

Agenda Notes and Project Updates 20170622

Engineering Proposal – Aldrich & Elliott

I requested a proposal from A&E for services to design improvements for the Pump Station #3 and PS #9 forcemains. These two forcemains currently tie together prior to discharging into a manhole before the siphon pipe under the Otter Creek. This is at the Weybridge St and Jayne Court intersection. Pump Station #9 is our most frequent offender of overflows. The close proximity of these two forcemains is certainly affecting the pumping capacity of both pump stations. However, PS9 suffers overflows partially due to the small wet well so reduced pumping capacity exacerbates the problem. Recommend award to A&E at \$9,800 for the project.

North and South Pleasant Street curb and sidewalk

Contractor will begin demolition of sidewalk and curbing on Thursday, June 22th.

Halpin Road Culvert

ANR wants a wetland delineation of the area. Their wetland maps are not up-to-date. The town will hire a wetland consultant to update the map. Then a permit will be required. Project start date is delayed several weeks.

Bids were received on May 24th. Three bids were received.

Champlain Construction Co - \$139,001.45

Masterson Excavation - \$167,872.00

J. Hutchins - \$174,850.00

The bid review is still underway so no action is needed at this time.

Water Monitoring Project

We are still waiting on a response from the State for a postponed bid process. It is “in their queue”. Also, VTrans District 5 is having a bit of internal wrangling over the location of the monitoring building in their ROW. Their permit staff has been working with our engineer to allow it in the ROW. The District Administrator is thinking otherwise. We will be having an on-site meeting.

Signalization Timing – Court Street and Cross Street

The signal timing for this intersection occasionally comes up for consideration for a change. This time the request is to stop all traffic in all directions (i.e. Bristol) when a pedestrian pushes the crosswalk light button.

Currently, when a button is pushed (called) it locks in and comes up at a certain point in the phases of the system. The pedestrian phase (white ped signal) for crossing Cross Street comes at the same time as north and southbound Court Street. This is called concurrent pedestrian phase. After a number of seconds the orange ‘do not walk’ symbol lights up. I have increased the white signal by 2 seconds from 5 to 7. This will put the pedestrian farther along the crosswalk and drivers will see the ‘walk’ signal longer.

Please note that the change point from white to orange is to allow pedestrians to finish the cross, but stop pedestrians from beginning to cross. This way, there won’t be a pedestrian in the crosswalk when the signal turns back to green for Cross Street.

A concern about adequate time to cross Court Street was brought to my attention at a Safe Routes to School meeting over a year ago. The request was to allow more time for pedestrians to get across Court Street (small legs, small strides). I increased the length of the white pedestrian phase from 5 to 6 seconds at that time. I just increased it to 7 seconds

The use of concurrent pedestrian phases are used at thousands of intersections across the country. It is a way to balance the need for traffic flow through the system and allow for pedestrian traffic. The signals on Court Street except Charles/Monroe are coordinated through the master

controller (VTrans) down at Centre Plaza. A pedestrian phase takes that intersection out of coordination and then takes several cycles to come back into coordination. The length of the complete cycle at each intersection needs to be the same so signals can be coordinated.

After the pedestrian/car accident at Cross Street months ago, I checked the pedestrian phase to make sure it was working correctly. It is. I also observed the intersection for about 20 minutes. Six pedestrians came to cross Cross Street. Two did not use the pedestrian button, but checked traffic and walked anyway. Two pushed the button and did not wait for the 'walk' light. Two pushed the button and waited. So, the effective benefit of the pedestrian phase was only used by 2 out of 6.

I do not see the need to stop all vehicle traffic for all pedestrian activations. The signalization project was to provide a balance of traffic flow and pedestrian access. It still does that.

Water Main Upgrades

Attached is a memo from April of 2017 outlining the areas in the system where leaks are more prevalent, expensive to repair, or affect the commercial/industrial business base.

Bonding costs and Tentative schedule

A \$1 million bond over 20 years costs ~ \$88,500 year (a bit more in the early years and less in the latter years). Spreading that over ~ 2100 users adds \$10.54 per quarter (\$42.16 annual) to the bill.

Step 1: Decide on what areas to replace & how much to Bond (tentative).

Step 2: Request proposals for an Engineering Opinion of Probable Cost in July of 2017.

Step 3: Approve proposal in August.

Step 4: Opinion due in November.

Step 5: Bond Vote in March 2018.

Step 6: Begin engineering in March if bond approved.

Step 7: Advertise for Construction Bids in February of 2019.

Step 8: Construction begins in April 2019.