

# Public Advisory Group Meeting 1

September 23, 2020



# Welcome to the PAG!



# Meeting Guidelines

- The meeting (including chat messages and poll responses) will be recorded and shared on the NJDOT website and the PAG SharePoint Site.
- Please remain muted unless called upon to speak.
- Please “raise your hand” if you wish to speak. Our moderator will call on participants to speak in the order in which hands were raised.
- You may also ask questions or submit comments using the chat feature.

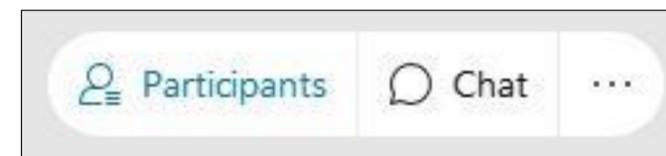
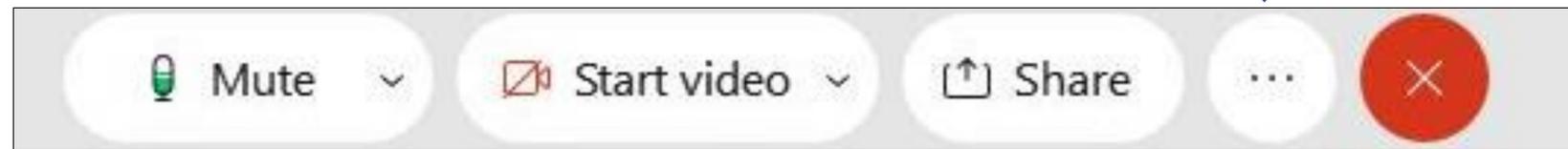
# Using the Webex Toolbars

**Turn webcam on or off.** Please note that if you choose to turn your webcam on all meeting attendees will be able to see you. Note that meeting video will be recorded.

**Technical options.** Adjust your audio connection, copy meeting link, etc.

**Show participants.** This feature allows you to view meeting attendees and raise your hand.

**Other options.** This button can be used to access polls. Note that poll responses will be recorded.



**Mute or unmute.** Please remain muted unless called upon to speak. Note that meeting audio will be recorded.

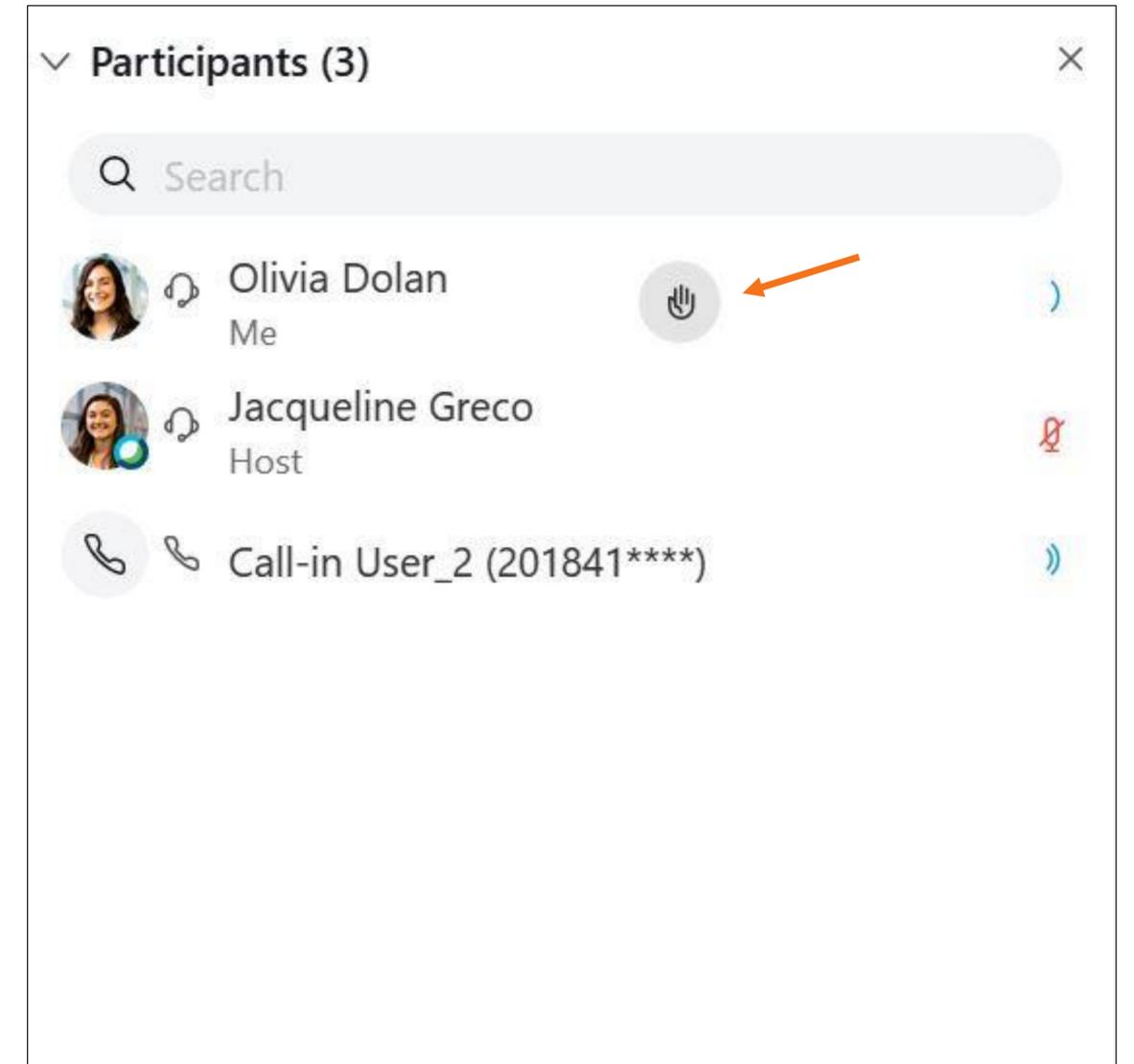
**Share screen.** Use this feature to share materials with the group.

**Leave the meeting.**

**Chat.** This feature can be used to write comments or ask questions in writing. Note that all chat messages will be recorded.

# Raising Your Hand in Webex

- You may raise your hand virtually to indicate that you have a question or wish to make a comment.
- Hover your mouse over your name on the participants window and select the hand raise feature.
- Please press the hand raise button again after you have spoken to lower your hand.
- Participants and attendees using a phone connection can raise their hand by dialing \*3.



# Public Advisory Group Overview



# Goals for Today's Meeting

- Why a PAG?
- Introduce Project Team Leadership and PAG Members
- Roles and responsibilities
- Project background
- Next steps

# Why a PAG?

- Created to address elected officials' input regarding community concerns
- Includes concerned residents and user groups
- Works proactively and collaboratively with project team to develop solutions to community concerns
- Acts as a conduit for communication among communities, community leaders, and project team

# PAG Purpose

To provide a forum for the exchange of information between the Project Team, members of the public, user groups, and key business groups that are **representative of the local communities affected by the project** and to **develop solutions to address community concerns.**

# Project Team Leadership

- Scott Deeck – NJDOT Project Manager
- Megan Fackler – NJDOT Office of Government and Community Relations, Acting Deputy Director
- Ali Vaezi – Consultant Team Project Manager
- David Hill – Consultant Team Deputy Project Manager
- Ileana Ivanciu – Technical Advisor, Environmental Analysis
- Andrea Burk – Environmental Analysis Task Leader
- Sara Margolis – Public Involvement Task Leader
- Joann Papageorgis – Technical Advisor, Public Involvement

# PAG Members

- Maryann Carroll – Delaware River Greenway Partnership, Executive Director
- Lauren Chamberlain – Borough of Delaware Water Gap – Resident
- John Corlett – AAA Northeast, Director of Public/Government Affairs and Traffic Safety
- John Donahue – Knowlton Township, Hardwick Township, Upper Mt. Bethel Township, Lower Mt. Bethel Township, Smithfield Township
- Crista Schaedel – Borough of Delaware Water Gap – Resident

# PAG Members, continued

- Lt. Jeffrey Shotwell – New Jersey State Police, Station Commander of the NJSP Hope Barracks
- Gail Toth – New Jersey Motor Truck Association, Executive Director
- Trooper Brian Weis – New Jersey State Police, Assistant Station Commander of the NJSP Hope Barracks
- Kimberly Witt (sitting in for Mark Zakutansky) – Appalachian Mountain Club, Director of Conservation Policy Engagement

# Expectations for PAG Members

- Bring to the Project Team's attention **community priorities or recommendations for solutions** that are prudent and feasible.
- **Share information** about the project goals and objectives with their constituents.
- **Share processes and procedures** followed in implementing the Project.
- **Work** with the Project Team to **raise and resolve community concerns and issues** throughout project duration.

# Project Team Responsibilities

- Answer questions
- Provide project background
- Receive suggestions from the group
- Provide timely feedback

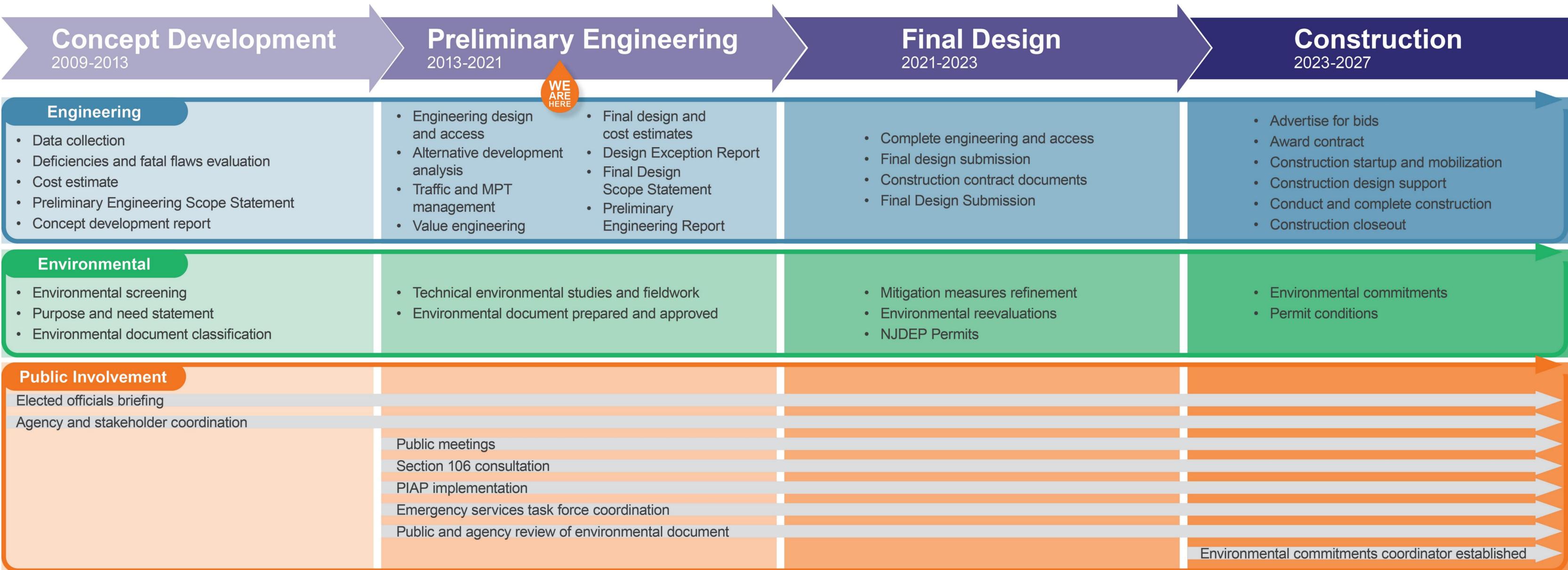
# PAG Member Poll

- How many years have you enjoyed the Delaware Water Gap National Recreation Area as a resident or visitor?
  - Less than 5 years
  - 5 - 10 years
  - 10 - 20 years
  - More than 20 years
- Which of the following activities have you done at the Gap?
  - Canoeing along the Delaware River during the spring, summer or fall
  - Bald Eagle viewing during the winter months along Old Mine Road
  - Walking or hiking the Appalachian Trail or other park trails to view fall's colors
  - Visiting the Gap's glacial lake, Sunfish Pond, via a hiking trail
  - Rock climbing on Mount Tammany or other rockface
  - Other activities
- Do you feel that you have a solid understanding of the I-80 Rockfall Mitigation Project?
  - Significant understanding
  - Moderate understanding
  - Minimal understanding

# Project Background



# NJDOT Project Delivery Process

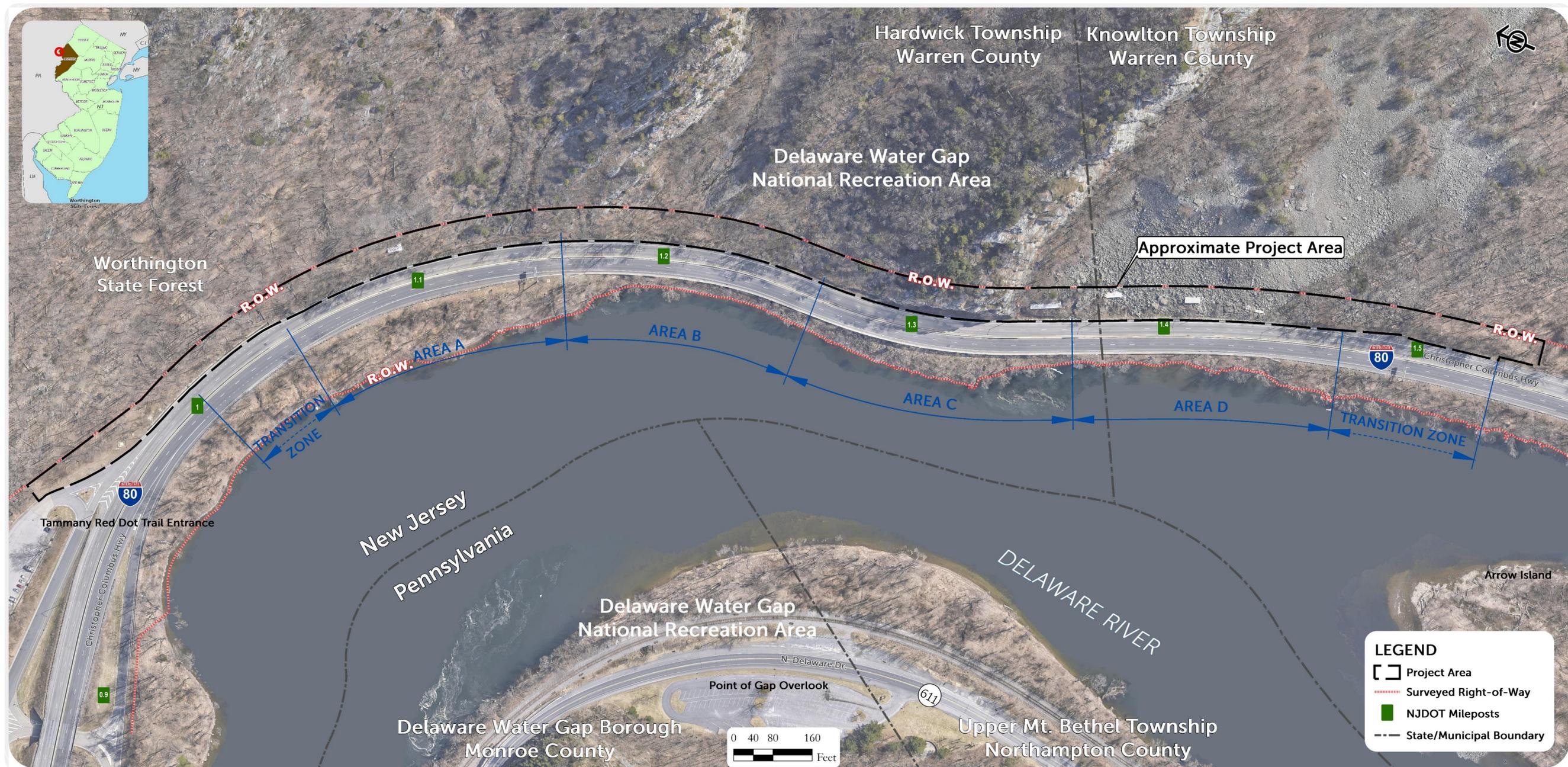


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# Engineering

- **Concept Development (CD) Phase**
  - Developed from a Transportation Problem Statement prepared in 2009
  - Includes the following activities:
    - Inventory of Existing Conditions
    - Traffic and Crash Summary
    - Environmental Screening
    - Purpose and Need
    - Evaluation of Concept Alternatives
    - Development of Preliminary Preferred Alternative
    - Summarized in the CD Report dated September 2011
  - Main objective is to identify and compare reasonable alternatives that address the Purpose and Need

# Project Location



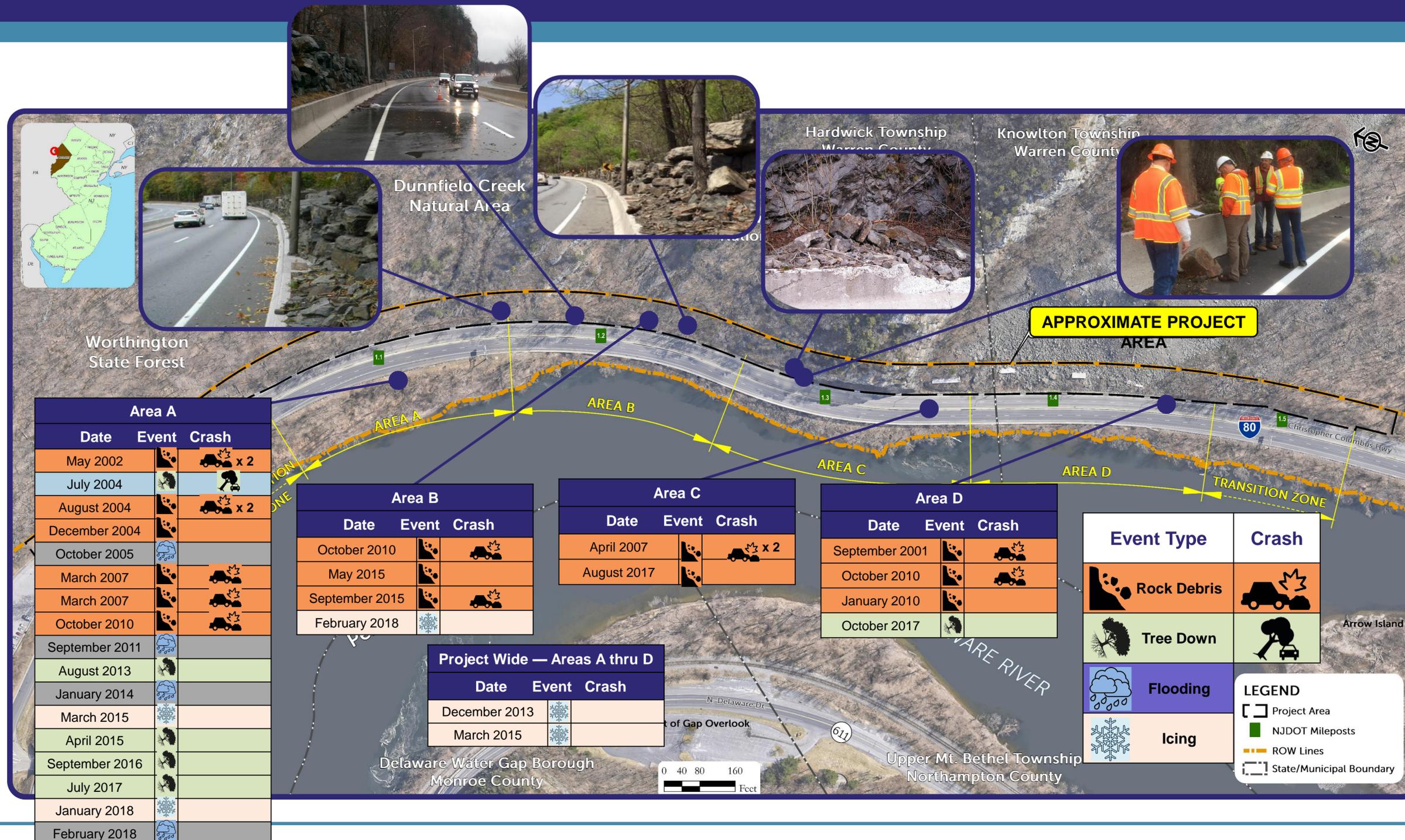
# Rockfall Hazards AREAS A AND B



# Rockfall Hazards AREAS C AND D



# Rockfall Events



# Rockfall Events



## Rockfall Incidents

Any documented report of rockfall or debris which directly impacts the highway, which were derived from NJ State Police Crash Reports, NJDOT Division of Operations & Maintenance Records, and NJDOT Department of Geology Field Reports

- Crash Reports that did not include rock debris were not accounted for in the summary.
- Regular maintenance activities of unclassified debris removal were not accounted for in the summary.

## Overall Summary

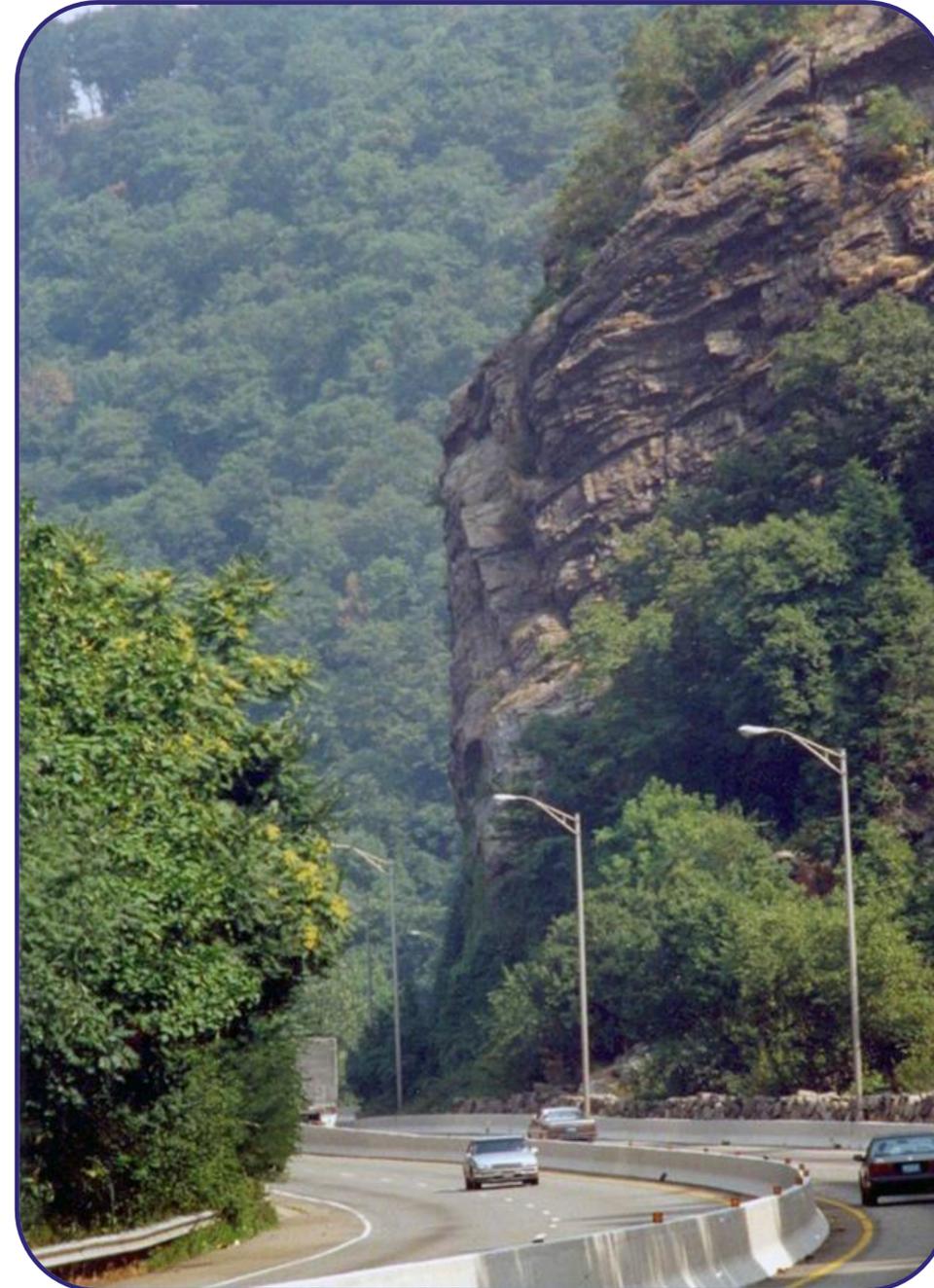
	Period	Rockfall	Debris, Icing, Flooding	TOTAL
<b>Concept Development</b>	2001 - 2011	11	3	14
<b>Preliminary Engineering</b>	2012 – 2017	3	8	11
	<b>2018</b>		3	3
				<b>28</b>



# Engineering

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# Project Purpose



# Engineering

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    - Purpose and Need
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# Conceptual Alternatives

Table 13 – Comparison Matrix for Area A & B Mitigation Alternatives

Option	Description	Risk Reduction	Outside Right-of-Way	Required Ongoing Maintenance	Construction Impact	Construction Difficulty	Construction Duration (days)		Cost (\$1,000)		Aesthetic Impact
							Low	High	Low	High	
I	No Action	None	No	Status Quo	None	None	0	0	\$0	\$0	Low
II	Rock Catch Fence	High	No	Moderate	Moderate	Moderate	35	60	\$262	\$393	Low
III	Heightened Concrete Barrier Curb with Energy Dissipation	High	No	Low	Moderate to High	Moderate	50	75	\$371	\$556	Moderate

Color Key:

Desirable

Neutral

Undesirable

# Conceptual Alternatives

**Table 14 – Comparison Matrix for Area C Mitigation Alternatives**

Option	Description	Risk Reduction	Outside Right-of-Way	Required Ongoing Maintenance	Construction Impact	Construction Difficulty	Construction Duration (days)		Cost (\$1,000)		Aesthetic Impact
							Low	High	Low	High	
I	No Action	None	No	Status Quo	None	None	0	0	\$0	\$0	None
II	Anchored or Draped Mesh on Lower Slope	Low	No	Moderate	Moderate	Moderate	25	40	\$339	\$509	Moderate
III	Rock Bolts and Anchored Mesh on Upper and Lower Slopes	Moderate	Yes	Moderate	Moderate	Moderate	40	60	\$1,069	\$1,603	High
IV	Rock Catch Fence	Low	No	High	Moderate	Low	15	25	\$106	\$158	Low
V	Hybrid System	High	No	Low	Moderate	Moderate	30	45	\$1,567	\$2,351	High

**Color Key:**

Desirable	Neutral	Undesirable
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# Conceptual Alternatives

**Table 15 – Comparison Matrix Area D Mitigation Alternatives**

Option	Description	Risk Reduction	Outside Right-of-Way	Required Ongoing Maintenance	Construction Impact	Construction Difficulty	Construction Duration (days)		Cost (\$1,000)		Aesthetic Impact
							Low	High	Low	High	
I	No Action	None	No	Status Quo	None	None	0	0	\$0	\$0	None
II	Removal / Reinforce	Low	Yes	Low	Moderate	Moderate	67	87	\$562	\$966	Low
III	Modify Catchment	Moderate	No	Moderate	Moderate	Moderate	90	120	\$705	\$1,267	Moderate
IV	Fence(s)	High	Yes	High	Low	High	54	91	\$649	\$1,104	High
V	Catchment / Fence Hybrid	Highest	No	Moderate	Moderate	Moderate	120	150	\$713	\$1,260	High

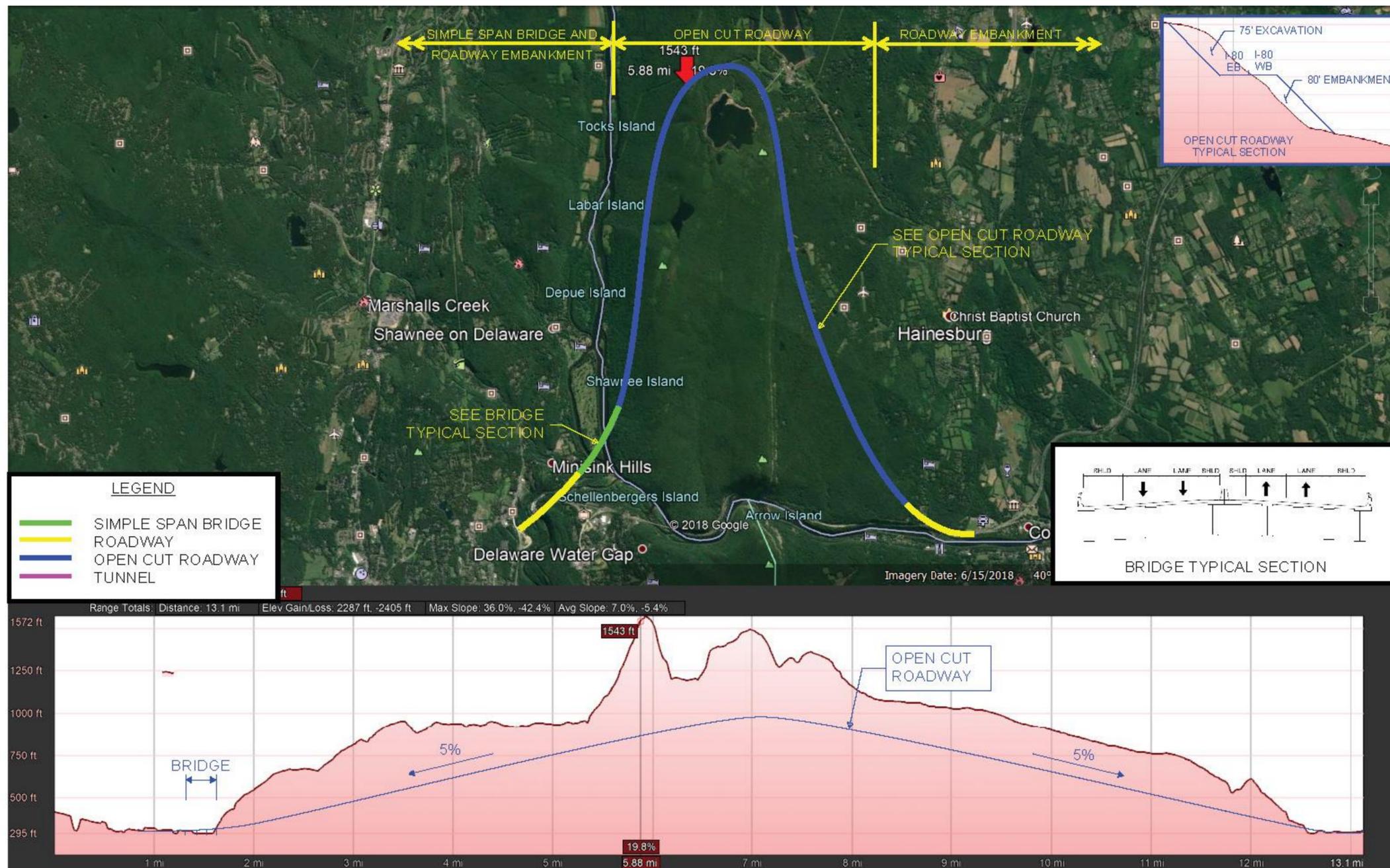
**Color Key:**

Desirable	Neutral	Undesirable
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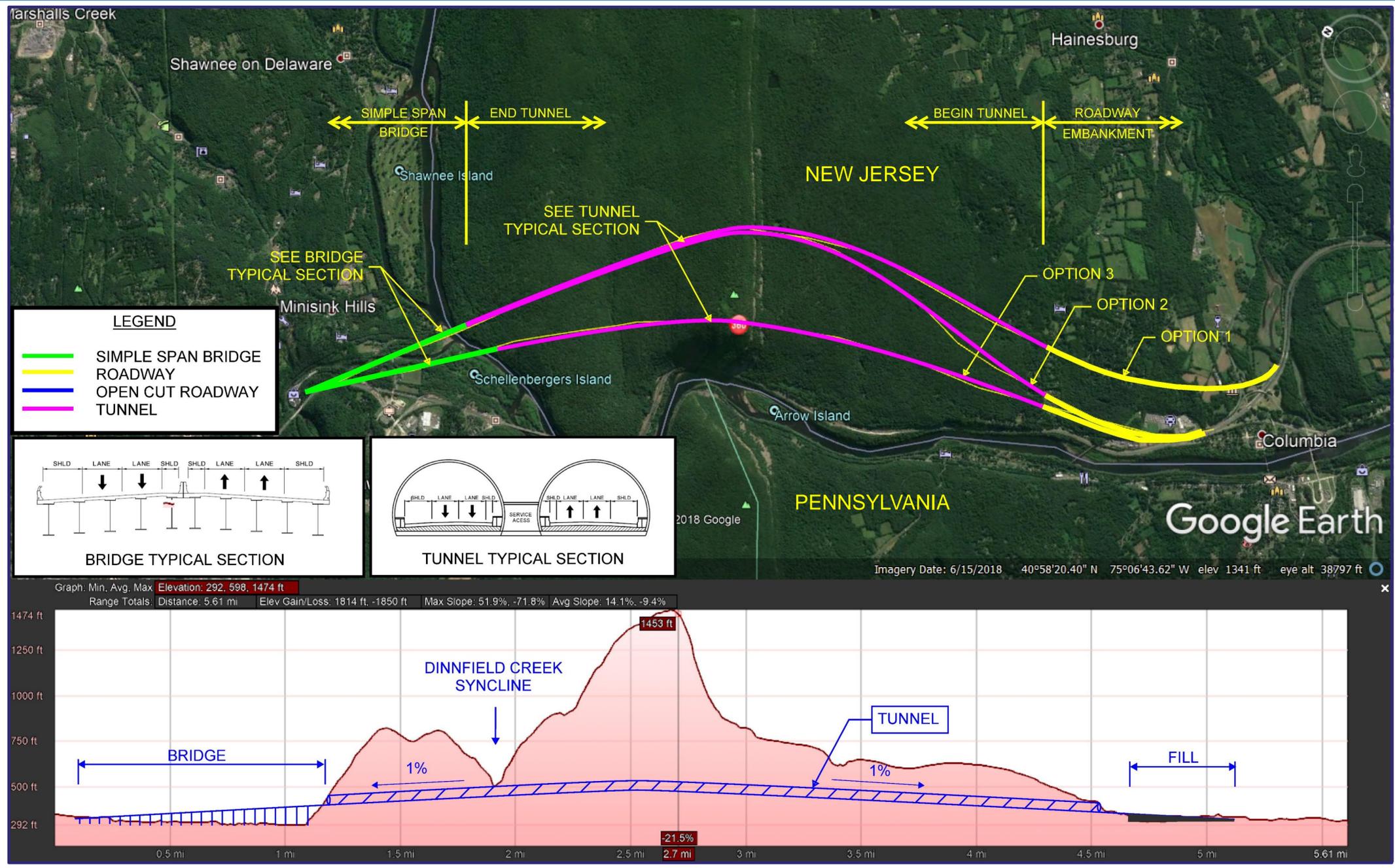
# Engineering

- Preliminary Engineering (PE) Phase
  - Phase began in 2013
  - Includes the following activities:
    - Advance the engineering to support the environmental effort
    - Advancing the alternatives developed in Concept Development
    - Initiate Environmental Technical Studies
    - Public Outreach
    - Summarized in the PE Report

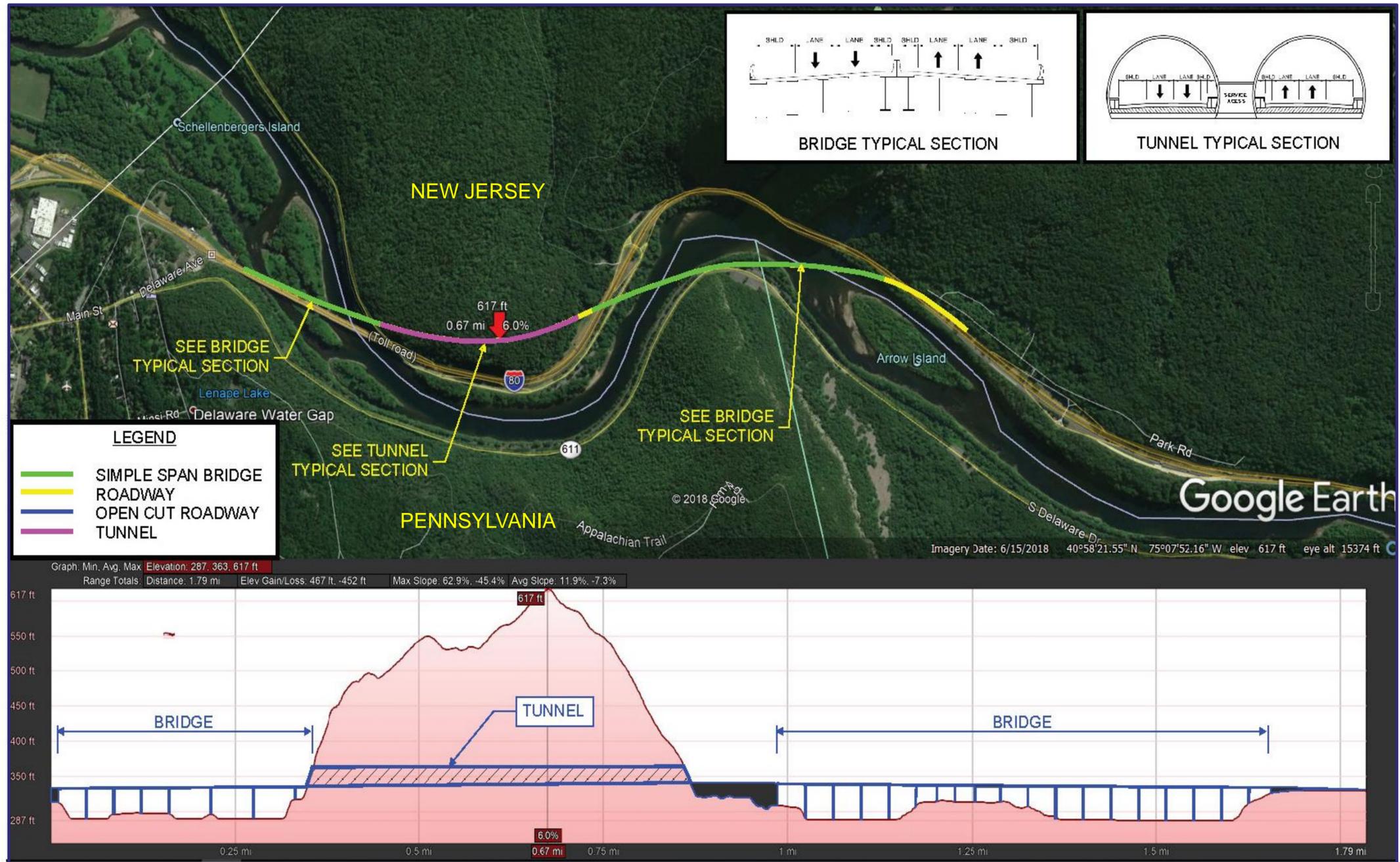
# Major Bypass Realignment



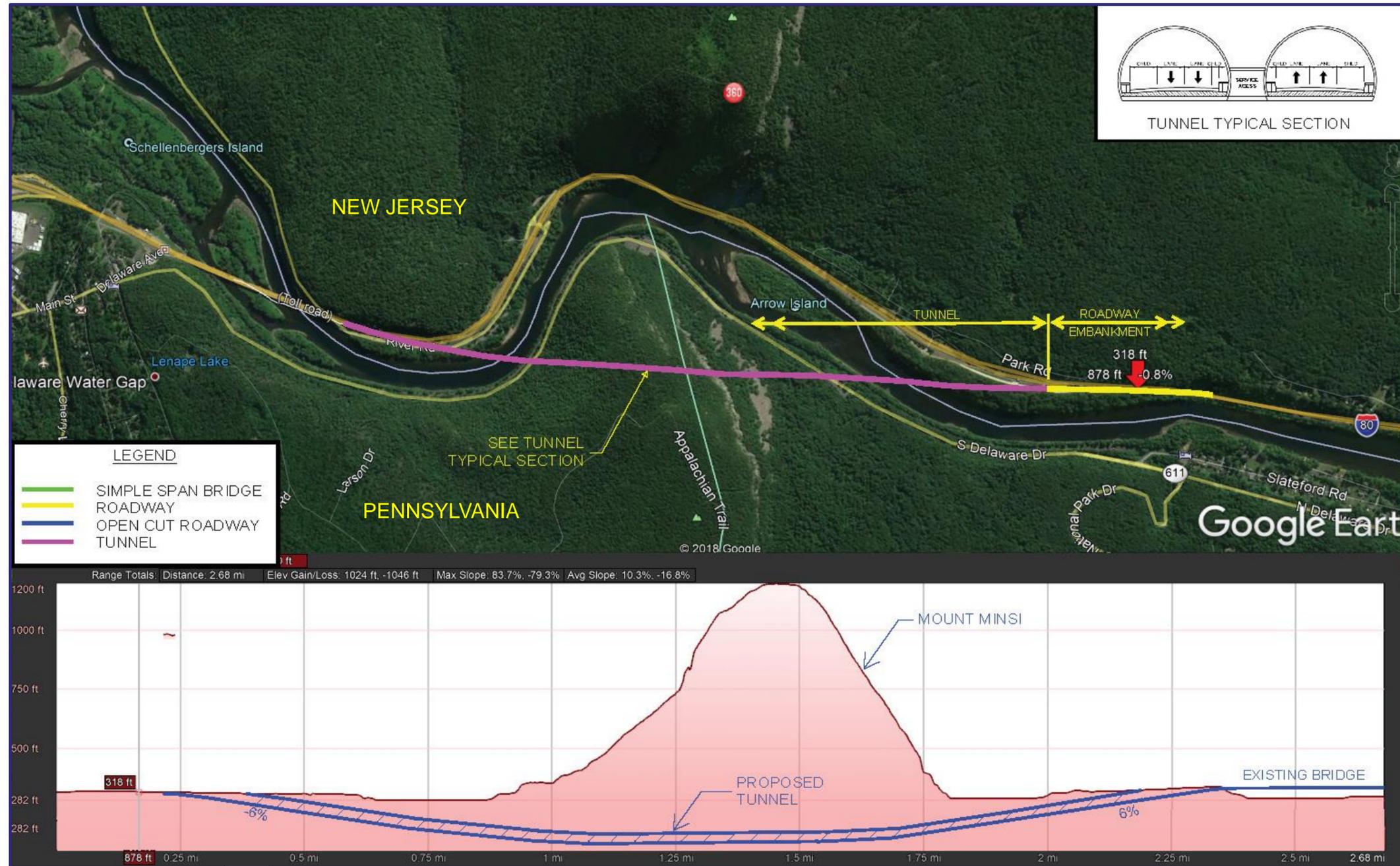
# Long Tunnel Realignment



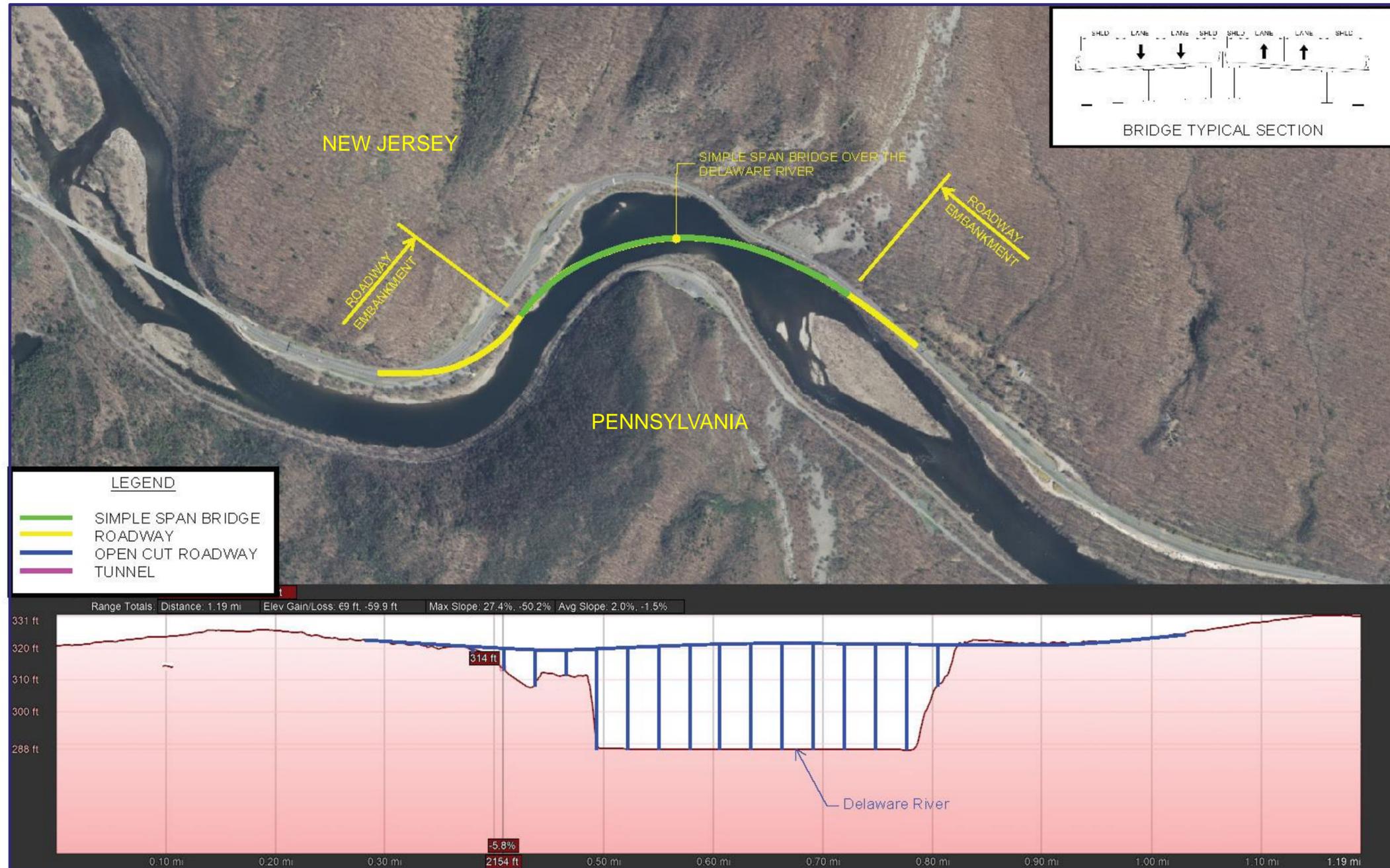
# Short Tunnel/Bridge Realignment



# Mt. Minsi Tunnel Realignment



# Highway Realignment Over Delaware River



# Fence Along Escarpment



# Alternatives Comparison Matrix

Alternative Name	Description	Meets Purpose and Need	Right of Way Impact	Required Ongoing Maintenance	Construction Impact	Construction Duration (Years)	Requires Lane Closures	Visual Impact	Ecological Impact	Open Space / Recreation Impact	Anticipated Construction Cost
Major Bypass Realignment	Shift highway alignment approximately 11 miles around Mt. Tammany through National Park Service lands	Yes	Yes	Low	High / PA Impacts	10+	Yes / Long Term	High	High	High	\$3.1 Billion
Bypass Realignment	Shift highway alignment approximately 6.3 miles through National Park Service lands	Yes	Yes	Low	High / PA Impacts	10+	Yes / Long Term	High	High	High	\$10.5 Billion
Bypass Realignment	Shift highway alignment approximately 6.0 miles through National Park Service lands	Yes	Yes	Low	High / PA Impacts	10+	Yes / Long Term	High	High	High	\$10.0 Billion
Bypass Realignment	Shift highway alignment approximately 5.6 miles through National Park Service lands	Yes	Yes	Low	High / PA Impacts	10+	Yes / Long Term	High	High	High	\$8.5 Billion
Tunnel / Bridge Realignment	Shift highway alignment approximately 2 miles through National Park Service lands with tunnel and bridges	Yes	Yes	Low	High / PA Impacts	10+	Yes / Long Term	High	High	High	\$3.2 Billion
Mt. Minzi Tunnel Realignment	Shift highway alignment and construct 2-mile tunnel through National Park Service lands	Yes	Yes	Low	High / PA Impacts	5-10	Yes / Long Term	High	High	High	\$4.5 Billion
Highway Realignment on Delaware River	Shift highway alignment south toward Delaware River	Yes	No	Low	High	5-10	Yes / Long Term	High	Moderate	Moderate	\$500 Million+
Fence Along Escarpment *	* Alternative developed at the request of Congressman Goffheimer. Construct high strength fence 120 ft. and	No	Yes	Moderate	Extreme	5-10	Yes / Off-Peak	High	High	High	\$175 Million+

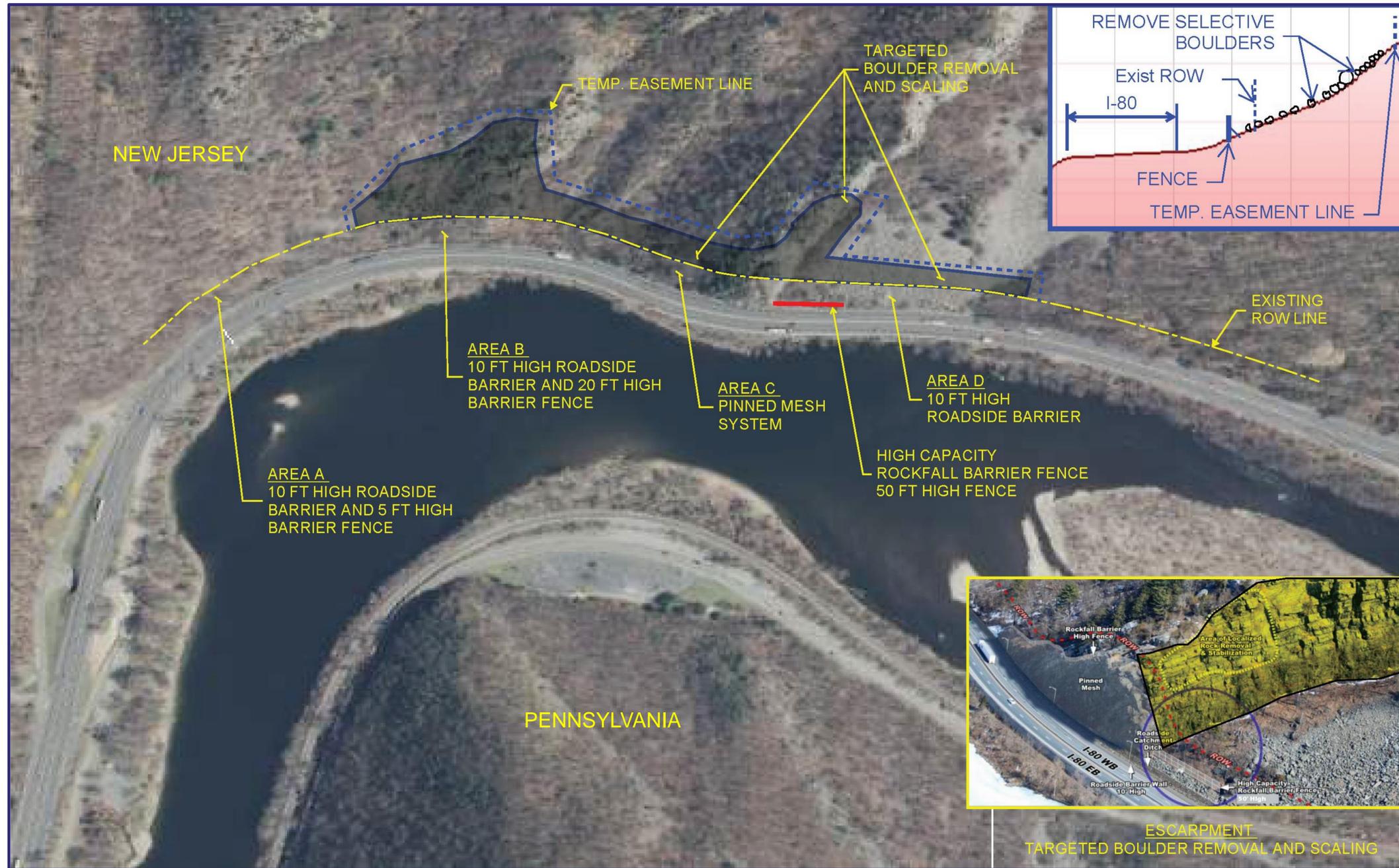
# No Build



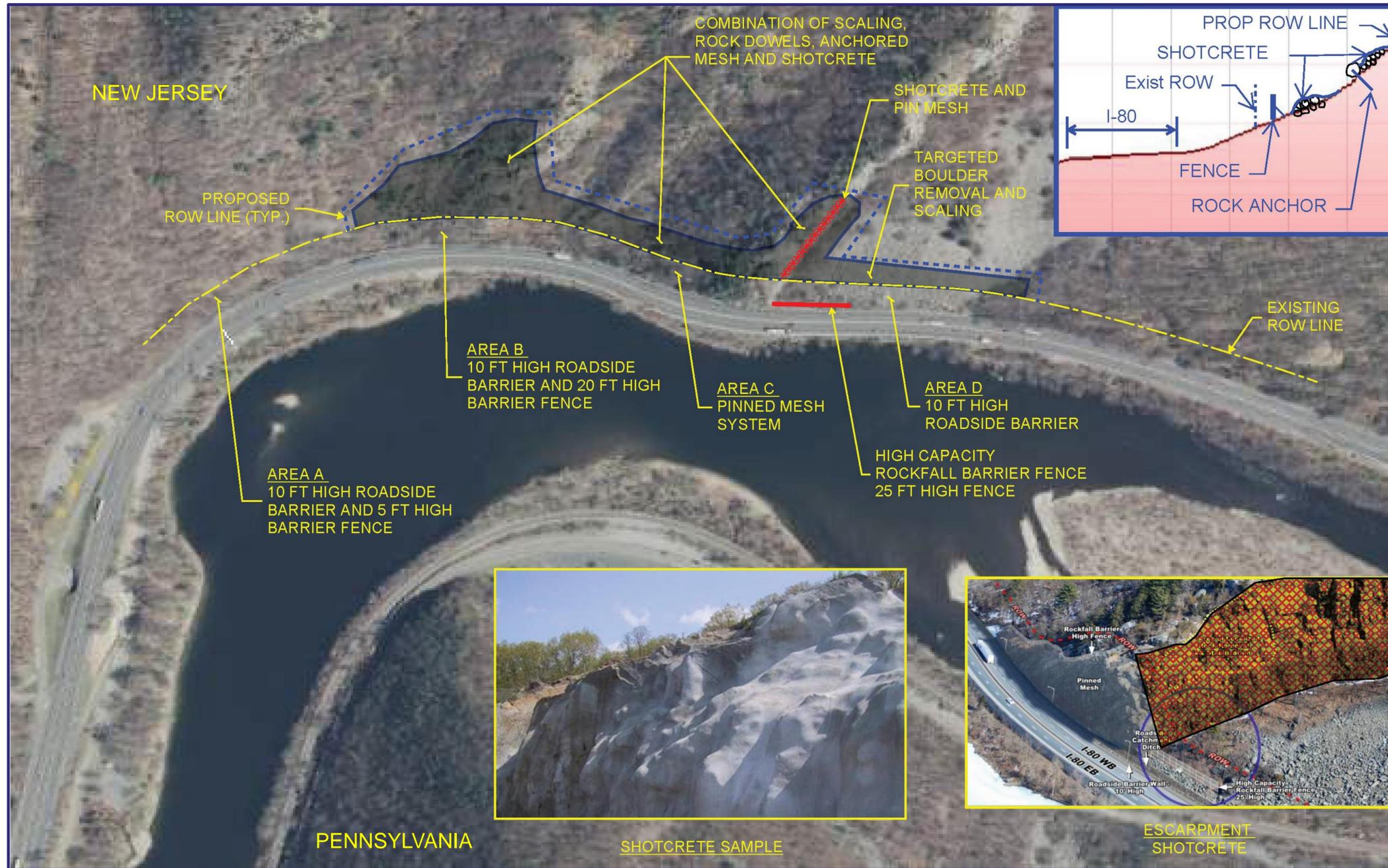
# Mass Excavation



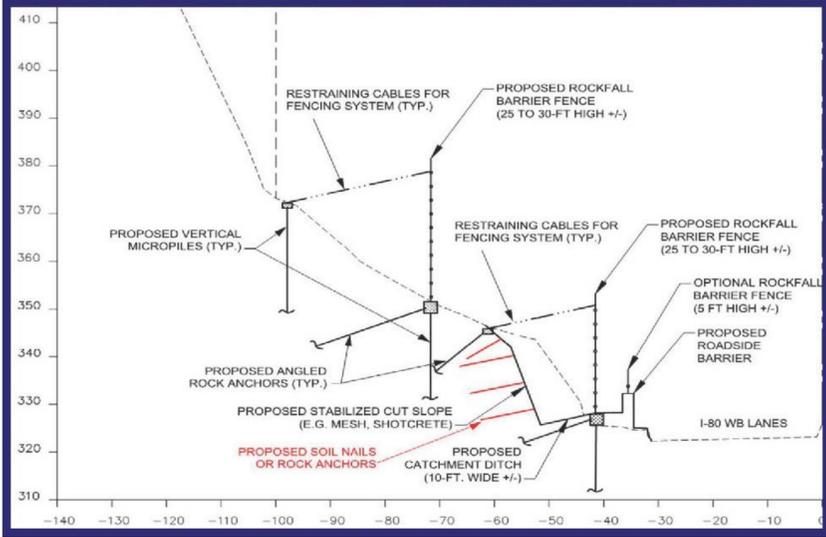
# Temporary Right-of-Way Impacts



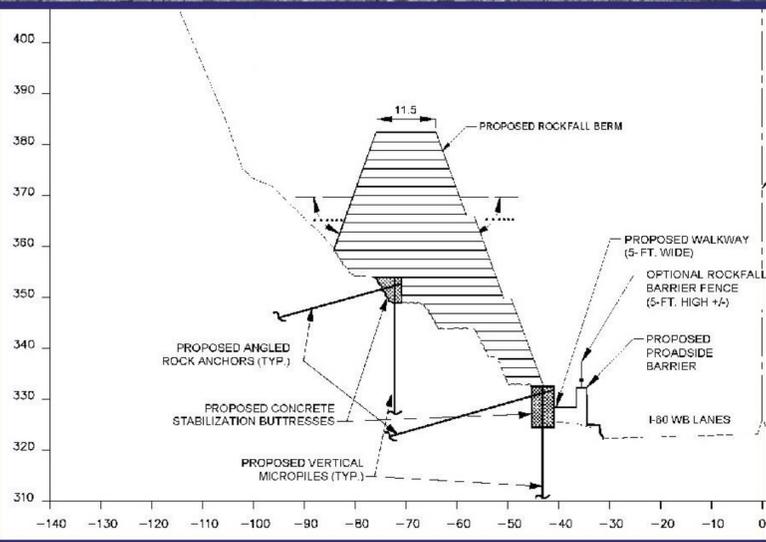
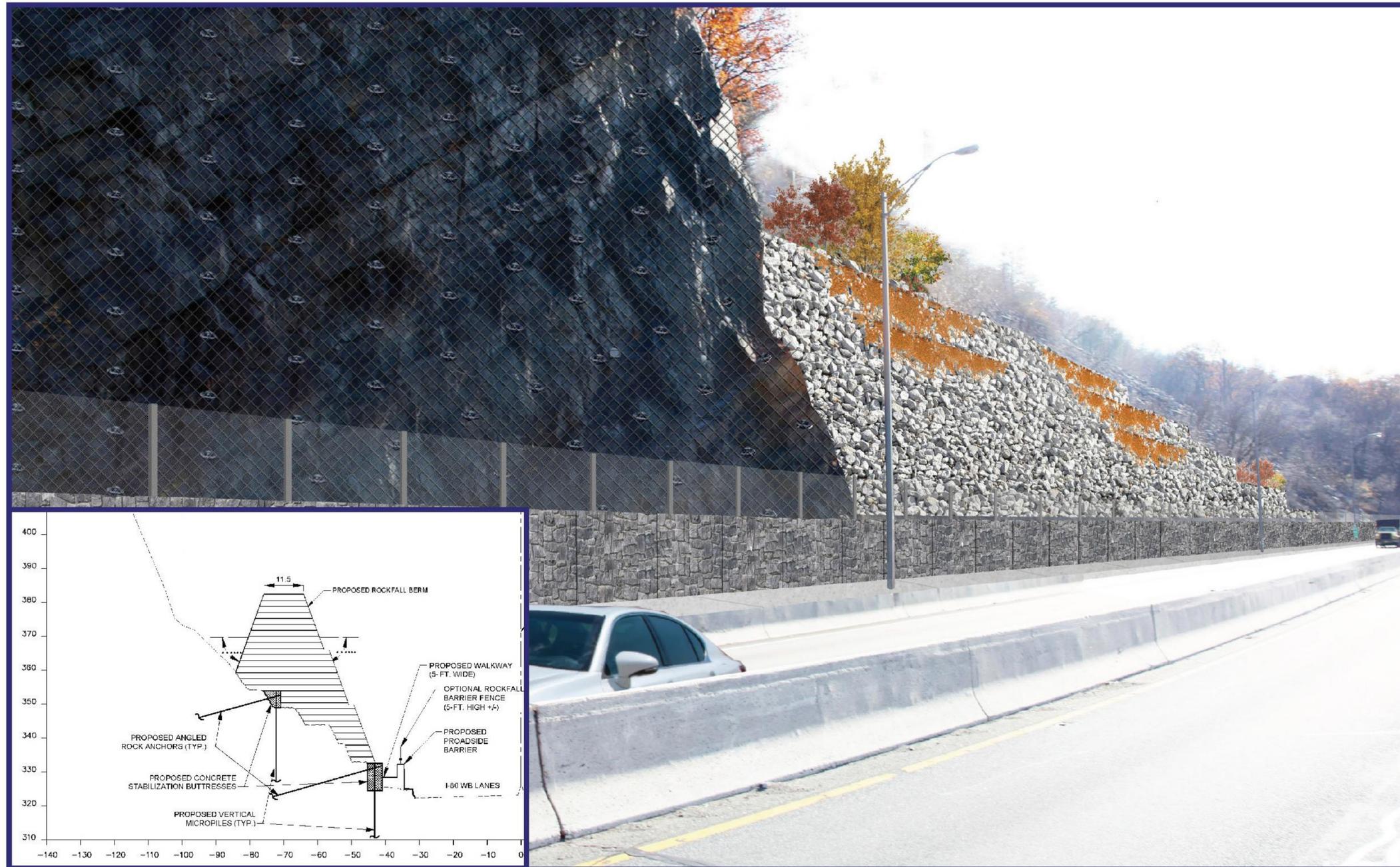
# Permanent Right-of-Way Impacts



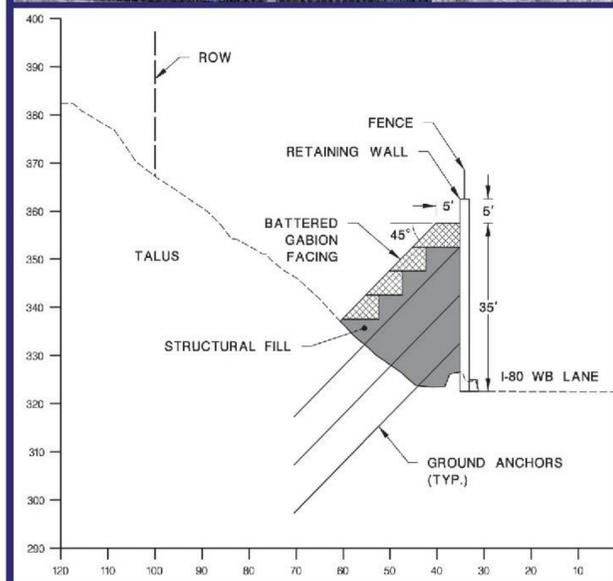
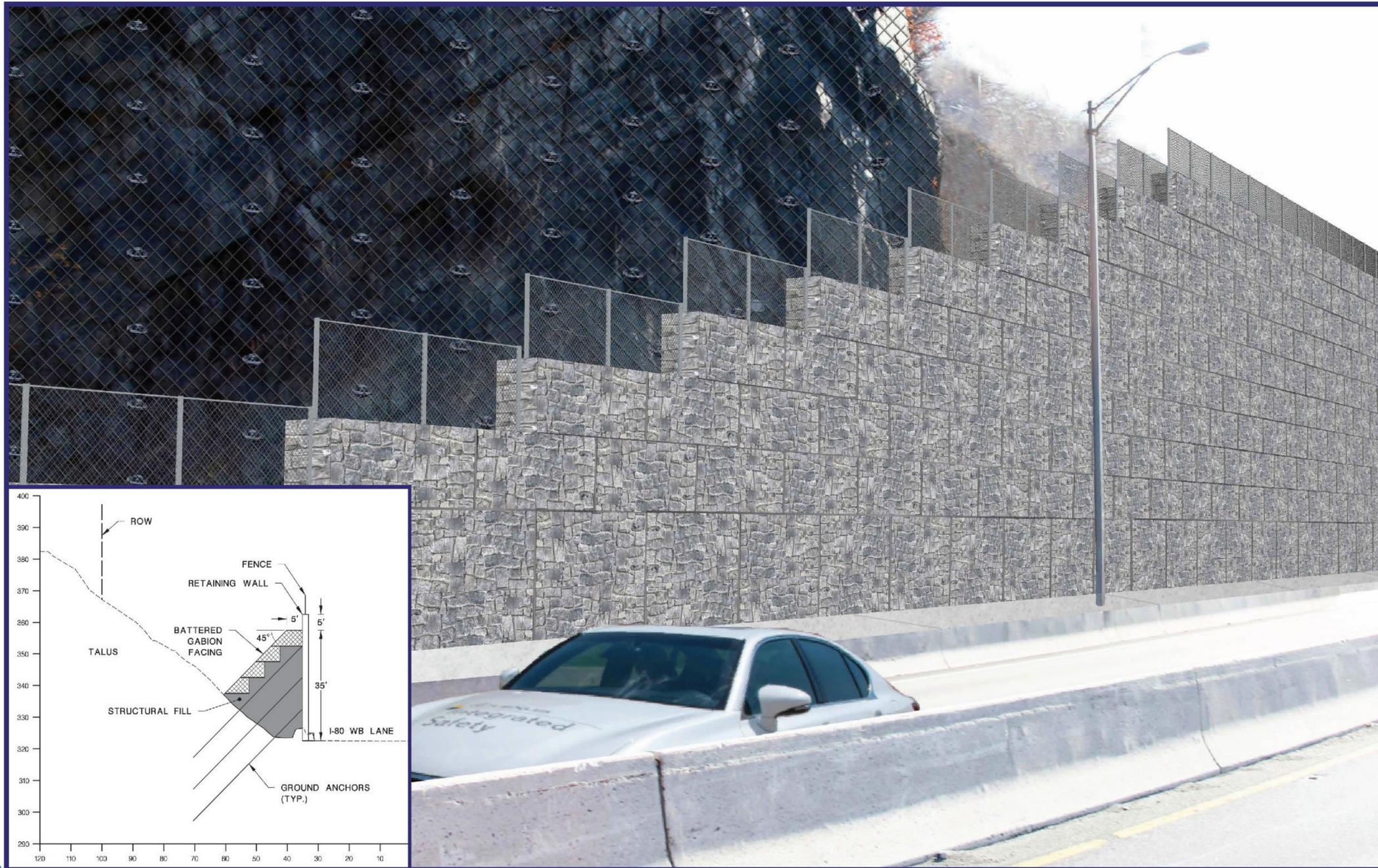
# Double Fence TRANSITION AREA C-D



# Rockfall Berm TRANSITION AREA C-D



# Retaining Wall TRANSITION AREA C-D



# Rockfall Shed Over Highway



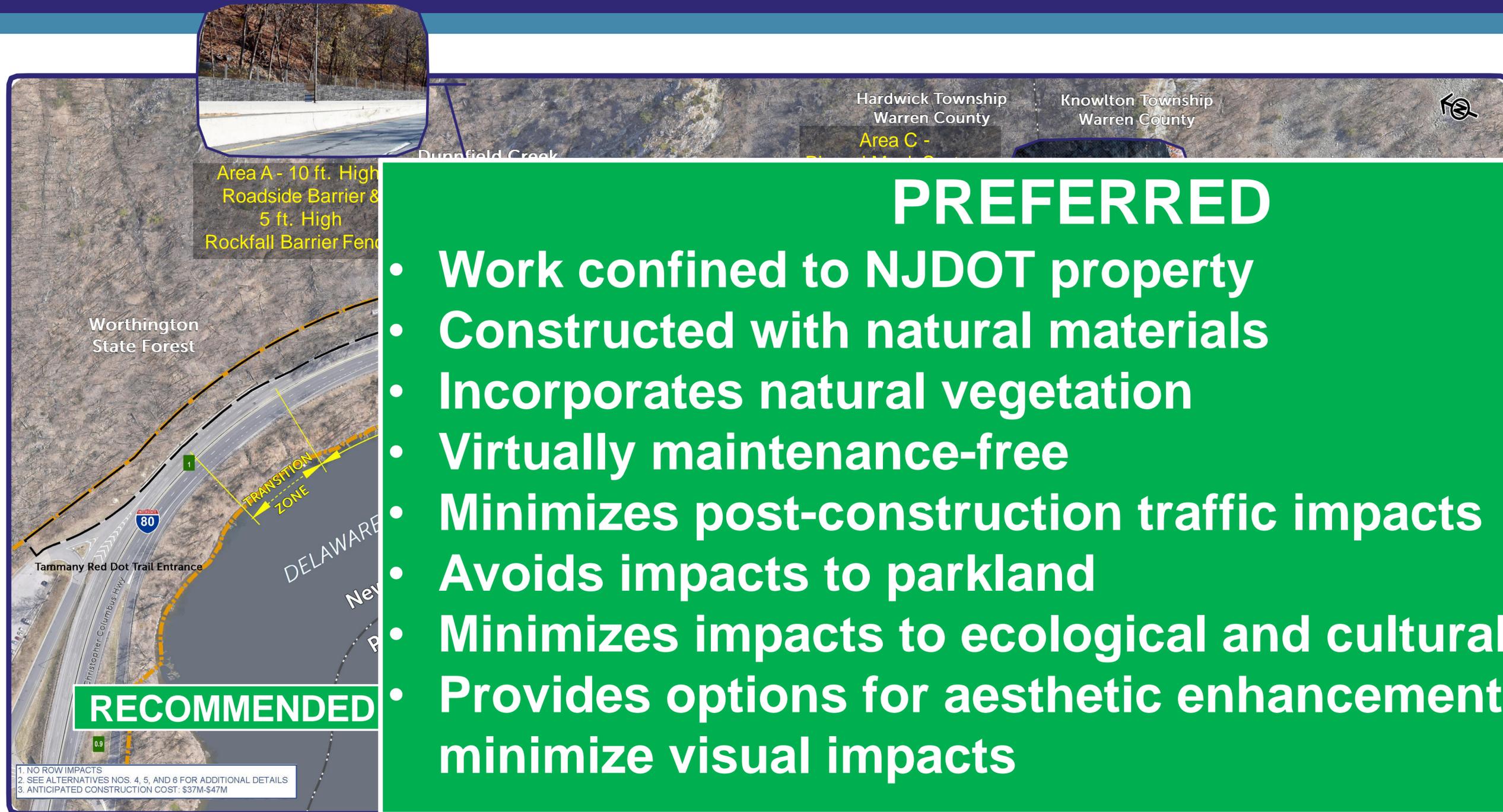
# Alternatives Comparison Matrix

ALT.#	Alternative Name	Description	Anticipated Construction Cost	Meets Purpose and Need and/or Scope of Project	Work within NJDOT Right of Way	Required Ongoing Maintenance	Construction Impact	Construction Duration (Years)	Requires Lane Closures	Visual Impact	Ecological Impact	Open Space/ Recreation Impact	Status
1	Mass Excavation	Loose rocks, cobbles and debris collected, boulders broken up and scaled	\$150 Million	Yes	No	Moderate	High	5-10	Permanent	High	High	High	Not Recommended
2	Temporary Right-of-Way Impacts	Rockfall source areas are temporarily mitigated on National Park Service lands without using permanent rock stabilization techniques	\$38 Million	Yes	No	Low	Moderate	4	Temporary	High	Moderate	Moderate	Not Recommended
3	Permanent Right-of-Way Impacts	Rockfall source areas are permanently mitigated and safely secured on National Park Service lands	\$60 Million	Yes	No	Moderate	High	4	Temporary	High	Moderate	High	Not Recommended
4	Double Fence	Construct double fence along portion of highway	\$37 Million	Yes	Yes	High	High	4-5	Temporary	High	High	Low	Not Preferred
5	Rockfall Berm	Construct large rockfall barrier along portion of highway	\$47 Million	Yes	Yes	Low	Low	4	Temporary	Low	Low	Low	Preferred
6	Retaining Wall	Construct large wall along portion of highway	\$39 Million	Yes	Yes	Moderate	High	4	Temporary	High	High	Low	Not Preferred
7	Rockfall Shed over Highway	Construct structural shed over all 4 lanes of Route 80	\$200 Million	Yes	No	Low	High	5-10	Permanent	High	Moderate	High	Not Recommended

# Preliminary Preferred Alternative



# Preliminary Preferred Alternative



# Preliminary Preferred Alternative AREA A - Proposed Improvements



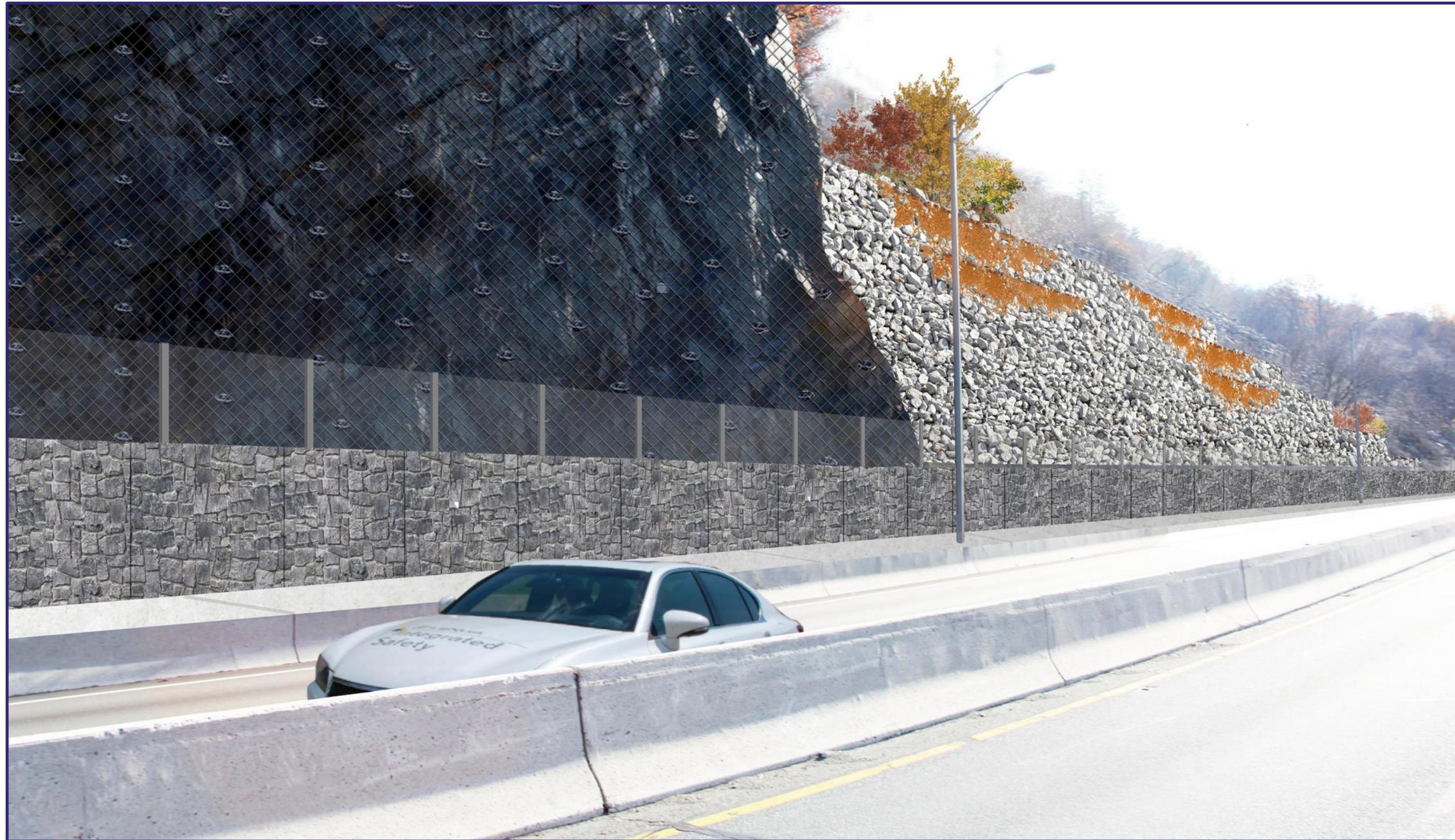
# Preliminary Preferred Alternative AREA B - Proposed Improvements



# Preliminary Preferred Alternative AREA C - Proposed Improvements



# Preliminary Preferred Alternative AREA C/D - Proposed Improvements



# Preliminary Preferred Alternative AREA D - Proposed Improvements



# Preliminary Preferred Alternative View from Pennsylvania - Proposed Improvements



# Construction Sequencing

## Duration

- Construction is anticipated to take four years.

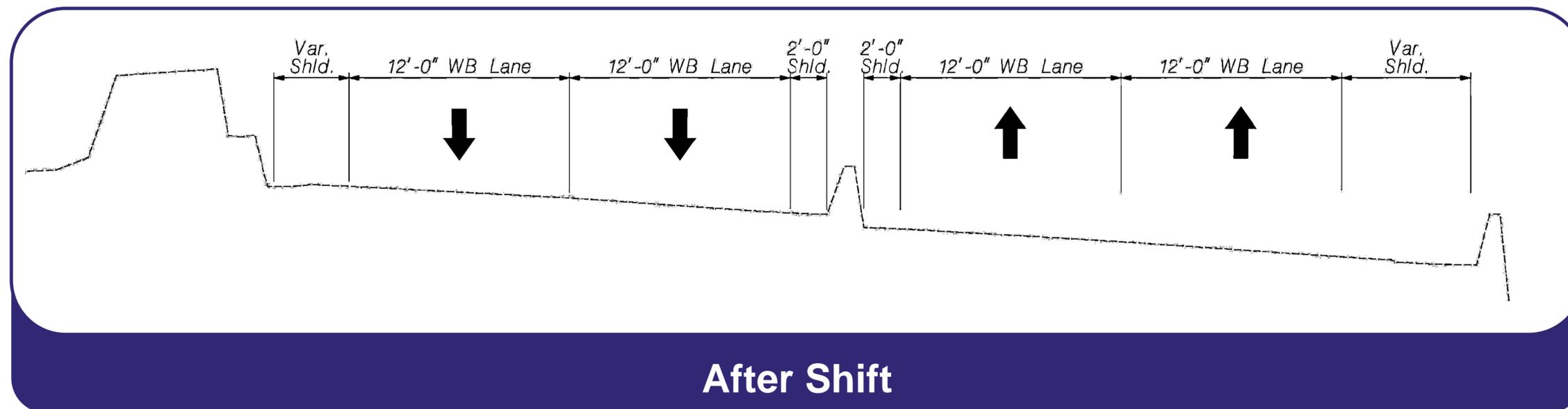
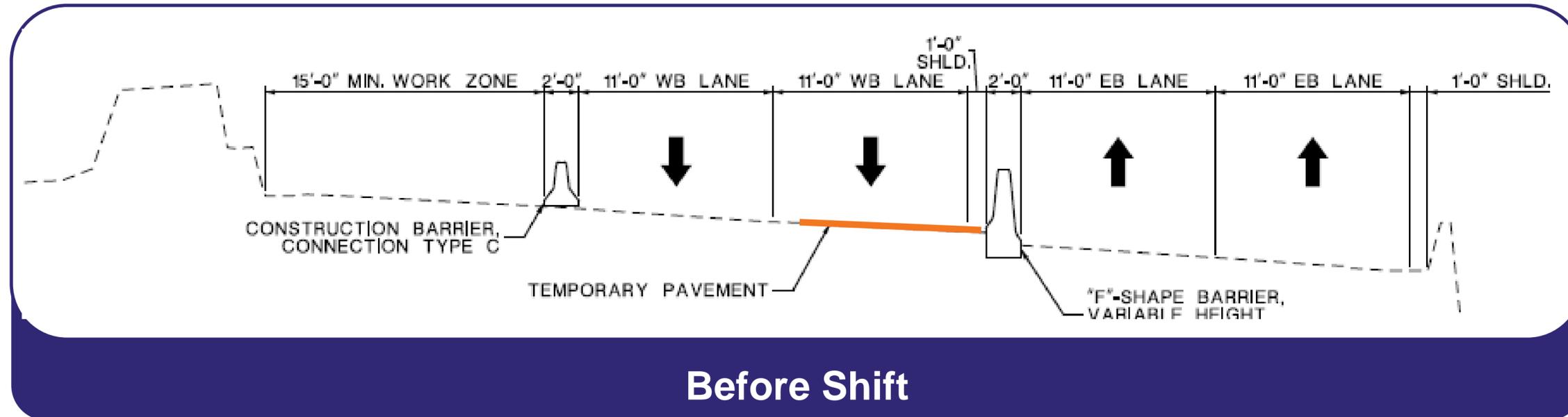
## Traffic Impacts

- Maintain all four lanes of traffic (two EB and two WB) during peak traffic hours through construction.
- Temporary lane closures during non-peak traffic and overnight hours.
- No planned detours or long-term lane reductions.
- Real-time monitoring used to adjust to actual conditions (i.e.: Smart Work Zones, etc.)

## Blasting

- Limited to Area B Only
- Restricted to 8:00am – 11:00am, Monday - Thursday
- NJSP controlled traffic stoppages (both EB and WB lanes) up to 15 minutes.

# Construction Sequencing YEAR 1 ROADWAY SHIFT



# Engineering

- Final Design (FD) Phase
  - To begin tentatively in 2021
  - Includes the following activities:
    - Complete engineering
    - Complete preparation of contract documents including plans, specifications, and estimate
    - Continue public outreach

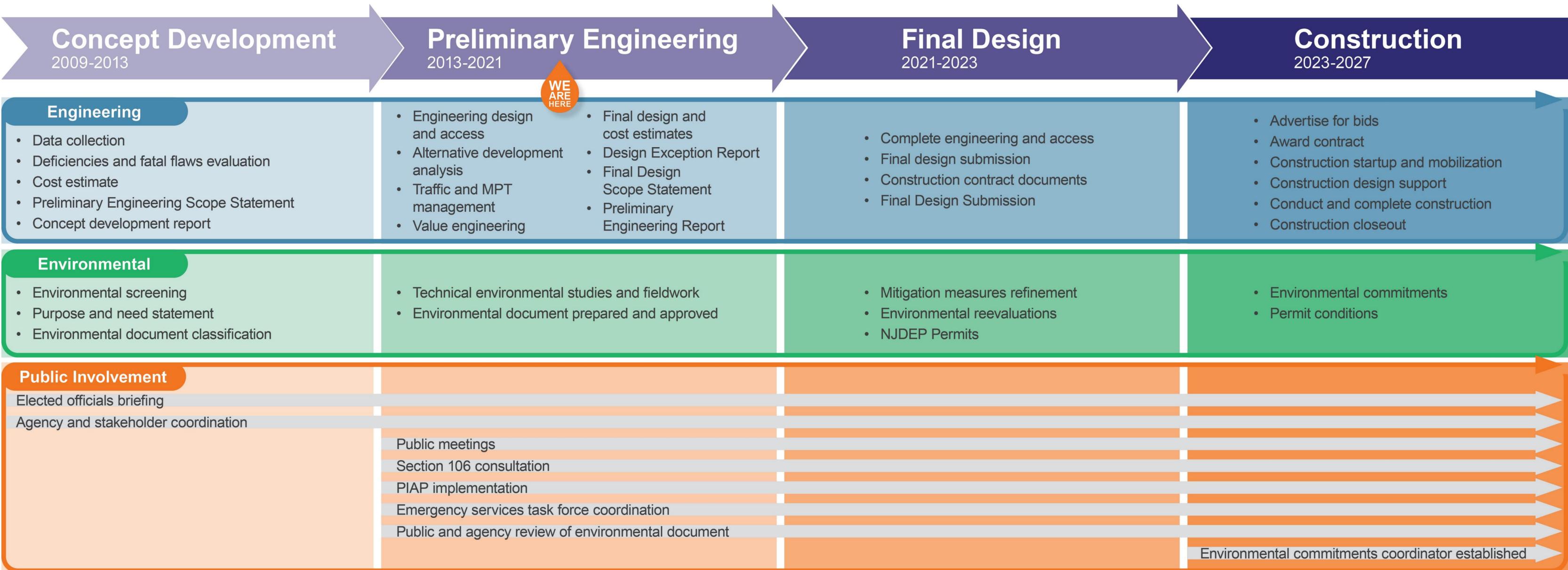
# Questions and Answers



# Wrap Up



# NJDOT Project Delivery Process



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# Next Steps

Prior to the next meeting:

- Address PAG questions
- Distribute meeting minutes
- Post information to SharePoint site
- PAG members review background materials

# Polling Questions

- What questions do you still have regarding the design process?
- What else would you like to learn about the project?
- What would you like to discuss at the next meeting?

# Thank You!

Questions or comments may be emailed to:

**[180Rockfall@dewberry.com](mailto:180Rockfall@dewberry.com)**

View this meeting recording and other project materials at:

<https://dewberryportal.sharepoint.com/sites/njdoti-80rockfallpag>

We will be reaching out to you for your availability for the next PAG meeting.