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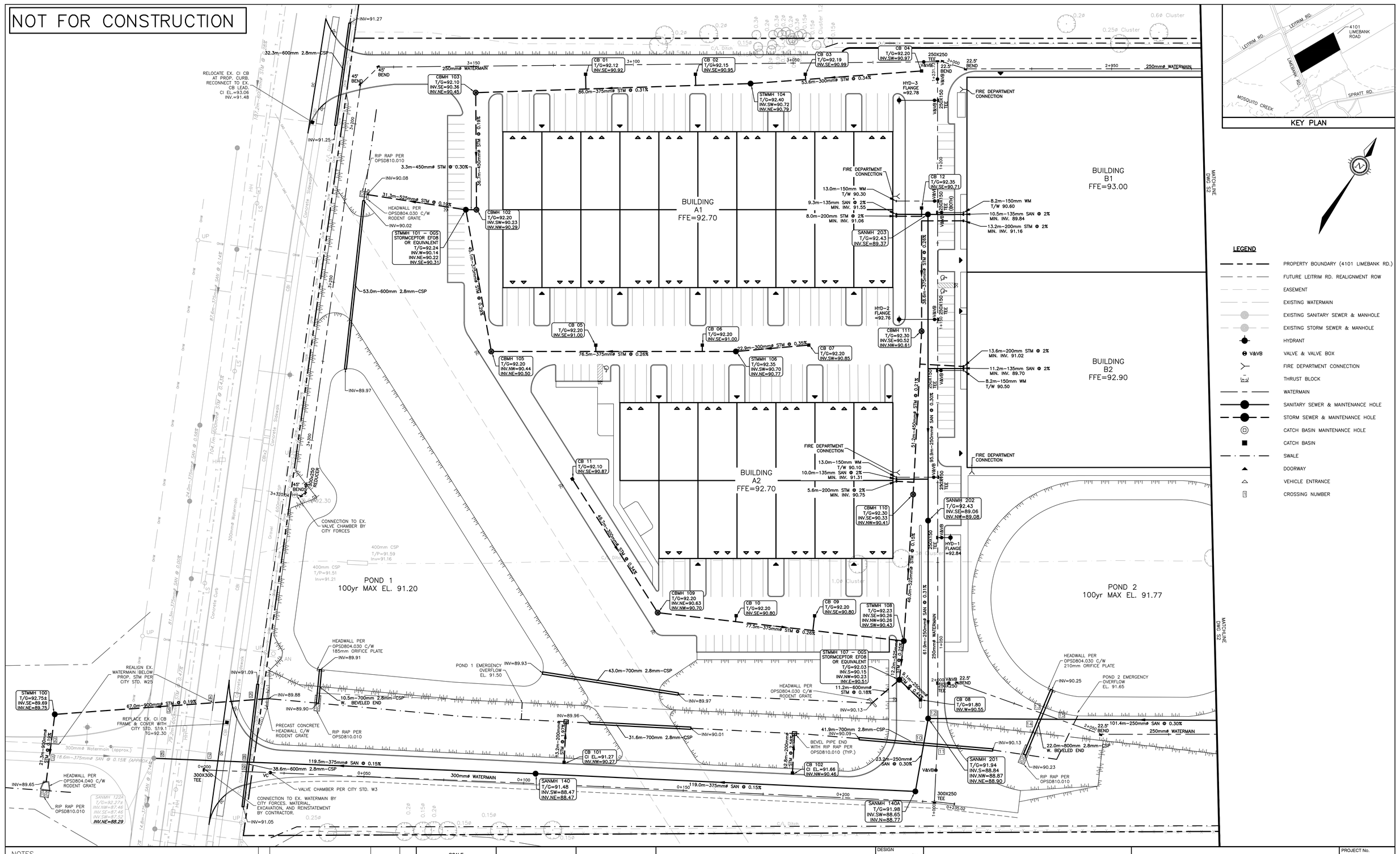

KEY PLAN

LEGEND

- PROPERTY BOUNDARY (4101 LIMEBANK RD.)
- FUTURE LEITRIM RD. REALIGNMENT ROW
- EASEMENT
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER & MANHOLE
- EXISTING STORM SEWER & MANHOLE
- HYDRANT
- V&VB VALVE & VALVE BOX
- FIRE DEPARTMENT CONNECTION
- THRUST BLOCK
- WATERMAIN
- SANITARY SEWER & MAINTENANCE HOLE
- STORM SEWER & MAINTENANCE HOLE
- CATCH BASIN MAINTENANCE HOLE
- CATCH BASIN
- SWALE
- DOORWAY
- VEHICLE ENTRANCE
- CROSSING NUMBER

NOTES

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PROPERTY BOUNDARIES ARE DERIVED FROM TOPOGRAPHICAL PLAN OF SURVEY OF PART OF LOTS 16 & 17 CONCESSION 2 (RIDEAU FRONT), GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA. PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. ONTARIO LAND SURVEYORS, REF: 24256–23. ELEVATIONS ARE REFERRED TO GEODETIC DATUM (CGVD28).

NO.	REVISION DESCRIPTION	DATE	BY

SCALE

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HORIZONTAL 1:500

Robinson Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

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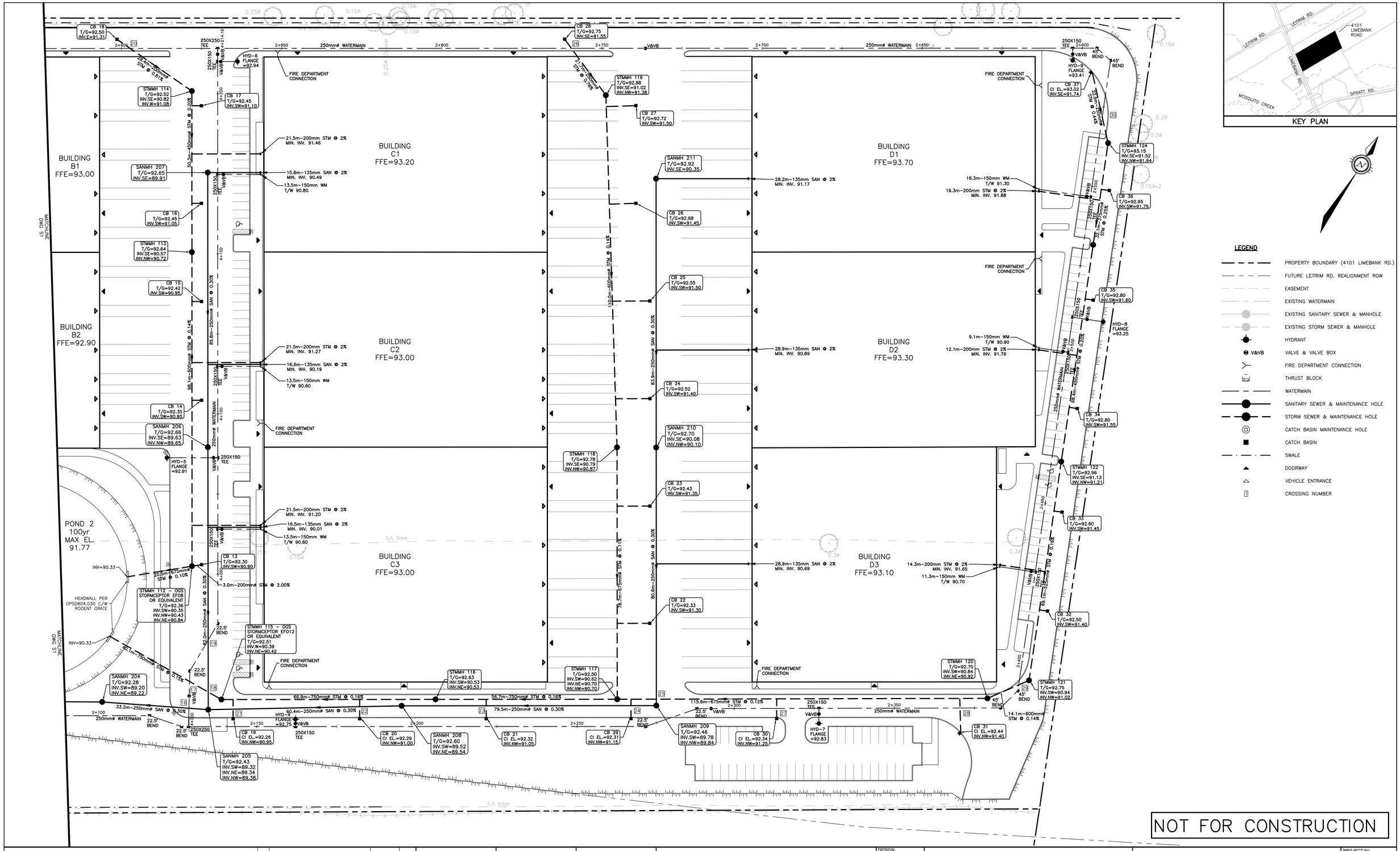
DRAWN	SM
CHECKED	CC
APPROVED	CC

GROUPE MONTONI

4101 LIMEBANK RD.
CITY OF OTTAWA

SERVICING PLAN

PROJECT No.	23074
SURVEY	AOV
DATED	SEPT 2024
DWG. No:	23074-S1



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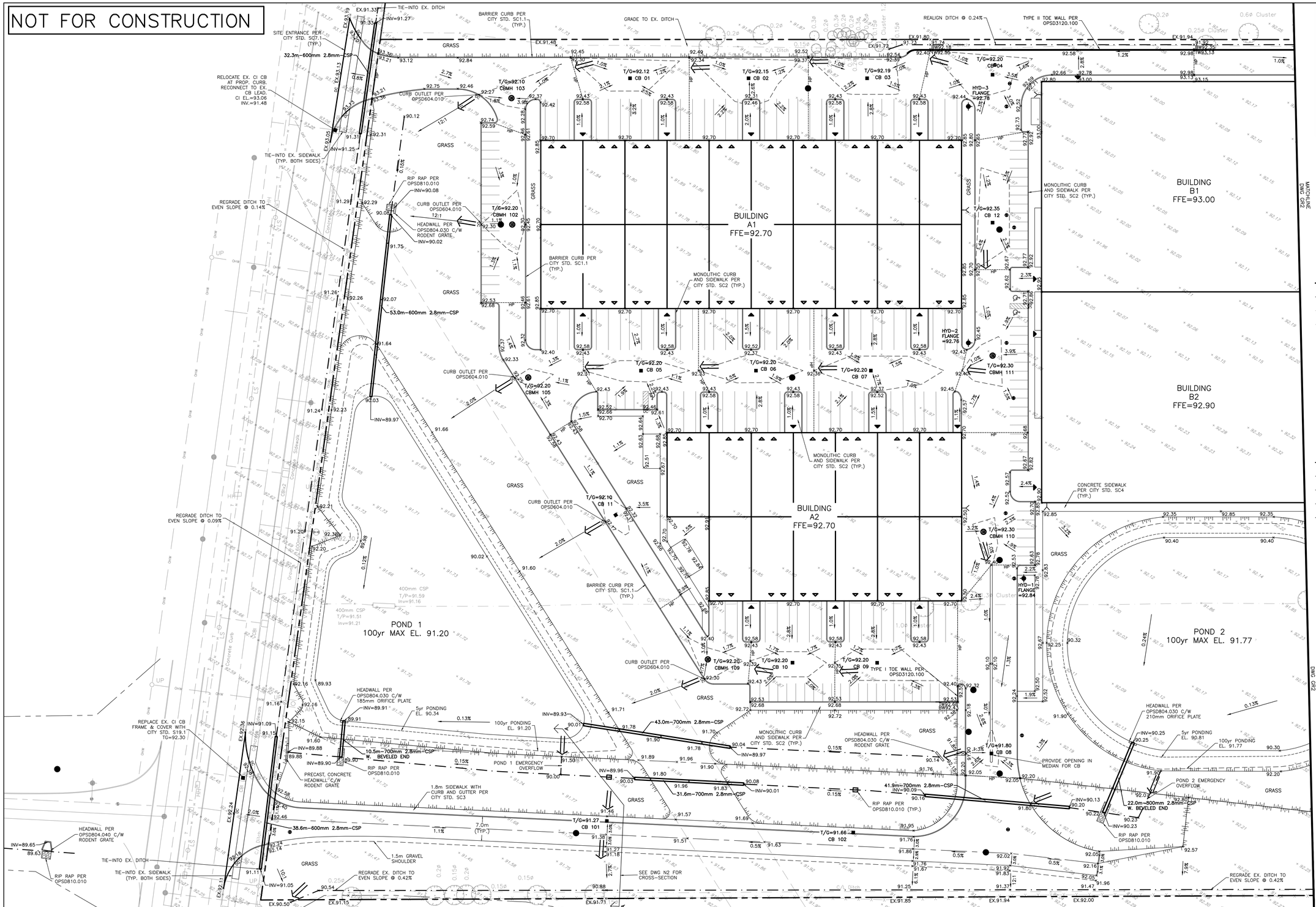
GROUPE MONTONI

4101 LIMEBANK RD.
CITY OF OTTAWA

SERVICING PLAN

PROJECT No.	23074
SURVEY	AOV
DATED	SEPT 2024
DWG. No:	23074-S2

NOT FOR CONSTRUCTION



LEGEND

- PROPERTY BOUNDARY (4101 LIMEBANK RD.)
- FUTURE LEITRIM RD. REALIGNMENT ROW
- EASEMENT
- EXISTING DITCH
- ×104.00 EXISTING ELEVATION
- HYDRANT
- VALVE & VALVE BOX
- FIRE DEPARTMENT CONNECTION
- MAINTENANCE HOLE
- CATCH BASIN MAINTENANCE HOLE
- CATCH BASIN
- ×105.00 PROPOSED GRADE
- 2.0% PROPOSED SLOPE
- DITCH
- TERRACING (3H:1V MAX.)
- 100-YR PONDING
- 5-YR PONDING
- HP LOCAL HIGH POINT
- DOORWAY
- VEHICLE ENTRANCE
- MAJOR OVERLAND FLOW ROUTE

NOTES

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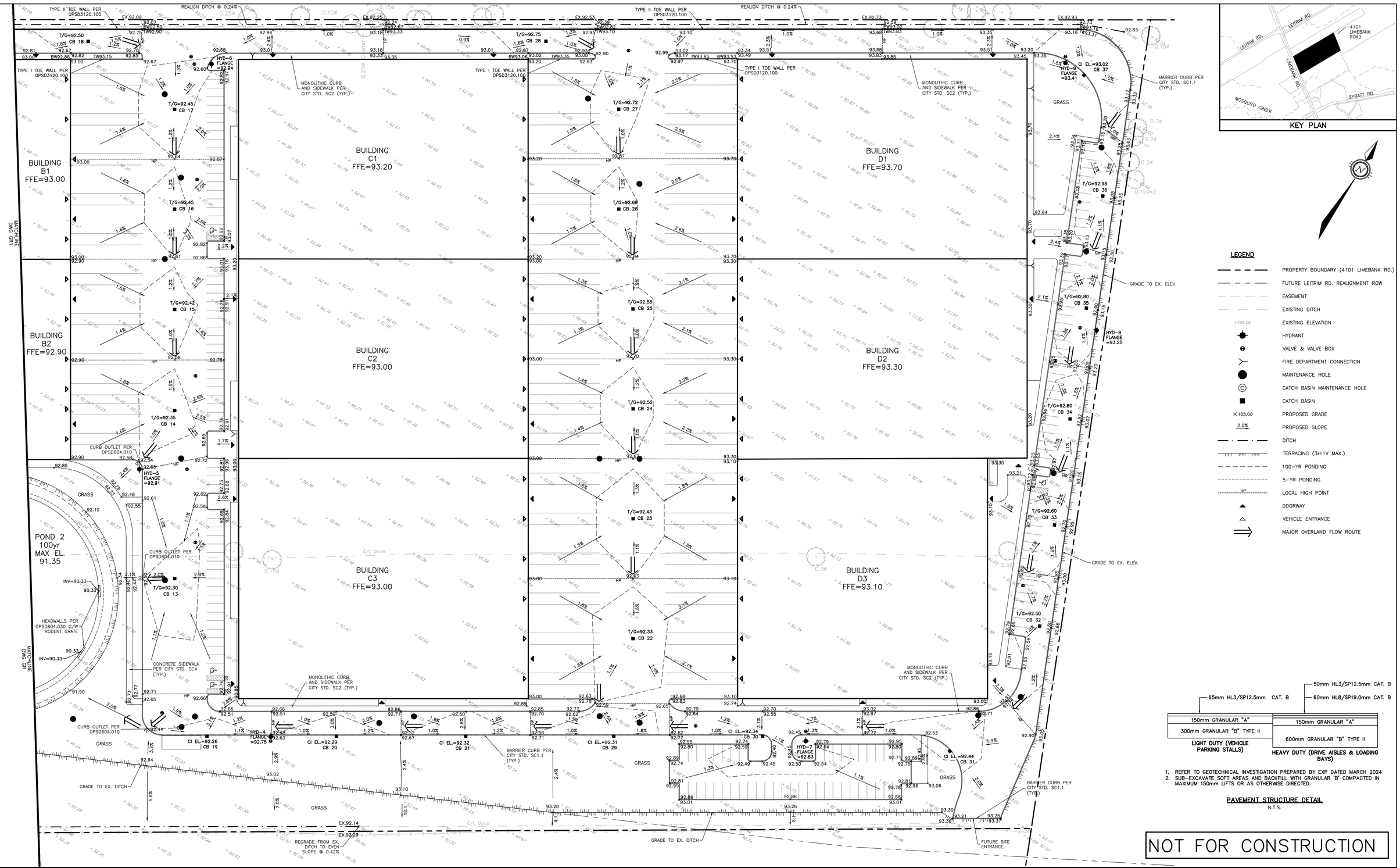
GROUPE MONTONI

4101 LIMEBANK RD.
CITY OF OTTAWA

GRADING PLAN

PROJECT No.	23074
SURVEY	AOV
DATED	SEPT 2024
DWG. No:	23074-GR1



KEY PLAN

LEGEND

- PROPERTY BOUNDARY (4101 LIMEBANK RD.)
- FUTURE LEITRIM RD. REALIGNMENT ROW
- EASEMENT
- EXISTING DITCH
- ×104.00 EXISTING ELEVATION
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- CATCH BASIN MAINTENANCE HOLE
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- ×105.00 PROPOSED GRADE
- 2.0% PROPOSED SLOPE
- DITCH
- TERRACING (3H:1V MAX.)
- 100-YR PONDING
- 5-YR PONDING
- HP LOCAL HIGH POINT
- DOORWAY
- VEHICLE ENTRANCE
- MAJOR OVERLAND FLOW ROUTE

1. REFER TO GEOTECHNICAL INVESTIGATION PREPARED BY EXP DATED MARCH 2024
2. SUB-EXCAVATE SOFT AREAS AND BACKFILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 150mm LIFTS OR AS OTHERWISE DIRECTED.

PAVEMENT STRUCTURE DETAIL
N.T.S.

NOT FOR CONSTRUCTION

NOTES

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GROUPE MONTONI

4101 LIMEBANK RD.
CITY OF OTTAWA

GRADING PLAN

PROJECT No.	23074
SURVEY	AOV
DATED	AUG 2024
DWG. No:	23074-GR2

GENERAL NOTES:

1. ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), AS AMENDED BY THE CITY OF OTTAWA.
2. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
3. ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
4. DESIGN ELEVATIONS GIVEN ARE TO BE ADHERED TO WITH NO CHANGES WITHOUT PRIOR WRITTEN APPROVAL BY ROBINSON LAND DEVELOPMENT.
5. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS TO PROPOSED GRADES WHERE NOTED, AND EXISTING GRADES OTHERWISE.
6. CONTRACTOR SHALL ADJUST FINAL GRADE OF EXISTING MAINTENANCE HOLES, VALVE BOXES, ETC. AS REQUIRED TO MATCH PROPOSED GRADES.
7. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
8. RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
9. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
10. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST AMENDMENT).
11. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
12. THE SUPPORT OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
13. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH, AS SPECIFIED BY OPSD, IS EXCEEDED.
14. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR. REFER TO LANDSCAPE PLANS FOR ANY TREE CUTTING.
15. REFER TO GEOTECHNICAL INVESTIGATION PREPARED BY EXP DATED MARCH 2024.
16. THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE FOR DEWATERING, SUPPORT AND PROTECTION OF EXCAVATIONS AND TRENCHING AS WELL AS RELEASE OF ANY PUMPED GROUNDWATER IN A CONTROLLED AND APPROVED MANNER.
17. DO NOT CONSTRUCT USING DRAWINGS THAT ARE NOT MARKED "ISSUED FOR CONSTRUCTION".
18. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.
19. THE CONTRACTOR SHALL BE RESPONSIBLE TO MANAGE EXCESS SOIL IN ACCORDANCE WITH ONTARIO REGULATION 406/19.

STORM SEWERS:

1. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.2 (LATEST AMENDMENT). ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.1 (LATEST AMENDMENT). PIPE SHALL BE JOINTED WITH STD. RUBBER GASKETS AS PER CSA A257.3 (LATEST AMENDMENT).
2. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
3. ALL STORM SEWER TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. S6 AND S7 CLASS 'B' UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY GEOTECHNICAL REPORT.
4. CLAY SEALS SHALL BE INSTALLED WITHIN SEWER TRENCHES IN ACCORDANCE WITH CITY STANDARD S8.
5. STORM MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24.1 AND S25. CBMH COVER AND FRAME AS PER CITY OF OTTAWA STD. S19.
6. CB FRAME PER OPSD 400.020 AND COVER PER CITY OF OTTAWA STD. 19.1. CURB INLET CB FRAME AND COVER PER CITY OF OTTAWA STD. S28.
7. STORM SEWER MANHOLES SERVING SEWERS LESS THAN 900mm SHALL BE CONSTRUCTED WITH A 300mm SUMP. FOR STORM SEWERS 900mm AND OVER USE BENCHING IN ACCORDANCE WITH OPSD 701.021.
8. THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED ABOVE. WHERE THE SPECIFIED TRENCH WIDTH IS EXCEEDED, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADDITIONAL BEDDING, A DIFFERENT TYPE OF BEDDING OR A HIGHER PIPE STRENGTH AT HIS OWN EXPENSE AND SHALL ALSO BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.
9. ALL STORM MANHOLES SHALL BE 1200mm DIAMETER AS PER OPSD 701.010 UNLESS OTHERWISE NOTED.
10. ALL CATCH BASINS SHALL BE 600mm X 600mm AS PER OPSD 705.010 UNLESS OTHERWISE NOTED.
11. ALL CB LATERALS SHALL BE 200mm PVC AT 2% UNLESS OTHERWISE NOTED.
12. STORM SERVICE CONNECTION REQUIRES APPROVED CONTROLLED SETTLEMENT JOINT IN ACCORDANCE WITH CITY OF OTTAWA STANDARD S11 AND S11.1.
13. FOUNDATION DRAINS TO BE INSTALLED WITH BACKWATER VALVES PER CITY OF OTTAWA STD. S14.
14. SEWERS, SERVICES AND LATERALS WITH LESS THAN 2m COVER SHALL BE INSULATED PER CITY OF OTTAWA STD. S35.
15. CULVERTS TO BE INSTALLED IN ACCORDANCE WITH CITY OF OTTAWA STD. S26 AND SHALL BE PROVIDED WITH FROST TAPER IN ACCORANCE WITH OPSD 803.030.

SANITARY SEWERS:

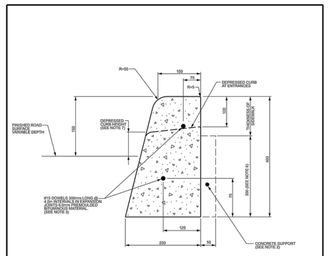
1. ALL SANITARY SEWERS SHALL BE PVC SDR 35 AND SERVICE LATERALS SHALL BE PVC SDR 28, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
2. SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B' BEDDING UNLESS OTHERWISE NOTED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY GEOTECHNICAL REPORT.
3. SANITARY MANHOLE FRAME AND COVERS SHALL BE WATERTIGHT AS PER CITY OF OTTAWA STD. S24 AND S25.
4. SANITARY SEWER MANHOLES SHALL BE 1200mm DIAMETER AS PER OPSD 701.010 AND BENCHED AS PER OPSD 701.021.
5. SANITARY PRE-CAST MANHOLE SHALL BE CONSTRUCTED WITH A HIGHER PERCENTAGE OF SILICA FUME IN THE CONCRETE TO MAKE IT MORE DENSE AND LESS SUSCEPTIBLE TO CORROSION OR PINHOLE LEAKS.
6. FOR SANITARY MANHOLES, DEPENDING ON THE ELEVATION OF THE GROUNDWATER TABLE, AND BASED ON THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL CONSULTANT, CRETEX SEALS, OR A SIMILAR PRODUCT, SHALL BE INSTALLED IN THE PRE-CAST MANHOLE SECTION TO JUST BELOW THE MANHOLE FRAME TO PREVENT INFILTRATION.
7. CLAY SEALS SHALL BE INSTALLED WITHIN SEWER TRENCHES IN ACCORDANCE WITH CITY STANDARD S8.
8. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSS 410 AND OPSS 407. CONTRACTOR SHALL PERFORM VIDEO INSPECTION OF ALL STORM AND SANITARY SEWERS. A COPY OF THE VIDEO AND INSPECTION REPORT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
9. SANITARY SERVICE CONNECTION REQUIRES APPROVED CONTROLLED SETTLEMENT JOINT IN ACCORDANCE WITH CITY OF OTTAWA STANDARD S11.1.
10. SEWERS AND LATERALS WITH LESS THAN 2m COVER SHALL BE INSULATED PER CITY OF OTTAWA STD. S35.

WATER SUPPLY:

1. ALL PVC WATERMAINS SHALL BE EQUAL TO AWWA C-900 CLASS 150, SDR 18, OR APPROVED EQUAL.
2. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY GEOTECHNICAL REPORT.
3. ALL PVC WATERMAINS SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWU OR RWU TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W36.
4. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
5. CONTRACTOR TO SUPPLY HYDRANT EXTENSION TO ADJUST THE LENGTH OF HYDRANT BARREL IF REQUIRED.
6. FIRE HYDRANTS SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W19, AND LOCATED AS PER CITY STD. W18.
7. VALVE IN BOXES SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W24.
8. WATERMAIN IN FILL AREAS TO BE INSTALLED WITH RESTRAINED JOINTS AS PER CITY OF OTTAWA STD. W25.5 AND W25.6.
9. THRUST BLOCKING OF WATERMAIN TO BE INSTALLED AS PER CITY OF OTTAWA STD. W25.3 AND W25.4.
10. INSULATION FOR WATERMAIN CROSSING OVER AND BELOW SEWER SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25, RESPECTIVELY, WHERE WATERMAIN COVER IS LESS THAN 2.4m.
11. INSULATION BETWEEN WATERMAIN AND OPEN STRUCTURES IN ACCORDANCE WITH CITY OF OTTAWA STD. W23 WHERE CLEARANCE IS LESS THAN 2.4m.
12. AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER / UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY STD. W25.2. 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 CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER AS PER CITY STD. W25.
13. CONNECTION TO EXISTING WATERMAIN TO BE PERFORMED BY CITY FORCES. CONTRACTOR TO PROVIDE LABOUR, EQUIPMENT AND MATERIAL REQUIRED FOR EXCAVATION, BEDDING AND REINSTATEMENT.
10. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS AND BLOW-OFFS AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAIN.
11. SWABBING, DISINFECTION, AND HYDROSTATIC TESTING TO BE CONDUCTED AS PER CITY OF OTTAWA STANDARDS IN THE PRESENCE OF A CITY INSPECTOR AND/OR CONSULTANT.

ROADWORK SPECIFICATIONS:

1. CONCRETE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.1 (BARRIER CURB). PROVISION SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS AND DRIVEWAYS.
2. ALL BARRIER CURB TO BE 150mm ABOVE FINISHED ASPHALT GRADE UNLESS OTHERWISE NOTED.
3. MONOLITHIC CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC2 WITH CONSTRUCTION JOINTS PER SC5.
4. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R10 AND OPSD 509.010, OPSS 310.
5. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
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. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW-CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW ASPHALT.
9. PAVEMENT DESIGN AS PER GEOTECHNICAL RECOMMENDATIONS. SEE REPORT BY EXP DATED MARCH 2024.

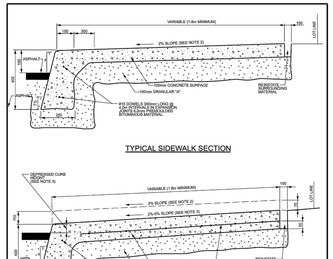


CONCRETE BARRIER CURB

NOTES:
1. THE FULL CURB DEPTH SHALL BE CARRIED THROUGH THE DEPRESSED ACCESS CROSSING.
2. A CONCRETE SUPPORT IS REQUIRED WHEN BUILT ADJACENT TO THE SIDEWALK.
3. IF AN EXTRUSION CURBING MACHINE IS USED:
- THE EXPANSION BITUMINOUS MATERIAL AND THE #15 DOWELS ARE TO BE PLACED AT THE END OF THE EXTRUSION.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
5. DUMMY JOINTS SHALL BE 25mm DEEP, FRONT, BACK AND TOP OF SECTION, AT 4m SPACING OR MATCH JOINTING WHERE SIDEWALK IS ADJACENT.
6. FOR DEPRESSED CURB AT ENTRANCES USE 25S.
7. DEPRESSED CURB HEIGHT - FOR PEDESTRIAN CURB RAMPS 0 TO 6 mm AND FOR PRIVATE ENTRANCES 0 TO 15mm.

N.T.S.

Ottawa	CONCRETE BARRIER CURB FOR GRANULAR BASE PAVEMENT (MODIFIED OPSD-600.110)	DATE:	JANUARY 2005
		REV. DATE:	MARCH 2021
		DWG. No:	SC1.1



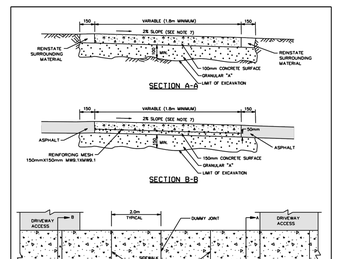
TYPICAL SIDEWALK SECTION

SECTION AT PRIVATE ENTRANCE AND PEDESTRIAN RAMPS

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
2. THE MAXIMUM SLOPE IS NOT TO EXCEED 2%.
3. FOR CURB RAMPS, SLOPE OF 2% TO 5% MAXIMUM 8%.
4. EXPANSION AND DUMMY JOINTS AS PER SC5.
5. DEPRESSED CURB HEIGHT - FOR PEDESTRIAN CURB RAMPS 0 TO 6 mm AND FOR PRIVATE ENTRANCES 0 TO 13 mm.

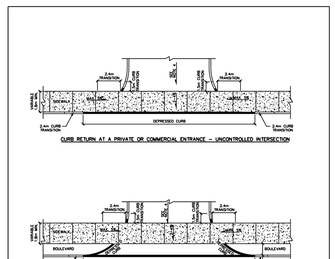
N.T.S.

Ottawa	MONOLITHIC CONCRETE CURB AND SIDEWALK	DATE:	MAY 2001
		REV. DATE:	MAY 2021
		DWG. No:	SC2



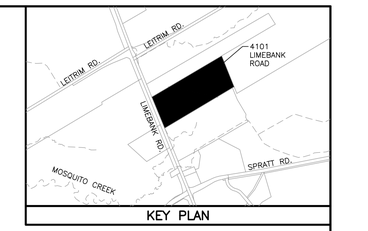
NOTES:
1. CONCRETE AND GRANULAR "A" IS TO BE INCREASED TO 150mm AT THE ENTRANCE AND 150x150mm WWS.1 x WWS.1 REINFORCING MESH IS TO BE PLACED AND DEPTH WITHIN DRIVEWAY ACCESS.
2. TRANSVERSE EXPANSION JOINTS ARE REQUIRED AT THE ENDS, THE MIDPOINT, AT INTERVALS OF 4m MAXIMUM, AND ALSO TO ISOLATE OBSTRUCTIONS FROM SIDEWALK, HYDRANTS, POLES, BUILDINGS, ETC.
3. WHEN THE OVERALL SIDEWALK WIDTH EXCEEDS 2.5m, A LONGITUDINAL CONSTRUCTION JOINT SHALL BE CREATED AT ITS MIDPOINT.
4. EDGES AND JOINTS ARE TO BE TROWED WITH A 75mm EDGING TOOL.
5. ALL CONCRETE SIDEWALKS ARE TO HAVE A BROOM FINISH UNLESS OTHERWISE SPECIFIED.
6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
7. THE MAXIMUM SLOPE IS NOT TO EXCEED 2%.
8. INITIAL DUMMY TRANSVERSE JOINTS AS REQUIRED SO THERE IS A MAXIMUM SPACING OF 3m BETWEEN ALL JOINTS.
9. SIDEWALK NOT TO BE DEPRESSED ACROSS DRIVEWAY ACCESSES.
10. EXPANSION AND DUMMY JOINTS AS PER SC5.

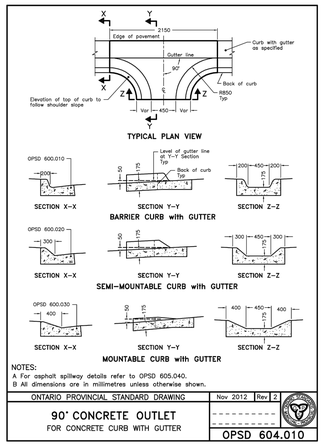
Ottawa	TYPICAL CONCRETE SIDEWALK IN BOULEVARD	DATE:	MAY 2001
		REV. DATE:	MARCH 2016
		DWG. No:	SC4



NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
2. CURB DETAILS SEE SC1.1, SC1.2 AND SC1.3.
3. SIDEWALK DETAILS SEE SC2 AND SC3.
4. MAXIMUM SLOPE VARIES, SEE PRIVATE APPROACH BYLAW.
5. UNCONTROLLED INTERSECTION MEANS AN ENTRANCE NOT LOCATED AT A TRAFFIC SIGNAL OR ALL-WAY STOP CONTROL.

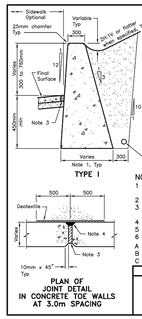
Ottawa	CURB RETURN ENTRANCES - UNCONTROLLED INTERSECTIONS	DATE:	MARCH 2007
		REV. DATE:	MARCH 2021
		DWG. No:	SC7.1





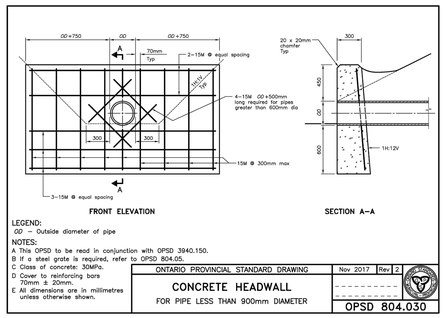
NOTES:
A For asphalt spillway details refer to OPSD 605.040.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING		Nov 2012	Rev 2
90° CONCRETE OUTLET FOR CONCRETE CURB WITH GUTTER		----------	----------
		OPSD 604.010	



NOTES:
1 Walls shall be founded on undisturbed soil having a minimum bearing capacity at ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III.
2 Excavation for toe walls shall be backfilled with free draining granular material.
3 10mm preformed joint filler, Type A, non-extruding and resilient bituminous type as specified.
4 Cold applied rubber asphalt joint sealing compound.
5 Where specified, wall drains shall be installed as per OPSD 3190.100.
6 150mm dia perforated pipe subdrain wrapped in geotextile.
A Maximum height of slope above top of wall is 4m.
B Concrete for toe walls shall be 30MPa.
C All dimensions are in millimetres unless otherwise shown.

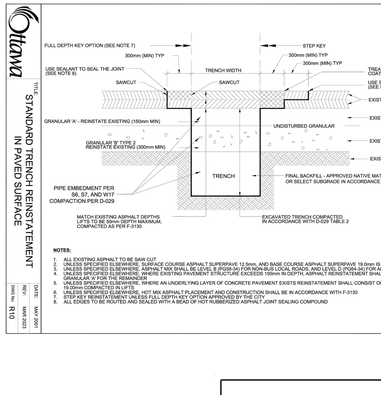
ONTARIO PROVINCIAL STANDARD DRAWING		Nov 2010	Rev 2
WALLS RETAINING CONCRETE TOE WALL		----------	----------
		OPSD 3120.100	



LEGEND:
OD = Outside diameter of pipe

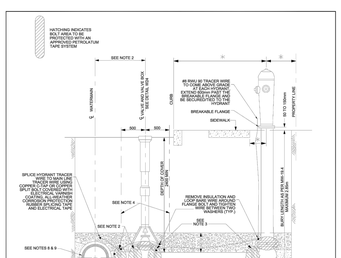
NOTES:
A This OPSD to be read in conjunction with OPSD 3940.150.
B If a steel grate is required, refer to OPSD 804.05.
C Class of concrete: 30MPa.
D Cover to reinforcing bars 70mm ± 20mm.
E All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING		Nov 2017	Rev 2
CONCRETE HEADWALL FOR PIPE LESS THAN 900mm DIAMETER		----------	----------
		OPSD 804.030	



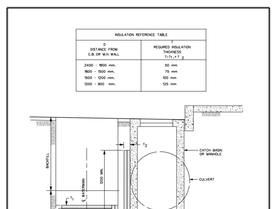
NOTES:
1. ALL EXISTING ASPHALT TO BE SAW CUT.
2. UNLESS SPECIFIED ELSEWHERE, SURFACE COURSE ASPHALT SUPERPAVE 12.5mm, AND BASE COURSE ASPHALT SUPERPAVE 19.0mm IS TO BE USED.
3. UNLESS SPECIFIED ELSEWHERE, ASPHALT MIX SHALL BE LEVEL 'E' (PG58-34) FOR NON-BUS LOCAL ROADS, AND LEVEL 'D' (PG64-34) FOR OTHER ROADS
4. UNLESS SPECIFIED ELSEWHERE, WHERE EXISTING PAVEMENT STRUCTURE EXCEEDS 150mm IN DEPTH, ASPHALT REINSTATEMENT SHALL BE 150mm AND UNLESS SPECIFIED ELSEWHERE, WHERE EXISTING PAVEMENT STRUCTURE IS SEWERED, WHERE AN UNDERLYING LAYER OF CONCRETE PAVEMENT EXISTS REINSTATEMENT SHALL CONSIST OF 150mm OF SUPERPAVE 19.0mm COMPACTED IN LIFTS.
5. FOR ARTERIAL ROADS, WHERE THICKER, HOT MIX ASPHALT PLACEMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH F-3130
6. CATHODIC PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH W36, W40, AND W42.
7. ALL EDGES TO BE ROUTED AND SEALED WITH A BEAD OF HOT RUBBERIZED ASPHALT JOINT SEALING COMPOUND

Ottawa	STANDARD TRENCH REINSTATEMENT IN PAVED SURFACE	DATE:	MAY 2003
		REV. DATE:	MARCH 2023
		DWG. No:	R10



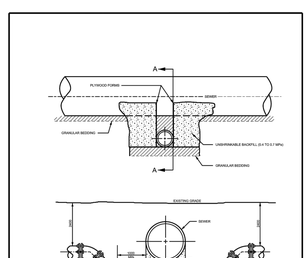
NOTES:
FOR ALL WATERMAINS
1. SEE DETAIL W25 FOR HYDRANTS IN DITCH AREAS
2. FOR WATERMAINS 400mm AND UNDER, LOCATE VALVE WITHIN 1.0m OF CENTRELINE. RETAINING/RESTRAINING DEVICES TO BE UTILIZED. FOR WATERMAINS 600mm AND OVER, BOLT VALVE WITH FLANGED END DIRECTLY TO FLANGED TEE
3. RETAINING/RESTRAINING DEVICES TO BE UTILIZED
4. TRACER WIRE SPLICES TO BE COMPLETED PER W55 AND TESTED PRIOR TO INSTALLATION. REFER TO MMI-19.4 AND F-4414
5. SEE SPP-2.120 FOR BACKFILL REQUIREMENTS IN THIS AREA
6. SEE F-4414 FOR HYDRANT LOCATION REQUIREMENTS
7. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED
8. FOR ALL 300mm WATERMAINS USE A 300 x 150 TANGENTIAL TEE WITH THE 150mm OUTLET ON TOP
9. FOR ALL 400mm WATERMAINS USE A 400 x 150 TANGENTIAL TEE WITH THE 150mm OUTLET ON TOP
10. "DUCTILE IRON ONLY" THERMITE WELD TWO #8 AWG/90 CABLES ACROSS EACH PIPEJOINTING JOINT OR CONNECTION TO ENSURE ELECTRICAL CONTINUITY ALONG ALL METALLIC COMPONENTS
11. ALL MATERIALS SHALL BE IN ACCORDANCE WITH MMI-19.15
12. TRACER WIRE BOLT CONNECTIONS TO BE COMPLETED PER W55
13. TRACER WIRE SPLICES TO BE COMPLETED PER MMI-19.4

Ottawa	TITLE: HYDRANT INSTALLATION - NEW CONSTRUCTION	DATE:	MAY 2001
		REV:	MAR 2023
		DWG No:	W19



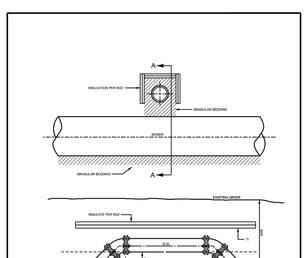
NOTES
1 INSULATION SHALL EXTEND 900 mm EACH WAY FROM THE ENDS OF THE STRUCTURE, OR AS PER W23 WHERE APPLICABLE.
2. STAGGER JOINTS OF ALL PVC SHEETS.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
4. INSULATION CAN BE AT EITHER LOCATION OR BOTH.

Ottawa	THERMAL INSULATION OF WATER-MAINS AT OPEN STRUCTURES	DATE:	MAY 2001
		REV. DATE:	FEB 2004
		DWG. No:	W23



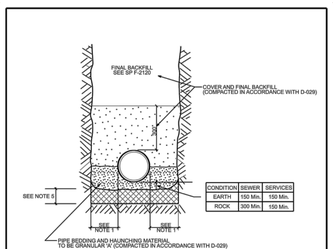
NOTES
FOR WATERMAIN 150mm (NOMINAL) TO 400mm (NOMINAL)
1. MARKED TO INVERT (BYPASSING 22.5 HALF BEND) 400mm (NOMINAL)
2. THRUST BLOCKS FOR MARKED UNDER THAN 400mm (NOMINAL) SHALL BE PER SPECIAL DESIGN.
3. THRUST BLOCKS FOR 400mm (NOMINAL) MAIN, BENDS SHALL BE 90% OF 22.5°.
4. CONCRETE FOR THRUST BLOCKS SHALL BE 20 MPa.
5. REFER TO W25.4 FOR RESTRAINED LENGTH REQUIREMENTS.
6. REFER TO W25.3 AND W25.4 FOR THRUST BLOCK REQUIREMENTS.
7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
8. CATHODIC PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH W36, W40, AND W42.
9. TRACER WIRE REQUIRED FOR PVC, PEA AND HDPE WATERMAIN PIPE ONLY AS PER W36

Ottawa	WATERMAIN CROSSING BELOW SEWER	DATE:	MAY 2001
		REV. DATE:	MARCH 2021
		DWG. No:	W25



NOTES
FOR WATERMAIN 150mm (NOMINAL) TO 400mm (NOMINAL)
1. MARKED TO INVERT (BYPASSING 22.5 HALF BEND) 400mm (NOMINAL)
2. THRUST BLOCKS FOR MARKED UNDER THAN 400mm (NOMINAL) SHALL BE PER SPECIAL DESIGN.
3. THRUST BLOCKS FOR 400mm (NOMINAL) MAIN, BENDS SHALL BE 90% OF 22.5°.
4. CONCRET

CROSSING TABLE			
CROSSING No.	SERVICE	INVERT/OBVERT	SEPARATION (m)
1	STM	89.67	1.73
	EX SAN	87.94	
2	STM	89.67	0.50
	WATER	89.17	
3	STM	89.70	1.53
	EX STM	88.17	
4	STM	89.72	0.50
	WATER	89.22	
5	CULVERT	91.08	0.17
	STM	90.91	
6	SAN	88.29	0.21
	EX STM	88.08	
7	*EX WATER*	89.60	0.91
	SAN	88.69	
8	CULVERT	91.07	2.36
	SAN	88.71	
9	CULVERT	91.06	1.17
	WATER	89.89	
10	CULVERT	90.11	1.03
	SAN	89.08	
11	CULVERT	90.11	0.67
	WATER	89.44	
12	WATER	89.42	0.25
	SAN	89.17	
13	CULVERT	90.24	0.68
	WATER	89.56	
14	CULVERT	90.24	0.97
	SAN	89.27	
15	WATER	89.54	0.25
	SAN	89.29	
16	WATER	89.82	0.25
	SAN	89.57	
17	STORM	90.26	0.50
	WATER	89.76	
18	STM	90.27	0.61
	SAN	89.66	
19	WATER	89.96	0.25
	SAN	89.71	
20	STM	91.21	1.01
	WATER	90.20	
21	STM	90.88	1.25
	SAN	89.63	
22	STM	90.93	1.18
	SAN	89.75	
23	STM	90.98	1.09
	SAN	89.89	
24	STM	91.08	1.05
	SAN	90.03	
25	STM	90.61	0.50
	SAN	90.11	
26	STM	91.46	1.05
	WATER	90.41	
27	STM	91.18	1.16
	WATER	90.02	
28	STM	91.20	0.99
	WATER	90.21	
29	STM	90.84	0.50
	WATER	90.34	
30	STM	91.64	0.74
	WATER	90.90	



NOTES:

1.

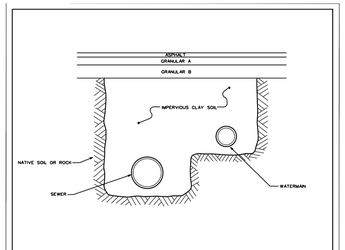
PIPE INSIDE DIAMETER (mm)	CLEARANCE (mm)
900 OR LESS	CONC 450 PVC 450
OVER 900	500

2. FINAL BACKFILL - APPROVED NATIVE MATERIAL OR SELECT SUBGRADE MATERIAL WITH 100% PASSING THE 37.5 mm SIEVE
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
4. INITIAL BACKFILL MATERIAL
   - CONCRETE PIPE – GRANULAR 'A', GRANULAR 'B', OR SELECT SUBGRADE MATERIAL WITH 100% PASSING THE 37.5 mm SIEVE
   - PVC PIPE – GRANULAR 'A'
5. WHEN APPROVED BY THE CONTRACT ADMINISTRATOR, POOR SOILS SHALL BE EXCAVATED TO CREATE A FOUNDATION THAT SHALL BE FILLED TO THE BOTTOM OF THE BEDDING WITH GRANULAR 'B'.

N.T.S.

SINGLE TRENCH (SEWER & SEWER SERVICES)

DATE: MAY 2001 | REV. DATE: MARCH 2021 | DWG. No.: S6

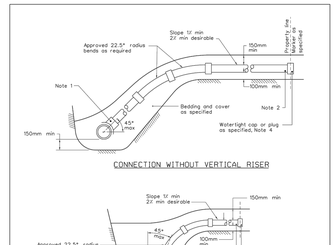


NOTES:

1. CLAY SEAL TO EXTEND FROM BOTTOM OF TRENCH EXCAVATION TO UNDERSIDE OF ROAD STRUCTURE.
2. CLAY SEAL TO EXTEND FULL TRENCH WIDTH TO EXISTING NATIVE SOILS WITH A MINIMUM THICKNESS OF 1.0m ALONG PIPES.
3. CLAY SEAL TO BE LOCATED SO THAT NO PIPE JOINTS ARE WITHIN THE CLAY SEAL MATERIAL.

CLAY SEAL FOR PIPE TRENCHES

DATE: MAY 2001 | REV. DATE: MARCH 2008 | DWG. No.: S8

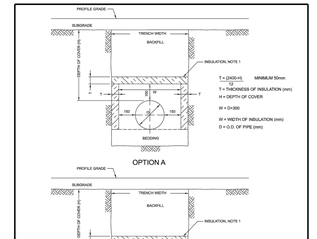


NOTES:

1. ALL DIAMETERS OF SERVICE CONNECTIONS TO FLEXIBLE MAIN SEWER SHALL BE MADE USING APPROVED TEE OR WYE FITTINGS.
2. SEWER SERVICES TO BE 125mm AND STORM SERVICES TO BE 300mm. FOR NEW RESIDENCES UNLESS SPECIFIED OTHERWISE. SERVICE PIPE AND RADIUS BENDS TO BE APPROVED CSA B182.2, SEWER PRODUCTS UNLESS SPECIFIED OTHERWISE.
3. APPROVED CONTROLLED SETTLEMENT JOINTS OPTIONAL FOR SERVICE CONNECTIONS TO MAIN SEWERS UP TO 5m DEEP. WHERE APPROVED, CONNECTIONS TO SEWERS OVER 5m DEEP REQUIRE APPROVED CONTROLLED SETTLEMENT JOINTS.
4. CAP OR PLUG AT THE PROPERTY LINE SHALL BE ADEQUATELY BRACED TO WITHSTAND TESTING PRESSURE.
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

SEWER SERVICE CONNECTIONS FOR FLEXIBLE MAIN SEWER PIPE (MODIFIED OPSD-1006.020)

DATE: MARCH 2006 | REV. DATE: MARCH 2013 | DWG. No.: S11.1

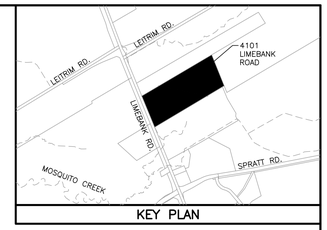


NOTES:

1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO MW-19.10 WITH
   A MINIMUM COMPRESSIVE STRENGTH OF 275 KPA.
2. MINIMUM INSULATION THICKNESS SHALL BE 50MM.
3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

INSULATION FOR SHALLOW SEWERS

DATE: MARCH 2005 | REV. DATE: — | DWG. No.: S35



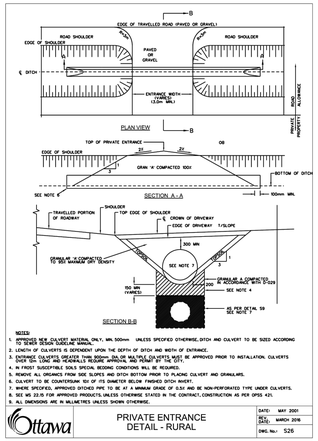
KEY PLAN

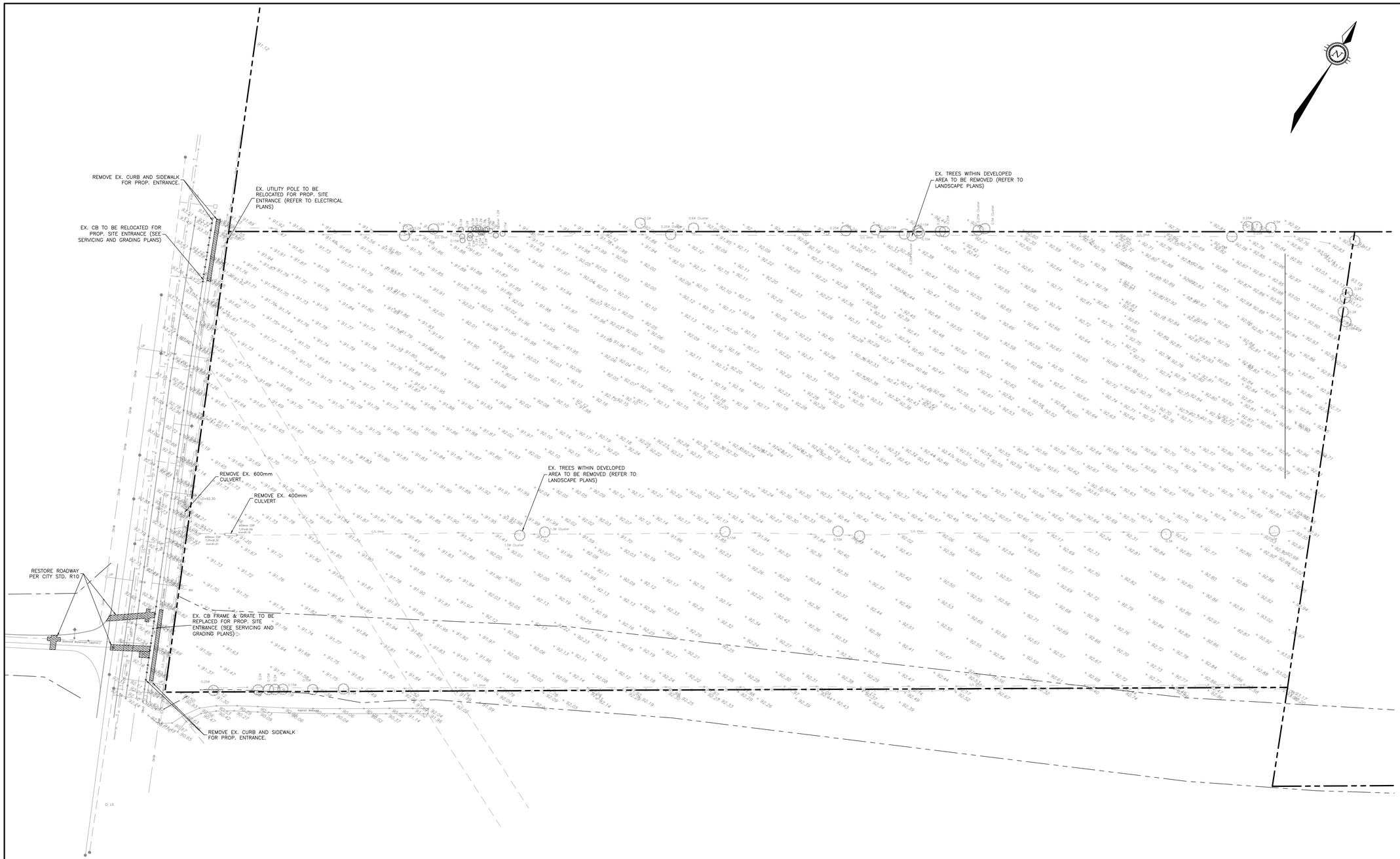
300mmø WATERMAIN GRADE TABLE					
STATION	FINISHED GRADE (m)	TOP OF WATER (m)	COVER DEPTH (m)		COMMENTS
0+000	92.29	89.89	2.40		300x300mm TEE TO EXISTING
0+020.7	92.29	89.89	2.40		300mm VALVE CHAMBER
0+025	92.24	89.84	2.40		TOP OF WATERMAIN
0+050	91.97	89.57	2.40		TOP OF WATERMAIN
0+075	91.69	89.29	2.40		TOP OF WATERMAIN
0+100	91.42	89.02	2.40		TOP OF WATERMAIN
0+125	91.35	88.95	2.40		TOP OF WATERMAIN
0+150	91.49	89.09	2.40		TOP OF WATERMAIN
0+175	91.63	89.23	2.40		TOP OF WATERMAIN
0+200	91.77	89.37	2.40		TOP OF WATERMAIN
0+225	91.91	89.51	2.40		TOP OF WATERMAIN
0+228.6	91.92	89.52	2.40		250x300mm TEE
0+235.0	91.96	89.56	2.40		CAP

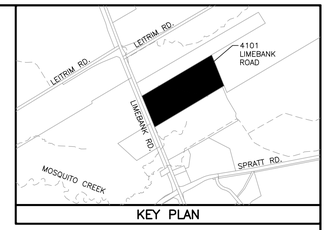
250mmø WATERMAIN GRADE TABLE					
STATION	FINISHED GRADE (m)	TOP OF WATER (m)	COVER DEPTH (m)		COMMENTS
1+000	91.92	89.52	2.40		250x300mm TEE
1+010.0	91.93	89.53	2.40		250mm VALVE
1+025	92.05	89.65	2.40		TOP OF WATERMAIN
1+037.3	92.07	89.67	2.40		250x250mm TEE
1+050	92.17	89.77	2.40		TOP OF WATERMAIN
1+075	92.38	89.98	2.40		TOP OF WATERMAIN
1+082.9	92.46	90.06	2.40		150x250mm HYDRANT TEE
1+100	92.52	90.12	2.40		TOP OF WATERMAIN
1+101.8	92.52	90.12	2.40		150x250mm BUILDING TEE
1+125	92.56	90.16	2.40		TOP OF WATERMAIN
1+135.2	92.49	90.09	2.40		150x250mm BUILDING TEE
1+150	92.50	90.10	2.40		TOP OF WATERMAIN
1+151.2	92.49	90.09	2.40		150x250mm HYDRANT TEE
1+175	92.63	90.23	2.40		TOP OF WATERMAIN
1+184.6	92.56	90.16	2.40		150x250mm BUILDING TEE
1+188.2	92.55	90.15	2.40		150x250mm BUILDING TEE
1+200	92.56	90.16	2.40		TOP OF WATERMAIN
1+219.8	92.52	90.12	2.40		150x250mm HYDRANT TEE
1+250	92.40	90.00	2.40		TOP OF WATERMAIN
1+226.4	92.40	90.00	2.40		250mm VALVE
1+231.7	92.31	89.91	2.40		250x250mm TEE

250mmø WATERMAIN GRADE TABLE					
STATION	FINISHED GRADE (m)	TOP OF WATER (m)	COVER DEPTH (m)		COMMENTS
2+000	92.07	89.67	2.40		250x250mm TEE
2+003.5	92.33	89.93	2.40		250mm VALVE
2+006.0	92.30	89.90	2.40		22.5° HORIZONTAL BEND
2+025	91.94	89.54	2.40		TOP OF WATERMAIN
2+050	92.41	90.01	2.40		TOP OF WATERMAIN
2+053.8	92.58	90.18	2.40		22.5° HORIZONTAL BEND
2+075	92.62	90.22	2.40		TOP OF WATERMAIN
2+100	92.57	90.17	2.40		TOP OF WATERMAIN
2+115.9	92.55	90.15	2.40		22.5° HORIZONTAL BEND
2+125	92.64	90.24	2.40		TOP OF WATERMAIN
2+126.6	92.66	90.26	2.40		22.5° HORIZONTAL BEND
2+128.7	92.66	90.26	2.40		250x250mm TEE
2+150	92.50	90.10	2.40		TOP OF WATERMAIN
2+162.1	92.58	90.18	2.40		150X250mm HYDRANT TEE
2+175	92.67	90.27	2.40		TOP OF WATERMAIN
2+200	92.65	90.25	2.40		TOP OF WATERMAIN
2+225	92.56	90.16	2.40		TOP OF WATERMAIN
2+250	92.69	90.29	2.40		TOP OF WATERMAIN
2+271.4	92.58	90.18	2.40		22.5° HORIZONTAL BEND
2+275	92.63	90.23	2.40		TOP OF WATERMAIN
2+288.4	92.61	90.21	2.40		22.5° HORIZONTAL BEND
2+292.8	92.57	90.17	2.40		250mm VALVE
2+300	92.49	90.09	2.40		TOP OF WATERMAIN
2+325	92.54	90.14	2.40		TOP OF WATERMAIN
2+326.5	92.55	90.15	2.40		150X250mm HYDRANT TEE
2+350	92.72	90.32	2.40		TOP OF WATERMAIN
2+375	92.61	90.21	2.40		TOP OF WATERMAIN
2+383.2	92.75	90.35	2.40		45° HORIZONTAL BEND
2+390.8	92.78	90.38	2.40		45° HORIZONTAL BEND
2+400	92.88	90.48	2.40		TOP OF WATERMAIN
2+425	92.68	90.28	2.40		TOP OF WATERMAIN
2+428.2	92.72	90.32	2.40		150X250mm BUILDING TEE
2+450	92.70	90.30	2.40		TOP OF WATERMAIN
2+475	92.95	90.55	2.40		TOP OF WATERMAIN
2+497.6	93.03	90.63	2.40		150X250mm BUILDING TEE
2+500	93.00	90.60	2.40		TOP OF WATERMAIN
2+508.7	92.93	90.53	2.40		150X250mm HYDRANT TEE
2+525	93.10	90.70	2.40		TOP OF WATERMAIN
2+546.7	93.10	90.70	2.40		150X250mm BUILDING TEE
2+550	93.10	90.70	2.40		TOP OF WATERMAIN
2+575	93.28	90.88	2.40		TOP OF WATERMAIN
2+589.7	93.10	90.70	2.40		45° HORIZONTAL BEND
2+595.4	93.11	90.71	2.40		45° HORIZONTAL BEND
2+600	93.11	90.71	2.40		TOP OF WATERMAIN
2+603.0	93.13	90.73	2.40		150X250mm HYDRANT TEE
2+625	93.49	91.09	2.40		TOP OF WATERMAIN
2+650	93.62	91.22	2.40		TOP OF WATERMAIN
2+675	93.60	91.20	2.40		TOP OF WATERMAIN
2+700	93.39	90.99	2.40		TOP OF WATERMAIN
2+725	93.00	90.60	2.40		TOP OF WATERMAIN
2+736.4	92.96	90.56	2.40		250mm VALVE
2+750	92.92	90.52	2.40		TOP OF WATERMAIN
2+775	92.97	90.57	2.40		TOP OF WATERMAIN
2+800	93.12	90.72	2.40		TOP OF WATERMAIN
2+825	93.11	90.71	2.40		TOP OF WATERMAIN
2+850	92.88	90.44	2.40		TOP OF WATERMAIN
2+870	92.68	90.28	2.40		250x250mm TEE
2+875	92.69	90.29	2.40		TOP OF WATERMAIN
2+900	92.58	90.20	2.40		TOP OF WATERMAIN
2+925	92.85	90.45	2.40		TOP OF WATERMAIN
2+950	92.97	90.57	2.40		TOP OF WATERMAIN
2+975	92.84	90.44	2.40		TOP OF WATERMAIN
2+995.7	92.59	90.19	2.40		22.5° HORIZONTAL BEND
3+000	92.43	90.03	2.40		TOP OF WATERMAIN
3+003.3	92.32	89.92	2.40		22.5° HORIZONTAL BEND
3+004.8	92.32	89.92	2.40		250x250mm TEE
3+009.1	92.30	89.90	2.40		250mm VALVE
3+025	92.41	90.01	2		TOP OF WATERMAIN
3+050	92.30	89.90	2.40		TOP OF WATERMAIN
3+075	92.26	89.86	2.40		TOP OF WATERMAIN
3+100	92.35	89.95	2.40		TOP OF WATERMAIN
3+125	92.24	89.84	2.40		TOP OF WATERMAIN
3+150	92.44	90.04	2.40		TOP OF WATERMAIN
3+175	92.85	90.45	2.40		250x250mm TEE
3+179.8	92.99	90.59	2.40		45° HORIZONTAL BEND
3+187.6	93.08	90.68	2.40		45° HORIZONTAL BEND
3+200	91.61	89.21	2.40		TOP OF WATERMAIN
3+225	91.91	89.51	2.40		TOP OF WATERMAIN
3+250	92.26	89.36	2.40		TOP OF WATERMAIN
3+275	91.60	89.21	2.40		TOP OF WATERMAIN
3+300	91.03	88.63	2.40		TOP OF WATERMAIN
3+314.3	92.20	89.80	2.40		300x250mm REDUCER
3+316.5	91.90	89.50	2.40		45° HORIZONTAL BEND
3+318.0	91.80	89.40	2.40		45° HORIZONTAL BEND
3+320.0	91.60	89.20	2.40		CONNECT TO EX. 300mm VALVE CHAMBER

250mmø WATERMAIN GRADE TABLE				
STATION	FINISHED GRADE (m)	TOP OF WATER (m)	COVER DEPTH (m)	COMMENTS
4+000	92.66	90.26	2.40	250x250mm TEE
4+009.6	92.56	89.93	2.63	250mm VALVE
4+017.4	92.67	89.76	2.91	22.5° HORIZONTAL BEND
4+025	92.60	89.93	2.67	TOP OF WATERMAIN
4+034.6	92.50	90.10	2.40	22.5° HORIZONTAL BEND
4+050	92.45	90.05	2.40	TOP OF WATERMAIN
4+064.0	92.45	90.05	2.40	150mm BUILDING TEE
4+075	92.59	90.19	2.40	TOP OF WATERMAIN
4+086.4	92.68	90.28	2.40	150mm HYDRANT TEE
4+100	92.51	90.11	2.40	TOP OF WATERMAIN
4+114.9	92.64	90.24	2.40	150mm BUILDING TEE
4+125	92.64	90.24	2.40	TOP OF WATERMAIN
4+150	92.74	90.34	2.40	TOP OF WATERMAIN
4+174.8	92.73	90.33	2.40	150mm BUILDING TEE
4+175	92.73	90.33	2.40	TOP OF WATERMAIN
4+200	92.58	90.18	2.40	TOP OF WATERMAIN
4+210.1	92.62	90.22	2.40	150mm HYDRANT TEE
4+212.3	92.65	90.25	2.40	250mm VALVE
4+214.2	92.68	90.28	2.40	250x250mm TEE


B
EDGE OF TRAVELLED ROAD (PAVED OR GRAVEL)
ROAD SHOULDER
EDGE OF SHOULDER
PAVED (OR GRAVEL)
ROAD SHOULDER
6
6
6





KEY PLAN

LEGEND

- PROPERTY BOUNDARY (4101 LIMEBANK RD.)
- FUTURE LEITRIM RD. REALIGNMENT ROW
- EASEMENT
- ×104.00 EXISTING ELEVATION
- EXISTING HYDRANT
- V&VB EXISTING VALVE & VALVE BOX
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER & MAINTENANCE HOLE
- EXISTING STORM SEWER & MAINTENANCE HOLE
- EXISTING CATCH BASIN
- GAS EXISTING GAS LINE
- H EXISTING HYDRO LINE
- T EXISTING TRAFFIC LINE
- OHW EXISTING OVERHEAD LINE
- EXISTING DITCH CENTRELINE
- X EXISTING FENCE

NOT FOR CONSTRUCTION

NOTES

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PROPERTY BOUNDARIES ARE DERIVED FROM TOPOGRAPHICAL PLAN OF SURVEY OF PART OF LOTS 16 & 17 CONCESSION 2 (RIDEAU FRONT), GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA. PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. ONTARIO LAND SURVEYORS, REF: 24256-23. ELEVATIONS ARE REFERRED TO GEODETIC DATUM (CGVD28).

NO.	REVISION DESCRIPTION	DATE	BY

SCALE

0 10m 20m 40m

HORIZONTAL 1:1000

Robinson Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

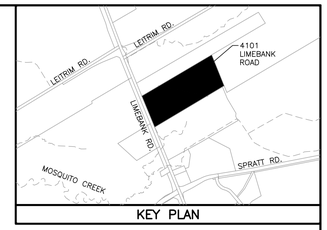
DESIGN	SM
CHECKED	CC
DRAWN	SM
CHECKED	CC
APPROVED	CC

GROUPE MONTONI

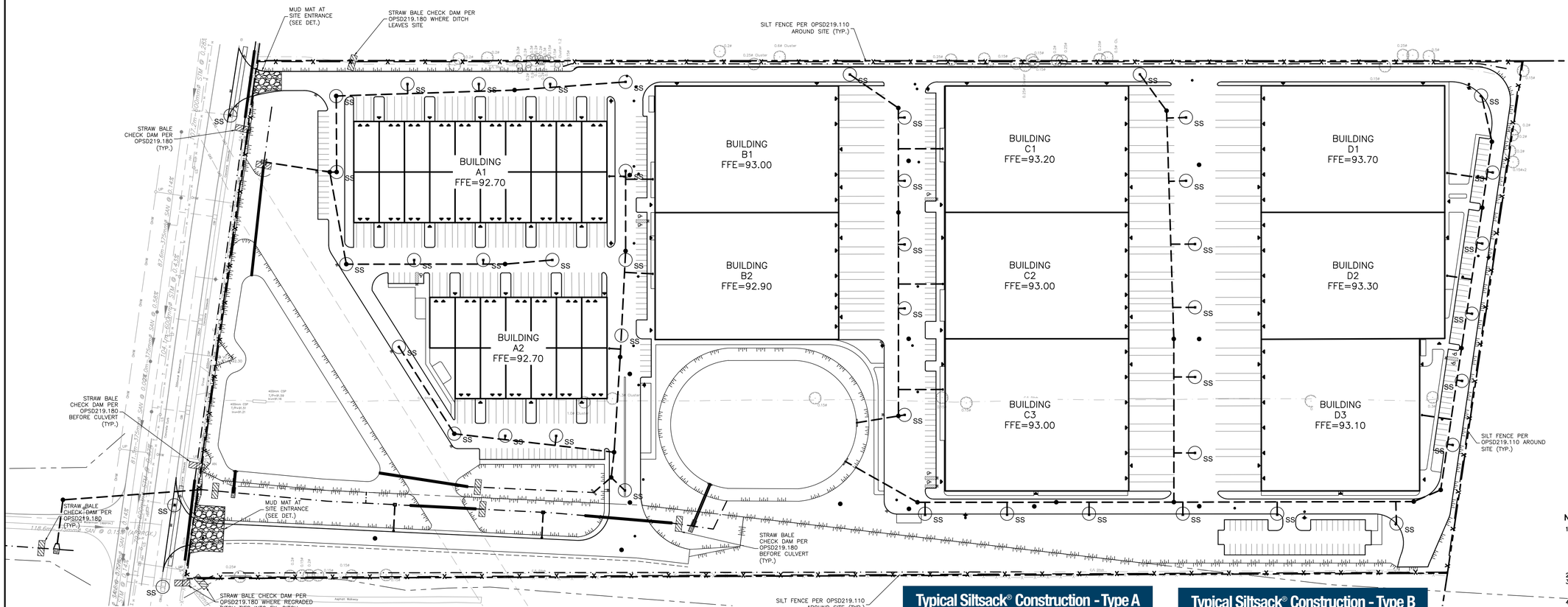
4101 LIMEBANK RD.
CITY OF OTTAWA

EXISTING CONDITIONS AND REMOVALS PLAN

PROJECT No.	23074
SURVEY	AOV
DATED	SEPT 2024
DWG. No:	23074-R1

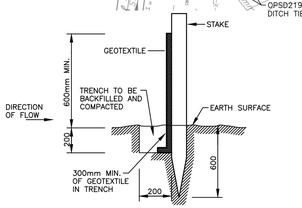


KEY PLAN

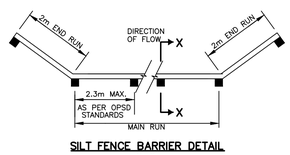


LEGEND

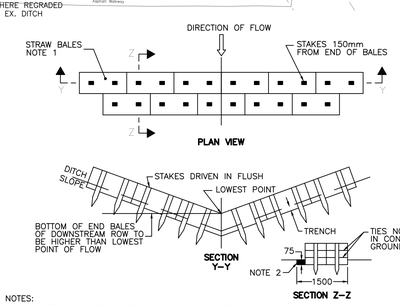
- PROPERTY BOUNDARY (4101 LIMEBANK RD.)
- FUTURE LEITRIM RD. REALIGNMENT ROW
- EASEMENT
- EXISTING STORM SEWER & MAINTENANCE HOLE
- EXISTING CATCH BASIN
- EXISTING DITCH CENTRELINE
- EXISTING DITCH CENTRELINE
- CATCH BASIN MAINTENANCE HOLE
- CATCH BASIN
- SWALE
- DOORWAY
- VEHICLE ENTRANCE
- SILT FENCE
- STRAW BALE CHECK DAM
- SILT SACK (OR APPROVED EQUIVALENT)



SECTION X–X
N.T.S.

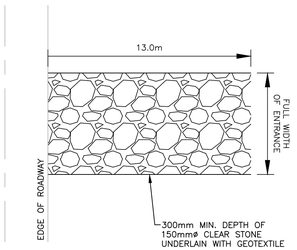


SILT FENCE BARRIER DETAIL
N.T.S.



NOTES:
1. NUMBER OF BALES VARIES AND SHALL SUIT DITCH.
2. STRAW BALES SHALL BE BUTTED TIGHTLY AGAINST ADJOINING BALES AND SHAPED TO CONFORM TO THE SIDES OF THE DITCH TO PREVENT WATER FLOW THROUGH BARRIER
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN

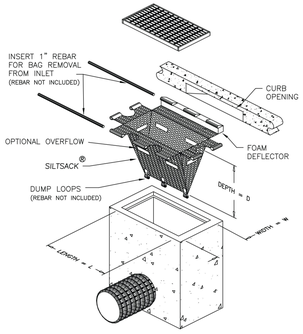
SEDIMENT CONTROL STRAW BALE DETAIL
OPSD 219.180



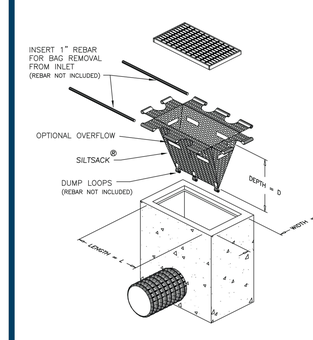
NOTES:
1. MUD MAT TO BE UNDERLAIN WITH A GEOTEXTILE FABRIC.
2. SEDIMENT SHALL BE CLEANED FROM ROADWAYS AS REQUIRED.
3. STORM INLETS IN CLOSE VICINITY TO MUD MAT SHALL BE PROTECTED WITH INLET CONTROL MEASURES.

MUD MAT DETAIL
N.T.S.

Typical Siltsack® Construction - Type A



Typical Siltsack® Construction - Type B



NOTES:
1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE ULTIMATE 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. LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION HAS BEEN RE-ESTABLISHED IN ALL DISTURBED AREAS. RE-VEGETATE DISTURBED AREAS AS SOON AS POSSIBLE.
4. STOCKPILE SOIL AWAY (15 METRES OR GREATER) FROM WATERCOURSES, DRAINAGE FEATURES AND TOP OF STEEP SLOPES.
5. SILT SACKS ARE TO BE PLACED UNDERNEATH THE FRAME AND COVER OF ALL PROPOSED AND EXISTING CATCH BASIN AND OPEN COVER STORM MANHOLES UNTIL CONSTRUCTION IS COMPLETED.
6. A SILT FENCE BARRIER SHALL BE INSTALLED AS PER OPSD 219.110 WHERE INDICATED AND MAINTAINED AS REQUIRED.
7. INSTALL MUD MATS AT ALL CONSTRUCTION ENTRANCES.
8. DURING ACTIVE CONSTRUCTION PERIODS, VISUAL INSPECTIONS SHALL BE UNDERTAKEN ON A WEEKLY BASIS AND AFTER MAJOR STORM EVENTS (>25mm RAIN IN 24 HOUR PERIOD) ON SEDIMENT CONTROL BARRIERS AND ANY DAMAGE REPAIRED IMMEDIATELY.
9. EROSION AND SEDIMENT CONTROL BARRIERS SHALL ALSO BE ASSESSED (AND REPAIRED AS REQUIRED) FOLLOWING SIGNIFICANT SNOWMELT EVENTS.
10. VISUAL INSPECTIONS SHALL ALSO BE UNDERTAKEN IN ANTICIPATION OF LARGE STORM EVENTS (OR A SERIES OF RAINFALL AND/OR SNOWMELT DAYS) THAT COULD POTENTIALLY YIELD SIGNIFICANT RUNOFF VOLUMES.
11. CARE SHALL BE TAKEN TO PREVENT DAMAGE TO EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION OPERATIONS.
12. IN SOME CASES, BARRIERS MAY BE REMOVED TEMPORARILY TO ACCOMMODATE THE CONSTRUCTION OPERATIONS. THE AFFECTED BARRIERS SHALL BE REINSTATED IMMEDIATELY AFTER CONSTRUCTION OPERATIONS ARE COMPLETED.
13. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED AS REQUIRED AS THE SITE BECOMES DEVELOPED.
14. SEDIMENT CONTROL DEVICES SHALL BE CLEANED OF ACCUMULATED SEDIMENTATION AS REQUIRED AND REPLACED AS NECESSARY.
15. DURING THE COURSE OF CONSTRUCTION, IF THE ENGINEER BELIEVES THAT ADDITIONAL PREVENTION METHODS ARE REQUIRED TO CONTROL EROSION AND SEDIMENTATION, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES, AS REQUIRED, TO THE SATISFACTION OF THE ENGINEER.
16. CONSTRUCTION AND MAINTENANCE REQUIREMENTS FOR EROSION AND SEDIMENT CONTROLS ARE TO COMPLY WITH OPSS 805.

NOT FOR CONSTRUCTION

NOTES

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NO.	REVISION DESCRIPTION	DATE	BY

SCALE
0 10m 20m 40m
HORIZONTAL 1:1000

Robinson Land Development
350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

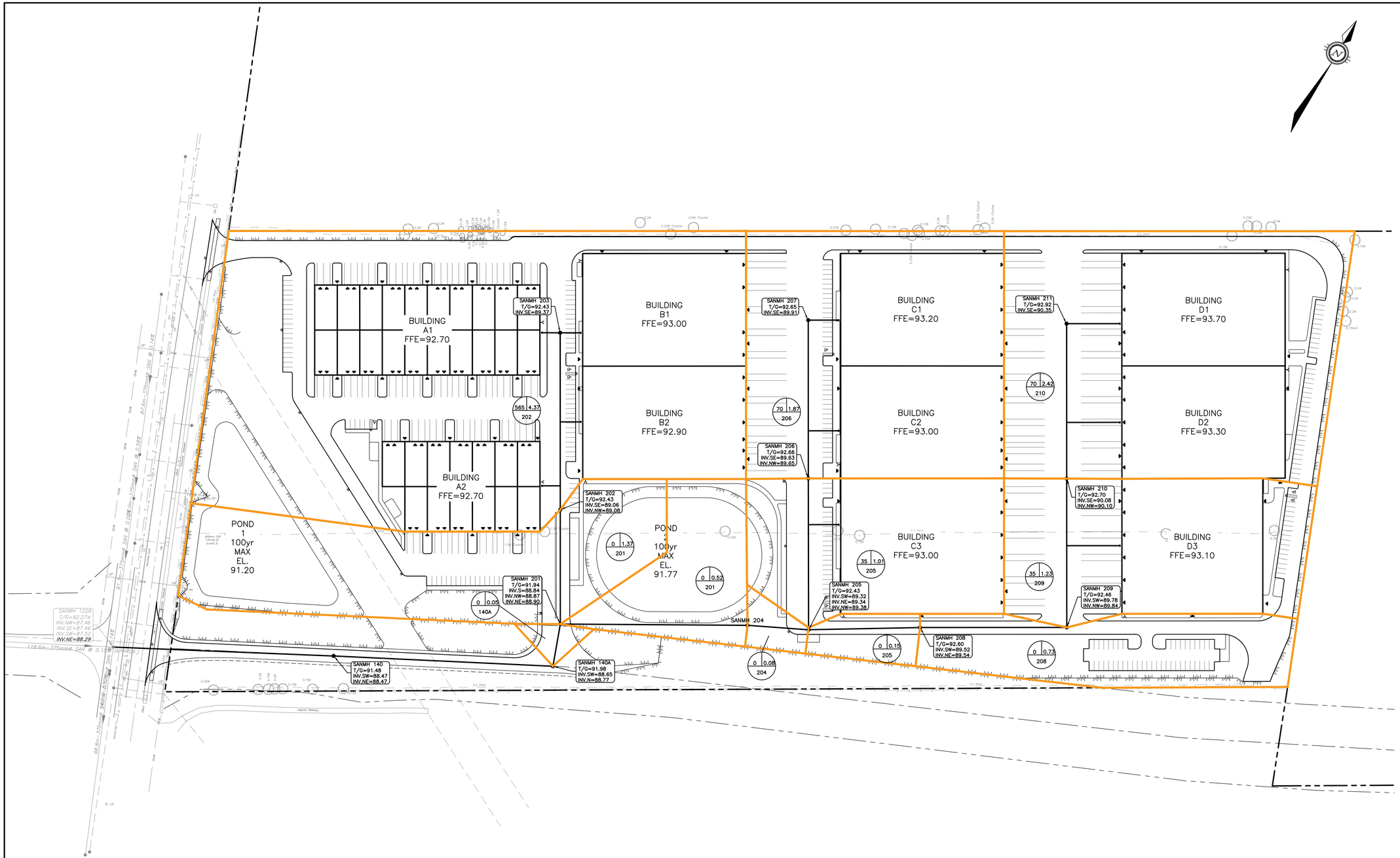
DESIGN	SM
CHECKED	CC
DRAWN	SM
CHECKED	CC
APPROVED	CC

GROUPE MONTONI

4101 LIMEBANK RD.
CITY OF OTTAWA

EROSION & SEDIMENT CONTROL PLAN

PROJECT No.	23074
SURVEY	AOV
DATED	SEPT 2024
DWG. No:	23074-ESC1



NOT FOR CONSTRUCTION

NOTES

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NO.	REVISION DESCRIPTION	DATE	BY

SCALE

0 10m 20m 40m

HORIZONTAL 1:1000

Robinson Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

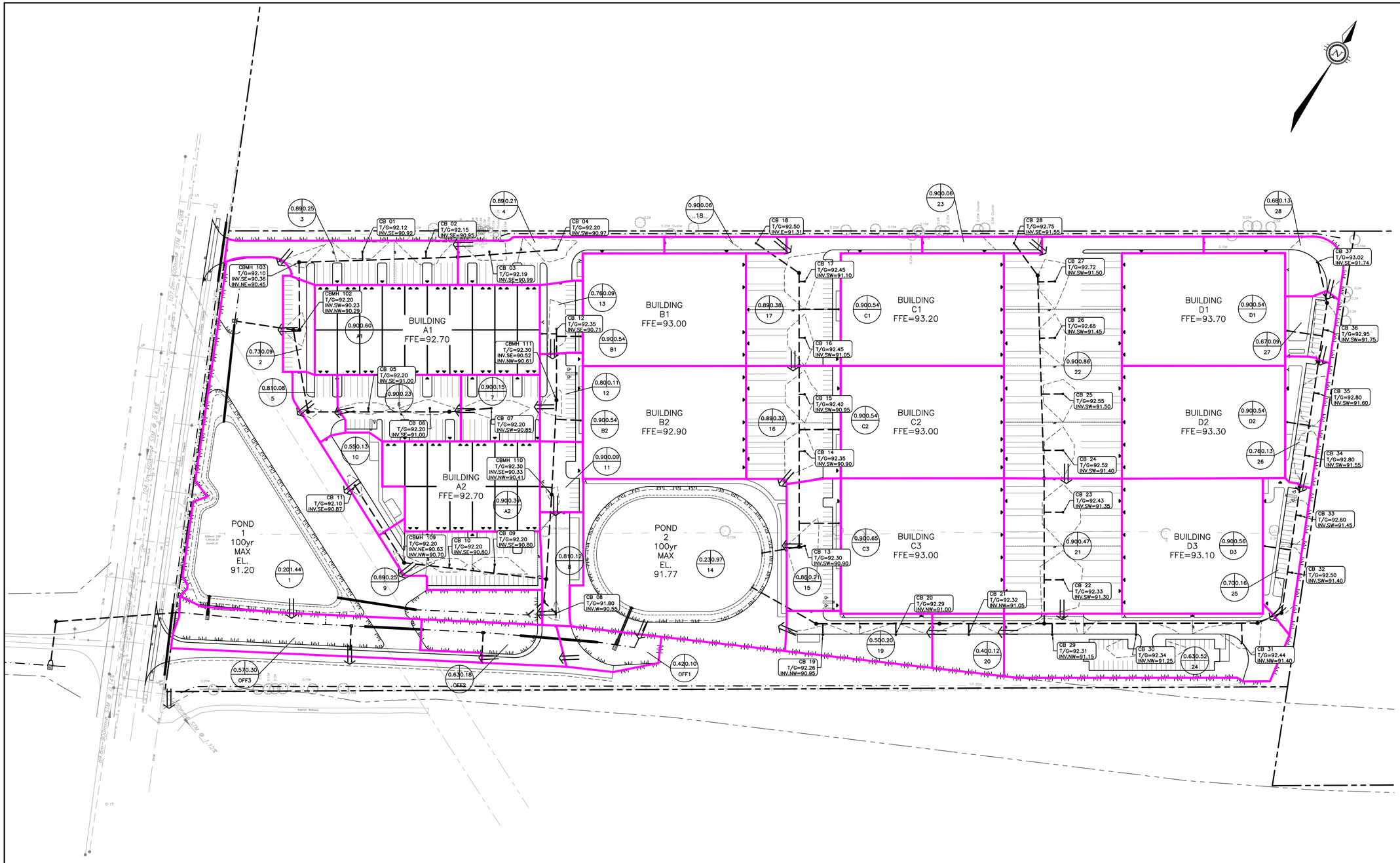
DESIGN	SM
CHECKED	CC
DRAWN	SM
CHECKED	CC
APPROVED	CC

GROUPE MONTONI

4101 LIMEBANK RD.
CITY OF OTTAWA

SANITARY DRAINAGE PLAN

PROJECT No.	23074
SURVEY	AOV
DATED	SEPT 2024
DWG. No:	23069-SAN1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BUILDING A2 FFE=92.70
BUILDING B1 FFE=93.00
BUILDING B2 FFE=92.90
BUILDING C1 FFE=93.20
BUILDING C2 FFE=93.00
BUILDING C3 FFE=93.00
BUILDING D1 FFE=93.70
BUILDING D2 FFE=93.30
BUILDING D3 FFE=93.10
POND 1 100yr MAX EL. 91.20
POND 2 100yr MAX EL. 91.77
CB 01 T/G=92.12 INV.SE=90.92
CB 02 T/G=92.15 INV.SE=90.95
CB 03 T/G=92.19 INV.SE=90.99
CB 04 T/G=92.20 INV.SW=90.97
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CB 06 T/G=92.20 INV.SE=91.00
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