

PROJECT NO.  
1013081

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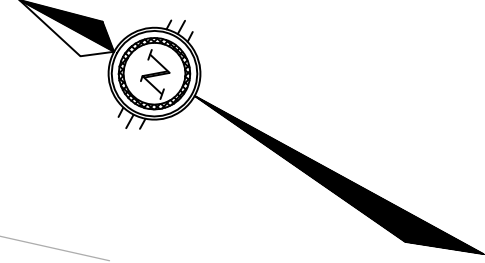
DATE  
AUGUST 2014



FILENAME: V:\10-40 Municipal Infrastructure\1013081-12 Montreal Road\3. Drawings\Working Drawings\1013081 - Engineering plans (SWM).dwg  
PLOT DATE: Sep 29, 2014 9:32am, jafferjee



FOR CONTINUATION SEE DRAWING C.05 - SHEET 1 OF 2



LEGEND:	
	PROPERTY LINE
	EXISTING WATERMAIN
	EXISTING FIRE HYDRANT
	EXISTING V&VB
	PROPOSED WATERMAIN
	PROPOSED FIRE HYDRANT
	PROPOSED V&VB
	EXISTING SANITARY SEWER AND MANHOLE
	PROPOSED SANITARY SEWER AND MANHOLE
	EXISTING STORM SEWER AND MANHOLE
	PROPOSED STORM SEWER AND MANHOLE
	EXISTING SAN SEWER TO BE REMOVED
	EXISTING STORM SEWER TO BE REMOVED
	EXISTING WATERMAIN TO BE REMOVED
	PROPOSED ROOF DRAINS
	PROPOSED DECK DRAINS OR CATCHBASINS
	PROPOSED REMOTE METER
	PROPOSED METER
	EXISTING CONCRETE CURB
	PROPOSED CONCRETE CURB
	PROPOSED DEPRESSED CURB
	EXISTING BUILDING OR STRUCTURE
	PROPOSED BUILDING OR STRUCTURE
	EXISTING GRADE
	PROPOSED GRADE
	PROPOSED SWALE GRADE
	PROPOSED GRADE (TOP OF CURB)
	PROPOSED GRADE (TOP OF WALL)
	PROPOSED GRADE (TOP OF RAMP WALL)
	PROPOSED GRADE (TOP OF PLANTER WALL)
	PROPOSED DIRECTION OF FLOW AND SLOPE
	PROPOSED BLOCK RETAINING WALL
	PROPOSED CENTERLINE OF SWALE
	PROPOSED FENCE (SEE LANDSCAPE PLANS)
	PROPOSED TERRACING

#### NOTES: GENERAL

- ALL SERVICES, MATERIALS, CONSTRUCTION METHODS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND REGULATIONS OF THE CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS, ONTARIO PROVINCIAL SPECIFICATION STANDARD SPECIFICATION (OPSS) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).
- THE POSITION OF EXISTING POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING THE COURSE OF CONSTRUCTION. ANY RELOCATION OF EXISTING UTILITIES REQUIRED BY THE DEVELOPMENT OF SUBJECT LANDS IS TO BE UNDERTAKEN AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR MUST NOTIFY ALL EXISTING UTILITY COMPANY OFFICIALS FIVE (5) BUSINESS DAYS PRIOR TO START OF CONSTRUCTION AND HAVE ALL EXISTING UTILITIES AND SERVICES LOCATED IN THE FIELD OR EXPOSED PRIOR TO THE START OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO HYDRO, BELL, CABLE TV, AND CONSUMERS GAS LINES.
- ALL TRENCHING AND EXCAVATIONS TO BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- REFER TO ARCHITECTS PLANS FOR BUILDING DIMENSIONS, ELEVATIONS, LAYOUT AND DECK STRUCTURE. REFER TO LANDSCAPE PLAN FOR LANDSCAPED DETAILS AND OTHER RELEVANT INFORMATION. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- TOPOGRAPHIC SURVEY COMPLETED AND PROVIDED BY FAIRHALL, MOFFATT & WOODLAND DATED JULY 18, 2014. CONTRACTOR TO VERIFY IN THE FIELD PRIOR TO CONSTRUCTION OF ANY WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.
- ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR DRAIN OUTLETS ARE PROVIDED.
- ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE WITH STEP JOINTS OF 500mm WIDTH MINIMUM.
- ALL DISTURBED AREAS OUTSIDE PROPOSED GRADING LIMITS TO BE RESTORED TO ORIGINAL ELEVATIONS AND CONDITIONS UNLESS OTHERWISE SPECIFIED. ALL RESTORATION SHALL BE COMPLETED WITH THE GEOTECHNICAL REQUIREMENTS FOR BACKFILL AND COMPACTION.
- ALL MATERIAL SUPPLIED AND PLACED FOR PARKING LOT AND ACCESS ROAD CONSTRUCTION SHALL BE TO OPSS STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED. CONSTRUCTION TO OPSS 206, 310 & 314. MATERIALS TO OPSS 1001, 1003 & 1010.
- ABUTTING PROPERTY GRADES TO BE MATCHED.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION.
- MINIMIZE DISTURBANCE TO EXISTING VEGETATION DURING THE EXECUTION OF ALL WORKS.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE PROPOSED BUILDING, PARKING AND ROADWAY LOCATIONS.
- AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. STORM SEWER, SANITARY SEWER, WATER, ETC.) THE CONTRACTOR SHALL DETERMINE THE PRECISE LOCATION AND DEPTH OF EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
- SERVICE TRENCHES ON MUNICIPAL RIGHT OF WAY TO BE REINSTATED AS PER CITY OF OTTAWA DETAIL R10.
- PRIOR TO CONSTRUCTION, A GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO IS TO INSPECT ALL SUB-SURFACES FOR FOOTINGS, SERVICES AND PAVEMENT STRUCTURES.
- FOR ANY SOILS RELATED INFORMATION, REFER TO THE PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT BY EXP SERVICES INC. LTD. DATED DECEMBER 23, 2013.

#### NOTES: WATERMAIN

- ALL WATERMAIN AND WATERMAIN APPURTENANCES, MATERIALS, CONSTRUCTION AND TESTING METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA AND MINISTRY OF ENVIRONMENT STANDARDS AND SPECIFICATIONS.
- ALL WATERMAIN SHALL BE POLY VINYL CHLORIDE (PVC) CLASS 150 DR 18 MEETING AWWA SPECIFICATION C900.
- ALL WATER MAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE. WHERE WATERMANS CROSS OVER OTHER UTILITIES, A MINIMUM 0.25m CLEARANCE SHALL BE MAINTAINED. WHERE WATERMANS CROSS UNDER OTHER UTILITIES, A MINIMUM 0.50m CLEARANCE SHALL BE MAINTAINED. WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED, THE WATERMAIN SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2, WHERE 2.4m MINIMUM DEPTH CANNOT BE ACHIEVED, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W22.
- WATER MAIN BEDDING TO BE AS PER CITY OF OTTAWA STANDARD W17.
- VALVE AND VALVE BOX TO BE AS PER CITY OF OTTAWA STANDARD W24.
- CONCRETE THRUST BLOCKS AND MECHANICAL RESTRAINTS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, REDUCERS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W25.3 & W25.4.
- CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS AS PER CITY OF OTTAWA STANDARD W45 & W45.
- FIRE HYDRANTS TO BE AS PER CITY OF OTTAWA STANDARD W19.
- IF WATER MAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
- ALL CONNECTIONS OF NEW WATERMAIN TO EXISTING WATERMAIN & ALL BLANKINGS OF EXISTING MAINS AND SERVICES SHALL BE PERFORMED BY CITY OF OTTAWA FORCES. THE CONTRACTOR SHALL PROVIDE EXCAVATION, BACKFILL AND REINSTATEMENT. THE CONTRACTOR SHALL CONSTRUCT WATER SERVICES APPURTENANCES AS PER CITY OF OTTAWA SPECIFICATIONS & SHALL COORDINATE AND PAY ALL RELATED COST INCLUDING THE COST OF CONNECTION, INSPECTION AND DISINFECTION BY CITY FORCES.
- ALL WATERMAIN PIPES AND FITTINGS LOCATED IN AREAS CONTAMINATED OR POTENTIALLY CONTAMINATED WITH HYDROCARBONS SHALL BE INSTALLED WITH NITRILE GASKETS.

#### NOTES: SANITARY SEWER AND MANHOLES

- ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR-35 (UNLESS SPECIFIED OTHERWISE) WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH CSA B-182.2.3.4.
- SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
- ALL WORK SHALL BE PERFORMED, AS APPLICABLE IN ACCORDANCE WITH OPSS 407, AND 410.
- ALL SANITARY MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSD 701.01, FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.

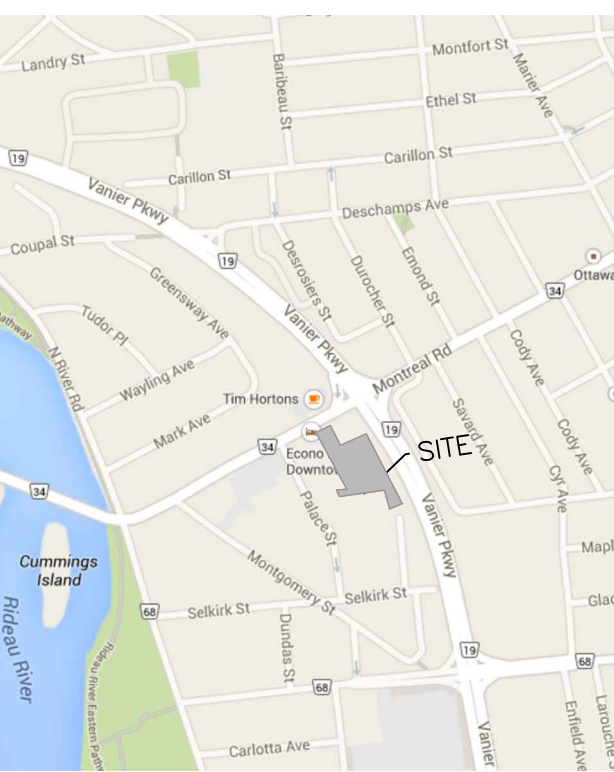
#### NOTES: STORM SEWERS AND STRUCTURES

- ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- STORM SEWERS 450mm DIAMETER AND SMALLER SHALL BE PVC SDR-35, WITH RUBBER GASKET PER CSA A-257.3. STORM SEWERS 525mm DIAMETER AND LARGER SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD S25 AND S28.1.
- SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
- ALL STORM MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSD 701.01, FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.1.
- CATCH BASINS TO BE AS PER OPSD 705.010 WITH FRAME AND COVERS TO OPSD 450.020. ALL CATCH BASIN MANHOLES TO BE OPSD 701.010 WITH FRAME AND COVER TO CITY OF OTTAWA STANDARD S25 AND S28.1.
- ROOF DRAINS, DECK DRAINS AND LANDSCAPE DECK DRAINS SHALL BE BY WATTS DRAINAGE. DRAINS SHALL BE SELECTED BASED ON THE RELEASE RATES.
- ALL CATCHBASIN LEADS TO BE MINIMUM 200mm DIAMETER AT MINIMUM 1.0% SLOPE UNLESS OTHERWISE SPECIFIED.

#### GENERAL NOTES:

THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.



KEY PLAN  
DATE



01	ISSUED FOR SITE PLAN APPLICATION	I.J.	SEPT 29, 2014
No.	REVISIONS	BY	DATE



NOT AUTHENTIC UNLESS SIGNED AND DATED



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CLIENT  
DCR PHOENIX DEVELOPMENTS

DESIGNED BY: I.J. DRAWN BY: I.J. APPROVED BY: I.J.

PROJECT

MIXED USE DEVELOPMENT  
112 MONTREAL ROAD  
OTTAWA, ON

DRAWING TITLE  
INTERIM STORMWATER  
MANAGEMENT PLAN  
SHEET 2 OF 2

PROJECT NO.  
1013081  
DATE  
AUGUST 2014

C.02