FLOOD PLAIN FILL AREA 'A'

CONTOUR INTERVAL (m)	PRE-DEVLOPEMENT CONDITIONS					POST DEVELOPMENT CONDITIONS					CHANGE IN STORAGE VOLUME	
	TOP AREA (sq.m)	BOTTOM AREA (sq.m)	DEPTH (m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)	TOP AREA (sq.m)	BOTTOM AREA (sq.m)	DEPTH (m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)
89.07 – 89.22	6	0	0.15	0.3	0.3	0	0	0.15	0	0	−0.3	−0.3
89.22 – 89.37	27	6	0.15	2.3	2.6	0	0	0.15	0	0	−2.3	−2.6
89.37 – 89.52	52	27	0.15	5.8	8.4	0	0	0.15	0	0	−5.5	−8.4
89.52– 89.67 (100-YEAR FLOOD)	87	52	0.15	10.3	18.7	0	0	0.15	0	0	−10.3	−18.7

FLOOD PLAIN FILL AREA 'B'

CONTOUR INTERVAL (m)	PRE-DEVELOPMENT CONDITIONS					POST DEVELOPMENT CONDITIONS					CHANGE IN STORAGE VOLUME	
	TOP AREA (sq.m)	BOTTOM AREA (sq.m)	DEPTH (m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)	TOP AREA (sq.m)	BOTTOM AREA (sq.m)	DEPTH (m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)
89.07 – 89.22	0	0	0.15	0	0	0	0	0.15	0	0	0	0
89.22 – 89.37	0	0	0.15	0	0	0	0	0.15	0	0	0	0
89.37 – 89.52	181	0	0.15	9.1	8.3	12	0	0.15	0.6	0.6	−8.5	−8.5
89.52– 89.67 (100-YEAR FLOOD)	479	181	0.15	47.7	53.0	61	12	0.15	5.0	5.6	−42.7	−51.2

FLOOD PLAIN CUT AREA

CONTOUR INTERVAL (m)	PRE-DEVLOPEMENT CONDITIONS					POST DEVELOPMENT CONDITIONS					CHANGE IN STORAGE VOLUME	
	TOP AREA (sq.m)	BOTTOM AREA (sq.m)	DEPTH (m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)	TOP AREA (sq.m)	BOTTOM AREA (sq.m)	DEPTH (m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)
89.07 – 89.22	33	0	0.15	1.7	1.7	98	0	0.15	4.9	4.9	3.3	3.3
89.22 – 89.37	80	33	0.15	8.2	9.9	263	98	0.15	26.1	31.0	17.9	21.1
89.37 – 89.52	148	80	0.15	16.8	26.7	446	263	0.15	52.6	83.6	35.7	56.8
89.52– 89.67 (100-YEAR FLOOD)	234	148	0.15	28.4	55.1	677	446	0.15	83.6	167.2	55.2	112.1

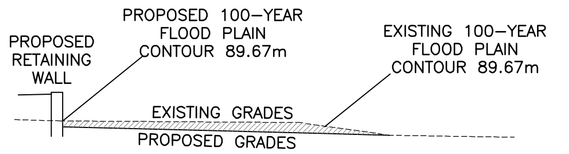
TOTAL

CONTOUR INTERVAL (m)	CHANGE IN STORAGE VOLUME	
	VOLUME (cu.m)	CUMULATIVE VOLUME (cu.m)
89.07 – 89.22	3.0	3.0
89.22 – 89.37	15.6	18.5
89.37 – 89.52	21.5	40.0
89.52– 89.67 (100-YEAR FLOOD)	2.2	42.2

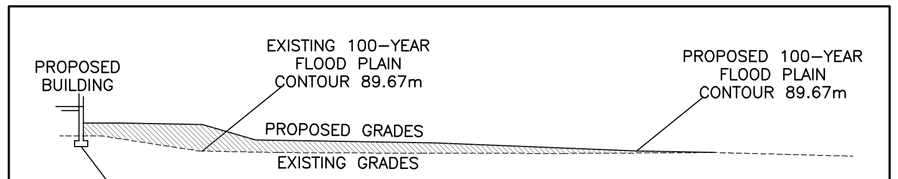
VOLUMES CALCULATED USING PRISMOIDAL FORMULA:

$V = D \times (A_T + A_B) + (A_T \times A_B)^{0.5} \div 3$

WHERE V = VOLUME
D = DEPTH (CONTOUR INTERVAL)
A_T = TOP AREA
A_B = BOTTOM AREA



FLOODPLAIN CUT AREA SECTION X–X

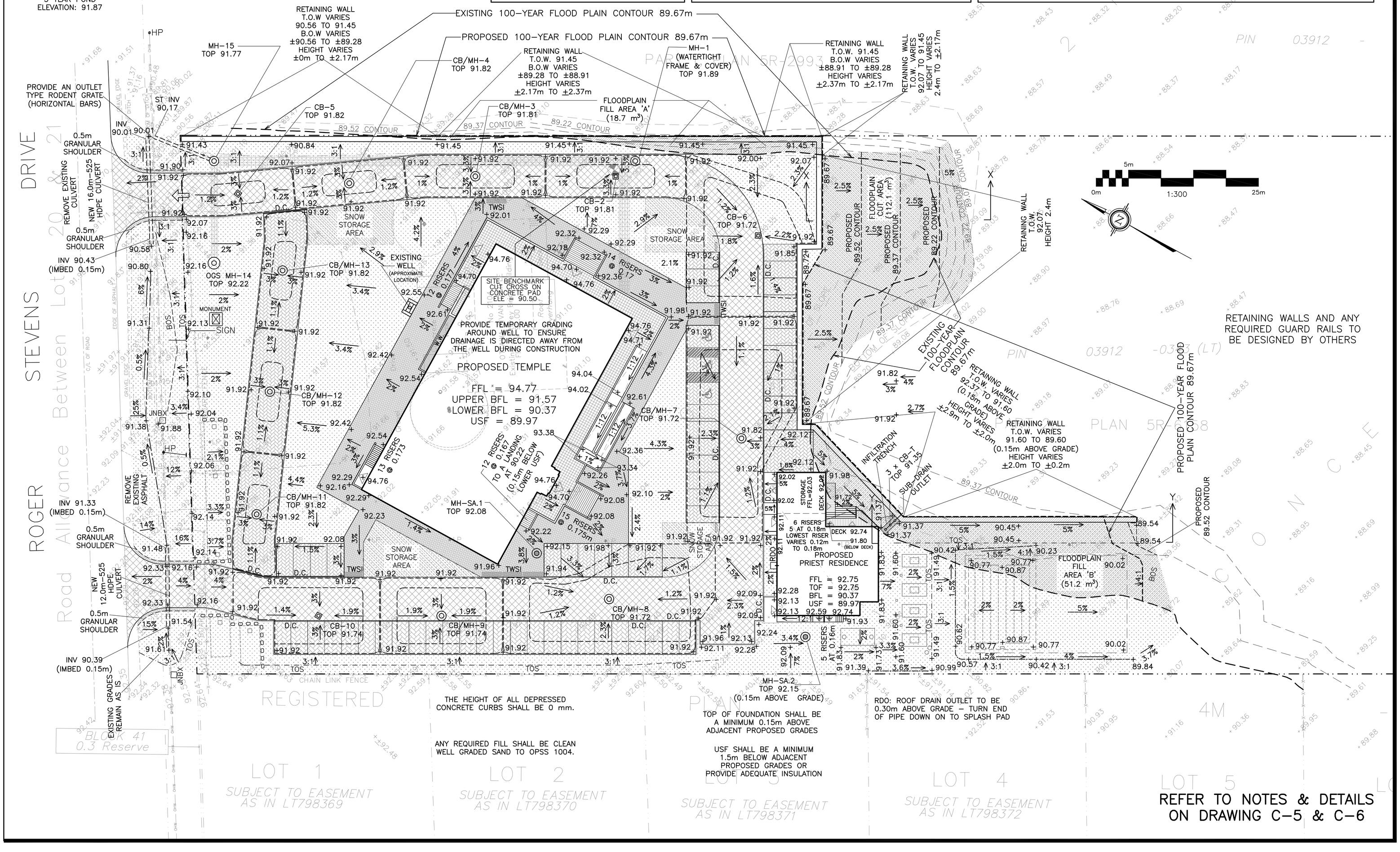


FLOODPLAIN FILL AREA 'B' SECTION Y–Y

EMERGENCY OVERLAND SPILL ELEVATION: 91.92

100 YEAR POND ELEVATION: 91.92

5 YEAR POND ELEVATION: 91.87



THE HEIGHT OF ALL DEPRESSED CONCRETE CURBS SHALL BE 0 mm.

ANY REQUIRED FILL SHALL BE CLEAN WELL GRADED SAND TO OPSS 1004.

TOP OF FOUNDATION SHALL BE A MINIMUM 0.15m ABOVE ADJACENT PROPOSED GRADES

USF SHALL BE A MINIMUM 1.5m BELOW ADJACENT PROPOSED GRADES OR PROVIDE ADEQUATE INSULATION

RDO: ROOF DRAIN OUTLET TO BE 0.30m ABOVE GRADE – TURN END OF PIPE DOWN ON TO SPLASH PAD

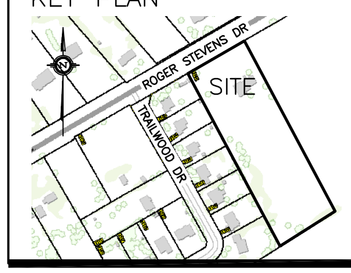
RETAINING WALLS AND ANY REQUIRED GUARD RAILS TO BE DESIGNED BY OTHERS

REFER TO NOTES & DETAILS ON DRAWING C–5 & C–6

LEGEND

FFL	FIRST FLOOR ELEVATION
TOF	TOP OF FOUNDATION
BFL	BASEMENT FLOOR ELEVATION
USF	UNDERSIDE OF FOOTING
	PROPERTY LINE
CB	CATCH BASIN
MH	STORM MANHOLE
CB/MH	CATCH BASIN/MANHOLE
MH	SANITARY MANHOLE
RDO	ROOF DRAIN OUTLET
x99.99	EXISTING GRADE ELEVATION
+99.99	PROPOSED GRADE ELEVATION
	EMERGENCY OVERLAND FLOW
2%	PROPOSED SLOPE OF GRADE
T.O.S	TOP OF SLOPE
B.O.S	BOTTOM OF SLOPE
	150mm BARRIER CURB
D.C	DEPRESSED CURB
	HEAVY-DUTY PAVEMENT
	PERMEABLE PAVERS
	CONCRETE PAVER WALKWAY
	TERRACE
	GRASS / LANDSCAPED AREA
	SNOW STORAGE AREA
	CUT / FILL AREA

KEY PLAN



No.	DATE	REVISION
7	APR 10–25	RE–ISSUED FOR APPROVAL
6	OCT 25–24	ISSUED FOR APPROVAL
5	OCT 18–24	ISSUED FOR COORDINATION
4	OCT 15–24	ISSUED FOR COORDINATION
3	SEP 20–24	ISSUED FOR COORDINATION
2	AUG 6–24	ISSUED FOR COORDINATION
1	JUL 11–24	PRELIMINARY

D. B. GRAY ENGINEERING INC.
Stormwater Management · Grading & Drainage · Storm & Sanitary Sewers · Watermains
700 Long Point Circle 613-425-8044
Ottawa, Ontario d.gray@dbgrayengineering.com

Project

PROPOSED HINDU TEMPLE
2104 ROGER STEVENS DR
NORTH GOWER, ONTARIO

Drawing Title

GRADING PLAN

Engineer's Seal

LICENSED PROFESSIONAL ENGINEER
D.B. GRAY
17016502
APR 10–24
PROVINCE OF ONTARIO
NOT VALID UNLESS SIGNED & DATED

Drawn	D.B.G
H. Scale	1:300
V. Scale	
Date	JUL 11–24
Job No.	20029

Drawing No.

C–3
of 7