



Tawa Park Drainage Improvements

Public Information Session
September 29, 2015

Drainage Services
Financial Services & Utilities

Edmonton



Introduction

1. Housekeeping Items

2. Presentation

- Flood Mitigation Program Overview in Mill Woods
- Tawa Park Drainage Project Overview
- Community Input on Park Development
- Conclusions and Next Steps

3. Information Boards / Question Period

4. Exit Survey

Please hold questions until after presentation.



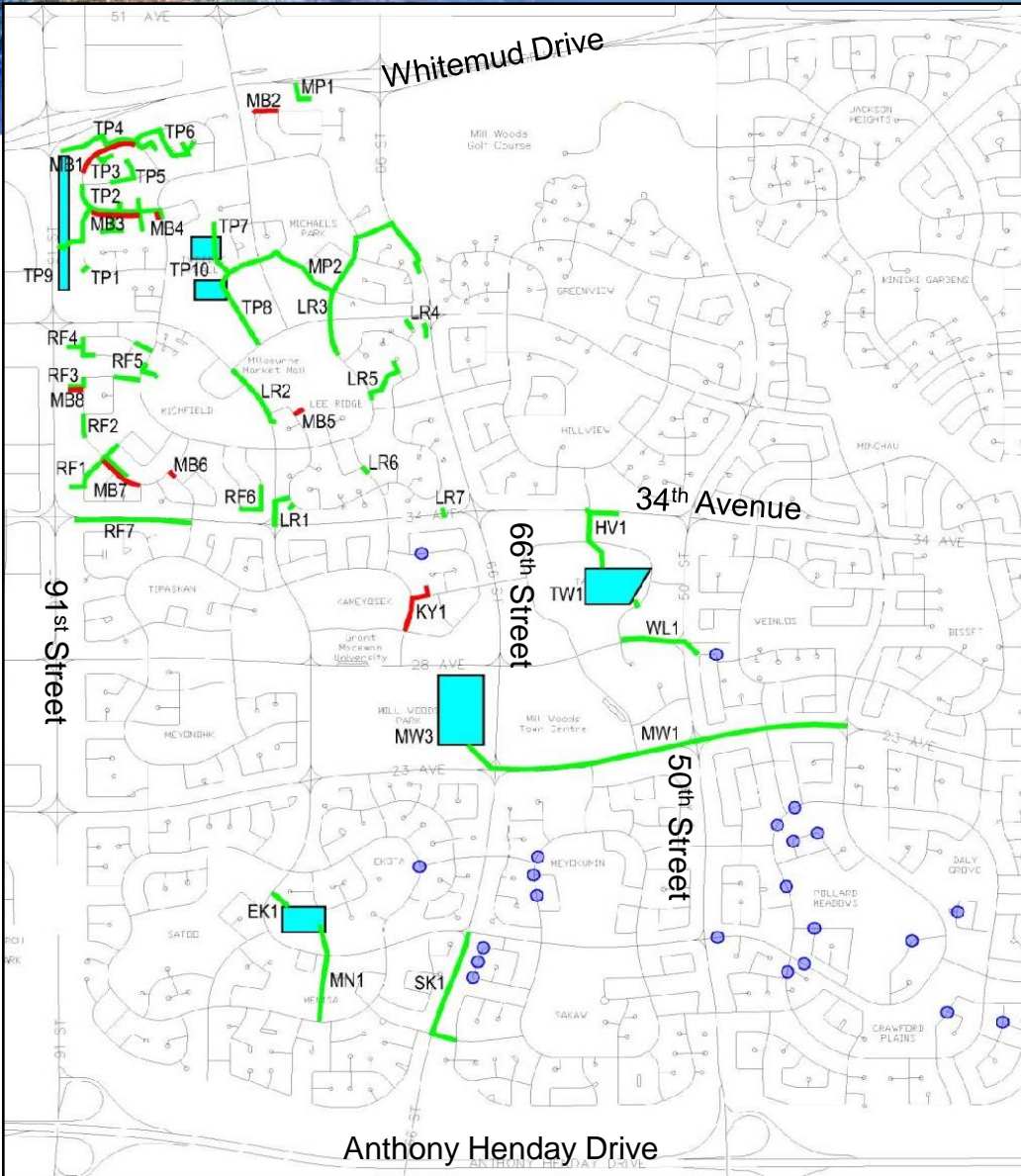
FLOOD MITIGATION PROGRAM



Flood Mitigation Program

- Expanded Flood Mitigation Program
 - Response to 2012 severe storm event
 - 1,200 reported basements flooded citywide
 - Most Projects in Mill Woods
 - \$250M in Mill Woods Area

Flood Mitigation Program



Flood Mitigation Program

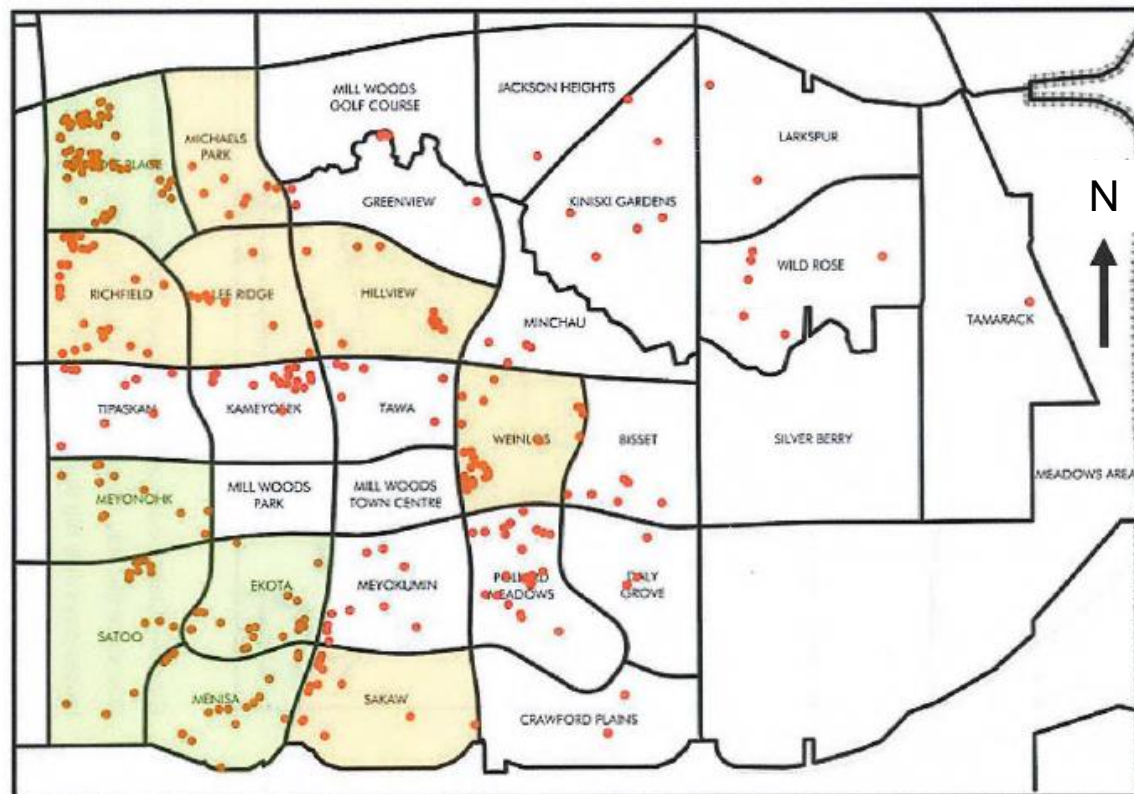
- Severe Rain Event in 2012



Hillview Apartment Complex Flooding – July 2012

Flood Mitigation Program

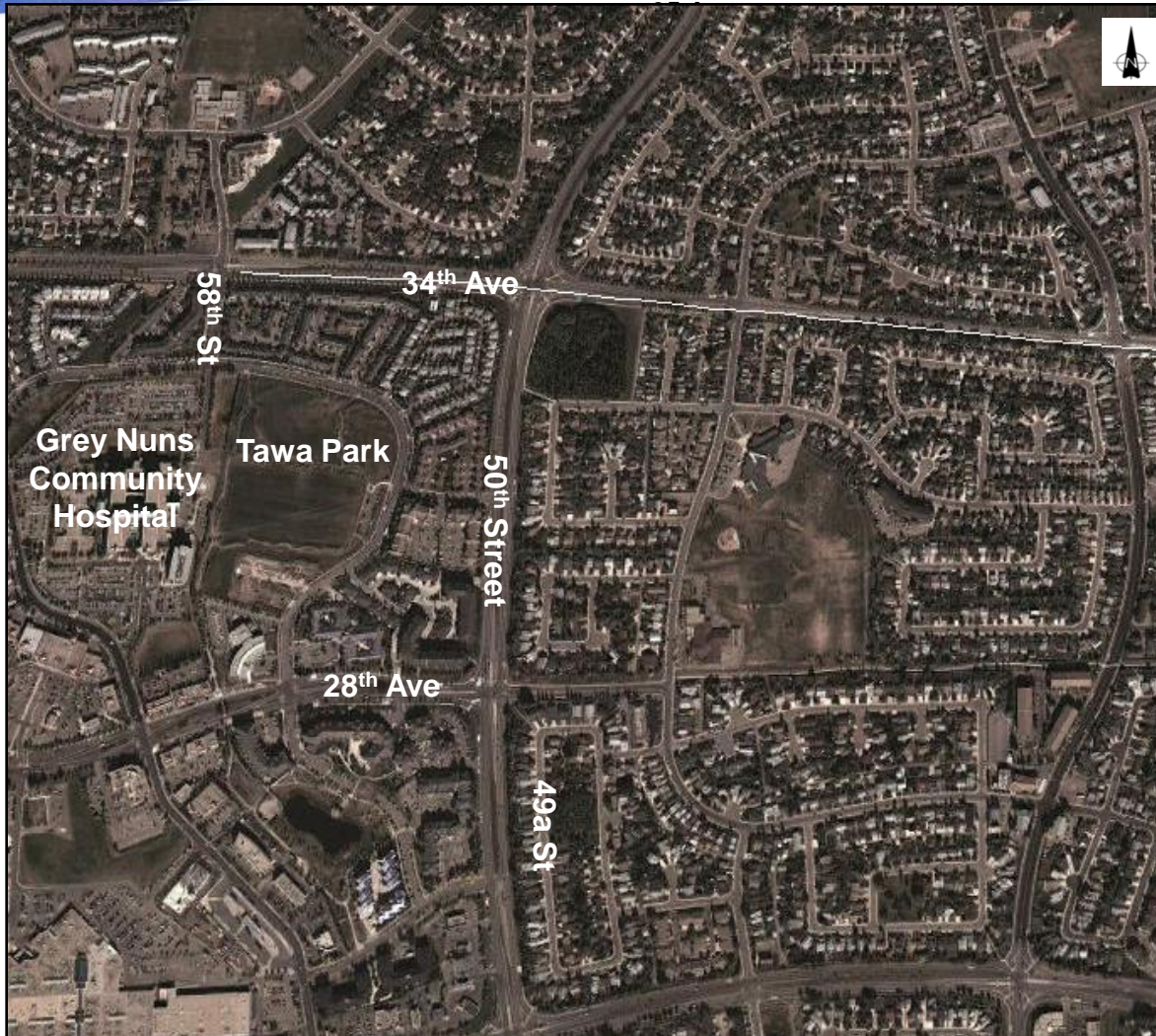
- Basement Flooding in Mill Woods





TAWA PARK DRAINAGE IMPROVEMENTS PROJECT

Tawa, Weinlos and Hillview



Edmonton



Tawa, Hillview & Weinlos

Basement Flooding (2012)

- 8 in Tawa
- 19 in Hillview
- 29 were in the Weinlos

Main causes for flooding:

- Sanitary Sewer Backups (basement floods)
- Surface Flooding (vehicles, homes)

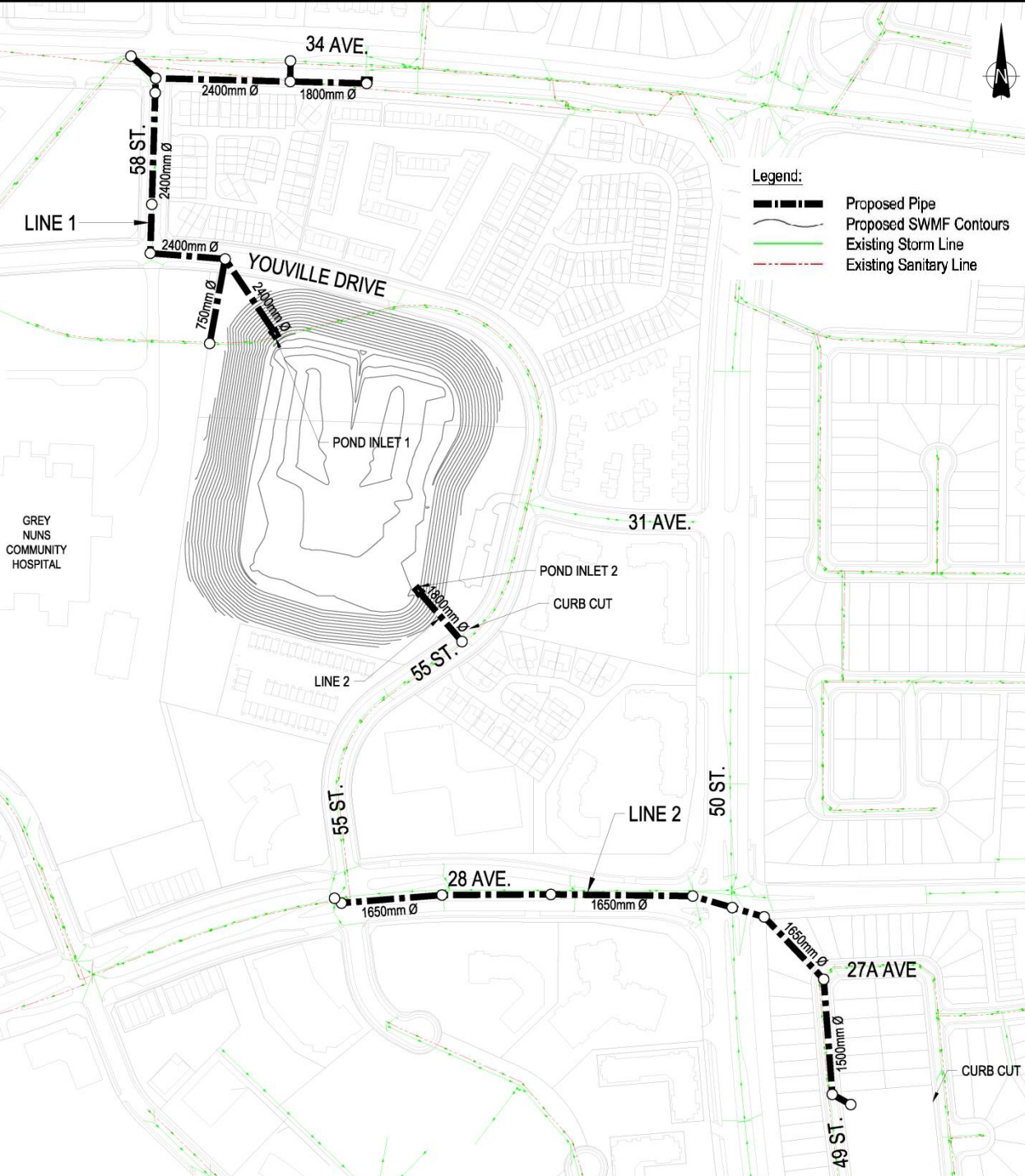
What could contribute to flooding?



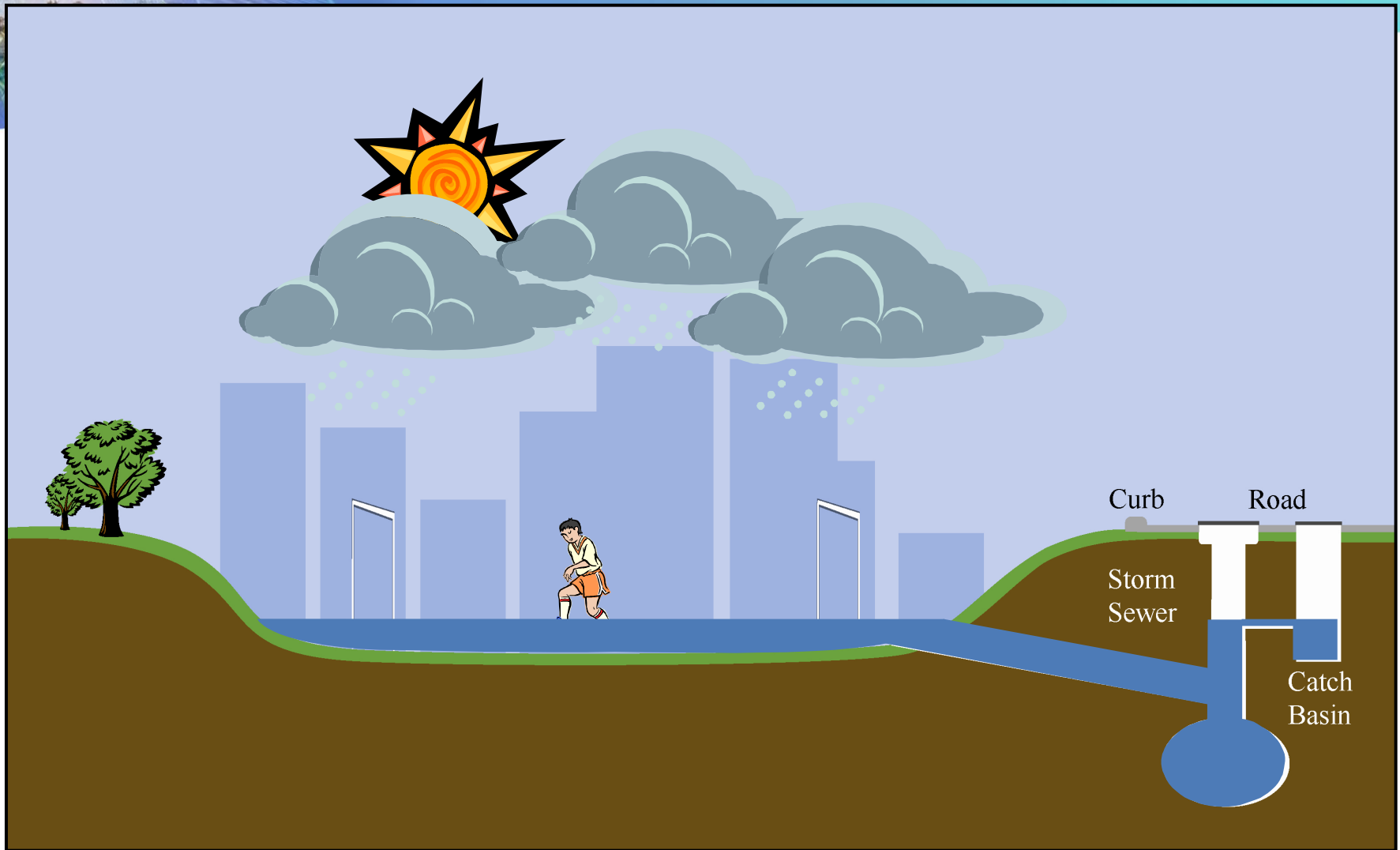
- Intense rainfall
- Water ponding in low areas, 34th Ave is drainage route
- Water infiltrating into sanitary sewers
- Plugging of catchbasins
- Flows exceeding capacity of either or both local and trunk sewers

Project Overview

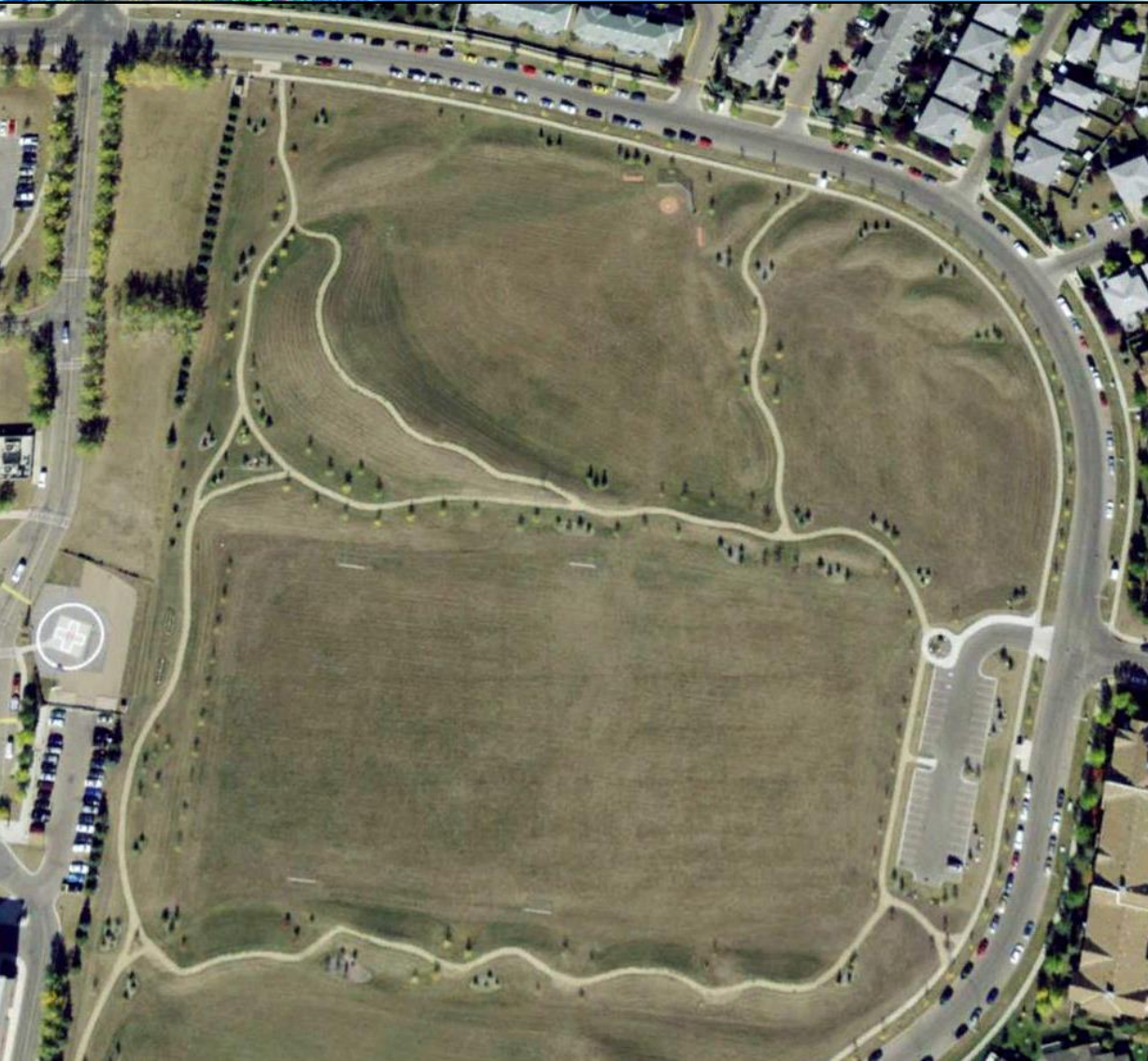
- Large diameter storm sewers
- Excavation and landscaping of pond in park area



How Do Dry Ponds Work?



Proposed Stormwater Management Facility at Sister Mary Ann Casey Park



Existing Condition:

- Park area with berms, parking lot, walking paths, two soccer fields and a baseball diamond

Proposals for the Site:

- Stormwater management facility featuring parking lot, reserved flatland, sports field potential at the bottom of the pond, walking paths, and a sliding hill.

Tawa Stormwater Management Facility Design Option 1 – Two Soccer Fields



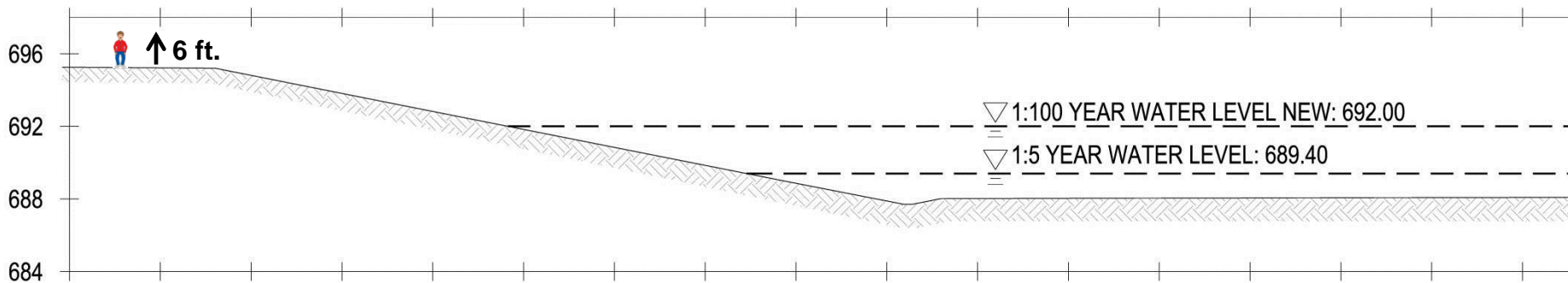
Tawa Stormwater Management Facility

Design Option 2 – One Soccer Field and Sliding Hill



Performance Characteristics of Proposed SWMF

Rainfall Event	Water Depth (m)	Storage Volume (m ³)	Time to Fill (hours)	Time to Drain (hours)
100 year	3.6	118,000	4	32
25 year	1.9	49,000	2.5	24
10 year	1.3	24,500	2	20
5 year	1	17,500	1.75	9
2 year		12,500	1	4



City of Edmonton Dry Pond Examples



Aldergrove Dry Pond
(87 Ave and 182 Street)



Belmead Dry Pond
(93 Ave and 176 Street)



Malmo Dry Pond (5H:1V side slope)
(51 Avenue and 115 Street)



What are the Benefits?

- Reduced surface ponding and flooding:
 - Along 34 Avenue
 - Along Youville Drive
 - Along 49 and 49a Street
- Reduced likelihood of sanitary backups.
- System has been designed to meet City standards during 1:100 year event.



MOVING FORWARD



Events/Milestones

1. Trees will be relocated from the Sister Mary Ann Casey Park this fall, beginning in October 2015.
2. Construction on pond will begin in early 2016.
 - Park Closed
 - Excavation / Material Hauling
3. Piping improvements in 2017
4. Park will reopen for spring/summer 2018.



Next Steps

- Use community input to complete design
- Hold Public Open House prior to construction
 - Provide information on Construction Impacts
 - Early 2016
- Hold Public Open House prior to pipe upgrades
 - Provide information on Construction Impacts
 - Early 2017
- Keep Community informed
 - Construction Notices, COE website, signage etc.



Thank You

Thank you for your attendance and we welcome any questions you have.

For more information please contact:

Scott MacIntosh

Project Manager - Drainage Design and Construction

780-496-5437

Scott.macintosh@edmonton.ca