

Lynnwood Neighbourhood Flood Relief

Lynnwood Ravine Inlet/Outlet Controls Project Update

Background

In response to the heavy rainfall that occurred in July 2004 in the City of Edmonton, which resulted in flooding in five neighborhoods in west Edmonton, the City of Edmonton initiated the Flood Prevention Program (FPP). The FPP objective was to identify the root causes of flooding and implement drainage improvements to reduce the risk of future flooding. The **Lynnwood Ravine Inlet/Outlet Control Project**, currently being designed by Earth Tech, is part of the overall drainage improvements in the five affected neighborhoods to reduce the risk of future flooding.

Project Information

To help reduce future flooding along 83rd Ave. (between 156th and 159th Streets), reduce basement flooding caused by excessive sanitary sewer inflows, and to use Lynnwood Ravine more effectively as a stormwater management facility, we plan to:

- Increase capacity of the existing storm sewer in the ravine.
- Reduce surface flooding by allowing the existing pipe under Lynnwood Ravine to overflow when the pipe is full. Excess flows conveyed overland will be stored in the ravine during major storm events for short periods of time. The reduction in surface flooding along 83rd Avenue (between 156th and 159th) will also reduce inflows into the sanitary system.
- Install additional catch basins upstream of 156th Street to effectively drain low lying areas, allowing more surface flows to enter the storm piped system and reduce depth and duration of inundation at these locations.
- Increase the capacity of the pipe draining the ravine to remove temporarily stored water quickly out of the ravine.

- Provide an emergency overflow route out of the ravine to decrease the depth of water stored in the ravine during severe storm events.

Construction is tentatively scheduled to take place between February 2007 and November 2007.

An **Environmental Review** is being conducted for the project pursuant to River Valley Bylaw 7188.

Current Status

Before proceeding to construction, the City would like to inform you about the recommendations and provide an update on the status of the Lynnwood Ravine Inlet/Outlet Controls project.

Your Role in the Project

Please share your thoughts with us on how this project affects you and your community, and on how to make it a success, by:

- ☑ **Completing a Questionnaire**
Available here or upon request from Kristine Smith at 453-0822.

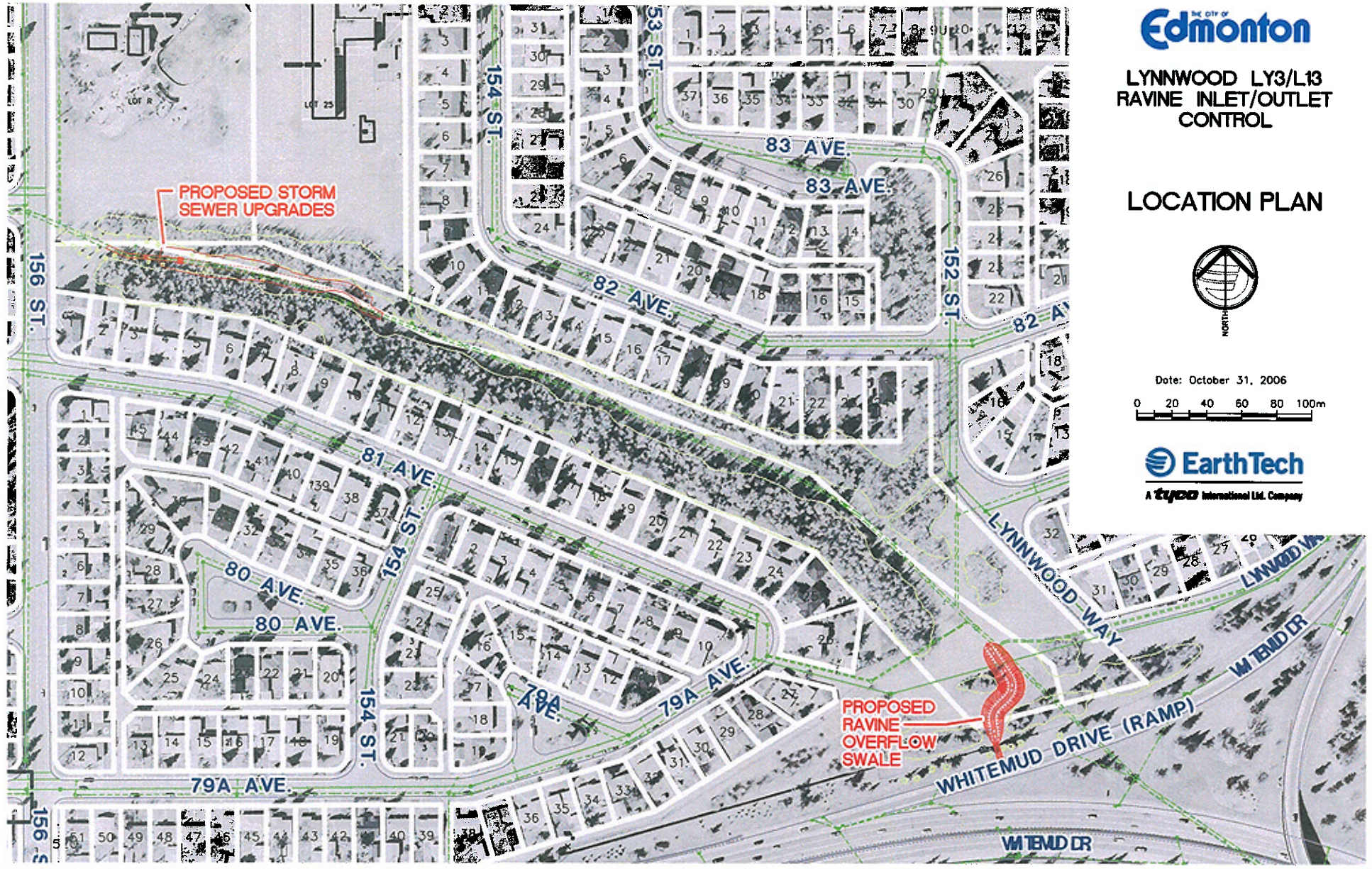
- ☑ **Contacting the Project Manager:**

City of Edmonton Project Manager
Leonora Lumabi, P. Eng., 496-6853

Earth Tech Project Manager
Magdy Hashem, P. Eng., 453-0808



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LYNNWOOD LY3/L13
RAVINE INLET/OUTLET
CONTROL

LOCATION PLAN



Date: October 31, 2006



Lynnwood Storm Trunk Upgrade

The neighbourhood of Lynnwood was examined as part of the West Edmonton Flood Study which recommended several key storm improvements to enhance the level of flood protection. The primary objective of these upgrades is to lower surcharge levels in the storm sewer and reduce surface flooding. This will also reduce the infiltration/inflows into the sanitary system, thereby reducing the risk of basement flooding.

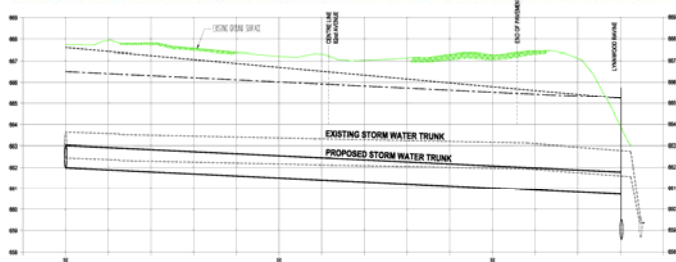
To accomplish this, the existing storm trunk, located on 152nd Street and extending from 83rd Avenue to the Lynnwood Ravine, will be upgraded. This solution entails the installation of a 1050 mm storm sewer in the park area west of 152nd St (see below). It will tie into the existing system at 83rd Avenue and the Lynnwood Ravine trunk and be installed via trenchless methods to minimize disturbance within the park area and to local residents.



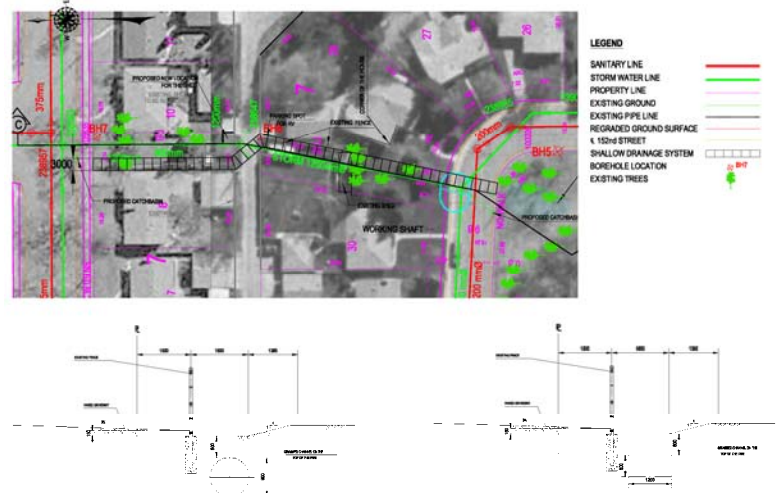
FLOODING AT INTERSECTION OF 84TH AVE AND 152ND STREET

Another matter which arose during preliminary design is a significant depression located at 84th Avenue and 152nd Street. This area has flooded on several occasions and reports indicate that water often ponds at the intersection and takes an extended period to drain.

A Public Utility Lane (PUL) running between 83rd and 84th avenues at 152nd Street obstructs stormwater from draining to the ravine and there is a need to improve the major system drainage. This could be accomplished by the installation of a shallow drainage system.



STORM TRUNK UPGRADE PLAN VIEW AND PROFILE



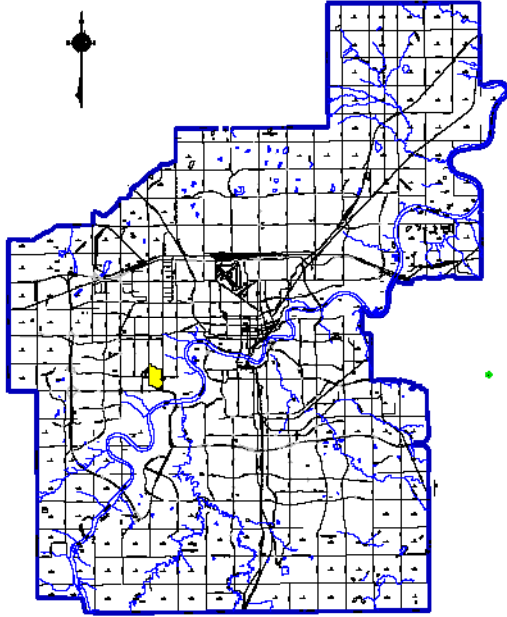
TYPICAL CROSS SECTION - CONCRETE OR HDPE PIPE

TYPICAL CROSS SECTION - BOX SECTION

84TH AVENUE RELIEF PLAN VIEW AND CROSS SECTIONS

Project Location

City of Edmonton



LEGEND:

- CITY OF EDMONTON CORPORATE BOUNDARY
- LYNNWOOD (LY4) DRAINAGE BASIN
- LYNNWOOD (LY4) DRAINAGE BASIN BOUNDARY
- LY4 UPGRADE LOCATION
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED 84th AVENUE EXTENSION
- FUTURE SANITARY INTERCEPTOR SEWER

