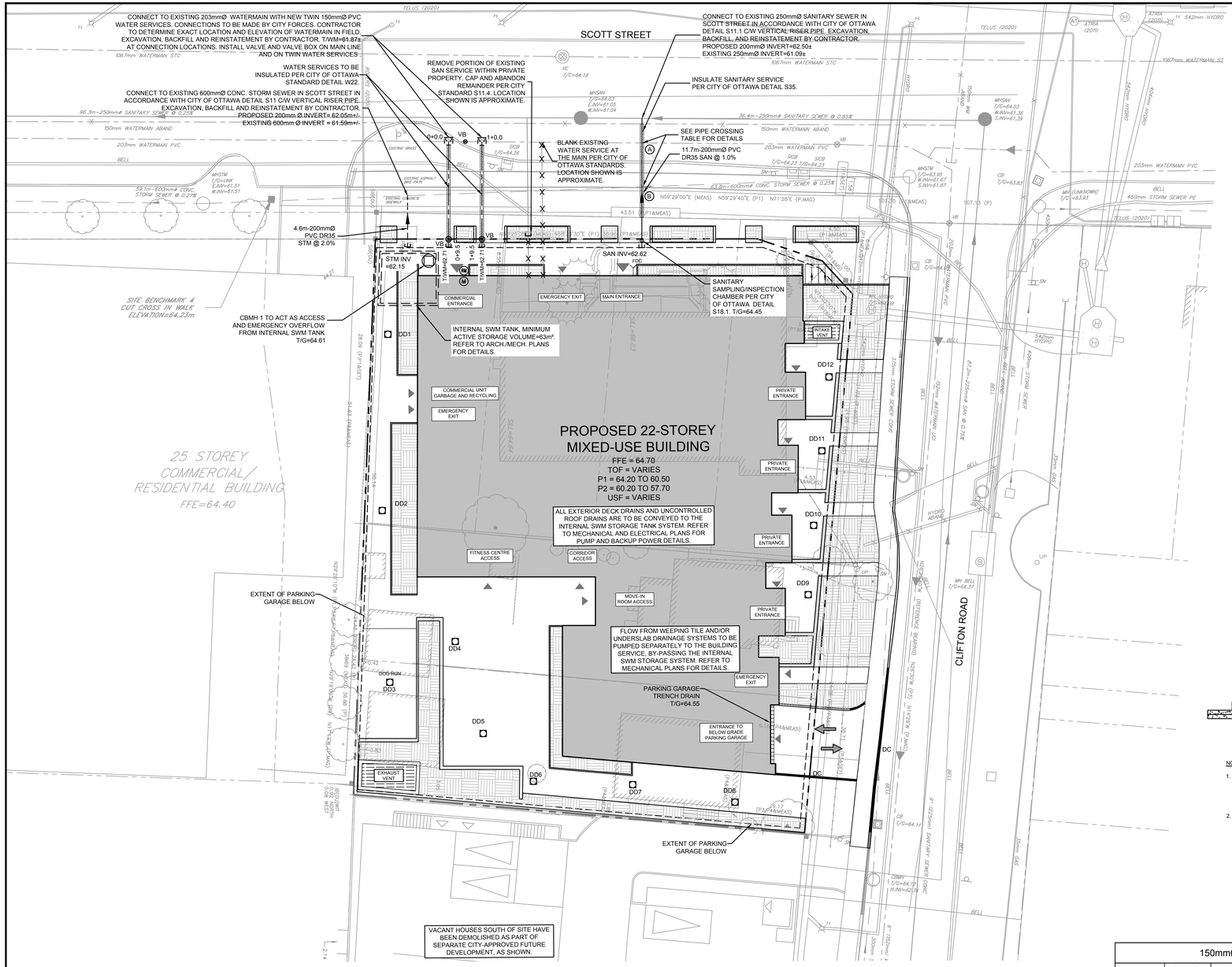
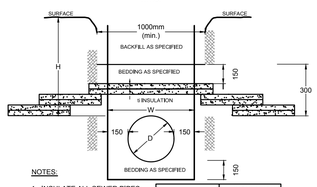


LEGEND

- PROPERTY LINE
- SAN MH 201 — PROPOSED SANITARY MH & SEWER
- CBMH 102 — PROPOSED CATCHBASIN MH & SEWER
- STMMH 101 — PROPOSED STORM MH & SEWER
- DD — MECHANICAL DECK DRAIN
- HYD — VB — PROPOSED HYDRANT C/w VALVE & VALVE BOX
- M — IR — PROPOSED WATER METER AND REMOTE METER
- PROPOSED BARRIER CURB
- DC — PROPOSED DEPRESSED CURB
- 150mmØ — PROPOSED WATER SERVICE AND DIAMETER
- VB — PROPOSED VALVE & VALVE BOX
- BEND — PROPOSED BEND AND THRUSTBLOCK 11.25°, 22.5°, 45° or TEE
- PROPOSED CAP
- PROPOSED FIRE DEPARTMENT CONNECTION
- PROPOSED BUILDING ENTRANCE
- THERMAL INSULATION FOR SHALLOW SEWERS
- PROPOSED LANDSCAPE AREA
- REMOVALS
- FFE — FINISHED FLOOR ELEVATION
- TOF — TOP OF FOUNDATION ELEVATION
- USF — UNDERSIDE OF FOOTING
- EXISTING CONCRETE CURB
- SANMH — EXISTING SANITARY MANHOLE & SEWER
- CBMH — EXISTING CATCHBASIN MANHOLE
- STMMH — EXISTING STORM MANHOLE & SEWER
- CB — EXISTING CATCHBASIN C/W CATCHBASIN LEAD
- 300mmØ WM — EXISTING WATERMAIN
- HYD — EXISTING HYDRANT C/W VALVE & LEAD
- EXISTING TREES / VEGETATION
- EX UP — EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY WIRES

PROPOSED STEPPED INSULATION DETAIL FOR SHALLOW SEWERS ONLY

N.T.S.

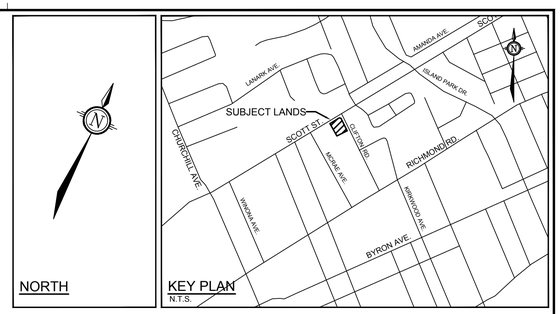


NOTES:

1. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 1.8m COVER WITH EXPANDED POLYSTYRENE INSULATION AS SHOWN.
2. THE THICKNESS OF INSULATION SHALL BE THE EQUIVALENT OF 25mm FOR EVERY 300mm REDUCTION IN THE REQUIRED DEPTH OF COVER (SEE TABLE)

COVER (mm)	INSULATION THICKNESS (mm)
1800-1500	50
1500-1200	75
1200-900	100
900-600	125

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)



GENERAL NOTES:

1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR $5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
5. COMPLETE ALL WORKS IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS USING THE CURRENT GUIDELINES, BYLAWS AND STANDARDS INCLUDING MATERIALS OF CONSTRUCTION, DISINFECTION AND ALL RELEVANT REFERENCES TO OPSS, OPSD & AWWA GUIDELINES - ALL CURRENT VERSIONS AND 'AS AMENDED'.
6. RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
7. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
8. ALL ELEVATIONS ARE GEODETIC.
9. REFER TO GEOTECHNICAL INVESTIGATION REPORT (PG4394-1 REVISION 1, DATED NOVEMBER 26, 2024) AND ASSOCIATED MEMORANDUM (DATED DECEMBER 5, 2024), PREPARED BY PATERSON GROUP INC., FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
11. REFER TO THE DEVELOPMENT SERVICING STUDY & STORMWATER MANAGEMENT REPORT (R-2024-087) PREPARED BY NOVATECH.
12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
13. PROVIDE LINE / PARKING PAINTING AS REQUIRED PER THE ARCHITECTURAL SITE PLAN.

SEWER NOTES:

1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'.
2. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200mmØ)	701.010	OPSD
CB, FRAME & COVER	400.020	OPSD
SANITARY MH FRAME & COVER	401.010 - TYPE "A"	OPSD
STORM / CBMH MANHOLE FRAME AND COVER	401.010 - TYPE "B"	OPSD
WATERTIGHT MH FRAME AND COVER	401.030	OPSD
LANDSCAPE DRAIN (ELBOW, COVER & PIPE)	S29 / S31	CITY OF OTTAWA
SEWER TRENCH	S6	CITY OF OTTAWA
STORM SEWER	PVC DR 35	
SANITARY SEWER	PVC DR 35	
CATCHBASIN LEAD	PVC DR 35	

3. ALL STORM AND SANITARY SERVICE LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
4. INSULATE ALL PIPES (SANISTM) THAT HAVE LESS THAN 1.8m COVER WITH HI-40 INSULATION PER INSULATION DETAIL FOR SHALLOW SEWERS. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
5. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
6. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
7. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
8. THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
9. ALL STORM MANHOLES AND CATCHBASIN MANHOLES ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO HAVE 600mm SUMPS.
10. ALL CATCHBASINS, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICD'S INSTALLED WITHIN THEM ARE TO HAVE 600mm SUMPS.
11. ALL WEEPING TILE SYSTEMS ARE TO BE PUMPED SEPARATELY TO THE BUILDING SERVICE AS INDICATED ON THE GENERAL PLAN OF SERVICES DRAWING. REFER TO MECHANICAL PLANS FOR DETAILS.
12. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
13. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS; T/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

WATERMAIN NOTES:

1. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE CITY OF OTTAWA FORCES.
2. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
VALVE BOX ASSEMBLY	W24	CITY OF OTTAWA
WATERMAIN CROSSING OVER SEWER	W25.2	CITY OF OTTAWA
WATERMAIN	PVC DR 18	

3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE, UNLESS OTHERWISE INDICATED.
4. PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, UNLESS OTHERWISE INDICATED.
5. WATER SERVICE IS TO BE CONSTRUCTED TO FOUNDATION WALL AND CAPPED.

150mmØ WATER SERVICE TABLE (WEST)

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
0+0.0	64.31±	61.87± ✱	150mmØ TEE CONNECTION TO EX. 203mmØ PVC WM
0+2.1 ✱✱	64.36	62.71	22.5° VERTICAL BEND
0+4.7 ✱✱	64.42	62.71	CROSS ABOVE EX.600mm STORM SEWER (CLEARANCE = ±0.25m)
0+8.8 ✱✱	64.57	62.71	150mmØ V&VB
0+9.5 ✱✱	64.60	62.71	CAP AT FOUNDATION WALL

150mmØ WATER SERVICE TABLE (EAST)

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
1+0.0 ✱✱	64.17±	61.87± ✱	150mmØ TEE CONNECTION TO EX. 203mmØ PVC WM
1+2.1 ✱✱	64.31	62.71	22.5° VERTICAL BEND
1+4.6 ✱✱	64.40	62.71	CROSS ABOVE EX.600mm STORM SEWER (CLEARANCE = ±0.25m)
1+8.8 ✱✱	64.55	62.71	150mmØ V&VB
1+9.5 ✱✱	64.58	62.71	CAP AT FOUNDATION WALL

✱ CONNECTIONS TO EXISTING 200mmØ WATERMAIN. EXACT ELEVATIONS TO BE FIELD DETERMINED.
✱✱ PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAIL W22 IN SHALLOW TRENCHES AND/OR CITY OF OTTAWA DETAIL W23 ADJACENT TO OPEN STRUCTURES.

INTERNAL SWM STORAGE SYSTEM

DESIGN EVENT	STORAGE SYSTEM CONTROLLED FLOW	STORAGE VOLUMES REQUIRED	STORAGE VOLUMES PROVIDED
1:2 YR	PUMPED FLOW RATE = 12.1 L/s	14.4m³	>63 m³
1:5 YR		23.8 m³	
1:100 YR		62.4 m³	

NOTES:
1. ALL DRAINAGE FROM AREA A-2 (PROPOSED AMENITY AREA DECK DRAINS AND ALL ROOF DRAINS) TO BE DIRECTED TO THE INTERNAL STORMWATER STORAGE SYSTEM. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR DETAILS.
2. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT SIZE AND DETAILS OF INTERNAL STORMWATER STORAGE SYSTEM.
3. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATION AND CONNECTIONS AND DETAILS OF THE INTERNAL STORMWATER STORAGE SYSTEM AND EMERGENCY OVERFLOW PIPING.

CRITICAL SEWER PIPE CROSSING TABLE

CROSSING	LOWER PIPE	HIGHER PIPE	CLEARANCE	SURFACE ELEVATION
Ⓐ	200mmØ WM T/P=61.78	200mmØ SAN INV=62.52	± 0.74m	64.15 m
Ⓑ	600mmØ STM T/P=62.31	200mmØ SAN INV=62.56	± 0.25m	64.36 m

BENCHMARK NOTES:

1. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA WITH AN ELEVATION OF 95.230.
2. IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
3. BENCHMARK WAS PROVIDED ON PLAN OF SURVEY OF ALL OF LOTS 24 AND 25, AND PART OF LOTS 45, 46, 47, AND 48, REGISTERED PLAN 369, SURVEYED BY STANTEC GEOMATICS LTD (PROJECT NO 161613828-110).

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

OWNER INFORMATION
GRANITE PRIVATE EQUITY LIMITED PARTNERSHIP
16 CONCOURSE GATE, SUITE 200
OTTAWA, ONTARIO K2E 7S8
KEN HOPPNER
613-831-5490 EXT 208
khoppner@morleyhoppner.com

No.	REVISION	DATE	BY
5.	REISSUED FOR SPC	APR 17/25	FST
4.	REVISED PER CITY COMMENTS	MAR 20/25	FST
3.	REISSUED FOR ZBLA AND SPC	DEC 13/24	FST
2.	REVISED PER CITY COMMENTS	NOV 01/24	FST
1.	ISSUED FOR SPC	JUL 31/24	FST

SCALE
1:200
1:200
0 2 4 6 8

DESIGN BB/KD
CHECKED FST
DRAWN BB/KD
CHECKED FST
APPROVED FST

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER F.S. THAUVETTE 100041399 April 17, 2025 PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
1950 SCOTT STREET AND 312 & 314 CLIFTON ROAD

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No. 121301
REV REV # 5
DRAWING No. 121301-GP

PLANNING PARTITION
PLAN #19152

ZBA# D02-02-24-0054 & SPC# D07-12-24-0072

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BENCHMARK NOTES:

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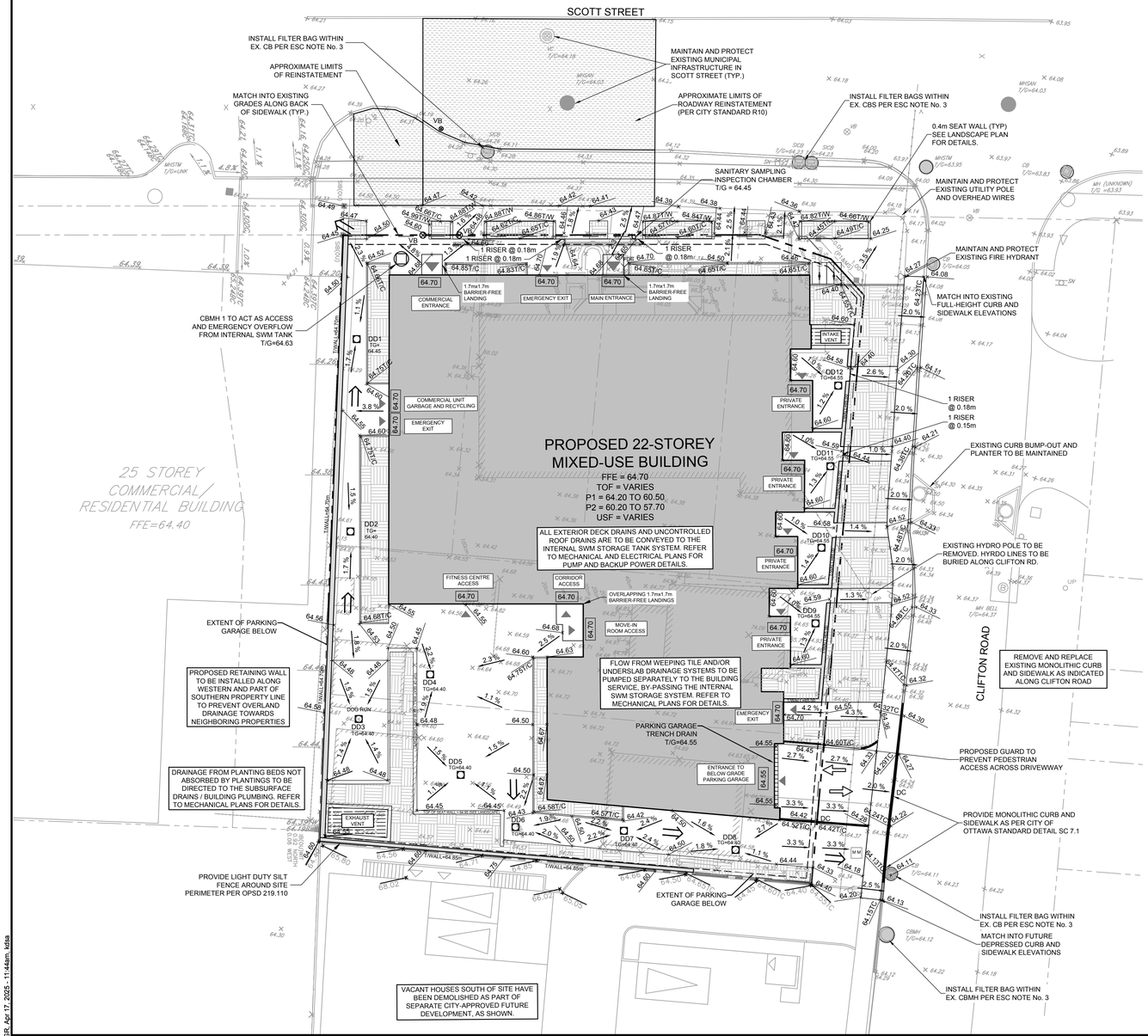
Erosion and Sediment Control Responsibilities:

				During Construction			After Construction Prior to Final Acceptance		After Final Acceptance
	ESC Measure	Symbol	Specification	Installation Responsibility	Inspection/Maintenance Responsibility	Inspection Frequency	Approval to Remove	Removal Responsibility	Inspection/Maintenance Responsibility
Temporary Measures	Silt Fence	— — —	OPSD 219.110	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Filter Fabric	Location as Indicated in ESC Note #3	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Mud Mat	M M	Drawing Details	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
	Dust Control	Location as Required Around Site	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Stabilized Material Stockpiling	Location as Required by Contractor	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
	Sediment Basin (for flows being pumped out of excavations)	Location as Required by Contractor	...	Developer's Contractor	Developer's Contractor	After Every Rainstorm	Developer's Contractor	Developer's Contractor	N/A



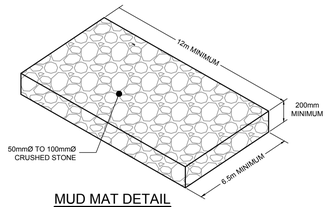
LEGEND

- PROPOSED ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- MATCH INTO EXISTING GRADES
- EXISTING ELEVATION
- GRADE AND DIRECTION
- PROPOSED SILT FENCING (OPSD 219.110)
- PROPOSED BUILDING ELEVATION
- PROPOSED FILTER BAG
- PROPERTY LINE
- FFE — FINISHED FLOOR ELEVATION
- TOF — TOP OF FOUNDATION
- USF — UNDERSIDE OF FOOTING
- DD — MECHANICAL DECK DRAINS
- VB — PROPOSED VALVE & VALVE BOX
- CBMH 1 — PROPOSED CATCHBASIN MANHOLE
- PROPOSED FIRE DEPARTMENT CONNECTION
- EMERGENCY OVERLAND FLOW ROUTE
- BUILDING ENTRANCE / EXIT
- APPROXIMATE LIMIT OF REINSTATEMENT AREA
- PROPOSED LANDSCAPE AREA
- DC — PROPOSED BARRIER CURB
- PROPOSED DEPRESSED CURB
- PROPOSED RETAINING WALL
- PROPOSED TACTILE WALKING SURFACE INDICATOR (TWSI)
- EXISTING VALVE & VALVE BOX
- EXISTING HYDRANT
- EXISTING CONCRETE CURB
- EXISTING CATCHBASIN
- EXISTING CATCHBASIN MH
- EXISTING UTILITY POLE C/W GUY WIRES
- EXISTING FENCE
- EXISTING OVERHEAD WIRES
- EXISTING AS-BUILT ELEVATION
- EXISTING AS-BUILT GRADE
- APPROVED DESIGN ELEVATION FOR ADJACENT PROPERTY

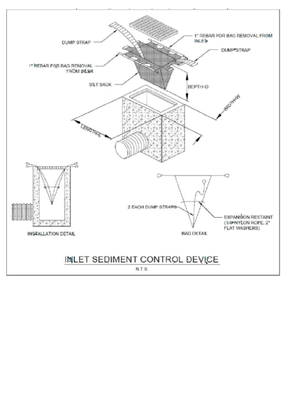
PAVEMENT STRUCTURE:

NEW LIGHT DUTY PAVEMENT
40mm HL3 OR SUPERPAVE 12.5
50mm HL8 OR SUPERPAVE 19.0
150mm GRANULAR "A"
450mm GRANULAR "B" TYPE II
ASPHALT GRADE PG 58-34

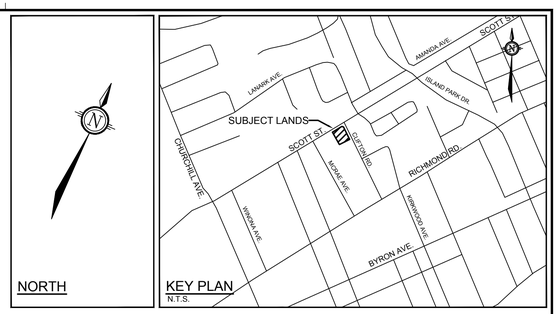
HEAVY DUTY PAVEMENT - ROADWAY RE-INSTATEMENT
MATCH EXISTING GRANULAR STRUCTURE OF ROADWAY
MATCH EXISTING ASPHALT THICKNESSES AS PER DETAIL R10.
NEW ASPHALT GRADE: PG 58-34



MUD MAT DETAIL
N.T.S.



INLET SEDIMENT CONTROL DEVICE
N.T.S.



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10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
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12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
13. PROVIDE LINE / PARKING PAINTING AS REQUIRED PER THE ARCHITECTURAL SITE PLAN.

GRADING NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
3. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
4. THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 99% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
5. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
6. MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
7. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
8. ALL CURBS SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA STANDARDS (SC1.1).
9. CONCRETE CURB AND SIDEWALK SHALL BE AS PER CITY OF OTTAWA STANDARD SC1.4.
10. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
11. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THIS PLAN.

EROSION AND SEDIMENT CONTROL NOTES :

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA 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.
2. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA. THEY ARE TO BE APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION. THESE PRACTICES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AND SHOULD INCLUDE AS A MINIMUM THOSE MEASURES INDICATED ON THE PLAN.
3. EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED DURING CONSTRUCTION IN ACCORDANCE WITH THE "GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES" (GOVERNMENT OF ONTARIO, MAY 1987). THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEETING ALL REGULATORY AGENCY REQUIREMENTS.
4. TO PREVENT SURFACE EROSION FROM ENTERING ANY STORM SEWER SYSTEM DURING CONSTRUCTION, FILTER BAGS WILL BE PLACED UNDER GRATES OF NEARBY CATCHBASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE CONSTRUCTION AREA (WHERE APPLICABLE).
5. TO LIMIT EROSION: MINIMIZE THE AMOUNT OF EXPOSED SOILS AT ANY GIVEN TIME, RE-VEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE AND PROTECT EXPOSED SLOPES WITH NATURAL OR SYNTHETIC MULCHES.
6. FOR MATERIAL STOCKPILING: MINIMIZE THE AMOUNT OF EXPOSED MATERIALS AT ANY GIVEN TIME; APPLY TEMPORARY SEEDING, TARPS, COMPACTION AND/OR SURFACE ROUGHENING AS REQUIRED TO STABILIZE STOCKPILED MATERIALS THAT WILL NOT BE USED WITHIN 14 DAYS.
7. 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.
8. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO ANY STORM SEWER SYSTEM. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
9. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
10. ROADWAYS ARE TO BE SWEPT AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE MUNICIPALITY.
11. THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS. MONITOR DUST LEVELS DURING SITE PREPARATION/EXCAVATION, AND CONSTRUCTION ACTIVITIES, AND WHEN DUST LEVELS BECOME VISUALLY APPARENT SPRAY WATER TO MINIMIZE THE RELEASE OF DUST FROM GRAVEL, PAVED AREAS AND EXPOSED SOILS. USE CHEMICAL DUST SUPPRESSANTS ONLY WHERE NECESSARY ON PROBLEM AREAS.

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

OWNER INFORMATION
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No.	REVISION	DATE	BY
7.	REISSUED FOR SPC	APR 17/25	FST
6.	REVISED PER CITY COMMENTS	MAR 20/25	FST
5.	REVISED PER CITY COMMENTS	FEB 14/25	FST
4.	REVISED PER CITY COMMENTS	JAN 08/25	FST
3.	REISSUED FOR ZBLA AND SPC	DEC 13/24	FST
2.	REVISED PER CITY COMMENTS	NOV 01/24	FST
1.	ISSUED FOR SPC	JUL 31/24	FST

SCALE
1:200
1:200
0 2 4 6 8

DESIGN BB/KD
CHECKED FST
DRAWN BB/KD
CHECKED FST
APPROVED FST

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER — F.S. THAUVETTE — 100041399 — April 17, 2025 — PROVINCE OF ONTARIO

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LOCATION
CITY OF OTTAWA
1950 SCOTT STREET AND 312 & 314 CLIFTON ROAD

DRAWING NAME
GRADING AND EROSION AND SEDIMENT CONTROL PLAN

PROJECT No. 121301
REV REV # 7
DRAWING No. 121301-GR

PLAN #19152

ZBA# D02-02-24-0054 & SPC# D07-12-24-0072

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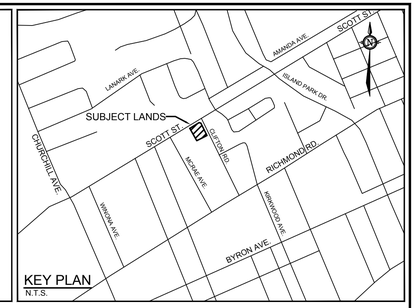
LEGEND

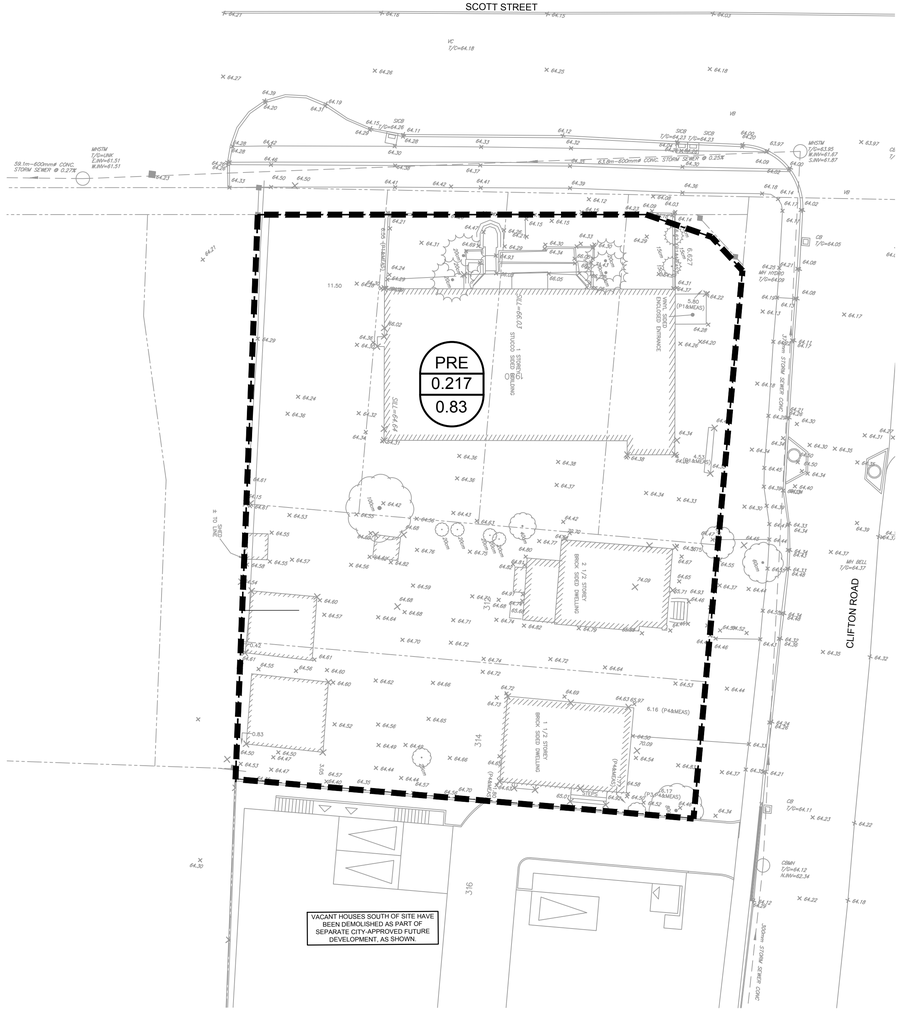
- PROPOSED BARRIER CURB
- DC — PROPOSED DEPRESSED CURB
- DRAINAGE AREA LIMITS
- DD3 — DECK DRAIN
- PRE / 0.217 / 0.83 — PRE-DEVELOPMENT AREA ID / PRE-DEVELOPMENT DRAINAGE AREA (ha) / 1:5 YEAR WEIGHTED RUNOFF COEFICIENT
- PROPOSED LANDSCAPE AREA
- CBMH 102 — PROPOSED CATCHBASIN MH & SEWER
- PROPOSED RETAINING WALL
- A-2 / 0.194 / 0.84 — POST-DEVELOPMENT AREA ID / POST-DEVELOPMENT DRAINAGE AREA (ha) / 1:5 YEAR WEIGHTED RUNOFF COEFICIENT
- EXISTING CONCRETE CURB
- VALVE — EXISTING VALVE & VALVE BOX
- SP — EXISTING SERVICE POST
- HYD — EXISTING HYDRANT
- CB — EXISTING CATCHBASIN
- CBMH — EXISTING CATCHBASIN MH
- EX UP — EXISTING UTILITY POLE C/W GUY WIRES

NORTH

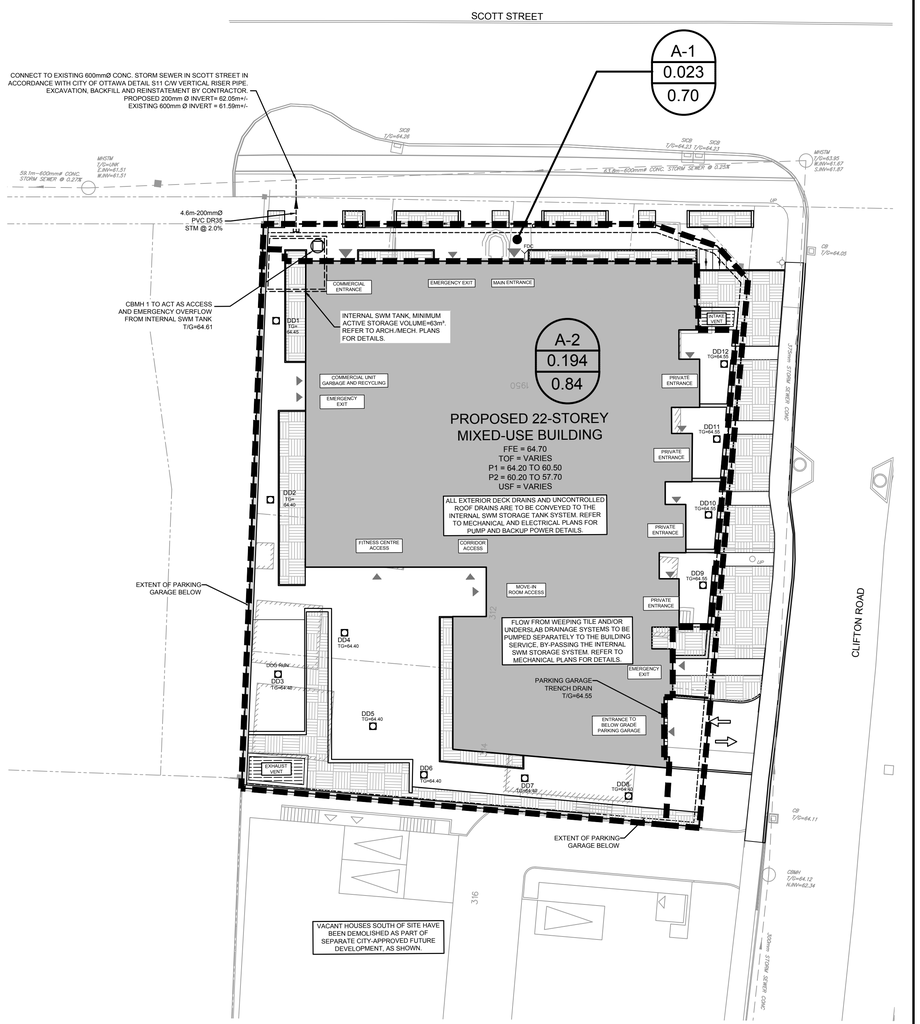


KEY PLAN
N.T.S.

PRE-DEVELOPMENT CONDITIONS



POST-DEVELOPMENT CONDITIONS



GENERAL NOTES:

1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR $5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
5. COMPLETE ALL WORKS IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS USING THE CURRENT GUIDELINES, BYLAWS AND STANDARDS INCLUDING MATERIALS OF CONSTRUCTION, DISINFECTION AND ALL RELEVANT REFERENCES TO OPSS, OPSD & AWWA GUIDELINES - ALL CURRENT VERSIONS AND 'AS AMENDED'.
6. RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
7. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
8. ALL ELEVATIONS ARE GEODETIC.
9. REFER TO GEOTECHNICAL INVESTIGATION REPORT (PG4394-1 REVISION 1, DATED NOVEMBER 26, 2024) AND ASSOCIATED MEMORANDUM (DATED DECEMBER 5, 2024, PREPARED BY PATERSON GROUP INC., FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
11. REFER TO THE DEVELOPMENT SERVICING STUDY & STORMWATER MANAGEMENT REPORT (R-2024-087) PREPARED BY NOVATECH.
12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
13. PROVIDE LINE / PARKING PAINTING AS REQUIRED PER THE ARCHITECTURAL SITE PLAN.

BENCHMARK NOTES:

1. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA WITH AN ELEVATION OF 95.230.
2. IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
3. BENCHMARK WAS PROVIDED ON PLAN OF SURVEY OF ALL OF LOTS 24 AND 25, AND PART OF LOTS 45, 46, 47, AND 48, REGISTERED PLAN 369, SURVEYED BY STANTEC GEOMATICS LTD (PROJECT NO 161613828-110).

INTERNAL SWM STORAGE SYSTEM

DESIGN EVENT	STORAGE SYSTEM CONTROLLED FLOW	STORAGE VOLUMES	
		REQUIRED	PROVIDED
1:2 YR	PUMPED FLOW RATE = 12.1 L/s	14.4m³	>63 m³
1:5 YR		23.8 m³	
1:100 YR		62.4 m³	

NOTES:

1. ALL DRAINAGE FROM AREA A-2 (PROPOSED AMENITY AREA DECK DRAINS AND ALL ROOF DRAINS) TO BE DIRECTED TO THE INTERNAL STORMWATER STORAGE SYSTEM. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR DETAILS.
2. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT SIZE AND DETAILS OF INTERNAL STORMWATER STORAGE SYSTEM.
3. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATION AND CONNECTIONS AND DETAILS OF THE INTERNAL STORMWATER STORAGE SYSTEM AND EMERGENCY OVERFLOW PIPING.

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

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SCALE 1:250 (1:250 0 2 4 6 8 10)

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DRAWING NAME
STORMWATER MANAGEMENT PLAN

PROJECT No. 121301
REV REV # 5
DRAWING No. 121301-SWM

PLAN #19152

ZBA# D02-02-24-0054 & SPC# D07-12-24-0072

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