

Queen Street Reconstruction

Council Presentation

January 26, 2016





INTRODUCTION

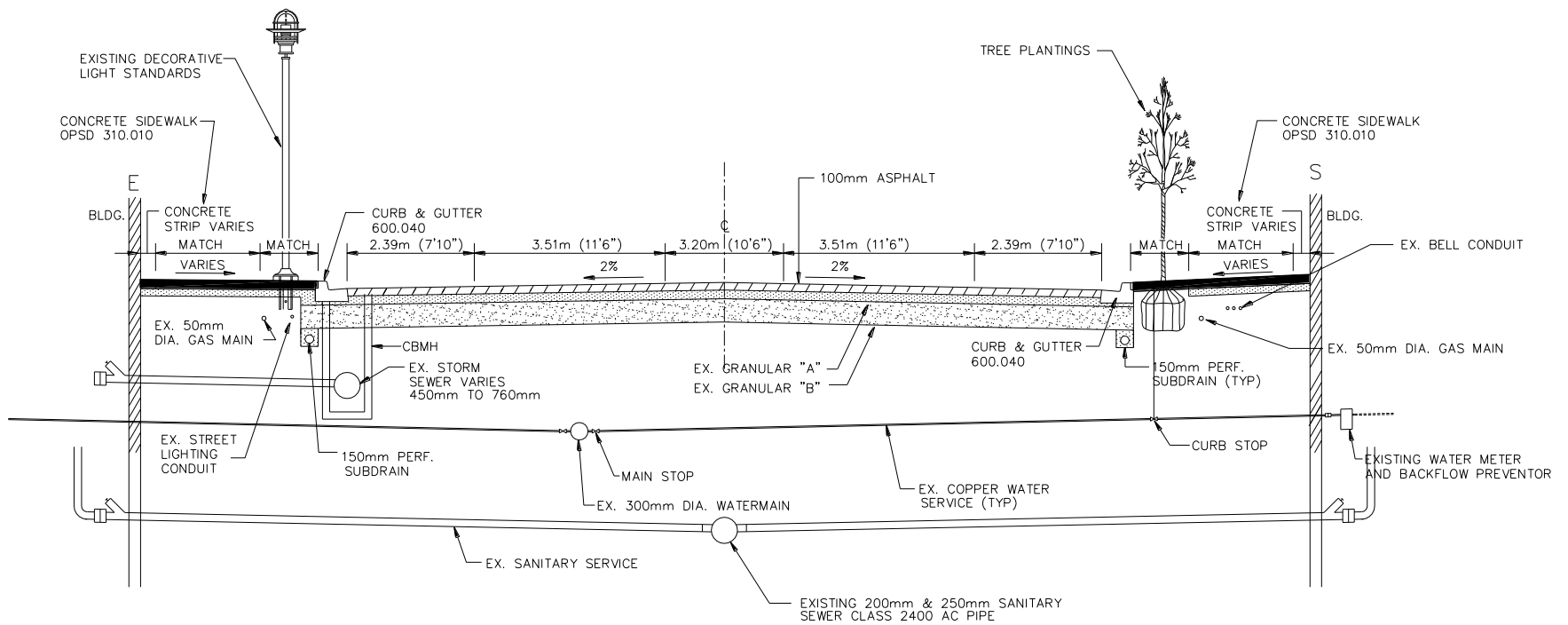
- Limits: Thomas Street to Peel Street
- Major Components:
 - Water Service Replacement
 - Asphalt Rehabilitation
 - Sidewalk Reconstruction
 - Improve Accessibility
- Opportunities:
 - Façade improvements
 - Church Street Intersection radius improvements

BACKGROUND

- Full Reconstruction in 1972
 - Storm Sewers
 - Sanitary Sewers
 - Watermains
 - Services
 - Roads & sidewalk
- Copper water service repairs
- Water St. signals installed in the 1960's

BACKGROUND

- Wellington St. signals installed in the 1960's
- Church St. signals installed in the 1980's and then modifications done in the late 1990's
- Queen St illumination (conc. Poles, HPS lights) mid 1990's



EXISTING CROSS SECTION

OUT OF SCOPE

- Replace existing light standards
- Replace the sanitary sewer
- Replace the storm sewer
- Replace the watermain

LIMITS OF PROJECT



THOMAS ST. TO WATER ST.



83 Queen Street,
adjacent to river



88 Queen Street,
(west of the Thames River)

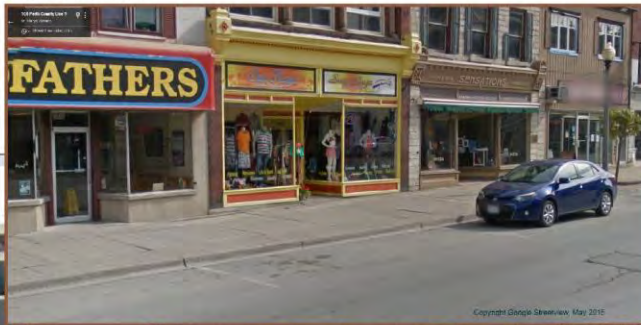


Queen Street Reconstruction
St Marys ON
PIC Panel #1

WATER ST. TO WELLINGTON ST.



105 Queen Street looking east



117-125 Queen Street



Queen Street Reconstruction
St Marys ON
PIC Panel #2



134 Queen Street looking west

WELLINGTON ST. TO CHURCH ST.



Queen Street Reconstruction
St Marys ON
PIC Panel #3



150 Queen Street looking west

CHURCH ST. TO PEEL ST.

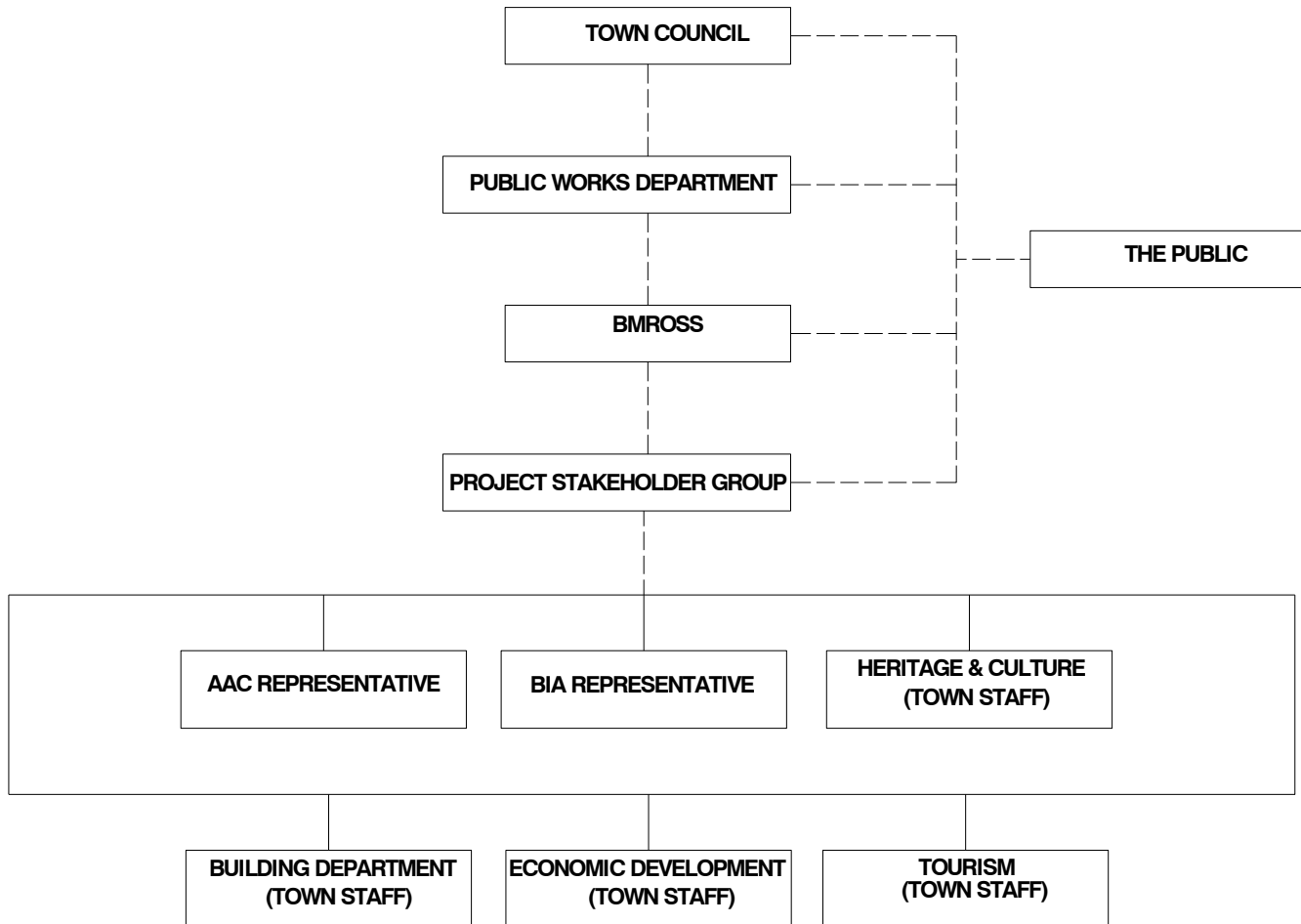


Queen Street Reconstruction
St Marys ON
PIC Panel #4



202 Queen Street looking west

PROJECT STRUCTURE



STATUS OF DESIGN

- Road grades
- Sidewalk grades and crossfalls
 - AODA support
- Investigated basements
- Traffic Study
 - Semi-actuated signals
 - Improve pedestrian line painting at Church St.

STATUS OF DESIGN

- Removal & New Construction dwgs
- Pedestrian Signals
- Semi-Actuated signals
- On-going discussions regarding:
 - Construction Staging
 - Service replacements
 - Detours



Varying step height

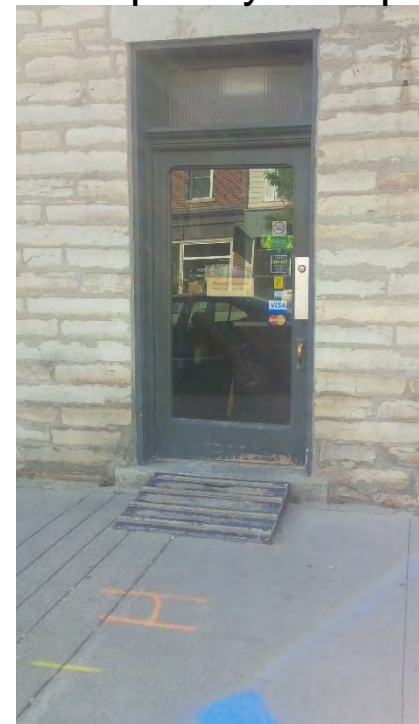
More than one step



Wide Entrance



Temporary Ramp



SCOPE CREEP

- Victoria Bridge
 - Replace water proofing membrane
 - Rehabilitate existing manholes to minimize infiltration
 - Widen the sidewalk
- Decorative poles and fixtures between Church & Peel
- Replace Traffic Controllers

SCOPE CREEP

- Replace HPS fixtures with LED fixtures
- Review accessible parking
- Repair 3 sanitary services

Victoria Bridge Sidewalk Widening



Cracked pole



OPPORTUNITIES

- Gateway Feature at east limit of Victoria Bridge
- Gateway Feature at Town Hall corner

TRAFFIC STUDY

- Replace existing 2 controllers with 3 controllers
- Upgrade signal operations from fixed time and after hours flash mode to provide semi-actuated operation
- Include full pedestrian control with Pedestrian Heads
- Adjust signal timing

TRAFFIC STUDY

- Water Street geometrics would allow for a north/south third lane
- Church Street truck traffic does not support the need for the compound curve
- Amend pedestrian line painting at Church Street

ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT (AODA)

- The Standard applies to all public spaces that are newly-constructed or redeveloped under the following conditions:
 - The organization that is responsible for the construction or redevelopment of the public space entered into a contract for the project **after** December 31, 2012

AND

- 
- The construction or redevelopment project will be substantially completed on or after the date January 1st 2016 for Designated Public Sector Organizations

AODA EXCEPTIONS

- Impact on wildlife, the environment and cultural heritage. For example:
 - Properties protected by the Ontario Heritage Act
 - Historic Sites and Monuments Act
 - United Nations Educational Scientific and Cultural Organizations (UNESCO)

AODA EXCEPTIONS

- Existing Site Constraints
 - Existing site constraints may prevent parts of a project from complying with some accessibility requirements. The regulation allows for such exemptions. For example:
 - Existing topography

AODA EXCEPTIONS

- Organizations must ultimately determine if their circumstances require exceptions.
- Organizations should be able to provide:
 - Proof that the exception was necessary
 - A rationale explanation why they did not meet a requirement

AODA Section 80.28

Exterior paths of travel, accessible pedestrian signals

80.28 (1) Where new pedestrian signals are being installed or existing pedestrian signals are being replaced at a pedestrian crossover, they must be accessible pedestrian signals. O. Reg. 413/12, s. 6.

(2) Accessible pedestrian signals must meet the following requirements:

1. They must have a locator tone that is distinct from a walk indicator tone.
2. They must be installed within 1,500 mm of the edge of the curb.
3. They must be mounted at a maximum of 1,100 mm above ground level.
4. They must have tactile arrows that align with the direction of crossing.
5. They must include both manual and automatic activation features.
6. They must include both audible and vibro-tactile walk indicators. O. Reg. 413/12, s. 6.

PROPOSED AODA DESIGN ELEMENTS

- Tactile surfaces at intersections
- Audible pedestrian signals
- Grades & crossfall for the Path of Travel
- Access to stores where achievable

PEDESTRIAN SIGNALS

Audible/Tactile
Pushbutton



Pedestrian
Signal



Tactile Surface

AODA

- Improve Accessibility as per the Accessibility For Ontarians with Disabilities Act
 - Exterior Path of Travel grades no greater than 5%
 - Exterior Path of Travel with a crossfall no greater than 5%
 - Exception, Paths of Travel beside roadways can be steeper than 5%, but must not be steeper than the slope of the adjacent roadway.

TABLE 1 – GRADING SUMMARY

	BOULEVARD	PATH OF TRAVEL	BLDG STRIP
AODA CLEAR WIDTH	UNDEFINED	1.5m min	UNDEFINED
BETTER PRACTICE		1.8m	
PROPOSED WIDTH	0.8m–1.2m	1.5m–1.8m	0m–1.5m
AODA CROSS SLOPE	UNDEFINED	5% max	UNDEFINED
BETTER PRACTICE		4% max	
PROPOSED CROSS SLOPE	0.5%–8%	1%–4%	0.4%–8%
AODA RUNNING SLOPE	UNDEFINED	5% max OR MATCH ROAD RUNNING SLOPE	UNDEFINED
PROPOSED RUNNING SLOPE	ROAD RUNNING SLOPE PLUS ?% max	ROAD RUNNING SLOPE PLUS 1% max	ROAD RUNNING SLOPE PLUS ?% max

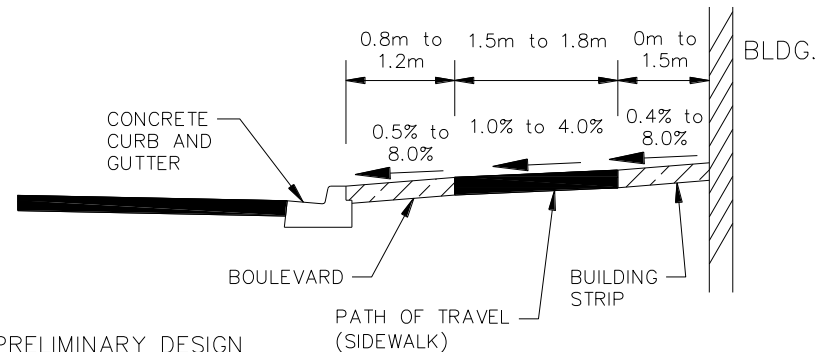


TABLE 2 – ACCESSIBILITY SUMMARY BASED ON PRELIMINARY DESIGN

	COMPLIANCE WITH AODA	BLVD & BLDG. STRIP CROSS SLOPE EXCEEDING AODA PoT CROSS SLOPE	BLVD & BLDG. STRIP RUNNING SLOPE EXCEEDING AODA PoT RUNNING SLOPE
TOTAL ACCESSIBLE ENTRANCES	36		
TOTAL ENTRANCES NOT ACCESSIBLE	26		
ADDITIONAL ENTRANCES THAT COULD BE MADE ACCESSIBLE		6	6



BMROSS
engineering better communities

Town of St. Mary's
Queen Street Reconstruction
Proposed Cross Section

CONTRACT No.
1

PROJECT No.
15130

SCALE
N.T.S.

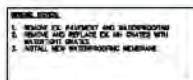
FIGURE No.
1

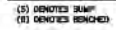


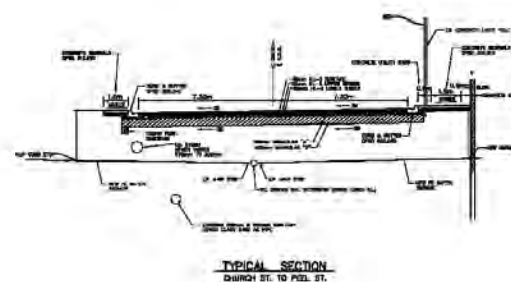
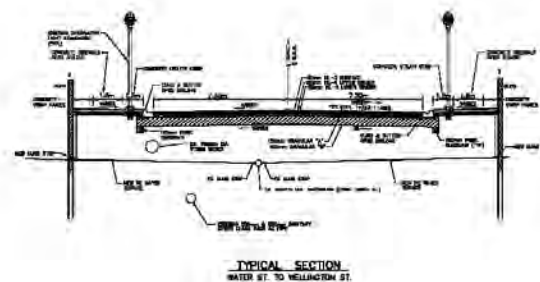
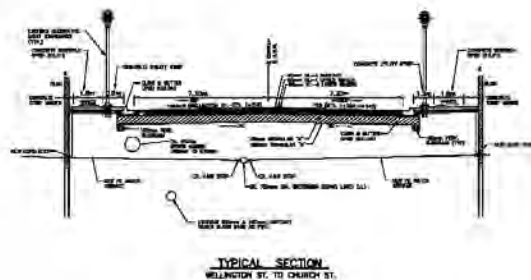
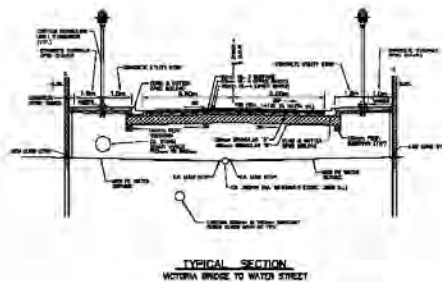
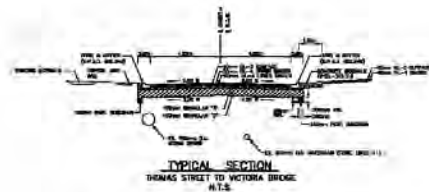
BLDG
STRIP

PATH OF
TRAVEL

BLVD







FACTS

The likelihood of winning congressional offices has grown in recent years, and many states have independently enacted legislation to aid in this effort. The following table summarizes the recent activities of all existing state legislatures concerning such legislation to help members of Congress. For any additional information, please contact your state legislator or the nearest state and federal election law center.

Design By: JAY Checked By: D.L.A.

PRELIMINARY

NO.	DATE	REMARKS
1	2	3



**Town of
St. Marys**
Queen Street Reconstruction
Typical Section*

Contract No. 1	Project No. 15130
Scale (If any) N.T.S.	Drawing No. 7 of



POLE SCHEDULE QUEEN STREET

THE JOURNAL

10



ACTA

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Source: 2000 Census	Source: 2000 Census
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The logo of the American Society of Civil Engineers (ASCE) is located at the bottom left of the page. It features a stylized bridge or arch structure above the text "AMERICAN SOCIETY OF CIVIL ENGINEERS".

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TOWN OF
St. Marys

Queen Street Reconstruction

TABLE 1

1999	1998
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1	15130
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Sale (H&M)	Drawing No.
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8 of 10

PROJECT TIMELINES

- July 8, 2015 – RFP Issued
- August 11th – Notification of Award of RFP
- September 1st – Utility Meeting
- September 1st – Pre-Design Open House
- September 14th – BIA Presentation
- October 14th – Stakeholder Meeting
- November 3rd – Site Meeting with AODA

PROJECT TIMELINES

- December 2nd – Stakeholder Meeting
- December 16th – Stakeholder Meeting
- January 26th – Council Meeting
- February 3rd – Stakeholder Meeting
- _____ – Pre-Qualify Contractors
- _____ – Advertise
- _____ – Close Tenders
- _____ – Begin Construction

CONSTRUCTION

- Probable construction duration exceeds the construction window from April 4th to June 16th
- Construction duration is a function of the following:
 - Scope
 - Staging/Phasing of work
 - Scheduling of multiple sub-trade mobilizations
 - Multiple crews working in close proximity
 - Maintaining access from Queen Street

CONSTRUCTION

- Goal is to maintain pedestrian access to retail establishments
 - Security fencing
 - Signage
 - Utilize rear access as much as possible
- Goal is to maintain two lanes of traffic
- Minimize construction delays by planning and identifying issues during the design stage

CONSTRUCTION ISSUES

- Parking
- Dust
- Noise
- Vibrations
- Inconvenienced
- Detours

PARKING

Public Lot

Army & Navy

Private Lot

Bell Bldg



Private Lot

Private Lot

Farmers Market

Jones St. Parking

PUBLIC RELATIONS

- The Town will work with the BIA to develop strategies to promote a positive image during the construction
- Celebrate the construction
 - Have employees wear hard hats & safety vests at work
 - Be creative
- Promote employee parking off site
- Promote a delivery service

NEXT STEPS

- Establish scope of electrical work
 - Street function requirements
 - Lighting
 - Design as required
- Confirm with Quadro's scope of work
- Define construction parameters
 - Time
 - Limits

NEXT STEPS

- Pre-Qualify contractors
- Tender