PROPOSED MIXED-USE RETAIL & RENTAL APARTMENT BUILDING
1050&1060 BANK STREET
OTTAWA, ON

SITE SERVICING PLAN

Contract No.	Drawing No. C001
Sheet No.	1 of 5
Asset No.	
Asset Group	
Des: DG	Chk'd: JF
Dwn: NI	Chk'd: JF
Utility Circulation No.:	CTY----
Construction Inspector:	
Scale: 1:150 HORIZONTAL 0m 2.5 5	

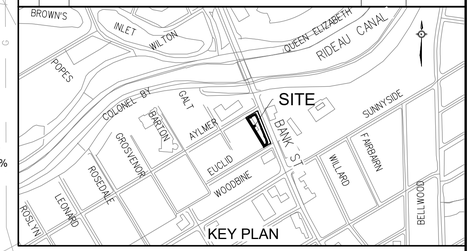
LICENSED PROFESSIONAL ENGINEER J.G. FOOKES 2020/12/15 PROVINCE OF ONTARIO

NOTE:
The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

MORRISON HERSHFIELD
200-2932 BASELINE RD.
OTTAWA, ON K2H 1B1

REVISIONS

No.	Description	By	Date (dd/mm/yy)
0	ISSUED FOR SITE PLAN APPROVAL	J.F.	02/12/19
1	RE-ISSUED FOR SITE PLAN APPROVAL	J.F.	15/12/20



AYLMER AVENUE

BANK STREET

EUCLID AVENUE

PROPOSED 6-STOREY MIXED-USE BUILDING
FFE=71.56m
BFE=68.66m
TOF = 71.71m
USF=68.16m

BLDG. ENTRANCE ELEV=72.20m

FFE AT REAR ENTRANCE DOORS=72.76m

EXISTING WATER SERVICE TO BE BLANKED AT THE MAIN BY CITY FORCES. EXCAVATION, BACKFILL, REINSTATEMENT BY CONTRACTOR. ROAD CUT REINSTATEMENT AS PER CITY OF OTTAWA STD. R10

SILVA CELL REFER TO LANDSCAPE FOR DETAILS TYP.

TREE PLANTER REFER TO LANDSCAPE FOR DETAILS TYP.

CONNECT TO EXISTING 300mmØ PVC SANITARY SEWER WITH TEE. EXISTING INVERT=66.72±. EXISTING SPRING LINE ELEVATION=66.87±. PROPOSED INVERT AT CONNECTION=66.87±. CONTRACTOR TO CONFIRM EXACT ELEVATION OF SEWER PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES. ROAD CUT REINSTATEMENT AS PER CITY OF OTTAWA STANDARD R10. CONNECTION TO SEWERMAIN PER S11.1

TVS CONNECTION TO EXISTING 300mmØ WATERMAIN BY CITY FORCES. EXCAVATION, BACKFILL, REINSTATEMENT BY CONTRACTOR. ROAD CUT REINSTATEMENT AS PER CITY OF OTTAWA STD. R10

12.6m - 150mmØ PVC DR35 SAN @ 2.0%

200mmØ PVC DR18 WM

WASTEWATER SAMPLING CHAMBER AS PER S18.1

REMOVE STORM SERVICE WHERE IN CONFLICT WITH WATERMAIN TRENCH.

FIRE DEPARTMENT CONNECTION

EXISTING WATER SERVICE TO BE BLANKED AT THE MAIN BY CITY FORCES. EXCAVATION, BACKFILL, REINSTATEMENT BY CONTRACTOR. ROAD CUT REINSTATEMENT AS PER CITY OF OTTAWA STD. R10

CONNECT TO EXISTING 375mmØ CONC. STORM SEWER WITH TEE. EXISTING INVERT=69.02±. EXISTING SPRING LINE ELEVATION=69.21±. PROPOSED INVERT AT CONNECTION=69.21±. CONTRACTOR TO CONFIRM EXACT ELEVATION OF SEWER PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES. ROAD CUT REINSTATEMENT AS PER CITY OF OTTAWA STANDARD R10. CONNECTION TO SEWERMAIN PER S11 AND 11.2

STM INV=69.02

REMOVE ALL EXISTING ON-SITE WATER SERVICES AND BLANK AT THE MAIN (BLANKING TO BE BY CITY FORCES. TYP.)

CAP ALL EXISTING STORM & SANITARY SERVICES AT THE PROPERTY LINE. ABANDON EXISTING SERVICES WITHIN THE R.O.W. PER STANDARD CITY OF OTTAWA DETAIL S11.4. (TYPICAL).

NOTE THAT NOT ALL SERVICES ARE SHOWN.CONTRACTOR IS RESPONSIBLE FOR LOCATING, CAPPING& ABANDONING ALL SERVICES& ASSOCIATED ROAD REINSTATEMENT.

SAN INV=67.61

T/WM=69.13

STORM WATER PUMP FOR RAMP AND FOUNDATION DRAIN BY MECHANICAL. CAPACITY 6.4L/S DISCHARGE DOWNSTREAM OF ICD.

PROPERTY LINE

PLANTER T/W=72.35

TVS CONNECTION TO EX 200mmØ WM BY CITY FORCES. EXCAVATION, BACKFILL & REINSTATEMENT BY CONTRACTOR. ROAD CUT REINSTATEMENT AS PER CITY STD. DETAIL R10

FH1 FL.ELEV=72.29

2.2m - 150mmØ PVC DR18 HYD LEAD

SITE BENCHMARK Fire Hydrant Top of Spindle Elevation = 73.22

OUTLINE OF SIXTH FLOOR ABOVE

OUTLINE OF FIFTH FLOOR ABOVE

STORM WATER STORAGE ACO STORMBRIXX OR APPROVED EQUIVALENT. APPROX. DIMENSIONS 21.6mx2.4mx1.2m (MIN 60m³ STORAGE)

STM INV=70.85

0.8m - 250mmØ PVC DR35 STM @ 2.0%

1.1m - 150mmØ PVC DR35 STM@2.0% INV=69.47 TEE CONNECTION FOR STORM PUMP DISCHARGE- CAPPED 1m FROM FOUNDATION WALL

3.8m - 250mmØ PVC DR35 STM@2.9%

19.2m - 250mmØ PVC DR35 STM @ 2.0%

CLAY SEAL

CB1 T/G=71.51 S INV=70.30

6.1m - 200mmØ PVC DR35 CB LEAD@2.0%

PLANTER T/W=72.04

STMH1 WITH ICD T/G=71.86 NE INV=69.70 NW INV=69.76 CB LEAD=70.18

PLANTER T/W=72.12

RAMP BELOW

TANK INV=69.65 INLET INV=70.82 OUTLET INV=69.95

GAS METER

CBMH 1 T/G=72.07 SE INV=69.87 NW INV=69.90

2.2m - 250mmØ PVC DR35 STM@2.3%

REAR PASSAGE

ACCESS PORT FOR INSPECTION AND CLEANING WITH S24.1 COVER

TRENCH DRAIN BY MECHANICAL DIRECTED TO STORM WATER PUMP

COORDINATE WITH HYDRO TO RELOCATE ANCHOR AND GUY

EXISTING FIRE HYDRANT TO BE BLANKED AT WM BY CITY FORCES

LEGEND

- NEW WATERMAIN
- NEW SANITARY SEWER
- NEW STORM SEWER
- NEW MANHOLE
- VB NEW VALVE AND VALVE BOX
- NEW HYDRANT
- NEW CAP
- NEW CATCH BASIN
- NEW STORM CB LEAD
- NEW ENTRANCE
- NEW FIRE DEPARTMENT CONNECTION
- RD NEW ROOF DRAIN
- NEW THERMAL INSULATION FOR SHALLOW SEWERS
- ST EXISTING STORM SEWER
- S EXISTING SANITARY SEWER
- W EXISTING WATERMAIN
- EXTENTS OF SILVA CELL, REFER TO LANDSCAPE FOR DETAILS
- PLANTER CURB (RIBBON CURB), REFER TO LANDSCAPE FOR DETAILS

NOTES:

GENERAL

1. COORDINATES ARE IN MTM ZONE 9 (76°30' WEST LONGITUDE) NAD-83 (ORIGINAL)
2. OBTAIN ALL NECESSARY PERMITS AND APPROVALSFROM THE CITY OF OTTAWA PRIOR TO STARTING CONSTRUCTION
3. ALL MATERIALS AND CONSTRUCTION TO BE IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARDS AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS & OPSD).
4. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING.
5. REFER TO "SITE SERVICING AND STORMWATER MANAGEMENT DESIGN BRIEF, 1050&1060 BANK STREET, MIXED-USE DEVELOPMENT" PREPARED BY MORRISON HERSHFIELD FOR SITE SERVICING REPORT
6. REFER TO GEOTECHNICAL INVESTIGATION REPORT (NO. PG4506-1 DATED APRIL 8, 2020) PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT SHALL REVIEW EXCAVATIONS PRIOR TO THE PLACEMENT OF GRANULAR MATERIAL.
7. CONTRACTOR TO VERIFY ALL EXISTING UTILITY ELEVATIONS AT CONNECTION AND CROSSING LOCATIONS PRIOR TO CONSTRUCTION AND ADVISE THE ENGINEER OF ANY DISCREPANCIES.
8. UNLESS DIRECTED OTHERWISE ANY DAMAGED ASPHALT OR CURB (REGARDLESS OF WHETHER WITHIN OR EXTERNAL TO THE SITE) SHALL BE REINSTATED IN ACCORDANCE WITH CITY STD. DET. R10 AND S1,
9. UNLESS DIRECTED OTHERWISE THE CONTRACTOR SHALL REINSTATE ALL SIGNS, LIGHTING AND OTHER STREET FURNITURE DISTURBED BY THE WORK.
10. THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT TRAFFIC MANAGEMENT PLANS FOR WORK IN RIGHT OF WAY IN ACCORDANCE WITH OTM BOOK 7.
11. CLAY SEALS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAIL S8 AND SHALL BE INSTALLED AT 50m INTERVALS IN ALL PIPE TRENCHES. CLAY SEAL TO EXTEND FULL TRENCH WIDTH AND FROM BOTTOM OF TRENCH EXCAVATION TO UNDERSIDE OF ROAD STRUCTURE, WITH A MINIMUM THICKNESS OF 1m ALONG PIPE.
12. LOCATE AND CAP ALL EXISTING STORM, SANITARY AND WATER SERVICES AT THE PROPERTY LINE. ABANDON EXISTING SERVICES WITHIN THE R.O.W. PER STANDARD CITY OF OTTAWA DETAIL S11.4 (TYPICAL).
13. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF DRAINAGE LAYOUT.

SEWERS

14. ALL STORM SEWERS, SANITARY SEWERS AND CATCH BASINS LEADS SHALL BE PVC DR 35 UNLESS OTHERWISE SPECIFIED.
15. REFER TO DETAIL 1 ON DRAWING C003 FOR SEWER INSTALLATION.
16. MAINTENANCE HOLES AND CATCH BASIN MAINTENANCE HOLES ON STORM SEWERS LESS THAN 900mm DIAMETER SHALL BE CONSTRUCTED WITH A 300mm SUMP. BENCHING SHALL BE INSTALLED IN MAINTENANCE HOLES ON STORM SEWERS 900mm AND ABOVE.
17. STORM SEWER MAINTENANCE HOLE COVERS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAIL S24.1 ON FRAMES TO DETAIL S25.
18. CONTRACTOR SHALL MAINTAIN EXISTING SEWER FLOWS DURING CONSTRUCTION IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS.
19. ALL MAINTENANCE HOLES, CATCHBASINS AND CLEANOUTS SHALL BE ADJUSTED TO POST-CONSTRUCTION GRADE.
20. CCTV INSPECTION OF ALL SEWERS SHALL BE COMPLETED AS PER CITY OF OTTAWA SPECIFICATIONS PRIOR TO THE INSTALLATION OF BASE COURSE ASPHALT.
21. BACKWATER VALVES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD S14 & S14.2.

WATERMAINS

22. REFER TO DETAIL 1 ON DRAWING C003 FOR WATERMAIN INSTALLATION.
23. ALL WATERMAIN MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE 2019 EDITION OF THE CITY OF OTTAWA STANDARD SPECIFICATIONS AND STANDARD DRAWINGS. PVC PIPE TO BE CLASS 150 DR18 TO LATEST EDITION OF A.W.W.A. SPECIFICATION C900 AND CSA B137.3 LATEST AMENDMENT WITH GASKETED BELL AND SPIGOT COUPLINGS.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A WATER PERMIT AS REQUIRED FROM THE CITY OF OTTAWA, AND COMPLYING WITH ALL CITY OF OTTAWA REQUIREMENTS. THE CITY MAY REQUIRE THAT CERTAIN ACTIVITIES (E.G. VALVE OPERATION, CONNECTION OF NEW WATER SERVICE TO EXISTING WATERMAIN, DISINFECTION) BE CARRIED OUT ONLY BY CITY FORCES.
25. ALL VALVES 300mm DIAMETER AND SMALLER SHALL INCLUDE A VALVE BOX AS PER W24.
26. THE NEW WATERMAIN IS TO BE INSTALLED WITH A MINIMUM OF 2.4m COVER (INCLUDING HYDRANT LEAD). WHERE 2.4m COVER IS NOT POSSIBLE, PROVIDE INSULATION IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAILS W22 & W23.
27. THRUST RESTRAINT SHALL BE PROVIDED BY BOTH RESTRAINING/RETAINING RINGS AND THRUST BLOCKS AT ALL DEAD END CAPS, PLUGS, VALVES, BENDS AND REDUCERS AS PER CITY OF OTTAWA STANDARD DETAILS W25.3, W25.4, W25.5 AND W25.6. ALL TEMPORARY THRUST RESTRAINTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
28. TRACER WIRE SHALL BE PROVIDED FOR ALL NEW PVC WATERMAINS IN ACCORDANCE WITH THE SPECIFICATIONS AND CITY OF OTTAWA STANDARD DETAIL W36.
29. CATHODIC PROTECTION SHALL BE PROVIDED FOR ALL NEW WATERMAINS IN ACCORDANCE WITH THE SPECIFICATIONS AND CITY OF OTTAWA STANDARD DETAILS W39, W40, W41, W42 AND W47. CATHODIC PROTECTION OF EXISTING WATERMAINS SHALL ALSO BE PROVIDED AT CONNECTIONS BETWEEN EXISTING AND NEW WATERMAINS.
30. ADJUST ALL VALVE CHAMBERS, VALVE BOXES AND HYDRANTS TO FINISHED GRADE.

UTILITY NOTE

31. THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPORTING AND PROTECTING ANY EXISTING UTILITIES, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY OWNERS' REQUIREMENTS. CONTRACTOR IS REQUIRED TO OBTAIN LOCATES, IN ADVANCE OF EXCAVATION WORK, AND FORWARD COPIES OF THE LOCATES TO THE CONSULTANT AND THE OWNER PRIOR TO EXCAVATION.
32. ALL CROSSING OF EX. UTILITIES TO BE IN ACCORDANCE WITH CITY STD. DET. S10

SAIDE SAYAH
MANAGER, CENTRAL BRANCH
PLANNING, INFRASTRUCTURE & ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
By Saide Sayah at 7:29 am, Jan 28, 2021

NEW STORM STRUCTURE

STRUCTURE	STRUCTURE TYPE	COVER TYPE	TOP OF GRATE	INVERT	NORTHING	EASTING	NOTES
MHST1	701.010	S24.1	71.86	69.70 (NE) 69.76 (NW)	5028644.29	368687.58	WITH ICD
CBMH1	701.010	S19	72.07	69.90 (NW) 69.87 (SE)	5028647.12	368684.90	
CB1	705.010	S19	71.51	70.30 (SW)	5028644.91	368693.63	

INLET CONTROL DEVICE DATA TABLE - STMH1

DESIGN EVENT	ICD TYPE	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	WATER ELEVATION (m)	REQUIRED VOLUME (m³)	TOTAL VOLUME PROVIDED
1:5 YR	IPEX Tempest LMF 50	250mmØ PVC	2.0	70.73	31.9	60m³
1:100 YR	IPEX Tempest LMF 50	250mmØ PVC	2.4	71.15	59.0	

PIPE CROSSING TABLE

CROSSING	LOWER PIPE	HIGHER PIPE	CLEARANCE	SURFACE ELEVATION
A	150mmØ SAN OBV=66.94	375mmØ STM INV=69.28	2.3m±	71.09m

PROPOSED HYDRANT LEAD TABLE

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
0+000	72.04	69.64±*	TVS CONNECTION TO EXISTING 200mmØ WATERMAIN
0+001.5	72.18	69.78±	200mmØ VALVE AND VALVE BOX
0+003.0	72.23	69.83±	HYDRANT

PROPOSED WATER SERVICE TABLE

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
0+000	71.70	68.70±*	TVS CONNECTION TO EXISTING 300mmØ WATERMAIN
0+001.5	71.11	68.71±	CROSS ABOVE 300mmØ SAN (1.7m± CLEARANCE)
0+005.9	71.10	68.70±	CROSS ABOVE 375mmØ STM (0.6m± CLEARANCE)
0+013.0	71.48	69.08±	200mmØ VALVE AND VALVE BOX
0+014.6	71.53	69.13±	CAP 1.0m FROM BUILDING FACE

* TVS CONNECTION TO EXISTING 300mmØ WATERMAIN. EXACT ELEVATION TO BE FIELD DETERMINED.

D07-12-19-0215

#18110

PROPOSED MIXED-USE RETAIL & RENTAL APARTMENT BUILDING
1050&1060 BANK STREET
OTTAWA, ON

GRADING AND EROSION AND SEDIMENT CONTROL PLAN

Contract No.	Drawing No. C002
Sheet No.	2 of 5
Asset No.	
Asset Group	
Des: DG	Chk'd: JF
Dwn: NI	Chk'd: JF
Utility Circulation No.:	CTY-----
Construction Inspector:	
Scale: 1:150 HORIZONTAL 0m 2.5 5	

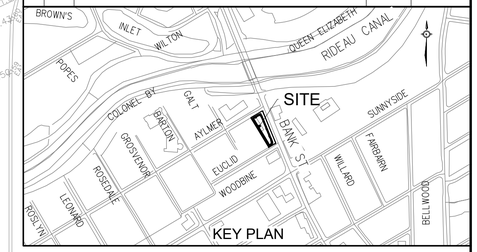
LICENSED PROFESSIONAL ENGINEER J.G. FOOKES 2020/12/15 PROVINCE OF ONTARIO

NOTE:
The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

MORRISON HERSHFIELD
200-2932 BASELINE RD.
OTTAWA, ON K2H 1B1

REVISIONS

No.	Description	By	Date (dd/mm/yy)
0	ISSUED FOR SITE PLAN APPROVAL	J.F.	02/12/19
1	RE-ISSUED FOR SITE PLAN APPROVAL	J.F.	15/12/20



LEGEND

- × 71.40 — PROPOSED ELEVATION
- × 71.65 — EXISTING ELEVATION
- × 71.40T — PROPOSED FINISH GRADE AT TOP OF WALL OR STEP
- × 71.40B — PROPOSED FINISH GRADE AT BOTTOM OF WALL OR STEP
- × 71.40TC — PROPOSED TOP OF CURB ELEVATION
- 2.0% — PROPOSED SLOPE DIRECTION
- DIRECTION OF MAJOR OVERLAND FLOW
- PROPOSED CURB
- DC — PROPOSED DEPRESSED CURB
- LIGHT DUTY SILT FENCE
- EXTENTS OF SILVA CELL, REFER TO LANDSCAPE FOR DETAILS
- PLANTER CURB (RIBBON CURB), REFER TO LANDSCAPE FOR DETAILS
- HEAVY DUTY PAVEMENT (SEE DRAWING C003 FOR DETAILS)
- CONCRETE SIDEWALK (REFER TO LANDSCAPE)
- 40mm MILLING & REINSTATEMENT WITH HL3 OR SP12.5 ASPHALTIC CONCRETE

NOTES:

GRADING

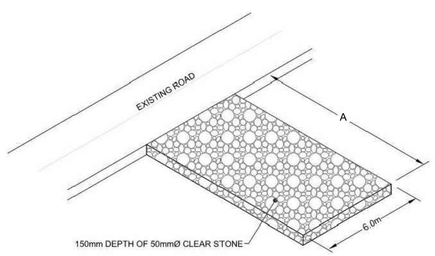
1. ALL ELEVATIONS ARE GEODETIC.
2. REFER TO ARCHITECTURAL AND LANDSCAPE DRAWINGS FOR LAYOUT, DIMENSIONS AND SURFACE FINISHES.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.
4. ALL ELEVATIONS BY CURBS ARE EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED.
5. REFER TO GEOTECHNICAL INVESTIGATION REPORT (NO. PG4506-1 DATED APRIL 8, 2020) PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT SHALL REVIEW EXCAVATIONS PRIOR TO THE PLACEMENT OF GRANULAR MATERIAL.
6. REINSTATE ALL DISTURBED/DAMAGED AREAS TO THEIR ORIGINAL CONDITION OR BETTER.
7. PROVIDE POSITIVE DRAINAGE, MATCHING EXISTING OVERALL DRAINAGE PATTERN INDICATED.
8. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA AND/OR ONTARIO PROVINCIAL STANDARDS.
9. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED
10. AREAS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
11. ALL AREAS SHALL DRAIN AT A MINIMUM OF 1%. ANY DISCREPANCIES PREVENTING THIS SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
12. BLEND NEW EARTHWORK INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDING AT ALL TOP AND BOTTOM OF SLOPES.
13. ALL SIDEWALKS CONSTRUCTED IN CITY ROW. SHALL BE MONOLITHIC CONCRETE CURB AND SIDEWALK PER STD. DETAIL SC 2 UNLESS OTHERWISE INDICATED.
14. SAW CUT AND KEY GRIND ASPHALT AT ALL TIE-INS PER CITY OF OTTAWA STANDARD R10.
15. PROVIDE LINE PAINTING.
16. SNOW IS TO BE REMOVED FROM THE SITE. ON SITE SNOW STORAGE IS NOT PROPOSED.
17. TOP OF FOUNDATION TO BE MINIMUM 0.15m ABOVE FINISHED GRADE.

EROSION AND SEDIMENT CONTROL

18. 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
19. THE AMOUNT OF EXPOSED SOIL, USING FILTER CLOTH UNDER THE GRATES OF CATCHBASINS AND MANHOLES, AND INSTALLING SILT FENCES AND OTHER EFFECTIVE SEDIMENT TRAPS. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
20. THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER.
21. REGULAR INSPECTION AND MAINTENANCE OF THE EROSION AND SEDIMENT MEASURES SHALL BE UNDERTAKEN. THE IMPLEMENTATION AND ADJUSTMENT AND/OR CORRECTIVE MAINTENANCE OF THE EROSION AND SEDIMENT MEASURES IS AN INTEGRAL PART OF THE PLAN AND MUST BE PERFORMED.
22. GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STRUCTURE FRAME AND COVER FOR ALL MANHOLES, CATCHBASINS, AND CATCHBASIN MANHOLES IN THE VICINITY OF WORK.
23. THE CONTRACTOR SHALL MAINTAIN ADJACENT ROADS IN A CLEAN CONDITION AT ALL TIMES.
24. PROVIDE MUD MATS AT SITE CONSTRUCTION ENTRANCE(S) AND EGRESS(S).

UTILITY NOTE

25. THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPORTING AND PROTECTING ANY EXISTING UTILITIES, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY OWNERS' REQUIREMENTS. CONTRACTOR IS REQUIRED TO OBTAIN LOCATES, IN ADVANCE OF EXCAVATION WORK, AND FORWARD COPIES OF THE LOCATES TO THE CONSULTANT AND THE OWNER PRIOR TO EXCAVATION. HAND EXCAVATION IS REQUIRED PER UTILITY OWNERS REQUIREMENTS.



MUD MAT - CONSTRUCTION ACCESS
NTS

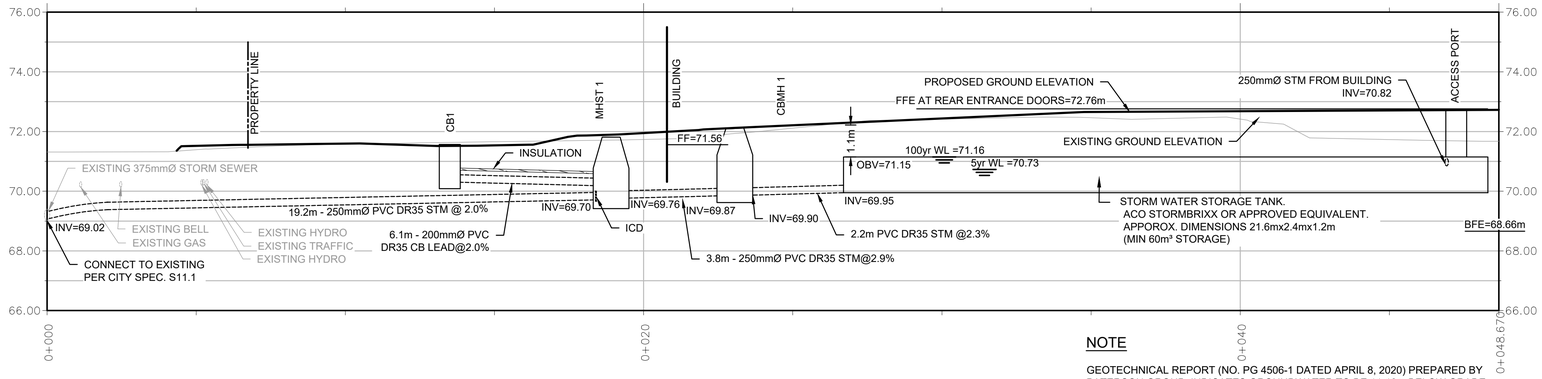
A - TO BE DETERMINED ON SITE IN CONJUNCTION WITH CONSTRUCTION MANAGER

SAIDE SAYAH
MANAGER, CENTRAL BRANCH
PLANNING, INFRASTRUCTURE & ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
By Saide Sayah at 7:30 am, Jan 28, 2021

D07-12-19-0215

#18110



SECTION A - A
SCALE 1:100

NOTE

GEOTECHNICAL REPORT (NO. PG 4506-1 DATED APRIL 8, 2020) PREPARED BY PATERSON GROUP, INDICATES GROUNDWATER TO BE 11-12m BELOW GRADE. HOWEVER AN IMPERMEABLE LINER IS REQUIRED FOR THE STORM WATER STORAGE TANK TO PREVENT EXFILTRATION FROM THE TANK IN THE VICINITY OF THE PERIMETER FOUNDATION DRAIN OF THE PROPOSED BUILDING.

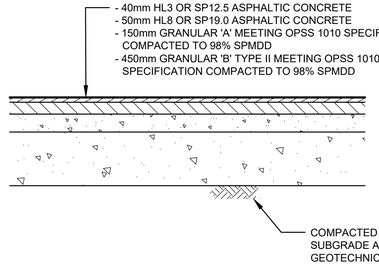
NOTES:

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
3. ALL DIMENSION ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.
4. WHEN NECESSARY POOR SOILS SHALL BE EXCAVATED TO CREATE A FOUNDATION THAT SHALL BE FILLED TO THE BOTTOM OF THE BEDDING WITH GRANULAR 'B'.
5. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER IS NOT PERMITTED ANYWHERE ON THIS SITE.
6. ALL EXISTING ASPHALT AND CONCRETE REMOVAL LIMITS TO BE SAWCUT.
7. 300 MM KEY TO BE SAWCUT AND REMOVED OR MILLED.
8. ROAD REINSTATEMENT ON THE CURB SIDE OF THE TRENCH EXCAVATION SHALL EXTEND TO THE CURB FACE.
9. TACK COAT SHALL BE APPLIED TO ALL MILLED SURFACES

1 C001 WATERMAIN AND SEWER INSTALLATION TYPICAL DETAIL
N.T.S.



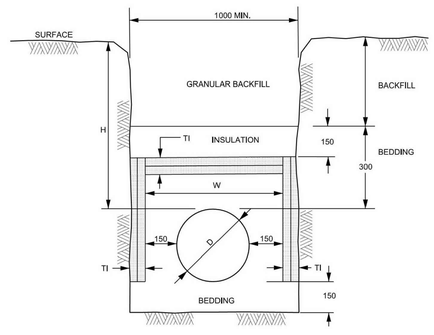
HEAVY DUTY PAVEMENT
N.T.S.

INSULATION NOTE

THE THICKNESS OF SEWER INSULATION SHALL BE THE EQUIVALENT OF 25mm FOR EVERY 300mm REDUCTION IN THE REQUIRED DEPTH OF COVER LESS THAN 1500mm (SEE TABLE BELOW)

TI=THICKNESS OF INSULATION (mm)
H=DEPTH OF COVER
W=D+300 (1000 MIN.)
W=WIDTH OF INSULATION (mm)
D=O.D. OF PIPE (mm)

COVER (mm)	INSULATION THICKNESS (mm)
1500-1200	75
1200-900	100
900-600	125



INSULATION DETAIL FOR SHALLOW SEWERS
N.T.S.

PROPOSED MIXED-USE RETAIL & RENTAL APARTMENT BUILDING
1050&1060 BANK STREET
OTTAWA, ON

DETAILS

Contract No.
Drawing No. C003
Sheet No. 3 of 5
Asset No.
Asset Group
Des: DG Chk'd: JF
Dwn: NI Chk'd: JF
Utility Circulation No.: CTY-----
Construction Inspector:
Scale:

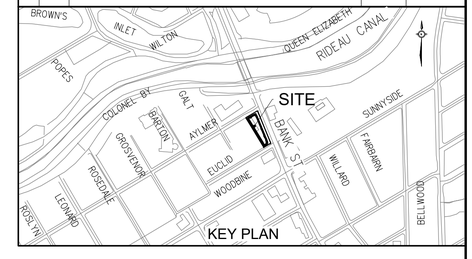
LICENSED PROFESSIONAL ENGINEER
J.G. FOOKES
2020/09/24
PROVINCE OF ONTARIO

NOTE:
The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

MORRISON HERSHFIELD
200-2932 BASELINE RD.
OTTAWA, ON K2H 1B1

REVISIONS

No.	Description	By	Date (dd/mm/yy)
0	ISSUED FOR SITE PLAN APPROVAL	J.F.	02/12/19
1	RE-ISSUED FOR SITE PLAN APPROVAL	J.F.	24/09/20



SAIDE SAYAH
MANAGER, CENTRAL BRANCH
PLANNING, INFRASTRUCTURE & ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
By Saide Sayah at 7:31 am, Jan 28, 2021

D07-12-19-0215

#18110

SAIDE SAYAH
MANAGER, CENTRAL BRANCH
PLANNING, INFRASTRUCTURE & ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
By Saide Sayah at 7:32 am, Jan 28, 2021

PL1
0.111 | 0.90

EBLDG1
0.031 | 0.90

EBLDG2
0.016 | 0.90

EST1
0.0014 | 0.90

SITE BENCHMARK
Fire Hydrant
Top of Spindle
Elevation = 73.22

MORRISON HERSHFIELD

1050 AND 1060 BANK STREET
EXISTING STORM DRAINAGE AREA PLAN

LICENSED PROFESSIONAL ENGINEER
J.G. FOOKES
2021/01/08
PROVINCE OF ONTARIO

LEGEND

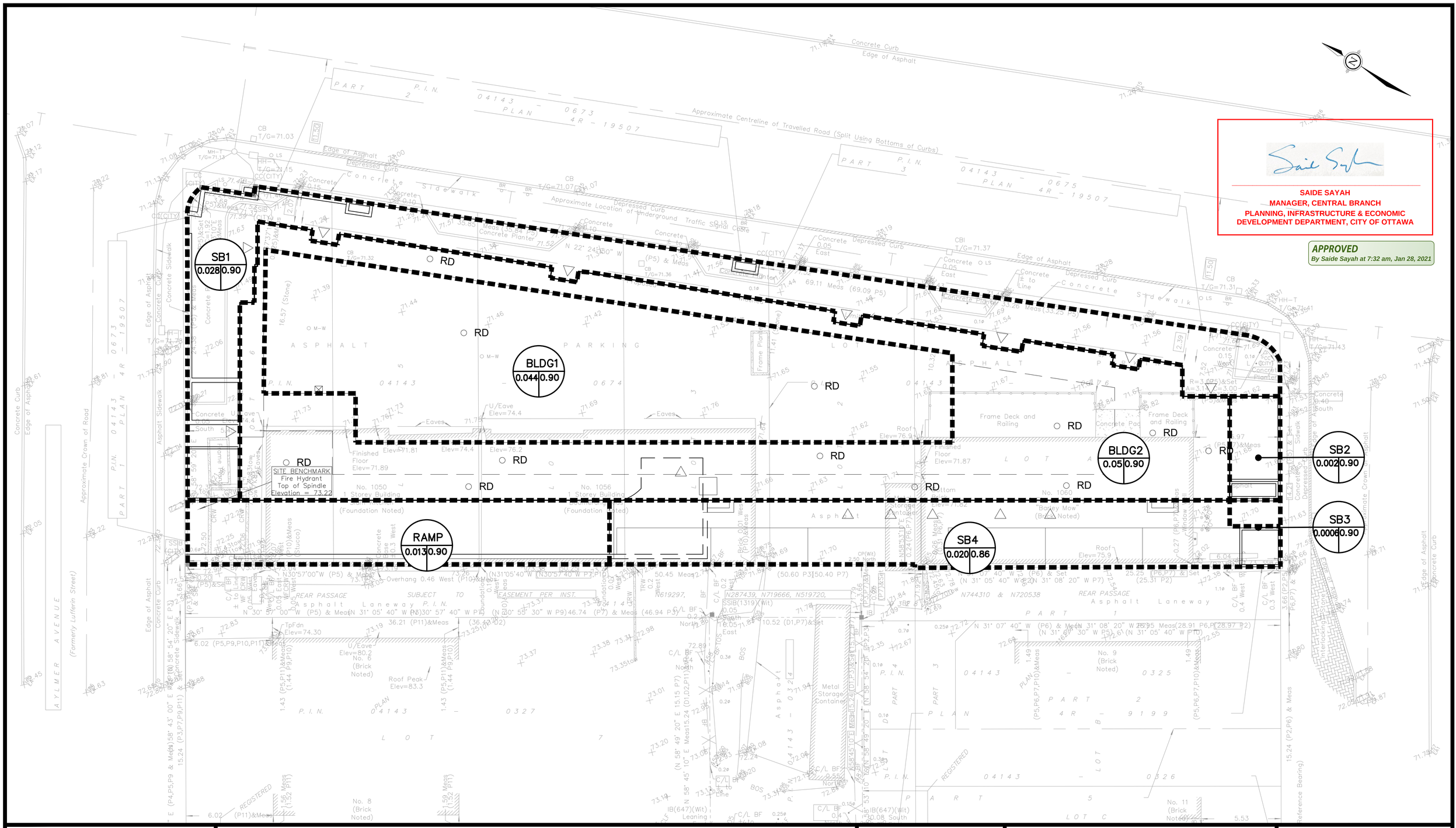
AREA ID
RUNOFF COEFFICIENT %
AREA ha
DRAINAGE AREA CHARACTERISTICS

C004

DATE: 2021-01-08

SCALE: N.T.S.

2021-Jan-08 9:00:45 AM P:\2019\190500700-1050-1060 Bank Street-Civil\09. CAD\07 Sheets\Existing Catchment Areas.dwg



SAIDE SAYAH
MANAGER, CENTRAL BRANCH
PLANNING, INFRASTRUCTURE & ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
By Saide Sayah at 7:32 am, Jan 28, 2021

MORRISON HERSHFIELD

1050 AND 1060 BANK STREET
PROPOSED STORM DRAINAGE AREA PLAN

LICENSED PROFESSIONAL ENGINEER
J.G. FOOKES
2020/09/24
PROVINCE OF ONTARIO

LEGEND

AREA ID — RUNOFF COEFFICIENT % — AREA ha

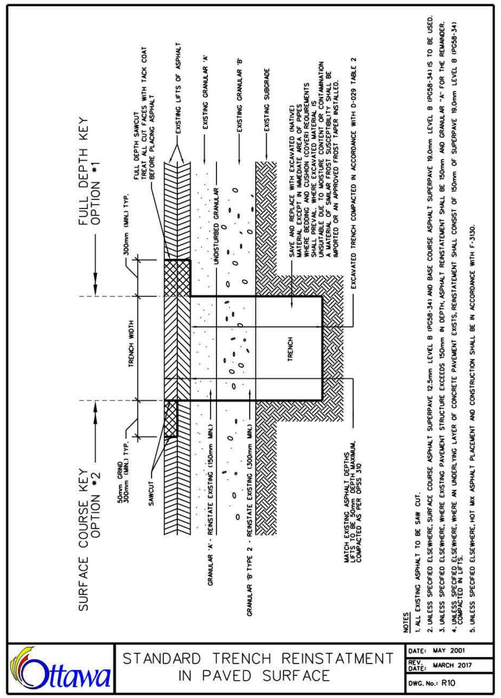
DRAINAGE AREA CHARACTERISTICS

C005

DATE: 2020-09-24

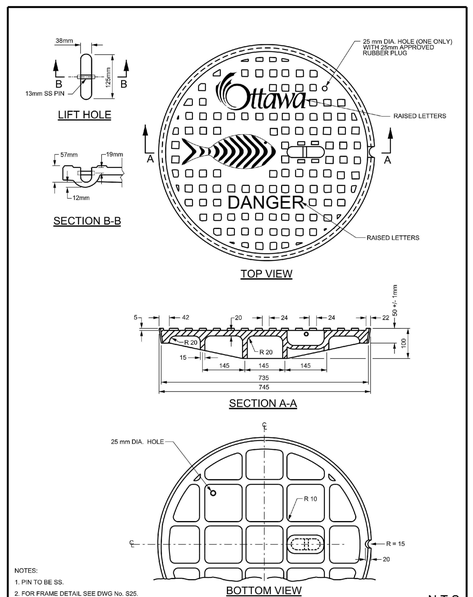
SCALE: N.T.S.

2020-Sep-21 3:35:20 PM P:\2019\190500700-1050-1060 Bank Street-Civil\09. CAD\07 Sheets\Proposed Catchment Areas.dwg



NOTES
1. ALL EXISTING ASPHALT TO BE SAW CUT.
2. UNLESS SPECIFIED ELSEWHERE, SURFACE COURSE ASPHALT SUPERPAVE 12.5mm LEVEL B (PDS8-341) AND BASE COURSE ASPHALT SUPERPAVE 19.0mm LEVEL B (PDS8-341) IS TO BE USED.
3. UNLESS SPECIFIED ELSEWHERE, WHERE EXISTING PAVEMENT STRUCTURE EXCEEDS 150mm IN DEPTH, ASPHALT REINSTATEMENT SHALL BE 150mm AND GRANULAR 'A' FOR THE REMAINDER.
4. UNLESS SPECIFIED ELSEWHERE, WHERE AN UNDERLYING LAYER OF CONCRETE PAVEMENT EXISTS, REINSTATEMENT SHALL CONSIST OF SUPERPAVE 19.0mm LEVEL B (PDS8-341) OVER 300mm GRANULAR 'B' TYPE 2.
5. UNLESS SPECIFIED ELSEWHERE, HOT MIX ASPHALT PLACEMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH F-3300.

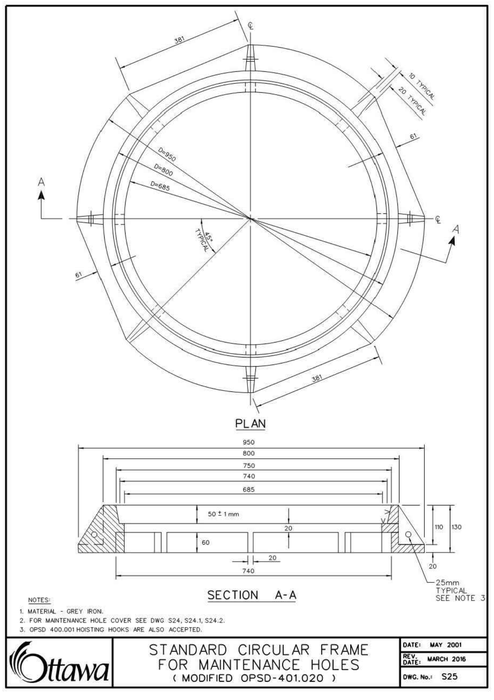
STANDARD TRENCH REINSTATMENT IN PAVED SURFACE	DATE: MAY 2001
	REV. DATE: MARCH 2017
	DWG. No.: R10



NOTES:
1. PIN TO BE SS.
2. FOR FRAME DETAIL SEE DWG No. S25.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

N.T.S.

STANDARD CIRCULAR STORM MAINTENANCE HOLE COVER	DATE: MARCH 2010
	REV. DATE: MARCH 2017
	DWG. No.: S24.1



NOTES:
1. MATERIAL - GREY IRON.
2. FOR MAINTENANCE HOLE COVER SEE DWG S24, S24.1, S24.2.
3. OPSD 400.001 HOISTING HOOKS ARE ALSO ACCEPTED.

STANDARD CIRCULAR FRAME FOR MAINTENANCE HOLES (MODIFIED OPSD-401.020)	DATE: MAY 2001
	REV. DATE: MARCH 2016
	DWG. No.: S25

PROPOSED MIXED-USE RETAIL
& RENTAL APARTMENT BUILDING
1050&1060 BANK STREET
OTTAWA, ON

TYPICAL DETAILS

Contract No.	Drawing No. C100
Sheet No.	of 5
Asset No.	
Asset Group	
Des: DG	Chk'd: JF
Dwn: NI	Chk'd: JF
Utility Circulation No.:	CTY-....
Construction Inspector:	
Scale:	

LICENSED PROFESSIONAL ENGINEER
J.G. FOOKES
2020/09/24
PROVINCE OF ONTARIO

NOTE:
The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

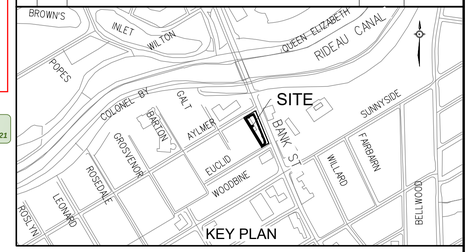
MORRISON HERSHFIELD
200-2932 BASELINE RD.
OTTAWA, ON K2H 1B1

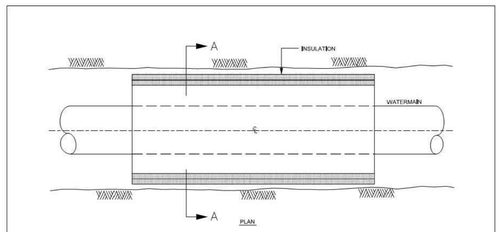
REVISIONS

No.	Description	By	Date (dd/mm/yy)
0	ISSUED FOR SITE PLAN APPROVAL	J.F.	02/12/19
1	RE-ISSUED FOR SITE PLAN APPROVAL	J.F.	24/09/20

SAIDE SAYAH
MANAGER, CENTRAL BRANCH
PLANNING, INFRASTRUCTURE & ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
By Saide Sayah at 7:33 am, Jan 28, 2021





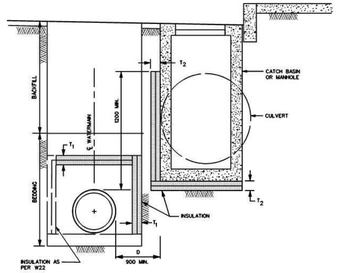
NOTES

FOR 150 - 400mm (NOMINAL DIAMETER) WATERMAINS, WHERE THE DEPTH OF COVER IS LESS THAN 2400mm

1. INCREMENTS OF THICKNESS SHALL BE ADJUSTABLE TO 25mm.
2. IN PROXIMITY OF MAINTENANCE HOLES, CULVERTS, CATCHBASINS, ETC., INSULATION SHALL BE PLACED PER DETAIL W23
3. DEPTH OF COVER LESS THAN 1200mm REQUIRES SPECIAL DESIGN
4. STAGGER JOINTS OF MULTIPLE SHEETS.
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

THERMAL INSULATION FOR WATERMAINS IN SHALLOW TRENCHES	DATE: MAY 2001
	REV. DATE: MARCH 2013
	DWG. No.: W22

INSULATION REFERENCE TABLE	
D DISTANCE FROM C.B. OR M.H. WALL	T REQUIRED INSULATION THICKNESS $T=T_1+T_2$
2400 - 1800 mm.	50 mm
1800 - 1500 mm.	75 mm
1500 - 1200 mm.	100 mm
1200 - 900 mm.	125 mm

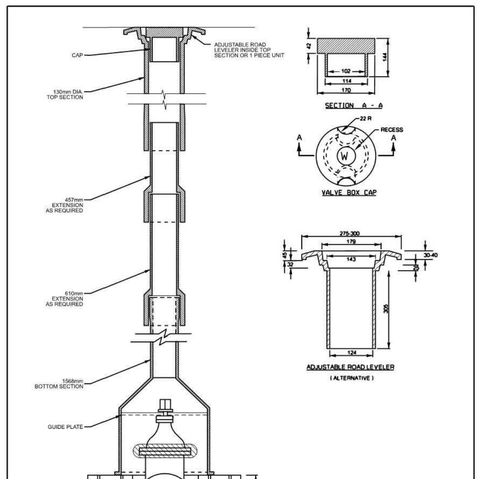


NOTES

FOR WATERMAINS & SERVICES IN PROXIMITY TO CATCHBASINS MAINTENANCE HOLES, CULVERTS ETC.

1. INSULATION SHALL EXTEND 1000 mm EACH WAY FROM THE ENDS OF THE STRUCTURE, PARALLELED TO THE WATERMAIN.
2. STAGGER JOINTS OF MULTIPLE SHEETS.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
4. INSULATION CAN BE AT EITHER LOCATION OR BOTH.

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

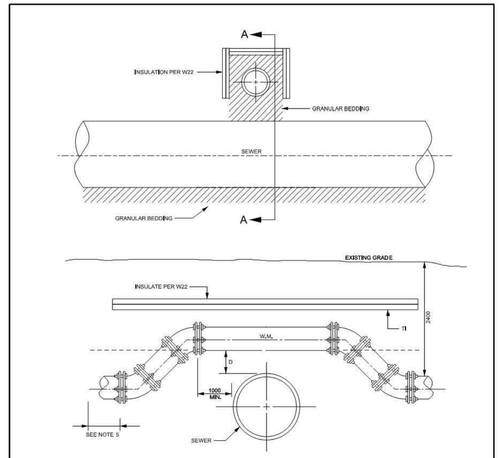


NOTES

FOR AUXILIARY, SERVICES AND ISOLATION VALVES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
2. FOR 200 AND 250mm VALVES, ADD BEDDING BELOW THE CONCRETE BLOCKS AS REQUIRED TO RAISE BELL HIGH ENOUGH TO PREVENT CONTACT WITH THE VALVE BONNET

VALVE BOX ASSEMBLY	DATE: MAY 2001
	REV. DATE: MARCH 2019
	DWG. No. W24



NOTES:

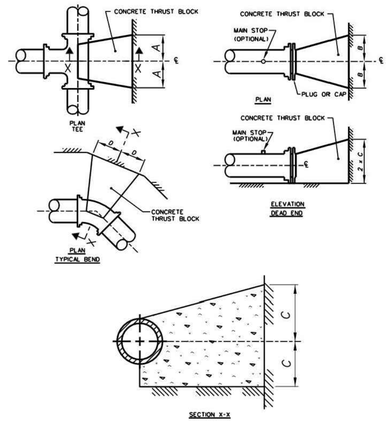
FOR WATERMAIN 100mm (NOMINAL) TO 400mm (NOMINAL)

1. BARREL TO BARREL SEPARATION (O) SHALL BE 250mm MINIMUM.
2. THRUST BLOCKS FOR MAINS LARGER THAN 400mm (NOMINAL) SHALL BE PER SPECIAL DESIGN.
3. FOR 300mm (NOMINAL) AND 400mm (NOMINAL) MAINS, BENDS SHALL BE MAX. 22°.30'.
4. CONCRETE FOR THRUST BLOCKS SHALL BE 20 MPa.
5. REFER TO W25.0 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. DESIGNED TO MEET THE INTENT OF THE MOE WATERMAIN DESIGN CRITERIA JUNE 2012.

WATERMAIN CROSSING OVER SEWER	DATE: MAY 2001
	REV. DATE: MARCH 2013
	DWG. No.: W25.2

D07-12-19-0215

#18110



NOTES:

1. CONCRETE SHALL BE PLACED TO WITHIN 50mm OF FACE OF THE BELL.
2. BOND BREAKER TO BE USED BETWEEN CONCRETE AND FITTINGS.
3. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
4. REFER TO W25.4 FOR ADDITIONAL REQUIREMENTS.
5. THRUST BLOCKS SHALL BE 20 MPa CONCRETE AND AS SHOWN ON ABOVE DRAWINGS UNLESS OTHERWISE DIRECTED BY THE CONTRACT ADMINISTRATOR.THE BLOCK SHALL BE CENTERED ON THE THRUST FORCE AND SHALL ALSO PARTIALLY CRADLE THE FITTING TO DISTRIBUTE THE FORCE.THE SIDES OF THE BLOCK SHALL BE 80mm FROM THE JOINT ON EITHER SIDE OF THE BEND OR TEE.
6. THE CONCRETE WHERE POSSIBLE SHALL BE PLACED AGAINST UNDISTURBED SOIL AT THE BOTTOM AND SIDE OF THE TRENCH. WHERE IT IS NOT POSSIBLE, THE FILL BETWEEN THE BEARING SURFACE AND THE UNDISTURBED SOIL MUST BE COMPACTED IN ACCORDANCE WITH D-029.
7. EXCEPT FOR THE ADDITION OF WATER,CONCRETE FOR THRUST BLOCKS SHALL COME PREMIXED FROM CONCRETE SUPPLIER, AS 'READY MIX'FROM A CONCRETE TRUCK.ON-SITE MIXING OF CEMENT,SAND AND AGGREGATE ETC.BY THE CONTRACTOR, FOR THE PURPOSE OF MAKING CONCRETE THRUST BLOCKS/ ANCHORS WILL NOT BE ACCEPTED.

Ottawa	CONCRETE THRUST BLOCKS FOR PVC AND DI PIPE 400mm AND UNDER	DATE: MAY 2001 REV. DATE: MARCH 2016 DWG. No.: W25.3

1. SOIL DESCRIPTION: VERY FINE SANDS, SANDY CLAYS, CLAYS.
SOILS WITH TYPICAL BEARING STRENGTH OF 100 TO 199 KPa

PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	250	250	200	200
152	400	400	250	300
203	550	550	300	450
254	650	650	400	500
305	800	800	450	650
406	1050	1050	600	850

2. SOIL DESCRIPTION: SILTY SAND GRAVELS OR CLAYEY SAND GRAVEL MIXTURES, MODERATE AMOUNT OF FINES.
SOILS WITH TYPICAL BEARING STRENGTH OF 200 TO 299 KPa

PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	200	200	150	150
152	250	250	200	200
203	350	350	250	270
254	450	450	300	350
305	500	500	350	400
406	750	750	400	600

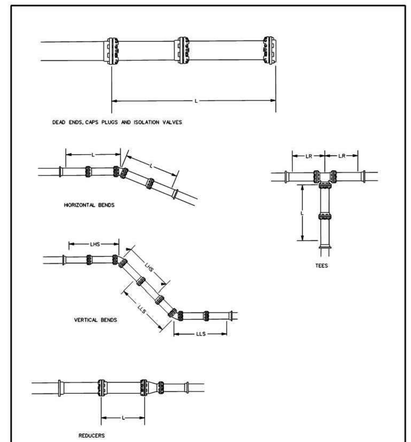
3. SOIL DESCRIPTION: SANDS, GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.
SOILS WITH TYPICAL BEARING STRENGTH OF 300 KPa AND OVER

PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	150	150	150	150
152	200	200	200	200
203	300	300	200	230
254	400	400	250	270
305	450	450	300	300
406	650	650	350	450

NOTES:

1. THE ABOVE THRUST BLOCK DIMENSIONS MEET OR EXCEED THE WATERMAIN DESIGN CRITERIA FOR FUTURE ALTERATIONS AUTHORIZED UNDER A DRINKING WATER WORKS PERMIT.
2. THE ASSUMPTIONS MADE FOR THE ABOVE CALCULATIONS ARE AS FOLLOWS:
   a) MAXIMUM OPERATING PRESSURE OF 100 psi,
   b) MAXIMUM SURGE PRESSURE WITH A FLOW VELOCITY CHANGE OF 3.6 m/s OF 115 psi (115 psi FOR CLASS 52 DI AND FOR PVC MAX. SURGE IS 35 psi)
3. THE TABLES APPLY TO BOTH DUCTILE IRON AND PVC. WHERE ONE LENGTH EXCEEDED THE OTHER THE LONGER LENGTH WAS USED.
4. DIMENSIONS MAY BE ADJUSTED SO LONG AS THE BEARING SURFACE AREA OF THE THRUST BLOCK IS NOT REDUCED.
5. TO BE USED IN CONJUNCTION WITH W25.3.

Ottawa	THRUST BLOCK DIMENSION TABLES FOR PVC AND DI PIPE 400mm AND UNDER	DATE: MAY 2001 REV. DATE: MARCH 2011 DWG. No.: W25.4



NOTES:

1. ANY JOINT THAT FALLS WITHIN THE RECOMMENDED LENGTH (L) SHALL BE RESTRAINED. SEE DRAWING W25.6
2. TO REDUCE THE NUMBER OF RESTRAINERS REQUIRED THE USE OF FULL PIPE LENGTHS IS RECOMMENDED IN THESE AREAS.

Ottawa	RESTRAINING AND RETAINING RINGS FOR PVC AND DI PIPE 400mm AND UNDER	DATE: MAY 2001 REV. DATE: NONE DWG. No.: W25.5

SAIDE SAYAH
MANAGER, CENTRAL BRANCH
PLANNING, INFRASTRUCTURE & ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

APPROVED
By Saide Sayah at 7:33 am, Jan 28, 2021

PROPOSED MIXED-USE RETAIL & RENTAL APARTMENT BUILDING
1050&1060 BANK STREET
OTTAWA, ON

TYPICAL DETAILS

Contract No.
Drawing No. C101
Sheet No. of 5
Asset No.
Asset Group
Des: DG Chk'd: JF
Dwn: NI Chk'd: JF
Utility Circulation No.: CTY-----
Construction Inspector:
Scale:

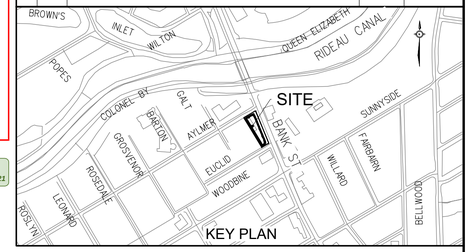
LICENSED PROFESSIONAL ENGINEER J.G. FOOKES 2020/09/24 PROVINCE OF ONTARIO

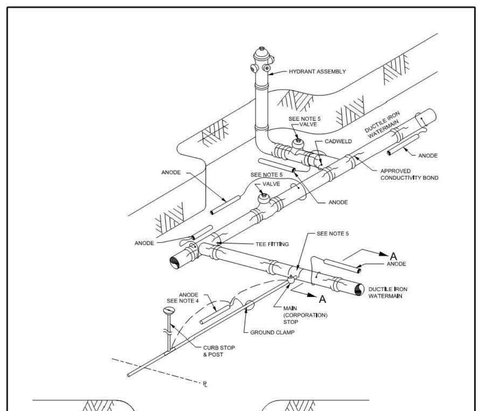
NOTE:
The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

MORRISON HERSHFIELD
200-2932 BASELINE RD.
OTTAWA, ON K2H 1B1

REVISIONS

No.	Description	By	Date (dd/mm/yy)
0	ISSUED FOR SITE PLAN APPROVAL	J.F.	02/12/19
1	RE-ISSUED FOR SITE PLAN APPROVAL	J.F.	24/09/20



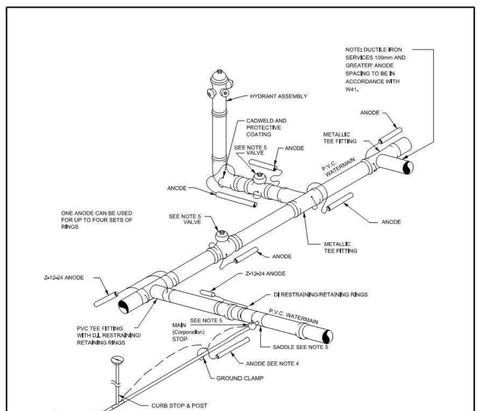


NOTES:

1. ANODE CONNECTING WIRE TO BE LOOPED AROUND PIPES / FITTINGS AND KNOTTED.
2. PROTECTIVE COATING TO BE APPLIED TO ALL CADWELDS.
3. ANODE TYPE & SPACING AS PER W40.
4. CONNECT ANODE TO COPPER SERVICES USING A GROUND CLAMP AND FOR PEX SERVICES CONNECT ANODE TO TRACER WIRE TERMINALS ON BOTH MAIN AND CURB STOPS.
5. PROTECT AUXILIARY VALVES, ISOLATION VALVES, SADDLES AND MAIN STOPS WITH A PETROLATUM WAX TAPE COATING SYSTEM.FOR PEX SERVICES ALSO WAX TAPE CURB STOP UP TO THE BASE OF THE TEE HEAD.
6. ALL DIMENSIONS ARE IN MILLIMETERS.

N.T.S.

Ottawa	CATHODIC PROTECTION FOR DUCTILE IRON WATERMAIN SYSTEMS	DATE: MAY 2001 REV. DATE: MARCH 2013 DWG. No.: W39



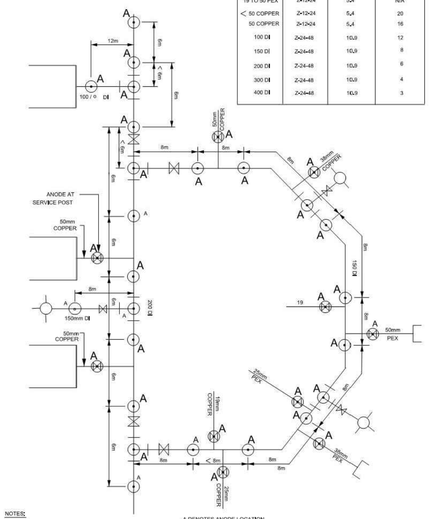
NOTES:

1. ANODE CONNECTING WIRE TO BE LOOPED AROUND PIPES / FITTINGS AND KNOTTED.
2. PROTECTIVE COATING TO BE APPLIED TO ALL CADWELDS.
3. ANODE TYPE & SPACING AS PER W40.
4. CONNECT ANODE TO COPPER SERVICES USING A GROUND CLAMP AND FOR PEX SERVICES CONNECT ANODE TO TRACER WIRE TERMINALS ON BOTH MAIN AND CURB STOPS.
5. PROTECT AUXILIARY VALVES, ISOLATION VALVES, SADDLES AND MAIN STOPS WITH A PETROLATUM WAX TAPE COATING SYSTEM.FOR PEX SERVICES ALSO WAX TAPE CURB STOP UP TO THE BASE OF THE TEE HEAD.
6. ALL DIMENSIONS ARE IN MILLIMETERS.

N.T.S.

Ottawa	CATHODIC PROTECTION FOR PVC WATERMAIN SYSTEMS	DATE: MAY 2001 REV. DATE: MARCH 2013 DWG. No.: W40

SIZE (mm)	ANODE TYPE	WEIGHT (Kg)	SPACING (m)
19 TO 50 PEX	Z-12-24	5.4	N/A
< 50 COPPER	Z-12-24	5.4	20
50 COPPER	Z-12-24	5.4	16
100 DI	Z-24-48	10.9	12
150 DI	Z-24-48	10.9	8
200 DI	Z-24-48	10.9	6
300 DI	Z-24-48	10.9	4
400 DI	Z-24-48	10.9	3



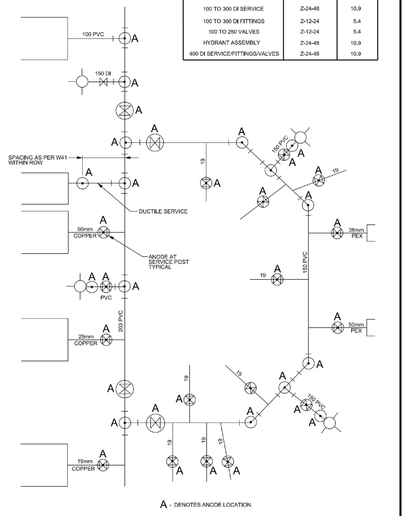
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

N.T.S.

Ottawa	TYPICAL ANODE INSTALLATION D.I. WATERMAIN	DATE: MAY 2001 REV. DATE: MARCH 2013 DWG. No.: W41

SIZE (mm)	ANODE TYPE	WEIGHT (Kg)
19 TO 50 COPPER SERVICE	Z-12-24	5.4
38 TO 50 PEX SERVICE	Z-12-24	5.4
100 TO 300 DI SERVICE	Z-24-48	10.9
100 TO 300 DI FITTINGS	Z-12-24	5.4
100 TO 250 VALVES	Z-12-24	5.4
HYDRANT ASSEMBLY	Z-24-48	10.9
400 DI SERVICE/FITTINGS/VALVES	Z-24-48	10.9



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

N.T.S.

Ottawa	TYPICAL ANODE INSTALLATION PVC WATERMAIN	DATE: MAY 2001 REV. DATE: MARCH 2014 DWG. No.: W42

D07-12-19-0215

#18110

PROPOSED MIXED-USE RETAIL & RENTAL APARTMENT BUILDING
1050&1060 BANK STREET
OTTAWA, ON

TYPICAL DETAILS

Contract No.	Drawing No. C102
Sheet No.	of 5
Asset No.	
Asset Group	
Des: DG	Chk'd: JF
Dwn: NI	Chk'd: JF
Utility Circulation No.:	CTY-----
Construction Inspector:	
Scale:	

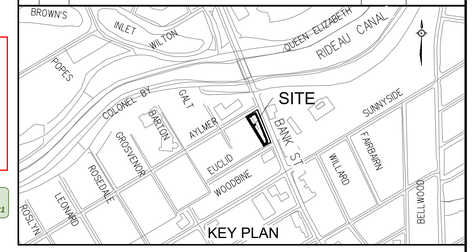
LICENSED PROFESSIONAL ENGINEER — J.G. FOOKES — 2020/09/24 — PROVINCE OF ONTARIO

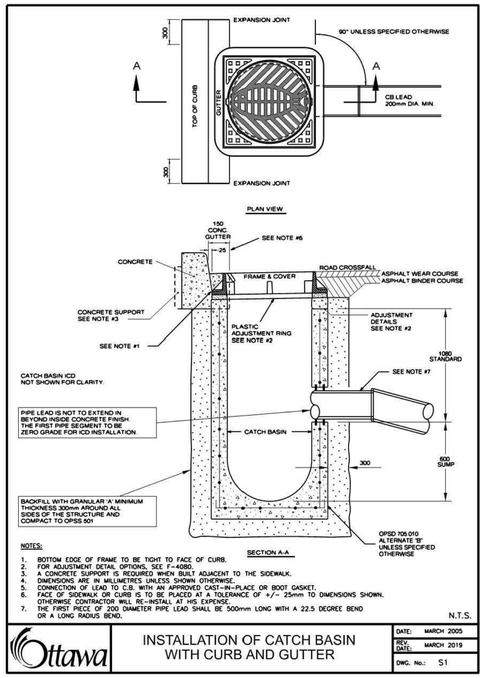
NOTE:
The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

MORRISON HERSHFIELD
200-2932 BASELINE RD.
OTTAWA, ON K2H 1B1

REVISIONS

No.	Description	By	Date (dd/mm/yy)
0	ISSUED FOR SITE PLAN APPROVAL	J.F.	02/12/19
1	RE-ISSUED FOR SITE PLAN APPROVAL	J.F.	24/09/20

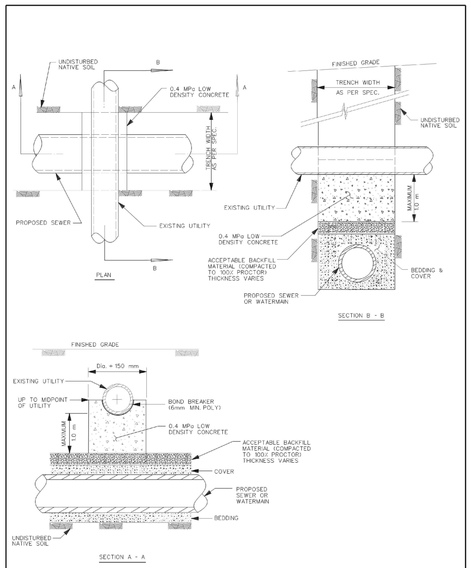




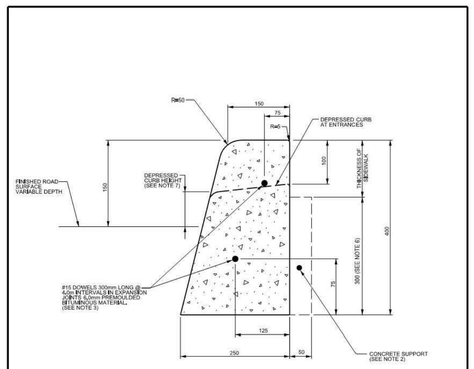
NOTES:
1. BOTTOM EDGE OF FRAME TO BE TIGHT TO FACE OF CURB.
2. FOR ADJUSTMENT DETAIL OPTIONS, SEE F-4080.
3. A CONCRETE SUPPORT IS REQUIRED WHEN BUILT ADJACENT TO THE SIDEWALK.
4. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
5. CONNECTION OF LEAD TO C.B. WITH AN APPROVED CAST-IN-PLACE OR BOOT GASKET.
6. FACE OF SIDEWALK OR CURB IS TO BE PLACED AT A TOLERANCE OF +/- 25mm TO DIMENSIONS SHOWN, OTHERWISE CONTRACTOR WILL RE-INSTALL AT HIS EXPENSE.
7. THE FIRST PIECE OF 200 DIAMETER PIPE LEAD SHALL BE 500mm LONG WITH A 22.5 DEGREE BEND OR A LONG RADIUS BEND.

N.T.S.

Ottawa | INSTALLATION OF CATCH BASIN WITH CURB AND GUTTER | DATE: MARCH 2005 | REV. DATE: MARCH 2019 | DWG. No.: S1



Ottawa | SUPPORT DETAIL FOR EXISTING UTILITY CROSSING SEWER OR WATERMAIN TRENCH | DATE: MAY 2001 | REV. DATE: NONE | DWG. No.: S10



CONCRETE BARRIER CURB

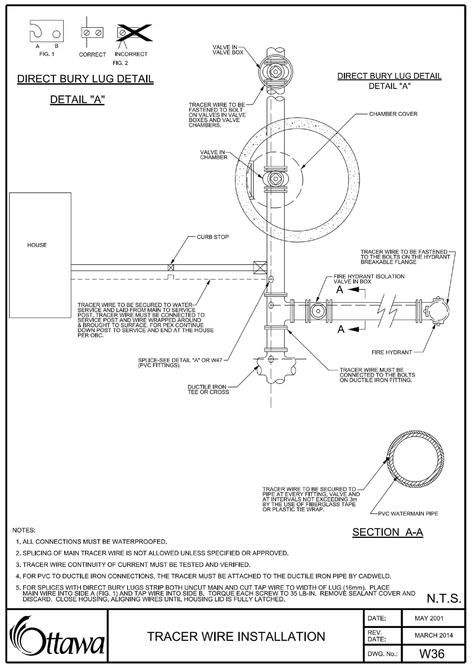
NOTES:
1. THE FULL CURB DEPTH SHALL BE CARRIED THROUGH THE DEPRESSED ACCESS CROSSING.
2. A CONCRETE SUPPORT IS REQUIRED WHEN BUILT ADJACENT TO THE SIDEWALK.
3. IF AN EXTRUSION CURBING MACHINE IS USED, THE EXPANSION BITUMINOUS MATERIAL AND THE #15 DOWELS ARE TO BE PLACED AT THE END OF THE EXTRUSION.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
5. DUMMY JOINTS SHALL BE 25mm DEEP, FRONT, BACK AND TOP OF SECTION AT 2m SPACING.
6. FOR DEPRESSED CURB AT ENTRANCES USE 250.
7. DEPRESSED CURB HEIGHT - FOR PEDESTRIAN CURB RAMPS 0 TO 6 mm AND FOR PRIVATE ENTRANCES 0 TO 25mm.

N.T.S.

Ottawa | CONCRETE BARRIER CURB FOR GRANULAR BASE PAVEMENT (MODIFIED OPSD-600.110) | DATE: JANUARY 2003 | REV. DATE: MARCH 2014 | DWG. No.: SC1.1

SAIDE SAYAH
MANAGER, CENTRAL BRANCH
PLANNING, INFRASTRUCTURE & ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

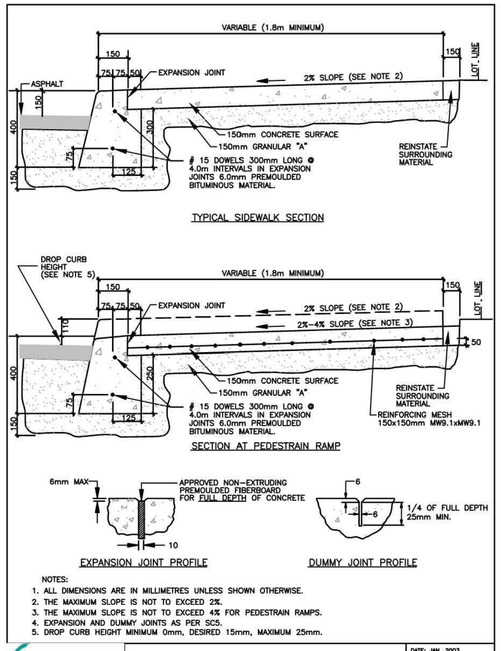
APPROVED
By Saide Sayah at 7:34 am, Jan 28, 2021



NOTES:
1. ALL CONNECTIONS MUST BE WATERPROOFED.
2. SPLICING OF MAIN TRACER WIRE IS NOT ALLOWED UNLESS SPECIFIED OR APPROVED.
3. TRACER WIRE CONTINUITY OF CURRENT MUST BE TESTED AND VERIFIED.
4. FOR PVC TO DUCTILE IRON CONNECTIONS, THE TRACER MUST BE ATTACHED TO THE DUCTILE IRON PIPE BY CADWELD.
5. FOR SPLICES WITH DIRECT BURY LUGS STRIP BOTH UNCUT MAIN AND CUT TAP WIRE TO WIDTH OF LUG (16mm). PLACE MAIN WIRE INTO SIDE A (FIG. 1) AND TAP WIRE INTO SIDE B. TORQUE EACH SCREW TO 35 LB-IN. REMOVE SEALANT COVER AND DISCARD. CLOSE HOUSING, ALIGNING WIRES UNTIL HOUSING LID IS FULLY LATCHED.

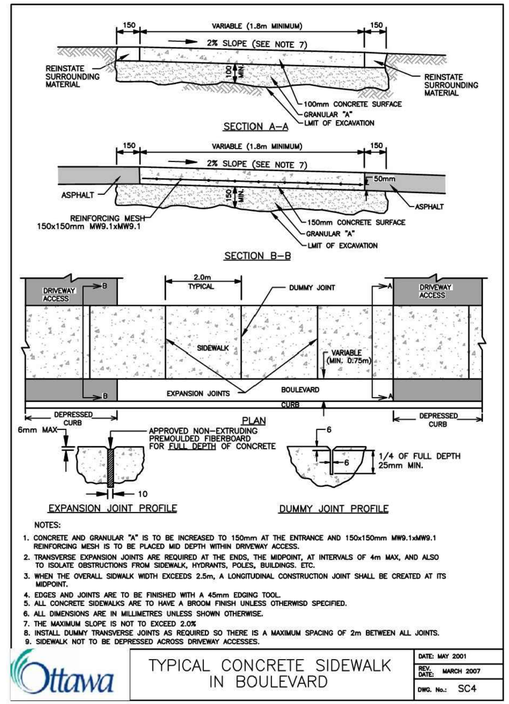
N.T.S.

Ottawa | TRACER WIRE INSTALLATION | DATE: MAY 2001 | REV. DATE: MARCH 2014 | DWG. No.: W36



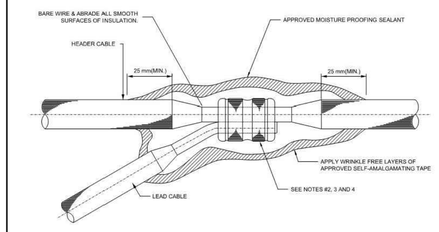
NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
2. THE MAXIMUM SLOPE IS NOT TO EXCEED 2%.
3. THE MAXIMUM SLOPE IS NOT TO EXCEED 4% FOR PEDESTRIAN RAMPS.
4. EXPANSION AND DUMMY JOINTS AS PER SCS.
5. DROP CURB HEIGHT MINIMUM 0mm, DESIRED 15mm, MAXIMUM 25mm.

Ottawa | CONCRETE BARRIER CURB WITH SIDEWALK | DATE: JAN. 2003 | REV. DATE: MARCH 2007 | DWG. No.: SC1.4



NOTES:
1. CONCRETE AND GRANULAR "A" IS TO BE INCREASED TO 150mm AT THE ENTRANCE AND 150x150mm MW9.1xMW9.1 REINFORCING MESH IS TO BE PLACED MID DEPTH WITHIN DRIVEWAY ACCESS.
2. TRANSVERSE EXPANSION JOINTS ARE REQUIRED AT THE ENDS, THE MIDPOINT, AT INTERVALS OF 4m MAX, AND ALSO TO ISOLATE OBSTRUCTIONS FROM SIDEWALK, HYDRANTS, POLES, BUILDINGS. ETC.
3. WHEN THE OVERALL SIDWALK WIDTH EXCEEDS 2.5m, A LONGITUDINAL CONSTRUCTION JOINT SHALL BE CREATED AT ITS MIDPOINT.
4. EDGES AND JOINTS ARE TO BE FINISHED WITH A 45mm EDGING TOOL.
5. ALL CONCRETE SIDEWALKS ARE TO HAVE A BROOM FINISH UNLESS OTHERWISD SPECIFIED.
6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
7. THE MAXIMUM SLOPE IS NOT TO EXCEED 2.0%
8. INSTALL DUMMY TRANSVERSE JOINTS AS REQUIRED SO THERE IS A MAXIMUM SPACING OF 2m BETWEEN ALL JOINTS.
9. SIDEWALK NOT TO BE DEPRESSED ACROSS DRIVEWAY ACCESSES.

Ottawa | TYPICAL CONCRETE SIDEWALK IN BOULEVARD | DATE: MAY 2001 | REV. DATE: MARCH 2007 | DWG. No.: SC4



NOTES:
1. SEE MW-19.9 FOR WIRE SPECIFICATIONS.
2. C-TAP, THERMITE WELD OR DIRECT BURY LUG.
3. PRE SILVER SOLDER WIRES WITH C-TAP AND INSTALL USING APPROVED TOOL.
4. ILLUSTRATED PROTECTION MEASURES ARE NOT REQUIRED WITH DIRECT BURY LUGS.
5. SEE MS-22.15 FOR APPROVED PRODUCTS.

Ottawa | WATERPROOFING OF SPLICES | DATE: MAY 2001 | REV. DATE: MARCH 2011 | DWG. No.: W47

D07-12-19-0215

#18110