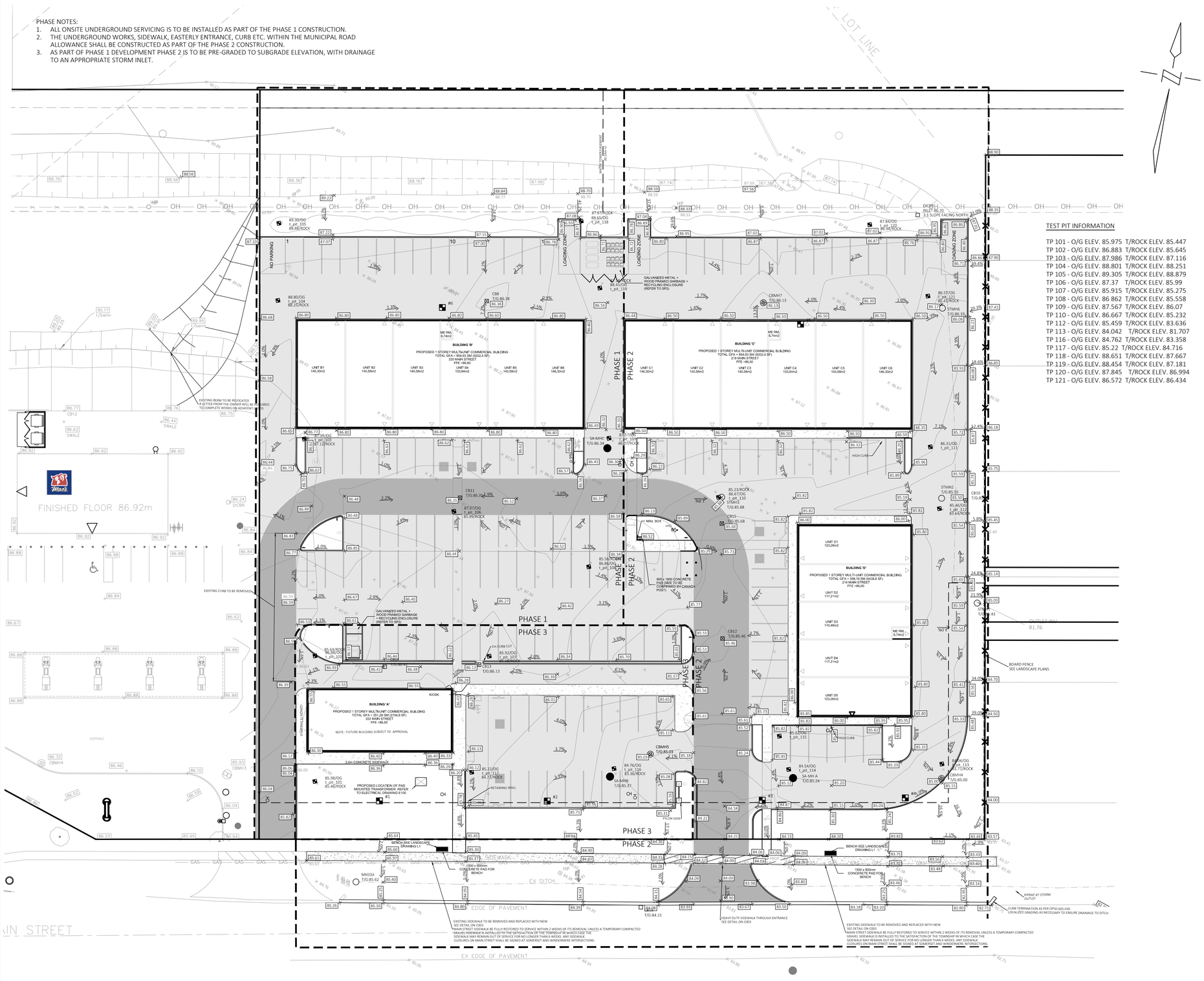
PHASE NOTES:
1. ALL ONSITE UNDERGROUND SERVICING IS TO BE INSTALLED AS PART OF THE PHASE 1 CONSTRUCTION.
2. THE UNDERGROUND WORKS, SIDEWALK, EASTERLY ENTRANCE, CURB ETC. WITHIN THE MUNICIPAL ROAD ALLOWANCE SHALL BE CONSTRUCTED AS PART OF THE PHASE 2 CONSTRUCTION.
3. AS PART OF PHASE 1 DEVELOPMENT PHASE 2 IS TO BE PRE-GRADED TO SUBGRADE ELEVATION, WITH DRAINAGE TO AN APPROPRIATE STORM INLET.



TEST PIT INFORMATION

TP 101 - O/G ELEV. 85.975 T/ROCK ELEV. 85.447
TP 102 - O/G ELEV. 86.883 T/ROCK ELEV. 85.645
TP 103 - O/G ELEV. 87.986 T/ROCK ELEV. 87.116
TP 104 - O/G ELEV. 88.801 T/ROCK ELEV. 88.251
TP 105 - O/G ELEV. 89.305 T/ROCK ELEV. 88.879
TP 106 - O/G ELEV. 87.37 T/ROCK ELEV. 85.99
TP 107 - O/G ELEV. 85.915 T/ROCK ELEV. 85.275
TP 108 - O/G ELEV. 86 862 T/ROCK ELEV. 85.558
TP 109 - O/G ELEV. 87.567 T/ROCK ELEV. 86.07
TP 110 - O/G ELEV. 86.667 T/ROCK ELEV. 85.232
TP 112 - O/G ELEV. 85.459 T/ROCK ELEV. 83.636
TP 113 - O/G ELEV. 84.042 T/ROCK ELEV. 81.707
TP 116 - O/G ELEV. 84.762 T/ROCK ELEV. 83.358
TP 117 - O/G ELEV. 85.22 T/ROCK ELEV. 84.716
TP 118 - O/G ELEV. 88.651 T/ROCK ELEV. 87.667
TP 119 - O/G ELEV. 88.454 T/ROCK ELEV. 87.181
TP 120 - O/G ELEV. 87.845 T/ROCK ELEV. 86.994
TP 121 - O/G ELEV. 86.572 T/ROCK ELEV. 86.434

KEY PLAN

LEGEND	EXISTING	PROPOSED
PAVEMENT		
CONCRETE CURB TYPE		
DITCH		
STORM SEWER & MANHOLE WITH DIRECTION OF FLOW	ST MH	ST MH
SAN. SEWER & MANHOLE WITH DIRECTION OF FLOW	SA MH	SA MH
WATERMAIN AND VALVE		
GAS METER LOCATION	GM	GM
GAS MAIN	GAS GAS GAS	GAS GAS GAS
HYDRO (UNDERGROUND)	UH UH UH	UH UH UH
HYDRO (OVER HEAD)	OH OH OH	OH OH OH
SINGLE CATCH BASIN	CB	CB
DITCH INLET CATCH BASIN	DICB	DICB
TWIN INLET CATCH BASIN	TICB	TICB
CATCH BASIN MANHOLE	CBMH	CBMH
HYDRANT & VALVE BOX	HYD	HYD
BELL UTILITY POLE & ANCHOR	BP	BP
HYDRO UTILITY POLE & ANCHOR	HP	HP
STREET LIGHT	SL	SL
TREES		
PROPERTY BOUNDARY		
EASEMENT		
FENCE		
SILT FENCE		
BENCH MARK LOCATION		BM
EXISTING GRADE	98.73	
PROPOSED GRADE		99.23 SWALE — PROPOSED DESCRIPTION
DOOR		
HEAVY DUTY ASPHALT REFER TO C003 FOR PAVEMENT COMPOSITION		
LIGHT DUTY ASPHALT REFER TO C003 FOR PAVEMENT COMPOSITION		
CONCRETE		
TEST PIT LOCATION TEST PITS #1 -#3 REFER TO GEOTECHNICAL REPORT TEST PITS #101 - #116 BY OWNER		#1
CHANNELL GRADE LEVEL BOX (BELL CANADA) 30w x 48 x 24 d	SGLB	SGLB

No.	By	Date	Revision	Checked
4	NB	MAY 17, 2018	ISSUED FOR SPA	MJ
3	NB	MARCH 7, 2018	ISSUED FOR COORDINATION	MJ
2	NB	JANUARY 3, 2018	ISSUED FOR SPA	MJ
1	NB	AUGUST 30, 2017	REVISED AS PER SITE PLAN	MJ

Josselyn Engineering Inc.

M. JOSSELYN — LICENSED PROFESSIONAL ENGINEER — PROVINCE OF ONTARIO — 2018/01/08

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OWNER: MAIN STREET PLAZA CORPORATION

PROJECT: MAIN STREET - BATH

DRAWING TITLE: GRADING PLAN

Designed By:	M.J.	Date:	Project No.	Drawing No.
Drawn By:	N.B.	JUNE 26, 2017	1218	C001
Checked By:	M.J.	Scale: 1:300		

PHASE NOTES:
1. ALL ONSITE UNDERGROUND SERVICING IS TO BE INSTALLED AS PART OF THE PHASE 1 CONSTRUCTION.
2. THE UNDERGROUND WORKS, SIDEWALK, EASTERLY ENTRANCE, CURB ETC. WITHIN THE MUNICIPAL ROAD ALLOWANCE SHALL BE CONSTRUCTED AS PART OF THE PHASE 2 CONSTRUCTION.
3. AS PART OF PHASE 1 DEVELOPMENT PHASE 2 IS TO BE PRE-GRADED TO SUBGRADE ELEVATION, WITH DRAINAGE TO AN APPROPRIATE STORM INLET.

TEST PIT INFORMATION
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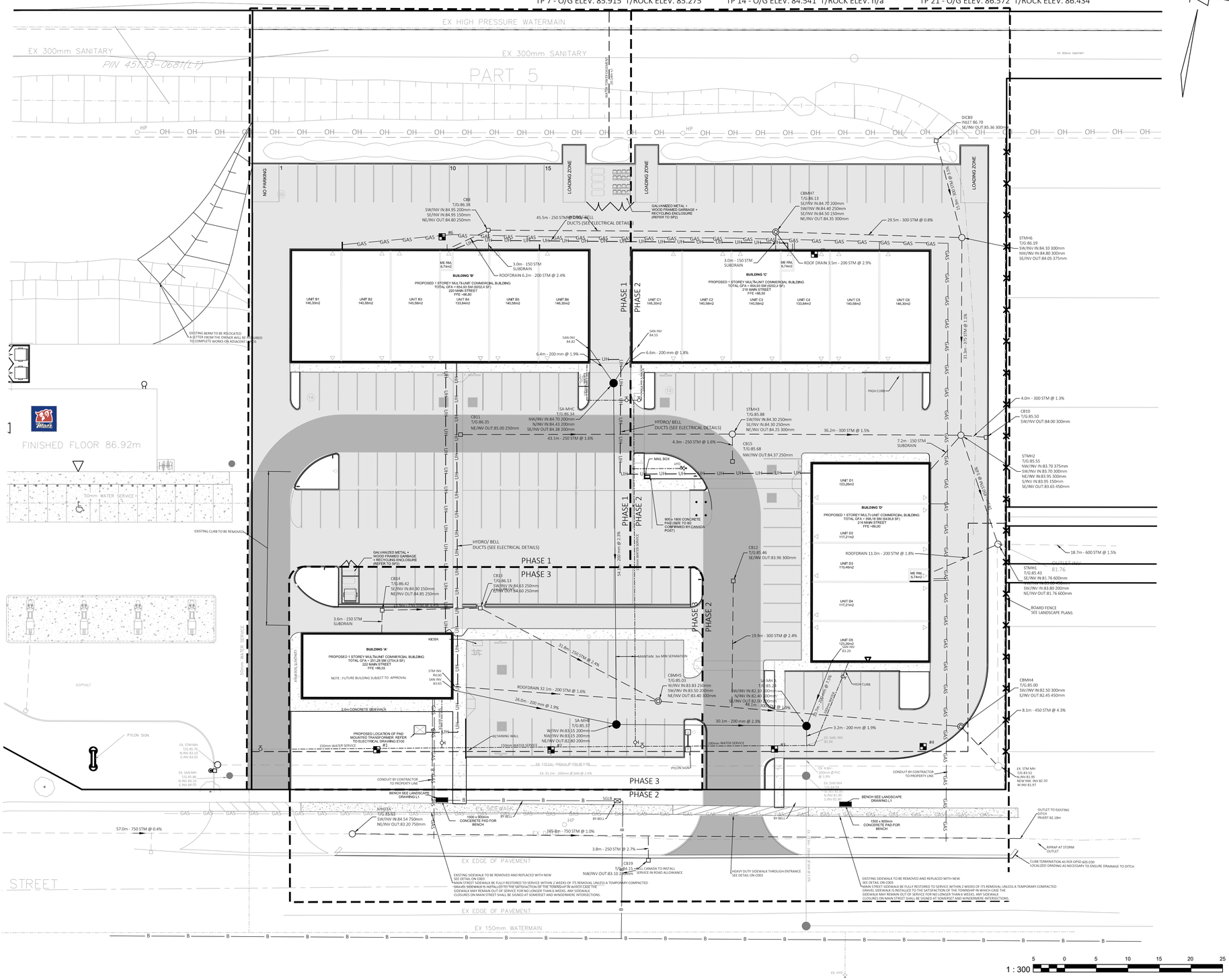
TP 2 - O/G ELEV. 86.883 T/ROCK ELEV. 85.645
TP 3 - O/G ELEV. 87.986 T/ROCK ELEV. 87.116
TP 4 - O/G ELEV. 88.801 T/ROCK ELEV. 88.251
TP 5 - O/G ELEV. 89.305 T/ROCK ELEV. 88.879
TP 6 - O/G ELEV. 87.37 T/ROCK ELEV. 85.99
TP 7 - O/G ELEV. 85.915 T/ROCK ELEV. 85.275

TEST PIT INFORMATION
TP 8 - O/G ELEV. 86.862 T/ROCK ELEV. 85.558
TP 9 - O/G ELEV. 87.567 T/ROCK ELEV. 86.07
TP 10 - O/G ELEV. 86.667 T/ROCK ELEV. 85.232
TP 11 - O/G ELEV. 86.313 T/ROCK ELEV. n/a
TP 12 - O/G ELEV. 85.459 T/ROCK ELEV. 83.636
TP 13 - O/G ELEV. 84.042 T/ROCK ELEV. 81.707
TP 14 - O/G ELEV. 84.541 T/ROCK ELEV. n/a

TEST PIT INFORMATION
TP 15 - O/G ELEV. 85.222 T/ROCK ELEV. n/a
TP 16 - O/G ELEV. 84.762 T/ROCK ELEV. 83.358
TP 17 - O/G ELEV. 85.22 T/ROCK ELEV. 84.716
TP 18 - O/G ELEV. 88.651 T/ROCK ELEV. 87.667
TP 19 - O/G ELEV. 88.454 T/ROCK ELEV. 87.181
TP 20 - O/G ELEV. 87.845 T/ROCK ELEV. 86.994
TP 21 - O/G ELEV. 86.572 T/ROCK ELEV. 86.434



BENCH MARKS:
1. TOP NUT HYDRANT ON THE SOUTH SIDE OF MAIN STREET AT THE WEST SIDE OF CREIGHTON DRIVE ELEVATION 126.185
2. TOP NUT HYDRANT ON THE SOUTH SIDE OF MAIN STREET AT THE WEST SIDE OF POTTER DRIVE ELEVATION 125.822

LEGEND	EXISTING	PROPOSED
PAVEMENT		
CONCRETE CURB TYPE		
DITCH		
STORM SEWER & MANHOLE WITH DIRECTION OF FLOW	ST MH	ST MH
SAN. SEWER & MANHOLE WITH DIRECTION OF FLOW	SAN MH	SAN MH
WATERMAIN AND VALVE	EX HYD	HYD
GAS METER LOCATION	GM	GM
GAS MAIN	GAS GAS GAS	GAS GAS GAS
HYDRO (UNDERGROUND)	UH UH UH UH	UH UH UH UH
HYDRO (OVER HEAD)	OH OH OH OH	OH OH OH OH
SINGLE CATCH BASIN	EX CB	CB
DITCH INLET CATCH BASIN	EX DICB	DICB
TWIN INLET CATCH BASIN	EX TICB	TICB
CATCH BASIN MANHOLE		MH
HYDRANT & VALVE BOX	EX HYD	HYD
BELL UTILITY POLE & ANCHOR	BP	BP
HYDRO UTILITY POLE & ANCHOR	HP	HP
STREET LIGHT	EX LS	LS
TREES		
PROPERTY BOUNDARY		
EASEMENT		
FENCE		
SILT FENCE		
BENCH MARK LOCATION		BM
EXISTING GRADE	98.73	
PROPOSED GRADE		99.23 SWALE PROPOSED DESCRIPTION
DOOR		
HEAVY DUTY ASPHALT REFER TO C003 FOR PAVEMENT COMPOSITION		
LIGHT DUTY ASPHALT REFER TO C003 FOR PAVEMENT COMPOSITION		
CONCRETE		
TEST PIT LOCATION TEST PITS #1 -#3 REFER TO GEOTECHNICAL REPORT TEST PITS #101 - #118 BY OWNER		#1
CHANNELL GRADE LEVEL BOX (BELL CANADA) 30w x 48 x 24 d	SGLB	SGLB

No.	By	Date	Revision	Checked
9	JDC	SEPTEMBER 20, 2018	REVISED LOCATION OF BELL SERVICING	MJ
8	NB	SEPTEMBER 6, 2018	ADDED HYDRO SERVICE FROM BUILDING B TO BUILDING C	MJ
7	JDC	AUGUST 23, 2018	REVISED LOCATION OF BELL & GAS SERVICING	MJ
6	NB	JUNE 5, 2018	REVISED INVERT AT CBMH5	MJ
5	NB	MAY 28, 2018	REVISED STM INVERTS	MJ
4	NB	MAY 17, 2018	ISSUED FOR SPA	MJ
3	NB	MARCH 7, 2018	ISSUED FOR COORDINATION	MJ
2	NB	JANUARY 3, 2018	ISSUED FOR SPA	MJ
1	NB	AUGUST 30, 2017	REVISED AS PER SITE PLAN	MJ

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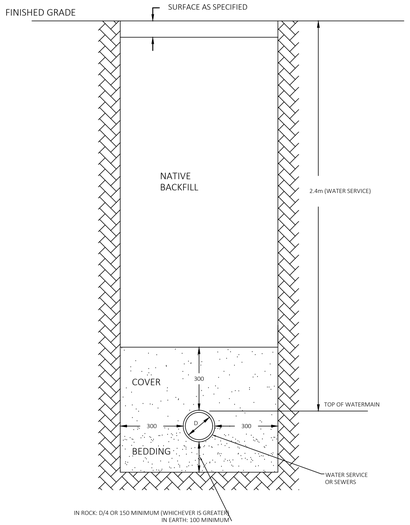
LICENSED PROFESSIONAL ENGINEER J. M. JOSSELYN 2018/09/19 PROVINCE OF ONTARIO

OWNER: MAIN STREET PLAZA CORPORATION

PROJECT: MAIN STREET - BATH

DRAWING TITLE: SERVICING PLAN

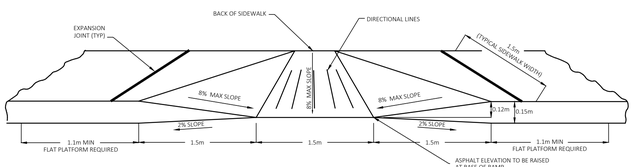
Designed By:	M.J.	Date:	Project No.	Drawing No.
Drawn By:	N.B.	JUNE 26, 2017	1218	C002
Checked By:	M.J.	Scale: 1:300		



NOTES:

1. BEDDING AND COVER TO BE GRANULAR A, COMPACTED TO 95% STANDARD PROCTOR DENSITY IN 150mm LAYERS.
2. THE BEDDING IS TO BE CAREFULLY SHAPED TO RECEIVE THE BOTTOM OF THE PIPE.

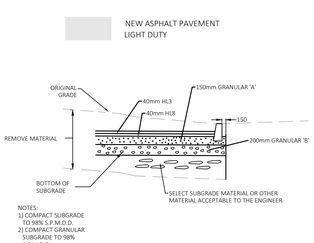
SEWERS OR WATER SERVICE IN SINGLE TRENCH



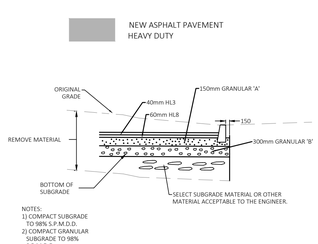
NOTES:

1. THE SLOPE OF THE RAMP SHOULD CONFORM TO OBC .

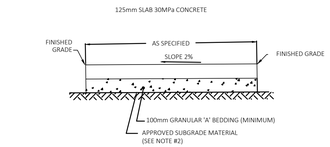
SIDEWALK RAMP DETAIL



LIGHT DUTY PAVEMENT COMPOSITION WITH CURB



HEAVY DUTY PAVEMENT COMPOSITION WITH CURB



TYPICAL SECTION

GENERAL NOTES

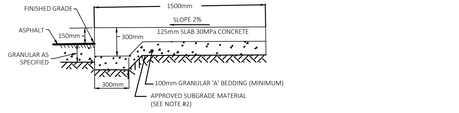
1. ALL THICKNESS DIMENSIONS ARE AFTER CONSOLIDATION TO 100% STD. PROCTOR DENSITY.
2. SUBGRADE MATERIAL TO BE COMPACTED TO 95% STD. PROCTOR DENSITY.
3. JOINT SPACING
   3.a. JOINTS EVERY 1.5m
   3.b. EXPANSION JOINT - ADJACENT TO STRUCTURES.
4. ALL OTHER JOINTS TO BE CONTRACTION JOINTS WITH A MINIMUM DEPTH OF 30 mm.

   Concrete shall conform to the following:

Class of Concrete	Minimum strength -30 MPa at 28 days
Coarse Aggregate	19 mm nominal maximum size
Air Content	6.0% to 8.0%
Water	O.P.S.S. 1302
Aggregate Cement - Normal Portland Type	O.P.S.S. 1301 (SLAG CEMENT NOT ACCEPTABLE)
Maximum Water/ Cement Ratio	0.45
Maximum Slump	75 mm
Curing Compound - White Pigmented	O.P.S.S. 1315+

5. 6. HEAVY DUTY SIDEWALK TO BE CONTINUOUS THROUGH ENTRANCES. INCLUDES 150mm x 150mm STEEL MESH REINFORCEMENT, 200mm CONCRETE THICKNESS AND HANDICAPPED ACCESSIBLE.

CONCRETE SIDEWALK



TYPICAL SECTION

GENERAL NOTES

1. ALL THICKNESS DIMENSIONS ARE AFTER CONSOLIDATION TO 100% STD. PROCTOR DENSITY.
2. SUBGRADE MATERIAL TO BE COMPACTED TO 95% STD. PROCTOR DENSITY.
3. JOINT SPACING
   A) JOINTS EVERY 1.5m
   B) EXPANSION JOINT - ADJACENT TO STRUCTURES.
4. ALL OTHER JOINTS TO BE CONTRACTION JOINTS WITH A MINIMUM DEPTH OF 30 mm.
5. Concrete shall conform to the following:

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Coarse Aggregate	19 mm nominal maximum size
Air Content	6.0% to 8.0%
Water	O.P.S.S. 1302
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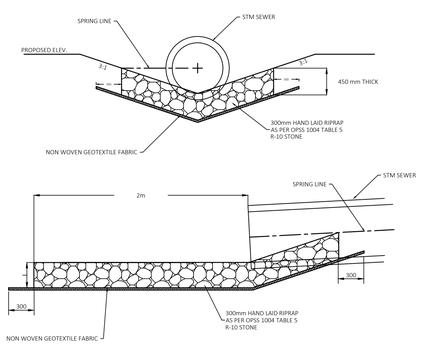
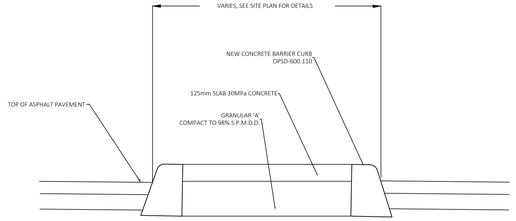
Maximum Water/ Cement Ratio	0.45
Maximum Slump	75 mm
Curing Compound - White Pigmented	O.P.S.S. 1315

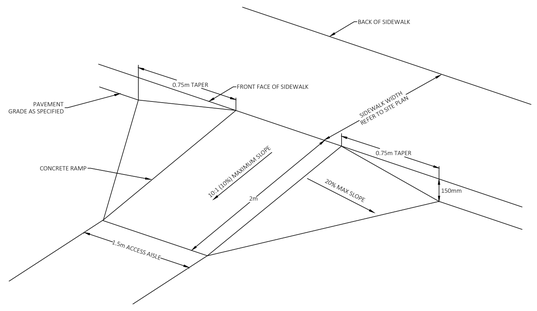
CONCRETE SIDEWALK ADJACENT TO ASPHALT PAVEMENT



RIP-RAP TREATMENT FOR SEWER



CONCRETE ISLAND DETAIL



ACCESS RAMP DETAIL

NOTES:

1. ALL CONSTRUCTION AND TESTING SHALL BE IN ACCORDANCE WITH THE ONTARIO PROVINCIAL STANDARDS AS AMENDED AND THE LOYALIST TOWNSHIP DEVELOPMENT GUIDELINES AS AMENDED. WHERE THERE IS A DISCREPENCY BETWEEN THE TWO, LOYALIST TOWNSHIP GUIDELINES SHALL BE USED.
2. WATERMAINS
   2.1. WATERMAINS TO BE PVC CLASS 150 (DR 18), OR AWWA C909 - MOLECULARLY ORIENTED POLYVINYL CHLORIDE (PVC) SPECIFICATION, PRESSURE CLASS 235.
   2.2. WATERMAINS SHALL NOT BE USED AS AN ELECTRICAL GROUND IN NEW BUILDINGS.
   2.3. WATERMAINS TO BE EVENLY GRADED, TO MINIMIZE LOCAL HIGH POINTS.
   2.4. ALL WATERMAIN PIPE TO BE CSA CERTIFIED.
   2.5. PVC WATERMAIN
      2.5.1. TRACER WIRE TO BE 12 GAUGE STRANDED COPPER. PLASTIC COATED TRACER WIRE T.W.U. 75 C 600V OR APPROVED EQUAL.
      2.5.2. INCLUDE TRACER WIRE AS PER DETAIL OF TRACER WIRE INSTALLATION FOR PVC WATERMAIN ON DETAIL SHEET.
      2.5.3. INSTALL ONE (1) 7.7 kg MAGNESIUM ANODE ON EVERY VALVE, HYDRANT AND FITTING. ALL THERMITE WELD CONNECTIONS SHALL BE COATED WITH ROYBOND 747 PRIMER AND ROYSTON "HANDY CAP" OR APPROVED EQUAL.
      2.5.4. PVC FITTINGS MAY BE USED WITH PVC PIPE.
3. HYDRANTS
   3.1. HYDRANTS TO BE INSTALLED IN ACCORDANCE WITH OPSD 1105.010
   3.2. HYDRANTS TO HAVE 150 mm BARREL, WITH TWO 63 mm HOSE CONNECTIONS AND ONE 100mm STORZ PUMPER PORT. ALL HYDRANTS TO BE LEFT HAND OPEN (COUNTER - CLOCKWISE).
   3.3. HYDRANTS ARE TO BE McAVITY 67 OR MUELLER CENTURY MODEL.
   3.4. HYDRANTS ARE TO BE SUPPLIED BY THE MANUFACTURER AS YELLOW
   3.5. HYDRANTS TO HAVE CONCRETE SHOCK COLLAR AND LOCATE STATION AS PER UTILITIES KINGSTON FIGURE 2W3.
4. VALVES
   4.1. VALVES SHALL BE RESILIENT SEAT WEDGE TYPE WITH NON-RISING STEM AND 50mm OPERATING NUT. VALVES SHALL BE LEFT HAND OPEN (COUNTER-CLOCKWISE)
5. WATERMAINS
   5.1. WATERMAINS SHOULD CROSS ABOVE SEWERS WHEREVER POSSIBLE WHETHER THE WATERMAIN IS ABOVE OR BELOW THE SEWER, A MINIMUM VERTICAL DISTANCE OF 500mm BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF THE SEWER SHOULD BE PROVIDED TO ALLOW FOR PROPER BEDDING AND STRUCTURAL SUPPORT OF THE WATERMAIN AND SEWER PIPE. SUFFICIENT STRUCTURAL SUPPORT FOR THE SEWER PIPES SHOULD BE PROVIDED TO PREVENT EXCESSIVE DEFLECTION OF THE JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHOULD BE CENTERED AT THE POINT OF CROSSING SO THAT JOINTS IN THE WATERMAIN WILL BE EQUIDISTANT AND AS FAR FROM THE SEWER, CROSSING PERPENDICULAR IF POSSIBLE. WATERMAINS SHALL BE TESTED IN ACCORDANCE WITH OPS 701 AND LOYALIST TOWNSHIP SPECIFICATIONS. TESTING AND DISINFECTION SHALL BE IN ACCORDANCE WITH "LOYALIST TOWNSHIP WATERMAIN TESTING AND DISINFECTION GUIDELINES".
6. WATER SERVICES
   6.1. WATER SERVICES ARE TO BE 25mm CROSS LINKED HIGH DENSITY POLYETHYLENE (PEX) AWWA C904, AND CSA-B137.5. WITH A MINIMUM WORKING PRESSURE RATING OF 1100 kPa (160 PSI) AT 23°C UNLESS NOTED OTHERWISE, AT A MINIMUM DEPTH OF 1.7 METRES OF COVER.

   ALL WATER SERVICES ARE TO BE WITHOUT JOINTS BETWEEN THE MAIN AND THE PROPERTY LINE, REGARDLESS OF LENGTH. THERE SHALL BE NO BURIED JOINTS EXCEPT AT THE STREETLINE AT THE SERVICE SET. A ZINC ANODE SHALL BE ATTACHED IN ACCORDANCE WITH THE DETAIL ON DRAWING No.1
   6.2. MAIN STOPS SHALL BE THE SAME SIZE AS THE SERVICE PIPE, NO LEAD AND SHALL HAVE AN AWWA TAPERED THREAD INLET AND A COMPRESSION JOINT OUTLET, 300 PSI BALL STYLE VALVE . MAIN STOPS SHALL BE MUELLER-CANADA B25008N, FORD METER B1006-NL OR CAMBRIDGE BRASS 301NL
   6.3. ALL CURB STOPS SHALL BE THE SAME SIZE AS THE SERVICE PIPE AND SHALL BE COMPRESSION JOINT INLET AND OUTLET, 300 PSI BALL STYLE VALVE. CURB STOPS SHALL BE CAMBRIDGE BRASS 202 SERIES, MUELLER B-25209 SERIES OR FORD METER B44 SERIES WITH STAINLESS STEEL RODS.
   6.4. SELF-DRAINING (STOP & DRAIN) TYPE CURB & MAIN STOPS ARE NOT PERMITTED.
   6.5. ALL PEX WATER SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH TOWNSHIP W-16 STANDARD AND INCLUDE A CONCRETE SUPPORT AND ELECTRICAL GROUNDING TAILING NUTS ON BOTH SIDES FOR THE CONNECTION OF THE TRACER WIRE.
   6.6. ALL MATERIALS SHALL BE CSA APPROVED, AWWA C800 AND NSF 61 COMPLIANT.
7. SANITARY SEWER MAINS
   7.1. SANITARY SEWER MAINS TO BE PVC DR 35 EQUAL TO CSA B182.2, CSA B182.3 OR CSA B137.3.
   7.2. BRANCH CONNECTIONS TO BE PRE-MANUFACTURED TEES (CSA CERTIFIED) UNLESS OTHERWISE SPECIFIED.
   7.3. ALL JOINTS TO BE BELL AND SPIGOT TYPE UNLESS OTHERWISE SPECIFIED.
   7.4. THE SANITARY SEWER SYSTEM AND BEDDING SHALL NOT BE USED FOR DE-WATERING PURPOSES.
   7.5. ALL SANITARY PIPE IS TO BE TESTED IN ACCORDANCE WITH OPS 410, INCLUDING ROUNDNESS TEST AND LOW PRESSURE AIR TEST.
   7.6. ALL SANITARY SEWER TO BE CSA CERTIFIED.
8. STORM SEWER MAINS AND CATCHBASIN
   8.1. MAINS AND LEADS TO BE REINFORCED CONCRETE 65-D (CL III) OR PVC DR 35, OR POLYETHYLENE (OPSS 1840 AND OPSD 806.02 CLASS 300).
   8.2. ALL JOINTS TO BE BELL AND SPIGOT TYPE UNLESS OTHERWISE SPECIFIED.
   8.3. ALL STORM SEWER PIPE IS TO BE TESTED IN ACCORDANCE WITH OPS 410. ALL PVC OR PE STORM GETS ROUNDNESS TEST.
   8.4. ALL STORM PIPE TO BE CSA CERTIFIED.
9. STORM SEWER SERVICES
   9.1. STORM SERVICES TO BE 100mm PVC DR 28 WHITE COLOR PIPE (ASTM D-3034) AT MINIMUM 2% GRADIENT WITH A MINIMUM OF 2.10 m COVER AT PROPERTY LINE UNLESS NOTED OTHERWISE. IF THE MINIMUM COVER CANNOT BE ACHIEVED, THEN THE COVER SHALL BE AS MUCH AS CAN BE ACHIEVED. MAXIMUM COVER TO BE 2.5m.
   9.2. RAINWATER LEADERS SHALL BE SEPARATE SERVICES FROM ANY FOUNDATION DRAINAGE TO AVOID SURCHARGING.
10. SANITARY SEWER SERVICES
   10.1. SANITARY SEWER SERVICES TO BE 125mm PVC DR 28 GREEN COLOR PIPE (ASTM D-3034), @ MINIMUM 2% GRADIENT WITH MINIMUM 2.40 m COVER AT PROPERTY LINE UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH LOYALIST TOWNSHIP SPECIFICATIONS. ONLY LONG RADIUS BENDS ARE ACCEPTABLE. IF THE MINIMUM COVER CANNOT BE ACHIEVED, THEN THE COVER SHALL BE AS MUCH AS CAN BE ACHIEVED.
   10.2. ALL LATERALS SHALL BE RUN PARALLEL INTO THE PROPERTY LINE OR AIMED TOWARDS THE HOUSE. IF SWEEPS ARE REQUIRED TO LINE UP THE SERVICE THEY SHOULD BE LOCATED ON THE MUNICIPAL SIDE OF THE SERVICE.
   10.3. THE INSTALLATION OF ANY NEW PIPES INTO EXISTING MANHOLES SHALL BE BY CORING AND SANITARY MANHOLES SHALL INCLUDE THE INSTALLATION OF A LINK-SEAL ADJUSTABLE FROM THE INSIDE OF THE STRUCTURE SEE DRAWING S4 LINK-SEAL FOR A CAST/CORED HOLE ON DETAIL SHEET.
11. MANHOLES
   11.1. MANHOLES TO BE 1200mm DIAMETER PRECAST CONCRETE OPSD 701.010 UNLESS NOTED OTHERWISE.
   11.2. SANITARY MANHOLES TO HAVE FRAME AND COVER OPSD 401.01 TYPE 'A' (CLOSED COVER). SANITARY MANHOLES TO BE BENCHED IN ACCORDANCE WITH OPSD SPECIFICATIONS.
   11.3. SANITARY MANHOLES TO HAVE 20 mm BUTYL MASTIC (EZ STICK) APPLIED TO ALL JOINTS, IN ADDITION TO STANDARD RUBBER GASKET.
   11.4. THE BOOT CONNECTION IS TO HAVE TWO RING CLAMPS TO TIGHTEN THE BOOT TO THE PIPE. THE CONTRACTOR IS TO DEMONSTRATE TO THE INSPECTOR THAT ALL RING CLAMPS HAVE BEEN PROPERLY TIGHTENED BEFORE BACKFILLING.
   11.5. SANITARY MANHOLES TO HAVE DAMP PROOFING SYSTEM BAKOR BLUESKIN SA SELF ADHESIVE WATER PROOFING USED IN CONJUNCTION WITH BLUESKIN ADHESIVE (PRIMER) OR BITUMINOUS EQUIVALENT, AROUND EVERY JOINT A MINIMUM 300 mm ABOVE AND BELOW THE JOINT.
   11.6. STORM MANHOLES TO HAVE FRAME AND COVER OPSD 401.01 TYPE 'B' (OPEN COVER). HEAVY GAUGE POLYURETHANE IS TO BE PLACED UNDER THE STORM COVER UNTIL THE BASE COURSE OF ASPHALT IS APPLIED. MANHOLES TO BE BENCHED IN ACCORDANCE WITH OPSD DETAILS. STORM CATCHBASIN MANHOLES TO HAVE 600 mm SUMP.
   11.7. MANHOLES TO HAVE MAXIMUM 3 ADJUSTMENT UNITS.
   11.8. THE INSTALLATION OF ANY NEW PIPES INTO NON-CAST HOLES SHALL BE BY CORING. LINK SEAL UNITS ARE TO BE UTILIZED FOR ALL SANITARY MANHOLES WITHOUT BOOTS.
12. CATCHBASINS
   12.1. SINGLE CATCHBASINS TO BE OPSD 705.010, DOUBLE CATCHBASINS TO BE OPSD 705.020.
   12.2. ROAD CATCHBASINS TO HAVE A DRAINAGE INTERCEPTION SURROUND AND WEEP HOLES AS PER DETAIL ON DETAIL DRAWING SHEET.
   12.3. FRAMES AND GRATES TO BE OPSD 400.010 UNLESS NOTED OTHERWISE.
   12.4. CATCHBASINS TO HAVE MAXIMUM 3 ADJUSTMENT UNITS
13. SEWER AND WATERMAIN BEDDING SHALL BE IN ACCORDANCE WITH OPSD 820 SERIES. BEDDING AND COVER SHALL CONFORM TO GRANULAR A AS PER OPSS SPECIFICATIONS.
14. ALL SIDEWALKS SHALL BE RAMPED AT INTERSECTIONS IN ACCORDANCE WITH OPSD 310.033. TACTILE PLATES SHALL BE CAST IRON IN ACCORDANCE WITH OPSD 310.039.
15. REGARDLESS OF SITE SPECIFIC ITEMS DETAILED ON THE PLANS, THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AS SUIT THE PROPOSED WORK METHODS TO CONTROL SEDIMENT FROM RUNNING OFF THE SITE PRIOR TO ANY DISTURBANCE. FOLLOWING CONSTRUCTION, DISTURBED AREAS, AS WELL AS PROPOSED GRASSED AND VEGETATED SURFACES, SHALL BE REINSTATED AS SOON AS PRACTICAL.
16. IF DURING THE PROCESS OF DEVELOPMENT, BURIED OR UNDETECTED ARCHAEOLOGICAL REMAINS ARE UNCOVERED, THE DEVELOPER OR AGENTS SHALL IMMEDIATELY NOTIFY THE ARCHAEOLOGY SECTION OF THE ONTARIO MINISTRY OF CULTURE, TOURISM AND RECREATION.
17. IN THE EVENT THAT HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, THE PROPONENT SHALL IMMEDIATELY CONTACT BOTH MTCR, AND THE REGISTRAR OR DEPUTY REGISTRAR OF THE CEMETERIES REGULATION UNIT OF THE MINISTRY OF CONSUMER AND COMMERCIAL RELATIONS (416) 326-8392.
18. THE CONTRACTOR SHALL NOTIFY THE UTILITIES DEPARTMENT AND ALL RESIDENTS WITHIN 120 m OF BLASTING OPERATIONS, 48 HOURS PRIOR TO BLASTING. BLASTING SHALL NOT TAKE PLACE UNTIL THIS HAS BEEN CARRIED OUT. BLASTING WITHIN 30m OF EXISTING INFRASTRUCTURE (HIGH PRESSURE WATERMAIN AND SANITARY TRUNK SEWER) ALONG NORTH LIMIT OF THE PROPERTY WILL NOT BE PERMITTED.
19. A VIBRATION PLAN SHALL BE PROVIDED FOR THE SITE PRIOR TO CONSTRUCTION.
20. EROSION AND SEDIMENT CONTROLS
   20.1. ALL EROSION AND SEDIMENT CONTROLS MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MONITORED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS UNTIL ALL DISTURBED AREAS HAVE BEEN REVEGETATED BY THE CONTRACTOR .
   20.2. ALL DISTURBED AREAS SHALL BE REVEGETATED WITH PERMANENT COVER IMMEDIATELY FOLLOWING COMPLETION OF CONSTRUCTION.
   20.3. THE TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE REMOVED ONCE THE SITE HAS BEEN STABILIZED/COMPLETION OF SITE WORKS.
21. WATERMAIN TESTING SHALL BE IN ACCORDANCE WITH LOYALIST TOWNSHIP - WATER DISTRIBUTION SYSTEM NEW CONSTRUCTION - TESTING REQUIREMENTS (SEE SPECIFICATIONS).
22. APPROVED FIRE ROUTE SIGNS WILL BE REQUIRED TO BE ERECTED ALONG THE PROPOSED FIRE ROUTE PRIOR TO OCCUPANCY.
23. REMOVE EXISTING ENTRANCES, CULVERTS, AND SIDEWALKS ETC. IN BOLLEVARD AREA OF MAIN STREET THAT ARE NO LONGER IN USE.
24. ANY DISTURBED AREAS NOT ACTIVELY UNDER CONSTRUCTION SHALL BE LEVELED AND SEEDED WITHIN 45 DAYS.

No.	By	Date	Revision	Checked
3	NB	MAY 17, 2018	ISSUED FOR SPA	MJ
2	NB	MARCH 7, 2018	ISSUED FOR COORDINATION	MJ
1	NB	JANUARY 3, 2018	ISSUED FOR SPA	MJ

Josselyn Engineering Inc.

LICENSED PROFESSIONAL ENGINEER
M. JOSSELYN
2018/01/26
PROVINCE OF ONTARIO

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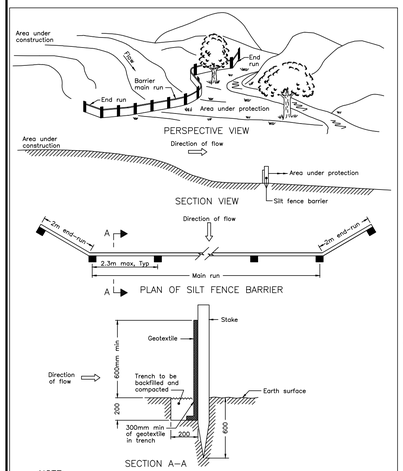
OWNER:
MAIN STREET PLAZA CORPORATION

PROJECT:
MAIN STREET - BATH

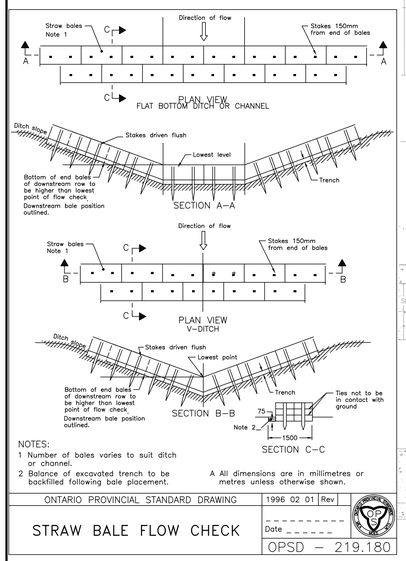
DRAWING TITLE:
DETAILS

Designed By: M.J.	Date: JUNE 26, 2017	Project No.	Drawing No.
Drawn By: N.B.		1218	C003
Checked By: M.J.	Scale: NOT TO SCALE		



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

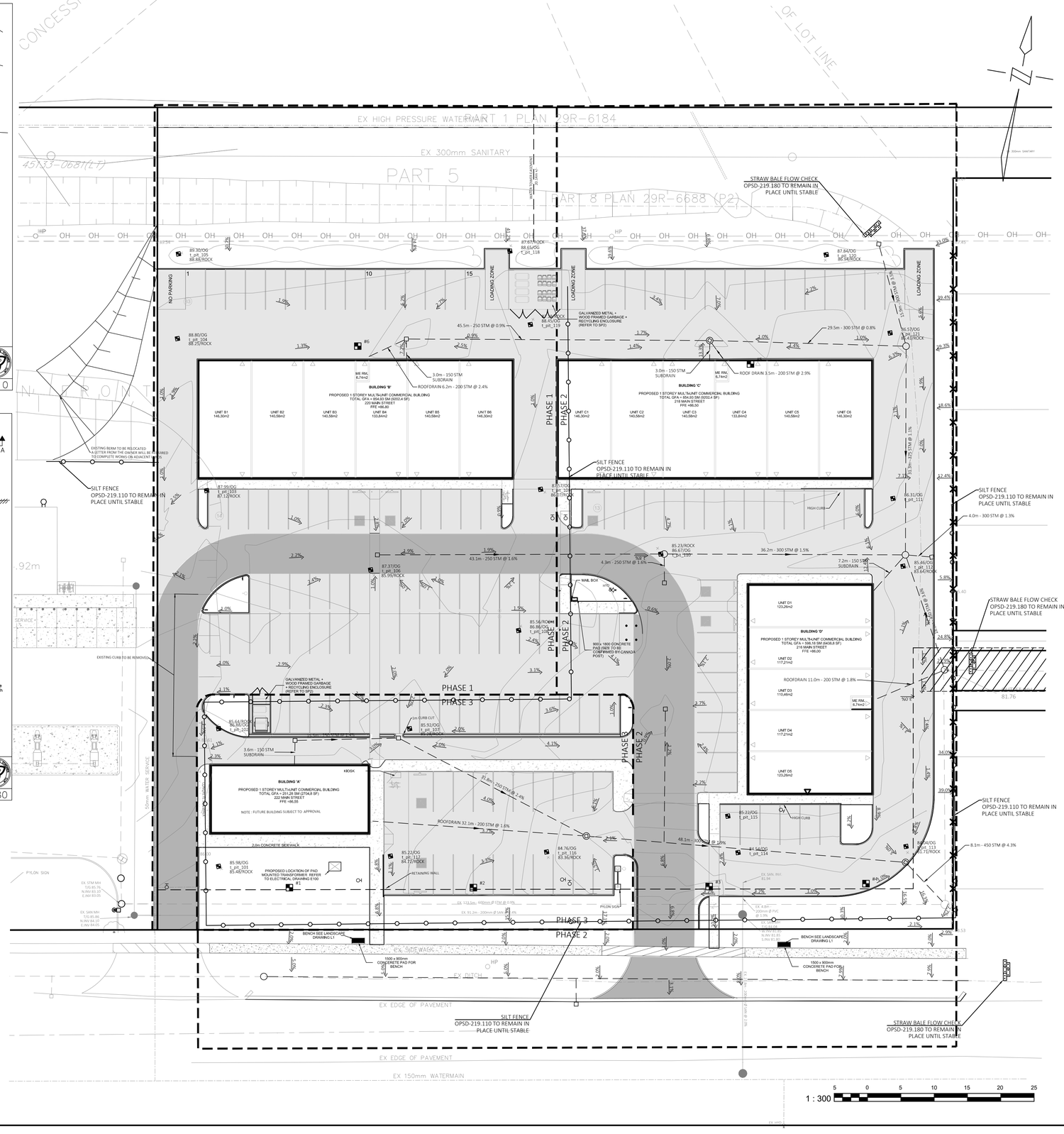
ONTARIO PROVINCIAL STANDARD DRAWING	1996 02 01	Rev
LIGHT DUTY SILT FENCE BARRIER	Date	
	OPSD – 219.110	



NOTES:
1 Number of bales varies to suit ditch or channel.
2 Balance of excavated trench to be backfilled following bale placement.

A All dimensions are in millimetres or metres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	1996 02 01	Rev
STRAW BALE FLOW CHECK	Date	
	OPSD – 219.180	



NOTES

1. DURING CONSTRUCTION, THE STRAW BALE BARRIER IS TO BE INSPECTED DAILY, AND REPAIRED AS NECESSARY TO CONTAIN ANY SEDIMENT. THIS REQUIREMENT SHALL CONTINUE UNTIL CONSTRUCTION ON THE SITE IS COMPLETE, FOLLOWING WHICH THE CONTRACTOR SHALL INSPECT THE BARRIER AS NECESSARY TO MAINTAIN ITS FUNCTION. THE OWNER SHALL REMOVE THE BARRIER ONCE THE SITE VEGETATION HAS BEEN WELL ESTABLISHED.
2. REGARDLESS OF SITE SPECIFIC ITEMS DETAILED ON THE PLANS,THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AS SUIT THE PROPOSED WORK METHODS TO CONTROL SEDIMENT FROM RUNNING OFF OF THE SITE. FOLLOWING CONSTRUCTION, DISTURBED AREAS, AS WELL AS PROPOSED GRASSED AND VEGETATED SURFACES, SHALL BE REINSTATED AS SOON AS PRACTICAL.
3. WHILE UNDERTAKING CLEARING, DEMOLITION, EXCAVATION OR CONSTRUCTION IN AREAS WHERE DWELLINGS OR OTHER STRUCTURES MAY HAVE HISTORICALLY EXISTED, THE CONTRACTOR IS TO BE VIGILANT FOR THE POTENTIAL PRESENCE OF UNDERGROUND FUEL TANKS, POTENTIALLY CONTAMINATED SOIL OR GROUNDWATER, OR ABANDONED WATER WELLS. IF ANY OF THE ABOVE ARE ENCOUNTERED,THE CONTRACTOR SHALL ENSURE THAT

   - ANY GARBAGE, DEMOLITION WASTES OR OTHER MISCELLANEOUS SOLID WASTES ENCOUNTERED ARE REMOVED IN ACCORDANCE WITH THE REQUIREMENTS OF ONTARIO REGULATION 347 AS AMENDED;

   - ANY ABANDONED FUEL TANKS ENCOUNTERED ARE DECOMMISSIONED IN ACCORDANCE WITH THE ENERGY ACT OR GASOLINE HANDLING ACT,AS APPROPRIATE;

   - ANY CONTAMINATED SOILS OR GROUND WATER IS PROPERLY CHARACTERIZED AND REMEDIATED IN ACCORDANCE WITH THE MINISTRY OF THE ENVIRONMENT GUIDELINE FOR USE AT CONTAMINATED SITES IN ONTARIO, AS AMENDED; AND

   - ANY UNUSED WATER WELLS ARE PROPERLY ABANDONED IN ACCORDANCE WITH ONTARIO REGULATION 903-WELLS.
4. SILT FENCES (OPSD 219.010) ARE TO BE INSTALLED WHEREVER THERE IS A POSSIBILITY OF RUNOFF FROM THE CONSTRUCTION SITE ONTO ADJACENT STREETS OR PROPERTIES. THESE SILT FENCES ARE TO BE MAINTAINED DURING CONSTRUCTION, AND UNTIL A GOOD GROWTH OF VEGETATION IS OBTAINED ON ALL GRASSED AREAS, AND UNTIL THE NEW HARD SURFACED AREAS ARE CONSTRUCTED.
5. ALL AREAS DISTURBED BY CONSTRUCTION ARE TO BE REINSTATED AS SOON AS POSSIBLE. DAMAGE TO EXISTING VEGETATED AREAS IS TO BE MINIMIZED BY FENCING THE WORK AREA, TO MAINTAIN CONSTRUCTION ACTIVITIES TO THE PRE-DEFINED AREAS.
6. STOCKPILES OF EXCAVATED MATERIAL, OR STOCKPILED GRANULARS, ARE TO BE LOCATED TO MINIMIZE THE POSSIBILITY OF RUNOFF BEYOND THE CONSTRUCTION ZONE. SILT FENCES MAY BE REQUIRED TO CONTAIN RUNOFF FROM STOCKPILES.
7. ALL CONSTRUCTION ENTRANCES TO CONFORM TO CONSTRUCTION ENTRANCE DETAIL.
8. PRECAUTIONS MUST BE TAKEN TO ENSURE THAT CONSTRUCTION VEHICLES AND MATERIALS DON'T DISTURB THE DRIVING OR ROAD QUALITY OF THE MUNICIPAL STREET WHEN ENTERING OR EXITING THE SITE DURING CONSTRUCTION. THE MUNICIPAL ROADWAYS ARE REQUIRED TO BE KEPT CLEAN OF DEBRIS AND ALL OTHER DELETERIOUS CONSTRUCTION MATERIALS. ADJACENT STREETS ARE TO BE POWER SWEPT ON A REGULAR BASIS TO REMOVE TRACKED MUD FROM THE CONSTRUCTION SITE.
9. FOR TREE PROTECTION REFER TO LANDSCAPE PLANS.

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3	NB	MAY 17, 2018	ISSUED FOR SPA	MJ
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LICENSED PROFESSIONAL ENGINEER M. JOSSELYN 2018/07/06 PROVINCE OF ONTARIO

OWNER: MAIN STREET PLAZA CORPORATION

PROJECT: MAIN STREET - BATH

DRAWING TITLE: EROSION AND SEDIMENT CONTROL PLAN

Designed By:	M.J.	Date:	Project No.	Drawing No.
Drawn By:	N.B.	JUNE 26, 2017	1218	C004
Checked By:	M.J.	Scale: 1:300		