

**Flood Prevention Improvements Consultation
for Affected West Edmonton Communities*
held May 29, 2007 at Aldergrove Community Hall**

*Includes the communities of Aldergrove, Belmead, La Perle, Thorncliffe, Summerlea and Terra Rosa

Consultation Summary

Attendance: 56

Main presenters: Albert Kwan, General Supervisor, Strategic Planning, Drainage Services, City of Edmonton
David Yue, Principal, Sameng Engineering

Presentation

The consultation began with introductions and a review of what the City of Edmonton has done since the last meeting with local residents in May 2006. This overview pointed out that since the last meeting City Council approved \$146M for flood prevention improvement projects throughout the city.

During the past year, more in-depth engineering analysis of flooding problems in local neighbourhoods has been done as well as concept design of underground and surface drainage improvements. In addition to offering new education and consultation services for homeowners, selected sanitary manhole covers have been sealed in the area to prevent rainwater from entering the sanitary system.

Mr. Yue, the consultant hired by the City of Edmonton to help identify and resolve flooding issues in west end communities, indicated there were five major improvement strategies for the six neighbourhoods:

Strategy 1:

Build a dry pond in Aldergrove and divert stormwater from low lying areas in west Thorncliffe, Belmead and Aldergrove to the pond. It would be located in parkland and a recreation area adjacent to the Aldergrove Community Hall and Aldergrove School at 85 Avenue and 182 Street. Stormwater would be held in the dry pond until the underground system had the capacity to drain it away. There would be multiple connections to the stormwater system to draw water to it and enable quick drainage.

Discussions have taken place with school, community league and City parks representatives. They have indicated their support in principle to build the dry pond. Recreation facilities would be replaced after dry pond construction. Recreation and landscape options would be considered during the preliminary and final design phases. Local residents would be asked for their input at that time.

Strategy 2:

Regrade Arrowhead Trail that runs one block west of 179 Street from 87 Avenue to Whitemud Drive. This regrading will create positive drainage away from homes and provide an outlet for water that currently pools in low areas within Thorncliffe.

Strategy 3:

Divert more stormwater from the 95th Avenue stormwater sewer line to Terra Losa pond. This will reduce street flooding and standing water in Summerlea and allow downstream stormwater trunks to work more effectively. The amount of extra water going into the pond would be controlled by a gate so the pond does not overflow.

Strategy 4:

Build a sanitary sewer relief pipe from 81 Avenue along 178 Street to the Quesnell main sanitary sewer trunk line along Whitemud Drive. This would increase capacity and relieve system pressure.

Strategy 5:

Pipe stormwater from low spots in La Perle and 178 Street to Terra Losa pond. This would relieve pressure on local sewers and divert more stormwater away from streets and private property. The amount of extra water going into the pond would be controlled by a gate so the pond does not overflow.

Timing

Projects will be completed over the course of several years. Mr. Kwan noted the dry pond and surrounding inlet pipe upgrades would be constructed first (2009/2010) as it would provide the greatest relief to the most people.

Next Steps

Concept design is being finished while approval to proceed from all stakeholders is confirmed. Preliminary and detailed design will follow and be completed (for the dry pond) in 2008. Construction would likely begin in 2009. Residents and other stakeholders will be consulted about landscaping, recreation features and other details before detailed design is completed.

Input from Residents

People at the meeting were in favour of the recommended improvements. There were a number of questions about the dry pond's design details including the grade of slopes, its depth, the length of time water would be standing in the pond, the speed of construction and options such as terracing of slopes.

Mr. Yue indicated slope grading would vary but be gentle. The pond at its deepest point would be 5-6 metres. The water level during a 2-5 year storm event would be 0.5 metres or less. A 100 year event might see as much as 1.8 metres of water in the pond.

The pond would fill and drain gradually but only maintain a water level for a short period of time. After a severe storm it may take 4-6 hours to drain. Design details will be finalized at a later date but the City is willing to consider installing a range of recreation or aesthetic features (within reason) desired by local residents and other stakeholders.

In response to a question, Mr. Kwan confirmed the existing stand of trees will not be removed. He noted it will likely take more than a year once construction begins before the fields could be used again. One resident expressed a desire to see the pond and other improvements fast tracked.

A few people expressed concern about adding extra water volume to Terra Losa pond. Mr. Yue reiterated that a flow control gate would be installed to limit the amount of water that would enter the pond. This would prevent possible flooding of surrounding homes and streets.

A number of residents had questions and concerns about sump pumps, surface drainage on their property and chronic sewer back-up. While the planned improvements should alleviate some of these concerns, residents were advised to contact Drainage Services' Home Flood Prevention Check-up at 944-7777 for an on-site consultation. The service is free.

One person asked if some of the flooding in the area was influenced by West Edmonton Mall. Drainage Services does not consider the mall a problem for surrounding neighbourhoods as it has its own stormwater retention system that eventually drains into a large sewer main.

Another person suggested deep sewers be extended into local neighbourhoods to provide flood relief. It was noted that this would be an expensive option to resolve localized problems. Mr. Yue said the drainage systems in west Edmonton neighbourhoods work well under normal conditions and the recommended upgrades will minimize flood risk when abnormal wetness occurs.

Updates

A copy of the May 29 presentation and other information about the City of Edmonton's flood prevention program can be found on Drainage Services' website at www.edmonton.ca/floodprevention. Additional comments or questions regarding plans for reducing the risk of flooding in west Edmonton may be forwarded to Douwe Vanderwel at 496-5553 or douwe.vanderwel@edmonton.ca