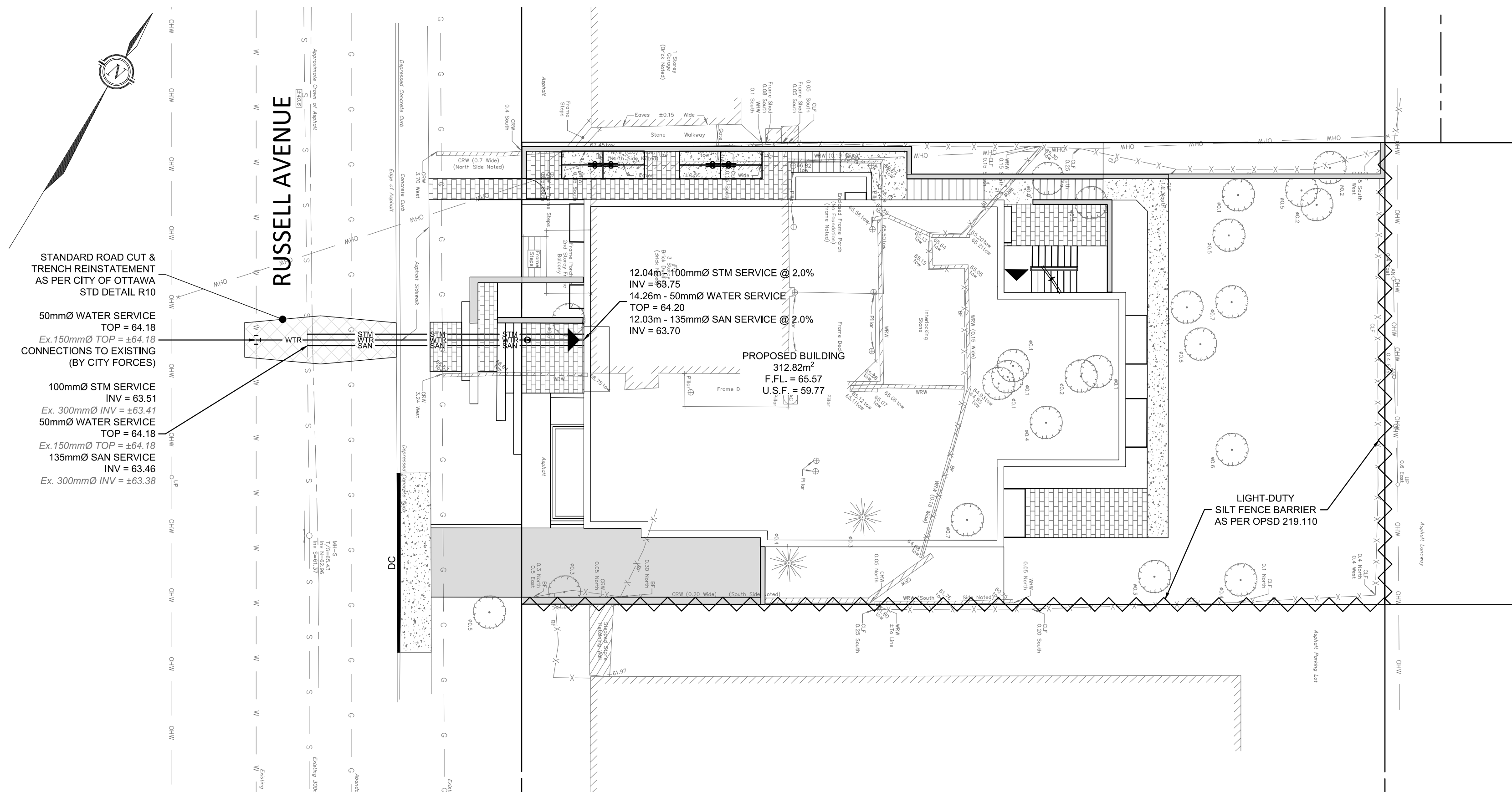


1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE BOUNDARY SHOWN HEREON HAVE BEEN DERIVED FROM THE CADASTRAL SURVEY OF THE CITY OF WINDSOR BY J. DENIS SURVEYING LTD. SURVEY PLAN #591-17, DATED JANUARY 19, 2018 AND CANNOT BE RELIED UPON TO BE ACCURATE OR COMPLETE. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LITTLER SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OR TOWNSHIP BEFORE COMMENCING CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
5. THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND MAINTAIN ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION. IF NOT SHOWN ON THESE DRAWINGS, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EXISTING AND MEET THE ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY OR TOWNSHIP AUTHORITIES.
7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY OR TOWNSHIP.
8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE CITY OR TOWNSHIP.
12. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY OR TOWNSHIP SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
13. CONTACT THE CITY OR TOWNSHIP FOR INSPECTION OR ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOT BEING RECTIFIED TO THE CITY OR TOWNSHIP SATISFACTION WILL BE THE RESPONSIBILITY OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
15. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
 - ELECTRICAL SERVICE - HYDRO ONTARIO,
 - GAS SERVICE - ENBRIDGE
 - TELEPHONE SERVICE - BELL CANADA,
 - TELEVISION SERVICE - ROGERS.
17. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO ONTARIO, BELL AND THE CITY OR TOWNSHIP.
18. ALL PROPOSED CURB SHALL BE CONCRETE BARRIER CURB UNLESS SPECIFIED.
19. ALL EXISTING REDUNDANT PRIVATE APPROACHES FRONTING THIS DEVELOPMENT MUST BE REMOVED TO THE SATISFACTION OF THE CITY OR TOWNSHIP.
20. THIS PLAN MUST BE READ IN CONJUNCTION WITH GEOTECHNICAL REPORT BY WSP DATED JAN 09, DATED JULY 2018 AND THE SITE SERVING REPORT BY MCMHOSH PERRY REPORT RCP-18-0176, DATED JULY 2018.

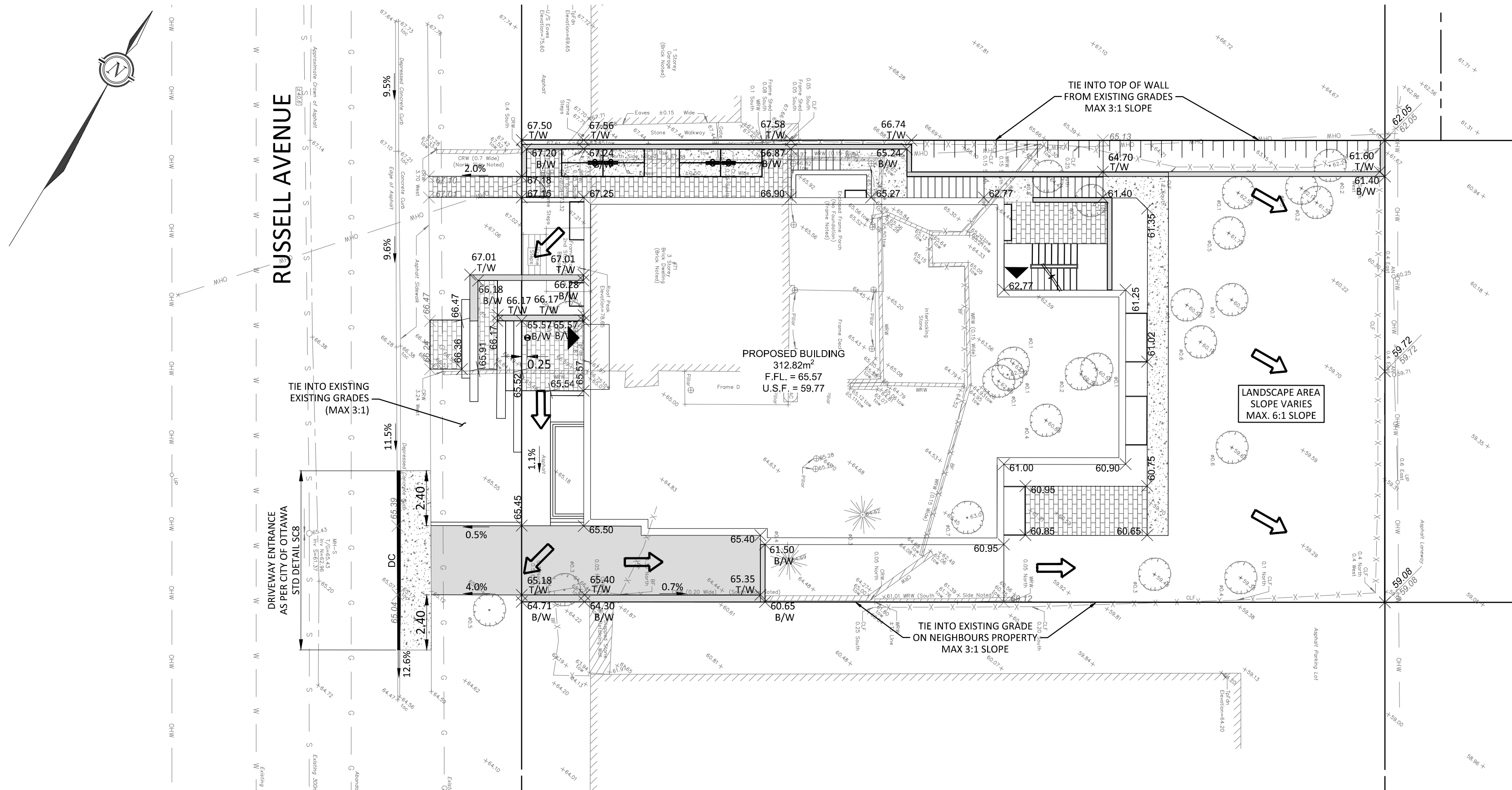
1. CONSTRUCT ALL SEWERS AND APPURTENANCES TO CITY OR TOWNSHIP STANDARDS (IF AVAILABLE) OR AS PER OPD STANDARDS.
2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
3. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
4. SUB-BEDDING, IF REQUIRED SHALL BE AS PER THE DIRECTION OF A GEOTECHNICAL ENGINEER.
5. BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR SAND.
6. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 0.2m BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
7. SEWERS AND CONNECTIONS 150mm DIAMETER SHALL BE PVC SDR 26 OR APPROVED EQUIVALENT. SEWERS AND CONNECTIONS 200mm DIAMETER AND LARGER TO BE PVC SDR 35 OR APPROVED EQUIVALENT.
8. INSULATE ALL SEWERS AND/OR SERVICES THAT HAVE LESS THAN 1.5m OF COVER WITH THERMAL INSULATION AS PER OPD 1109.030.
9. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 10m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED AT LEAST 200mm LONG. ALL SHALL BE PROTECTED BY A 100mm CONCRETE SLAB.
10. CONTRACTOR TO TELEPHONE (CCTV) ALL PROPOSED SEWERS ONSITE. OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR LARGER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
11. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN.
12. ALL CATCHBASIN AND CATCHBASIN MANHOLE LEADS ARE TO BE MINIMUM 200mmØ WITH MINIMUM 1.0% SLOPE UNLESS OTHERWISE NOTED.
13. ALL CATCHBASINS EXCLUDING LANDSCAPE CATCHBASINS ARE TO HAVE 150mm Ø PERFORATED PIPE FOR 3.0m ON ALL AVAILABLE SITES AS PER CITY OF OTTAWA STANDARD DRAWING 'R1'.

1. CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY OR TOWNSHIP STANDARDS.
2. INDUSTRIAL-COMMERCIAL SERVICE CONNECTIONS TO BE 50mm COPPER PIPING AND SHALL CONFORM TO ASTM 888 TYPE 'K' SOFT.
3. WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY OR TOWNSHIP STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
4. IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
5. USE APPROVED SADDLE CONNECTION WITH MAIN (CORPORATION) STOP AS PER CITY OF OTTAWA STANDARD DRAWING "W26".
6. CONNECTION TO EXISTING BY CITY OR TOWNSHIP FORCES, EXCAVATION, BACKFILLING AND REINFORCEMENT IS TO BE COMPLETED BY THE CONTRACTOR.
7. THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER CITY OR TOWNSHIP STANDARDS (IF AVAILABLE) OR OPSD 1109.030.

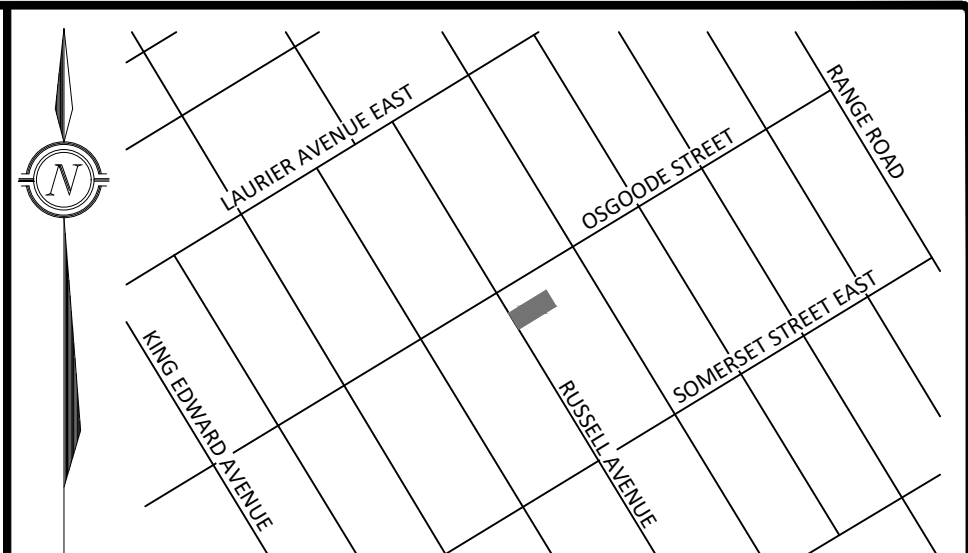
- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE AMOUNT OF EXPOSED SOIL (TEMPORARY) SEDIMENT CONTROL (GEOTEXTILES) INSURING AN OVERFLOW UNDER GRADE OR SURFACE TO BE IMPLEMENTED DURING CONSTRUCTION ON ALL PORTIONS OF THE PROJECT. DURING TEMPORARY DRAINAGE CATCHBASINS AND CATCHBASIN MANDIBLES AND OTHER SEDIMENT TRAPS, NO RECYCLED GEOTEXTILE MATERIAL SHALL BE PERMITTED FOR USE ON SOILS.
2. AT THE DISCRETION OF THE PROJECT MANAGER OR MUNICIPAL STAFF, ADDITIONAL SILT CONTROL DEVICES SHALL BE INSTALLED AT DESIGNATED LOCATIONS:
 3. FOR SILT FENCE BARRIER, USE OPSD 219.110. GEOTEXTILE FOR SILT FENCE AS PER OPSD 198.01, TABLE 3.
 4. EXCEPT AS PROVIDED IN PARAGRAPHS 4.1, 4.2, AND 4.2 BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 30 DAYS AFTER THE CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED, STABILIZATION BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE.
 5. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 2 DAYS AFTER WHEN CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED, CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED (LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE A LATER DATE AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.
5. SEDIMENT THAT IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED IN A MANNER THAT AVOIDS ESCAPE OF THE SEDIMENT TO THE DOWNSTREAM SIDE OF THE CONTROL MEASURE AND AVOIDS DAMAGE TO THE EXISTING INFRASTRUCTURE. WHEN THE SEDIMENT IS REMOVED, THE GRADE EXISTING AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOLLOWING:
 - 5.1.1. AT THE SIGHT-DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LENGTH OF THE FOLLOWING:
 - 5.1.1.1. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.
 - 5.1.1.2. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.
 - 5.1.2. FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE ON THE CONTROL MEASURE.
 - 5.1.3. ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
 - 5.1.4. ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS PER OPSD 180.
6. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MONITORED TO ENSURE THEY ARE IN EFFECTIVE WORKING ORDER. THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED PRIOR TO ANY FORECAST STORM EVENT AND FOLLOWING A FORECAST STORM EVENT.
7. DUST CONTROL MEASURES SHALL BE CONSIDERED PRIOR TO CLEARING AND GRADING. THE USE OF WATER, CALCIUM CHLORIDE FLAKES/SOLUTION OR MAGNESIUM CHLORIDE FLAKES/SOLUTION SHALL BE USED AS DUST SUPPRESSANTS AS PER OPSD 506. THIS IS TO LIMIT DUST RELEASE TO THE AIR. DUST RELEASE SHALL NOT BE UNLIMITED, WHERE THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM.
8. ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL AND SOIL AS SOON AS FEASIBLE, AS PER OPSD 570.
9. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
10. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
11. STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM DRAINAGE) AND MAINTAINED WITH EROSION AND SEDIMENT CONTROL MEASURES WHERE MATERIAL IS LEFT IN PLACE IN EXCESS OF 14 DAYS.
12. IF REQUIRED, DEWATERING/SETTLING BASINS SHALL BE CONSTRUCTED AS PER OPSD 219.240 AND LOCATED ON FLAT GRADE UPSTREAM OF OTHER EXISTING MITIGATION MEASURES. WATERCOURSES SHALL NOT BE DIVERTED, OR BLOCKED, AND TEMPORARY DIVERSIONS, CREEPS, OR CHANNELS SHALL NOT BE CONSTRUCTED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY TO CONSTRUCT OR MAINTAIN ANY DIVERSIONS FILL TO THE EROSION PORTION OF THE WATERCOURSE WITHOUT HARM.
13. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSD 577
14. WHERE DOWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSD 518.
15. ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFLEX 270R GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.



1 SERVICING AND SEDIMENT C101 & EROSION CONTROL



2 GRADING & DRAINAGE
C101



PROPERTY BOUNDARY	-----
LEGAL BOUNDARY	-----
EX. ASPHALT	-----
EX. GRAVEL	-----
EX. DITCH	
EX. FENCE	-----
PROPOSED LOT LINE	-----
PROPOSED CENTRELINE	-----
PROPOSED ASPHALT	-----
PROPOSED GRAVEL	-----
PROPOSED DITCH	-----
PROPOSED FENCE	-----
PROPOSED CULVERT	
PROPOSED RIPRAP	
PROPOSED SWALE	
PROPOSED TOP OF SLOPE	-----

2	REVISED FOR SITE PLAN CONTROL	AUG. 31, 2018
1	ISSUED FOR SITE PLAN CONTROL	AUG. 9, 2018
No.	Revision/Issue	Date

Check and verify all dimensions before proceeding with the work Do not scale drawings

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Stamp:



Client:

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OTTAWA, ON K1Z 8N8

Project:

71 RUSSELL AVENUE

NEW APARTMENT BUILDING

OTTAWA

ONTARIO

Drawing Title:

SERVICING, GRADING & DRAINAGE AND SEDIMENT & CONTROL PLAN

Scale: 1:150

1-150	Project Number
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Drawn by: P.G.K.

P.G.K.

R.P.K.

R.P.R.

Date: JUN.4, 2018

SHEET 1 of 1

C101