICE AND SEWER LATERALS OF LESS THAN 2.4m FOR SERVICE LATERALS AND WATER SERVICE FROM ANY EXISTING CATCH BASINS AND/OR MANHOLES.

22. WATER SERVICE, STORM SEWER LATERALS, AND SANITARY SEWER LATERAL ARE THE RESPONSIBILITY OF THE OWNER'S PLUMBER FROM 1m OUTSIDE THE FOUNDATION WALL INTO THE PROPOSED BUILDING UNDER THE LATEST REVISION OF THE ONTARIO PLUMBING CODE.

23. WHERE FROST COVER FROM UNDERSIDE OF BUILDING CONCRETE FOOTING TO PROPOSED FINISHED GROUND ELEVATION IS LESS THAN 1.5m, IT IS RECOMMENDED THAT INSULATION (50mm THICK) MINIMUM BE INSTALLED AT FOOTING AND FOUNDATION OF THE BUILDING TO PROVIDE SUFFICIENT FROST COVER FOR FOUNDATION STRUCTURES. INSULATION REQUIREMENTS SHALL BE REVIEWED AND RECOMMENDED BY OWNER'S SOILS ENGINEER. EXACT INSULATION REQUIREMENTS SHALL BE CONFIRMED BY ARCHITECT AND OWNER'S SITE SOILS ENGINEER TO CONTRACTOR BEFORE INSTALLATION.

24. IT IS REQUIRED THAT A CITY APPROVED BACKWATER VALVE BE INSTALLED AT THE NEW 125mm DIA. AND 150mm DIA. (FOUNDATION DRAINS) STORM LATERAL SERVICE AND A FULL PORT BACKWATER VALVE BE INSTALLED FOR THE NEW SANITARY LATERAL SERVICE AS PER CITY DETAIL S14, S14.1, AND S14.2.

25. THE OWNER'S HOUSE DESIGNER AND PLUMBER SHALL CHECK THE CURRENT ONTARIO PLUMBING CODE FOR REQUIREMENTS FOR A BACKWATER VALVE IN THE BUILDING AND AS PER THE MECHANICAL ENGINEER'S DRAWINGS AT THE SANITARY AND STORM SEWER SERVICE LINES.

26. DETAILS OF THE EXISTING SEWERS AND WATERMAIN SHOWN ON BRONSON AVENUE FROM THE CITY MAY NOT BE CURRENT. THE CONTRACTOR SHALL REFER TO THE CITY'S SEWER AND WATERMAIN DRAWINGS FOR DETAILS BEFORE DIGGING. THE CONTRACTOR IS ADVISED TO EXCAVATE AND INVESTIGATE THE SEWER ELEVATIONS IN FRONT OF THIS PROPERTY FIRST TO ENSURE THAT 1% (MINIMUM) PIPE SLOPE OF THE SANITARY AND STORM LATERALS CAN BE ACHIEVED USING THE PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION. IF 1% (MINIMUM) SLOPE IS NOT POSSIBLE FROM THE BUILDING TO THE SEWER, THEN THE CONTRACTOR SHOULD INFORM THE OWNER'S PROJECT MANAGER AND THE CITY ACCORDINGLY FOR FURTHER DIRECTION.

27. FOR DEVELOPMENT OF THIS SITE, THE CONTRACTOR MUST FIRST CONSTRUCT THE UNDERGROUND SANITARY, STORM, AND WATER SERVICES FROM THE SEWER AND WATERMAIN TO THE PROPERTY, PRIOR TO BUILDING CONCRETE FOUNDATION POURING. THE CONTRACTOR SHALL VERIFY SEWER DEPTHS TO ENSURE THAT THE SEWER LATERALS CAN ACHIEVE A SLOPE OF 1% (MINIMUM) AND STILL BE BELOW PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION. IF THIS IS FOUND NOT POSSIBLE, THE CONTRACTOR SHALL CONTACT THE OWNER AND HIS OR HER PROJECT MANAGER TO REPORT THE FINDING IN ORDER TO ADJUST BUILDING FOUNDATION GRADES PRIOR TO CONCRETE POURING.

28. EXISTING HOUSE LATERALS AND WATER SERVICE PIPING SHALL BE REMOVED. WATER SERVICE SHALL BE BLANKED AT THE MAIN AS PER CITY OF OTTAWA'S REQUIREMENTS. SEWER LATERAL(S) SHALL BE CAPPED AND/OR PLUGGED AT FRONT PROPERTY LINE. ALL WATER AND SEWER LATERAL REMOVAL WORKS SHALL BE CARRIED OUT TO CITY OF OTTAWA'S SATISFACTION.

29. ALL EXISTING BUILDING WATER SERVICES PRESENTLY SERVICING THIS PROPERTY SHALL BE ABANDONED AND TO BE BLANKED AT THE WATERMAIN TO THE SATISFACTION OF THE CITY WATER OPERATIONS DEPARTMENT'S STANDARDS AND REQUIREMENTS.

30. CONCRETE CURB AND SIDEWALK DETAILS AS PER CITY OF OTTAWA STANDARDS (DWG. No. SC1.1, SC1.4 DATED MARCH 2007 AND SC8 DATED 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 SECTIONS OF EXISTING DEPRESSED CONCRETE CURB AND SIDEWALK FOR THE OLD DRIVEWAYS SHALL BE REMOVED AND REPLACED BY RAISED CURB AND SIDEWALK. THE CURB AND SIDEWALK ARE TO BE RAISED ARE TO BE RAISED BEYOND THE LIMITS SHOWN ON THE PLAN IN ORDER TO TIE INTO THE EXISTING CURB AND SIDEWALK. INTERLOCKING PAVING STONE IS TO BE INSTALLED BETWEEN THE CURB AND SIDEWALK TO MATCH EXISTING CONDITIONS.

31. THE DEVELOPER/CONTRACTOR SHALL CONTACT ALL THE UTILITY COMPANIES REGARDING LOCATION OF THE EXISTING OVERHEAD UTILITY WIRES FOR RELOCATION AND POSSIBLE CONFLICT CLEARANCE PRIOR TO CONSTRUCTION.

32. STORM-WATER MANAGEMENT NOTES
- REFER TO PROPOSED ROOFTOP STORMWATER MANAGEMENT PLAN (DWG. No. 818-113 SWM-1) FOR ROOFTOP 2 YEAR, 5 YEAR AND 100 YEAR HWL.
- SEE STORM DRAINAGE REPORT No. R-818-113 DATED APRIL 2019 ALSO FOR DETAILS.
- CONTROLLED ROOF DRAIN FLOW RATE SHALL BE 0.63L/S OR 10 U.S. GAL/MIN.

33. NO EXCESS DRAINAGE, DURING AND AFTER CONSTRUCTION, WILL BE DIRECTED TOWARDS THE NEIGHBOURS' PROPERTIES ALONG BOTH SIDE YARDS.

34. ALL TREES ON THE RIGHT-OF-WAY ARE TO BE MAINTAINED BEFORE AND AFTER CONSTRUCTION, AND ALL TREES WITHIN THE PROPERTY SHALL BE PROTECTED AS PER THE "MUNICIPAL TREES AND NATURAL AREAS PROTECTION BYLAWS" AND THE "URBAN TREES CONSERVATION BYLAW" AS AMENDED FROM TIME TO TIME.

35. THERE WILL BE NO ALTERATION TO THE EXISTING GRADE AND DRAINAGE PATTERN ON THE PROPERTY LINES.

36. THE RETAINING WALL TO BE CONSTRUCTED AND MATERIAL TYPE SHALL BE SPECIFIED BY THE OWNER'S HOUSE DESIGNER AND/OR HIS STRUCTURAL ENGINEER. ANY RETAINING WALLS BUILT ON THIS LOT EXCEEDING 1.0m IN HEIGHT FROM PROPOSED FINISHED GROUND ELEVATION WILL BE REQUIRED TO BE PREPARED AND CERTIFIED BY THE OWNER'S STRUCTURAL ENGINEER AND APPROVED BY THE CITY OF OTTAWA BEFORE CONSTRUCTION.

37. CONTRACTOR IS RESPONSIBLE TO KEEP THE ROADS FREE AND CLEAN FROM MUD OR DEBRIS.

38. SEDIMENT AND EROSION CONTROL MEASURES MAYBE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY OF OTTAWA SITE INSPECTOR OR CONSERVATION AUTHORITY. ALSO REFER TO DWG. #818-113 ESC-1 ENTITLED EROSION AND SEDIMENT CONTROL PLAN FOR DETAILS.

39. THE SERVICING CONTRACTOR IS INFORMED AND IS AWARE THAT MECHANICAL EXCAVATION WITHIN 3.0m OF THE CENTERLINE OF THE 610mm DIA. WATERMAIN WITHIN BRONSON AVENUE IS PROHIBITED UNTIL THE EXACT LOCATION OF THE MAIN IS IDENTIFIED IN THE FIELD. THIS INVOLVES THE REMOVAL OF THE OVERBURDEN ACROSS THE MAIN UP TO 1.0m ABOVE THE OBVERT OF THE MAIN WITH MECHANICAL EXCAVATION AND HAND DIG/HYDRO-EXCAVATE THE FINAL METER TO CONFIRM THE LOCATION. PLACE 50.0mm POLYSTYRENE BOARD INSULATION OVER THE STORM LATERAL TRENCH OVER THE 610mm DIA. WATERMAIN CROSSING. A CITY WATER INSPECTOR IS TO BE PRESENT DURING WORK AROUND THE 610mm BACKBONE WATERMAIN.

APPROVED
By Jenny Kluke at 11:41 am, Mar 09, 2020

JENNY KLUKE
PLANNER
PLANNING, INFRASTRUCTURE & ECONOMIC DEVEVELOPMENT DEPARTMENT, CITY OF OTTAWA

NO.	REVISION	DATE	BY
3	REVISIONS AS PER ARCHITECT'S REVISED SITE PLAN OF JANUARY 7, 2020	01/09/20	TLM
2	REVISIONS AS PER CITY'S REVIEW COMMENTS OF NOVEMBER 21, 2019	12/13/19	TLM
1	REVISIONS AS PER CITY'S REVIEW COMMENTS OF AUGUST 16, 2019 AND REVISED SITE PLAN OF SEPTEMBER 11, 2019	10/18/19	TLM

LICENSED PROFESSIONAL ENGINEER — 01/09/20 — TONY LAI, P.ENG. — PROVINCE OF ONTARIO

SCALE
0 1 3 5m
1:100 HORIZONTAL
VERTICAL

DESIGN	T.L.M.
CHECKED	T.L.M.
DRAWN BY	G.U.
CHECKED	T.L.M.
APPROVED	T.L.M.

PROJECT: 501 BRONSON AVENUE
PART OF LOT 44
REGISTERED PLAN 30
CITY OF OTTAWA

OWNER: ZHAOKUN WANG (613) 656-4699
641 NEW LISKEARD CRES. OTTAWA, ON K2J 0N3

DRAWING TITLE: PROPOSED SITE SERVICING AND LOT GRADING PLAN

T.L. MAK ENGINEERING CONSULTANTS LTD.
CONSULTING ENGINEERS

PROJECT No.	DATE	DRAWING No.
818-113	MARCH 2019	G-1

D07-12-19-0110
17987