

## Memorandum

**To:** Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator  
**From:** Barr Engineering Co.  
**Subject:** Engineer's Report Summarizing November 2023 Activities for December 13, 2023 Board Meeting  
**Date:** December 6, 2023

The purpose of this memorandum is to provide the Riley-Purgatory-Bluff Creek Watershed District (RPBCWD) Board of Managers and the District Administrator with a summary of the activities performed by Barr Engineering Co., serving in the role of District Engineer, during November 2023.

### General Services

- a. Participated in the November 1 regular Board of Managers meeting as well as the November 6 continuation of the meeting.
- b. Met virtually with Administrator Jeffery, staff Nicklay, and Counsel Welch on November 14 and 30 to discussion status of permit violations, Upper Riley Creek restoration project status, Middle Riley (aka Bearpath), and upper Bluff Creek capital project.
- c. Participated in the November 16 workshop.
- d. Refined task order for the Upper Bluff Creek restoration project in response to Administrator review.
- e. Met with Administrator Jeffery, Chanhassen staff, and Kimley-Horn staff on November 21 to discuss a regional stormwater management approach for the reconstruction of 78<sup>th</sup> Street, Market Boulevard and the City Civic Campus in downtown Chanhassen.
- f. Prepared Engineer's Report for engineering services performed during November 2023.
- g. Miscellaneous discussions with Administrator Jeffery about budgeting, CIP timing and process, permits, EHAP, and ongoing studies.

### Permitting Program

- a. *Permit 2023-036 Jerrys Enterprises Chipotle* – The project is a redevelopment of the northeast parking lot at Preserve Village into a Chipotle restaurant and associated onsite parking areas in Eden Prairie, MN. The project includes an underground stormwater management facility to provide volume control, water quality, and rate control. The project triggers RPBCWD erosion prevention and sediment control rule and the stormwater management rule. Reviewed November 16 resubmittal. Drafted the permit report for consideration at the December 13, 2023 regular meeting of the Board of Managers.
- b. *Permit 2023-064 Rainbow Drive Culvert Replacement* – The proposed project includes replacement of an existing, deteriorated arch corrugated metal culvert that conveys Purgatory Creek under Rainbow Drive in the vicinity of Eden Prairie Road in Eden Prairie. The project

triggers RPBCWD floodplain management rule, erosion prevention and sediment control rule, creek and wetland buffer rule, and waterbody crossing and structures rule. Reviewed November 14 resubmittal and informed the applicant the submittal remains incomplete because of missing cut and fill volumes at 1-foot increments to demonstrate compliance with the compensatory storage criteria.

- c. Miscellaneous preapplication calls, emails and meetings with future applicants with questions about rule applicability and criteria. Also answering questions from existing permit applicants about how to address comments provided during the review process and conditions of approval.

#### **Data Management/Sampling/Equipment Assistance**

- a. Prepared, loaded, and verified 16 RMB Laboratory (RMB) reports to the database.
- b. Prepared, loaded, and verified lake and creek data collected in 2023 that was collected with the Survey123 mobile application.
- c. Corrected data in the online database after review by RPBCWD.

#### **Task Order 6: WOMP Station Monitoring**

##### ***Purgatory Creek Monitoring Station at Pioneer Trail***

- a. No activity.

##### ***Purgatory Creek Monitoring Station at Valley View Rd***

- a. Download and review data.
- b. Maintenance – replace sample bottles, winterize station, and work on floorboard heater replacement.
- c. Flow and stage data QA/QC.

#### **Task Order 24B: Silver Lake Water Quality Improvement Project**

- a. Vegetation maintenance contract is underway through December 2025.

#### **Task Order 28B: Rice Marsh Lake (RM\_12a) Water Quality Improvement Project**

- a. The year vegetation establishment period is in process.
- b. The maintenance plan for the project was reviewed by the City of Chanhassen. As requested by the City, an inspection & maintenance checklist has been developed and is under review by the District Administrator.
- c. Prepared Pay App #7 for the completion of Year 1 vegetation establishment and installation of an additional screening shrub for Board consideration at the December 13 meeting.

#### **Task Order 29B: Middle Riley Creek (Reach R3) Stabilization Project Design**

- a. Stantec completed site inspection on November 8, 2023.
- b. Ongoing vegetation management will continue through July 15, 2025.



Photo of sprouting live stakes at north site – November 8, 2023

### **Task Order 30B: Pioneer Trail Wetland Restoration Project**

- a. The three-year vegetation establishment period is in process.



Photos of restored wetland taken on 10-30-2023.

### **Task Order 032B: Upper Riley Creek Ecological Enhancement Project**

- a. Bid package and associated drawings were provided to RPBCWD legal in September for review.
- b. RPBCWD permit is planned for submittal after plans have been updated and property owner easements are in process in January.
- c. Barr has completed the following out of scope tasks to support the project. These items have caused the project design and permitting budget to be nearly exhausted. Because property owner coordination, some permitting, and project bidding remain to be complete, it is anticipated that a budget increase will be requested at the early 2024 meeting:
  - i. Additional coordination and site visit with the Chanhassen City Forester to confirm trees marked for preservation.
  - ii. Design a stream re-meander between Park Drive and Park Road at District's request. This concept was abandoned due to it requiring additional private easements.
  - iii. Develop concepts for the bone-yard area prior to authorization of a decant facility

task order.

- iv. Because the stream reach is within a detailed FEMA floodplain, substantially more hydrologic and hydraulic modeling was needed than planned to confirm conformance with the City's floodplain ordinance and FEMA's no-rise requirements.

#### **Task Order 033: Wetland Assessment – Phase 1**

- a. Continued drafting Phase 1 report to define ecosystem services and describe methodology for assessing each service.

#### **Task Order 036B: Upper Bluff Creek Reach 5 Design**

- a. A scope of work for detailed design of the Upper Bluff Creek Reach 5 wetland and stream restoration project has been shared with Administrator Jeffery and will be brought before the Board at the December 13 workshop meeting.

#### **Task Order 037: Sediment Analysis**

- a. Sediment results for the Lake Susan wetland were delivered in November.
- b. Completing data analysis to determine P sources in the wetland
- c. The Lake Susan and Lake Susan wetland memos will be delivered together by the end of the year.

#### **Task Order 039A: Lotus Lake Water Quality Project – Preliminary Engineering**

- a. Finalizing draft feasibility study report including text, tables, and figures.
- b. Compiling summary of all concepts and developing project recommendations.

#### **Task Order 040: Alum Application on Lotus Lake**

- a. Draft memo was delivered to the District Administrator in early June 2023.
- b. Next steps include incorporating comments from the District once received.

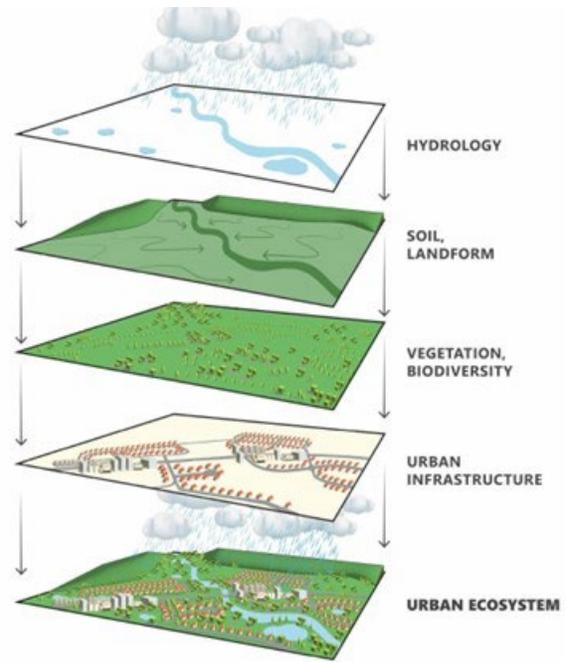
#### **Task Order 41: Chanhassen Decant Facility**

- a. Provided plan view of site constraints at existing "Bone Yard".

#### **Task Order 43: Ecosystem Health Action Plan**

- a. Met twice monthly with District staff to discuss team efforts.
- b. Reviewed the Soil Health Report developed by Zach Dickhausen.
- c. Continued developing graphics that support ecosystems understanding.

- d. Continued writing the Ecosystems Function section of the EHAP that describes impacts to the District ecosystem and potential solutions to these issues. Additional sections written include the impacts and potential solutions to lake, wetland, and stream ecosystems, degraded soils, urban heat island effect, and climate change.
- e. Planning and scheduling Workshop 4 with city and agency staff to discuss potential strategies for addressing ecosystem degradation. Three separate round-table discussions will be conducted with groups centered around 1. City planning, 2. Natural resources, and 3. Water resources.
- f. Presented the general concept of the EHAP at the Minnesota Watersheds Annual Conference.



**Task Order 44: Lake Susan Park Pond Reuse Intake Modification**

- a. Worked with contractor on form of agreement.
- b. Assisted Administrator Jeffery and Counsel Welch with development of a access agreement with the city of Chanhassen.