Brightwood Lake Dam Removal & Kellogg Creek Restoration

Public Meeting

December 13, 2021

RiverReach Construction

GPD GROUP

EnviroScience
Excellence In Any Environment

Concord Township 1822

Stormwater Management 1840 Lake
www.lakecountyohio.gov/smd

CEC
Civil & Environmental Consultants, Inc.

Agenda

1. Introductions
2. Where We've Been
3. Project Goals
4. Project Status
5. Conceptual Design
6. Landscape
7. Anticipated Schedule
8. Frequently Asked Questions
9. Questions

Introductions

Design Build Team

Bob Parker

Project Manager

Civil & Environmental Consultants Inc.

- Owners Representative

Ivan Valentic

Project Manager

GPD Group

- Survey
- H&H Modeling
- Civil Engineering
- Landscape Architecture

Julie Bingham

Restoration Design Manager

EnviroScience Inc.

- Stream Assessment
- Ecological Services
- Restoration Design

Shannon Carneal

Project Principal

RiverReach Construction

- Construction Management
- Construction

Where We've Been

Brightwood Lake Dam Removal & Kellogg Creek Restoration

Where We've Been

Brightwood Dam

Brightwood Lake Dam was classified as a Class 1 dam and needed improvements to meet Class 1 dam standards

- Rehabilitated dam and dredge sediment
  - Approximately $5 million cost
  - No funding available
  - Dam is still impediment to fish migration and Kellogg Creek habitat
- Remove Dam & Restore Stream
  - Re-establish fish migration
  - Enhance habitat in Kellogg Creek

Obtained funding through Ohio EPA Water Resources Restoration Sponsor Program to remove the dam and restore Kellogg Creek

- Design-Build contract
  - Request for qualifications prepared and advertised
  - Received qualifications statement from 9 teams
  - Shortlisted to 3 teams and issued request for proposals
  - Proposals reviewed, RiverReach team was deemed the best team for the project

Project Goals

Brightwood Lake Dam Removal & Kellogg Creek Restoration

Project Goals

Dam and Stream

- Removal of dam
- Remove dam owner liability
- Stabilization of sediment
- Improve water quality of Kellogg Creek
- Provide fish passage
- Provide warm water habitat
- Minimize long-term maintenance

Project Status

Brightwood Lake Dam Removal & Kellogg Creek Restoration

Project Status

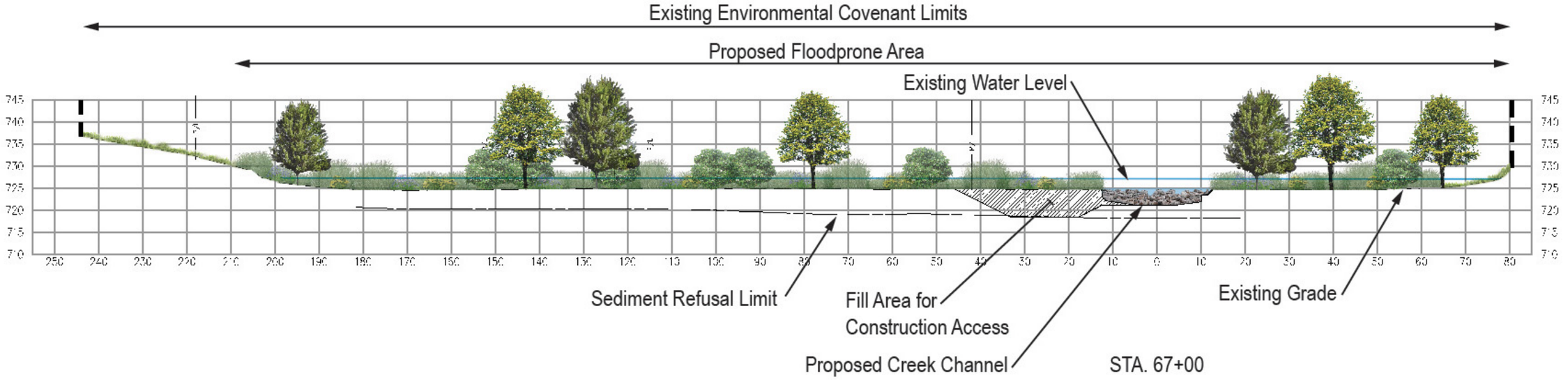
Safety and Dam Breach

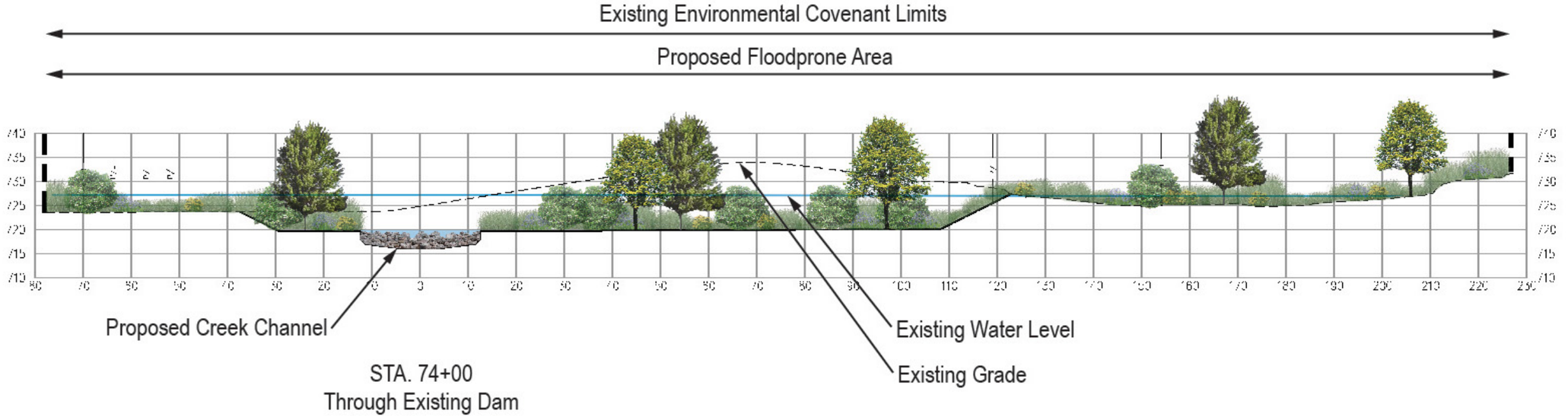
- Covenants
  - Needed 39
  - Signed 38
  - Covenants are important!
- Fish Removal 400+
  - 2nd removal planned
- Safety fencing
- Valve is Open!
- Temporary breach approval in progress

Conceptual Design

Brightwood Lake Dam Removal & Kellogg Creek Restoration

Conceptual Plan





Conceptual Cross Sections

Existing Conditions

Example Projects

Highland Park Stream Restoration

- Highland Hills, Ohio
- 4,900 lf
- Partial dam removal
- Pond restoration

Project in Year 1

Example Projects

Highland Park Stream Restoration

Project in Year 3

Example Projects

Beechers Brook

- Mayfield Heights, Ohio
- 900 lf of stream restoration
- Bank stabilization

Project in Year 1

Example Projects

Beechers Brook

Project in Year 3/4

Example Projects

Kenston Lake

- Stream restoration
- Dam breach
- Pond Restoration

Project in Year 1

Project in Year 3

Landscape

Brightwood Lake Dam Removal & Kellogg Creek Restoration

Invasive Species

Landscape

- For a successful project prevention and removal of invasive species growth will be required
- Species to avoid
  - Phragmites
  - Garlic Mustard
  - Multiflora Rose
  - Reed Canary Grass
  - Honeysuckle
  - Japanese Knotweed
  - Purple Loosestrife
- Create a monoculture
- Crowd out native plants
- LCSMD to maintain invasives

Native Plants

Landscape

- Plant types
  - Trees
  - Woody Shrubs
  - Herbaceous Plants
- Native species are adaptive to the conditions
- Crowd out invasives

Schedule

Brightwood Lake Dam Removal & Kellogg Creek Restoration

Anticipated Schedule

Design and Construction

- US Army Corp of Engineers Permitting and Design – On going until Summer
- Public Meeting/ Preconstruction Meeting – Spring/Summer
- Construction – Summer/Fall
- Final Construction – Spring 2023
- Invasives Species Management – 2023 - 2027

Frequently Asked Questions

Brightwood Lake Dam Removal & Kellogg Creek Restoration

Frequently Asked Questions

Brightwood Dam

- What will be done with the existing storm sewers that currently flow into the lake?

  Answer: Storm sewers will be extended and blended in the restored stream

- What about by footer drains/downspout drains/sump pump outlets…what will happen to them?

  Answer: Private drainage pipes from residential structures that can be found will be extended into the stream valley. If you know you have these outlets, but they are buried or somehow not visible, please somehow find them and mark them so the team can extend them. The design build team will not be able to extend what they don't know is there.

- My sprinkler system currently using lake water to irrigate my lawn. Will this affect that?

  Answer: Your irrigation system will need to be changed to the public water supply. Drawing water from the stream would be difficult.

- Once this project is complete, will it be possible that development occurs in the area where the lake is now?

  Answer: No development will be able to take place. The environmental covenants signed by participants will prohibit any kind of building or development in perpetuity.

Q&A

Civil & Environmental Consultants, Inc.

RiverReach Construction

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Lake
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