

State Project 0158-0218: Replacement of Bridge No. 04971

Town Virtual Public Information Meeting

Live Event: Monday, September 20th, 7:00 p.m.

Join us for a Question and Answer session following the formal presentation and send us a question or a comment during the session.

Project Email:

DOT-FLBP@ct.gov

Phone: (860) 944-1111 (voicemail only)

Visit the Project Webpage:

<https://portal.ct.gov/DOTWestport158-218>



A recording of this presentation will be posted after the live event. Closed captioning, including non-English translation options, will be available at that time.

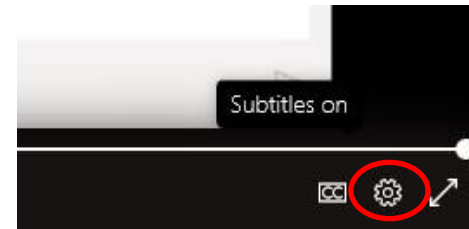
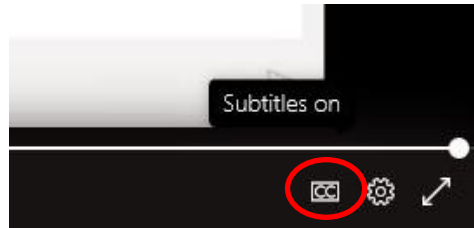
La grabación de esta presentación estara disponible despues del evento en YouTube, incluyendo subtítulos y acceso a traducciones en otros idiomas.



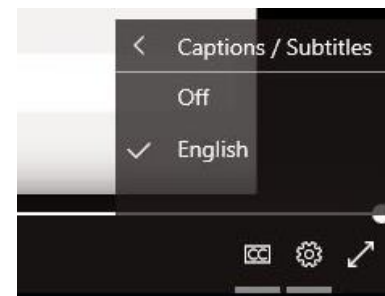
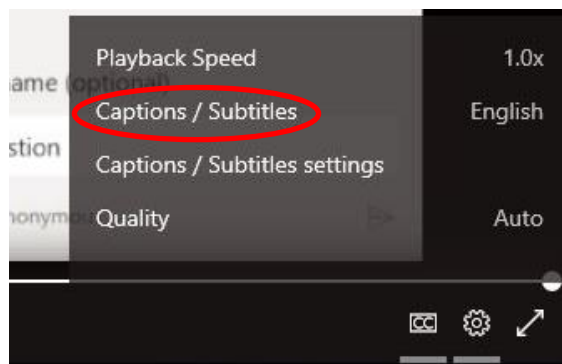
How to View Captions or Subtitles

Captions / Subtitles (MS Teams only)

- 1) Select "CC" at bottom right
- 2) Select Settings wheel



- 3) Select "Captions / Subtitles"
- 4) Select desired language



Available Languages:

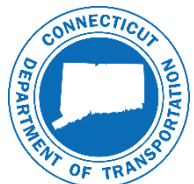
- English
- Spanish
- Portuguese
- Creole



Project 0158-0218: Replacement of Bridge No. 04971



Priti Bhardwaj, P.E.
Project Manager – CT DOT
Tel. No. (860) 594-3311
Priti.Bhardwaj@ct.gov



Goals for Tonight's Meeting



- Interaction with the Project Team
- Explain Federal Local Bridge “Design Managed by State” (DMS) Program
- Welcoming Remarks by Towns of Westport and Fairfield
- Introduce the Project Team
- Formal Presentation of the Design Progress
 - Explain the condition of existing bridge & define Purpose and Need
 - Recommend a viable proposal (Design Plans are only 30% complete)
 - Explain the ROW Process
- Open the Forum to your Q&A's



Public Information Meeting Overview



Interaction with Project Team during the Meeting

There are 3 ways of communicating with us during the live Q&A:

by email: DOT-FLBP@ct.gov

by Phone: (860) 944-1111 (voicemail)

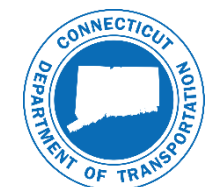
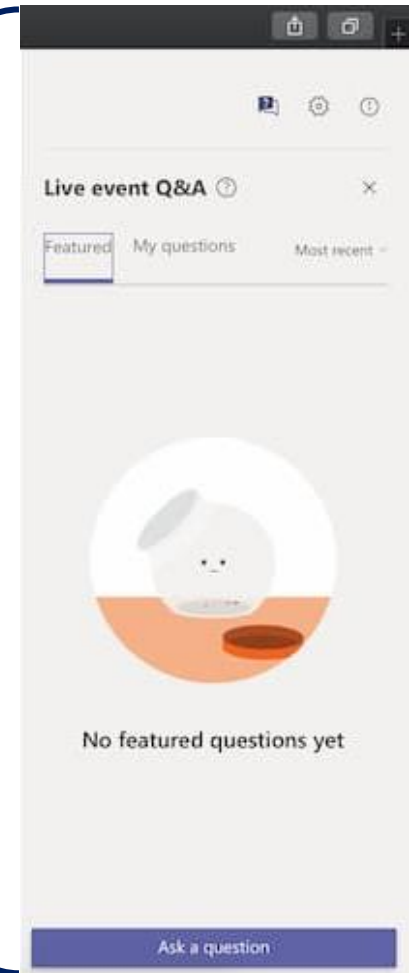
by Chat: **MS Teams Live Event Chat**

Moderator will Post Questions to the MS Teams Chat Window under 'Featured' Tab

Project Webpage:

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**Comment Period is Open through October 4, 2021 via Email or Telephone;
MS Teams Chat Function is Only Available during Live Q&A Session**



Posting a Question in MS Teams Chat



Title VI – Civil Rights



Brief Survey

<https://www.surveymonkey.com/r/QGXFVM8>



Civil Rights flyer available

<https://portal.ct.gov/DOT/Business/Contract-Compliance/Civil-Rights-and-Accessibility>

No person shall, on the basis of race, color or national origin, be excluded from participation or subject to discrimination in the development of this project



Federal Local Bridge Program - “Design Managed by State” (DMS)



- Traditional Fed. Local Program: 80% Federal & 20% Town for Design, ROW & CN
- DMS: Design Phase is funded with 80% Federal & 20% State Funds
 - Design is at zero cost to the Towns of Westport & Fairfield
 - Design is in “Full Partnership” & Coordination with the Town



Goals of DMS:

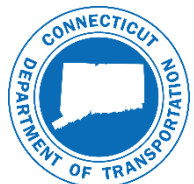
- Provide a “Streamlined approach to Design” using full DOT resources
- Aid the Towns of Westport & Fairfield to keep their bridges in “State of Good Repair” by effective use of Funds
- Decrease typical Design time from 48 months to 24 months
- Utilize Accelerated Bridge Construction ‘ABC’ to shorten Construction duration
- Increase the number of municipal projects delivered to construction each year



Welcoming Remarks from Town of Westport



Keith Wilberg, PE, LS
Westport Town Engineer
Department of Public Works
Tel. No. (203) 341-1128
kwilberg@westportct.gov



Welcoming Remarks from Town of Fairfield



William Hurley, PE
Fairfield Engineering Manager
Tel. No. (203) 256-3015
whurley@fairfieldct.org



Project Team



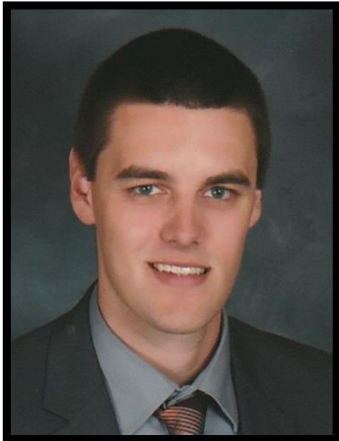
Bart Sweeney, P.E.
Division Chief
of Bridges
CTDOT



Louis Bacho, P.E.
Principle Engineer
CTDOT



Priti Bhardwaj, P.E.
Project Manager
CTDOT



James Barrows
Project Engineer
CTDOT



Anand Seshadri, P.E.
Project Manager
CLE

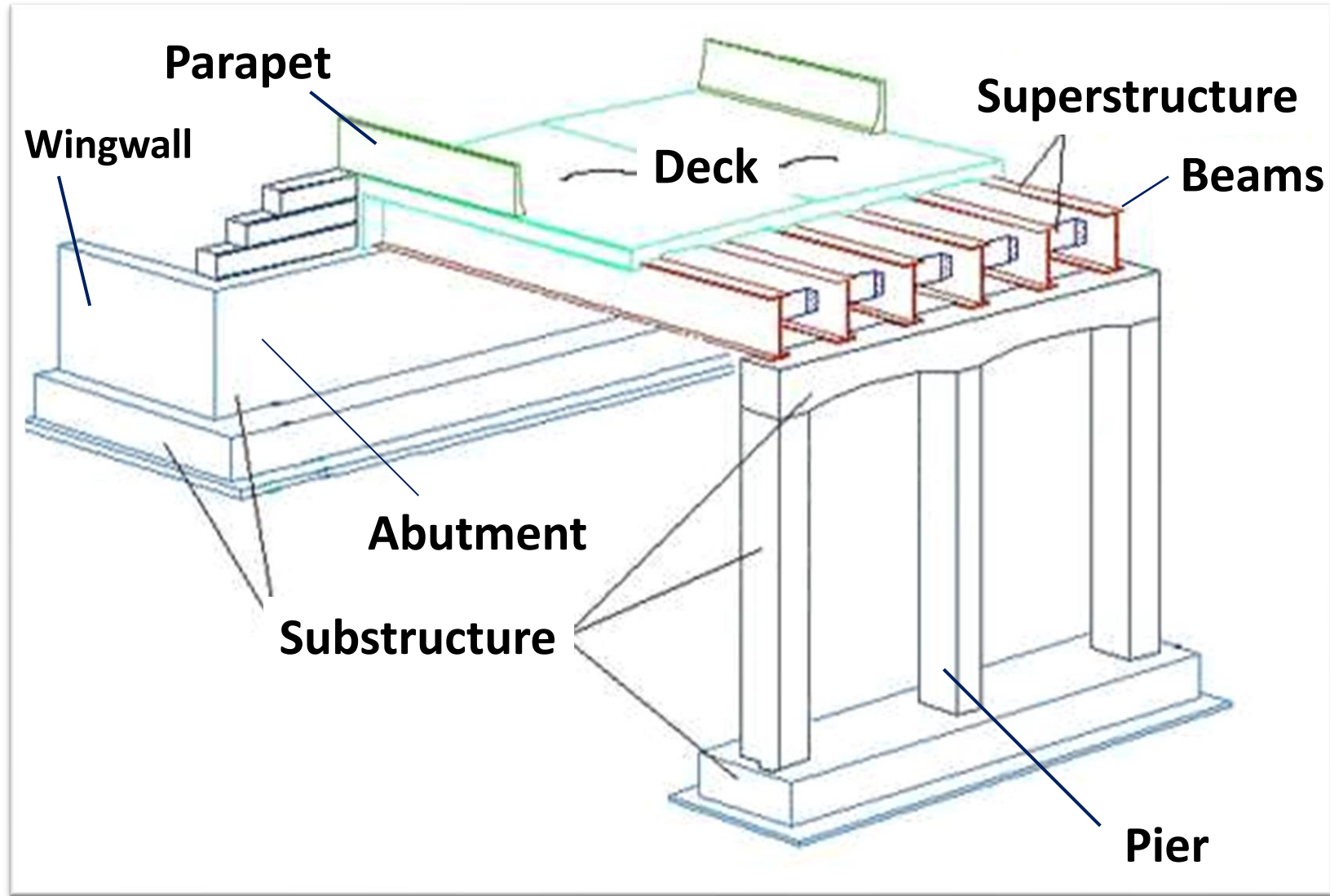


Robert Bahler
Project Engineer
CLE





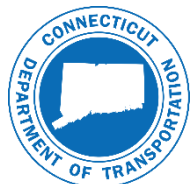
Bridge Structural Elements Diagram



Bridge Condition Ratings

Scale: 1 to 9

- 9 – Excellent
- 8 – Very Good
- 7 – Good
- 6 – Satisfactory
- 5 – Fair
- 4 – Poor
- 3 – Serious
- 2 – Critical
- 1 – Imminent Failure

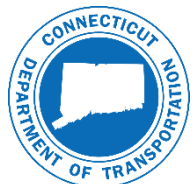


Bridge No. 04971 – Introduction



Project No. 158-218

Old Road No. 2 (Wakeman Lane) over Sasco Brook



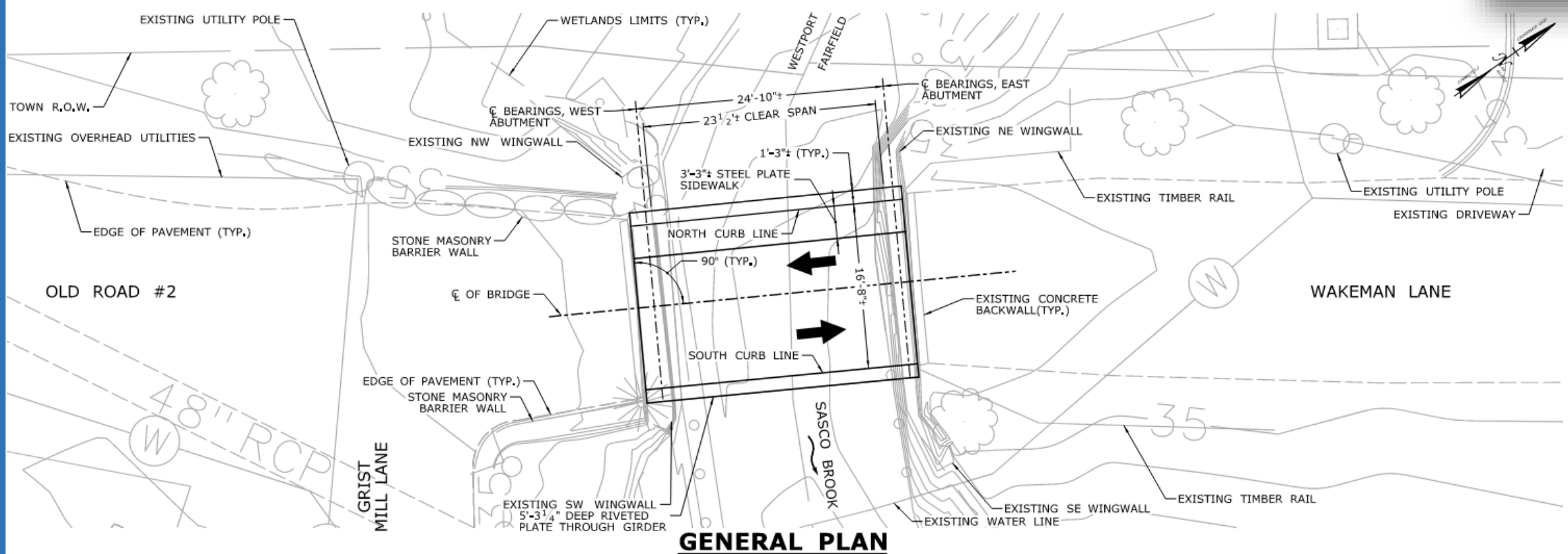
Bridge No. 04971 – Site Overview



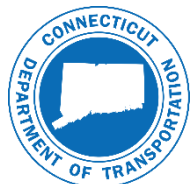
- Average Daily Traffic (ADT):
 - 309 (Traffic Count March 2021)



Bridge No. 04971 – Existing Bridge Plan



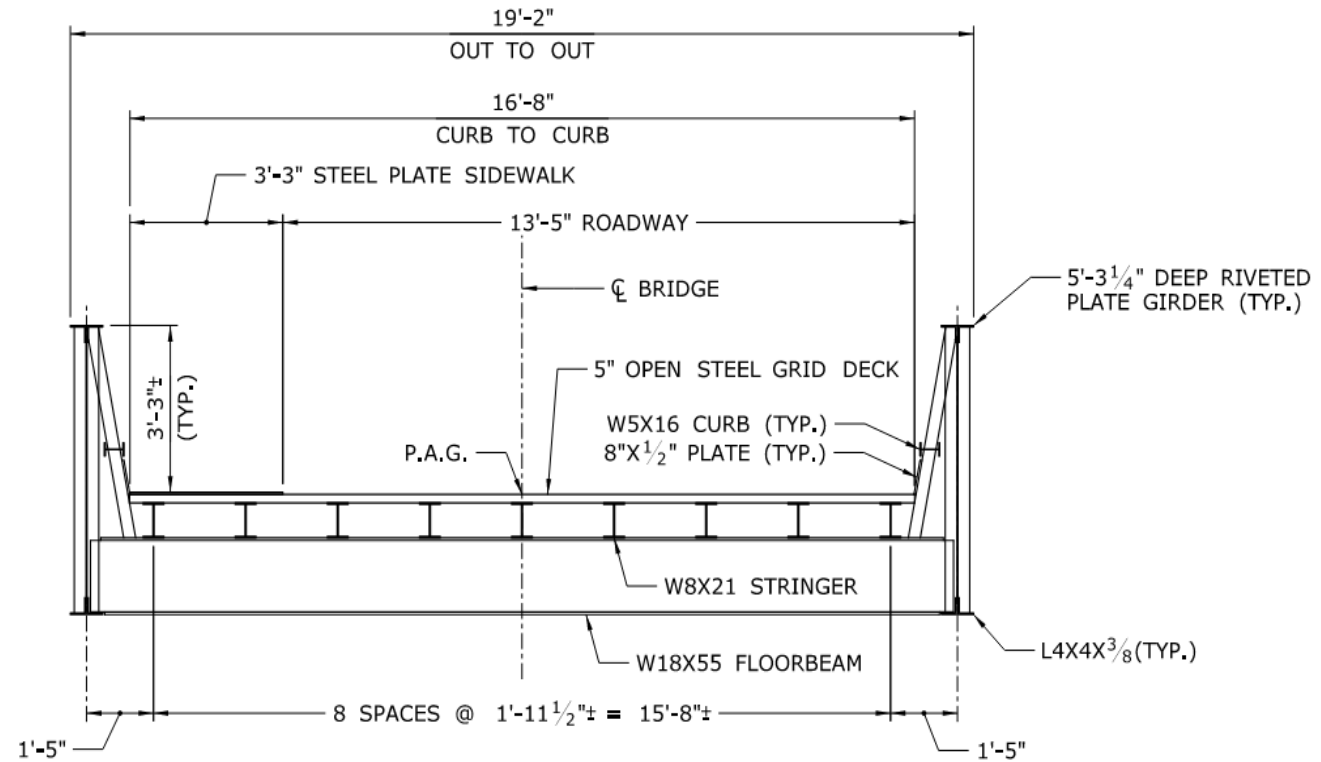
- Constructed – 1965
- Rehabilitated – 2002



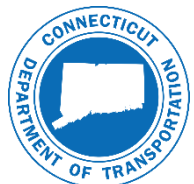
Bridge No. 04971 – Existing Bridge Cross Section



- Roadway width: 16'-8"
- Superstructure:
 - Deck: Open steel grid deck
 - 9 longitudinal steel stringers
 - 3 transverse steel floorbeams
 - 2 steel trough girders
- Fracture Critical



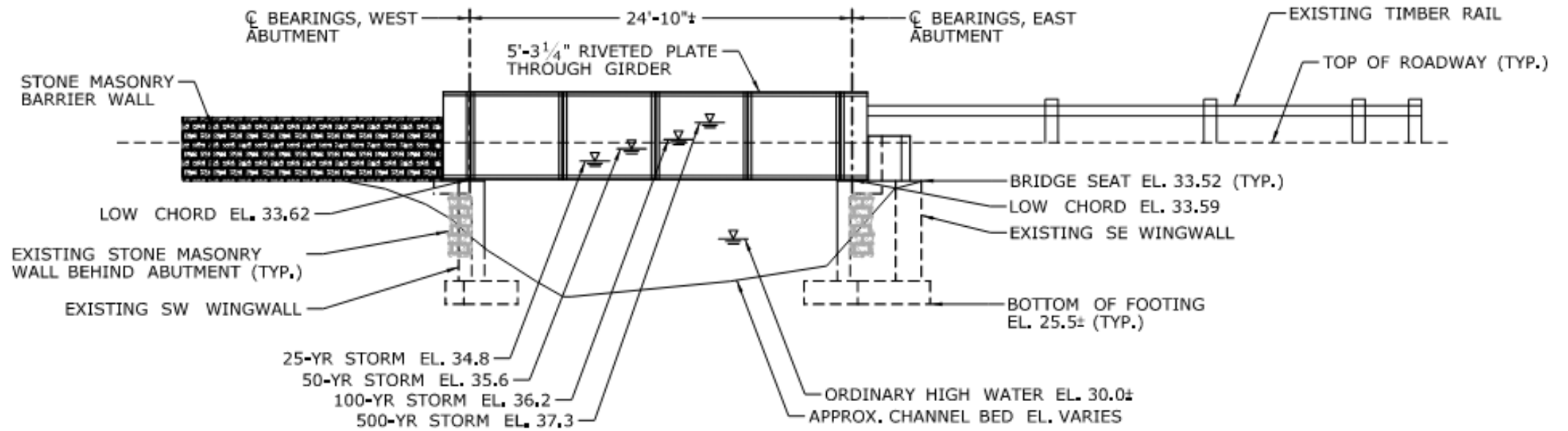
EXISTING BRIDGE SECTION (LOOKING EAST)





Bridge No. 04971 – Existing Bridge Elevation

- Span Length: 24 feet ±
- Substructure: Concrete abutments and wingwalls
- Foundation: Spread footings
- Hydraulics: Does not pass 25-Year storm



SOUTH ELEVATION



Bridge No. 04971 – Existing Bridge Condition Rating



South
(Downstream)
Elevation

ITEM	CONDITION	RATING	BRIDGE CLASSIFICATION
Deck	Good	7	
Superstructure	Poor	4	Structurally Deficient*
Substructure	Satisfactory	6	
Approach Roadway	Satisfactory	6	
Stream Channel	Satisfactory	6	
Deck Geometry	Intolerable	2	Functionally Obsolete
Scour Critical Rating	Scour Critical	3	Scour Critical

* Load Restriction – 10 TONS



Bridge No. 04971 – Existing Site Photos



South Elevation
(Downstream)



North Elevation
(Upstream)



West Approach –
looking East over
the bridge



East Approach –
looking West over
the bridge



Bridge No. 04971 – Existing Site Photos



Open grid deck, southern through girder, rub rails, and timber guide rail bridge attachment.



Northern through girder, rub rails, and steel plated sidewalk.



Underside of Superstructure and east abutment.



Superstructure Deterioration – Floorbeam / Girder connection



Bridge No. 04971 – Existing Site Photos



Load Posting – 10 Tons



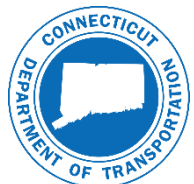
Undermining of Bridge Substructure



Downstream Channel



Upstream Channel



Bridge No. 04971 – Project Purpose & Need



- 55 years since original construction (1965)
- Roadway width inadequate for State & Federal Standards (Functionally Obsolete)
 - 16'-8" Existing vs. 24' Minimum
 - Town width requirement: 26' (Westport), 24' (Fairfield)
- Bridge & approach rail system does not meet current safety standards
- Fracture critical superstructure – (2) through girders
- Floorbeams & Girders in poor condition (Structurally Deficient)
- Inadequate load carrying capacity (Posted: 10 Tons)
- Existing bridge does not pass 25-YR storm
- Bridge is Scour Critical
- Poor horizontal & vertical roadway alignment

Note: Despite deficiencies, the bridge is safe for the traveling public

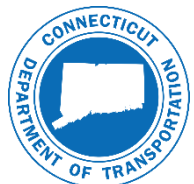
MINIMUM CURB-TO-CURB WIDTH		
ADT	FHWA	CTDOT
101-400	20 feet	24 feet
401-1000	22 feet	24 feet
1000-2000	24 feet	24 feet



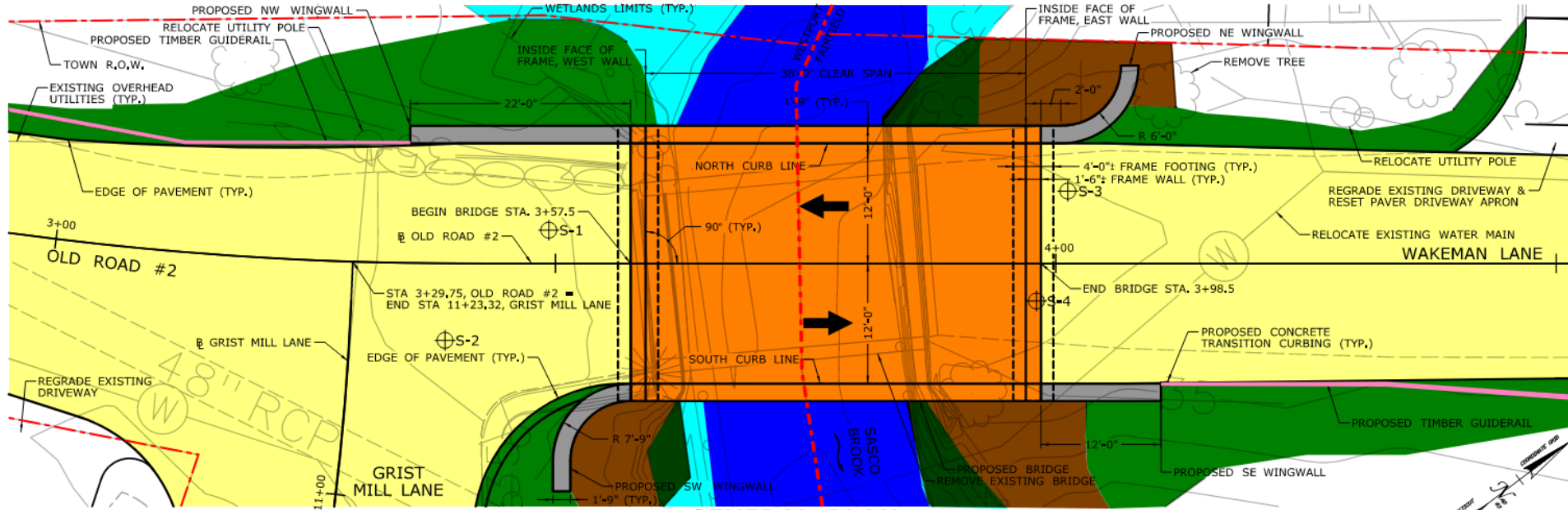
Bridge No. 04971 – Proposed Improvements



- Full Bridge Replacement – with 75-year service life
- 24' wide roadway
- Crash-tested bridge rail/parapet system
- Use of timber guide rail at approaches
- Improved hydraulics – passage of 100-YR storm
- Minor realignment of Old Road No. 2 (Wakeman Lane)



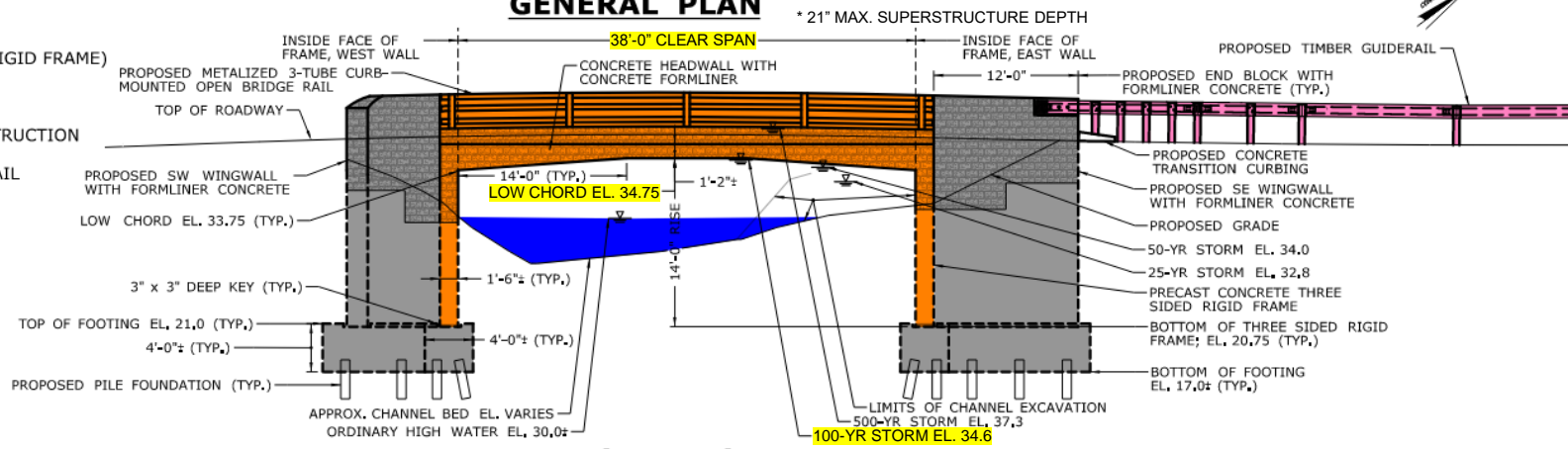
Bridge No. 04971 – General Plan & Elevation



GENERAL PLAN

LEGEND:

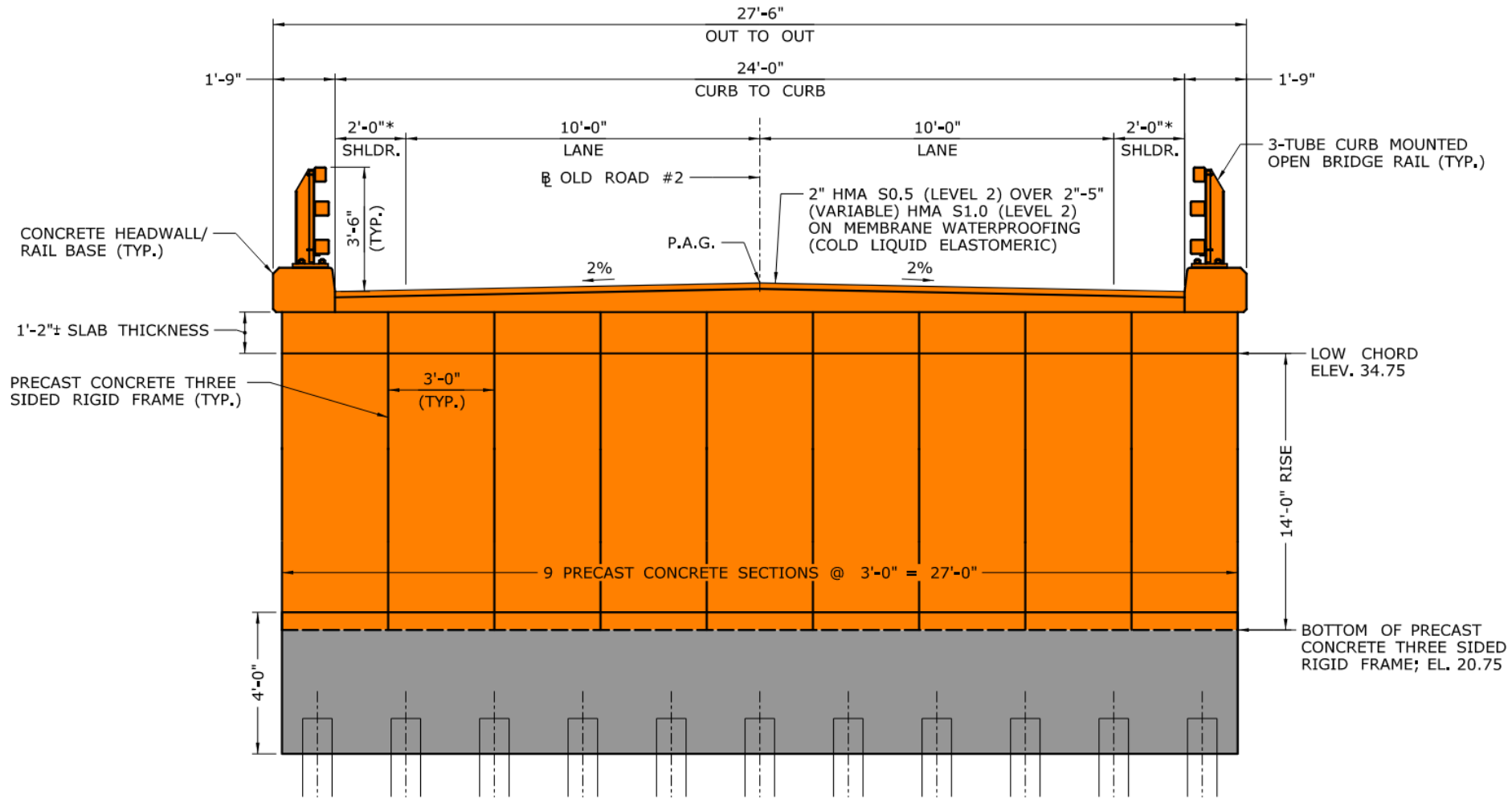
- PROPOSED BRIDGE (3-SIDED RIGID FRAME)
- PROPOSED SUBSTRUCTURE
- PROPOSED ROADWAY RECONSTRUCTION
- PROPOSED APPROACH GUIDERAIL
- PROPOSED FILL
- PROPOSED CUT
- WATERCOURSE
- WETLANDS
- R.O.W. LINE



DOWNSTREAM (SOUTH) ELEVATION



Bridge No. 04971 – Bridge Section



LEGEND:

- PROPOSED BRIDGE (3-SIDED RIGID FRAME)
- PROPOSED SUBSTRUCTURE

PROPOSED BRIDGE SECTION (LOOKING EAST)

SCALE: 3/8"=1'-0"

* 2' UNSTRIPED SHOULDER



Bridge No. 04971 – Bridge Aesthetics



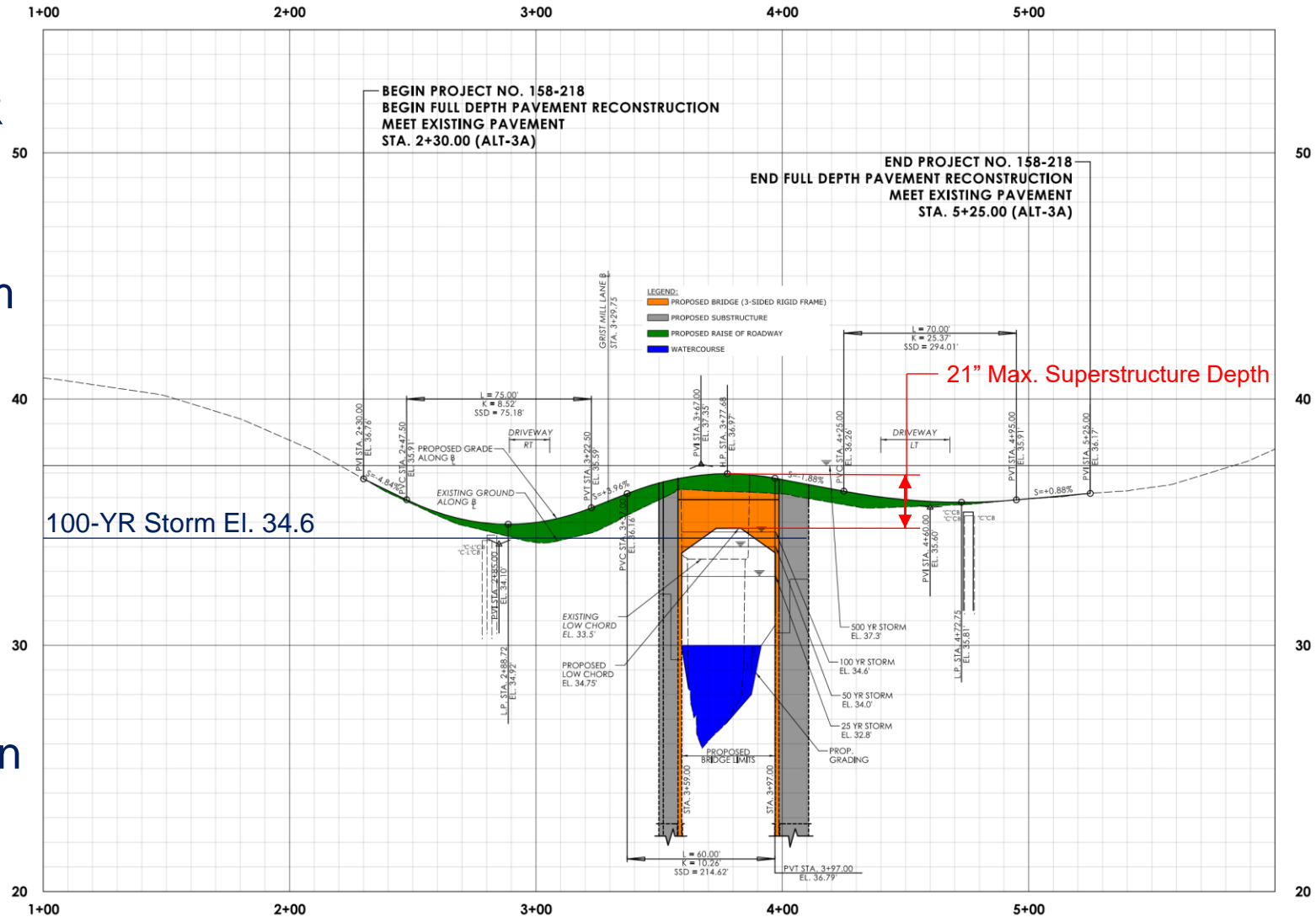
- Concrete Form Liner on exposed concrete surfaces – replicated to Town's choice of stone
- Open Bridge rail – metalized to Town's color choice
- Timber guiderail at (2) approach corners



Bridge No. 04971 – Old Road No. 2 Roadway Profile



- Existing Bridge:
 - Does not pass 25-YR storm
- Proposed Bridge:
 - Passes 100-YR storm
 - Eliminates roadway overtopping
- Upgrade achieved by:
 - 6" Raise in roadway profile
 - Shallow depth of superstructure
 - Increased bridge span

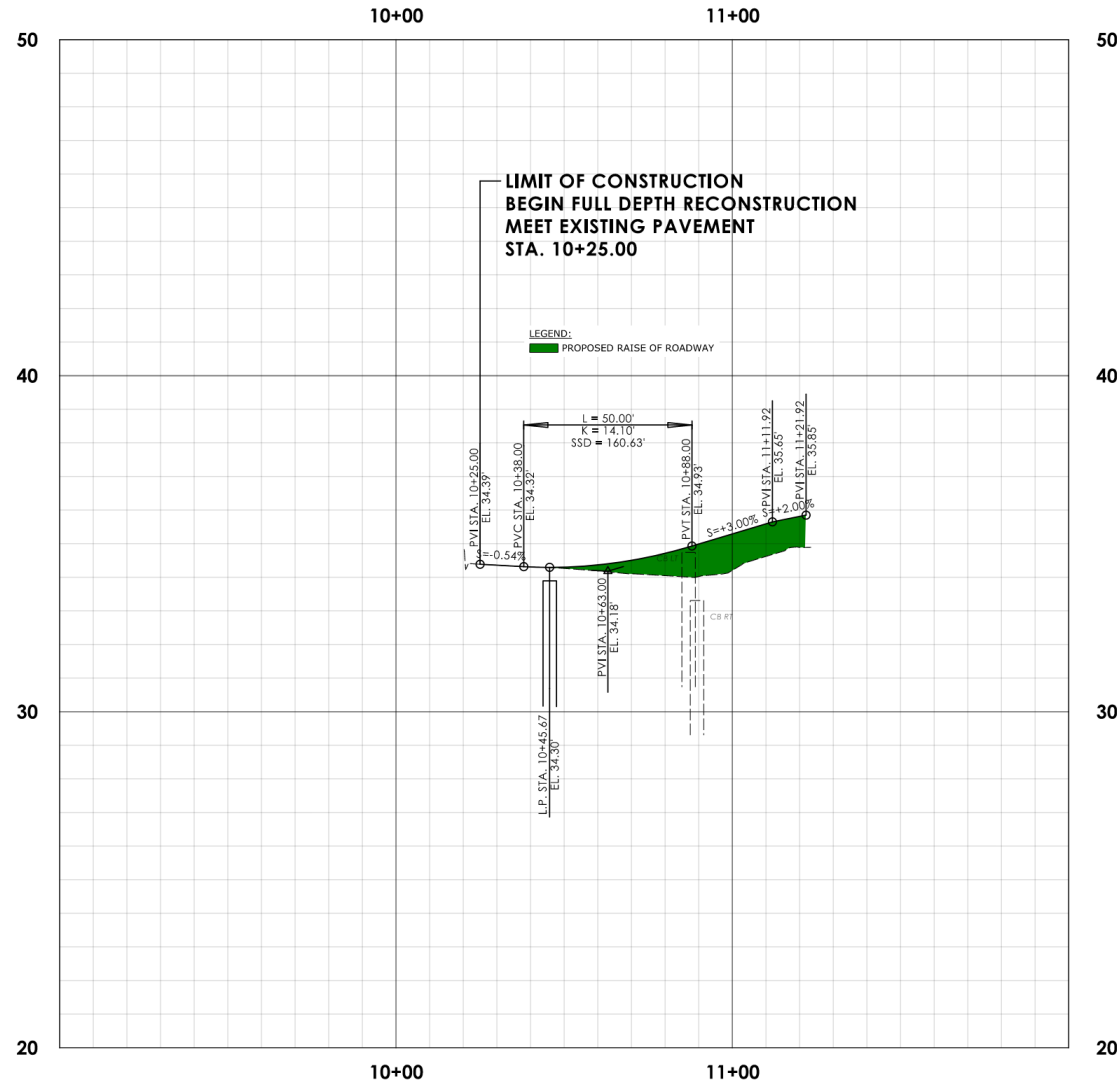


Bridge No. 04971 – Grist Mill Lane Roadway Profile



Proposed Roadway:

- 6" Raise in Profile to match the profile raise of Old Road No. 2

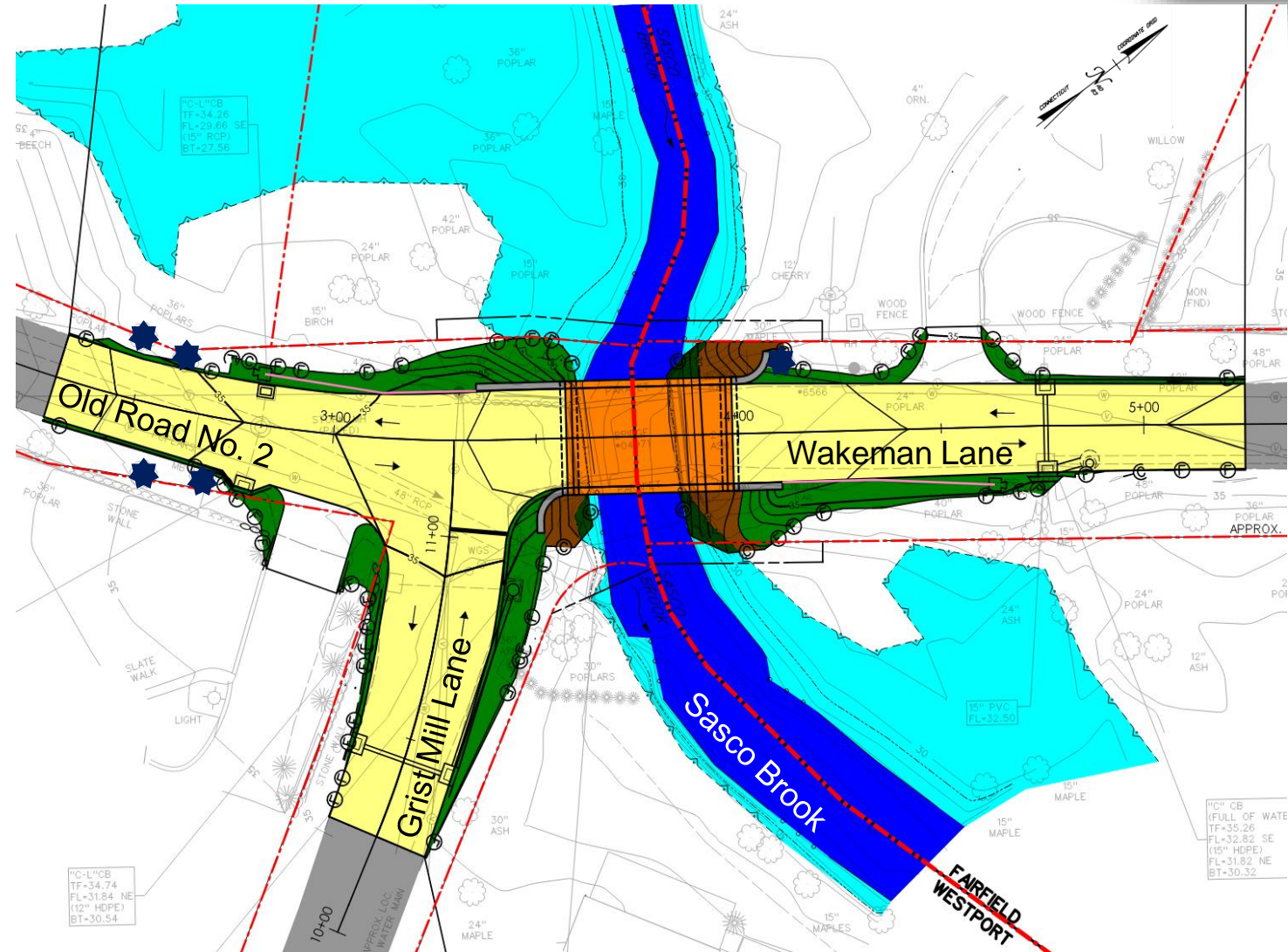


Bridge No. 04971 – Roadway Plan



Proposed Alignment:

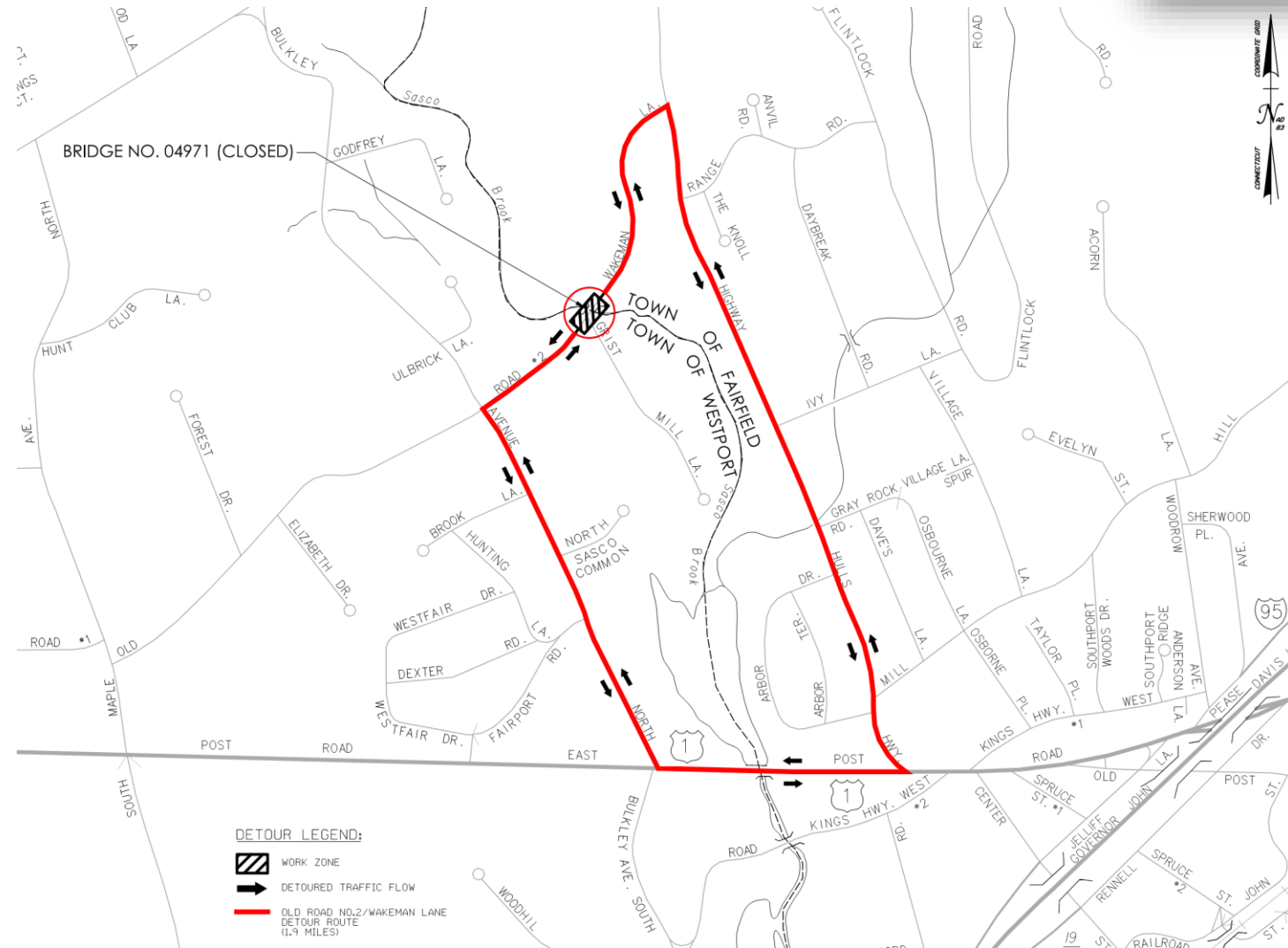
- Channelizes traffic through the intersection and over the bridge
- Turning movements at intersection meets truck standards
- Consistent lane width across the bridge



Bridge No. 04971 – Maintenance and Protection of Traffic



- Bridge closure with detour:
 - Safe work zone for residents, commuters & contractor
 - Short construction duration



Bridge No. 04971 – Utility & Environmental Impacts



- Utility Impacts:
 - Temporarily relocate existing overhead utilities
 - Permanently relocate existing watermain
 - Modifications to drainage system
- Environmental Impacts:
 - Tree clearing along roadway
 - Temporary wetland and watercourse impacts
- Anticipated Permits:
 - Town of Westport Inland-Wetlands
 - Town of Fairfield Inland-Wetlands
 - Flood Management Certification (MOU)
 - US Army Corps of Engineers – Self Verification or Pre-Construction Notification

Overhead Utilities



Water Main in Channel

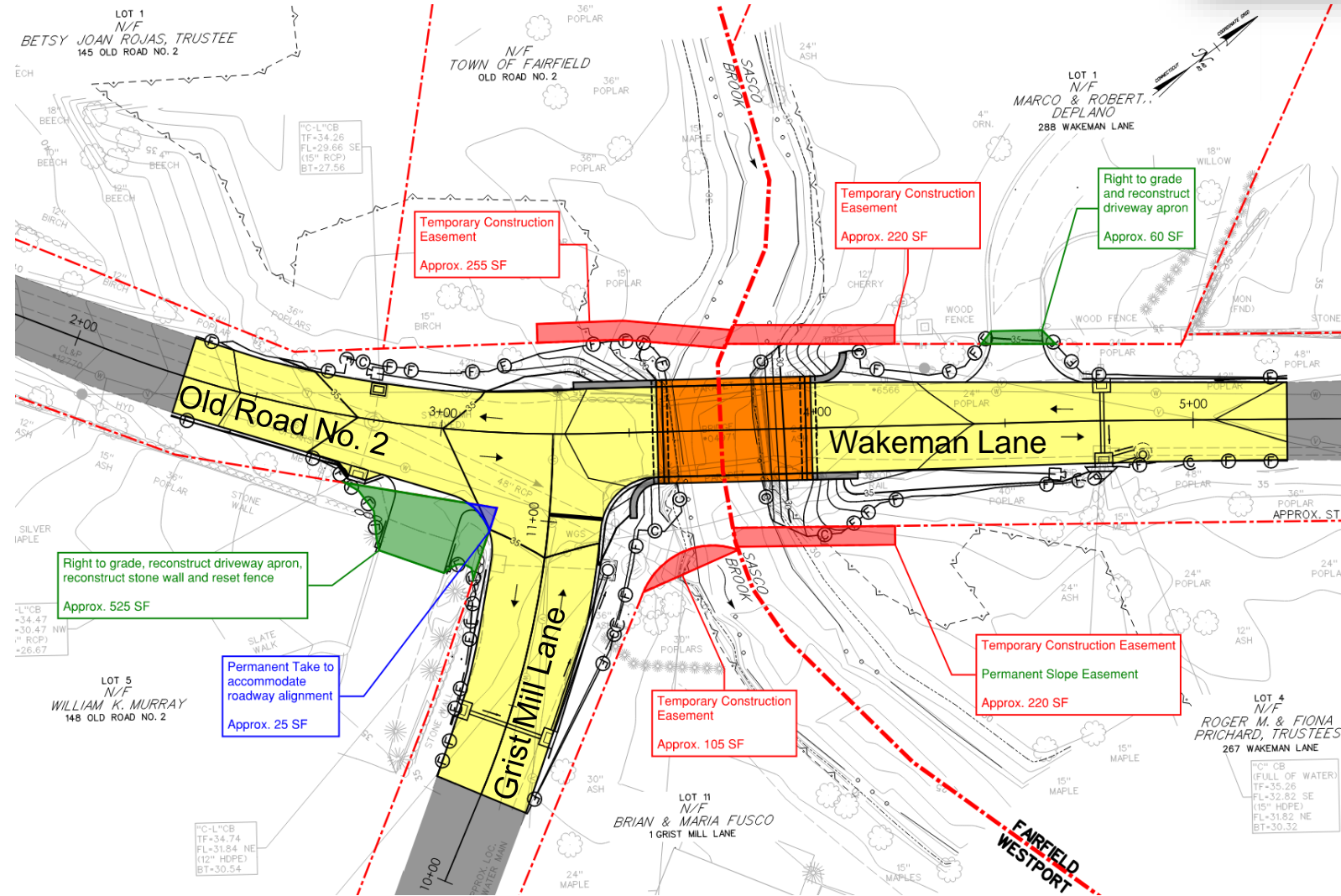


Bridge No. 04971 – Rights of Way Impacts



Properties with impacts:

- Town of Fairfield
- 288 Wakeman Lane
- 267 Wakeman Lane
- 1 Grist Mill Lane
- 148 Old Road No. 2



Division of Rights of Way



- Function
 - Acquire all property/property rights necessary for the project.
- Statutory References
 - State of Connecticut: C.G.S. Section 13a-73 & 13a-98e
 - Federal: Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as Amended.
- Impacts to Private Property*
 - Partial Acquisitions
 - Easements
 - Rights

*Impacts are Subject to Change as Design Progresses



Division of Rights of Way



- ROW Process
 - Letter of Intent to Acquire
 - Valuation
 - Offer of Compensation
 - Negotiation
 - Acquisition
 - Agreement
 - Condemnation



Bridge No. 04971 – Schedule and Cost



- Schedule:
 - Construction Start: Spring 2023 (subject to permit approvals)
 - 8 months Construction duration
- Construction Cost: \$2,570,000
- 80% Federal Funds, 10% Westport Funds, 10% Fairfield Funds

Note: The Cost and Schedule are preliminary and are subject to change



Live Question and Answer Section (Q&A)



Send a Question and Comment via:

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by Chat: **MS Teams Live Event Chat**

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