

GENERAL NOTES

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. DO NOT SCALE DRAWINGS.
3. REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE DESIGN ENGINEER AS APPLICABLE.
4. USE ONLY LATEST REVISED DRAWINGS OR THOSE THAT ARE MARKED "ISSUED FOR CONSTRUCTION".
5. DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH THE PROVINCIAL AND LOCAL BUILDING CODES LATEST EDITION.
6. ALL WORKS AND MATERIALS USED SHALL COMPLY AS REQUIRED BY THE BUILDING CODE LATEST EDITION.
7. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS & SPECIFICATIONS.
8. EVERYTHING IS TO BE CONSIDERED NEW UNLESS SPECIFIED EXISTING OTHERWISE.



KEY PLAN
NTS

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LEGEND

- EXISTING ELEVATION
- EXISTING CATCHBASIN
- EXISTING MANHOLE
- PROPOSED SLOPE
- FLUSH WITH FINISH GRADE
- ABOVE FINISH GRADE
- PROPOSED ELEVATION
- MATCH EXIST. ELEVATION
- PROP. ELE. (CURB TOP)
- PROP. ELE. (CURB BOTTOM)
- NEW CATCHBASIN
- NEW C.B./M.H.
- NEW MANHOLE
- PROPERTY LINE
- RIDGE LINE
- OVERLAND FLOW
- SURFACE PONDING AREA
- EX. EASEMENT

NOTES

BEARINGS AND MTM GRID, DERIVED BY REAL TIME NETWORK (RTN) OBSERVATIONS, MTM ZONE 9, NAD 83 (CSRS) (2010.0)

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9999907

ELEVATIONS SHOWN ON THIS PLAN ARE REFERRED TO GEODETIC DATUM AND ARE DERIVED FROM CITY OF OTTAWA BENCH MARK 00119883075, HAVING PUBLISHED ELEVATION OF 90.612 METRES

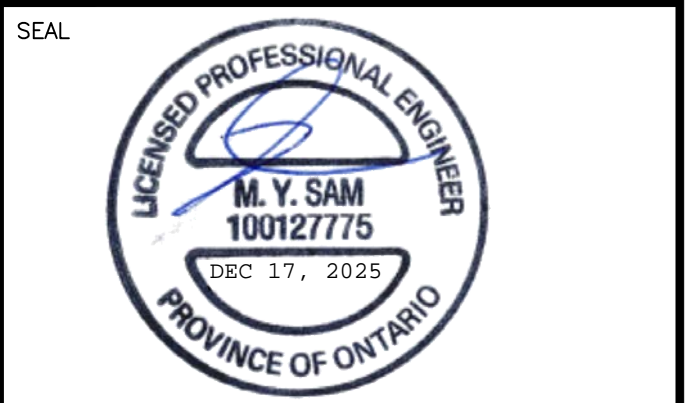
EX. INFORMATION NOTES

INFORMATION REGARDING EXISTING STORM, SANITARY AND WATER EXTRACTED FROM PROJECT PART OF LOT 6 CONCESSION 2 DWG #24-10-007-04, DATED 2024-02-26 BY J.D. BARNES LTD AND FROM PROJECT 101048-0 DWG #101048-0P, DATED APRIL 2002 BY NOVATECH ENGINEERING CONSULTANTS LTD.

| REVISION TABLE | | |
|----------------|-----------------------------|------------------------|
| REV. | DESCRIPTION | DRAWN APP'D. DATE |
| 0 | PRELIMINARY DESIGN | DL JS OCT 17, 2025 |
| 1 | 1st REVISION AS PER COMMENT | DL JS OCT 24, 2025 |
| 2 | 2nd REVISION AS PER COMMENT | DL JS OCT 29, 2025 |

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CONSULTANT
J+B ENGINEERING INC.
TORONTO: 28 CECILIAN DR. CALGARY: 536-1114 AVE. SW
SUITE 301 SUITE 200
M4B 2B8 M4B 2B8
416-228-2018 403-555-2255

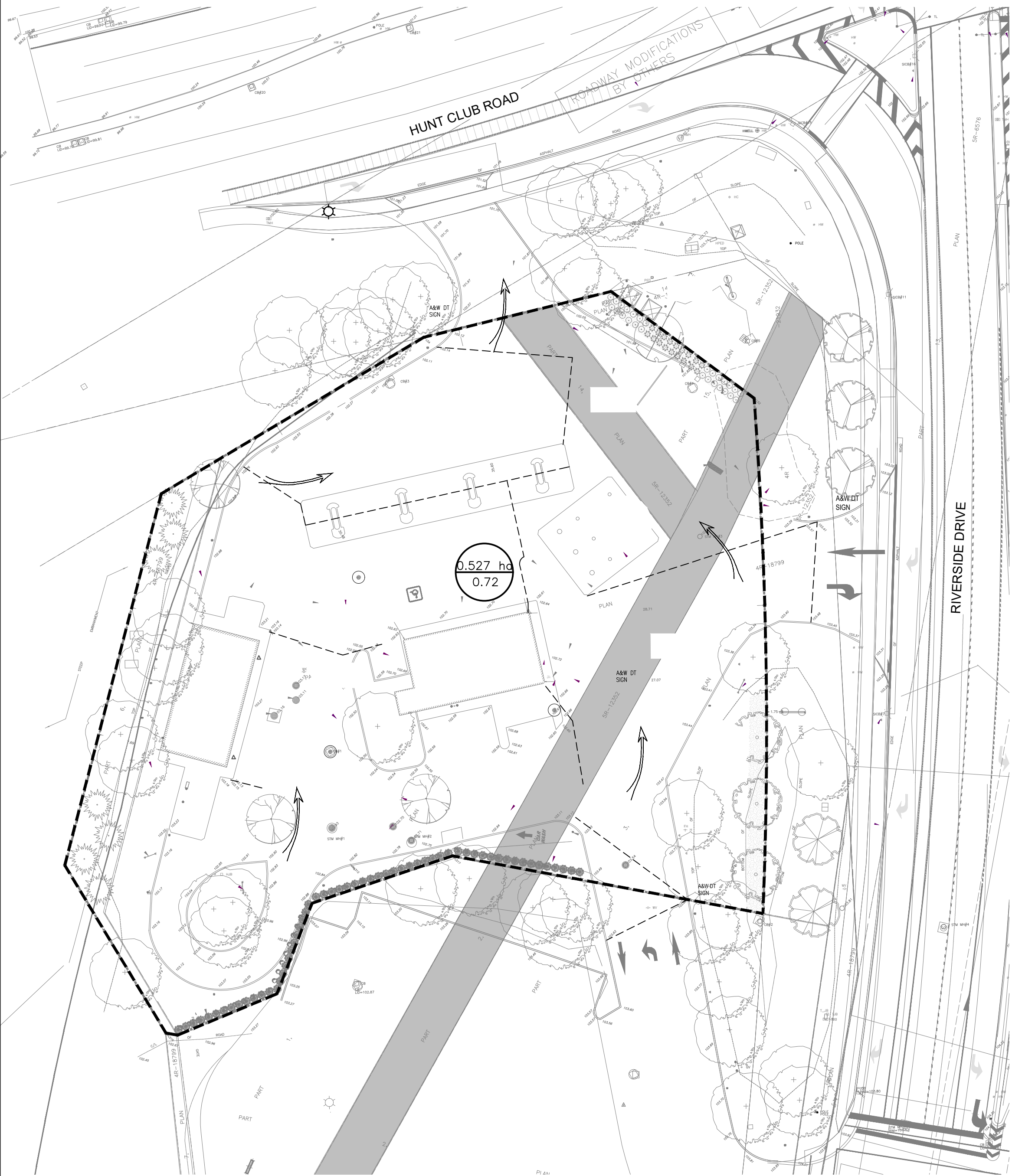
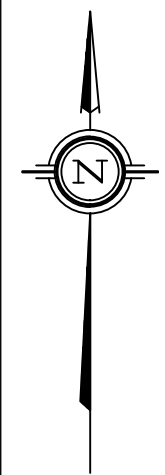


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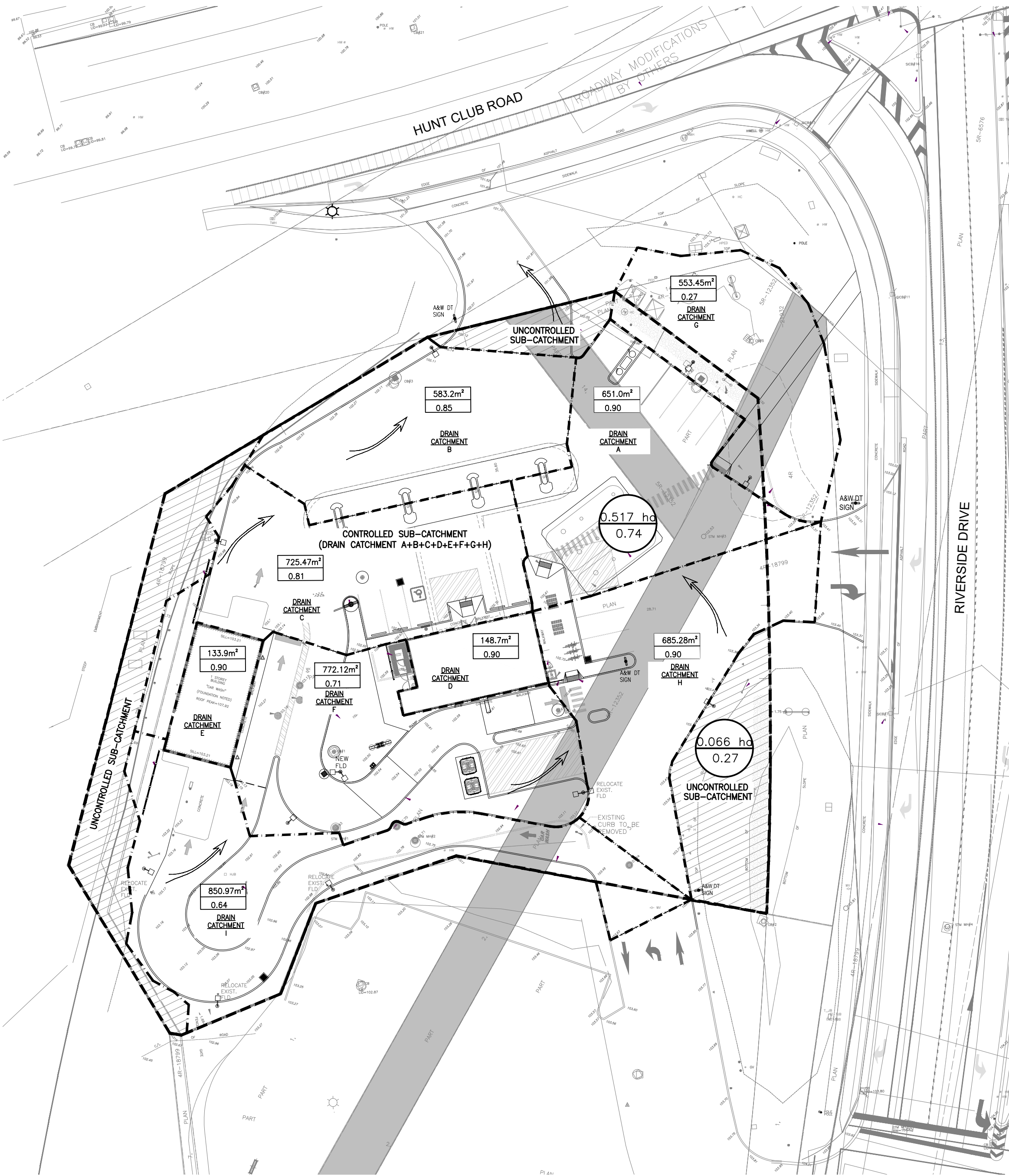
GRADING PLAN

PROJECT:
**4000 RIVERSIDE DRIVE
@ HUNT CLUB DRIVE
OTTAWA, ON**

| | |
|------------------------------------|--|
| DRAWN BY: | CAD INFO: SHEET SIZE D (559 x 864) |
| DRAWING SCALE: 1:250 | PETRO-CANADA 250272 |
| DATE DRAWN: 2025-07-30 | CONSULTANT |
| CHECKED BY: | PLOT SCALE 1:1 |
| APPROVED BY: JS | PLOT DATE |
| STD No./OUTLET No. 35197 | PLOT CONFIGURATION |
| | SHEET No. P300 |



1 PRE-DEVELOPMENT DRAINAGE PLAN
P-303 SCALE: 1:400



2 POST-DEVELOPMENT DRAINAGE PLAN
P-303 SCALE: 1:400

| | | |
|--|---------|--------|
| CONTROLLED SUB-CATCHMENTS= (DRAIN CATCHMENT A+B+C+D+E+F+G+H+I) | sq.m. | 10.67 |
| UNCONTROLLED SUB-CATCHMENTS= | sq.m. | 5.75 |
| EXISTING CONTROLLED FLOW RATE= (VIA EX.165mm ORIFICE) | cu.m/s. | 0.2177 |
| PROPOSED CONTROLLED FLOW RATE= | cu.m/s. | 0.2159 |

| EXISTING STORAGE VOLUME (100 YEAR EVENT) | | | |
|--|-------|-------|--|
| CATCH BASINS AND MANHOLES | cu.m. | 18.05 | |
| UNDERGROUND CONDUIT | cu.m. | 16.31 | |
| SURFACE PONDING VOLUME | cu.m. | 24.05 | |
| TOTAL REQUIRED | cu.m | 57.10 | |
| TOTAL PROVIDED | cu.m. | 58.41 | |

| PROPOSED STORAGE VOLUME (100 YEAR EVENT) | | | |
|--|-------|-------|--|
| CATCH BASINS AND MANHOLES | cu.m. | 33.94 | |
| UNDERGROUND CONDUIT | cu.m. | 20.62 | |
| SURFACE PONDING VOLUME | cu.m. | 16.82 | |
| TOTAL REQUIRED | cu.m. | 55.21 | |
| TOTAL PROVIDED | cu.m. | 71.38 | |



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LEGEND

| | |
|--|---|
| | EXISTING ELEVATION |
| | EXISTING CATCHBASIN |
| | EXISTING MANHOLE |
| | NEW CATCHBASIN |
| | NEW C.B./M.H. |
| | SUB-CATCHMENT AREA RUNOFF COEFFICIENT |
| | OVERLAND FLOW |
| | NEW MANHOLE |
| | PROPERTY LINE |
| | RIDGE LINE |
| | DRAIN CATCHMENT BOUNDARY |
| | DRAIN CATCHMENT AREA RUNOFF COEFFICIENT |
| | UNCONTROLLED AREA |

NOTES

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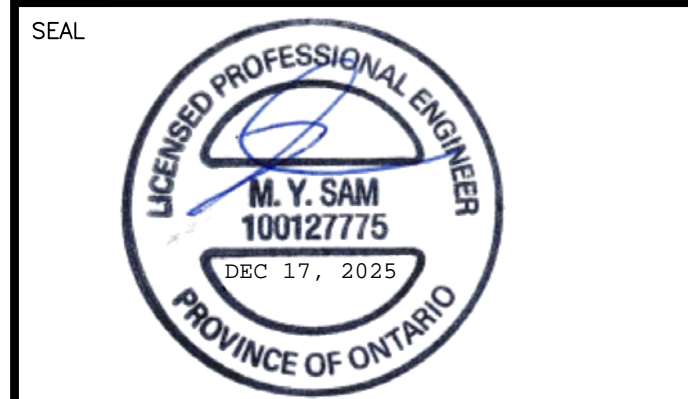
DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999907

ELEVATIONS SHOWN ON THIS PLAN ARE REFERRED TO GEODETIC DATUM AND ARE DERIVED FROM CITY OF OTTAWA BENCH MARK 00119883075, HAVING PUBLISHED ELEVATION OF 90.612 METRES

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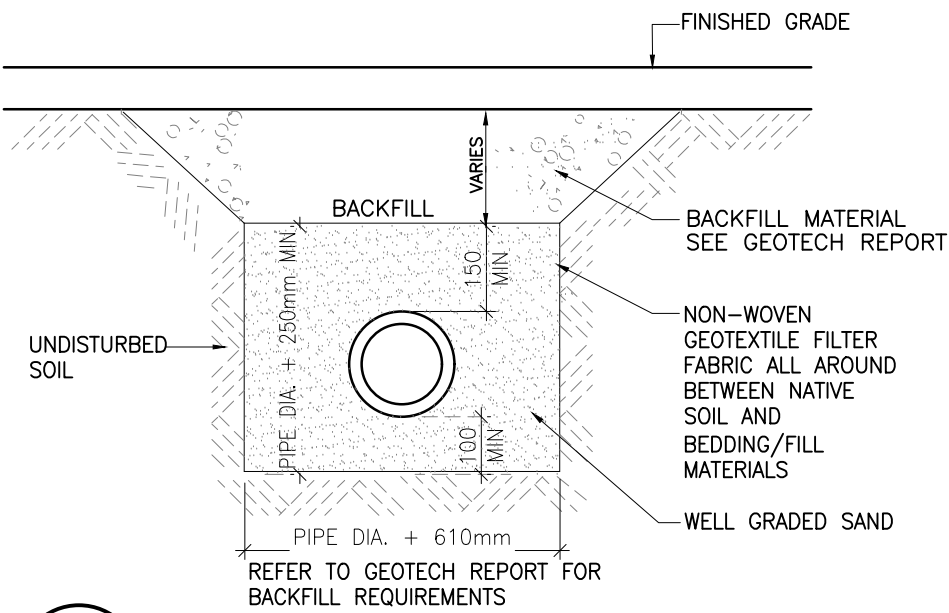
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PRE VS POST DRAINAGE PLAN

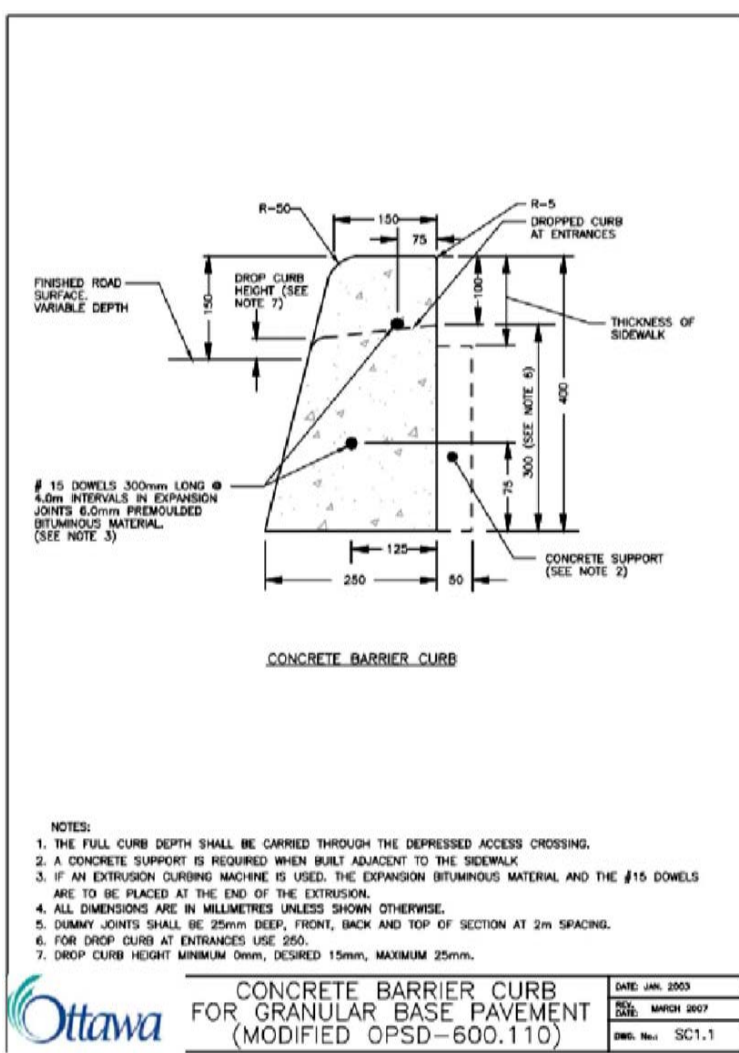
PROJECT:
**4000 RIVERSIDE DRIVE
@ HUNT CLUB DRIVE
OTTAWA, ON**

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| DRAWING SCALE: 1:400 | PETRO-CANADA 250272 CONSULTANT |
| DATE DRAWN: 2025-07-30 | PLOT SCALE 1:1 |
| CHECKED BY: | PLOT DATE |
| APPROVED BY: JS | PLOT CONFIGURATION |
| STD No./OUTLET No. 35197 | SHEET No. P303 |

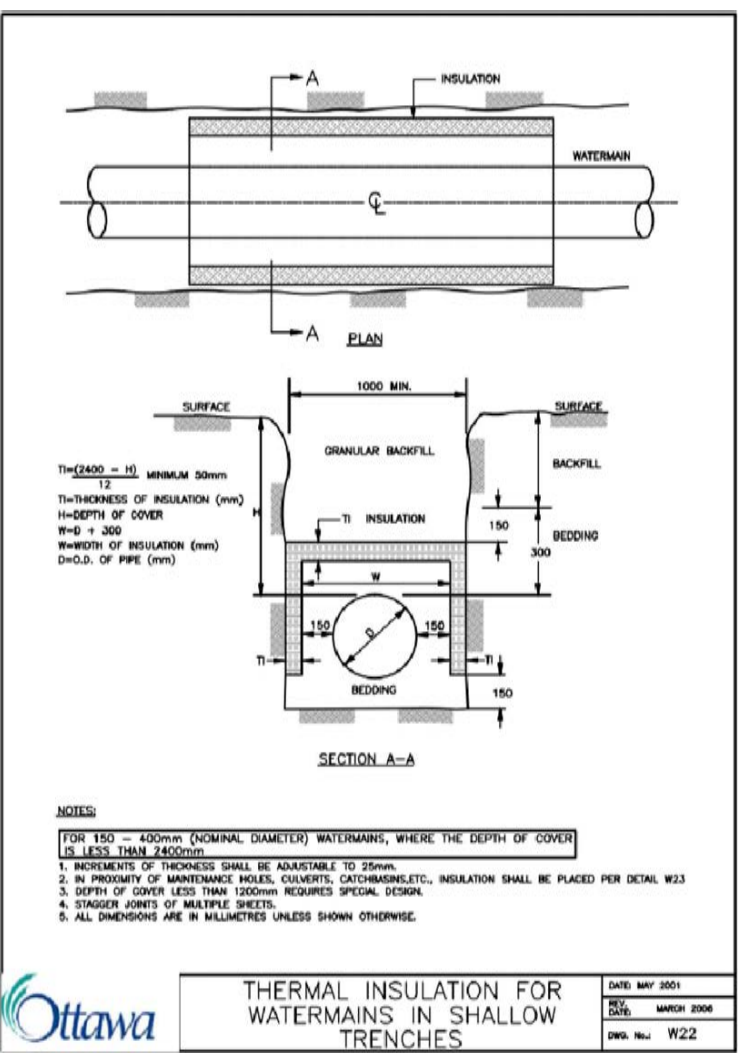
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|----------------|--------------------------|------------------------|
| REV. | DESCRIPTION | DRAWN APP'D. DATE |
| 3 | REVISED AS PER SITE PLAN | DL JS DEC 17, 2025 |
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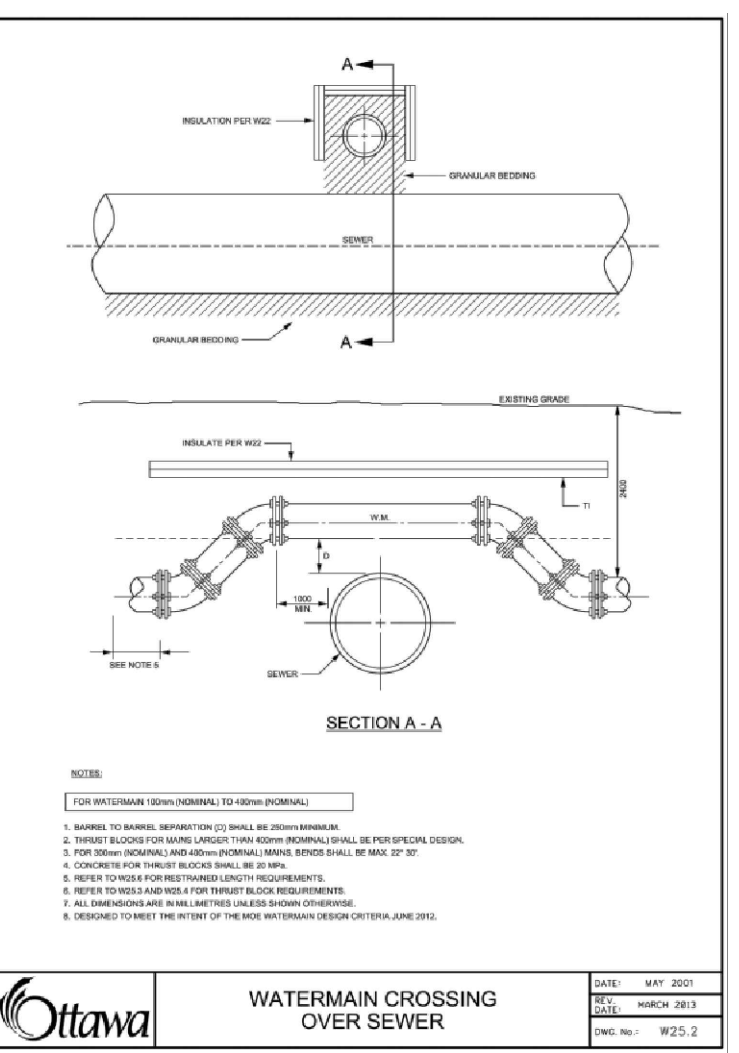
1 PIPE BEDDING DETAIL
SCALE: NTS



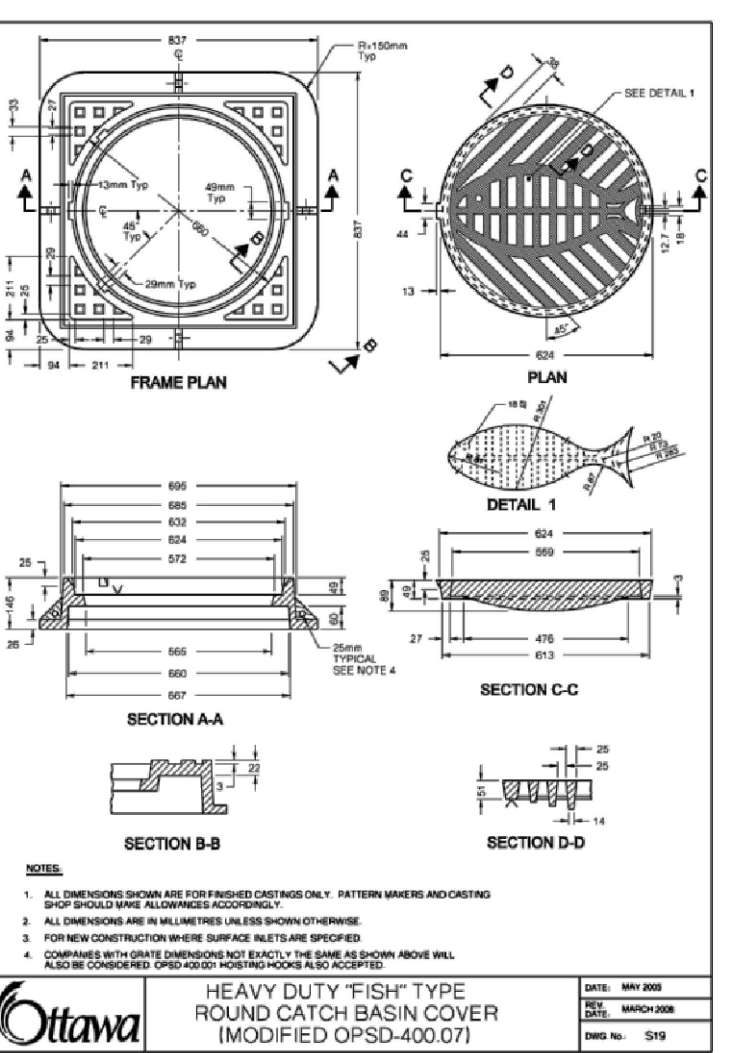
CONCRETE BARRIER CURB FOR GRANULAR BASE PAVEMENT (MODIFIED OPSD-600.110)



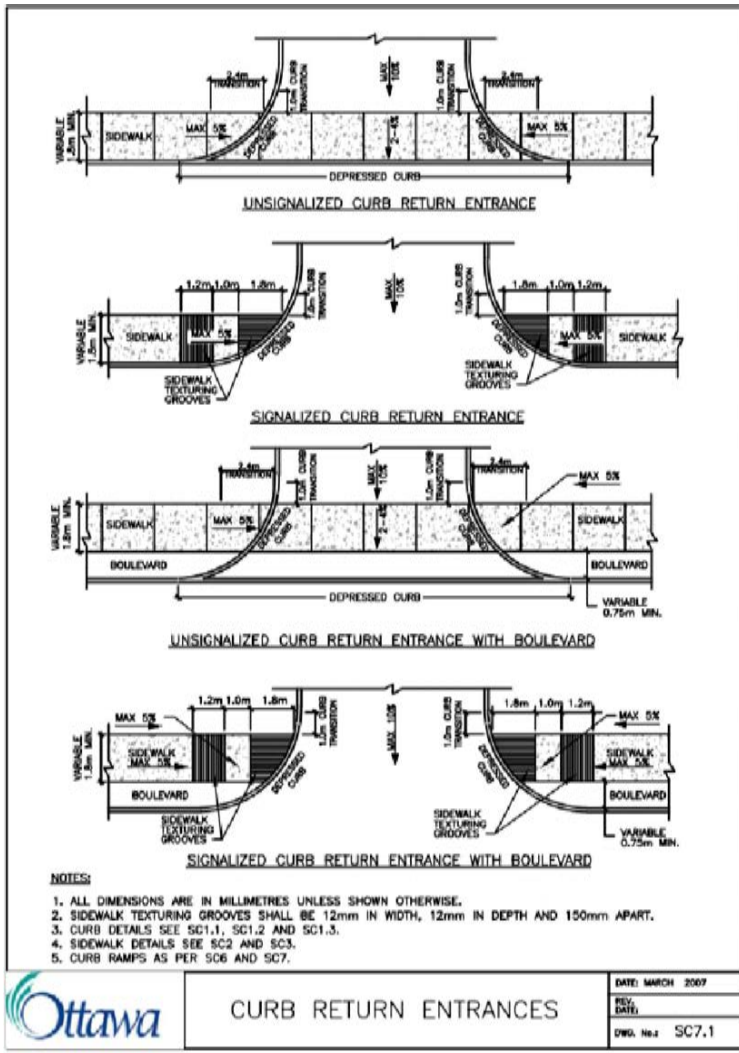
THERMAL INSULATION FOR WATERMAINS IN SHALLOW TRENCHES



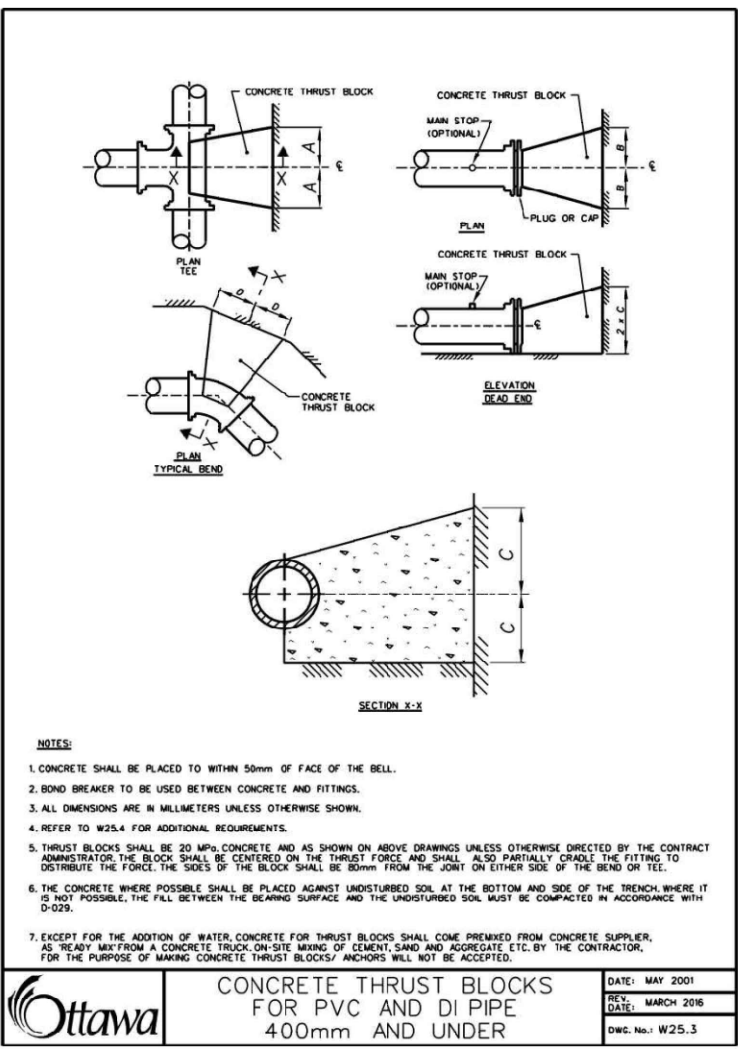
WATERMAIN CROSSING OVER SEWER



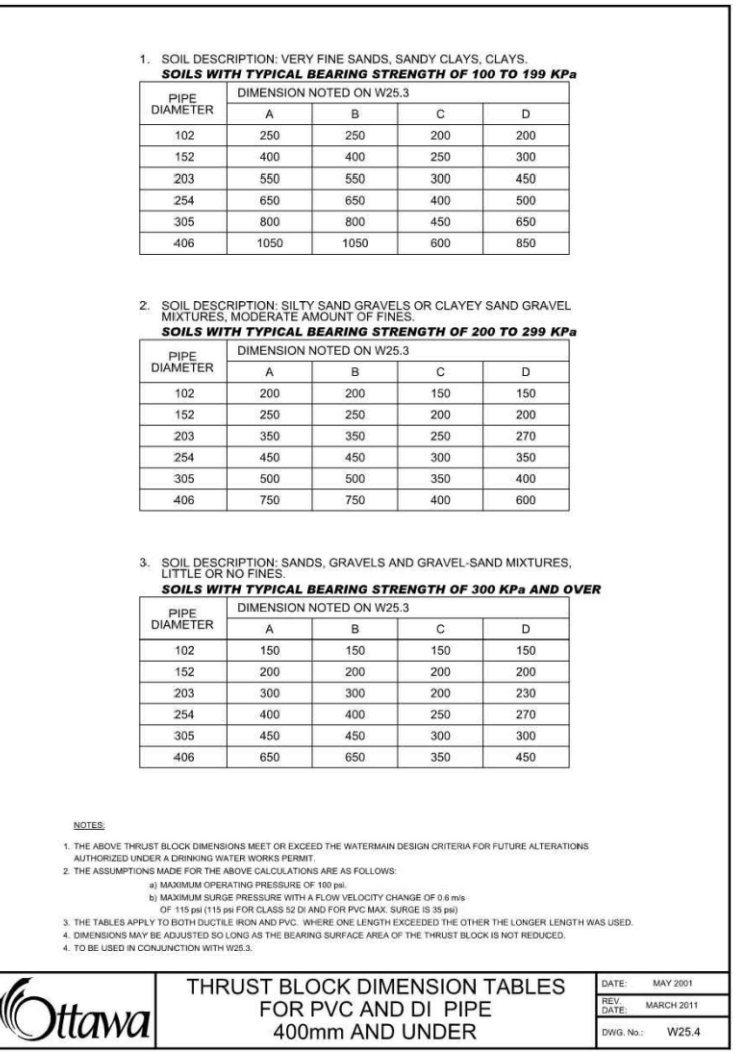
HEAVY DUTY FISH-TYPE ROUND CATCH BASIN COVER (MODIFIED OPSD-400.07)



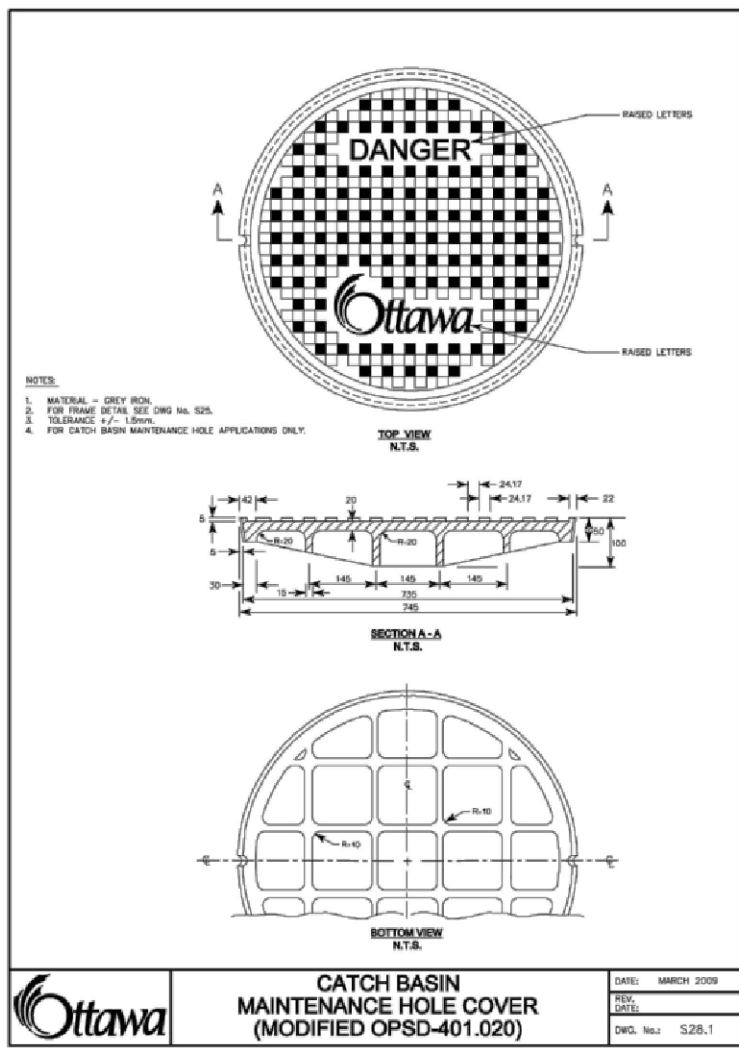
CURB RETURN ENTRANCES



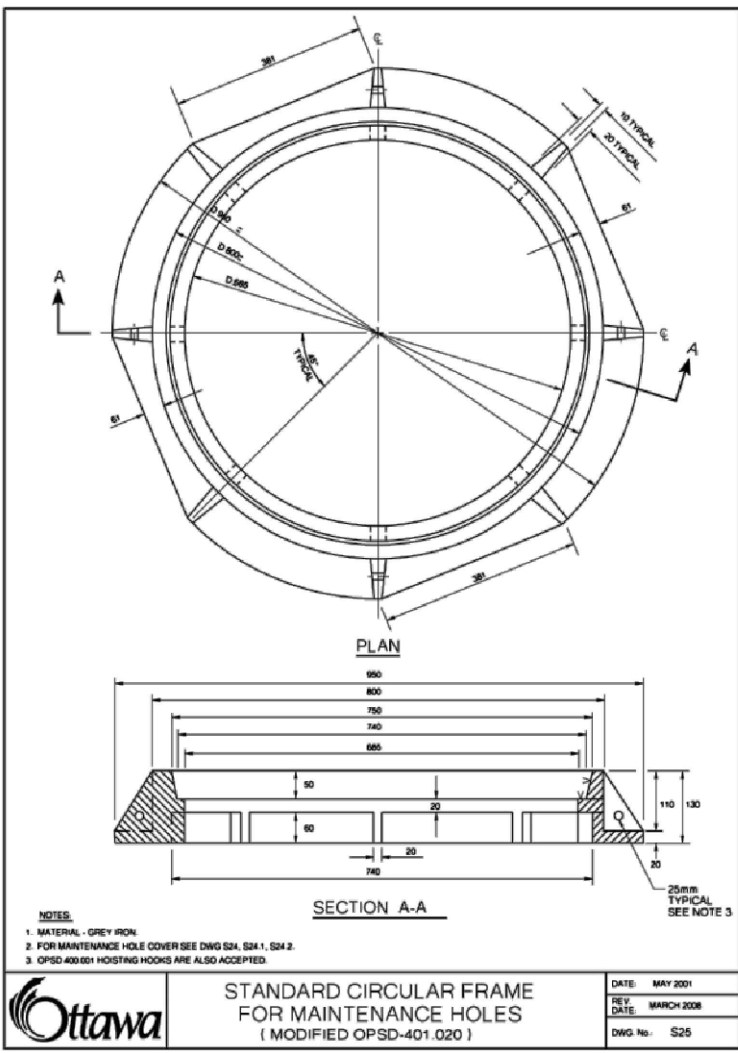
CONCRETE THRUST BLOCKS FOR PVC AND DI PIPE 400mm AND UNDER



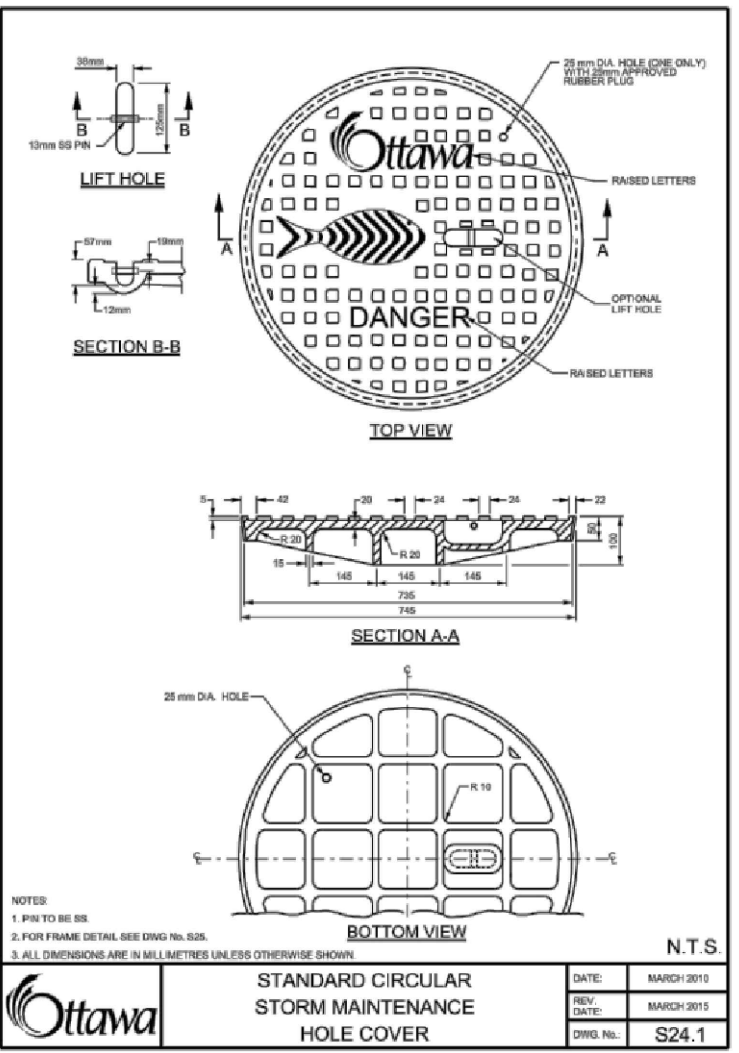
THRUST BLOCK DIMENSION TABLES FOR PVC AND DI PIPE 400mm AND UNDER



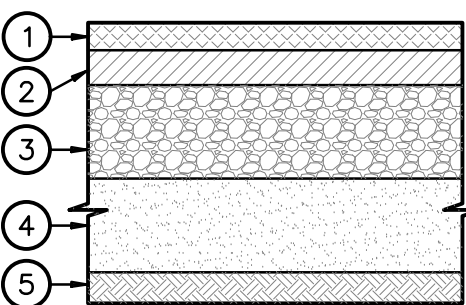
CATCH BASIN MAINTENANCE HOLE COVER (MODIFIED OPSD-401.020)



STANDARD CIRCULAR FRAME FOR MAINTENANCE HOLES (MODIFIED OPSD-401.020)



STANDARD CIRCULAR STORM MAINTENANCE HOLE COVER



2 TYP. SECTION THROUGH PAVEMENT
SCALE: NTS

| PAVING SCHEDULE | | | |
|-----------------|--|------------|------------|
| ITEM NO. | MATERIAL DESCRIPTION | LIGHT DUTY | HEAVY DUTY |
| ① | HL-3 WEAR COURSE | 50mm | 40mm |
| ② | HL-8 BINDER COURSE | — | 50mm |
| ③ | GRANULAR BASE COURSE (OPSS GRANULAR A CRUSHED STONE) | 150mm | 150mm |
| ④ | GRANULAR SUB-BASE COURSE (OPSS GRANULAR B TYPE-U) | 300mm | 300mm |
| ⑤ | SUBGRADE (TO BE RESHAPED) | VARIES | VARIES |

MBD: MARSHALL BULK DENSITY
SPMD: STANDARD PROCTOR MAX. DRY DENSITY
PAVEMENT STRUCTURE AS PER GEOTECHNICAL REPORT BY JOHN D. PATERSON AND ASSOCIATES LIMITED, DATED MARCH 24, 2002

GRADING AND SERVICES NOTES

- ALL DIMENSIONS AND ELEVATIONS ARE METRIC, UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS AND DESIGN ELEVATIONS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER OR ARCHITECT WHERE APPLICABLE.
- THE CONTRACTOR SHALL RESTORE TO ORIGINAL OR BETTER CONDITION FOR ANY EXISTING CONDITION DISTURBED DURING THE CONSTRUCTION AT CONTRACTOR'S EXPENSE.
- CONTROL MANHOLES ARE TO BE BENCHMARKED TO THE INVERTS.
- LANDSCAPING SHALL NOT ENCROACH ON BOULEVARD NOR SHALL BOULEVARD GRADES BE ALTERED.
- STANDARD DRAWINGS OF THE CITY CONSTITUTE PART OF THE PLANS OF THE CONTRACT.
- ANY CONFLICT WITH EXISTING SERVICES SHALL BE RECTIFIED AS PER CITY'S REQUIREMENTS.
- MINIMUM VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE INVERTS OF THE SEWER AND A CROWN OF A WATER MAIN SHALL COMPLY WITH THE MUNICIPAL AND LOCAL BY-LAWS AT ALL CROSSINGS.
- CONSTRUCT PAVEMENT AS SPECIFIED. SEE PAVEMENT STRUCTURE DETAILS 1/P-304.
- ALL CONCRETE CURBS FROM EXISTING ROAD CURB TO STREET LINE SHALL BE BARRIER CURB TO CITY STANDARDS. ALL CONCRETE CURB HEIGHTS SHALL BE 150mm ABOVE FINISHED GRADE (A.F.G.) UNLESS OTHERWISE NOTED. DRIVEWAY CURBS ARE TO BE DISCONTINUOUS AT SIDEWALKS AND TAPERED BACK MINIMUM OF 300mm OR TO THE APPROVAL OF DESIGN ENGINEER.
- ALL REQUIRED CURB CUTTING AT ENTRANCES AND CURB DEPRESSIONS AT SIDEWALK CROSSINGS SHALL BE INSTALLED TO THE APPROVAL OF THE DESIGN ENGINEER.

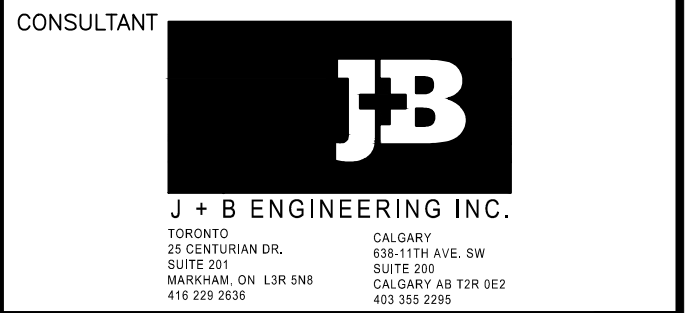
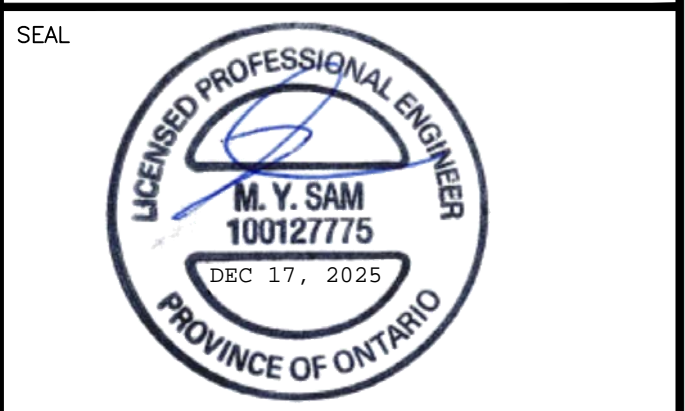
- A MINIMUM CLEARANCE OF 1000mm FROM ALL ABOVE GROUND SERVICES AND UTILITIES IS REQUIRED.
- INSTALLATION OF WATER MAIN IN PRIVATE PROPERTY SHALL COMPLY WITH THE MUNICIPAL AND LOCAL BY-LAWS.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. BELL, HYDRO, GAS, OR ANY OTHER UTILITIES THAT MAY EXIST ON THE SITE OR WITHIN THE STREET LINE MUST BE LOCATED AND VERIFIED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO CONSTRUCTION.
- ALL SANITARY SEWER, STORM SEWER, AND WATER MAIN ON PRIVATE PROPERTY ARE TO BE INSTALLED IN ACCORDANCE WITH THE PROVINCIAL BUILDING CODE.
- ALL WATER MAIN AND HYDRANT INSTALLATIONS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE LATEST PLANS, STANDARDS, AND SPECIFICATIONS OF THE LOCAL UTILITIES COMMISSION.
- NO BLASTING IS PERMITTED ON THE CITY RIGHT-OF-WAY AND NEAR ANY ADJACENT BUILDING.
- THE TOP OF CONCRETE CURBS ABUTTING CITY'S SIDEWALKS SHALL BE KEPT LEVEL WITH THE SIDEWALKS FOR A DISTANCE OF 600mm FROM THE SIDEWALK.
- THE PROPERTY IS TO BE GRADED AND SELF-CONTAINED SO THAT SURFACE DRAINAGE IS DIRECTED AWAY FROM THE BUILDINGS.
- THE OWNER AND/OR CONTRACTOR IS REQUIRED TO OBTAIN A "ROAD CUT PERMIT" FROM THE CITY BEFORE COMMENCING ANY WORK ON THE CITY'S ROAD ALLOWANCE.
- WHEN THE DEPTH OF THE COVER OVER THE PROP. SANITARY OR STORM SEWERS IS LESS THAN 2.0m SEWER LINES ARE TO BE INSULATED. THE INSULATION TO BE STYROFOAM BRAND H.I. TYPE IV OR EQUAL

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NOTES AND DETAILS

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OTTAWA, ON

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