

TOWN OF COLEBROOK

State Project No. 029-104

Replacement of Bridge No. 05141 - Sandy Brook Road over Sandy Brook and Preservation of Bridge No. 05146 - Old Creamery Road over Still River

**Public Information Meeting
May 12, 2021 at 6:00 pm
Online via Zoom**

Report of Meeting

In Attendance

Harry White	Neighbor
Earnie Marmer	Neighbor
Abrah Carroll	Neighbor
Penny White	Resident
Chris Johnstone	Colebrook – Selectman
Diane Johnstone	Colebrook – Board of Finance
Tom McKeon	Colebrook – First Selectman
Debi McKeon	Colebrook – Town Clerk
Cathie Norton	Colebrook – Assistance Town Clerk
Sean Laudati	BL Companies
Steve Fraysier	BL Companies
Jagdeesh Gopal	GM2 Associates, Inc.
Dennis Garceau	GM2 Associates, Inc.

Transactions & Discussions

Dennis Garceau (Project Manager, GM2) initiated the presentation of State Project No. 029-104 for the Replacement of Bridge No. 05141 – Sandy Brook Road over Sandy Brook and the Preservation of Bridge No. 05146 – Old Creamery Road over Still River. The material presented generally followed “Attachment A”, which is a copy of the slides presented during the virtual meeting. Each bridge site was presented separately and a questions and answer period took place at the end of each bridge site presentation as well.

Thomas McKeon (First Selectman, Colebrook) and Jagdeesh Gopal (GM2 Associates, Inc.) assisted with the presentation and answering questions.

Questions and answers took place at the end of the presentation of each bridge site. The questions and answers that were discussed at the meeting are summarized as follows:

Bridge Site 1 - Replacement of Bridge No. 05141 – Sandy Brook Road over Sandy Brook:

Question 1: Are we going to leave the existing abutments in place?

Answer 1: Yes. The advantage to this is that once we take the deck and the beams off, we will keep the existing abutments in place and do all the new construction of the new supports behind those abutments and stay out of the water so there are minimal to no impacts to the environment. Once the new abutments are in place, the existing abutments will be cut down to provide a maintenance shelf and access for the bridge inspectors to inspect underneath and at the beam ends.

Question 2: Do we gain anything in terms of clearance for flow by doing that?

Answer 2: Yes. As mentioned before, it does create some improvements to the hydraulics where we are getting no overtopping to the low point in the road for the 100 -year design storm.

Question 3: What kind of climate change scenario modeling has been done here since this bridge is going to be here for at least 75 years?

Answer 3: There is detailed hydraulic analysis that is performed by a pre-approved CTDOT hydraulic engineer and all that is vetted and reviewed in detail to the latest standards and requirements from CTDOT Hydraulics and Drainage and also our Liaison as well from BL Companies.

Question 4: Are we going to leave the existing abutments in place which actually reduces the amount of demo? Right?

Answer 4: Yes.

Question 5: How much more flow capacity is gained? Is it significant with this? Is that 6" of freeboard that significant?

Answer 5: I think it helps. You are not going to get that overtopping that you may get occasionally, once in 10 years. There are definitely some improvements. It doesn't eliminate everything, but there are definitely some sizable improvements.

Question 6: What is picking up the bridge runoff itself?

Answer 6: We are sliding the low point off to the south as well. So, the intention is to get that away from the driveway (Harry White's driveway).

Question 7: Shouldn't there be a pick up before the driveway (Harry White's driveway)? Do you think grades are going to do that with the crown in the road? Something seems to be missing.

Answer 7: When we reconstruct the driveway, we typically put a 2" lip and the driveway is raised about 2" at the gutter vertically and then we typically put some kind of a crest point in the driveway to help alleviate some of that runoff. We definitely understand the sensitivity and that is something we will study further as we go forward. Right now, we are at the preliminary design phase, which is about 30%. So, when we move into Final Design, we will address your concern in more detail when we initiate the Semi-Final Design (about 70% design).

Question 8: Do we get to see anything at that point?

Answer 8: That is something that (through the Town) we can share. You can get that information through the Town.

Question 9: Are we not looking at a high parapet on the side of the road on the side of the bridge? We are going to have a low one and a railing like it is now?

Answer 9: Yes, it is similar to the existing, but it is more robust and adequate for the new standards for traffic impact loads. The intention is to keep it an open bridge rail so you can still have a nice view of river as a pedestrian.

Question 10: The rail that you are using, you said you are trying to keep it aesthetically pleasing to be in a country environment. So, it is colored brown in the picture. So that is brown metal as well?

Answer 10: Basically, we can work with the Town on that and get feedback from the public. We show brown, but it can be black or silver.

Question 11: At the bottom of the hill, at the curved bridge (the second bridge) it is architectural bronze on the rail? Is this going to be 588 steel? Dark beams with no paint?

Answer 11: No. It will not be what they call Core 10 or weathering steel. But it will be steel and actually painted and for some projects we have done a powder coating which gives it more durability.

Question 12: Why did they use Core 10 down below and not for this one? Is there any structural reason for that?

Answer 12: The rail was anodized aluminum railing on the bridge and on the approaches (the guiderail) was conventional galvanized on the other bridge. We are no longer allowed to use the aluminum rail system by the program because the safety standard that this crash collision prevention systems have to meet are more stringent requirements than at that time. So right now, we have to meet MASH compliance hardware. MASH essentially is based on a crash tested system and there are requirements from the Feds. Therefore, we can only use systems that are compliant with MASH.

Question 13: Is this a bullet rail type guiderail?

Answer 13: There are different styles and this is more of a tubular type system. The final rail is something that we can certainly work on through Tom as long as it is MASH compliant.

Question 14: Can we look quickly at the taking drawing? What is that going to look like in the final game in terms of the landscape/the terrain on the south side of the bridge?

Answer 14: It is going to look very similar. It is going to be restored. We are raising the profile a little, so there will be some reconstruction to your driveway. For the most part, there is an outfall there now and there will be a new outfall for that cross pipe. It will look similar to what you have now, but some of that vegetation will have to come down to do those changes.

Question 15: There will be an excavation across my driveway (Harry White's driveway)? Will I be able to get in and out of my driveway during that? Except when the actual hole is being dug?

Answer 15: Yes, we will need to trench that to get that new pipe system installed. Yes, that is a requirement during construction that your access is maintained and coordinated with the contractor.

Question 16: Don't know if this is too early to ask. How long will they be doing demo? How long will they be driving piles?

Answer 16: It is a little bit premature, but in general we are using conventional construction here. So, the good news is that based on the subsurface investigation, bedrock is fairly shallow and we are not going to have to go with deep foundations, which require pile driving. These will be cast in place type abutments. Obviously, there will be some demolition that has to occur. Removing of the superstructure itself, which is the beams and the deck. Then the contractor will have to do some removing and cutting down of the existing concrete abutments. But talking in general time frames, it will take about a 2-4 week period as far as removal goes. As far as the removal of the deck it usually comes out fairly quick within a week.

Question 17: Can we go back to the aesthetics? It seems that as this is discussed more going forward, the brown look is more pleasing than the silver aluminum look. Can that be worked into the plans as they are finalized?

Answer 17: So, once we get closer to finalizing, we can work with the public on that. We don't believe that we can use the weathering steel guiderail (brown one) anymore. So, the option might be that you have to either paint it afterwards, which we have done as well. That and the color we can certainly discuss going forward. We can pursue a similar look to the lower bridge.

Bridge Site 2 - Preservation of Bridge No. 05146 – Old Creamery Road over Still River:

Question 1: Are you taking a lot of trees?

Answer 1: The only work that may require some minor clearing is to install that riprap slope areas within those triangular areas in hatch on the plan. There are some smaller trees in close proximity of the four corners of the bridge. But aside from that, the intention is to not do that much clearing for this type of work.

Question 2: Will you try to minimize the removal of trees?

Answer 2: Yes.

Question 3: Is it possible to get a copy of the take page.

Answer 3: Yes. As part of this process, the CTDOT Rights-of-Way department will be meeting with any of the property owners where there are impacts. So, you will also be having that and contact information can be share as well, which is definitely part of this program.

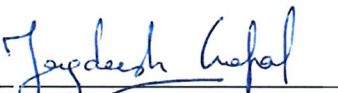
Question 4: When will the legal property stuff be done?

Answer 4: Typically, we start that process at the next phase at the 70% phase. So, we are probably looking at within a 2-4 month period. But again, we can make any of these preliminary drawings available and give you access to that if wanted.

Submitted by: 

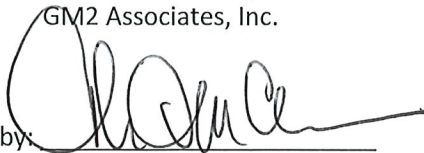
Dennis Garceau, PE
Project Manager
GM2 Associates, Inc.

Date: 05/20/21

Reviewed by: 

Jagdeesh Gopal, PE
Principal-in-Charge
GM2 Associates, Inc.

Date: 05/21/2021

Approved by: 

Thomas McKeon
First Selectman
Town of Colebrook

Date: 6/3/21

Replacement of Sandy Brook Rd over Sandy Brook and Preservation of Old Creamery Road over Still River

Colebrook, CT

SPN 029-104

Public Information Meeting Presentation

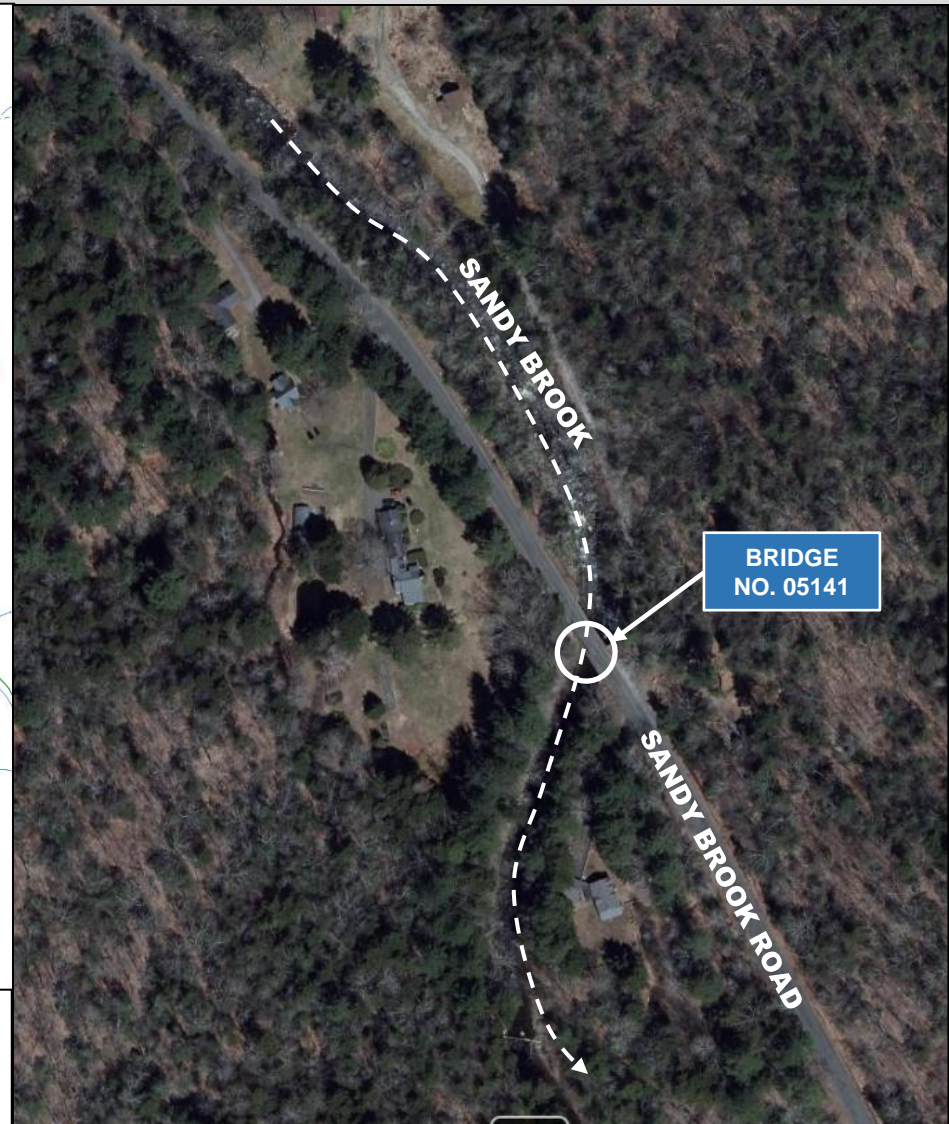
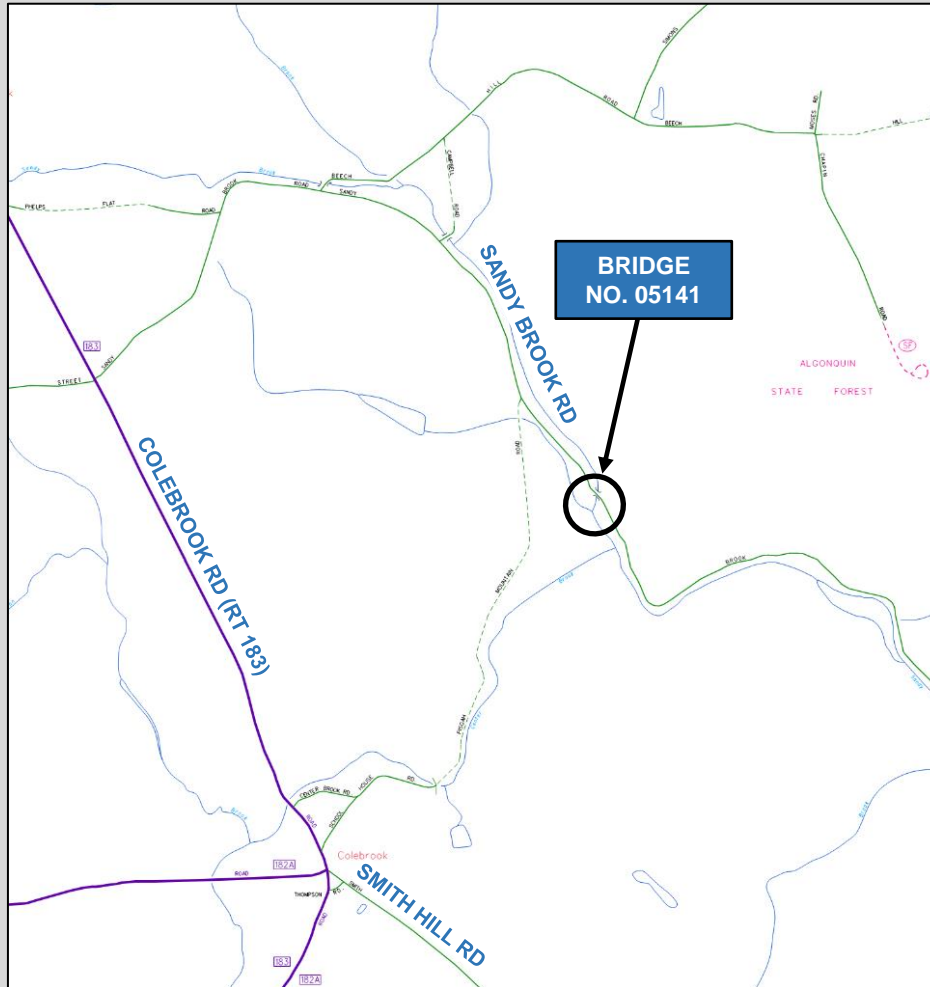
May 12, 2021

"ATTACHMENT A"

Prepared by:



Bridge No. 05141 Sandy Brook Road over Sandy Brook



**Replacement of Bridge No. 05141
Sandy Brook Rd over Sandy Brook**

Bridge No. 05141 Sandy Brook Road over Sandy Brook



Bridge No. 05141

Originally Built: 1947

- Overall Length: 70'
- Out to Out Width: 25.67'
- Concrete Deck with Steel Stringers
- Concrete Abutments & Wingwalls
- Steel Bridge Rail



Sandy Brook Road over Sandy Brook

Why Rehabilitation/Replacement?

According to January 2021 Inspection:

- Structurally Deficient – Poor Condition Overall
- Steel Girders (Poor) – Heavy Rust Throughout
- Concrete Abutments (Good) – No Scour
- Hydraulically Inadequate – Roadway Overtops
- Study of both Rehab & Replacement Alts.





Project Objectives

- Rehabilitation with 25-year Life
- Replacement with 75-year Life
- Minimize Environmental & Property Impacts
- Minimize Inconvenience to Adjacent Residents & Commuters
- Reduce Frequency of Roadway Overtopping (If Possible)
- Cost Effective, Aesthetic, & Low Maintenance Structure



Alternatives Studied

Alt Description

1. Metalized Steel Beams with Conc. Deck on Rehabilitated Conc. Abutments
2. Metalized Steel Beams with Conc. Deck on New Conc. Abutments on Spread Footings
3. Prestressed Conc. Spread Box Beams with Conc. Deck on New Conc. Abutments

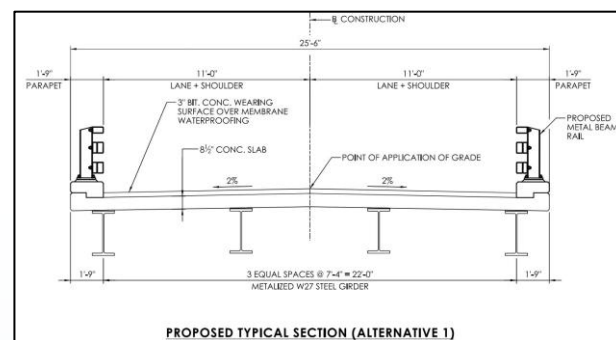
Estimated Cost

\$2.0 Million

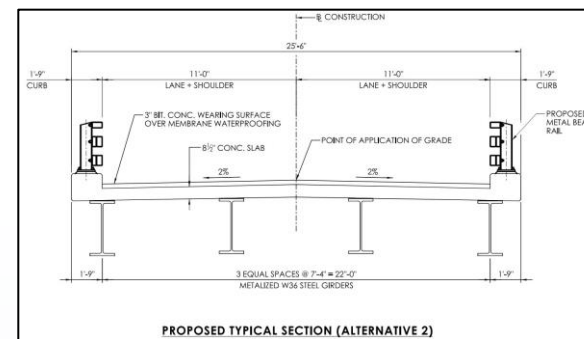
\$3.6 Million

\$3.5 Million

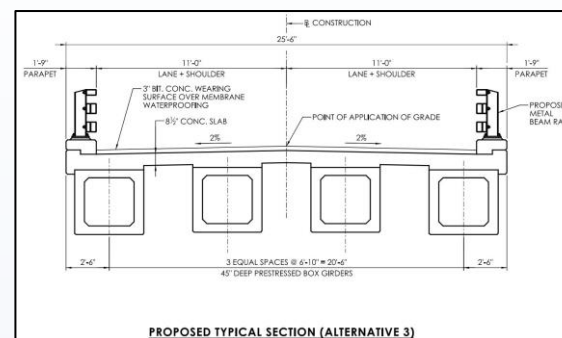
Alternative 1 (Rehabilitation)



Alternative 2 (Replacement)

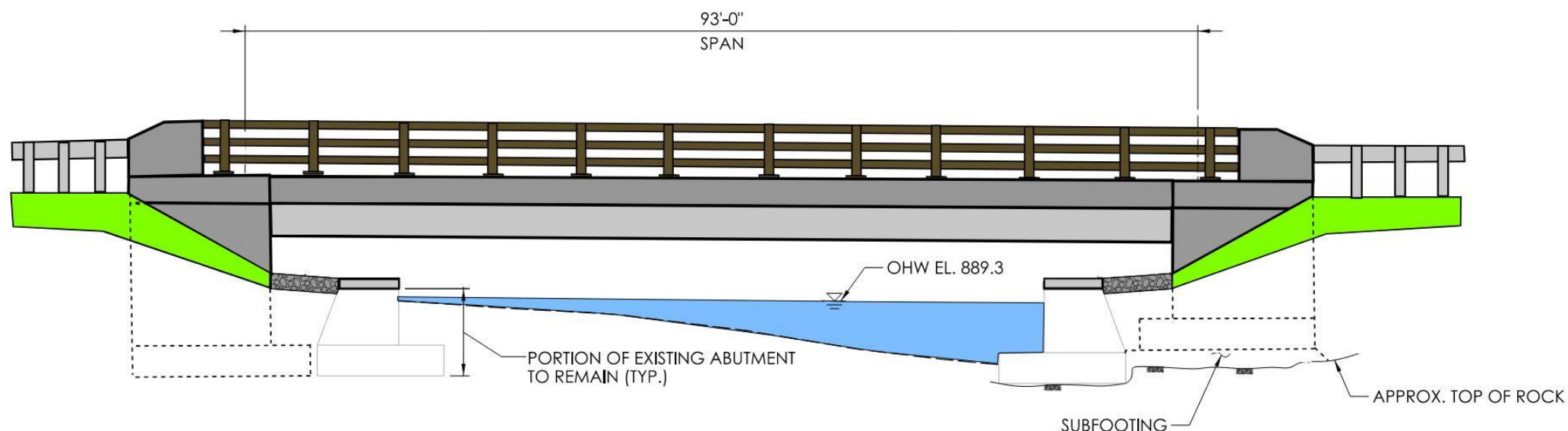


Alternative 3 (Replacement)



Recommended Alternative

Alt. 2 – Replacement – Metalized Steel Beams on New Concrete Abutments on Spread Footings



Advantages:

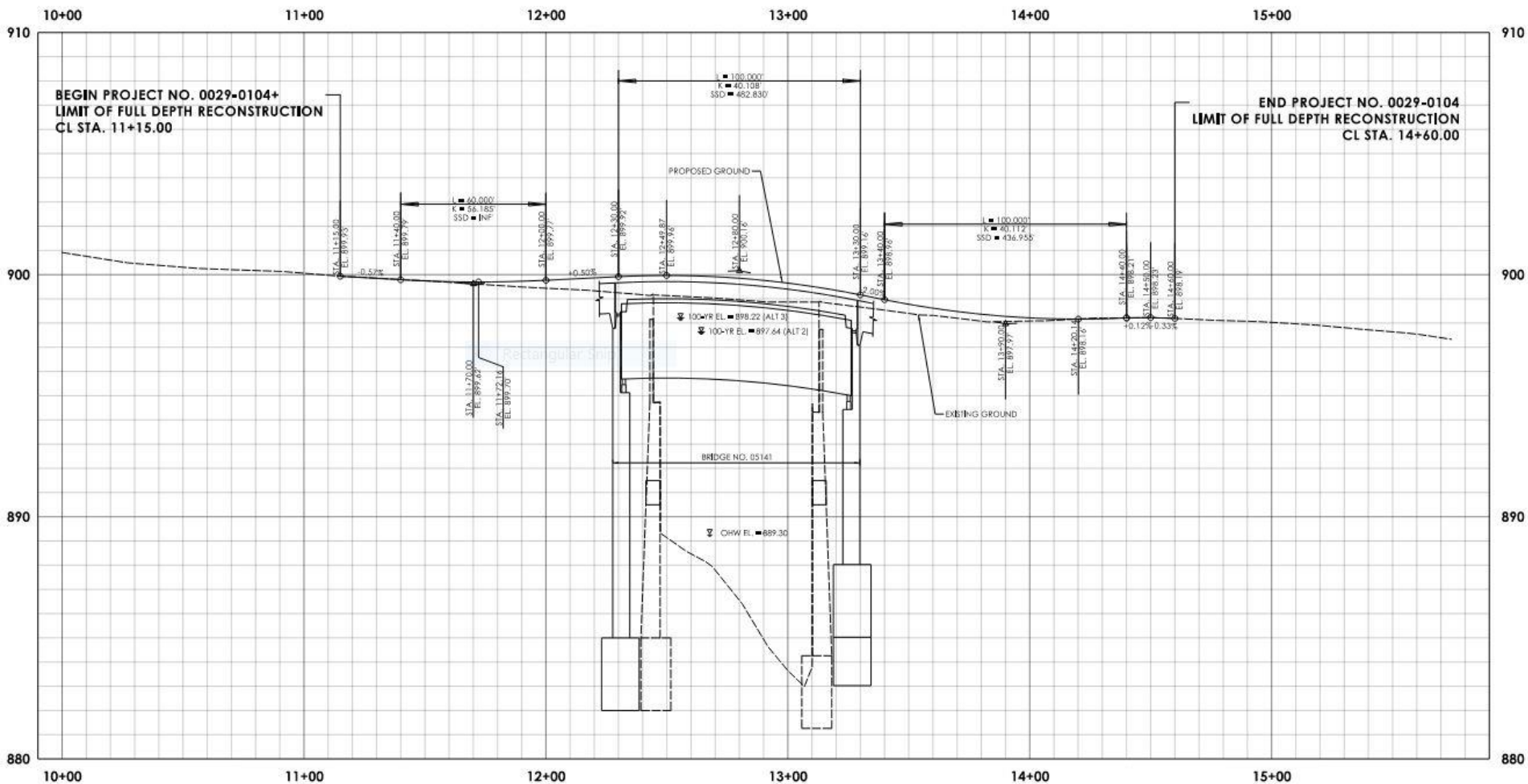
- Minimal Adverse Impacts on Stream
- Easier & Shorter Construction
- Similar Aesthetics to Existing
- Best Long Term Solution (Based on Life Cycle Cost Analysis)

2023 Cost: \$3.6 M

Bridge No. 05141 Sandy Brook Road over Sandy Brook



Proposed Design



Roadway Profile

Existing Condition:

- Overtops during 100-YR - South of Bridge
- No freeboard

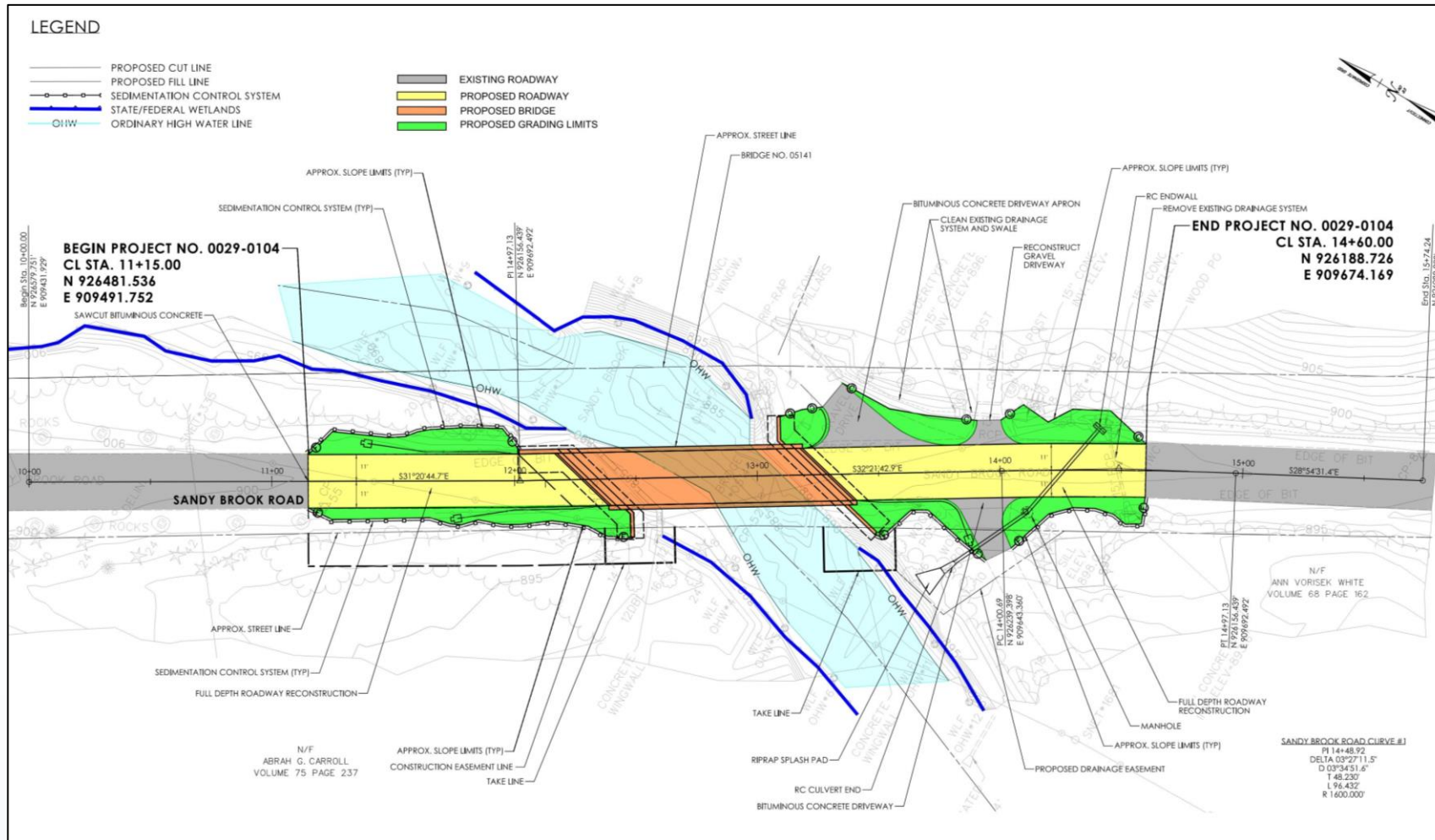
Proposed:

- 6" Raise at Bridge
- No overtopping
- Adequate freeboard

Bridge No. 05141 Sandy Brook Road over Sandy Brook



Proposed Design



- New Bridge (93' Length & 22' Curb to Curb)
- 250 LF Roadway Reconstruction
- Roadway - 22' curb to curb
- 2 – 9' lanes with 2- 2' shoulders (unstriped)
- Guiderail Upgrades
- Aesthetics:
 - Open Metal Bridge Rail

Roadway Plan

Bridge No. 05141 Sandy Brook Road over Sandy Brook



Road Closure

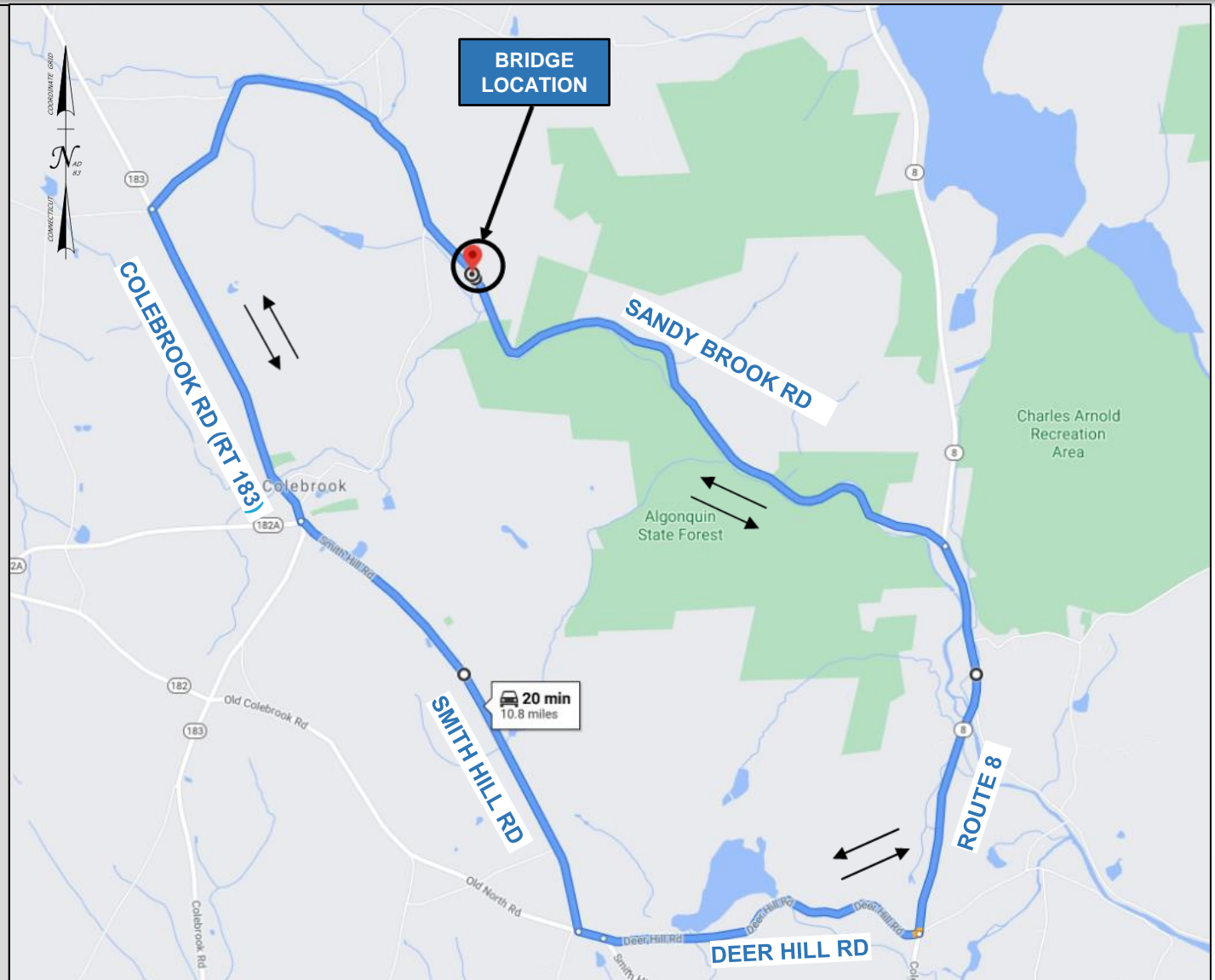
Rural Local

ADT = 648 (2019)

Access maintained for all private driveways

Detour via Colebrook Rd (RT 183),
Smith Hill Rd, Deer Hill Rd & Colebrook
River Rd (RT 8)

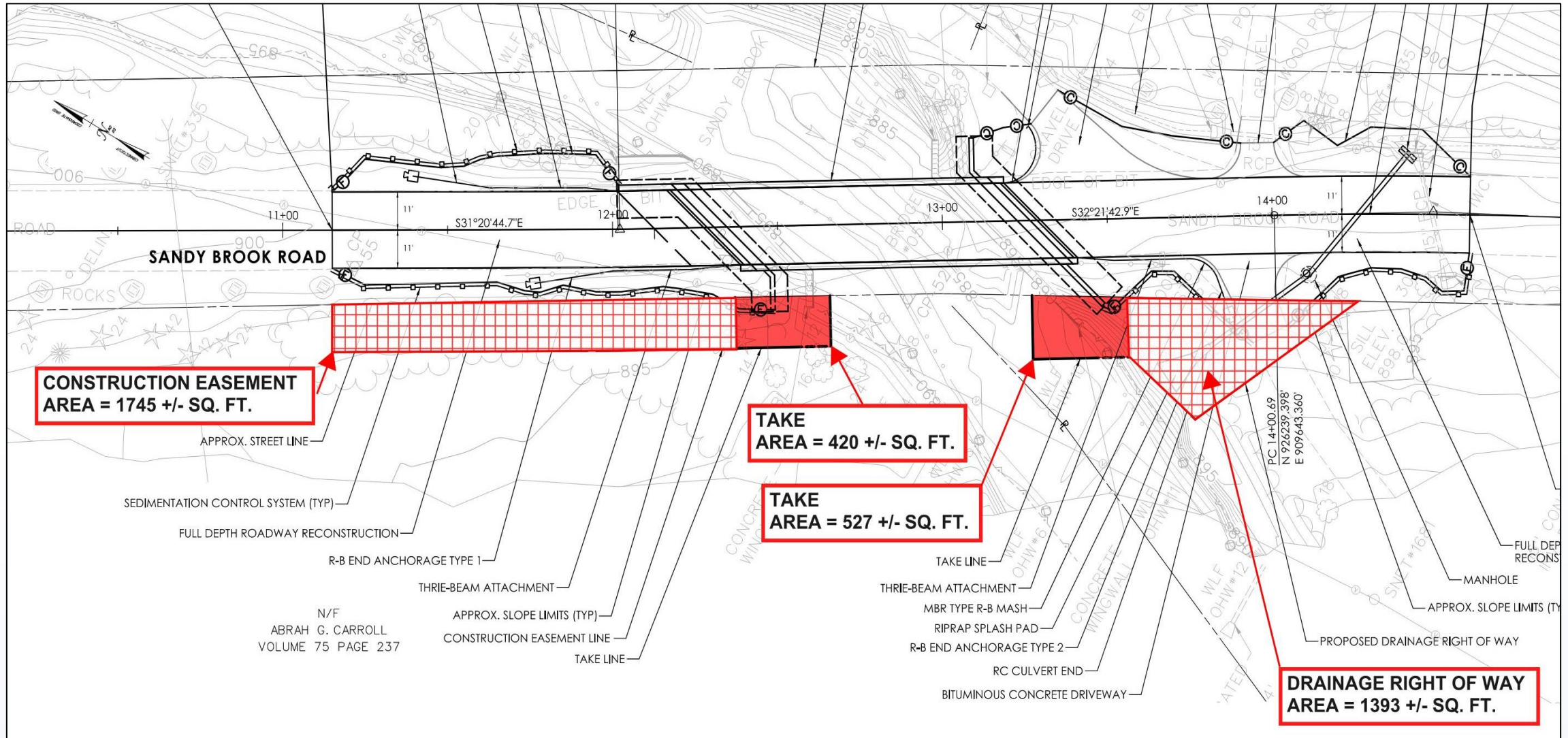
Detour Length = 10.8 Miles



Bridge No. 05141 Sandy Brook Road over Sandy Brook



Rights-of-Way





Project Cost

- The Estimate Total 2023 Construction Cost is Approximately **\$3,600,000**
- 80% Federal & 20% Local Funding
- Town Share is About **\$720,000**

Project Schedule

- Anticipate Start of Construction in **Spring 2023**
- Project Duration 6 to 8 months
- Construction Complete in **Fall 2023**



Questions & Answers

Contacts



GM2 Associates, Inc.

Dennis A. Garceau, PE
Project Manager

115 Glastonbury Boulevard
Glastonbury, CT 06033

Phone: (860) 659-1416

Email: dgarceau@gm2inc.com

Town of Colebrook

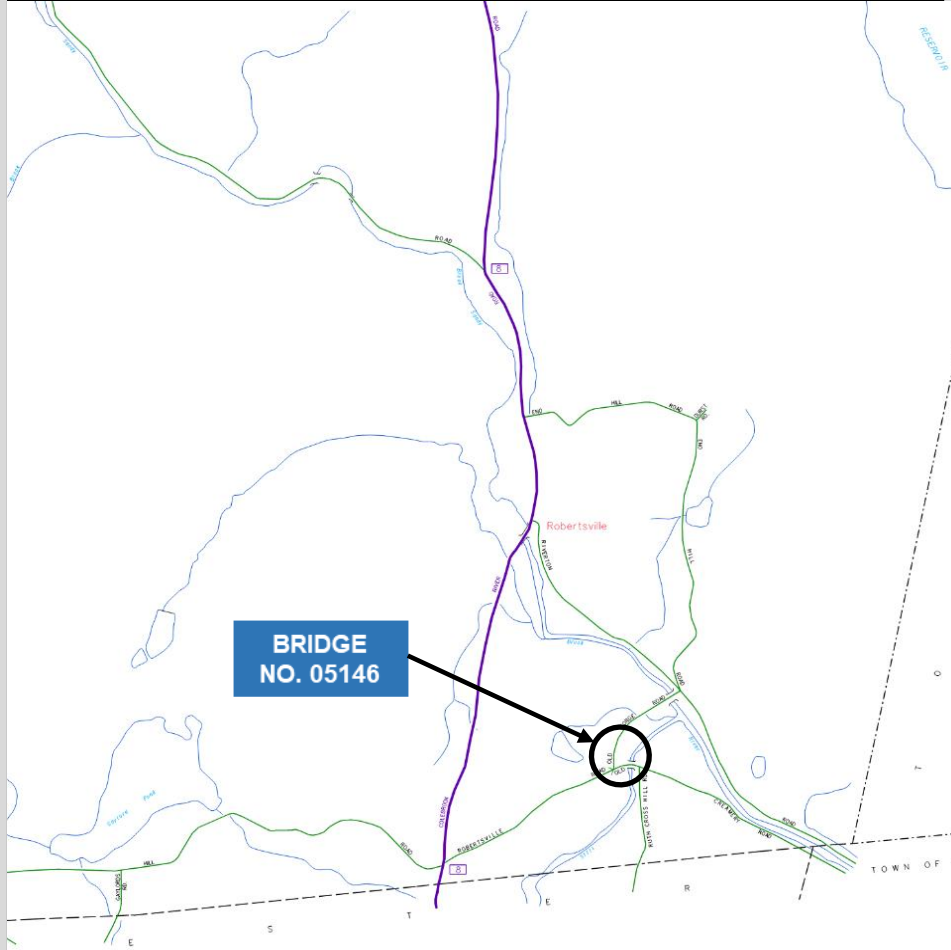
Thomas D. McKeon
First Selectman

562 Colebrook Road
Colebrook, CT 06021

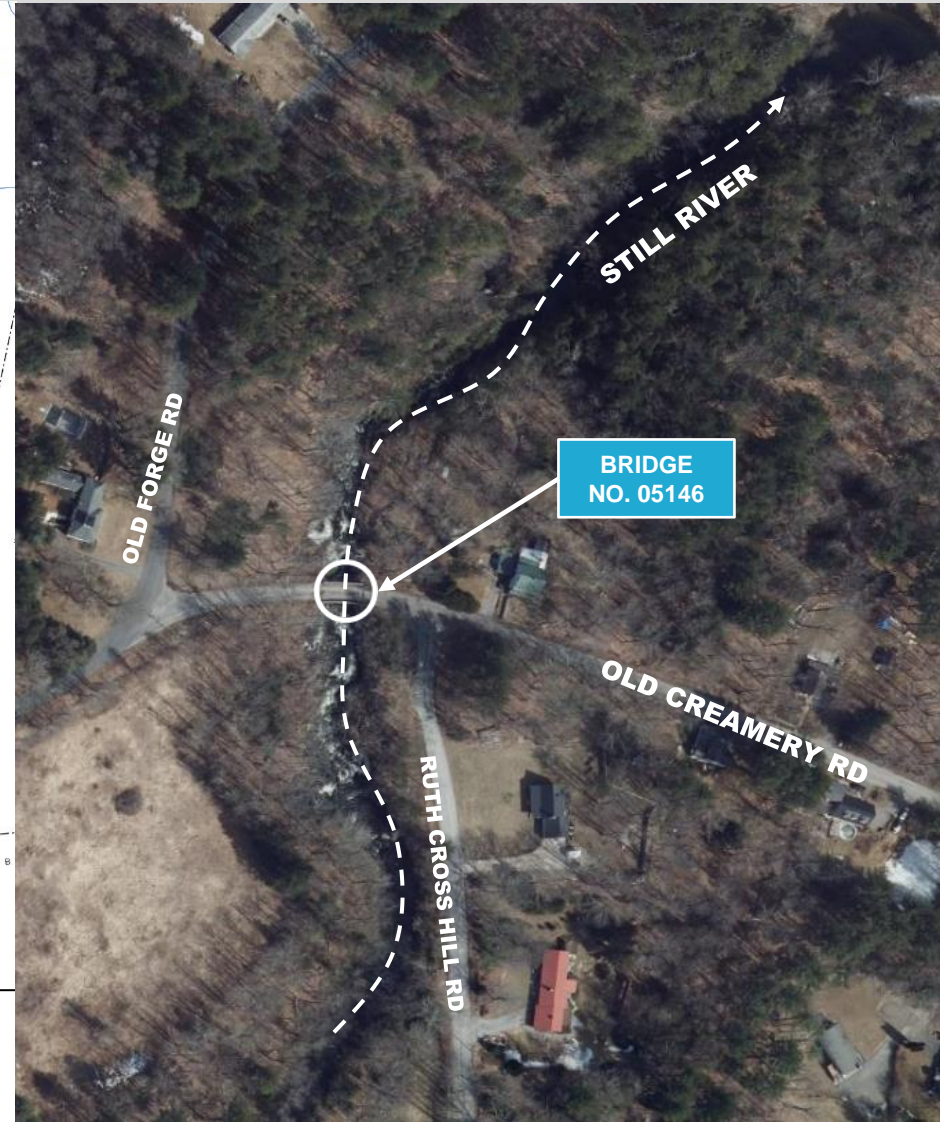
Phone: (860) 379-2259

Email: tommckeon@colebrooktownhall.org

Bridge No. 05146 Old Creamery Road over Still River



**Preservation of Bridge No. 05146
Old Creamery Rd over Still River**



Bridge No. 05146 Old Creamery Road over Still River



Bridge No. 05146

Originally Built: 1930

Reconstructed: 1965

- Overall Length: 46'
- Out to Out Width: 23.67'
- Concrete Deck with Steel Stringers
- Stone Masonry Abutments & Wingwalls
- Concrete Parapet with Handrail



Old Creamery Road over Still River

Why Preservation?

According to February 2021 Inspection:

- Not Structurally Deficient – Satisfactory Condition
- Steel Girders (Good) – No Significant Deficiencies
- Stone Masonry Abutments (Satisfactory) – No Scour
- Hydraulically Adequate – Underclearance
- Eligible as a Bridge Preservation



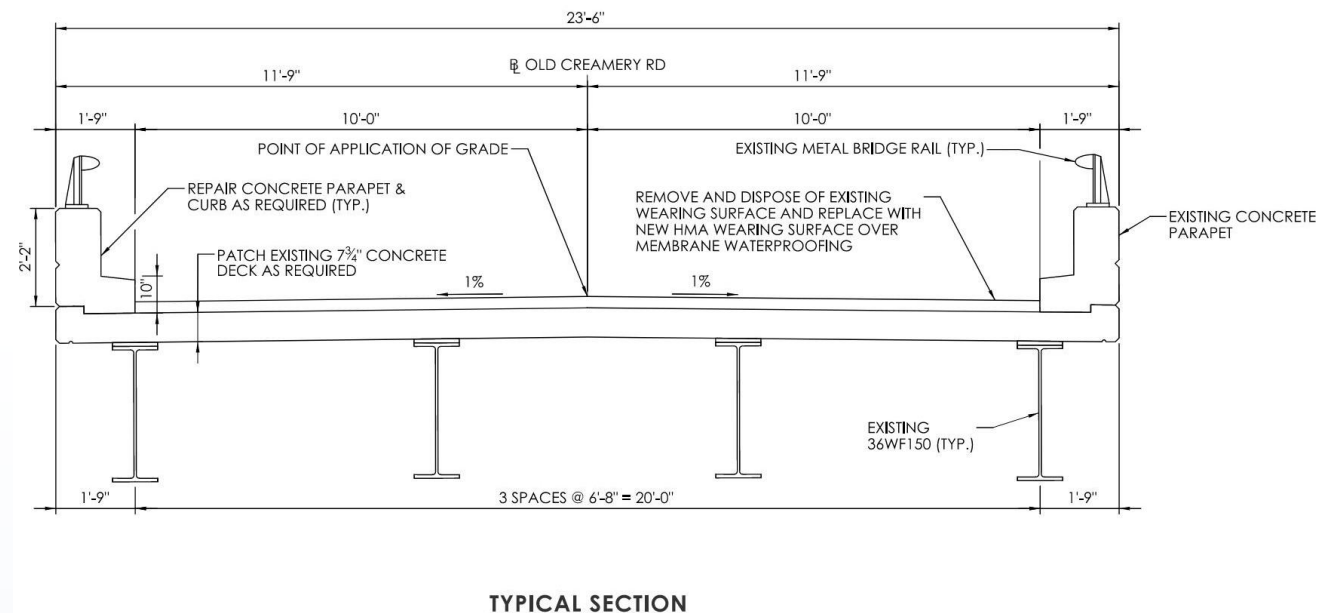


Project Objectives

- Preserve Bridge in “Fair” or Better Condition
- Perform Proactive/Preventative Maintenance Type Repairs
- Extend Useful Life
- Reduce Lifetime Costs
- Minimize Environmental & Property Impacts
- Minimize Inconvenience to Adjacent Residents & Commuters

Recommended Proposed Work

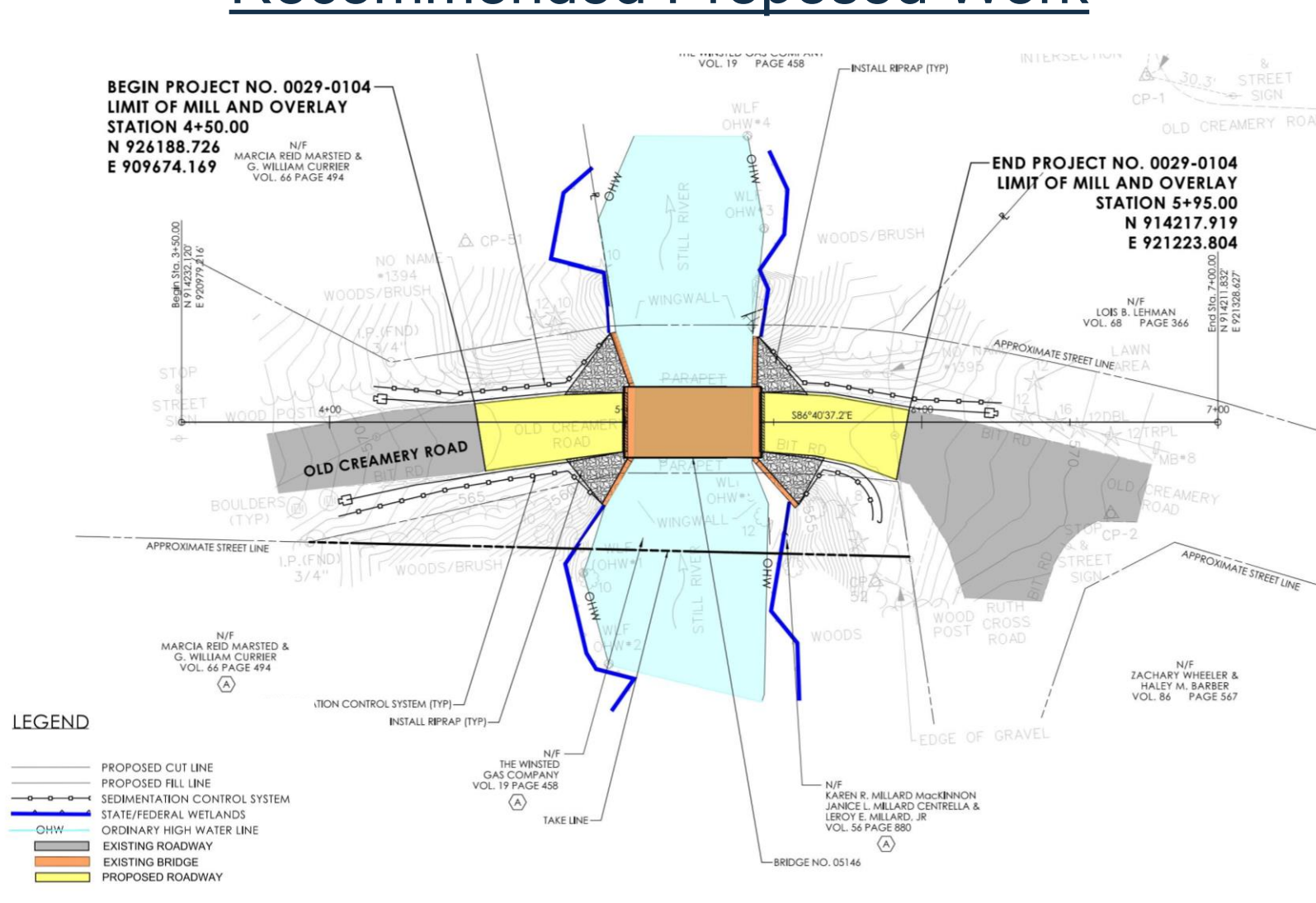
- Remove Existing Bituminous Overlay
- Repair Concrete Parapets/Curbs
- Patch Top of Concrete Deck
- Install New Waterproofing Membrane
- Install New Bituminous Overlay
- Install Deck Joints
- Mill & Pave Roadway Approaches (50 feet)
- Install Modified Riprap to Address Erosion
- Repoint and Replace Missing Stones to Repair Abutments & Wingwalls
- Remove Graffiti & Apply Anti-Graffiti Coating



Bridge No. 05146 Old Creamery Road over Still River



Recommended Proposed Work



Bridge No. 05146 Old Creamery Road over Still River



Road Closure

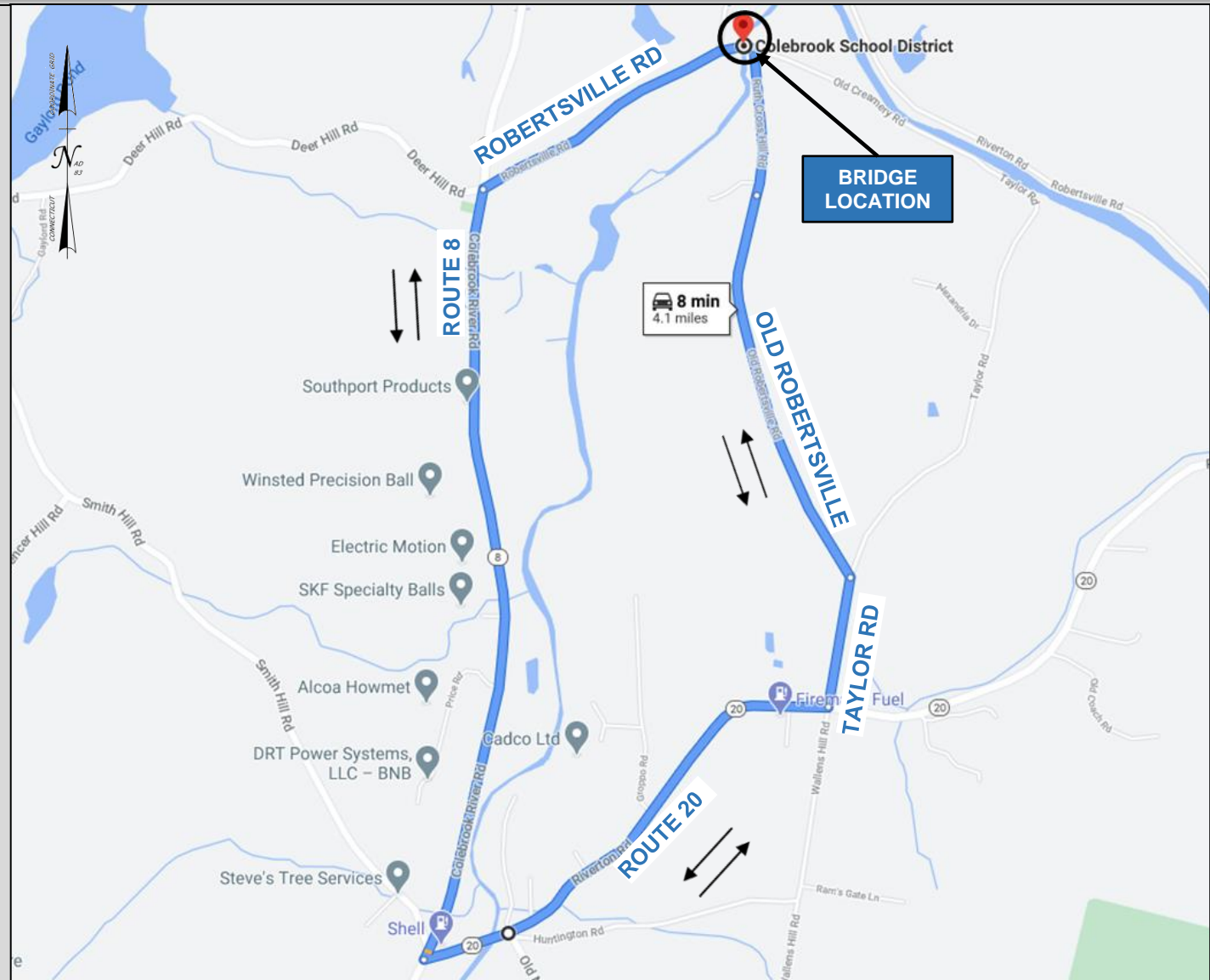
Rural Local

ADT = 324 (2019)

Access maintained for all private driveways

Detour via Robertsville Rd, Colebrook River Rd (RT 8), Riverton Rd (RT 20), Taylor Rd, & Old Robertsville

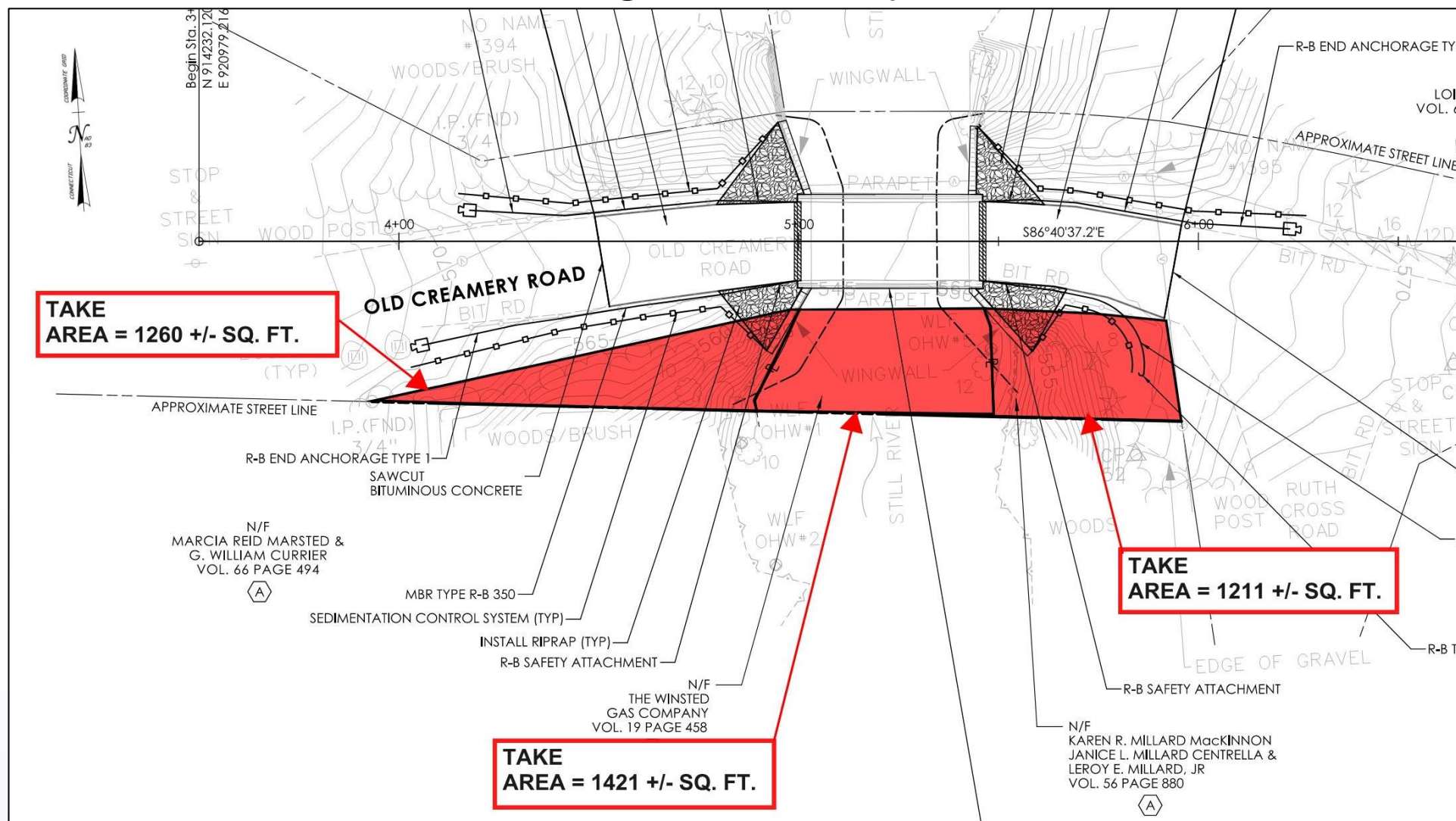
Detour Length = 4.1 Miles



Bridge No. 05146 Old Creamery Road over Still River



Rights-of-Way





Project Cost

- The Estimate Total 2023 Construction Cost is Approximately **\$350,000**
- 80% Federal & 20% Local Funding
- Town Share is About **\$70,000**

Project Schedule

- Anticipate Start of Construction in **Summer 2023**
- Project Duration 3 months
- Construction Complete in **Fall 2023**



Questions & Answers

Contacts



GM2 Associates, Inc.

Dennis A. Garceau, PE
Project Manager

115 Glastonbury Boulevard
Glastonbury, CT 06033

Phone: (860) 659-1416

Email: dgarceau@gm2inc.com

Town of Colebrook

Thomas D. McKeon
First Selectman

562 Colebrook Road
Colebrook, CT 06021

Phone: (860) 379-2259

Email: tommckeon@colebrooktownhall.org