

HILL NEIGHBORHOOD GREEN INFRASTRUCTURE MASTER PLAN



FUSS & O'NEILL

AGENDA

- **6:00 – 6:15 Pizza & Meet and Greet**
- **6:15 – 6:30 Project Introduction**
- **6:30 – 7:30 Open House**



Andy Bohne
Senior Project Manager



Emily Wright
Senior Project Manager

Landscape
Architects

Scientists



Julianne Busa
Senior Resilience Scientist



Michael Soares
Senior Wetland Scientist



Jeffrey Dawson
Landscape Designer



Camilla Novo
Landscape Designer

Who is FUSS & O'NEILL?



Caitlin Strzegowski
Climate Resilience Engineer



Sarah Frisby
Climate Resilience Engineer

Environmental
Planners



Chelsea Zakas
Environmental Planner



Ian Concannon
Environmental Planner

Engineers &
Analysts



Jhon Escobar
Geotechnical Engineer
& Project Manager



Lauren Meiser
Environmental Analyst

PROJECT APPROACH

- **Outreach & Engagement**
 - **Workshop**
 - **School Raingarden Design**
 - **School Rain Garden Implementation**
- **Green Infrastructure Assessment**
- **Geotechnical Assessment**
- **Hydrology Modeling**
- **Focus Area Concept Design**
- **Neighborhood Green Infrastructure Master Plan**

WHY THIS PROJECT MATTERS

The Hill Neighborhood sits on elevated terrain with sandy soils that naturally drain downhill toward the Connecticut River. As extreme rainfall events have become more frequent and intense due to climate change, the Town has experienced growing concerns about stormwater runoff, erosion, and infrastructure vulnerability. In recent years, heavy rain events have led to:

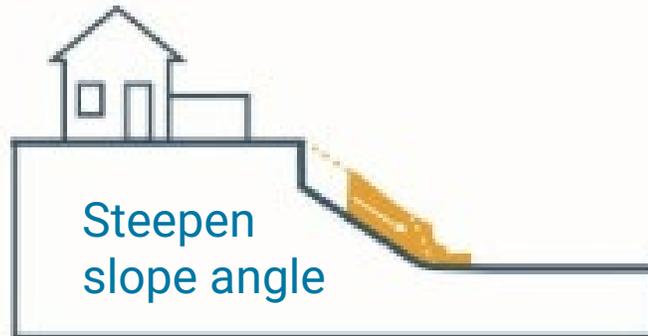
- Increased erosion along steep slopes
- Strain on local drainage systems
- Risk of roadway washouts
- Temporary road closures

PROJECT GOALS:

Protecting public safety, maintaining reliable access to homes, and safeguarding infrastructure are top priorities of this project.



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PROJECT CO-BENEFITS

Improving water quality

- Capturing and filtering pollutants
- Absorbing water close to where it falls



Reducing the amount of water that enters drains

- Reduce localized flooding
- Reduce the amount of piped water that enters streams & rivers
- Minimize erosion



Introducing more green infrastructure

- Demonstrates a more sustainable way to manage stormwater
- Creates spaces to learn about this concept



HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: PROJECT AREA



PROJECT AREA

CONNECTICUT RIVER



HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: SOIL BORINGS



HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: SOIL BORINGS

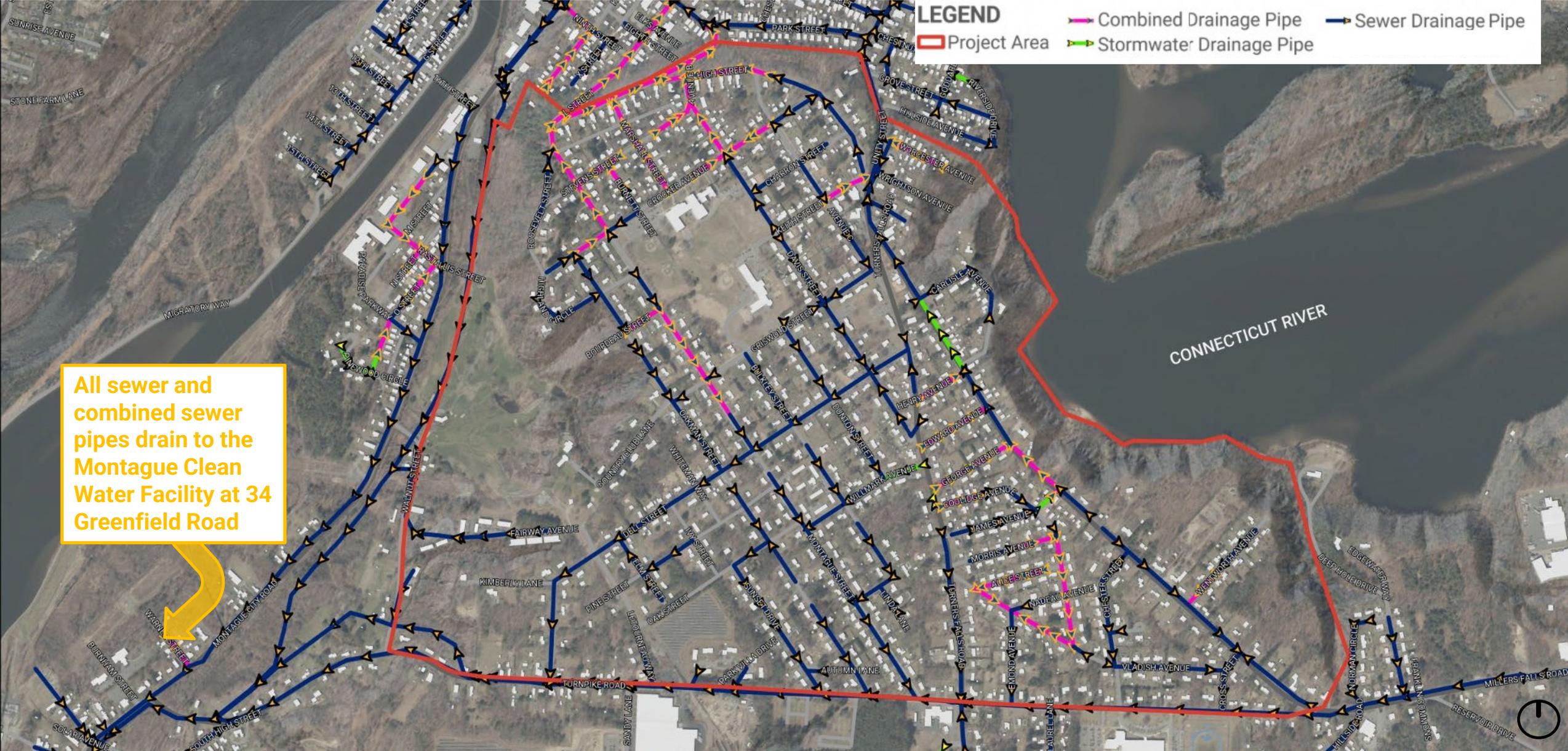


Soil Borings

- Between 17 to 72 feet of granular soils, underlain by clayey silt material
- Groundwater table encountered at approximate depths between 15 and 55 feet
- Perched groundwater encountered at approximate depths between 4 and 60 feet

HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: STORMWATER INFRASTRUCTURE



All sewer and combined sewer pipes drain to the Montague Clean Water Facility at 34 Greenfield Road

HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: PRIORITY AREAS



DEMONSTRATION RAIN GARDEN AT ELEMENTARY SCHOOL

EROSION AT OUTFALL AT OAKMAN STREET

EROSION AT OUTFALL AT COUNTRY CLUB LANE

EROSION AT OUTFALL AT DELL STREET

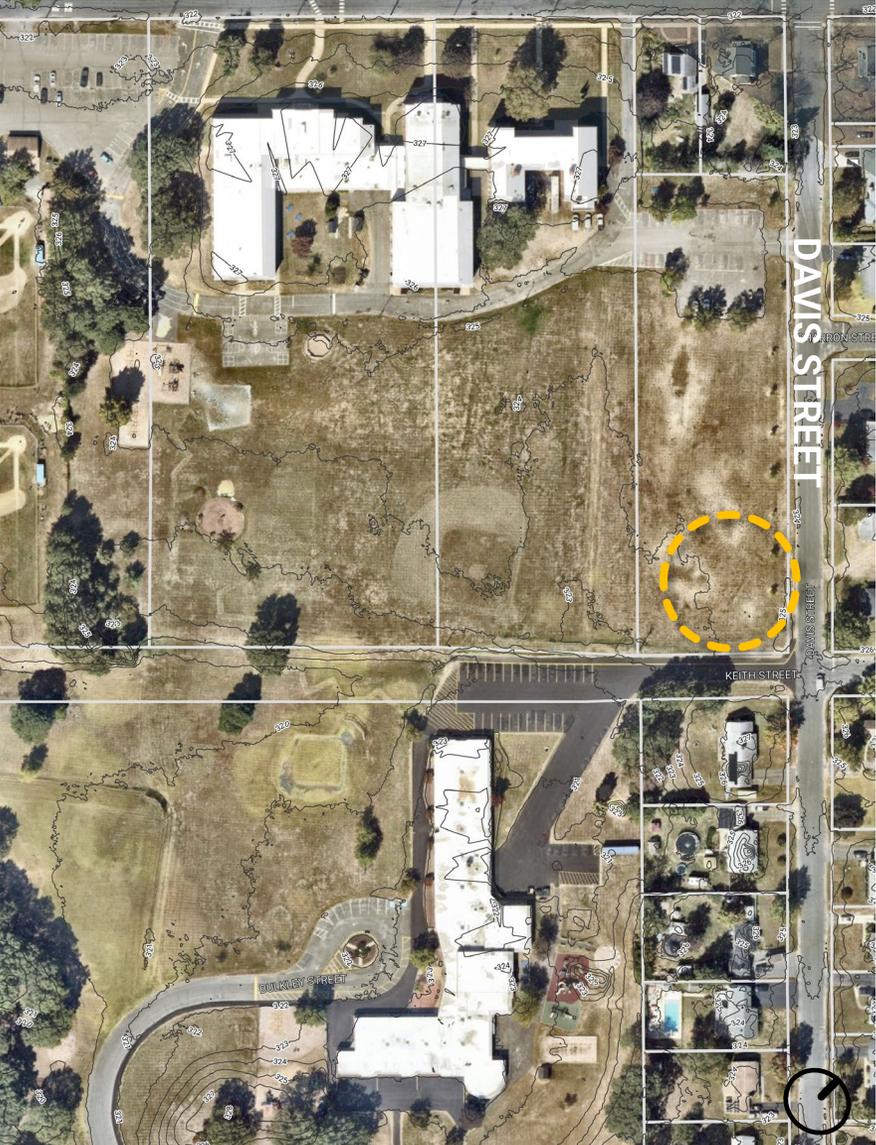
EROSION AT MILLERS FALLS ROAD

CONNECTICUT RIVER



HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: ELEMENTARY SCHOOL RAIN GARDEN



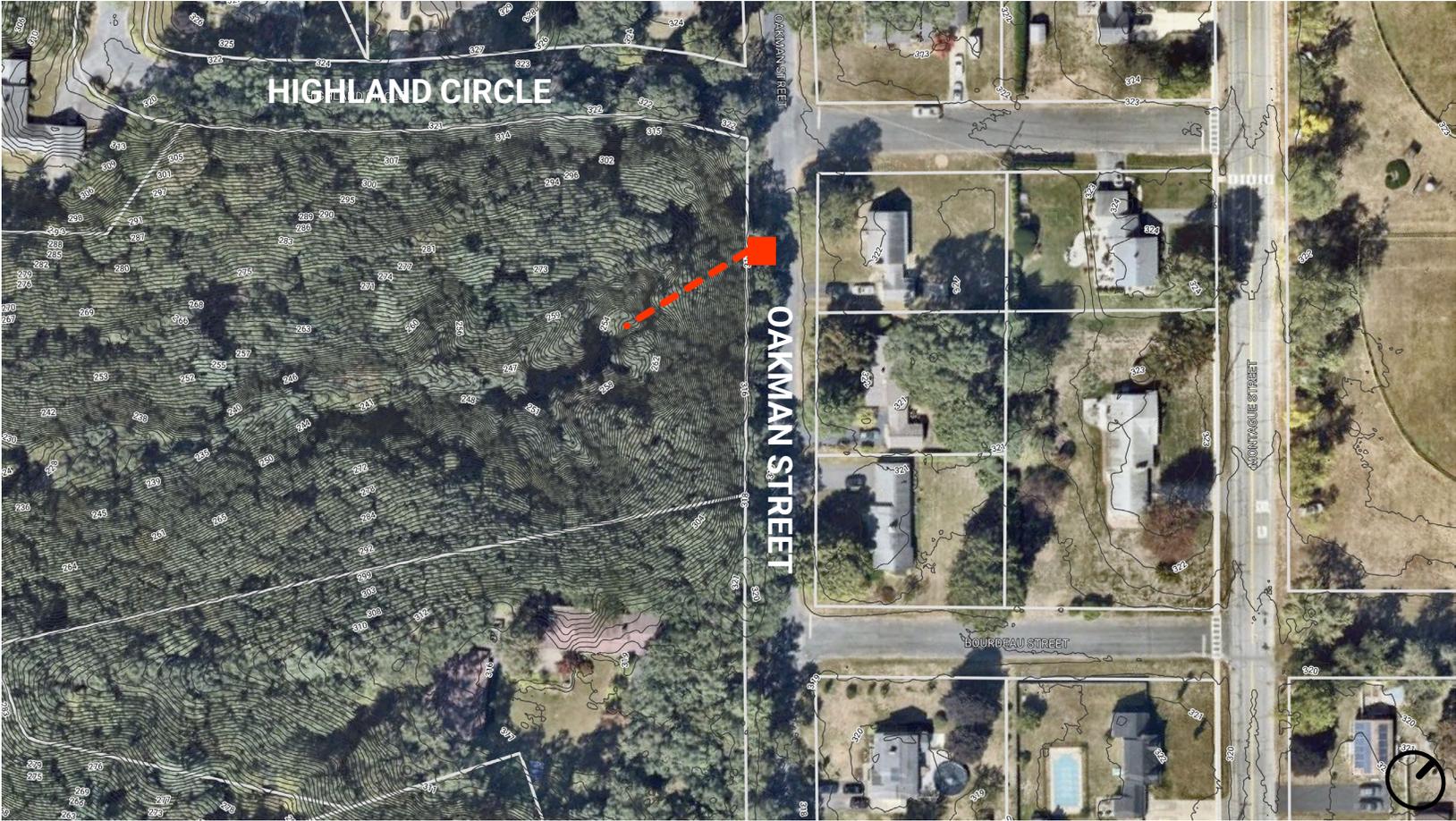
KEY PLAN



STREET VIEW

HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: OAKMAN STREET



KEY PLAN

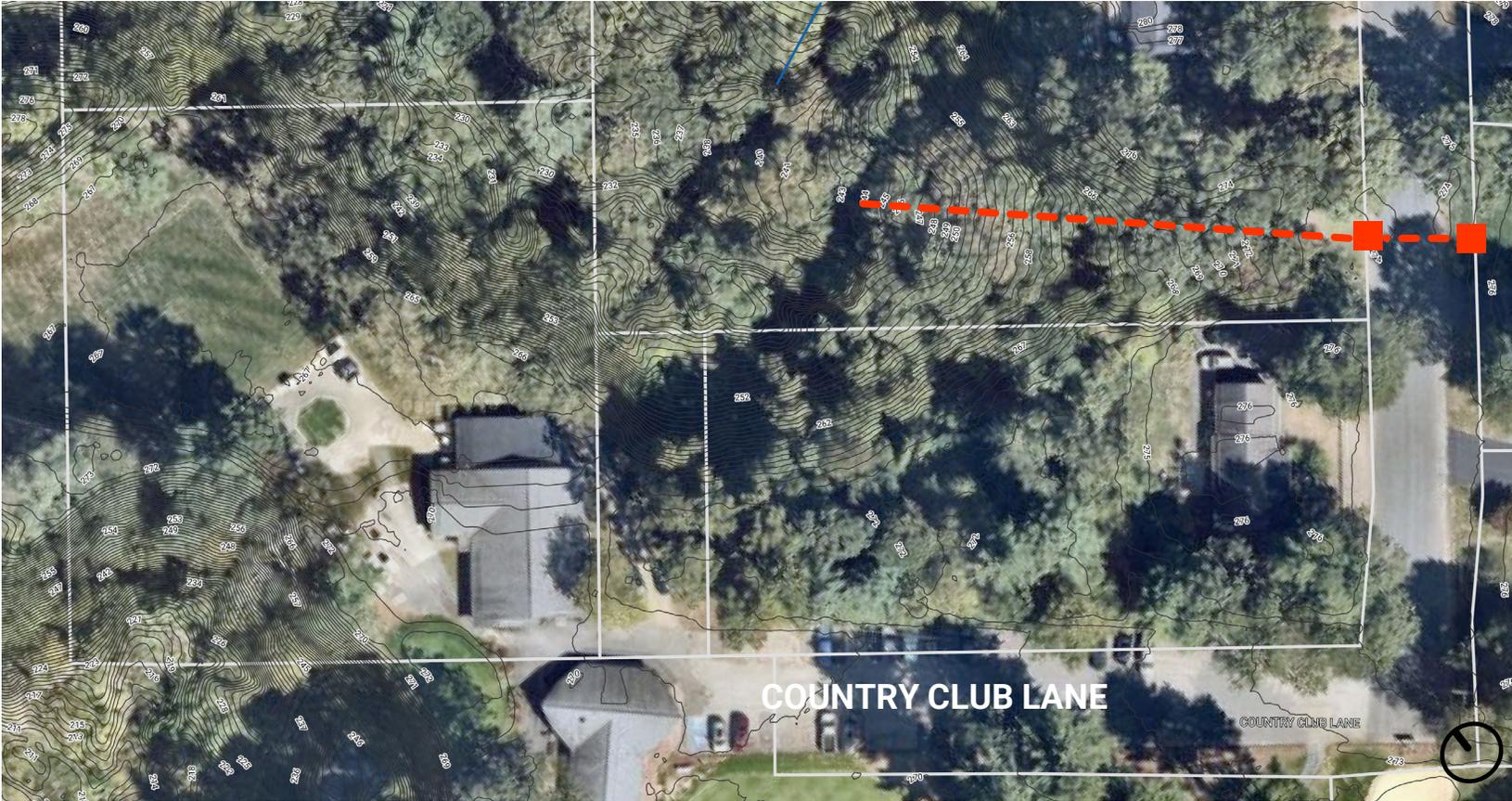
HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: OAKMAN STREET



HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: COUNTRY CLUB LANE



KEY PLAN

HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: COUNTRY CLUB LANE



HILL NEIGHBORHOOD GREEN INFRASTRUCTURE MASTER PLAN: DELL STREET



KEY PLAN

HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: DELL STREET



HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: MILLERS FALLS ROAD



KEY PLAN

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HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: MILLERS FALLS ROAD



HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: TOOLS TO REDUCE EROSION



STREET TREES



RAIN GARDENS



VEGETATED SWALE

HILL NEIGHBORHOOD

GREEN INFRASTRUCTURE MASTER PLAN: NEXT STEPS

Upcoming Community Design
Workshop at Shea Theater

- Monday, April 13 4:30-6pm
- Thursday, April 16 6-7:30pm

Please Visit the Project for Updates

