Norwich Public Utilities

Preliminary Engineering Design Services for Relocation of Shipping Street Pump Station and Related Sewer Mains

Public Meeting

February 17, 2026

Introductions

Norwich Public Utilities

Matt Hross, P.E.
Utility Project Engineer II

Jennifer Kelly Lachmayr, P.E., BCEE
Senior Vice President
Area Leader New England

Alan Levy, P.E.
Senior Engineer

Project Stakeholders

CT Department of Energy and Environmental Protection (DEEP)

City of Norwich

Agenda

1 Project Background & Overview of Preliminary Engineering Design

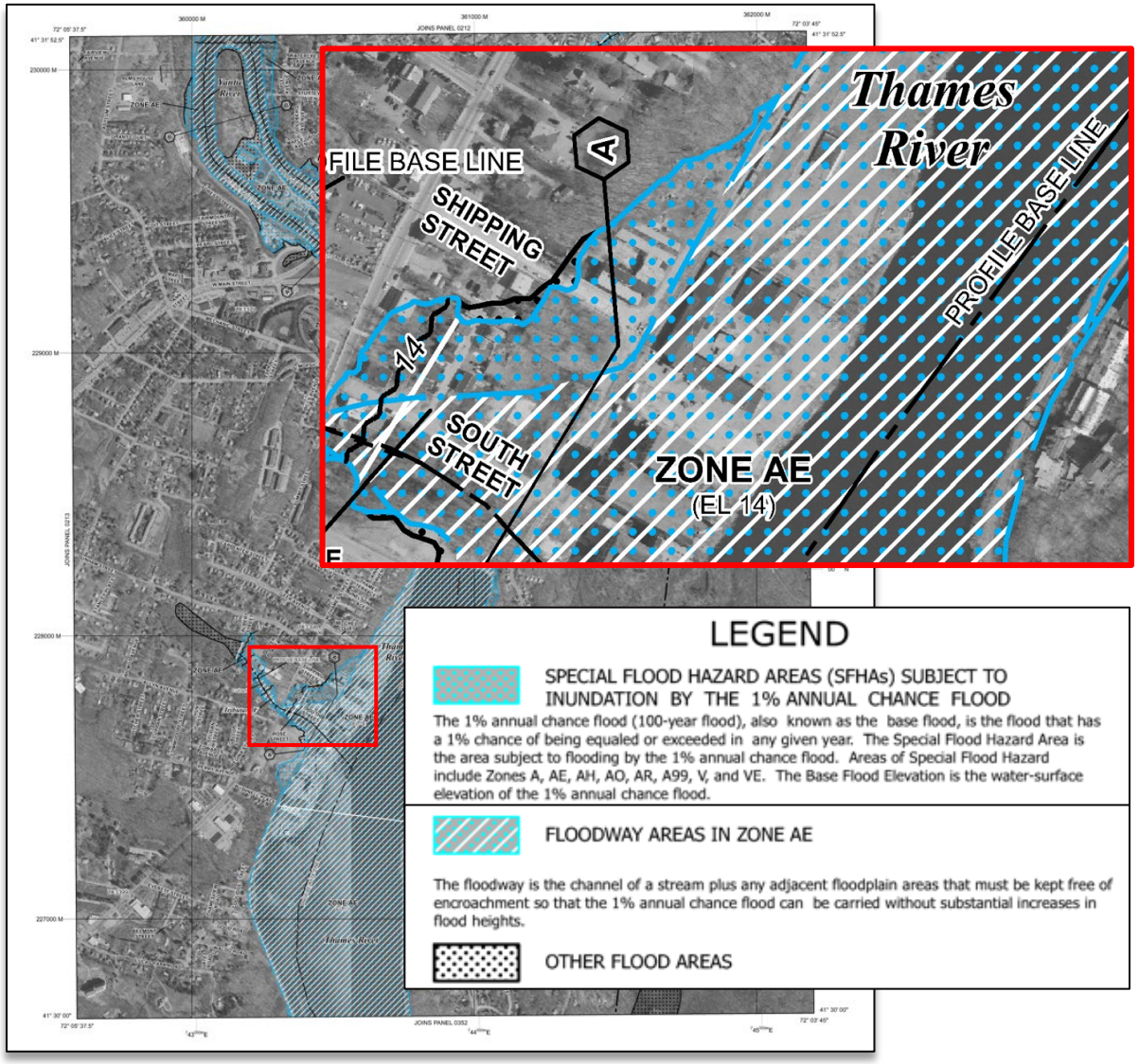
2 Implementing Robust Resilience Measures

3 CT DEEP Resilience Fund – Application for Detailed Design

4 Schedule

5 Designing for Norwich: Community Priorities and Sustainable Outcomes

Project Background



Project Objective
– Increase Infrastructure Resilience and Access

Grant for Preliminary Design through the **CT DEEP Climate Resilience Fund**
– Relocating PS and Related Sewer Mains out of the Regulatory Floodway of Thames River

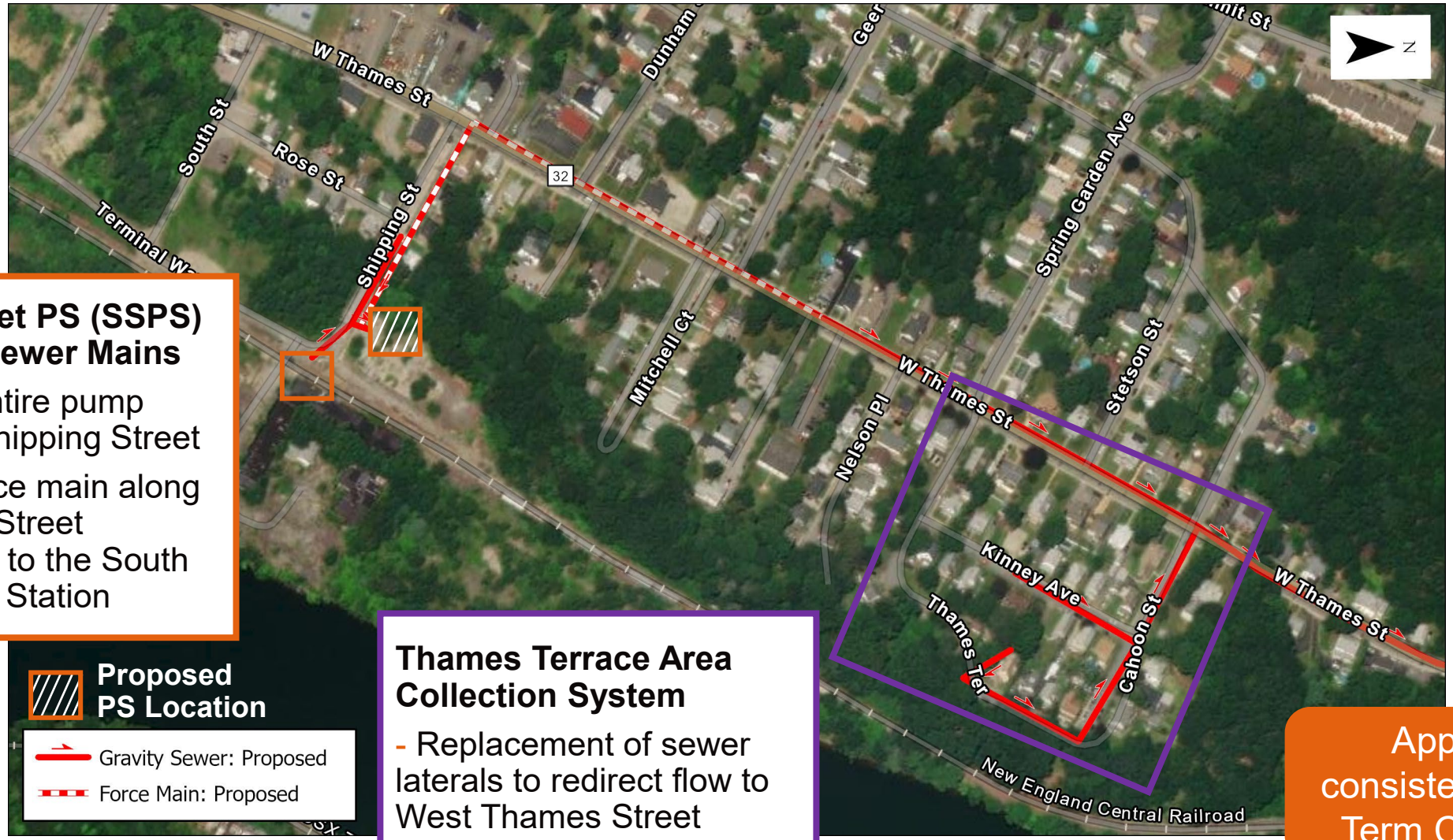
NPU Selected Arcadis to provide Preliminary Design Services

Conducted site investigations to verify existing conditions of the proposed project site and met with NPU to review design alternatives

Completed preliminary design for the selected alternative: design criteria, cost estimate, preliminary plans and profiles, etc.

Project Overview and Components to Preliminary Design

Location of Current Shipping Street PS



Shipping Street PS (SSPS) and Related Sewer Mains

- Relocating entire pump station to 26 Shipping Street
- Proposed force main along West Thames Street conveying flow to the South Thames Pump Station

Thames Terrace Area Collection System

- Replacement of sewer laterals to redirect flow to West Thames Street

Approach is consistent with Long Term Control Plan

Overview of Preliminary Design Report (PDR) & Alternatives Reviewed

Shipping Street Pump Station (SSPS) Relocation

★ Option 1 ★	Option 2
Relocate the entire PS outside of the regulatory floodway and elevate critical equipment	Relocate only electrical controls to higher ground, while reusing the wet well from existing PS

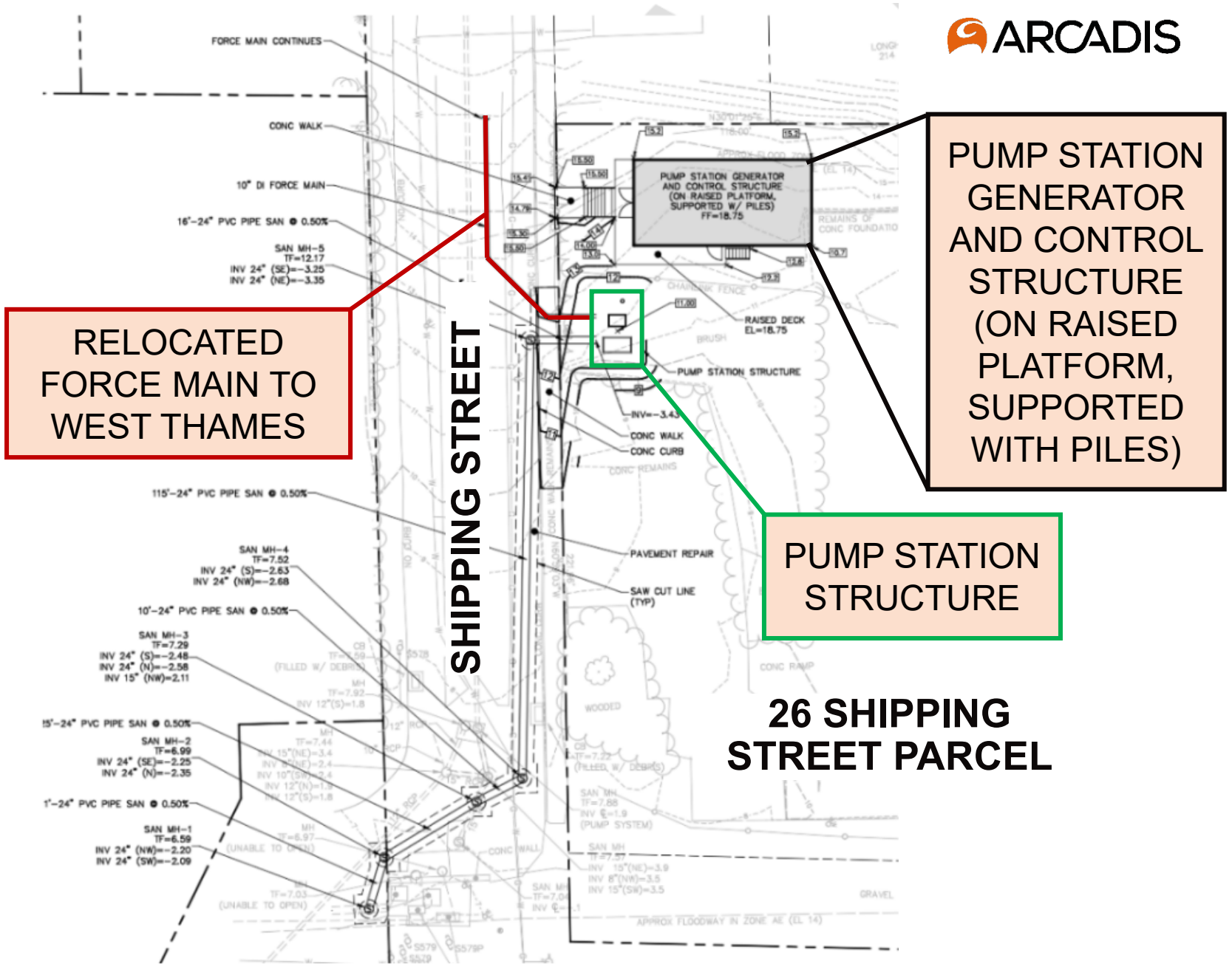
Thames Terrace Sewer Upgrade

★ Option 1 ★	Option 2
Reconfigure laterals and local mains to convey by gravity to West Thames Street	Maintain existing sewers and install a small package pump station and short force main

The PDR also addresses the following topics

- Force Main Relocation & Gravity Sewer Main Upgrades - **Work on West Thames Street/RTE 32**
- Conceptual Cost Estimate
- Available Funding Sources
- Permitting & Regulatory Compliance (PERSISTS Framework)
- Community Outreach & Stakeholder Engagement

Proposed Layout of PS Structure and Electrical & Control Building



PERSISTS Framework

Current Grant Requirement

CT DEEP requires that projects funded by the Climate Resilience Fund use the PERSISTS decision-support framework that was developed by UCONN's CIRCA for preliminary design.

Preliminary Design Report

Includes a summary table of how the proposed PS relocation project meets CT DEEP's PERSISTS framework

Framework		This Project…
P	ermittable	Can get all necessary federal, state and local permits
E	quitable	Considers impacts to vulnerable populations
R	ealistic	Can be realistically engineered and is plausibly feasible
S	afe	Reduces risks to people and infrastructure
I	nnovative	Has considered innovative options
S	cientific	Applies and improves on the best available science
T	ransferrable	Can serve as a model for other communities
S	ustainable	Is socially, economically, and ecologically sustainable and supported by the public and leadership

Implementing Robust Resilience Measures

Current Grant Requirement

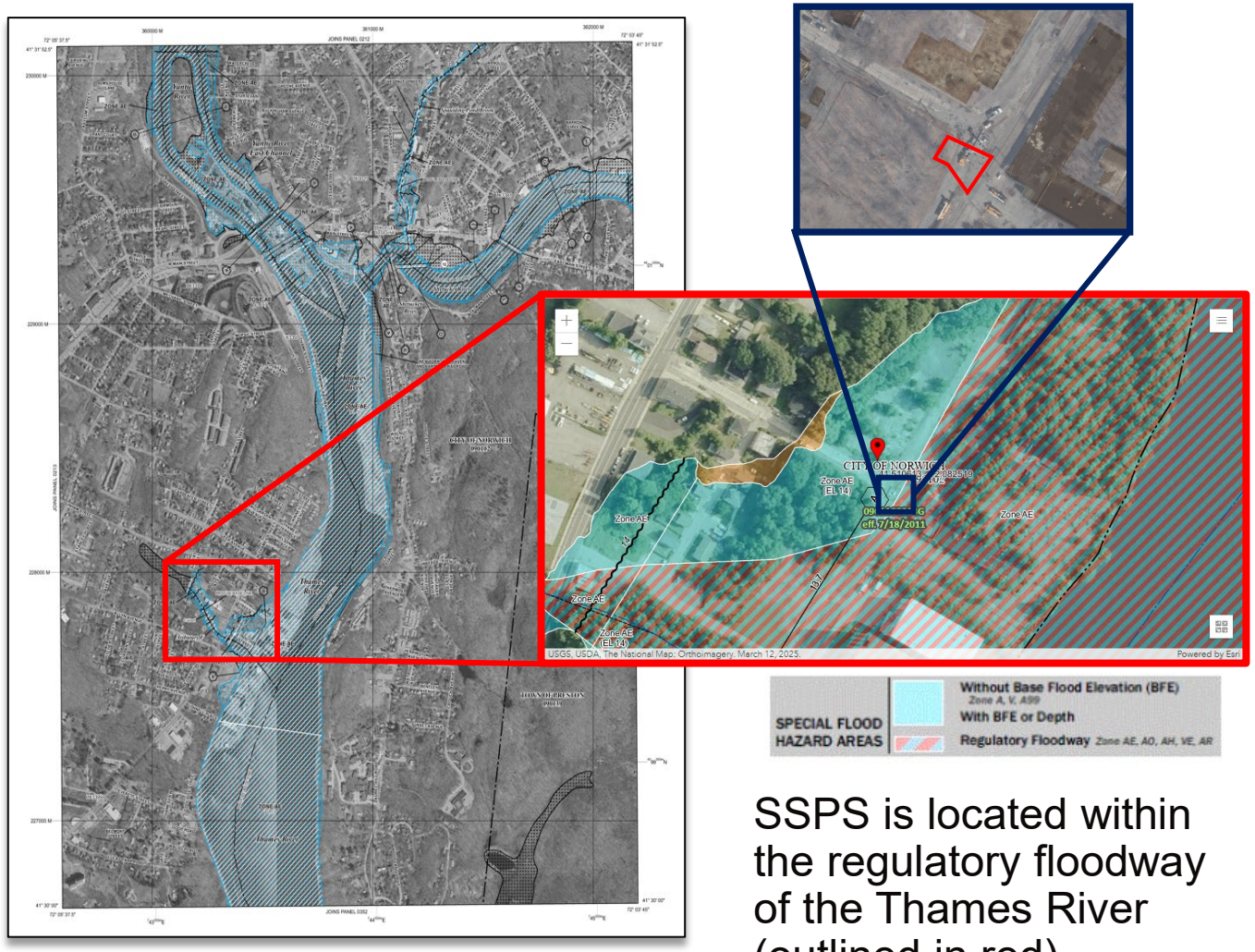
Submittal to CT DEEP: Memo summarizing mitigation measures in the project design to strengthen system resilience (separate submittal from PDR)

Preliminary Project Design

Relocates SSPS out of the regulatory floodway and elevates the new electrical/control building to the established design flood elevation (DFE)

Design Solutions for System Resilience

- Work **maximizes flood resilience** by removing critical assets from the floodway
- Reduces the risk of sewer overflows and impacts to water quality
- Aligns with CT DEEP adaptation guidance



SSPS is located within the regulatory floodway of the Thames River (outlined in red)

CT DEEP Climate Resilience Fund – Advancement Category for Detailed Design

Application Submitted to CT DEEP: January 15, 2026

DEEP Climate Resilience Fund 2025

CT DEEP issued a Notice of Funding Opportunity October 3, 2025, for resilience projects

Funding Category

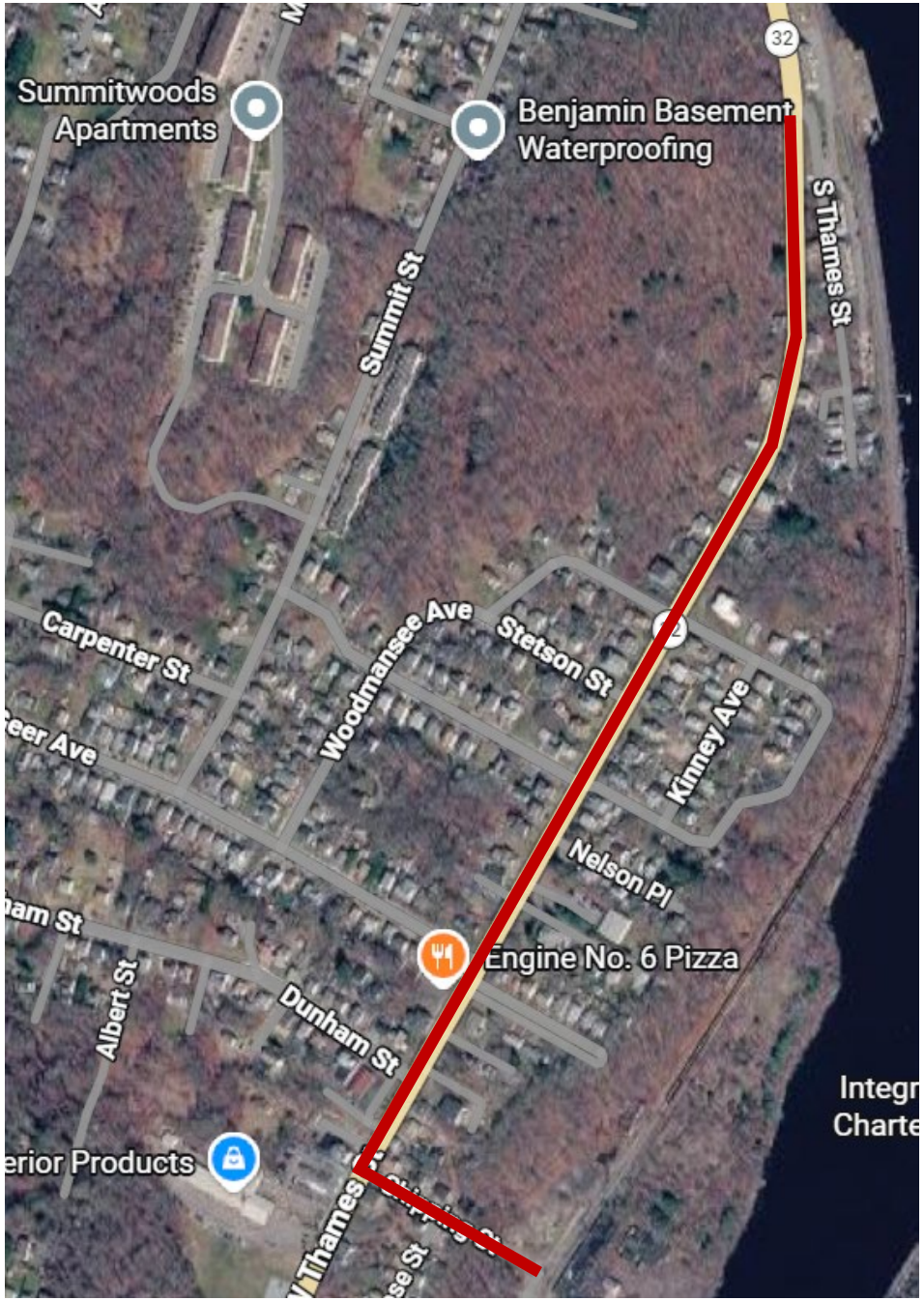
NPU targeted the Advancement funding category to fund detailed design and construction preparation.

Detailed Design Scope of Work

- Development of detailed design plans and technical specifications for the new pump station and associated sewer mains
- Preparation of bid-ready documents for construction procurement
- Coordination with state and local agencies for permitting and compliance

Designing for Norwich:
Community Priorities and Sustainable Outcomes

- **Location**: Route 32 — Shipping Street to South Thames Street (outlined in red)
- **Community benefits:** Reliable service during flood events and high-volume periods; prevents sewer backups in neighborhoods
- **Resilience & operations**: Pump station designed to run during floods, reducing staff intervention and infrastructure risk
- **Environment & compliance**: No anticipated ecological impacts; design follows CT DEEP Stormwater Quality Manual



Schedule