



Engineering & Public Services

Departmental Activity Report

May - August 2007

ENGINEERING

Bylaws

Truck Route Bylaw

After a review of the submissions received the consulting contract has been awarded to Delcan Consultants. The Consultants will make a presentation to Council on September 24th, 2007. An Open House will be held on October 11th, 2007.

Projects

Transportation Planning Study Projects

- **Mt. Newton Cross Road Bike Route (Central Saanich Rd. to East Saanich Rd.)**

The lines have been painted and shoulder graded. Paving works to start mid-October. A request for widening the bicycle lane to accommodate wheel chairs in front of the Saanich Peninsula Hospital has been received. Work has already started in this regard.

- **Mt. Newton and Central Saanich Road Crosswalk Review**

Report and preliminary cost estimate for traffic calming due in October from Boulevard Transportation.

- **Mt. Newton and East Saanich Road Traffic Light**

Report due in October from Bundt and Associates.

- **East Saanich and Prosser Road Crosswalk Review**

Boulevard Transportation to provide report in October.

- **Sidewalk Infill on Keating X Road**

Work to be completed by District Public Works crew will begin this Fall.

- **Pavement Management Project**

Stantec Consulting Ltd. has been retained to conduct a study of the roadways within the District. Key elements of the study are to identify which sections of the road network, on a priority basis require rehabilitation, the options of rehabilitation methods, and funding scenarios. The project will be conducted through the Fall with the final report presented by year end.

- **Bus Shelters**

Works to start this Fall at various bus stop locations.

- **Integrated Stormwater Management (ISMP) Study**

After a review of the submissions received the consulting contract has been awarded to WorleyParsons Komex consultants. The first stakeholders meeting with the consultant will be held September 20th. Creeks and Communities Workshops will be held Sept. 29th and Oct. 22nd, and an Open House will be held Oct. 25th, 2007.

Sandhill Creek Stewardship Engineering and Public Works staff continue to work with Peninsula Streams representatives. Public Works Coordinator is the District's liaison on this project.

SCADA - Preparations for the upgrades to the Hagan and Brentwood pumps of the waste water collection system have commenced, as well as the implementation of the SCADA system to five of the Water PRV stations. Anticipated for completion in late Fall 2007. This project is conducted in partnership with the CRD.

Sewer System Modifications - \$120,000

- *Root repairs – ongoing*
- *A feasibility study is currently under way for the replacement of the sanitary sewer through the creek bed in Ravine Way Park with a suspended pipeline above the ravine. Maintenance of this section of sewer main is problematic due to limited access, and the location in the creek bed poses environmental concerns.*
- *No other major system modifications are planned this year.*

Ravine Way Foot Bridge - *The replacement of the foot bridge, originally intended to be conducted in conjunction with replacement of the sewer main, has been deferred pending the outcome of the associated sewer main feasibility study. A structural analysis of the bridge will be conducted in Fall 2007 to verify the integrity.*

CIPP Grant – (Cycling Infrastructure Partnership Program) *Wallace Drive/Interurban Rail Trail between Stelly's Cross and Hovey Road works to start October to be completed by March 2008.*

English Meadows Subdivision - *Installation and acceptance of the infrastructure has been completed. A number of residential building permits have been issued.*

General Drainage Projects

- *Brentview Drive, Phase II to be completed in the Fall.*
- *Mt. St. Michael ditch works will commence this Fall (if funds available).*
- *Welch Road drainage works to start this Fall.*

Senanus Water Main Project

The successful application of the Municipal Rural Infrastructure Grant was announced on August 31, 2007. Confirmation of the availability of this funding will now permit the District to move

forward with the next steps in the process in consultation with the area residents.

Brentwood Bay Water Study - *Preliminary considerations for the preparation of an RFP for a study of the water distribution system in Brentwood Bay in regards to the availability of water for fire fighting in the commercial area as well as the redistribution of the pressure zones is ongoing. A MRIG application for this study has been submitted.*

Brentwood Bay Water Study – *A RFP has been advertised for a study of the water distribution system in Brentwood Bay in regards to the availability of water for fire fighting in the commercial area as well as the redistribution of the pressure zones. It is anticipated that the study will be completed by the end of December. An application for funding through the Infrastructure Planning Grant Program has been submitted for this study.*

Dock Maintenance

The contract for the inspection and maintenance of the Saanichton Bay and Brentwood Bay docks was terminated by the contractor in July. A RFP will be advertised for a replacement contractor with the anticipated commencement in October of 2007. The Parks section of PW will be conducting routine inspections and maintenance until a new contract is in place.

PUBLIC WORKS

Vehicle Equipment Maintenance

- ❖ *Police – regular servicing of the fleet and two new black and white units readied for service.*
- ❖ *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 and Inspections – regular servicing of vehicles.*
- ❖ *Strict stock control and implementation of new provincial inspection and safety code requirements.*
- ❖ *Implemented the “Idle Control Policy” to reduce emissions and fuel consumption.*
- ❖ *Installed a Biodeisel fuel tank at the Yard and all Public Works diesel units are now running on this more environmentally friendly fuel.*

Roads and Drain Maintenance

- ❖ *Completed 30,000 square meters of chip seal on Lochside, Thomson, Marcot and Newton Place. 1200 staff hours were spent on prep work, paving, placing the product and finally cleanup of the sites.*
- ❖ *Contract paving was completed at: Woodward and Sea Drive (open graded asphalt); Keating Cross Hwy. ramp, spots on Bella Vista and Tamany, and Wallace from West Saanich to Silverdale (grind and pave); Simpson and the bottom of Cultra (remove and repave).*
- ❖ *Completed 110 hours of road shoulder repair.*
- ❖ *Curb and gutter painting is currently under way and all line painting is complete.*
- ❖ *Sight line clearing (90 hours)*
- ❖ *Road side grass cutting (410 hours)*
- ❖ *Cut grass around all the District guardrails.*
- ❖ *Cleaned and trimmed 75 traffic islands.*
- ❖ *Completed sidewalk inspections and curb and sidewalk repairs.*
- ❖ *Capital sidewalk project scheduled on Keating in the fall.*
- ❖ *Drainage repairs (350 hours)*
- ❖ *Responded to numerous calls, inquiries and customer requests.*

- ❖ *Capital drainage projects will commence in the next month or two.*

Water and Sewer Maintenance

- ❖ *Maintained the entire water distribution system in the District.*
- ❖ *Maintained the entire sanitary sewer collection system.*
- ❖ *Installation of the auxiliary generator at Delamere sanitary pump station very near completion.*
- ❖ *Annual water meter replacement / check valve installation program is 95% complete.(320 installed)*
- ❖ *Water SCADA – the parts have just arrived from the CRD.*
- ❖ *Twenty Storz nozzles have been installed and the remaining thirty have been returned to the provider for re-machining. These nozzles facilitate easier hook-up for the Fire Dept.*
- ❖ *Second of the tri-annual meter readings is completed.*
- ❖ *Sewer system capital upgrades are 52% complete.*
- ❖ *Water main upgrades are pending the consultants report.*
- ❖ *Parts have been ordered for the PRV upgrades.*
- ❖ *Flushed five kilometers of sanitary sewer main and repaired twenty three manholes.*
- ❖ *Assisted Roads Drains with storm response.*

Parks Maintenance

- ❖ *Performed routine Parks tasks such as litter collection, trail maintenance and painting within the Parks System.*
- ❖ *Routine grass cutting within our community, neighbourhood and nature parks.*

- ❖ Monthly park and playground inspections completed.
- ❖ Saanichton Green security lighting installation is complete and the drainage project will be completed by October 2007.
- ❖ Fifteen dedication benches are being refinished.
- ❖ Park benches have been refinished at numerous Neighbourhood and Passive parks.
- ❖ Tree management is under way as well as assisting other sections of Public Works with tree related issues.
- ❖ Annual brushing and trail cleaning has been completed in all parks.
- ❖ Centennial lacrosse box was repaired and repainted.
- ❖ Responded to extreme amounts of vandalism in all parks.
- ❖ Prepared Centennial Park for Central Saanich Days and received many complements.

Workplace Safety and Risk Management

In order to comply with Workers' Compensation Board (WCB) 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:
 - i. Materials Handling Safety
 - ii. Personal Protective Equipment
 - iii. Hazards of extreme sun exposure

- iv. Oxygen therapy
- v. Annual Hearing tests
- vi. WHMIS and Transportation of Dangerous Goods on line training
- vii. Safe work procedures for hot or cold weather conditions

- ❖ Developed "Emergency Evacuation" procedures.
- ❖ Developed a new "Worker Orientation Checklist" to accommodate the new "Young and New Worker" Work Safe BC Regulations.
- ❖ Prior to a work related lost-time accident during the last week of August, Public Works had worked 398 days without a lost time accident.
- ❖ Installed bio-med was kits for use in cleaning wounds or flushing eyes
- ❖ Upgraded all first aid to Work Safe Level 1 requirements

Public Services

- ❖ Fuel Tanks:
 - i. Monitored tanks on a weekly basis to ensure that the tanks are not leaking, and
 - ii. Physically inventoried tanks on a monthly basis to ensure that there is not any fuel loss.
- ❖ Processed 153 requests for service.

Vehicles, Equipment and Supplementary

Description	Budget	Actual Cost	Status
Replace vehicle #403 with #413, cab & chassis	50,000	30,502.14	ETA Dec 13/07
Replace vehicle #403 with #413, service body, radio & hydraulics	0	25,200.00	Estimated, ETA Jan 17/08
Replace vehicle #409 with # 419	42,000	30,123.30	ETA Nov 28/07
Replace vehicle 508 with # 518	30,000	18,936.51	ETA Oct 11/07

Replace vehicle #707 with # 717	82,000	93,035.10	ETA Jan 17/08
Bio-Diesel Dispensing System	10,000	5,436.67	Completed
Traffic Light Upgrade, year 1	6,500	7,170.01	Completed
PW Yard Upgrade, Roof Repair & Sign Shop	22,200	26,077.91	Completed
Traffic Signal Upgrade	6,500	7,387.89	Completed
TOTAL	\$249,200.00	\$243,869.53	

Environmental Initiatives

- ❖ *Scraping out the grass and debris from sidewalks seems to prevent growth and reduce the need to use herbicides.*
- ❖ *Wood products are no longer burned at the Works Yard, they are sent for grinding and the byproduct is recycled.*
- ❖ *All organic waste products are composted and produce topsoil for Public Works projects.*
- ❖ *All asphalt and concrete construction waste is returned to the production plant for recycling.*
- ❖ *Continue to implement the Integrated Pest Management program to reduce the use of pesticides in the community.*
- ❖ *Initiate the use of hybrid technology to reduce emissions and fuel consumption.*
- ❖ *Ongoing installation of low power LED lights so vehicles don't have to have the motor running on the job. This initiative reduces fuel consumption and reduces harmful emissions.*
- ❖ *An "Idle Control" policy is in place for all public works vehicles to reduce emissions and reduce harmful emissions.*
- ❖ *A fuel additive is added to the diesel and gas to reduce emissions and add lubrication to reduce maintenance costs.*

- ❖ *Implemented Biodeisel use by installing tanks in the Central Saanich Works Yard in an attempt to reduce air pollution and consumption of fossil fuels.*
- ❖ *Invasive Species Management Program to remove invasive species in Centennial Park.*
- ❖ *Urban Forest Management Plan, including reestablishing disturbed areas with native species and planted well over 2000 trees and shrubs in various locations.*
- ❖ *Established an alkaline battery recycle program.*
- ❖ *The Parks Department are now providing biodegradable dog dispenser bags for use in the District; and biodegradable garbage bags are being used in the trash cans on a trial basis.*

Nirmal Bhattacharya, P. Eng.
Municipal Engineer
September 2007

