

Appendix 1 - Wetland Reclamation Design Guidelines

Table 1.1 Overview of wetland reclamation design guidelines

Organization	Guidelines	Shoreline Slope Ratio
Alberta Transportation (Alberta Transportation 2014)	Gentle slopes surrounding a wetland at a 2:1 or 3:1 height to length ratio that will guide runoff into a wetland and irregular shorelines for the wetland itself	3:1 adjacent to open water; 6:1 in the littoral zone; variable slopes after.
United States Environmental Protection Agency (EPA 2015)	Recommends selecting sites for reclamation that have gradual slopes and can be easily altered. Primarily recommends finding sites with natural topography rather than constructing a landscape to mimic natural topography.	N/A
United States Environmental Protection Agency (EPA 2000)	Use existing natural landforms and gravity when designing wetlands. Ensure wetland and adjacent land have topographic variability and diversity.	N/A
City of Saskatoon	Design should have the goal of attaining ‘naturalistic’ features that mimic existing natural wetlands, including undulating boundaries and natural landform shapes. Wetland itself should have a length to width ratio greater than 1:1 with some consensus of ideal ratio between 2:1 < L:W < 4:1.	3.5:1 or lower slope angle directly adjacent to the wetland.

References

- Alberta Transportation (2014) General Design Guidelines for a Constructed 'Habitat' Wetland
– Grasslands Natural Region of Alberta. Report prepared by Green Plan Ltd.
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- EPA (2013) A handbook of constructed wetlands (Vol. 1). Bibliogov.
<https://www.epa.gov/sites/production/files/2015-10/documents/constructed-wetlands-handbook.pdf>
- EPA (2000) Guiding Principles for Constructed Treatment Wetlands: Providing for Water Quality and Wildlife Habitat.
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