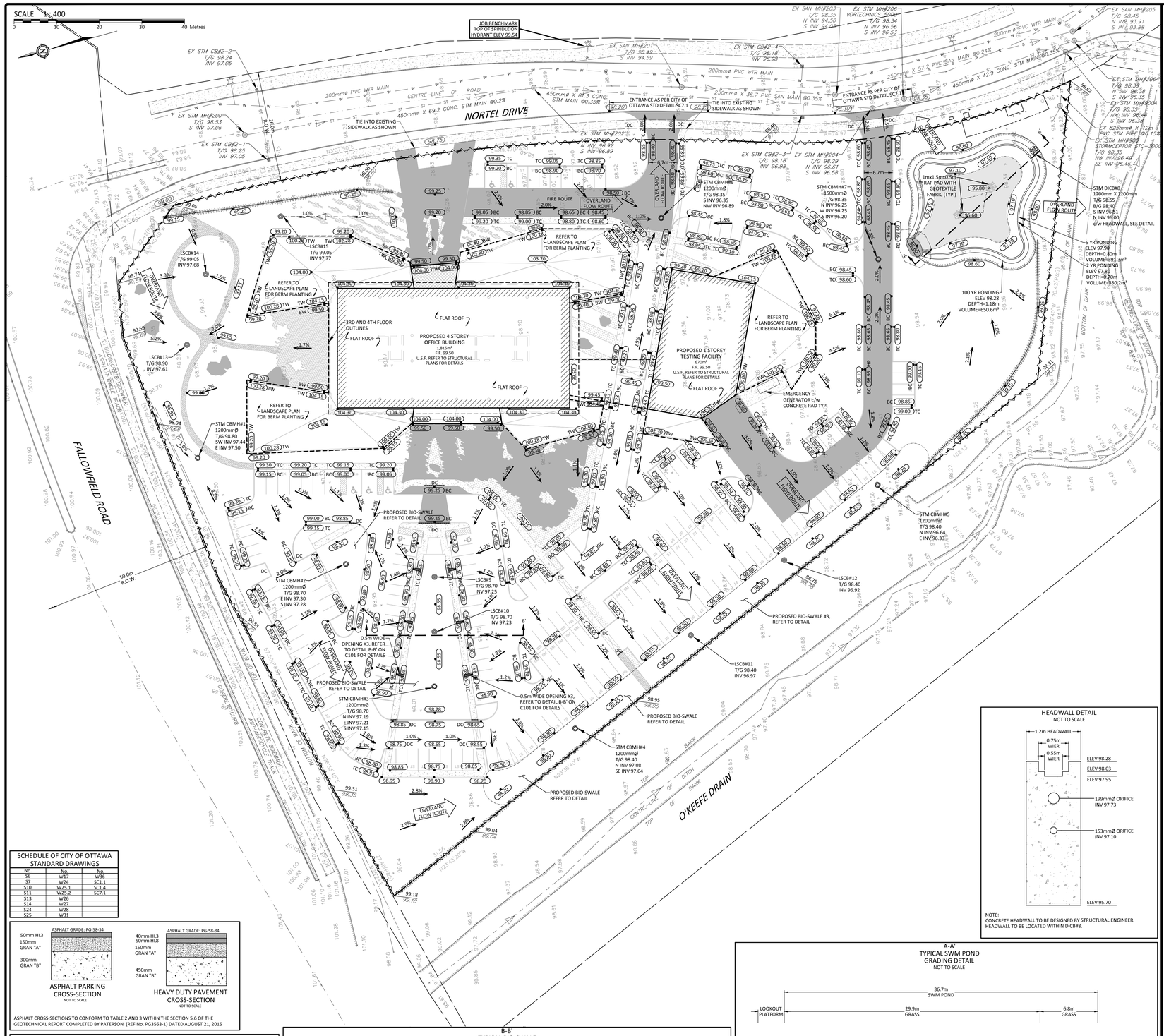


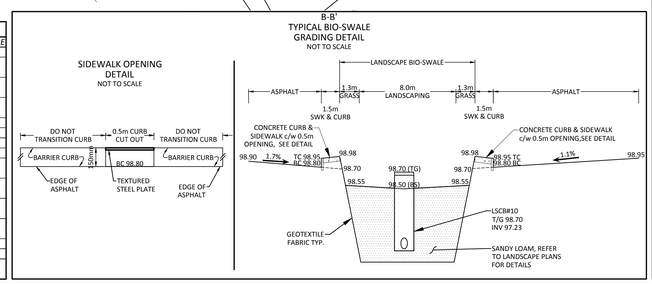
SCHEDULE OF CITY OF OTTAWA STANDARD DRAWINGS

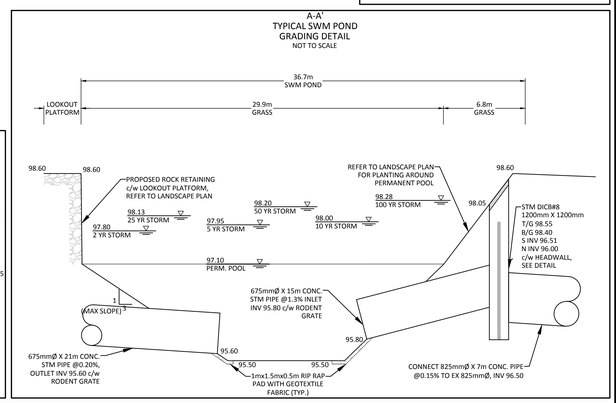
No.	No.	No.
S6	W17	W36
S7	W24	SC1.1
S10	W25.1	SC1.4
S11	W25.2	SC7.1
S13	W26	
S14	W27	
S24	W28	
S25	W31	

ASPHALT CROSS-SECTIONS TO CONFORM TO TABLE 2 AND 3 WITHIN THE SECTION 5.6 OF THE GEOTECHNICAL REPORT COMPLETED BY PATERSON (REF No. PG3563-1) DATED AUGUST 21, 2015

SCHEDULE OF ONTARIO PROVINCIAL STANDARD DRAWINGS

No.	TITLE	DATE	REV.	STRUCTURE
219.110	LIGHT DUTY SILT FENCE BARRIER	NOV 2006	1	
400.020	CAST IRON, SQUARE FRAME WITH SQUARE FLAT GRATE FOR CATCH BASINS, HERRING BONE OPENINGS	NOV 2013	2	
401.010	CAST IRON, SQUARE FRAME WITH CIRCULAR CLOSED OR OPEN COVER FOR MAINTENANCE HOLES	NOV 2013	3	
401.030	CAST IRON, SQUARE FRAME WITH CIRCULAR WATERTIGHT COVER FOR MAINTENANCE HOLSE	NOV 2013	3	SAN MH#1
405.010	MAINTENANCE HOLE STEPS, HOLLOW	NOV 2013	3	
509.010	PAVEMENT REINSTATEMENT FOR UTILITY CUTS	NOV 2013	2	
701.010	PRECAST CONCRETE MAINTENANCE HOLE, 1200mm DIAMETER	NOV 2014	5	
701.021	MAINTENANCE HOLE BENCHING AND PIPE OPENING DETAILS	NOV 2014	4	
701.030	PRECAST CONCRETE MAINTENANCE HOLE COMPONENTS, 1200mm DIAMETER TAPERED TOP AND FLAT CAP	NOV 2014	4	STM CBMH#2-6
701.040	PRECAST CONCRETE MAINTENANCE HOLE COMPONENTS, 1500mm DIAMETER TRANSITION CONE AND SLABS	NOV 2014	4	STM CBMH#7
702.050	PRECAST CONCRETE DITCH INLET MAINTENANCE HOLE- TYPE B 1200X1200mm	NOV 2014	3	STM DICB#8
704.010	PRECAST CONCRETE ADJUSTMENT UNITS FOR MAINTENANCE HOLES, CATCH BASINS, AND VALVE CHAMBERS	NOV 2014	3	
705.010	PRECAST CONCRETE CATCH BASIN	NOV 2014	3	STM CB#1
708.030	CATCH BASIN CONNECTION, FLEXIBLE PIPE SEWER	NOV 2011	2	
1006.020	SEWER SERVICE CONNECTIONS, FOR FLEXIBLE MAIN PIPE SEWER	NOV 2011	2	





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 OBTAINED FROM THEM.
2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOW HEREON HAVE BEEN DERIVED FROM UNCONFIRMED INFORMATION SUPPLIED BY H.A.KEN SHIPMAN SURVEY LTD. 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 OF OTTAWA 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. ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL, SEED & MULCH AS SOON AS FEASIBLE.
7. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF CITY OF OTTAWA AUTHORITIES.
8. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER, OR THE CITY.
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. 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 CITY.
13. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS AND 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. HYDRO, GAS AND BELL SERVICE LOCATIONS SUBJECT TO THE APPROVAL AGENCY:
    - TELEPHONE SERVICE - BELL CANADA;
    - CABLE - ROGERS;
    - GAS SERVICE - ENBRIDGE
    - ELECTRICAL SERVICE - HYDRO OTTAWA
17. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES (BELL, HYDRO) AND THE CITY OF OTTAWA.
18. ALL PROPOSED CURB SHALL BE CONCRETE BARRIER CURB AS PER CITY STANDARD SC1.1
19. ALL EXISTING REDUNDANT PRIVATE APPROACHES FRONTING THIS DEVELOPMENT MUST BE REMOVED TO THE SATISFACTION OF THE CITY OF OTTAWA
20. THIS PLAN MUST BE READ IN CONJUNCTION WITH GEOTECHNICAL REPORT BY PATERSON GROUP INC. (REPORT # PG3563-1) DATED AUGUST 21, 2015 AND REVISED SITE SERVICING REPORT BY MP (REF #CP-15-0338) DATED APRIL 15, 2016.

SEWER NOTES

1. CONSTRUCT ALL SEWER AND APPURTENANCES TO ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS, AS WELL AS THE CITY OF OTTAWA STANDARDS AS INDICATED.
2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 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 2 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
7. SEWERS AND CONNECTIONS 150mm DIAMETER AND SMALLER TO BE PVC SDR 28 OR APPROVED EQUIVALENT. SEWERS AND CONNECTIONS 200mm DIAMETER AND LARGER TO BE PVC SDR 35 OR APPROVED EQUIVALENT.
8. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 1.5m OF COVER WITH THERMAL INSULATION.
9. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"x8' LONG MARKER.
10. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS ONSITE, INCLUDING OUTLET CONNECTION TO THE CITY MAIN, 150mmØ OR GREATER 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 AS WELL AS CATHCBASIN MANHOLES LEADS ARE TO BE 200mmØ, SLOPE TO BE 1% UNLESS OTHERWISE NOTED. ALL CATCHBASINS EXCLUDING LANDSCAPE CATCHBASINS TO HAVE 150 mmØ PERFORATED PIPE FOR 3.0m ON ALL AVAILABLE SIDES AS PER CITY STD DWG R1, 2009 REVISION.

EROSION AND SEDIMENT CONTROL

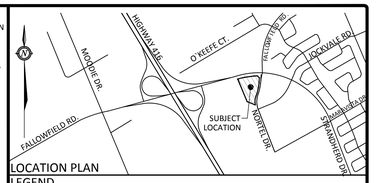
1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, TEMPORARY SEDIMENT CONTROL (GEOSOCK INSERTS WITH AN OVERFLOW UNDER GRATE OR COVER) TO BE IMPLEMENTED DURING CONSTRUCTION ON ALL PROPOSED ROAD CATCHBASINS, REARYARD CATCHBASINS AND CATCHBASIN MANHOLES AND OTHER SEDIMENT TRAPS. NO RECYCLED GEOSOCK MATERIAL SHALL BE PERMITTED FOR USE ON SITE.
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 OPSS 1860, TABLE 3.
4. EXCEPT AS PROVIDED IN PARAGRAPHS 4.(a), and (b) 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. FOR LIGHT-DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE FOLLOWING:
     - 5.1.1. A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE.
     - 5.1.2. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.
   - 5.2. FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS.
   - 5.3. ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
   - 5.4. 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. 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 CATCHBASINS, MANHOLES), AND BE SURROUNDED BY EROSION 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 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.
13. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSS 577
14. WHERE DEWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSS 518.
15. ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 270R GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.

City of Ottawa File # D07-12-15-0197

APPROVED ☐ REFUSED ☐

THIS ____ DAY OF ____, 20 ____

DERRICK MOODIE, ACTING MANAGER
DEVELOPMENT REVIEW, SUBURBAN SERVICES



LOCATION PLAN

LEGEND

EXISTING FEATURES

- GRADES TO BE MAINTAINED (115.00)
- TOP OF CURB GRADE (115.00)TC
- BOTTOM OF CURB GRADES (115.00)BC
- HIGH POINT GRADES (115.00)HP
- SURFACE WATER DRAINAGE 2.0%
- SWALE SLOPE 0.2%
- CONCRETE BARRIER CURB
- DEPRESSED CURB
- SURVEY GRADES
- STORM SEWER/LATERAL
- SANITARY SEWER/LATERAL
- WATER SEWER/LATERAL
- BELL CABLE SERVICE
- OHHB OVERHEAD HYDRO
- h UNDERGROUND HYDRO
- G GAS SERVICE
- HBCG HYDRO/BELL CABLE/GAS SERVICE
- BH4 BOREHOLE LOCATION
- PROPERTY LINE
- TRAFFIC LIGHT
- CATCHBASIN (CB)
- DITCH INLET CATCHBASIN (DICB)
- CATCHBASIN MANHOLE (CBMH)
- MANHOLE (MH)
- FIRE HYDRANT
- WATERVALVE

PROPOSED FEATURES

- DESIGN GRADES (115.00)
- TOP OF CURB GRADE (115.00)TC
- BOTTOM OF CURB GRADES (115.00)BC
- HIGH POINT GRADES (115.00)HP
- SURFACE WATER DRAINAGE 2.0%
- SWALE SLOPE 0.2%
- CONCRETE BARRIER CURB
- DEPRESSED CURB
- CORNER LOT GRADES
- STM STORM SEWER/LATERAL
- SAN SANITARY SEWER/LATERAL
- WTR WATER SEWER/LATERAL
- BC BELL/CABLE SERVICE
- H UNDERGROUND HYDRO SERVICE
- GAS GAS SERVICE
- BOTTOM OF SLOPE
- TOP OF SLOPE
- TOP OF BERM
- SILT FENCE
- 3m PERFORATED LINE AS SHOWN ON PLAN — CATCHBASIN (CB)
- 3m PERFORATED LINE AS SHOWN ON PLAN — DITCH INLET CATCHBASIN (DICB)
- 3m PERFORATED LINE AS SHOWN ON PLAN — CATCHBASIN MANHOLE (CBMH)
- FIRE HYDRANT
- WATERVALVE
- HEAVY DUTY ASPHALT
- LANDSCAPE PAVERS
- CONCRETE SIDEWALK
- LANDSCAPE PATHWAY
- LANDSCAPE BIO-SWALE
- 5yr ponding — 5 YEAR PONDING ELEVATION
- 100yr ponding — 100 YEAR PONDING ELEVATION

ALL ELEVATIONS ON THIS PLAN ARE GEODETIC

No.	Revision/Issue	Date
09	RE-ISSUED FOR CONSTRUCTION - EXCAVATION AND FOUNDATION SERVICING WORK	JUL 22/16
08	ISSUED FOR CONSTRUCTION - EXCAVATION AND FOUNDATION SERVICING WORK	JUL 14/16
07	REVISED BERM ELEVATIONS	JUN 17/16
06	REVISED AS PER CITY COMMENTS	JUNE 02/16
05	ISSUED FOR FOUNDATION PERMIT	MAY 31/16
04	REVISED SAN OUTLETS AS PER OPTIMUM LAYOUT	MAY 19/15
03	REVISED TEST FACILITY GRADES	MAY 11/16
02	REVISED AS PER CITY COMMENTS/REVISED SITE PLAN	APR 13/16
01	ISSUED FOR SITEPLAN CONTROL	DEC 10/15

Check and verify all dimensions before proceeding with the work

Do not scale drawings

McINTOSH PERRY
115 Walgreen Road R.R. #3, Carp, ON K0A 1L0
Tel: 613-836-2184 Fax: 613-836-3742

Stamp:

Stamp: LICENSED PROFESSIONAL ENGINEER 2016/07/22 R.P. KENNEDY 100090734 PROVINCE OF ONTARIO

Client:

TAL-CO BUILDING INNOVATION LTD.
1341 COKER STREET, SUITE 2 P: 613-821-3959
GREELY, ON, K4P 1A1 F: 613-821-2938

Project:

4501 STRANDHERD DRIVE, BLOCK 16
TOMLINSON HEAD OFFICE
OTTAWA ONTARIO

Drawing Title:

LOT GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

Scale: 1:400	Project Number: 0CP-15-0338
Drawn by: JMJ	
Checked By: CJM/KRA	Drawing Number: C101
Designed By: JMJ	SHEET 1of 2
Date: OCTOBER 19, 2015	

D07-12-15-0197

FILENAME: G:\2015\0CP\0-15-0338 Tal-Co, Tomlinson Head Office, Fallowfield Road\01 Drawing\0CP-15-0338-PRESENTATION.dwg
LAST SAVED: Friday, July 22, 2016 LAST SAVED BY: jjunker
LAST PLOTTED: Monday, July 25, 2016 CTB FILE USED: ----