



Engineering & Public Services

Departmental Activity Report

January – June 2011

ENGINEERING

Transportation Projects

▪ Traffic Speeding and Calming Issues

Engineering continue to liaise with Central Saanich Police Services to assist with Traffic Management issues.

▪ **Pole Mounted Speed Activated Control Signs**

Four signs have been installed and activated during varying hours of the day. In cooperation with Central Saanich Police Services, signs will be relocated to areas within the District where speeding is a concern.

▪ **Bayside Middle School Crosswalk**

Two new pedestrian activated flashing lights were installed on Wallace Drive at Bayside. A new left turn lane was put in place to avoid right hand pass vehicles onto paved shoulder.

▪ **Mt. Newton Cross Road Crosswalk**

As per recommendations from the Boulevard Transportation study, a crosswalk will be installed on Mt. Newton X Rd in the vicinity of the Saanich Peninsula Hospital. Completion expected end of October.

▪ BC Hydro Beautification (Brentwood Bay)

All businesses within the beautification corridor have been transferred to the new underground system. BC Hydro is completing their portion of the works.

▪ **Brentwood Bay Crosswalk Review**

Two independent reviews of the crosswalks in Brentwood Bay have been completed. Engineering and Public Works are analyzing the reports and modifications to improve visibility and compliance are proceeding.

▪ Building Canada Fund Grant – East Saanich Road (Island View to Cultra) Project

- 2.1 km of old AC watermain has been replaced with new PVC;
- Drainage works almost complete
- Concrete curbs complete to Prosser Road;
- First life of asphalt from Island View to Veyaness complete;
- Curb work continues north of Prosser Road;
- Sidewalk construction to start after curbs are in;
- Works within the Shady Creek area (fish ladders) to be completed by September 15, 2011;
- Landscaping to start later in September.

▪ Benvenuto Avenue Restoration and Management Planning Study

Stantec Consulting Ltd. has completed the project study. A summary presentation of the

project's final report was presented at the Committee of Council Meeting Feb. 14th, 2011. The project has been referred to the District's 2011-2015 Financial Plan. Council has earmarked expenditures of \$50,000 (2012) and \$120,000 (2013) in the District's 2011-2015 Financial Plan. Supplementary Funding requests will be resubmitted in 2012 to undertake the next recommended steps.

Storm Water / Water /Drainage

▪ **Integrated Stormwater Management (ISMP)**

➤ **Healthy Watershed Committee** – The Terms of Reference for Healthy Watershed Committee membership was approved by Council. Advertisements and letters were completed for the HWC members. Calls to interested individuals will continue in September to get community members involved.

➤ **Dooley Road Culvert Rehabilitation** – Watershed Ecological Services undertook a one year review of the works completed in 2010.

➤ **Graham Creek Hydraulic Improvements** – Proposed works were presented at two Open Houses. Site meetings were held with all affected property owners. Tender packages available third of week of August. As the Department of Fisheries window to undertake this project closes on Sept.15, 2011, the proposed works are deferred to 2012.

▪ **AC Watermain Replacement – Tanner Rd to Gliddon Rd**

This construction project has been completed by G&E Equipment Ltd.

▪ **Senanus Water Main Project**

The construction contract for the Senanus Watermain Project has been issued to the low

bidder, Draycor Construction Ltd. Construction is underway and expected to be completed by the end of September. Construction is progressing without any geotechnical or archaeological issues and the project arborists have reported that boulevard trees have not been impacted.

The construction contract for the Fire Pump Station has been awarded to the low bidder, Ridgeline Mechanical and is underway. Construction of the station is expected to be completed in October.

Domestic water will be provided upon commissioning of the watermain, followed soon after by full fire flows.

Preparation of the Well Closure Bylaw and Water Conservation Plan required as part of the grant conditions are under preparation and will be introduced to Council in the Fall.

▪ **Brentwood Bay Water-Fire Protection**

Genivar Consulting Ltd. has completed the pre-construction investigation and partial design for the proposed watermain upgrades. The total estimated project cost in 2009 dollars was \$1,400,000. The project has been included for design (2013) and implementation (2014 and 2015) in the District's 2011-2015 Financial Plan. Supplementary Funding requests will be resubmitted in 2012 for inclusion in the 2012-2016 Financial Plan. The Water Master Plan scheduled for development in 2011-2012 will also consider this project.

An application under the GSPF (Capital Project) has been submitted.

i **District Wide Water Master Plan**

The terms of reference for the Water Master Plan are under preparation and are expected to be released in early Fall 2011 for commencement of the project by year end. An application under the GSPF (Capacity Building Project) has been submitted.

Sewer System Modifications

- **Root Repairs** – Ongoing.

- **SCADA**

Software and equipment to upgrade the remaining eight sanitary sewer stations will continue in 2011 to maintain compatibility with the CRD system.

- **Brentwood Bay Beach-Sewer Scour Protection**

The installation of scour protection matting has been postponed until the permitted Department of Fisheries window in 2012.

Dock Maintenance

The Parks Section of Central Saanich PW conducts routine maintenance and inspection of the two dock facilities. Capital improvements, major repairs and structural inspections continue to be administered by Engineering.

Rezoning and Subdivision Applications

Engineering and Public Works Department continue to review the Subdivision, Rezoning and Development Permit applications referred by the Planning Department.

PUBLIC WORKS

Vehicle Equipment Maintenance

- ❖ **Public Works** - Implemented the use of plant based alternative hydraulic fluids on all Public Works equipment (backhoes, mowers, etc).
- ❖ **Police** – regular servicing of the fleet.
- ❖ **Fire** – provincial inspection and regular servicing of all fire equipment.
- ❖ **Roads/Drains** – regular servicing and provincial inspections.
- ❖ **Parks** - regular servicing of vehicles and continued cooperation with Parks staff to

optimize well maintained and safe equipment operation.

- ❖ **Water/Sewer** – regular servicing and provincial inspections.
- ❖ **Engineering/Inspections** - regular servicing.

Water and Sewer Maintenance

- ❖ Maintained the entire water distribution system in the District.
- ❖ Maintained the entire sanitary sewer collection system.
- ❖ Annual water meter replacement / check valve installation program is underway.
- ❖ Completed first of tri-annual water meter reading and vegetation management around water meters.
- ❖ Completed the annual Water Meter Replacement / Backflow installation program.
- ❖ Continued updating the Scada System to Pumping Stations, the remaining four are scheduled for completion by 2012.
- ❖ Completed annual cleaning and inspected all Pump Station wet wells and plumbing.
- ❖ Completed annual testing of all Sewage Pumps (check valves maintenance and removal of debris in the pumps).
- ❖ Completed approximately 150 km water main uni-directional flushing of mains cleaned.
- ❖ Approximately 2000 m of sewer main lines were flushed.
- ❖ The first round of water meter reading was completed. Public side leaks are repaired and notes are left for the private side leaks.
- ❖ Checked meters, pruned bushes, completed box repairs.
- ❖ Approximately 20 new Storz nozzle adaptors were installed onto the fire hydrants to assist the Fire Department in quicker connections to the hydrants.

- ❖ 8 new water services with meters and check valves have been installed.
- ❖ Weed eating and painting of all the hydrants is underway.
- ❖ Ongoing checks and maintenance on all our PRV stations and booster station continues.
- ❖ Responded to approx 15 leaks ranging from some minor and a few major repairs on our ageing AC water mains, with service saddles breaking, valves starting to leak. We have had a few repairs on service line splits, and meter bottom breaks.
- ❖ Bi-weekly flushing of all the sewer stations as well as inspection and maintenance of the 13 smaller grinder stations are still ongoing.
- ❖ 2011 camera work was scheduled earlier this year to help identify inflow/infiltration issues entering the system. All the video footage was reviewed and repairs and maintenance are underway.
- ❖ Three sections of sewer main replaced on Brentwood Drive.
- ❖ Ongoing manhole I&I (Inflow and Infiltration) were completed, which resulted in a few manholes that needed repair.
- ❖ System upgrades, with the removal of root problems and installing Inspection Chamber pots where required.
- ❖ Annual video inspections of 9000 meters of the municipal sewer system is underway.
- ❖ Provided assistance to other departments, as required. (Yard Drainage works).

Roads and Drainage Maintenance

- ❖ Dealing with customer service requests, requests for service from Engineering or other Departments and staff supervision.
- ❖ Completed annual sidewalk inspection and the annual road surface inspection as part of the Pavement Management Plan.

- ❖ Started the year with 2 snow events and responded to 5 snow/freezing temperature events requiring Department response.
- ❖ Sweeper cleaning over 330 hours.
- ❖ Repairing shoulders for 275 hours.
- ❖ Regular maintenance on existing bus stop shelters.
- ❖ Working in partnership with the Police Department in responding to the increase in graffiti and vandalism.
- ❖ Reviewed 2010 storm drain video records.
- ❖ Patching potholes and service requests over 1050 hrs.
- ❖ Picking up litter and abandon furniture/boats etc.
- ❖ Routine sign repairs.
- ❖ Other drainage works included root cutting and flushing of over 2400 meters of drainage lines.
- ❖ Replaced and upgraded drainage on Central Saanich Rd near Tanner Rd.
- ❖ Drainage improvements on Martindale @ Lochside.
- ❖ Serviced 80 traffic islands, weeding, mulching and some pressure washing.

Parks Maintenance

- ❖ Performed routine Parks tasks such as litter collection and graffiti removal.
- ❖ In late March routine grass cutting within our community and neighbourhood parks.
- ❖ Monthly playground and irrigation inspections completed.
- ❖ Turf Management - deep tined, aerated and top dressed Centennial and Alexander Field.
- ❖ Ball Field maintenance completed at Rom Knott and Centennial Park.
- ❖ Performed projects in the Invasive Plant Removal Program within various locations.
- ❖ Responded to extreme amounts of vandalism at Centennial Park.
- ❖ Power washed the shelters, tennis courts and lacrosse box at Centennial Park.
- ❖ Hazard tree maintenance and dormant pruning of shrubs and trees completed.

- ❖ Staff have planted over 450 trees and native shrubs in various locations throughout the district.
- ❖ Completed Dock inspection and maintenance tasks.
- ❖ Built a new wall and foundation at the Centennial Park caretaker's residence.
- ❖ Constructed new retaining wall at Cultural Center.
- ❖ Installed new fence at the Newman Farm off Central Saanich Rd.

Workplace Safety and Risk Management

In order to comply with WorkSafe BC Regulations and limit the District's liabilities, the following steps were taken:

- ❖ Weekly General Safety Meetings and Monthly Safety Committee Meetings were held at the Public Works Yard.
- ❖ Ensured the completion of quarterly inspections:
 - i. First Aid Kits
 - ii. Eye wash stations
 - iii. Emergency Lights
- ❖ Provided training/clinics for the following issues: First Aid, Forklift, Traffic Control, and Hearing Test, Respirator Fit Testing and ongoing safety videos.
- ❖ Monitored Work Safe BC coverage of contractors who perform services for the Public Works Division.

Public Services

Vehicles, Equipment and Supplementary

- ❖ Annual Line Marking Program secured.

- ❖ Annual Chip Seal Maintenance Program Secured.
- ❖ 2011 Street Light Upgrades are underway.
- ❖ Re-decking and painting of Parks trailers.
- ❖ Annual sewer station fuel tank maintenance was completed.

2011 Vehicle/Equipment Replacement Program Cost Summary

Description	Budget	Expense	Actual Estimate or Quote	Status
Replace #410, Backhoe (#420)	110,000	76,236.19	Actual	Rec'd
Replace #609, Ford Escape Hybrid (#619)	50,000	38,453.36	Actual	Oct 31
Replace #208, 1 Ton Truck (#218) service body & 3/4Ton Pick-up truck (#219)	70,000	60,288.46	Actual	Nov
TOTAL	\$230,000	\$174,978.04		

2011 Vehicle/Equipment Supplemental Program Cost Summary

Description	Budget	Expense	Actual Estimate, or Quote	Status
Liquid Anti-Icing System (#388)	26,000	33,204.08	Actual	Aug 31
3/4ton Pick-up, Hybrid (#411), including disposal of vehicle #403	50,000	37,027.84	Actual	Dec 15
Brine Making Equipment #389	28,000	27,114.15	Actual	Aug 22
Water/Sewer Shed Upgrade: Roof	50,000	41,646.28	Actual	Sep 2
TOTAL	\$154,000	\$134,210.10		

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