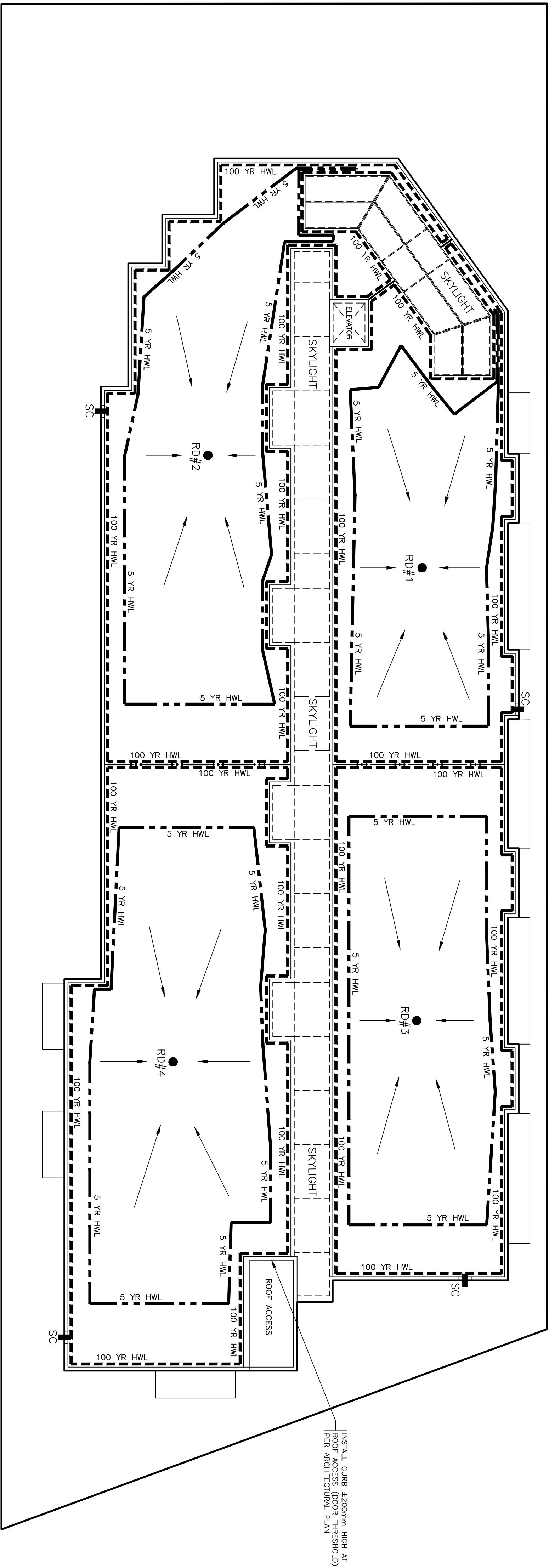


OLD RICHMOND ROAD



WATTS® Adjustable Accoutrol Weir

Tag: _____

Adjustable Flow Control for Roof Drains

For more flexibility in controlling flow with heads deeper than 2", Watts Drainage offers the Adjustable Accoutrol. The Adjustable Accoutrol Weir is designed with a large parabolic opening that can be covered to restrict flow down to 2" of head, or 2.5 gpm per inch of head, or 2.5 gpm per inch of head, or 2.5 gpm per inch of head, or 2.5 gpm per inch of head. Note: Flow rate 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 Accoutrol Weir that has 1/2 the slot exposed will be: [5 gpm (per inch of head) x 2 inches of head] x 2 1/2 gpm (for the third inch of head) = 12 1/2 gpm.

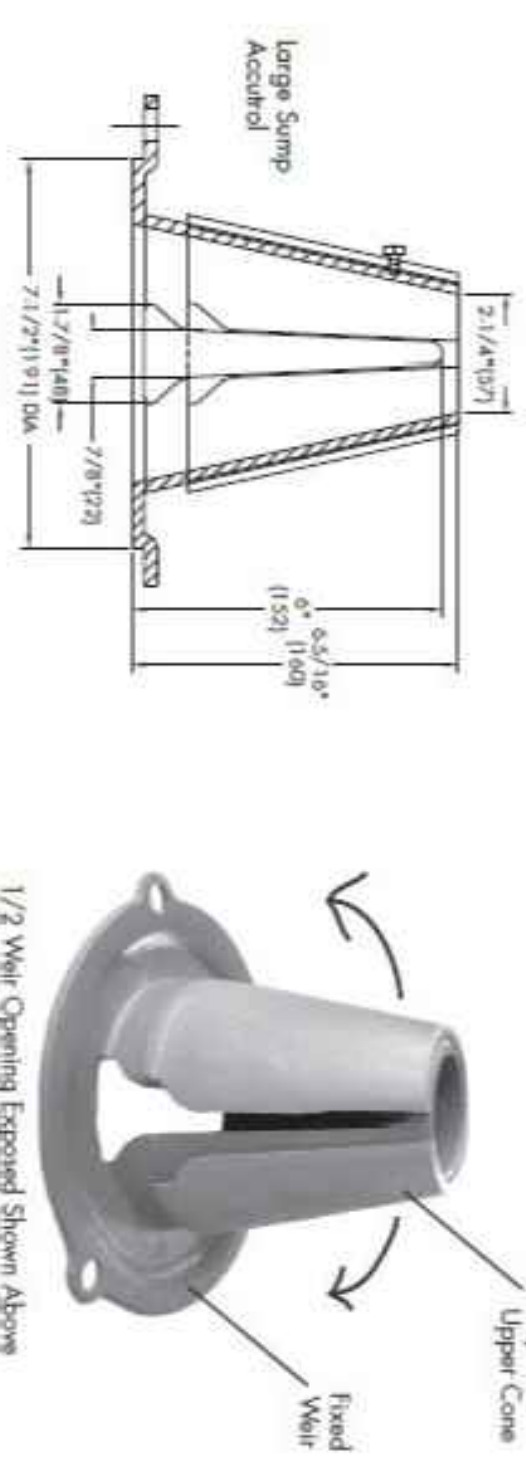


TABLE 1. Adjustable Accoutrol Flow Rate Settings

Weir Opening Flow Rate (gpm per inch)	1"	2"	3"	4"	5"	6"
1/4"	5	10	15	20	25	30
1/2"	5	10	12.5	17.5	21.25	25
3/4"	5	10	12.5	15	17.5	20
1"	5	10	11.25	12.5	13.75	15
1 1/4"	5	5	5	5	5	5

NOTES

1. STORMWATER MANAGEMENT NOTES

ROOF DRAIN DETAILS

MODEL TYPE: WATTS MODEL "ADJUSTABLE ACCOUTROL WEIR" (MODEL NO. RD-100A-AD). (WEIR OPENING EXPOSED IS AS SHOWN BELOW TO PERMIT A RELEASE FLOW RATE OF 30.0 US GAL/MIN (1.89 L/S) UNDER A MAXIMUM HEAD OF UP TO 150mm (6 INCHES).

NUMBER OF CONTROL DEVICES: 1 CONTROLLED ROOF DRAIN PER DESIGNATED ROOF AREA

FLOW PER ROOF DRAIN ARE: ROOF DRAIN #1 (1.89 L/S), ROOF DRAIN #2 (1.89 L/S), ROOF DRAIN #3 (1.89 L/S), AND ROOF DRAIN #4 (1.89 L/S)

TOTAL FLOW FROM FLAT ROOFTOP OF BUILDING AT MAXIMUM HEAD OF 150mm (6 INCHES) PER DRAIN

AT THE (4) PROPOSED DRAINS = 7.56 L/S

DEPTH AND VOLUME:

ROOF DRAIN # & DRAINAGE AREA (m²)	NUMBERS OF ROOF DRAINS	WATTS ROOF DRAIN (WEIR OPENING)	CONTROLLED FLOW (WEIR OPENING)	APPROXIMATE FLOW (WEIR OPENING)	STORAGE VOLUME AVAILABLE (m³)	MAX. STORAGE AVAILABLE (m³)
RD-1 (0.0208 m²)	1	(FULL EXPOSED DRAINING)	1.89	0.12	4.84	10.80
RD-2 (0.0204 m²)	1	(FULL EXPOSED DRAINING)	1.89	0.12	6.89	15.87
RD-3 (0.0222 m²)	1	(FULL EXPOSED DRAINING)	1.89	0.12	5.00	11.69
RD-4 (0.0441 m²)	1	(FULL EXPOSED DRAINING)	1.89	0.12	7.94	17.96
TOTAL ROOF DRAINAGE AREA (m²)	4		6.32	0.48	24.57	56.32
TOTAL ROOF DRAINAGE VOLUME (m³)						62.17

SUPPLIER LOCATION: AS SHOWN ON THIS DRAWING

5 YEAR ELEVATION: 120mm (6 INCHES) ABOVE THE ROOF DRAIN FOR ROOF AREA #1, #2, #3 AND #4

100 YEAR ELEVATION: 150mm (6 INCHES) ABOVE THE ROOF DRAIN FOR ROOF AREA #1, #2, #3 AND #4

EACH ROOF DRAIN SHALL BE SIZED FOR A RELEASE RATE AS SPECIFIED ABOVE. THE OWNER'S MECHANICAL ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE ROOF DRAIN SYSTEM. THE OWNER'S MECHANICAL ENGINEER SHALL OBTAIN FOR THEIR RECORDS TO ENSURE PROPER RELEASE RATE FOR STORMWATER MANAGEMENT COMPLIANCE.

ROOF PITCH IS ASSUMED TO HAVE 1.0% (MIN.) SLOPE.

ROOF SUPPERS ARE RECOMMENDED TO BE INSTALLED 6mm ABOVE EDGE OF ROOFTOP ELEVATION FOR EMERGENCY OVERFLOW PURPOSES AT ROOF AREA #1, #2, #3 AND #4 AT PERIMETER OF BUILDING.

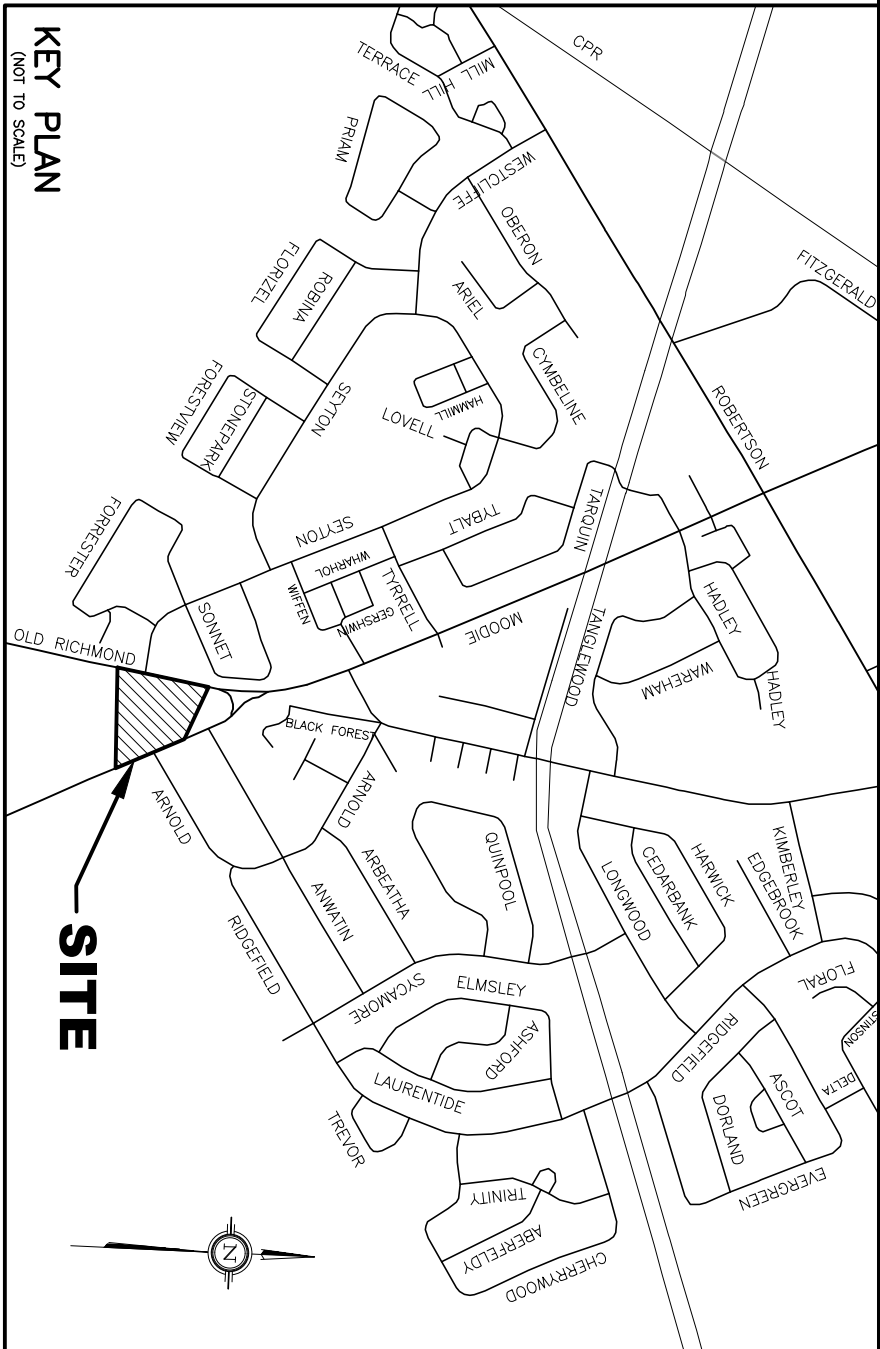
SEE STORM DRAINAGE REPORT NO. R-819-106 DATED DECEMBER 2024 FOR DETAILS ALSO.

PROPOSED ROOF DRAINS AND SUPPLIER LOCATIONS SHOWN ON THIS PLAN SHALL BE REVIEWED BY THE OWNER AND OWNER'S BUILDING DESIGNER FOR APPROVAL.

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 #1, #2, #3 AND #4 AND ANY OF THE SUPPORTING STRUCTURES THAT MAY BE AFFECTED BY THE STORM WATER.

ROOF DRAIN #1, #2, #3 AND #4 INCLUSIVE SHALL OUTLET INTO THE DESIGNATED 150mm PVC STORMWATER PIPE AS SHOWN ON THE PROPOSED GRADING AND SERVING PLAN (DWG NO. 819-106, G-1).

FOR GRADING AND SERVING DETAILS OF THIS SITE, REFER TO DWG. NO. 819-106, G-1.



LEGEND

- 100 YR HIGH WATER LEVEL
- 5 YR HIGH WATER LEVEL
- PROPOSED HIGH ROOF LINE
- PROPOSED ROOF DRAIN NUMBER AND LOCATION
- PROPOSED ROOF SQUIPPER LOCATION [FOR EMERGENCY OVERFLOW ONLY]
- PROPOSED GENERAL DIRECTION OF LOT GRADING AND SURFACE FLOW

No.	REVISION	DATE	BY
1	ISSUED FOR SITE PLAN APPLICATION	12/14/21	TLM
2	REVISIONS AS PER ARCHITECT'S REVISED SITE PLAN FOR NOV. 12, 2024 AND CITY'S REVIEW COMMENTS OF MAY 20, 2023	12/31/24	TLM
3	REVISIONS AS PER ARCHITECT'S REVISED ROOF PLAN	09/25/26	TLM

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

PROJECT
4000 OLD RICHMOND ROAD
PART OF LOTS 32 AND 33
CONCESSION 5 (RIDEAU FRONT)
GEOGRAPHIC TOWNSHIP OF NEPEAN
CITY OF OTTAWA

PROJECT No.	DATE	DRAWING No.
819-106	JULY 2021	SWM-1

T.L. MAK ENGINEERING CONSULTANTS LTD.
CONSULTING ENGINEERS

#18728