SR 0080 Section 17M I-80 Reconstruction Project Visual Resources Technical Memorandum

Prepared for:

Pennsylvania Department of Transportation

Engineering District 5-0

Agreement E02656 - MPMS 76357

October 2019

Prepared By:



Table of Contents

1.	Introduction	.3
2.	Methodology and Regulatory Context	.3
3.	Affected Environment	.4
4.	Environmental Consequences	.4
5.	Minimization and Mitigation	.5
Atta	chment A	. 6

1. Introduction

Interstate 80 (I-80) is a transcontinental highway that runs east-west through Pennsylvania from New Jersey to California. In 2009, PennDOT completed the *I-80 Corridor Study*, which examined an 18-mile stretch between Interchange 293 (I-380) and Interchange 307 (Delaware Water Gap). The study recommended a 3.5-mile segment between Interchange 303 (PA 611) and Interchange 307 (PA 611/PA 191) for reconstruction. That segment, which passes through Stroud Township, the Borough of Stroudsburg, and the Borough of East Stroudsburg in Monroe County, is the subject of the current I-80 Reconstruction Project (SR 0080 Section 17M, PennDOT MPMS# 76357). Figure 1 shows the project location and study area.

The purpose of the I-80 Reconstruction Project is to provide a safe and efficient transportation system on this National Highway System component for both local and regional connections in the area by reducing future congestion in the 2045 design year to Level of Service (LOS) E or better, improving safety, and bringing I-80 up to current standards.

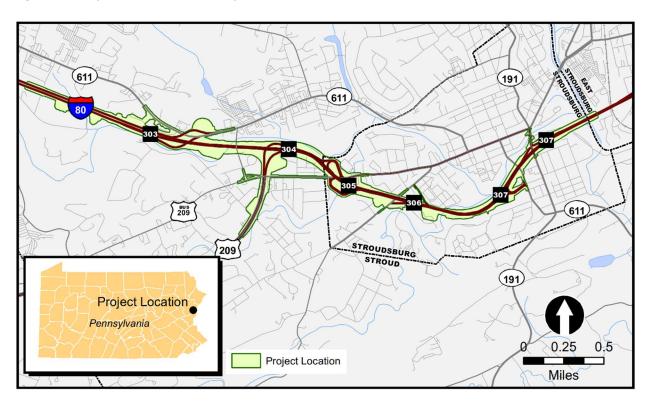


Figure 1 – Project Location and Study Area

2. Methodology and Regulatory Context

The visual resources assessment addresses potential changes to the visual environment due to Build Alternatives 2B and 2D and viewer responses. Design plans for the build alternatives are provided in Attachment A. The assessment is consistent with the FHWA *Guidelines for the Visual Impact Assessment of Highway Projects* (2015). The degree of visual impact is determined based on the compatibility of the impact and the sensitivity to the impact. The first step in visual assessment is to evaluate the compatibility of the proposed action with the visual character of the existing landscape. The second step

is to determine the sensitivity to the impact based on changes in the visual character. The resulting degree of visual impact is a beneficial, adverse, or neutral change to visual quality.

3. Affected Environment

Through the project area, I-80 follows a meandering route that generally parallels Pocono and McMichael Creeks. Because the route is located within a stream valley, views of the roadway from the surrounding area are obscured by existing buildings, terrain, and vegetation in some areas and unobscured in others. For example, existing views of the I-80 corridor from Rotary Creek Park, Bryant Park (a small park located south of I-80 at the corner of Bryant Street and PA 611/Park Avenue), and the Stroudsburg Cemetery are primarily unobstructed.

Views from a traveler's perspective on I-80 are of the wooded slopes and streams found adjacent to the corridor. Existing topography and vegetation obscure urban views for the most part, although brief views of the Boroughs of Stroudsburg and East Stroudsburg can be seen.

4. Environmental Consequences

The No-Build Alternative will not change visual resources or views of and from I-80.

Build Alternatives 2B and 2D would increase the number of lanes on I-80 and reconfigure the interchanges. Viewers with unobstructed views of the highway would be relatively insensitive to these changes because of the highway views that are present in the existing condition. Thus, the degree of impact for these viewers would be neutral. Where no view of the highway is present and no change to that condition would occur, no visual impact would occur.

Viewers with obstructed views in the existing condition, but who would have their views changed by project-related vegetation removal or by acquisition of properties that currently provide visual screening, would experience a visual change. These viewers would be relatively sensitive to these visual changes because of the loss of existing screening. Thus, the degree of impact for these viewers would be moderate.

Additionally, noise walls have been recommended in certain areas as part of Build Alternatives 2B and 2D. The locations of the proposed noise walls are identified on the design plans in Attachment A. The noise walls would obstruct the view of the highway for many properties. These viewers would be relatively sensitive since their view would be changing. Generally, a noise wall that blocks the view of the highway would be considered a beneficial change to visual quality for the affected property owners.

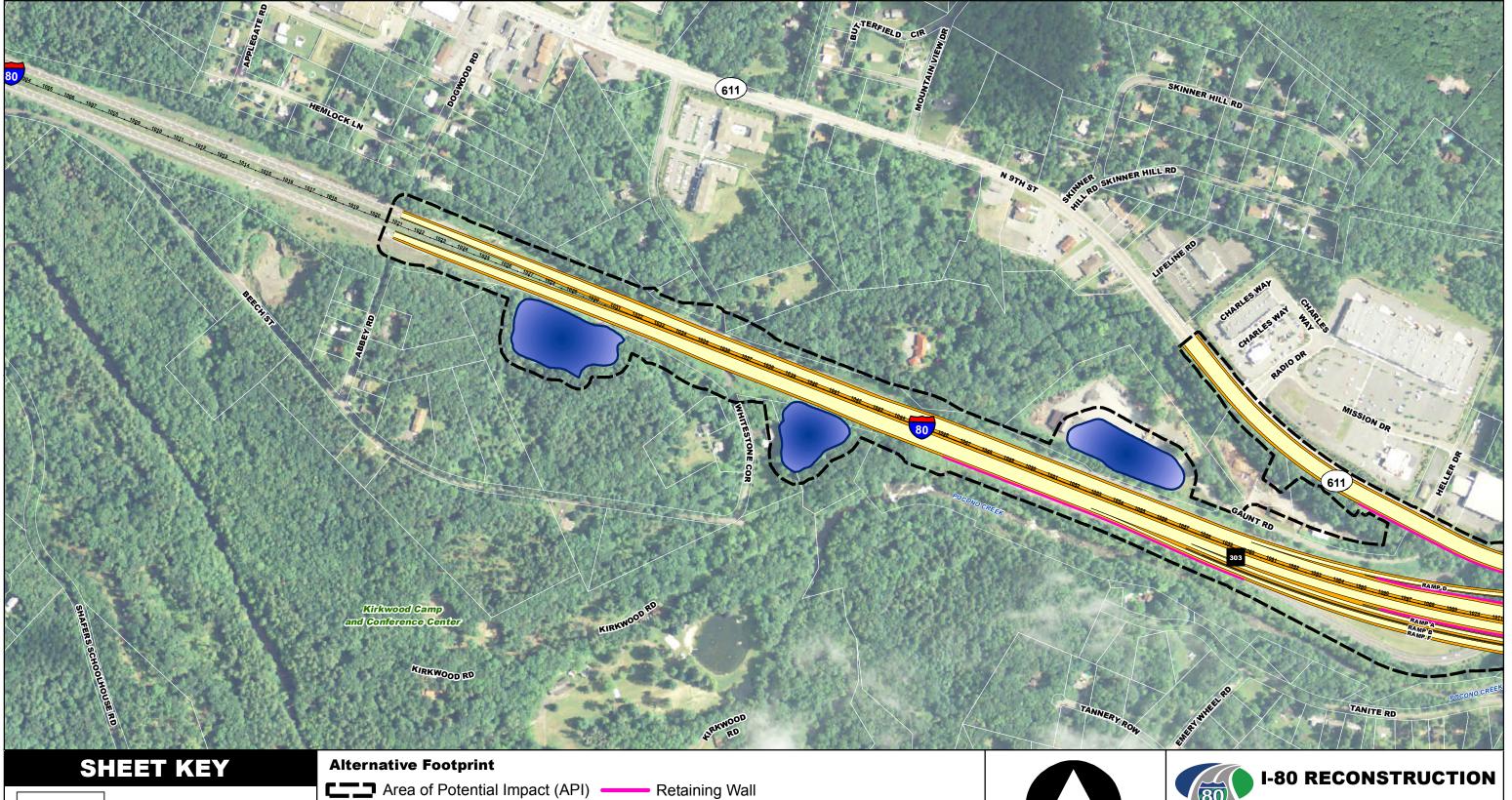
Likewise, retaining walls are proposed along many roadway sections throughout the project study area in Build Alternatives 2B and 2D (see Attachment A). The retaining walls minimize property impacts, but also alter the visual environment. Depending on their locations, viewers may be relatively insensitive to relatively sensitive. Impacts to those whose views would be changed by a retaining wall could be interpreted as positive or negative. Some viewers may prefer a naturalized, vegetated view and perceive the retaining wall negatively, while other viewers may prefer a more clean, hardscaped view and see the retaining wall as an improvement.

5. Minimization and Mitigation

PennDOT will examine ways to reduce right-of-way needs for the alternative that is selected. Reducing right-of-way needs could reduce visual changes that are caused by removal of vegetation or buildings that currently block views of the highway. One of the ways that right-of-way needs have been reduced is through the use of retaining walls in the project design. Using retaining walls allows slopes to be steepened, thus less land is required for stable earthen slopes.

Attachment A

Build Alternatives 2B and 2D Design Plans





Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction.

Recommended Noise Wall Structure



Storm Water Basin



Exit

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

Pavement Shoulder

Pavement Lanes



200 400

Feet

Print Date: 6/17/2019

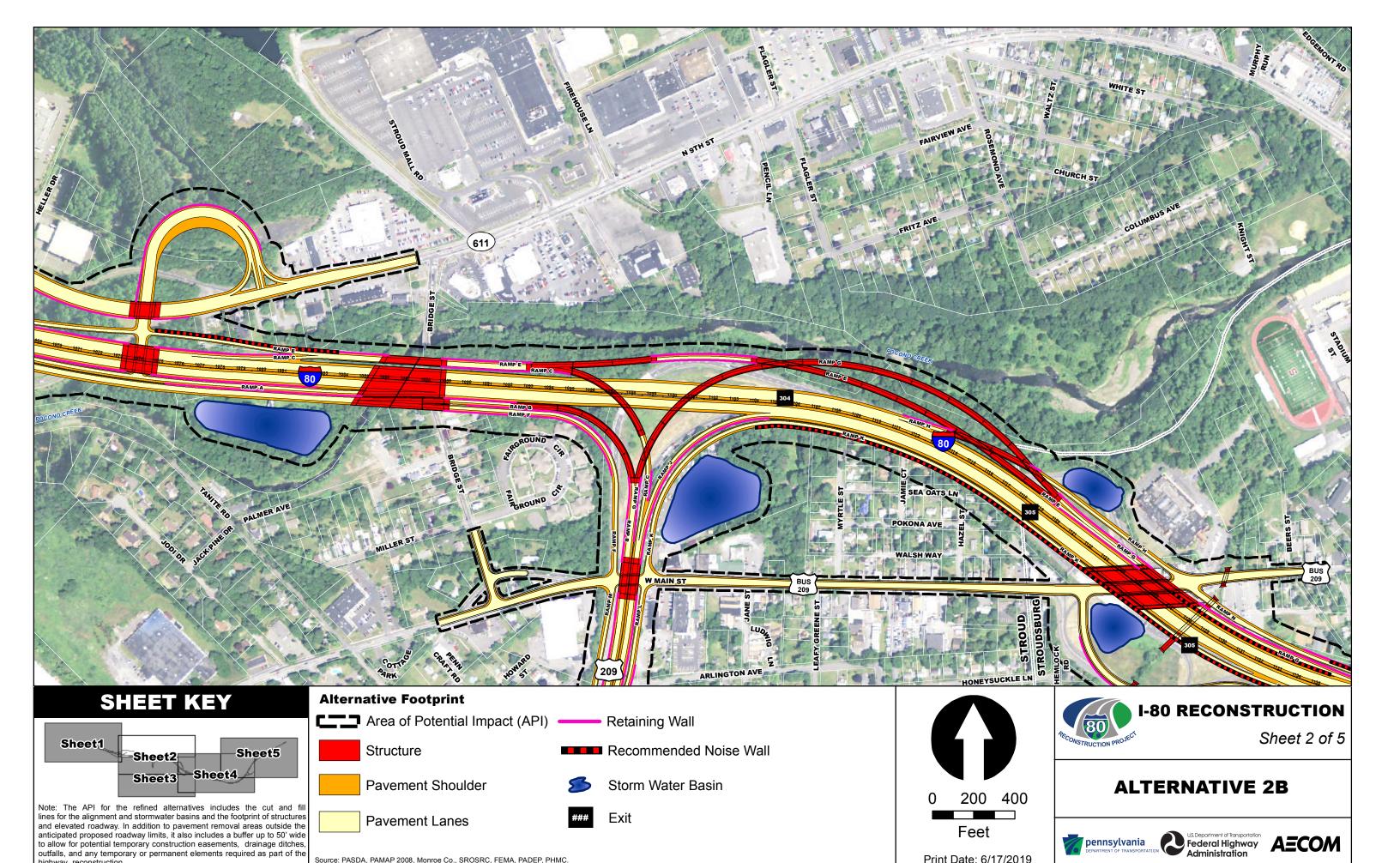


Sheet 1 of 5

ALTERNATIVE 2B



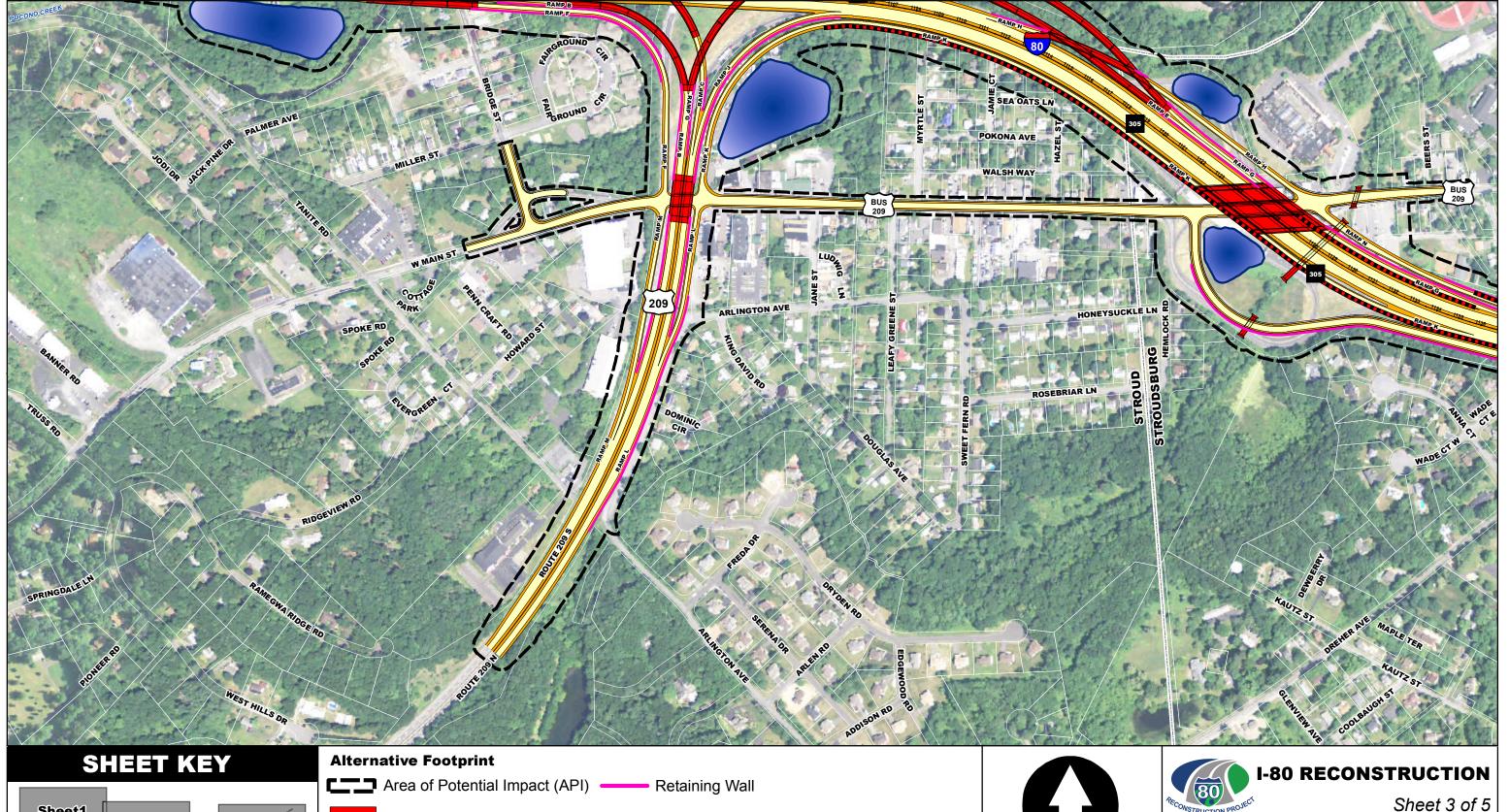


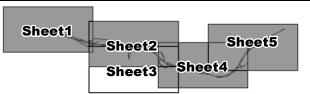


Print Date: 6/17/2019

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

highway reconstruction.





Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction highway reconstruction.

Structure

Recommended Noise Wall



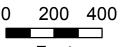
Storm Water Basin

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

Pavement Shoulder

Pavement Lanes





Feet

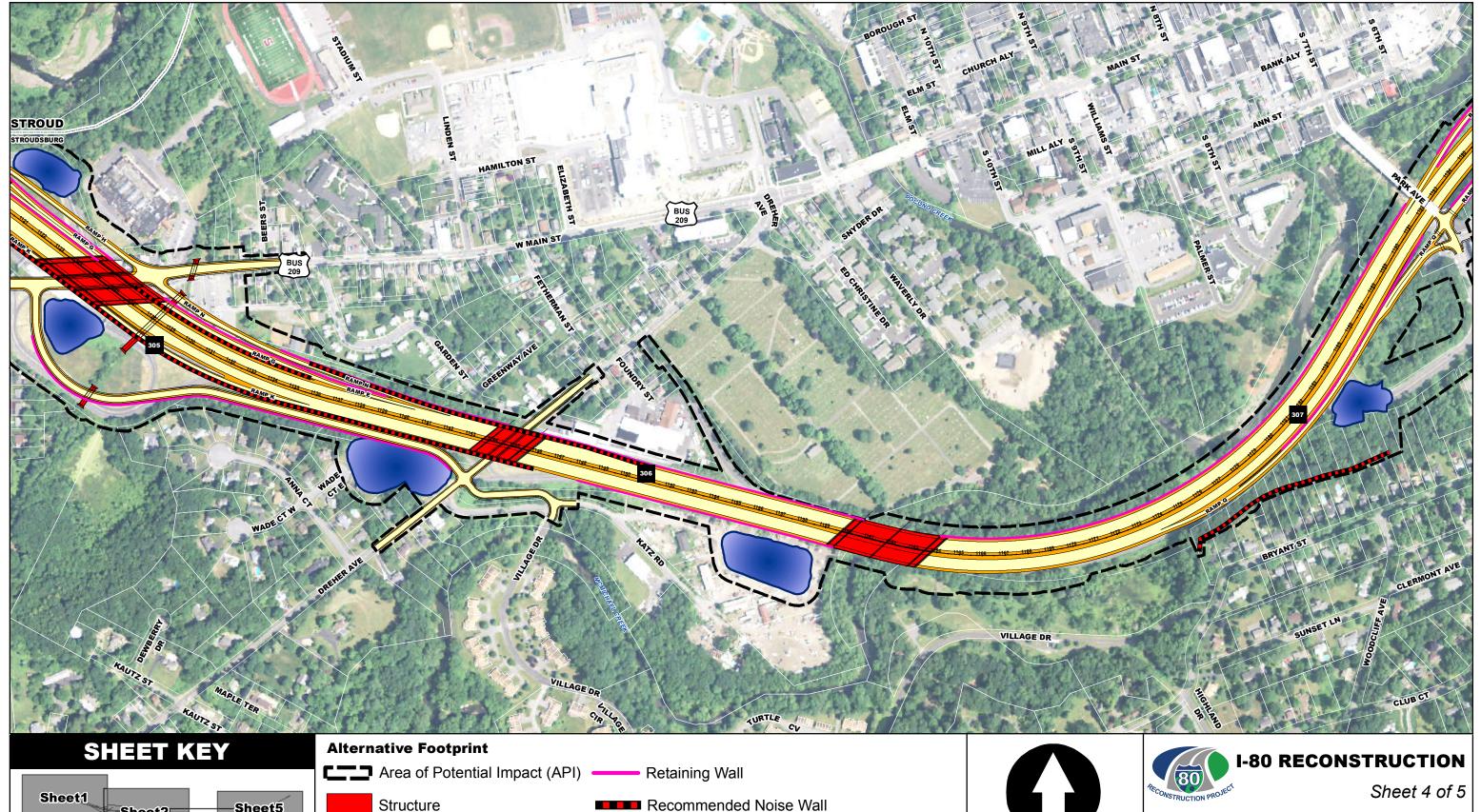
Print Date: 6/17/2019

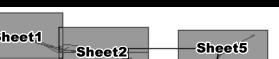


ALTERNATIVE 2B









Sheet4

Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction highway reconstruction.

Sheet3

Recommended Noise Wall

Pavement Shoulder

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

Pavement Lanes

Storm Water Basin



200 400

Feet

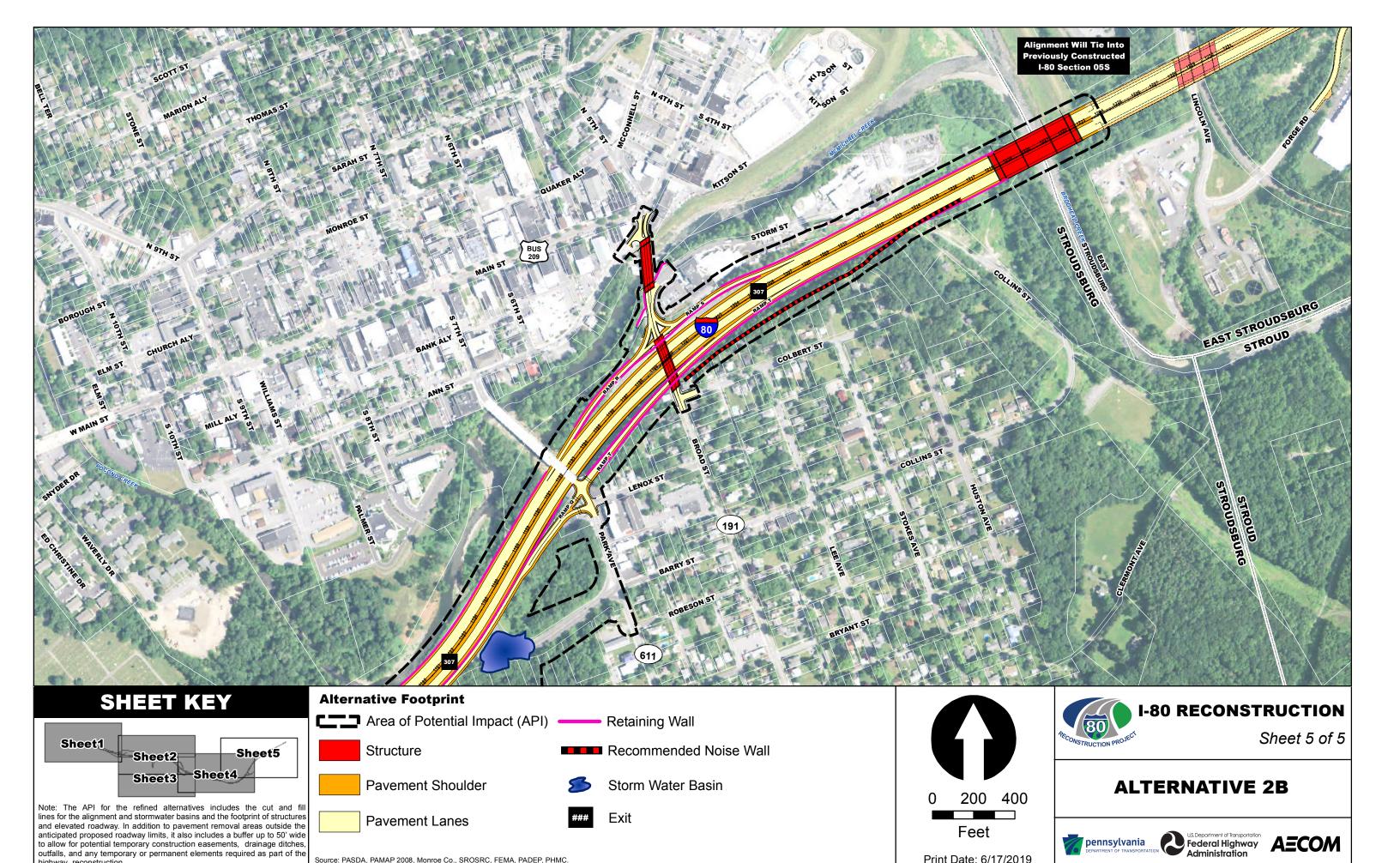
Print Date: 6/17/2019

ALTERNATIVE 2B









Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

highway reconstruction.

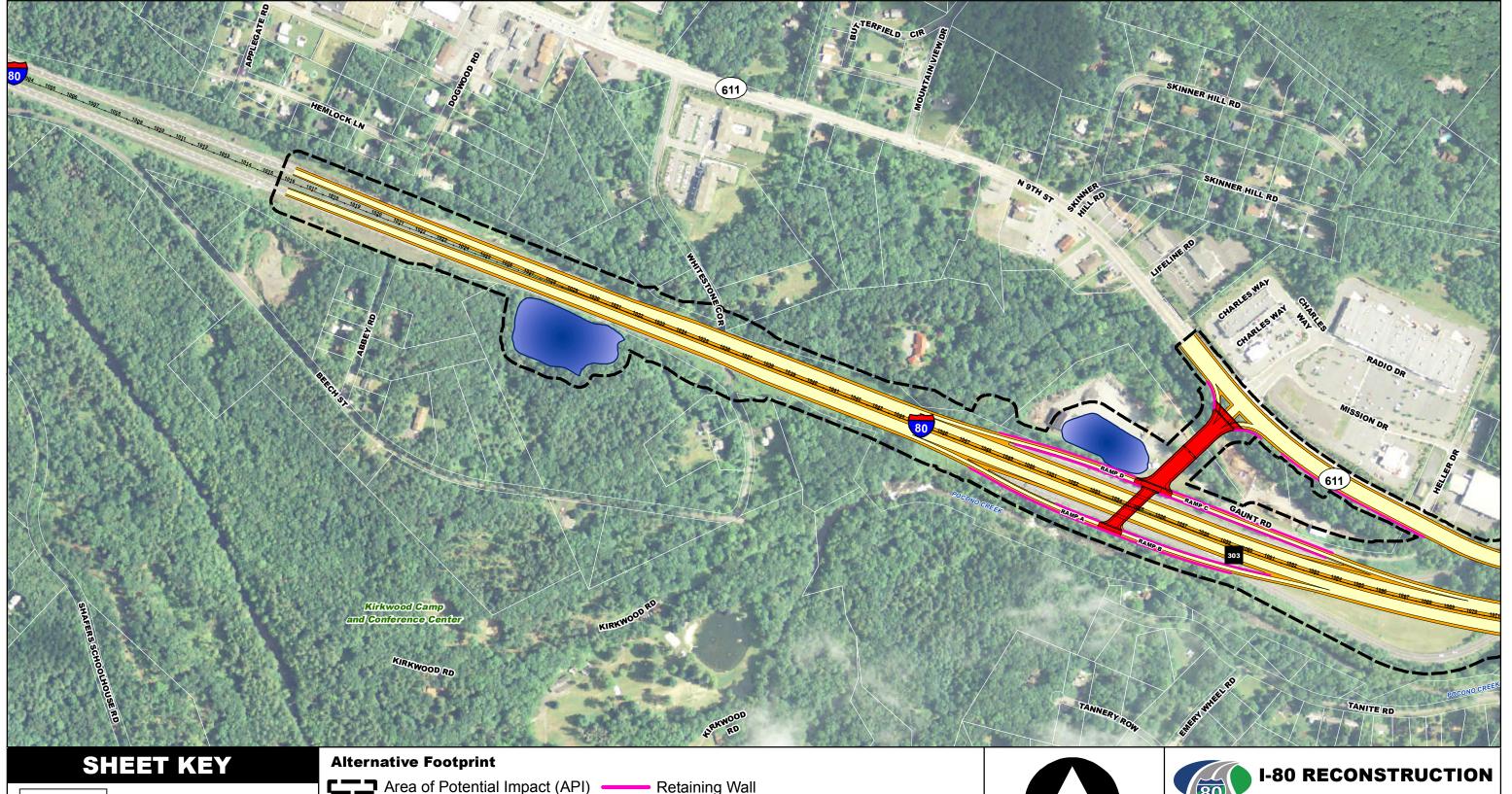
Feet

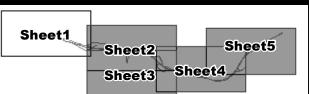
Print Date: 6/17/2019

US Department of Transportation Federal Highway Administration

AECOM

pennsylvania





Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction.

Area of Potential Impact (API) ——— Retaining Wall Structure

Recommended Noise Wall

Storm Water Basin

Pavement Shoulder

Pavement Lanes

Exit

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.



200 400

Feet

Print Date: 6/17/2019

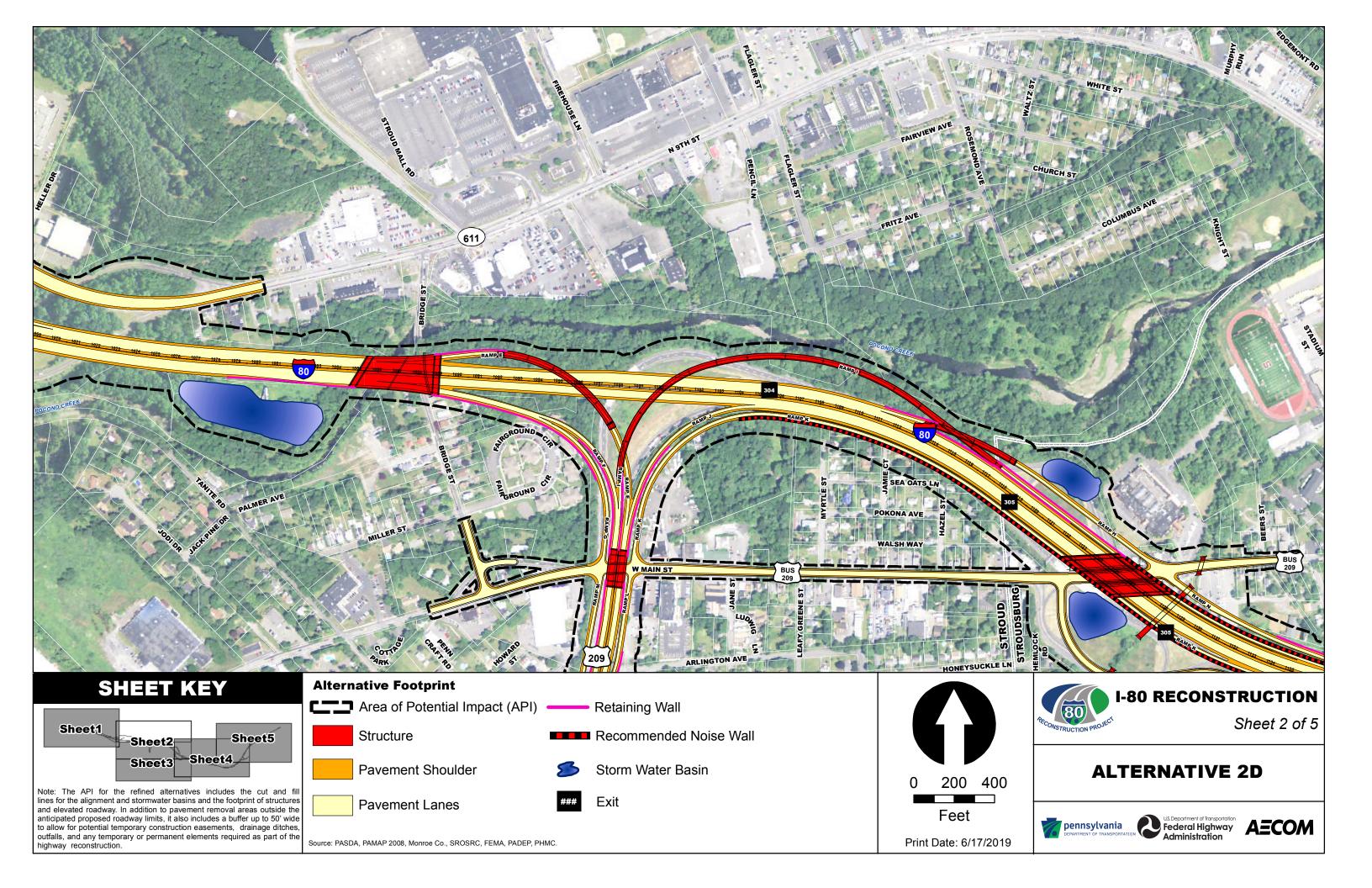


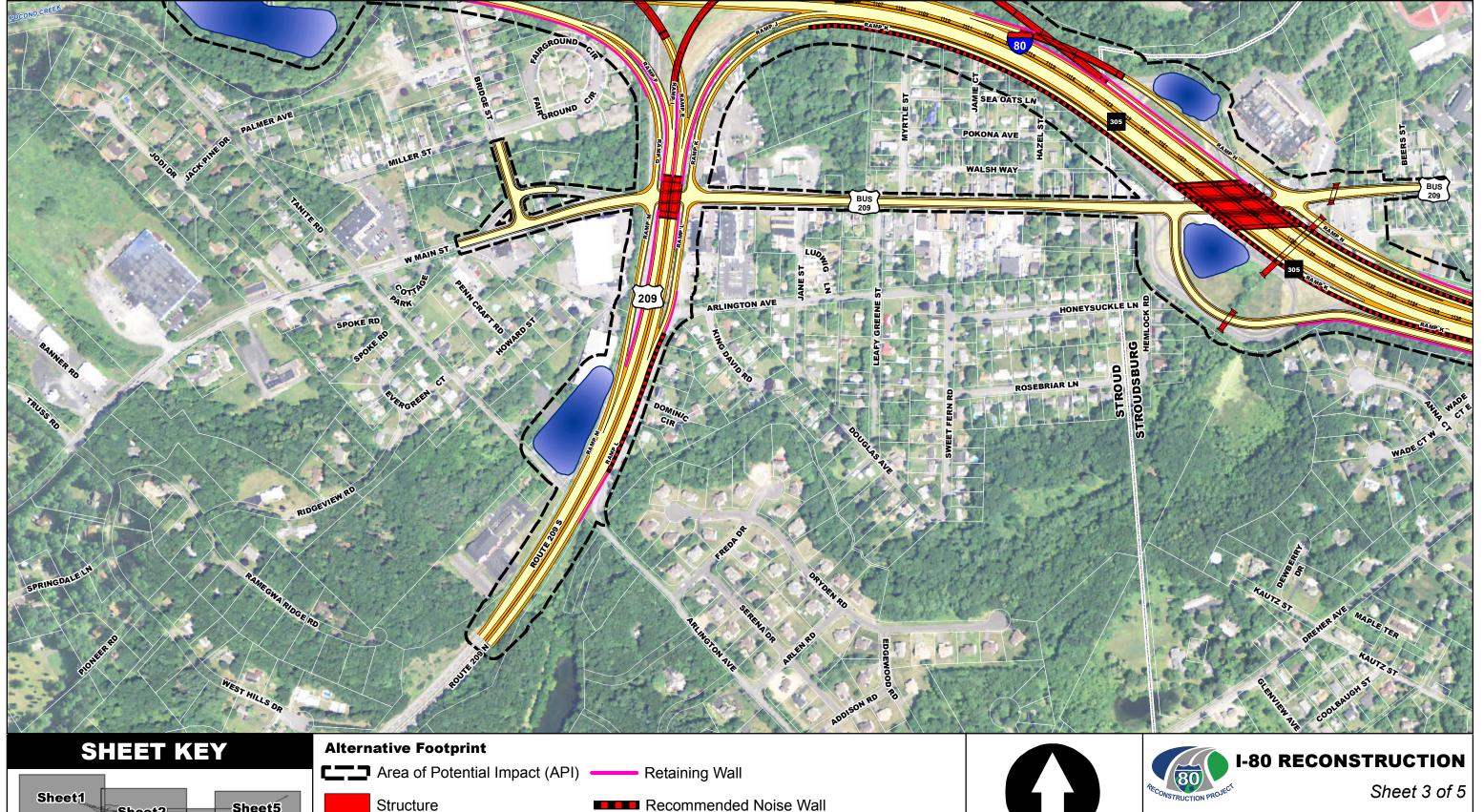
Sheet 1 of 5

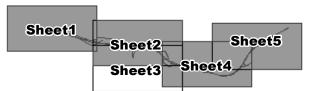
ALTERNATIVE 2D



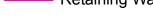








Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction.

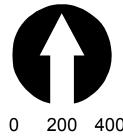


Recommended Noise Wall



Storm Water Basin





200 400

Feet

Print Date: 6/17/2019



ALTERNATIVE 2D

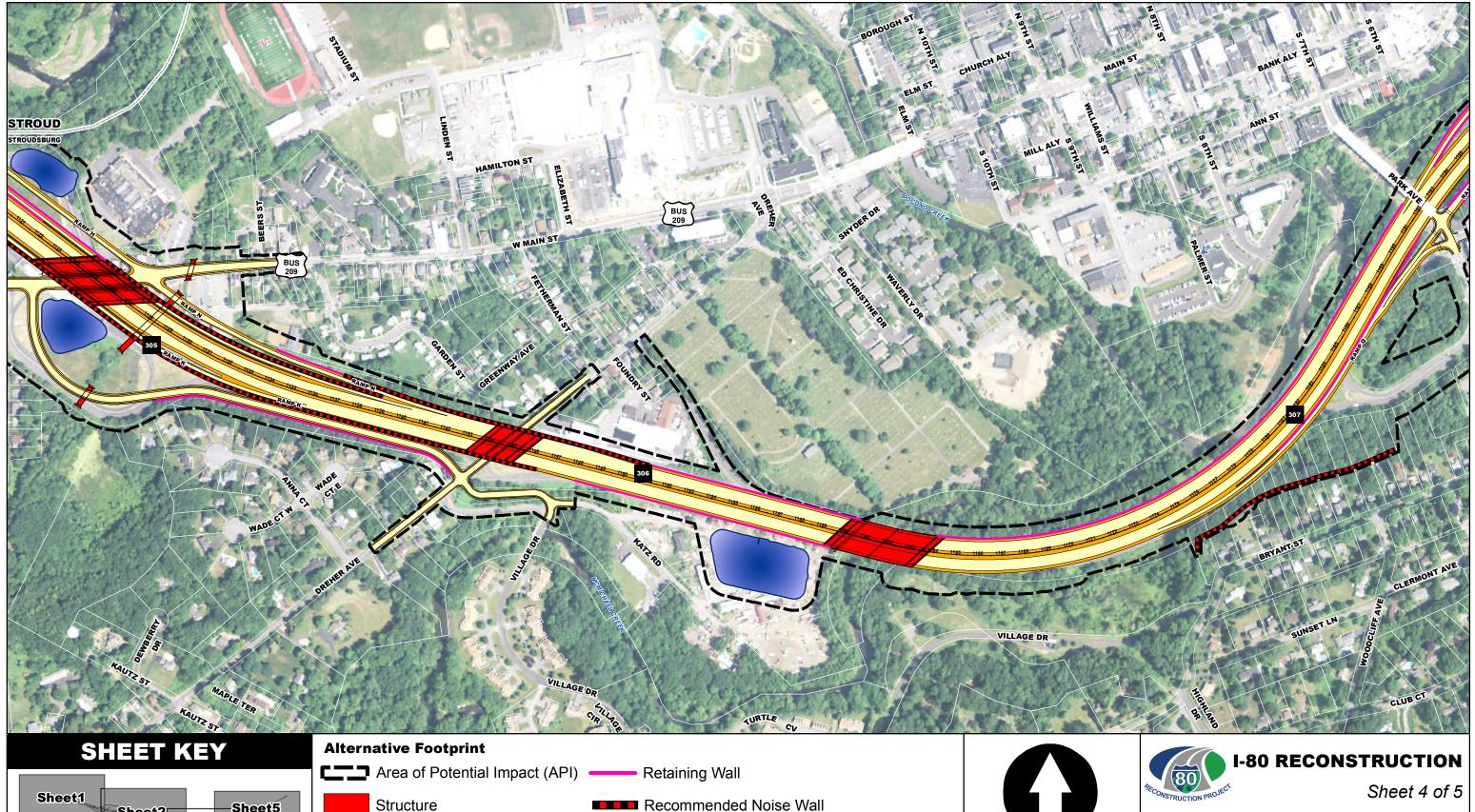


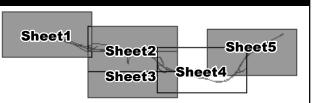


Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

Pavement Shoulder

Pavement Lanes





Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction highway reconstruction.

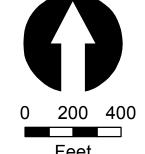
Recommended Noise Wall

Storm Water Basin

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

Pavement Shoulder

Pavement Lanes



Feet

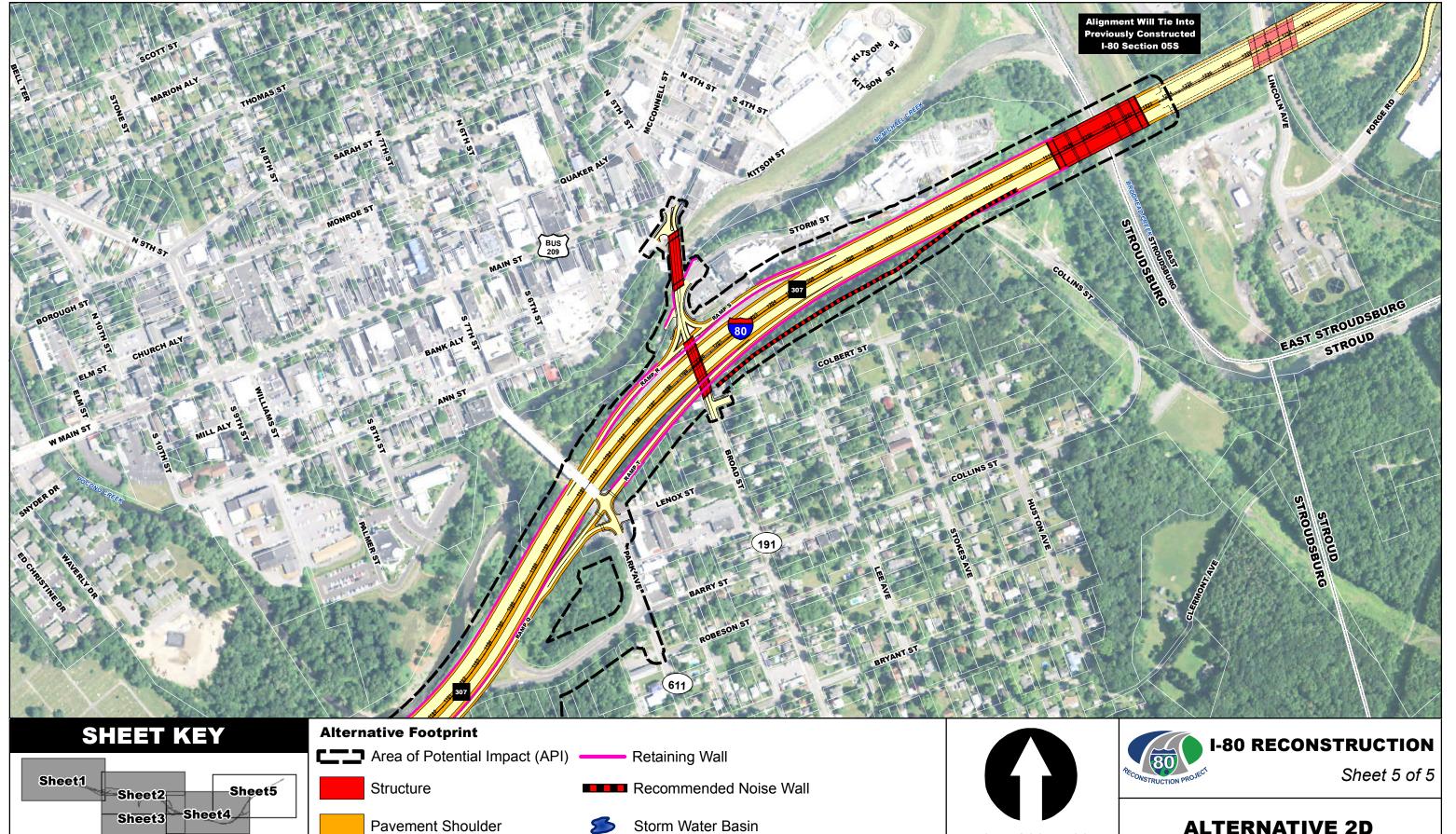
Print Date: 6/17/2019

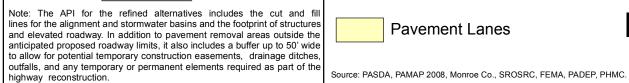
ALTERNATIVE 2D











Pavement Lanes

highway reconstruction.

200 400 Feet Print Date: 6/17/2019





