

Applicant: Sarah Schweiger; City of Minnetonka
Representative: Sarah Schweiger; City of Minnetonka
Project: Sediment Removal – Wing Lake
Location: Excelsior Boulevard and Highland Road: Minnetonka
Rule(s): 5 and 8
Reviewer(s): Bob Obermeyer, Barr Engineering Co.

General Background

The applicant proposes the removal of a total of 55 cubic yards of accumulated sediment at two existing storm sewer outfalls discharging into Wing Lake. The storm sewer outfalls are from Highland Road storm sewer systems discharging into the lake.

The proposed work is below elevation 940.3 M.S.L., the ordinary highwater elevation (O.H.W.) of Wing Lake (91P) established by the Minnesota Department of Natural Resources (MDNR). The District's Sediment Removal Rule 8.0 applies to the project because the project includes removal of accumulated sediment from Wing Lake, a public waterbody.

The District's Floodplain Management and Alterations Rule 2.2.1b states even though land altering activities are proposed below the 100-year frequency flood elevation of Wing Lake, a permit under this rule is not required for the removal of accumulated sediment from a water basin.

The District's Stormwater Management Rule 4.0 and Erosion Control Rule 5.0 apply to the project because more than 50 cubic yards of material will be disturbed, Rules 4.2.1a and 5.2.1a, respectively. However, since the project does not propose to construct, disturb and reconstruct any new and/or existing impervious area the requirements of the district stormwater rule (4.0) will not apply.

The District's Sediment Removal Rule 8.0 applies to the project because the project includes removal of accumulated sediment from the banks of a public waterbody, Wing Lake.

Exhibits

1. Permit Application dated October 21, 2022
2. Project submittal received October 21, 2022.
3. E-mail correspondence from the DNR dated October 25, 2022, waiving authority for work associated with the proposed sediment removal from Wing Lake, as this activity will be authorized by under DNR General Permit #1997-6112 if permitted under the NMCWD rules.

2.0 Floodplain Management and Drainage Alterations

The project proposes land-altering activities below the 100-year frequency flood elevation of Wing Lake for the removal of 55 cubic yards of sediment at the outlet of two existing storm sewer systems. As previously stated, Rule 2.2.1b states even though land altering activities are proposed below the 100-year frequency flood elevation of Wing Lake, a permit under this rule is not required for the removal of accumulated sediment from a water basin.

3.0 Wetlands Management

The District's Wetland Management Rule 3.0 does not apply since Wing Lake is a Protected Waters Basin, 91P, as determined by the MDNR.

4.0 Stormwater Management

The District's Stormwater Management Rule 4.0 is triggered because more than 50 cubic yards of material will be disturbed, Rule 4.2.1a. However as previously stated, since the project does not propose to construct, disturb, and reconstruct any new and/or existing impervious area the requirements of the district stormwater rule will not apply.

5.0 Erosion and Sediment Control

The District's requirements for erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed, Rule 5.2.1a.

The erosion control plan prepared by the City includes installation of stabilized rock construction entrances, storm drain inlet protection, and floatation silt curtain in Wing Lake.

The contractor for the project, if different from the City of Minnetonka maintenance staff, will need to designate a contact who will remain liable to the district for performance under the District's Erosion and Sediment Control Rule 5.0 from the time the permitted activities commence until vegetative cover is established, in accordance with subsection 5.4.1e.

8.0 Sediment Removal

The District's Sediment Removal Rule 8.0 applies to the project because the project includes removal of approximately 55 cubic yards of accumulated sediment at two outfalls from Highland Road storm sewers discharging to Wing Lake (Public Water #91P).

Rule 8.3 Criteria states, removal of accumulated sediment at stormwater outfalls may be permitted upon submittal of an application meeting the following criteria:

8.3.1 Removal of sediment must not alter the original alignment, slope or cross-section of the beds, banks, or shores of any public water.

The supporting materials demonstrate, and the NMCWD Engineer concurs, that approximately 55 cubic yards of sediment will be removed from Wing Lake.

The project proposes removal of sediment at two existing outfalls, as shown on the figures Location of Removal 1 and Removal 2 of the submittal. Accumulated material to be removed is located below the O.H.W., representing the "dead storage" volume of the lake, and will not result in alteration of the alignment, slope or cross-section of the lake bed or bank(s).

8.3.2 Any excavated materials storage or disposal sites must be identified and shown to be:

a) Not below the OHW of a public water, public water wetland or wetland subject to the Wetland Conservation Act

b) Not in the floodplain; or

c) Not subject to erosion or likely to cause redeposition of the sediment to an adjacent water body, storm water facility or storm sewer.

Excavated material will not be stored or disposed onsite. The plans note that excavated materials will be removed from the site and properly disposed based on the testing of the material. The removed sediment will not be stockpiled, and/or disposed on-site, therefore will not be subject to erosion or likely to cause re-deposition of the sediment to Wing Lake or storm sewer inlet(s).

8.3.3 Degradation or erosion of the banks or bed of the subject water body by entry of equipment must be avoided.

A stabilized rock construction entrance/exist will be constructed to provide access to the two storm sewer outlets.

The erosion control plan submitted by the city includes installation of floating silt fence for in-water erosion control. Equipment used to excavate soil will be placed above the banks of the two water waterbodies.

8.3.4 Where determined necessary by the District to protect water quality, a flotation silt curtain shall be placed around the sediment removal site and maintained for the duration of the project.

Flotation silt curtain will be provided at the existing outfalls to Wing Lake.

8.3.5 No activity affecting the bed of a protected water maybe conducted between March 15 and June 15 on watercourses, or between April 1 and June 30 on all other public water bodies, to minimize impacts of fish spawning and migration.

The project schedule proposes work associated with the pipe outfall and sediment removal is to be completed by January 1, 2023, complying with the Rule 8.3.5 criteria.

11.0 Fees

Because the property owner is a public entity, no fees are charged.

Rules 2.0, 3.0, 4.0, 5.0, 6.0 and 8.0 \$0

12.0 Financial Assurances

Because the property owner is a public entity, the district's financial assurance requirements do not apply.

Sureties for the project are: \$0

Findings

1. The proposed work will take place within publicly owned property by the City.

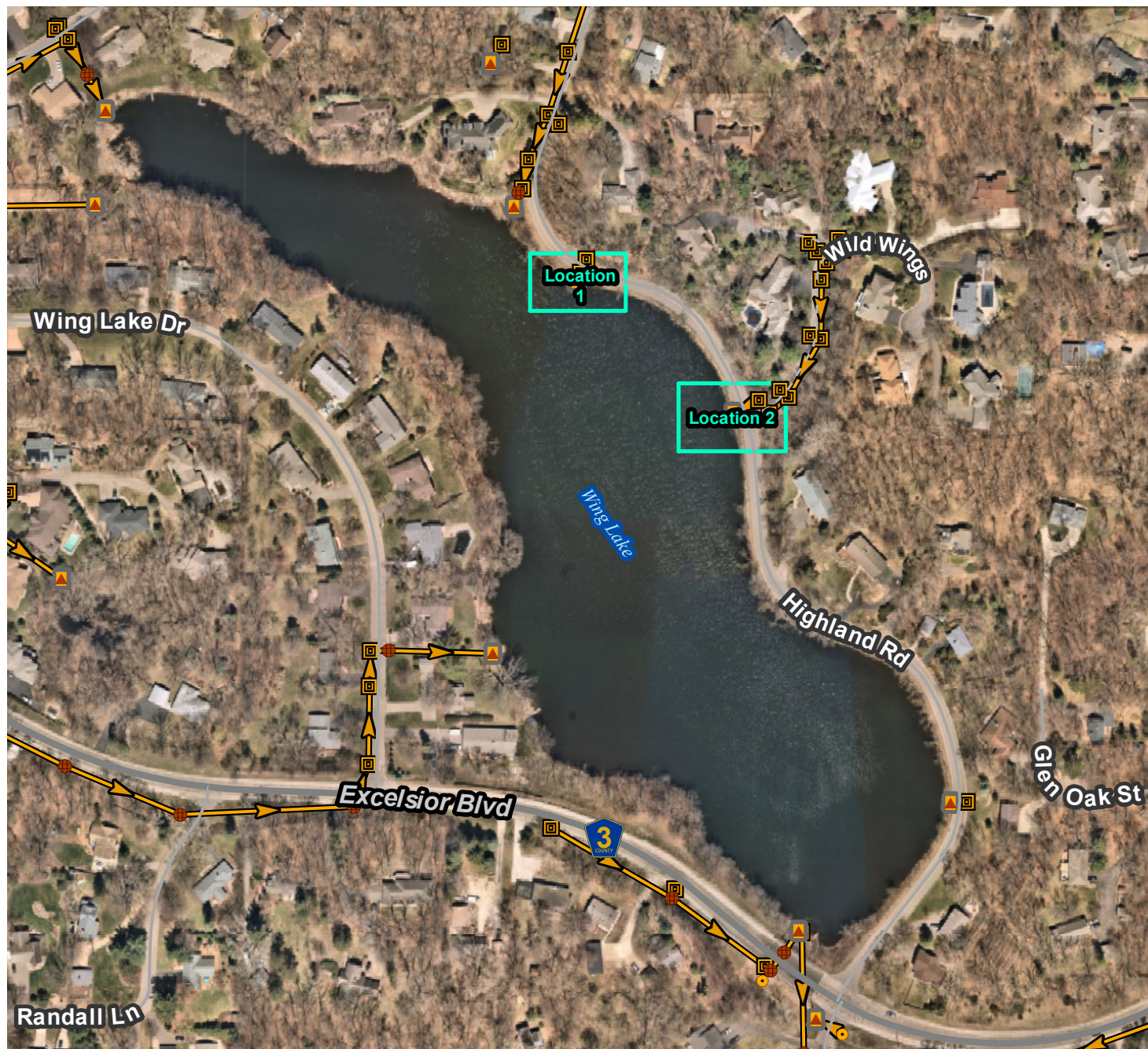
2. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
3. For the purposes of compliance with Minnesota State Work in Waters Rules (Minn. R. Ch. 6115), the DNR has waived jurisdiction over the work in the banks of the public water basin and public water wetland, and the applicant may proceed with the associated work under General Permit #1997-6112, so long as the applicant complies with the conditions of the general permit. Authorization by NMCWD for removal of accumulated sediment within Wing Lake under NMCWD's Sediment Removal Rule 8.0 represents state authorization of the work under the general permit, so long as the work proceeds in compliance with the conditions of the general permit.

Recommendation




Approval, contingent upon:

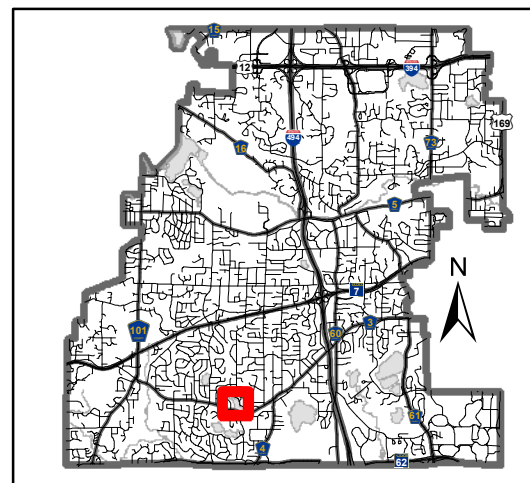
1. General Conditions

2. The applicant providing a name and contact information from the contractor, if different than the City of Minnetonka maintenance personnel, responsible for the erosion and sediment control at the site. NMCWD must be notified if the responsible individual changes during the permit term.

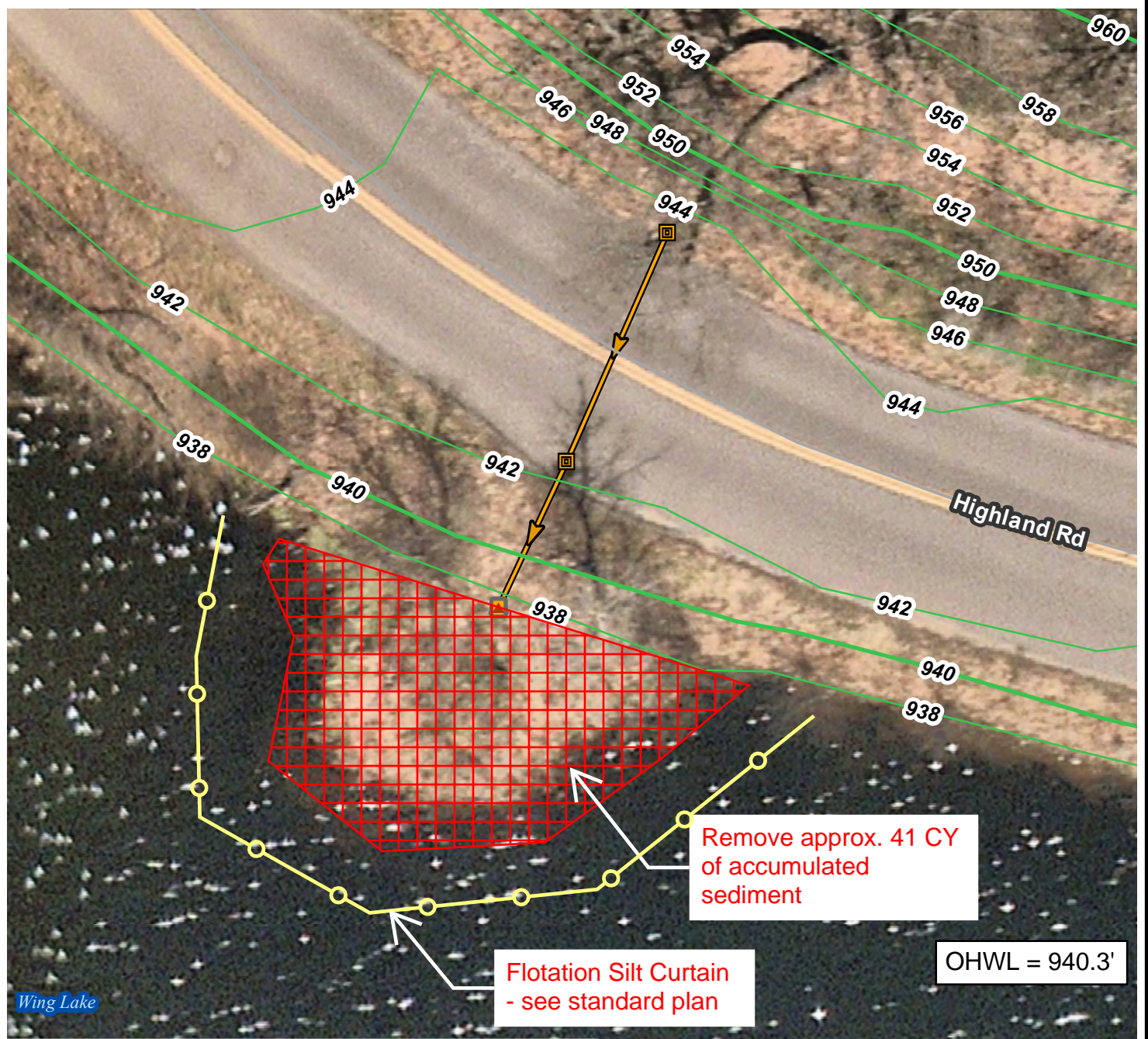


Wing Lake Sedimentation Removal 2022

-  Inlet Point
-  Manhole
-  Discharge Point
-  Catch Basin
-  Gravity Main

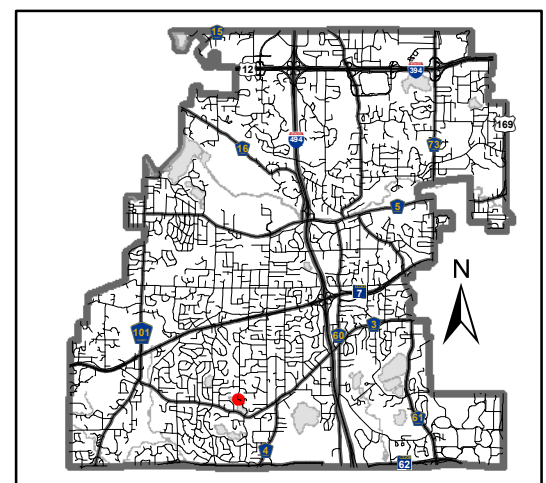


This map is for illustrative purposes only.

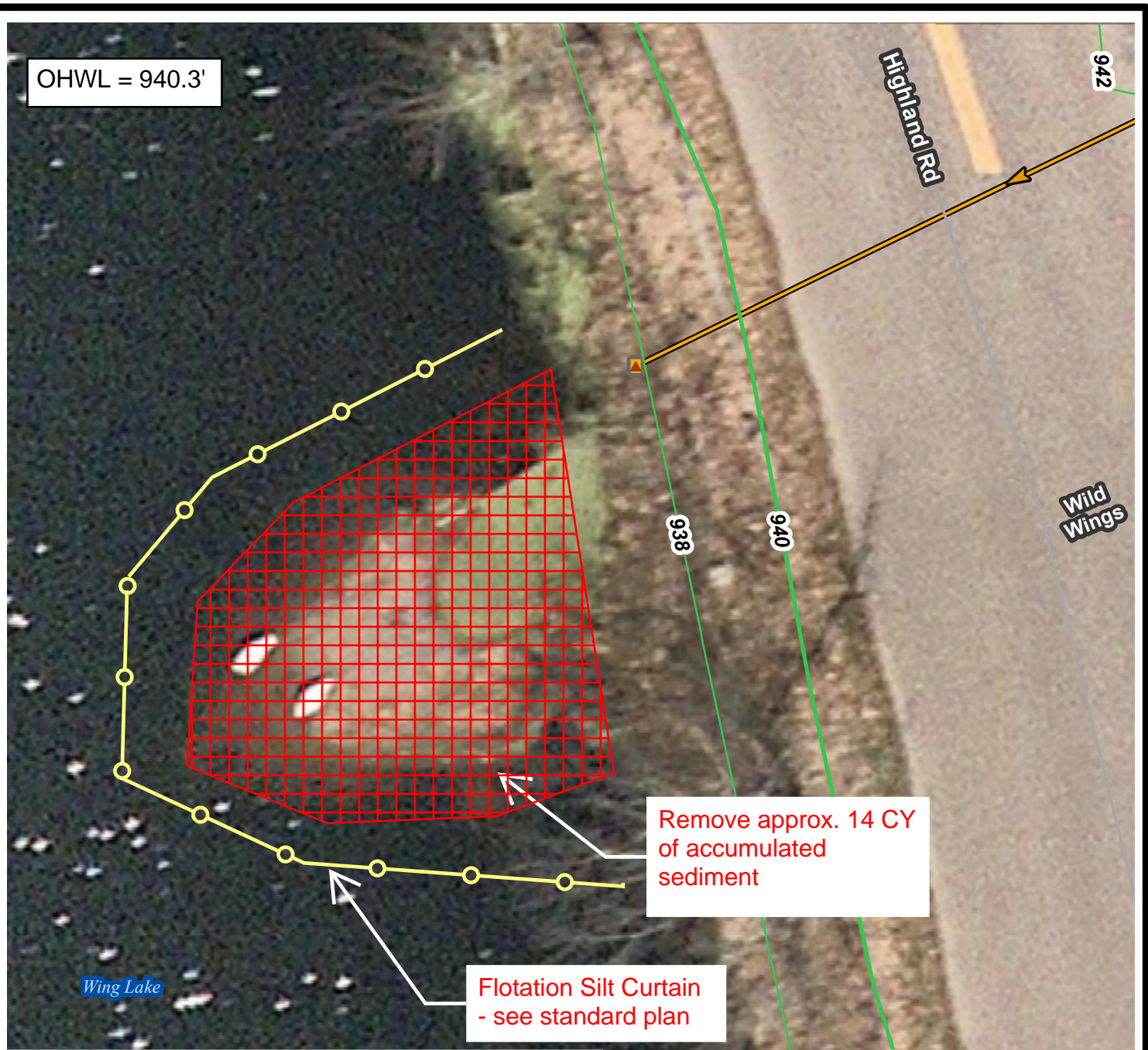


Wing Lake Sediment Removal-Location 1

- 10 Ft. Contour
- 2 Ft. Contour
- Inlet Point
- Manhole
- ▲ Discharge Point
- Catch Basin
- Gravity Main

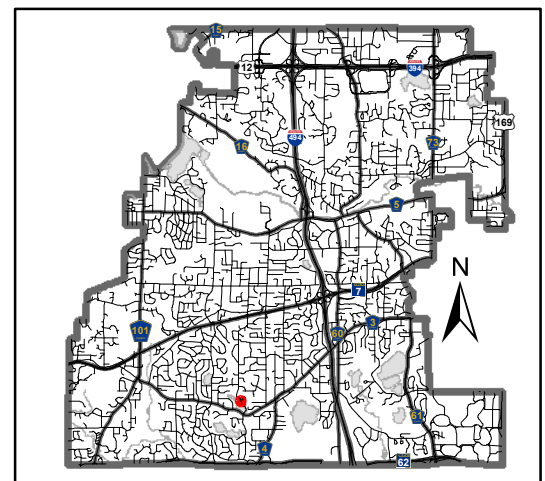


This map is for illustrative purposes only.



Wing Lake Sediment Removal-Location 2

- 10 Ft. Contour
- 2 Ft. Contour
- Inlet Point
- Manhole
- ▲ Discharge Point
- Catch Basin
- Gravity Main



This map is for illustrative purposes only.