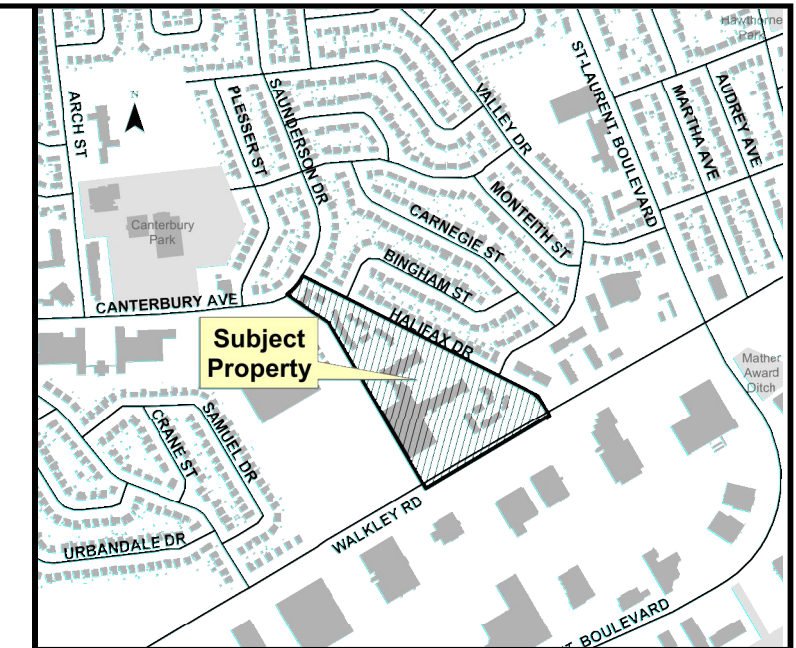


INSULATION REFERENCE TABLE	
EARTH COVER	REQUIRED INSULATION THICKNESS
2.0m - 1.8m	25mm
1.8m - 1.5m	50mm
1.5m - 1.2m	75mm
1.2m - 0.9m	100mm
0.9m - 0.6m	125mm

INSULATION DETAIL  
N.T.S.

GENERAL CONSTRUCTION NOTES:

- ALL MATERIAL (SANITARY, STORM & WATERMAIN) AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH THE CURRENT OPSD, OPSS AND CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS.
- UNLESS OTHERWISE NOTED, DIMENSIONS FROM STREET LINE ARE TO THE CENTRELINE OF SEWER OR MAINTENANCE HOLE.
- THE INSIDE DIAMETER OF PIPES ARE REFERRED TO IN PLAN VIEW.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL, REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ALL ASSOCIATED WORKS TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE, VIA EXCAVATION, THE EXACT LOCATION AND ELEVATION OF THE EXISTING WATERMANS, SEWERS AND UNDERGROUND STRUCTURES AS REQUIRED FOR ALL CONNECTIONS, RELOCATIONS AND BLANKINGS.
- EXISTING STORM SEWER SYSTEM AND CATCH BASIN NETWORK TO BE REMOVED AND DISPOSED OF OFFSITE.
- SERVICING DESIGN DRAWINGS TO BE READ IN CONJUNCTION WITH THE SITE SERVICING REPORT (APRIL 2019) PREPARED BY J.L. RICHARDS & ASSOCIATES LIMITED (JLR 28584-000.1).
- ALL WATERMANS SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- WATERMANS CROSSING BELOW OR OVER A SEWER SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWING W25 AND W25.2.
- PROVIDE A MINIMUM OF 2.4m COVER ON ALL WATERMANS AND WATER SERVICES. OTHERWISE PROVIDE THERMAL INSULATION AS PER CITY STANDARD DRAWING W22 (IN SHALLOW TRENCHES) AND W23 (AT OPEN STRUCTURES).
- AT ALL CONNECTION POINTS, REINSTATE SURFACES TO EXISTING CONDITION OR BETTER.
  - ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING No. R10.
  - THICKNESS OF GRANULAR AND ASPHALT LAYERS SHALL MATCH EXISTING.
  - BOULEVARDS SHALL BE REINSTATED WITH 100mm TOPSOIL AND SOD.
- SANITARY SERVICE LATERAL TO BE 150mmØ PVC DR 35.
  - STORM SEWERS TO BE PVC SDR 35 c/w INSULATION WHERE MINIMUM COVERAGE OF 1.8m IS NOT ACHIEVED (REFER TO INSULATION DETAIL).
  - WATERMANS AND HYDRANT LATERAL TO BE PVC DR 18.
- ALL SANITARY & STORM MAINTENANCE HOLES TO BE 1200Ø UNLESS OTHERWISE NOTED AS PER OPSD 701.910 c/w FRAME AND COVERS AS PER CITY STANDARD DRAWINGS S24 AND S24.1, RESPECTIVELY. SANITARY AND STORM MAINTENANCE HOLES TO HAVE WATERTIGHT COVERS AS PER OPSD 401.030. CATCH BASIN MAINTENANCE HOLE COVER TO BE PER CITY STANDARD DRAWING S28.1.
- ALL CATCH BASINS TO BE 600x600mm PRECAST CONCRETE PER OPSD 705.010 c/w FRAME AND COVERS AS PER CITY STANDARD DRAWING S19.
- DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL SITE PLAN PREPARED BY DREDGE LEAHY ARCHITECTS INC.
- SERVICES TO BE TERMINATED 1.0m FROM BUILDING WALL (TYPICAL).
- CONCRETE CURB TO BE BARRIER TYPE AS PER CITY STANDARD DRAWING SC1.1.
- SIDEWALKS AND WALKWAYS TO BE CONSTRUCTED AS PER CITY OF OTTAWA DETAIL SC2 (OR SC1.4) AND SC4.
- PAVEMENT DESIGN TO BE IN ACCORDANCE WITH PROJECT GEOTECHNICAL RECOMMENDATIONS. REFER TO ARCHITECTURAL SITE PLAN PREPARED BY DREDGE LEAHY ARCHITECTS INC. FOR FIRE ROUTES.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION DEPICTED ON THIS PLAN FROM THE SURVEY COMPLETED BY FAIRHALL, MOFFATT & WOODLAND LTD ON MARCH 15, 2019. THE SITE BENCHMARKS ARE BM1 - MAGNETIC NAIL & WASHER IN CONCRETE SIDEWALK, HAVING AN ELEVATION OF 83.79m AND BM3 - MAGNETIC NAIL & WASHER IN CONCRETE SIDEWALK HAVING AN ELEVATION OF 82.16m.
- EXCAVATION FOR THE INSTALLATION OF SERVICES ALONG OR IN PROXIMITY OF A BUILDING OR A STRUCTURE IS TO BE CONTAINED WITHIN A TRENCH BOX WIDTH AND IS TO ENSURE NO CONFLICT WITH ANY FUTURE FOOTINGS. SELECT SUBGRADE MATERIAL, COMPACTED TO 100% SPD TO 1.0m BELOW EXISTING GRADE FOR FULL TRENCH WIDTH OF DISTURBED AREA SHALL BE USED FOR BACKFILL, INCLUDING ALONG ANY SEWERS AND WATERMANS ADJACENT TO A BUILDING OR OTHER STRUCTURE.
- HYDRANT SHALL BE INSTALLED AS PER CITY STANDARD DRAWING W19.



LEGEND

- PROPOSED CATCH BASIN
- EXISTING CATCH BASIN
- PROPOSED WATERMAIN, HYDRANT VALVE & VALVE BOX AND REDUCER
- EXISTING WATERMAIN, HYDRANT VALVE & VALVE BOX AND REDUCER
- PROPOSED STORM SEWER & MAINTENANCE HOLE
- EXISTING STORM SEWER & MAINTENANCE HOLE
- ✕✕✕✕ EXISTING STORM SEWER, CB & MAINTENANCE HOLE TO BE REMOVED
- PODIUM STORM INFRASTRUCTURE BY OTHERS
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER & MAINTENANCE HOLE
- ⊙ PROPOSED LANDSCAPING CATCH BASIN
- CONCRETE SURFACE
- ▬ DEPRESSED CURB
- ⊙ SITE BENCHMARK

2	REISSUED FOR SITE PLAN CONTROL	23/07/2019
1	ISSUED FOR SITE PLAN CONTROL	12/04/2019
No.	ISSUE / REVISION	DD/MM/YY

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SCALE: 1:400

CLIENT:

**LS GP Inc.**  
2193 Arch Street  
Ottawa, ON  
K1G 2H5  
(613) 731-6331

CONSULTANT:

**J.L. Richards**  
ENGINEERS - ARCHITECTS - PLANNERS

CONSULTANT:

PROFESSIONAL STAMP

**K.R. PERRY MORENO**  
10912432  
July 23/19  
PROVINCE OF ONTARIO

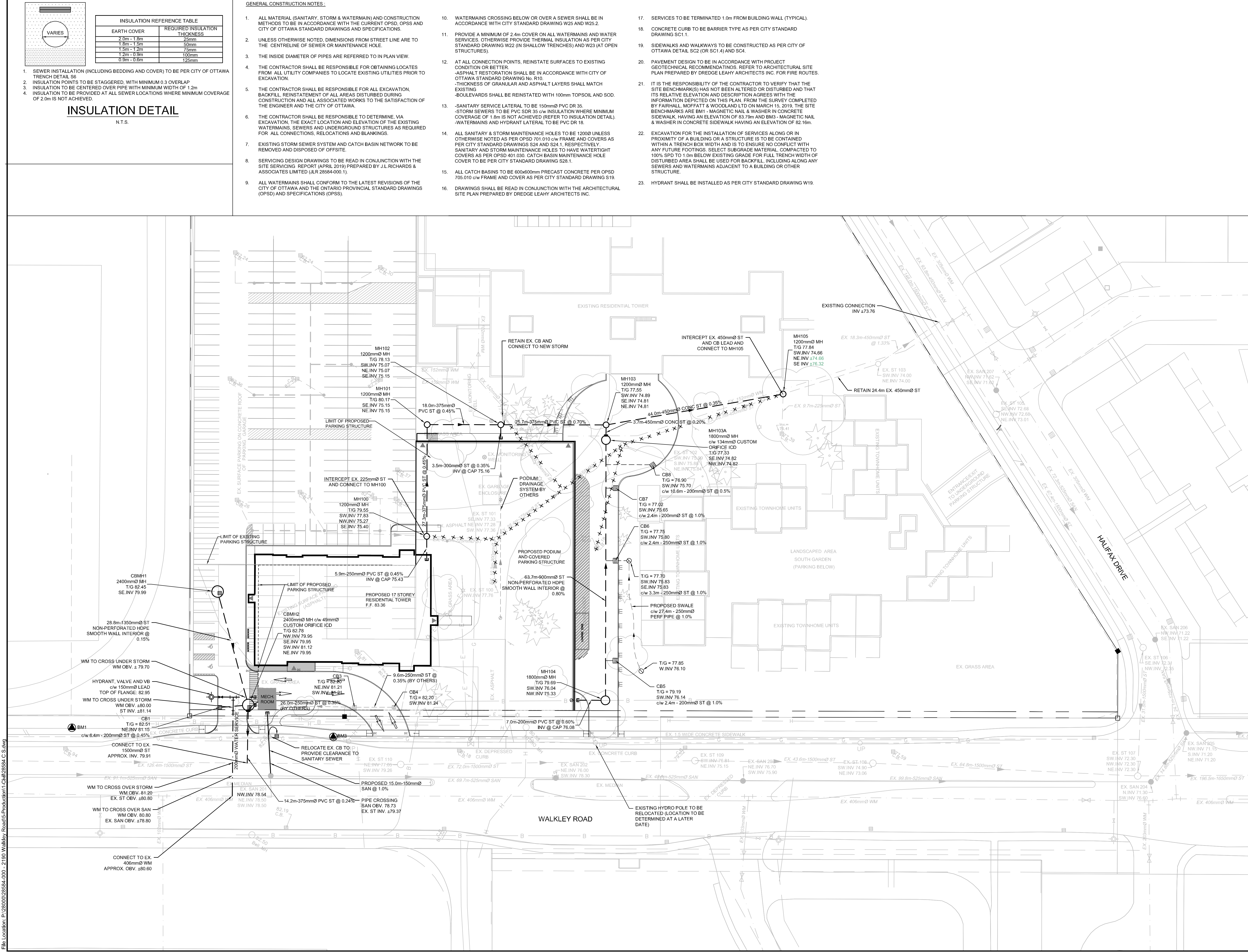
PROJECT:

**2270 WALKLEY ROAD**

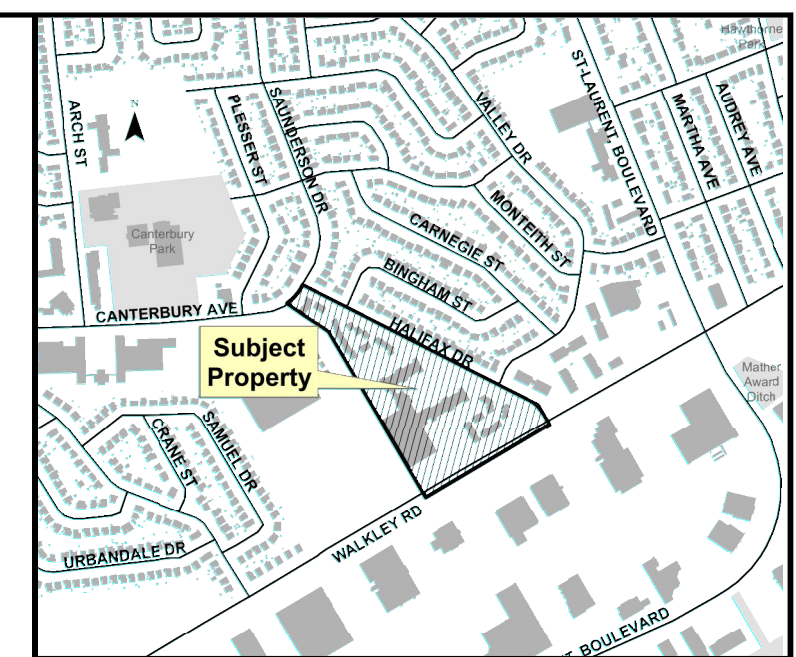
DRAWING:

**SITE SERVICING PLAN**

DESIGN: KF	DRAWING #:
DRAWN: SP	S
CHECKED: LD	
JLR #: 28584-000.1	



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**LEGEND**

- CATCH BASIN MAINTENANCE HOLE
- PROPOSED CATCH BASIN
- PROPOSED STORM MAINTENANCE HOLE
- PROPOSED ELEVATION
- EXISTING ELEVATION (EXISTING GROUND FROM FAIRHALL MOFFATT & WOODLAND, OLS, MARCH 15, 2019)
- PROPOSED TERRACING (MAX 3:1)
- SURFACE SLOPE
- FLOW DIRECTION
- PROPOSED CONCRETE SURFACE
- PROPOSED GRASS SURFACE
- DEPRESSED CURB

2	REISSUED FOR SITE PLAN CONTROL	23/07/2019
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 ENGINEERS - ARCHITECTS - PLANNERS

CONSULTANT:

PROFESSIONAL STAMP 	PROJECT NORTH 
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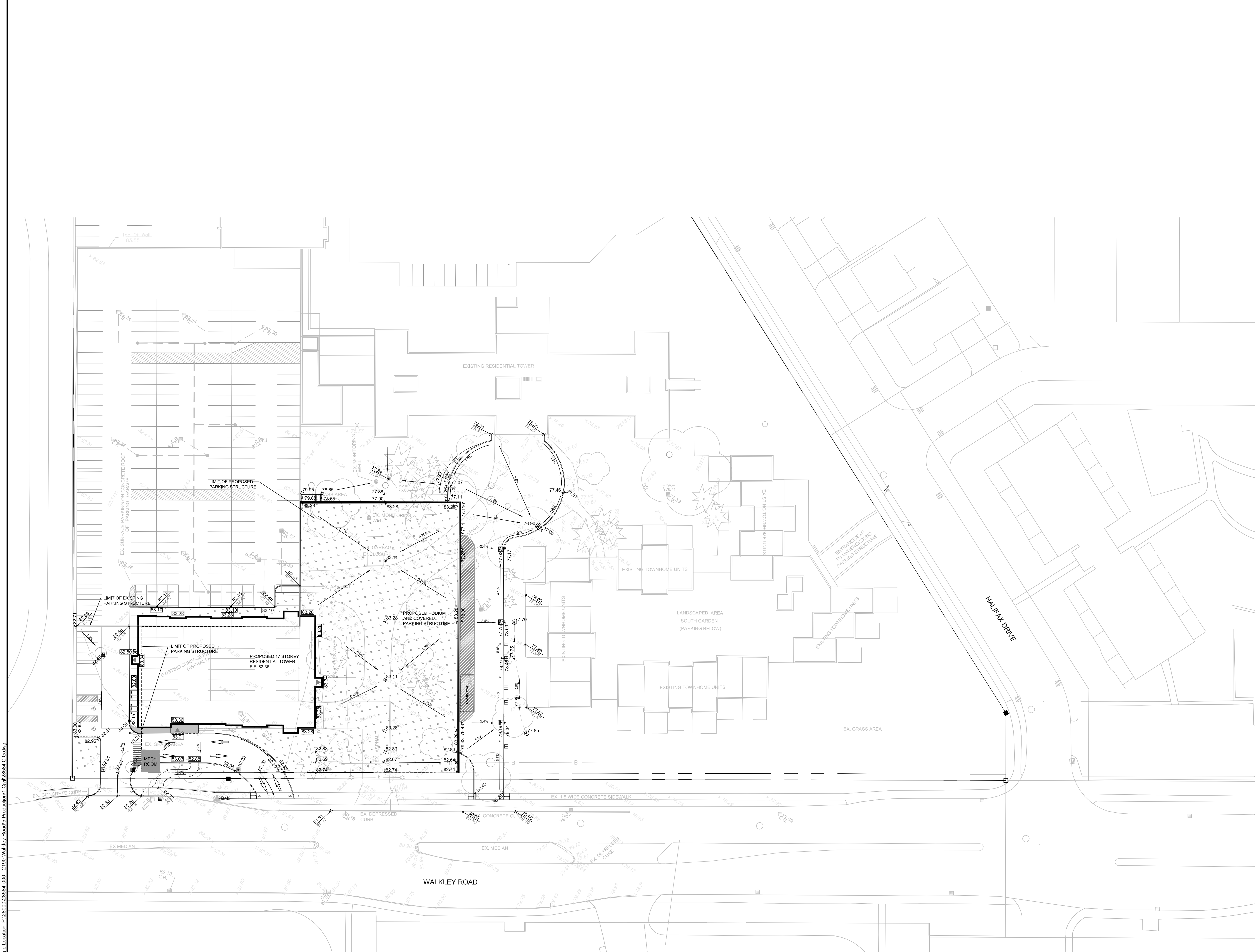
PROJECT:

**2270 WALKLEY ROAD**

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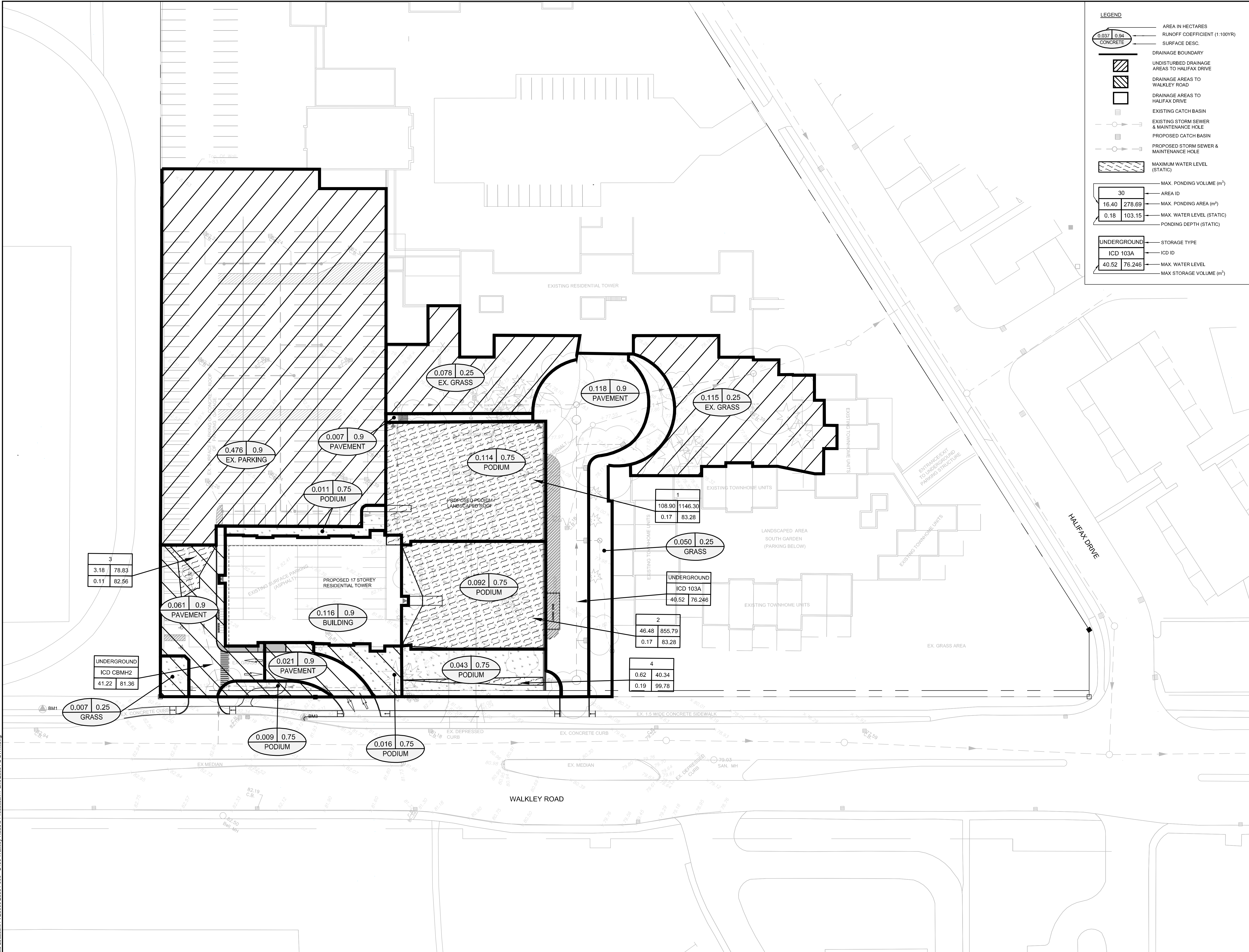
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DESIGN: KF	DRAWING #:
DRAWN: SP	<b>G</b>
CHECKED: LD	
JLR #: 28584-000.1	



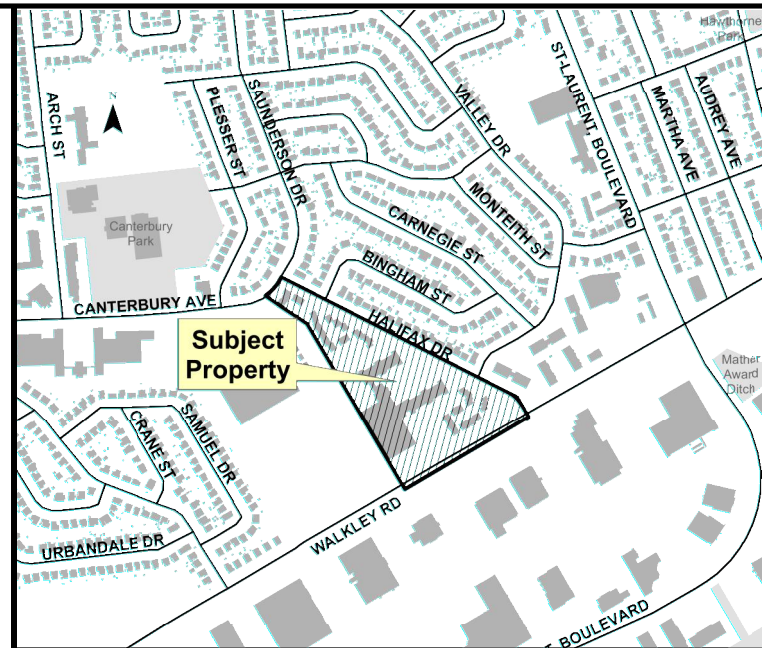
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**LEGEND**

- 0.037 0.84 CONCRETE
- AREA IN HECTARES
- RUNOFF COEFFICIENT (1:100YR)
- SURFACE DESC.
- DRAINAGE BOUNDARY
- UNDISTURBED DRAINAGE AREAS TO HALIFAX DRIVE
- DRAINAGE AREAS TO WALKLEY ROAD
- DRAINAGE AREAS TO HALIFAX DRIVE
- EXISTING CATCH BASIN
- EXISTING STORM SEWER & MAINTENANCE HOLE
- PROPOSED CATCH BASIN
- PROPOSED STORM SEWER & MAINTENANCE HOLE
- MAXIMUM WATER LEVEL (STATIC)
- MAX. PONDING VOLUME (m<sup>3</sup>)
- AREA ID
- MAX. PONDING AREA (m<sup>2</sup>)
- MAX. WATER LEVEL (STATIC)
- PONDING DEPTH (STATIC)
- UNDERGROUND
- STORAGE TYPE
- ICD 103A
- ICD ID
- MAX. WATER LEVEL
- MAX STORAGE VOLUME (m<sup>3</sup>)



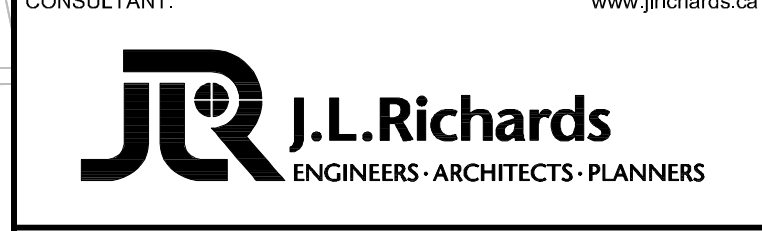
No.	ISSUE / REVISION	DDMMYY
2	REISSUED FOR SITE PLAN CONTROL	23/07/2019
1	ISSUED FOR SITE PLAN CONTROL	12/04/2019

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CONSULTANT:

PROFESSIONAL STAMP

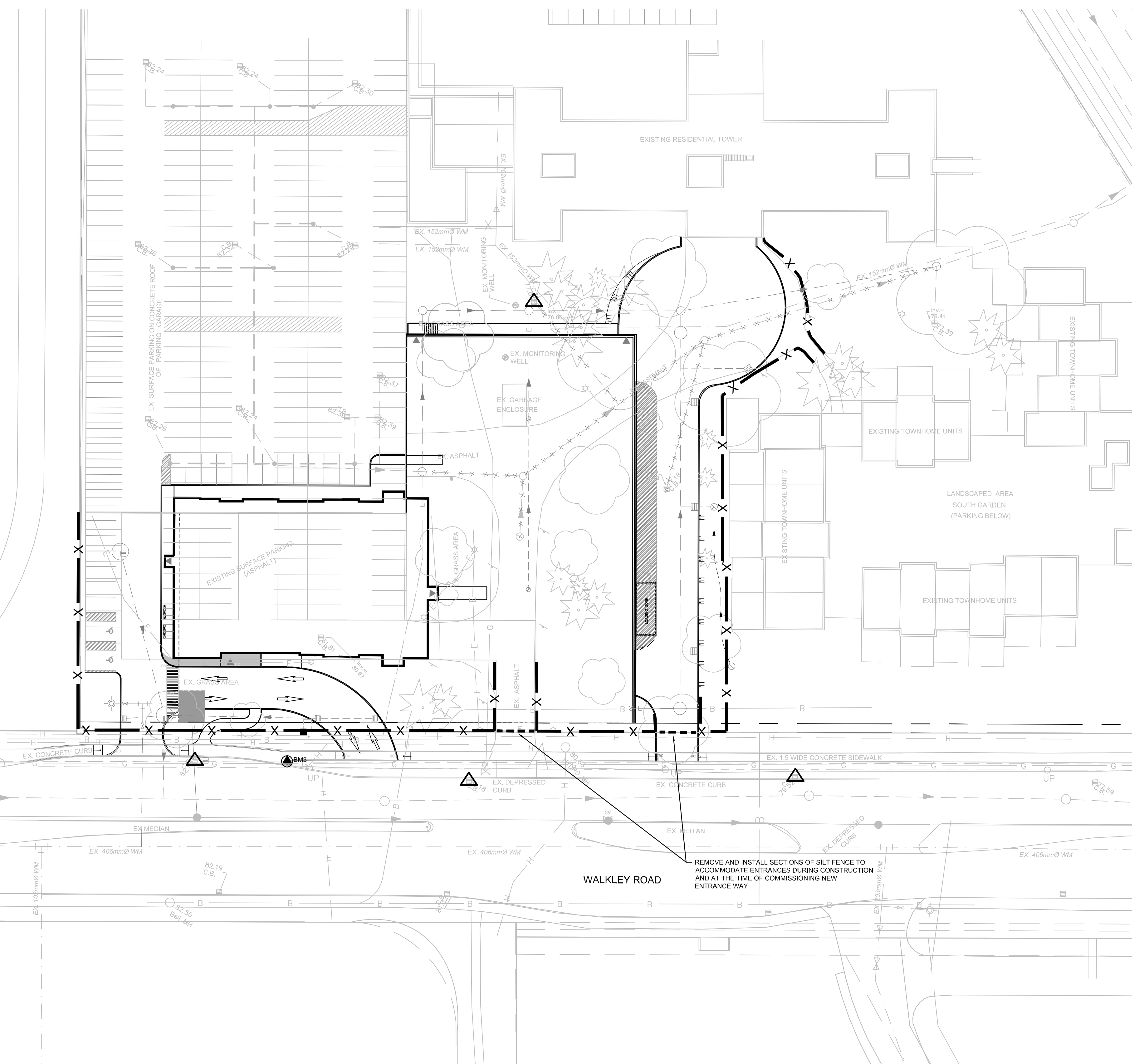
PROJECT NORTH

PROJECT:  
**2270 WALKLEY ROAD**

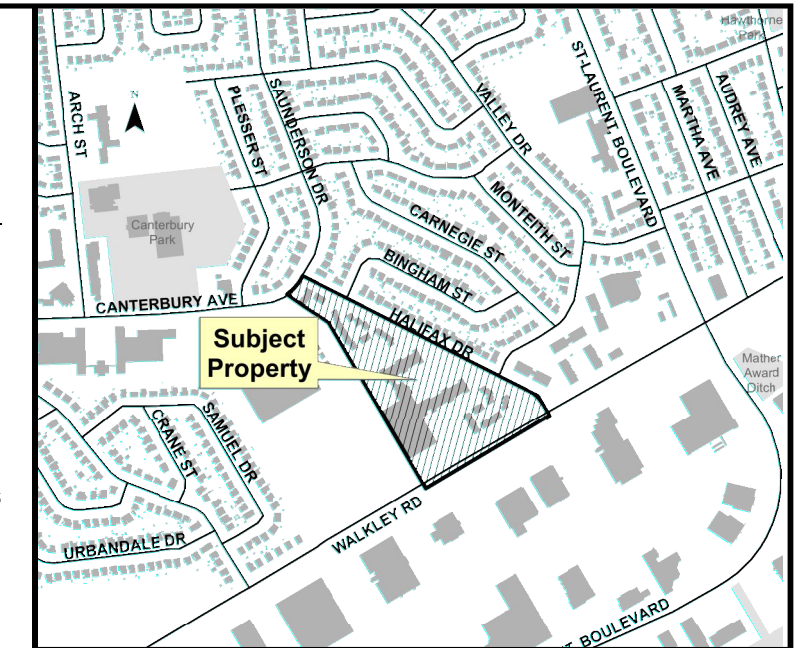
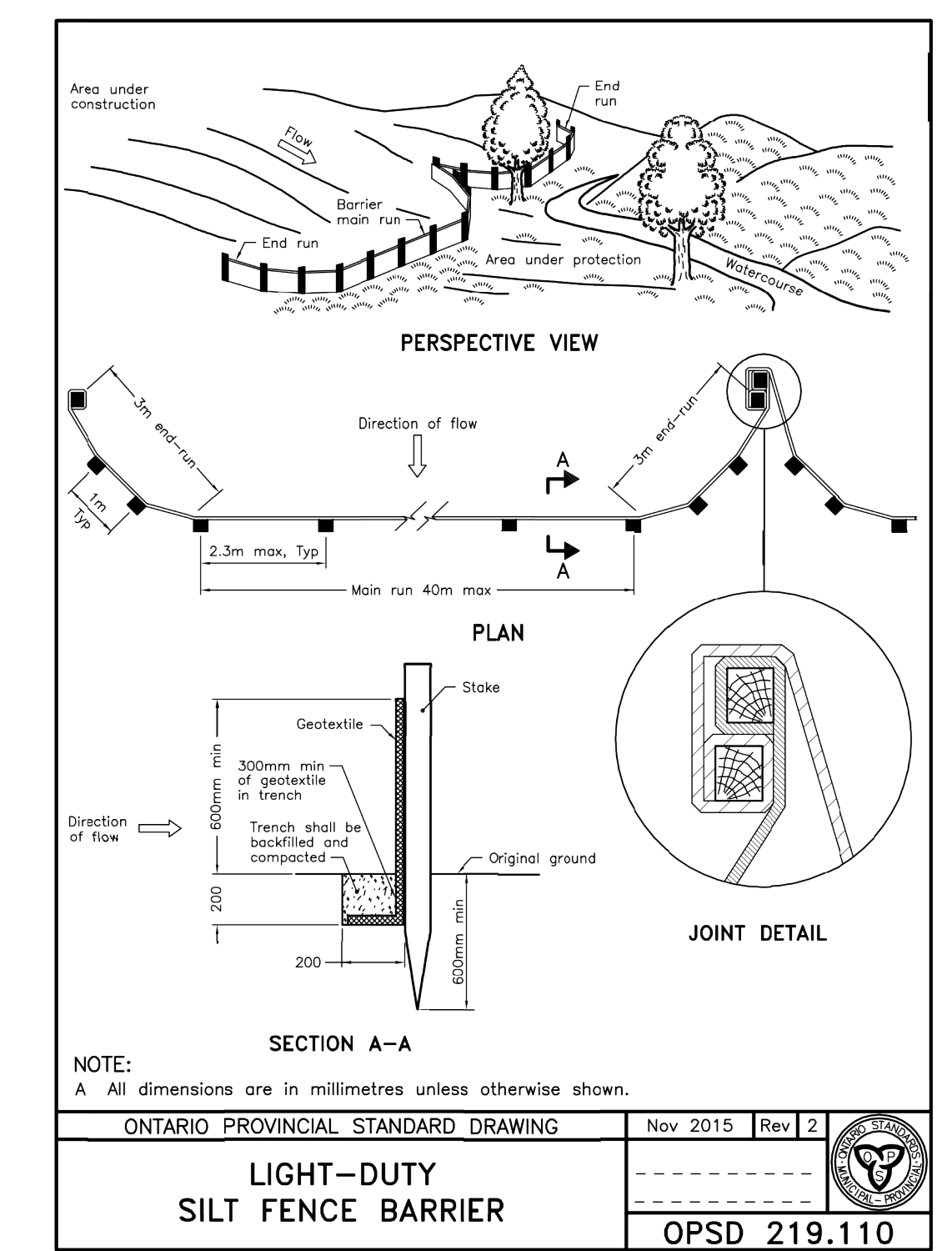
DRAWING:  
**DRAINAGE AND PONDING PLAN**

DESIGN: KF	DRAWING #:
DRAWN: SP	<b>SWM</b>
CHECKED: LD	
JLR #: 28584-000.1	

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- NOTES:**
1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. 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. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO WORK AND MAINTAINED DURING THE WORK PHASE BY THE GENERAL CONTRACTOR. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY BY THE GENERAL CONTRACTOR TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY AND ARE BEING MAINTAINED AND/OR UPGRADED AS REQUIRED. IF THE SEDIMENT AND EROSION CONTROL MEASURES ARE NOT FUNCTIONING PROPERLY, NO FURTHER WORK SHALL OCCUR UNTIL THE PROBLEM HAS BEEN ADDRESSED AND RECTIFIED.
  3. ALL MATERIALS AND EQUIPMENT USED FOR THE PURPOSE OF SITE PREPARATION AND PROJECT COMPLETION SHALL BE OPERATED AND STORED IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCES (I.E. PETROLEUM PRODUCTS, SILT, ETC.) FROM ENTERING DRAINAGE CHANNELS, TRIBUTARIES AND SEWER SYSTEMS.
  4. VEHICLE AND EQUIPMENT RE-FUELLING AND MAINTENANCE SHALL BE CONDUCTED AWAY FROM DRAINAGE CHANNELS IN A CONTROLLED MANNER TO PREVENT FUEL SPILLAGE.
  5. ANY PART OF EQUIPMENT ENTERING DRAINAGE CHANNELS SHALL BE FREE OF FLUID LEAKS AND EXTERNALLY CLEANED/DEGREASED TO PREVENT ANY DELETERIOUS SUBSTANCES FROM ENTERING THE WATER.
  6. STOCKPILED MATERIALS SHOULD BE STORED AND STABILIZED AWAY FROM DRAINAGE CHANNELS AND TRIBUTARIES.
  7. SEDIMENT AND EROSION CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY SITE INSPECTOR, ENGINEER AND/OR THE LOCAL CONSERVATION AUTHORITY.
  8. INSPECTIONS AND REPAIR OF SEDIMENT AND EROSION CONTROLS WILL BE CONDUCTED AS SOON AS POSSIBLE FOLLOWING ANY RAIN EVENTS.
  9. WORKS WILL NOT BE CONSIDERED COMPLETE UNTIL ALL SEDIMENT CONTROLS ARE REMOVED.
  10. ALL SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED AND CONSTRUCTED PER OPSS AND OPSD. SILT FENCE SHALL BE TO OPSD 218.110.
  11. FILTER FABRIC TO BE PLACED UNDER GRATE OF EXISTING STREET CATCH BASINS. THE FILTER FABRIC SHALL BE INSPECTED DAILY TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY AND ARE MAINTAINED AS REQUIRED.
  12. ALL PROPOSED CATCH BASINS ARE TO BE INSTALLED WITH FILTER FABRIC AND SHALL BE MAINTAINED FOR THE DURATION OF THE WORK PHASE.
  13. A MUD MAT OR OTHER SEDIMENT CONTROL MEASURE SHALL BE IMPLEMENTED AT THE WALKLEY ROAD SITE ENTRANCES TO PREVENT THE TRANSPORT OF SEDIMENT ONTO PAVED SURFACES. THE CONTRACTOR SHALL ENSURE THAT ADJACENT ROADS AND RIGHT-OF-WAYS ARE KEPT CLEAN AND FREE OF DIRT / DEBRIS.



No.	ISSUE / REVISION	DD/MM/YY
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**CONSULTANT:** www.jrichards.ca

**J.L. Richards**  
 ENGINEERS - ARCHITECTS - PLANNERS

**CONSULTANT:**

**PROFESSIONAL STAMP**

LICENCED PROFESSIONAL ENGINEER  
 K.R. FERREY MORENO  
 100122432  
 July 23/19  
 PROVINCE OF ONTARIO

**PROJECT NORTH**

**PROJECT:**

**2270 WALKLEY ROAD**

**DRAWING:**

**EROSION AND SEDIMENT CONTROL PLAN**

DESIGN: KF	DRAWING #:
DRAWN: SP	<b>ESC</b>
CHECKED: LD	
JLR #: 28584-000.1	