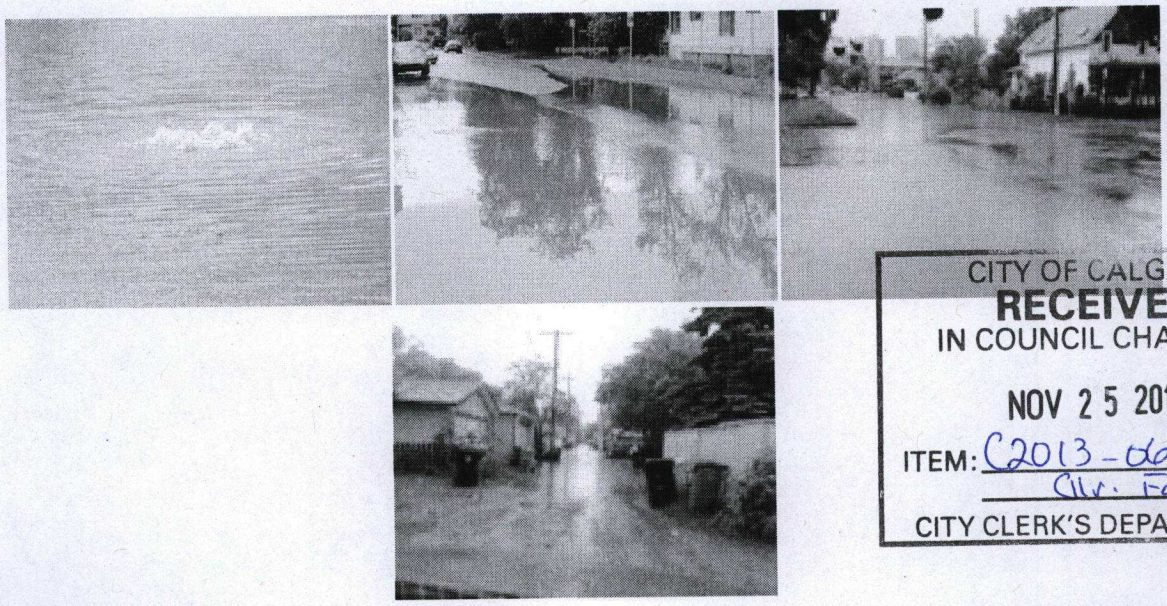
Executive Summary

Recurring Storm Sewer Back-ups

Sunnyside – 8th Street between 2nd and 3rd Avenues NW



For at least 25 years there has been storm sewer surcharge at 8th Street between 2nd and 3rd Avenues NW during heavy rainfall when the Bow River level is high (storm gates are closed). The manhole surcharge pools along 8th Street and down the alley between 2nd and 3rd Avenues, flooding 15 or more homes on that block. Back-flow prevention valves in manholes could prove somewhat effective in reducing the storm sewer flooding in that specific area.

In 2009 (NW INNER CITY DRAINAGE STUDY, Associated Engineering) recommendations were made to increase the size of pipe running along that segment of 8th Street. The overall strategy of the Study was to provide 1) storage for excess runoff and 2) additional pipe capacity where it provides the most relief to surface flooding. Significant underground storm water storage was recommended by the study (Upper Plateau-Option 5):

5000 m3 within Capitol Hill (Project 2)

16,500 m3 near 14th St. and 14th Ave NW (Project 1)

3800 m3 along 17th Ave. NW from 9th St. to 13th St. NW (Project 3)

Surcharging was determined to be due to:

Undersized storm sewers resulting in flooding manholes and overland flow

Lack of a continuous major system resulting in accumulations of overland flow in traplows

Large head loss in the drop manholes along 10th and 14th Streets NW

Sunnyside residents were hit very hard in recent storm drainage flooding and need help to prevent repeated storm sewer back-up.

Could we escalate Projects 1, 2 & 3 to a higher priority on Drainage Improvement Upgrade Prioritization List?

Could a back-flow prevention valve be installed as a short-term solution?