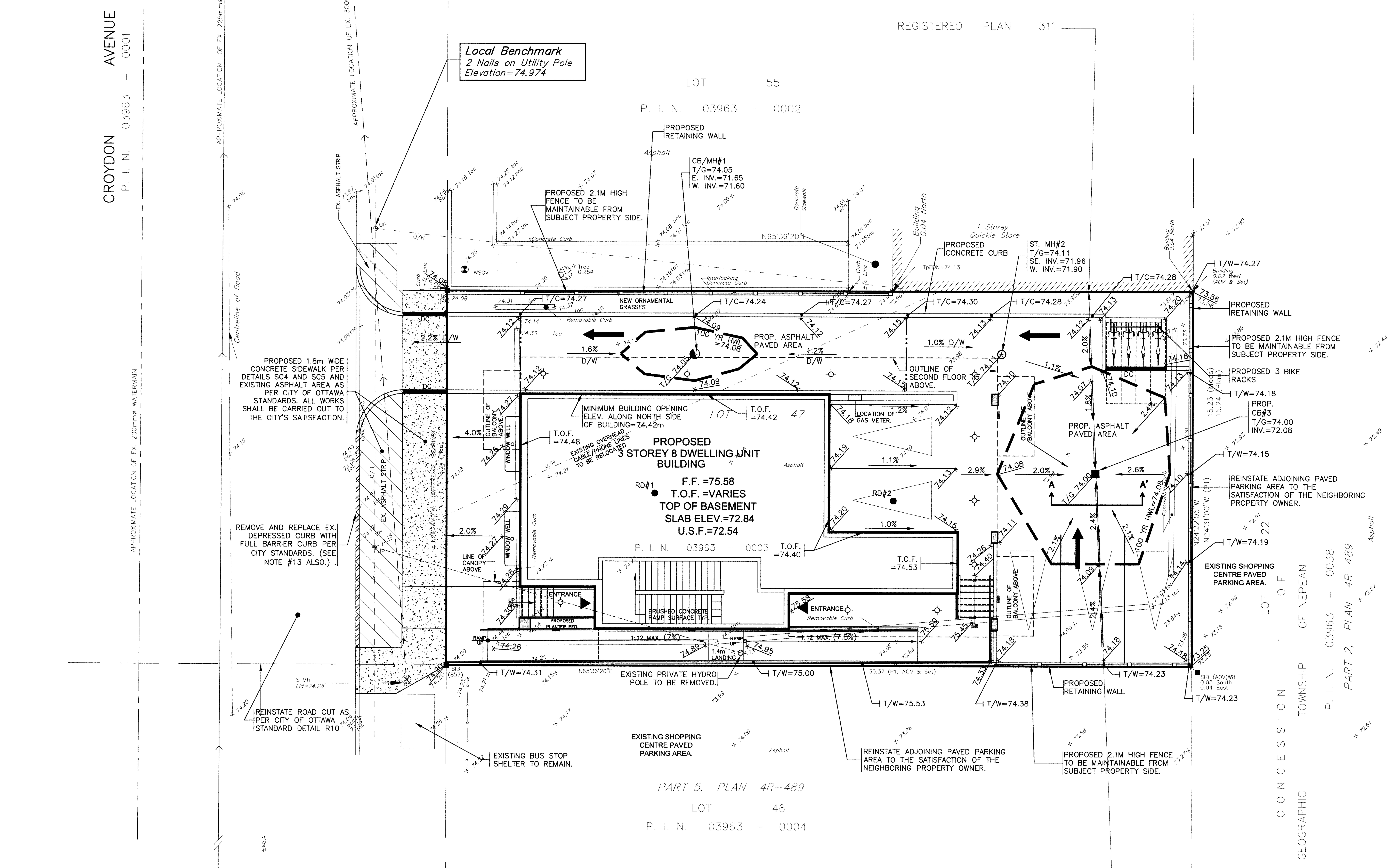


SECTION A–A'

50mm OF SUPERPAVE 12.5 ASPHALTIC CONCRETE

150mm OPSS GRAN. "A" (BASE)

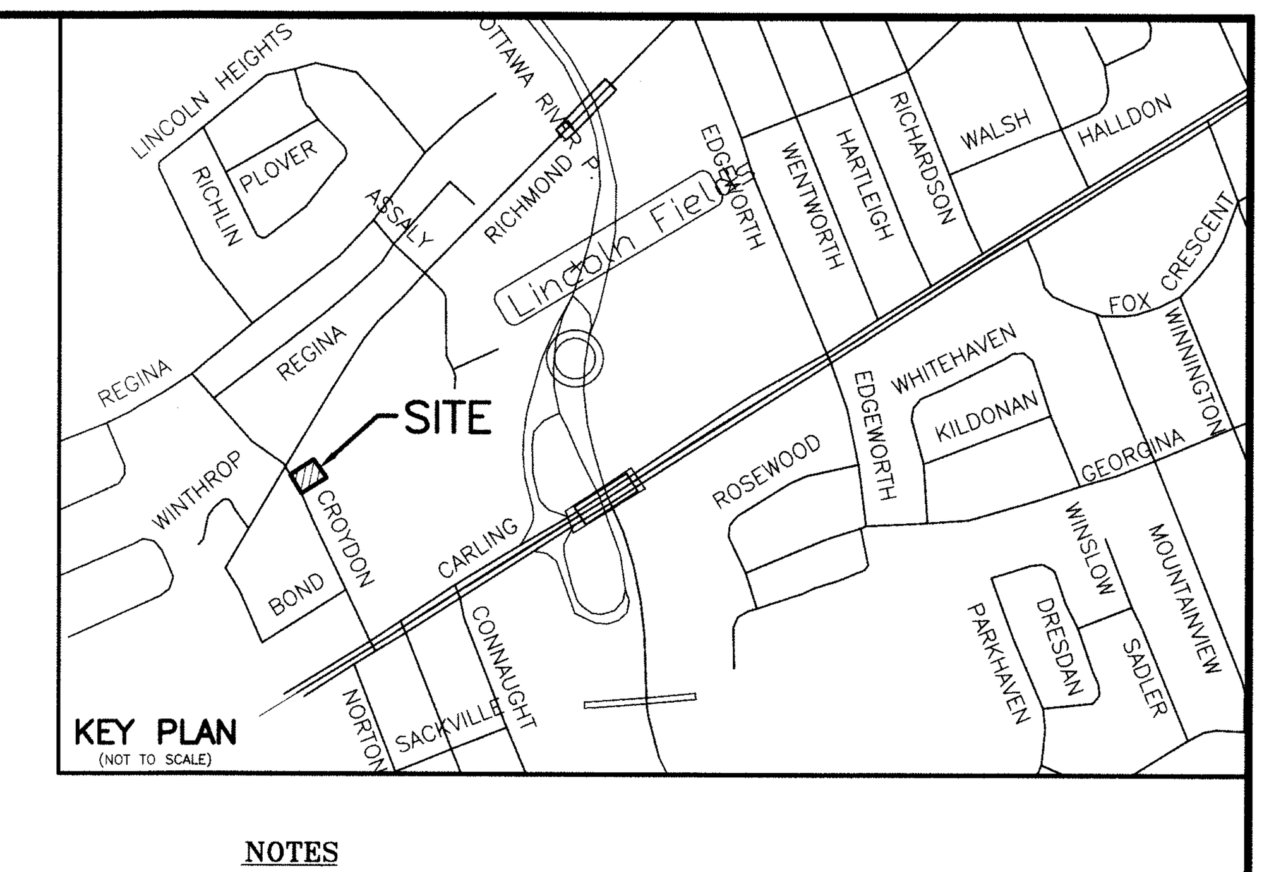
300mm OPSS GRAN. "B" – TYPE II SUB–BASE OVER (50 OR 100mm MINUS CRUSHED STONE)

NON–WOVEN GEOTEXTILE FABRIC (4 oz/sy) SUCH AS TERRAFIX 270R OR APPROVED ALTERNATIVE

TYPICAL ACCESS ROADWAY AND PARKING PAVEMENT STRUCTURE

X–SECTIONAL DETAIL
NOT TO SCALE

NOTE: – PAVEMENT STRUCTURE SHOWN ON THIS PLAN SHALL BE VERIFIED BY THE OWNER'S SOILS ENGINEER PRIOR TO SUBGRADE EXCAVATION
– ASPHALTIC CONCRETE (PG 58–34)
– SEE NOTE #2 FOR PAVEMENT STRUCTURE DETAILS



LEGEND

74.12	PROPOSED ELEVATION
73.99	EXISTING ELEVATION
F.F.	PROPOSED MAIN LEVEL SUBFLOOR ELEVATION
T.O.F.	PROPOSED TOP OF CONCRETE FOUNDATION ELEVATION
U.S.F.	PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION
D/W	PROPOSED DRIVEWAY
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATERMAIN
MH–S	EXISTING SANITARY MANHOLE
MH–ST	EXISTING STORM MANHOLE
CB	EXISTING INLET CATCH BASIN
FH	EXISTING FIRE HYDRANT
WV	EXISTING WATER VALVE
UP	EXISTING UTILITY POLE
O/H	EXISTING OVERHEAD WIRES
	PROPOSED V&VB
	PROPOSED GENERAL DIRECTION OF LOT GRADING AND SURFACE WATER FLOW
	PROPOSED RETAINING WALL
T/W	PROPOSED TOP OF RETAINING WALL ELEVATION
T/C	PROPOSED TOP OF CURB ELEVATION
	PROPOSED ASPHALT SWALE
	PROPOSED CB/MH (CATCH BASIN/MANHOLE)
	PROPOSED STORM MANHOLE
	PROPOSED CATCH BASIN (600mmX600mm)
	PROPOSED HIGH RIDGE LINE
DC	PROPOSED DEPRESSED CURB
	PROPOSED OVERLAND FLOW ROUTE
RD	PROPOSED ROOF DOWNSPOUT LOCATION
	PROPOSED 100 YR HIGH WATER LEVEL = 74.08
	PROPOSED CONCRETE SPLASH PAD LOCATION
SP	PROPOSED EMERGENCY BACKUP SUMP PUMP(S) AND PIT LOCATION FOR HOUSE WEEPING TILE DRAINAGE
	PROPOSED CONCRETE SIDEWALK ON CITY ROW
	PROPOSED NEW BARRIER CONCRETE CURB

NOTES

1. 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 AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING.

2. 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 KOLLAARD ASSOCIATES (PROJECT No. 160861 DATED JANUARY 24, 2017). FOR DETAILS OF PAVEMENT STRUCTURE DETAILS, REFER TO PAGES No. 13 AND 14 OF THE GEOTECHNICAL REPORT.

3. SITING DETAILS FOR THE PROPOSED BUILDING WERE TAKEN FROM THE OWNER'S HOUSE DESIGNER'S (P–SQUARED CONCEPTS INC.) SITE PLAN (DWG. No. SP–01 DATED JULY 14, 2017 REV. 4 PROJECT No. 0205). FOR DETAILS OF THE MAIN LEVEL SUBFLOOR (F.F.), TOP OF FLOOR (T.O.F.), TOP OF BASEMENT SLAB ELEVATION AND UNDERSIDE OF FOOTING (U.S.F.) INFORMATION FOR THE VARIOUS ELEVATION LEVELS OF THE NEW BUILDING, REFER TO THE OWNER'S HOUSE DESIGNER'S EXTERIOR ELEVATIONS PLAN (PROJECT No. 0205 DWG. No. A–02 DATED APRIL 26, 2017 REV. 2).

4. EXISTING BUILDING AND STRUCTURE LOCATION, TOPOGRAPHICAL INFORMATION ON THIS DRAWING, GEODETIC SITE BENCHMARK, SEWER INVERT AND LOCATION ETC. SHOWN ON THIS PLAN WERE PROVIDED BY FARLEY, SMITH & DENIS SURVEYING LTD. (FILE No. 346–10 DATED SEPTEMBER 29, 2010 RECEIVED ON MAY 10, 2017). T.L. MAK ENGINEERING CONSULTANTS LTD. DOES NOT TAKE ANY RESPONSIBILITY FOR THE SURVEY INFORMATION SHOWN HERE. THE CONTRACTOR IS ADVISED TO OBTAIN AND REVIEW TO HIS SATISFACTION THIS SURVEY/TOPOGRAPHICAL PLAN PRIOR TO CONSTRUCTION. STORM AND SANITARY INVERT INFORMATION WAS TAKEN FROM AVAILABLE CITY OF OTTAWA PLAN AND PROFILE DRAWING CROYDON AVENUE – RICHMOND ROAD TO CARLING AVENUE PLAN No. K–28–d DATED MAY 29/58 CITY FILE No. 1309.

5. ALL GRADES SHOWN ARE GEODETIC AND METRIC (SEE FARLEY, SMITH & DENIS SURVEYING LTD.'S TOPOGRAPHICAL PLAN).

6. 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.

7. ALL GRADING SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA.

8. STORMWATER MANAGEMENT NOTES
- THE 5 YEAR HIGH WATER LEVEL IS ESTIMATED AT ELEVATION = 72.33m CONFINED IN THE UNDERGROUND STORM PIPE AND DRAINAGE STRUCTURES.
- THE 100 YEAR HIGH WATER LEVEL IS ESTIMATED AT ELEVATION = 74.08m AT PARKING LOT.
- SEE STORM DRAINAGE REPORT No. R–817–21 DATED JUNE 2017 ALSO FOR DETAILS.
- INSTALL ICD FLOW RESTRICTOR HYDROVEX MODEL No. (50 VHV–1) OR EQUAL AS SHOWN ON THIS DRAWING.
- CONTROLLED ROOF DRAIN FLOW RATE SHALL BE 0.63L/S OR 10 U.S. GAL/MIN.

9. PROPOSED TOP OF MAIN LEVEL SUBFLOOR, TOP OF FOUNDATION, TOP OF BASEMENT SLAB AND UNDERSIDE OF FOOTING ELEVATIONS SHALL BE REVIEWED AND APPROVED BY THE OWNERS AND P–SQUARED CONCEPTS INC. PRIOR TO CONSTRUCTION.

10. PRIOR TO 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.

11. THIS GRADING DESIGN PLAN WAS PREPARED FOR THE OWNERS FOR BUILDING PERMIT ISSUANCE. ALL WORKS CONSTRUCTED BY THE CONTRACTOR SHALL MEET CITY OF OTTAWA'S CURRENT ENGINEERING STANDARDS AND PER CITY'S REQUIREMENTS. THIS GRADING PLAN SHALL NOT BE USED FOR BUILDING CONSTRUCTION LAYOUT PURPOSES. REFER TO THE HOUSE DESIGNER'S APPROVED SITE PLAN FOR EXACT DIMENSIONS REGARDING BUILDING LOCATION LAYOUT.

12. IF EXISTING GRADES ALONG ANY EXISTING ABUTTING 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.

13. CONCRETE BARRIER CURB AND DEPRESSED CURB DETAILS AS PER CITY OF OTTAWA STANDARDS (DWG. No. SC1.1, MARCH 2007 AND SC6, MAY 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.

14. CONCRETE SIDEWALK, DEPRESSED CURB AND DEPRESSED CONCRETE SIDEWALK DETAILS AS PER CITY OF OTTAWA STANDARDS (DWG. No. SC1 REV. DATE MARCH 2007, SC4 REV. DATE MARCH 2007 AND SC7.1 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.

15. THE EXISTING CONCRETE CURB AND SIDEWALK ON CROYDON AVENUE IF 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.

16. THE CONTRACTOR, UPON COMPLETION OF THE NEW ENTRANCEWAY, SHALL RESTORE THE EXISTING CROYDON 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.

17. ASPHALT DRIVEWAY PAVEMENT STRUCTURES SHALL MEET THE MINIMUM REQUIREMENTS AS SET OUT AS PER THE OWNER'S SOILS ENGINEER AND APPROVED BY THE CITY AND THIS STRUCTURE MUST ALSO BE APPROVED BY THE OWNER'S SOILS ENGINEER ON SITE PRIOR TO CONSTRUCTION BY THE CONTRACTOR. SITE SOILS ENGINEER SHALL APPROVE ALL ROAD SUBGRADE FROST TAPERING AND TRANSITION WORKS PRIOR TO GRANULAR PLACEMENT.

18. 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 THE BUILDING FOOTING AND FOUNDATION TO PROVIDE SUFFICIENT FROST COVER FOR THE FOUNDATION STRUCTURES. THE FOOTINGS WILL NEED TO BE REVIEWED FOR INSULATION BY THE OWNER'S SOILS ENGINEER. EXACT INSULATION REQUIREMENTS SHALL BE AS PER HOUSE DESIGNER'S INSULATION DETAILS AS SHOWN ON THEIR ARCHITECTURAL DRAWINGS AND CONFIRMED BY THE OWNER'S SITE SOILS ENGINEER.

19. NO EXCESS DRAINAGE, DURING AND AFTER CONSTRUCTION, WILL BE DIRECTED TOWARDS THE NEIGHBORS' PROPERTIES.

20. 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 BY–LAWS' AND THE 'URBAN TREES CONSERVATION BY–LAW' AS AMENDED FROM TIME TO TIME.

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

22. 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 PRIOR TO CONSTRUCTION.

23. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE FOR PROTECTION OF THE RECEIVING STORM SEWER DURING CONSTRUCTION ACTIVITIES. THESE PRACTICES ARE REQUIRED TO ENSURE NO SEDIMENT AND/OR ASSOCIATED POLLUTANTS ARE RELEASED TO THE RECEIVING WATERCOURSE. THESE PRACTICES INCLUDE INSTALLATION OF SEDIMENT BARRIERS ON ALL CATCH BASIN AND MAINTENANCE HOLES AND A SILT FENCE BARRIER (AS PER OPSD 219.110 AND ASSOCIATED SPECIFICATIONS) ALONG THE PROPERTY LIMITS OF THE PROPOSED DEVELOPMENT AND ALL OTHER AREAS THAT SHEET DRAIN OFF SITE. MAINTENANCE HOLE SEDIMENT BARRIERS TO BE AMOCO 4555 NONWOVEN GEOTEXTILE OR APPROVED EQUIVALENT.

24. REFER TO DWG. No. 817–21, S–1 FOR SITE SERVICING DETAILS.

APPROVED ☐ REFUSED ☐

THIS ____ DAY OF __________, 20____

DERRICK MOODIE
MANAGER, DEVELOPMENT REVIEW - WEST
PLANNING, INFRASTRUCTURE & ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

NO.	REVISION	DATE	BY
3	AS PER CITY'S REVIEW COMMENTS OF SEPTEMBER 15, 2017	11/09/17	TLM
2	REVISIONS AS PER LATEST REVISED SITE PLAN OF JULY 14, 2017	07/20/17	TLM
1	REVISIONS AS PER OWNER'S BUILDING DESIGNER'S COMMENTS OF JUNE 13, 2017 AND JUNE 21, 2017	06/22/17	TLM

LICENSED PROFESSIONAL ENGINEER — TONY L.M. MAK — PROVINCE OF ONTARIO — NOV.14/17

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: 351 CROYDON AVE, LOT 47, REGISTERED PLAN 348, CITY OF OTTAWA

DRAWING TITLE: PROPOSED SITE GRADING PLAN

T.L. MAK ENGINEERING CONSULTANTS LTD.
CONSULTING ENGINEERS

PROJECT No.	DATE	DRAWING No.
817–21	MAY 2017	G–1

D07-12-17-0102

PLAN # 17488