

- GENERAL PROJECT NOTES:
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  - Do not scale drawings.
  - All elevations are in metres and are geodetic. Geodetic information was obtained from the "Plan of Survey of part of Lot 31 Concession 9 (Geographic township of Goulbourn) City of Ottawa" completed by Stanley Geomatics Ltd. on March 7, 2016, Project # 161013624-111.
  - Temporary Benchmark (TBM) is the top of a pipe for the fire hydrant on Fernbank Road, located about 14.5m northwest of the proposed site entrance. Elevation= 96.59m.
  - This drawing does not represent a legal survey.
  - All dimensions to be verified on site by contractor prior to construction.
  - Any changes made to this plan must be verified and approved by Kollaard Associates Inc.
  - All materials and construction to be in accordance with City of Ottawa standards and Ontario Provincial Standards and Specifications, including (but not limited to): sewer and watermain material types, dissection, provide minimum 2.4 metres of cover for water services, cathodic protection, City of Ottawa insulation specifications for watermain, pipe bedding, reinstatement of disturbed areas and leakage testing.
  - Reference Kollaard file #180084 Servicing and SWM Report for additional information relating to the site services design and the stormwater management design for this site.

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10	REVISED TO MATCH LATEST SITE PLAN	2019/05/21	RR
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8	ISSUED FOR CONSTRUCTION	2019/04/01	RR
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**Kollaard Associates**  
Engineers

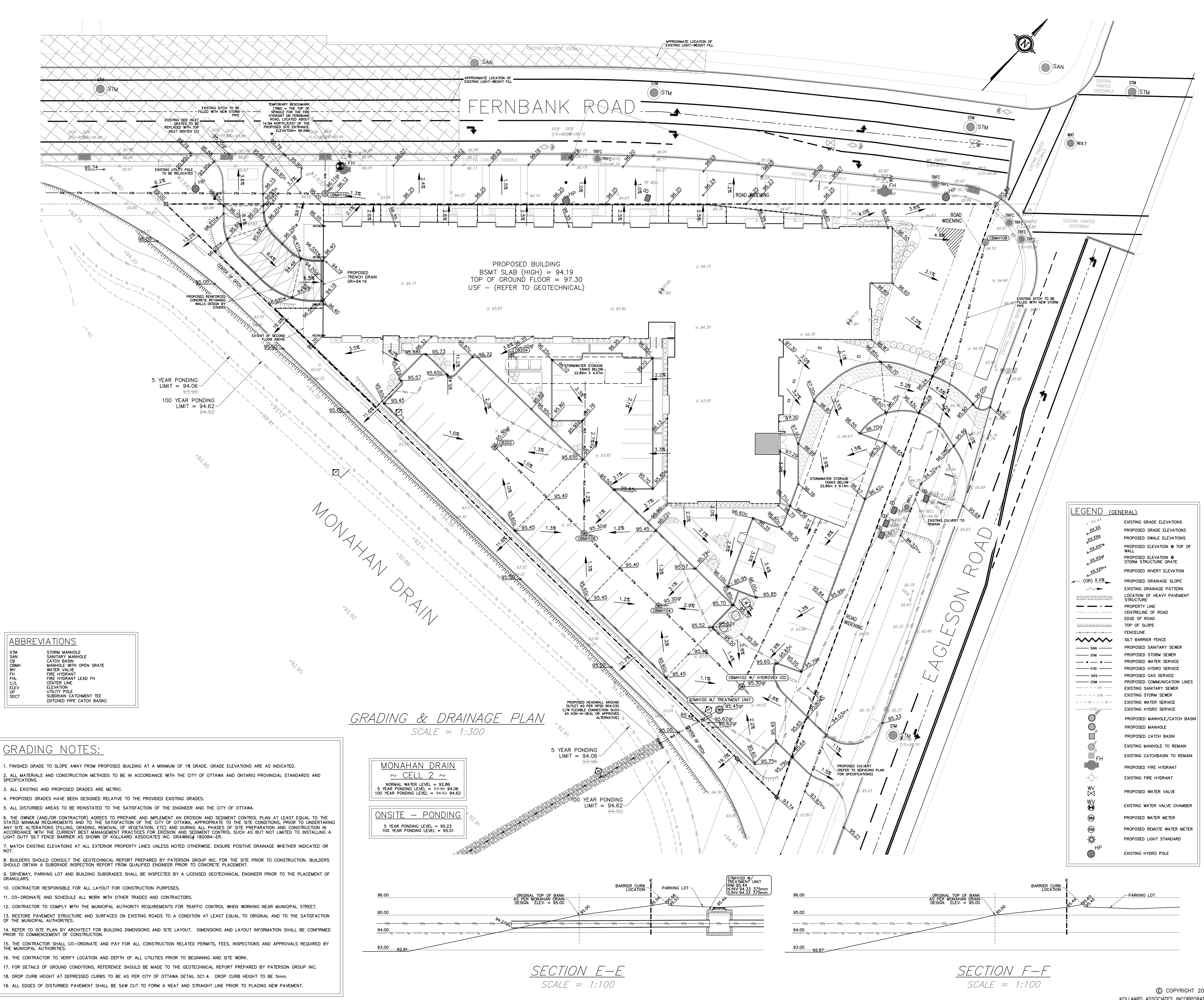
P.O. BOX 189, 210 PRESCOTT ST.(613) 860-0923  
KEMPTVILLE, ONTARIO info@kollaard.ca  
KOC 1.0 FAX (613) 258-0475  
http://www.kollaard.ca

CLIENT NAME  
**IRONCLAD DEVELOPMENTS**

PROJECT NAME  
**PROPOSED 6 STOREY  
APARTMENT DEVELOPMENT**

PROJECT LOCATION  
**800 EAGLESON RD  
KANATA, ON  
K2M 0A8**

	DESIGNED BY	CHECKED BY
	SD	SD
	DRAWN BY	APPROVED BY
	RR	SD
DATE	23.APR.2018	
SCALE	1:300	
PROJECT No.	180084	
SHEET SET	1 of 8	



ABBREVIATIONS

STM	STORM MANHOLE
SAN	SANITARY MANHOLE
CB	CATCH BASIN
WV	WATER VALVE
FH	FIRE HYDRANT
FL	FIRE HYDRANT LEAD FH
C/L	CENTER LINE
ELEV	ELEVATION
UP	UTILITY POLE
SDCT	SUBURBAN CATCHMENT TEE (DITCHED PIPE CATCH BASIN)

- GRADING NOTES:
- FINISHED GRADE TO SLOPE AWAY FROM PROPOSED BUILDING AT A MINIMUM OF 1% GRADE. GRADE ELEVATIONS ARE AS INDICATED.
  - ALL MATERIALS AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
  - ALL EXISTING AND PROPOSED GRADES ARE METRIC.
  - PROPOSED GRADES HAVE BEEN DESIGNED RELATIVE TO THE PROVIDED EXISTING GRADES.
  - ALL DISTURBED AREAS TO BE REINSTATED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA.
  - THE OWNER (AND/OR CONTRACTOR) AGREES TO PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN AT LEAST EQUAL TO THE STATED MINIMUM REQUIREMENTS AND TO THE SATISFACTION OF THE CITY OF OTTAWA, APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL, SUCH AS BUT NOT LIMITED TO INSTALLING A LIGHT DUTY SILT FENCE BARRIER AS SHOWN OF KOLLAARD ASSOCIATES INC. DRAWING# 180084-ER.
  - WATCH EXISTING ELEVATIONS AT ALL EXTERIOR PROPERTY LINES UNLESS NOTED OTHERWISE. ENSURE POSITIVE DRAINAGE WHETHER INDICATED OR NOT.
  - BUILDERS SHOULD CONSULT THE GEOTECHNICAL REPORT PREPARED BY PATERSON GROUP INC. FOR THE SITE PRIOR TO CONSTRUCTION. BUILDERS SHOULD OBTAIN A SUBGRADE INSPECTION REPORT FROM QUALIFIED ENGINEER PRIOR TO CONCRETE PLACEMENT.
  - DRIVEWAY, PARKING LOT AND BUILDING SUBGRADES SHALL BE INSPECTED BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
  - CONTRACTOR RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.
  - CO-ORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
  - CONTRACTOR TO COMPLY WITH THE MUNICIPAL AUTHORITY REQUIREMENTS FOR TRAFFIC CONTROL WHEN WORKING NEAR MUNICIPAL STREET.
  - RESTORE PAVEMENT STRUCTURE AND SURFACES ON EXISTING ROADS TO A CONDITION AT LEAST EQUAL TO ORIGINAL AND TO THE SATISFACTION OF THE MUNICIPAL AUTHORITIES.
  - REFER TO SITE PLAN BY ARCHITECT FOR BUILDING DIMENSIONS AND SITE LAYOUT. DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  - THE CONTRACTOR SHALL CO-ORDINATE AND PAY FOR ALL CONSTRUCTION RELATED PERMITS, FEES, INSPECTIONS AND APPROVALS REQUIRED BY THE MUNICIPAL AUTHORITIES.
  - THE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO BEGINNING AND SITE WORK.
  - FOR DETAILS OF GROUND CONDITIONS, REFERENCE SHOULD BE MADE TO THE GEOTECHNICAL REPORT PREPARED BY PATERSON GROUP INC.
  - DROP CURB HEIGHT AT DEPRESSED CURBS TO BE AS PER CITY OF OTTAWA DETAIL SC1.4. DROP CURB HEIGHT TO BE 5mm.
  - ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT.

MONAHAN DRAIN  
~ CELL 2 ~

NORMAL WATER LEVEL = 92.86
5 YEAR PONDING LEVEL = 93.99 94.06
100 YEAR PONDING LEVEL = 94.62 94.62

ONSITE - PONDING

5 YEAR PONDING LEVEL = 95.23
100 YEAR PONDING LEVEL = 95.51

SECTION E-E  
SCALE = 1:100

SECTION F-F  
SCALE = 1:100

DRAWING No. 180084-SER

DRAWING SITE SERVICING PLAN

KEY PLAN:

N.T.S.

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CLIENT NAME

IRONCLAD DEVELOPMENTS

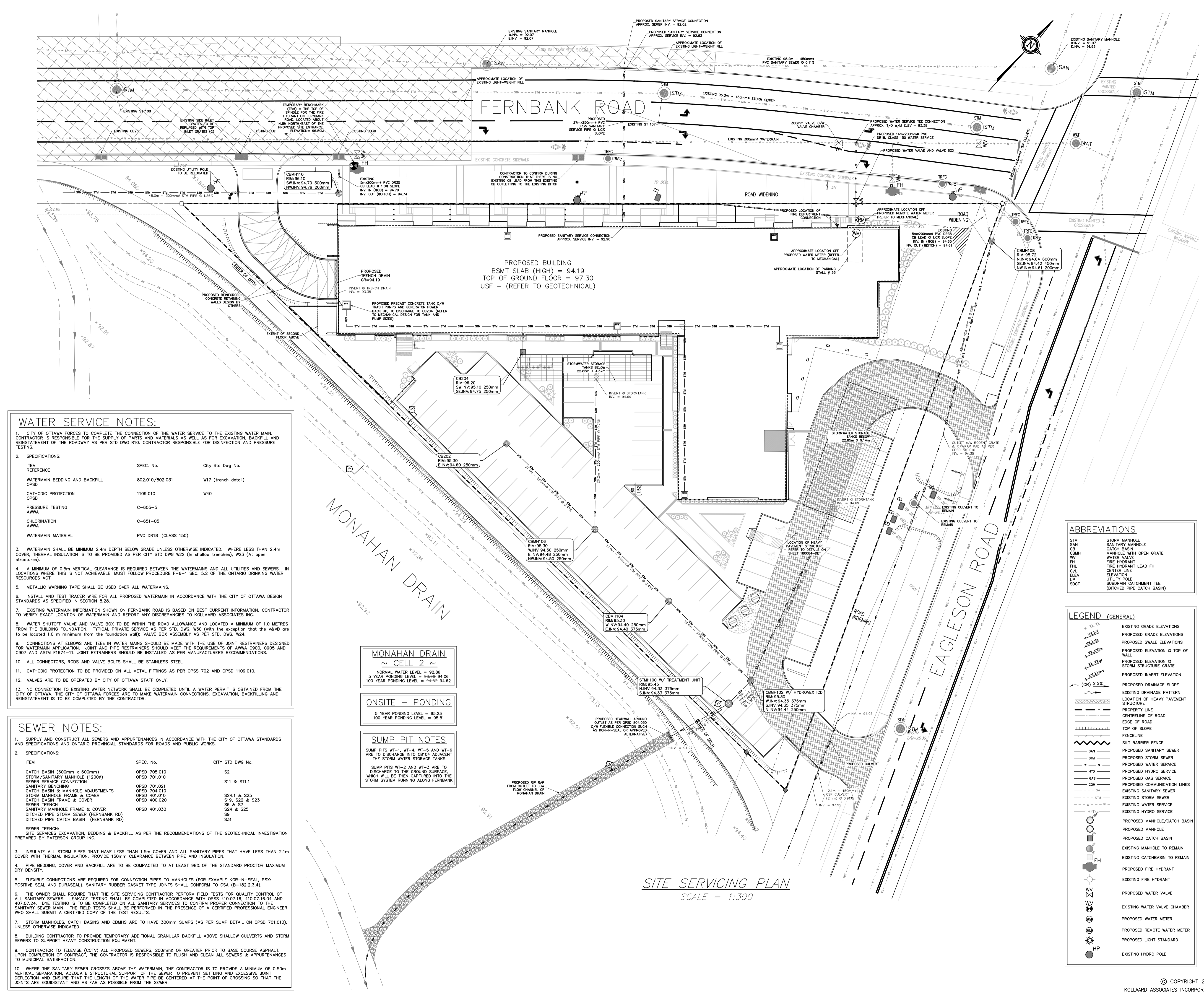
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2 of 8	



**WATER SERVICE NOTES:**

- CITY OF OTTAWA FORCES TO COMPLETE THE CONNECTION OF THE WATER SERVICE TO THE EXISTING WATER MAIN. CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY OF PARTS AND MATERIALS AS WELL AS FOR EXCAVATION, BACKFILL AND REINSTATEMENT OF THE ROADWAY AS PER STD DWG R10. CONTRACTOR RESPONSIBLE FOR DISINFECTION AND PRESSURE TESTING.
- SPECIFICATIONS:

ITEM	SPEC. No.	City Std Dwg No.
WATERMAIN BEDDING AND BACKFILL OPSD	802.010/802.031	W17 (trench detail)
CATHODIC PROTECTION OPSD	1109.010	W40
PRESSURE TESTING AWWA	C-605-5	
CHLORINATION AWWA	C-651-05	
WATERMAIN MATERIAL	PVC DR18 (CLASS 150)	
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. WHERE LESS THAN 2.4m COVER, THERMAL INSULATION IS TO BE PROVIDED AS PER CITY STD DWG W22 (In shallow trenches), W23 (At open structures).
- A MINIMUM OF 0.5m VERTICAL CLEARANCE IS REQUIRED BETWEEN THE WATERMANS AND ALL UTILITIES AND SEWERS. IN LOCATIONS WHERE THIS IS NOT ACHIEVABLE, MUST FOLLOW PROCEDURE F-6-1 SEC. 5.2 OF THE ONTARIO DRINKING WATER RESOURCES ACT.
- METALLIC WARNING TAPE SHALL BE USED OVER ALL WATERMANS.
- INSTALL AND TEST TRACER WIRE FOR ALL PROPOSED WATERMAIN IN ACCORDANCE WITH THE CITY OF OTTAWA DESIGN STANDARDS AS SPECIFIED IN SECTION 6.28.
- EXISTING WATERMAIN INFORMATION SHOWN ON FERNBANK ROAD IS BASED ON BEST CURRENT INFORMATION. CONTRACTOR TO VERIFY EXACT LOCATION OF WATERMAIN AND REPORT ANY DISCREPANCIES TO KOLLAARD ASSOCIATES INC.
- WATER SHUTOFF VALVE AND VALVE BOX TO BE WITHIN THE ROAD ALLOWANCE AND LOCATED A MINIMUM OF 1.0 METRES FROM THE BUILDING FOUNDATION. TYPICAL PRIVATE SERVICE AS PER STD. DWG. W50 (with the exception that the V&BV are to be located 1.0 m minimum from the foundation wall); VALVE BOX ASSEMBLY AS PER STD. DWG. W24.
- CONNECTIONS AT ELBOWS AND TEES IN WATER MAINS SHOULD BE MADE WITH THE USE OF JOINT RESTRAINTS DESIGNED FOR WATERMAIN APPLICATION. JOINT AND PIPE RESTRAINTS SHOULD MEET THE REQUIREMENTS OF AWWA C900, C905 AND C907 AND ASTM F1674-11. JOINT RESTRAINTS SHOULD BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
- ALL CONNECTORS, ROOS AND VALVE BOLTS SHALL BE STAINLESS STEEL.
- CATHODIC PROTECTION TO BE PROVIDED ON ALL METAL FITTINGS AS PER OPS5 702 AND OPSD 1109.010.
- VALVES ARE TO BE OPERATED BY CITY OF OTTAWA STAFF ONLY.
- NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY OF OTTAWA. THE CITY OF OTTAWA FORCES ARE TO MAKE WATERMAIN CONNECTIONS. EXCAVATION, BACKFILLING AND REINSTATEMENT IS TO BE COMPLETED BY THE CONTRACTOR.

**SEWER NOTES:**

- SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS AND ONTARIO PROVINCIAL STANDARDS FOR ROADS AND PUBLIC WORKS.
- SPECIFICATIONS:

ITEM	SPEC. No.	CITY STD DWG No.
CATCH BASIN (600mm x 600mm)	OPSD 705.010	S2
STORM/SANITARY MANHOLE (1200ø)	OPSD 701.010	S11 & S11.1
SEWER SERVICE CONNECTION	OPSD 701.021	
SANITARY BENCHING	OPSD 704.021	S24.1 & S25
CATCH BASIN & MANHOLE ADJUSTMENTS	OPSD 704.010	S19, S22 & S23
STORM MANHOLE FRAME & COVER	OPSD 401.010	S6 & S7
CATCH BASIN FRAME & COVER	OPSD 400.020	S24 & S25
SEWER TRENCH	OPSD 401.030	S9
DITCHED PIPE STORM SEWER (FERNBANK RD)		S31
DITCHED PIPE CATCH BASIN (FERNBANK RD)		
- SEWER TRENCH: SITE SERVICES EXCAVATION, BEDDING & BACKFILL AS PER THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION PREPARED BY PATERSON GROUP INC.
- INSULATE ALL STORM PIPES THAT HAVE LESS THAN 1.5m COVER AND ALL SANITARY PIPES THAT HAVE LESS THAN 2.1m COVER WITH THERMAL INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
- PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
- FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTION PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). SANITARY RUBBER GASKET TYPE JOINTS SHALL CONFORM TO CSA (B-182.2,3,4).
- THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPS5-410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- STORM MANHOLES, CATCH BASINS AND CBMHs ARE TO HAVE 300mm SUMPS (AS PER SUMP DETAIL ON OPSD 701.010), UNLESS OTHERWISE INDICATED.
- BUILDING CONTRACTOR TO PROVIDE TEMPORARY ADDITIONAL GRANULAR BACKFILL ABOVE SHALLOW CULVERTS AND STORM SEWERS TO SUPPORT HEAVY CONSTRUCTION EQUIPMENT.
- CONTRACTOR TO TELEVIEW (CCTV) ALL PROPOSED SEWERS, 200mmø OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES TO MUNICIPAL SATISFACTION.
- WHERE THE SANITARY SEWER CROSSES ABOVE THE WATERMAIN, THE CONTRACTOR IS TO PROVIDE A MINIMUM OF 0.50m VERTICAL SEPARATION, ADEQUATE STRUCTURAL SUPPORT OF THE SEWER TO PREVENT SETTLING AND EXCESSIVE JOINT DEFLECTION AND ENSURE THAT THE LENGTH OF THE WATER PIPE BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS ARE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

**MONAHAN DRAIN**  
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**ONSITE - PONDING**  
5 YEAR PONDING LEVEL = 95.23  
100 YEAR PONDING LEVEL = 95.51

**SUMP PIT NOTES**  
SUMP PITS WT-1, WT-4, WT-5 AND WT-6 ARE TO DISCHARGE INTO CB104 ADJACENT THE STORM WATER STORAGE TANKS.  
SUMP PITS WT-2 AND WT-3 ARE TO DISCHARGE TO THE GROUND SURFACE, WHICH WILL BE THEN CAPTURED INTO THE STORM SYSTEM RUNNING ALONG FERNBANK.

SITE SERVICING PLAN  
SCALE = 1:300

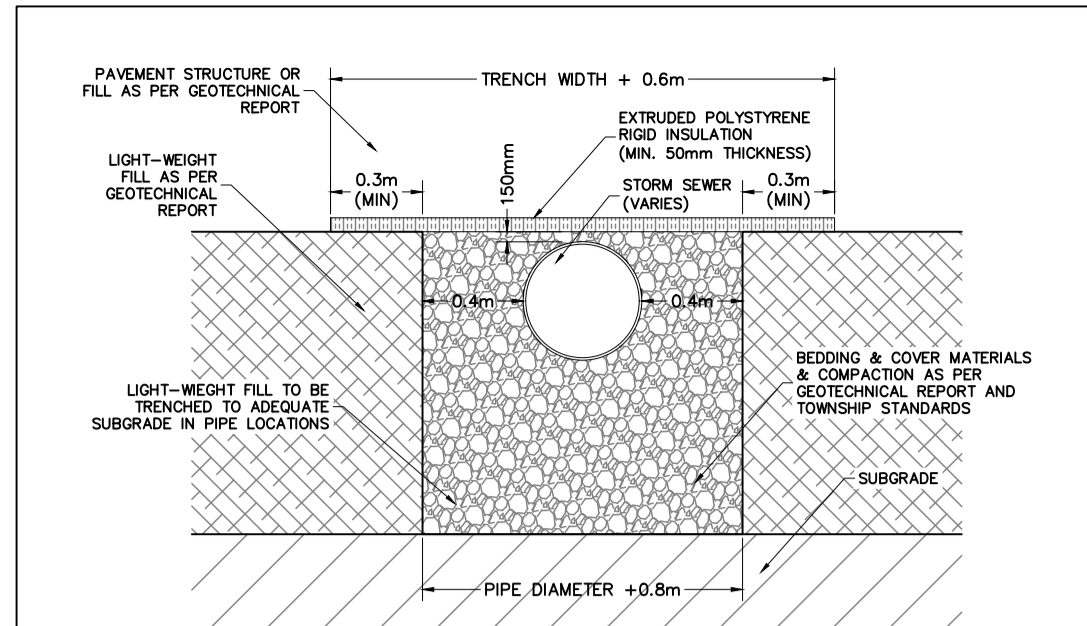
**ABBREVIATIONS**

STM	STORM MANHOLE
SAN	SANITARY MANHOLE
CB	CATCH BASIN
CBMH	MANHOLE WITH OPEN GRATE
WV	WATER VALVE
FH	FIRE HYDRANT
PH	FIRE HYDRANT LEAD FH
C/L	CENTER LINE
ELEV	ELEVATION
UP	UTILITY POLE
SDCT	SUBDRAIN CATCHMENT TEE (DITCHED PIPE CATCH BASIN)

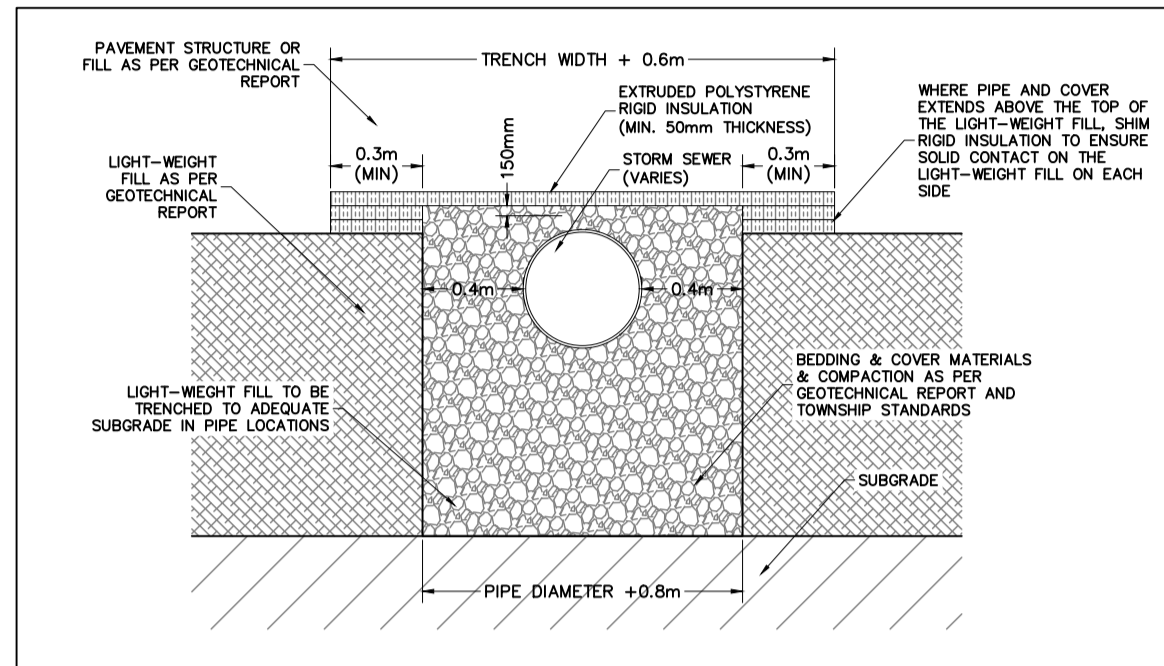
**LEGEND (GENERAL)**

	EXISTING GRADE ELEVATIONS
	PROPOSED GRADE ELEVATIONS
	PROPOSED SHALE ELEVATIONS
	PROPOSED ELEVATION @ TOP OF WALL
	PROPOSED ELEVATION @ STORM STRUCTURE GRATE
	PROPOSED INVERT ELEVATION
	PROPOSED DRAINAGE SLOPE
	EXISTING DRAINAGE PATTERN
	LOCATION OF HEAVY PAVEMENT STRUCTURE
	PROPERTY LINE
	CENTRELINE OF ROAD
	EDGE OF ROAD
	TOP OF SLOPE
	FENCE LINE
	SILT BARRIER FENCE
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED WATER SERVICE
	PROPOSED HYDRO SERVICE
	PROPOSED GAS SERVICE
	PROPOSED COMMUNICATION LINES
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATER SERVICE
	EXISTING HYDRO SERVICE
	PROPOSED MANHOLE/CATCH BASIN
	PROPOSED MANHOLE
	PROPOSED CATCH BASIN
	EXISTING MANHOLE TO REMAIN
	EXISTING CATCHBASIN TO REMAIN
	PROPOSED FIRE HYDRANT
	EXISTING FIRE HYDRANT
	PROPOSED WATER VALVE
	EXISTING WATER VALVE CHAMBER
	PROPOSED WATER METER
	PROPOSED REMOTE WATER METER
	PROPOSED LIGHT STANDARD
	EXISTING HYDRO POLE

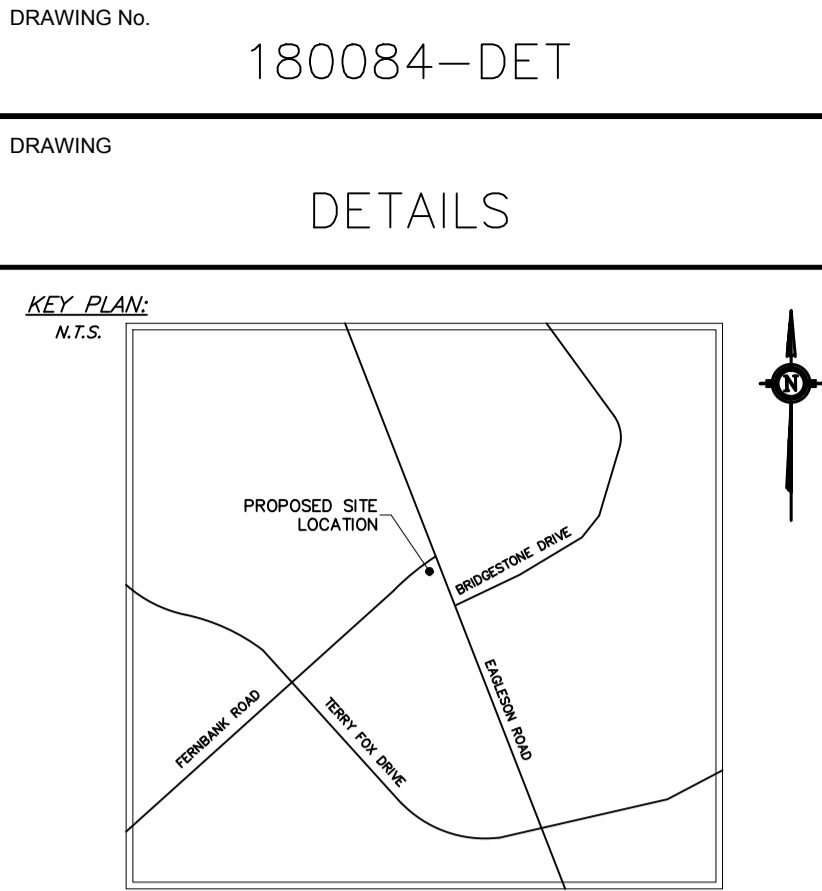
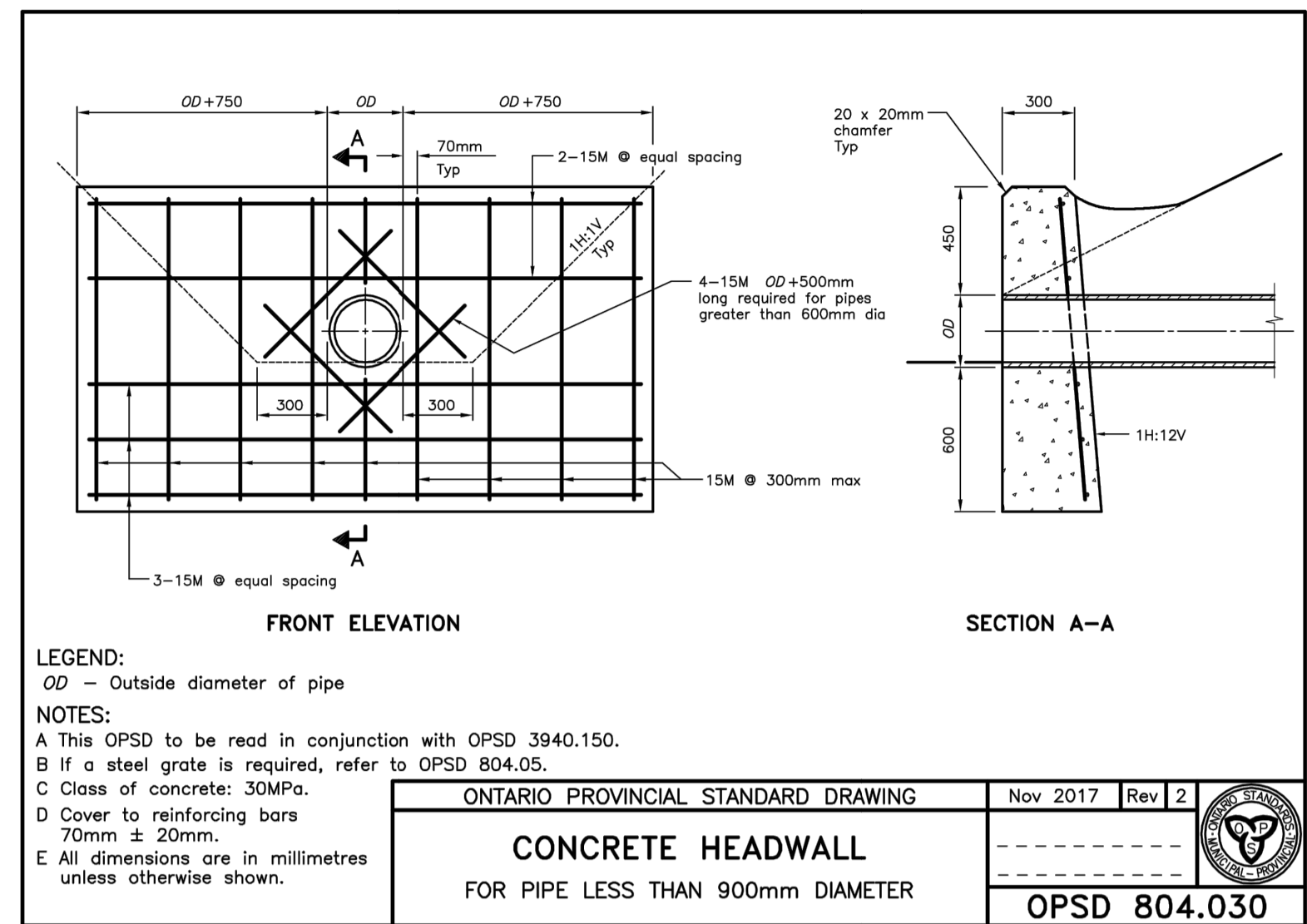
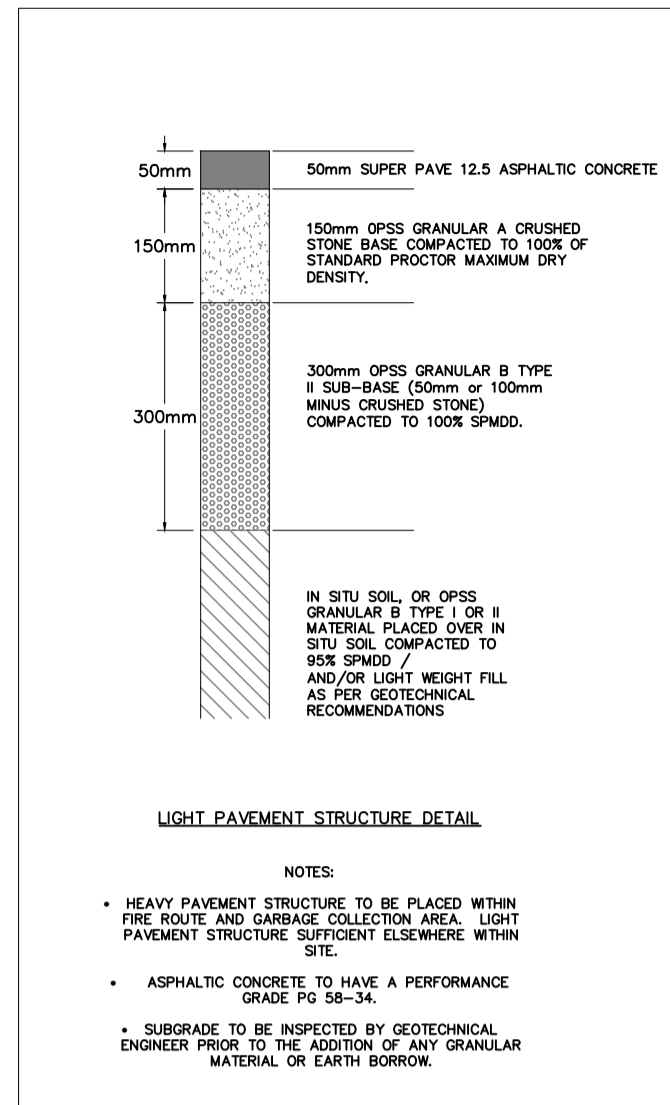
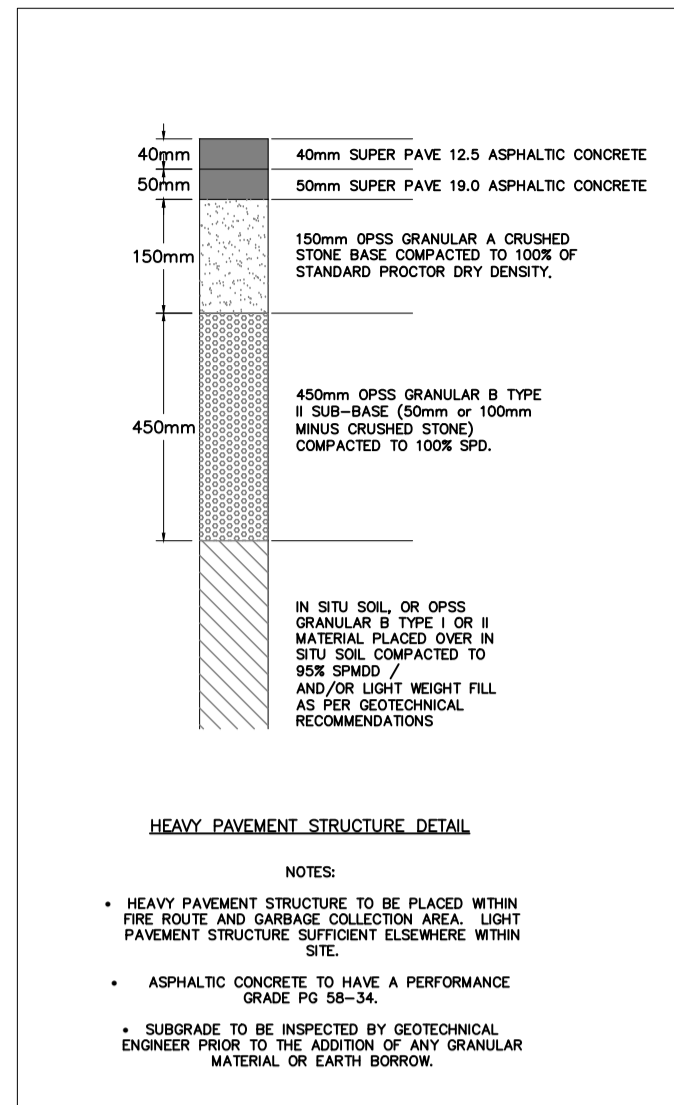
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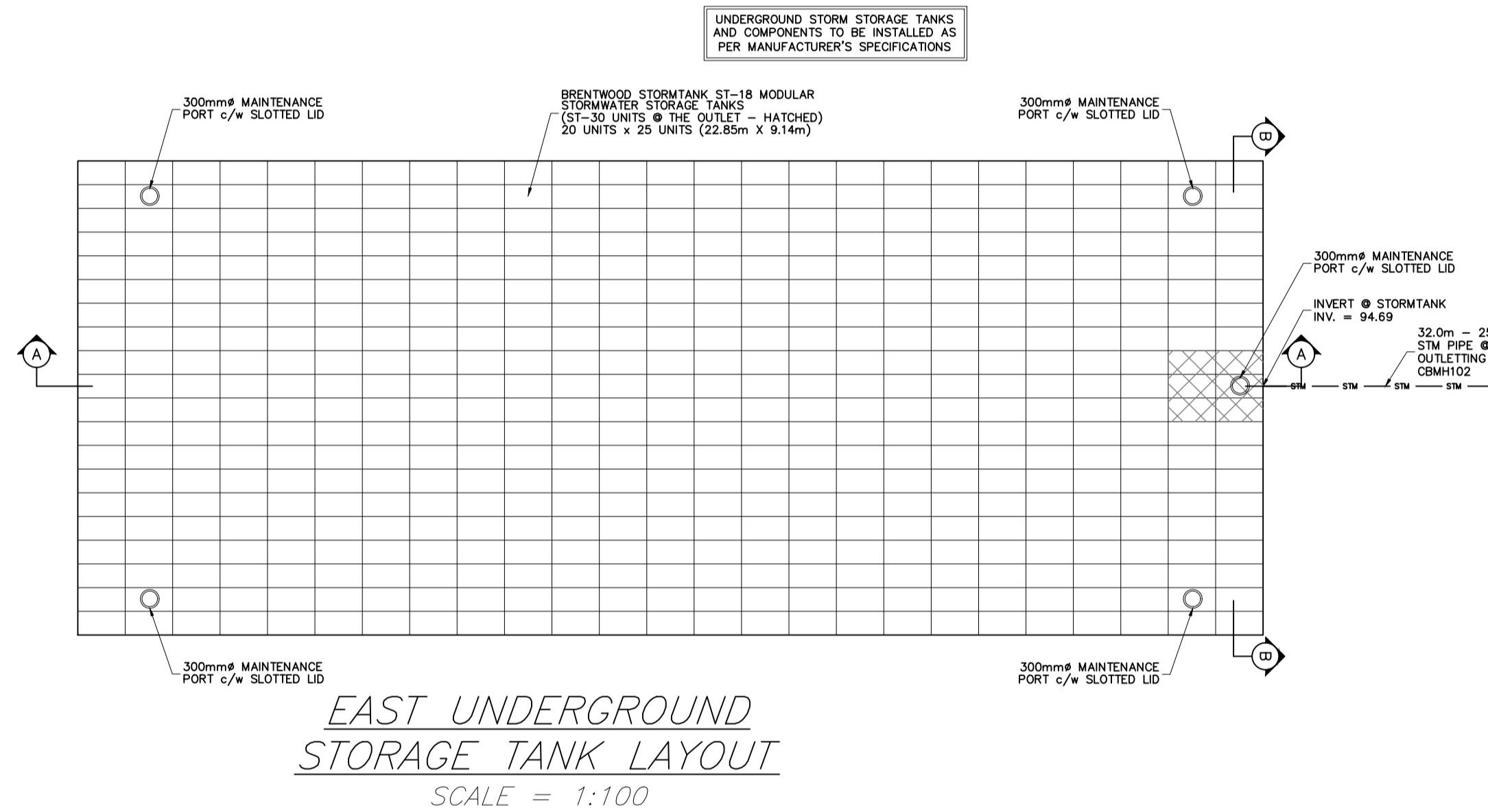
*TYPICAL SEWER INSULATION DETAIL  
(NOT TO SCALE)*



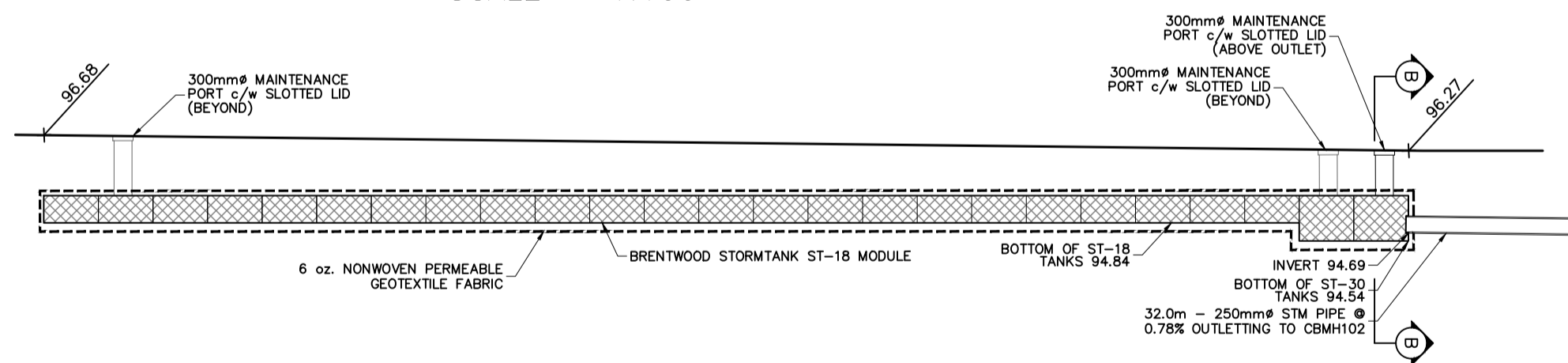
*TYPICAL SEWER INSULATION DETAIL  
(WHERE PIPE & COVER EXTEND ABOVE LWF)  
(NOT TO SCALE)*



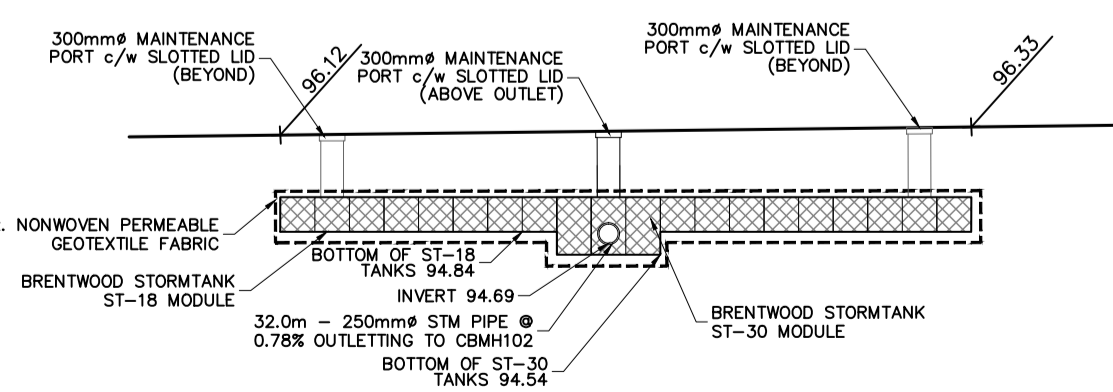
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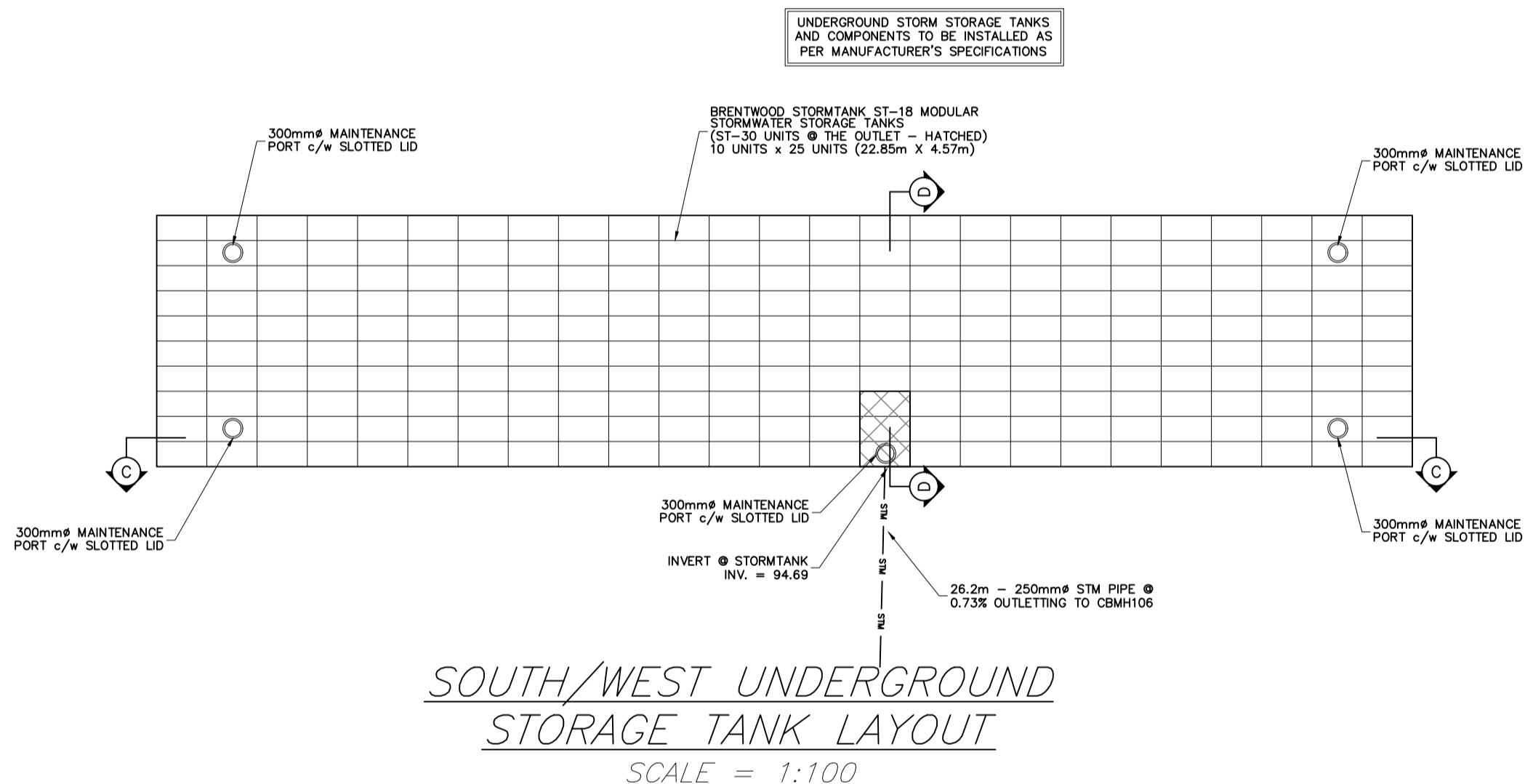
*EAST UNDERGROUND  
STORAGE TANK LAYOUT  
SCALE = 1:100*



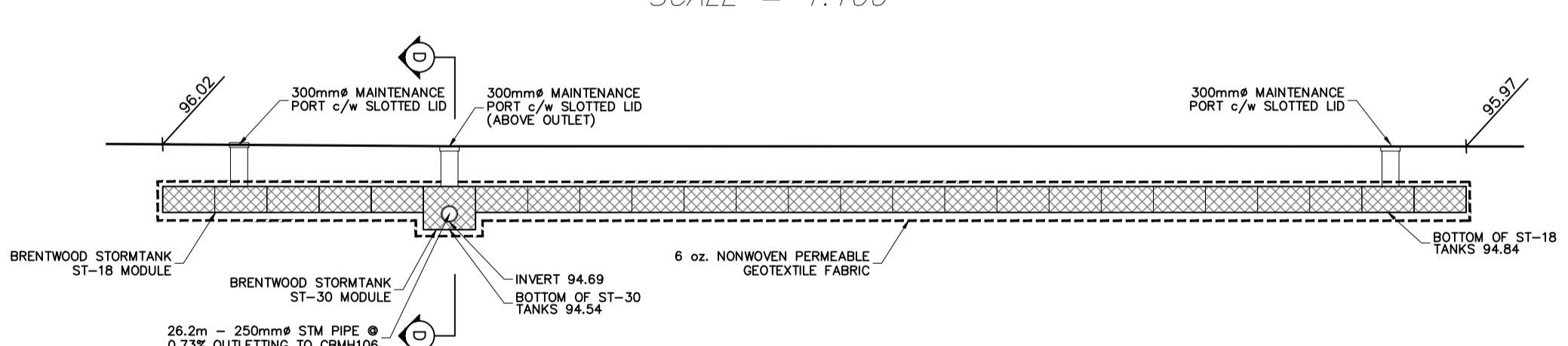
*SECTION A-A  
EAST UNDERGROUND  
STORAGE TANK SECTION 1  
SCALE = 1:100*



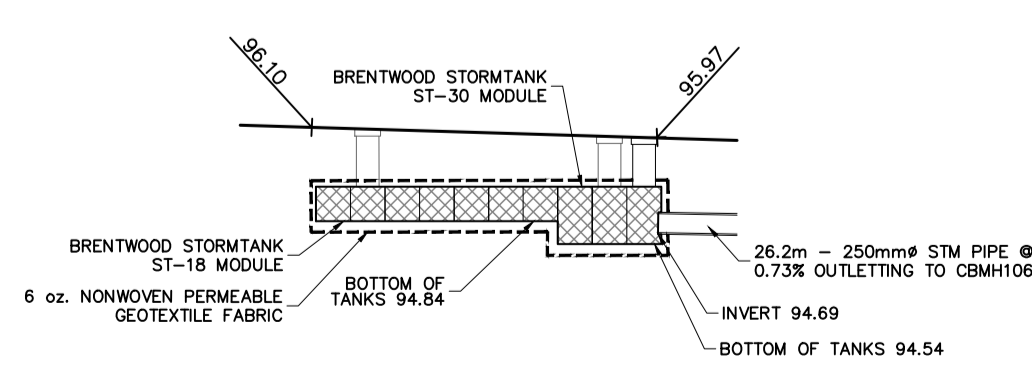
*SECTION B-B  
EAST UNDERGROUND  
STORAGE TANK SECTION 2  
SCALE = 1:100*



*SOUTH/WEST UNDERGROUND  
STORAGE TANK LAYOUT  
SCALE = 1:100*



*SECTION C-C  
SOUTH/WEST UNDERGROUND  
STORAGE TANK SECTION 1  
SCALE = 1:100*



*SECTION D-D  
SOUTH/WEST UNDERGROUND  
STORAGE TANK SECTION 2  
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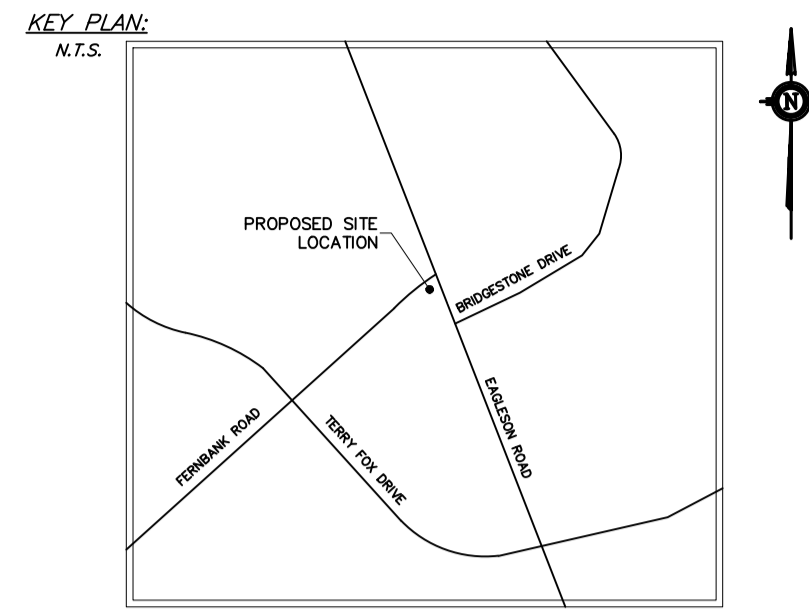
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DRAWING  
SEDIMENT & EROSION CONTROL PLAN



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- Any changes made to this plan must be verified and approved by Kollaard Associates Inc.
- All materials and construction to be in accordance with City of Ottawa standards and Ontario Provincial Standards and Specifications, including (but not limited to): sewer and watermain material types; disinfection; provide minimum 2.4 metres of cover for water services, cathodic protection; City of Ottawa insulation specifications for watermain, pipe bedding, reinstatement of disturbed areas and leakage testing.
- Reference Kollaard file #180084 Servicing and SWM Report for additional information relating to the site services design and the stormwater management design for this site.

Subject to City Approval

10	REVISED TO MATCH LATEST SITE PLAN	2019/05/21	RR
9	REVISED AS PER 3rd MUNICIPAL COMMENTS	2019/05/09	RR
8	ISSUED FOR CONSTRUCTION	2019/04/01	RR
7	ISSUED FOR CONSTRUCTION	2019/03/13	SD
6	NOT APPLICABLE TO THIS SHEET	2019/03/11	SD
5	REVISED AS PER 2nd MUNICIPAL COMMENTS	2019/02/20	RR
4	REVISED AS PER 2nd MUNICIPAL COMMENTS	2019/01/08	RR
3	REVISED AS PER MUNICIPAL COMMENTS	2018/12/11	RR
2	NO CHANGES TO THIS SHEET	2018/09/11	RR
1	REVISED FOR SITE PLAN CONTROL	2018/08/13	RR
0	ISSUED FOR SITE PLAN CONTROL	2018/06/18	RR

No.	REVISION	DATE	BY
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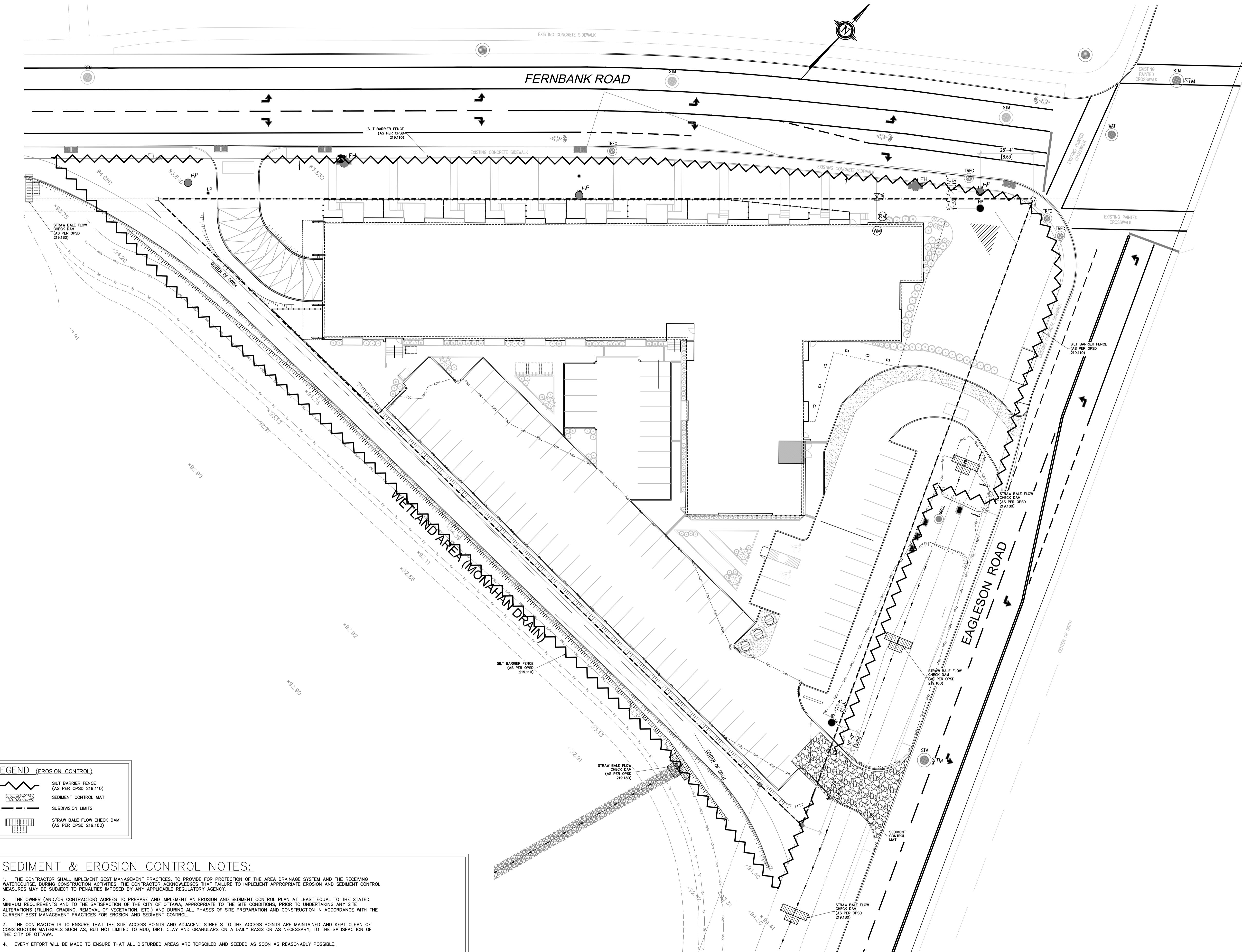
P.O. BOX 189, 210 PRESCOTT ST.(613) 860-0923  
KEMPTVILLE, ONTARIO info@kollaard.ca  
KOG 1J0 FAX (613) 258-0475  
http://www.kollaard.ca

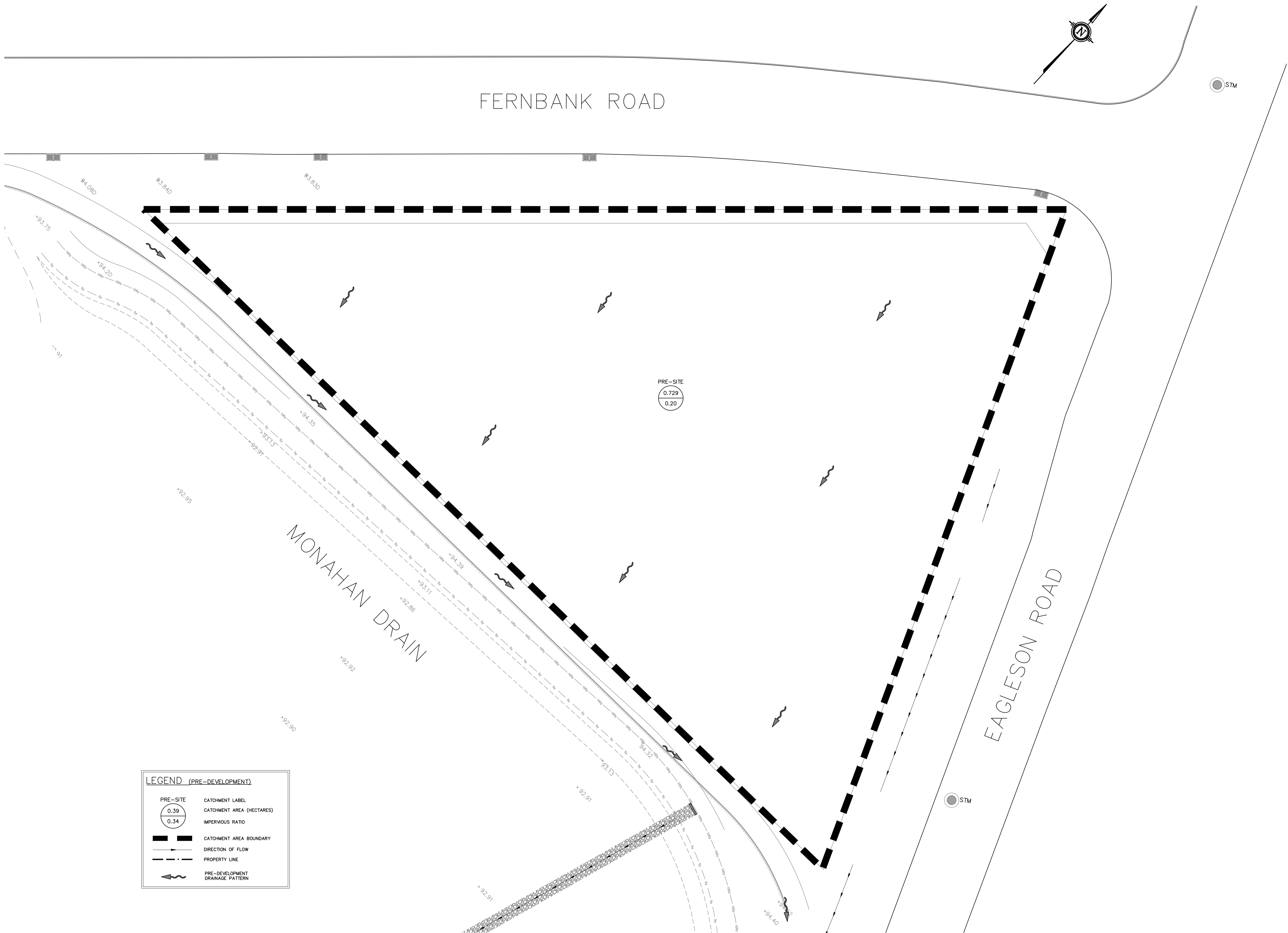
CLIENT NAME  
IRONCLAD DEVELOPMENTS

PROJECT NAME  
PROPOSED 6 STOREY  
APARTMENT DEVELOPMENT

PROJECT LOCATION  
800 EAGLESON RD  
KANATA, ON  
K2M 0A8

DESIGNED BY SD	CHECKED BY SD
DRAWN BY RR	APPROVED BY SD
DATE 23.APR.2018	
SCALE 1:300	
PROJECT No. 180084	
SHEET SET 4 OF 8	





**LEGEND (PRE-DEVELOPMENT)**

PRE-SITE	CATCHMENT LABEL
0.39	CATCHMENT AREA (HECTARES)
0.34	IMPERVIOUS RATIO
	CATCHMENT AREA BOUNDARY
	DIRECTION OF FLOW
	PROPERTY LINE
	PRE-DEVELOPMENT DRAINAGE PATTERN

PRE-DEVELOPMENT CATCHMENT AREAS  
SCALE = 1:300

DRAWING No. 180084-PRECA

DRAWING PRE-DEVELOPMENT CATCHMENT AREAS

KEY PLAN:  
N.T.S.

- GENERAL PROJECT NOTES:
- All dimensions are in metres.
  - Do not scale drawings.
  - All elevations are in metres and are geodetic. Geodetic information was obtained from the "Plan of Survey of part of Lot 31, Concession 9 (Geographic Township of Goulbourn) City of Ottawa" completed by Stattek Geomatics Ltd. on March 7, 2018, Project # 161613824-111.
  - Temporary Benchmark (TBM) is the top of spindle for the fire hydrant on Fernbank Road, located about 14.5m northwest of the proposed site entrance. Elevation 86.59m.
  - All dimensions to be verified on site by contractor prior to construction.
  - This drawing does not represent a legal survey.
  - Any changes made to this plan must be verified and approved by Kollaard Associates Inc.
  - All materials and construction to be in accordance with City of Ottawa standards and Ontario Provincial Standards and Specifications, including (but not limited to): sewer and watermain material types; disinfection; provide minimum 2.4 metres of cover for water services, cathodic protection; City of Ottawa insulation specifications for watermain, pipe bedding, reinstatement of disturbed areas and leakage testing.
  - Reference Kollaard file #180084 Servicing and SWM Report for additional information relating to the site services design and the stormwater management design for this site.

Subject to City Approval

10	REVISED TO MATCH LATEST SITE PLAN	2019/05/21	RR
9	NO CHANGES TO THIS SHEET	2019/05/09	RR
8	ISSUED FOR CONSTRUCTION	2019/04/01	RR
7	ISSUED FOR CONSTRUCTION	2019/03/13	SD
6	NOT APPLICABLE TO THIS SHEET	2019/03/11	SD
5	REVISED AS PER 2nd MUNICIPAL COMMENTS	2019/02/20	RR
4	REVISED AS PER 2nd MUNICIPAL COMMENTS	2019/01/08	RR
3	REVISED AS PER MUNICIPAL COMMENTS	2018/12/10	RR
2	NO CHANGES TO THIS SHEET	2018/09/11	RR
1	REVISED FOR SITE PLAN CONTROL	2018/08/13	RR
0	ISSUED FOR SITE PLAN CONTROL	2018/06/15	RR

**Kollaard Associates Engineers**

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KOG 1JO FAX (613) 258-0475  
http://www.kollaard.ca

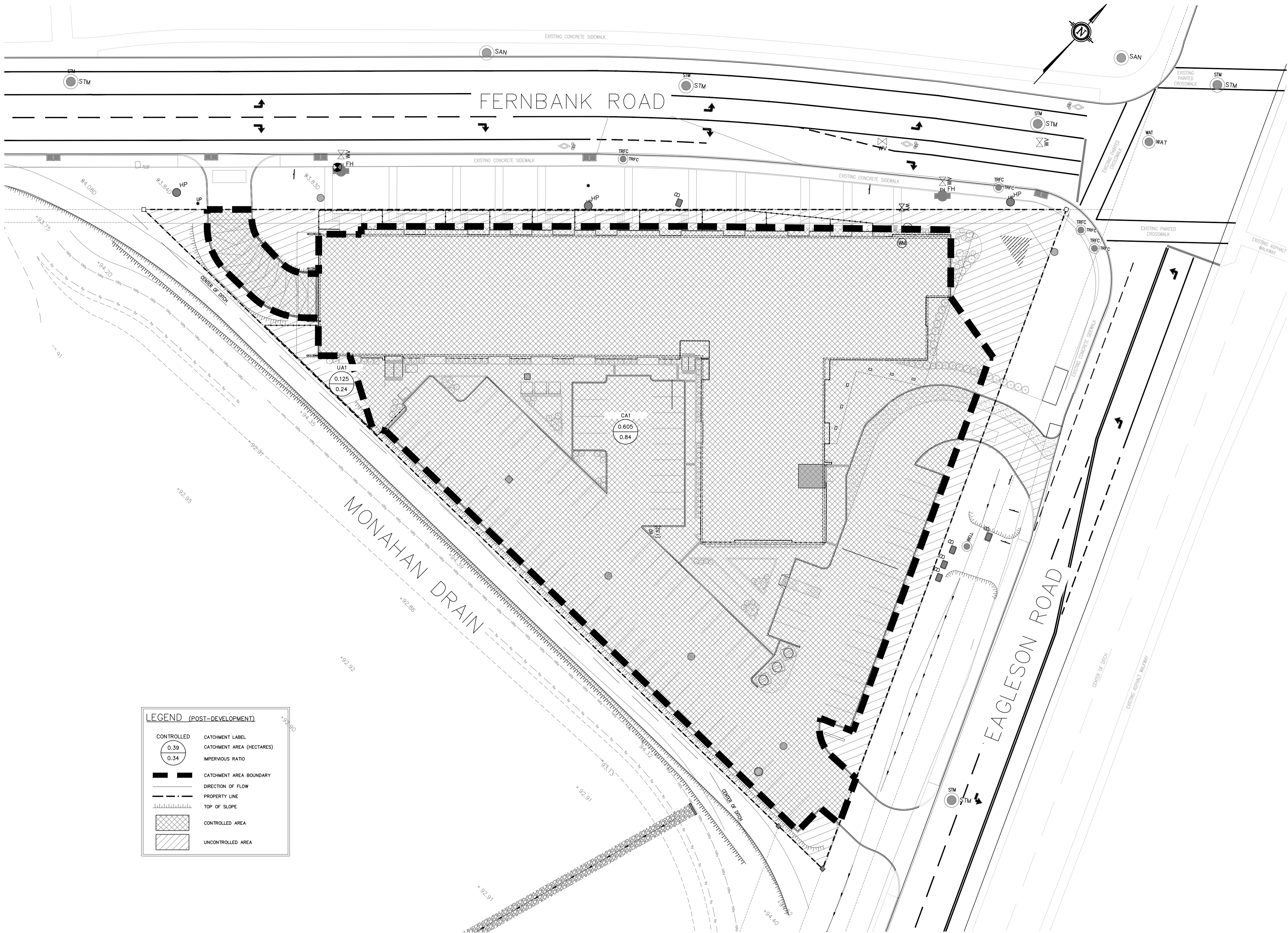
CLIENT NAME  
IRONCLAD DEVELOPMENTS

PROJECT NAME  
PROPOSED 6 STOREY APARTMENT DEVELOPMENT

PROJECT LOCATION  
800 EAGLESON RD  
KANATA, ON  
K2M 0A8

DESIGNED BY SD	CHECKED BY SD
DRAWN BY RR	APPROVED BY SD
DATE 23.APR.2018	
SCALE 1: 300	
PROJECT No. 180084	
SHEET SET 5 OF 8	





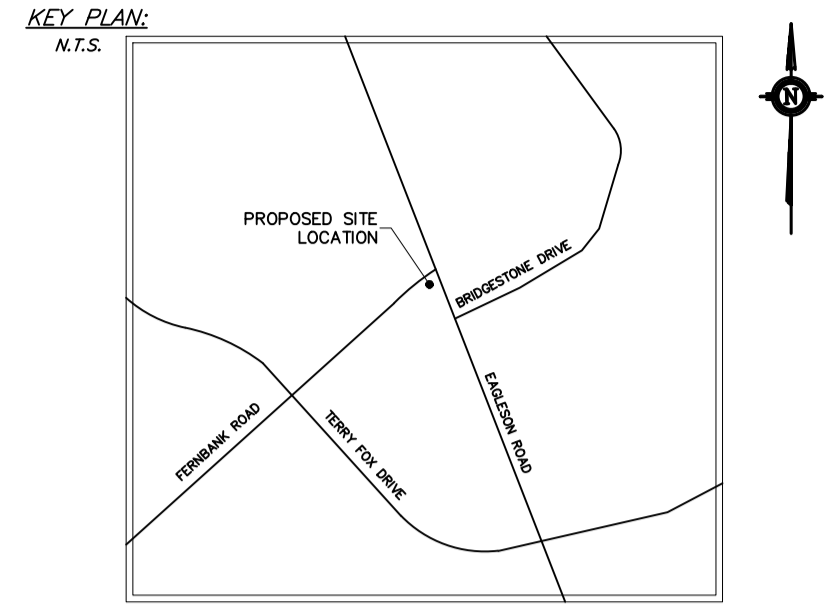
**LEGEND (POST-DEVELOPMENT)**

	CATCHMENT LABEL
	CATCHMENT AREA (HECTARES)
	IMPERVIOUS RATIO
	CATCHMENT AREA BOUNDARY
	DIRECTION OF FLOW
	PROPERTY LINE
	TOP OF SLOPE
	CONTROLLED AREA
	UNCONTROLLED AREA

POST-DEVELOPMENT CATCHMENT AREAS  
SCALE = 1:300

DRAWING No. 180084-POSTCA

DRAWING  
POST-DEVELOPMENT CATCHMENT AREAS



GENERAL PROJECT NOTES:

Subject to City Approval

10	REVISED TO MATCH LATEST SITE PLAN	2019/05/21	RR
9	NO CHANGES TO THIS SHEET	2019/05/09	RR
8	ISSUED FOR CONSTRUCTION	2019/04/01	RR
7	ISSUED FOR CONSTRUCTION	2019/03/13	SD
6	NOT APPLICABLE TO THIS SHEET	2019/03/11	SD
5	REVISED AS PER 2nd MUNICIPAL COMMENTS	2019/02/20	RR
4	REVISED AS PER 2nd MUNICIPAL COMMENTS	2019/01/08	RR
3	REVISED AS PER MUNICIPAL COMMENTS	2018/12/11	RR
2	REVISED FOR INCL. IN SMR	2018/09/11	RR
1	REVISED FOR SITE PLAN CONTROL	2018/08/13	RR
0	ISSUED FOR SITE PLAN CONTROL	2018/06/18	RR
No.	REVISION	DATE	BY

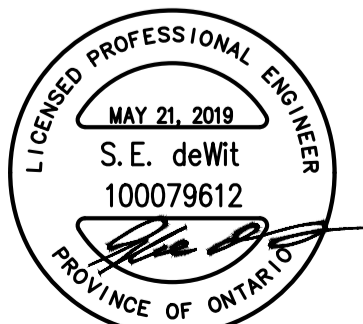
**Kollaard Associates Engineers**

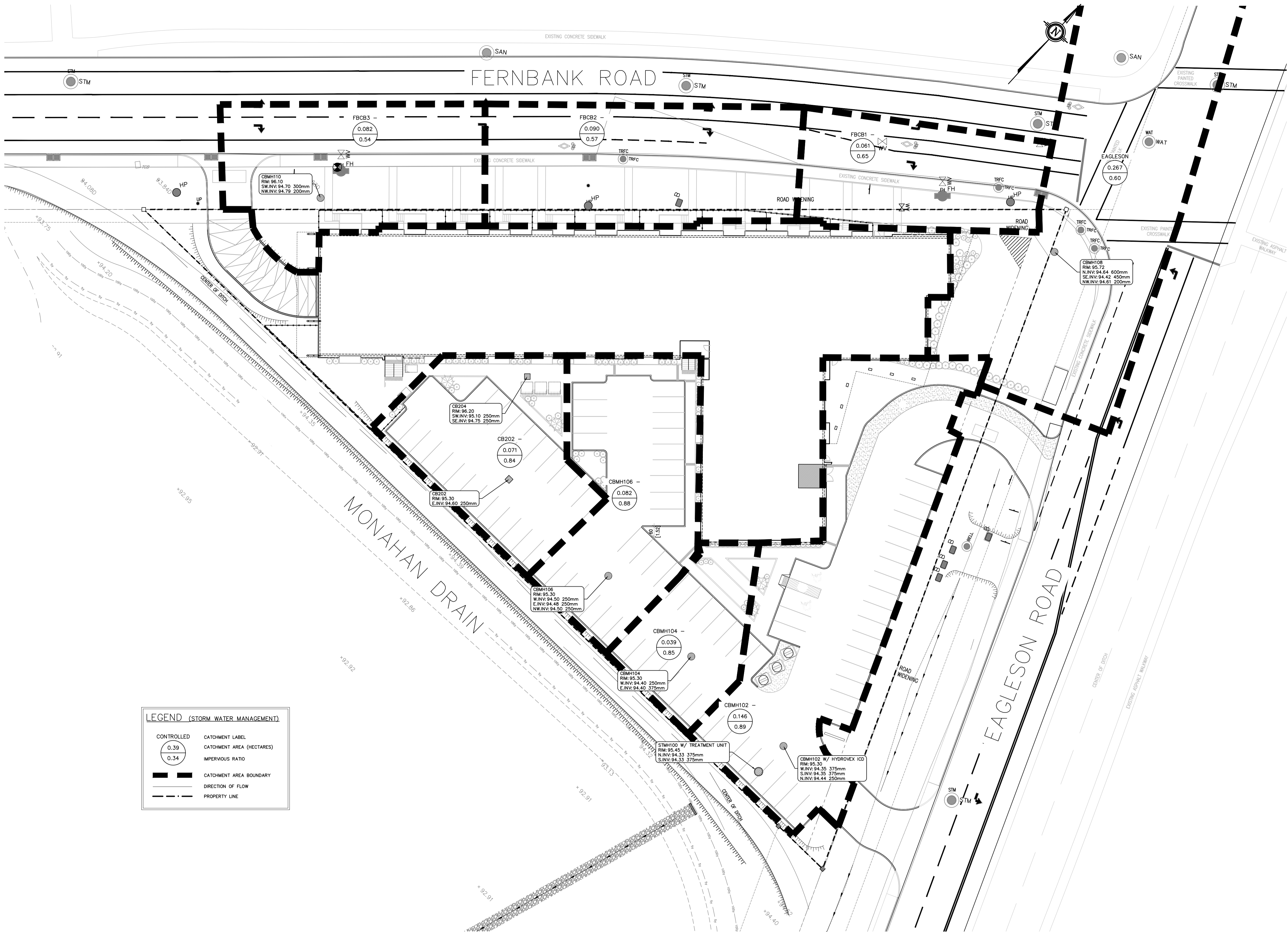
P.O. BOX 189, 210 PRESCOTT ST.(613) 860-0923  
KEMPTVILLE, ONTARIO info@kollaard.ca  
K0G 1J0 FAX (613) 258-0475  
http://www.kollaard.ca

CLIENT NAME  
IRONCLAD DEVELOPMENTS

PROJECT NAME  
PROPOSED 6 STOREY  
APARTMENT DEVELOPMENT

PROJECT LOCATION  
800 EAGLESON RD  
KANATA, ON  
K2M 0A8

	DESIGNED BY SD	CHECKED BY SD
	DRAWN BY RR	APPROVED BY SD
	DATE 23.APR.2018	
	SCALE 1: 300	
	PROJECT No. 180084	
SHEET SET 6 OF 8		



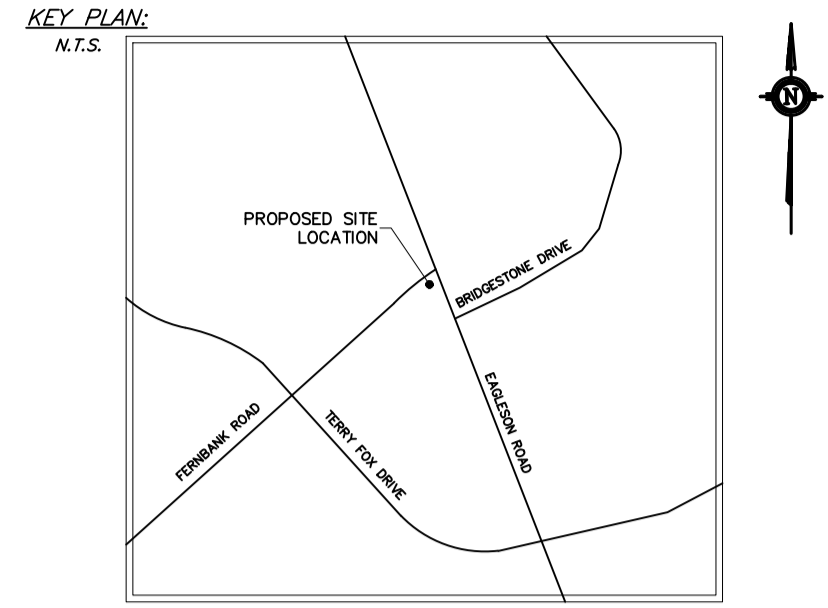
**LEGEND (STORM WATER MANAGEMENT)**

CONTROLLED	CATCHMENT LABEL
0.39	CATCHMENT AREA (HECTARES)
0.34	IMPERVIOUS RATIO
---	CATCHMENT AREA BOUNDARY
---	DIRECTION OF FLOW
---	PROPERTY LINE

STORM SEWER CATCHMENT AREAS  
SCALE = 1:300

DRAWING No. 180084-SSCA

DRAWING  
STORM SEWER CATCHMENT AREAS



GENERAL PROJECT NOTES:

Subject to City Approval

No.	REVISION	DATE	BY
10	REVISED TO MATCH LATEST SITE PLAN	2019/05/21	RR
9	REVISED AS PER 3rd MUNICIPAL COMMENTS	2019/05/09	RR
8-8	NO CHANGES TO THIS SHEET	2019/02/20	RR
5	REVISED AS PER 2nd MUNICIPAL COMMENTS	2019/02/20	RR
4	REVISED AS PER 2nd MUNICIPAL COMMENTS	2019/01/08	RR
3	REVISED AS PER MUNICIPAL COMMENTS	2018/12/11	RR
2	REVISED FOR INCL. IN SSMR	2018/09/11	RR
1	REVISED FOR SITE PLAN CONTROL	2018/08/13	RR
0	ISSUED FOR SITE PLAN CONTROL	2018/06/18	RR

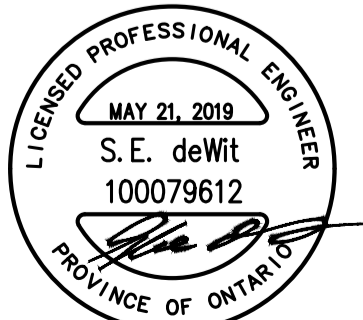
**K** Kollaard Associates  
Engineers

P.O. BOX 189, 210 PRESCOTT ST.(613) 860-0923  
KEMPVILLE, ONTARIO info@kollaard.ca  
KOG 1JO FAX (613) 258-0475  
http://www.kollaard.ca

CLIENT NAME  
IRONCLAD DEVELOPMENTS

PROJECT NAME  
PROPOSED 6 STOREY  
APARTMENT DEVELOPMENT

PROJECT LOCATION  
800 EAGLESON RD  
KANATA, ON  
K2M 0A8

	DESIGNED BY SD	CHECKED BY SD
	DRAWN BY RR	APPROVED BY SD
	DATE 23.APR.2018	
	SCALE 1: 300	
	PROJECT No. 180084	
	SHEET SET 7 OF 8	

D07-12-18-0096