



AECOM

Taylor Run Infrastructure Stabilization Community Meeting

November 13, 2025

This meeting is being recorded.





We want to hear from you!

- ▶ Use the Q&A box to submit during tonight's meeting
- ▶ Submit a comment using the Smartsheet Link:



- ▶ Public feedback and comments will be collected through Friday, November 21, 2025



Tonight's Agenda

- ▶ Introduction of Project

Who is involved? Where is the project located?

- ▶ Project Overview

Why is this important? What is the project history? What are the goals?

- ▶ Work Completed

What have we done so far?

- ▶ Existing Conditions & Proposed Approach

What does it look like now? What will it look like?

- ▶ Project Schedule

When will it happen?

- ▶ Open Discussion and Q&A



Project Team



Transportation & Environmental Services City of Alexandria

Alex Haptemariam, P.E, CFM
Camille Liebnitzky, PE, ENV SP
Daniel E. Medina, PhD, PE
Jesse E. Maines, MPA
Brian Rahal, PE, CFM

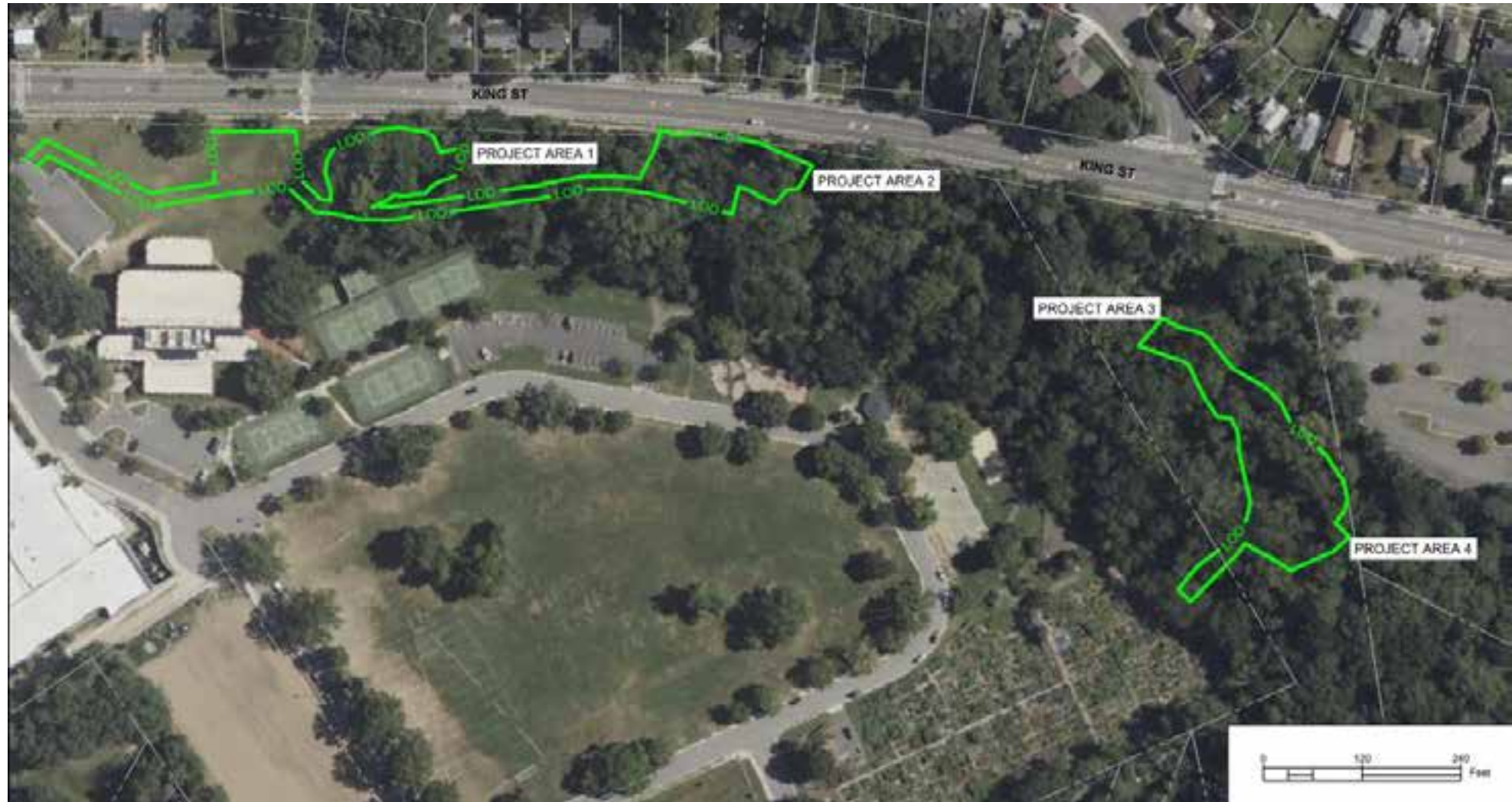


Lead Design Consultant

Brandon Alderman, CERP
Tori Nelson, PE
Sean Bernheisel, EIT



Project Location





Project History

- ▶ Project was originally scoped as a stream restoration; however, community feedback indicated that a larger collaboration effort was needed.
- ▶ City hired an outside facilitator to lead stakeholder discussions.
- ▶ **Staff presented the facilitator's recommendations to City Council in June 2023.**
- ▶ Council directed staff to proceed with stream stabilization following a **"minimal design" approach**
- ▶ City hired a design consultant to prepare engineering plans for infrastructure protection and channel stabilization following this minimal approach



Minimal Approach Techniques

Before



Proposed Approach



Rendering of proposed approach: Greeley-Hansen, 2023



Minimal Approach Techniques

Before



Proposed Approach



Rendering of proposed approach: Greeley-Hansen, 2023



Minimal Approach Techniques

Before



Proposed Approach



Rendering of proposed approach: Greeley-Hansen, 2023



Revised Project Goals



Protect critical, at-risk infrastructure (e.g., sewer pipes, manholes, outfalls, and trails)



Stabilize streambanks and reduce erosion



Preserve and protect mature trees and wetlands



Minimize limits of disturbance, vegetation removal, and construction impacts





Where will we be working?

- ▶ Four distinct areas, totaling ~600 linear, non-continuous feet
- ▶ Total disturbed area: 1.6 acres



- ▶ Temporary impacts for construction access shown in gray



What have we done so far?

- ▶ Topographic survey
- ▶ Tree survey
- ▶ Geotechnical investigation
- ▶ Hydrologic and hydraulic modeling
- ▶ Performed sewer inspections using CCTV
- ▶ Performed existing condition assessment





Existing Condition – Project Area 1

- ▶ 72" outfall in disrepair
- ▶ Undersized plunge pool causing bed scour
- ▶ Bank erosion undermining trees





Proposed Approach: Project Area 1



Boulder Weir



Rock Façade Finish



Gravity Wall with Safety Railing

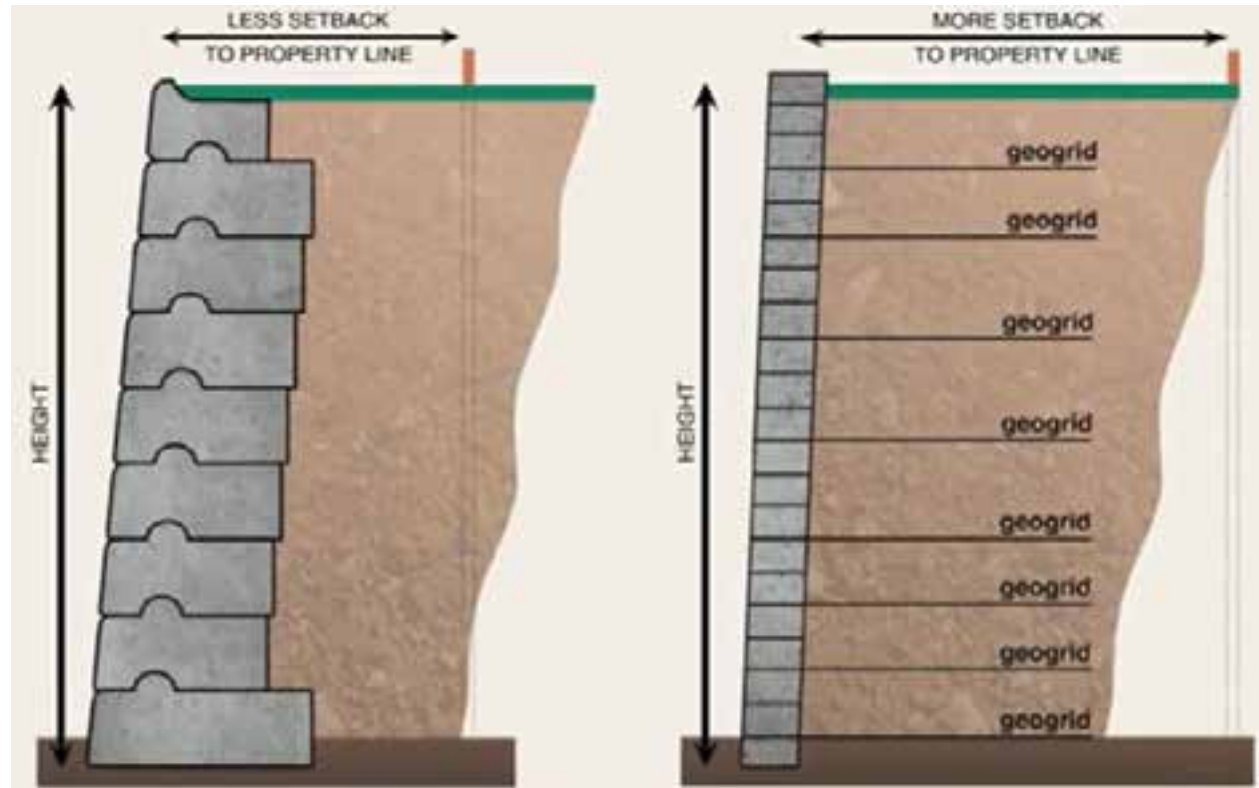


Plunge Pool



Minimal Approach Techniques

► Gravity wall vs. standard retaining wall



Gravity Wall

Standard Reinforced
Retaining Wall





Existing Condition – Project Area 2

- ▶ Exposed sanitary sewer crossing
- ▶ 36" outfall with undercut headwall
- ▶ Severe lateral bank erosion





Proposed Approach: Project Area 2



Rock Façade Finish



Gravity Wall with Safety Railing



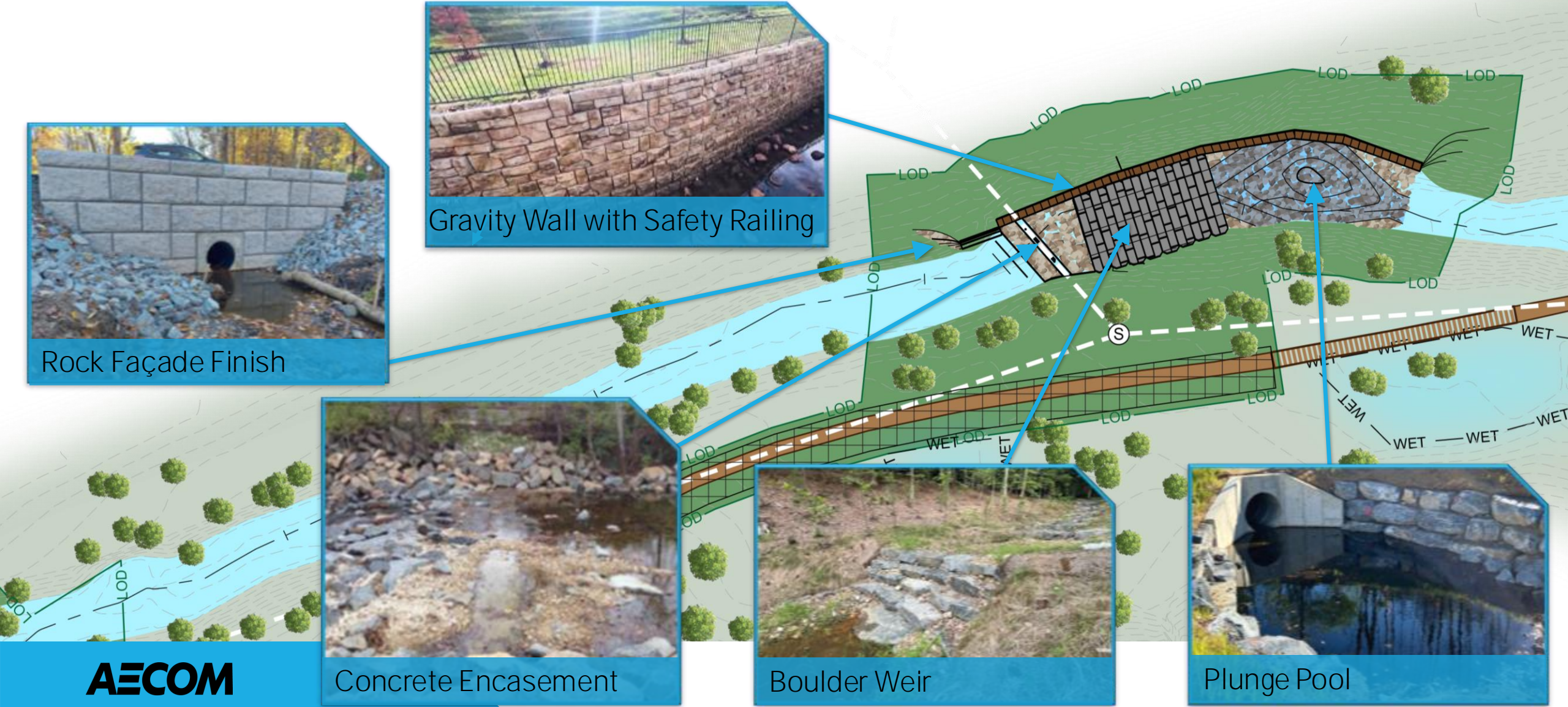
Concrete Encasement



Boulder Weir



Plunge Pool





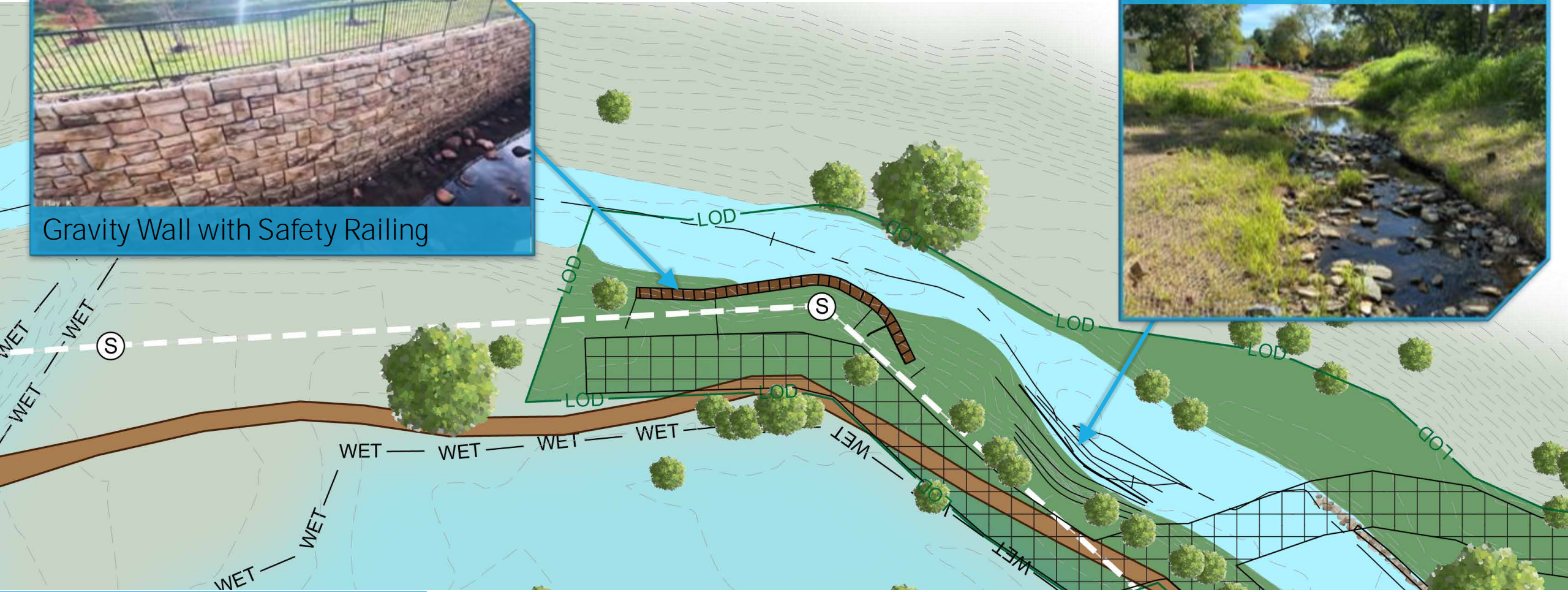
Existing Condition – Project Area 3

- ▶ Exposed sanitary manhole with undercut concrete base
- ▶ Risked sanitary sewer exposure due to erosion
- ▶ Woody debris accumulation





Proposed Approach: Project Area 3





Existing Condition – Project Area 4

- ▶ Failing sheet pile wall
- ▶ Exposed sanitary pipe and manhole
- ▶ Root exposure and damage to significant red maple tree





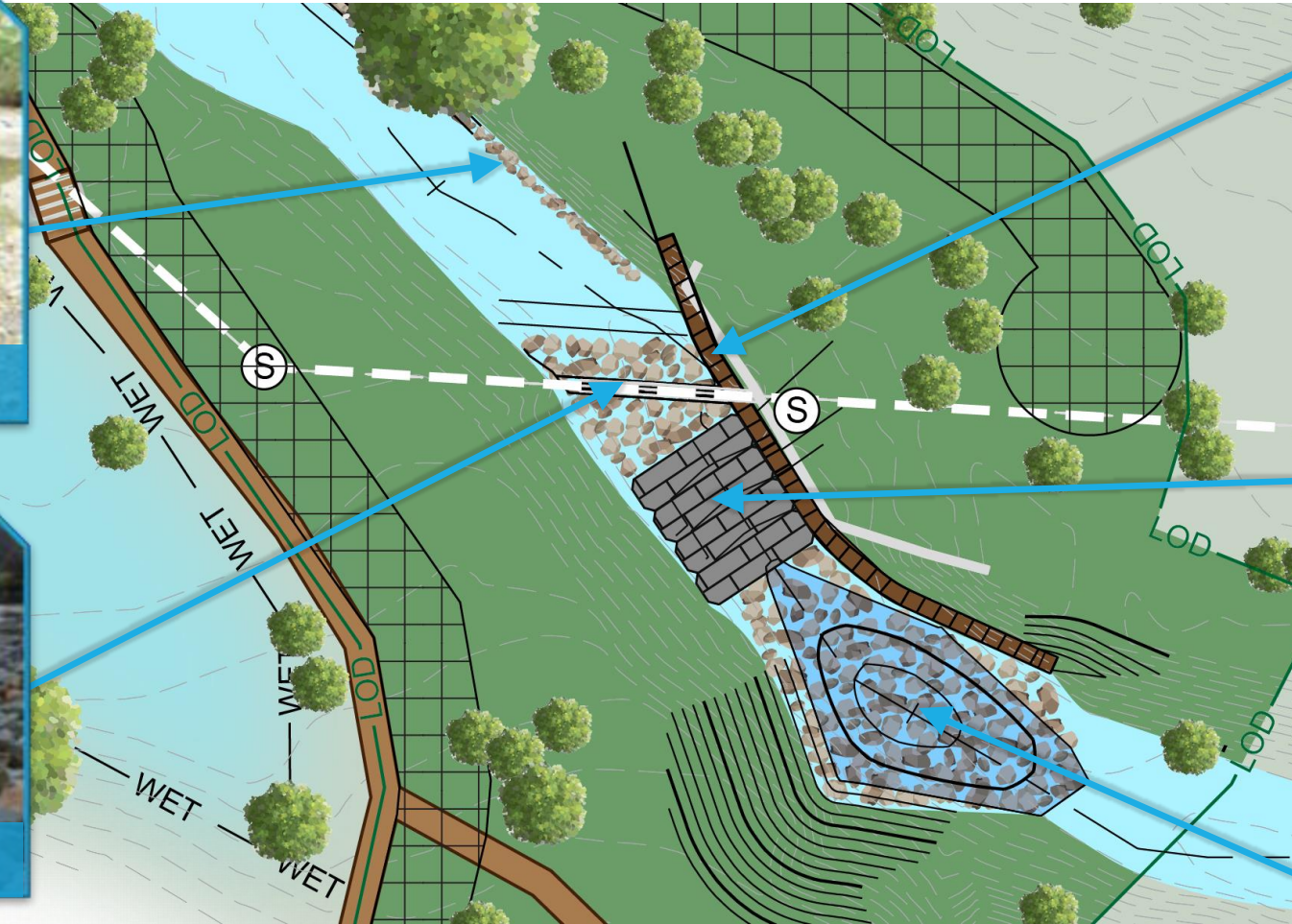
Proposed Approach: Project Area 4



Rock Packing



Concrete Encasement



Gravity Wall with Safety Railing



Boulder Weir



Plunge Pool



Minimal Disturbance and Replanting

- ▶ Minimal disturbance
 - ▶ Following “minimal approach” set by CBG and approved by Council
- ▶ Critical Root Zone Protection
 - ▶ Mulch and deck matting proposed to protect tree roots
- ▶ Native Plantings
 - ▶ Replanting anticipates 150 new trees



Deck Mat/Construction Access Road



Minimal Disturbance for Tree Preservation

Location	Living trees proposed for removal	Dead trees proposed for removal	Total trees proposed for removal
Project Area 1	19	12	31
Project Area 2	2	1	3
Project Area 3	2	0	2
Project Area 4	3	4	7
Total	26	17	43

- 53 trees estimated for removal in 2023 minimal design impact concept
- Of living trees proposed for removal, 11 are above 12" DBH and one is **above 24" DBH**



Tree Preservation: Project Area 1

Living trees
proposed for
removal

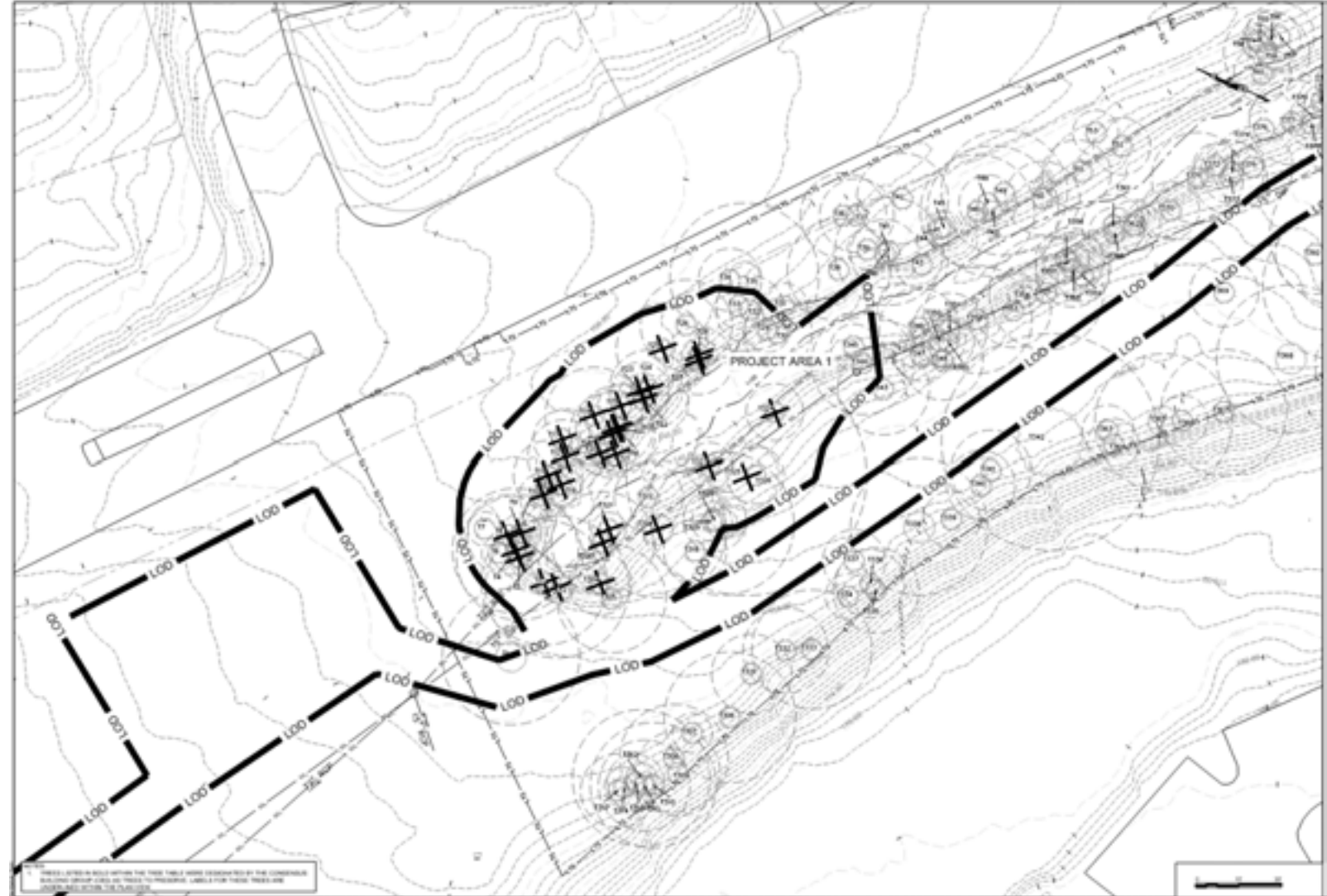
19

Dead trees
proposed for
removal

12

Total trees
proposed for
removal

31





Tree Preservation: Project Area 2

Living trees
proposed for
removal

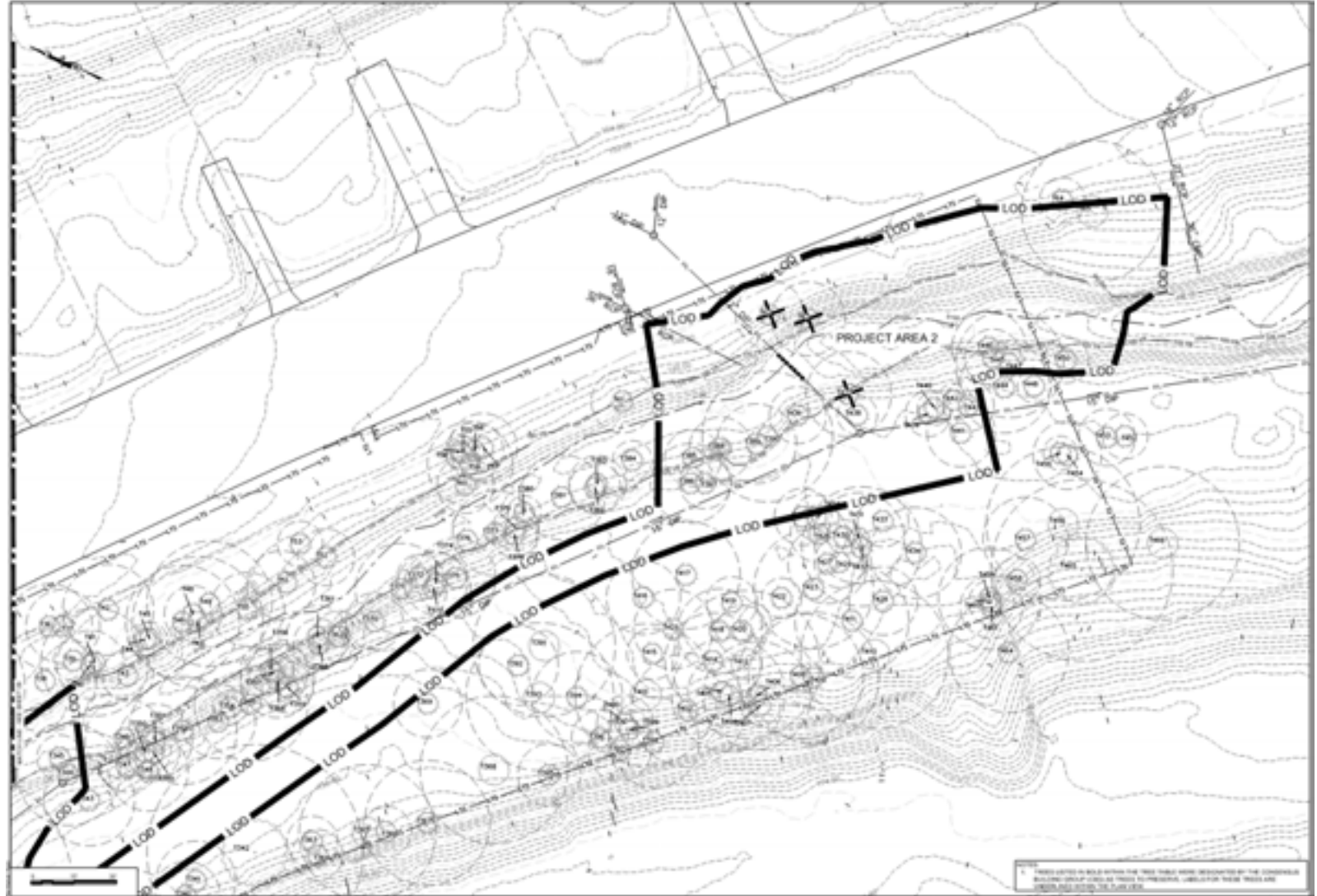
2

Dead trees
proposed for
removal

1

Total trees
proposed for
removal

3





Tree Preservation: Project Area 3

Living trees
proposed for
removal

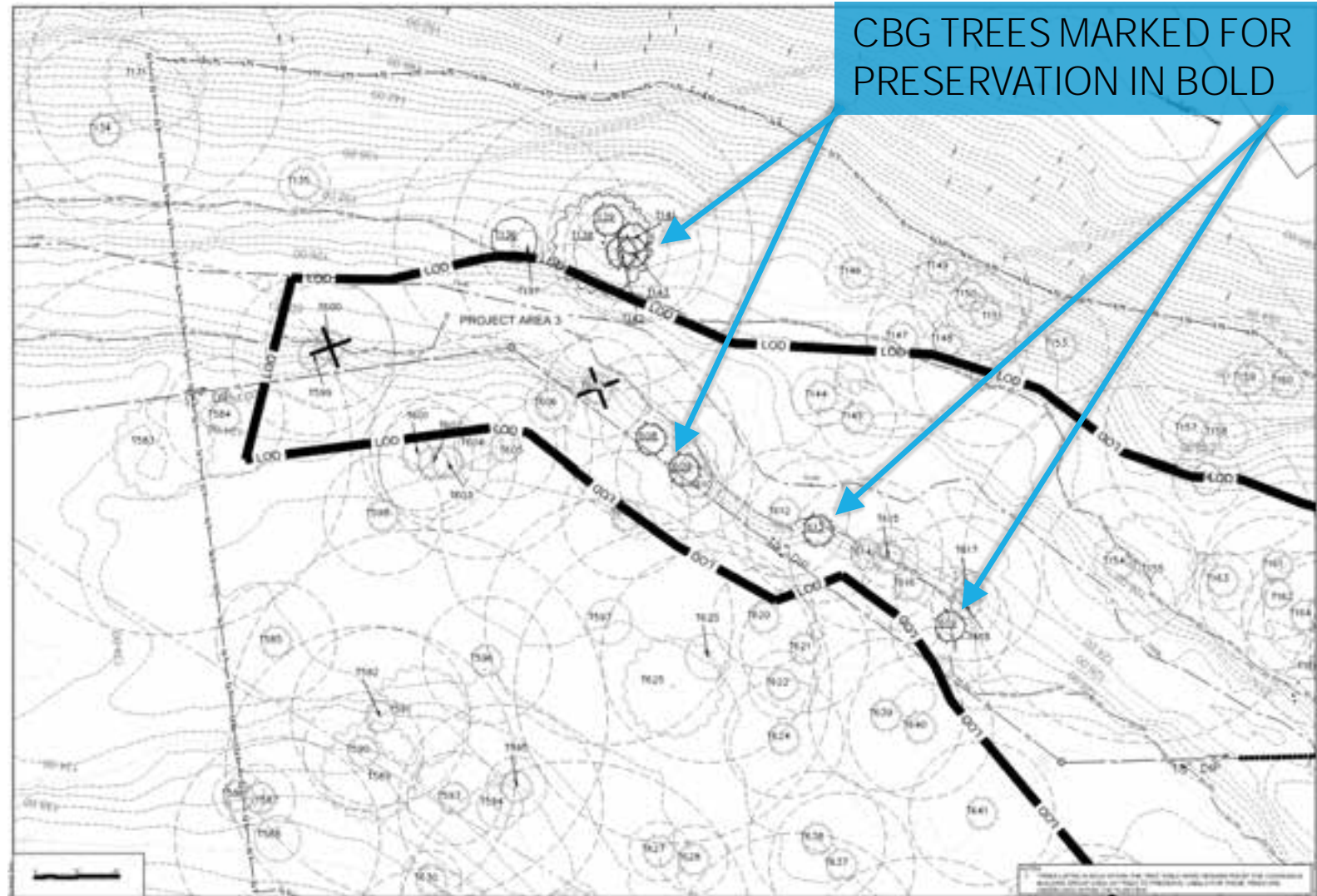
2

Dead trees
proposed for
removal

0

Total trees
proposed for
removal

2





Tree Preservation: Project Area 4

Living trees
proposed for
removal

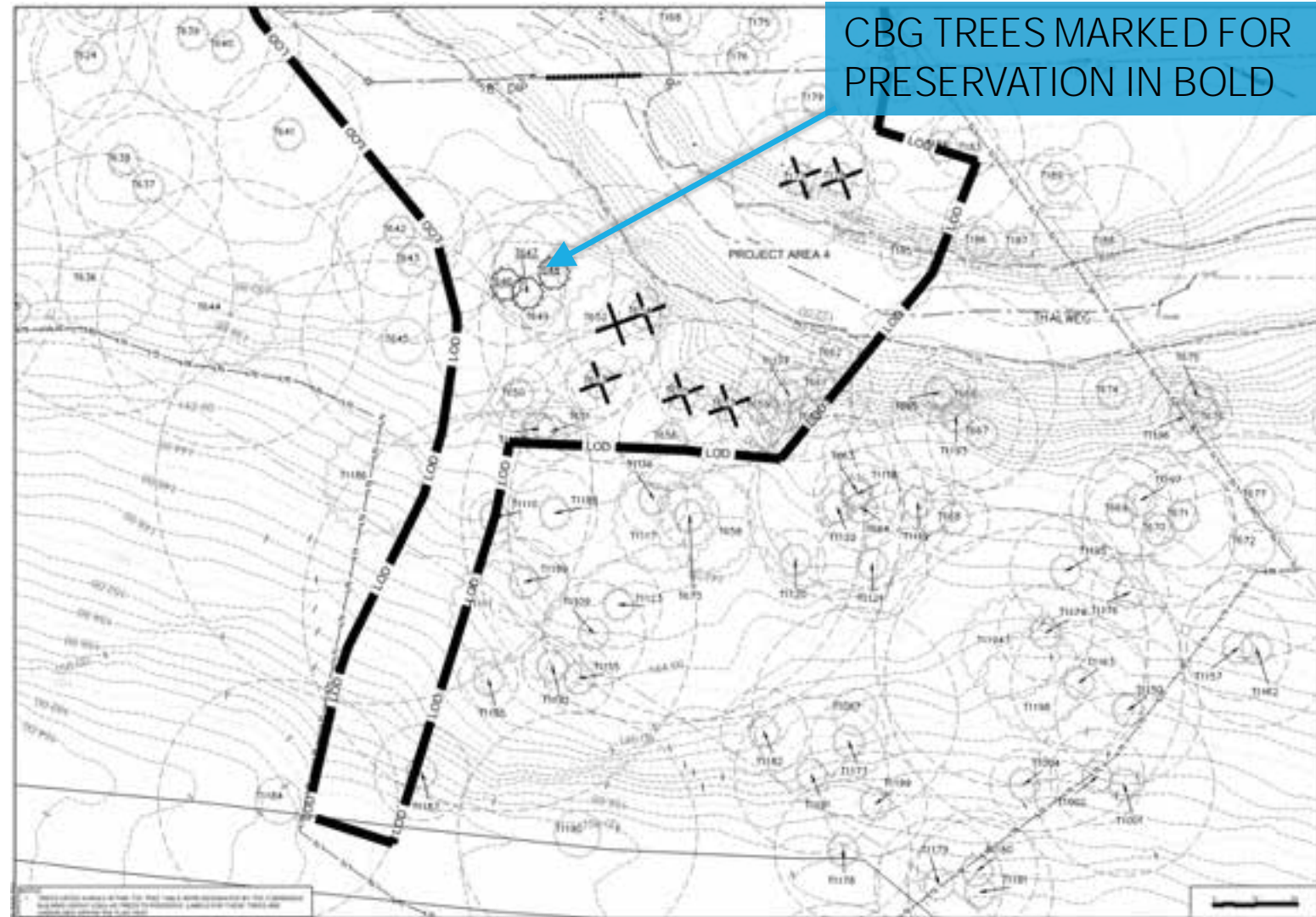
3

Dead trees
proposed for
removal

4

Total trees
proposed for
removal

7





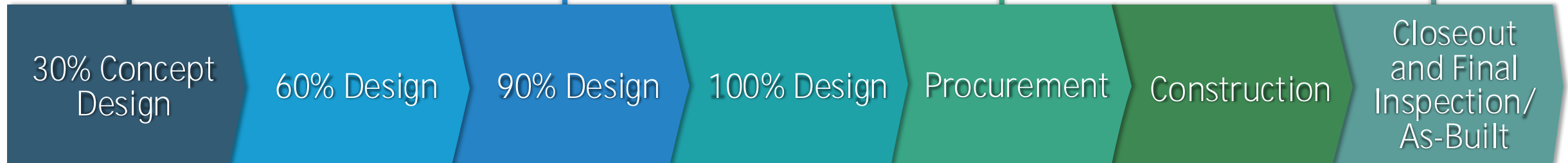
Project Schedule

June 15, 2025 -
December 15, 2025
Duration: 6 Months

May 15, 2026 –
July 31, 2026
Duration: 2.5 Months

October 1, 2026 –
February 28, 2027
Duration: 5 Months

September 1, 2027 –
December 15, 2027
Duration: 3.5 Months



December 15, 2025
– May 15, 2026
Duration: 5 Months

August 1, 2026 –
September 30, 2026
Duration: 2 Month

March 1, 2027 –
September 1, 2027
Duration: 6 Months



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Additional Information



What Will It Look Like?

- ▶ Streambank and Trail Stabilization
 - ▶ Gravity Retaining Walls
 - ▶ Installed along eroded banks in Project Areas 1, 2, and 4
 - ▶ Rock façade finish for natural aesthetics
 - ▶ Safety railings added near public access points
- ▶ Sheet Piles Installed at wall base to prevent undermining and bed scour
 - ▶ Chosen over deeper wall embedment for reduced impact, cost, and constructability
- ▶ Removal of Significant Woody Debris



What Will It Look Like?

► Gravity Retaining Wall Textures



Ledgestone

Ledgestone blocks give retaining walls a random, stacked stone look. Because they're made using architectural-grade precast concrete, the level of detail is outstanding.



Cobblestone

Cobblestone blocks have a great quarried stone aesthetic. Each one-ton block features the appearance of six smaller blocks, making it a great look for any size project.



Limestone

Limestone blocks have a natural split limestone texture that beautifully mimics real quarried limestone. The massive size of each block face gives walls an impressive scale.



Kingstone

Striking a balance between the scale of Limestone and relief of Ledgestone, Kingstone appears weathered by water and time like the crown of a natural stone outcropping.



Smooth

When you're looking for something a little more modern, the Redi-Rock Smooth texture with its crisp, clean lines provides the sophistication you're after.



What Will It Look Like?

▶ Streambed Improvements

▶ Boulder Cascades

- ▶ Project Area 1: 56 ft cascade, 4 ft drop
- ▶ Project Area 2: 95 ft cascade, 7.5 ft drop
- ▶ Project Area 4: 73 ft cascade, 3.4 ft drop

▶ Plunge Pool Redesign

- ▶ **Type I pool (36' x 30' x 3') to meet VDEQ standards**
- ▶ Energy dissipation and grade control

▶ Thalweg Realignment & Substrate Mix

- ▶ Stabilizes flow path and reduces erosion



What Will It Look Like?

► Boulder Cascade and Plunge Pool



Boulder Cascade



Plunge Pool



What Will It Look Like?

► Gravity Walls Around Manholes





What Will It Look Like?

► Concrete Encasement

