



CORPORATION OF THE TOWNSHIP OF ESQUIMALT

Municipal Hall
1229 Esquimalt Road
Esquimalt, B.C. V9A 3P1

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PERIOD REPORT

DATE: January 8, 2020 Report No. EPW-20-001
TO: Laurie Hurst, Chief Administrative Officer
FROM: Jeff Miller, Director of Engineering & Public Works
SUBJECT: Engineering & Public Works Departments - 2019 Third Period Report

The following is a report on the activities pertaining to the Engineering & Public Works Departments from September 1, 2019 to December 31, 2019.

1. DIVISION ACHIEVEMENTS AND ACTIVITIES

1. Sanitary Sewer

- 7 new service lateral installed this period (14 total for the year).
- 4 service laterals replaced (due to blockages) this period (17 total for the year).
- Test and clear inspections as and when required.
- 0 manholes replaced this period (0 total for the year).
- 0 new manholes installed this period (0 total for the year).

2. Pump Stations

- Crews carried out routine maintenance activities.
- Annual program for pump maintenance/controls inspections was carried out.
- Program also includes coordinating similar activities for View Royal pump stations.
- Design and installation of lockout mechanisms on the various stations was completed.

3. Storm Drains

- 9 new service laterals installed this period (16 total for the year).
- 0 service laterals replaced (due to blockages) this period (6 total for the year).
- 0 storm main drain replaced due to failure this period (1 total for the year).
- Test and clear inspections as and when required.
- 0 manholes replaced this period (0 total for the year).
- 0 new manholes installed this period (2 total for the year).
- 6 catch basins replaced this period (6 total for the year).
- 1 new catch basin installed this period (1 total for the year).
- Program for catch basin cleaning was completed.
- Discussions with DND and the Coast Guard were initiated with respect to spill response, with some minor joint exercises being completed.
- Training in spill response has been completed for half of Public Works staff in conjunction with some staff from the District of Saanich.
- Discussions with Public Works Canada will occur in the first period of 2020.
- Received a negative response from Infrastructure Canada on the grant application for end of pipe treatment structures for Gorge Creek and West Bay collection basins. Second intake to occur in February of 2020.

4. Liquid Waste Management

Waste Water - Inflow and Infiltration

- Obtained legal opinion regarding working on private property.
- Continue to build program/ bylaw for inflow and infiltration mitigation based on reports: EPW-18-036, EPW-09-044, EPW-15-019, EPW-17-046, and EPW-17-064.
- Continued inspection of Gosper Crescent storm and sanitary mains working with residents and CRD Source Control staff to confirm possible cross- connections.
- Separation of combined manhole at Uganda to occur later in 2020.
- Received funding from CRD for inflow and infiltration master plan development. Work to take place in 2020.
- Models of the sanitary and storm collection systems were completed. Models are also being calibrated with them being turned over to the Township in mid-year.
- Working with Communications to develop communication strategy for proposed work and upcoming bylaw.

Liquid Waste Management Plan

- Participated on the Esquimalt Liaison Committee to review concerns and activities associated with the Waste Water Treatment Plant project.
- Participated on the Technical Committee to review technical aspects of solids line to Hartland.

Integrated Watershed Management

- Staff participated as a member of the committee.
- No activities undertaken.

5. Roads

- Pothole repairs carried out as required.

- The 2019 painting of curbs, crosswalks and stop bars program has been completed (multi-year program). Stop bars being replaced with thermo plastic markings.
- Major repair/minor capital works project saw a number of locations milled and overlaid with new asphalt.
- Carried out surface restoration for third parties.
- Approximately 133.34 tonnes of asphalt placed for the period (total for the year = 503.93).

6. Traffic Management

- Traffic orders and sign installation is ongoing.

7. Sidewalk Maintenance

- Carried out surface restoration for third parties.
- Approximately 48.8 cubic meters of concrete (includes curb and gutter and sidewalk panels) was placed (total for the year = 152.6 cubic meters).
- Approximately 327.1 linear meters was replaced for the period (total for the year = 781.6 linear meters).

8. Sidewalk Ramps

- Replacement of existing ramps was not undertaken due to time and manpower requirements for other projects and third party work.
- New sidewalk ramps were installed concurrent with intersection upgrades at the corner of Head Street and Esquimalt Road
- New ramps are to be installed as part of Constance Avenue upgrades in 2020.

9. Trip Hazards

- As per Council Policy PLAN-17 Sidewalk Maintenance, trip hazard inspection survey has been completed.
- Third year of three year cycle.
- Inspection of trip hazards was undertaken by a third party consultant, and will be verified by staff later in 2020
- Survey determined that there are:
 - 5 - No. 1 trip hazards completed this period (total of 22 completed to date of those identified at the start of the three year program).
 - 0- No. 2 trip hazards completed this period.
 - 0 - No. 3 trip hazards completed this period.

10. Bus Shelters

- Normal maintenance schedule underway.
- Includes refuse collection, graffiti removal and power washing of the shelters and sidewalks adjacent to them.
- Shelters have experienced a rash of theft of solar powered lighting panels, and a number of failures of internal components.

11. Solid Waste Management

Garbage and Kitchen Scraps Collection

- Operations normal.
- Number of additional garbage and organics bins purchased to the end of period =15 (total

additional bins purchased since 2014= 303)

- Tonnage of garbage waste stream collected for period = 348.47 (total for the year = 1053.9).
- Tonnage of kitchen scraps collected for period = 200.65 (549.12 total for the year).
- Tonnage for the year = 1620 (1769 total for same period 2018).
- CRD is continuing the program of processing kitchen scraps at out of region locations.
- CRD is determining a processing system for kitchen scraps. The possibility of combining yard/garden waste has been discussed. CRD does not know if this combination will move forward and is supposed to have further discussions with municipalities.

Yard and Garden

- Operations normal.
- Request for Proposal for the operation of transfer station is completed. New hours of operation have been implemented.
- Usage of transfer station during period: September to December

* New information not received from Contractor:

- Esquimalt residents = 7,703 (total for the year = 12,806).
- View Royal residents = 5,092 (total for the year = 7,744).
- Commercial = 36 (total for the year = 69).
- Tonnage removed from site = 736.28 (total for the year = 1,089.82).
- Tonnage removed in 2018 second period = 662.35 (total for 2018 = 1,746.62).

Recycling

- Operations normal.
- Staff preparing a new contract for tender in 2020.

12. Fleet

- Operations normal.
- Vehicles purchased:
 - Bylaw truck (in Fleet)
 - 2 - $\frac{3}{4}$ ton trucks (in Fleet)
 - Tractor (in Fleet)
 - Mower (purchased, awaiting delivery)
 - Parade float (in Fleet)
 - High roof cargo van (in Fleet)
 - Fire rescue unit (purchased, awaiting delivery)
- Vehicles remaining:
 - Brine truck - Tender issued at end of third period. Tender will be awarded in the first period of 2020.
 - Crew cab with dump box - Tender issued at end of third period. Tender will be awarded in the first period of 2020.
 - Single axle truck with sander and plow - Have started work on specifications. Tender will be released in the first period of 2020.

13. Work Orders

- Work orders for call outs and/or repairs at View Royal pump stations for the period = 14 (25 total for the year).

- Work orders issued for asphalt/sidewalk repairs following work by other utilities for the period = 37 (88 total for the year)
- Work orders issued for sanitary and storm services to accommodate new development in the period = 10 (27 total for the year).
- Note: this period number includes capping (3), catch basin installation (1) and 1 manhole installation.

14.00. Projects/ Programs

14.01. Aerial Photograph

- Working with CRD to obtain an aerial photo of the Township.

14.02. Corridor/Traffic Study

- Lyall Street Project scope of work for the replacement of asphalt sidewalk and speed control measures approved by Council.
- Finalizing construction plans and tender documents for release in 2020.
- Potential cross-section options for Lampson Street were presented to Council. Changes will be made to the options based on feedback from Committee of the Whole.
- Consultant undertaking high level review for potential location of a controlled intersection along Tillicum Road between Craigflower Road and Tillicum Bridge.

14.03. Multiple Storm Drain/Sanitary Sewer Main Replacements

- Various sections of main line (storm/sanitary) will be removed and replaced based on condition assessment and criticality.
- Additional locations are being identified by condition assessment from CCTV inspections of lines from Road Corridor Program.
- Identifying locations for repairs.
- First project has been completed with the removal and replacement of 19.6 metres of 600 mm diameter storm drain across Paradise Street.
- Next project to occur in early 2020 along Lampson Corridor.

14.04. Review of Public Works Fuel Tanks

- The study will review the integrity of the fuel tanks at Public Works and confirm the condition of the tanks.
- Review of tanks determined that tanks have a single wall and are not in compliance with today's standards. They are approximately 22 years old.
- There have been significant issues with the cardlock system not functioning.
- Budget request will be made in 2020 for their removal and replacement.

14.05. Service Line Modification in Public Works Yard

- The storm collection laterals within the Public Works Yard need to be modified.
- This project will involve the rerouting of the storm service to the sanitary service in order to better control water quality.
- Design completed and components ordered.
- Approval granted from CRD to discharge into the sewer and amend Township's permit.
- Construction to happen in the first period 2020.

14.06. Inspection of Masonry Structures

- An inventory of the masonry structures has been completed.
- In 2020, a consultant will be retained to assist in the assessment of the structures.

14.07. Replacement of Emergency Generator at Public Works

- This project will upgrade the emergency generator to ensure that the public works operations and secondary emergency operations centre will not be impacted by a lack of power.
- Emergency Operations Centre power requirement needs additional standby power demand to meet operations needs during an event.
- Based on review of the generator, it is undersized and needs to be replaced.
- Generator and switching gear ordered in 2019. Awaiting delivery.
- Installation of generator and switching gear to occur in first period of 2020.

14.08. Parking Study

- In the first period of 2020, a scope of work will be developed for a parking study.
- A consultant will be retained to assist in the study.

14.09. Integrated Resource Management Study

- The request for proposal has been released and closed December 20, 2019.
- Review of received proposals and award of contract to occur in early 2020.

14.10. Municipal Hall HVAC Control System Replacement

- Public Works has retained a consultant to determine where the issues are with the control system.
- A portion of the recommended work in replacement of controllers and software has occurred.
- Remaining controller replacement to occur in 2020 with HVAC System Replacement.
- HVAC control system for Archie Browning Sports Centre, Recreation Centre and Municipal Hall has been standardized. As design takes place for the new Public Safety Building, the same software will be utilized.

14.11. Municipal Hall HVAC System Replacement

- Public Works has retained a consultant to assist with the development of a scope of work and tender package.
- It has determined that all the HVAC units are at the end of their lifespan and need to be replaced.
- Work will occur over a two year period.
- Tender to be released in first/second period of 2020 pending budget approval.

14.12. Street Light Replacement Program

- Lights replaced along Colville Road.
- Annual program for replacement has been completed.
- Engineering has developed new light standards based on type of road and location.

14.13. Sidewalk Capital Program

- This project increases the sidewalk network in length and improves connectivity.
- The purchase of land along Admirals Road between the Constance Avenue cut across and Bewdley Avenue has been completed.

- The sidewalk construction has been completed. Landscaping and minor work on gate posts to be carried out in early 2020.

14.14. Sidewalk Replacement Program

- This project sees existing sidewalks upgraded to current standards.
- The program will see the replacement of an asphalt walk with the installation of a concrete sidewalk on Comerford Street from Esquimalt Road to the end of the existing walk.
- Work is to be completed in 2020.

14.15. Road Corridor Program

- This program will include modifications of various road corridors for both above and below surface infrastructure.
- Pipe infrastructure inspections have been completed for approximately 29.2 km of 67.5 km of the storm collection system and approximately 26.6 km of 58.5 km of the sanitary collection system.
- Tender will be released in 2020 to continue inspections in 2020
- In the second period, a surface evaluation was undertaken for a number of items. All roads are included in the evaluation.
- The information will be used to determine the maintenance and renewal for road surfaces, sidewalks, streetlights, line paintings and signage.
- The information obtained will be used to develop programs for maintenance, replacement or upgrade in 2020.

14.16. Crosswalks Colville Road and Hutchinson Ave

- A pedestrian controlled crosswalk will be added to this intersection.
- Tender for this work was released and awarded in the second period.
- Construction to occur in early 2020.

14.17. Head Street and Esquimalt Road Intersection

- Preliminary design has been completed for the road lanes configuration.
- Scope of work for the upgrading of lights/poles and sidewalk work has been completed.
- A tender for this was released and awarded in the second period.
- Project has reached substantial completion with minor works to occur in early 2020 to complete the project.

14.18. ETAG (Esquimalt Together Against Graffiti)

- Public Works/Parks Departments continue to carry out work on the public realm as required.
- Township and Victoria Police continue to develop framework for restructuring of ETAG.
- Review of potential contracted services to be undertaken in 2020.

14.19. Esquimalt Town Square Project

Brown Field Remediation

- The Certificate of Record and Detailed Site Investigation have been completed.
- Application for Certificates of Compliance occurred in third period.
- Working with consultant and Ministry of Environment to review and award Certificates in early 2020.

Storm and Sanitary Relocation

- New design locations for storm and sanitary service laterals have been completed.

- Temporary storm and sanitary pump stations installed.
- Work has been tendered and working with developer for construction in 2020.

15.0 Traffic Orders

- Number of Traffic Orders issued this period = 0 (total for the year = 10)

16.0. Development Applications

- Number of development applications for Engineering comments this period = 33 (total for the year = 61). This number includes rezoning and subdivision applications.
- Number of building permit applications for Engineering comments = 10 (total for the year = 84 = 10). This number includes demo permits.

2. COMMITTEES

- Engineering staff are not appointed to sit on any Council committees at this time.