Elmwood & Lynnwood Community Consultation on Flood Prevention held November 21, 2005 at Lynnwood School

Consultation Summary

Attendance: 28

Main presenter: Douwe Vanderwel, Senior Engineer & Flood Prevention Project Leader

for Ward 1, Drainage Services, City of Edmonton

Presentation

The consultation began with introductions and an overview of 2005 flood prevention programs and educational activities. Mr. Vanderwel then reviewed drainage engineering findings for the community and presented recommended system improvements. These were:

- Build two dry ponds in Elmwood and divert stormwater to the ponds. The water would be held there until the underground system had the capacity to drain it away. There would be multiple connections to the stormwater system to enable quick drainage. One pond would be built adjacent to the school yard and recreation fields at H.E. Beriault School. The other in a park at 162 Street and 80 Avenue.
- Build a new, larger sanitary sewer along 159 Street to increase capacity and relieve system pressure. It would be connected to the 87 Avenue main trunk line.
- Replace the existing sanitary sewer along 83 Avenue with a larger pipe to increase capacity.
- Replace the sanitary sewer on 156 Street with a larger pipe to increase capacity.
- Build a new sanitary sewer line from 84 Avenue to 87 Avenue and connect it to the 87 Avenue main trunk line.
- Build a new sanitary sewer line from 79A Avenue to 87 Avenue along 152
 Street. It would be connected to the 87 Avenue main trunk.
- Upgrade the storm sewer on 153 Street beginning at 83 Avenue south to the to the Lynnwood Storm Trunk..
- Build a new storm sewer line along 80 Avenue from 158 Street to 159 Street and divert the flow south to the Quesnell Storm Trunk along Whitemud Drive.
- Re-grade selected streets to improve surface drainage and direct more water to the Lynnwood Ravine. Improvements would be made to the ravine to get water to move through the ravine to the North Saskatchewan River more quickly. This would be done by increasing the outlet drain size to the Quesnell Trunk and by providing an overflow spillway for the ravine to Whitemud Drive.
- Seal sanitary manhole covers to prevent rainwater from entering the sanitary system. (already completed)
- Subsidize the installation of backwater valves in all homes in low lying areas.
 (already in place)

The estimated cost of implementing system improvements is \$16.81 million. The implementation plan calls for top priority projects to be done in two to three years while the remainder would be completed in three to six years. Implementation timing will depend on further stakeholder discussions, funding and the capacity to do the work.

Next Steps

Mr. Vanderwel emphasized that moving ahead with the recommendations and an implementation plan is contingent on receiving City Council's approval of a funding package. This package will include recommended improvements for all 43 at risk neighbourhoods and is scheduled to be presented in April, 2006. In the meantime, design work is continuing. A portion of the funding for the package may come from a provincial infrastructure grant. The remainder would come from utility rates paid for by all users, not just residents in affected neighbourhoods.

Input from Residents

Most people at the meeting were in favour of the recommended improvements, including the dry ponds. However, one person felt the dry ponds would not help them because they would not hold enough water. Another person noted larger pools of water normally accumulate near the proposed location for the smaller dry pond. Mr. Vanderwel explained available space dictated where ponds could be located and their size. While of limited benefit, he felt the dry ponds would make a difference in managing surface flooding in localized areas.

If the dry pond is built, the school yard and recreation fields would be regraded towards the pond. This will redirect water away from nearby buildings and fields including Hillcrest School and prevent water from flowing across the school grounds and onto 163 Street and 80 Avenue.

One person was worried that the changes plus the flows for other neighbourhoods may lead to an overloading of the main sanitary trunk on 87th Avenue. Mr. Vanderwel acknowledged that the trunk accepts sewage from the edge of the city at Lewis Estates and the Grange. However, it is very deep and very large and will be upgraded further downstream to ensure any additional flows can be accommodated.

One person wondered if a low spot at 152 Street and 84 Avenue could be regraded to drain into the Lynnwood Ravine. Mr. Vanderwel indicated this was possible but permission from homeowners may prove difficult as homes lay between that location and the ravine. The ravine's discharge outlet to an underground storm sewer would be enlarged and an emergency overflow to Whitemud Drive would be built to ensure that water levels in the Ravine have a high water limit.

In response to a question, Mr. Vanderwel confirmed that a cost-benefit analysis was factored into the recommendations and implementation plan. Which projects proceed will depend largely on funding approvals but City Councillors in the affected areas have been supportive to date of Drainage Services' flood prevention measures.

There were a number of questions asked about the backwater value subsidy program and the protection offered by backwater valves. It was explained that the valve can protect homeowners from sanitary sewer backup but not stormwater. The subsidy program – fully funded by the City of Edmonton - will continue next year if funds for this purpose are approved. The current subsidy may or may not cover the cost of installation as plumber estimates vary.

It was pointed out that lot grading, proper eavestroughs and downspouts, good weeping tile, etc. are needed to minimize stormwater flood risk on personal property. One person noted that insurance will cover sanitary flooding but not damage caused by stormwater. It was unknown if Drainage Services' planned upgrades will result in lower insurance premiums.

Updates

Updates to residents on the improvement plans will be provided via information bulletins and Drainage Services' website at www.edmonton.ca/floodprevention. Additional comments or questions may be forwarded to Mr. Vanderwel at 496-5553 or douwe.vanderwel@edmonton.ca