### Moffatt Street Reconstruction Roadway, Drainage, and Streetlighting Improvements

North Limit to South Limit City of St. Catharines

### **Public Information Centre**

City of St. Catharines Fire Station #4 Corporate Training Room 427 Merritt Street St. Catharines, Ontario

> July 10, 2018 4:00pm to 6:30pm





# **PIC INFORMATION**

- PIC is intended for information purposes and for the public to review the proposed design
- Please register on the sign-in sheet provided
- Information also provided at <u>http://www.stcatharines.ca/moffatt</u>
- For any additional information or questions, please contact one of the team members below:

Mr. Kerry Howe Jr., P.Eng. Project Manager Kerry T. Howe Engineering Ltd. 98 Church Street, P.O. Box 460 St. Catharines, On L2R 6V9 Tel.: (905) 688-6550 ext. 235 Email: <u>khowe.kth@cogeco.net</u> Ms. Samantha Downing, P. Eng. Project Manager City of St. Catharines 50 Church Street P.O. Box 3012 St. Catharines, ON L2R 7C2 Tel.: (905) 688-5601 ext. 1610 Fax: (905) 641-4450 Email: sdowning@stcatharines.ca





## MOFFATT STREET RECONSTRUCTION AREA







## MOFFATT STREET RECONSTRUCTION DETAILS

#### • Existing Conditions:

- Limited road width averaging 5.8m wide (less than 3m travel lanes)
- Limited area with curb and sidewalk: only on west side from 160m south of Disher St. to north limit
- Limited turning movements at bulbs at north and south end
- Existing road structure in poor condition
- Streetlighting improvements required
- Lack of sidewalk throughout the full length of roadway

#### • Proposed Design:

- New road platform consisting of new road base, asphalt, and curbs on both sides
- New travelled lanes to be 3m wide
- Superelevated proposed road platform to ensure drainage to the east side
- Increased bulb radius at north and south ends for improved turning movements
- Drainage utilizing a combination of existing catch basin outlets and new rip rap outlets
- 1.8m wide curb-face sidewalk throughout the full length (reduced to 1.5m wide from #103 Moffatt St. to #133 Moffatt St. due to limited Right-of-Way width in respective area) with 2% crossfall throughout
- No road side parking will be allowed along Moffatt St. after reconstruction





## MOFFATT STREET RECONSTRUCTION DETAILS

#### • Proposed Design Continued:

- Construct parking lot areas at south end bulb (6 spaces) and north of #128 Moffatt St. (9 spaces)
- Reconstruct entrances to the Merritt Recreation Trail with new asphalt and "switch-back" alignment to ensure 5% maximum longitudinal grade
- Raise Rossie Place intersection and north end bulb to reduce significant grade changes, which improves sightlines, safety, and driveability
- Install new streetlighting
- Minor watermain replacements just south of Disher Street (minor disruptions to service during connection period - Contractor to notify residents prior to watermain shut down)
- Some existing driveways are well over the typical standard maximum of 8%, as listed in the City of St. Catharines Design Standards. Proposed grading design incorporates improving the current driveway condition by lessening (or increasing) grade, however in some cases the proposed grade improvement may still be over the desired 8% maximum.
- Install new guiderail at Marshall Lane intersection on eastern side
- Install new guiderail around perimeter of southern bulb
- Remove existing guide rail from Corbin Street to Arsenault Lane as barrier curb will be installed





## MOFFATT STREET RECONSTRUCTION TYPICAL SECTION





**Engineering Limited** 

### **MOFFATT STREET RECONSTRUCTION DRIVEWAY IMPACTS**

	Ex. Grade	Prop. Grade	Difference	
			(Ex Prop.)	
Location	(%)	(%)	(%)	Comments
dwy #7	8.6	6.4	2.2	Flattening
dwy #7	11	4.4	6.6	Flattening
dwy #11	11.3	5.9	5.4	Flattening
dwy #15	12	5.4	6.6	Flattening
dwy #15	6.6	1.5	5.1	Flattening
dwy #17	7.1	7.1	0	No Change
				Flattening
dwy #21	2.1	1.8	0.3	*CB to be removed
dwy #23 1/2	-1.2	0.9	-2.1	Steepening
dwy #23	12	11.5	0.5	Flattening
dwy #49	10.2	4.2	6	Flattening
dwy #53	16	7.1	8.9	Flattening
dwy #53A	9.5	5.1	4.4	Flattening
dwy #55	10.4	4.5	5.9	Flattening
dwy #57	13.1	7.5	5.6	Flattening
dwy #63	10	2.2	7.8	Flattening
dwy #65	7.5	1.8	5.7	Flattening
dwy #71	9.8	2.4	7.4	Flattening
dwy #73	12.5	3.8	8.7	Flattening
dwy #81	12.7	5.9	6.8	Flattening
dwy #89	10	5.4	4.6	Flattening
dwy #91	9.7	6.8	2.9	Flattening
dwy #93	5.5	3.8	1.7	Flattening
dwy #97	0	3.1	-3.1	Steepening
dwy #99	3.7	4.9	-1.2	Steepening

#### **MOFFATT DRIVEWAY GRADES:**

- The above chart represents the existing driveway grades and the proposed grades for the portion of driveway that will be new and matched into the existing
- In many cases on Moffatt St., the existing driveway grade is greater than the City of St. Catharine's standard maximum of 8%, and the proposed may not improve enough to get below 8%, but all efforts were made to improve the existing condition while maintaining other constraints
- Refer to cross-section design drawings for proposed design
- Field conditions will dictate final as-constructed driveway slopes

	Ex. Grade	Prop. Grade	Difference	
			(Ex Prop.)	
Location	(%)	(%)	(%)	Comments
dwy #101	6.2	3.6	2.6	Flattening
dwy #105	1.7	2.1	-0.4	Steepening
dwy #107	3.3	4.9	-1.6	Steepening
dwy #109	3	4.1	-1.1	Steepening
dwy #111	5.5	4.2	1.3	Flattening
dwy #113	5	4.4	0.6	Flattening
dwy #115	6.7	6	0.7	Flattening
dwy #115	9.4	7.4	2	Flattening
dwy #117	6.6	4.9	1.7	Flattening
dwy #119	5.5	5.4	0.1	Flattening
dwy #121	2.9	4.4	-1.5	Steepening
dwy #124	1.4	4.6	-3.2	Steepening
dwy #123	2.6	5	-2.4	Steepening
dwy #125	3.3	4.6	-1.3	Steepening
dwy #124	-0.3	6.1	-6.4	Steepening
dwy #124	-1.1	3.5	-4.6	Steepening
dwy #128	1.1	5.2	-4.1	Steepening
dwy #127	6.6	6.5	0.1	Flattening
dwy #129A	7	5.4	1.6	Flattening
dwy #128	-0.4	4.2	-4.6	Steepening
dwy #129B	5.6	6.3	-0.7	Steepening
dwy #131	4.5	5.4	-0.9	Steepening
dwy #133	13	8.4	4.6	Flattening
dwy #135	6	6.7	-0.7	Steepening
dwy #137	6.3	7.3	-1	Steepening
dwy #139	5.8	6	-0.2	Steepening
dwy #141	9.8	9.1	0.7	Flattening
dwy #143	10.2	7.4	2.8	Flattening
dwy #151	20	8.5	11.5	Flattening
dwy #155	23.1	12.5	10.6	Flattening
dwy #159	5.1	1.5	3.6	Flattening





### MOFFATT STREET RECONSTRUCTION WATERMAIN WORKS AREA

- Minor watermain replacements between Disher Street and Arsenault Lane
- Replacing existing cast iron watermains with new PVC piping
- Water shutdown notifications to affected residents will be supplied by the Contractor



### MOFFATT STREET RECONSTRUCTION PROJECTED TIMELINES

#### **PROJECTED TIMELINES:**

- Hydro pole relocations projected to complete mid July 2018
- Remaining utility relocations to continue to end of 2018/beginning of 2019 (ie. Bell/Cogeco)
- Moffatt Street reconstruction to commence Spring of 2019, subject to 2019 budget approval, with projected construction to be 4 to 5 months.





### MOFFATT STREET RECONSTRUCTION PROJECTED TRAFFIC IMPACTS

### **TRAFFIC IMPACTS:**

- During construction, there will traffic delays due to limited road width.
- A minimum of one lane of traffic shall be maintained at all times using appropriate traffic control methods and devices.
- Two lanes of traffic shall be maintained when possible, specifically after work hours and on weekends or holidays. Pedestrian access to all businesses and individual residences to be maintained at all times. At least one access to individual properties shall be maintained where possible for vehicles. Property access closures are to be scheduled at least 2 business days in advance between the Contractor and the business owner and/or residents.
- Constant vehicle bypass of the construction will not be possible. Contractor will accommodate all vehicles in both directions, however, delays in either direction for construction purposes (ie. Contractor loading dump trucks) or to allow traffic flow through will be evident on a normal basis during the construction period. Final traffic control plan to be finalized by Contractor.
- Sidewalk access may be limited due to the construction, thus proper signage for sidewalk closures or alternate routes will be utilized, if applicable.





## **MOFFATT STREET SECONDARY ACCESS**

- A proposed secondary access to Moffatt Street is not included in this project and does not have any impact on the Moffatt Street road reconstruction
- The construction of a secondary access between Oakdale Avenue and Moffatt Street or upgrades to the emergency access (link between southern bulb of Moffatt Street to Glendale Avenue) is being examined, at a high level, through the City's Transportation Master Plan. The project will require a separate Municipal Class EA to be undertaken to fully examine the potential alternatives, including the 'Do Nothing' scenario
- Funding to initiate a Municipal Class EA and background studies of a second access road between Oakdale Avenue and Moffatt Street or upgrades to the emergency access will be referred to the Budget Standing Committee as part of the draft 2019 capital budget works



