



Engineering
& Design

Oak Orchard Road (CR 187) over Youngs Creek, C-123 Culvert Replacement Project

Public Informational Briefing

October 2026

Town of Clay, Onondaga County, New York

PIN 3757.32

PROJECT TEAM

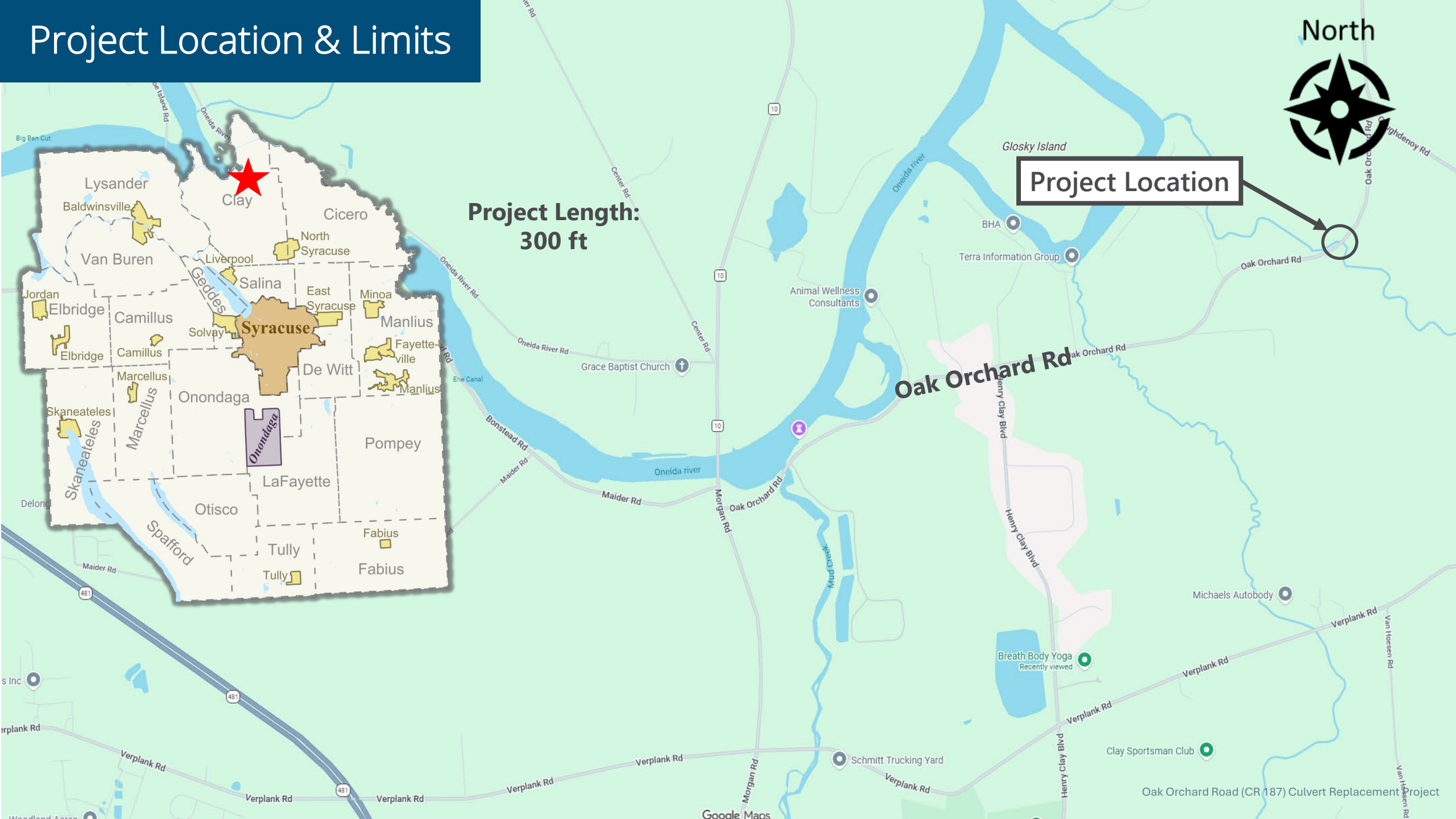
Roadway Owner &
Project Sponsor

Local Project Liaison

Consulting
Engineering Team



Project Location & Limits



Why Is the Project Needed?

- Original concrete structure is more than 80 years old and is approaching the end of its useful service life.
- Extensive deterioration includes map cracking, efflorescence, hollow-sounding concrete, spalling, exposed reinforcement, and progressively worsening delamination. (see photos on next two pages)
- C-123 has a general rating of 3.0.
- Required repairs are beyond the capabilities of County maintenance forces.
- Existing railing does not meet current standards.
- The design report concludes that the structure is beyond repair and needs replacement.



Existing Conditions



Outlet elevation



Existing Conditions



Looking upstream from inside structure at outlet



Inside structure at inlet



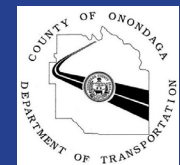
Project Purpose & Objectives

Purpose:

- Address structural and operational deficiencies for at least 50 years.
- Use cost-effective techniques to minimize life-cycle maintenance and repair costs.

Objectives:

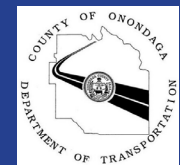
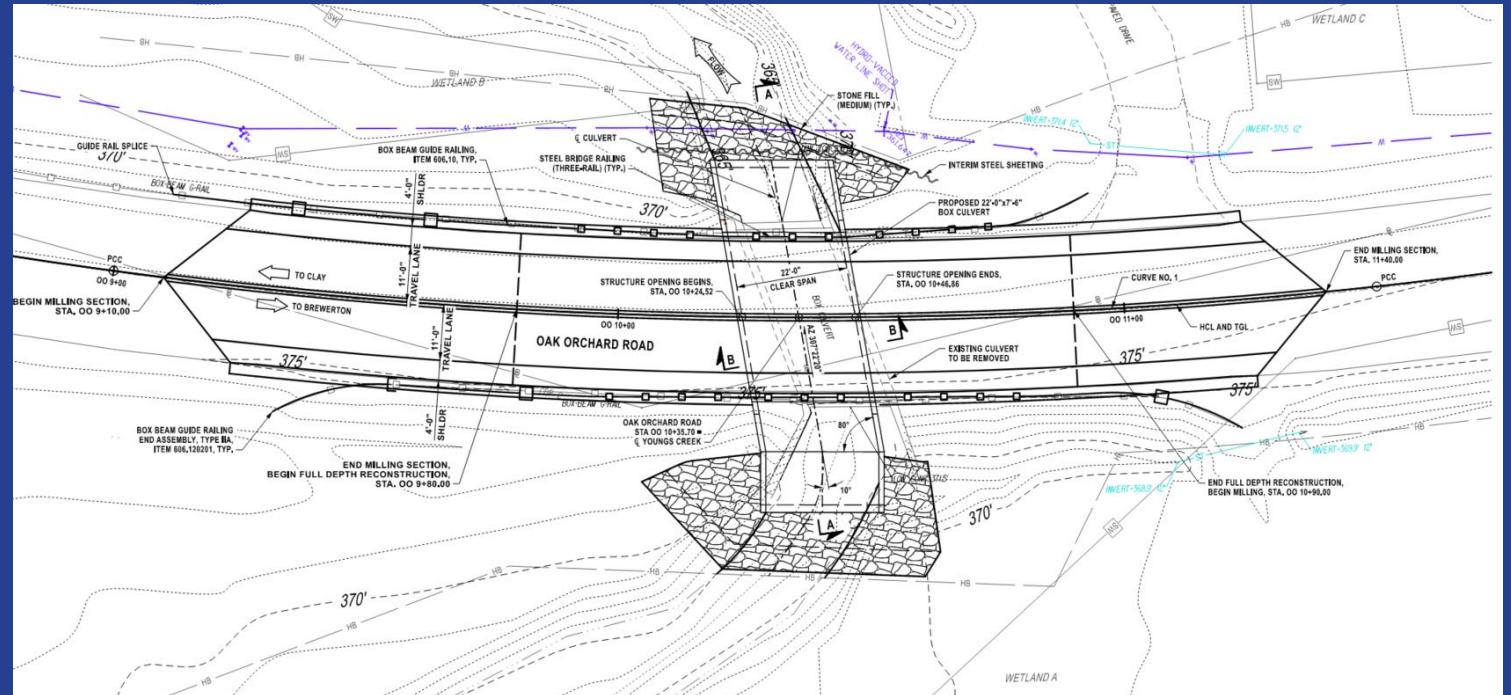
- Provide a 50-year service life.
- Provide a hydraulic opening meeting current design standards.
- Address scour potential near the structure.
- Optimize roadway superelevation.
- Provide safe bridge rail and guiderail meeting current standards.



Proposed Culvert Replacement

Proposed Structure:

- Replace C-123 with a 4-sided precast concrete box culvert.
- Precast concrete wingwalls and cut-off walls.
- 22'-0" clear span and 7'-6" clear rise.
- Proposed span is 1.47 times the existing waterway opening.
- Stone fill will be provided for scour protection in the stream and along the banks.



Hydraulic & Stream Considerations

Hydraulic Performance:

- Average Ordinary High Water width: 31.2 ft.
- Hydraulic analysis supports the proposed replacement.
- 50-year storm +10%: 2.24 ft of freeboard.
- 100-year storm +10%: 2.10 ft of freeboard.
- Climate-change flows increased by 10% per NYSDOT requirements.

Stream & Permit Considerations

- Youngs Creek is a Class C/Standard C waterbody.
- Work will include temporary fills for cofferdams and dewatering.
- Stone fill will be used for scour protection.
- USACE Nationwide Permit #3 with pre-construction notification is anticipated.
- Section 401 Individual Water Quality Certification is anticipated.



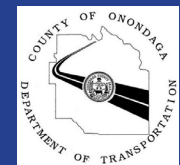
Roadway & Safety Improvements

Roadway:

- Proposed lane width: 11 ft.
- Proposed shoulder width: 4 ft (identified as a nonstandard feature).
- Improve operational characteristics by optimizing superelevation.
- Existing and proposed horizontal curve radius: 1,028 ft.
- Stopping sight distance exceeds 455 ft.

Safety:

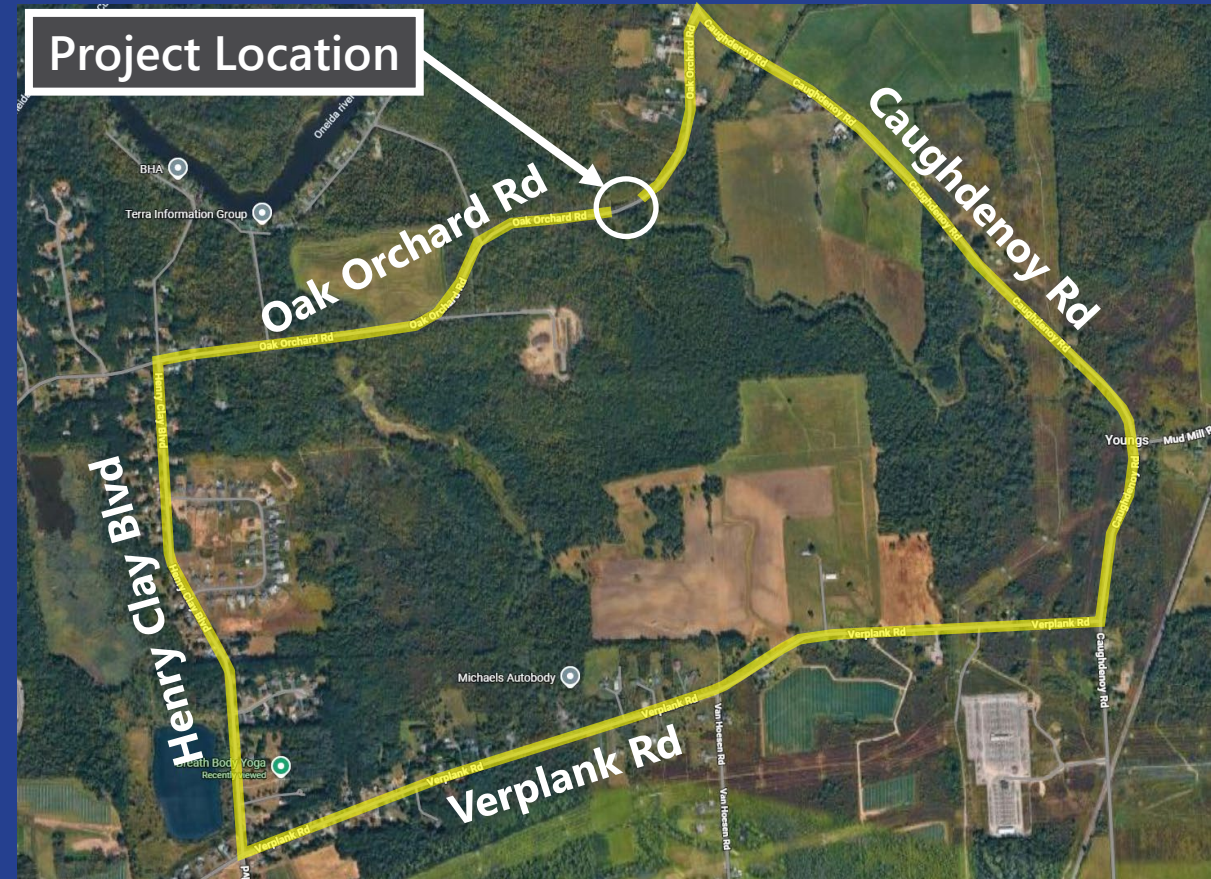
- Provide safe bridge rail and guiderail meeting current standards.
- Existing railing does not meet current standards.
- Design speed: 55mph.
- Existing level of service: A
- Crash review found one injury crash in 2023, about 880 ft northeast of the culvert; no site-specific crash reduction measures were recommended.



Construction & Traffic Management

During Construction:

- Oak Orchard Road will be closed to traffic at the project area.
- Vehicles will use an off-site detour of approximately 5.6 miles.
- Proposed detour uses Henry Clay Boulevard, Verplank Road, Caughdenoy Road, and Oak Orchard Road.
- NYSDOT has reviewed and approved the proposed route.
- A full detour plan will be developed during final design.
- No pedestrian accommodation is anticipated because no pedestrian traffic was observed in this rural setting.



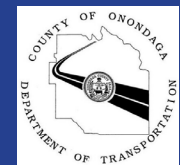
Utilities & Right of Way

Potential Utility Impact:

- OCWA waterline is located on the northwest side of the structure, parallel to the road.
- Approximately 100 ft of underground waterline is identified as potentially impacted.
- Relocation may be required.
- Subsurface Utility Exploration has been requested to confirm the waterline location.

Right of Way:

- All proposed work can be accomplished within the existing highway right of way.
- No right of way acquisitions are anticipated.
- Work limits are approximately 150 ft west and 150 ft east of the creek centerline.
- ROW clearance is scheduled for November 20, 2026.



Environmental Considerations



Three wetlands were delineated on November 12, 2025; two are federal jurisdictional and three meet state jurisdictional criteria.



A NYSDEC Article 24 Freshwater Wetlands Permit is anticipated for work within wetlands and the 100-ft adjacent area.



Young Creek is a state-regulated navigable water; an NYSDEC Article 15 Protection of Waters Permit is anticipated.



The project is within FEMA Zone AE (1% annual chance flood hazard) but will not encroach on the 100-year flood zone or increase the 100-year flood surface elevation.



Approximately 0.1 acres of trees are anticipated to be removed for the culvert replacement.



SHPO review concluded the project has no potential to cause effect on historic properties.



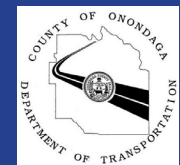
Permits & Agency Coordination

Anticipated Permits:

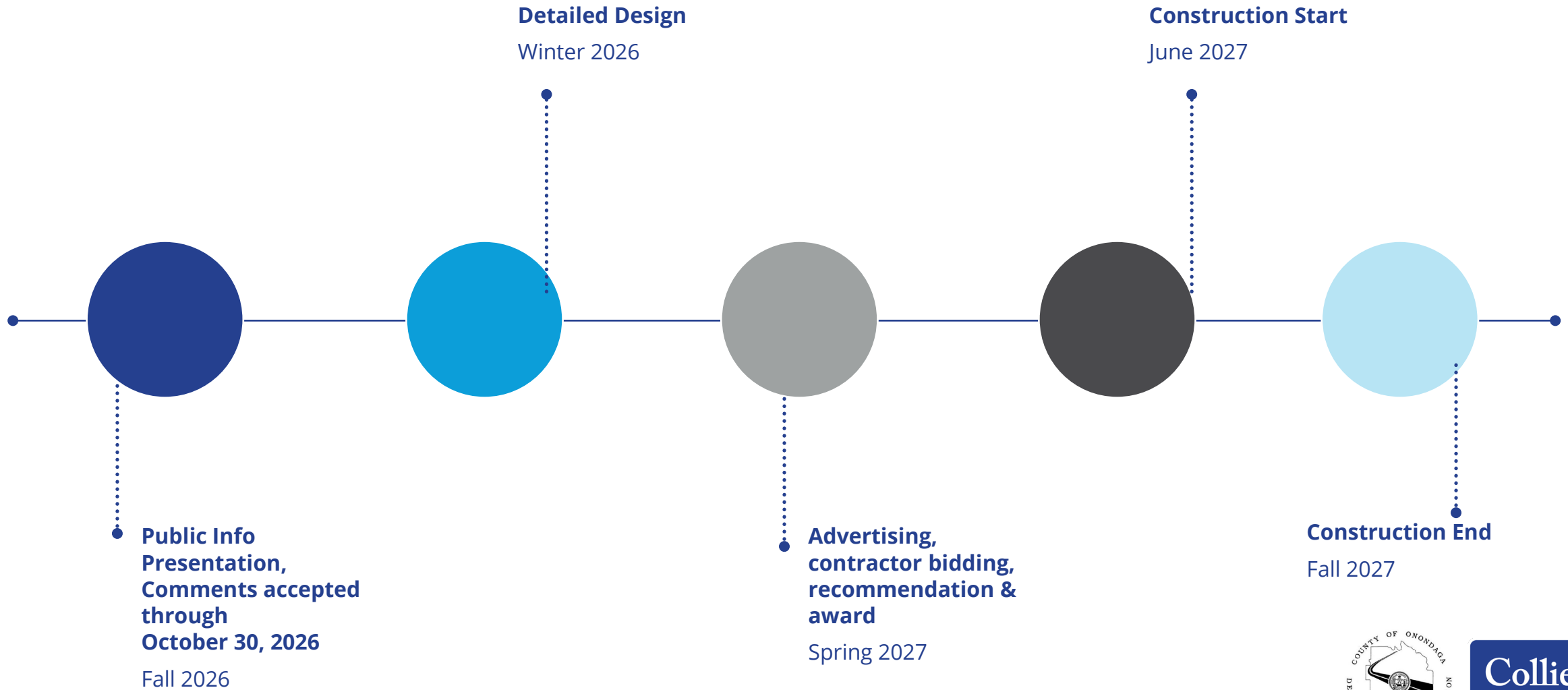
- NYSDEC SODES General Permit
- NYSDEC Article 24 Freshwater Wetlands Permit
- NYSDEC Article 15 Protection of Waters Permit
- Section 401 Individual Water Quality Certification
- USACE Nationwide Permit #3

Coordination:

- New York State Department of State; Coastal Zone/LWRP coordination
- New York State Historic Preservation Office
- New York State Department of Environmental Conservation
- U.S. Fish and Wildlife Service
- Town of Clay
- OCWA



Project Schedule



FUNDING



The Estimated Construction Cost for the Project is **\$1.6 Million**

100% State funded



Project cost and schedule are identified as consistent with the Regional Capital program.



Construction cost values are from the Engineer's Estimate at Design Report level.



QUESTIONS OR COMMENTS

There is a printable PDF comment form available on this website as well as an electronic question submittal form

First Name *

Last Name *

Email *

Message

Submit

Please submit comments via mail, email, phone, or electronic form.

Comments are due by **October 30, 2026**

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