

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND LANDSCAPE DRAWINGS

7. TOPOGRAPHIC SURVEY COMPLETED AND PROVIDED BY FAIRHALL MOFFATT & WOODLAND LTD. DATED ON OCTOBER 04, 2019. CONTRACTOR TO VERIFY IN THE FIELD PRIOR TO CONSTRUCTION OF ANY WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
8. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. VERIFY THAT JOB BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED.
9. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCH-BASIN OUTLETS ARE PROVIDED.
10. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE WITH STEP JOINTS OF 500mm WIDTH MINIMUM.
11. ALL DISTURBED AREAS OUTSIDE PROPOSED GRADING LIMITS TO BE RESTORED TO ORIGINAL ELEVATIONS AND CONDITIONS UNLESS OTHERWISE SPECIFIED. ALL RESTORATION SHALL BE COMPLETED WITH THE GEOTECHNICAL REQUIREMENTS FOR BACKFILL AND COMPACTION.
12. ALL PROPERTY LINE GRADES ARE TO MATCH EXISTING.
13. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION.
14. MINIMIZE DISRUPTION TO EXISTING VEGETATION DURING THE EXECUTION OF ALL WORKS.
15. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE PROPOSED BUILDING, PARKING AND ROADWAY LOCATIONS.

16. AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. STORM SEWER, SANITARY SEWER, WATER, ETC) THE CONTRACTOR SHALL DETERMINE THE EXISTENCE LOCATION AND DEPTH OF EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
17. CONTRACTOR TO OBTAIN POST-CONSTRUCTION TOPOGRAPHIC SURVEY COMPLETED BY OLS OR P ENG CONFIRMING COMPLIANCE WITH DESIGN GRADING AND SERVICING. SURVEY IS TO INCLUDE LOCATION AND INVERTS FOR BURIED UTILITIES.
18. ABIDE BY RECOMMENDATIONS OF GEOTECHNICAL REPORT. REPORT ANY VARIATIONS IN OBSERVED CONDITIONS FROM THOSE INCLUDED IN REPORT.
19. REPORT REFERENCES
 - i. STORMWATER MANAGEMENT REPORT, PREPARED BY WSP CANADA INC. PROJ. NO. 19M-019935-00, MARCH 31/2023.
 - ii. GEOTECHNICAL INVESTIGATION REPORT, PREPARED BY EXP SERVICE INC., PROJ. NO. 2002-0012/4936-C, MARCH 2023.

** CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES, AND MEETING ASSOCIATED LEED REQUIREMENT **

1. PRIOR TO START OF CONSTRUCTION:
 - 1.1. INSTALL SILT FENCE IN LOCATION SHOWN ON DWG C05.
 - 1.2. INSTALL FILTER FABRIC OR SILT SACK FILTERS IN ALL THE CATCHBASINS AND MANHOLES TO REMAIN DURING CONSTRUCTION WITHIN THE SITE (SEE TYPICAL DETAIL).
 - 1.3. INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
2. DURING CONSTRUCTION:
 - 2.1. MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE AND IMPACTS TO EXISTING GRADING.
 - 2.2. PERMITTER VEGETATION TO REMAIN IN PLACE UNTIL PERMANENT STORM WATER MANAGEMENT IS IN PLACE. OTHERWISE, IMMEDIATELY INSTALL SILT FENCE WHEN THE EXISTING SITE IS DISTURBED AT THE PERIMETER.
 - 2.3. DISTURBED AREAS SHALL BE PROTECTED FROM OVERLAND FLOW BY PROVIDING TEMPORARY SWALES TO THE SATISFACTION OF THE FIELD ENGINEER, TIE-IN TEMPORARY SWALE TO EXISTING CB'S AS REQUIRED.
 - 2.4. PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS.
 - 2.5. INSPECT SILT FENCES, FILTER FABRIC FILTERS AND CATCH BASIN SUMPS WEEKLY AND WITHIN 24 HOURS AFTER A STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY.
 - 2.6. DRAWING TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
 - 2.7. EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STORM DRAINS.
 - 2.8. DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH TO ALLOW VEGETATION TO GROW (LONGER THAN 30 DAYS).
 - 2.9. CONTROL WIND-BLOWN DUST OFF SITE BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED AND TO THE SATISFACTION OF THE FIELD ENGINEER).
 - 2.10. NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE FIELD ENGINEER.
 - 2.11. CITY ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM CONSTRUCTION.
 - 2.12. VEHICLE TRACKING AS REQUIRED.
 - 2.13. DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPED.
 - 2.14. ANY UNWANTED MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.
 - 2.15. TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION EQUIPMENT OR WASTE MATERIALS FROM BEING TRACKED INTO ADJACENT PROPERTIES OR PUBLIC STREETS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED.
 - 2.16. EROSION CONTROL MEASURES TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
 - 2.17. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PREVENT PROBLEMS WITH THE SOIL AND DRAINAGE SYSTEM AND THE 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.

1. ALL WATERMAIN AND WATERMAIN APPURTANANCES, MATERIALS, CONSTRUCTION AND TESTING METHODS SHALL CONFORM TO THE CURRENT CITY OF STAMPAH AND DISTRICT OF COLUMBIA STANDARDS AND

2. ALL WATERMAIN 300mm DIAMETER AND SMALLER TO BE POLY VINYL CHLORIDE (PVC) CLASS 150 DR 18 MEETING ANWA SPECIFICATION C900.
3. ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 24m BELOW FINISHED GRADE, WHERE WATERMANS CROSS OVER OTHER UTILITIES, A MINIMUM 0.30m CLEARANCE SHALL BE MAINTAINED; WHERE WATERMANS CROSS UNDER OTHER UTILITIES, A MINIMUM 0.50m CLEARANCE SHALL BE MAINTAINED. WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED, THE WATERMAIN SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2. WHERE 24m MINIMUM DEPTH CANNOT BE ACHIEVED, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W22. WHERE A WATERMAIN IS IN CLOSE PROXIMITY TO AN OPEN STRUCTURE, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W23.
4. CONCRETE THRUST BLOCKS AND MECHANICAL RESTRAINTS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, REDUCERS, ENDS OF MAINS AND VALVES 100mm OR LARGER, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W25 & S. W25.4.
5. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS AS PER CITY OF OTTAWA STANDARD W40 & W42.
6. ALL VALVES AND VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARD
7. FIRE HYDRANT LOCATION AND INSTALLATION AS PER CITY OF OTTAWA STANDARDS W18 & W19. CONTRACTOR TO PROVIDE FLOW TEST AND PAINTING OF NEW HYDRANT IN ACCORDANCE WITH CITY STANDARDS.
8. IF WATER MAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE DEFLECTION PERCENTAGE IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

9. ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW SANITARY PIPING. PROVIDE DYE TESTING FOR NEW SERVICES.
10. SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR-35 (UNLESS SPECIFIED OTHERWISE) WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH CSA B-182 2.3.4.
11. SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6

12. MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES AS PER THE OPSD 701.021
13. ANY SANITARY SEWER WITH LESS THAN 2.5m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.

1. CONTRACTOR TO REINSTATE ROAD CUTS AS PER CITY OF OTTAWA DETAIL R10.
2. CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING, TO THE SATISFACTION OF THE GEOTECHNICAL CONSULTANT PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL.
3. FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS.

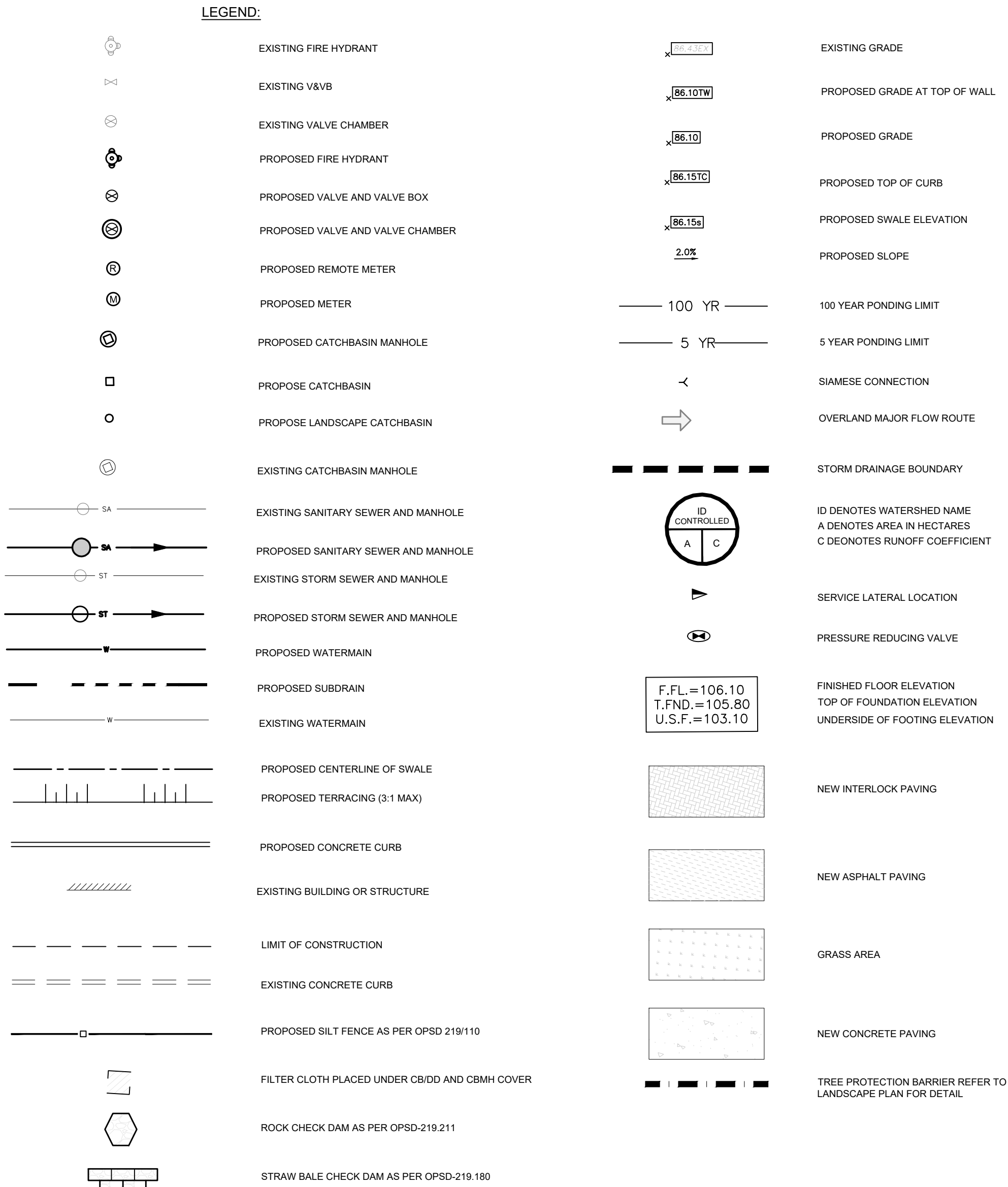
14. ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND

- SEWERS, SERVICES AND CB LEADS.
15. STORM SEWERS 450mm DIAMETER AND SMALLER SHALL BE PVC SDR-35, WITH RUBBER GASKET PER CSA A-257.3.
16. SEWER BEDDINGS AS PER CITY OF OTTAWA DETAIL 56.
17. ALL STORM MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSD 701.01 FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.
18. ANY NEW OR EXISTING STORM SEWER WITH LESS THAN 2.0m cover REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W20, OR APPROVED BY THE ENGINEER.
19. CB IN LANDSCAPE AREAS SHALL BE AS PER CITY OF OTTAWA STANDARD S31.
20. ALL CATCHBASIN BASES TO BE MINIMUM 200mm DIAMETER AT MINIMUM 1.0% SLOPE UNLESS OTHERWISE SPECIFIED.
21. STORM CATCHBASINS AS PER OPSD 700.05 AND FRAME/COVER AS PER CITY STANDARD DRAWINGS S19. STORM CMB'S AS INDICATED IN TABLE WITH SUMPS AND FRAME/COVER AS PER OPSD 401.010 TYPE B. SANITARY M/H'S AS PER OPSD 701.010 TYPE A BASE WITH BENCHING, AND FRAME/COVER AS PER OPSD 401.010 TYPE A. ADJUSTMENT SECTIONS SHALL BE AS PER OPSD 704.010.

23. NO SERVICE LATERALS ARE TO BE DIRECTLY CONNECTED TO A MANHOLE.
24. SERVICE LATERALS THAT HAVE INSUFFICIENT COVER ARE TO BE THERMALLY INSULATED AS PER CITY OF OTTAWA STANDARD W22.
25. ALL SERVICE LATERALS, LOCATED WITHIN THE ROW, ARE TO BE AT A MIN. OF 1% GRADIENT.

PAVEMENT STRUCTURE - LIGHT DUTY(CARS ONLY)		
COURSE	MATERIAL	THICKNESS
SURFACE	HL3 OR SUPERPAVE 12.5 AC	65 mm
BASECOURSE	OPSS GRANULAR 'A'	150 mm
SUBBASE	OPSS GRANULAR 'B' TYPE II	300 mm

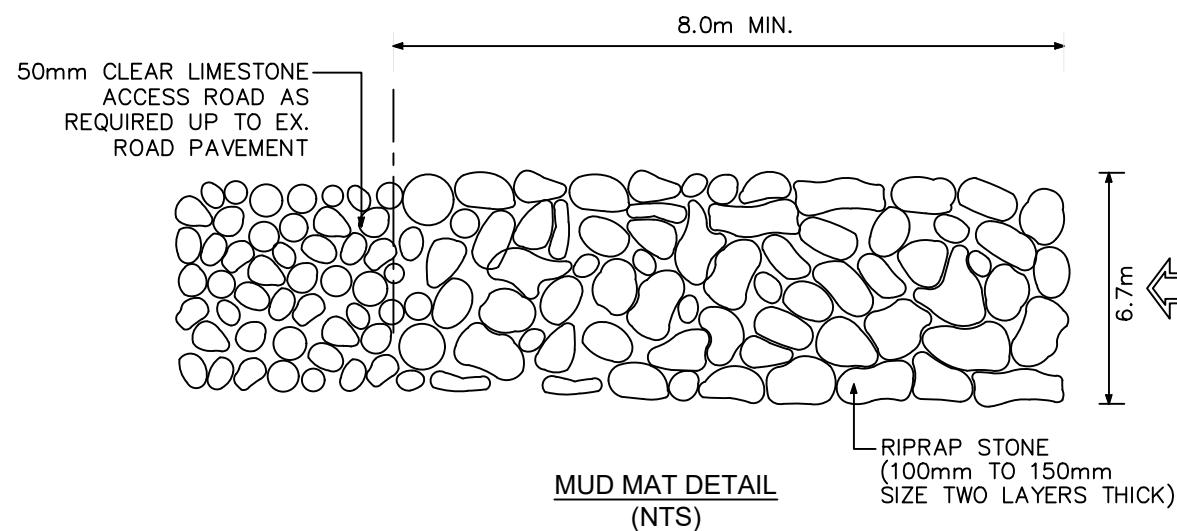
WATERMAIN SCHEDULE					
STATION	DESCRIPTION	FINISHED GRADE	EXISTING GRADE	PROP. TOP OF W/M	AS-BUILT TOP OF W/M
0+000	Connect to Ex. 305mm W/M with 300x200 TEE		56.390		54.280
0+003.50	Crossing Existing 600mm Sanitary Sewer		56.410	54.010	
0+005.40	Crossing Existing 1050mm Storm Sewer		56.390	52.692	
0+012.64	DMA VC	56.540		54.140	
0+013.40	45 degree bend	56.560		54.160	
0+014.06	45 degree bend	56.580		54.180	
0+016.13	200 X 200 TEE	56.570		54.170	
0+016.13	200mm V&VB	56.590		54.190	
0+016.13	W/M STUB	56.620		54.220	
0+017.13	200 X 200 TEE	56.570		54.180	
0+017.13	200mm V&VB	56.580		54.190	
0+017.13	W/M STUB	56.590		54.200	
0+025.30	45 degree bend	56.600		54.200	
0+026.52	45 degree bend	56.610		54.210	
0+081.71	200 X 200 TEE	56.680		54.280	
0+081.71	200mm V&VB	56.700		54.300	
0+081.71	Fire Hydrant	56.730		54.330	
0+155.12	45 degree bend	57.130		54.730	
0+156.61	45 degree bend	57.150		54.750	
0+158.70	200x150 TEE	57.140		54.740	
0+158.70	200mm V&VB	57.150		54.750	
0+158.70	Fire hydrant	57.150		54.750	
0+164.77	200mm V&VB	56.860		54.460	
0+167.32	45 degree bend	56.790		54.390	
0+168.94	200x150 Reducer	56.790		54.390	
0+174.18	Connect to Ex. 150mm W/M with 150x150 TEE		56.690		54.290



PIPE CROSSING TABLE								
		Invert	Obvert			Invert	Obvert	
1	EX.1050mm@CONC STM	53.192	54.375	0.500	Clearance Above	52.492	52.692	200mmØ W/M
2	EX.600mm@CONC SAN	53.014	53.709	0.797	Clearance Under	53.810	54.010	200mmØ W/M
3	300mmØ PVC SAN	54.680	54.980	0.315	Clearance Above	53.182	54.365	EX.1050mm@CONC STM
4	375mmØ PVC STM	54.080	54.455	0.500	Clearance Above	53.430	53.580	150mmØ HYDRANT LEAD
5	150mmØ PVC STM	54.440	54.590	0.500	Clearance Above	53.740	53.940	200mmØ W/M
6	375mmØ PVC STM	54.280	54.655	0.500	Clearance Above	53.580	53.780	200mmØ W/M
6	375mmØ PVC STM	54.310	54.685	0.500	Clearance Above	53.610	53.810	200mmØ W/M

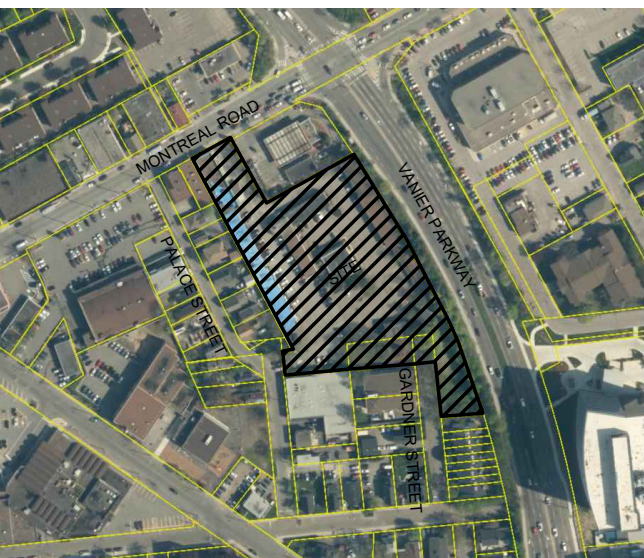
STORM STRUCTURE TABLE							
STRUCTURE ID	TOP OF GRATE ELEVATION	INVERT IN		INVERT OUT		DESCRIPTION	
				SIZE		OPSD	COVER
CBMH01	56.94	54.300	54.860	54.280	1200mm DIA.	OPSD 701.010	S28.4
CBMH02	56.79		54.310	54.250	1200mm DIA.	OPSD 701.010	S28.4
STMH03	56.88	54.230	54.270	54.210	1200mm DIA.	OPSD 701.010	S24.1
STMH04	56.63		53.690	53.670	1200mm DIA.	OPSD 701.010	S24.1
STMH05	57.06		54.620	54.320	1200mm DIA.	OPSD 701.010	S24.1
CBMH06				54.780	1200mm DIA.	OPSD 701.010	S28.4
CBMH07	56.50		55.450	55.390	1200mm DIA.	OPSD 701.010	OPSD 403.010
TEMP DICB	55.90			54.910	600X600mm	OPSD 705.010	OPSD 403.010

SAN STRUCTURE TABLE							
STRUCTURE ID	TOP OF GRATE ELEVATION	INVERT IN		INVERT OUT	SIZE	DESCRIPTION	COVER
SAMH01	56.56		54.79	54.77	1200mm DIA.	OPSD-701.010	S24
SAMH02	56.50	54.67	53.01	53.01	1200mm DIA.	OPSD-701.010	S24



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KEY PLAN
(N.T.S)

BENCH MARK No.1 ELEVATION=56.43

ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO
GEODETIC DATUM AND ARE DERIVED FROM THE WESTERLY
LIMIT OF PART 1, PLAN 5R-6112 SHOWN AS HAVING A
BEARING OF N28°27'30"W.

TOWNSHIP: CITY OF OTTAWA

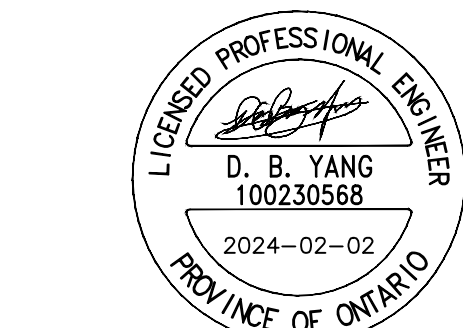
04	REVISED AS PER CITY COMMENTS	D.Y.	2024-02-02
03	REVISED AS PER CITY COMMENTS	D.Y.	2023-06-14
02	REVISED AS PER CITY COMMENTS	D.Y.	2023-04-03
01	ISSUED FOR SPA	D.Y.	2022-09-13
No.	REVISIONS	BY	DATE

HORIZONTAL SCALE:



SCALE: 1:300

DISTANCES SHOWN ON THIS PLAN ARE IN METRES
AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048



NOT VALID UNLESS SIGNED AND DATED



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CLIENT

2705460 ONTARIO INC.
C/O ANAND AGGARWAL
MANOR PARK MANAGEMENT
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OTTAWA, ON K1K 0R8



 ANNIS, O'SULLIVAN, VOLLEBEKK
Ontario Land Surveyors
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TEL.(613)727-0850 FAX(613)727-1079

DESIGNED BY: D.Y. DRAWN BY: J.T. APPROVED BY: D.Y.

PROJECT

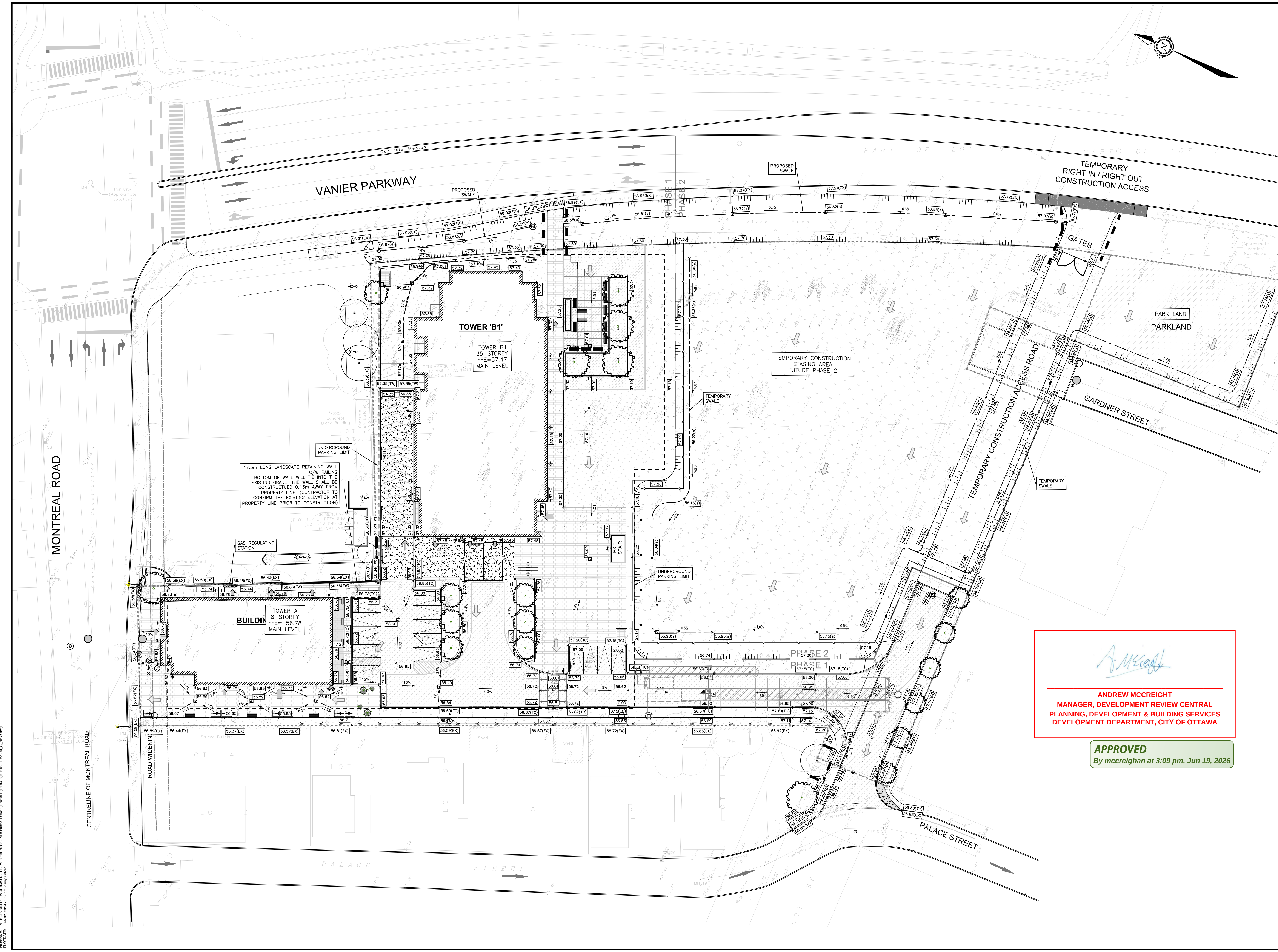
112 MONTREAL ROAD
RESIDENTIAL DEVELOPMENT

NOTES AND DETAILS

PROJECT NO. _____ DRAWING NO. _____

19M-01935-00 C01

#18856



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SUBJECT TO APPROVAL

BENCH MARK No.1 ELEVATION=56.43

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TOWNSHIP: CITY OF OTTAWA

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wsp

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DESIGNED BY: D.Y. DRAWN BY: J.T. APPROVED BY: D.Y.

PROJECT

112 MONTREAL ROAD
RESIDENTIAL DEVELOPMENT

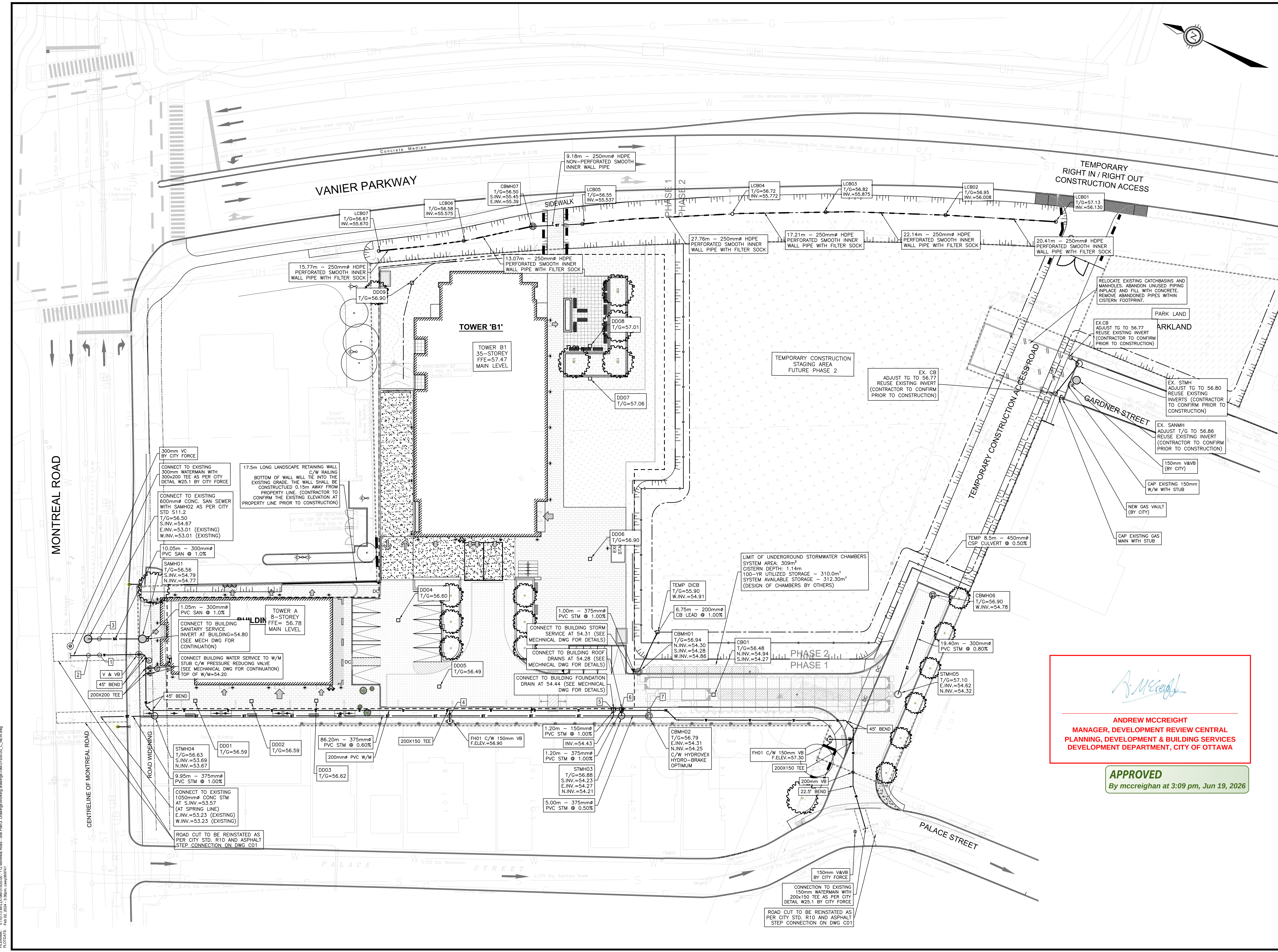
DRAWING TITLE

GRADING PLAN

PROJECT NO. 19M-01935-00 DRAWING NO. C02

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PLOT DATE: Feb 02, 2024, 3:38pm, caw006241

D07-12-22-0138



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KEY PLAN
(N.T.S.)

SUBJECT TO APPROVAL

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TOWNSHIP: CITY OF OTTAWA

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APPROVED
By mcCreighan at 3:09 pm, Jun 19, 2026

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DESIGNED BY: D.Y. DRAWN BY: J.T. APPROVED BY: D.Y.

PROJECT:

112 MONTREAL ROAD
RESIDENTIAL DEVELOPMENT

DRAWING TITLE

SERVICING PLAN

PROJECT NO. 19M-01935-00 DRAWING NO. C03

FILENAME: V:\15.11.M12\1047105-00 - 112 Montreal Road - Site Plan\3. Drawings\Working drawings\1047105-00_C_NEW.dwg
PLOT DATE: Feb 02, 2024, 3:38pm, caw006941

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PLOTDATE: Feb 02, 2024, 3:38pm, caw006941



Adjustable Accutrol Weir
Tag: _____

Adjustable Flow Control
for Roof Drains

ADJUSTABLE ACCUTROL (for Large Sump Roof Drains only)

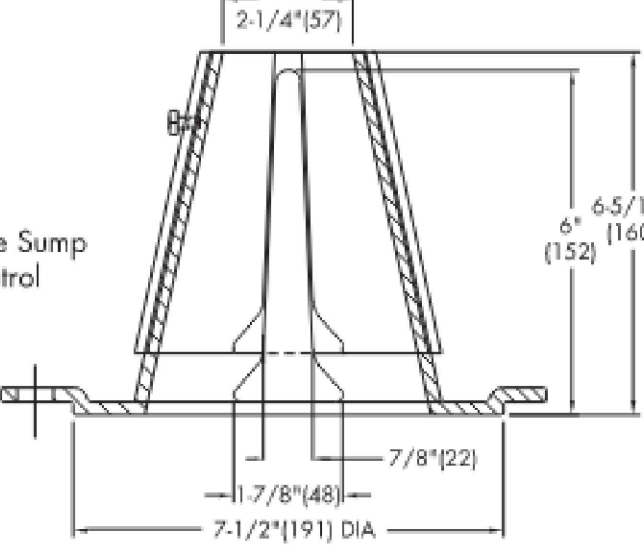
For more flexibility in controlling flow with heads deeper than 2", Watts Drainage offers the Adjustable Accutrol. The Adjustable Accutrol Weir is designed with a single parabolic opening that can be covered to restrict flow above 2" of head to less than 5 gpm per inch, up to 6" of head. To adjust the flow rate for depths over 2" of head, set the slot in the adjustable upper cone according to the flow rate required. Refer to Table 1 below.

Note: Flow rates are directly proportional to the amount of weir opening that is exposed.

EXAMPLE:

For example, if the adjustable upper cone is set to cover 1/2 of the weir opening, flow rates above 2" of head will be restricted to 2-1/2 gpm per inch of head.

Therefore, at 3" of head, the flow rate through the Accutrol Weir that has 1/2 the slot exposed will be:
[5 gpm (per inch of head) x 2 inches of head] + 2-1/2 gpm (for the third inch of head) = 12-1/2 gpm.



Weir Opening Exposed	1"	2"	3"	4"	5"	6"
Fully Exposed	5	10	15	20	25	30
3/4	5	10	13.75	17.5	21.25	25
1/2	5	10	12.5	15	17.5	20
1/4	5	10	11.25	12.5	13.75	15
Closed	5	5	5	5	5	5

Job Name

Job Location

Engineer

Contractor

Contractor's P.O. No.

Representative

Roof Drains

Catchment ID	Status	Common Name	Area (ha.)	Area (m ²)	Area to Cistern 1 (m ²)	Area controlled by Rooftop (m ²)	WATT Drains		
							Number of Drains Req. (~1 Drain / 150 m2)	Area Per Drain	Width / Length (m)
S01	Controlled	Building A	0.05	500	190	310	5	62.00	7.87
S02	Controlled	Building B1	0.081	810	447	363	4	90.75	9.53

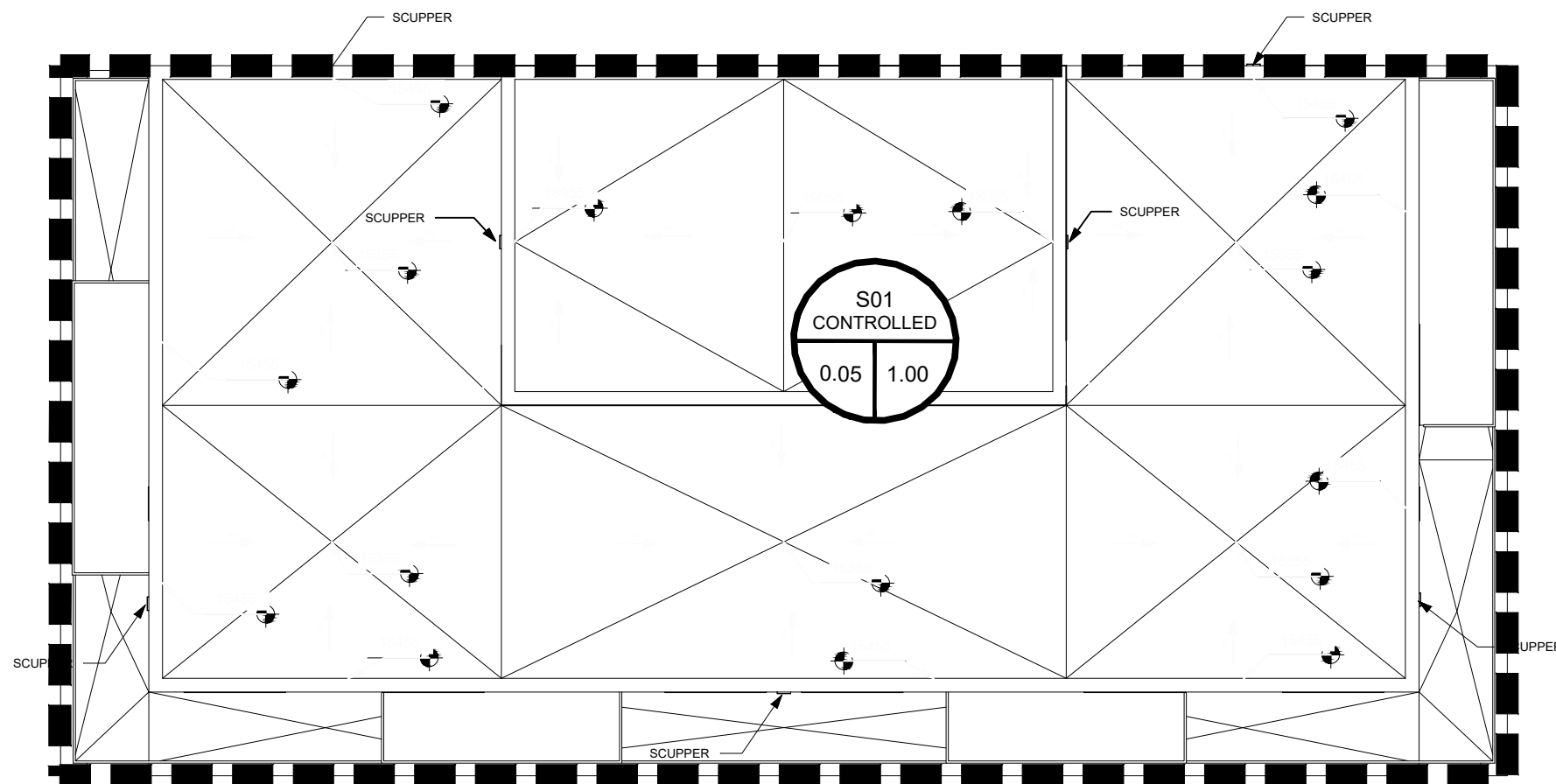
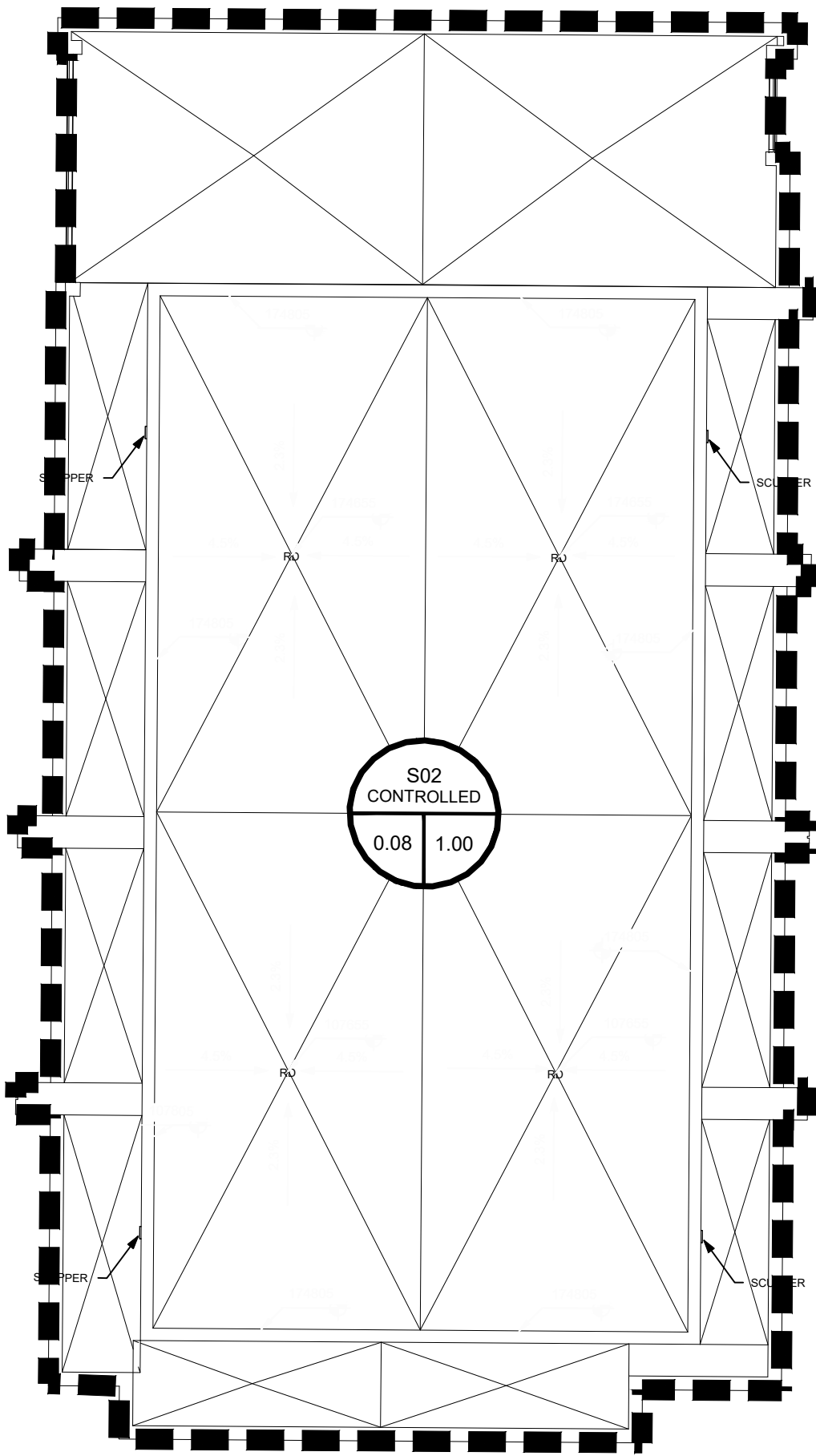
METRIC	Flow Rate (m3/sec)					
Weir opening	25.4	50.8	76.2	101.6	127.0	152.4
	0.02540	0.05080	0.07620	0.10160	0.12700	0.15240
Fully Exposed	0.000315451	0.000630902	0.000946353	0.001261804	0.001577255	0.001892706
3/4	0.000315451	0.000630902	0.00086749	0.001104079	0.001340667	0.001577255
1/2	0.000315451	0.000630902	0.000788628	0.000946353	0.001104079	0.001261804
1/4	0.000315451	0.000630902	0.000709765	0.000788628	0.00086749	0.000946353
Closed	0.000315451	0.000315451	0.000315451	0.000315451	0.000315451	0.000315451

Table 3-3: Post-Development Modelling Results (C)

RETURN PERIOD (YEARS)	ROOFTOP MAXIMUM STORAGE VOLUME, PEAK RELEASE RATE ¹ , AND PONDING DEPTH						UNCONTROLLED FLOW RATE ² (L/S)
	TOWER A			TOWER B1			
	(m³)	(L/s)	(m)	(m³)	(L/s)	(m)	
5	4.5	1.5	0.054	6.4	1.2	0.073	2.9
100	11.5	1.5	0.086	15.4	1.2	0.142	8.3

¹ Based on the critical duration resulting in maximum storage utilized on each roof surface

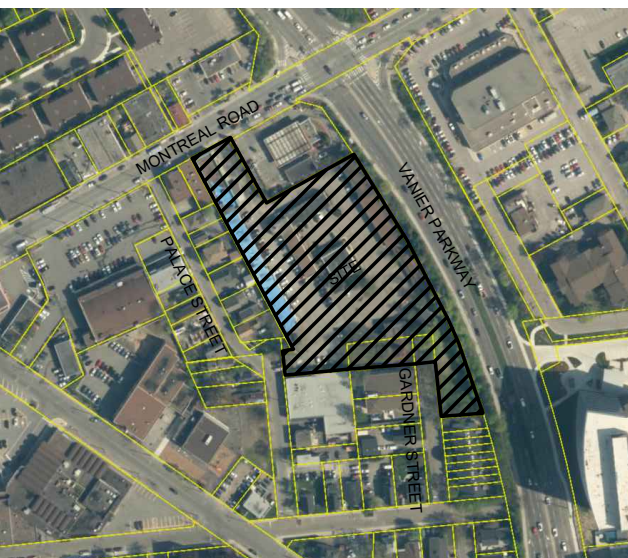
² Based on the critical duration resulting in the maximum flow released from the site



GENERAL NOTES:

THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.



KEY PLAN
(N.T.S.)

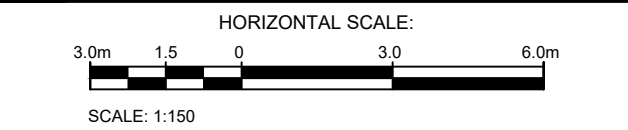
SUBJECT TO APPROVAL

BENCH MARK No.1 ELEVATION=56.43

ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM THE WESTERLY LIMIT OF PART 1, PLAN SR-6112 SHOWN AS HAVING A BEARING OF N28°27'30"W.

TOWNSHIP: CITY OF OTTAWA

02	REVISED AS PER CITY COMMENTS	D.Y.	2023-04-03
01	ISSUED FOR SPA	D.Y.	2022-09-13
No.	REVISIONS	BY	DATE



DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048



NOT VALID UNLESS SIGNED AND DATED



2611 Queensview Dr. Ottawa, ON Canada K2B 8K2
t: 613.829.2800 f: 613.829.8299 www.wspgroup.com

CLIENT

2705460 ONTARIO INC.
C/O ANAND AGGARWAL
MANOR PARK MANAGEMENT
231 BRITTANY DRIVE, SUITE D
OTTAWA, ON K1K 0R8



ANNIS, O'SULLIVAN, VOLLEBEKK
Ontario Land Surveyors
14 CONCOURSE GATE, SUITE 400, NEPEAN, ONTARIO, K2E 7S8
TEL: (613) 727-0850 FAX: (613) 727-1079

DESIGNED BY: D.Y.	DRAWN BY: J.T.	APPROVED BY: D.Y.
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PROJECT

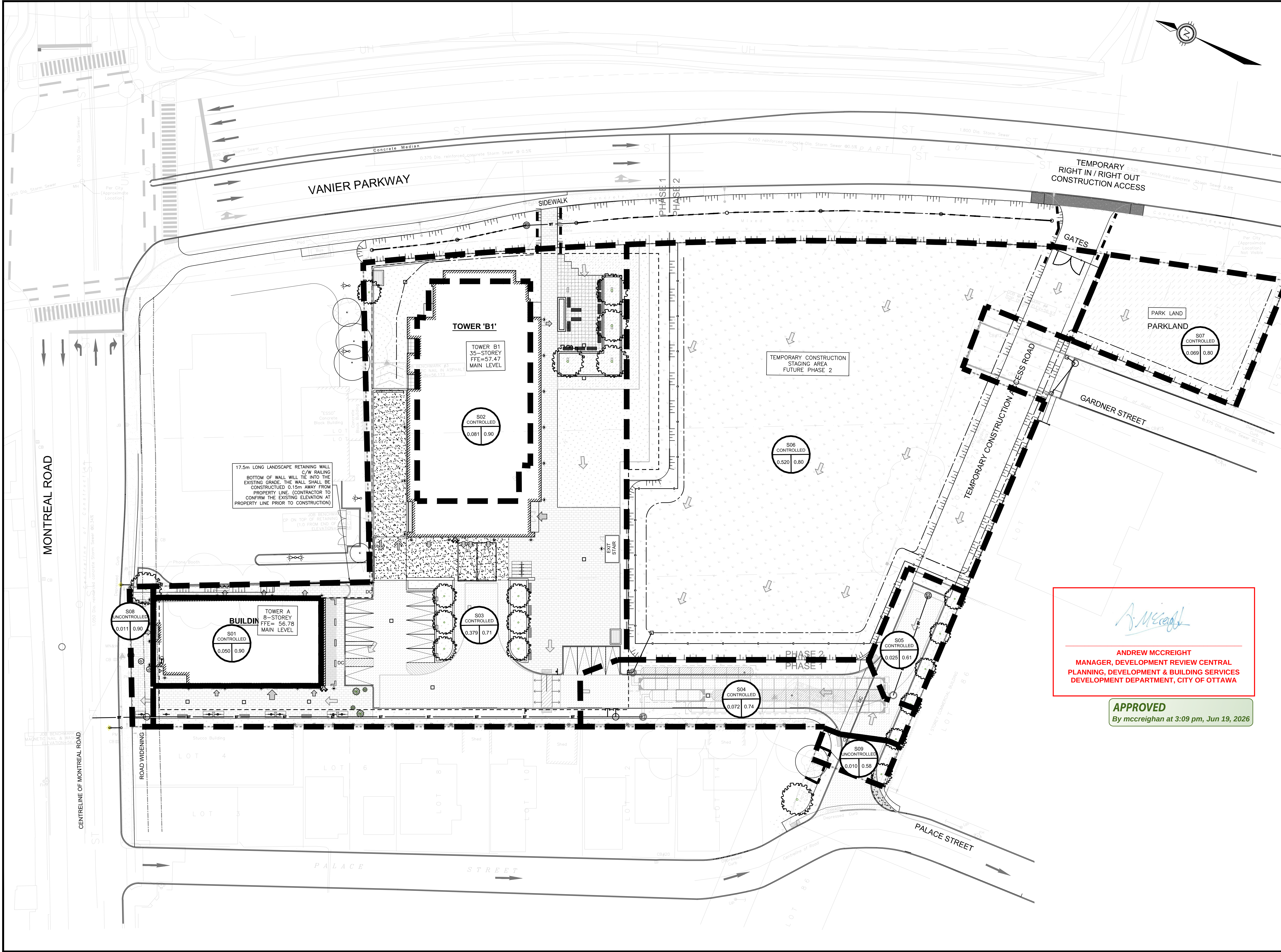
112 MONTREAL ROAD
RESIDENTIAL DEVELOPMENT

DRAWING TITLE

ROOF DRAINAGE PLAN

PROJECT NO.
19M-01935-00

DRAWING NO.
C04A



GENERAL NOTES:

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KEY PLAN
(N.T.S.)

SUBJECT TO APPROVAL

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TOWNSHIP: CITY OF OTTAWA

04	REVISED AS PER CITY COMMENTS	D.Y.	2024-02-02
03	REVISED AS PER CITY COMMENTS	D.Y.	2023-06-14
02	REVISED AS PER CITY COMMENTS	D.Y.	2023-04-03
01	ISSUED FOR SPA	D.Y.	2022-09-13

No.	REVISIONS	BY	DATE

HORIZONTAL SCALE:

SCALE: 1:300

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

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DESIGNED BY:	DRAWN BY:	APPROVED BY:
D.Y.	J.T.	D.Y.

PROJECT

112 MONTREAL ROAD
RESIDENTIAL DEVELOPMENT

DRAWING TITLE

STORM DRAINAGE
AREA PLAN

PROJECT NO.
19M-01935-00

DRAWING NO.
C04

APPROVED

By mcCreighan at 3:09 pm, Jun 19, 2026

ANDREW MCCREIGHT
MANAGER, DEVELOPMENT REVIEW CENTRAL
PLANNING, DEVELOPMENT & BUILDING SERVICES
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

