



- CULVERT IMPROVEMENTS**
- ① HOWARD CRESCENT: 3600mm X 1200mm CONCRETE BOX CULVERT
 - ② LAY STREET: 3600 X 1200mm CONCRETE BOX CULVERT
 - ③ GROVE STREET (A): 3600mm X 1200mm CONCRETE BOX CULVERT
 - ④ GROVE STREET (B): 3600mm X 1200mm CONCRETE BOX CULVERT
 - ⑤ ST. VINCENT STREET: TWIN 3600mm X 1200mm CONCRETE BOX CULVERTS
 - ⑥ ROSE STREET: 3000mm X 1500mm CONCRETE BOX CULVERT
 - ⑦ LAURIE CRESCENT: 3000mm X 1500mm CONCRETE BOX CULVERT
 - ⑧ BOTHWELL CRESCENT: 7.93m CONCRETE SPAN BRIDGE
 - ⑨ GROVE STREET (C): 3600mm X 1500mm CONCRETE BOX CULVERT
 - ⑩ PARKDALE CRESCENT: 3600mm X 1500mm CONCRETE BOX CULVERT
 - ⑪ DAVIDSON STREET/GUNN STREET: 3600mm X 1500mm CONCRETE BOX CULVERT
 - ⑫ WELLINGTON STREET: 3600mm X 1500mm CONCRETE BOX CULVERT
 - ⑬ BERCY STREET: 3600mm X 1500mm CONCRETE BOX CULVERT
 - ⑭ OTTAWAY AVENUE: 3000mm X 1500mm CONCRETE BOX CULVERT
- CHANNEL IMPROVEMENTS**
- A HOWARD CRESCENT TO LAY STREET (REGRADE CHANNEL / 2.4m BOTTOM WIDTH / 3:1 SIDE SLOPES)
 - B DOWNSTREAM OF LAY STREET (REGRADE CHANNEL)
 - C UPSTREAM/DOWNSTREAM OF GROVE STREET (B) (2.4m BOTTOM WIDTH / 3:1 SIDE SLOPES)
 - D OTTAWAY TO LAURIE CRESCENT (CONSISTENT CROSS-SECTION AS D/S CHANNEL) – NEW CHANNEL
 - E GROVE STREET TO PARKDALE CRESCENT (3.0m BOTTOM WIDTH / 3:1 SIDE SLOPES)
 - F BERCY STREET TO QUEEN STREET (CONSISTENT CROSS-SECTION AS D/S CHANNEL) – NEW CHANNEL
- 50 YEAR DESIGN STORM CAPACITY**
- ① ② ③ ④ ⑥ ⑦ ⑨ ⑩ ⑪ E ⑭
- 100 YEAR DESIGN STORM CAPACITY**
- ⑤ ⑬ ⑫ A B C D F

- GENERAL RECOMMENDATIONS**
- AS PART OF ROAD RENEWAL PROJECTS, LOCAL STORM SEWERS ARE TO BE UP SIZED TO SATISFY CURRENT DESIGN STANDARDS, STORM SEWERS ARE TO BE RELOCATED TO THE MUNICIPAL ROAD ALLOWANCE, AND AREAS ABSENT OF MINOR DRAINAGE SYSTEMS ARE TO BE SERVICED BY STORM SEWERS WHERE FEASIBLE.
- TRUNK STORM SEWER IMPROVEMENTS**
- ⑮ SOPHIA STREET FROM PEEL STREET TO OWEN STREET (3000mm X 1500mm CONCRETE BOX CULVERT) – ADDITIONAL SEWER
 - ⑯ OWEN STREET FROM SOPHIA STREET TO COLLIER STREET (1650ø STM) – SEWER REPLACEMENT
 - ⑰ OWEN STREET FROM COLLIER STREET TO SIMCOE STREET (2400mm X 1200mm CONCRETE BOX CULVERT) – SEWER REPLACEMENT
 - ⑱ LAKESHORE DRIVE FROM MEMORIAL SQUARE TO KEMPENFELT BAY (2400mm X 1500mm CONCRETE BOX CULVERT) – SEWER REPLACEMENT
 - ⑲ SOPHIA STREET FROM OWEN STREET TO CLAPPERTON STREET (2400mm X 1200mm CONCRETE BOX CULVERT) – ADDITIONAL SEWER
 - ⑳ CLAPPERTON STREET FROM SOPHIA STREET TO BAYFIELD STREET (2400mm X 1200mm CONCRETE BOX CULVERT) – SEWER REPLACEMENT
- EXISTING SOPHIA STREET/BAYFIELD STREET TRUNK STORM SEWER, PROPOSED OWEN STREET TRUNK STORM SEWER AND PROPOSED CLAPPERTON STREET TRUNK STORM SEWER TO HAVE COMBINED 100 YEAR DESIGN STORM CAPACITY.

- Legend**
- STORM DEVICES
 - CLAPPERTON STREET TRUNK STORM SEWER
 - EXISTING SOPHIA STREET/BAYFIELD STREET TRUNK STORM SEWER
 - OWEN STREET TRUNK STORM SEWER
 - FLOW DIVERSION
 - ▨ PARK LAND
 - CENTRALIZED LID LOCATION
 - ▨ SWMF RETROFIT/EXPANSION/CREATION
 - EXISTING SWMF
 - SEWER RELOCATION
 - CULVERT
 - DITCH
 - WATERCOURSE
 - STORM SEWER
 - ROADS
 - CULVERT IMPROVEMENTS ①
 - CHANNEL IMPROVEMENTS A
 - SWMF
 - BUILDINGS
 - STUDY AREA
 - ▭ MUNICIPAL BORDER

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SCALE = 1:6,500

0 80 160 320 480 640 Meters

SOPHIA CREEK WATERSHED & MULCASTER DRAINAGE AREA EA UPDATE

FIGURE 14 - PREFERRED ALTERNATIVE SOLUTIONS

DATE: SEPTEMBER 2017

DISCLAIMER

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