

Wetlands Assessment

Paragon Soil and Environmental Consulting

Wetland boundaries within the project area that had previously been mapped during the desktop exercise were verified with the wetland described and visually documented by taking photographs and compiling a representative species list, following the process outlined in the *Alberta Wetland Identification and Delineation Direction*. Regulated weed species were also recorded.

The assessment area is about 1.1 ha of the total 2.0 ha wetland. The assessment area is a seasonal graminoid marsh wetland (MG III), defined by its characteristics and indicators observed in the wettest zone of the wetland.

Wetland classification (class, form, type) is derived from the *Alberta Wetland Classification System*.

Plant species identified within the assessment area were predominantly forbs, such as common cattail, and common plantain, along with graminoids, such as canary grass species, sough grass, and manna grass. Several non-native and invasive species including the noxious creeping thistle were also noted. The presence of non-native and invasive species is common for wetlands near anthropogenic activities/disturbance and areas have

been tilled for agricultural use in the past.

The furthest eastern extent of the wetland within the assessment area is presently cultivated cropland while the main wetland core within the assessment area is no longer cultivated. Compared to historical aerial imagery, it appears that the overall cultivated extent of the wetland has decreased since the construction of the road network in the project area. This is likely because of a relatively higher (seasonally above ground) water table due to altered historic surface water flow toward the northwest within the project area.

The seasonal (Class III) wetland identified is subject to the authorization under the *Water Act* and wetland replacement considerations would be subject to authorization under the *Alberta Wetland Policy*.

Current Church Property (red)
Proposed Project Area (blue)
Assessment Area (orange)
Wetlands Boundary (orange/yellow)





**Center of Seasonal Graminoid Marsh Wetland (MGIII) in 13-35-051-26-W4M
October 11, 2023**

Plant Species List for Graminoid Marsh Wetland (MG III) in 13-35-051-26-W4M

Vegetation Layer	Scientific Name	Common Name
Forb	<i>Typha Latifolia</i>	Common Cattail
	<i>Plantago Major</i> *	Common Plantain*
	<i>Cirsium Arvense</i> **	Creeping Thistle**
	<i>Thlaspi Arvense</i> *	Stinkweed*
	<i>Taraxacum Officinale</i> *	Common Dandelion*
	<i>Draba</i> sp.	Draba Species
	<i>Potentilla Norvegica</i>	Rough Cinquefoil
	<i>Rumex</i> sp.	Dock
	<i>Trifolium Hybridum</i> *	Alsike Clover*
Graminoid	<i>Phalaris</i> sp.	Canary Grass
	<i>Beckmannia Syzigachne</i>	Slough Grass
	<i>Glyceria</i> sp.	Manna Grass
	<i>Carex Aquatilis</i>	Water Sedge
	<i>Hordeum Jubatum</i>	Foxtail Barley
	<i>Scirpus</i> sp.	Bulrush
Bryophyte	<i>Campylium</i> sp.	Campylium Moss

Notes:

Species listed in observed order of abundance (highest to lowest) within each layer.

*ABWRET invasive list species and is exotic/introduced.

**Noxious weed (GOA 2016b.)