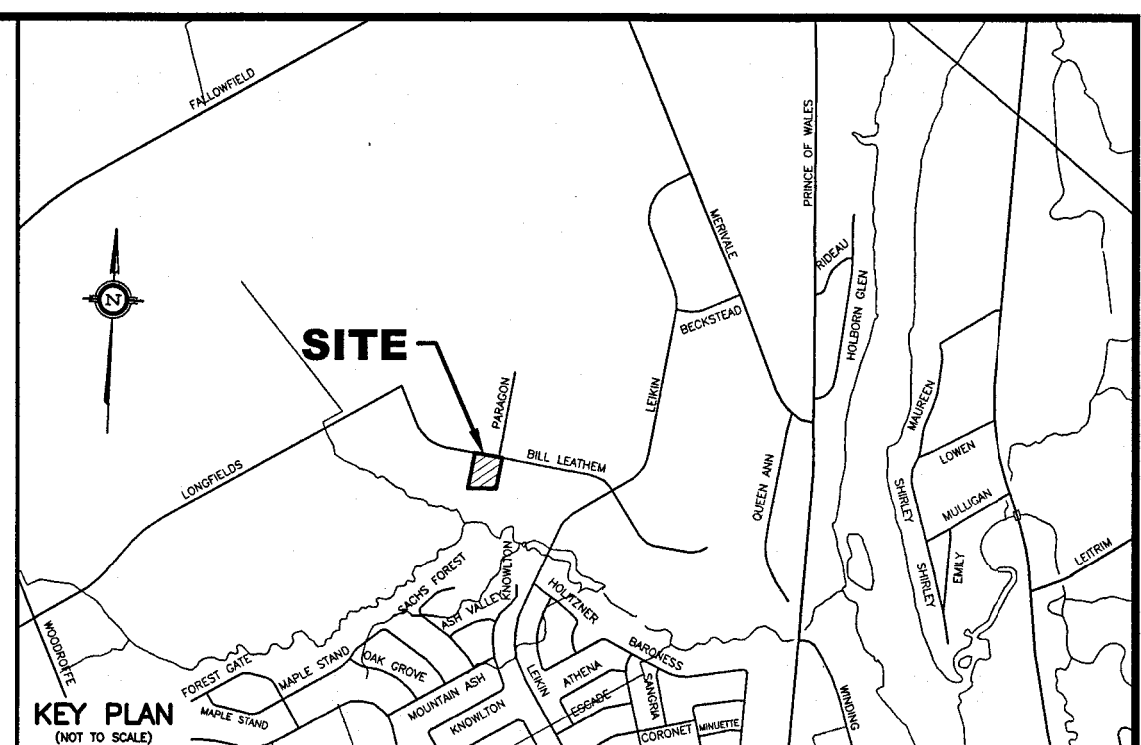
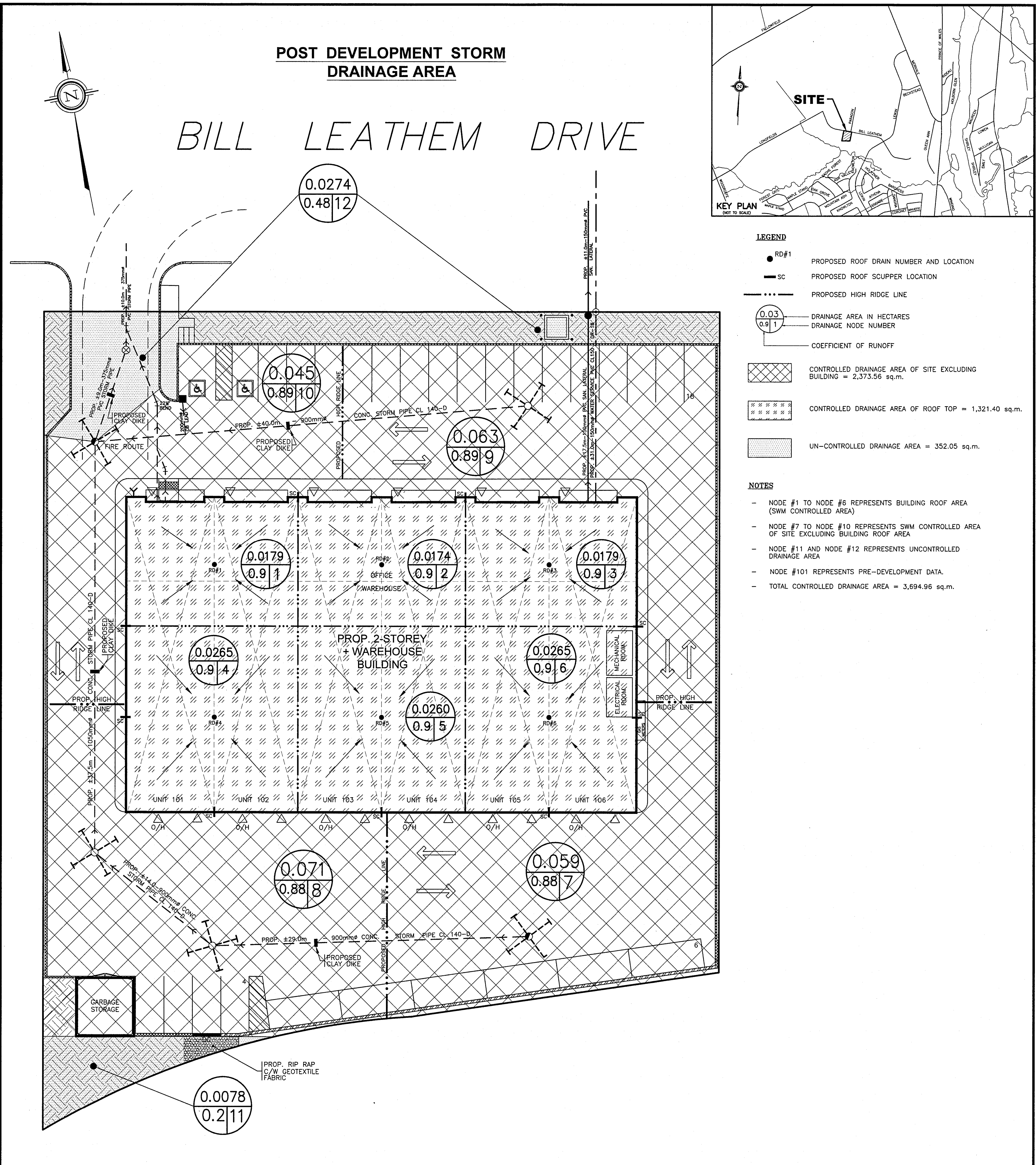
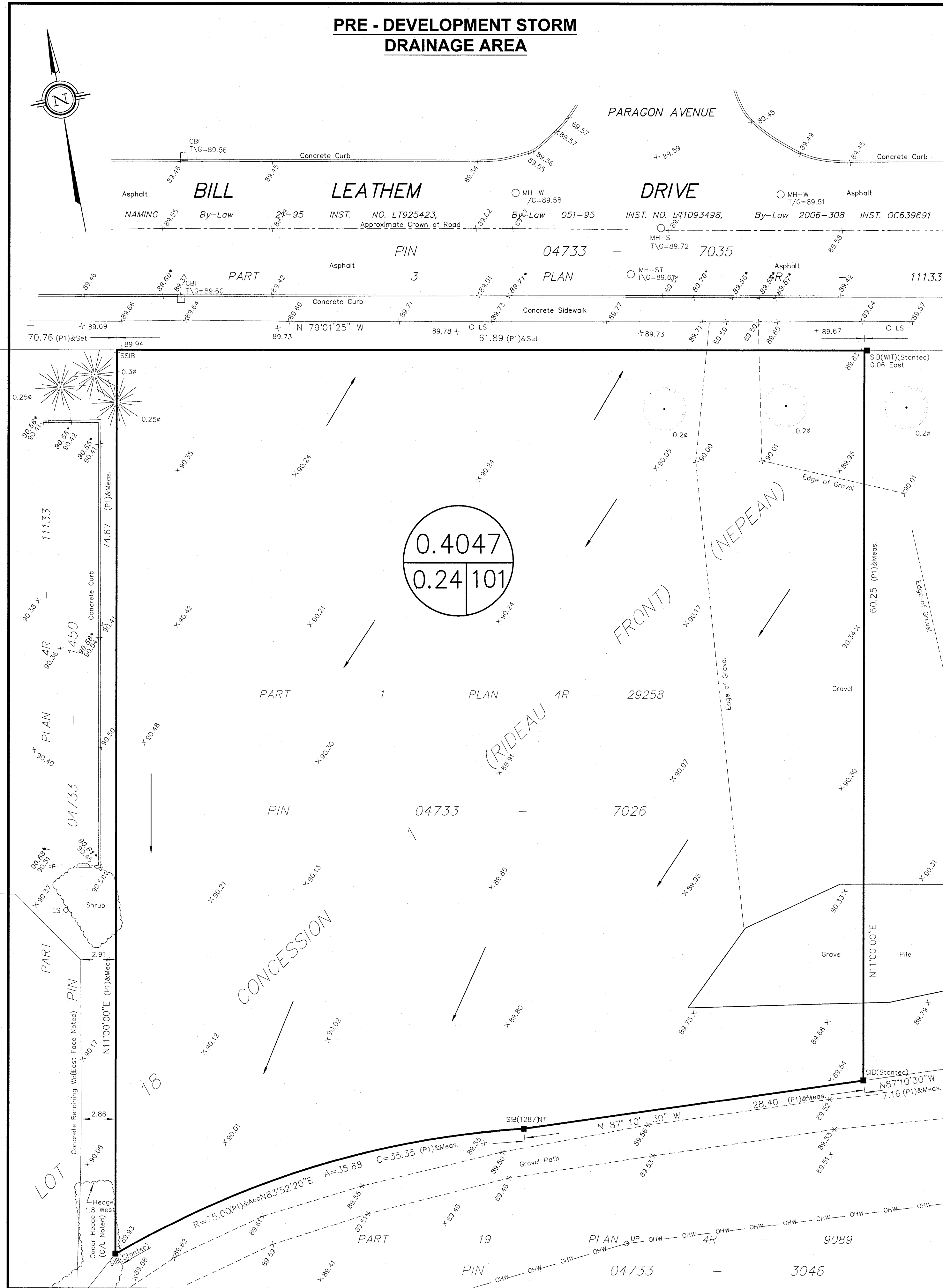




- LEGEND**
- RD#1 PROPOSED ROOF DRAIN NUMBER AND LOCATION
 - SC PROPOSED ROOF SCUPPER LOCATION
 - PROPOSED HIGH RIDGE LINE
 - 0.03 DRAINAGE AREA IN HECTARES
 - 0.91 DRAINAGE NODE NUMBER
 - COEFFICIENT OF RUNOFF
 - CONTROLLED DRAINAGE AREA OF SITE EXCLUDING BUILDING = 2,373.56 sq.m.
 - CONTROLLED DRAINAGE AREA OF ROOF TOP = 1,321.40 sq.m.
 - UN-CONTROLLED DRAINAGE AREA = 352.05 sq.m.
- NOTES**
- NODE #1 TO NODE #6 REPRESENTS BUILDING ROOF AREA (SWM CONTROLLED AREA)
 - NODE #7 TO NODE #10 REPRESENTS SWM CONTROLLED AREA OF SITE EXCLUDING BUILDING ROOF AREA
 - NODE #11 AND NODE #12 REPRESENTS UNCONTROLLED DRAINAGE AREA
 - NODE #101 REPRESENTS PRE-DEVELOPMENT DATA.
 - TOTAL CONTROLLED DRAINAGE AREA = 3,694.96 sq.m.

4		REVISIONS AS PER ARCHITECT'S SITE PLAN ROOF SCUPPER LOCATIONS OF MARCH 1, 2024 AND REVIEW COMMENTS OF MARCH 4, 2024	03/05/24	TLM
3		REVISIONS AS PER DEVELOPER'S COMMENTS OF FEBRUARY 5, 2024 AND ARCHITECT'S REVISED SITE PLAN OF FEBRUARY 23, 2024	03/01/24	TLM
2		REVISIONS AS PER CITY'S REVIEW COMMENTS OF DECEMBER 15, 2023	02/27/24	TLM
1		ISSUED FOR SITE PLAN APPLICATION	10/26/23	TLM
No.	REVISION	DATE	BY	

SCALE

0 2 4 6 10m

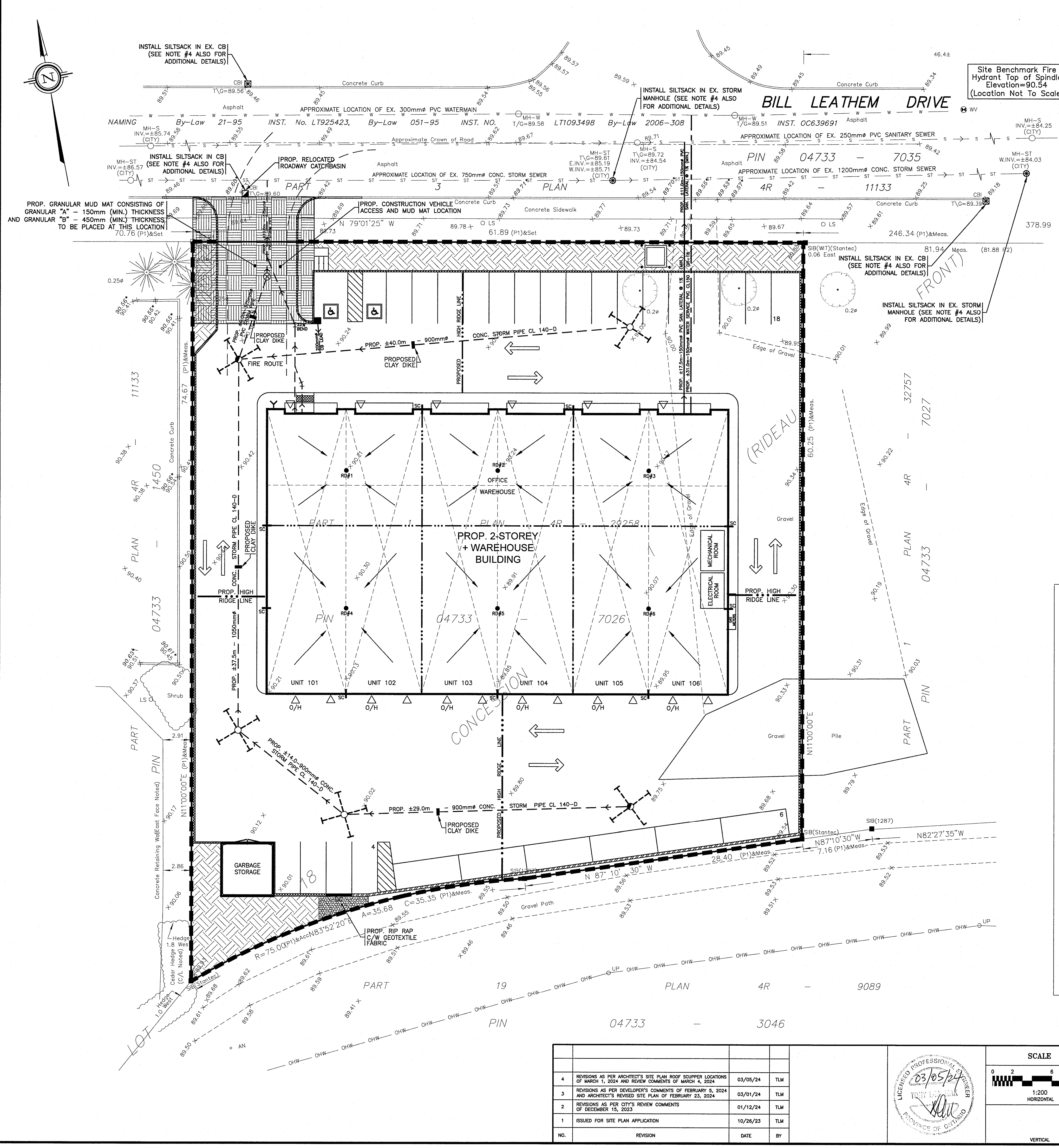
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HORIZONTAL

VERTICAL

DESIGN	T.L.M.	PROJECT	96 BILL LEATHAM DRIVE PART OF LOT 18 CONCESSION 1 (RIDEAU FRONT) GEOGRAPHIC TOWNSHIP OF NEPEAN CITY OF OTTAWA		
CHECKED	T.L.M.	DRAWING TITLE	STORM DRAINAGE AREA PLAN		
DRAWN BY	P.M.	PROJECT No.	822-125	DATE	JUNE 2023
CHECKED	T.L.M.	DRAWING No.	D-1		
APPROVED	T.L.M.				

T.L. MAK ENGINEERING CONSULTANTS LTD.
CONSULTING ENGINEERS



LEGEND

- SILT FENCE BARRIER LOCATION
- PROPOSED MUD MAT AREA
- DENOTES SILTSACK INSTALLATION IN EX. STORM MANHOLE
- DENOTES SILTSACK INSTALLATION IN EX. CATCHBASIN
- DENOTES SILTSACK INSTALLATION IN EX. RELOCATED CATCHBASIN

EROSION AND SEDIMENT CONTROL NOTES

BEST MANAGEMENT PRACTICES

EROSION AND SEDIMENT CONTROLS (BEST MANAGEMENT PRACTICES) SHALL BE PROVIDED DURING CONSTRUCTION OF THIS PROJECT. EROSION MUST BE MINIMIZED AND SEDIMENTS MUST BE REMOVED FROM CONSTRUCTION SITE RUNOFF IN ORDER TO PROTECT DOWNSTREAM AREAS. DURING ALL CONSTRUCTION, EROSION AND SEDIMENTATION SHOULD BE CONTROLLED BY THE FOLLOWING TECHNIQUES:

- MINIMIZE THE EXTENT OF EXPOSED SOILS.
- MINIMIZE THE AREA TO BE CLEARED AND GRUBBED.
- PROTECT EXPOSED SLOPES WITH PLASTIC OR SYNTHETIC MULCHES.
- INSTALL "SILTSACK" CATCH BASIN SEDIMENT CONTROL DEVICE OR EQUAL IN CATCH BASINS ALONG BILL LEATHAM DRIVE ON-SITE AND OFF-SITE WITHIN THE ROAD RIGHT OF WAY ADJACENT TO THIS PROPERTY AS RECOMMENDED BY THE MANUFACTURER. SILTSACK SHALL BE INSPECTED EVERY 2 TO 3 WEEKS AND AFTER EVERY MAJOR STORM. SILT SACKS SHALL BE PLACED ON ALL STORM SEWER MAINTENANCE HOLE OPENINGS DURING CONSTRUCTION.
- INSTALL SILT FENCES AROUND THE PERIMETER OF STOCKPILES OF TOPSOIL TO BE USED OR REMOVED FROM SITE. (LOCATION TO BE DETERMINED).
- SEDIMENT CONTROL DEVICES SHALL BE INSPECTED EVERY 2 TO 3 WEEKS AND AFTER MAJOR STORMS AND CLEANED OF ANY ACCUMULATED SILT AS REQUIRED. THE DEPOSITS WILL BE DISPOSED OF AS PER THE REQUIREMENTS OF THE CONTRACT.
- IN SOME CASES SOME FILTER BARRIERS MAY BE REMOVED TEMPORARILY TO ACCOMMODATE CONSTRUCTION OPERATIONS. THE AFFECTED BARRIERS WILL BE REINSTATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED. REMOVAL SHALL NOT OCCUR IF RUNOFF OR RAINFALL IS PREDICTED UNLESS A NEW DEVICE HAS BEEN INSTALLED TO PROTECT THE EXISTING STORM AND SANITARY SEWER SYSTEMS.
- NO REFUELING OR CLEANING OF EQUIPMENT IS PERMITTED NEAR ANY EXISTING WATERWAYS.
- DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL INSPECT, MAINTAIN AND REMOVE THE CONTROL MEASURES.
- THIS PROPOSED EROSION AND SEDIMENT CONTROL PLAN IS CONSIDERED BY (RVCA) A LIVING DOCUMENT WHICH MAY BE MODIFIED IN THE EVENT THE CONTROL MEASURES ARE INSUFFICIENT.
- CONTRACTOR IS RESPONSIBLE TO KEEP THE ROADS FREE AND CLEAN FROM MUD AND DEBRIS DURING THE CONSTRUCTION PERIOD.

PERSPECTIVE VIEW

SECTION

PLAN

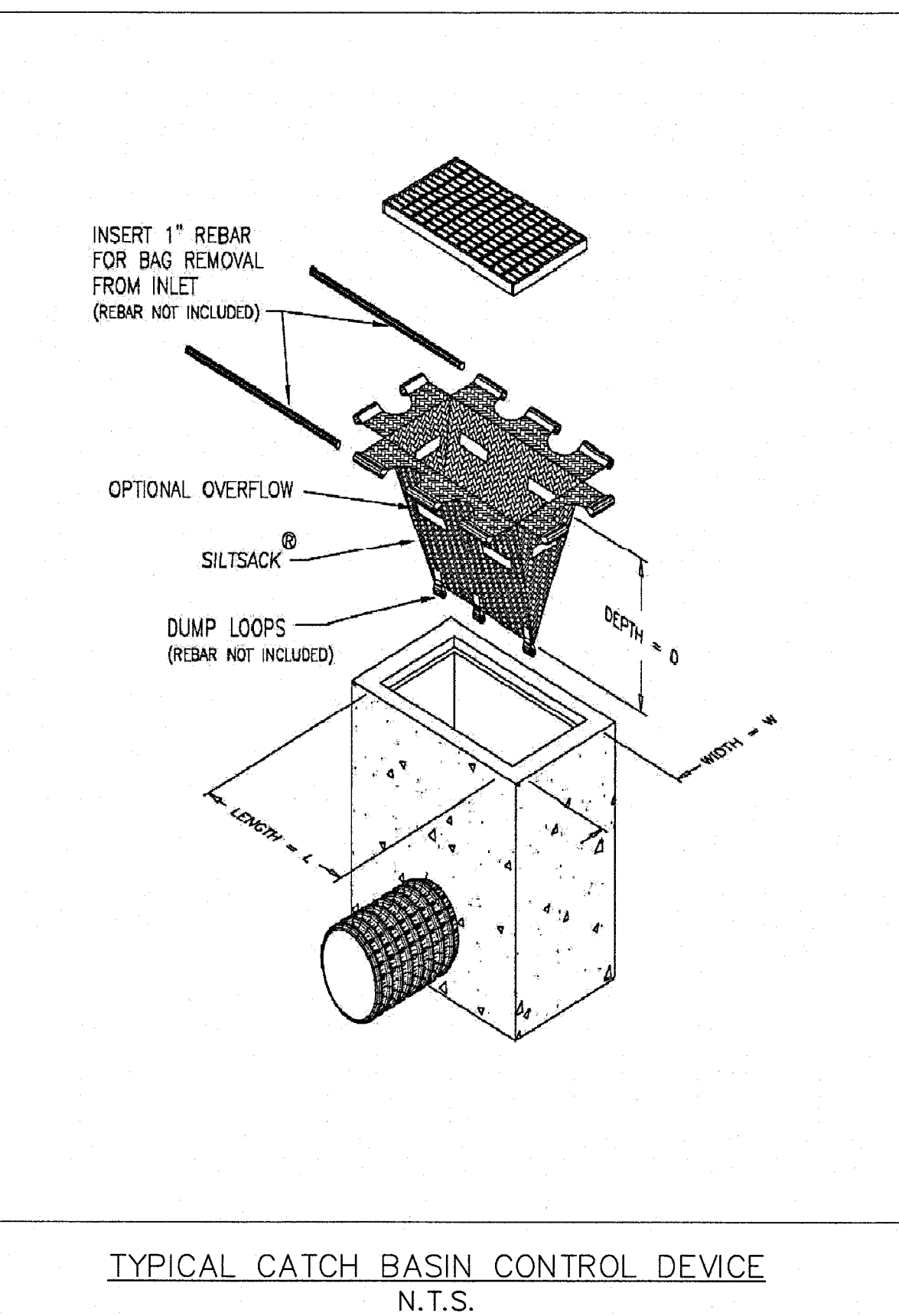
SECTION A-A

NOTE: A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2006 Rev 1

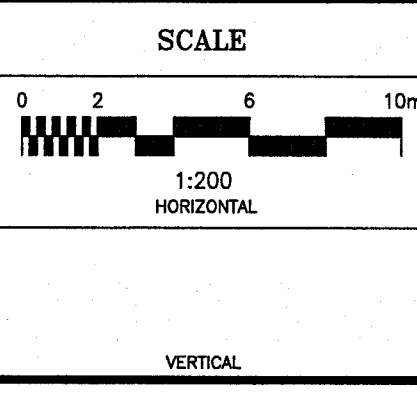
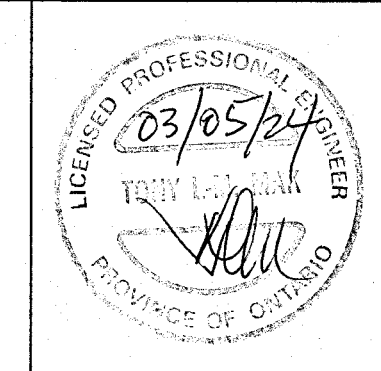
LIGHT-DUTY SILT FENCE BARRIER

OPSD 219.110



TYPICAL CATCH BASIN CONTROL DEVICE
N.T.S.

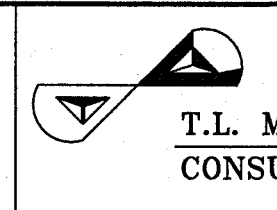
NO.	REVISION	DATE	BY
4	REVISIONS AS PER ARCHITECT'S SITE PLAN ROOF SCUPPER LOCATIONS OF MARCH 1, 2024 AND REVIEW COMMENTS OF MARCH 4, 2024	03/05/24	TLM
3	REVISIONS AS PER DEVELOPER'S COMMENTS OF FEBRUARY 5, 2024 AND ARCHITECT'S REVISED SITE PLAN OF FEBRUARY 23, 2024	03/01/24	TLM
2	REVISIONS AS PER CITY'S REVIEW COMMENTS OF DECEMBER 15, 2023	01/12/24	TLM
1	ISSUED FOR SITE PLAN APPLICATION	10/26/23	TLM



DESIGN	T.L.M.
CHECKED	T.L.M.
DRAWN BY	P.M.
CHECKED	T.L.M.
APPROVED	T.L.M.

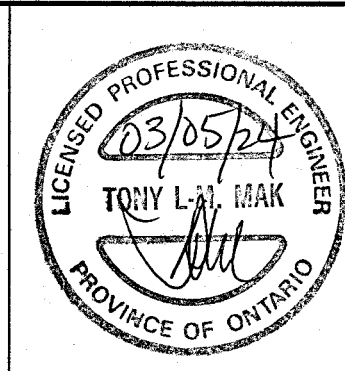
PROJECT
96 BILL LEATHAM DRIVE
PART OF LOT 18
CONCESSION 1 (RIDEAU FRONT)
GEOGRAPHIC TOWNSHIP OF NEPEAN
CITY OF OTTAWA

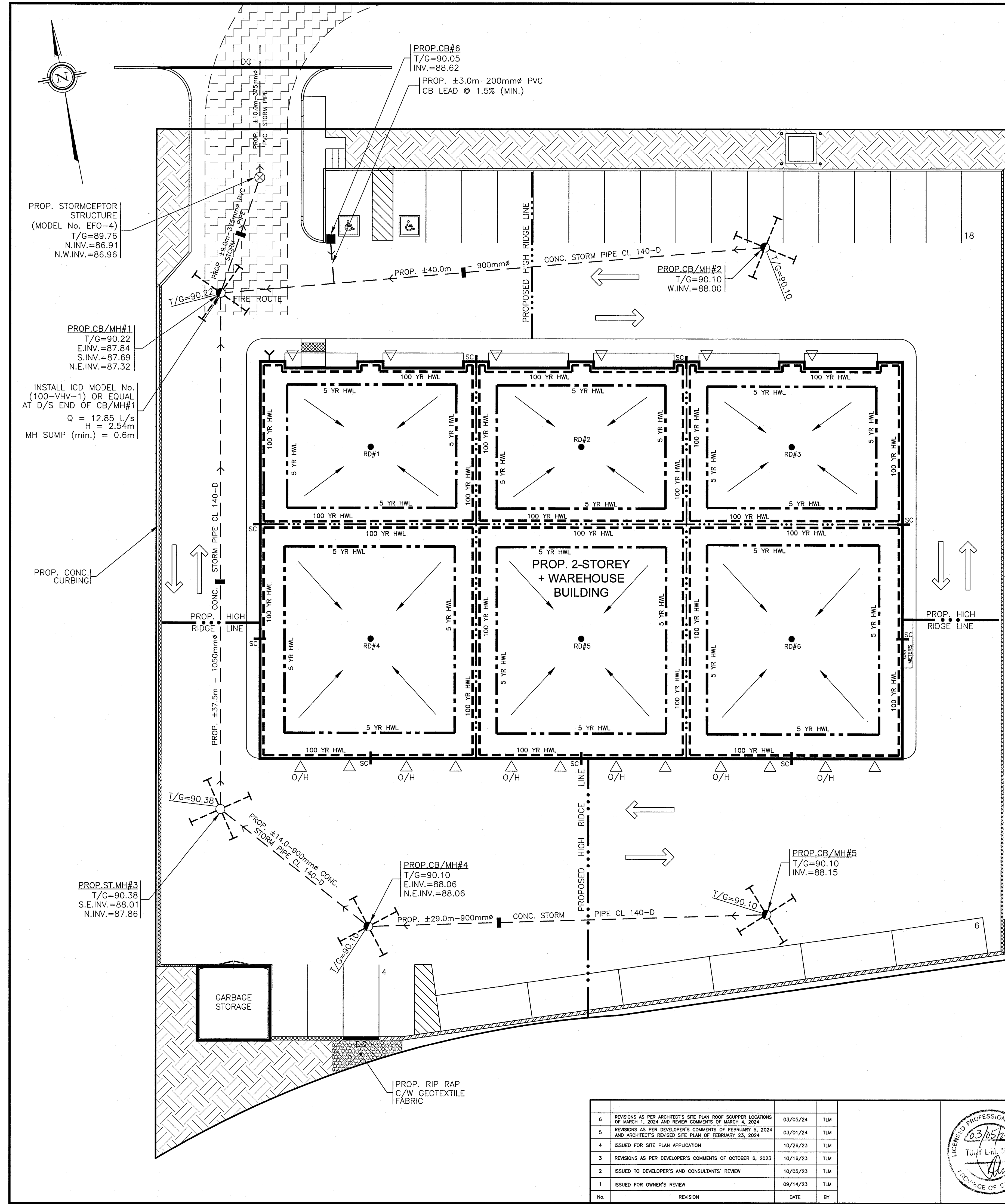
DRAWING TITLE
PROPOSED EROSION AND SEDIMENT CONTROL PLAN



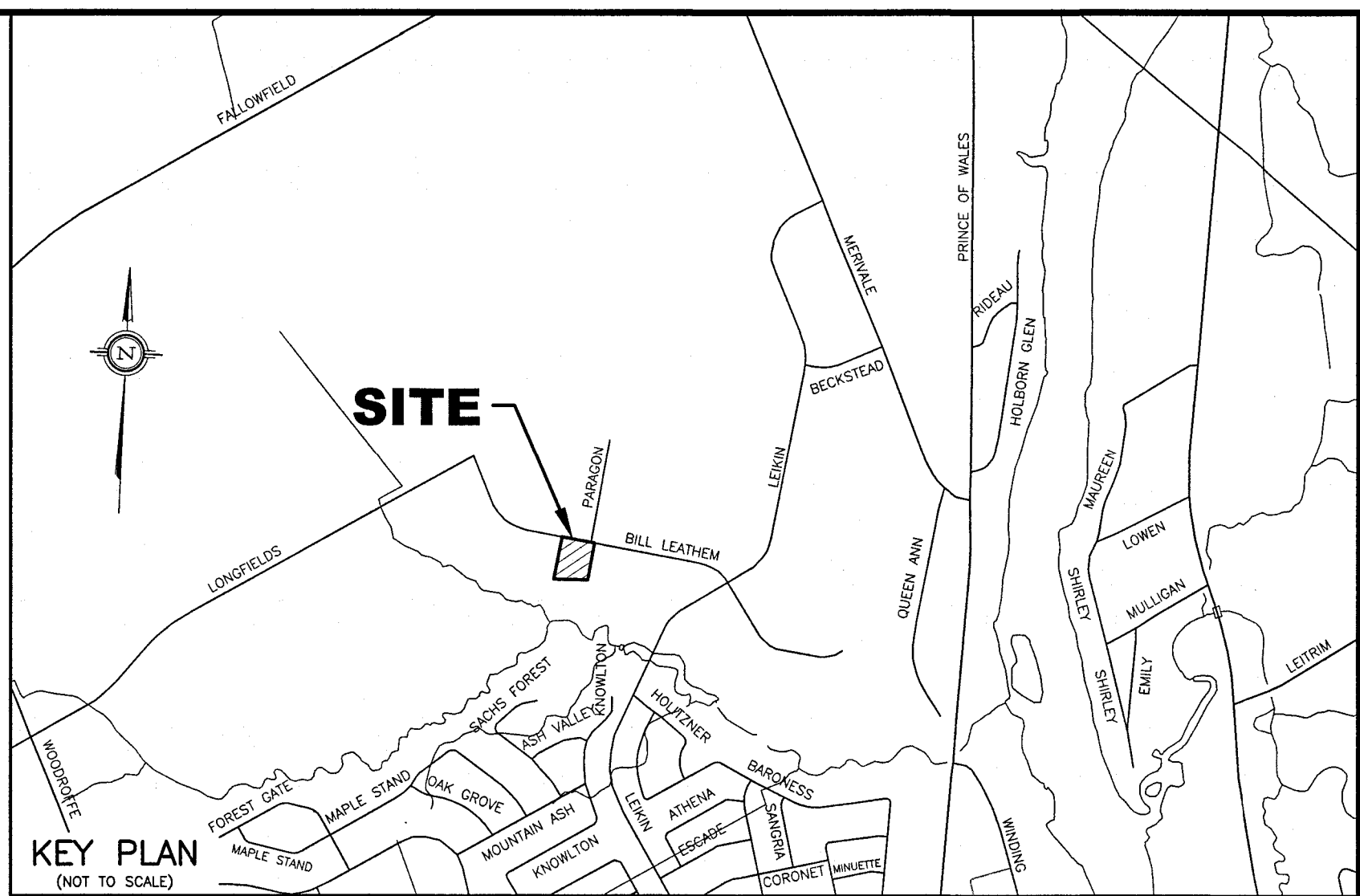
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CONSULTING ENGINEERS

PROJECT No.	DATE	DRAWING No.
822-125	JUNE 2023	ESC-1





- LEGEND**
- 100 YR HIGH WATER LEVEL
 - 5 YR HIGH WATER LEVEL
 - PROPOSED HIGH RIDGE LINE
 - RD#1 DENOTES PROPOSED ROOF DRAIN NUMBER AND LOCATION
 - SC PROPOSED ROOF SCUPPER LOCATION
 - PROPOSED GENERAL DIRECTION OF LOT GRADING AND SURFACE FLOW



NOTES

1. STORMWATER MANAGEMENT NOTES

ROOF DRAIN DETAILS

MODEL TYPE: WATTS MODEL "ADJUSTABLE ACCUTROL WEIR" (MODEL No. RD-100A-ADJ). (WEIR OPENING EXPOSED IS : 1/4 OPENING EXPOSED) TO PERMIT A RELEASE FLOW RATE OF 13.75 US GAL/MIN. OR 0.87 L/s UNDER A HEAD OF 120mm AND AT MAXIMUM FLOW RATE OF 15.0 US GAL/MIN. OR 0.95 L/s UNDER A HEAD OF LP TO 150mm.

NUMBER OF CONTROL DEVICES: 1 CONTROLLED ROOF DRAINS PER DESIGNATED ROOF AREA FOR SWM ATTENUATION

MAXIMUM FLOW PER ROOF DRAIN: 15.0 U.S. GAL/MIN. OR 0.95 L/s.

TOTAL FLOW FROM FLAT ROOFTOP OF BUILDING AT MAXIMUM HEAD OF 150mm PER DRAIN AT THE (6) PROPOSED DRAINS = 5.70 L/s

DEPTH AND VOLUME:

ROOF AREA ID & DRAINAGE AREA (ha)	NUMBER OF ROOF DRAINS	WATTS ROOF DRAIN MODEL ID (WEIR OPENING)	CONTROLLED FLOW PER DRAIN (L/s)		APPROXIMATE PONDING DEPTH ABOVE DRAINS (m)		STORAGE VOLUME REQUIRED (m³)		MAX. STORAGE AVAILABLE (m³)
			5 YR	100 YR	5 YR	100 YR	5 YR	100 YR	
No. 1 (0.0179 ha)	1	RD-100-A-ADJ (1/4 OPENING EXPOSED)	0.87	0.95	0.12	0.15	2.79	6.72	8.87
No. 2 (0.0174 ha)	1	RD-100-A-ADJ (1/4 OPENING EXPOSED)	0.87	0.95	0.12	0.15	2.69	6.46	8.53
No. 3 (0.0179 ha)	1	RD-100-A-ADJ (1/4 OPENING EXPOSED)	0.87	0.95	0.12	0.15	2.79	6.72	8.63
No. 4 (0.0265 ha)	1	RD-100-A-ADJ (1/4 OPENING EXPOSED)	0.87	0.95	0.12	0.15	4.95	11.47	13.11
No. 5 (0.0260 ha)	1	RD-100-A-ADJ (1/4 OPENING EXPOSED)	0.87	0.95	0.12	0.15	4.80	11.15	12.90
No. 6 (0.0265 ha)	1	RD-100-A-ADJ (1/4 OPENING EXPOSED)	0.87	0.95	0.12	0.15	4.95	11.47	13.12
TOTAL ROOF (0.132 ha)	6		5.22	5.70	—	—	22.97	53.99	65.16

- SCUPPER LOCATION: AS SHOWN ON THIS DRAWING
- 5 YEAR ELEVATION: 120mm ABOVE THE ROOF DRAIN FOR ROOF AREA #1, #2, #3, #4, #5 AND #6
- 100 YEAR ELEVATION: 150mm ABOVE THE ROOF DRAIN FOR ROOF AREA #1, #2, #3, #4, #5 AND #6
- EACH ROOF DRAIN SHALL BE SIZED FOR A (MAX) RELEASE RATE OF 15.0 U.S. GAL/MIN. OR 0.95 L/s. UNDER A HEAD OF 150mm. THE OWNER'S MECHANICAL ENGINEER SHALL SPECIFY THE REQUIRED ROOF DRAIN TYPE AND MODEL NO. AND PROVIDE THE NECESSARY INFORMATION TO THE CITY OF OTTAWA FOR THEIR RECORDS TO ENSURE PROPER RELEASE RATE FOR STORMWATER COMPLIANCE.
- ROOF PITCH IS ASSUMED TO HAVE 1.30% (MIN.) SLOPE.
- ROOF SCUPPERS ARE RECOMMENDED TO BE INSTALLED 0mm ABOVE EDGE OF ROOFTOP ELEVATION FOR EMERGENCY OVERFLOW PURPOSES AT ROOF AREA #1, #2, #3, #4, #5 AND #6 AT PERIMETER OF BUILDING.
- SEE LATEST REVISED STORM DRAINAGE REPORT No. R-822-125 DATED MARCH 2024 FOR DETAILS ALSO.
2. PROPOSED ROOF DRAINS AND SCUPPER LOCATIONS SHOWN ON THIS PLAN SHALL BE REVIEWED BY THE OWNER AND OWNER'S BUILDING DESIGNER FOR APPROVAL.
3. THE OWNER'S BUILDING DESIGNER AND STRUCTURAL ENGINEER SHALL ENSURE THAT THE ADDITIONAL STORMWATER STORAGE VOLUME FROM STORMWATER MANAGEMENT MEASURES ARE ACCOUNTED FOR IN THE STRUCTURAL DESIGN OF AND WATERPROOFING OF ROOF AREA No. 1 to No. 6 INCLUSIVE AND ANY OF THE SUPPORTING STRUCTURES THAT MAY BE AFFECTED BY THE STORED WATER.
4. ROOF DRAIN #1, #2, #3, #4, #5 AND #6 INCLUSIVE SHALL OUTLET INTO THE DESIGNATED 150mmØ PVC STORMWATER PIPE AS SHOWN ON THE PROPOSED GRADING AND SERVICING PLAN (DWG No. 822-125, G-1).
5. SITE STORAGE VOLUME FROM PROPOSED UNDERGROUND DRAINAGE PIPES AND STRUCTURES:

EVENT	NON-ROOF AREA ESTIMATED HWL ON-SITE	CALCULATED MINIMUM VOLUME (m³)	AVAILABLE SITE STORAGE VOLUME (m³)
5 YR	88.22m	47.13	48.53
100 YR	90.05m	108.89	109.40

6. FOR GRADING AND SERVICING DETAILS OF THIS SITE, REFER TO DWG. No. 822-125, G-1.
7. ESTIMATED 5-YEAR HWL FOR THE SITE EXCLUDING THE ROOF TOP AREA = 88.22m AND THE 100-YEAR HWL = 90.05m ON-SITE (ALL CONFIRMED WITHIN PROPOSED UNDERGROUND DRAINAGE SYSTEM).

WATTS Adjustable Accutrol Weir

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.

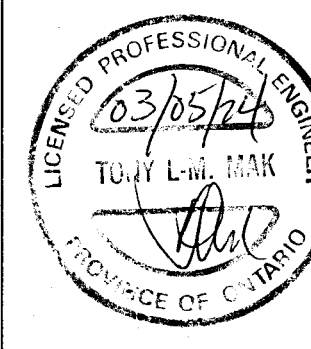
Therefore, at 3" of head, the flow rate through the Accutrol Weir that has 1/2 the slot exposed will be: [5 gpm (per inch of head) x 2 inches of head] x 1/2 = 2-1/2 gpm (for the third inch of head) = 12-1/2 gpm.

1/2 Weir Opening Exposed Shown Above

TABLE 1. Adjustable Accutrol Flow Rate Settings

Weir Opening Exposed	1"	2"	3"	4"	5"	6"
1/4	5	10	15	20	25	30
1/2	5	10	15	20	25	30
3/4	5	10	15	20	25	30
Full	5	10	15	20	25	30

No.	REVISION	DATE	BY
6	REVISIONS AS PER ARCHITECT'S SITE PLAN ROOF SCUPPER LOCATIONS OF MARCH 1, 2024 AND REVIEW COMMENTS OF MARCH 4, 2024	03/05/24	TLM
5	REVISIONS AS PER DEVELOPER'S COMMENTS OF FEBRUARY 5, 2024 AND ARCHITECT'S REVISED SITE PLAN OF FEBRUARY 23, 2024	03/01/24	TLM
4	ISSUED FOR SITE PLAN APPLICATION	10/26/23	TLM
3	REVISIONS AS PER DEVELOPER'S COMMENTS OF OCTOBER 6, 2023	10/16/23	TLM
2	ISSUED TO DEVELOPER'S AND CONSULTANTS' REVIEW	10/05/23	TLM
1	ISSUED FOR OWNER'S REVIEW	08/14/23	TLM



SCALE

0 1.5 4.5 7.5m

1:150 HORIZONTAL

VERTICAL

DESIGN T.L.M.

CHECKED T.L.M.

DRAWN BY P.M.

CHECKED T.L.M.

APPROVED T.L.M.

PROJECT

96 BILL LEATHAM DRIVE
PART OF LOT 18
CONCESSION 1 (RIDEAU FRONT)
GEOGRAPHIC TOWNSHIP OF NEPEAN
CITY OF OTTAWA

DRAWING TITLE

PROPOSED SITE
STORMWATER MANAGEMENT PLAN

PROJECT No. 822-125

DATE JUNE 2023

DRAWING No. SWM-1

T.L. MAK ENGINEERING CONSULTANTS LTD.
CONSULTING ENGINEERS