

**LEGEND**

2.5%	PROPOSED GRADE AND DIRECTION	100	PROPOSED SANITARY MANHOLE
x 105.58 HP	PROPOSED ELEVATION AT HIGH POINT	1000	PROPOSED STORM MANHOLE
x 103.63	PROPOSED ELEVATION EXISTING ELEVATION	95	PROPOSED CATCHBASIN WITH ICD
x 85.89	EXISTING ELEVATION	RYCB1	PROPOSED REAR YARD CATCHBASIN WITH ICD
58.13 BS	EXISTING ELEVATION AT BACK OF SIDEWALK	96	PROPOSED LANDSCAPE TYPE CATCHBASIN WITH TOP OF GRATE ELEVATION
35.00	EXISTING CONTOUR AND ELEVATION		SWALE AND TERRACE
VB	PROPOSED VALVE & VALVE BOX LOCATION		100 yr PONDING AREA
HYD	PROPOSED HYDRANT WITH TOP OF FLANGE ELEVATION		100 yr + 20% PONDING AREA
			MAX. STATIC PONDING AREA

- GENERAL NOTES:**
- DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  - THE ORIGINAL TOPOGRAPHY AND GROUND ELEVATIONS, SERVICING AND SURVEY INFORMATION SHOWN ON THIS PLAN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF ALL INFORMATION OBTAINED FROM THIS PLAN.
  - CO-ORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
  - BEFORE COMMENCING CONSTRUCTION, PROVIDE PROOF OF COMPREHENSIVE ALL RISK AND OPERATIONAL LIABILITY INSURANCE INCLUDING BLASTING. INSURANCE POLICY TO NAME THE OWNER, ENGINEER AND THE CITY AS CO-INSURED. AMOUNT OF INSURANCE TO BE SPECIFIED BY OWNER'S AGENT.
  - CONNECT TO EXISTING SYSTEMS AS DETAILED, INCLUDING ALL RESTORATION WORK NECESSARY TO REINSTATE SURFACES TO EXISTING CONDITIONS OR BETTER.
  - DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS.
  - OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS BEFORE COMMENCING CONSTRUCTION.
  - RESTORE ALL TRENCHES AND SURFACE FEATURES TO EXISTING CONDITIONS OR BETTER AND TO THE SATISFACTION OF CITY OF OTTAWA AUTHORITIES.
    - ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DETAIL R-10.
    - THICKNESS OF GRANULAR MATERIAL AND ASPHALT LAYERS TO MATCH EXISTING.
    - BOULEVARDS SHALL BE REINSTATED WITH 100mm OF TOPSOIL, SEED AND MULCH.
  - REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE INSTRUCTED BY ENGINEER.
  - ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.
  - ALL FENCING TO BE LOCATED 0.15m INSIDE PROPERTY LINE. REFER TO LANDSCAPING PLAN FOR DETAILS.
  - REFER TO GEOTECHNICAL INVESTIGATION REPORT PG4278-1(DATED JULY 5, 2018), PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS AND CONSTRUCTION RECOMMENDATIONS.
  - PERFORATED PIPE SUB-DRAINS TO BE PROVIDED AT SUBGRADE LEVEL EXTENDING FROM THE ROADSIDE CATCHBASIN FOR A DISTANCE OF 3.0m, PARALLEL TO THE CURB IN TWO DIRECTIONS.
  - GRADE RAISE RESTRICTIONS ON SITE AS PER GEOTECHNICAL INVESTIGATION (DATED 10/2019) PREPARED BY PATERSON GROUP.

- GRADING AND PAVEMENT NOTES:**
- ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED HARD SURFACE (ie. PAVEMENT, CURB, SIDEWALK, ETC.) AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
  - EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE HEAVILY PROOF ROLLED WITH A LARGE (10 TON) VIBRATORY STEEL DRUM ROLLER UNDER DRY CONDITIONS AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
  - 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.
  - THE GRANULAR BASE SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
  - BUILD ROADWAYS WITH 2% CROSSFALL INCLUDING SUBGRADE AND GRANULAR BASE.
  - ROADWAY SUBGRADE TO BE INSPECTED BY THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION TO REVIEW IF A WOVEN GEOTEXTILE IS REQUIRED BELOW THE GRANULAR MATERIALS, AND TO CONFIRM THE DEPTH AND COMPACTION OF GRANULAR B.
  - PRIOR TO PLACEMENT OF TOPLIFT, THE CONTRACTOR SHALL ADJUST ALL STRUCTURES TO FINAL GRADE PER CITY OF OTTAWA STANDARDS.
  - MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
  - MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
  - ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
  - ALL CURBS SHALL BE MOUNTABLE CURB UNLESS OTHERWISE NOTED AND CONSTRUCTED PER CITY OF OTTAWA STANDARD (SC1.3).
  - REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.

**PAVEMENT STRUCTURE:**

40mm	ASPHALT SP12.5
50mm	ASPHALT SP19.0
150mm	GRAN "A"
450mm	GRAN "B" TYPE II
690mm	TOTAL DEPTH

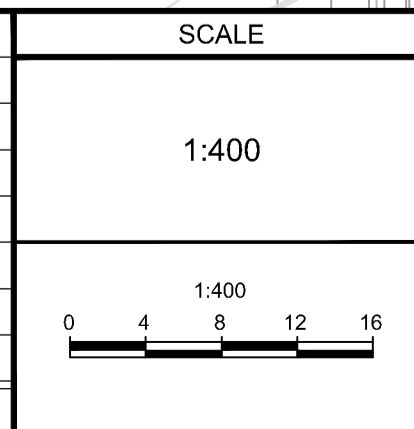
LOCAL ROADS - 6.7m PLATFORM

**PONDING**

PONDING ID	STRUCTURE	100 YEAR PONDING ELEVATION	100 YEAR PONDING DEPTH (m)	100 YEAR +20% PONDING ELEVATION	100 YEAR + 20% PONDING DEPTH (m)	MAX STATIC PONDING ELEVATION	MAX STATIC PONDING DEPTH (m)
P1	CB1	89.15	0.15	89.22	0.22	89.29	0.29
P2	CB2	89.32	0.24	89.36	0.28	89.38	0.30
P3	CB3	89.31	0.16	89.34	0.19	89.45	0.30
P4	CB4	89.32	0.14	89.35	0.17	89.48	0.30
P5	CB5	89.38	0.20	89.42	0.24	89.43	0.25
P6	CB6	89.38	0.25	89.45	0.32	89.38	0.25
P7	CB7	89.32	0.20	89.35	0.23	89.42	0.30
P8	CB8	89.29	0.24	89.33	0.28	89.33	0.28
P9	LCB1	89.31	0.16	89.34	0.19	89.45	0.30

**NOTE:**  
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, 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.

No.	REVISION	DATE	BY
1.	ISSUED FOR APPROVAL	JUN 29/20	MAB



DESIGN	DTD
CHECKED	MAB
DRAWN	DTD
CHECKED	MAB
APPROVED	JGR

**FOR REVIEW ONLY**

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**CITY OF OTTAWA**  
PROVENCE ORLEANS - 2128 TRIM ROAD (BLOCK 126)

**GRADING PLAN**

PROJECT No.	120057
REV	REV # 1
DRAWING No.	120057-GR