

Eagle Creek Flood Basin – Industry Day



June 5, 2025

EAGLE CREEK FLOOD BASIN - INDUSTRY DAY



HSSE: Safety

Situational Awareness



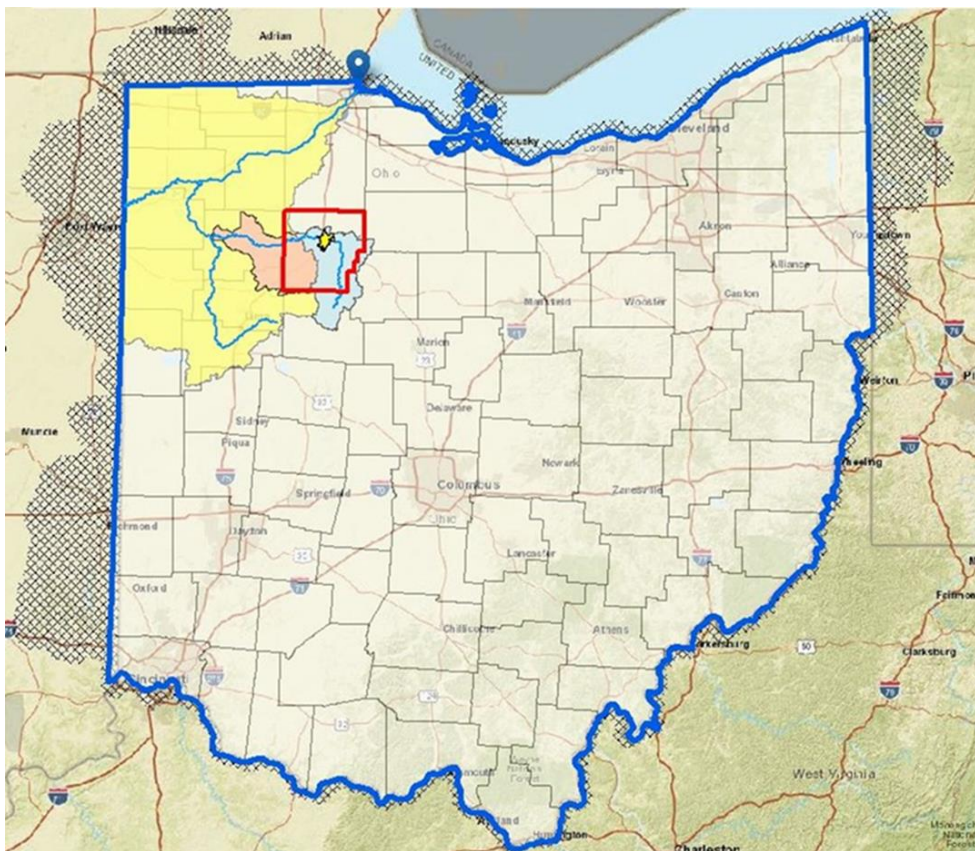
SaferTogether™

Situational Awareness involves being aware of what is happening around you to understand how information, events, and your own actions will impact your goals and objectives.

Ask questions about your work environment and consider the consequences:

1. **LOOK** – What is happening?
2. **THINK** – What will happen next and how will it affect me?
3. **ACT** – Identify a hazard and do something about it.

Remember to communicate with your team and others involved.



Agenda

1. Welcome and Introductions
2. Industry Day Meeting Protocols
3. Project Presentation
4. Frequently Asked Questions
5. Closing



Introductions

Steve Wilson, PE, PS

PROJECT MANAGER - MWCD
SCWILSON@FBFALLS.COM

John Menninger, PE

CIVIL ENGINEER OF RECORD - STANTEC
JOHN.MENNINGER@STANTEC.COM

Kyle Blakley, PE

GEOTECH ENGINEER OF RECORD - STANTEC
KYLE.BLAKLEY@STANTEC.COM

David Hayson, PE, SI

PROJECT TECHNICAL LEAD - STANTEC
DAVID.HAYSON@STANTEC.COM



Industry Day Meeting Protocols

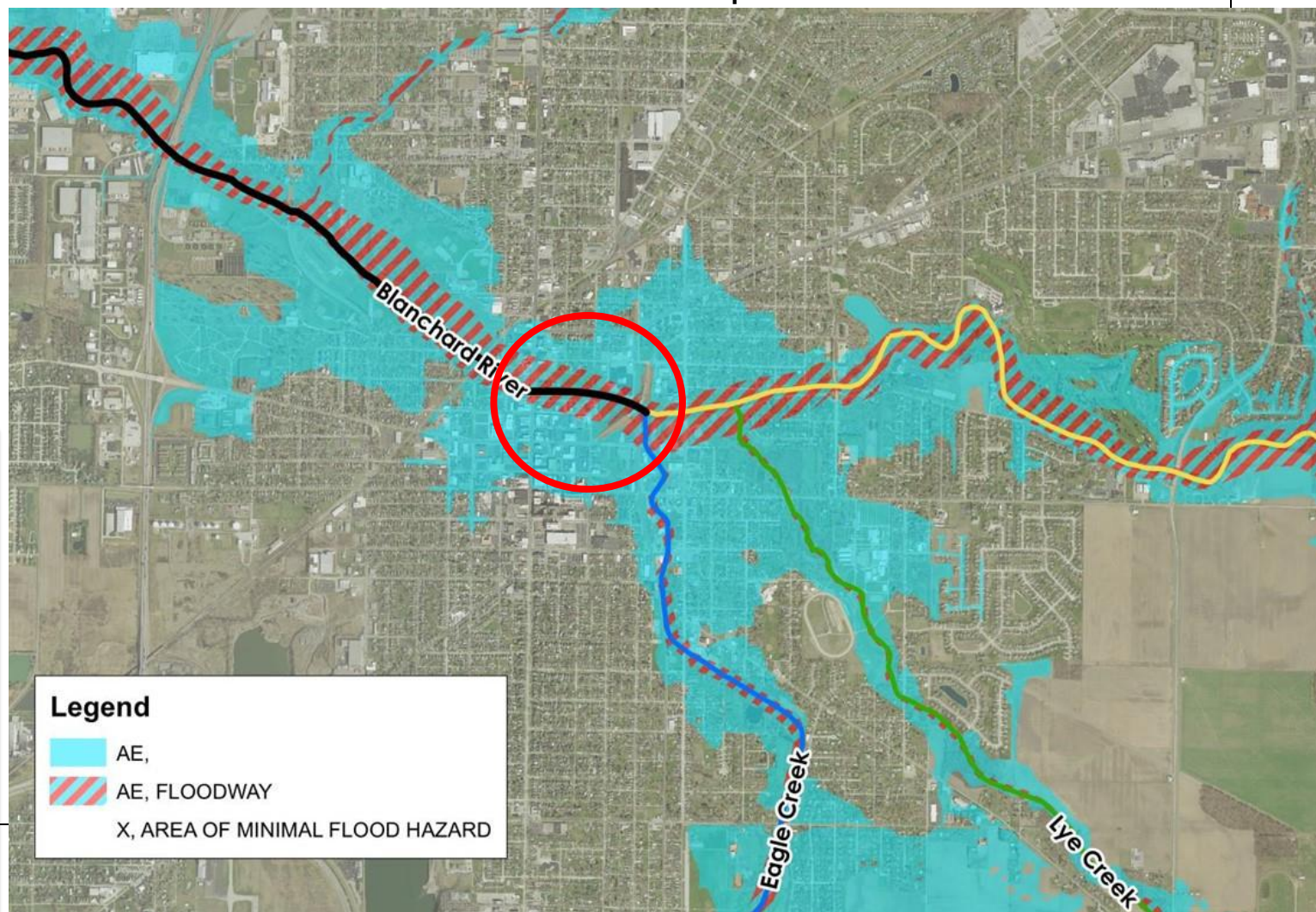
- Industry Day attendance not required to Bid
- Meeting Format: Project Presentation followed by FAQ / Q&A
- May defer some questions for written response via Bid Documents
- Additional questions may be submitted during the bidding process
- Optional site walk following presentation

Minutes or notes from this meeting will not be distributed. No information provided by MWCD or any of its representatives during this meeting shall be binding, unless such information is included in the bidding documents.

Project Background

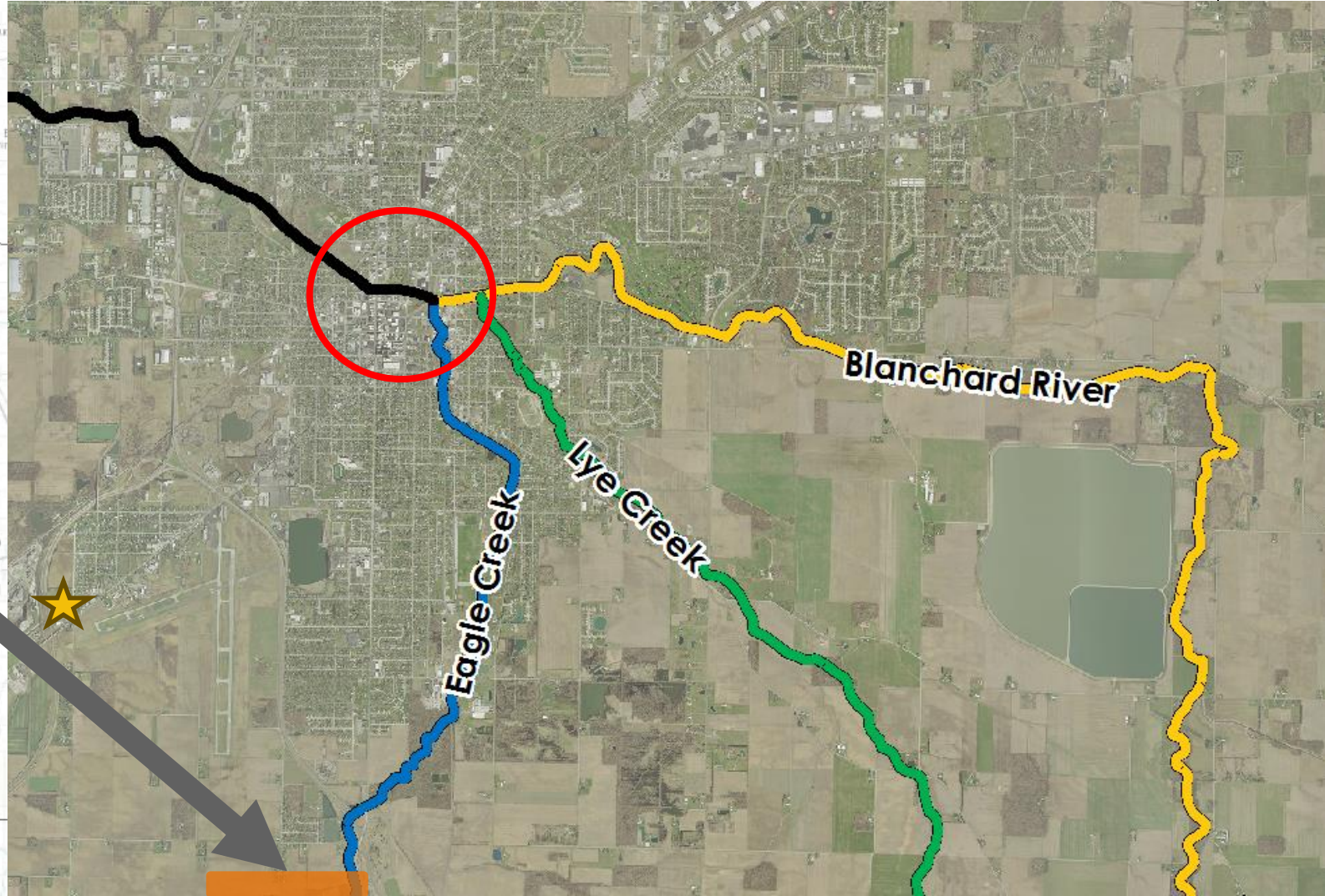
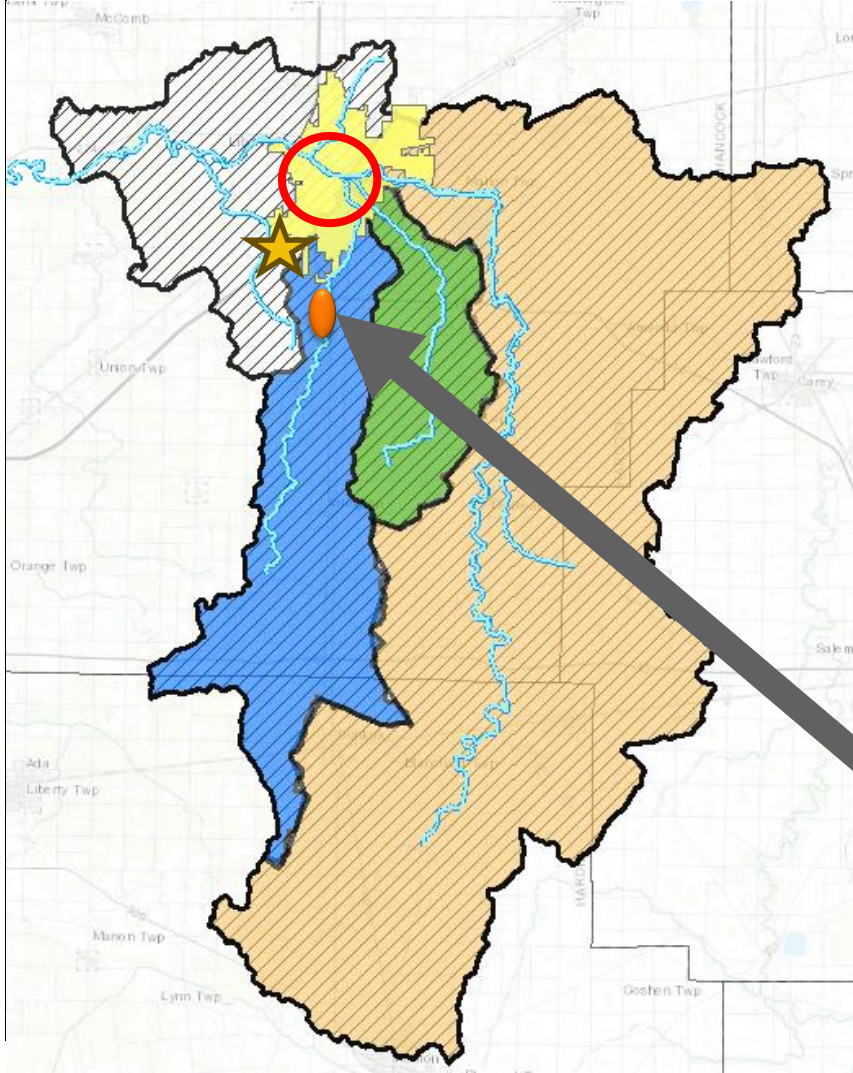
FEMA - 1% Special Flood Hazard Areas

Downtown Findlay, August 2007





Project Background / Objective





Project Objective

Primary Goal

- Reduce peak flow rates in Eagle Creek and the Blanchard River during large storm events to mitigate potential damages
 - Provide storage for 100-year flood

Secondary Goal

- Improve water quality by creating wetlands and native habitats / riparian corridors

Tertiary Goal

- Provide passive recreation opportunities



Project Site / Existing Conditions



Project Site / Proposed Conditions

- Dry-reservoir storage basin
- Detains water during flood events



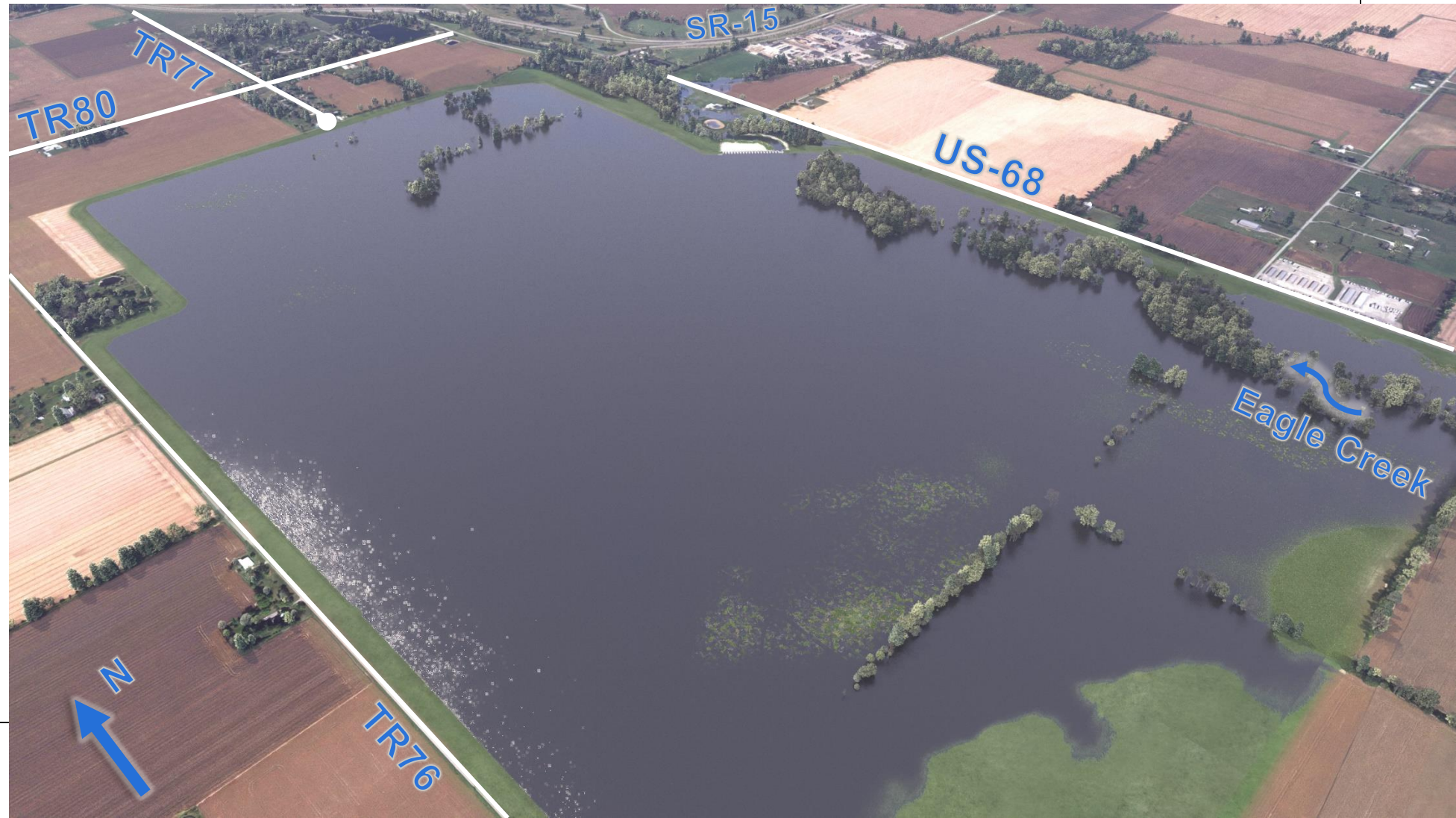


Project Site / Storm Conditions



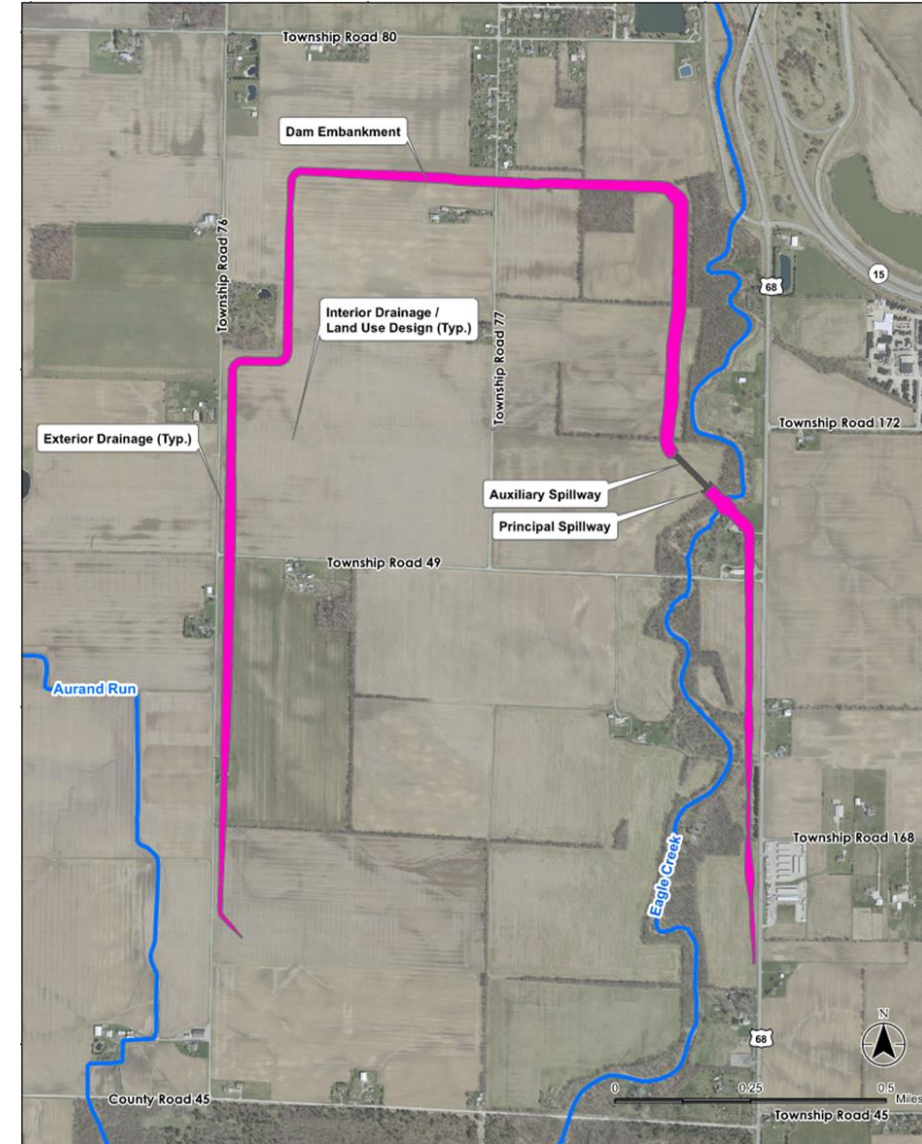


Project Site / Flood Storage Conditions



Major Project Components

- Dam Embankment
- Principal Spillway
- Auxiliary Spillway
- Exterior Drainage
- Interior Plantings / Restoration
/ Bank Stabilization



Dam Embankment

Embankment Length

- ~3.70 miles (19,500 ft.)

Max. Embankment Height

- ~29 feet

Average Embankment Height

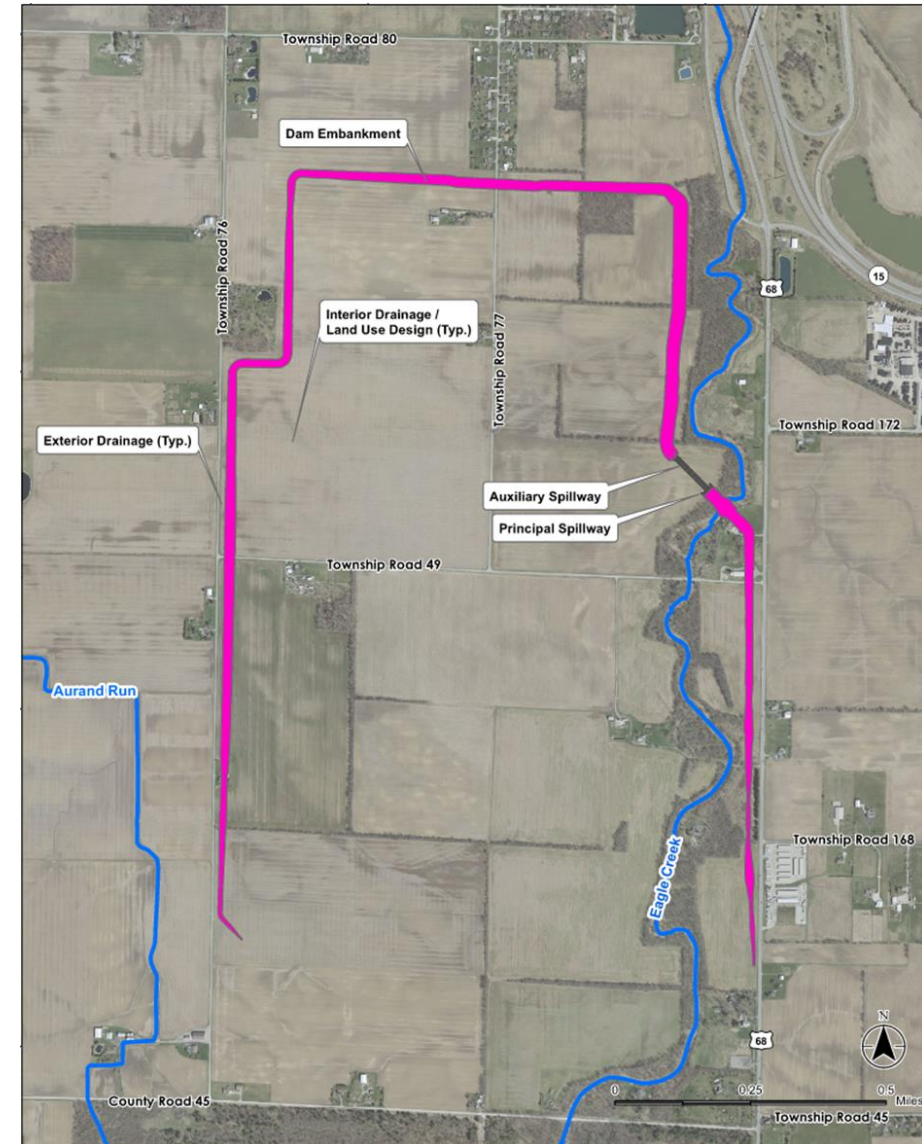
- ~12.5 feet

Storage Footprint

- ~900 acres

Storage Capacity @ Normal Pool

- ~7,000 ac-ft

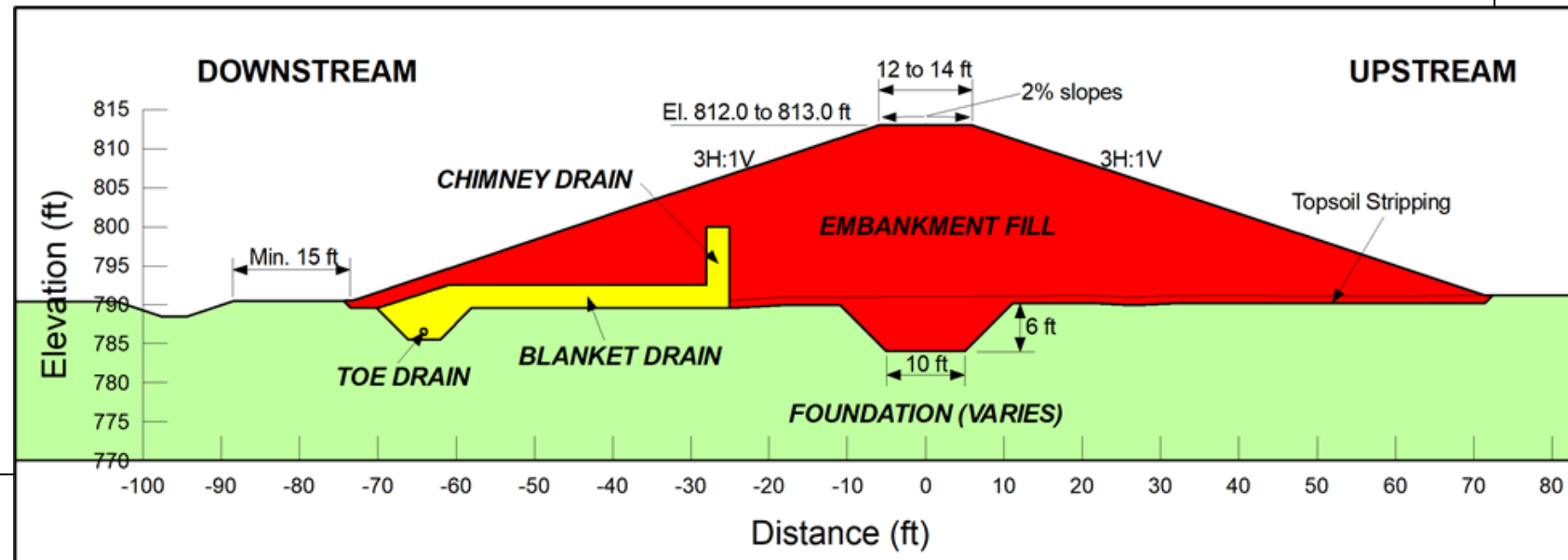




Dam Embankment

Typical Section:

- Earthen Embankment (~672,000 CY)
 - Typically Fill Type 1 (primarily clay soils)
 - On-site soil borrow material
- 3H:1V side slopes
- 15' wide bench
 - Interior
 - Exterior

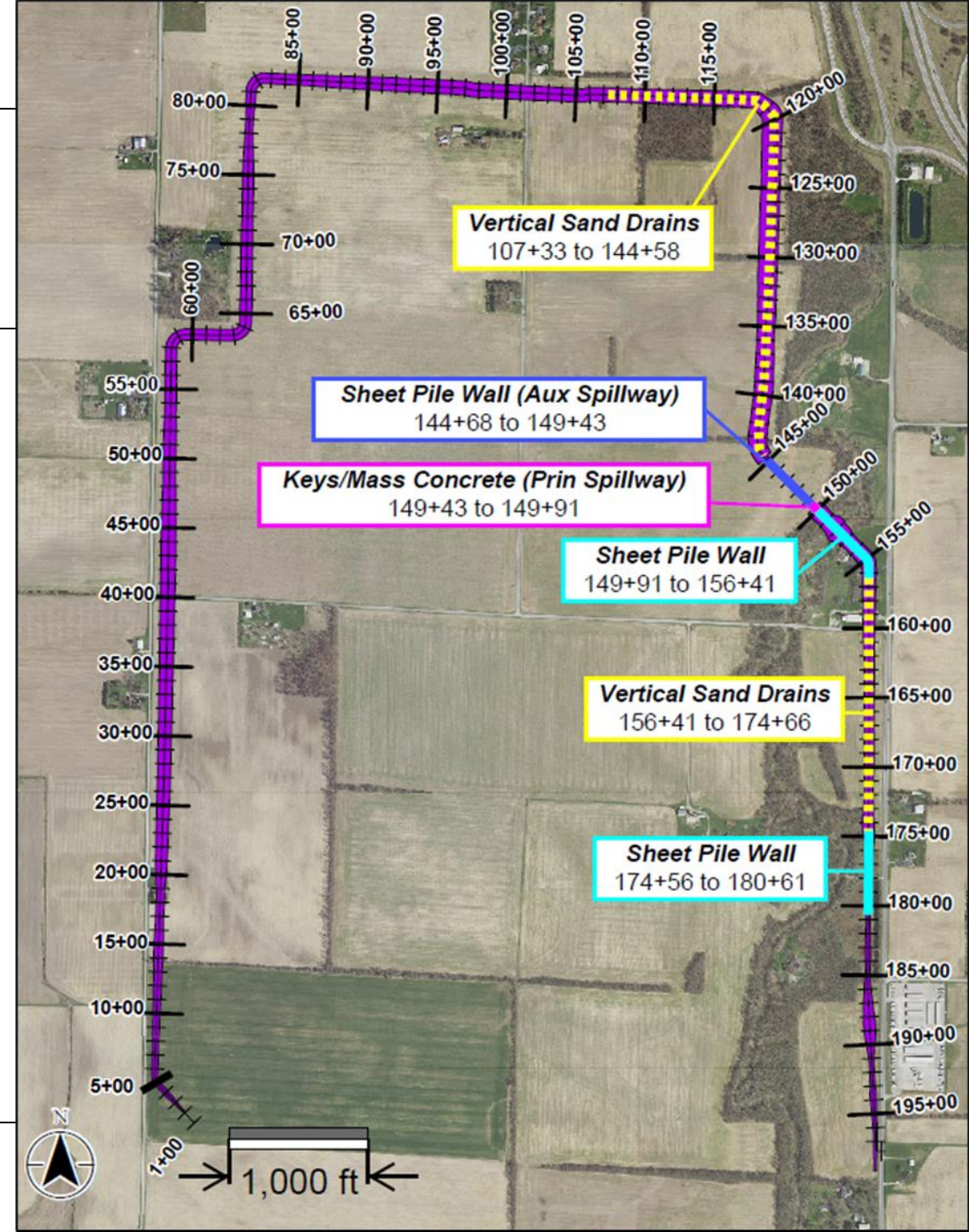
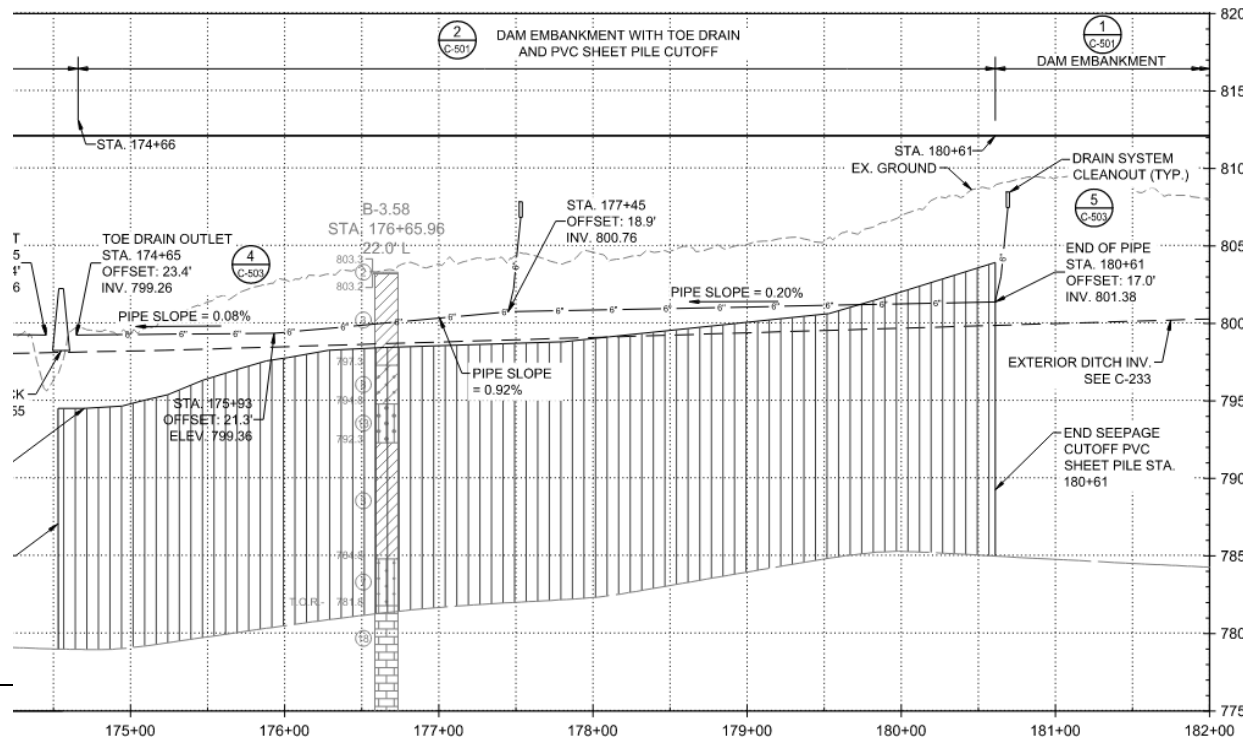




Dam Embankment

At Critical Sections:

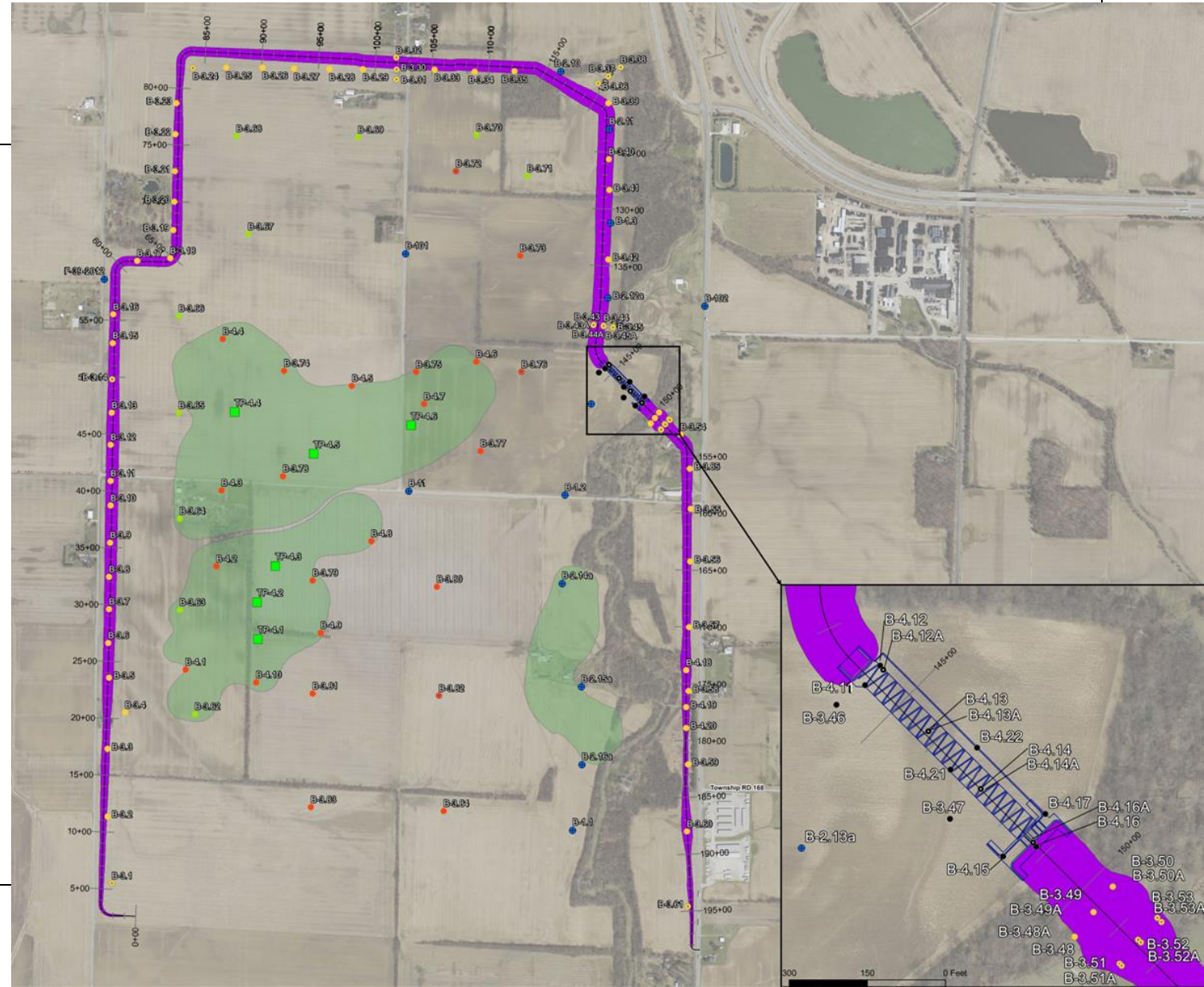
- Vinyl Sheet Pile Cutoff – ~15-18' deep



Dam Embankment – Borrow Material

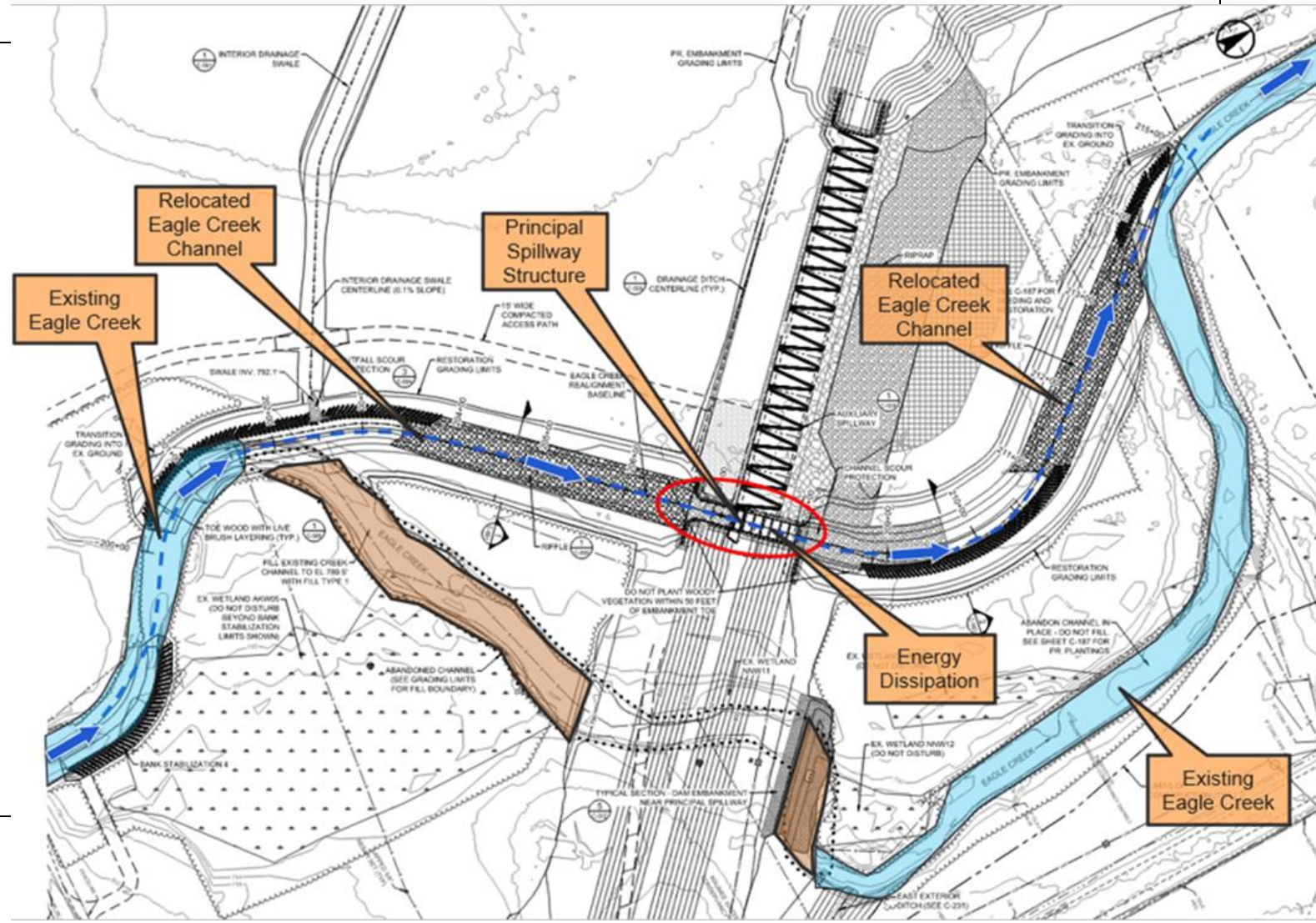
~120 Exploration Locations

- **72** Embankment Borings
- **13** Principal / Auxiliary Spillway Borings
- **23** Borings and **6** Test Pits in Proposed Borrow / Wetland
- **10** Borings to Evaluate Continuity of Fine-Grained Surface Layer



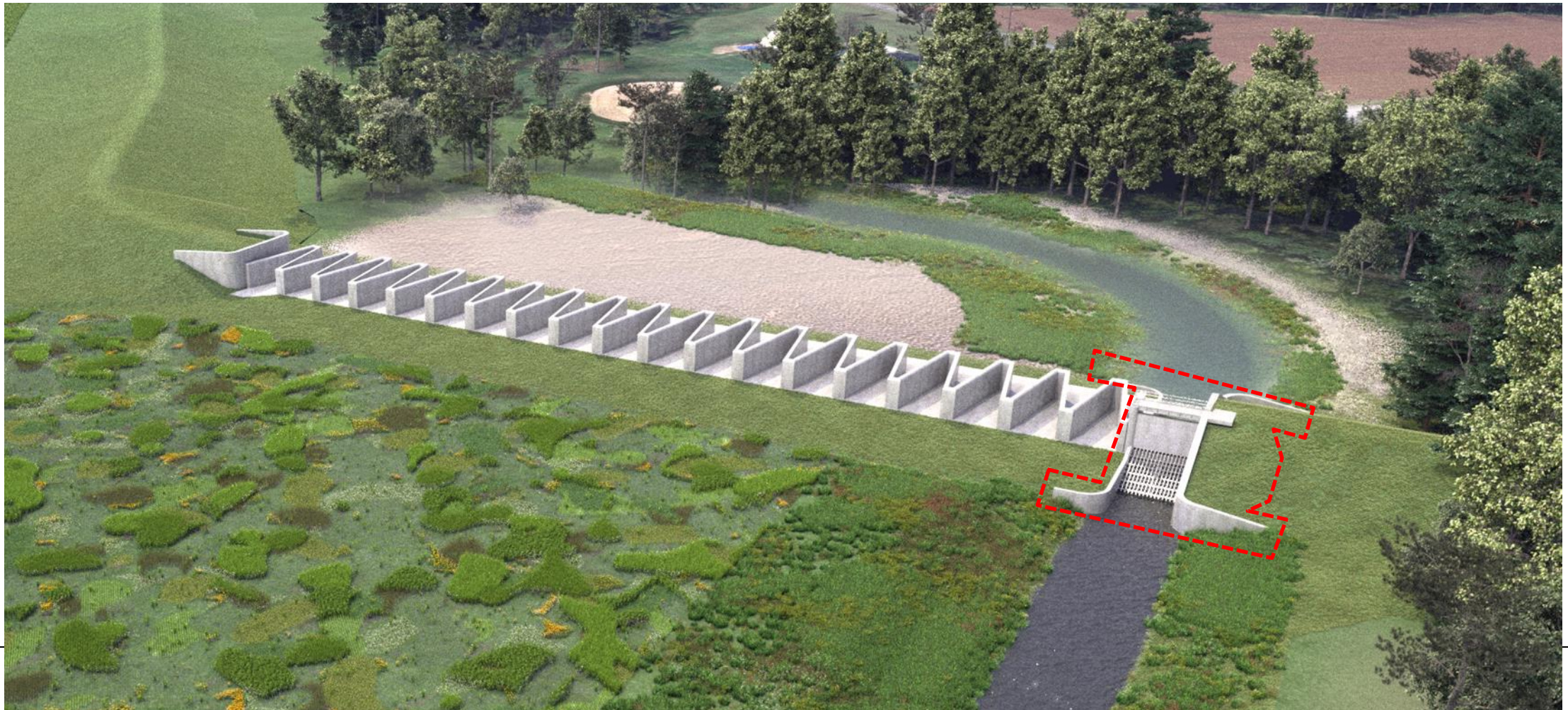
Integrated Principal / Auxiliary Spillway

- Detains water during flood events
- Principal Spillway maintains controlled release of discharge into Eagle Creek through control wall orifices
- ~1,250' new channel



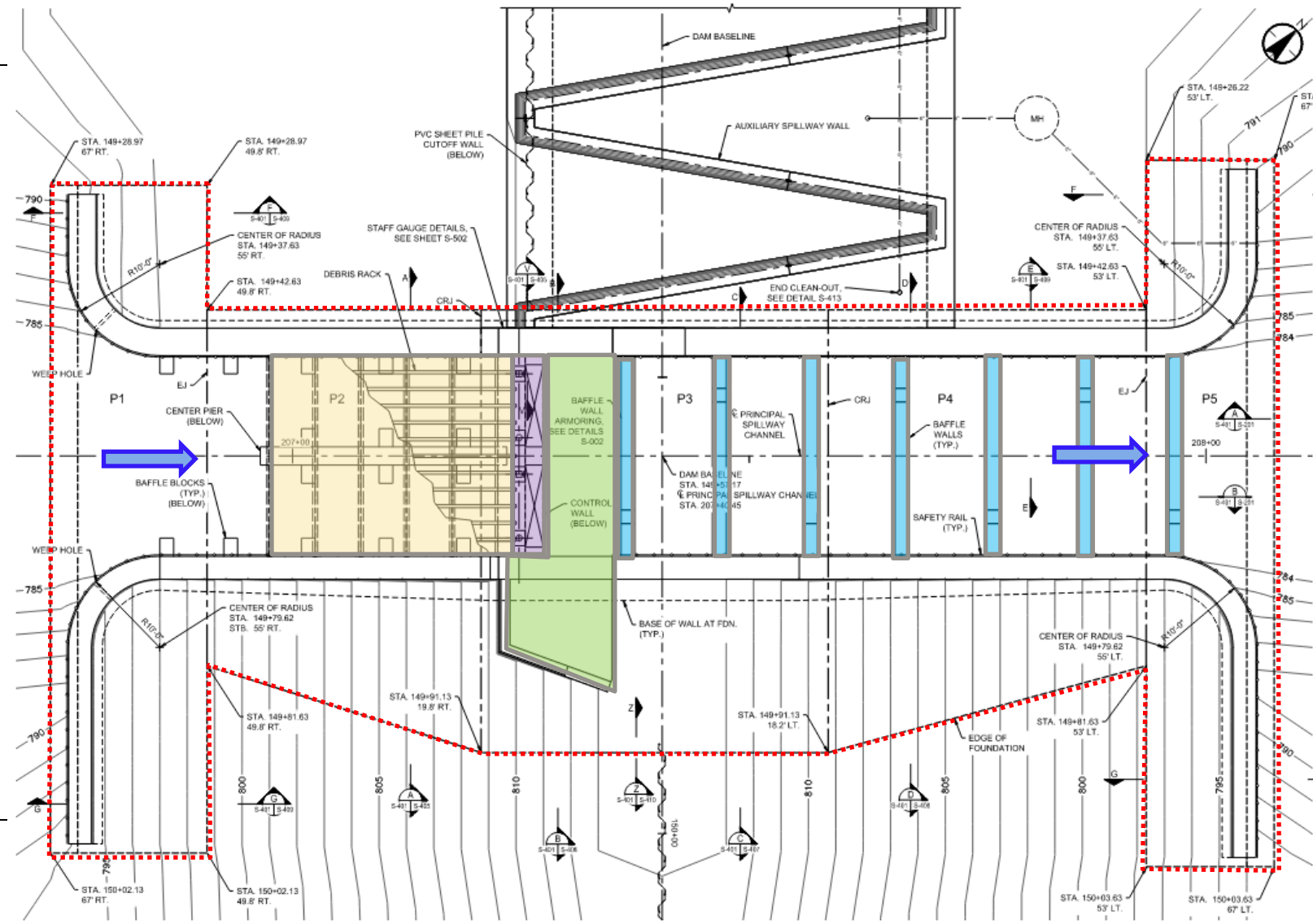


Integrated Principal / Auxiliary Spillway



Principal Spillway

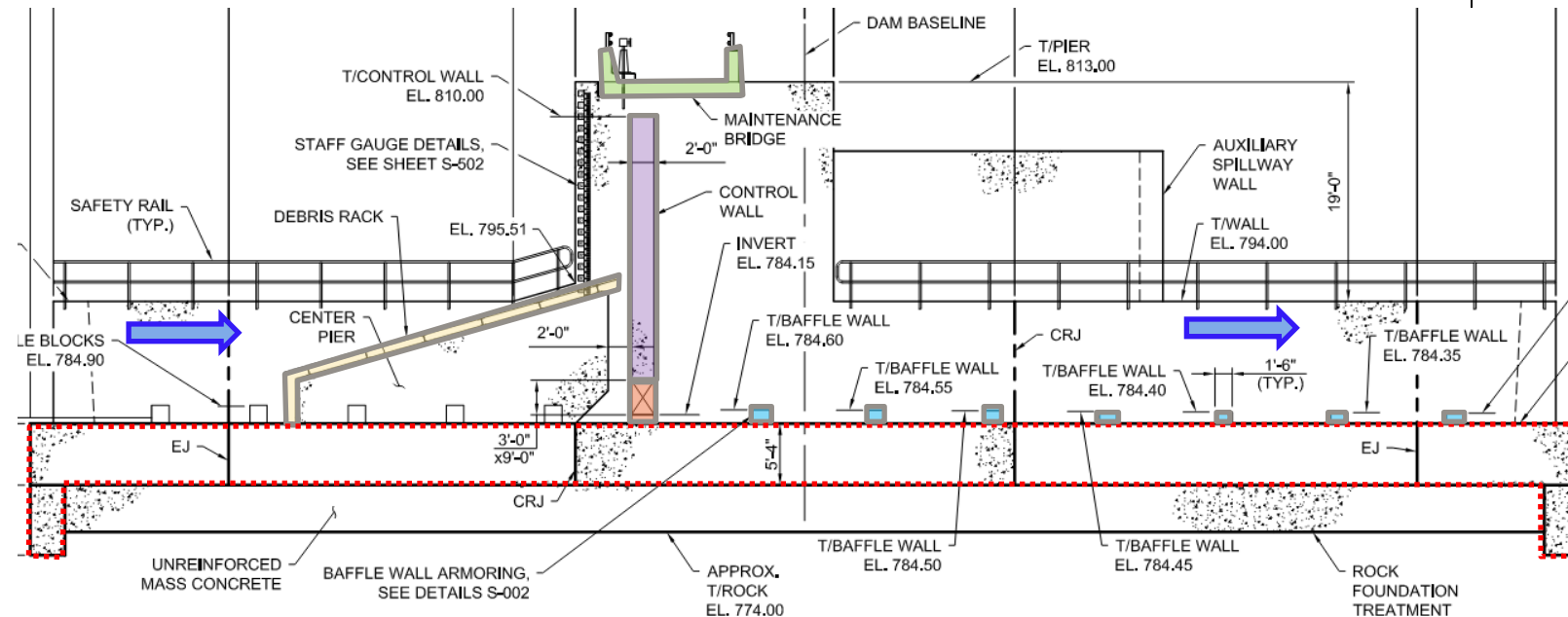
- Spillway Channel
 - ~134' x 22'
- Steel Reinforced Concrete
 - ~2,300 CY Total
- Debris Rack
 - Stainless Steel (7,700 LB)
 - 22' W x 13' H x 29' L





Principal Spillway

- Founded on bedrock
- Control wall
 - Two orifices w/ gates
- Baffle blocks
 - Energy dissipation
- Maintenance bridge

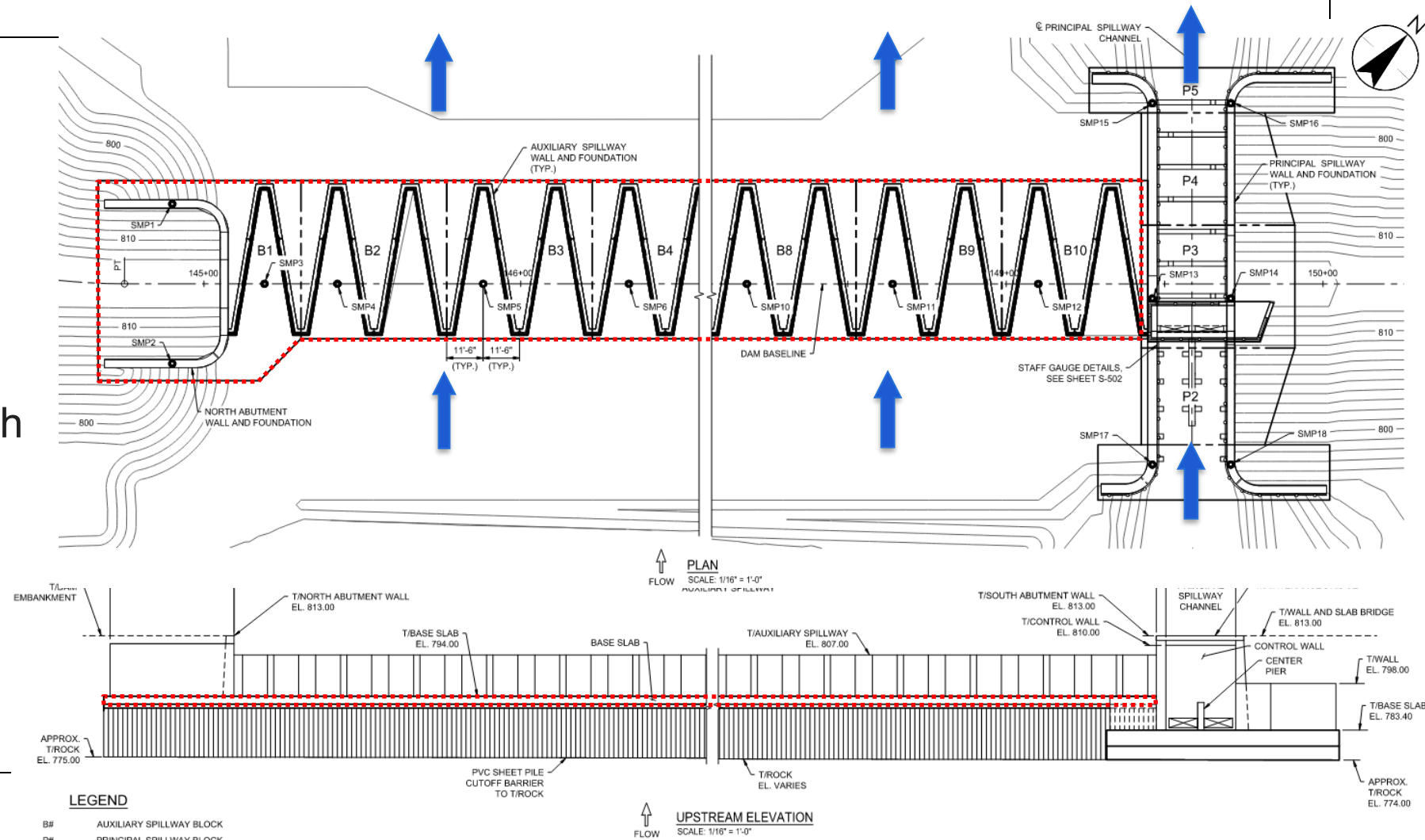




Auxiliary Spillway

Labyrinth Spillway

- Steel Reinforced Concrete
 - ~4,620 CY
- 437 LF, 13' High
- 1,672' Effective Length
- 2.5' thick foundation
 - ~476' x 49'
- PVC sheet pile to bedrock





Integrated Principal / Auxiliary Spillway





Integrated Principal / Auxiliary Spillway





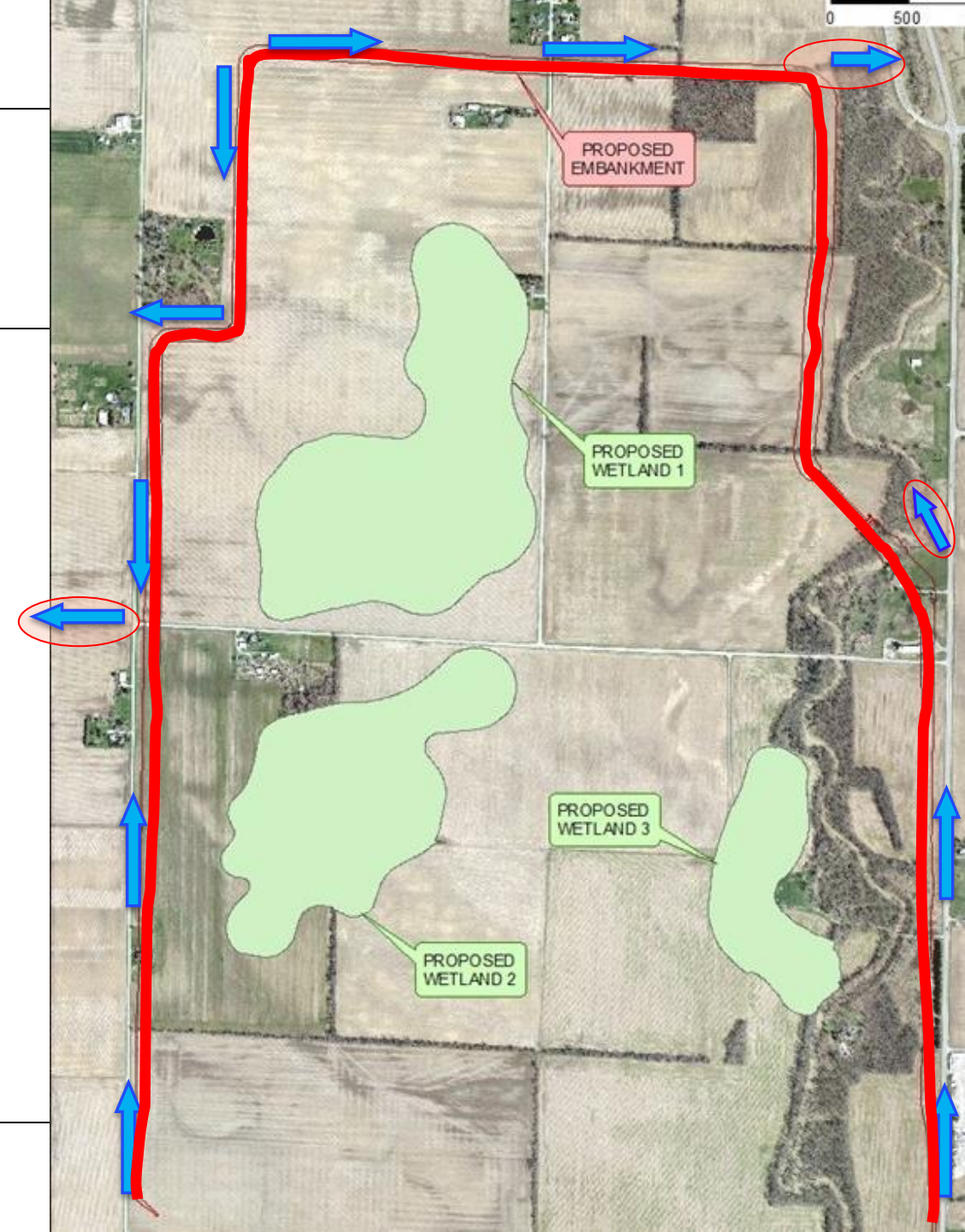
Integrated Principal / Auxiliary Spillway





Exterior Drainage

- Western side of site
 - To Aurand Run ditch
- North and East
 - To Eagle Creek
- Trapezoidal ditches designed to convey runoff
- Culverts at road crossings

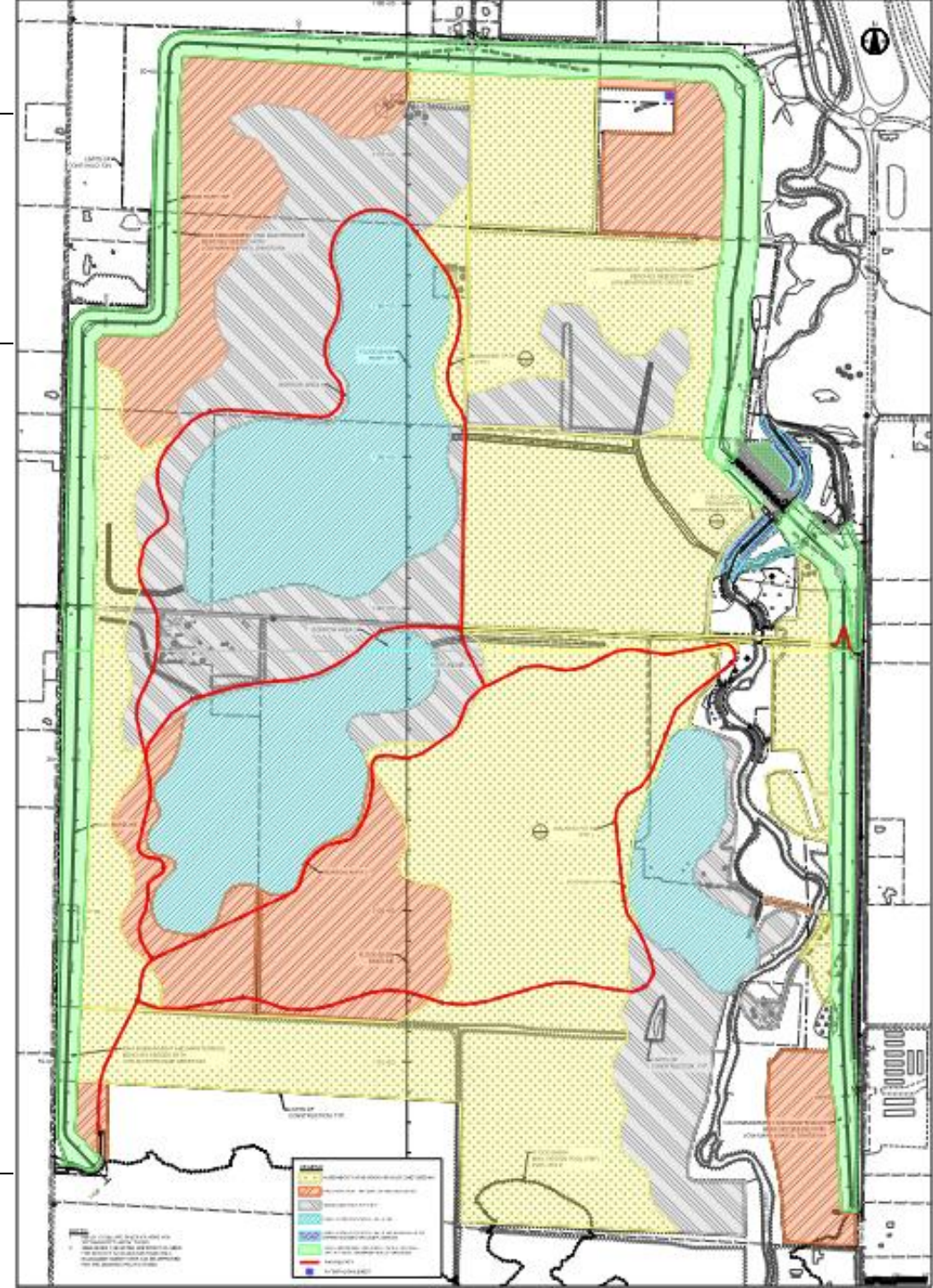


Interior Work

- Base Bid: Restoration of borrow areas with native seed
- Alternate Bid: Fine grading of borrow areas for wetland restoration with enhanced plantings

LEGEND

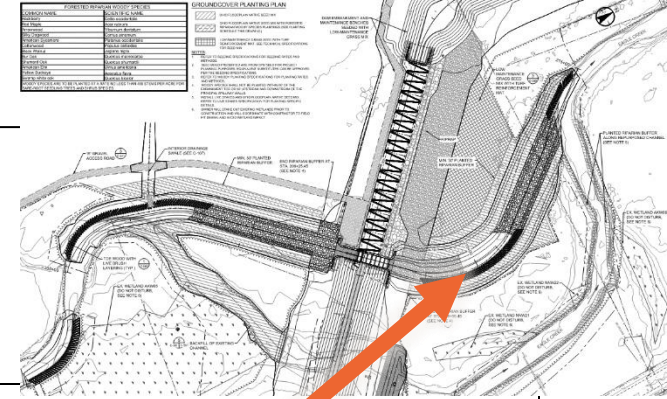
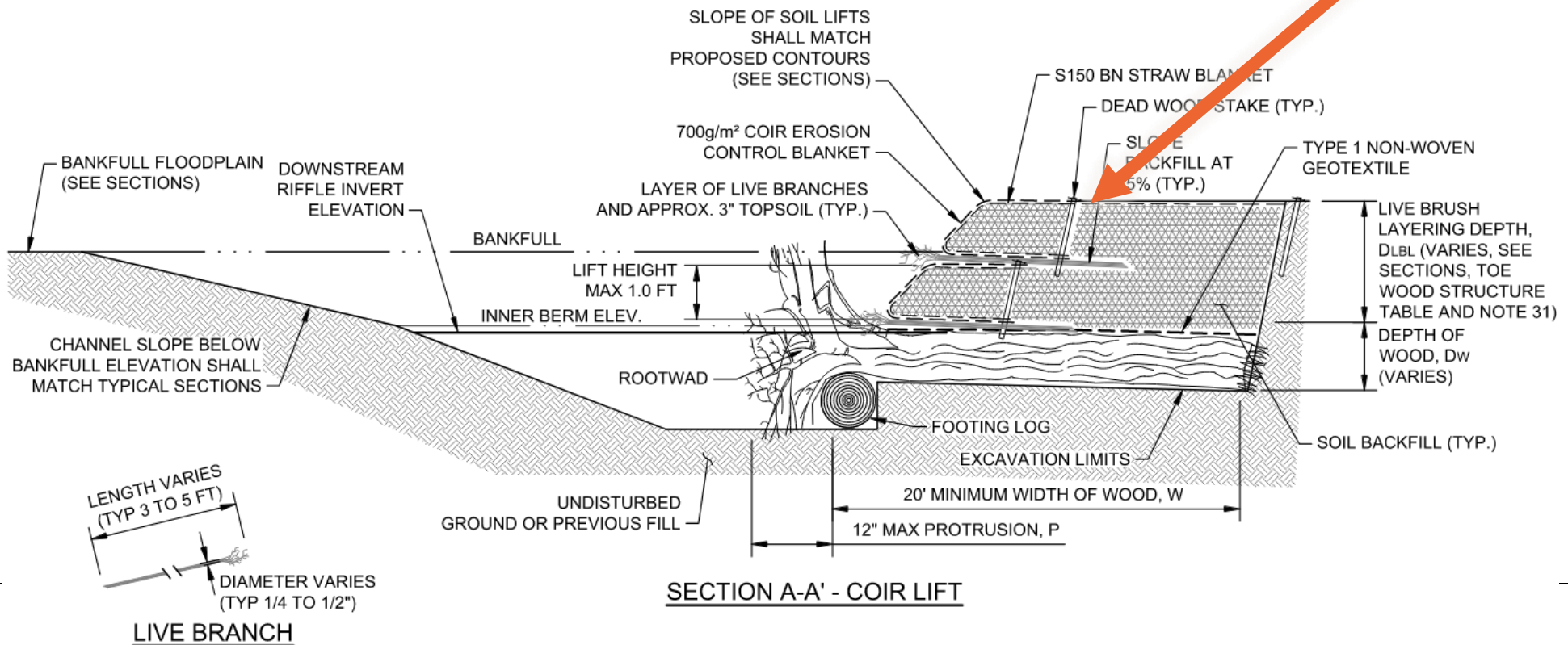
	MIXED HEIGHT NATIVE GRASS AND WILDFLOWER SEED MIX
	EASTERN GREAT LAKES NATIVE POLLINATOR MIX
	WOODLAND EDGE SEED MIX
	OHIO FLOODPLAIN NATIVE SEED MIX
	OHIO FLOODPLAIN NATIVE SEED MIX WITH FORESTED RIPARIAN WOODY SPECIES PLANTINGS
	DAM EMBANKMENT AND MAINTENANCE BENCHES SEEDED WITH LOW-MAINTENANCE GRASS MIX
	WALKING PATH





Bank Stabilizations

- ~1,400 LF Toe Wood
- ~6,100 LF Live Brush Layering





Bidding Process

“Lowest and Best”

EJCDC – Base Contract Documents

Qualifications

- Schedule A – Current Projects
- Schedule B – Previous Experience w/ Similar Projects
- Schedule C – Key Project Individuals
- Schedule D – Project Specific Experience
 - Embankment Dams
 - Concrete Hydraulic Structures and Spillways
 - Oversight by ODNr Dam Safety



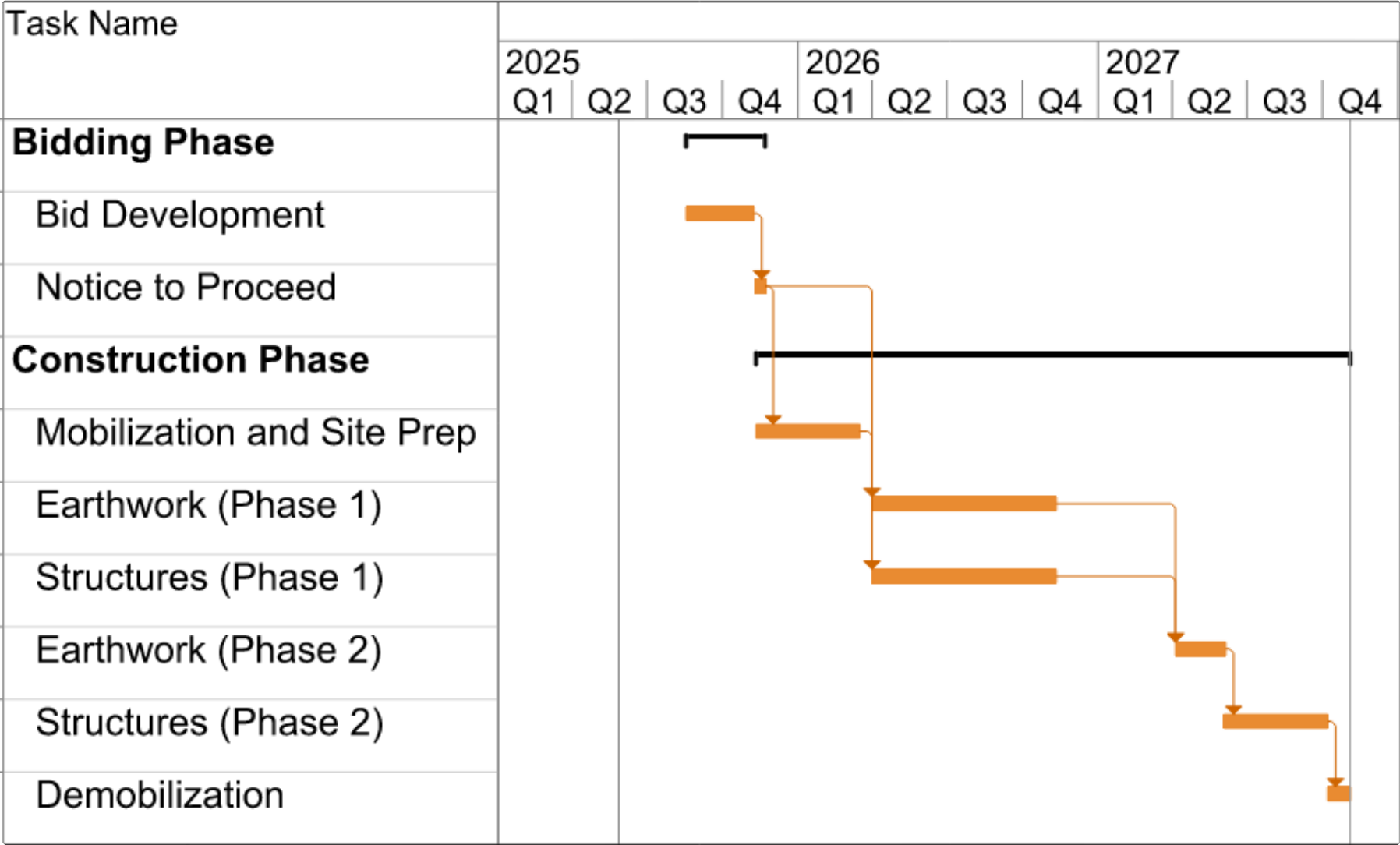
Bidding Process

Schedule

- Currently anticipate advertising for bids in Aug. 2025
- A local pre-bid meeting will be held around the mid-point of bid advertisement to provide additional opportunity for questions.
- Bid Opening anticipated Oct. 2025
- Notice to Proceed to be issued in November 2025



Tentative Construction Schedule





Schedule Drivers

Work Restrictions

- Tree Clearing (4/1 – 9/30)
- In-Water Work (3/15 – 6/30)
- ODNR Dam Safety Winter Work Plan (12/1 – 4/15)

Staging

- Embankment (2 Phases)
- Structures (2 Phases)
- Stream Diversion



Construction Costs

Opinion of probable construction cost:
~\$42,400,000

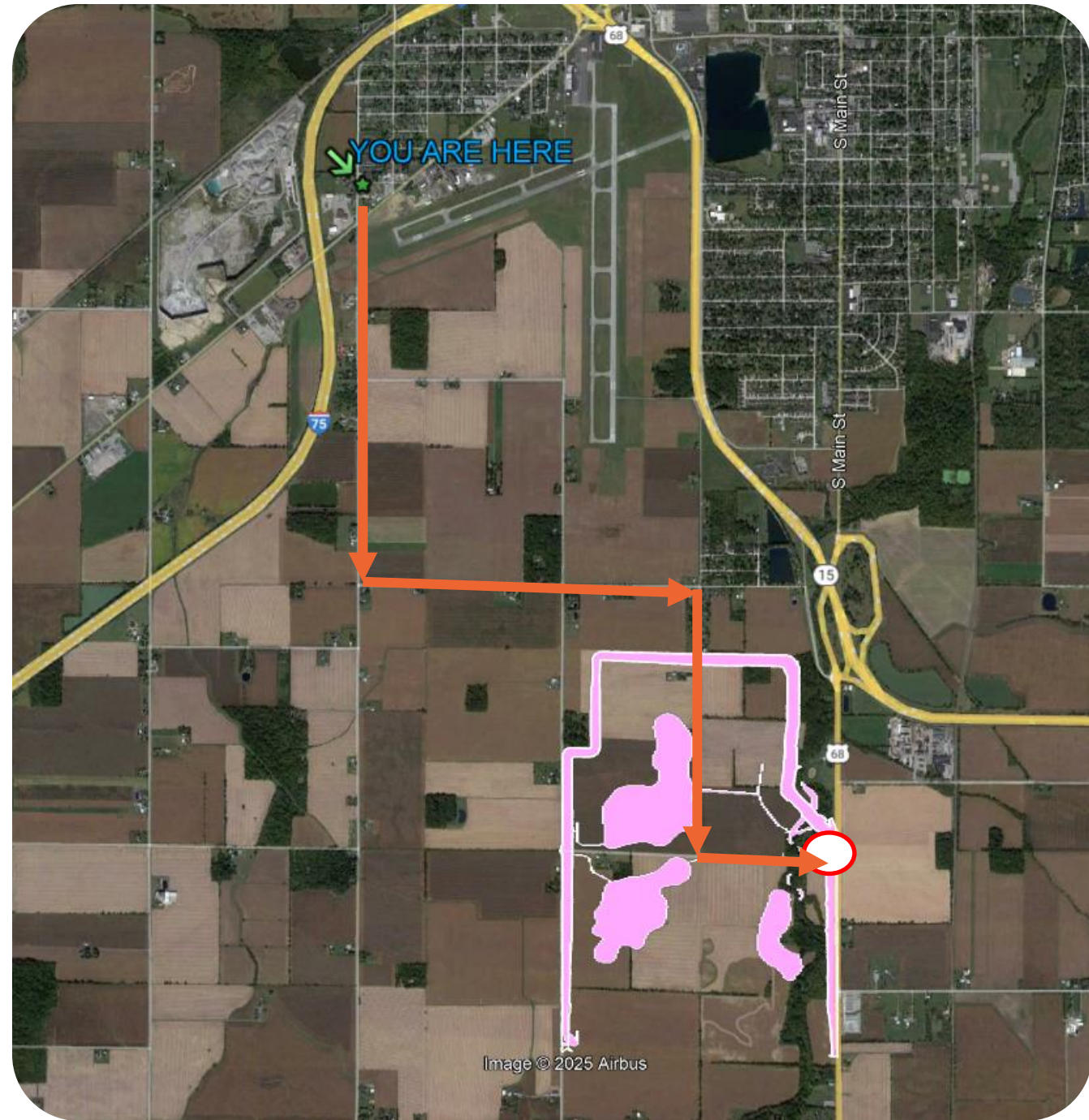
Value Engineering Cost Proposals (VECP)

- 50/50 split on savings
- Significant changes must be approved by ODNR Dam Safety

Optional Site Visit

Corner of TR49 and US-68

40.979308, -83.651156





www.HancockCountyFlooding.com

Thank you

Steve Wilson – scwilson@fbfalls.com

- Maumee Watershed Conservancy District

John Menninger – john.menninger@stantec.com

- Stantec Consulting Services Inc.

Kyle Blakley – kyle.blakley@stantec.com

- Stantec Consulting Services Inc.

David Hayson – david.hayson@stantec.com

- Stantec Consulting Services Inc.