

RENAME: U:\Drawings\Project - Proposed\2025\0610\CO-25-1505 White Owl Group_Dwg\012 - Drawing\CO-25-1505-Design_L.dwg
LAST SAVED: Tuesday, June 30, 2026 1:55:58 PM
LAST PRINTED: Tuesday, June 30, 2026 1:55:58 PM
C:\Users\jburden\AppData\Local\Temp\1\106534269.dwg

GENERAL NOTES

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. PER THE PROVIDED SURVEY ELEVATIONS ARE GEODETIC AND ARE REFERRED TO CITY OF OTTAWA BENCHMARK POINT 0011968(1)13 HAVING A PUBLISHED ELEVATION OF 126.18 METRES (CVD02878).
2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY (OR SHOWN ON) REGISTERED PLAN 4M-300 PREPARED BY JD BARNES DATED APRIL 5, 2024 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 LAND TITLES 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 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 ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR 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 EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY 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.
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. CONTRACTOR TO MINIMIZE THE ACTUAL LIMITS OF REMOVALS AND REINSTATEMENT WHEREVER POSSIBLE, AND SHALL MAKE THEIR OWN JUDGEMENT AND ACCOUNT FOR ALL MATERIAL AND LABOUR REQUIRED FOR ADEQUATELY REINSTATING THE AREA TO PRE-CONSTRUCTION CONDITIONS OR BETTER, AND BEAR THE COST OF THE SAME. NO ADDITIONAL PAYMENT WILL BE MADE FOR REINSTATEMENT WORK NOT SHOWN ON THE CONTRACT DRAWINGS AS A DIRECT RESULT FROM CONSTRUCTION.
10. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
11. 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.
12. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
13. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
14. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
15. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
16. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
 - ELECTRICAL SERVICE - HYDRO OTTAWA,
 - 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 OTTAWA, BELL AND THE CITY.
18. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION
19. FOR GEOTECHNICAL INFORMATION, REFER TO THE GEOTECHNICAL REPORT FOR 3145 CONROY ROAD, PREPARED BY OTHERS
20. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.

EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, TEMPORARY SEDIMENT CONTROL (GEOSOCK INSERTS WITH AN OVERFLOW UNDER GRATE OR COVER) TO BE IMPLEMENTED DURING CONSTRUCTION ON ALL PROPOSED ROAD CATCHBASINS, REARWARD CATCHBASINS AND CATCHBASIN MANHOLES AND OTHER SEDIMENT TRAPS. NO RECYCLED GEOSOCK MATERIAL SHALL BE PERMITTED FOR USE ON SITE. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
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 OPSS 219-110. GEOTEXTILE FOR SILT FENCE AS PER OPSS 1860, TABLE 3.
4. EXCEPT AS PROVIDED IN PARAGRAPHS 4.1. 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 14 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.
 - 4.1. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE.
 - 4.2. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE BY THE 14TH DAY 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 CONTROL MEASURE. SEDIMENT SHALL BE REMOVED TO THE LEVEL OF THE GRADE EXISTING AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOLLOWING:
 - 5.1.1. FOR LIGHT-DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE FOLLOWING:
 - 5.1.1.1. A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT 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 REPAIRS.
 - 5.2. ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
 - 5.3. ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS PER OPSS 180.
6. ALL 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 STORM EVENT.
7. DUST CONTROL MEASURES SHOULD 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 OPSS 506. THIS IS TO LIMIT WIND EROSION OF SOILS WHICH MAY TRANSPORT SEDIMENTS OFFSITE, WHERE THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM.
8. ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL AND SOD AS SOON AS FEASIBLE, AS PER OPSS 570.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS, MANHOLES), AND BE SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS LEFT IN PLACE IN EXCESS OF 14 DAYS.
11. IF REQUIRED, DEMATERING/SETTLING BASINS SHALL BE CONSTRUCTED AS PER OPSS 219-240 AND LOCATED ON FLAT GRADE UPSTREAM OF ANY EXISTING MITIGATION MEASURES. WATERCOURSES SHALL NOT BE DIVERTED, OBSTRUCTED, OR BLOCKED, AND TEMPORARY WATERCOURSES CROSSINGS SHALL NOT BE CONSTRUCTED OR UTILIZED, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY, THE CONTRACTOR SHALL RELEASE ANY STRANDED FISH TO THE OPEN PORTION OF THE WATERCOURSE WITHOUT HARM.
12. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSS 577
13. WHERE DEMATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSS 518.
14. ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 270R GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.

GENERAL NOTES FOR ROADWAYS

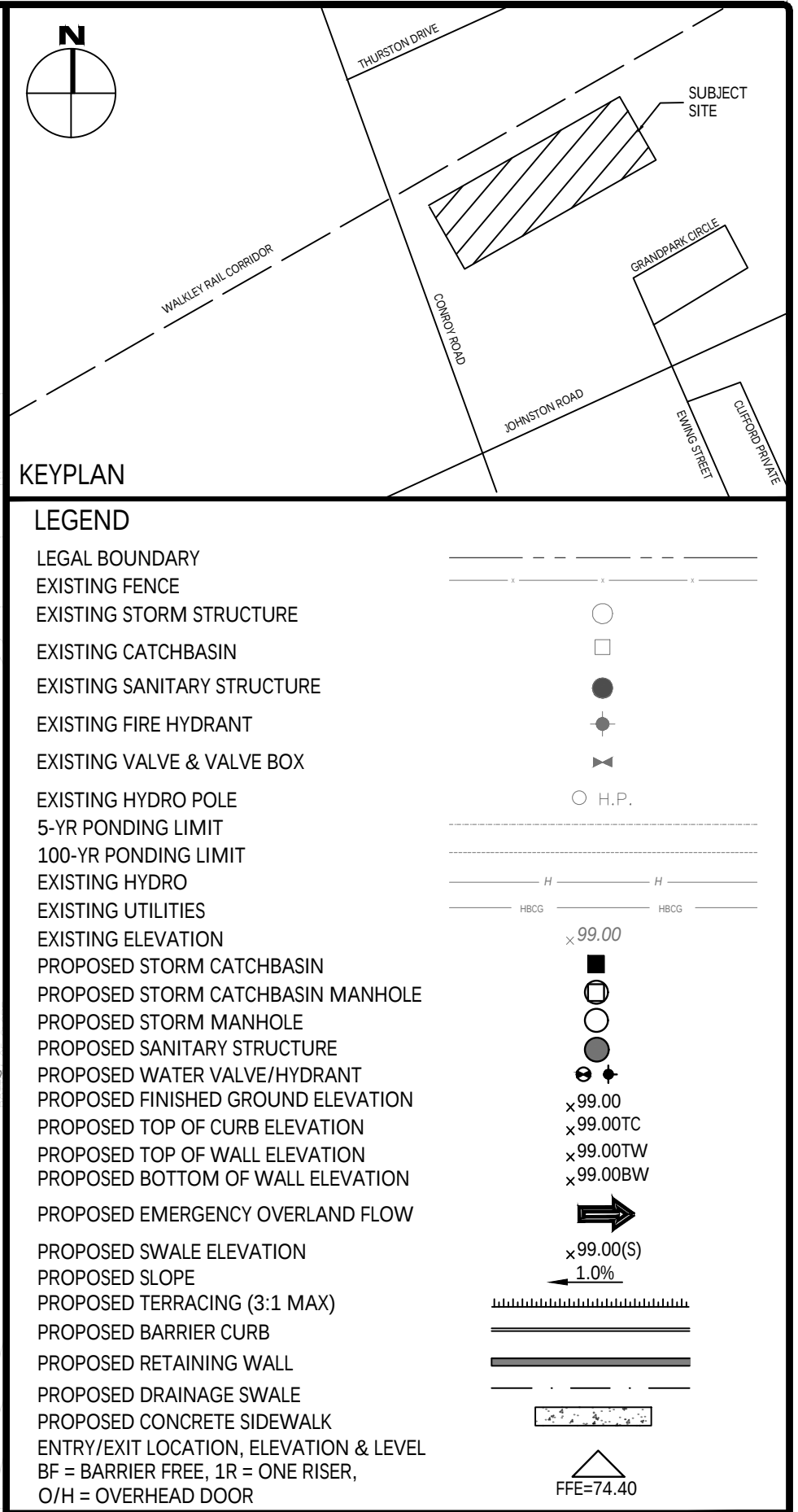
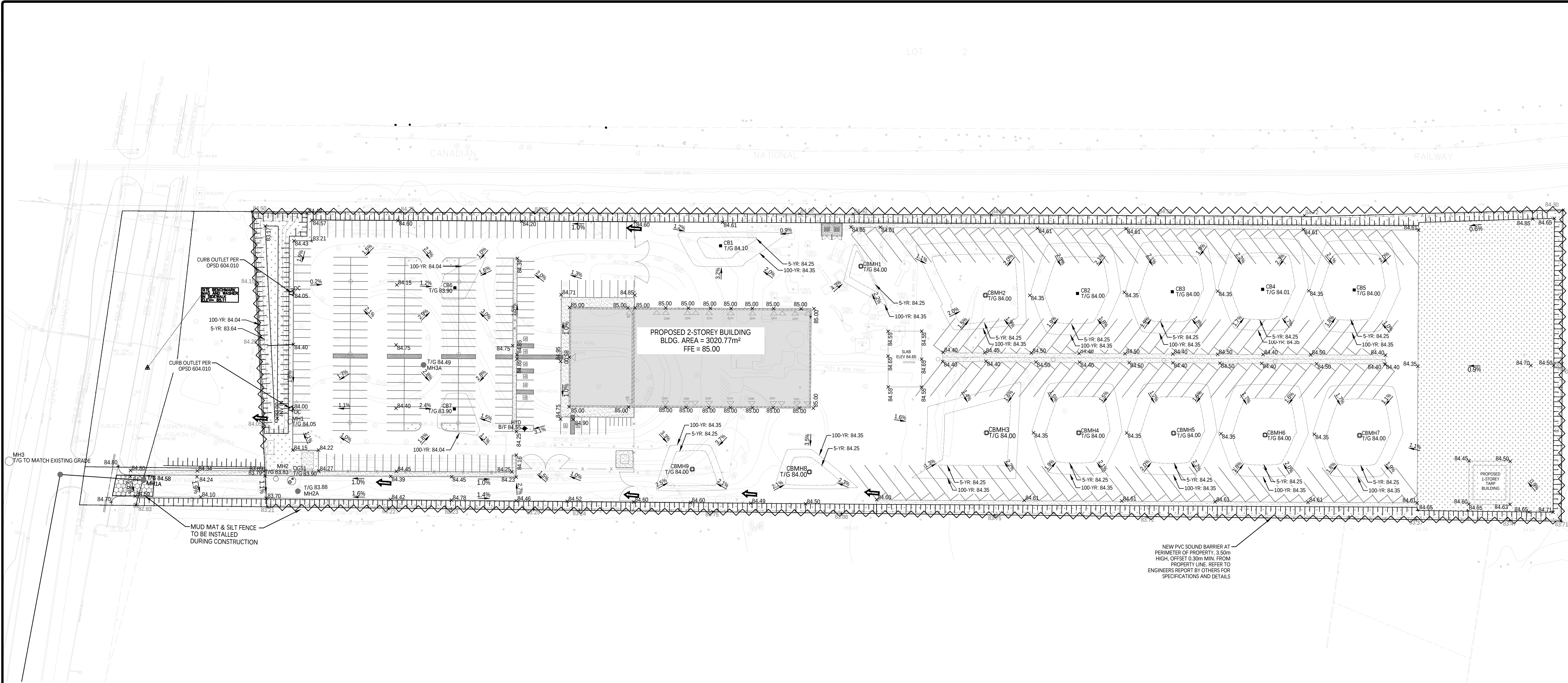
1. ALL TOPSOIL AND ORGANIC MATERIAL SHALL BE STRIPPED WITHIN THE ROADWAY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF TOWN AUTHORITIES.
3. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH OPSS 509.010, OPSS 310.
4. GRANULAR 'A' SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
5. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 100% SPMD.
6. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
7. SUB-EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.
8. IN AREAS OF NEW PAVEMENT CONSTRUCTION, ALL SURFICIAL TOPSOIL AND ANY LOOSE/SOFT, WET, ORGANIC OR DELETERIOUS MATERIALS ARE TO BE REMOVED FROM THE PROPOSED SUBGRADE SURFACE. ANY SUBEXCAVATED AREAS SHOULD BE FILLED WITH COMPACTED EARTH BORROW. THE SUBGRADE SURFACE IS TO BE PROOF-ROLLED IN THE PRESENCE OF A GEOTECHNICAL ENGINEER. THE SUBGRADE SURFACE IS TO BE SHAPED AND CROWNED TO PROMOTE DRAINAGE OF THE GRANULAR MATERIALS.
9. ANY FILL REQUIRED FOR THE ACCESS ROADWAYS AND PARKING AREAS IS TO CONSIST OF MATERIAL WHICH MEETS OR EXCEEDS OPSS SPECIFICATIONS FOR GRANULAR B TYPE I OR II. THE MATERIALS ARE TO BE PLACED IN MAXIMUM 300mm THICK LIFTS AND COMPACTED TO 98% SPMD MINIMUM USING VIBRATORY COMPACTION EQUIPMENT.
10. WHERE NEW PAVEMENT WILL ADJUT EXISTING PAVEMENT, THE DEPTHS OF GRANULAR MATERIALS IS TO TAPER UP OR DOWN AT 5 HORIZONTAL TO 1 VERTICAL OR FLATTER, TO MATCH THE DEPTHS OF THE GRANULAR MATERIALS EXPOSED IN THE EXISTING PAVEMENT.

PROPOSED PAVEMENT STRUCTURE

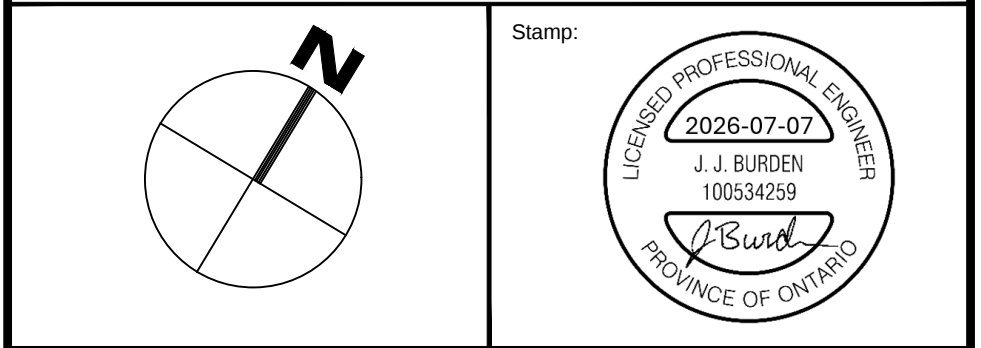
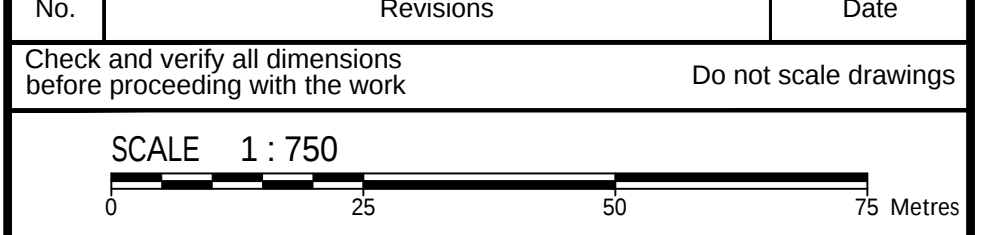
1. ASPHALT MATERIALS SHALL COMPLY WITH OPSS 310. PER GEOTECHNICAL ASSESSMENT REPORT PROVIDED BY TERRAPEX.
2. PARKING AREAS LIGHT-DUTY PAVEMENT STRUCTURE:
 - 40mm SURFACE COURSE ASPHALTIC CONCRETE HL-3 (OPSS 1150)
 - 50mm BINDER COURSE ASPHALTIC CONCRETE HL-8 (OPSS 1150)
 - 150mm GRANULAR 'A' BASE (OPSS 1010)
 - 300mm GRANULAR 'B' SUB-BASE (OPSS 1010)
3. DRIVEWAY AREAS HEAVY-DUTY PAVEMENT STRUCTURE:
 - 50mm SURFACE COURSE ASPHALTIC CONCRETE HL-3 (OPSS 1150)
 - 70mm BINDER COURSE ASPHALTIC CONCRETE HL-8 (OPSS 1150)
 - 150mm GRANULAR 'A' BASE (OPSS 1010)
 - 600mm GRANULAR 'B' SUB-BASE (OPSS 1010)

GENERAL NOTES FOR GRADING

2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT GRADING AROUND HYDRANTS, TRANSFORMERS, AND UTILITY PEDESTALS, ETC., MEET CURRENT HYDRO AND UTILITY COMPANY REQUIREMENTS.
3. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED.
4. CONTRACTOR TO ADJUST EXISTING CATCH BASINS, MANHOLES, FIRE HYDRANTS, VALVE CHAMBERS AND VALVE BOXES TO FINAL GRADE AS REQUIRED.
5. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING FOUNDATIONS OF ADJACENT BUILDINGS DURING EXCAVATION AND CONSTRUCTION PERIOD.
6. GRADING IN GRASSED AREAS WILL BE BETWEEN 2% TO 7%. GRADES IN EXCESS OF 7% WILL REQUIRE A MAXIMUM 3:1 TERRACING.
7. ALL PERVIOUS/LAWN AREAS TO BE TREATED WITH 100mm TOPSOIL & SEED OR SOD AS SOON AS FEASIBLE, EXCEPT WHERE NOTED



5	FOR SUBMISSION	06.30.2026
4	FOR SUBMISSION	03.19.2026
3	FOR SUBMISSION	03.13.2026
2	FOR SUBMISSION	11.14.2025
1	FOR REVIEW	08.25.2025
No.	Revisions	Date
Check and verify all dimensions before proceeding with the work		
Do not scale drawings		



Client: **WO MW REALTY LIMITED**
180 RENFREW DRIVE
MARKHAM, ON

Project: **PROPOSED OFFICE/INDUSTRIAL BUILDING**
3145 CONROY ROAD
OTTAWA, ON

Drawing Title: **SITE GRADING, DRAINAGE, EROSION & SEDIMENT CONTROL PLAN**

Scale: 1:750	Project Number: CO-25-1505
Drawn By: RP	Checked By: JB
Designed By: RP	Drawing Number: C101

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

#15862 D07-12-25-0107

- GENERAL NOTES**
- 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. PER THE PROVIDED SURVEY ELEVATIONS ARE GEODETIC AND ARE REFERRED TO CITY OF OTTAWA BENCHMARK POINT 001080118 HAVING A PUBLISHED ELEVATION OF 120.18 METRES (CD+20.78).
 - THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY (OR SHOWN ON) REGISTERED PLAN 4M-300 PREPARED BY JD BARNES DATED APRIL 5, 2024 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 LAND TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
 - THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
 - THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
 - RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.
 - EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
 - TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - CONTRACTOR TO MINIMIZE THE ACTUAL LIMITS OF REMOVALS AND REINSTATEMENT WHEREVER POSSIBLE, AND SHALL MAKE THEIR OWN JUDGEMENT AND ACCOUNT FOR ALL MATERIAL AND LABOUR REQUIRED FOR ADEQUATELY REINSTATING THE AREA TO PRE-CONSTRUCTION CONDITIONS OR BETTER, AND BEAR THE COST OF THE SAME. NO ADDITIONAL PAYMENT WILL BE MADE FOR REINSTATEMENT WORK NOT SHOWN ON THE CONTRACT DRAWING AS A DIRECT RESULT FROM CONSTRUCTION.
 - ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
 - 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.
 - DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
 - ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
 - CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
 - ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
 - ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
 - ELECTRICAL SERVICE - HYDRO OTTAWA,
 - GAS SERVICE - ENBRIDGE,
 - TELEPHONE SERVICE - BELL CANADA,
 - TELEVISION SERVICE - ROGERS.
 - INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO OTTAWA, BELL AND THE CITY.
 - CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION.
 - FOR GEOTECHNICAL INFORMATION, REFER TO THE GEOTECHNICAL REPORT FOR 3145 CONROY ROAD, PREPARED BY OTHERS.
 - ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.

- SEWER NOTES:**
- CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
 - SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
 - CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
 - SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE 1 BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE 1 TO MINIMIZE DIFFERENTIAL FROST HEAVING. TRENCH BACKFILL FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
 - SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
 - SEWERS AND CONNECTIONS 375mmØ AND SMALLER TO BE PVC SDR-35 OR APPROVED EQUIVALENT. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE. SEWERS AND CONNECTIONS 450mmØ AND LARGER TO BE REINFORCED CONCRETE MINIMUM CLASS 65-D OR GREATER.
 - SEWERS AND WATERMANS LOCATED PARALLEL TO EACH OTHER SHOULD BE CONSTRUCTED IN SEPARATE TRENCHES. WHEN IT IS IMPOSSIBLE OR NOT PRACTICAL TO MAINTAIN VERTICAL AND/OR HORIZONTAL SEPARATION PER MECF STANDARDS, ALL SEWERS SHOULD BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, PRESSURE TESTED IN PLACE AT A PRESSURE OF 350 kPa (50 psi) WITHOUT LEAKAGE USING THE TESTING METHODOLOGY IN ONTARIO PROVINCIAL STANDARD SPECIFICATION 701 (OPSS 701) OF THE OPS.
 - INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER CITY DETAIL S35, OPTION A.
 - SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
 - SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"x8" LONG MARKER.
 - CONTRACTOR TO TELEPHONE (CITY) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
 - DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.
 - CONTRACTOR TO PROVIDE SHOP DRAWING(S) TO THE CITY (AS WELL AS THE CIVIL CONSULTANT) FOR ANY INFRASTRUCTURE TO BE INSTALLED IN THE ROW OR EASEMENTS.

- WATERMAIN NOTES**
- CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.
 - WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMANS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER CITY DETAIL W22.
 - 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 AND CITY OF OTTAWA STANDARDS W25 AND W25.2.
 - THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER CITY DETAIL W23.
 - VALVES TO BE OPERATED BY CITY STAFF ONLY.
 - NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR IS ON SITE. NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CONNECTIONS TO BE COMPLETED BY CITY FORCES. EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY SITE SERVICING CONTRACTOR.
 - CONCRETE THRUST BLOCKS TO CONFORM TO CITY STANDARD W25.3.
 - WATERMAIN 100-300mmØ TO BE CLASS 150 DR-18 PVC OR APPROVED EQUIVALENT.
 - ALL PVC WATERMAIN SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWM OR RWU TRACER WIRE IN ACCORDANCE WITH CITY STANDARD W36.
 - FIRE HYDRANTS SHALL CONFORM TO CITY STANDARDS W18, W19, AND W20.
 - VALVE BOXES SHALL CONFORM TO CITY STANDARD W24.
 - 300mmØ VALVES AND SMALLER TO BE INSTALLED WITH VALVE BOXES AS PER CITY STANDARD W24. 400mmØ VALVES AND LARGER TO BE INSTALLED WITH BUTTERFLY VALVES AND VALVE CHAMBERS AS PER CITY STANDARD W2.
 - AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W25.2 FOR CROSSING UNDER SEWER. THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CROSSLINED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

STM STRUCTURE TABLE				
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
CB1	84.10		NE82.050	COVER: CITY S19.1 FRAME: CITY S19.1 STR: OPSD 705.010
CB2	84.00		SE80.700	COVER: CITY S19.1 FRAME: CITY S19.1 STR: OPSD 705.010
CB3	84.00		SE80.900	COVER: CITY S19.1 FRAME: CITY S19.1 STR: OPSD 705.010
CB4	84.01		SE81.100	COVER: CITY S19.1 FRAME: CITY S19.1 STR: OPSD 705.010
CB5	84.00		SE81.270	COVER: CITY S19.1 FRAME: CITY S19.1 STR: OPSD 705.010
CB6	83.90		SW83.080	COVER: CITY S19.1 FRAME: CITY S19.1 STR: OPSD 705.010
CB7	83.90		SW83.240	COVER: CITY S19.1 FRAME: CITY S19.1 STR: OPSD 705.010
CBMH1	84.00	SW81.800	E81.730	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
CBMH2	84.00	W81.520	SE81.500	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
CBMH3	84.00	NE80.260 NW81.250	SW80.220	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
CBMH4	84.00	NE80.440 NW80.450	SW80.420	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
CBMH5	84.00	NW80.660	SW80.600	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
CBMH6	84.00	NE80.800 NW80.830	SW80.770	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
CBMH7	84.00	NW81.020	SW80.960	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
CBMH8	84.00	NE79.900	SW79.860	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
CBMH9	84.00	NE79.660	SW79.340	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
MH1	84.05	W82.800	SE80.450	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
MH2	83.83	NE79.555	SW78.545	COVER: CITY S28.1 FRAME CITY S25 STR: OPSD 701.010
MH3	TBD	NE77.980	MATCH EXISTING INVERT	COVER: CITY S19 FRAME CITY S25 STR: OPSD 705.010
OGS1	83.90	NE78.610 NW80.250	SW79.590	STORMCEPTOR EF010 OR APPROVED EQUIVALENT

SAN STRUCTURE TABLE				
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
MH1A	84.58	NE81.120	SW81.100	FRAME: CITY S25 COVER: CITY S24 STR: OPSD 701.010
MH2A	83.88	N81.420	SW81.390	FRAME: CITY S25 COVER: CITY S24 STR: OPSD 701.010
MH3A	84.49	NE81.760	S81.730	FRAME: CITY S25 COVER: CITY S24 STR: OPSD 701.010
MHSA-01	REFER TO MUNI	NE81.000	REFER TO MUNI DESIGN	REFER TO MUNI DESIGN

WATER COVER TABLE				
LOCATION	STATION	FINISHED GRADE	TOP OF PIPE	COVER
A - 400 x 200 TEE	0+000.00	85.00	82.60	2.40
11.25' BEND	0+029.70	83.36	80.96	2.40
VALVE	0+062.60	83.50	81.10	2.40
45° BEND	0+085.32	83.43	81.03	2.40
45° BEND	0+143.78	84.25	81.85	2.40
TEE	0+177.49	84.70	82.30	2.40
BUILDING	0+192.02	84.95	82.55	2.40
B - 200x200 TEE	1+000.00	84.70	82.30	2.40
VALVE	1+012.50	84.42	82.02	2.40
HYDRANT	1+015.34	84.45	82.05	2.40

CROSSING CONFLICT TABLE		
LOCATION	DESCRIPTION	SEPARATION
1	150mmØ SAN SEWER OBV 81.77 375mmØ STM SERVICE INV 83.14	1.37
2	200mmØ WTR SERVICE OBV 81.94 375mmØ STM SEWER INV 83.17	1.23
3	750mmØ STM SEWER OBV 78.83 400mmØ WTR MAIN INV 81.80	2.97
4	750mmØ STM SEWER OBV 78.57 150mmØ SAN SERVICE INV 81.43	2.06
5	750mmØ STM SEWER OBV 79.41 200mmØ WTR SERVICE INV 81.21	2.08
6	200mmØ SAN SERVICE OBV 81.21 400mmØ WTR MAIN INV 81.80	0.59

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

KEYPLAN

LEGEND

- LEGAL BOUNDARY
- EXISTING FENCE
- EXISTING STORM STRUCTURE
- EXISTING CATCHBASIN
- EXISTING SANITARY STRUCTURE
- EXISTING FIRE HYDRANT
- EXISTING VALVE & VALVE BOX
- EXISTING HYDRO POLE
- 5-YR PONDING LIMIT
- 100-YR PONDING LIMIT
- EXISTING HYDRO
- EXISTING UTILITIES
- EXISTING ELEVATION
- PROPOSED STORM CATCHBASIN
- PROPOSED STORM CATCHBASIN MANHOLE
- PROPOSED SANITARY STRUCTURE
- PROPOSED WATER VALVE/HYDRANT
- PROPOSED FINISHED GROUND ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- PROPOSED BOTTOM OF WALL ELEVATION
- PROPOSED EMERGENCY OVERLAND FLOW
- PROPOSED SWALE ELEVATION
- PROPOSED SLOPE
- PROPOSED TERRACING (3:1 MAX)
- PROPOSED BARRIER CURB
- PROPOSED RETAINING WALL
- PROPOSED DRAINAGE SWALE
- PROPOSED CONCRETE SIDEWALK
- ENTRY/EXIT LOCATION, ELEVATION & LEVEL
- BF = BARRIER FREE, 1R = ONE RISER, O/H = OVERHEAD DOOR

SCALE 1:750

Client: WO MW REALTY LIMITED
180 RENFREW DRIVE
MARKHAM, ON

Project: PROPOSED OFFICE/INDUSTRIAL BUILDING
3145 CONROY ROAD
OTTAWA, ON

Drawing Title: SITE SERVICING PLAN

Scale: 1:750
Project Number: CO-25-1505
Drawing Number: C102