

Date: November 6, 2023

To: CLFLWD Board of Managers

From: Mike Kinney, District Administrator

Subject: Permit 23-015 Beltz Park Improvements- Phase 1



Background/Discussion

The purpose of this agenda item is for managers to review, discuss, and consider approving permit number 23-015.

Permit 23-015 is located at the intersection of 11th Ave. SE & South Shore Dr. In Forest Lake, MN 55025. The project will involve a number of updates to an existing city park, Beltz Park including installation of an improved playground area, onsite restrooms, picnic shelter, and associated ADA features. The project will disturb about 1.5 acres and will create approximately 0.4 acres of new impervious area. The project will trigger both stormwater management and sediment and erosion control rules. Stormwater management will be met through a bioinfiltration basin while silt fences, erosion control blankets, a rock construction entrance, inlet protections, revegetation specifications and an implementation schedule will satisfy sediment and erosion control requirements.

Recommended Motion

Proposed Motion: Manager _____ moves to approve permit application #23-015 with conditions stated in EOR's November 8, 2023, memorandum. Seconded by Manager _____.

Attached

Emmons & Olivier Resources' November 8, 2023 Memorandum Emmons & Olivier Resources' Exhibit

memo



Project | Beltz Park Improvements- Phase 1 Date | 11-8-2023

 To |
 Patrick Casey Paul Strong
 Contact Info |
 Applicant Agent

 Cc |
 Mike Sandager
 Contact Info |
 CLFLWD

From Greg D. Graske, P.E. Contact Info EOR

Regarding Permit Application #23-015, City of Forest Lake

Applicant

City of Forest Lake Attn. Patrick Casey 1408 Lake Street South Forest Lake, MN 55025 Phone: 651-209-9750

patrick.casey@ci.forest-lake.mn.us

Authorized Agent

Paul Strong
Bolton & Menk
111 Washington Avenue South – Suite 650
Minneapolis, MN 55401
Phone: 612-416-0220

paul.strong@bolton-menk.com

Project Purpose: The project includes installation of an improved playground area, onsite restrooms, picnic shelter, and associated ADA features. The project will disturb about 1.5 acres on a 4.5-acre site and will create approximately 0.4 acres of new impervious area.

Project Location: South of 11th Avenue SE and west of South Shore Drive. Site drains to Forest Lake.

Applicable District Rules: 1.0, 2.0, 3.0

Recommendation: Approval, with issuance on receipt of the following:

1. Final Signed Plan Set incorporating the submitted revised plan sheets C3.01 and C2.05 (revised on November 2, 2023).

Stipulations of Permit:

- 1. As-built survey of biofiltration basin.
- 2. Additional permitting will be required for Phase 2 of the project.
- 3. Maintenance of biofiltration practice in accordance with the terms of the "Cooperative Agreement for Maintenance of Stormwater Management Facilities and Watercourse and Basin Crossings" (November 9, 2012).

Rule 2.0: Stormwater Management

The project includes installation of an improved playground area, onsite restrooms, picnic shelter, and associated ADA features. The project is being split into two phases. The project narrative indicates that Phase 1 will disturb about 1.5 acres and create approximately 0.4 acres of new/reconstructed impervious area. This permit is for Phase 1 only, additional permitting and stormwater management

will be required for Phase 2. Under both existing and proposed conditions drainage is routed to storm water pipes located along South Shore Drive that ultimately flow into Forest Lake.

For redevelopment projects, the required treatment volume of 1.1 inches of runoff from all new and reconstructed impervious surfaces must be captured and treated. Infiltration is not feasible due to clay soil types. Less than 50% of the site will be disturbed and less than 50% of the existing hard surface will be reconstructed, therefore only the reconstructed impervious areas require treatment. The proposed biofiltration basin requires use of the 0.65 conversion factor for treatment volume. Runoff is routed through green space before reaching the biofiltration basin, thereby providing pretreatment. This results in a total required treatment volume of 2,488 CF. The proposed biofiltration basin provides 3,724 CF of treatment volume, therefore meeting the District volume requirements. The submitted treatment area figure and grading plan indicate that the basin will treat the new play area, part of the picnic shelter area and a portion of the existing park and play area. The impervious area treated (0.45 acres) is slightly larger than the impervious area required to be treated (0.41 acres). Some portions of the new/reconstructed impervious areas that are not captured by the BMPs will sheet flow through green space where suspended solids will be removed from this runoff to the maximum extent practicable.

Implementation schedule and phasing notes have been provided indicating that the proposed BMPs will be built concurrently with the work authorized under this permit.

Discharge from the site reduces peak rates compared to existing conditions at all discharge locations, thereby satisfying District Rate Control requirements. A summary table of rates leaving the site is below.

Conditions	2-year	10-year	100-year
Existing (cfs)	2.3	6.7	23.8
Proposed (cfs)	2.2	6.0	14.8

Rate Control Summary

The proposed picnic shelter meets freeboard requirements over the proposed biofiltration basin. There will be no adverse impact to bounce or inundation periods of downstream waterbodies.

Rule 3.0: Erosion Control

The proposed project includes silt fence, erosion control blankets, rock construction entrance, inlet protection, revegetation specifications and an implementation schedule. A detailed Storm Water Pollution Prevention Plan (SWPPP) has been submitted. The proposed plans meet District Erosion Control requirements. The District may require the installation of additional sediment control best management practices at a later time, if deemed necessary based on site conditions during construction.

Rule 4.0: Lake, Stream, and Wetland Buffer Requirements

The proposed project does not trigger this rule; a subdivision was not proposed and no municipal rezoning or variance was required for this project.

Rule 5.0: Shoreline and Streambank Alterations

The proposed project does not trigger this rule; a DNR general permit applicable to property owners who hold a District permit is not in effect.

Rule 6.0: Watercourse and Basin Crossings

The proposed project does not trigger this rule; no roadways, utilities, or water control structures are proposed in the bed of District waterbodies.

Rule 7.0: Floodplain and Drainage Alterations

The proposed project does not trigger this rule; the City of Forest Lake has a state-approved floodplain ordinance.

Rule 8.0: Wetland Management

The proposed project does not trigger this rule; the District is not the LGU for wetland impacts.

Rule 9.0: Fees

The proposed project does not trigger this rule, government agencies are exempt.

Rule 10.0: Financial Assurances

The proposed project does not trigger this rule; by Board policy, the District does not require financial assurances from government agencies.

Rule 11.0: Variances

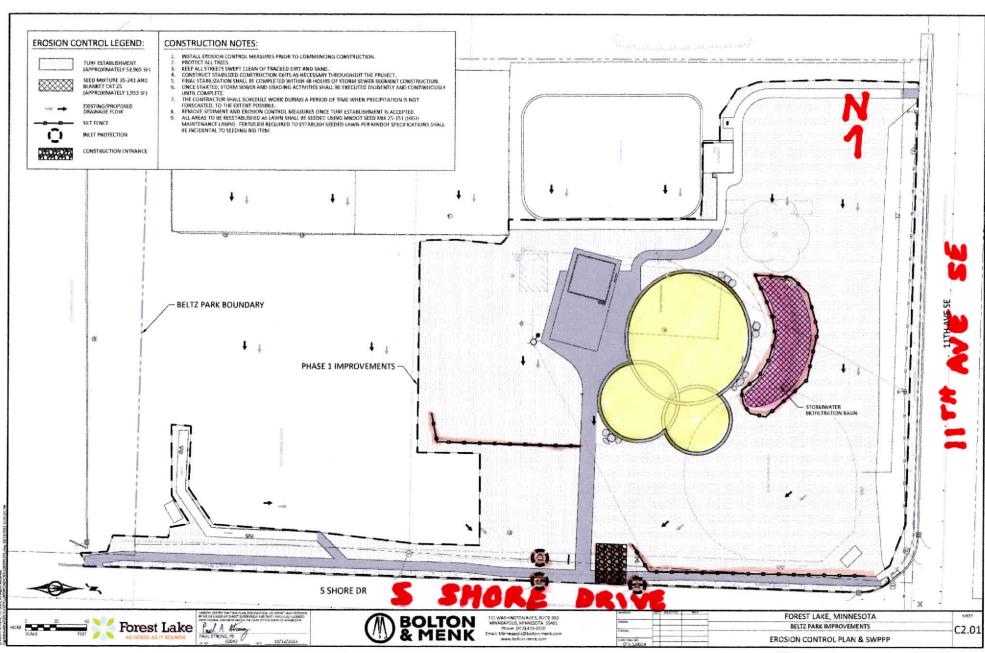
The proposed project does not request a variance.

Submittals Received

The following submittals were received and reviewed as the basis for this permit application review:

- 1. Application, received July 25, 2023, prepared July 14, 2023, prepared by Applicant.
- 2. Project Narrative, received October 16, 2023, dated October 16, 2023, prepared by Bolton & Menk.
- 3. Plan Set (23 sheets), received October 16, 2023, dated October 12, 2023, prepared by Bolton & Menk.
- 4. Concept Site Plan, received July 25, 2023, undated, prepared by Bolton & Benk.
- 5. Geotechnical Evaluation Report, received July 25, 2023, dated November 28, 2023, prepared by Braun Intertec.
- 6. Existing Drainage Area Figure, received October 16, 2023, dated October 2023, prepared by Bolton & Menk.
- 7. Proposed Drainage Area Figure, received October 16, 2023, dated October 2023, prepared by Bolton & Menk.

- 8. Treated Impervious Area Figure, received October 16, 2023, dated October 2023, prepared by Bolton & Menk.
- 9. Existing and proposed stormwater modeling summery spreadsheets, received October 16, 2023, undated, prepared by Bolton & Menk.
- 10. Updated Plan Sheet C2.05, received November 2, 2023, last revised November 2, 2023, prepared by Bolton & Menk
- 11. Updated Plan Sheet C3.01, received November 2, 2023, last revised November 2, 2023, prepared by Bolton & Menk



23-015

memo



Project Name | Beltz Park Date | 12-14-2023

To / Contact info | CLFLWD Board of Managers

Cc / Contact info | CLFLWD Administrator

From / Contact info | Greg D. Graske, P.E.

Regarding | Permit 22-015

Background

At the November 16th Board meeting Beltz Park (permit 22-015) was brought to the Board for approval. The Board had a few questions regarding stormwater opportunities beyond the confines of the permit requirements that needed a bit more time to fully answer. The Board tabled the permit for consideration at the next board meeting.

Summary of Questions

Are there further opportunities downstream from the project site where a regional facility could be placed in lieu of onsite treatment on the park?

The water from the park and the adjacent street are collected by existing stormwater pipes and routed east of the park between two existing single family home lots. There is not sufficient space for a regional treatment feature here.

Could a BMP be placed underground in the park to capture stormwater from adjacent streets and property.

Potentially, but the amount of water that could be captured (relatively small drainage area) versus the cost of rerouting the infrastructure and building the facility would need to be considered. The cost of such a project would likely have a very high-cost relative to the benefit. A feasibility assessment would need to be conducted to determine the actual cost-benefit and determine whether the project would be feasible. Things that would have to be further reviewed would be utility conflicts, depth of needed infrastructure and connections to existing infrastructure, soil types, groundwater elevations, etc. If a determination was made that an underground facility would be feasible, this feature likely could be placed where the proposed ponding area is currently indicated for Phase II of the park project.

Could the Church of St. Peter's runoff be treated?

Most of the Church of St. Peter site drains to Rice Creek Watershed District (RCWD) and the parcel is located within the political boundary of RCWD. Historically about 1-acre of impervious area from this parking lot was routed to CFLWLD and ultimately to Forest Lake. When the church parking lot was redone around 2016, there was coordination between CLFLWD and RCWD to determine what to do with this drainage area. The parking lot was graded in such a way that the runoff could be re-routed to a catch basin that was then directed to a ponding area west of the parking lot. This ponding area discharges to RCWD. This essentially removed this drainage area and associated pollutants from reaching Forest Lake under most storm events. Therefore, additional treatment is not needed for the Church of St. Peter's runoff.

Other thoughts:

The discharge point for the stormwater system along South Shore Drive might be a good location for a HDS (hydrodynamic separator) to capture sediment and debris before entering the lake. Because of the location of the stormwater pipe network the HDS structure would need to be placed on the opposite side of the street from the park. Utility conflicts would also need to be explored. Implementing this with a future street project would be significantly more cost effective, but the HDS structure implementation could potentially be considered as part of the Beltz park project if there are no imminent plans to do street improvements before that time.

Recommended Board Action

Approve Permit 22-015 with conditions as presented at the November 16th Board meeting.

Provide direction as to whether further assessment of an underground treatment facility and/or a HDS structure should be investigated for consideration with a future phase of the park project.