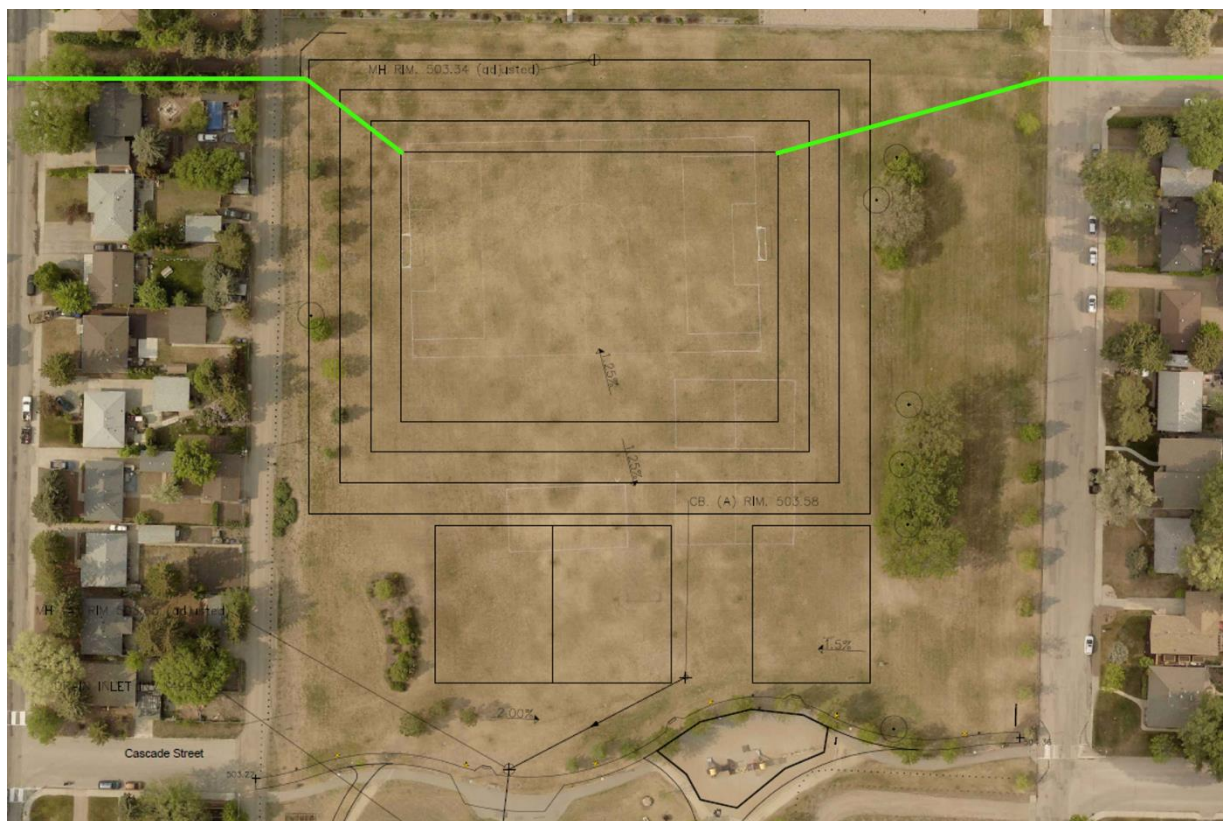


Flood Control Strategy Update – Churchill Park

Churchill Park Dry Pond Feasibility Assessment Concept

Design



### Technical Feasibility

The Engineering and Planning section within Saskatoon Water has identified the following design parameters to be included in the Churchill Park dry pond project:

- A 1200 mm storm sewer will be constructed from Flood Zone 1 (Ruth St/Cairns and Bute St/Munroe Ave intersections) to the dry pond in Churchill Park.
- A 900 mm storm sewer will be constructed from Flood Zone 24 and 25 (Ruth St/York Ave and Bute St/Albert Ave intersections) to the dry pond in Churchill Park.
- Two inlet/outlet structures will be constructed within the pond side slope in the northwest and northeast corner of the dry pond as shown above in the concept design image. These structures will drain and fill the pond. The dry pond/large multi-purpose field will be graded to transport storm water overland to the inlet/outlet structures.
- Approximately 33,000 cubic meters of common fill will be excavated from Churchill Park for construction of the dry pond. Approximately 9,600 cubic meters of storm water storage will be constructed (~1-in-10 year design capacity).
- The side slopes of the dry pond will be approximately 4(H):1(V).
- The current ground water level of the area is approximately 499.4 to 499.5 m, which is about 1.0 to 1.1 m below the pond flood base.
- The large multi-purpose field will be constructed within the storm pond with the three smaller multi-purpose fields relocated to the south outside the dry pond footprint.
- The dry pond will be designed to be drained 24 hours after a rain event.
- Approximately eight trees will be removed along the west side of Churchill Park and will be replaced or compensated through policy.

Please note the above design parameters were identified in the preliminary design stage and may change as the project team progresses through the detailed design.

### Estimated Costs

The following table presents the current breakdown of estimated eligible (i.e. construction) costs for the Churchill Park dry pond project:

Flood Control Strategy Update – Churchill Park

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<b>Description</b>	<b>Estimated Costs</b>
Storm sewer infrastructure upgrades including road restoration	\$ 5,922,328
Dry pond construction	\$ 803,014
Landscape construction including irrigation and sub-drainage	\$ 1,000,000
Contingency	\$ 1,292,063
Associated taxes including rebates	\$ 541,044
<b>Total Eligible Costs:</b>	<b>\$ 9,558,450</b>
Internal ineligible costs (design, project management, etc.)	\$ 500,000
<b>Total Ineligible Costs:</b>	<b>\$ 500,000</b>
<b>Total Project Costs:</b>	<b>\$ 10,058,450</b>