# Drakes Island Road Bridge Replacement Project

July 27, 2022

CMA ENGINEERS

# Project Team & Partners

- Town of Wells
- CMA Engineers
- GZA GeoEnvironmental
- Wells National Estuarine Research Reserve
- Rachel Carson National Wildlife Refuge
- Drakes Island Community
- Morris Communications

# How to Comment or Ask Questions Tonight

- In person, raise your hand
- At home, click on the hand symbol at the bottom of your screen
- I will call on you to speak
- Please tell us your name and where you live
- Why a hybrid meeting?
- We are recording the meeting and will follow up with a meeting report on the Town website: search for Drakes Island Road Bridge Replacement

# Introduction

- The Town's goal is to build a long-term, safe, high-quality bridge, preserve and enhance the salt marsh habitat, and establish strong community participation and support.
- The Town of Wells has hired an engineering firm to help the community determine what the replacement for this bridge could look like.

# Project Area



# Public Outreach

- First of two informational meetings
- The primary purpose of this meeting is to hear your input and answer questions
- A second informational meeting will present project alternatives for public feedback before progressing to the design phase
- Project page on Town of Wells website

*https://www.wellstown.org/1024/Drakes-Island-Road-Bridge-Replacement-Pr*

# Project Schedule & Timing

- Project Initiation ..... April 2022
- Engineering Study ..... July 2022
- First Public Meeting ..... July 2022
- Second Public Meeting ..... Early 2023
- Engineering Study Complete ..... March 2023
- Preliminary Design ..... 2023
- Final Design ..... 2024
- Project Construction ..... No Earlier than Fall 2024

# Drakes Island Road
## Bridge Replacement Project

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Linden Street Bridge, Exeter, NH


River Road Culvert, Ogunquit, ME


Norris Brook Culvert, Exeter, NH


Tuck's Point Sewall, Manchester, MA

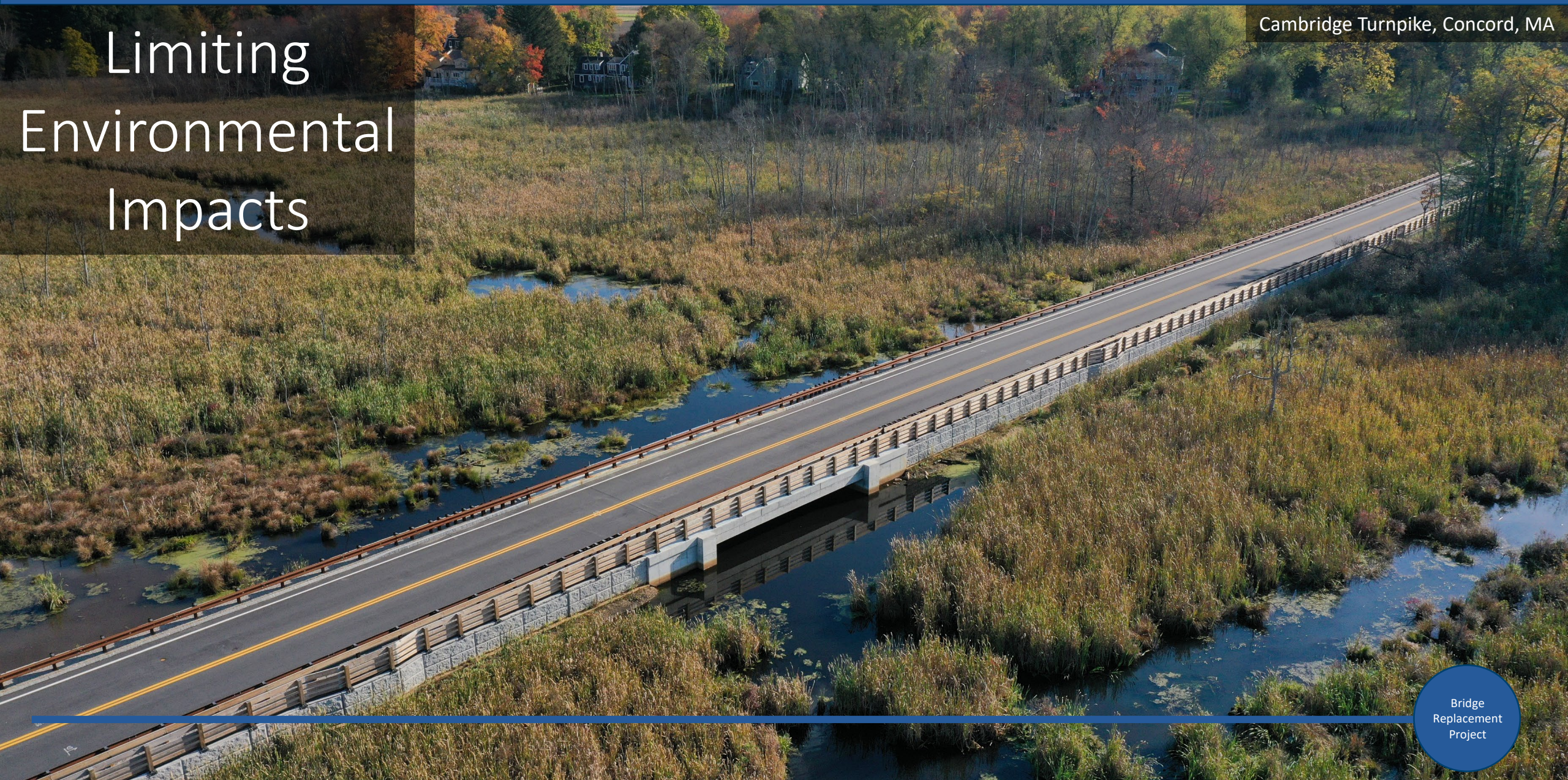
Bridge Replacement Project

# Project Complexity

- Deep Foundations
- Rigorous Environmental Permitting
- Tidal Hydraulics & Storm Surge
- High Quality, Sensitive Environmental Setting

- Construction Access
- Utilities
- Adjacent Structures
- Resident Access During Construction

# Limiting Environmental Impacts



Cambridge Turnpike, Concord, MA

# Phased Bridge Construction

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Current Mean Higher High Water (MHHW)

Current MHHW Plus 4 Feet of Sea Level Rise

# Existing Bridge Condition

Substructure: 4 – Poor Condition
Superstructure: 7 – Good Condition
Deck: 7 – Good Condition

# Engineering Process

- Engineering Study
  - Collect Site Information
  - Informational Meeting
  - Preliminary Permitting
  - Site Hydraulics
  - Identify and Evaluate Alternatives
  - Informational Meeting
  - Engineering Study Report
- Preliminary Design
- Final Design
- Construction

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# Information Gathering

## Known Information

- Existing bridge has surpassed its useful lifespan
- New bridge will have a 75-year + lifespan
- Existing top of bridge is within 9-inches of the current design flood elevation
- Site abuts tidal salt marsh on all sides
- Currently no pedestrian facilities across existing bridge

## Information to be Determined

- Length of proposed span
- Roadway cross section
- Elevation of new bridge and roadway
- Effects of project on surrounding tidal salt marsh
- Final structure type and material
- Exact timeframe for completion of design and start of construction

# Gather Site Data and Community Input

- Establish Design Criteria and Preferred Alternative
- Preliminary Design – Determine Type, Span, and Location of Bridge
- Final Design – Detailed Design, Submit Permits, Final Project Plans
- Advertise Project Plans and Specification Package to Contractors
- Observe Construction to Confirm Materials and Quality of Work

# Project & Community Considerations

- Planning for Future: Sea-Level-Rise
- Pedestrian & Bike Access
- Safety / Speed
- Island Access During Construction
- Other??